

### **ACTIVITY DETERMINATION**

**Project No. BGWPZ** 

Conflict of Interest <sup>1</sup>	
In this matter:	
<ol> <li>I have declared any possible conflict of interests (real, potential or perceived) to the Chief Executive, Land &amp; Housing Corporation.</li> <li>I do not consider I have any personal interests that would affect my professional judgement.</li> <li>I will inform the Chief Executive, Land &amp; Housing Corporation as soon as I become aware of a possible conflict of interest.</li> </ol>	
Signed	

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 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	Street or property name
13	Latty Street
Suburb, town or locality	Postcode
Fairfield	2165
Local Government Area(s)	Real property description (Lot and DP)
Fairfield	Lot 4 DP35006
ACTIVITY DESCRIPTION	
Provide a description of the activity	
	nd associated structures, and construction of a manor house with surface parking for 2 vehicles, associated landscaping, fencing

<sup>1.</sup> 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 "related persons" as defined in the Property, Stock and Business Agency Act 2002.

Signed...

Dated...3. May .2023

Emma Nicholson
A/Head of Policy and Innovation
Land and Housing Corporation
Department of Planning & Environment

### **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 and as modified below by any of the undermentioned identified requirements:

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd.mm.yyyy]:	Prepared by:
Architectural				
Cover	A - 001-001	Rev 03	27.10.2022	Studio Johnston
Site Plan	A - 100-001	Rev 03	27.10.2022	Studio Johnston
Block Analysis	A - 100-002	Rev 03	27.10.2022	Studio Johnston
Site Analysis	A - 100-003	Rev 03	27.10.2022	Studio Johnston
Demolition Plan	A - 100-004	Rev 03	27.10.2022	Studio Johnston
Cut and Fill Plan	A - 100-005	Rev 03	27.10.2022	Studio Johnston
Ground Level	A - 110-001	Rev 03	27.10.2022	Studio Johnston
Level 1	A - 110-002	Rev 03	27.10.2022	Studio Johnston
Roof	A - 110-003	Rev 03	27.10.2022	Studio Johnston
East & South Elevation	A - 200-001	Rev 03	27.10.2022	Studio Johnston
West & North Elevation	A - 200-002	Rev 03	27.10.2022	Studio Johnston
Section AA & BB	A - 300-001	Rev 03	27.10.2022	Studio Johnston
GFA Diagrams	A - 400-001	Rev 03	27.10.2022	Studio Johnston
Landscaped Open Space	A - 410-001	Rev 03	27.10.2022	Studio Johnston
Adaptable Unit	A - 420-001	Rev 03	27.10.2022	Studio Johnston
Shadow Diagrams	A - 700-001	Rev 03	27.10.2022	Studio Johnston
View from sun 21 June	A - 710-001	Rev 03	27.10.2022	Studio Johnston
View from sun 21 June	A - 710-002	Rev 03	27.10.2022	Studio Johnston
Landscape				
Coversheet	000	Issue F	25.10.2022	Site Image Landscape Architects
Landscape Plan	100	Issue E	25.10.2022	Site Image Landscape Architects

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd.mm.yyyy]:	Prepared by:
BASIX Calculation Plan	101	Issue D	28.10.2022	Site Image Landscape Architects
Details and Specifications	500	Issue E	25.10.2022	Site Image Landscape Architects
Stormwater Management				
Notes and Legends	Drawing No C01	Rev 6	27.10.2022	Greenview Consulting Pty Ltd
Ground Floor Drainage Plan	Drawing No C02	Rev 6	27.10.2022	Greenview Consulting Pty Ltd
Site Stormwater Details (Sheet 1)	Drawing No C03	Rev 6	27.10.2022	Greenview Consulting Pty Ltd
OSD Catchment Plan	Drawing No C04	Rev 6	27.10.2022	Greenview Consulting Pty Ltd
Notes and Legends	Drawing No ESM1	Rev 4	27.10.2022	Greenview Consulting Pty Ltd
Environmental Site Management Plan	Drawing No ESM2	Rev 4	27.10.2022	Greenview Consulting Pty Ltd
<b>BASIX &amp; NatHERS Certificate</b>				
BASIX Certificate	No 1275824M_0 2	-	04.11.2022	Greenview Consulting Pty Ltd
NatHERS Certificate	No 0007707 970	-	04.11.2022	Greenview Consulting Pty Ltd
Specialist Reports				
Arboricultural Impact Assessment and Tree Protection Plan and specification	13 Latt/AIA/ 020522	Rev 4	27.10.2022	Green Spaces Consultancy
Building Code of Australia 2019 Amendment 1 Final Report	021-217800	R03	27.10.2022	Philip Chun Building Compliance
Access Review			27.10.2022	Morris Goding Access Consulting
Geotechnical Investigation and Acid Sulfate Soil Assessment	21/2580		September 2021	STS Geotechnics Pty Ltd
Flood Review for proposed Residential Development	210825	Rev 5	30.03.2023	Greenview Consulting Pty Ltd

- **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 are to be certified in accordance with Section 6.28 of the *Environmental Planning and Assessment Act 1979*.

### **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

5. Stormwater shall be collected within the site and conveyed in a pipeline to the appropriate gutter or drain under the control of Fairfield City Council substantially in accordance with the approved concept stormwater drainage plans.

- **6.** 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.
- 7. All driveways shall be graded in such a manner as to provide continuous surface drainage flow paths to the appropriate points of discharge.
- **8.** 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 & Parking**

- 9. Concrete vehicular crossings and laybacks shall be provided at the entrances/exits to the property. The crossings and laybacks shall be constructed in accordance with Fairfield City Council's standard requirements for residential crossings. Council shall be provided with plans for the crossings and laybacks together with the payment of any council inspection fees.
- Particular care shall be taken in the location of vehicular crossings and/or laybacks to avoid poles, pits etc. The cost of any necessary adjustments to utility mains and services associated with the construction of the laybacks/driveways shall be borne by the Land & Housing Corporation. Obsolete gutter laybacks shall be constructed as kerb in accordance with the council's standards.
  - Note: It is recommended that discussions be held with the relevant authorities before construction works commence.
- 11. Car parking spaces and driveways shall be constructed of concrete or other approved hard surface materials. The car parking 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**

- 12. 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 and 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).
- **13.** An appropriately qualified person shall design any retaining walls or other methods necessary to prevent the movement of excavated or filled ground, including associated stormwater drainage measures.

### **Building Siting**

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

### Smoke Detection System(s)

**15.** Smoke detection systems shall be installed throughout the building 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 be:

- i. connected to a permanent 240V power supply; and
- ii. provided with a battery backup to activate the alarm unit in the event of failure of the permanent power supply.

### **Site Soil Contamination**

16. 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

- 17. Landscaping shall be carried out substantially in accordance with the approved landscape plans and maintained for a period of 12 months by the building contractor. Fairfield City Council shall be consulted in relation to the planting of any street trees.
- 18. 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 Council and provide a copy to the Land & Housing Corporation.

### **Fencing**

**19.** 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**

**20.** Suitable letterbox facilities shall be provided in accordance with Australia Post specifications.

### **Public Liability Insurance**

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

22. 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.

**23.** All existing services within the boundary to remain live shall be identified, pegged and made safe.

### **Demolition**

- 24. The builder shall notify the occupants of premises on either side, opposite and at the rear of the site a minimum of 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.
- 25. 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.
- 26. 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 building constructed before 1987 is assumed to contain asbestos.

### **Utilities Service Provider Notification**

27. 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**

**28.** Fairfield City Council shall be advised by the building contractor in writing, of the date it is intended to commence work, including demolition. A minimum period of 5 working days notification shall be given.

### **Site Safety**

- **29.** A sign shall be erected in a prominent position on the site:
  - (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 the telephone number on which that person may be contacted during and outside working hours, and
  - (c) stating that unauthorised entry to the 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.

**30.** 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 may 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.

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

### **Site Facilities**

- **32.** 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 shall be a standard flushing toilet and shall be connected to a public sewer. If connection to a public sewer is not practicable, to an accredited sewerage management facility provided by Fairfield City Council or if this is also 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 be placed on any property other than that to which this activity relates.
- **33.** Access to the site shall only be provided via an all weather driveway on the property and shall not be provided from any other site.

### **Protection of Trees**

34. The existing tree located at the rear of 11 Latty St, near the common side boundary with the development site, and identified as 'Tree 1' in the Arboricultural Impact Assessment and Tree Protection Plan and Specification prepared by Green Spaces Consultancy, 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 Protection Plan and Specification.

### **Waste Management**

**35.** A final Waste Management Plan shall be prepared and submitted to the 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**

**36.** 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.

- **37.** 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.
- **38.** 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.
- **39.** Where the site is to be connected to reticulated gas, a certificate from an approved gas carrier certifying that satisfactory arrangements have been made for the provision of underground gas services, to the site and to each dwelling, shall be obtained prior to work commencing.

### **Stormwater Disposal**

40. 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 Fairfield City Council's drainage code.

### **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

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

### **Heritage**

43. 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 or indigenous items have been uncovered, the Department of Planning and Environment must be contacted.

44. 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.

### **Demolition**

- **45.** Any existing structures identified for demolition shall be demolished prior to commencement of the construction of the activity.
- **46.** Demolition shall be carried out in accordance with the appropriate provisions of AS 2601.
- **47.** Where materials containing asbestos are to be removed, demolition shall be carried out by a licensed contractor(s) that has a current SafeWork NSW accreditation in asbestos removal.
- **48.** Removal of asbestos-based thermal, or acoustic insulation such as sprayed asbestos and asbestos-based lagging and 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)].
- **49.** Hazardous and intractable waste, including all asbestos laden waste arising from the demolition process shall be removed and disposed of in accordance with the requirements of SafeWork NSW.
- **50.** 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.
- **51.** Demolition procedures shall maximise the reuse and recycling of demolished materials in order to reduce the environmental impacts of waste disposal.
- **52.** 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.
- 53. 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**

54. 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

55. Demolition / construction / civil work shall only occur on the site between the hours of 7.00am to 5.00pm Monday to Saturday with no work permitted on Sundays or public holidays.

### **Excavation & Backfilling**

**56.** 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**

- **57.** Any noise generated during the carrying out of the activity shall not exceed the limits specified in the July 2009 Interim Construction Noise Guidelines published by the former Department of Environment and Climate Change.
- **58.** No fires shall be lit, or waste materials burnt, on the site.
- **59.** No washing of concrete forms or trucks shall occur on the site.
- **60.** Any contamination / spills on the site during construction works shall be actively managed and reported immediately to the appropriate regulatory authorities to minimise any potential damage to the environment.
- 61. Dust generation during demolition / construction shall be controlled using regular control measures such as on site watering or damp cloth fences.
- **62.** All vehicles transporting loose materials and travelling on public roads shall be secured (i.e. closed tail gate and covered) to minimise dust generation.
- 63. 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**

- **64.** The Land & Housing Corporation shall bear the cost of any necessary adjustments to utility mains and services.
- **65.** 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**

**66.** 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

67. The occupation of the development shall not commence until all the Identified Requirements of this determination have been complied with.

### **Council Infrastructure Damage**

**68.** The cost of repairing any damage caused to Fairfield 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**

- 69. 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 Fairfield 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 Fairfield City Council.

### PART B - Additional Identified Requirements

### **Site Specific Requirements**

- **70.** The proposed development is to have a minimum finished floor level set above RL +8.4m AHD to provide adequate freeboard above the 1% Annual Exceedance Probability (AEP) flood event, as recommended by the Flood Review prepared by Greenview Consulting Pty Ltd, dated 30 March 2023.
- 71. All components used below the ground floor level are to be constructed using flood compatible materials as per the schedule contained in the Flood Review prepared by Greenview Consulting Pty Ltd, dated 30 March 2023. Prior to construction, a structural engineer is to confirm all materials below the flood planning level of RL +8.4m AHD meet these requirements.

- **72.** Prior to construction, a structural engineer is to confirm that the proposed construction is able to withstand the forces of floodwaters up to the ground floor level, including:
  - a. Force from floodwater (flows);
  - b. Force from debris; and
  - c. Uplift forces due to buoyancy.
- **73.** Unit 1 is not to be an Adaptable Dwelling. Any reference to Unit 1 being an Adaptable Dwelling is to be deleted in the detailed construction documentation.

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

**74.** The full height vertical window to the first floor lobby which faces the southern side boundary is to be fitted with translucent glazing.

### **Requirements Resulting from Adjoining Occupier Comments**

**75.** A solid Colorbond metal panel fence to a height of 2.1m is to be provided adjacent to the bin holding bay. A metal roof at a height of 2.1m is to be provided over the bin holding bay. Vertical slatted metal screens to a height of 1.5m are to be provided on each side of the bin holding bay.

### **ADVISORY NOTES**

- 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 or by dialling 1100.

# Residential Housing Development

13 Latty Street, Fairfield

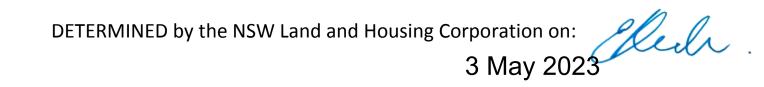


No. of Apt	Floor Level (Living)	Unique Apt ID	Room Name	9:00		9.30		10.00		10.30		11.00		11.30		12.00		12.30		1.00		1.30		2.00		2.30		3.00	Total Hours	≥3 hours sun to LIVING & P.O.S
1		Unit 1	LIVING	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	6	V
			P.O.S	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	6	'
2		Unit 2	LIVING	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	6	V
			P.O.S	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	6	'
3		Unit 3	LIVING	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	6	V
			P.O.S	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0	N	0	N	0	N	0	N	0	N	3.5	1
4		Unit 4	LIVING	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	6	V
[	[		P.O.S	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	0.5	Υ	6	' '

Total

≥ 3 hours sunlight 100.0%

Living Area and Private Open Space (POS) Solar Access Table





Location Map

			Location Map						
	Fairfield -	PROPOSED I	DEVELOPMENT DATA	- GENERAL HOUSING	G				
Locality / Suburb				Fairfield					
Street Address									
Title description (Lot & DP)	13 Latty Street  Lot 4; DP 35006								
Site Area	780.3 m <sup>2</sup>								
Existing Lot				1					
Proposed GFA			330.5 m²						
 Dwellings			4 (4 x 2	?-bed)					
	Number	Туре	No of Bedrooms	Adaptable	Area (m²)	Private Open Space (m²)			
	Unit 1	General	2 Bed	Adaptable	77.2	45.1 m <sup>2</sup>			
	Unit 2	General	2 Bed	Silver Level	72.8	62.2 m²			
	Unit 3	General	2 Bed		77.2	13.0 m²			
	Unit 4	General	2 Bed		72.8	12.0 m²			
	Cor	ntrol	Require	ement		Proposed			
	Fairfield	LEP 2013	9.0	m					
Height	Housin	g SEPP	9.0	m	8.3 m (at highest point of building)				
	Part 3B Co	odes SEPP	8.5	m					
FCD	Fairfield	LEP 2013	0.45	5:1	0.4	4.4.(2.42.20.654.)			
FSR	Part 3B Co	odes SEPP	25% of lot area + 150n	n² to a max. of 400m²	0.4	4:1 (343.3m2 GFA)			
		Front	Average of neare	st two residential		/ 000			
		Setback	accommodation bu	iildings within 40m	6.000m				
			Within 10m of building line: min. 1.5m						
Carla a alaa	Part 3B		>10m behind the	nd the building line and		4.005 (N)			
Setbacks	Codes SEPP	Side Setback	> 4.5m ir	n height:	4.903m (North) 4.020m (South)	4.905m (North)			
			setback =	= h - 3m		4.020m (South)			
			h is the height of part	of building in metres					
		Rear Setback	min.	10m		11.000m			
Doulsing.	Housin	g SEPP	4 v 0 F /2	b a d \ _ 2		2			
Parking	(accessi	ble area)	4 x 0.5 (2-	bea) = 2		2			
Brivata Onan Space (BOS)	LAHC [	Dwelling	Ground - to excee	d these min. dim.	Ground -	· U1 (45.1m²), U2 (62.2m²)			
Private Open Space (POS)	requir	ements	First - 10m² with	n min. dim. 2m	First - U	J3 (13.0m²), U4 (12.0m²)			
			50% of the lot are	ea minus 100m²					
			(min. 50% located b	ehind building line)		298.8m²			
Landscaped Open Area	Part 3B Co	odes SEPP	25% of the area of forwa	ard of the building line	lin	270.0111- nc. 49.2m² at front)			
			to be land	dscaped	(11	ic. 47.2111- at 11011t)			
			min. dim. 1	.5m x 1.5m					
Deep Soil	SII	JDG	15% of the site are	ea (min. dim. 3m)	25% of	the site area (200.6m²)			
	320		with 2/3 located at	the rear of the site	with >2/3	located at rear (160.5m²)			
	ΙΔΗΟΓ	Dwelling	Living areas and POS fo	•					
Solar Access		ements	the development to re	ceive min. 3 hours on	100 % (4/4)				
	Toquii		June	21					

Development Data Table

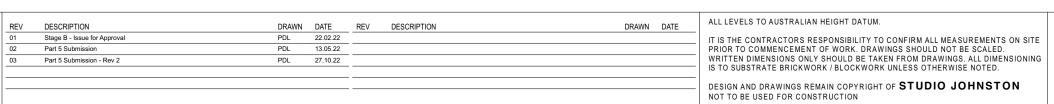














L1/268A DEVONSHIRE ST SURRY HILLS NSW 2010

PH: 02 9211 2700

ABN: 63111324353





V	DESCRIPTION	DRAWN	DATE	REV	DESCRIPTION	DRAWN DATE	ALL LEVELS TO AUSTRALIAN HEIGHT DATUM.
	Stage B - Issue for Approval	PDL	22.02.22				IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM ALL MEASUREMENTS ON SI
	Part 5 Submission	PDL	13.05.22				PRIOR TO COMMENCEMENT OF WORK. DRAWINGS SHOULD NOT BE SCALED.
	Part 5 Submission - Rev 2	PDL	27.10.22				WRITTEN DIMENSIONS ONLY SHOULD BE TAKEN FROM DRAWINGS. ALL DIMENSIONI
							IS TO SUBSTRATE BRICKWORK / BLOCKWORK UNLESS OTHERWISE NOTED.
							DESIGN AND DRAWINGS REMAIN COPYRIGHT OF STUDIO JOHNSTON
							NOT TO BE USED FOR CONSTRUCTION

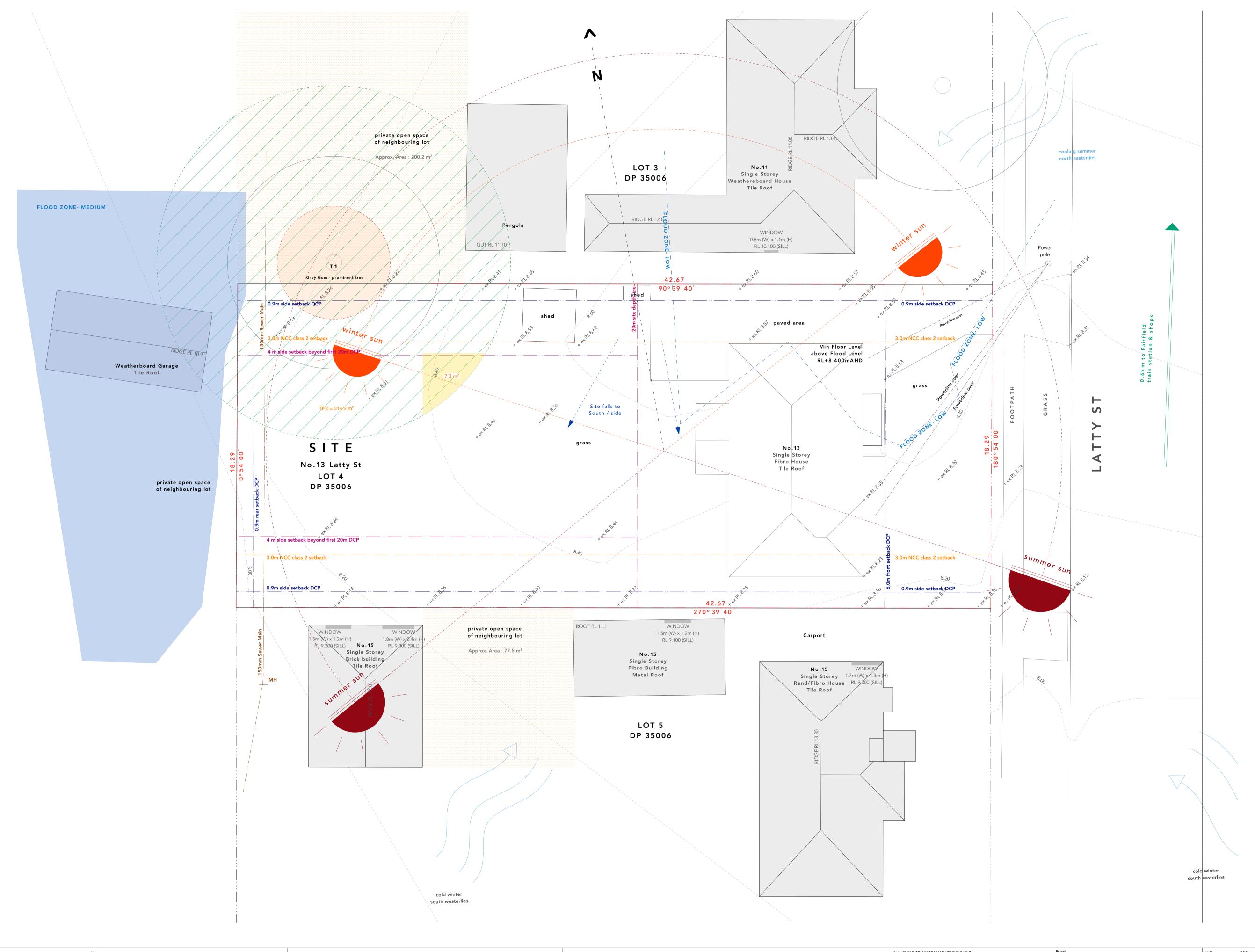
Pantry

Laundry

Microwave/Oven Private Open Space Communal Open Space

Louvers (Exhaust)

Stormwater Pit



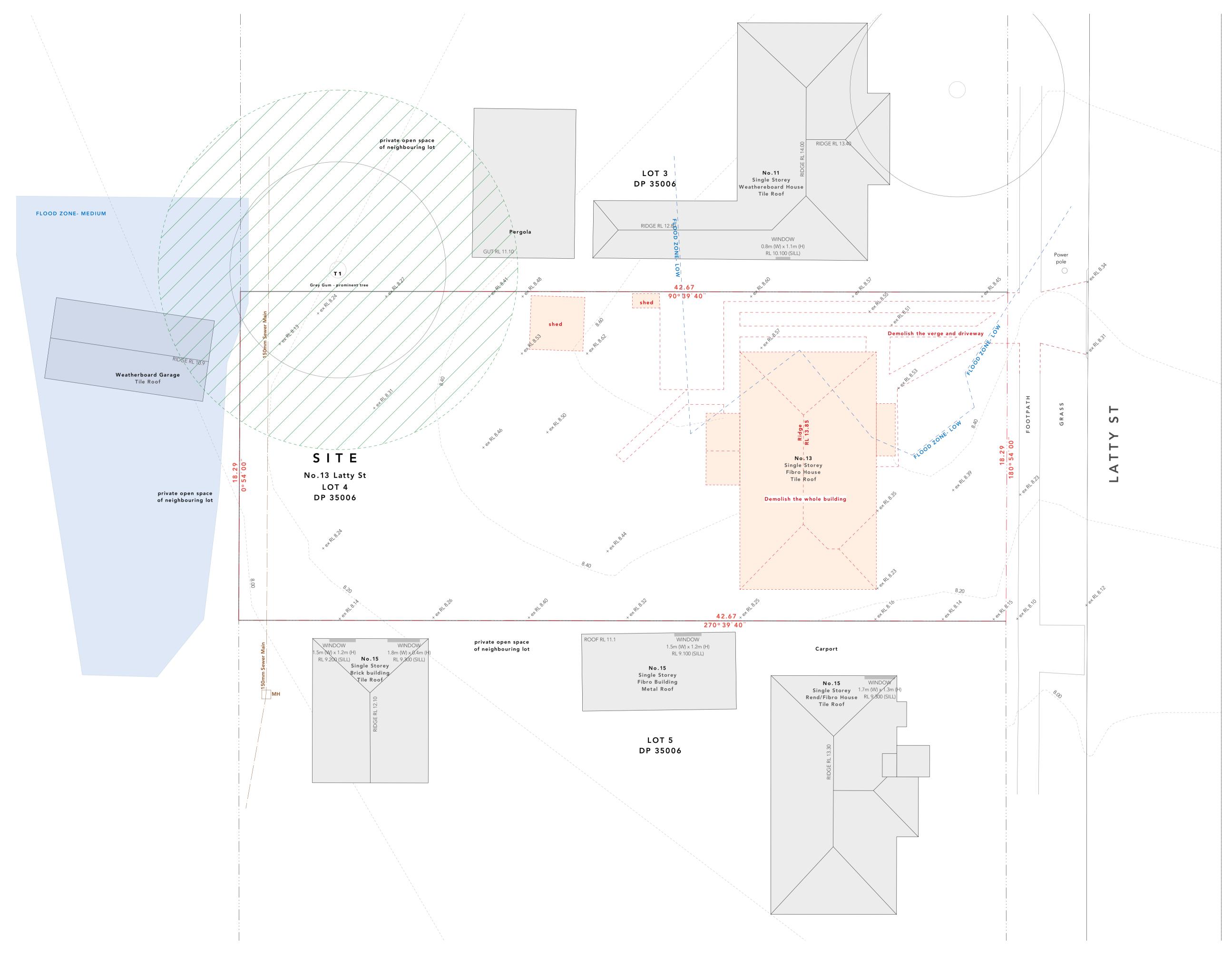




ALL LEVELS TO AUSTRALIAN HEIGHT DATUM. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM ALL MEASUREMENTS ON SITE PRIOR TO COMMENCEMENT OF WORK. DRAWINGS SHOULD NOT BE SCALED.
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13 Latty Street, Fairfield Lot 4 / DP 35006 Site Analysis

1:100 @ A1 **A - 100 -**27.10.22

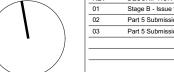


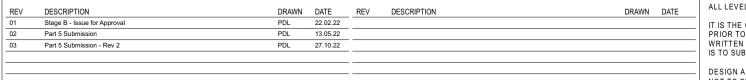












ALL LEVELS TO AUSTRALIAN HEIGHT DATUM.

