



## ACTIVITY DETERMINATION

Project No. BGYMP

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

In this matter:

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

Signed..........

Name.....Emma Nicholson.....

Dated...18 December 2023.....

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

16-22

Street or property name

Funda Crescent

Suburb, town or locality

Lalor Park

Postcode

2147

Local Government Area(s)

Blacktown

Real property description (Lot and DP)

Lots 360, 361, 362 & 363 in DP 31954

### ACTIVITY DESCRIPTION

Provide a description of the activity

Demolition of 4 existing dwellings and structures, removal of trees and construction of a new two storey seniors housing development with 18 units (8 x 2 bedroom and 10 x 1 bedroom), at grade parking for 8 cars and associated landscaping, and consolidation of 4 lots into a single lot.

1. Conflict of interest includes actual and potential. A conflict of interest includes pecuniary i.e. financial interests to you or a related party or non-pecuniary i.e. benefits to relatives, friends, business associates and personal causes, etc. This includes "related persons" as defined in the Property, Stock and Business Agency Act 2002.

Signed.....

Dated...18 December 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 as modified below and by any of the undermentioned Identified Requirements:

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
<b>Architectural</b>				
Coversheet	AR – 0000	O	14.09.2023	Mode
Legends/Notes	AR – 0001	M	14.09.2023	Mode
3D View & Development Data Table	AR – 0002	O	14.09.2023	Mode
3D Views	AR – 0003	L	14.09.2023	Mode
Site Analysis	AR – 0004	I	14.09.2023	Mode
Block Analysis Plan	AR – 0005	I	14.09.2023	Mode
Site Plan	AR – 0100	P	14.09.2023	Mode
Demolition Plan	AR – 0500	L	14.09.2023	Mode
General Arrangement Plan – Ground Level	AR – 1000	S	14.09.2023	Mode
General Arrangement Plan – First Level	AR – 1001	P	14.09.2023	Mode
General Arrangement Plan – Roof Plan	AR – 1002	L	14.09.2023	Mode
Elevations – Sheet 1	AR – 2000	M	14.09.2023	Mode
Elevations – Sheet 2	AR – 2001	M	14.09.2023	Mode



Activity Determination  
16-22 Funda Crescent, Lalor Park

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Sections	AR – 2100	M	14.09.2023	Mode
Door & Window Schedules	AR – 4100	L	14.09.2023	Mode
Photomontage	AR – 8000	H	14.09.2023	Mode
Area Plan	AR – 8050	G	14.09.2023	Mode
Solar Analysis	AR – 8100	L	14.09.2023	Mode
Solar Analysis	AR – 8101	D	14.09.2023	Mode
Solar Study – Sheet 1	AR – 8200	J	14.09.2023	Mode
Solar Study – Sheet 2	AR – 8201	J	14.09.2023	Mode
Landscape Plan				
Landscape Plan	LD – 1000	F	29.09.2023	Mode
<b>Civil/ Stormwater</b>				
General Notes	C00.01	F	30.08.2023	Engineering Studio
Sediment & Erosion Control Plan	C01.01	F	30.08.2023	Engineering Studio
Stormwater Drainage Plan	C02.01	F	30.08.2023	Engineering Studio
Stormwater Details Sheet 1	C02.02	F	30.08.2023	Engineering Studio
Typical Details Sheet 2	C02.03	F	30.08.2023	Engineering Studio
Proposed Design Levels	C02.04	F	30.08.2023	Engineering Studio
Driveway Longsection	C02.05	F	30.08.2023	Engineering Studio
External Catchment Swale analysis	C02.06	F	30.08.2023	Engineering Studio
Bulk excavation Plan	C03.01	F	30.08.2023	Engineering Studio
<b>Survey</b>				
Detail and Level Survey	1 of 10	-	-	Norton Survey Partners
Detail and Level Survey	2 of 10	-	-	Norton Survey Partners
Detail and Level Survey	3 of 10	-	-	Norton Survey Partners
Detail and Level Survey	4 of 10	-	-	Norton Survey Partners
Detail and Level Survey	5 of 10	-	-	Norton Survey Partners
Detail and Level Survey	6 of 10	-	-	Norton Survey Partners
Detail and Level Survey	7 of 10	-	-	Norton Survey Partners
Detail and Level Survey	8 of 10	-	-	Norton Survey Partners
Detail and Level Survey	9 of 10	-	-	Norton Survey Partners
Detail and Level Survey	10 of 10	-	-	Norton Survey Partners
<b>Structural Plans</b>				
Ground Floor Plan	SK01	4	12.01.2023	Core Consulting Engineers
First Floor Plan	SK02	4	12.01.2023	Core Consulting Engineers
Roof Plan	SK03	4	12.01.2023	Core Consulting Engineers
<b>BASIX</b>				
BASIX Certificate	BASIX Certificate No. 1340983M_04	-	03.04.2023	Green Start Energy Solutions

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Thermal Assessor Certificate	Nathers Certificate no. 0003180114	-	20.06.2023	Tutis Consulting
<b>Reports</b>				
Development Application Accessibility Report	10360DA	3	13.01.2023	Purely Access
Arborist's Impact Assessment and Tree Management Plan	7717	-	05.04.2023	Redgum Horticultural
BCA Report	023-219785	-	04.04.2023	Philip Chun Building Compliance
Geotechnical Investigation	22/0595	-	February 2022	STS Geotechnics
Waste Management Plan	22318	-	January 2023	Dickens Solutions
Traffic Impact Statement	22.036r01v03	-	28.04.2023	Traffix
Safety in Design Report	22032	-	02.12.2022	Mode

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

## OPERATIONAL MATTERS

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

### Stormwater Run-off

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

9. To prevent water from entering buildings, surface waters shall be collected and diverted clear of the buildings by a sub-surface / surface drainage system.

### **Vehicular Access & Parking**

10. A concrete vehicular crossing and layback shall be provided at the entrance/exit to the property. The crossing and layback shall be constructed in accordance with Blacktown City Council's standard requirements for residential crossings. Council shall be provided with plans for the crossing and layback together with the payment of any council inspection fees.
11. Particular care shall be taken in the location of 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 layback/driveway shall be borne by the Land & Housing Corporation. Obsolete gutter layback(s) shall be constructed as kerb in accordance with Blacktown City Council's standards.

***Note:***

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

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

### **Site Works**

13. All soil erosion and sediment control measures required to be put in place prior to the commencement of demolition / construction works shall be maintained during the entire period of the works until all the disturbed areas are restored by turfing, paving or revegetation. Soil erosion and sediment control measures shall be designed in accordance with the guidelines set-out in the Blue Book *Managing Urban Stormwater: Soils and Construction* (4th edition, Landcom, 2004).
14. An appropriately qualified person shall design retaining walls or other methods necessary to prevent the movement of excavated or filled ground, including associated stormwater drainage measures.

### **Building Siting**

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

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

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

### **Site Soil Contamination**

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

### **Landscaping**

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

### **Tree Removal**

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

### **Fencing**

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

### **Provision of Letterbox Facilities**

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

### **Public Liability Insurance**

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

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

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

## Disconnection of Services

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

## Demolition

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

***Note:***

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

## Utilities Service Provider Notification

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

***Note:***

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

## Council Notification

30. Blacktown City Council shall be advised 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

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

- (a) showing the name, address and telephone number of the responsible Land & Housing Corporation officer for the work, and
- (b) showing the name of the principal contractor (if any) and a telephone number on which that person may be contacted outside working hours, and
- (c) stating that unauthorised entry to the work site is prohibited.

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

**Note:**

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

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

**Note:**

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

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

### Site Facilities

34. The following facilities shall be installed on the site:
- (a) Toilet facilities shall be provided at the rate of 1 toilet for every 20 persons or part thereof employed at the site. Each toilet provided shall be a standard flushing toilet and shall be connected to a public sewer or if connection to a public sewer is not practicable, to an accredited sewerage management facility provided by Blacktown City Council or if this is not practicable to some other council approved management facility.
  - (b) Adequate refuse disposal methods and builders storage facilities. Builders' wastes, materials or sheds shall not to be placed on any property other than that which this approval relates to.
35. Access to the site shall only be provided via an all weather driveway on the property and is not to be provided from any other site.

### Protection of Trees

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

### Waste Management

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

## PRIOR TO ANY CONSTRUCTION WORK COMMENCING ON SITE

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

### Service Authority Clearances

38. A compliance certificate, or other evidence, shall be obtained from the relevant water utility provider (Sydney Water) confirming service availability prior to work commencing.

**Note:**

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

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

### Stormwater Disposal

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

## DURING DEMOLITION AND CONSTRUCTION WORKS

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

### Landfill

44. Where site filling is necessary, a minimum of 95% standard compacting shall be achieved and certified by a NATA registered Soils Lab.

45. Land fill materials must satisfy the following requirements:
- i. be Virgin Excavated Natural Matter (VENM);
  - ii. be free of slag, hazardous, contaminated, putrescible, toxic or radio-active matter; and
  - iii. be free of industrial waste and building debris.

### Heritage

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

### Demolition

48. Any existing structures identified for demolition shall be demolished prior to commencement of the construction of the activity.
49. Demolition shall be carried out in accordance with the appropriate provisions of AS 2601.
50. Where materials containing asbestos are to be removed, demolition shall be carried out by a licensed contractor(s) who have current SafeWork NSW accreditation in asbestos removal.
51. Removal of asbestos-based thermal or acoustic insulation, such as sprayed asbestos and asbestos-based lagging, including friable asbestos boards, shall be carried out in accordance with the National Occupational Health and Safety Commission's Code of Practice for the Safe Removal of Asbestos, 2<sup>nd</sup> Edition [NOHSC:2002 (2005)].
52. Hazardous or intractable wastes, including all asbestos laden waste, arising from the demolition process shall be removed and disposed of in accordance with the requirements of SafeWork NSW and the Department of Planning and Environment.
53. Documentary evidence, in the form of tip receipts from an approved Waste Management Facility, shall be obtained by the demolition contractor and submitted to the Land & Housing Corporation demonstrating the appropriate disposal of the asbestos waste.
54. Demolition procedures shall maximise the reuse and recycling of demolished materials in order to reduce the environmental impacts of waste disposal.
55. During demolition, the public footpath and the public road shall not be obstructed by any vehicles. The public road and footpath shall be swept (not hosed) clean of any material, including clay, soil and sand.



56. All vehicles leaving the site with demolition materials shall have their loads covered and vehicles shall not track soil and other material onto the public roads and footpaths. The footpath shall be suitably protected against damage when plant and vehicles access the site. All loading of vehicles with demolished materials shall occur on site.

### **Survey Reports**

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

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

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

### **Excavation & Backfilling**

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

### **Pollution Control**

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

### **Impact of Construction Works**

67. The Land & Housing Corporation shall bear the cost of any necessary adjustments to utility mains and services.

68. Care shall be taken to prevent any damage to adjoining properties. The building contractor shall be liable to pay compensation to any adjoining owner if, due to demolition/construction works, damage is caused to such adjoining property.

#### **Termite Protection**

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

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

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

#### **PRIOR TO OCCUPATION OF THE DEVELOPMENT**

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

##### **General**

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

##### **Council Infrastructure Damage**

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

##### **Stormwater Drainage**

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

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

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

A positive covenant and restriction-as-to-user shall be placed over the onsite detention system in accordance with Blacktown 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 Blacktown City Council.

## **PART B – Additional Identified Requirements**

### **Specific Requirements for Seniors Housing**

73. The independent living units shall comply with the accessibility and useability standards referenced in section 85 and set out in Schedule 4 of *State Environmental Planning Policy (Housing) 2021*.

***Note:***

*This requirement does not apply to the provisions set out under sections 2, 7-13 and 15-20 of Schedule 4 for an independent living unit, or part of such a unit, that is located above the ground floor.*

74. Only the following kinds of people shall be accommodated in the approved development:
- (a) seniors or people who have a disability; or
  - (b) people who live within the same household with seniors or people who have a disability; or
  - (c) staff employed to assist in the administration and provision of services to the seniors housing development.

***Note:***

*It should be noted that 'seniors', as defined in the Housing SEPP, are any of the following:*

- (a) people aged 60 or more years,
- (b) people who are resident at a facility at which residential care (within the meaning of the Aged Care Act 1997 of the Commonwealth) is provided, and
- (c) people who have been assessed as being eligible to occupy housing for aged persons provided by a social housing provider.

A restriction as to user shall be registered against the title of the property, prior to occupation, in accordance with Section 88E of the Conveyancing Act 1919 limiting the use of any accommodation to the kinds of people referred to above and that the dwellings cannot be subdivided.

75. Pathway lighting shall be designed to provide a minimum of 20 lux at ground level and be located to avoid glare for pedestrians and adjacent dwellings.
76. Access to, and within, the site shall be provided in accordance with AS 1428.1 so that a person using a wheelchair can use common areas and common facilities associated with the activity.
77. A 1.2m wide concrete footpath and required kerb ramps across the site frontage, connecting to the existing pedestrian accessway towards southern boundary of the site, shall be constructed in accordance with the Blacktown City Council specifications to provide an accessible pathway from the site to the nearest bus stops.

**Note:**

*The responsible officer at the Blacktown City Council shall be contacted regarding Council's specifications and any necessary approvals.*

78. Entry doors to units shall to be provided with door viewers to enable residents to view approaches to their units without the need to open the door.

**Site Specific Requirements**

79. During construction, should the subsurface conditions vary from those inferred above, STS would be contacted to determine if any changes should be made to recommendations of the Geotechnical Site Investigation. The exposed bearing surfaces for footings should be inspected by a geotechnical engineer to ensure the allowable pressure given has been achieved.
80. A convex mirror is to be placed in the location of the access drive to ensure safe circulation as identified on the Swept Paths Analysis Plan within the Traffic Impact Statement.
81. The side boundary fence height shall be reduced to 1.2m for front setback part of the development to ensure the clear visibility from the site into the pedestrian link along southern boundary of the site.

**Requirements Resulting from Council Comments**

82. No works are to occur on or encroach upon adjoining RE1 zoned land. If any works are to be carried out within RE1 land then consent from Blacktown City Council is to be obtained.
83. The vehicular crossing is to be constructed as per Council standards A(BS)102S and any redundant crossings shall be removed and verges to be reinstated.
84. In lieu of the provision of water quality filtration system and a MUSIC model the following monetary contributions must be paid prior to commencement of construction works on the site.

The current indexed contributions are:

S7.11 Contribution	Amount
Stormwater Quality	\$23,912.00.

Please note that the contributions are subject to quarterly indexation using the Consumer Price Index (CPI) to the date of payment. A revised quote to be obtained at the time of payment.

85. Contact must be made with Council's Open Space Policy & Tree Management Coordinator should street tree removal be required or should the development be located within the drip-line of any street trees.
86. The existing planter bed along southern pedestrian pathway is to be retained and protected during construction. Any damages to the Council's planter bed is to be repaired by the building contractor at no cost to Blacktown City Council.
87. The proposed privacy screens located on the balconies of units 17 and 18 are to be designed to prevent overlooking into neighbouring properties. This is to be achieved by

angling the slats, restricting the aperture between the slats or a combination of the both.

88. The approved bin collection points for all bins across the site shall be shown on the approved plans.
89. No plantings or landscaping is to be located where the bin collection points are located, to ensure safe and efficient collection of bins and bulky waste from the development is not hindered.
90. The waste material sorting, storage and re-use requirements of the approved Waste Management Plan and Council's Site Waste Management and Minimisation Development Control Plan shall be implemented during development works.
91. Evidence of tipping dockets must be provided to the Land & Housing Corporation for all demolition and construction waste generated onsite.
92. All litter shall be managed onsite by ensuring waste receptacles are covered when not in use during construction.
93. The NSW Land and Housing Corporation must sign Council's 'Onsite Waste Collection Agreement Form', before collections can occur onsite. The form must be approved prior to the commencement of construction works.
94. Ongoing management of waste for the site must be in accordance with the waste requirements outlined in the approved waste management plan.

#### ADVISORY NOTES

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



# Decision Statement

**Project No. BGYMP**

## SITE IDENTIFICATION

### STREET ADDRESS

Unit/Street No.

16-22

Street or property name

Funda Crescent

Suburb, town or locality

Lalor Park, NSW

Postcode

2147

Local Government Area(s)

Blacktown

Real property description (Lot and DP)

Lots 360, 361, 362 and 363 in DP 31954

## ACTIVITY DESCRIPTION

Provide a description of the activity

Demolition of 4 existing dwellings and structures, removal of trees and construction of a new two storey seniors housing development with 18 units (8 x 2 bedroom and 10 x 1 bedroom), at grade parking for 8 cars and associated landscaping, and consolidation of four lots into a single lot.

The Land & Housing Corporation (LAHC) has proposed the above activity under the provisions of *State Environmental Planning Policy (Housing) 2021* (Housing SEPP) which requires determination under Part 5 of the *Environmental Planning & Assessment Act 1979* (EP&A Act). This Decision Statement relates to the Review of Environmental Factors (REF) for the above activity prepared under Part 5 of the EP&A Act and the *Environmental Planning and Assessment Regulation 2021*.

Based on the REF document and supporting documentation, including advice from Blacktown City Council a decision to proceed with the proposed activity has been made. This decision included consideration of the following:

### Significant Impact on the Environment

- The proposed activity is not likely to have a significant impact on the environment and therefore an EIS is not required.
- The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values, meaning a SIS and/or BDAR is not required.

### Reasons for the Decision

- Following an assessment of the proposed activity and associated environmental impacts within the REF document it was decided that the proposed seniors housing will have economic and social benefits and any minor short-term impacts on the environment or surrounding properties can be appropriately mitigated.

- The proposed seniors housing will assist LAHC in providing new, fit for purpose housing in the Blacktown local government area, which will assist in addressing the existing and growing demand for accommodation in this local government area.

Mitigation Measures

- Mitigation measures are required to minimise or manage environmental impacts and are detailed throughout the REF and specifically within Section 8. All mitigation measures are detailed as Identified Requirements within the Activity Determination. Additional mitigation measures, detailed in the Activity Determination have been imposed to minimise the impact on the surrounding environment, ensure appropriate site safety and ensure legislative compliance.

Signed..... .....

Dated.....18 December 2023.....

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



## PART 5

### SENIOR HOUSING DEVELOPMENT

## LALOR PARK SENIOR HOUSING

16-22 FUNDA CRESCENT, LALOR PARK

LOT 360, 361, 362 & 363 IN DP31954

JOB NO. BGYMP

## Housing SEPP 2021

## External works

- Units on ground floor level to be linked by an AS1428.1 compliant accessible path to the adjoining road.
- Pathway lighting to be Glare free for pedestrians and dwelling and must provide at least 20 lux at ground level.
- Letterboxes must be provided on a hard-standing area, lockable and have wheelchair circulation (1550mm diameter) and linked via an accessible path as per AS1428.1
- There should be no step to the main entry door, entry to external verandah that contain clothes line and between path from street to the verandah. A max threshold of 35mm is permitted where a threshold ramp is provided.
- A garbage storage area must be provided in an accessible location. Provide 1550mm circulation spaces in front of bins

## Carparking

- Car parking to comply with AS2890.6.

## Doorway requirements

- Main entry door, door to courtyards, main accessible bathroom, laundry to be 850mm clear (920mm min door leaf) with door circulation spaces as per AS1428.1. All other doors to have 850mm clear opening with scope of provision of door circulation in the future.
- Door handles and hardware for all doors must be provided in accordance with AS 4299 with single hand operation, lever style, operation located between 900-100mm above FFL and all external doors to be keyed alike.

## Bedroom requirements

- Main bedroom to have size of queen bed with 1,200mm wide at the foot of the bed, and 1,000mm wide beside the bed between it and the wall, wardrobe or any other obstruction.

## Electrical requirements

- Bedroom must have a telephone outlet next to the bed on the side closest to the door and a general power outlet beside the telephone outlet.
- Bedroom must have wiring to allow a potential illumination level of at least 300 lux.
- Switches and power points must be provided in accordance with AS 4299 with switches located between 900-1000mm and in line with door handles, (Rocker action / toggle / push pad switches with 35mm width are preferred) and GPOs to be at least 600mm above FFL (1000mm preferred) and not less than 500mm horizontally from internal corners.
- Living room, must have a telephone adjacent to a general power outlet and Living and dining room must have wiring to allow a potential illumination level of at least 300 lux.

## Laundry / Linen cupboard

- Laundry must have the provision for the installation of an automatic washing machine and a clothes dryer, a slip-resistant floor surface and an accessible path to clothes line is to be provided.

- At least 1 linen cupboard is to be provided with 600mm minimum width and adjustable shelving

## Main bathroom

- Bathroom must be Slip-resistant floor surface.
- Bathroom must have shower as per AS1428.1 without a hob, waterproofed to AS 3740, floor falls to waste, walls reinforced to accommodate grabrails / folding seat in the future, taps to be lever or capstan with single outlet, taps to be easily reached from shower entry, wall cabinet that is sufficiently illuminated, and a double general power outlet beside the mirror.
- All tiled areas such as bathrooms, kitchen, and laundries to be such that there is no lip at the doorway. Recess the concrete slab at wet areas if required for compliance.

## Kitchen

- Kitchen fittings must be provided as per Clause 4.5 of AS 4299:
- 800mm wide work surface which is adjustable or replaceable as a unit at variable heights within range of 750mm to 850mm above FFL in between the wall oven and cooktop.
- Tap set with capstan or lever handles with the taps or operating handles to be located 300mm from front of the sink
- Cooktops with front or side controls with raised crossbars, isolating switch and a work surface of 800mm length at the same height
- Wall oven located next to adjustable height work bench minimum 820mm width.



16-22 Funda Crescent, Lalar Park	
This is a summary of the BASIX commitments as detailed in the BASIX certificate. Refer to current BASIX certificate for complete details.	
BASIX COMMITMENTS SUMMARY	
RESIDENTIAL UNITS	
<b>WATER COMMITMENTS</b>	
<u>Fixtures</u>	
All Showerheads	4 Star
All Toilets Flushing Systems	3 Star
All Kitchen Taps	4 Star
All Bathroom Taps	4 Star
HW Recirculation or Diversion?	No
<u>Appliances</u>	
All Dish Washers / Clothes Washers	N/A
<u>Alternative Water Source</u>	
Central Water Tank	Landscape, Toilet Connection ONLY
<b>ENERGY COMMITMENTS</b>	
<u>Hot Water</u>	
Hot Water System	Gas Instantaneous 4 Star
<u>Bathroom Ventilation</u>	
Each Bathroom	Individual Fan, Ducted to Facade/Roof
Operation Control	Interlocked to Light
<u>Kitchen Ventilation</u>	
Each Kitchen	Individual Fan, Ducted to Facade/Roof
Operation Control	Manual Switch On / Off
<u>Laundry Ventilation</u>	
Each Laundry	Individual Fan, Ducted to Facade/Roof
Operation Control	Interlocked to Light
<u>Cooling &amp; Heating</u>	
Cooling	Ceiling Fans at Living & Bedrooms
Heating	N/A
<u>Artificial Lighting</u>	
Bedrooms, Living Areas, Kitchen, Bathrooms/Toilets, Laundry, Hallways	Yes
<u>Natural Lighting</u>	
Number of Bedrooms	No
Kitchen	Yes in Unit 06, 07, 15 & 16
<u>Appliances</u>	
Kitchen Cooktop/Oven	Gas Cooktop and Electric Oven
Well Ventilated Fridge Space	No
Dish Washer	N/A
Clothes Washer / Clothes Dryer	N/A
Private Outdoor or Unsheltered Clothes Drying Line	Yes


SHEET LIST		Current Revision
No.	Name	
0000	COVER SHEET	O
0001	LEGENDS / NOTES	M
0002	3D VIEW & DEVELOPMENT DATA TABLE	O
0003	3D VIEWS	L
0004	SITE ANALYSIS	I
0005	BLOCK ANALYSIS PLAN	I
0100	SITE PLAN	P
0500	DEMOLITION PLAN	L
1000	GENERAL ARRANGEMENT PLAN - GROUND LEVEL	S
1001	GENERAL ARRANGEMENT PLAN - FIRST LEVEL	P
1002	GENERAL ARRANGEMENT PLAN - ROOF PLAN	L
2000	ELEVATIONS - SHEET 1	M
2001	ELEVATIONS - SHEET 2	M
2100	SECTIONS	M
4000	DOOR & WINDOW SCHEDULES	L
8100	PHOTOMONTAGE	H
8050	AREA PLAN	G
8100	SOLAR ANALYSIS	L
8101	SOLAR ANALYSIS	D
8200	SOLAR STUDY - SHEET 1	J
8201	SOLAR STUDY - SHEET 2	J

BASIX COMMITMENTS SUMMARY	
COMMON AREAS	
<b>WATER COMMITMENTS</b>	
Showerheads	No Common Facility
Toilets	No Common Facility
Taps	No Common Facility
Clothes Washer	No Common Facility
<b>ENERGY COMMITMENTS</b>	
<u>Ventilation</u>	
Common Area Ventilation	No Mechanical Ventilation
<u>Lighting</u>	
Primary Type of Artificial Lighting	LED
Lighting Efficiency Measure	Daylight Sensor and Motion Sensor
Light Control System / BMS	No
<u>Central Systems</u>	
Central Water Tank - Rainwater or Stormwater	Size: 7000
<u>Alternative Energy Supply</u>	
Photovoltaic System	Rated Electrical Output (min): 5.0 peak kW

NathERS COMMITMENTS SUMMARY	
<ul style="list-style-type: none"> <li>R3.5 insulation to ceiling</li> <li>R2.0 External Wall Insulation</li> <li>Roof type : Metal Roof : Medium Colour (SA 0.475 - 0.7) + 55mm Foil Blanket R1.3</li> <li>External Glazing: Aluminium standard single-glazed: clear glass: U = 6.70 &amp; SHGC = 0.70</li> <li>All External door and windows to be weather sealed</li> <li>Exhaust Fans / Downlights to be sealed (if any)</li> <li>Eaves and Shading as per drawings</li> </ul>	

SUBJECT SITE: 16-22 FUNDA CRESCENT, LALOR PARK



STATUS			
PART 5			
		SYDNEY Level 5, 111-117 Devonshire St Surry Hills NSW 2010 T +61 2 8396 9500 syd@modedesign.com.au	
CLIENT		ABN: 65 112 807 931	
LAHC			
PROJECT			
LALOR PARK SENIOR HOUSING			
16-22 Funda Crescent, Lalor Park 360, 361, 362 & 363 DP31954			
DRAWING TITLE			
COVER SHEET			
DRAWN VL		CHECKED KM	
ISSUE 14/09/2023 8:33:04 AM		SCALE @ A1 NTS	SCALE @ A3 NTS
PROJECT No	STAGE	DRAWING No	REVISION
22032	C	AR-0000	0



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18 December 2023

SYMBOLOLOGY

BUILDING ELEMENTS		DRAFTING CONVENTIONS	
DOORS AND WINDOWS		DOOR	
		WINDOW	
		WINDOW	
CEILINGS		CEILING TYPE	HEIGHT ABOVE LEVEL
OTHER BUILDING ELEMENTS	Z.ZZ-00a REFER CODING SYSTEM		
MATERIALS/ FINISHES	MMmq01 REFER CODING SYSTEM		

REVISION	
REVISION	
	REVISION CLOUD REVISION NUMBER REVISION DESCRIPTION

SETOUT	
GRID	
LEVEL	
SLOPE	
STEP	

REFERENCING	
PLAN TITLE VIEW NUMBER	
REFERENCE SHEET	PLAN Scale: 1 : 100 DRAWING SCALE

ELEVATION/ SECTION TITLE VIEW NUMBER	
REFERENCE SHEET	ELEVATION Scale: 1 : 100 DRAWING SCALE

ELEVATION REFERENCE VIEW NUMBER	
REFERENCE SHEET	A101
ROOM ELEVATIONS	
VIEW NUMBER	00
REFERENCE SHEET	A101

SECTION REFERENCES	
VIEW NUMBER	A101
REFERENCE SHEET	A101

ABBREVIATIONS LEGEND

DRAFTING ABBREVIATIONS	
AFFL	ABOVE FINISHED FLOOR LEVEL
ASFL	ABOVE STRUCTURAL FLOOR LEVEL
COS	CHECK/ CONFIRM ON SITE
EQ	EQUAL
FFL	FINISHED FLOOR LEVEL
NOM	NOMINAL
NTS	NOT TO SCALE
R##	RADIUS ##mm
SFL	STRUCTURAL FLOOR LEVEL
TBC	TO BE CONFIRMED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
Ø	DIAMETER

PERFORMANCE REQUIREMENTS

ACOUSTIC PERFORMANCE	
---	ACOUSTIC RATING A
---	ACOUSTIC RATING B
---	ACOUSTIC RATING C
---	ACOUSTIC RATING D
FIRE & SMOKE PERFORMANCE	
---	SMOKE RATING
---	FIRE RATING A
---	FIRE RATING B
---	FIRE RATING C
---	FIRE RATING D

TREE LEGEND

TREES TO BE REMOVED  
TREES TO BE RETAINED  
STRUCTURAL ROOT ZONE (SRZ)  
- REFER TO ARBORIST REPORT FOR DETAILS  
TREE PROTECTION ZONE (TPZ)  
- REFER TO ARBORIST REPORT FOR DETAILS

LEVEL LEGEND

EXISTING LEVEL  
PROPOSED LEVEL  
EL 0.00  
RL 0.00

UNIT TYPE LEGEND

ONE BEDROOM UNIT  
TWO BEDROOM UNIT

LANDSCAPE LEGEND

PRIVATE LANDSCAPE AREA  
LAWN AREA  
COMMON LANDSCAPE AREA  
DEEP SOIL ZONE  
PARKING  
DRIVEWAYS  
WALKWAYS  
COURTYARD / BALCONY

GENERAL LEGEND

SITE BOUNDARY  
SITE SETBACK  
BALCONY OVER  
EXISTING SYDNEY WATER MAIN  
EXISTING SYDNEY WATER SEWER MAIN  
EQUIPMENT CLEARANCE  
SERVICE RISER

ABBREVIATION LEGEND

AC AC OUTDOOR CONDENSER  
AG MAINTENANCE ACCESS GATE  
BOL BOLLARD  
CB BROOM CUPBOARD  
CL LINEN CUPBOARD  
COM COMMS CUPBOARD  
CLO CLOTHESLINE  
D DOOR  
W WINDOW  
DP DOWNPIPE  
GAS INSTANTANEOUS GAS  
GTR GUTTER  
LVR EXHAUST LOUVER  
PIT STORMWATER PIT  
POS PRIVATE OPEN SPACE  
FIP FIRE INDICATIVE PANEL  
PWR POWER CUPBOARD  
MMC MIMIC PANEL  
MP METER PANEL  
MSB MAIN SWITCHBOARD

EXTERIOR FINISHES SCHEDULE LEGEND			
CODE	IMAGE	DESCRIPTION	COLOUR
AL		ALUMINIUM POWDERCOATED: WINDOWS/DOORS FRAME	COLORBOND MONUMENT
AW		WINDOW AWNINGS	DULUX ELECTRO GOLD PEARL
BR1		FACE BRICK	AUSTRAL METALLIX - TITANIUM
BR2		FACE BRICK	AUSTRAL METALLIX - GUN METAL BLUE
BT		ALUMINIUM BATTERN SCREENS	DULUX ELECTRO GOLD PEARL
CLD1		PREFINISHED FIBRE CEMEN SHEET	CEMINTEL SURROUND - BLUISH BASE
CON		EXPOSED CONCRETE SLAB EDGE	
DP		DOWNPIPE	COLORBOND BASALT
F1		VERTICAL SLAT FENCE	COLORBOND MONUMENT
F2		VERTICAL SLAT FENCE	COLORBOND BASALT
F3		1.8m COLORBOND FENCE	COLORBOND MONUMENT
F4		1.5m COLORBOND FENCE	COLORBOND MONUMENT
FS		FASCIA	COLORBOND BASALT
GL		GLASS: WINDOWS AND DOORS	
LVR1		METAL LOUVER	COLORBOND MONUMENT
LVR2		LOUVER ABOVE DOOR	COLORBOND MONUMENT
MS		METAL ROOF SHEET	COLORBOND BASALT

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AMENDMENTS				
REV	DESCRIPTION	AUTH	CHK	DATE
E	DRAFT PART 5	VL	KM	17.11.22
F	DRAFT PART 5	VL	KM	25.11.22
G	DRAFT PART 5	VL	KM	02.12.22
H	PART 5	VL	KM	21.12.22
I	PART 5	BB	KM	28.03.23
J	PART 5	BB	KM	17.04.23
K	PART 5	BB	MW	05.06.23
L	PART 5	BB	MW	13.06.23
M	PART 5	MK	MW	29.08.23

STATUS  
PART 5

SYDNEY  
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ABN: 65 112 807 931

CLIENT  
LAHC

PROJECT  
LALOR PARK SENIOR  
HOUSING  
16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE  
LEGENDS / NOTES

DRAWN VL	CHECKED KM
ISSUE 14/09/2023 8:34:36 AM NTS	SCALE @ A1 NTS SCALE @ A3 NTS
PROJECT No 22032	STAGE C
DRAWING No AR-0001	REVISION M





18 December 2023



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L	PART 5	BB	KM	17.04.23
M	PART 5	BB	MW	05.06.23
N	PART 5	BB	MW	13.06.23
O	PART 5	MK	MW	29.08.23

DEVELOPMENT DATA TABLE

SITE AREA	2294.016 m <sup>2</sup>		
NUMBER OF DWELLINGS	18 DWELLINGS - 10 x 1 BED - 8 x 2 BED		
	AUTHORITY	REQUIRED OR ALLOWED	PROPOSED (APPROX)
FSR	LEP	NOT ADOPTED	NOT ADOPTED
	HOUSING SEPP	0.5:1 = 1147 m <sup>2</sup>	0.58:1 = 1328 m <sup>2</sup>
HEIGHT	LEP	9.5m	8.6m
	HOUSING SEPP (CL.42)	9.5m	8.6m
SETBACK	BLACKTOWN COUNCIL - DCP	FRONT	6m
		SIDE	3m
		REAR	3m
CAR PARKING	HOUSING SEPP (CL.108) 0.2 x (NO. OF DWELLINGS)	3.6 SPACES	4 SPACES
	HOUSING SEPP ACCESSIBLE AREA PARKING RATES: 0.4 x (NO. OF 1 BED) 0.5 x (NO. OF 2 BED)	0.4 x 10 (OF 1 BED) = 4 0.5 x 8 (OF 2 BED) = 4 TOTAL = 8	8 SPACES INCLUSIVE OF 4 ACCESSIBLE SPACES
LANDSCAPING	HOUSING SEPP (CL.108)	35 m <sup>2</sup> / DWELLING = 630 m <sup>2</sup>	719 m <sup>2</sup> = 31.3%
DEEP SOIL	HOUSING SEPP (CL.108)	MIN 15% OF SITE AREA = 344.1 m <sup>2</sup> MIN. DIMENSION OF 3M WITH IF PRACTICABLE, MIN 65% OF AREA AT REAR	432 m <sup>2</sup> (19%) AT REAR = 220 m <sup>2</sup> = 50.9%
PRIVATE OPEN SPACE	HOUSING SEPP (CL.108)	GROUND FLOOR DWELLINGS: NOT LESS THAN 15 m <sup>2</sup> WITH MIN 3 x 3 m SIZE  ANY OTHER DWELLINGS: 1 BED = 8 m <sup>2</sup> 2 BED = 10 m <sup>2</sup> NOT LESS THAN 2m IN LENGTH AND DEPTH ACCESSIBLE FROM LIVING ROOMS	COMPLIES
SOLAR ACCESS	HOUSING SEPP (CL.108)	70% OF DWELLINGS TO HAVE ACCESS TO DIRECT SOLAR ACCESS FOR A MIN. OF 2 HOURS BETWEEN 9AM AND 3PM MID WINTER TO POS AND LIVING ROOMS	COMPLIES  14 UNITS (3HR) = 78% 14 UNITS (2HR) = 78%

UNIT SCHEDULE

			PRIVATE OPEN SPACE		SOLAR	
UNIT NO.	NO. OF BEDS	AREA (m²)	AREA (m²)	SIZE	LIVING	POS
GROUND LEVEL			GROUND LEVEL			
UNIT 01	2 BEDROOM	77 m²	30 m²	Min 3 x 3m	YES - 3hr	YES - 3hr
UNIT 02	1 BEDROOM	58 m²	23 m²	Min 3 x 3m	NO	NO
UNIT 03	2 BEDROOM	77 m²	20 m²	Min 3 x 3m	YES - 3hr	YES - 3hr
UNIT 04	1 BEDROOM	57 m²	22 m²	Min 3 x 3m	YES - 3hr	YES - 3hr
UNIT 05	1 BEDROOM	57 m²	23 m²	Min 3 x 3m	YES - 3hr	YES - 3hr
UNIT 06	1 BEDROOM	56 m²	23 m²	Min 3 x 3m	YES - 3hr	YES - 3hr
UNIT 07	1 BEDROOM	56 m²	23 m²	Min 3 x 3m	YES - 1hr	YES - 1hr
UNIT 08	2 BEDROOM	76 m²	43 m²	Min 3 x 3m	YES - 3hr	YES - 3hr
UNIT 09	2 BEDROOM	76 m²	43 m²	Min 3 x 3m	YES - 3hr	YES - 3hr
LEVEL 01			LEVEL 01			
UNIT 10	2 BEDROOM	77 m²	10 m²	Min 2m (D)	YES - 3hr	YES - 3hr
UNIT 11	1 BEDROOM	58 m²	9 m²	Min 2m (D)	NO	NO
UNIT 12	2 BEDROOM	77 m²	10 m²	Min 2m (D)	YES - 3hr	YES - 3hr
UNIT 13	1 BEDROOM	57 m²	10 m²	Min 2m (D)	YES - 3hr	YES - 3hr
UNIT 14	1 BEDROOM	58 m²	10 m²	Min 2m (D)	YES - 3hr	YES - 3hr
UNIT 15	1 BEDROOM	56 m²	10 m²	Min 2m (D)	YES - 3hr	YES - 3hr
UNIT 16	1 BEDROOM	58 m²	10 m²	Min 2m (D)	YES - 1hr	YES - 1hr
UNIT 17	2 BEDROOM	76 m²	11 m²	Min 2m (D)	YES - 3hr	YES - 3hr
UNIT 18	2 BEDROOM	78 m²	11 m²	Min 2m (D)	YES - 3hr	YES - 3hr
Grand total		1185 m²	340 m²			

	LEVEL	AREA (m <sup>2</sup> )
LOBBY	GROUND LEVEL_BLOCK A	41 m <sup>2</sup>
LOBBY	GROUND LEVEL_BLOCK B	22 m <sup>2</sup>
STAIR	GROUND LEVEL_BLOCK A	6 m <sup>2</sup>
STAIR	GROUND LEVEL_BLOCK B	5 m <sup>2</sup>
LOBBY	LEVEL 01_BLOCK B	24 m <sup>2</sup>
LOBBY	LEVEL 01_BLOCK A	47 m <sup>2</sup>
Grand total		144 m <sup>2</sup>

STATUS  
PART 5



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ABN: 65 112 807 931

CLIENT  
LAHC

PROJECT  
**LALOR PARK SENIOR HOUSING**  
16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE  
**3D VIEW & DEVELOPMENT DATA TABLE**

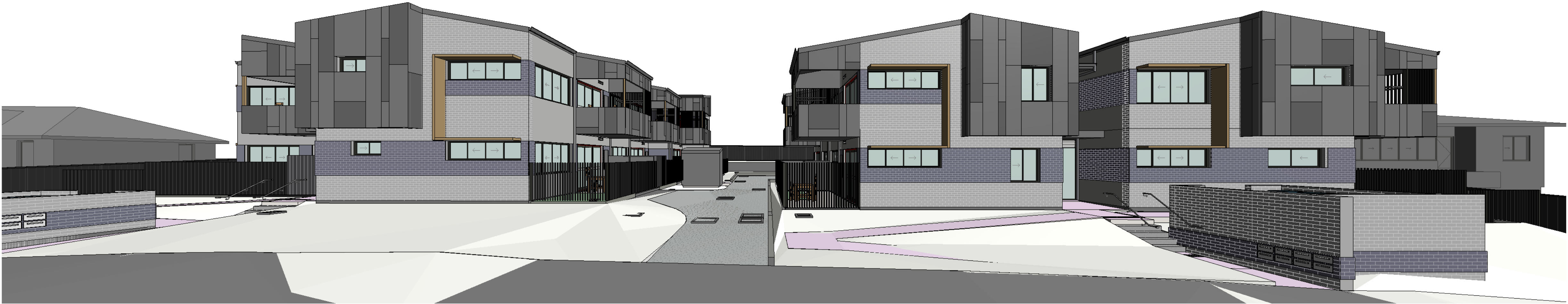
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PROJECT No 22032	STAGE C
DRAWING No AR-0002	REVISION O



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AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
D	DRAFT PART 5	VL	KM	17.11.22
E	DRAFT PART 5	VL	KM	25.11.22
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G	PART 5	VL	KM	21.12.22
H	PART 5	BB	KM	28.03.23
I	PART 5	BB	KM	17.04.23
J	PART 5	BB	MW	05.06.23
K	PART 5	BB	MW	13.06.23
L	PART 5	MK	MW	29.08.23



STATUS  
PART 5

**mode** SYDNEY  
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CLIENT  
LAHC

PROJECT  
**LALOR PARK SENIOR HOUSING**  
16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE  
**3D VIEWS**


DRAWN VL	CHECKED KM	SCALE @ A1 NTS	SCALE @ A3 NTS
ISSUE 14/09/2023 8:32:45 AM	STAGE C	DRAWING No AR-0003	REVISION L
PROJECT No 22032			

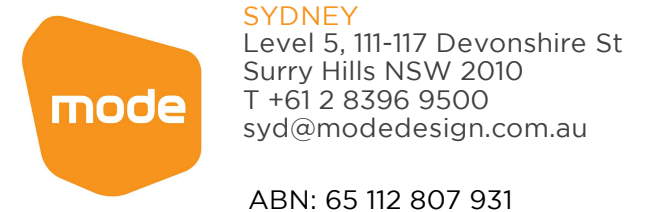


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D	PART 5	VL	KM	21.12.22
E	PART 5	BB	KM	28.03.23
F	PART 5	BB	KM	17.04.23
G	PART 5	BB	MMW	05.06.23
H	PART 5	BB	MMW	13.06.23
I	PART 5	MMK	MMW	29.08.23



STATUS <b>PART 5</b>	NORTH 
-------------------------	------------------------------------------------------------------------------------------------



CLIENT  
LAHC

PROJECT  
**LALOR PARK SENIOR  
HOUSING**  
16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE  
**SITE ANALYSIS**

DRAWN VL		CHECKED KM	
ISSUE 14/09/2023 8:34:53 AM		SCALE @ A1 1 : 200	SCALE @ A3 1 : 400
PROJECT No <b>22032</b>	STAGE <b>C</b>	DRAWING No <b>AR-0004</b>	REVISION <b>I</b>





BLOCK ANALYSIS INFORMATION

18 December 2023

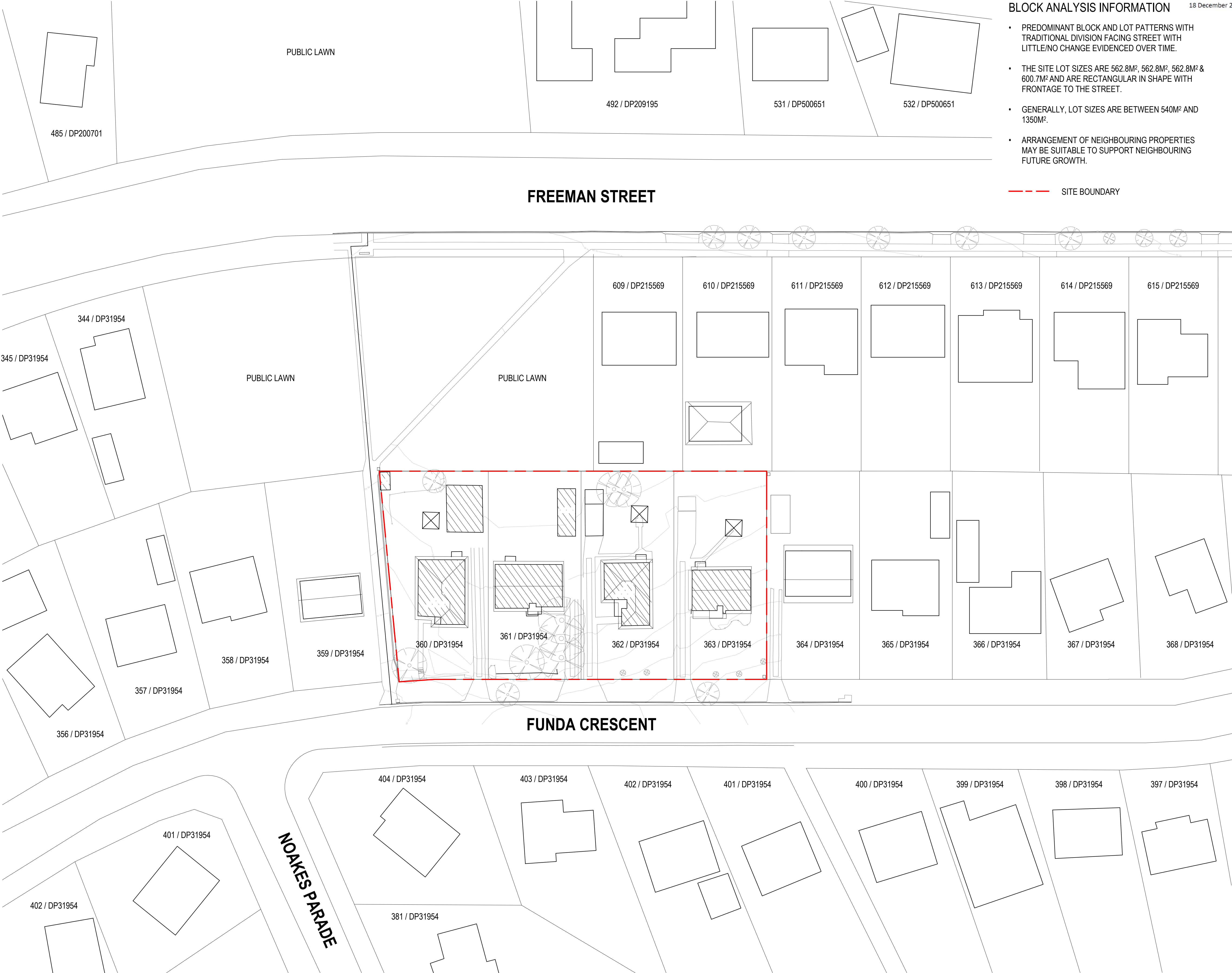
- PREDOMINANT BLOCK AND LOT PATTERNS WITH TRADITIONAL DIVISION FACING STREET WITH LITTLE/NO CHANGE EVIDENCED OVER TIME.
- THE SITE LOT SIZES ARE 562.8M<sup>2</sup>, 562.8M<sup>2</sup>, 562.8M<sup>2</sup> & 600.7M<sup>2</sup> AND ARE RECTANGULAR IN SHAPE WITH FRONTAGE TO THE STREET.
- GENERALLY, LOT SIZES ARE BETWEEN 540M<sup>2</sup> AND 1350M<sup>2</sup>.
- ARRANGEMENT OF NEIGHBOURING PROPERTIES MAY BE SUITABLE TO SUPPORT NEIGHBOURING FUTURE GROWTH.