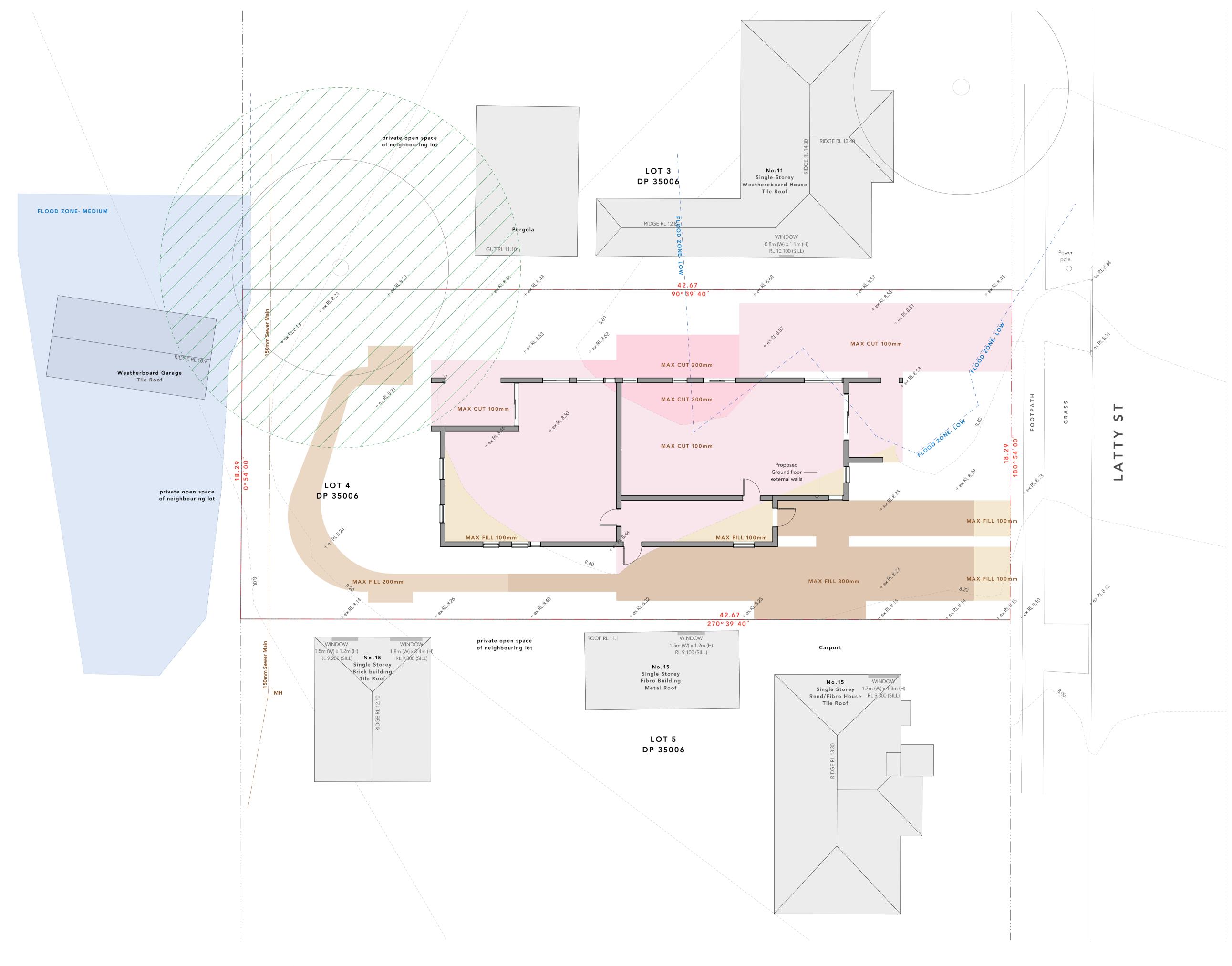
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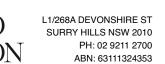
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13 Latty Street, Fairfield Lot 4 / DP 35006

Title

Demolition Plan Job No. 2115 Dwg No. 1
Scale 1:100 @ A1
Date 27.10.22
Drawn/Checked PDL/ SR

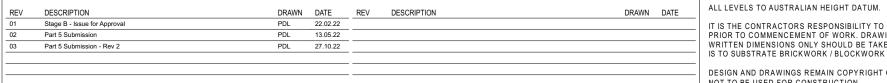






Planning,
Industry & Parramatta NSW 2124
Phone No: 1800 738 718
Website: www.dpie.nsw.gov.au/land-and-housing-corporation





ALL LEVELS TO AUSTRALIAN HEIGHT DATUM.

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Project

13 Latty Street, Fairfield Lot 4 / DP 35006

Title

Cut and Fill Plan

Job No. 2115 Dwg No.

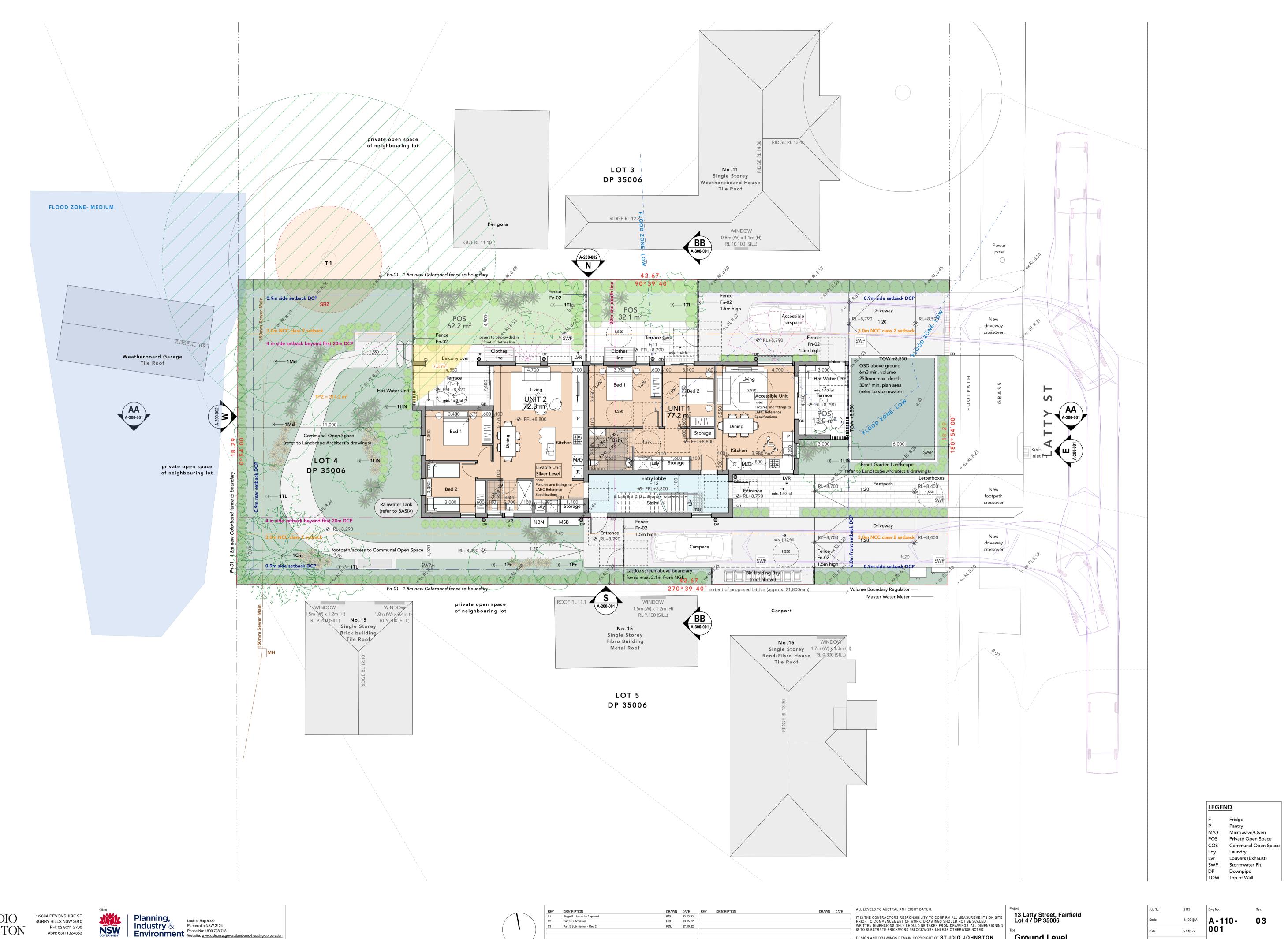
Scale 1:100 @ A1

Date 27.10.22

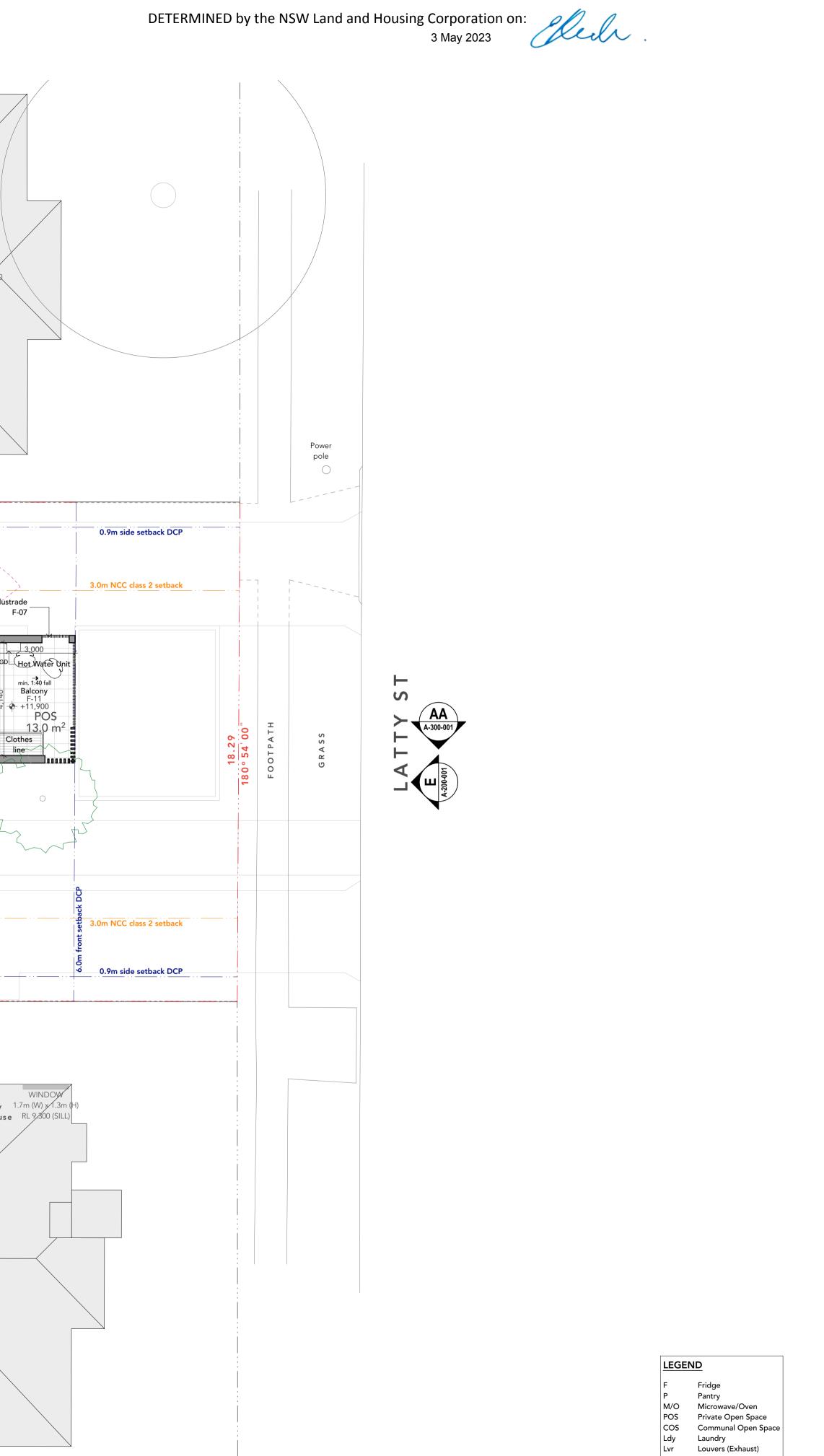
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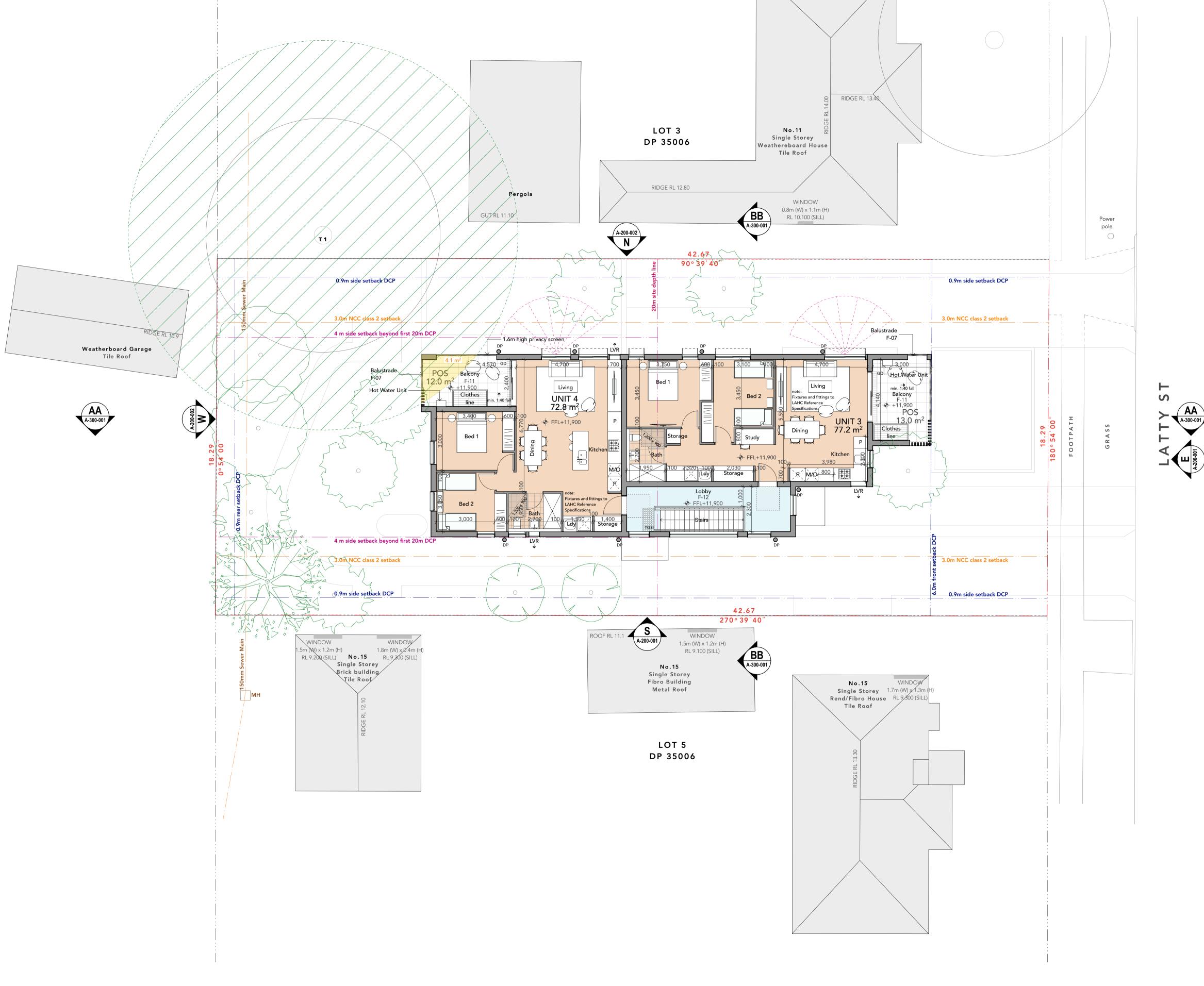
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**Ground Level** 



ABN: 63111324353

















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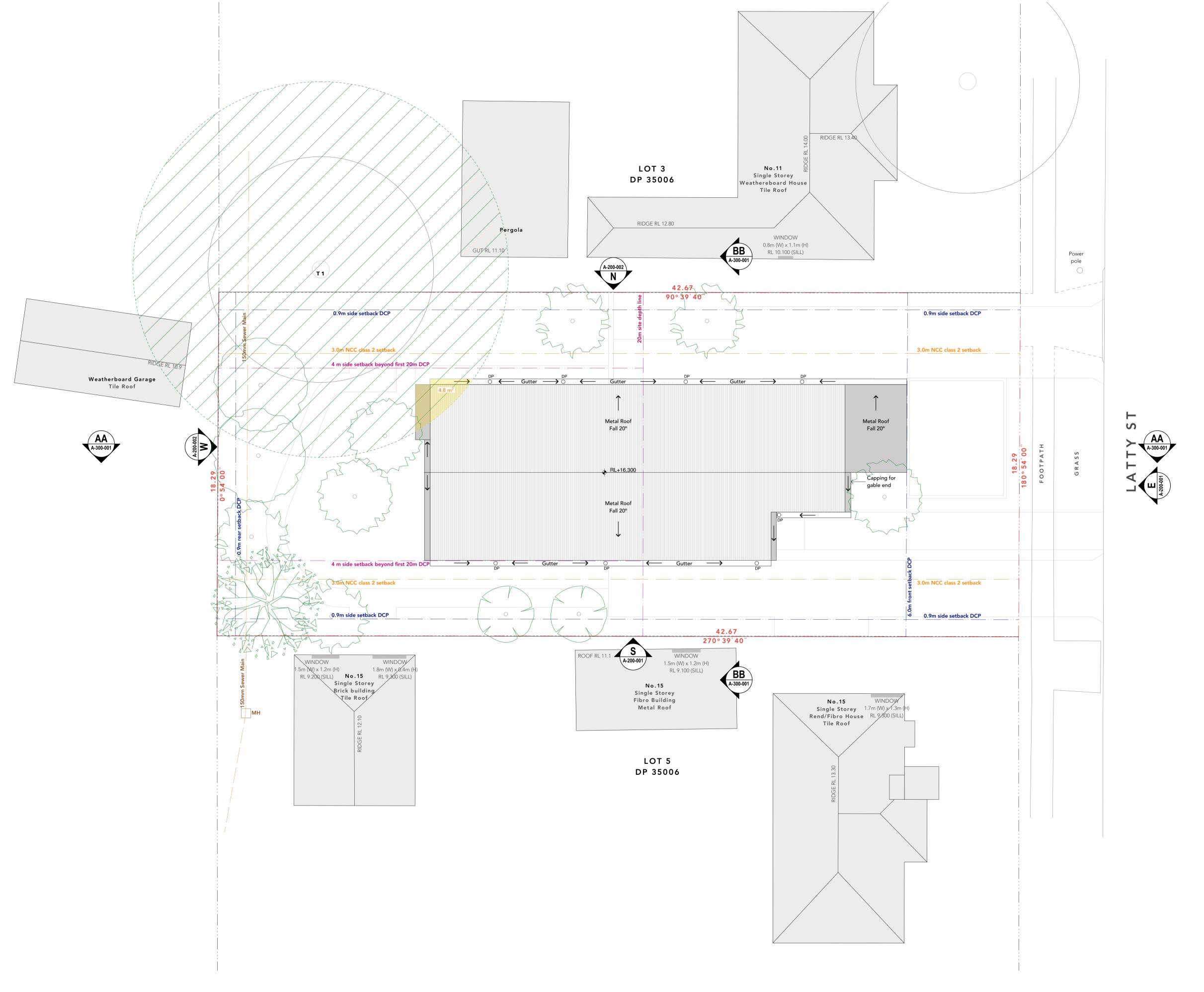
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13 Latty Street, Fairfield Lot 4 / DP 35006 Level 1

1:100 @ A1 **A - 110 -**002 27.10.22

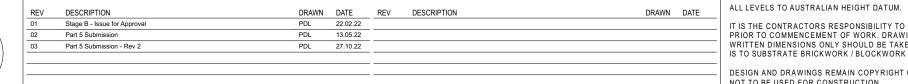
SWP Stormwater P
DP Downpipe
TOW Top of Wall

Stormwater Pit



L1/268A DEVONSHIRE ST SURRY HILLS NSW 2010 PH: 02 9211 2700 ABN: 63111324353

Planning, Industry & Locked Bag 5022 Parramatta NSW 2124 Environment Phone No: 1800 738 718
Website: www.dpie.nsw.gov.au/land-and-housing-corporation



13 Latty Street, Fairfield Lot 4 / DP 35006 IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM ALL MEASUREMENTS ON SITE PRIOR TO COMMENCEMENT OF WORK. DRAWINGS SHOULD NOT BE SCALED.
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1:100 @ A1 **A - 110 -**003 27.10.22