--- SITE BOUNDARY

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AMENDMENTS

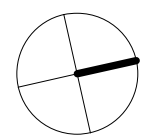
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A	DRAFT PART 5	VL	KM	17.11.22
B	DRAFT PART 5	VL	KM	25.11.22
C	DRAFT PART 5	VL	KM	02.12.22
D	PART 5	VL	KM	21.12.22
E	PART 5	BB	KM	28.03.23
F	PART 5	BB	KM	17.04.23
G	PART 5	BB	MW	05.06.23
H	PART 5	BB	MW	13.06.23
I	PART 5	MK	MW	29.08.23



STATUS  
PART 5

0m 3 6 9 12 15

NORTH



SYDNEY  
Level 5, 111-117 Devonshire St  
Surry Hills NSW 2010  
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syd@modedesign.com.au

ABN: 65 112 807 931

CLIENT  
LAHC

PROJECT  
**LALOR PARK SENIOR HOUSING**  
16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE  
**BLOCK ANALYSIS PLAN**

DRAWN VL	CHECKED KM	SCALE @ A1 1:300	SCALE @ A3 1:600
ISSUE 14/09/2023 8:33:01 AM	PROJECT No 22032	STAGE C	REVISION I
DRAWING No AR-0005			



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AMENDMENTS				
REV	DESCRIPTION	AUTH	CHK	DATE
H	DARFT PART 5	VL	KM	02.12.22
I	PART 5	VL	KM	21.12.22
J	PART 5	BB	KM	28.03.23
K	PART 5	BB	KM	17.04.23
L	PART 5	BB	KM	28.04.23
M	PART 5	BB	KM	23.05.23
N	PART 5	BB	MW	05.06.23
O	PART 5	BB	MW	13.06.23
P	PART 5	MK	MW	29.08.23

**TREE LEGEND**

TREES TO BE REMOVED

TREES TO BE RETAINED

STRUCTURAL ROOT ZONE (SRZ)  
- REFER TO ARBORIST REPORT FOR DETAILS

TREE PROTECTION ZONE (TPZ)  
- REFER TO ARBORIST REPORT FOR DETAILS

**LEVEL LEGEND**

EXISTING LEVEL

PROPOSED LEVEL

EL 0.00

RL 0.00

**UNIT TYPE LEGEND**

ONE BEDROOM UNIT

TWO BEDROOM UNIT

**LANDSCAPE LEGEND**

PRIVATE LANDSCAPE AREA

LAWN AREA

COMMON LANDSCAPE AREA

DEEP SOIL ZONE

PARKING

DRIVEWAYS

WALKWAYS

COURTYARD / BALCONY

**GENERAL LEGEND**

SITE BOUNDARY

SITE SETBACK

BALCONY OVER

EXISTING SYDNEY WATER MAIN

EXISTING SYDNEY WATER SEWER MAIN

EQUIPMENT CLEARANCE

SERVICE RISER

**ABBREVIATION LEGEND**

AC AC OUTDOOR CONDENSER

AG AG MAINTENANCE ACCESS GATE

BOL BOLLARD

CB BROOM CUPBOARD

CL LINEN CUPBOARD

COM COMMS CUPBOARD

CLO CLOTHESLINE

D DOOR

W WINDOW

DP DOWNPIPE

CHS CHAS

GTR GUTTER

LVR EXHAUST LOUVER

PIT STORMWATER PIT

POS PRIVATE OPEN SPACE

FIP FIRE INDICATIVE PANEL

PWR POWER CUPBOARD

MIMIC MIMIC PANEL

MP METER PANEL

MSB MAIN SWITCHBOARD

STATUS

PART 5

0m 2 4 6 8 10

NORTH

mode

SYDNEY Level 5, 111-117 Devonshire St  
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syd@modedesign.com.au

ABN: 65 112 807 931

CLIENT

LAHC

PROJECT

LALOR PARK SENIOR HOUSING

16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE

SITE PLAN

DRAWN	VL	CHECKED	KM
ISSUE	14/09/2023 8:34:59 AM	SCALE @ A1	SCALE @ A3
PROJECT No	22032	DRAWING No	AR-0100
STAGE	C	REVISION	P



FUNDA CRESCENT



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18 December 2023

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AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
D	DRAFT PART 5	VL	KM	17.11.22
E	DRAFT PART 5	VL	KM	25.11.22
F	DRAFT PART 5	VL	KM	02.12.22
G	PART 5	VL	KM	21.12.22
H	PART 5	BB	KM	28.03.23
I	PART 5	BB	KM	17.04.23
J	PART 5	BB	MW	05.06.23
K	PART 5	BB	MW	13.06.23
L	PART 5	MK	MW	29.08.23

TREE LEGEND

TREES TO BE REMOVED

TREES TO BE RETAINED

STRUCTURAL ROOT ZONE (TPZ)  
- REFER TO ARBORIST REPORT FOR DETAILS

TREE PROTECTION ZONE (TPZ)  
- REFER TO ARBORIST REPORT FOR DETAILS

LEVEL LEGEND

EXISTING LEVEL

RL 0.00

GENERAL LEGEND

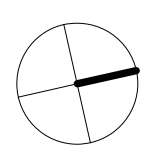
EXISTING TO BE DEMOLISHED

EXISTING FLOOR TO BE DEMOLISHED

STATUS  
PART 5

0m 1 2 3 4 5

NORTH



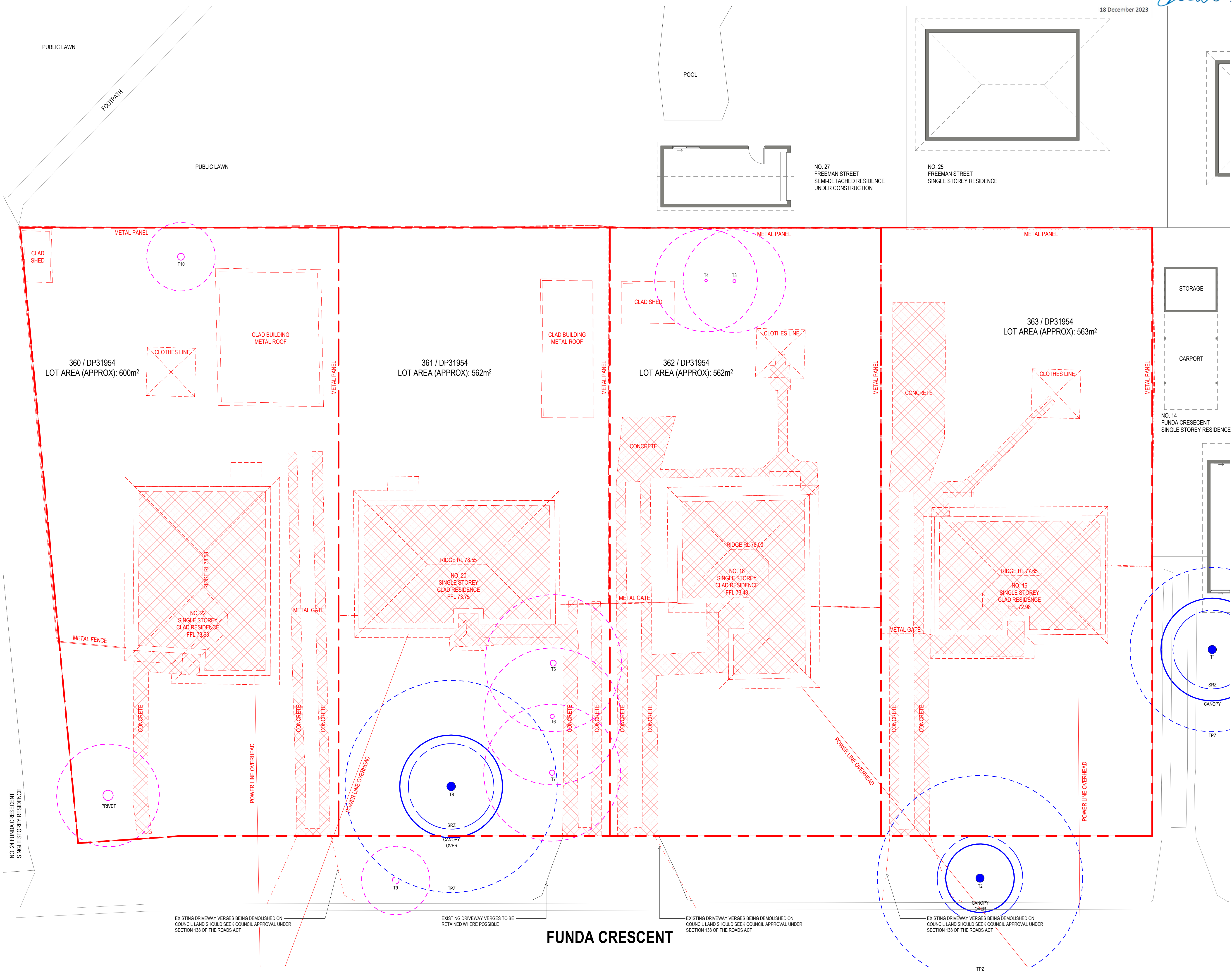
SYDNEY  
Level 5, 111-117 Devonshire St  
Surry Hills NSW 2010  
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syd@modedesign.com.au

ABN: 65 112 807 931

CLIENT  
LAHC

PROJECT  
**LALOR PARK SENIOR HOUSING**  
16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954  
DRAWING TITLE  
**DEMOLITION PLAN**

DRAWN Author 14/09/2023 8:33:08 AM	CHECKED Checker SCALE @ A1 1:100	SCALE @ A3 1:200	REVISION
PROJECT No 22032	STAGE C	DRAWING No AR-0500	REVISION L





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AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
L	PART 5	BB	KM	28.03.23
M	PART 5	BB	KM	17.04.23
N	PART 5	BB	KM	28.04.23
O	PART 5	BB	KM	23.05.23
P	PART 5	BB	MW	05.06.23
Q	PART 5	BB	MW	13.06.23
R	PART 5	MK	MW	29.08.23
S	BATTEN AND BULK STORE REVISION	MK	MA	11.09.23

TREE LEGEND

TREES TO BE REMOVED

TREES TO BE RETAINED

STRUCTURAL ROOT ZONE (SRZ)

- REFER TO ARBORIST REPORT FOR DETAILS

TREE PROTECTION ZONE (TPZ)

- REFER TO ARBORIST REPORT FOR DETAILS

LEVEL LEGEND

EXISTING LEVEL

PROPOSED LEVEL

UNIT TYPE LEGEND

ONE BEDROOM UNIT

TWO BEDROOM UNIT

LANDSCAPE LEGEND

PRIVATE LANDSCAPE AREA

LAWN AREA

COMMON LANDSCAPE AREA

DEEP SOIL ZONE

PARKING

DRIVEWAYS

WALKWAYS

COURTYARD / BALCONY

GENERAL LEGEND

SITE BOUNDARY

SITE SETBACK

BALCONY OVER

EXISTING SYDNEY WATER MAIN

EXISTING SYDNEY WATER SEWER MAIN

EQUIPMENT CLEARANCE

SERVICE RISER

ABBREVIATION LEGEND

AC OUTDOOR CONDENSER

MAINTENANCE ACCESS GATE

BOLLARD

BROOM CUPBOARD

LINEN CUPBOARD

COMMS CUPBOARD

CLOTHESLINE

DOOR

WINDOW

DOWNPIPE

INSTANTANEOUS GAS

GUTTER

EXHAUST LOUVER

STORMWATER PIT

PRIVATE OPEN SPACE

FIRE INDICATIVE PANEL

POWER CUPBOARD

MIMIC

METER PANEL

MAIN SWITCHBOARD

STATUS

PART 5

0m 1 2 3 4 5

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PROJECT

LALOR PARK SENIOR HOUSING

16-22 Funda Crescent, Lalor Park

360, 361, 362 & 363 DP31954

DRAWING TITLE

GENERAL ARRANGEMENT PLAN - GROUND LEVEL

DRAWN

VC

ISSUE

14/09/2023 8:34:21 AM

PROJECT No

22032

CHECKED

KM

SCALE @ A1

1:100

DRAWING No

AR-1000

SCALE @ A3

1:200

REVISION

S



FUNDA CRESCENT

EXISTING DRIVEWAY VERGES TO BE RETAINED WHERE POSSIBLE

NEW DRIVEWAY VERGES BEING CONSTRUCTED ON COUNCIL LAND SHOULD SEEK COUNCIL APPROVAL UNDER SECTION 138 OF THE ROADS ACT



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AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
I	DARFT PART 5	VL	KM	02.12.22
J	PART 5	VL	KM	21.12.22
K	PART 5	BB	KM	28.03.23
L	PART 5	BB	KM	17.04.23
M	PART 5	BB	MW	05.06.23
N	PART 5	BB	MW	13.06.23
O	PART 5	MK	MW	29.08.23
P	BATTEN AND BULK STORE REVISION	MK	MA	11.09.23

TREE LEGEND

TREES TO BE REMOVED

TREES TO BE RETAINED

STRUCTURAL ROOT ZONE (SRZ)

- REFER TO ARBORIST REPORT FOR DETAILS

TREE PROTECTION ZONE (TPZ)

- REFER TO ARBORIST REPORT FOR DETAILS

LEVEL LEGEND

EXISTING LEVEL

PROPOSED LEVEL

EL 0.00

RL 0.00

UNIT TYPE LEGEND

- ONE BEDROOM UNIT
- TWO BEDROOM UNIT

LANDSCAPE LEGEND

- PRIVATE LANDSCAPE AREA
- LAWN AREA
- COMMON LANDSCAPE AREA
- DEEP SOIL ZONE
- PARKING
- DRIVEWAYS
- WALKWAYS
- COURTYARD / BALCONY

GENERAL LEGEND

- SITE BOUNDARY
- SITE SETBACK
- BALCONY OVER
- EXISTING SYDNEY WATER MAIN
- EXISTING SYDNEY WATER SEWER MAIN
- EQUIPMENT CLEARANCE
- SERVICE RISER

ABBREVIATION LEGEND

- AC OUTDOOR CONDENSER
- AG MAINTENANCE ACCESS GATE
- BOL BOLLARD
- CB BROOM CUPBOARD
- CL LINEN CUPBOARD
- COM COMMS CUPBOARD
- CLO CLOTHESLINE
- D DOOR
- W WINDOW
- DP DOWNPIPE
- GAS INSTANTANEOUS GAS
- GTR GUTTER
- LVR EXHAUST LOUVRE
- PIT STORMWATER PIT
- POS PRIVATE OPEN SPACE
- FIP FIRE INDICATIVE PANEL
- PWR POWER CUPBOARD
- MIMIC MIMIC PANEL
- MP METER PANEL
- MSB MAIN SWITCHBOARD

STATUS  
PART 5

0m 1 2 3 4 5



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ABN: 65 112 807 931

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PROJECT  
LALOR PARK SENIOR  
HOUSING

16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE  
GENERAL ARRANGEMENT  
PLAN - FIRST LEVEL

DRAWN VL	CHECKED KM
ISSUE 14/09/2023 8:33:48 AM	SCALE @ A1 1:100
PROJECT No 22032	SCALE @ A3 1:200
STAGE C	DRAWING No AR-1001
REVISION P	





18 December 2023

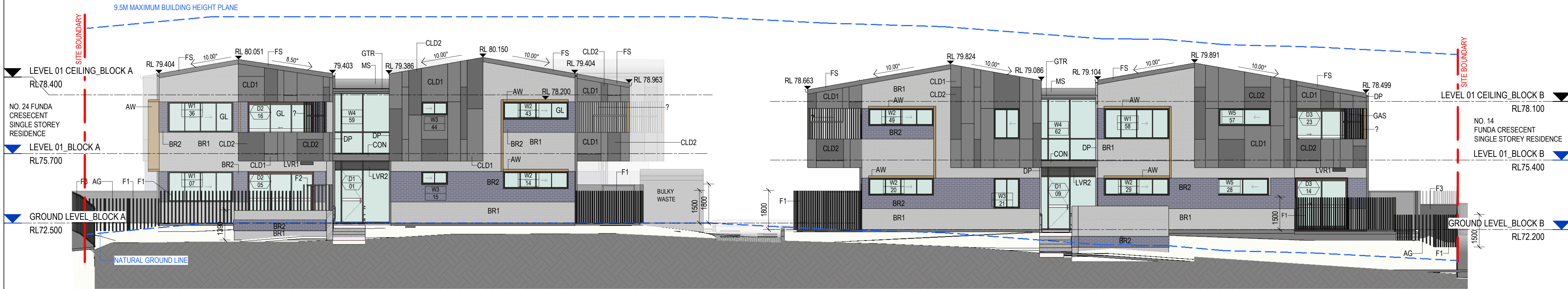
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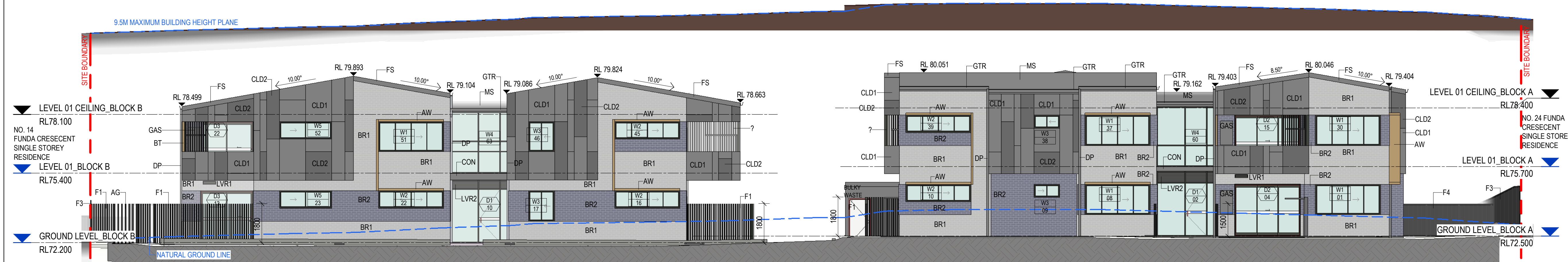
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F	DRAFT PART 5	VL	KM	02.12.22
G	PART 5	VL	KM	21.12.22
H	PART 5	BB	KM	28.03.23
I	PART 5	BB	KM	17.04.23
J	PART 5	BB	KM	23.05.23
K	PART 5	BB	MW	05.06.23
L	PART 5	BB	MW	13.06.23
M	PART 5	MK	MW	29.08.23

LEGEND

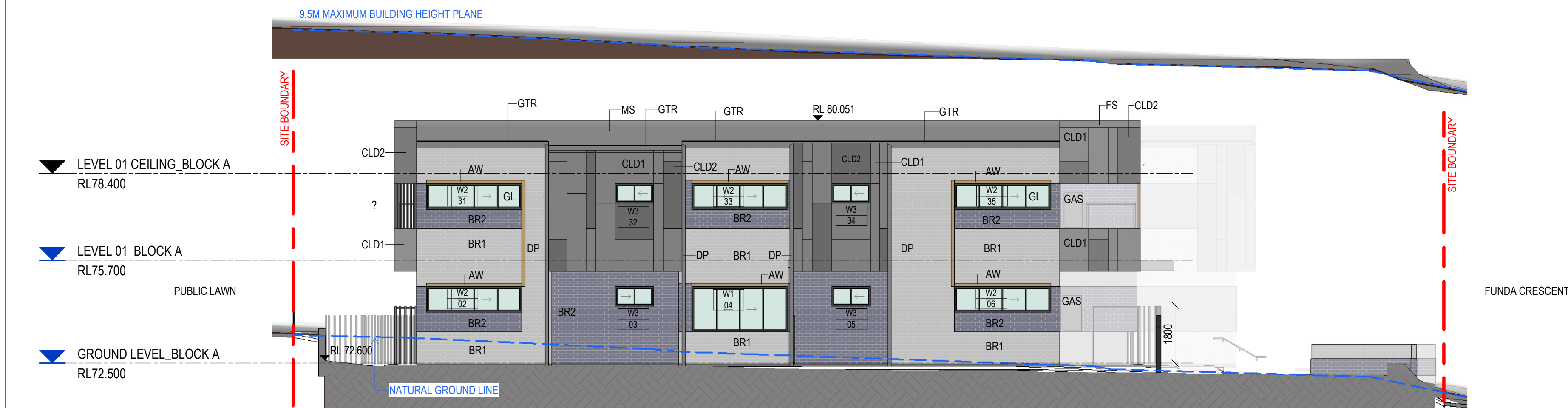
D	DOOR NUMBER
W	WINDOW NUMBER
0.00m	
0.00m	



1 ELEVATION EAST ELEVATION\_BLOCK A & B  
Scale: 1:100



2 ELEVATION WEST ELEVATION\_BLOCK A & B  
Scale: 1:100



3 ELEVATION SOUTH ELEVATION\_BLOCK A  
Scale: 1:100

EXTERIOR FINISHES SCHEDULE Copy 1			
CODE	IMAGE	DESCRIPTION	COLOR
AL		ALUMINUM POWDERCOATED: WINDOWS/DOORS FRAME	COLORBOND MONUMENT
AW		WINDOW AWNINGS	DULUX ELECTRO GOLD PEARL
BR1		FACE BRICK	AUSTRAL METALLIX - TITANIUM
BR2		FACE BRICK	AUSTRAL METALLIX - GUN METAL BLUE
BT		ALUMINUM BATTERY SCREENS	DULUX ELECTRO GOLD PEARL
CLD1		PREFINISHED FIBRE CEMENT SHEET	CEMENTEL SURROUND - BLUSH BASE
CON		EXPOSED CONCRETE SLAB EDGE	
DP		DOWNPIPE	COLORBOND BASALT
F1		VERTICAL SLAT FENCE	COLORBOND MONUMENT

EXTERIOR FINISHES SCHEDULE Copy 1			
CODE	IMAGE	DESCRIPTION	COLOR
F2		VERTICAL SLAT FENCE	COLORBOND BASALT
F3		1.8m COLORBOND FENCE	COLORBOND MONUMENT
F4		1.5m COLORBOND FENCE	COLORBOND MONUMENT
FS		FASCIA	COLORBOND BASALT
GL		GLASS: WINDOWS AND DOORS	
LVR1		METAL LOUVRE	COLORBOND MONUMENT
LVR2		LOUVRE ABOVE DOOR	COLORBOND MONUMENT
MS		METAL ROOF SHEET	COLORBOND BASALT

STATUS  
PART 5

0m 1 2 3 4 5



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CLIENT  
LAHC

PROJECT  
**LALOR PARK SENIOR HOUSING**  
16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE  
**ELEVATIONS - SHEET 1**

DRAWN VL	CHECKED KM
ISSUE 14/09/2023 8:33:24 AM	SCALE @ A1 1:100
PROJECT No 22032	STAGE C
DRAWING No AR-2000	REVISION M



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## LENGEND

9.5M MAXIMUM BUILDING HEIGHT PLANE

SITE BOUNDARY

MS GTR RL 80.150 GTR MS GTR GTR FS RL 79.403 8.50° RL 80.051 FS 10.00° RL 79.404

BR1 CLD1 BR1 CLD1 BR1 CLD1 CLD2

W1 42 D2 19 GL W1 41 D2 18 GAS W4 61 D2 17 W1 40

BR2 BR1 DP CLD2 DP BR1 DP CLD2 LVR1 CON DP CLD2 BR1 BR2 CLD1

W1 13 GL D2 08 1800 GAS W1 12 D2 07 D1 03 BR2 F1 D2 06 W1 11

F1 F3 AG

BULKY WASTE

NATURAL GROUND LINE

ELEVATION NORTH ELEVATION\_BLOCK A

Scale: 1 : 100

PUBLIC LAWN

RL 72.600

1500

9.5M MAXIMUM BUILDING HEIGHT PLANE

SITE BOUNDARY

GTR GTR MS GTR RL 79.824

CLD1 DP DP CLD1

AW GAS W1 47 48 D2 20 21

CLD2 DP BR1 BR1 DP CLD2

BR2 LVR1 W1 18 19 16 GAS D2

F3 F1

RL 72.550 RL 72.390 RL 72.100

NATURAL GROUND LINE


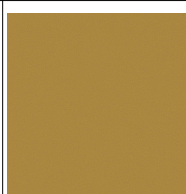

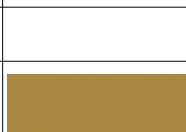
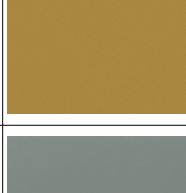
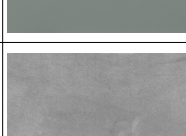
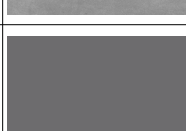
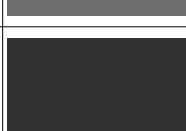

GROUND LEVEL\_BLOCK A RL72.500

FUNDA CRESCENT

2 ELEVATION SOUTH ELEVATION\_BLOCK B

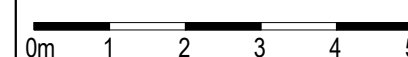
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EXTERIOR FINISHES SCHEDULE Copy 1			
CODE	IMAGE	DESCRIPTION	COLOR
AL		ALUMINUM POWDERCOATED: WINDOWS/DOORS FRAME	COLORBOND MONUMENT
AW		WINDOW AWNINGS	DULUX ELECTRO GOLD PEARL
BR1		FACE BRICK	AUSTRAL METALLI TITANIUM
BR2		FACE BRICK	AUSTRAL METALLI GUN METAL BLUE
BT		ALUMINUM BATTREN SCREENS	DULUX ELECTRO GOLD PEARL
CLD1		PREFINISHED FIBRE CEMENT SHEET	CEMENTEL SURROUND - BLUE BASE
CON		EXPOSED CONCRETE SLAB EDGE	
DP		DOWNPIPE	COLORBOND BASA
F1		VERTICAL SLAT FENCE	COLORBOND MONUMENT

EXTERIOR FINISHES SCHEDULE Copy 1			
CODE	IMAGE	DESCRIPTION	COLOUR
F2		VERTICAL SLAT FENCE	COLORBOND BASA
F3		1.8m COLORBOND FENCE	COLORBOND MONUMENT
F4		1.5m COLORBOND FENCE	COLORBOND MONUMENT
FS		FASCIA	COLORBOND BASA
GL		GLASS: WINDOWS AND DOORS	
LVR1		METAL LOUVRE	COLORBOND MONUMENT
LVR2		LOUVRE ABOVE DOOR	COLORBOND MONUMENT
MS		METAL ROOF SHEET	COLORBOND BASA

STATUS  
PART 5



**SYDNEY**  
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syd@modedesign.com.au

ABN: 65 112 807 931

CLIENT  
**LAHC**

PROJECT  
LALOR PARK SENIOR  
HOUSING

16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE  
**ELEVATIONS - SHEET 2**

DRAWN VL		CHECKED KM	
ISSUE 14/09/2023 8:33:36 AM		SCALE @ A1 1 : 100	SCALE @ A3 1 : 200
PROJECT No <b>22032</b>	STAGE <b>C</b>	DRAWING No <b>AR-2001</b>	REVISION <b>M</b>

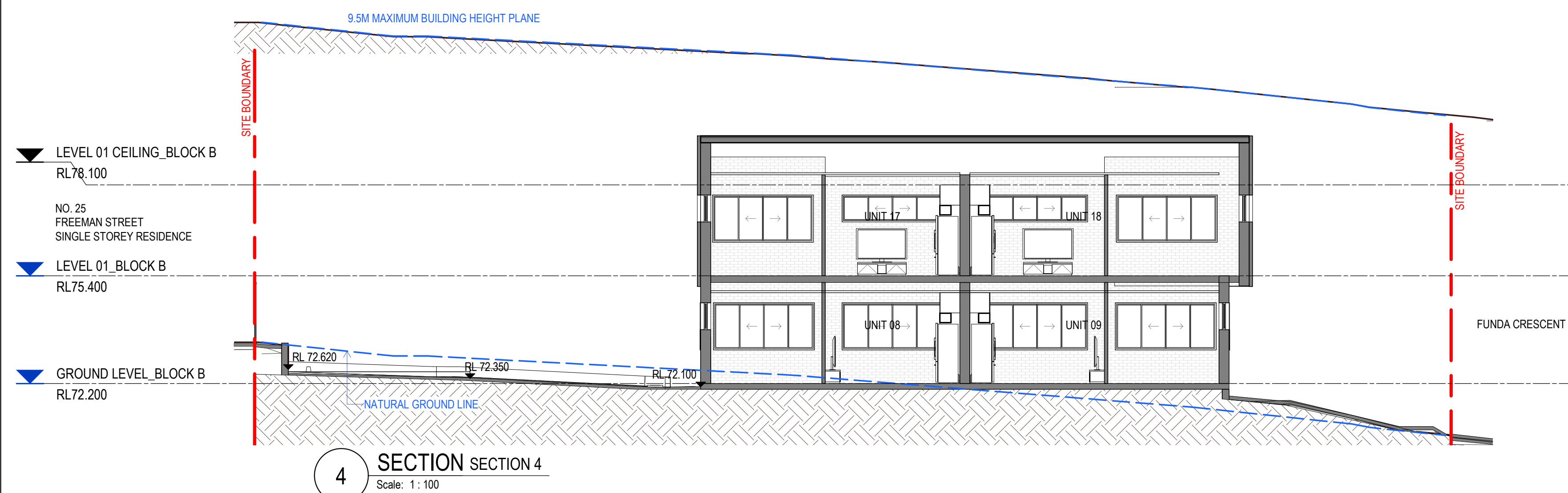
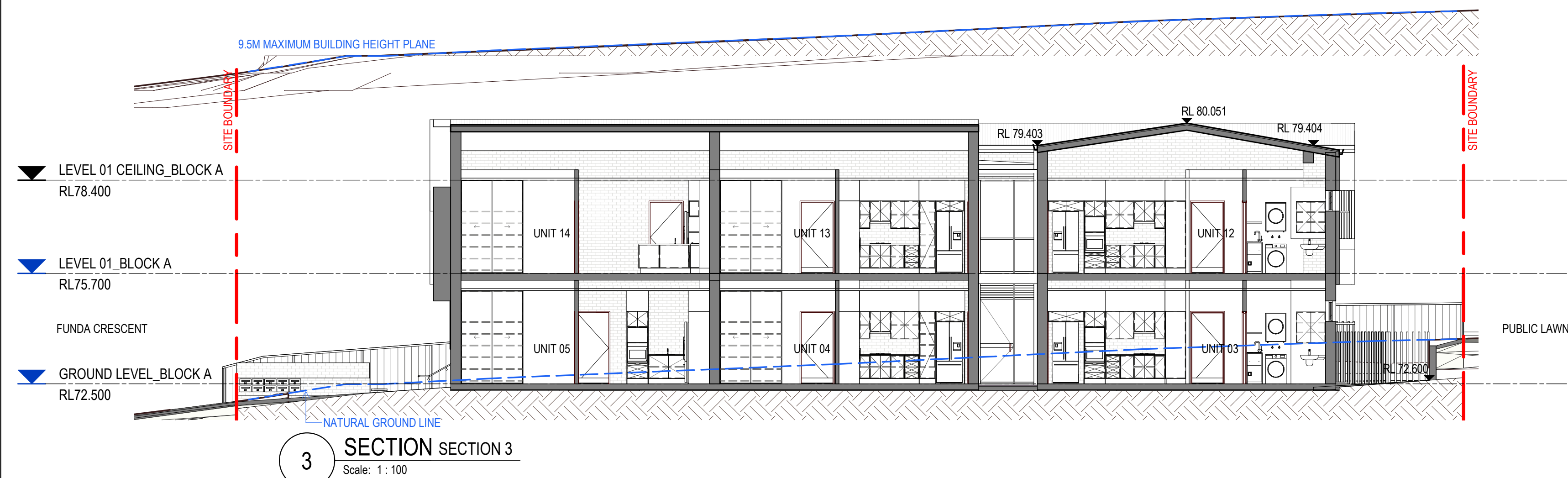
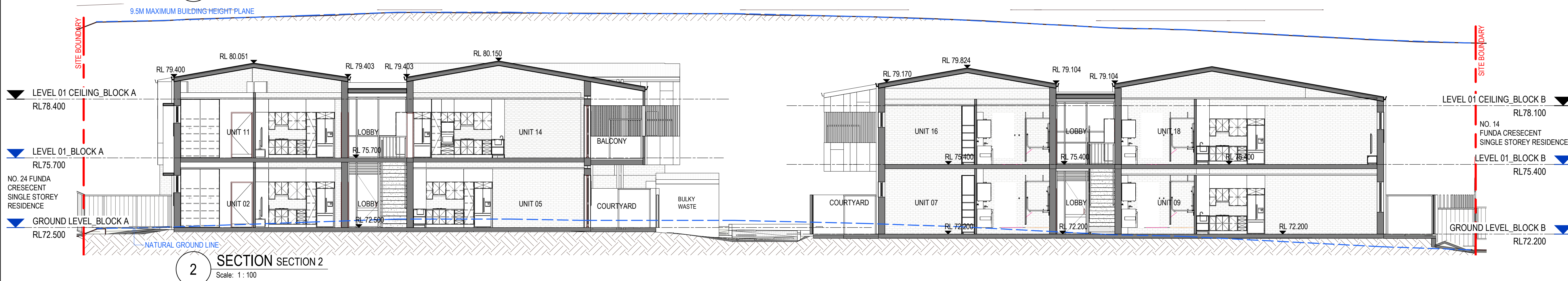
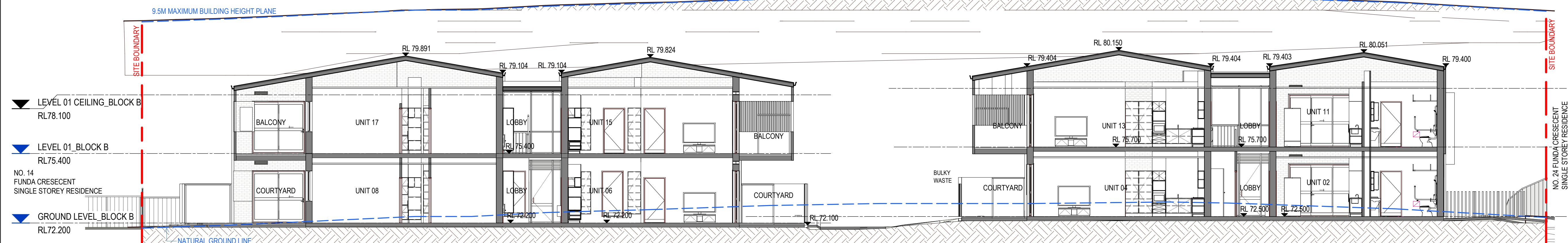


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## AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
E	DRAFT PART 5	VL	KM	25.11.22
F	DRAFT PART 5	VL	KM	02.12.22
G	PART 5	VL	KM	21.12.22
H	PART 5	BB	KM	28.03.23
I	PART 5	BB	KM	17.04.23
J	PART 5	BB	KM	23.05.23
K	PART 5	BB	MW	05.06.23
L	PART 5	BB	MW	13.06.23
M	PART 5	MK	MW	29.08.23



## PART 5

0m 1 2 3 4 5



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syd@modedesign.com.au

ABN: 65 112 807 931

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LAHCPROJECT  
LALOR PARK SENIOR  
HOUSING16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954DRAWING TITLE  
SECTIONS

DRAWN VL	CHECKED KM	SCALE @ A1 1:100	SCALE @ A3 1:200
ISSUE 14/09/2023 8:34:47 AM	STAGE C	DRAWING No AR-2100	REVISION M
PROJECT No 22032			



DOOR SCHEDULE\_GLAZED DOORS

			DIMENSIONS		COMMENTS
TYPE	NO.	OPERATION	HEIGHT	WIDTH	
GROUND LEVEL_BLOCK B					
D1	09	SW	2400	950	
D1	10	SW	2400	950	
D2	11	SL	2400	3000	
D2	12	SL	2400	3000	
D3	13	SL	2400	2400	
D3	14	SL	2400	2400	
GROUND LEVEL_BLOCK A					
D1	01	SW	2400	950	
D1	02	SW	2400	950	
D1	03	SW	2400	950	
D2	04	SL	2400	3000	
D2	05	SL	2400	3000	
D2	06	SL	2400	3000	
D2	07	SL	2400	3000	
D2	08	SL	2400	3000	
LEVEL 01_BLOCK B					
D2	20	SL	2400	3000	
D2	21	SL	2400	3000	
D3	22	SL	2400	2400	
D3	23	SL	2400	2400	
LEVEL 01_BLOCK A					
D2	15	SL	2400	3000	
D2	16	SL	2400	3000	
D2	17	SL	2400	3000	
D2	18	SL	2400	3000	
D2	19	SL	2400	3000	

WINDOW SCHEDULE					
TYPE	NO.	DIMENSIONS		SILL HEIGHT	COMMENTS
		WIDTH	HEIGHT		
GROUND LEVEL_BLOCK B					
W2	16	3000	800	1600	
W3	17	1200	1400	1000	
W1	18	3000	700	1700	
W1	19	3000	700	1700	
W2	20	3000	800	1600	
W3	21	1200	1400	1000	
W2	22	3000	800	1600	
W5	23	2400	800	1600	
W1	24	3000	1400	1000	
W1	25	3000	1400	1000	
W1	26	3000	1400	1000	
W1	27	3000	1400	1000	
W5	28	2400	800	1600	
W2	29	3000	800	1600	
GROUND LEVEL_BLOCK A					
W1	01	3000	1400	1000	
W2	02	3000	800	1600	
W3	03	1200	600	1800	TRANSLUCENT GLASS
W1	04	3000	1400	1000	
W3	05	1200	600	1800	TRANSLUCENT GLASS
W2	06	3000	800	1600	
W1	07	3000	1400	1000	
W1	08	3000	1400	1000	
W3	09	1200	600	1800	TRANSLUCENT GLASS
W2	10	3000	800	1600	
W1	11	3000	1400	1000	
W1	12	3000	1400	1000	
W1	13	3000	1400	1000	
W2	14	3000	800	1600	
W3	15	1200	600	1800	TRANSLUCENT GLASS
LEVEL 01_BLOCK B					
W2	45	3000	800	1600	
W3	46	1200	1400	1000	
W1	47	3000	700	1700	
W1	48	3000	700	1700	
W2	49	3000	800	1600	
W3	50	1200	1400	1000	
W1	51	3000	1400	1000	
W5	52	2400	800	1600	
W1	53	3000	1400	1000	
W2	54	3000	800	1600	
W2	55	3000	800	1600	
W1	56	3000	1400	1000	
W5	57	2400	800	1600	
W1	58	3000	1400	1000	
LEVEL 01_BLOCK A					
W1	30	3000	1400	1000	
W2	31	3000	800	1600	
W3	32	1200	600	1800	TRANSLUCENT GLASS
W2	33	3000	800	1600	
W3	34	1200	600	1800	TRANSLUCENT GLASS
W2	35	3000	800	1600	
W1	36	3000	1400	1000	
W1	37	3000	1400	1000	
W3	38	1200	600	1800	TRANSLUCENT GLASS
W2	39	3000	800	1600	
W1	40	3000	1400	1000	
W1	41	3000	1400	1000	
W1	42	3000	1400	1000	
W2	43	3000	800	1600	
W3	44	1200	600	1800	TRANSLUCENT GLASS

TYPE	NO.	WIDTH	HEIGHT	SILL HEIGHT	TRANSOM HEIGHT	COMMENTS
LEVEL 01_BLOCK A						
W4	59	2700	2700	0	1000	OPERABLE WITH 125MM RESTRICTER
W4	60	2700	3000	0	1000	OPERABLE WITH 125MM RESTRICTER
W4	61	1700	2700	0	1000	OPERABLE WITH 125MM RESTRICTER
LEVEL 01_BLOCK B						
W4	62	2700	2700	0	1000	OPERABLE WITH 125MM RESTRICTER
W4	63	2700	3000	0	1000	OPERABLE WITH 125MM RESTRICTER

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AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
D	DRAFT PART 5	VL	KM	17.11.22
E	DRAFT PART 5	VL	KM	25.11.22
F	DRAFT PART 5	VL	KM	02.12.22
G	PART 5	VL	KM	21.12.22
H	PART 5	BB	KM	28.03.23
I	PART 5	BB	KM	17.04.23
J	PART 5	BB	MW	05.06.23
K	PART 5	BB	MW	13.06.23
L	PART 5	MK	MW	29.08.23

DOOR NOTES (AU)

- DOOR SCHEDULE TO BE READ IN CONJUNCTION WITH DOOR HARDWARE SCHEDULE.
- WHERE REQUIRED, SEALS ARE TO BE CONTINUOUS. COORDINATE CLOSERS AND LATCHES TO SUIT.
- REFER TO GA PLANS AND ELEVATIONS FOR DOOR HANDING AND SLIDING DIRECTION
- VISUAL INDICATORS ON GLAZING TO COMPLY WITH AS1428.1.
- ALL GLASS SELECTED AND INSTALLED TO AS1288. SAFETY GLASS WHERE REQUIRED.
- GRILLES TO MECHANICAL ENGINEER'S DOCUMENTS.
- DROP BOLTS TO ALL NON-LOCKING LEAFS OF DOUBLE DOORS UNLESS NOTED OTHERWISE.