**LEGEND** 

M/O POS COS Ldy Lvr

Pantry

Laundry

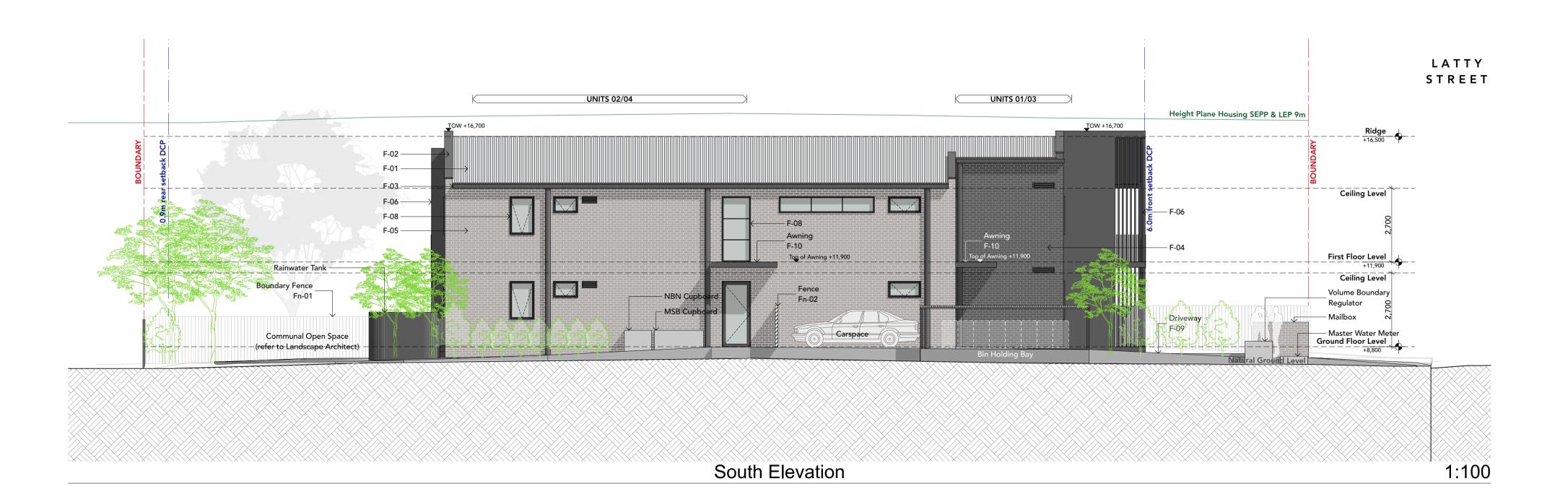
SWP Stormwater P
DP Downpipe
TOW Top of Wall

Microwave/Oven Private Open Space Communal Open Space

Louvers (Exhaust)

Stormwater Pit





# Private Open Space Laundry

Communal Open Space

### M/O POS COS Ldy Lvr SWP DP TOW Louvers (Exhaust) Stormwater Pit Downpipe Top of Wall

### **LEGEND**

Finishes 8	Materials

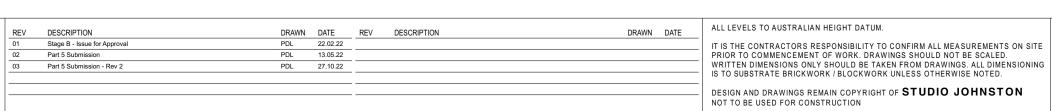
Finishes 8	& Materials		
F-01	Roofing	Metal Roof	Dulux Monument or similar
F-02	Capping	Colourbond	Dulux Monument or similar
F-03	Fascia, Gutter, Downpipe	Colourbond	Dulux Monument or similar
F-04	Walls	Face Brick	PGH Bricks Breeze or similar
F-05	Walls	Face Brick	PGH Bricks Zephyr or similar
F-06	Walls	Pre-finished FC Sheet	Cemintel Barestone Graphite or similar
F-07	Balustrade	Slatted Metal Balustrade	Dulux Monument or similar
F-08	Windows, Doors & Louvres	Powdercoated Aluminium	Dulux Monument or similar
F-09	Driveway	Concrete	Brushed finish
F-10	Awning	Powdercoated Aluminium	Dulux Monument or similar
F-11	Balcony/ Terrace	Outdoor Tiles	Mid Grey
F-12	Lobby/ Footpath	Tiles	Terracotta colour
	•		

ence Typ	e		
Fn-01	Boundary fence	Colorbond Metal Fence	Dulux Monument or similar
Fn-02	On-site/POS fence	Slatted Metal Fence	Dulux Monument or similar













# M/O POS COS Ldy Lvr SWP DP TOW Laundry

Private Open Space Communal Open Space

Louvers (Exhaust) Stormwater Pit Downpipe Top of Wall

### **LEGEND**

Finishes 8	& Materials		
F-01	Roofing	Metal Roof	Dulux Monument or similar
F-02	Capping	Colourbond	Dulux Monument or similar
F-03	Fascia, Gutter, Downpipe	Colourbond	Dulux Monument or similar
F-04	Walls	Face Brick	PGH Bricks Breeze or similar
F-05	Walls	Face Brick	PGH Bricks Zephyr or similar
F-06	Walls	Pre-finished FC Sheet	Cemintel Barestone Graphite or similar
F-07	Balustrade	Slatted Metal Balustrade	Dulux Monument or similar
F-08	Windows, Doors & Louvres	Powdercoated Aluminium	Dulux Monument or similar
F-09	Driveway	Concrete	Brushed finish
F-10	Awning	Powdercoated Aluminium	Dulux Monument or similar
F-11	Balcony/ Terrace	Outdoor Tiles	Mid Grey
F-12	Lobby/ Footpath	Tiles	Terracotta colour

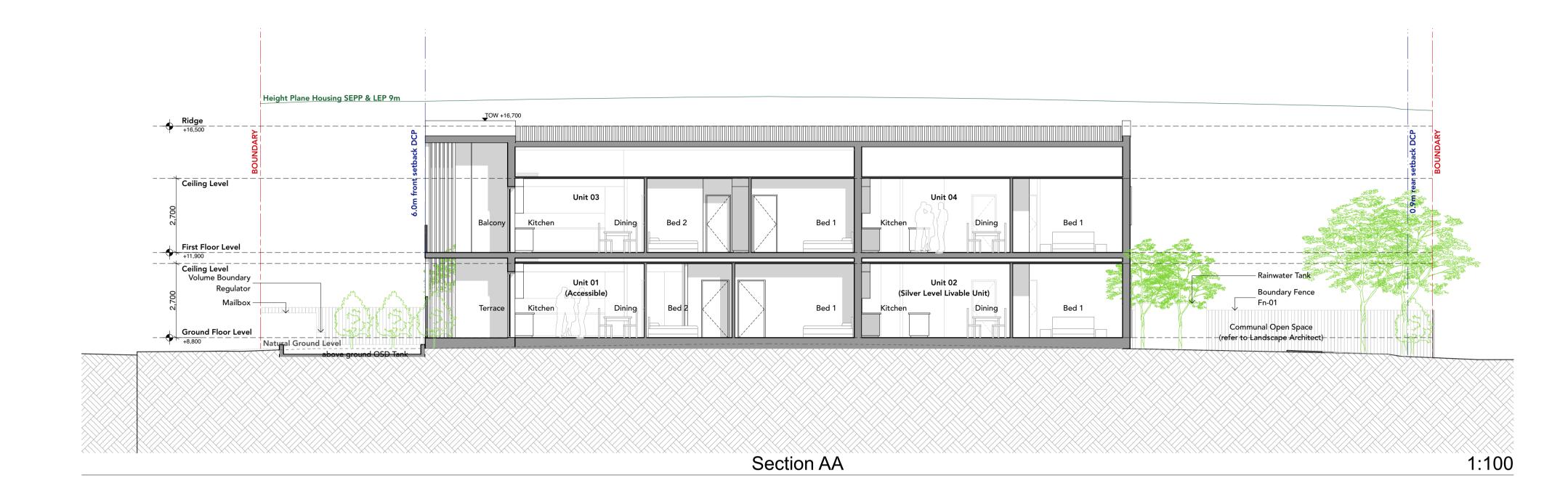
Fn-0	1 Boundary fence	Colorbond Metal Fence	Dulux Monument or similar
Fn-0	2 On-site/POS fence	Slatted Metal Fence	Dulux Monument or similar

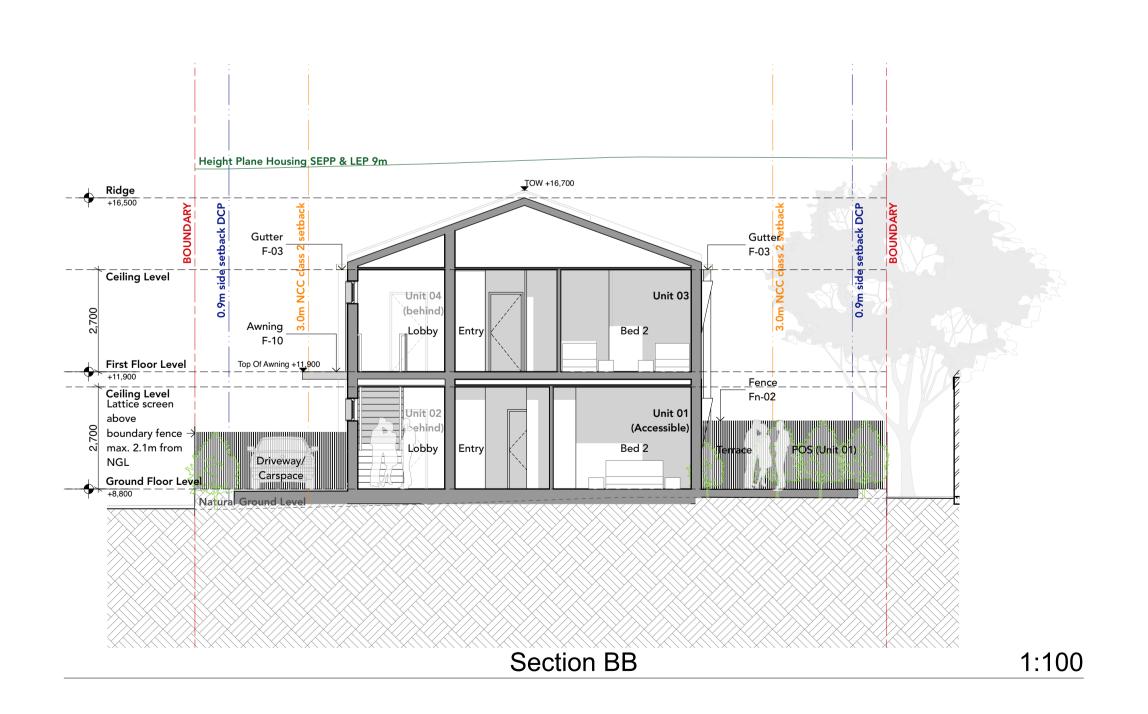












### **LEGEND** Pantry M/O Microwave/O POS Private Open COS Communal Op Ldy Laundry Lvr Louvers (Exha SWP Stormwater P DP Downpipe TOW Top of Wall Microwave/Oven Private Open Space Communal Open Space Louvers (Exhaust) Stormwater Pit

### **LEGEND**

### Finishes & Materials

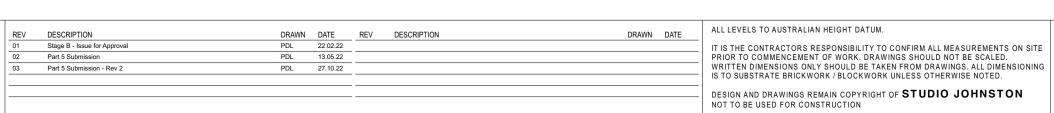
Finishes 8	& Materials			
F-01	Roofing		Metal Roof	Dulux Monument or similar
F-02	Capping		Colourbond	Dulux Monument or similar
F-03	Fascia, Gutter, Downpipe		Colourbond	Dulux Monument or similar
F-04	Walls		Face Brick	PGH Bricks Breeze or similar
F-05	Walls		Face Brick	PGH Bricks Zephyr or similar
F-06	Walls		Pre-finished FC Sheet	Cemintel Barestone Graphite or similar
F-07	Balustrade		Slatted Metal Balustrade	Dulux Monument or similar
F-08	Windows, Doors & Louvres		Powdercoated Aluminium	Dulux Monument or similar
F-09	Driveway		Concrete	Brushed finish
F-10	Awning		Powdercoated Aluminium	Dulux Monument or similar
F-11	Balcony/ Terrace	16 ( ) 25	Outdoor Tiles	Mid Grey
F-12	Lobby/ Footpath		Tiles	Terracotta colour

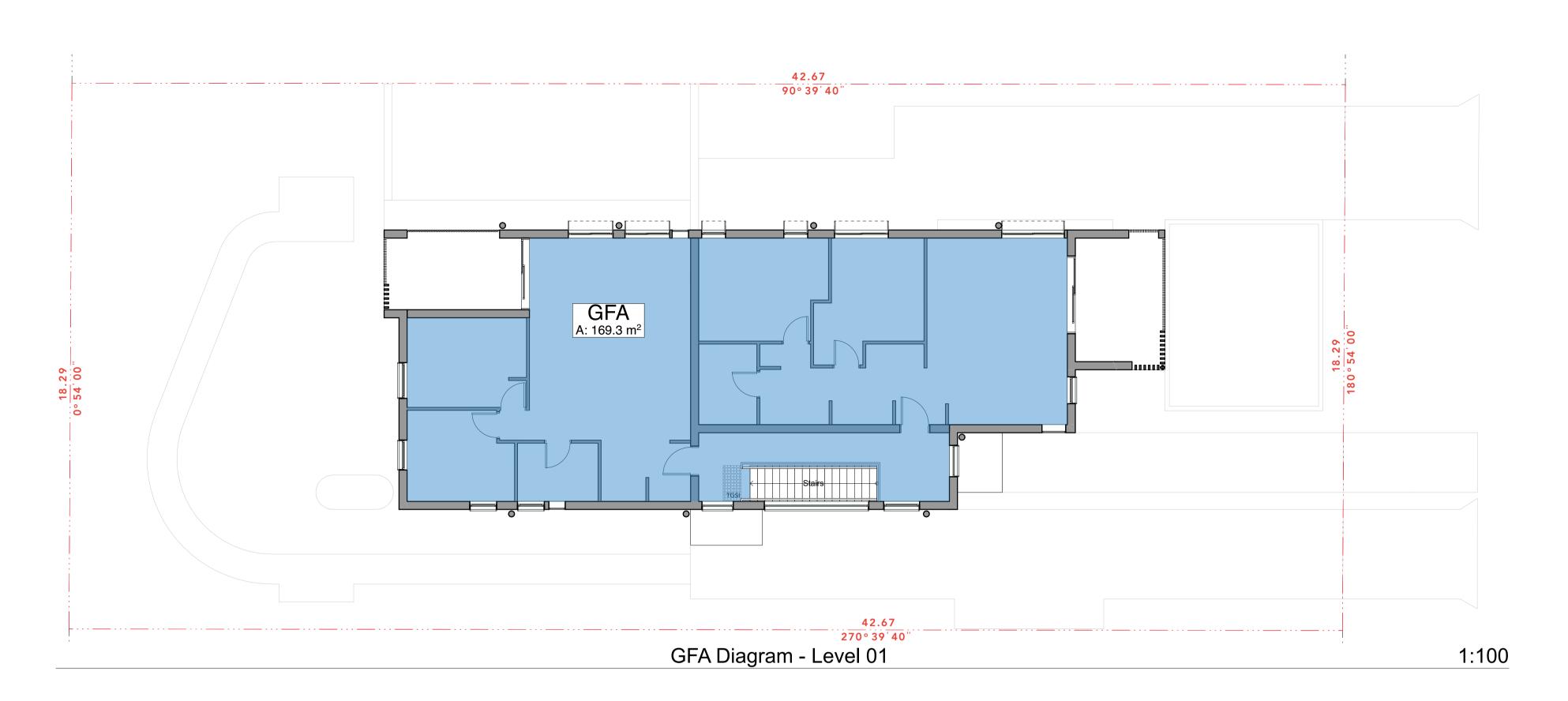
Fence Typ Fn-01	Boundary fence	Colorbond Metal Fence	Dulux Monument or similar
Fn-02	On-site/POS fence	Slatted Metal Fence	Dulux Monument or similar

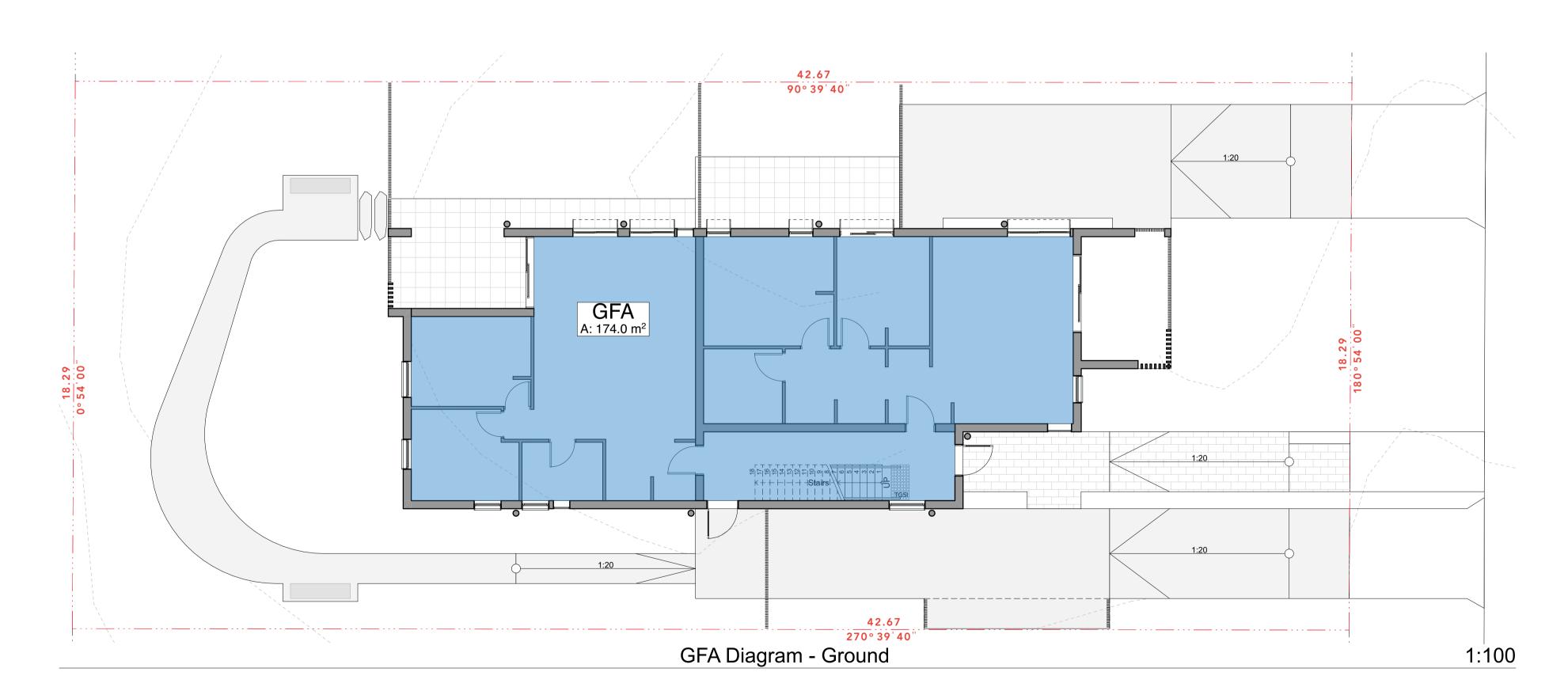












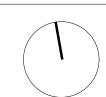
SITE AREA - 780.3 m<sup>2</sup>

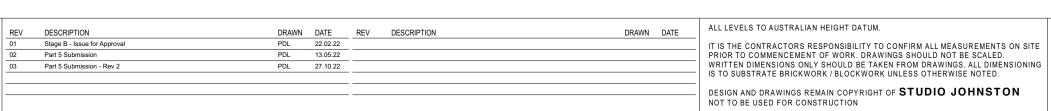
Level	Measured Area
Level 01	169.33
Ground	174.00
Total Gross Floor Area (GFA	) 343.33 m²

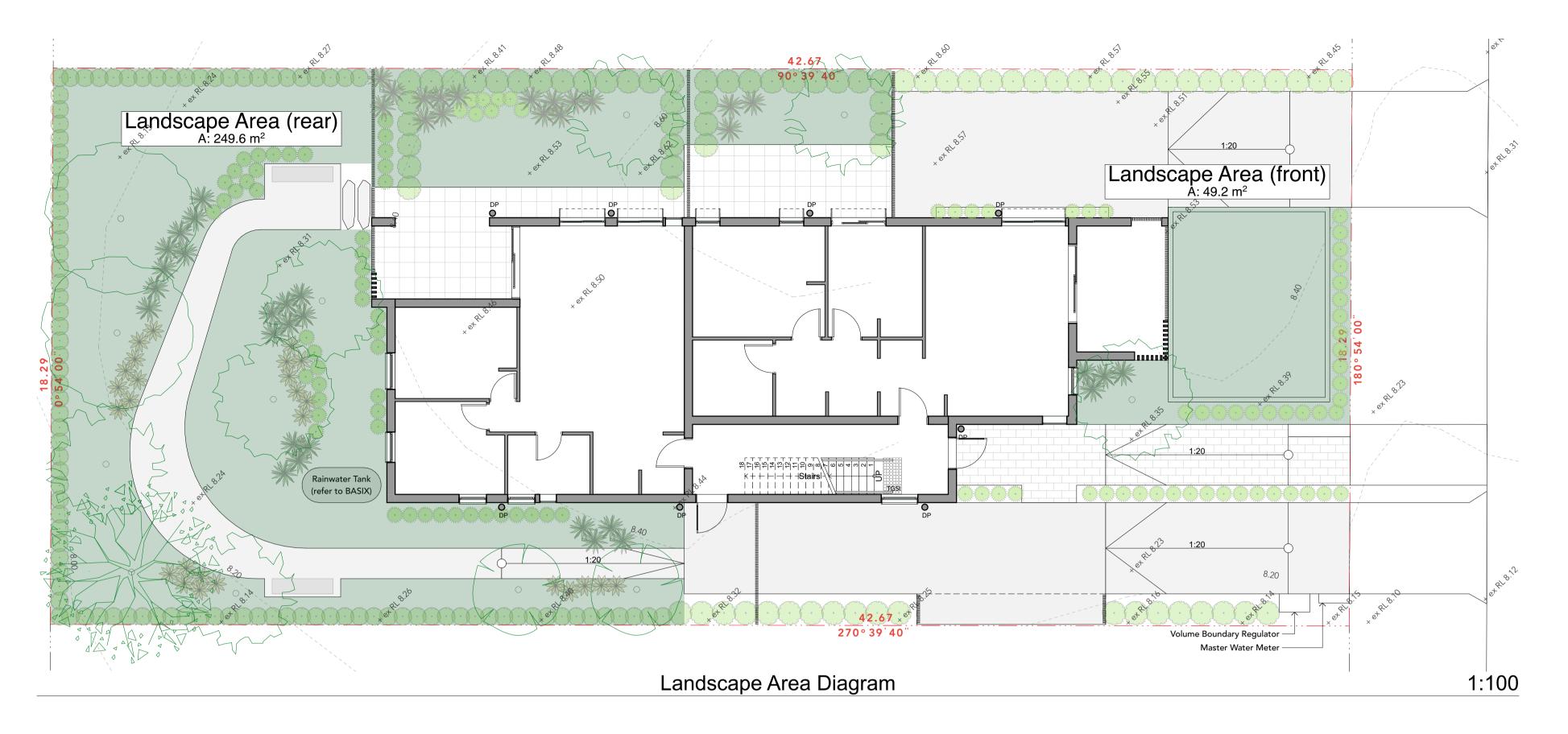
Floor Space Ratio (FSR) - 0.44:1

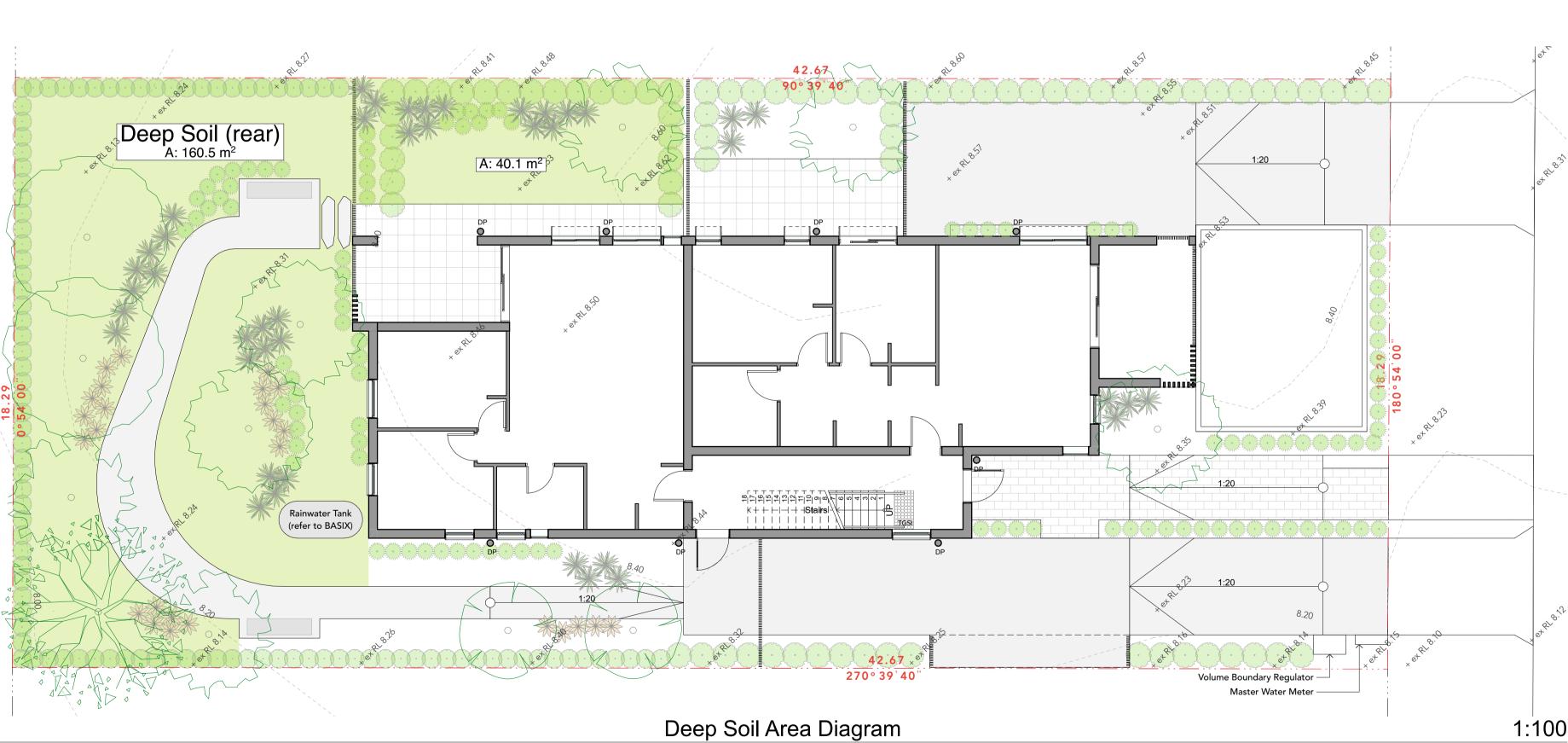












### SITE AREA - 780.3 m<sup>2</sup>

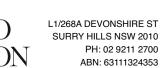
Level	Zone Name	Measured Area
Ground	Landscape Area (front)	49.19
Ground	Landscape Area (rear)	249.59
Total Landscap	ed Open Space	298.78 m²

SITE AREA - 780.3 m<sup>2</sup>

Level	Zone Name	Measured Area
Ground	Deep Soil	40.10
Ground	Deep Soil (rear)	160.54
		200.64 m <sup>2</sup>

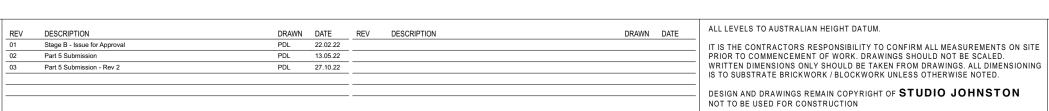
Total Deep Soil Area

Total Deep Soil Area Percentage - 25% of Site Area including 80% (160.5m<sup>2</sup>) at rear

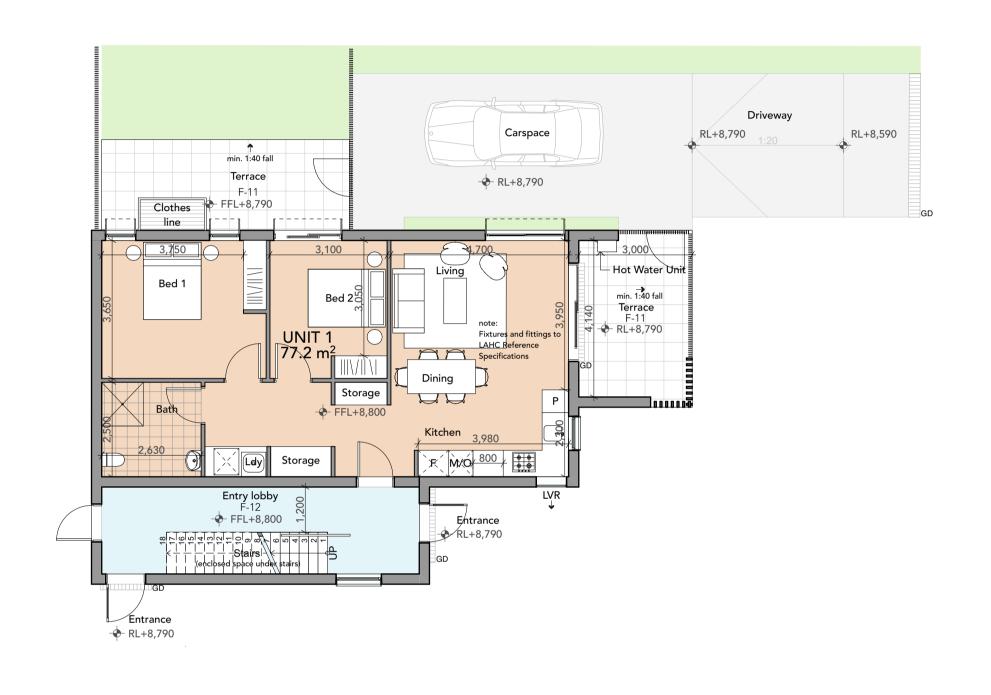


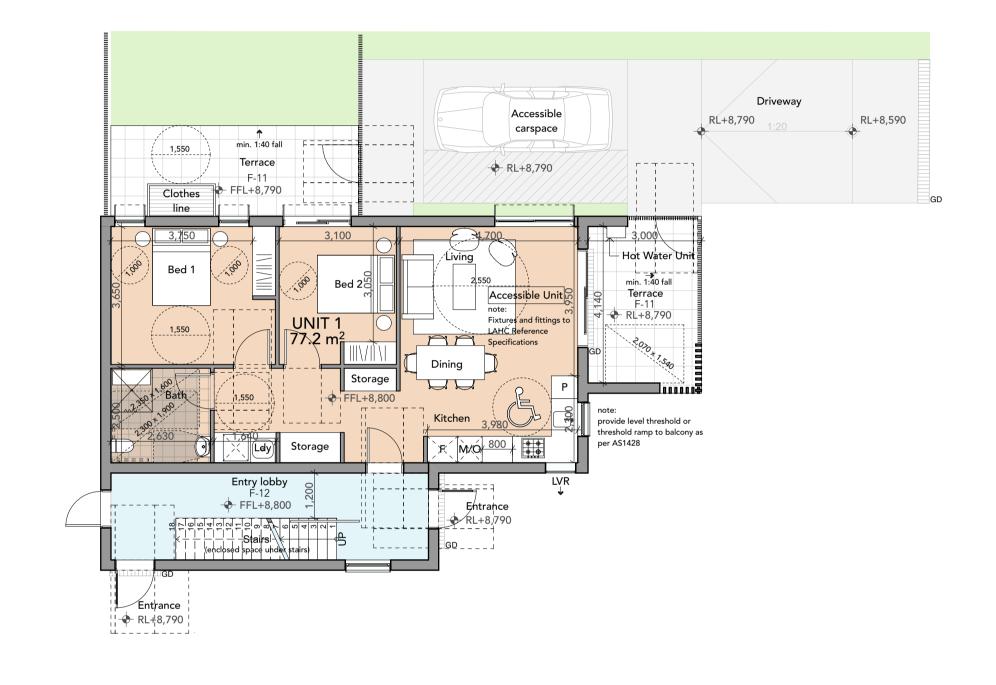






1:100





Post-Adaptable 1:100 Pre-Adaptable 1:100

> **LEGEND** Fridge Pantry P Pantry
> M/O Microwave/
> POS Private Ope
> COS Communal (
> Ldy Laundry
> Lvr Louvers (Exh.
> SWP Stormwater F
> DP Downpipe
> TOW Top of Wall Microwave/Oven Private Open Space Communal Open Space Louvers (Exhaust) Stormwater Pit