DOOR OPERATION

- B BI-FOLDING
- C CAVITY SLIDING
- F FACE SLIDING
- G GRILLE (COLLAPSING)
- H HINGED (SIDE)
- O OVERHEAD (SECTIONAL)
- M MULTI-FOLDING (CONCERTINA)
- P PIVOT
- R ROLL-UP (SHUTTER/ GRILLE)
- S SLIDING STACKING
- T TILT PANEL (OVERHEAD)
- W WALL OPERABLE
- X OPENING ONLY

DOORS ABBREVIATIONS

PANEL TYPE

- SC SOLID CORE
- HC HOLLOW CORE
- TF TIMBER FRAMED GLASS
- TFT TIMBER FRAMED GLASS WITH TRANSOM
- AF ALUMINIUM FRAMED GLASS
- AFT ALUMINIUM FRAMED GLASS WITH TRANSOM
- LV LOUVRE
- FSR FRAMELESS GLASS WITH RAILS
- RS ROLLER SHUTTER
- SD SMOKE DOOR
- FD FIRE DOOR

FRAME TYPE

- MF METAL FRAME
- TF TIMBER FRAME
- AF ALUMINIUM FRAME
- RSF ROLLER SHUTTER FRAME
- SOF SECTIONAL OVERHEAD FRAME

FINISHES

- AN ANODISED ALUMINIUM - CLEAR
- GL FRAMELESS GLASS
- PT PAINT
- PC POWDERCOAT

HARDWARE SETS

- ENS ENTRY SET
- EXS EXIT SET
- PRS PRIVACY SET
- PSS PASSAGE SET
- PTS PATIO SET

FROM ELEVATIONS

- VP VISION PANEL
- GR GRILLE
- KP KICK PLATE

STATUS  
DRAFT PART 5



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LAHC

PROJECT  
LALOR PARK SENIOR  
HOUSING  
16-22 Funda Crescent, Lalor Park  
360, 361, 362 & 363 DP31954

DRAWING TITLE  
DOOR & WINDOW  
SCHEDULES

DRAWN VL		CHECKED KM	
ISSUE 14/09/2023 8:33:12 AM		SCALE @ A1	SCALE @ A3 1: 200
PROJECT No 22032	STAGE C	DRAWING No AR-4100	REVISION L





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AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
A	DRAFT PART 5	VL	KM	25.11.22
B	DRAFT PART 5	VL	KM	02.12.22
C	PART 5	VL	KM	21.12.22
D	PART 5	BB	KM	28.03.23
E	PART 5	BB	KM	17.04.23
F	PART 5	BB	MW	05.06.23
G	PART 5	BB	MW	13.06.23
H	PART 5	MK	MW	29.08.23



FUNDA CRESCENT PERSPECTIVE

STATUS  
PART 5



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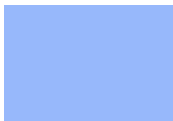
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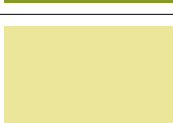
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PROJECT No 22032	STAGE C	DRAWING No AR-8000	REVISION H

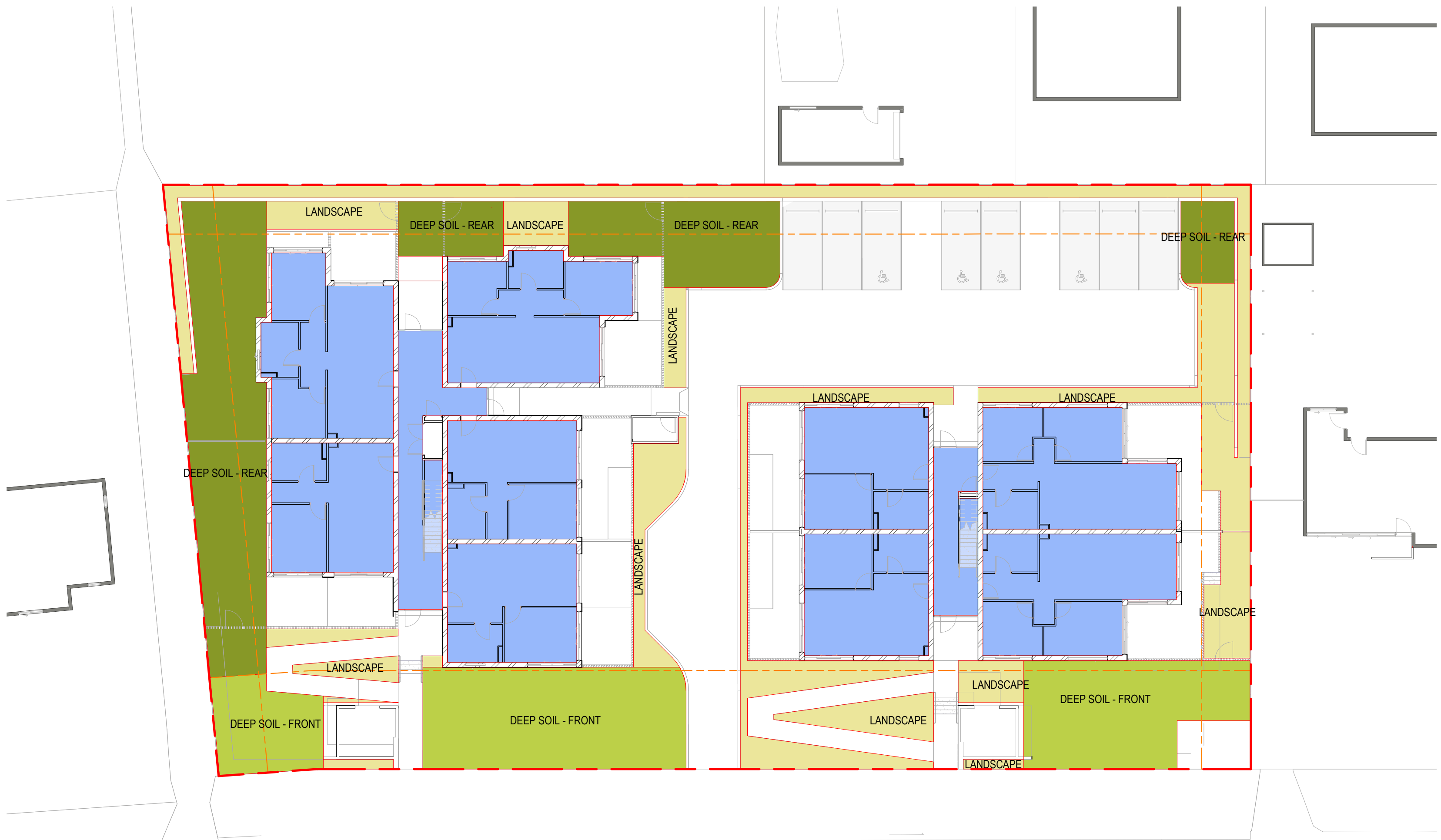


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FSR CALCULATION		
Image	Name	Area
	BLOCK A - FIRST LEVEL	374 m²
	BLOCK A - GROUND LEVEL	373 m²
	BLOCK B - FIRST LEVEL	290 m²
	BLOCK B - GROUND LEVEL	291 m²
Grand total		1328 m²

LANDSCAPE CALCULATION		
Image	Name	Area
	DEEP SOIL - FRONT	212 m²
	DEEP SOIL - REAR	220 m²
	LANDSCAPE	287 m²
Grand total		719 m²



1 **PLAN AREA PLAN - GROUND LEVEL**  
Scale: 1 : 200



2 **PLAN AREA PLAN - FIRST LEVEL**  
Scale: 1 : 200

STATUS

**PART 5**

0m246810

NORTH



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DRAWING TITLE

**AREA PLAN**

DRAWN  
VL

CHECKED  
KM

ISSUE  
14/09/2023 8:32:56 AM

SCALE @ A1  
1 : 200

SCALE @ A3  
1 : 200

PROJECT No  
**22032**

STAGE  
**C**

DRAWING No  
**AR-8050**

REVISION  
**G**

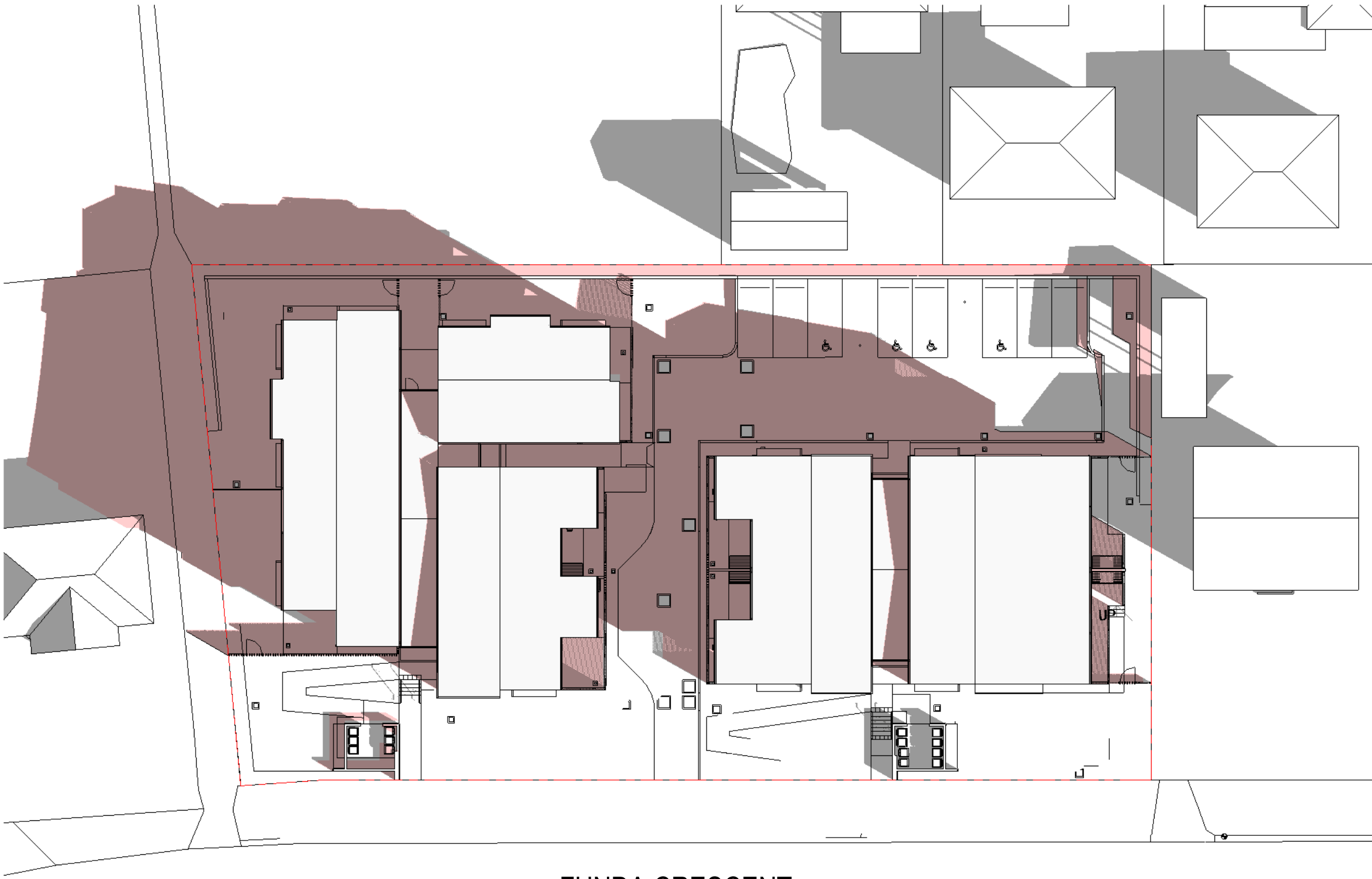


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AMENDMENTS

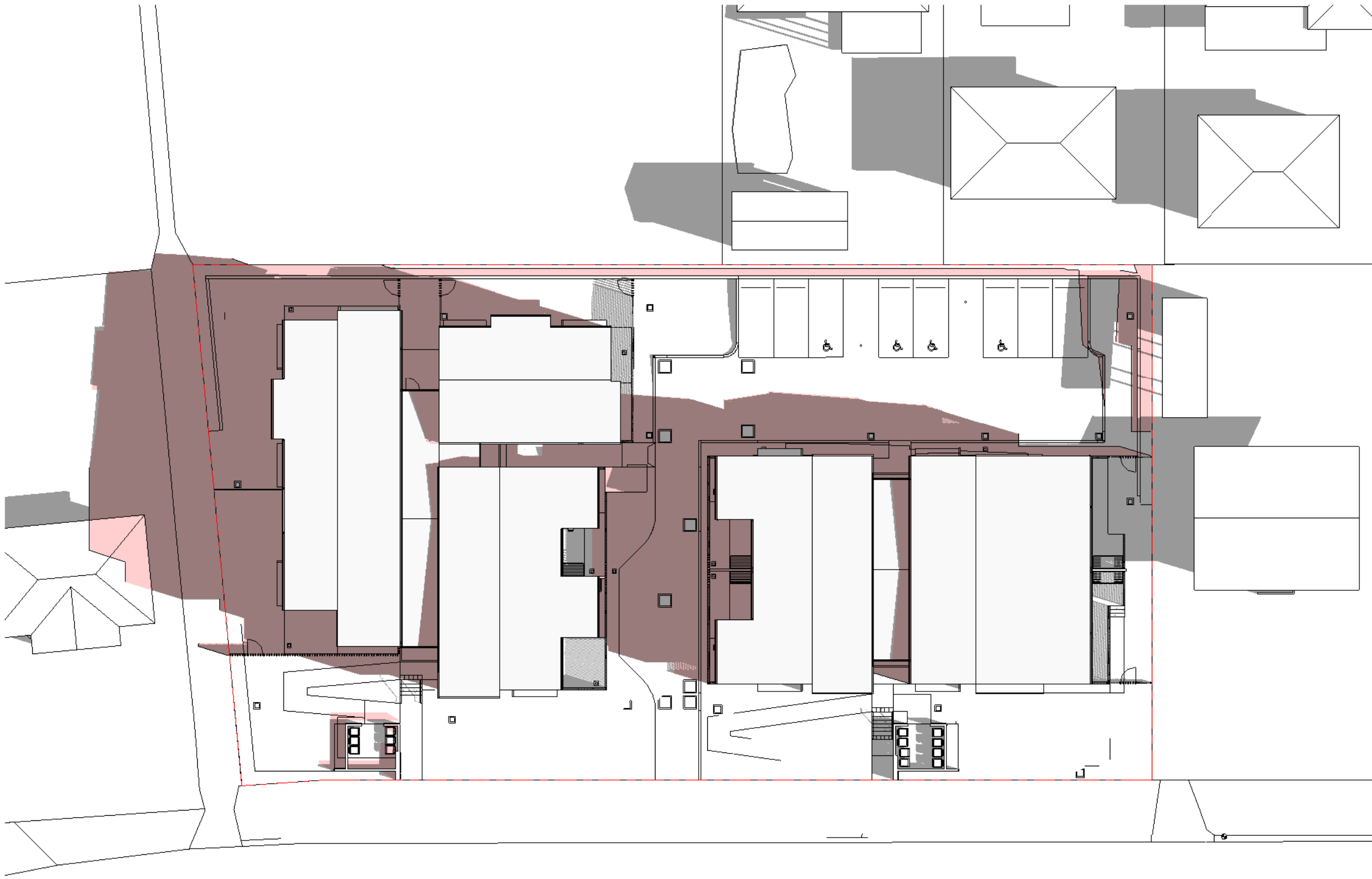
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E	DRAFT PART 5	VL	KM	25.11.22
F	DRAFT PART 5	VL	KM	02.12.22
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J	PART 5	BB	MW	05.06.23
K	PART 5	BB	MW	13.06.23
L	PART 5	MK	MW	29.08.23



FUNDA CRESCENT

1 PLAN SOLAR DIAGRAM - 21ST JUNE 9AM

Scale: 1 : 300



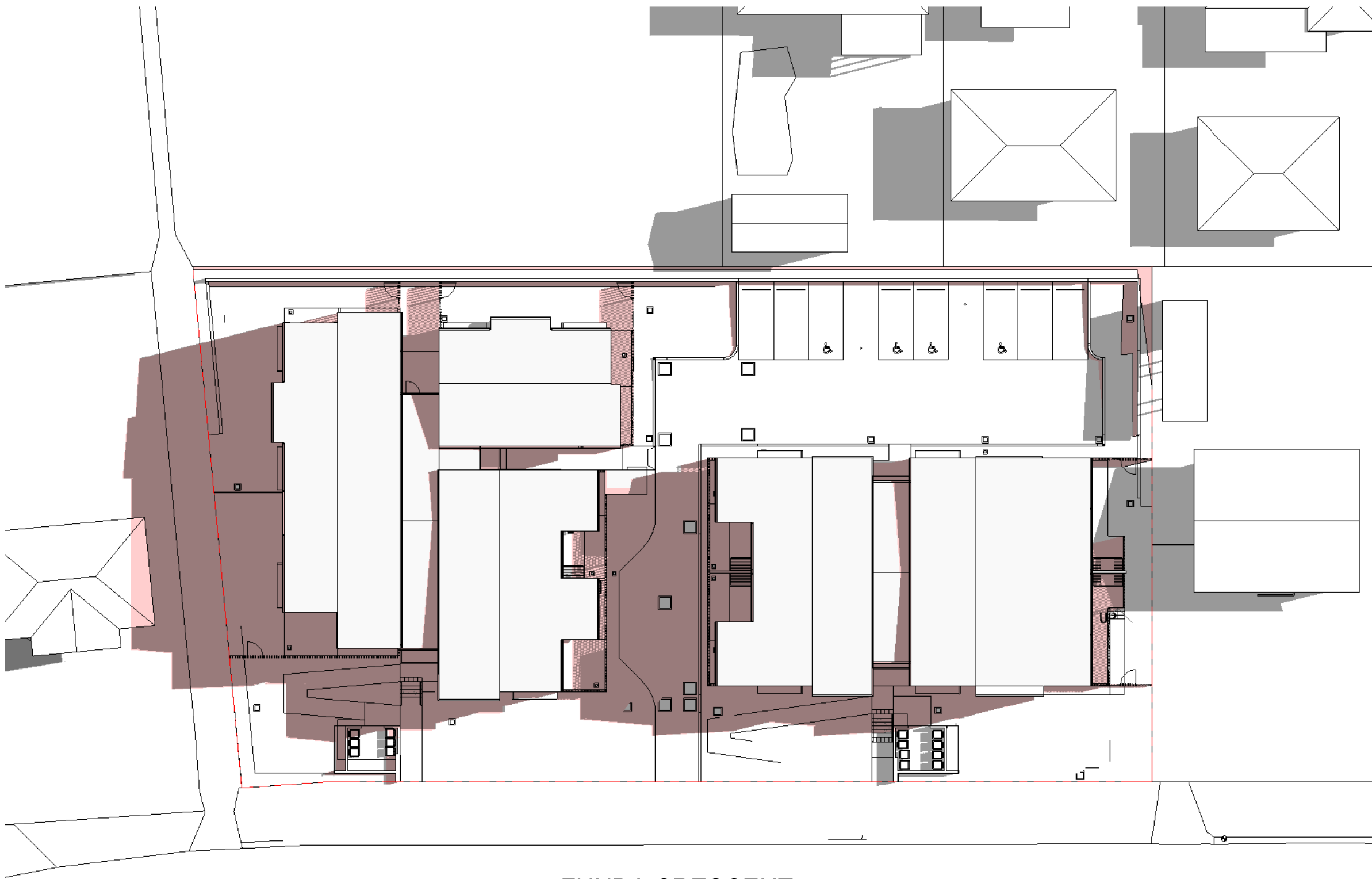
2 PLAN SOLAR DIAGRAM - 21ST JUNE 10AM

Scale: 1 : 300



3 PLAN SOLAR DIAGRAM - 21ST JUNE 11AM

Scale: 1 : 300



FUNDA CRESCENT

4 PLAN SOLAR DIAGRAM - 21ST JUNE 12PM

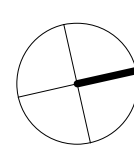
Scale: 1 : 300

LEGEND

- GREY AREA INDICATES EXISTING SHADOWS CAST BY NEIGHBOURING PROPERTIES
- PINK AREA INDICATES SHADOWS CAST BY PROPOSED DEVELOPMENT

STATUS  
PART 5

NORTH



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**LALOR PARK SENIOR HOUSING**  
16-22 Funda Crescent, Lalor Park  
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DRAWING TITLE  
**SOLAR ANALYSIS**

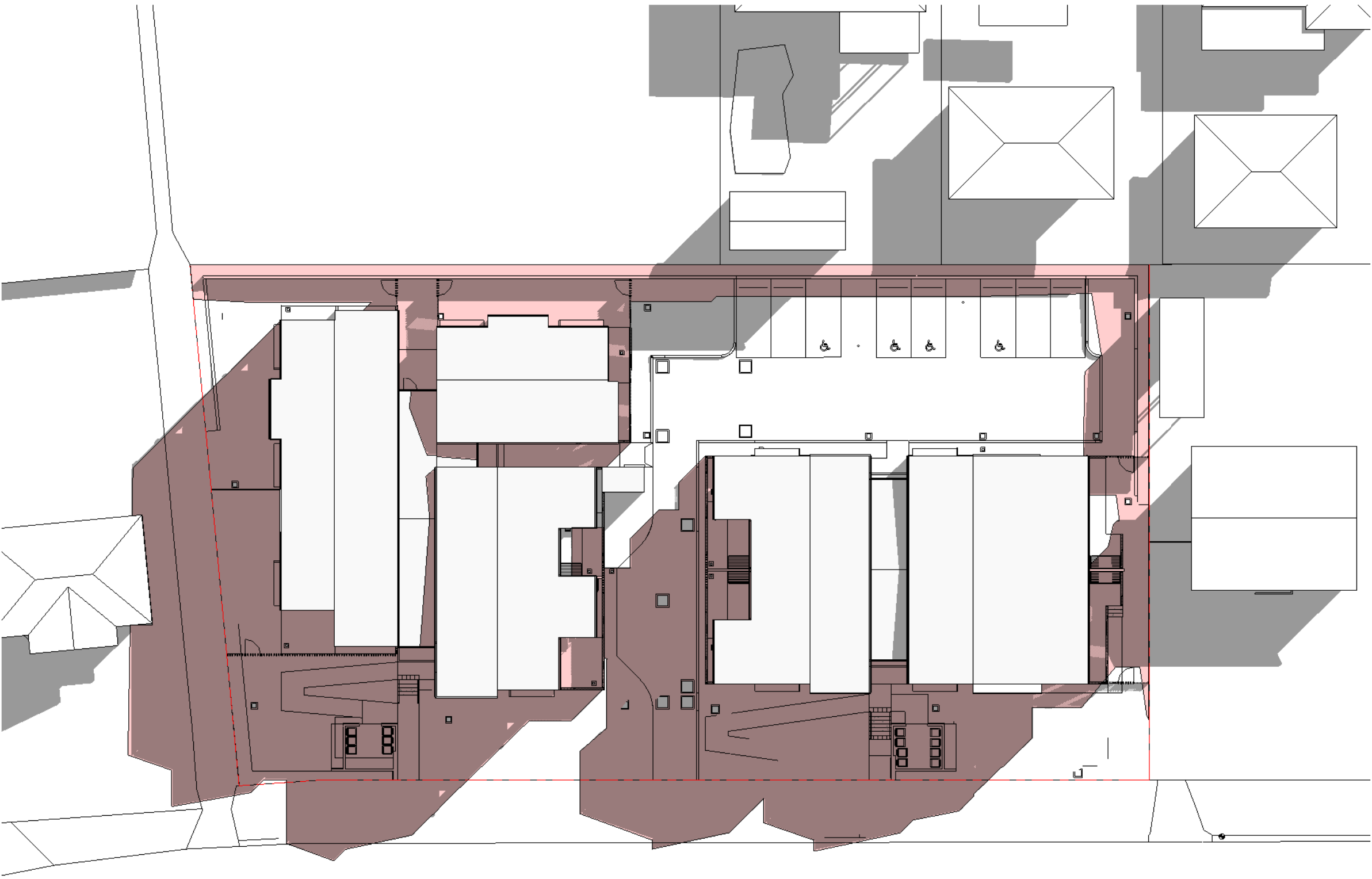
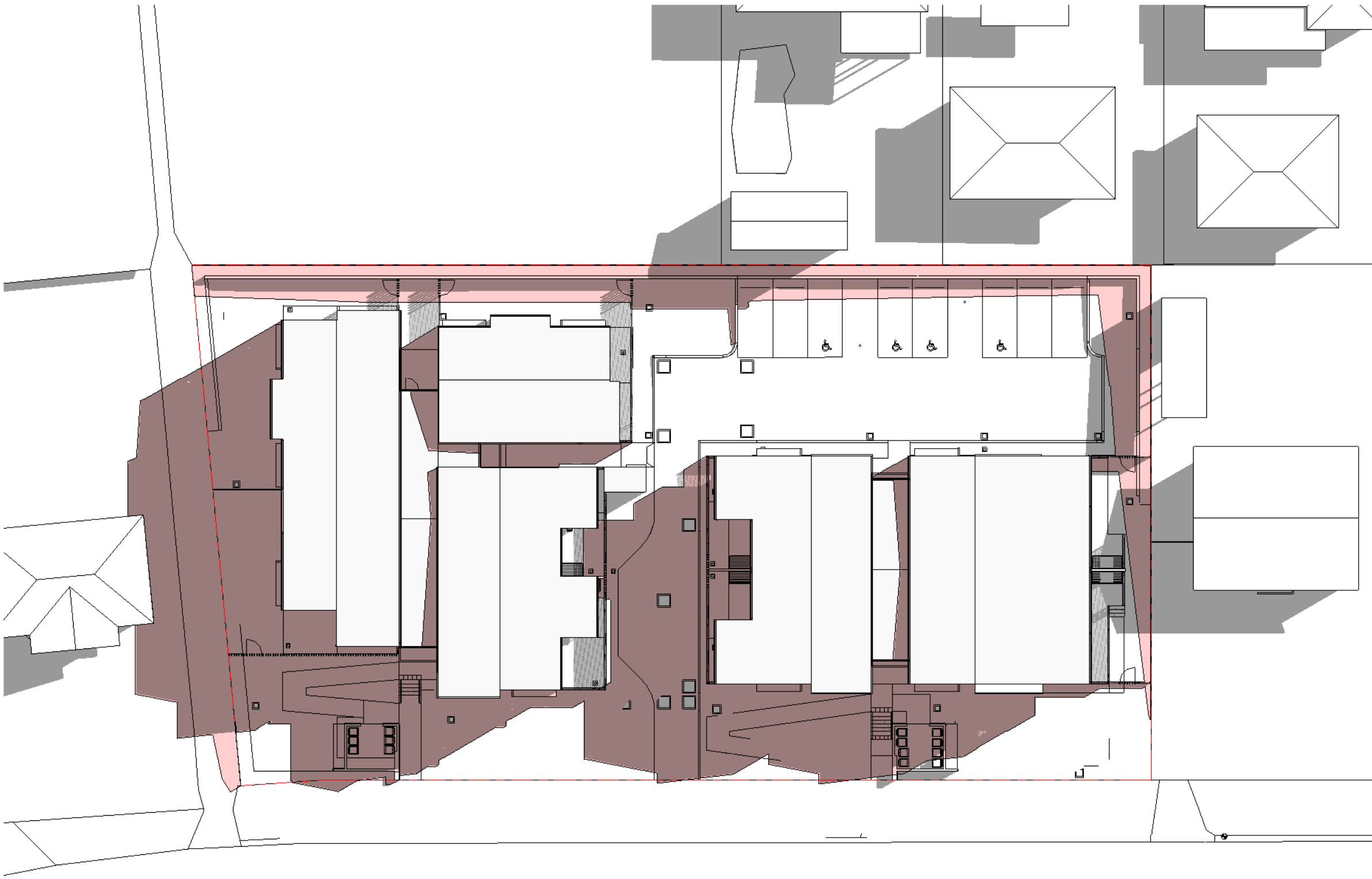
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ISSUE 14/09/2023 8:35:22 AM	PROJECT No 22032	STAGE C	DRAWING No AR-8100
			REVISION L