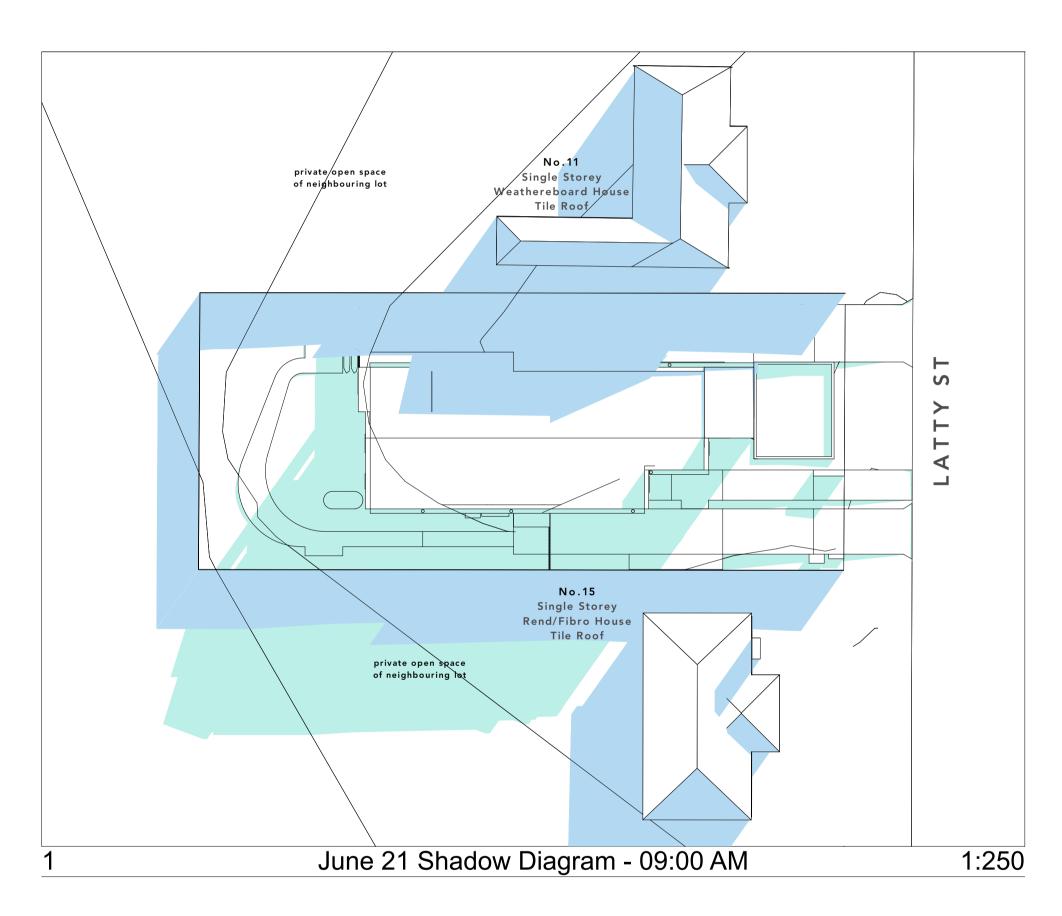


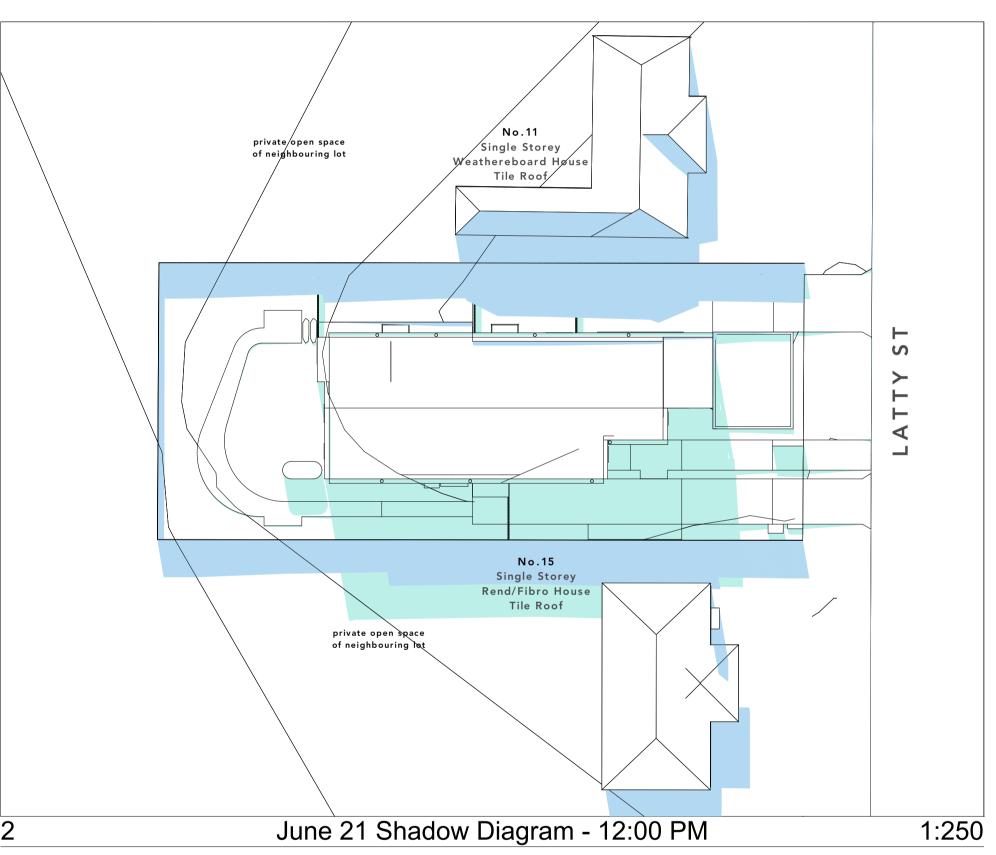


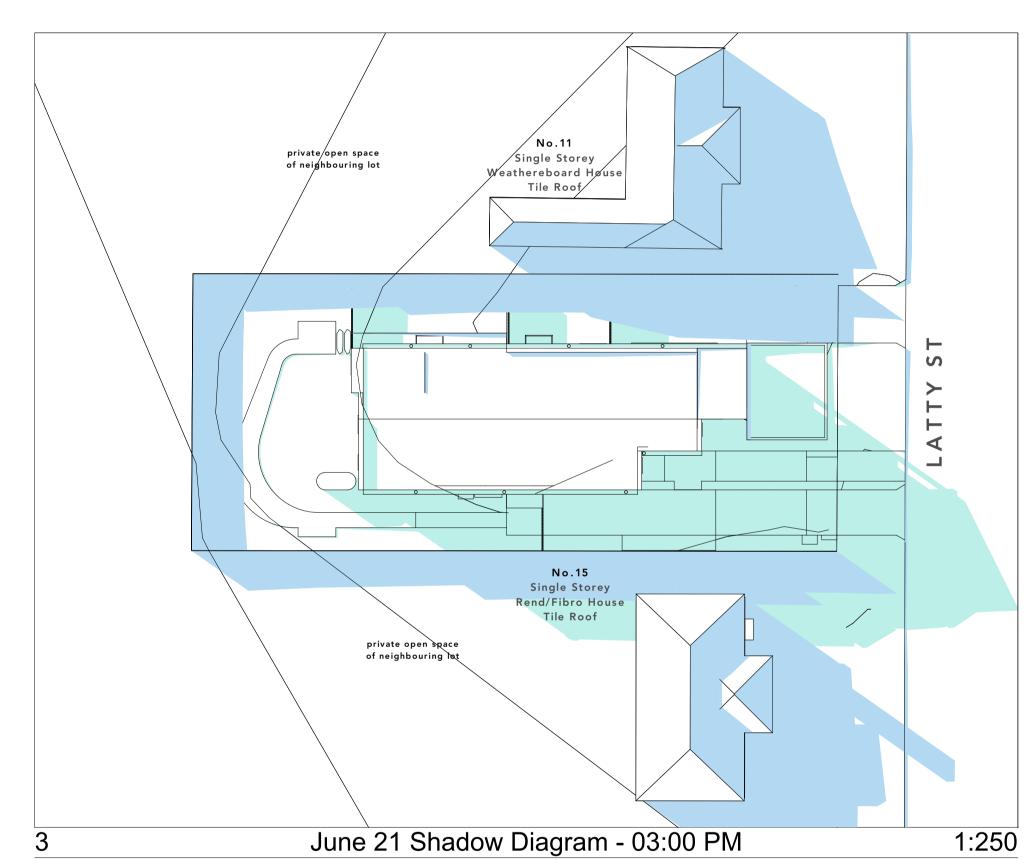












### **LEGEND**

**Existing Shadow** 

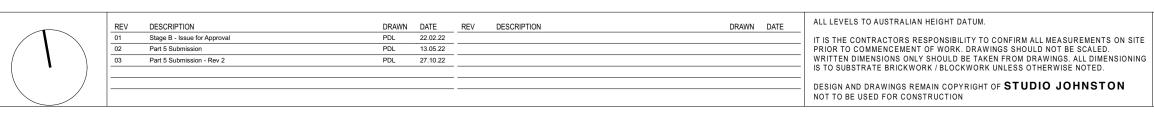
Proposed Shadow











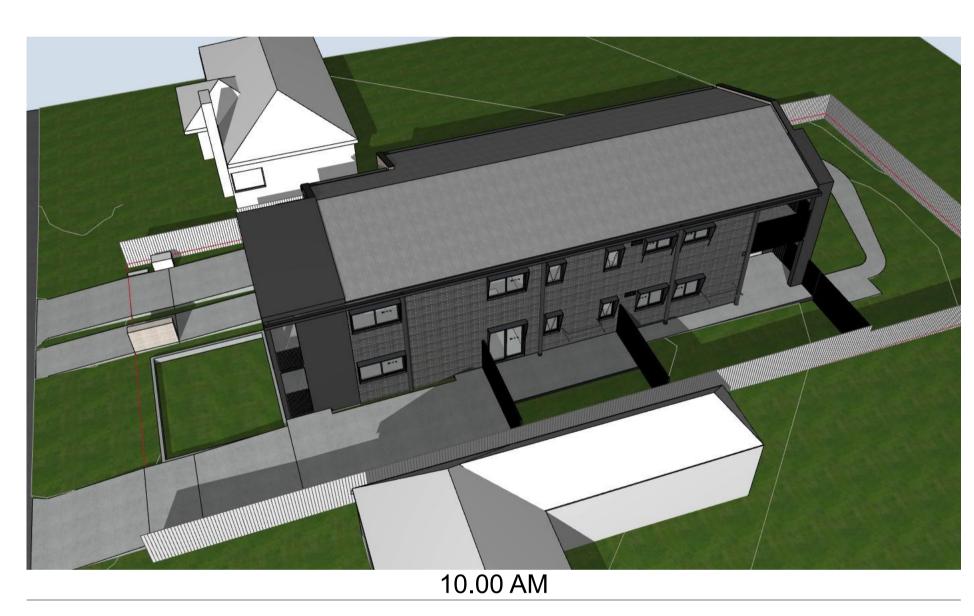




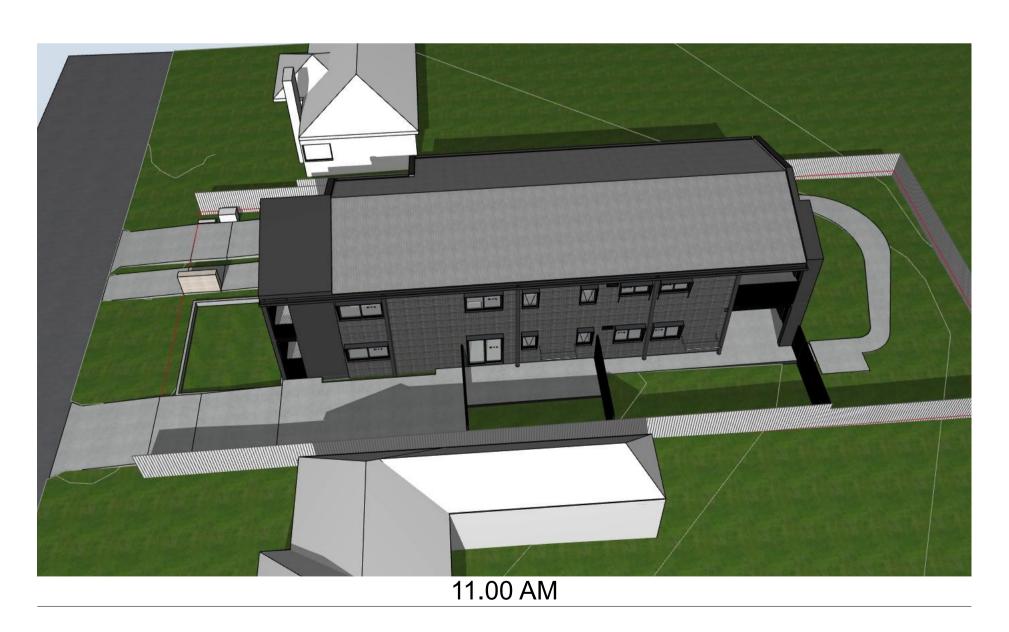


















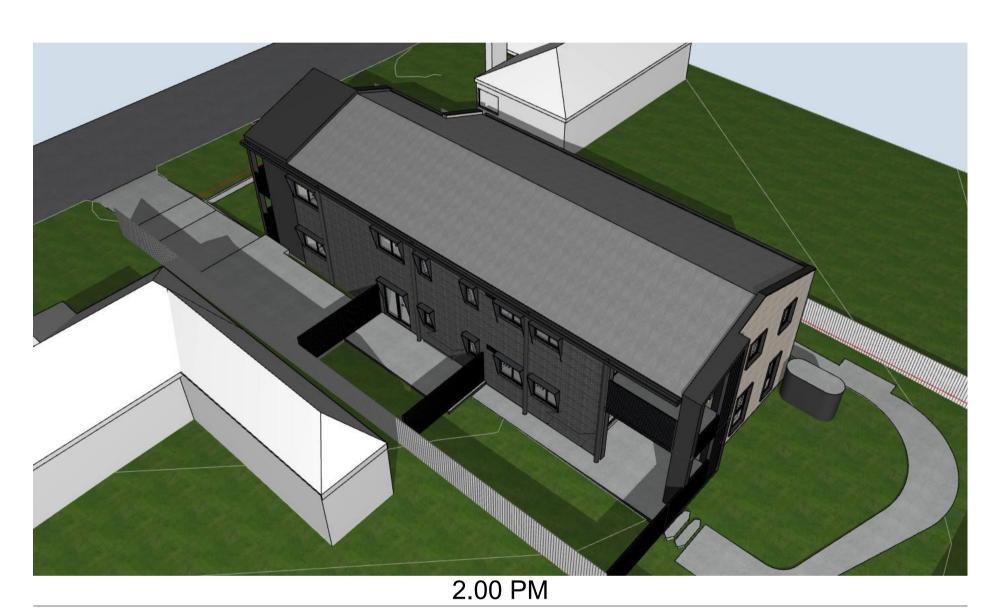


View from sun 21 June















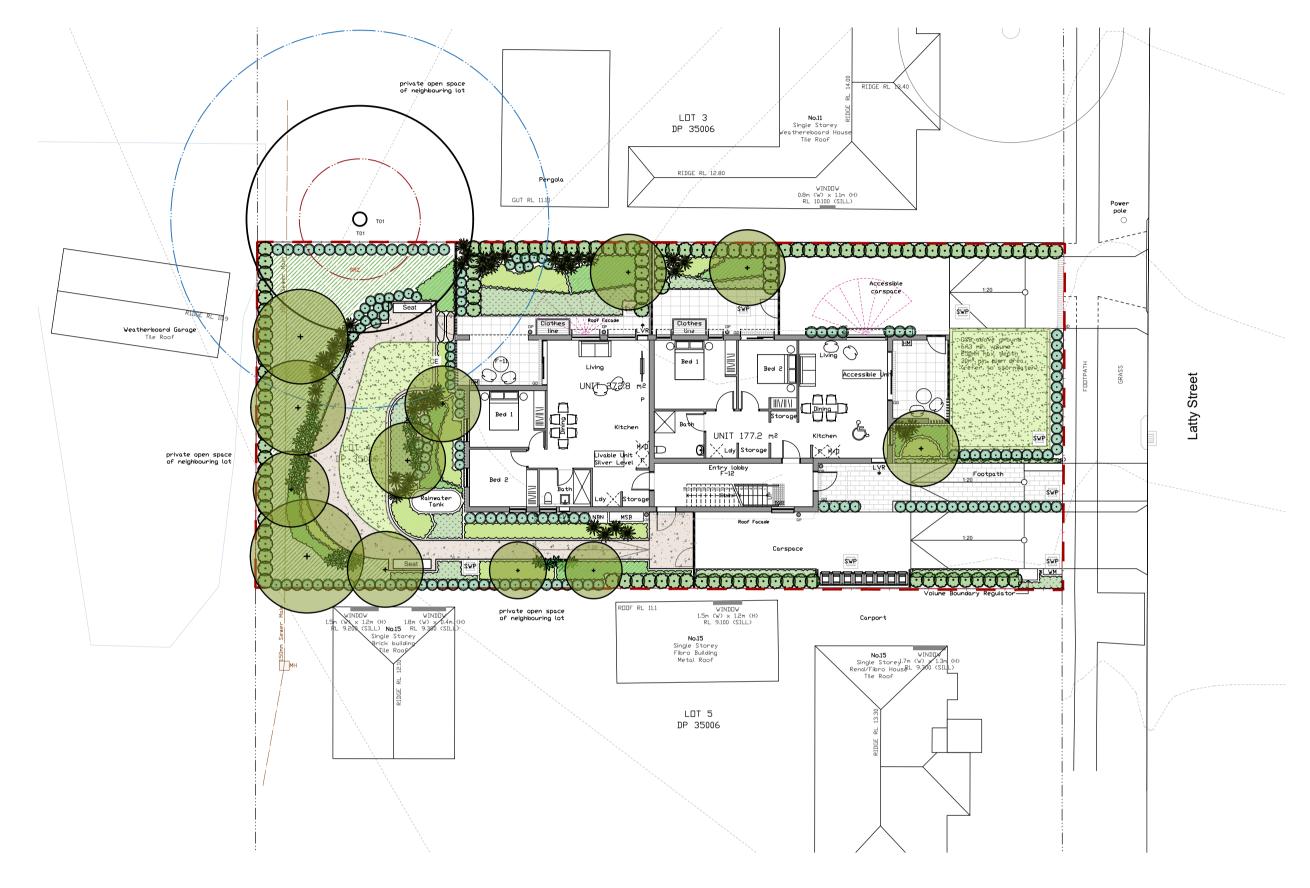
# 13 Latty Street, Fairfield - LAHC

# Landscape Development Application

### **Drawing Schedule**

Drawing Number	Drawing Title	Scale
000	Landscape Coversheet	N/A
100	Landscape Plan	1:100
500	Details and Specifications	N/A

Symbol	Botanic Name	Common Name	Height x Width	Pot Size	Spacing	Quantity
			(m)			
	Trees					
Cm	Corymbia maculata	Spotted Gum	30 x 10	100L	As Shown	1
LiN	Lagerstroemia indica x fauriei 'Natchez'	White Crepe Myrtle	5 x 4	100L	As Shown	3
Md	Melaleuca decora	White Feather Honeymyrtle	6 x 4	75L	As Shown	2
TL	Tristaniopsis 'Luscious'	Water Gum	10 x 8	75L	As Shown	4
Er	Elaeocarpus reticulatus 'Prima Donna'	Blueberry ash	5 x 4	75L	As Shown	2
	Shrubs / Accents					
ABP	Anigozanthos 'Bush Pioneer'	Kangaroo Paw	1.5 x 1	300mm	As Shown	21
ABR	Anigozanthos 'Bush Ranger'	Kangaroo Paw	0.6 x 0.5	300mm	As Shown	5
As	Adenanthos sericeus	Woolly bush	1.5 x 1.5	300mm	As Shown	70
AsM	Acmena smithii 'Minor'	Dwarf Lilly Pilly	3 x 2	300mm	As Shown	118
Са	Correa alba	White Correa	1 x 1.5	300mm	As Shown	16
De	Doryanthes excelsa	Gymea Lily	2 x 2	300mm	As Shown	39
Ec	Echium candicans	Pride of Madeira	1.5 x 1.5	300mm	As Shown	14
Wf	Westringia fruticosa 'Aussie Box'	Coastal Rosemary	0.7 x 0.7	300mm	As Shown	81
	Groundcovers/ Grasses					
Dg	Dietes grandiflora	African iris	1.2 x 1.2	150mm	5/m2	13
Dr	Dichondra repens	Kindney Weed	0.2 x 1.5	150mm	5/m2	79
Hs	Hibbertia scandens	Golden Guinea Flower	0.2 x 1.5	150mm	5/m2	54
LI	Lomandra longifolia	Mat Rush	0.7 x 1	150mm	5/m2	16
LIT	Lomandra longifolia 'Tanika'	Mat Rush 'Tanika'	0.7 x 1	150mm	5/m2	59
Мр	Myoporum parvifolium	Broad leaf form	0.2 x 1.5	150mm	3/m2	37
PN	Pennisetum 'Nanfray'	Swamp Grass	0.6 x 0.6	150mm	5/m2	55
LEG	Liriope muscari `Evergreen Giant`	Liriope	$0.7 \times 0.7$	150mm	5/m2	79
	Low Water Use Planting Matrix					
Dr	Dichondra repens	Kindney Weed	0.2 x 1.5	150mm	5/m2	50
LI	Lomandra longifolia	Mat Rush	0.7 x 1	150mm	5/m2	50
LmM	Lomandra multiflora ssp. Multiflora	Many-flowered Mat-rush	0.3 x 0.9	150mm	5/m2	50
Ju	Juncus usitatus	Common Rush	0.5 x 0.5	150mm	5/m2	50
TM	Themeda 'Mingo'	Kangaroo Grass	0.5 x 0.5	150mm	5/m2	50



Site Plan | 1:200

### NOT FOR CONSTRUCTION

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The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

Architecture Coordination Architecture Coordination **Updated Submission Updated Submission** B Final Issue for Development Application JR SB 05.05.2022 A Issue for Development Application

SJ CK 25.10.2022 SJ CK 17.10.2022 SJ SB 13.05.2022 SJ SB 13.05.2022 JR SB 15.02.2022 Issue Revision Description Drawn Check Date

Legend



Fax: (61 2) 9698 2877

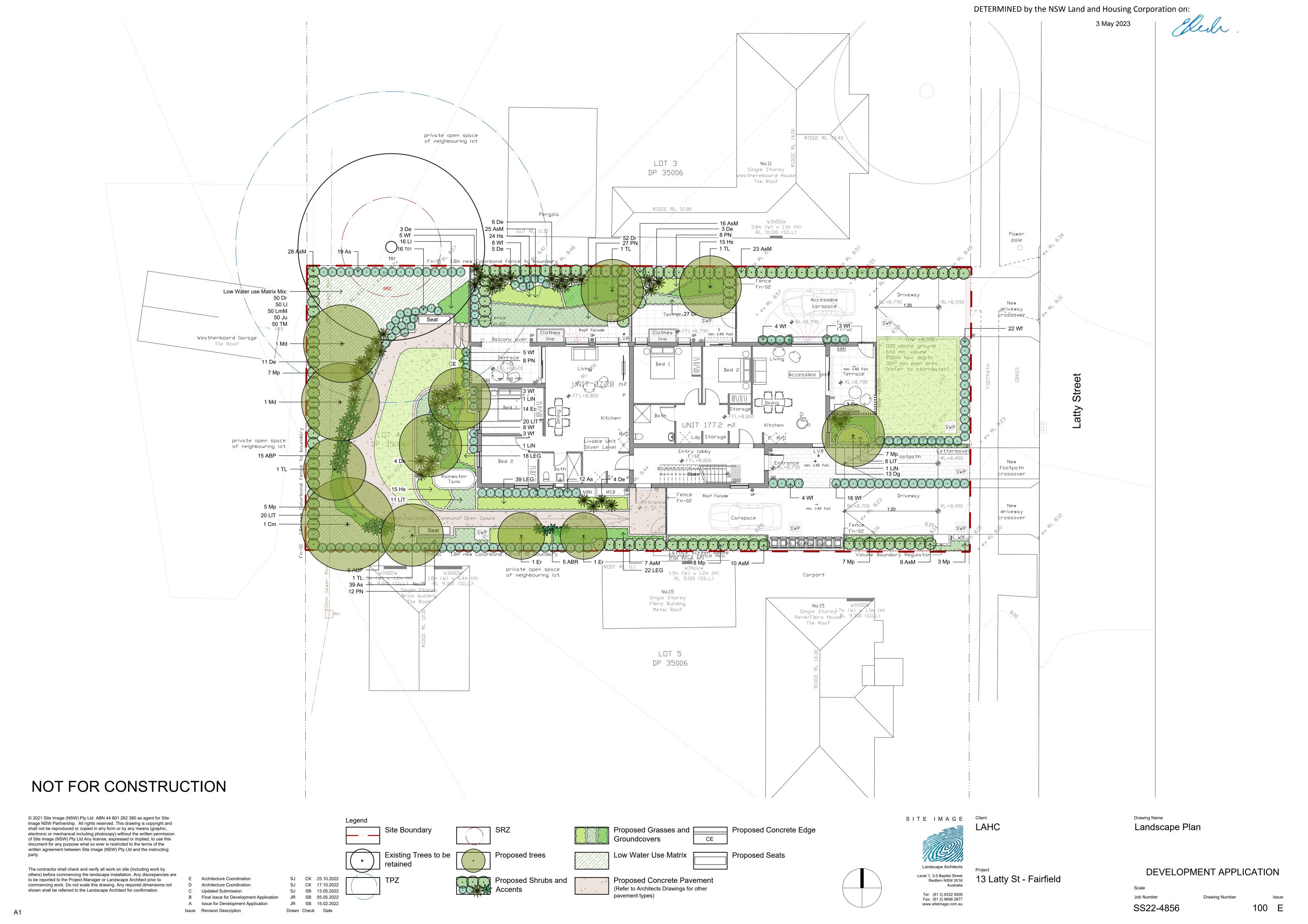
www.siteimage.com.au

SITE IMAGE Client 13 Latty St - Fairfield

**Drawing Name** Coversheet

DEVELOPMENT APPLICATION

Job Number SS22-4856





### **GENERAL NOTES**

All plans and details included in the project documents shall be read in form consistent with the species or variety; conjunction with this specification. All structural and civil works components of the landscape design shall be referenced to engineers' natural climatic conditions prevailing at the site, and in particular details and specifications. Read this specification in conjunction with the plant and materials schedule on this drawing. If in doubt about any • Grown in final containers for not less than twelve weeks; detail or if conflicts are found in the documents, seek advice.

### **Workmanship and Materials**

The whole of the landscape works shall be carried out by a competent, relation to their container. trained and qualified landscape contractor who is experienced in horticultural practices, landscape construction and planting techniques. Plant Installation The landscape contractor shall hold a current Building Contractors License and/or be a financial member of LNA Landscape Association NSW & ACT or equivalent organisations in other states.

### **EXISTING TREES**

### Trees to be Retained and Protected

Identify and mark trees and shrubs to be retained using a suitable non-injurious, easily visible and removable means of identification. Protect from damage the trees and shrubs to be retained, including those beyond the site area, both above and below the ground. If a tree becomes damaged during the works or it is proposed to perform work 

Embankment Stabilisation on a tree, give written notice immediately and obtain instructions.

### Work near Trees

Keep the area of the drip-line free from construction material and Do not remove topsoil from, or add topsoil to, the area within the drip-line of trees.

### **EARTHWORKS**

### **Excavation, Trimming and Filling**

Except as otherwise note in the contract, bulk excavation is excluded from the landscape works. Trim and fill the excavated ground surfaces accordance with manufacturer's recommendations. to achieve design levels to accommodate finish materials as detailed. Compact the finished surface as required for the finished ground treatment.

### Sub-soil Drainage

supply and install sub-soil drainage pipes as required for the new works to ensure that all gardens are well drained. Connect the sub-soil depth drainage pipes to the nearest downstream stormwater pits. Include pipe filter socks.

### **HARDWORKS**

Garden Walls, Fences, Steps, TGSI and Edging Construct garden walls as shown on plan, as detailed and of the

material scheduled. Provide footings, step nosings, tactile surfaces to • Advanced (>100 lt): 3 off 50 x 50 x 2400mm. comply with standards and applicable legislation.

### **SOFTWORKS**

### Soil Testing

Undertake at least two (2) soil tests, in locations as advised by Project use of maximum hose lengths of 30m. Manager, and provide results and recommendations for the improvement of plant growth and to adjust the soil to achieve appropriate planting medium (including pit levels) for successful plant growth.

finished design levels. Shape the subsoil to fall to subsoil drains where applicable. Do not excavate within the drip line of trees to be retained. Excavate all turf areas to bring the subsoil to at least 100mm below LANDSCAPE MAINTENANCE finished design levels. Shape the subsoil to fall to subsoil drains where applicable. Do not excavate within the drip line of trees to be retained. 
The Landscape Contractor shall rectify defects during installation and by hand. During cultivation, thoroughly mix in materials required to be shall include, but not be limited to, the following: incorporated into the subsoil, as recommended in the soil testing • Replacing failed plants; results and to manufacturer's recommendations. Trim the surface to Pruning; design levels after cultivation.

Import topsoil for the garden and turf areas, unless the topsoil can be • Maintaining mulch; provided from material recovered from the site, as recommended in the • Mowing and top dressing; soil testing results. Spread the topsoil on the prepared subsoil and • Irrigation and watering; grade evenly, compact lightly and uniformly in 150mm layers. Avoid • Erosion control; and differential subsidence and excess compaction and produce a finished • Weeding and rubbish removal. topsoil surface which has the following characteristics:

- flush with adjoining hard surfaces such as paths and edge;
- Smooth and free from stones or lumps of soil; • Graded to drain freely, without ponding, to catchment points;
- Graded evenly to adjoining surfaces; and Ready for planting.

### Compost Provide, in accordance with AS 4454, well rotted vegetative material or

Fertiliser Provide proprietary fertilisers, delivered to the site in sealed bags

animal manure, free from harmful chemicals, grass and weed growth.

### marked to show manufacturer or vendor, weight, fertiliser type, N:P:K ratio, recommended uses and application rates.

Supply plants in accordance with the landscape drawings and

schedules, which have the following characteristics:

• Large healthy root systems, with no evidence of root curl, restriction Vigorous, well established, free from disease and pests, of good

Hardened off, not soft or forced, and suitable for planting in the

 Trees, unless required to be multi-stemmed, shall have a single leading shoot; and • Containers shall be free from weeds and of appropriate size in

shade conditions:

Following excavation of the planting hole place and spread 15gms of wetting agent pre-mixed with one (1) litre of water. Place the plant correctly orientated to north or for best presentation. Backfill the planting holes with specified topsoil mixture. Lightly tamp and water to eliminate air pockets. Ensure the topsoil is not placed over the top of the rootball. Keep the plant stem at the same height above the ground • as it was above the soil in the container. Apply fertiliser, as recommended in the soil testing results or in accordance with the

Where necessary to prevent soil erosion or soil movement, stabilise embankments. As a minimum this should be on slopes >1:3. Stabilise • embankments using biodegradable fibre reinforced with heavy weight plants remain correctly staked. Remove those not required at the end polymer mesh. Lay mesh from top to bottom of slope. Install in debris. Do not place bulk materials and harmful materials under or near accordance with manufacturer's specification, including 300 x 300 mm • trees. Do not place spoil from excavations against tree trunks. Prevent anchor trenches at top and bottom, backfilled with soil over the mesh wind-blown materials such as cement from harming trees and plants. and compacted, and U-shaped galvanised steel pegs at 1000 mm centres and 250mm centres at edge overlaps. Plant after matting is

Supply and install root control barriers to all new tree plantings adjacent to walls, paths and all trunk service trenches, where their proximity poses a threat to the stability of the infrastructure. Install in

Mulch shall be approved recycled wood fibre or pine bark mulch. Place control devices in a tidy and weed free condition and reinstate as mulch in all garden beds to a depth of 75mm, after all specified plants necessary to ensure control measures are effective where deemed are installed. Keep mulch clear of all plant stems and rake to an even necessary. Keep the excavated works drained and free of standing water. Allow to surface flush with the surrounding surfaces evenly graded between •

Stakes shall be durable hardwood, straight, free of knots and twists, pointed at one end, in the following quantities and sizes for each of the various plant pot sizes: • Plants (>25 lt): 1 off 38 x 38 x 1200mm;

All landscape areas are proposed to be manually irrigated. Hose taps should be installed where practical at locations to allow the

Semi-advanced plants (>75 lt): 2 off 50x50x 1800mm;

Watering must be carried out at regular intervals. This should be high frequency immediately after installation and as required to establish planting and at times of low rainfall.

Frequency to be adjusted as required at all times to maintain healthy Excavate all garden beds to bring the subsoil to at least 300mm below plant growth.

Cultivate the subsoil to a further depth of 100mm. Remove stones that become apparent in the works under normal use for the duration of exceeding 25mm, clods of earth exceeding 50mm, and weeds, rubbish the contract Defects Liability Period. The Landscape Contractor shall or other deleterious material brought to the surface during cultivation. maintain the contract areas by the implementation of industry accept Do not disturb services or tree roots, if necessary cultivate these areas horticultural practices for 52 weeks. The landscape maintenance works

- Insect and pest control;
- Fertilising; Stakes and ties;

### • Finished to design levels, allowing for mulch or turf, which is to finish Maintenance Log Book

Implement and keep a maintenance log book recording when and what maintenance work has been undertaken and what materials, actions and decisions have been used, implemented and concluded to keep the landscape always looking its best.

### **Maintenance Activities**

Schedule the following activities to occur on a timely basis.

Plant replacement - Replace plants that have failed to mature, die or are damaged. Replacement plants shall be in a similar size and quality and identical species or variety to the plant that has failed. Replacement of plants shall be at the cost of the landscape contractor unless advised otherwise. If the cause of the failure is due to a controllable situation then correct the situation prior to replacing

• **Pruning** - Prune dead wood, broken limbs, dead or infected foliage and as needed to develop strong, healthy plants to achieve the

shape and form expected of the plant type.

### Insect and pest control - Avoid spraying:

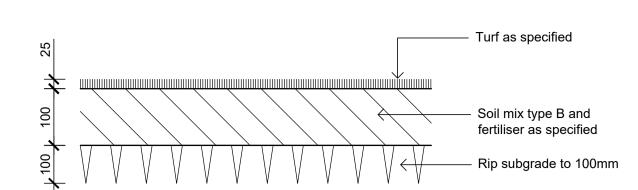
- if ever possible: in wet weather or if wet weather is imminent;
- if target plants are still wet after rain;
- in windy weather; and if non-target species are too close.
- Immediately report to the Project Manager any evidence of intensive weed infestation, insect attack or disease amongst plant material. Submit all proposals to apply chemicals and obtain approval before starting this work. When approved, spray with herbicide, insecticide, fungicide as appropriate in accordance with the manufacturers' recommendations. Record in the logbook all relevant details of
- Product brand / manufacturer's name, Chemical / product name,
- Chemical contents, Application quantity and rate,
- Date of application and location, Results of application, and

spraying activities including:

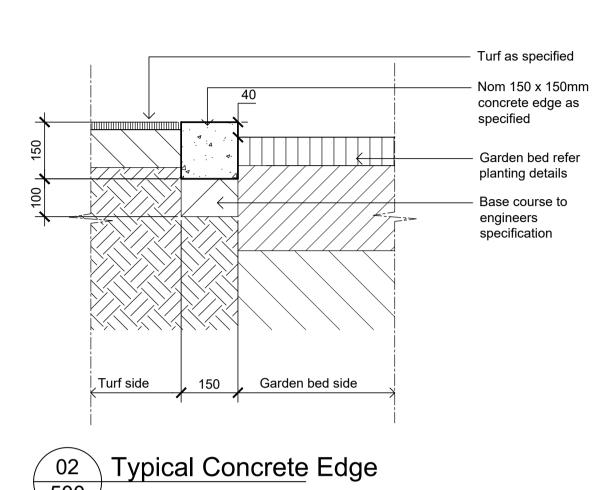
- Use approval authority. Fertilising - Fertilise gardens with a proprietary slow release fertiliser applied in accordance with the manufacturer's directions and recommendations. Record in the logbook all relevant details of manufacturer's recommendations around the plants in the soil at the
  - fertilising including:
  - O Product brand / manufacturer's name, Fertiliser / product name,
  - Application quantity and rate, and Date of application and location.
  - Stakes and ties Adjust and replace as required to ensure of the planting establishment period (Defects Liability Period).
  - Maintaining mulch Maintain the surface in a clean, tidy and weed free condition and reinstate the mulch as necessary to ensure
  - correct depth as specified. **Mowing and top dressing** - Mow the turf to maintain a grass height of between 30-50mm. Do not remove more than one third of the grass height at any one time. Remove grass clippings from the site after each mowing. Top dress to a maximum of 10mm to fill
  - depressions and hollows in the surface. Irrigation and watering - Maintain the irrigation system to sure that each individual plant receives the required amount of water to maintain healthy and vigorous growth, adjust and rectify as required.

Provide additional watering, if necessary. • **Erosion control** - Where necessary, maintain the erosion

Weeding and rubbish removal - During the plant establishment design surface levels. Over fill to allow mulch to settle to the specified period remove by hand, rubbish and weed growth that may occur or re-occur throughout all planted, mulched and paved areas. The contractor shall target weeds that are capable of producing a major infestation of unwanted plants by seed distribution. Whenever possible, time weed removal to precede flowering and seed set.