18 December 2023

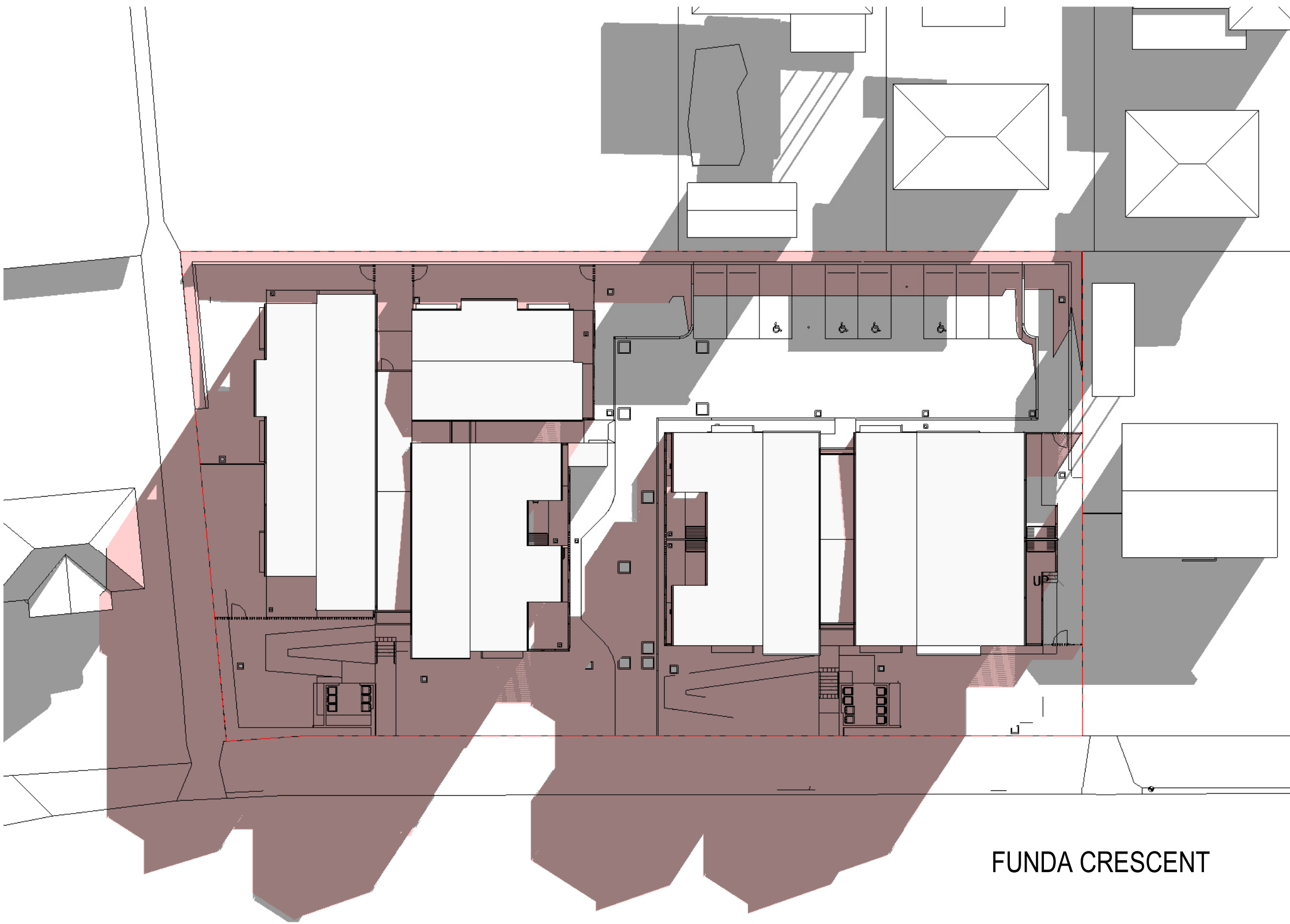
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AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
A	PART 5	BB	KM	17.04.23
B	PART 5	BB	MW	05.06.23
C	PART 5	BB	MW	13.06.23
D	PART 5	MK	MW	29.08.23



2 PLAN SOLAR DIAGRAM - 21ST JUNE 2PM  
Scale: 1 : 300



FUNDA CRESCENT

1 PLAN SOLAR DIAGRAM - 21ST JUNE 1PM  
Scale: 1 : 300

3 PLAN SOLAR DIAGRAM - 21ST JUNE 3PM  
Scale: 1 : 300


LEGEND

- GREY AREA INDICATES EXISTING SHADOWS CAST BY NEIGHBOURING PROPERTIES
- PINK AREA INDICATES SHADOWS CAST BY PROPOSED DEVELOPMENT

STATUS

0m 1 2 3 4 5

NORTH



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DRAWN Author		CHECKED Checker	
ISSUE 14/09/2023 8:35:09 AM As indicated		SCALE @ A1 As indicated	SCALE @ A3 1 : 200
PROJECT No 22032	STAGE C	DRAWING No AR-8101	REVISION D



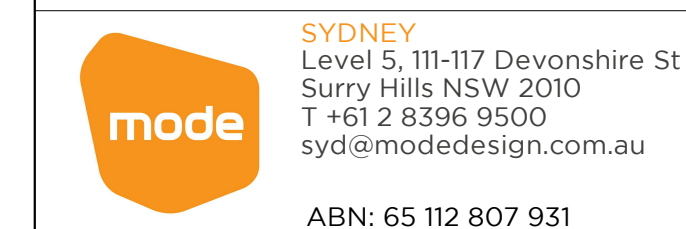
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REV	DESCRIPTION	AUTH	CHK	DATE
B	DRAFT PART 5	VL	KM	17.11.22
C	DRAFT PART 5	VL	KM	25.11.22
D	DRAFT PART 5	VL	KM	02.12.22
E	PART 5	VL	KM	21.12.22
F	PART 5	BB	KM	28.03.23
G	PART 5	BB	KM	17.04.23
H	PART 5	BB	MW	05.06.23
I	PART 5	BB	MW	13.06.23
J	PART 5	MK	MW	29.08.23

STATUS  
PART 5



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PROJECT  
**LALOR PARK SENIOR  
HOUSING**  
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360, 361, 362 & 363 DP31954

DRAWING TITLE  
**SOLAR STUDY - SHEET 1**

DRAWN VL		CHECKED KM	
ISSUE 14/09/2023 8:35:37 AM		SCALE @ A1 NTS	SCALE @ A3 NTS
PROJECT No <b>22032</b>	STAGE <b>C</b>	DRAWING No <b>AR-8200</b>	REVISION <b>J</b>



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## AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
B	DRAFT PART 5	VL	KM	17.11.22
C	DRAFT PART 5	VL	KM	25.11.22
D	DRAFT PART 5	VL	KM	02.12.22
E	PART 5	VL	KM	21.12.22
F	PART 5	BB	KM	28.03.23
G	PART 5	BB	KM	17.04.23
H	PART 5	BB	MW	05.06.23
I	PART 5	BB	MW	13.06.23
J	PART 5	MK	MW	29.08.23



1 3D VIEW VIEW FROM SUN ANGLE - 1PM  
Scale: NTS



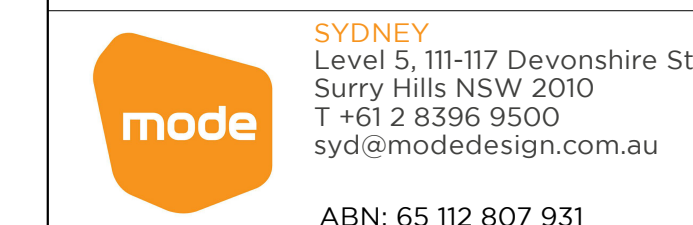
2 3D VIEW VIEW FROM SUN ANGLE - 2PM  
Scale: NTS



3 3D VIEW VIEW FROM SUN ANGLE - 3PM  
Scale: NTS

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STATUS  
PART 5



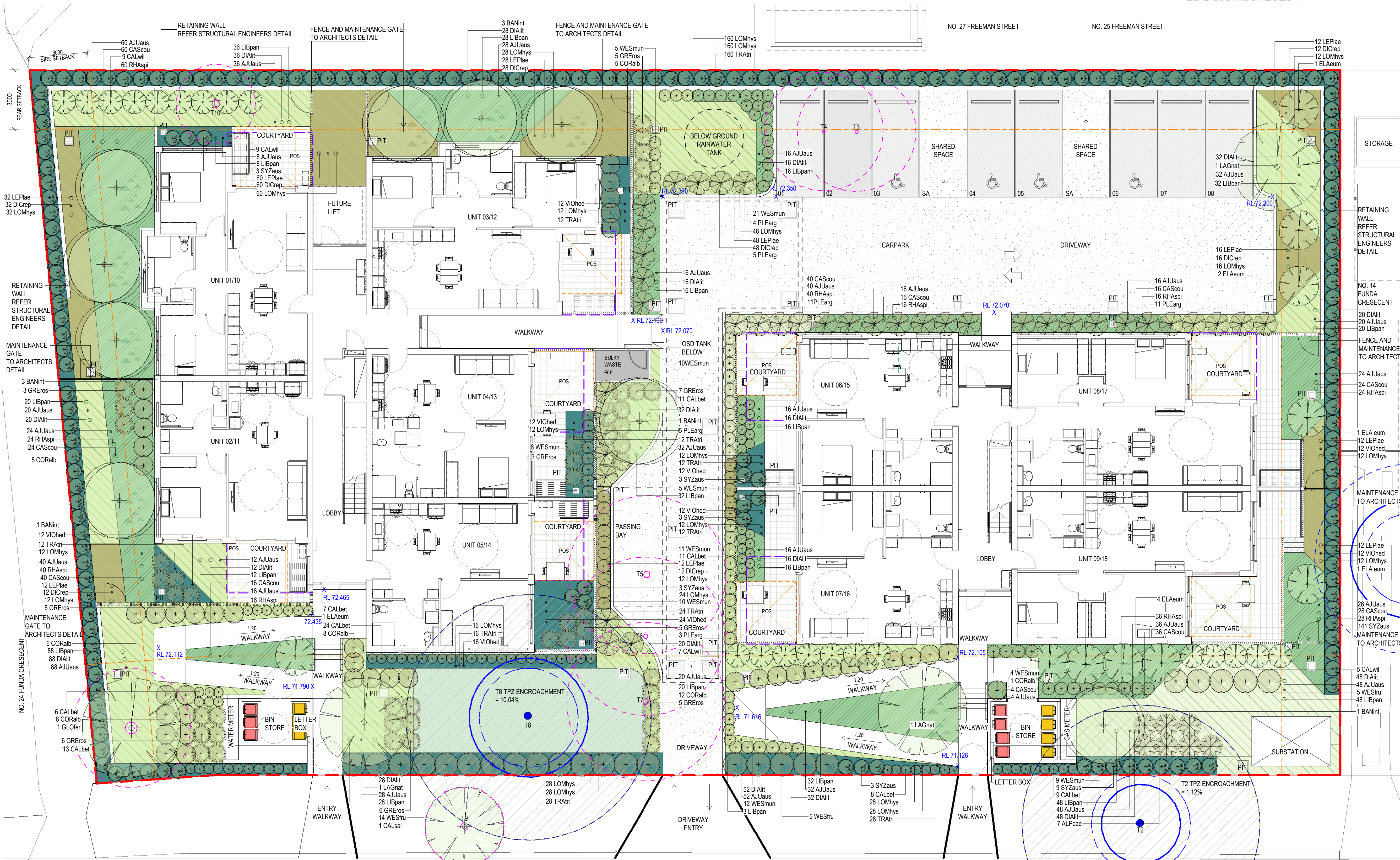
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PROJECT  
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HOUSING**  
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DRAWING TITLE  
**SOLAR STUDY - SHEET 2**

DRAWN VL		CHECKED KM	
ISSUE 14/09/2023 8:35:50 AM		SCALE @ A1 NTS	SCALE @ A3 NTS
PROJECT No <b>22032</b>	STAGE <b>C</b>	DRAWING No <b>AR-8201</b>	REVISION <b>J</b>





PLANTING SCHEDULE

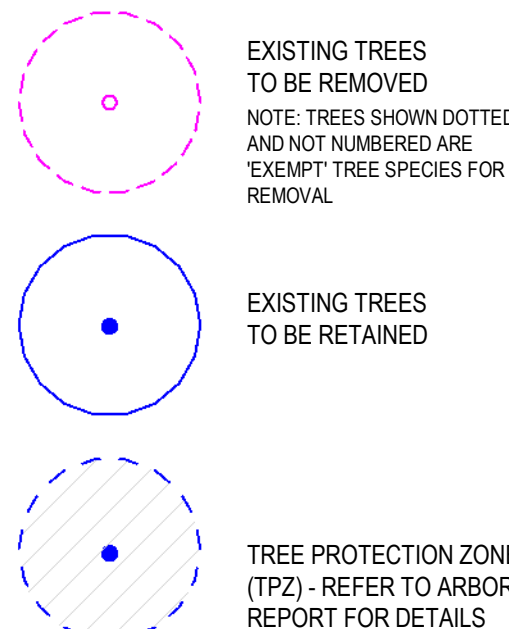
CODE	BOTANIC NAME	COMMON NAME	Plant Height	Plant Spread	POT SIZE (MIN.)	QUANTITY
TREES						
BANint	BANKSIA integrifolia	Coastal Banksia	7000	4000	200Ltr	9
CALsal	CALLISTEMON salignus	Willow Bottlebrush	6000	4000	200L	1
CALvim	CALLISTEMON viminalis 'Slim'	Bottlebrush	7000	1200	45L	21
ELAeum	ELAEOCARPUS eumundii	Eumundi Quandong	7000	2000	200L	10
GLOfer	GLOCHIDION ferdinandi	Cheese Tree	7000	5000	200Ltr	1
LAGnat	LAGERSTROEMIA indica x fauriei 'Natchez'	'Natchez' Crepe Myrtle	6000	4000	200L	3
SYZaus	SYZYGIUM australe 'Straight & Narrow'	Weeping Lilly Pilly	8000	800	45L	195
SHRUBS						
ALPcae	ALPINIA caerulea	Native Ginger	2500	2000	200mm	7
CALbet	CALLISTEMON viminalis 'Better John'	'Better John' Callistemon	300	600	200mm	87
CORalb	CORREA alba	Correa	1500	1200	200mm	43
GREeros	GREVILLEA rosmarinifolia	Grevillea Crimson Villea	800	800	200mm	45
PLEearg	PLECTRANTHUS argentatus	Silver Spurflower	1500	1200	140mm	39

PLANTING SCHEDULE

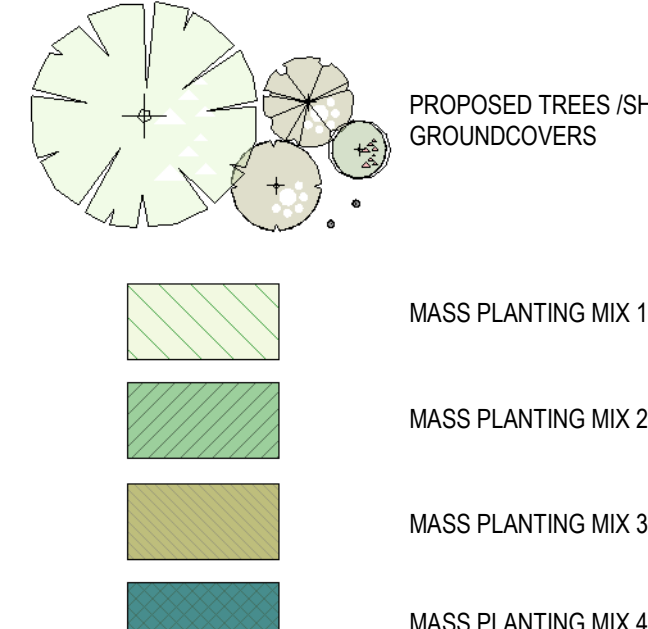
CODE	BOTANIC NAME	COMMON NAME	Plant Height	Plant Spread	POT SIZE (MIN.)	QUANTITY
TREES						
WESfru	WESTRINGIA fruticosa 'smokey'	Costal Rosemary	1500	1500	200mm	24
WESmun	WESTRINGIA fruticosa 'Mund'	Coastal Rosemary	300	600	200mm	93
GROUNDCOVERS						
AJUaus	AJUGA australis	Australian Bugle	400	1000	140mm	872
CAScou	CASUARINA glauca 'Cousin It'	She-oak	200	5000	140mm	304
DIAlit	DIANELLA caerulea 'Little Jess'	Native Flax	350	350	140mm	572
DICrep	DICHONDRA repens	Kindy Weed	350	350	140mm	220
LEPcae	LEPTOSPERMUM laevigatum 'Shore Tuff'	'Shore Tuff' Leptospermum	1500	1500	200mm	247
LIBpan	LIBERTIA paniculata	Grass Flag	300	300	140mm	531
LOMhys	LOMANDRA hystrix 'Tropic Belle'	Mat Rush	800	800	140mm	779
RHAspi	RHAGODIA spinescens	Aussie Flat Bush	200	1000	140mm	300
TRAtri	TRACHELOSPERMUM jasminoides 'Tricolor'	Tricolour Jasmine	300	600	140mm	316
VIOhed	VIOLA hederacea	Native Violet	100	400	140mm	124

LEGEND

EXISTING VEGETATION



SOFTWORKS



LAWN AREA



PROPOSED LEVELS



REFER ARCHITECTS DOCUMENTATION

HARDWORKS



CONCRETE SURFACE

REFER ARCHITECTS DETAIL

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AMENDMENTS

REV	DESCRIPTION	AUTH	CHK	DATE
A	STAGE B - SKETCH DESIGN	LZ	TW	10.10.2022
B	NOTIFICATION PLAN	LZ	TW	17.11.2022
C	PART 5 SUBMISSION	LZ	TW	21.11.2022
D	PART 5 SUBMISSION	LZ	TW	02.12.2022
E	PART 5 SUBMISSION	LZ	TW	21.12.2022
F	PART 5 SUBMISSION	LZ	TW	22.05.2023
G	REVISED PART 5 SUBMISSION	LZ	TW	31.08.2023
H	REVISED PART 5 SUBMISSION	LZ	TW	29.09.2023

STATUS  
**PART 5 SUBMISSION**

0m 1 2 3 4 5

NORTH

**mode** SYDNEY  
Level 5, 111-117 Devonshire St  
Surry Hills NSW 2010  
T +61 2 8396 9500  
syd@modedesign.com.au

ABN: 65 112 807 931

CLIENT  
**Land and Housing Corporation**

PROJECT  
**LALOR PARK SENIOR HOUSING**  
16-22 Funda Crescent, Lalor Park

DRAWING TITLE  
**LANDSCAPE PLAN**

DRAWN LZ		CHECKED TW	
ISSUE 29/09/2023 3:09:16 PM		SCALE @ A1 1:100	
PROJECT No 22032	STAGE SD	DRAWING No LD-1000	REVISION H



# PROPOSED DEVELOPMENT AT 22 FUNDA CRESCENT, LALOR PARK

## GENERAL

- G1** These drawings shall be read in conjunction with all architectural and other consultants drawings and specifications and with such other written instructions and sketches as may be issued during the course of the Contract. Any discrepancies shall be referred to the Superintendent before proceeding with any related works. Construction from these drawings, and their associated consultant's drawings is not to commence until approved by the Local Authorities.
- G2** All materials and workmanship shall be in accordance with the relevant and current Standards Australia codes and with the By-Laws and Ordinances of the relevant building authorities except where varied by the project specification.
- G3** All set out dimensions shall be obtained from Architect's and Engineer's details. All discrepancies shall be referred to the Architect and Engineer for decision before proceeding with related work.
- G4** During construction the structure shall be maintained in a stable condition and no part shall be overstressed. Temporary bracing shall be provided by the builder/subcontractor to keep the works and excavations stable at all times.
- G5** Unless noted otherwise levels are in metres and dimensions are in millimetres.
- G6** The alignment and level of all services shown are approximate only. The contractor shall confirm the position and level of all services prior to commencement of construction. Any damage to services shall be rectified at the contractors expense.
- G7** Any substitution of materials shall be approved by the Engineer and included in any tender.
- G8** All services, or conduits for servicing shall be installed prior to commencement of pavement construction.
- G9** Subsoil drainage, comprising 100 agriculture pipe in geo-stocking to be placed as shown and as may be directed by the superintendent. Subsoil drainage shall be constructed in accordance with the relevant local authority construction specification.
- G10** The structural components detailed on these drawings have been designed in accordance with the relevant Standards Australia codes and Local Government Ordinances for the following loadings. Refer to the Architectural drawings for proposed floor usage. Refer to drawings for live loads and superimposed dead loads.

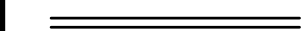



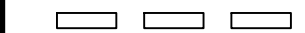
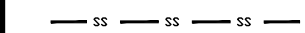



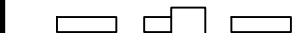






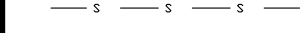
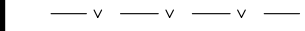
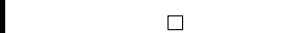
## DRAINAGE NOTES

- D1** All drainage levels to be confirmed on site, prior to any construction commencing.
- D2** All pipes within the property to be a minimum of 100 dia upvc @ 1% minimum grade, uno.
- D3** All pits within the property are to be fitted with "weldok" or approved equivalent grates:  
- Light duty for landscaped areas  
- Heavy duty where subjected to vehicular traffic
- D4** All pits within the property to be constructed as one of the following:  
1) Precast stormwater pits  
2) Cast insitu mass concrete  
3) Cement rendered 230mm brickwork subject to the relevant local authority construction specification.
- D5** Ensure all grates to pits are set below finished surface level within the property. Top of pit RL's are approximate only and may be varied subject to approval of the engineer. All invert levels are to be achieved.
- D6** Any pipes beneath relevant local authority road to be rubber ring jointed RCP, uno.
- D7** All pits in roadways are to be fitted with heavy duty grates with locking bolts and continuous hinge.
- D8** Provide step irons to stormwater pits greater than 1200 in depth.
- D9** Trench back fill in roadways shall comprise sharp, clean granular back fill in accordance with the relevant local authority specification to non-trafficable areas to be compacted by rodding and tamping using a flat plate vibrator.
- D10** Where a high early discharge (hed) pit is provided all pipes are to be connected to the hed pit, uno.
- D11** Down pipes shall be a minimum of dn100 sw grade upvc or 100 x100 colorbond/zincalume steel, uno.
- D12** Colorbond or zincalume steel box gutters shall be a minimum of 450 wide x 150 deep.
- D13** Eaves gutters shall be a minimum of 125 wide x 100 deep (or of equivalent area) colorbond or zincalume steel, uno.
- D14** Subsoil drainage shall be provided to all retaining walls & embankments, with the lines feeding into the stormwater drainage system, uno.


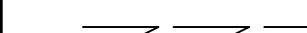



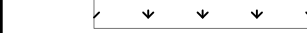
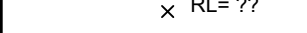
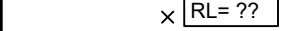



## EROSION AND SEDIMENT CONTROL NOTES

- E1** These notes are to be read in conjunction with erosion and sediment control details in this drawing set.
- E2** The contractor shall implement all soil erosion and sediment control measures as necessary and to the satisfaction of the relevant local authority prior to the commencement of and during construction. No disturbance to the site shall be permitted other than in the immediate area of the works and no material shall be removed from the site without the relevant local authority approval. All erosion and sediment control devices to be installed and maintained in accordance with standards outlined in nsw department of housing's "managing urban stormwater - soils and constructions".
- E3** Place straw bales length wise in a row as parallel as possible to the site contours, uno. Bale ends to be tightly butted. Bales are to be placed so that straws are parallel to the row. Bales are to be placed 1.5m to 2m downslope from the toe of the disturbed batter, uno.
- E4** Council approved filter fabric to be entrenched 150mm deep upslope towards disturbed surface. Fabric to be a minimum SF2000 or better. Fix fabric to posts with wire ties or as recommended with manufacturer's specifications. Fabric joints to have a minimum of 150mm overlap. Wire to be strung between posts with filter fabric overlap to prevent sagging.
- E5** Stabilised entry/exit points to remain intact until finished driveway is complete. Construction of entry/exit points to be maintained and repaired as required so that it's function is not compromised. Construction of entry/exit point to be in accordance with the detail contained within this drawing set.
- E6** All drainage pipe inlets to be capped until:  
- downpipes connected  
- pits constructed and protected with silt barrier
- E8** Provide and maintain silt traps around all surface inlet pits until catchment is revegetated or paved.
- E7** The contractor shall regularly maintain all erosion and sediment control devices and remove accumulated silt from such devices such that more than 60% of their capacity is lost. All the silt is to be placed outside the limit of works. The period for maintaining these devices shall be at least until all disturbed areas are revegetated and further as may be directed by the superintendent or council.
- E8** The contractor shall implement dust control by regularly wetting down (but not saturating) disturbed area.
- E9** Topsoil shall be stripped and stockpiled outside hazard areas such as drainage lines. This topsoil shall be respread later on areas to be revegetated and stabilised only. (i.e. all footpaths, batters, site regarding areas, basins and catchdrains). Topsoil shall not be respread on any other areas unless specifically instructed by the superintendent. If they are to remain for longer than one month stockpiles shall be protected from erosion by covering them with a mulch and hydroseeding and, if necessary, by locating banks or drains downstream of a stockpile to retard silt laden runoff.
- E10** Lay 300 wide minimum turf strip on 100 topsoil behind all kerb and gutter with 1000 long returns every 6000 and around structures immediately after backfilling as per the relevant local authority specification.
- E11** The contractor shall grass seed all disturbed areas with an approved mix as soon as practicable after completion of earthworks and regrading.
- E12** Revegetate all trenches immediately upon completion of backfilling.
- E13** When any devices are to be handed over to council they shall be in clean and stable condition.

## STANDARD LINE TYPES AND SYMBOLS

	PROPOSED KERB & GUTTER
	EXISTING KERB & GUTTER
	PROPOSED BELOW GROUND PIPELINE
	PROPOSED SUSPENDED PIPELINE
	EXISTING PIPELINE
	SUBSOIL DRAINAGE LINE
	PROPOSED KERB INLET PIT
	EXISTING KERB INLET PIT
	PROPOSED JUNCTION OR INLET PIT
	EXISTING JUNCTION OR INLET PIT
	DESIGN CENTRELINE
	EXISTING EDGE OF BITUMEN
	TELECOMMUNICATION CONDUIT
	GAS MAIN
	WATER MAIN
	SEWER MAIN
	UNDERGROUND ELECTRICITY CABLES
	PERMANENT MARK & S.S.M.
	BENCHMARK, SURVEY STATION

## STANDARD LINE TYPES AND SYMBOLS

	OVERLAND FLOW PATH
	GUTTER DRAINAGE DIRECTION
	DOWNPIPE
	DOWNPIPE WITH SIDE OVERFLOW
	PERVIOUS (GRASSED) AREAS
	EXISTING (PRE-DEVELOPMENT) RL
	POST DEVELOPMENT RL
	GRADED IMPERVIOUS AREA (ROOF, CONC SLABS ETC)
	SEDIMENT FENCE
	CROSSING PIPES
	NODE POINT

## LEGEND

AHD	Australian height datum	SS	Stainless steel
AG	Ag-pipe (Sub soil drainage)	SU	Box gutter sump
ARI	Average recurrence interval	TW	Top of wall
BG	Box Gutter	TWL	Top water level
BWL	Bottom water level	U/S	Underside of slab
CL	Cover level	VG	Vally gutter
CO	Clean out inspection opening	UNO	Unless noted otherwise
DCP	Discharge control pit		
DP	Down pipe		
DRP	Dropper pipe		
EBG	Existing box gutter		
EDP	Existing down pipe		
EEG	Existing eaves gutter		
EG	Eaves gutter		
FRC	Fiber reinforced concrete		
FW	Floor waste		
GD	Grated drain		
GSP	Grated surface inlet pit		
HED	High early discharge		
HP	High point of gutter		
IL	Invert level		
IO	Inspection opening		
O/F	Overflow		
OSD	On-site detention		
PSD	Permissible site discharge		
P1	Pipe 1		
RCP	Reinforced concrete pipe		
RHS	Rectangular hollow section		
RL	Reduced level		
RRJ	Rubber ring joint		
RRT	Rainwater re-use tank		
RWH	Rain water head		
RWO	Rain water outlet		
SLAP	Sealed lid access pit		
SP	Spreader pipe		
SPR	Spreader		

## RECOMMENDED MAINTENANCE SCHEDULE

DISCHARGE CONTROL PIT (DCP)	FREQUENCY	RESPONSIBILITY	PROCEDURE
Inspect flap valve and remove any blockage.	Six monthly	Owner	Remove grate. Ensure flap valve moves freely and remove any blockages or debris.
Inspect screen and clean.	Six monthly	Owner	Remove grate and screen if required and clean it.
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate & screen to inspect orifice. see plan for location of dcp.
Inspect dcp sump & remove any sediment-sludge.	Six monthly	Owner	Remove grate and screen. Remove sediment/sludge build-up and check orifice and flap valve clear.
Inspect grate for damage or blockage.	Six monthly	Owner	Check both sides of grate for corrosion, (especially corners and welds) damage or blockage.
Inspect return pipe from storage and return any blockage.	Six monthly	Owner	Remove grate and screen. ventilate underground storage if present. open flap valve and remove any blockages in return line. Check for sludge/debris on upstream side of return line.
Inspect outlet pipe and remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and screen. ventilate underground storage if present. Check orifice and remove any blockages in outlet pipe. Flush outlet pipe to confirm it drains freely. Check for sludge/debris on upstream side of return line.
Check fixing of step irons is secure.	Six monthly	Maintenance Contractor	Remove grate and ensure fixings secure prior to placing weight on step iron.
Inspect overflow weir & remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and open cover to ventilate underground storage if present. ensure weir clear of blockages.
Empty basket at overflow weir (if present).	Six monthly	Maintenance Contractor	Remove grate and ventilate underground storage chamber if present. Empty basket, check fixings secure and not corroded.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance Contractor	Remove grate and screen. ensure plate mounted securely, tighten fixings if required. seal gaps as required.
Check attachment of screen to wall of pit.	Annually	Maintenance Contractor	Remove grate and screen. ensure screen fixings secure. repair as required.
Check screen for corrosion.	Annually	Maintenance Contractor	Remove grate and examine screen for rust or corrosion, especially at corners or welds.
Check attachment of flap valve to wall of .	Annually	Maintenance Contractor	Remove grate. Ensure fixings of valve are secure.
Check flap valve seals against wall of pit.	Annually	Maintenance Contractor	Remove grate. fill pit with water and check that flap seals against side of pit with minimal leakage.
Check any hinges of flap valve move freely.	Annually	Maintenance Contractor	Remove grate. Test valve hinge by moving flap to full extent.
Inspect dcp walls (internal and external, if appropriate) for cracks or spalling.	Annually	Maintenance Contractor	Remove grate to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Check step irons for corrosion.	Annually	Maintenance Contractor	Remove grate. Examine step irons and repair any corrosion or damage.
Check orifice diameter correct and retains sharp edge.	Five yearly	Maintenance Contractor	Compare diameter to design (see work-as- executed) and ensure edge is not pitted or damaged.
STORAGE			
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate and screen. remove sediment/sludge build-up.
Check orifice diameter correct and retains sharp edge.	Six monthly	Owner	Remove blockages from grate and check if pit blocked.
Inspect screen and clean.	Six monthly	Owner	Remove debris and floatable material likely to be carried to grates.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance Contractor	Remove grate to inspect internal walls. repair as required. clear vegetation from external walls if necessary and repair as required.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Compare actual storage available with work-as executed plans. If volume loss is greater than 5%, arrange for reconstruction to replace the volume lost. Council to be notified of the proposal.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Check along drainage lines and at pits for subsidence likely to indicate leakages.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

F	30.08.23	ISSUED FOR 75% CO-ORDINATION	O.G.
E	14.03.23	RE-ISSUED FOR APPROVAL	O.G.
D	14.03.23	RE-ISSUED FOR SUIT ARBORIST COMMENTS	O.G.
C	16.01.23	RE-ISSUED FOR SUIT ARCHITECTURAL	O.G.
B	23.11.22	RE-ISSUED FOR APPROVAL	O.G.
REV	DATE	DESCRIPTION	BY

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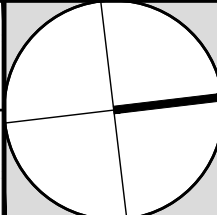


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Postal Address  
PO Box 7191  
NORWEST NSW 2153

## PROPOSED DEVELOPMENT AT 16-22 FUNDA CRESCENT, LALOR PARK FOR MODE DESIGN

## GENERAL NOTES

JOB NUMBER: 220109	DWG NUMBER: C00.01	ORIGINAL SIZE: A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: SCALE	



*Engineering Studio*

COMMENCEMENT OF WORKS

THE CONTRACTOR SHALL ENSURE THAT NO SPOIL OR FILL ENCROACHES UPON ADJACENT AREAS FOR THE DURATION OF WORKS.

THE CONTRACTOR SHALL ENSURE THAT KERB INLETS AND DRAINS RECEIVING STORMWATER SHALL BE PROTECTED AT ALL TIMES DURING DEVELOPMENT. KERB INLET SEDIMENT TRAPS SHALL BE INSTALLED ALONG THE IMMEDIATE VICINITY ALONG THE STREET FRONTAGE.

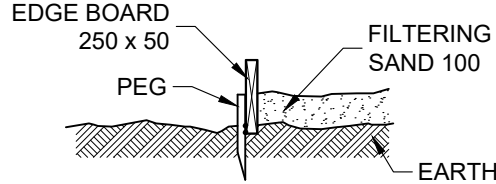
SEDIMENT FENCING SHALL BE SECURED BY POST (WHERE METAL STAR PICKETS ARE USED PLASTIC SAFETY CAPS SHALL BE USED) AT 2000 INTERVALS WITH GEOTEXTILE FABRIC EMBEDDED 200 IN SOIL.

ALL TOPSOIL STRIPPED FORM THE SITE AND STOCKPILED DOES NOT INTERFERE WITH DRAINAGE LINES AND STORMWATER INLETS AND WILL BE SUITABLY COVERED WITH AN IMPERVIOUS MEMBRANE MATERIAL AND SCREENED BY SEDIMENT FENCING.

SEDIMENT TRAP

1000 x 1000 WIDE 500 DEEP PIT, LOCATED AT THE LOWEST POINT TO THE TRAP SEDIMENT.

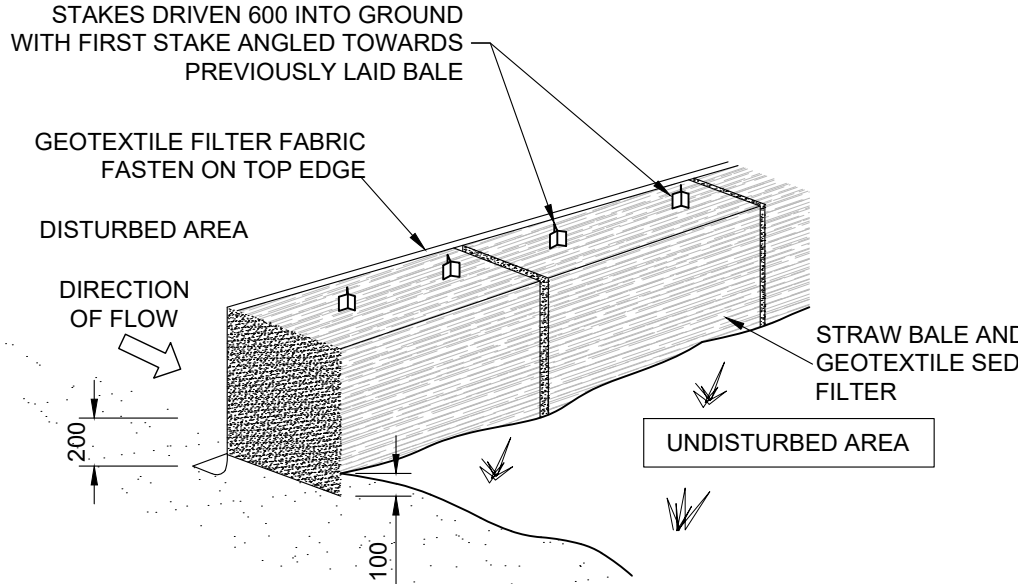
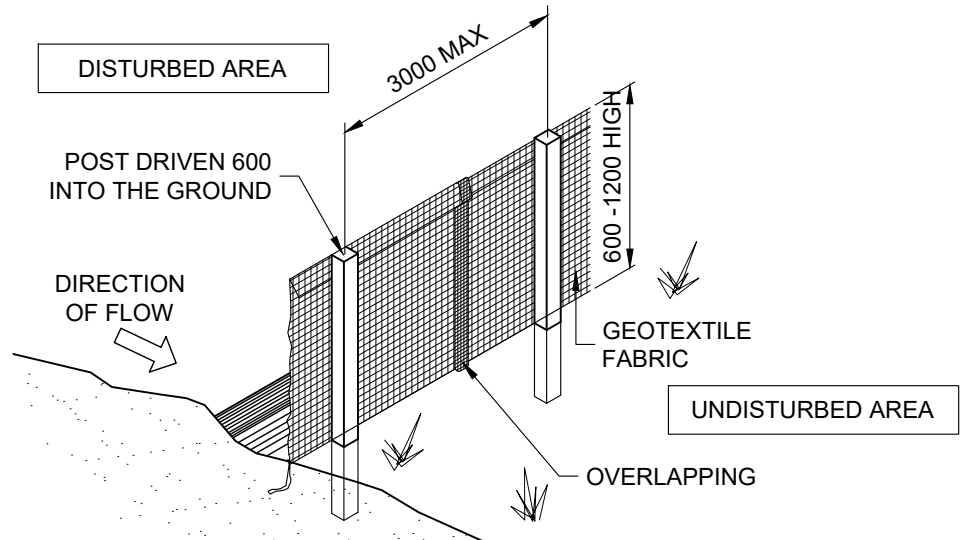
WASHOUT AREA TO BE 1800 x 1800 ALLOCATED FOR THE WASHING OF TOOL & EQUIPMENT.



SEDIMENT FENCE

PROVIDE 'SEDIMENT FENCE ON DOWN SLOPE BOUNDARY AS SHOWN ON PLAN.

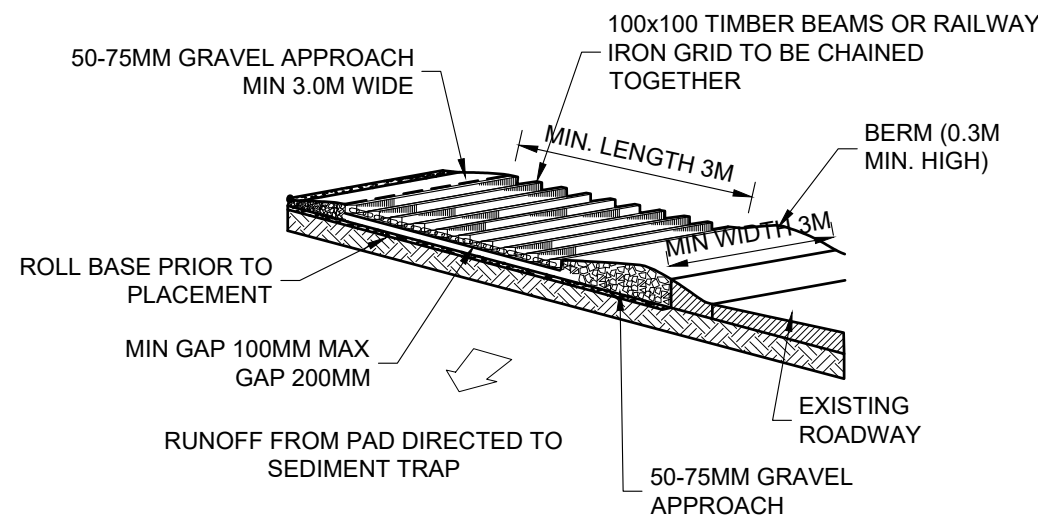
FABRIC TO BE BURIED BELOW GROUND AT LOWER EDGE.



DRAINAGE AREA 0.5 HA. MAX. SLOPE GRADIENT 1:2 MAX. SLOPE LENGTH 50m.

TEMPORARY CONSTRUCTION ENTRY/EXIT

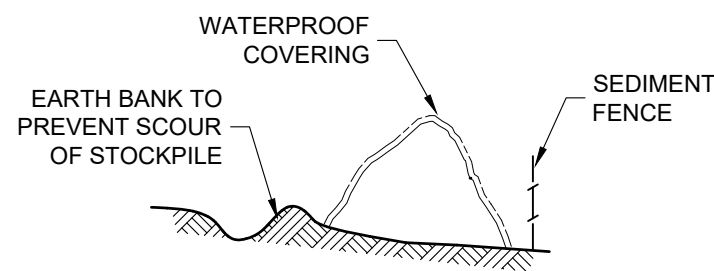
VEHICLE ACCESS TO THE BUILDING SITE SHOULD BE RESTRICTED TO A SINGLE POINT SO AS TO REDUCE THE AMOUNT OF SOIL DEPOSITED ON THE STREET PAVEMENT.