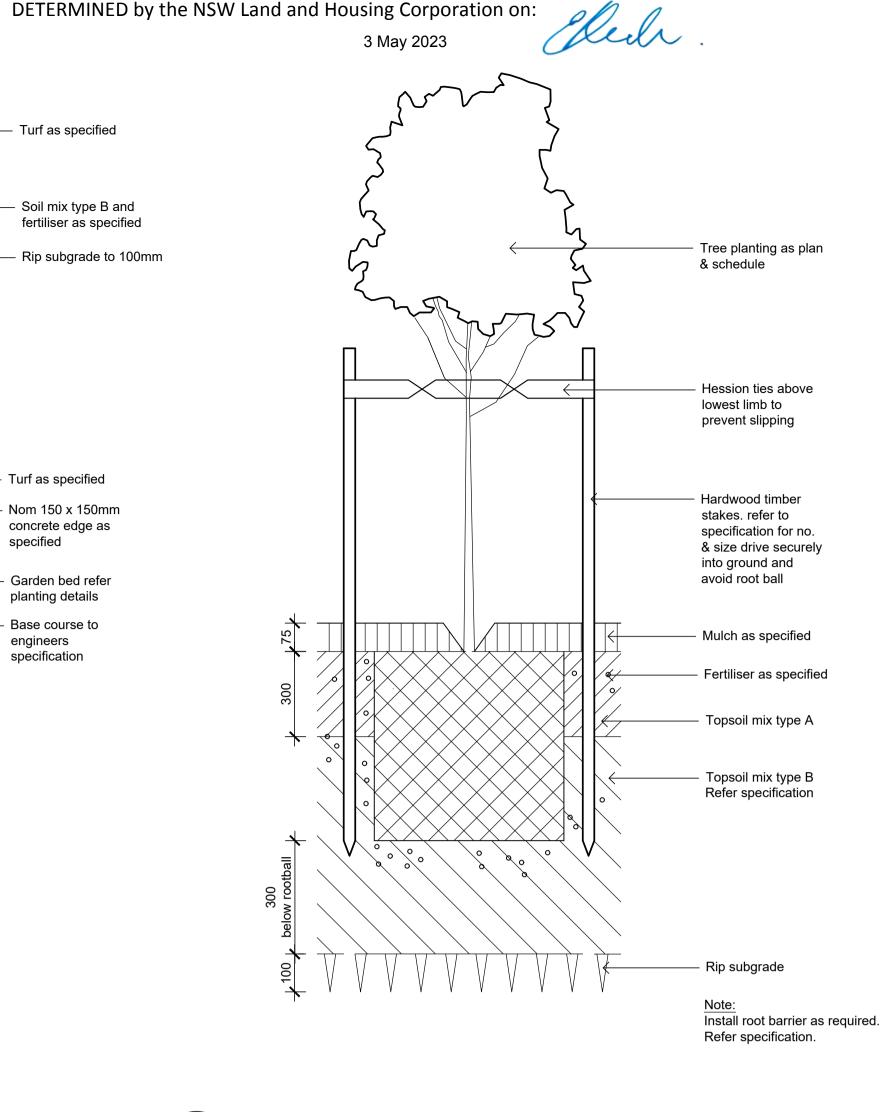


# Detail Turf on Even Grade

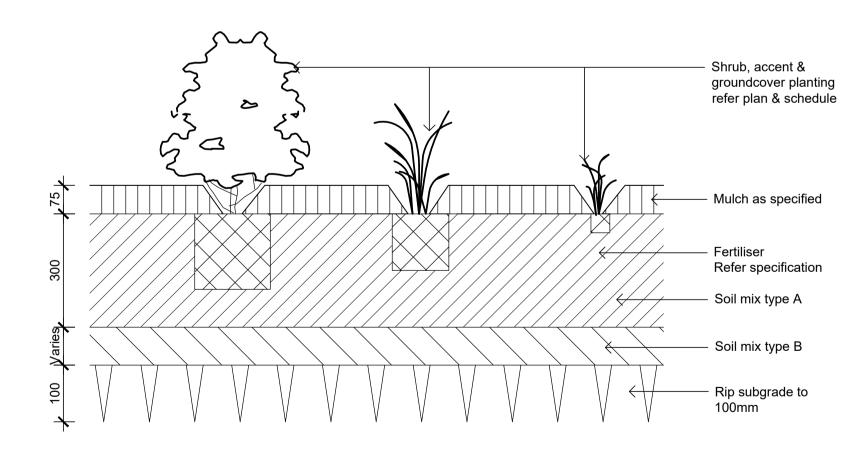


### Maintenance Program

	Activity			Fr	equen	СУ			Action
		D	W	2W	3W	М	ЗМ	6M	
1	Logbook	+		+		+			Complete a logbook entry every day at site and at least every two weeks. All actions listed below require a logbook entry. Upon request, make the logbook available for inspection. Submit copies of new entries in the logbook to the Contract Administrator on a monthlogosis. Please note that more frequent, short, occasional inspection should result in less maintenance work when problems are observed earlier than they might otherwise have been seen.
2	Plant Replacement			+		+			Inspect and replace failed plants within 2 weeks of observation of failure. Match species, size (original) and location of new with old.
3	Mulch			+		+			Inspect and replace mulch deficiencies within 2 weeks of observation. Prior to placing new mulch aerate the soil by fork turning to a depth of at least 100mm, roughly level the soil and then place mulch. Do not disturb major plant roots while aerating soil.
4	Erosion Control			+					Inspect every two weeks and repair ground, soil and mulch immediately. Maintain erosion control device as necessary.
5	Stakes and ties			+					Inspect every two weeks, adjust and/or replace as necessary but remove as plants mature and are able to support themselves.
6	Weed and Rubbish removal			+					Inspect and remove immediately upon observation. Leave no waste on site. Dispose of waste material at a designated waste disposal site
7	Pruning			+					Inspect every 2 weeks and prune as necessary to remove dead wood, improve plant shape and promote healthy vigorous new growth.
8	Spraying			+					Inspect every 2 weeks and action as necessary. Do not spray if other non-chemical methods will satisfy the need to remove insects. Spray for disease control only when absolutely necessary.
9	Urgent Works		+						Complete within 1 week (7 days) of notification. Inspect and clear drains.
10	Planting and fertilising			+			+		Inspect every 2 weeks and remove spent flowers and dead stalks as they become apparent. Fertilise gardens every 3 months or other frequency in accordance with fertiliser manufacturer's directions.
11	Watering	+		+					Water when and where necessary every day at site and at least every 2 weeks generally. Do not allow soil and plants to dehydrate. Allow for prolonged rain, windy and dry periods. Water in the early morning or late afternoon to avoid excessive evaporation during the heat of the day.
12	Mowing, top dressing and edging			+		+		+	Summer fortnightly. Winter monthly. Top-dress 6 monthly.



# Detail 75-200L Tree Planting on Grade



### Detail Shrub Accent & Groundcover Planting on Grade 500 / 1:10

# Tel: (61.2) 8332 5600 Fax: (61 2) 9698 2877

www.siteimage.com.au



**Details and Specifications** 

DEVELOPMENT APPLICATION

Job Number SS22-4856

500 E

# NOT FOR CONSTRUCTION

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The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

SJ CK 25.10.2022 **Architecture Coordination** SJ CK 17.10.2022 **Architecture Coordination** Updated Submission B Final Issue for Development Application A Issue for Development Application Issue Revision Description

Legend

SJ SB 13.05.2022 JR SB 05.05.2022 JR SB 15.02.2022 Drawn Check Date

# CIVIL DESIGN

## FOR PROPOSED DEVELOPMENT AT 13 Latty Street, Fairfield, NSW

### **GENERAL NOTES**

- 1. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION.
- 2. THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN. 3. IT IS THE RESPONSIBILITY OF THE TENDERER TO SEEK CLARIFICATION WHERE DOCUMENTATION IS CONFLICTING OF UNCLEAR WHERE NO CLARITY IS OBTAINED. THE TENDERER IS TO
- ALLOW FOR BOTH INTERPRETATIONS IN THEIR PRICING 4 CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN
- ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER. 5. SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE
- DIRECTED OR REMOVED FROM SITE. 6. ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH
- 7. ALL DRAINAGE LINES THOUGH ADJACENT LOTS SHALL BE CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S
- 8. 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. 9. THESE PLANS SHALL BE A READ IN CONJUNCTION WITH OTHER RELEVANT CONSULTANTS' PLANS SPECIFICATIONS CONDITIONS OF DEVELOPMENT CONSENT AND CONSTRUCTION CERTIFICATE REQUIREMENTS.
- 10. 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.
- 11. THE BUILDER IS TO VERIFY ALL LEVELS ON SITE PRIOR TO COMMENCING CONSTRUCTION. 12. 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 13. ALL TERRACE FLOOR AND PLANTER GRATES TO HAVE FIRE
- COLLARS FITTED 14. ALL PITS HAVING AN INTERNAL DEPTH THAT EXCEEDS 1.0m SHALL BE PROVIDED WITH GALVANIZED STEP IRON'S AT 300 mm CENTRES
- PLACED IN A STAGGERED PATTERN AND SHALL BE IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS AS4198-1994. 15. ALL MULCHING TO BE USED WITHIN THE AREA DESIGNATED AS ON SITE DETENTION STORAGE SHALL BE OF A NON-FLOATABLE
- MATERIAL SUCH AS DECORATIVE RIVER GRAVEL. BARK MULCHING SHALL NOT BE USED WITHIN THE DETENTION STORAGE AREA. 16. 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 17. GREENVIEW IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY

SURVEY INFORMATION PROVIDED ON THIS DRAWING.

- 18. ALL LEVELS SHOWN ARE EXPECTED TO BE TO A.H.D. 19. ALL CHAINAGES AND LEVELS ARE IN METERS, AND DIMENSIONS IN
- MILLIMETRES, UNLESS NOTED OTHERWISE. 20. THE SURVEY INFORMATION ON THIS DRAWING HAS BEEN PROVIDED BY THE ARCHITECT
- 21. CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A REGISTERED SURVEYOR
- 22. W.A.E DRAWINGS BY A REGISTERED SURVEYOR ARE REQUIRED PRIOR TO CERTIFICATION OF DRAINAGE. 23. 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

- 1. RAINWATER SUPPLY PLUMBING TO BE CONNECTED TO OUTLETS WHERE REQUIRED BY BASIX CERTIFICATE (BY OTHERS) 2. NO DIRECT CONNECTION BETWEEN TOWN WATER SUPPLY AND THE RAINWATER SUPPLY
- 3. PROVIDE AN APPROVED STOP VALVE AND/OR PRESSURE LIMITING VALVE AT THE RAINWATER TANK 4. PROVIDE AT LEAST ONE EXTERNAL HOSE COCK ON THE TOWN WATER SUPPLY FOR FIRE FIGHTING.
- 5. 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.
- 6. ALL PLUMBING WORKS ARE TO BE CARRIED OUT BY LICENSED PLUMBERS IN ACCORDANCE WITH AS/NZ3500.1 NATIONAL PLUMBING AND DRAINAGE CODE.
- 7. PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED OUT BY A LICENSED ELECTRICIAN.
- 8. ONLY ROOF RUN-OFF IS TO BE DIRECTED TO THE RAINWATER
- TANK SURFACE WATER INLETS ARE NOT TO BE CONNECTED. 9. PIPE MATERIALS FOR RAINWATER SUPPLY PLUMPING 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)
- 10. EVERY RAINWATER SUPPLY OUTLET POINT AND THE RAINWATER TANK ARE TO BE LABELLED 'RAINWATER' ON A METALLIC SIGN IN ACCORDANCE WITH AS1319
- 11. ALL INLETS AND OUTLETS TO THE RAINWATER TANK ARE TO HAVE SUITABLE MEASURES PROVIDED TO PREVENT MOSQUITO AND
- 12. ALL DOWNPIPES CHARGED TO THE RAINWATER TANK ARE TO BE SEALED UP TO GUTTER LEVEL AND BE PRESSURE TESTED AND
- 13. 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

2 | 13.04.2022 | JPS | ISSUED FOR APPROVAL

1 03.02.2022 JPS ISSUED FOR APPROVAL

REV. DATE BY

### **EARTHWORK NOTES**

- 1. 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. 5. CUT AND FILL OVER THE SITE TO LEVELS REQUIRED. PRIOR TO ANY FILLING IN AREAS OF CUT OR IN EXISTING GROUND,
- WEIGHT OF 5 TONNES WITH A MINIMUM OF 10 PASSES. 7. 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%.

PROOF ROLL THE EXPOSED SURFACE WITH A ROLLER OF MINIMUM

- 8. FOR ON SITE FILLING AREAS, THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
- 9. 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 10. 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
- 11. COMPACTION TESTING SHALL BE CARRIED OUT AT THE RATE OF 2 TESTS PER 1000SQ METRES PER LAYER BY A REGISTERED NATA LABORATORY. THE COSTS OF TESTING AND RE-TESTING ARE TO BE ALLOWED FOR BY THE BUILDER.
- 12. BATTERS TO BE AS SHOWN, OR MAXIMUM 1 VERT: 4 HORIZ. 13. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING FINAL
- 14. ALL BATTERS AND FOOTPATHS ADJACENT TO ROADS SHALL BE TOP SOILED WITH 150mm APPROVED LOAM AND SEEDED UNLESS OTHERWISE SPECIFIED.

### DRAINAGE INSTALLATION

### RCP CONVENTIONAL

### INSTALLATIONS & ROAD CROSSINGS

- 1. SUPPLY & INSTALLATION OF DRAINAGE WORKS TO BE IN ACCORDANCE WITH THESE DRAWINGS. THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN STANDARDS.
- BACKFILL SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. A GRANULAR GRAVEL AGGREGATE MATERIAL (<10mm) BACKFILL IS RECOMMENDED FOR THE BEDDING, HAUNCH SUPPORT AND SIDE ZONE DUE TO IT'S SELF COMPACTING ABILITY
- 3. A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARREL AND THE TRENCH WALL FOR PIPES < 600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA AND D/6 CLEARANCE FOR PIPES > 1200 DIA. BEDDING 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

		•				
М	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

e.COMPACTION TESTING SHALL BE CARRIED OUT BY AN 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 ARCHITECTURALS 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. 4. ALL DOWNPIPES TO HAVE LEAF GUARDS.
- . ALL EAVES GUTTERS ARE TO BE DESIGNED TO THE 5% AEP (20YR) STORM EVENTS UNC 6. ALL EAVES GUTTER OVERFLOWS ARE TO BE IN ACCORDANCE WITH AS3500.3
- ALL BOX GUTTERS ARE TO BE DESIGNED TO CATER TO THE 1% AEP (100YR) STORM EVENTS UNO
- 8. IN ACCORDANCE WITH AS3500.3 CLAUSE 3.7.6.G, BOX GUTTERS SHALL: a. BE STRAIGHT (WITHOUT CHANGE IN DIRECTION) b. 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. d. DISCHARGE AT THE DOWNSTREAM END WITHOUT CHANGE OF DIRECTION
- (I.E. NOT TO THE SIDE); AND e. BE SEALED TO THE RAINHEADS AND SUMPS 9. 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. 10. 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 11. ALL DOWNPIPES ARE TO BE PIPE CONNECTED INTO THE FORMAL RAINWATER OR STORMWATER LINE UNLESS SPECIFICALLY NOTED ON THE DRAWINGS

### STORMWATER DRAINAGE NOTES

- 1. 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 MINIMUM INTERNAL DIMENSIONS FOR

STORMWATER AND INLET PITS

Depth to invert	Minimum internal dimensions mm						
of outlet	Recta	Circular					
	Width	Length	Diameter				
≤450	350	350	_				
≤600 >600 ≤900 >900 ≤1200	450 600 600	450 600 900	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 5. ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE
- CLASS 3 U.N.O. BY COUNCILS SPECIFICATION. 6. PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE
- **DRAWINGS** 7. MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS UNO.
- 8. ALL PIPES LOCATED IN LANDSCAPE AREAS TO HAVE 300mm COVER. WHERE NOT POSSIBLE AND COVER IS BETWEEN 150mm AND 300mm USE SEWER GRADE PIPE.
- 9. PIPES 225mm DIA AND OVER SHALL BE LAID AT 0.5% MIN. GRADE U.N.O. 10. PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O
- 11. BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY. 12. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL
- 13. 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. 14. BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO
- PITS TO MATCH PIT INVERTS 15. ALL LANDSCAPED PITS TO BE MIN 450 SQUARE U.N.O OR LARGER AS REQUIRED BY AS3500.3 TABLE 7.5.2.1
- 16. GREENVIEW RECOMMENDS ALL COURTYARDS TO HAVE 450 SQUARE PLASTIC PIT INSTALLED WITH A 150mm DIA. CONNECTION TO FORMAL DRAINAGE
- 17. ALL DRIVEWAY PITS TO BE MIN 600 SQUARE U.N.O OR LARGER AS REQUIRED BY AS3500.3 TABLE 7.5.2.1 18. ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED
- STORMWATER DRAINAGE LINE. 19. ALL STORMWATER DRAINAGE WORK TO AVOID TREE ROOTS. WHERE NOT POSSIBLE, ALL EXCAVATIONS IN VICINITY OF TREE ROOTS ARE TO BE HAND
- 20. GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION 21. ALL BASES OF PITS TO BE BENCHED (TO HALF PIPE DEPTH) TO THE INVERT OF
- THE OUTLET PIPE AND PROVIDE GALVANISED ANGLE SURROUNDINGS TO 22. ANY VARIATION TO THAT WORKS AS SHOWN ON THE APPROVED DRAWINGS ARE TO BE CONFIRMED BY THE ENGINEER PRIOR TO THE COMMENCEMENT 23 ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY
- OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS 24. ALL GRATES TO HAVE CHILDPROOF LOCKS 25. ALL WORK WITHIN COUNCIL RESERVE AREAS TO BE INSPECTED BY COUNCIL PRIOR TO BACKFILLING. 26. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO
- THE FINISHED LEVELS ONCE ISSUED BY COUNCIL. 27. WATER PROOF ALL CONCRETE BALCONIES & ROOFS TO ARCHITECTS DETAILS 28. ALL BALCONIES TO HAVE FLOOR WASTE AND 1% FALL WITH SAFETY OVERFLOW. 29. ALL SUBSOIL DRAINAGE SHALL BE A MINIMUM OF Ø65mm 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. 30. 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 EYE'S AT HIGH POINTS OR TO COUNCILS REQUIREMENTS.
- 31. ALL GRATES IN AREAS OF FREQUENT PEDESTRIAN TRAFFIC (IE FOOTPATHS, WALKWAYS, ETC.) TO BE HEELPROOF GRATE.
- 32. REFER ARCHITECTS DETAIL FOR GRATE FINISH (IE STAINLESS STEEL OR 33. 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 PEDAL 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	CARRIGEWAYS OF ROADS AND AREAS OPEN TO COMMERCIAL VEHICHLES.			
TABLE AS PER AS3996 - 2006. ENGINEER TO BE NOTIFIED IF LOAD CONDITIONS LISTED ABOVE ARE EXCEEDED.				

### 32. COVER TO PIPE TO BE AS PER TABLE BELOW:

### COVER TABLE

PIPE TYPE	COVER
PVC	300
PVC	100
PVC	100 BELOW UNDERSIDE OF PAVEMENT
STEEL	NIL BELOW UNDERSIDE OF PAVEMENT
RCP	500 BELOW UNDERSIDE OF PAVEMENT
	PVC PVC PVC STEEL

### STORMWATER DRAINAGE NOTES CONTINUED 33. 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 ALL RETAINING WALLS CLOSE TO HABITABLE AREAS BE FITTED WITH AN IMPERMEABLE MEMBRANE AND SUBSOIL DRAINAGE TO PREVENT GROUNDWATER
- 34. GREENVIEW RECOMMENDS ALL IN-GROUND STORMWATER PIPE RUNS ARE SET OUT BY THE BUILDER PRIOR TO COMMENCEMENT OF WORKS. WHERE 300MM COVER IS NOT ACHIEVED. NOTIFY ENGINEER.
- 35. 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

### ON-SITE DETENTION

- 1. ON-SITE DETENTION (OSD) TANKS ARE TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CURRENT APPLICABLE AUSTRALIAN STANDARDS INCLUDING AS3500 3 NCC AND COUNCILS' 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

### ABOVE GROUND OSD TANKS

- WHERE ABOVE-GROUND OSD SYSTEMS ARE PROPOSED TO BE LOCATED IN LANDSCAPED AREAS THE FOLLOWING CRITERIA IS RECOMMENDED IN ACCORDANCE WITH AS3500.3 N12.A:
- a. A DESIRABLE MINIMUM SLOPE FOR SURFACES DRAINING TO AN OUTLET TO BE 1:60, AND AN ABSOLUTE MINIMUM SLOPE TO BE 1:100. THE DESIRABLE MAXIMUM DEPTH OF PONDING UNDER DESIGN
- STORAGE VOLUMES IN LANDSCAPING AREAS TO BE INCREASED BY 20% TO ALLOW FOR VEGETATION GROWTH, CONSTRUCTION INACCURACIES

d. SUBSOIL DRAINS TO BE PROVIDED AROUND OUTLETS TO PREVENT THE

GROUND BECOMING SATURATED DURING PROLONGED WET WEATHER; e. WHERE THE STORAGE IS LOCATED IN AREAS WHERE FREQUENT PONDING WOULD CAUSE MAINTENANCE PROBLEMS OR INCONVENIENCE. THE FIRST 10% TO 20% OF THE STORAGE SHOULD BE IN AN AREA THAT CAN TOLERATE FREQUENT INUNDATION, SUCH AS A PAVED OUTDOOR

ENTERTAINMENT AREA, A SMALL UNDERGROUND TANK, A PERMANENT

a. DEPTHS OF PONDING TO NOT EXCEED 200mm UNDER DESIGN CONDITIONS

TRANSVERSE PAVING SLOPES WITHIN STORAGES TO BE NOT LESS THAN

- WATER FEATURE OR A ROCKERY WHERE ABOVE-GROUND OSD SYSTEMS ARE PROPOSED TO BE LOCATED IN DRIVEWAY AND CAR PARK STORAGES, THE FOLLOWING CRITERIA IS RECOMMENDED IN ACCORDANCE WITH AS3500.3 N12.B:
- 1:140; AND WHERE THE STORAGE IS LOCATED IN COMMONLY USED AREAS WHERE PONDING WOULD CAUSE INCONVENIENCE, PART OF THE STORAGE SHOULD BE PROVIDED IN AN AREA OR FORM THAT WILL NOT CAUSE A

### 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

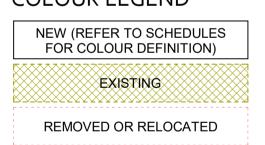
### **ANNUALLY**

ANTOALLI		
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 PITTING / SCARRING, REPLACE IF NECESSARY

### COLOUR LEGEND



	GREENVIEW CIVIL SHEET LIST	
No.	SHEET NAME	REV.
C01	NOTES & LEGENDS	6
C02	GROUND FLOOR DRAINAGE PLAN	6
C03	SITE STORMWATER DETAILS SHEET 1	6
C04	OSD CATCHMENT PLAN	6
C10	GROUND FLOOR TURNING PATHS SHEET 1	2
C11	GROUND FLOOR TURNING PATHS SHEET 2	3

### RECOMMENDED SAFETY SIGNS



### CONFINED SPACE DANGER SIGN

- 1. 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) 2. THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED
- ALUMINUM OR POLYPROPYLENE 3. SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE



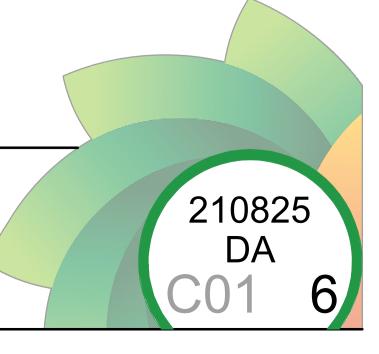
### **ABBREVIATIONS**

PROPOSED FINISHED FLOOR LEVEL PROPOSED PIT SURFACE LEVEL PROPOSED PIT INVERT LEVEL INSPECTION OPENING KERB & GUTTER

PROPOSED RAINWATER TANK

FINISHED PAVEMENT LEVE REINFORCED CONCRETE PIPE **ROLL KERB & GUTTER** FINISHED SURFACE LEVEL RAINWATER DRAINAGE OUTLET

TOP OF NEW KERB I EVEL TOP OF NEW RETAINING WALL LEVEL TOP OF WATER LEVEL RIGID PVC PIPE VERTICAL DROPPER





DESCRIPTION

13 Latty Street, Fairfield, NSW

STUDIO JOHNSTON

(02) 8544 1683 www.greenview.net.au

DRAWN: JPS

DESIGN: RC

CHECKED: AMcK

**NOTES & LEGENDS** 

**CIVIL DESIGN** 

SCALE: 1:100

- 150W GRATED DRAIN

GENERAL LEGEND

↓ ↓ LANDSCAPE ↓ ↓ BYPASS LANDSCAPE HARDSTAND ROOF AREA TO DRAIN





**EXISTING PROPOSED TREES** 

ABOVE GROUND OSD

CIV	/ - FIXTURES SCHEDULE
TYPE	DESCRIPTION
	GRATED STORMWATER PIT
	PERIMETER STRIP DRAIN
300W	GRATED STRIP DRAIN
5000L RWT	SLIMLINE TANK 5000L

CIV - STORMWATER SERVICES		
	TYPE	DESCRIPTION
	STW	STORMWATER

### **GROUND FLOOR DRAINAGE PLAN** Scale: 1:100

5000L ABOVE GROUND RAINWATER TANK

SIZE AND USAGE TO BE INACCORDANCE

NOTE: CONNECT Ø150mm RWT OVERFLOW

WITH BASIX REQUIREMENTS.

PIPE INTO STORMWATER SYSTEM

- 1. ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- 2. 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.

300W GRATED DRAIN -

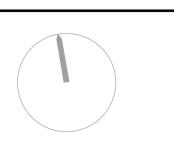
- 3. PRIOR TO COMMENCING ANY WORKS ON THE SITE. THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTION INTO COUNCIL'S KERB/DRAINAGE SYSTEM MATCH THE DESIGN LEVELS. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER IMMEDIATELY
- 4. ALL STORMWATER DRAINAGE WORK TO AVOID TREE ROOTS. WHERE NOT POSSIBLE, ALL EXCAVATIONS IN VICINITY OF TREE ROOTS ARE TO BE HAND DUG.
- 5. 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.
- 6. PROVIDE GALVANISED ANGLE SURROUNDINGS TO GRATE WHERE IN TRAFFICABLE AREAS.
- 7. PROVIDE 100mm GAP IN BASE OF FENCE FOR EMERGENCY OVERFLOWS. 8. PROVIDE SUBSOIL DRAINAGE AND OUTLETS TO ALL ON PODIUM PLANTER BOXES. OUTLET PIPES NOT SHOWN
- FOR CLARITY OF DOCUMENTATION.
- 9. ALL DOWNPIPES ARE TO BE PIPE CONNECTED INTO THE FORMAL RAINWATER OR STORMWATER LINE UNLESS SPECIFICALLY NOTED ON THE DRAWINGS OTHERWISE.

### • FAIRFIELD LGA

- NOTE: NO OSD FOR SINGLE DWELLINGS OR DUAL OCS WITH IMP < 70% DESIGN METHOD: REDUCE 5YR AND 100YR POST-DEVELOPMENT FLOWRATES TO PRE-DEVELOPMENT FLOWRATES, AND ACHIEVE PSD FOR 100yr 9hr STORM
- PSD 100yr 9 hr = 140 L/s/ha SITE AREA = 780m<sup>2</sup>
- PSD 100yr 9hr = 10.9 = 11 L/s PRE-DEVELOPMENT IMP% = 196m<sup>2</sup> [25%]
- POST-DEVELOPMENT AREAS: - AREA BYPASSING OSD = 342m<sup>2</sup> [58m<sup>2</sup> IMP] @ 17%
- TO OSD = 438m<sup>2</sup> [298m<sup>2</sup> IMP] @ 68% IMP. LONGEST FLOW PATH = 45m @ 0.2%
- USE DRAINS RUNOFF-ROUTING MODEL TO ARR2019 METHODOLOGY (10 PATTERNS PER DURATION)
- DRAINS PARAMETERS: IL = 0mm, CLR = 0.4\*1.9 = 0.76 mm/hr, N\* (HARD) = 0.015, N\*(GRASS) = 0.170
- SSR100 (1%AEP) =  $5.8m^3$ Q5 PRE / POST = 12 / 12 L/s
- Q100 PRE / POST = 25 / 20 L/s
- Q100yr 9HR = 9 L/s < 11 L/s [OK]
- VOLUME PROVIDED IN ABOVE-GROUND PONDING = 6m3 [OK] ORIFICE CONTROL [TWL 8.50, GL 8.25, IL 7.63] = Ø70mm [DRAINS]

C	Greenview CONSULTING (02) 8544 1683 www.greenview.net.au

150W GRATED DRAIN -



**CIVIL DESIGN** 

BUILDER TO VERIFY EXISTING PIT GRATE

LEVEL AND DEPTH SURVEYS PRIOR TO

ENGINEER TO VERIFY DESIGN LEVELS.

CONSTRUCTION WORKS. NOTIFY

GROUND FLOOR DRAINAGE PLAN

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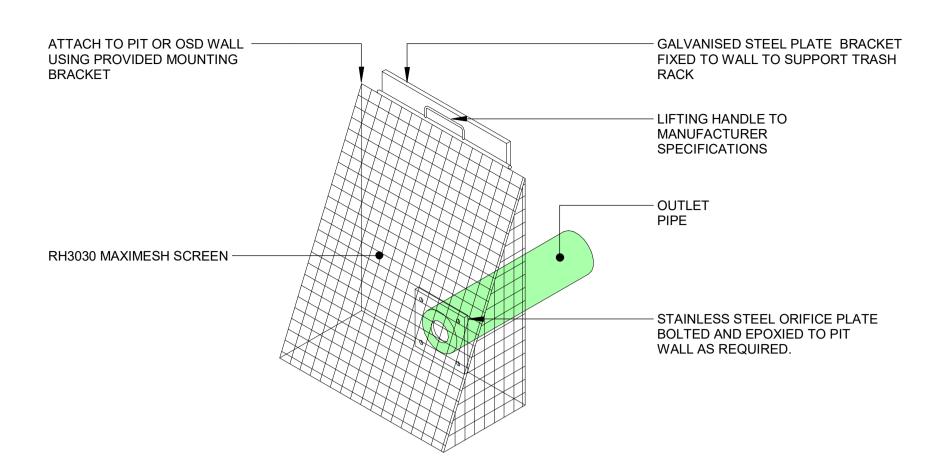
13 Latty Street, Fairfield, NSW

STUDIO JOHNSTON

PROPOSED DEVELOPMENT

DESIGN: RC

CHECKED: AMcK SIZE: A1 SCALE: As indicated

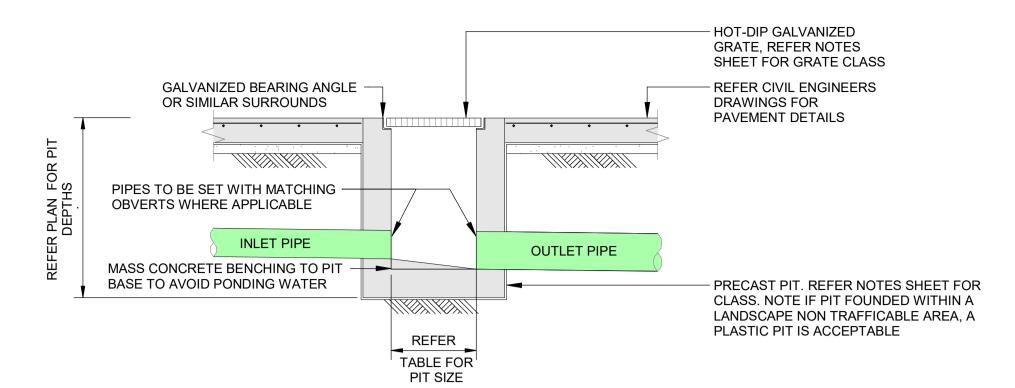


PROVIDE PRE-MADE TRASH SCREEN AS PER MASCOT ENGINEERING "MULTI-PURPOSE TRASH SCREENS" OR APPROVED EQUIVALENT

TYPICAL TRASH SCREEN DETAIL Scale: 1:10

- HEAVY DUTY GRATE GALVANIZED BEARING ANGLE — SURROUNDS OR SIMILAR - BITUMINOUS **FILLERBOARD** 

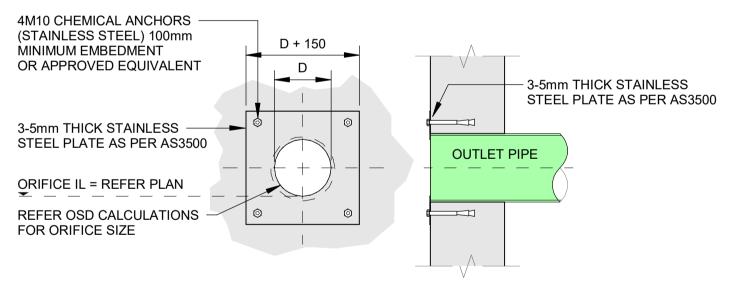
TYPICAL GRATED DRAIN DETAIL Scale: 1:20



- 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.

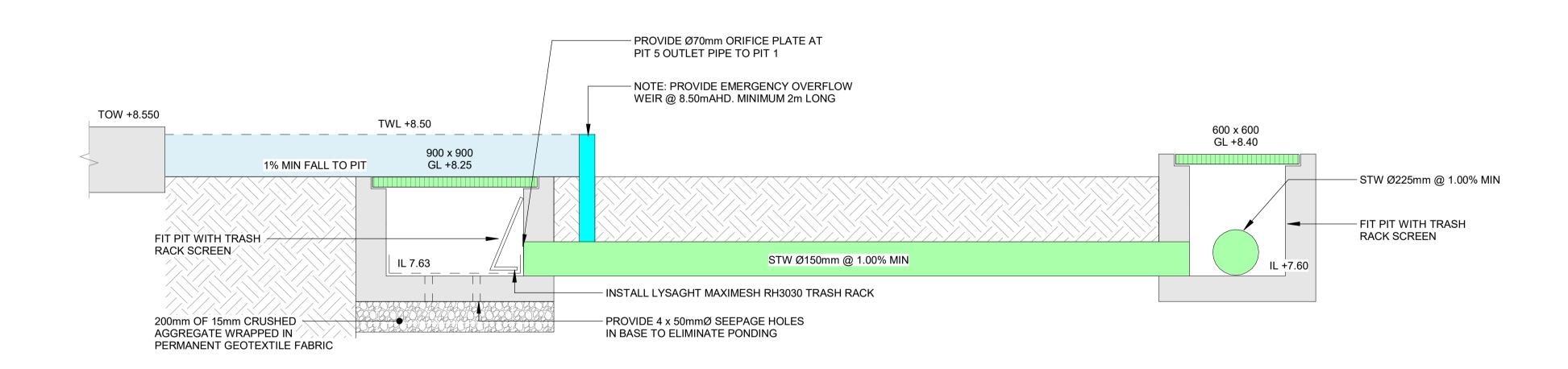
PIT SIZE	
DEPTH	PIT DIMENSION
0 - 600	450 mm x 450 mm
600 - 900	600 mm x 600 mm
900 - 1200	600 mm x 900 mm
1200 +	900 mm x 900 mm

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



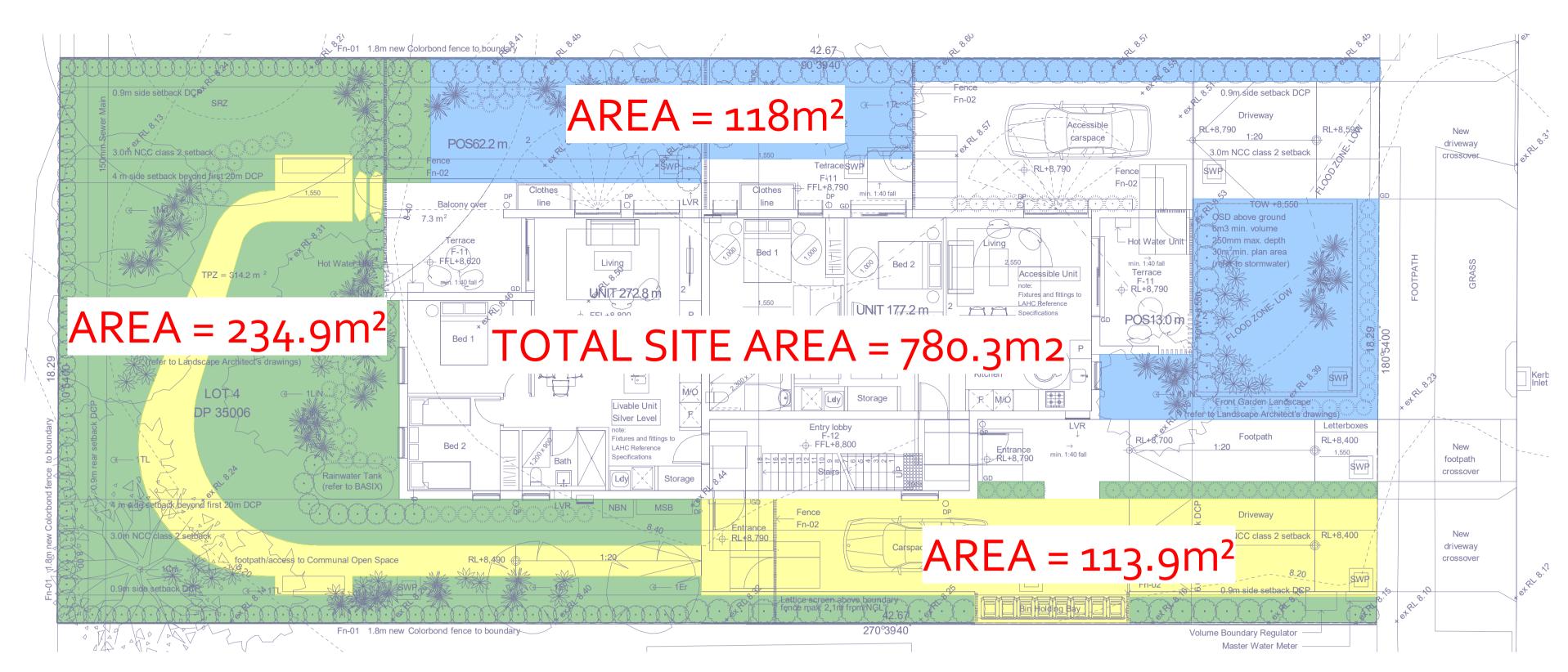


TYPICAL ORIFICE PLATE DETAIL Scale: 1:10



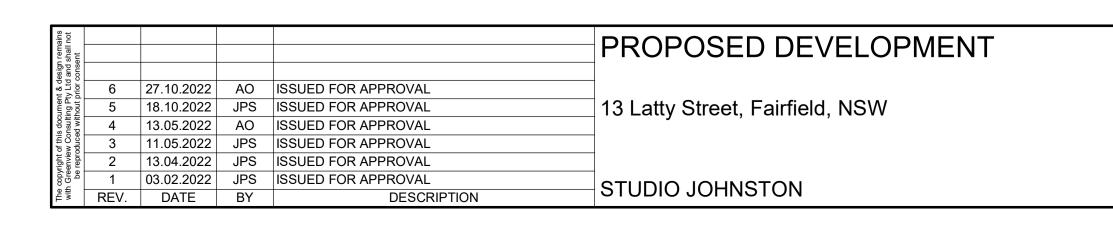
ABOVE GROUND PONDING Scale: 1:20



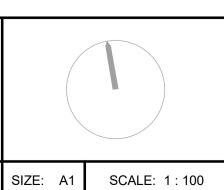


OSD CATCHMENT PLAN Scale: 1:100

TOTAL OSD BYPASS AREA = 348.8m<sup>2</sup>

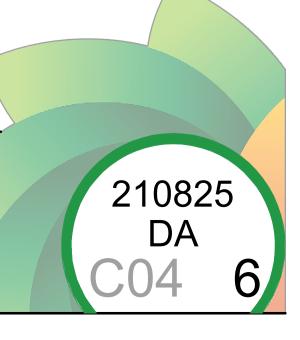






CIVIL DESIGN

OSD CATCHMENT PLAN



SANDBAGS OVERLAP

GAP BETWEEN BAGS

ACT AS SPILLWAY

ONTO KERB

# CIVIL DESIGN

## FOR PROPOSED DEVELOPMENT AT 13 Latty Street, Fairfield, NSW

### **GENERAL INSTRUCTIONS**

- 1. THIS SOIL AND WATER MANAGEMENT PLAN IS TO BE READ IN CONJUNCTION WITH OTHER ENGINEERING PLANS RELATING TO
- 2. CONTRACTORS WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE UNDERTAKEN AS INSTRUCTED IN THIS SPECIFICATION AND CONSTRUCTED FOLLOWING THE GUIDELINES OF "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION"
- DEPT OF HOUSING, 1998 (BLUE BOOK). 3. ALL SUBCONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN REDUCING THE POTENTIAL FOR SOIL
- EROSION AND POLLUTION TO DOWNSLOPE AREAS. 4. THESE PLANS SHALL BE READ IN CONJUNCTION WITH OTHER RELEVANT CONSULTANTS' PLANS, SPECIFICATIONS, CONDITIONS OF DEVELOPMENT CONSENT AND CONSTRUCTION CERTIFICATE REQUIREMENTS. WHERE DISCREPANCIES ARE FOUND NOTIFY
- ENGINEER IMMEDIATELY FOR VERIFICATION. WHERE THESE PLANS ARE NOTED FOR DEVELOPMENT APPLICATION PURPOSES ONLY, THEY SHALL NOT BE USED FOR OBTAINING A CONSTRUCTION CERTIFICATE NOR USED FOR

### LAND DISTURBANCE INSTRUCTIONS

- 1. DISTURBANCE TO BE NO FURTHER THAN 5 (PREFERABLY 2) METRES FROM THE EDGE OF ANY ESSENTIAL ENGINEERING ACTIVITY AS SHOWN ON APPROVED PLANS. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE ZONES THAT, WHERE APPROPRIATE, ARE IDENTIFIED WITH BARRIER FENCING (UPSLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR SIMILAR
- 2. ACCESS AREAS ARE TO BE LIMITED TO A MAXIMUM WIDTH OF 10 METRES THE SITE MANAGER WILL DETERMINE AND MARK THE LOCATION OF THESE ZONES ON-SITE ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE BOUNDARIES THAT, WHERE APPROPRIATE ARE IDENTIFIED WITH BARRIER FENCING (UPSLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR SIMILAR
- 3. ENTRY TO LANDS NOT REQUIRED FOR CONSTRUCTION OR ACCESS IS PROHIBITED EXCEPT FOR ESSENTIAL THINNING OF PLANT
- 4. WORKS ARE TO PROCEED IN THE FOLLOWING SEQUENCE. A. INSTALL ALL BARRIER AND SEDIMENT FENCING WHERE SHOWN
- B. CONSTRUCT THE STABILISED SITE ACCESS. CONSTRUCT DIVERSION DRAINS AS REQUIRED.
- D. INSTALL MESH AND GRAVEL INLETS FOR ANY ADJACENT KERB
- E. INSTALL GEOTEXTILE INLET FILTERS AROUND ANY ON-SITE
- F. CLEAR SITE AND STRIP AND STOCKPILE TOPSOIL IN LOCATIONS SHOWN ON THE PLAN G. UNDERTAKE ALL ESSENTIAL CONSTRUCTION WORKS ENSURING THAT ROOF AND/OR PAVED AREA STORMWATER SYSTEMS ARE CONNECTED TO PERMANENT DRAINAGE AS
- SOON AS PRACTICABLE H. GRADE LOT AREAS TO FINAL GRADES AND APPLY PERMANENT STABILISATION (LANDSCAPING) WITHIN 20 DAYS OF COMPLETION OF CONSTRUCTION WORKS. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER
- THE PERMANENT LANDSCAPING HAS BEEN COMPLETED. 5. ENSURE THAT SLOPE LENGTHS DO NOT EXCEED 80 METRES WHERE PRACTICABLE. SLOPE LENGTHS ARE DETERMINED BY SILTATION FENCING AND CATCH DRAIN SPACING.
- 6. ON COMPLETION OF MAJOR WORKS LEAVE DISTURBED LANDS WITH A SCARIFIED SURFACE TO ENCOURAGE WATER INFILTRATION AND ASSIST WITH KEYING TOPSOIL LATER

### SITE MAINTENANCE INSTRUCTIONS

- 1. THE SITE SUPERINTENDENT WILL INSPECT THE SITE AT LEAST WEEKLY AND AT THE CONCLUSION OF EVERY STORM EVENT TO: A. ENSURE THAT DRAINS OPERATE PROPERLY AND TO EFFECT ANY
- NECESSARY REPAIRS B. REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING LANDS CLOSER THAN 5 METRES FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS AND PAVED AREAS
- C. REMOVE TRAPPED SEDIMENT WHENEVER THE DESIGN CAPACITY OF THAT STRUCTURE HAS BEEN EXCEEDED. D. ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED
- THE EROSION HAZARD AND NOT TO INITIATE UPGRADING OR E. CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE
- DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS. MAKE ONGOING CHANGES TO THE PLAN WHERE IT PROVES INADEQUATE IN PRACTICE OR IS SUBJECTED TO CHANGES IN CONDITIONS ON THE WORK-SITE OR ELSEWHERE IN THE CATCHMENT.
- F. MAINTAIN EROSION AND SEDIMENT CONTROL STRUCTURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.

THE SITE SUPERINTENDENT WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL. ENTRIES WILL INCLUDE:

A. THE VOLUME AND INTENSITY OF ANY RAINFALL EVENTS. THE CONDITION OF ANY SOIL AND WATER MANAGEMENT WORKS.

THE CONDITION OF VEGETATION AND ANY NEED TO IRRIGATE. THE NEED FOR DUST PREVENTION STRATEGIES. E. ANY REMEDIAL WORKS TO BE UNDERTAKEN.

THE LOGBOOK WILL BE KEPT ON-SITE AND MADE AVAILABLE TO ANY AUTHORISED PERSON UPON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF THE WORKS.

### SAFETY IN DESIGN NOTES

1. 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

### SEDIMENT CONTROL INSTRUCTIONS

- 1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN ON THE PLAN AND ELSEWHERE AT THE DISCRETION OF THE SITE SUPERINTENDENT TO CONTAIN SOIL AS NEAR AS POSSIBLE TO
- SEDIMENT FENCES WILL NOT HAVE CATCHMENT AREAS EXCEEDING 900 SQUARE METRES AND HAVE A STORAGE DEPTH OF AT LEAST 0.6 METRES.
- SEDIMENT REMOVED FROM ANY TRAPPING DEVICES WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS CANNOT OCCUR
- 4. STOCKPILES ARE NOT TO BE LOCATED WITHIN 5 METRES OF HAZARD AREAS INCLUDING AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS PAVED AREAS AND DRIVEWAYS WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR WATER HAS BEEN
- TREATED BY AN APPROVED DEVICE. TEMPORARY SEDIMENT TRAPS WILL REMAIN IN PLACE UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY
- 7. ACCESS TO SITES SHOULD BE STABILISED TO REDUCE THE LIKELIHOOD OF VEHICLES TRACKING SOIL MATERIALS ONTO PUBLIC ROADS AND ENSURE ALL-WEATHER ENTRY/EXIT.

### SOIL EROSION CONTROL INSTRUCTIONS

- 1. EARTH BATTERS WILL BE CONSTRUCTED WITH AS LOW A GRADIENT AS PRACTICABLE BUT NO STEEPER, UNLESS
- OTHERWISE NOTED, THAN: 2(H):1(V) WHERE SLOPE LENGTH LESS THAN 12 METRES. 2.5(H):1(V) WHERE SLOPE LENGTH BETWEEN 12 AND 16
- 3(H):1(V) WHERE SLOPE LENGTH BETWEEN 12 AND 20 METRES. 4(H):1(V) WHERE SLOPE LENGTH GREATER THAN 20 METRES. 2. ALL WATERWAYS, DRAINS, SPILLWAYS AND THEIR OUTLETS WILL BE CONSTRUCTED TO BE STABLE IN AT LEAST THE 1:20 YEAR ARI.
- TIME OF CONCENTRATION STORM EVENT. WATERWAYS AND OTHER AREAS SUBJECT TO CONCENTRATED. FLOWS AFTER CONSTRUCTION ARE TO HAVE A MAXIMUM GROUNDCOVER C-FACTOR OF 0.05 (70% GROUND COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION, FLOW VELOCITIES ARE TO BE LIMITED TO THOSE SHOWN IN TABLE 5-1 OF "MANAGING URBAN STORMWATER-SOILS AND CONSTRUCTION", DEPT OF HOUSING 1998 (BLUE BOOK). FOOT AND VEHICULAR
- TRAFFIC WILL BE PROHIBITED IN THESE AREAS. 4. STOCKPILES AFTER CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND-COVER C-FACTOR OF 0.1 (60% GROUND-COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION.
- 5. ALL LANDS, INCLUDING WATERWAYS AND STOCKPILES, DURING CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND-COVER C-FACTOR OF 0.15 (50% GROUND COVER) WITHIN 20 WORKING DAYS FROM INACTIVITY EVEN THOUGH WORKS MAY CONTINUE LATER.
- FOR AREAS OF SHEET FLOW USE THE FOLLOWING GROUND COVER PLANT SPECIES FOR TEMPORARY COVER: JAPANESE MILLET 20 KG/HA AND OATS 20 KG/HA
- PERMANENT REHABILITATION OF LANDS AFTER CONSTRUCTION WILL ACHIEVE A GROUND-COVER C-FACTOR OF LESS THAN 0.1 AND LESS THAN 0.05 WITHIN 60 DAYS, NEWLY PLANTED LANDS WILL BE WATERED REGULARLY UNTIL AN EFFECTIVE COVER IS ESTABLISHED AND PLANTS ARE GROWING VIGOROUSLY, FOLLOW-UP SEED AND FERTILISER WILL BE APPLIED AS NECESSARY.
- REVEGETATION SHOULD BE AIMED AT RE-ESTABLISHING NATURAL SPECIES. NATURAL SURFACE SOILS SHOULD BE REPLACED AND NON-PERSISTANT ANNUAL COVER CROPS SHOULD BE USED.

### WASTE CONTROL INSTRUCTIONS

- 1. ACCEPTABLE BINS WILL BE PROVIDED FOR ANY CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHING, LIGHTWEIGHT WASTE MATERIALS AND LITTER. CLEARANCE SERVICES WILL BE MANNER APPROVED BY THE SITE SUPERINTENDENT. ALL POSSIBLE POLLUTANT MATERIALS ARE TO BE STORED WEL CLEAR OF ANY POORLY DRAINED AREAS. FLOOD PHONE AREAS. STREAMBANKS, CHANNELS AND STORMWATER DRAINAGE AREAS. STORE SUCH MATERIALS IN A DESIGNATED AREA UNDER COVER WHERE POSSIBLE AND WITHIN CONTAINMENT BUNDS.
- . ALL SITE STAFF AND SUB-CONTRACTORS ARE TO BE INFORMED OF THEIR OBLIGATION TO USE WASTE CONTROL FACILITIES PROVIDED.

MAINTENANCE AREAS WHICH ARE TO HAVE CONTAINMENT BUNDS.

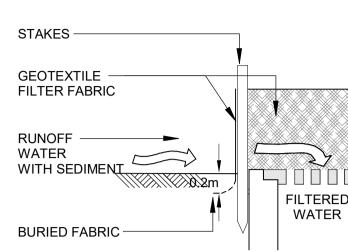
. ANY DE-WATERING ACTIVITIES ARE TO BE CLOSELY MONITORED TO ENSURE THAT WATER IS NOT POLLUTED BY SEDIMENT, TOXIC MATERIALS OR PETROLEUM PRODUCTS. PROVIDE DESIGNATED VEHICULAR WASHDOWN AND

### PROCEDURE FOR DE-WATERING

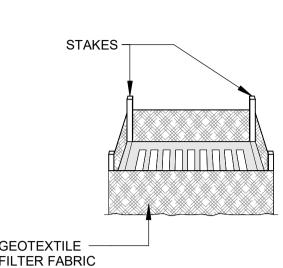
- ENSURE PERMISSION FOR DE-WATERING IS RECEIVED FROM AUTHORITIES BEFORE PUMPING OUT.
- AN ON-SITE TREATMENT PROCESS DISCHARGING TO THE STORMWATER SYSTEM WILL BE IMPLEMENTED. ALL SITE WATERS DURING CONSTRUCTION WILL BE CONTAINED ON SITE AND RELEASED ONLY WHEN pH IS BETWEEN 8.5 & 6.5, SUSPENDED SOLIDS ARE LESS THAN 50mg/L, TURBIDITY LESS THAN 100 NTU'S OIL AND GREASE LESS THAN 10mg/L AND BIOCHEMICAL OXYGEN DEMAND (BOD5) LESS THAN 30mg/L (FOR STORMS LESS THAN 1 IN 5 YEAR EVENTS).
- METHODS OF SAMPLING AND ANALYSIS OF WATER QUALITY WILL BE IN ACCORDANCE WITH THE APPLICABLE METHOD LISTED IN THE EPA PUBLISHED APPROVED METHODS FOR THE SAMPLING ANALYSIS OF WATER POLLUTANTS IN NEW SOUTH WALES.
- 4. WHERE LABORATORY ANALYSIS IS REQUIRED AS INDICATED BY IN SITU TESTING, APPROPRIATE SAMPLE BOTTLES AND PRESERVATIVES WILL BE USED AND GUIDANCE FOR THE SAMPLING METHOD OBTAINED FROM APPLICABLE PARTS OF AS5667.1 AND AS5667.6. ANALYSIS WILL BE UNDERTAKEN WHERE PRACTICAL BY A NATA REGISTERED LABORATORY CERTIFIED TO PERFORM THE APPLICABLE ANALYSIS.
- AS EXCAVATION TO TOP SOIL PROGRESSES, ANY WATER COLLECTED AT THE BOTTOM OF EXCAVATIONS WILL BE DIVERTED TO A TEMPORARY SEDIMENTATION BASIN OR SETTLEMENT TANK. IF THE WATER CONTAINS ONLY SEDIMENTS, IT WILL BE FILTERED AND PUMPED TO STORMWATER. BEFORE THIS CAN HAPPEN IT MUST CONTAIN LESS THAN 50mg/L TOTAL SUSPENDED SOLIDS.
- POLLUTED WATER MUST NOT ENTER THE STORMWATER SYSTEM IN SOME CIRCUMSTANCES, A LIQUID WASTE COMPANY MAY BE REQUIRED TO COLLECT CONTAMINATED WATER FOR DISPOSAL AT A LICENSED TREATMENT FACILITY.

THE BUILDER AND EXCAVATION CONTRACTOR ARE TO ENSURE ANY WATER DISCHARGED INTO COUNCIL STORMWATER SYSTEM FROM THE EXCAVATED PORTIONS OF THE SITE COMPLY WITH THE RELEVANT ENVIRONMENTAL CRITERIA AND APPROPRIATE CONTROL METHODS SHALL BE ADOPTED. THE PROPOSED CONTROL METHODS ARE STRICTLY TO COMPLY WITH THE ANZECO

WHERE WORK INVOLVES EXCAVATION OR STOCKPILING OF RAW OR LOOSE MATERIALS, EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PROVIDE WHOLLY WITHIN THE SITE WHILST WORK IS BEING CARIED OUT IN ORDER TO PREVENT SEDIMENT AND SILT FROM SITE WORKS BEING CONVEYED BY STORMWATER INTO COUNCIL'S STORMWATER SYSTEM. NATURAL WATER COURSES, BUSHLANDS, AND NEIGHBORING PROPERTIES, IN THIS REGARD, ALL STORMWATER DISCHARGE FROM THE SITE SHALL MEET THE REQUIREMENTS OF THE PROTECT OF ENVIRONMENT OPERATIONS ACT 1997 AND THE DEPARTMENT OF ENVIRONMENT CLIMATE CHANGE AND WATER GUIDELINES. THE CONTROL DEVICES ARE TO BE MAINTAINED IN A SERVICEABLE CONDITION AT



INLET SEDIMENT TRAP Scale: 1:20

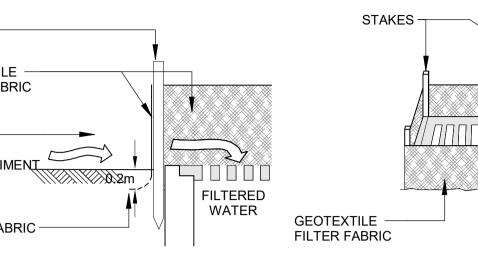


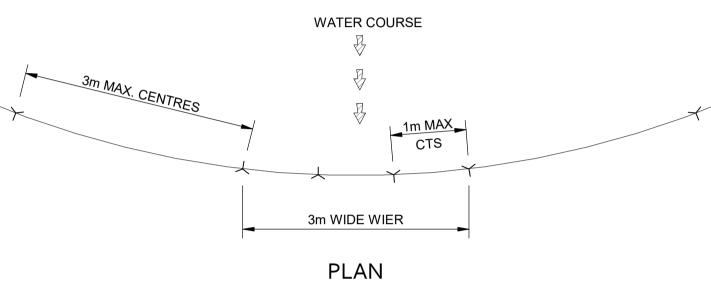
SANDBAG SEDIMENT TRAP Scale: 1:20

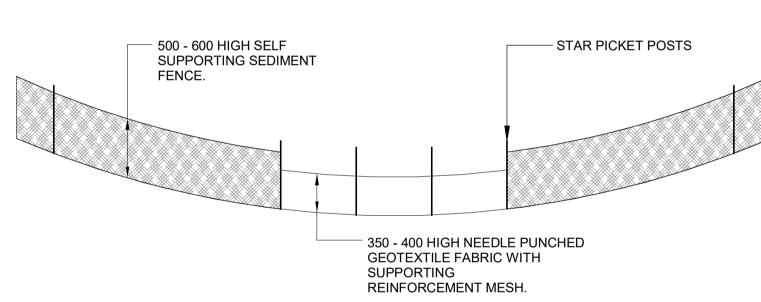
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SANDBAGS

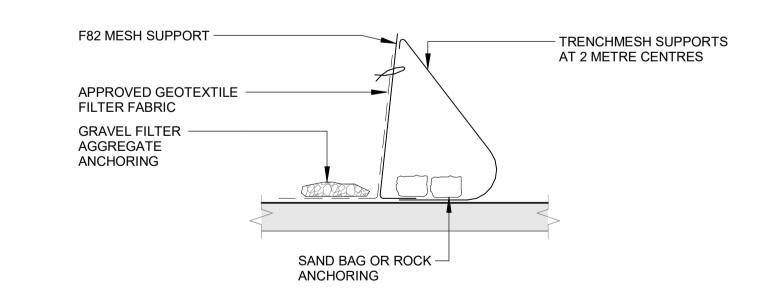






**ELEVATION** 

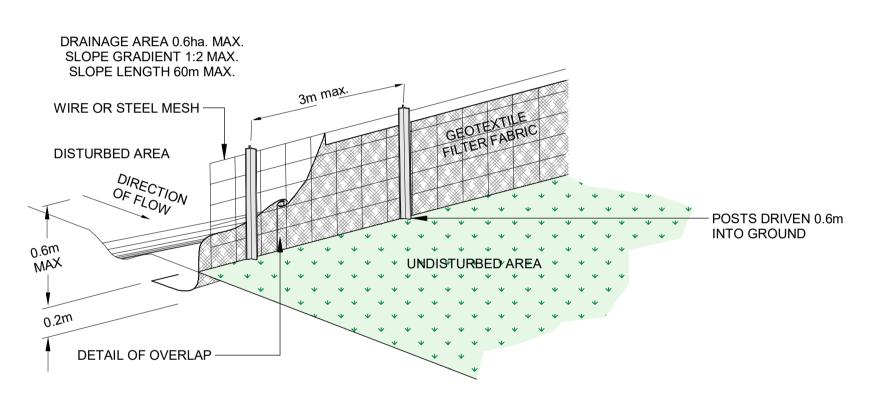
## ESM\_SEDIMENT FENCE WEIR Scale: 1:20



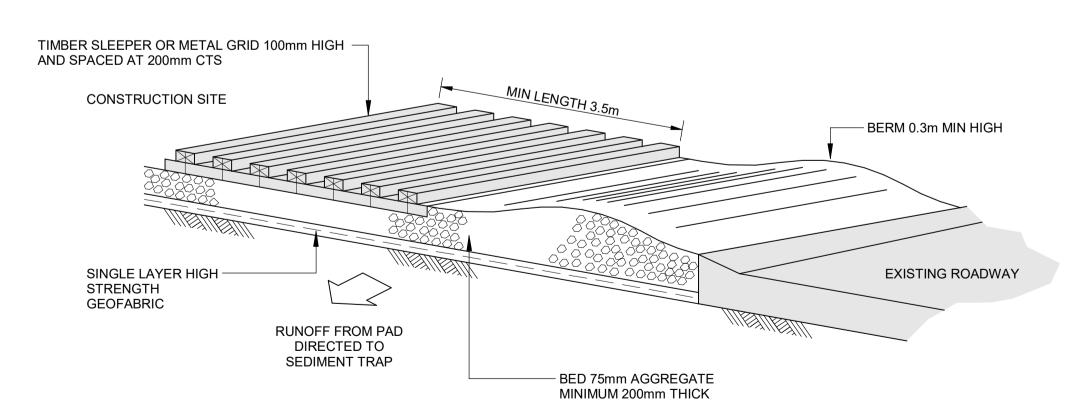
1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.

2. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER. 3. JOIN SECTIONS OF FABRIC AT A SUPPORT WITH A 150mm OVERLAP.

4. REFER TO DETAIL SD 6-9 "BLUE BOOK"



SEDIMENT SILT FENCE Scale: 1:20



TEMPORARY CONSTRUCTION EXIT Scale: 1:20

SIZE: A1 SCALE: As indicated

SILT FENCE BARRIER DETAIL Scale: 1:20

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### PROPOSED DEVELOPMENT

13 Latty Street, Fairfield, NSW

STUDIO JOHNSTON

(02) 8544 1683 www.greenview.net.au CHECKED: AMcK DESIGN: RC DRAWN: JPS

**CIVIL DESIGN** 

**NOTES & LEGENDS** 

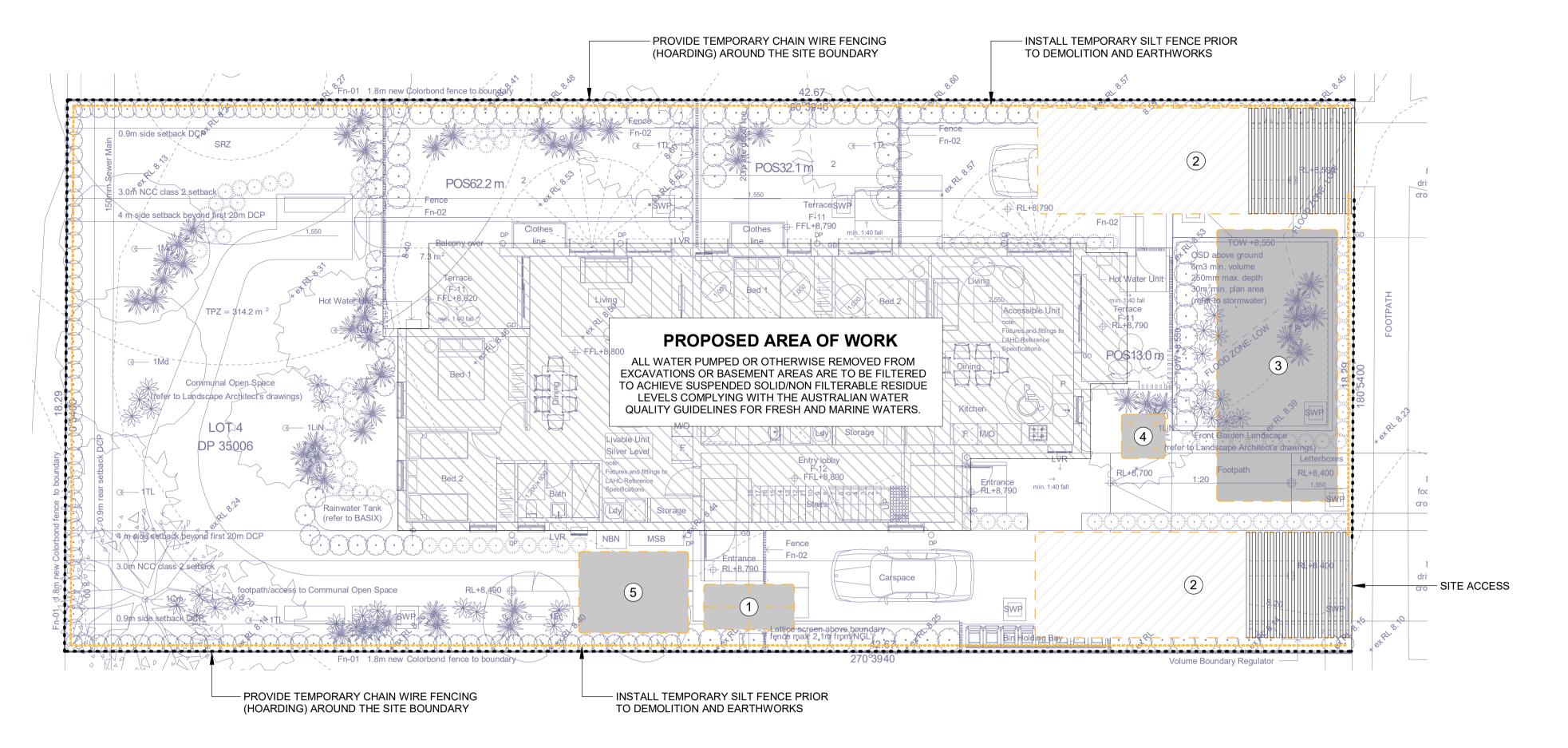


3 May 2023

### SITE MANAGEMENT LEGEND

• • • • • • CHAIN WIRE FENCE SILT FENCE

ESM	M - SITE MANAGEMENT SCHEDULE		
TYPE DESCRIPTION			
1	SKIP BIN (PROVIDE COVER)		
2	SITE ACCESS GRATE		
3	MATERIALS STOCKPILE (RELOCATE AS NECESSARY)		
4	TOILET FACILITY		
5	SITE SHED		



### ENVIRONMENTAL SITE MANAGEMENT LAYOUT

Scale: 1:100

FOR NOISE CONTROL, VIBRATION MANAGEMENT, DUST CONTROL, ODOUR CONTROL REFER TO NOTES ON THIS DRAWING. FOR OTHER NOTES (LITTER/WASTE, STORMWATER) REFER ESM1

WHERE WORK INVOLVES EXCAVATION OR STOCKPILING OF RAW OR LOOSE MATERIALS, EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PROVIDE WHOLLY WITHIN THE SITE WHILST WORK IS BEING CARIED OUT IN ORDER TO PREVENT SEDIMENT AND SILT FROM SITE WORKS BEING CONVEYED BY STORMWATER INTO COUNCIL'S STORMWATER SYSTEM, NATURAL WATER COURSES, BUSHLANDS, AND NEIGHBORING PROPERTIES. IN THIS REGARD, ALL STORMWATER DISCHARGE FROM THE SITE SHALL MEET THE REQUIREMENTS OF THE PROTECT OF ENVIRONMENT OPERATIONS ACT 1997 AND THE DEPARTMENT OF ENVIRONMENT, CLIMATE CHANGE AND WATER GUIDELINES. THE CONTROL DEVICES ARE TO BE MAINTAINED IN A SERVICEABLE CONDITION AT ALL TIMES.

THE BUILDER AND EXCAVATION CONTRACTOR ARE TO ENSURE ANY WATER DISCHARGED INTO COUNCIL STORMWATER SYSTEM FROM THE EXCAVATED PORTIONS OF THE SITE COMPLY WITH THE RELEVANT ENVIRONMENTAL CRITERIA AND APPROPRIATE CONTROL METHODS SHALL BE ADOPTED. THE PROPOSED CONTROL METHODS ARE STRICTLY TO COMPLY WITH THE ANZECC 2000 GUIDELINES.

### NOISE CONTROL

- WHERE POSSIBLE, STRATEGICALLY PLACE NOISE-GENERATING PLANT / EQUIPMENT TO TAKE ADVANTAGE OF
- NATURAL SCREENING (E.G. BUILDINGS) • AVOID PLACING NOISE-GENERATING PLANT / EQUIPMENT CLOSE TOGETHER AND/OR OPERATE
- SIMULTANEOUSLY
- MAINTAIN ALL PLANT & EQUIPMENT TO MINIMISE NOISE EMISSIONS (E.G. REPAIR BROKEN SILENCING EQUIPMENT, TIGHTEN RATTLING COMPONENTS ETC)
- ALL PLANT & EQUIPMENT TO BE OPERATED IN THE CORRECT MANNER TO AVOID UNNECESSARY NOISE **EMISSIONS**
- ALL DELIVERIES TO SITE TO BE IN ACCORD WITH THE RELEVANT CONSTRUCTION TRAFFIC MANAGEMENT PLAN
- NO PUBLIC ADDRESS SYSTEMS TO BE USED EXCEPT IN THE CASE OF EMERGENCIES • WHERE NECESSARY, FIT PLANT WITH SILENCERS AND/OR OTHER NOISE ATTENUATION MEASURES
- ENSURE CONSTRUCTION VEHICLES AND PLANT/EQUIPMENT ARE TURNED OFF WHEN NOT IN USE (I.E. AVOID

### VIBRATION MANAGEMENT

- USE LOW-VIBRATION EMITTING PLANT & EQUIPMENT WHERE POSSIBLE • WHERE PRACTICAL, USE NON-PERCUSSIVE PILING TECHNIQUES OR PROVIDE ACCOUSTIC SHIELDING

- WHERE POSSIBLE, STAGE ANY VEGETATION REMOVAL TO MINIMISE EXPOSED AREAS AREAS EXPOSED (IN THE SHORT TERM) TO BE STABILISED USING WATERING AND/OR GEO-FABRICS AS
- APPROPRIATE TO MINIMISE DUST GENERATION MODIFY / REDUCE CONSTRUCTION ACTIVITIES DURING HIGH WIND CONDITIONS IF INCREASED DUST GENERATION IS A POSSIBILITY
- DUST CONTROL MEASURES TO BE IMPLEMENTED AS THE SITE SUPERVISOR DEEMS APPROPRIATE, INCLUDING WATER CARTS, SPRINKLERS, SPRAYS, DUST SCREENS, ETC
- CHECK EROSION CONTROL MEASURE REGULARLY TO ENSURE CAPTURED SILT DOES NOT BECOME AIRBORNE

### ODOUR CONTROL

- SEGRATE AND COLLECT WASTE REGULARLY TO ENSURE ODOURS ARE MINIMISED
- NO BURNING-OFF OF WASTE AT ANY TIME

<ul> <li>REMOVE WASTE BINS FROM SITE REGULARLY</li> </ul>

C	greenview CONSULTING (02) 8544 1683 www.greenview.net.au
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**CIVIL DESIGN** 

**ENVIRONMENTAL SITE MANAGEMENT PLAN** 



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