BUILDING MATERIAL STOCKPILE

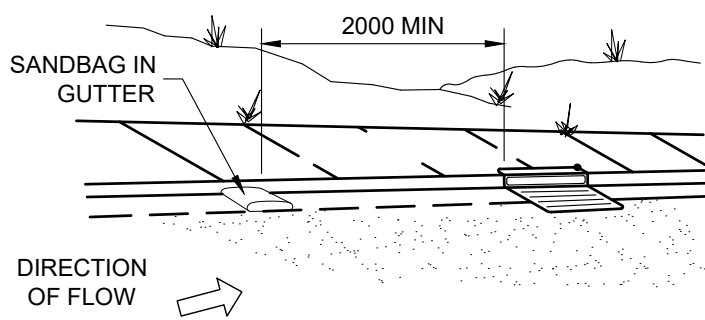
ALL STOCKPILES OF BUILDING MATERIAL SUCH AS SAND AND SOIL MUST BE PROTECTED TO PREVENT SCOUR AND EROSION.

THEY SHOULD NEVER BE PLACED IN THE STREET GUTTER WHERE THEY WILL WASH AWAY WITH THE FIRST RAINSTORM.



SANDBAG KERB SEDIMENT TRAP

IN CERTAIN CIRCUMSTANCES EXTRA SEDIMENT TRAPPING MAY BE NEEDED IN THE STREET GUTTER.



GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNO (UNLESS NOTED OTHERWISE), NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.

ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORK.

DURING EXCAVATION WORK THE STRUCTURE SHALL BE MAINTAINED IN A STABLE AND NO PART SHALL BE OVERSTRESSED.

ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE SPECIFICATION.

EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.

ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACK FILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL COUNCIL.

ALL TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.

ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.

CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS UNLESS DIRECTED OTHERWISE.

STORMWATER DRAINAGE

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3 - 1990 "STORMWATER DRAINAGE" & AS/NZS 3500.3.2-1998 "STORMWATER DRAINAGE - ACCEPTABLE SOLUTIONS".

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO ENGINEER IMMEDIATELY.

ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL.

DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE uPVC OR 100 x 100 COLORBOND OR ZINCALUME STEEL, UNO.

BOX COLORBOND OR ZINCALUME STEEL. GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.

EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL.

SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

SEDIMENT AND EROSION CONTROL NOTES

SEDIMENT AND EROSION CONTROL SHALL BE EFFECTIVELY MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL THE SITE HAS BEEN STABILISED OR LANDSCAPED TO THE SUPERINTENDENT'S SATISFACTION

A SINGLE ALL WEATHER ACCESS WAY WILL BE PROVIDED AT THE FRONT OF THE PROPERTY CONSISTING OF 50-75 AGGREGATE OR SIMILAR MATERIAL AT A MINIMUM THICKNESS OF 150 LAID OVER NEEDLE-PUNCHED GEOTEXTILE FABRIC AND CONSTRUCTED PRIOR TO COMMENCEMENT OF WORKS.

SOIL CONSERVATION NOTE

PRIOR TO COMMENCEMENT OF CONSTRUCTION PROVIDE 'SEDIMENT FENCE,' 'SEDIMENT TRAP' AND WASHOUT AREA TO ENSURE THE CAPTURE OF WATER BORNE MATERIAL GENERATED FROM THE SITE.

MAINTAIN THE ABOVE DURING THE COURSE OF CONSTRUCTION, AND CLEAR THE 'SEDIMENT TRAP AFTER EACH STORM.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

REV	DATE	DESCRIPTION	BY
F	30.08.23	ISSUED FOR 75% CO-ORDINATION	O.G.
E	14.03.23	RE-ISSUED FOR APPROVAL	O.G.
D	14.03.23	RE-ISSUED FOR SUIT ARBORIST COMMENTS	O.G.
C	16.01.23	RE-ISSUED FOR SUIT ARCHITECTURAL	O.G.
B	23.11.22	RE-ISSUED FOR APPROVAL	O.G.

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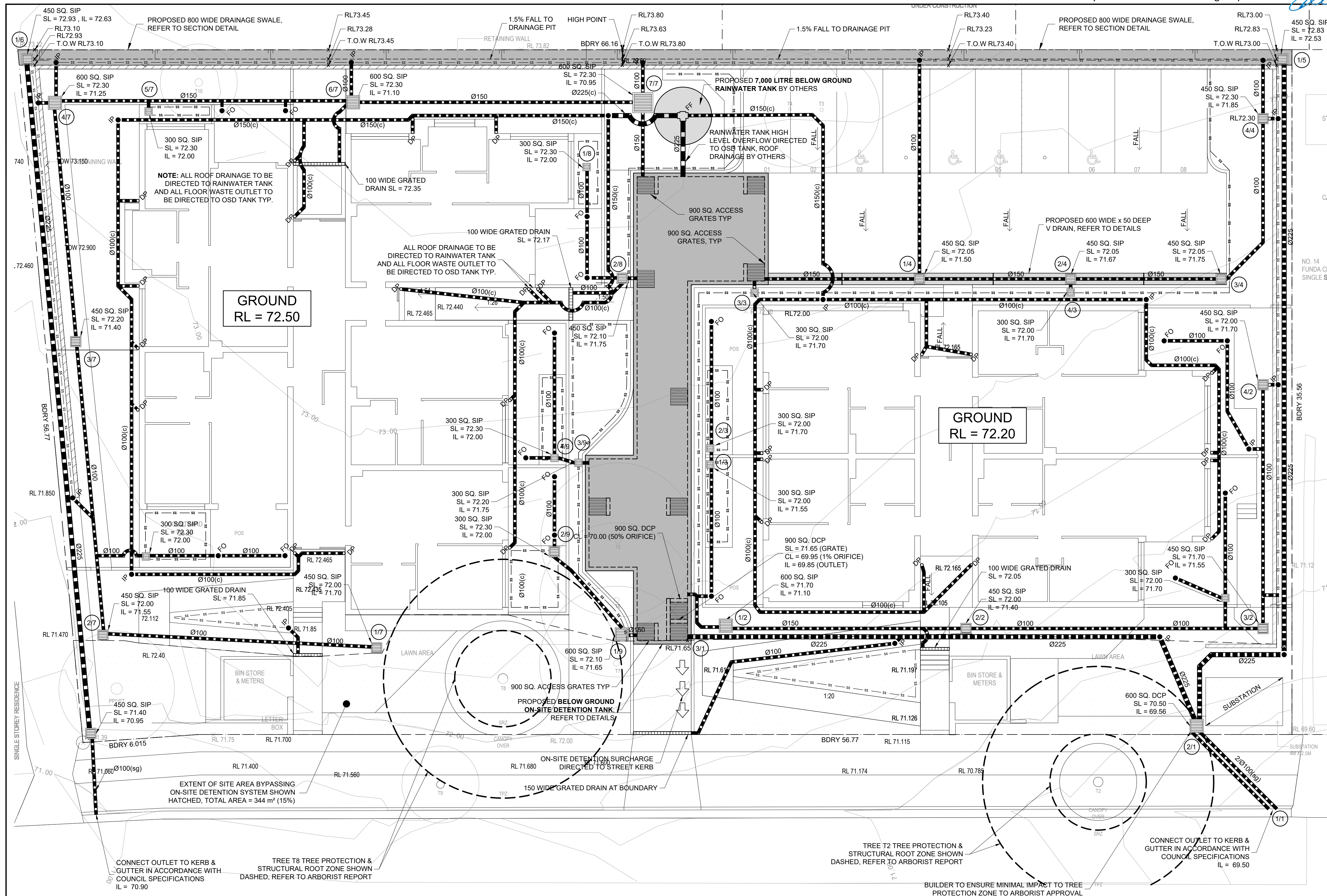
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Web: www.engineeringstudio.com.au  
Postal Address  
PO Box 7191  
NORWEST NSW 2153

PROPOSED DEVELOPMENT  
AT 16-22 FUNDA CRESCENT, LALOR PARK  
FOR MODE DESIGN

SEDIMENT & EROSION CONTROL PLAN

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
220109	C01.01	A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: 1:200 U.N.O.	





## 5. STORMWATER DESIGN SUMMARY

COUNCIL: BLACKTOWN CITY COUNCIL	
100 YEAR, 5 MIN STORM	= 225 mm/h
20 YEAR, 5 MIN STORM	= 172 mm/h
TOTAL SITE AREA	= 2294.0 m <sup>2</sup>
PROPOSED PAVING FOOTPRINT	= 852.0 m <sup>2</sup>
IMPERVIOUS PATHS & DRIVEWAYS	= 587.0 m <sup>2</sup>
TOTAL IMPERVIOUS SITE AREA	= 1439.0 m <sup>2</sup>
IMPERVIOUS SITE PERCENTAGE	= 62%

100% PROPOSED ROOF AREA DIRECTED TO 7,000 LITRE  
RAINWATER RE-USE TANK TO BUILDERS DETAILS IN  
ACCORDANCE WITH BASIX SPECIFICATIONS. HIGH LEVEL  
OVERFLOW DIRECTED TO PROPOSED BELOW GROUND ON-SITE  
DETENTION (OSD) TANK. OSD DISCHARGE DIRECTED TO  
STREET KERB & GUTTER VIA GRAVITY IN ACCORDANCE WITH  
COUNCIL STORMWATER SPECIFICATIONS.

**WATER SENSITIVE URBAN DESIGN SUMMARY**  
SITE LOCATED WITHIN SECTION 7.11 CONTRIBUTIONS PLAN  
No.19 - BLACKTOWN GROWTH PRECINCT AREA THEREFORE NO  
WATER CONSERVATION & QUALITY CONTROLS REQUIRED  
SUBJECT TO VOLUNTARY CONTRIBUTION IN ACCORDANCE  
WITH BLACKTOWN COUNCIL CODE.

## ON-SITE DETENTION DESIGN SUMMARY

CATCHMENT: UPPER PARRAMATTA RIVER CATCHMENT  
ON-SITE DETENTION REQUIRED FOR PROPOSED COMMERCIAL  
DEVELOPMENTS IN ACCORDANCE WITH THE 'UPPER  
PARRAMATTA RIVER CATCHMENT TRUST ON-SITE  
STORMWATER DETENTION HANDBOOK'.

PERCENTAGE OF TOTAL SITE DRAINED	= 86.5%
DETERMINED SITE STORAGE REQUIREMENT 50%	= 68.82 m <sup>3</sup>
DETERMINED SITE STORAGE REQUIREMENT 1%	= 104.37 m <sup>3</sup>







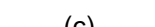
DETERMINED PERMISSIBLE SITE DISCHARGE	= 24.3 l/s
MAXIMUM HEAD TO ORIFICE CENTRE LINE	= 1.70 m
DETERMINED <b>100 YEAR ORIFICE DIAMETER</b>	= 98.5 mm
DETERMINED <b>1.5 YEAR ORIFICE DIAMETER</b>	= 58.5 mm

STORAGE PROVIDED IN OSD TANK (50%)	= 69.35 m <sup>3</sup>
STORAGE PROVIDED IN OSD TANK (1%)	= 106.50 m <sup>3</sup>

## STORMWATER DRAINAGE NOTES

- ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O.
- ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.
- FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL, TYPICAL

## LEGEND

- |                                                                                       |                                                 |
|---------------------------------------------------------------------------------------|-------------------------------------------------|
|    | DOWNPIPE BY OTHERS                              |
|    | INSPECTION POINT                                |
|  | FIRST FLUSH RAINWATER DEVICE TO BUILDERS DETAIL |
| X <span style="border: 1px solid black; padding: 2px;">100.00</span>                  | PROPOSED FINISHED SURFACE LEVEL                 |
| (c)                                                                                   | CHARGED PIPE                                    |
|  | PROPOSED BELOW GROUND PIPELINE                  |
|  | SUBSOIL DRAINAGE LINE                           |
|  | PROPOSED SURFACE INLET PIT                      |
|  | OVERLAND FLOW PATH                              |

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

F	30.08.23	ISSUED FOR 75% CO-ORDINATION	O.G.
E	14.03.23	RE-ISSUED FOR APPROVAL	O.G.
D	14.03.23	RE-ISSUED FOR SUIT ARBORIST COMMENTS	O.G.
C	16.01.23	RE-ISSUED FOR SUIT ARCHITECTURAL	O.G.
B	23.11.22	RE-ISSUED FOR APPROVAL	O.G.
REV	DATE	DESCRIPTION	BY

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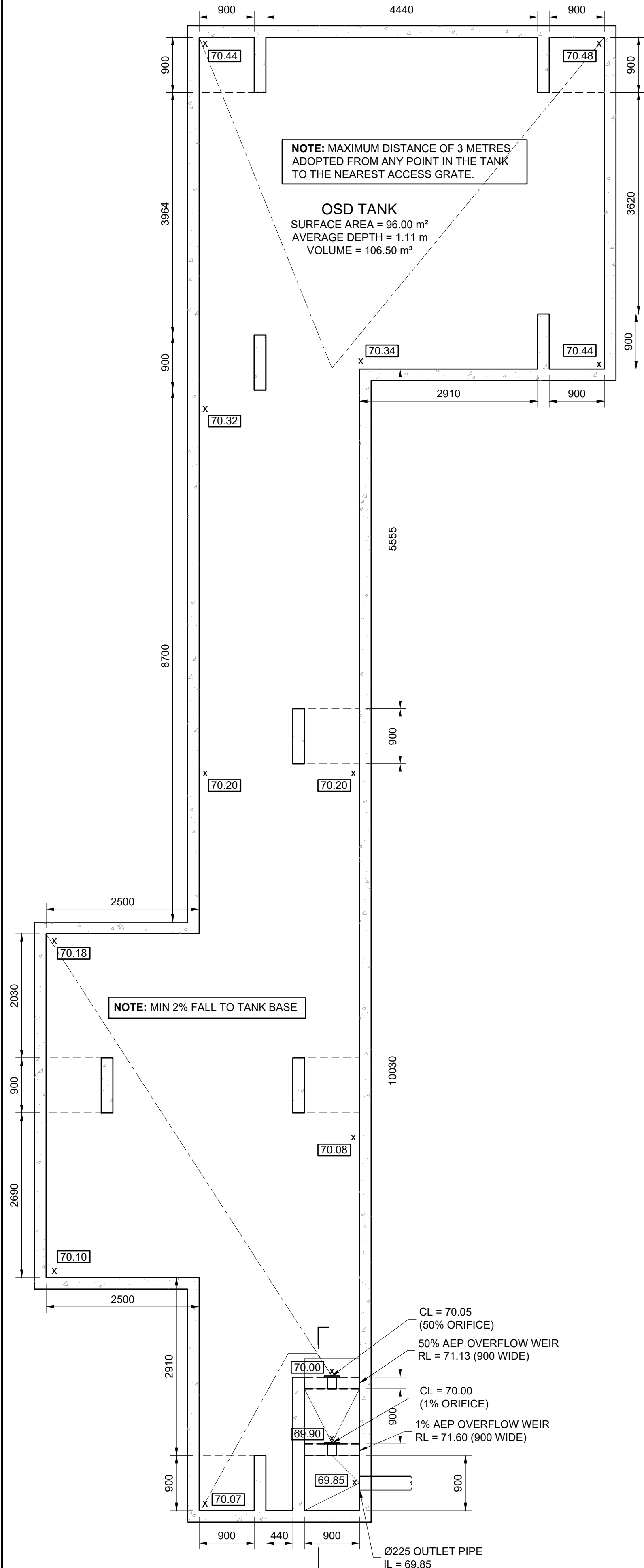
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**PROPOSED DEVELOPMENT**  
**AT 16-22 FUNDA CRESCENT, LALOR PARK**  
**FOR MODE DESIGN**

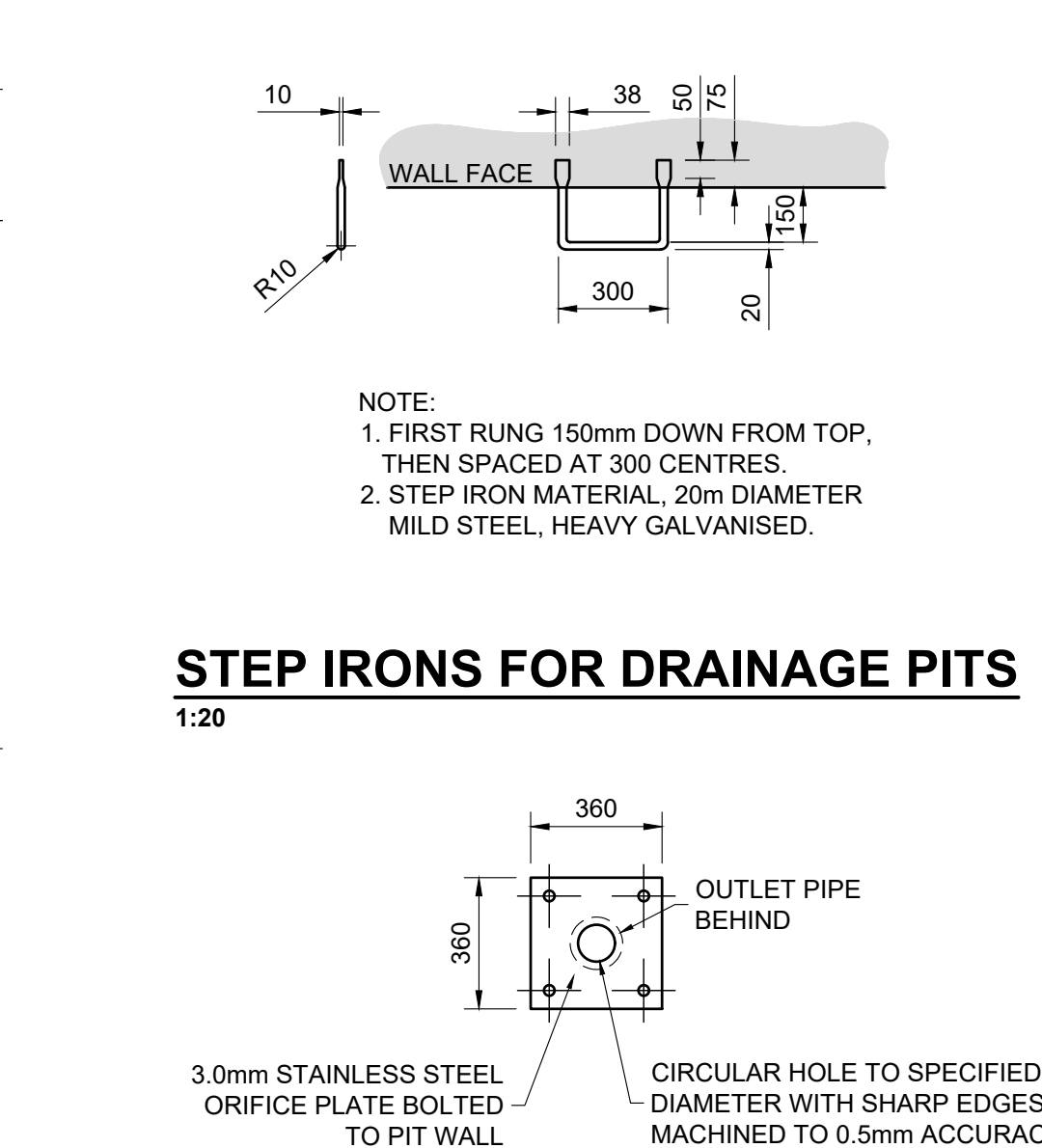
## STORMWATER DRAINAGE PLAN

JOB NUMBER: 220109	DWG NUMBER: C02.01	ORIGINAL SIZE: A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: 1:200 U.N.O.	

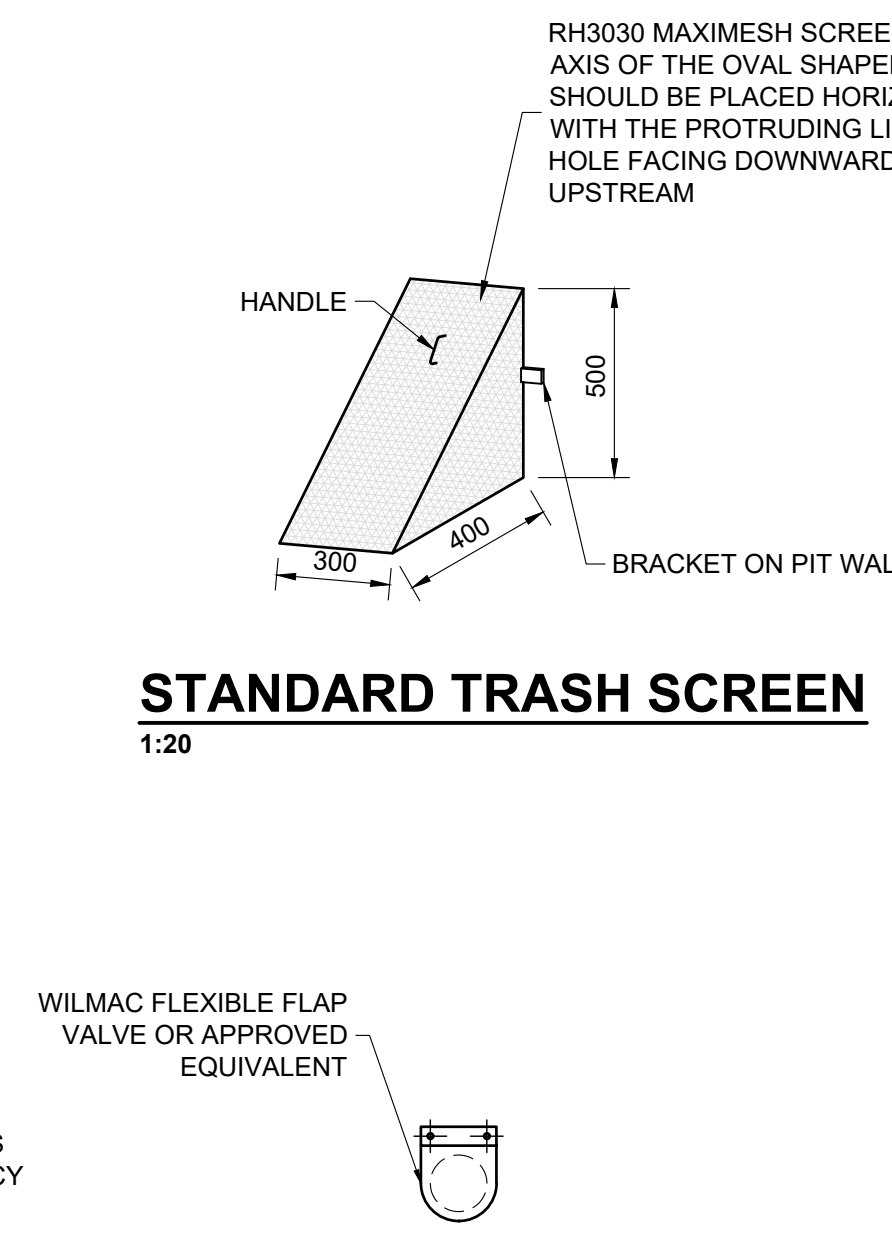




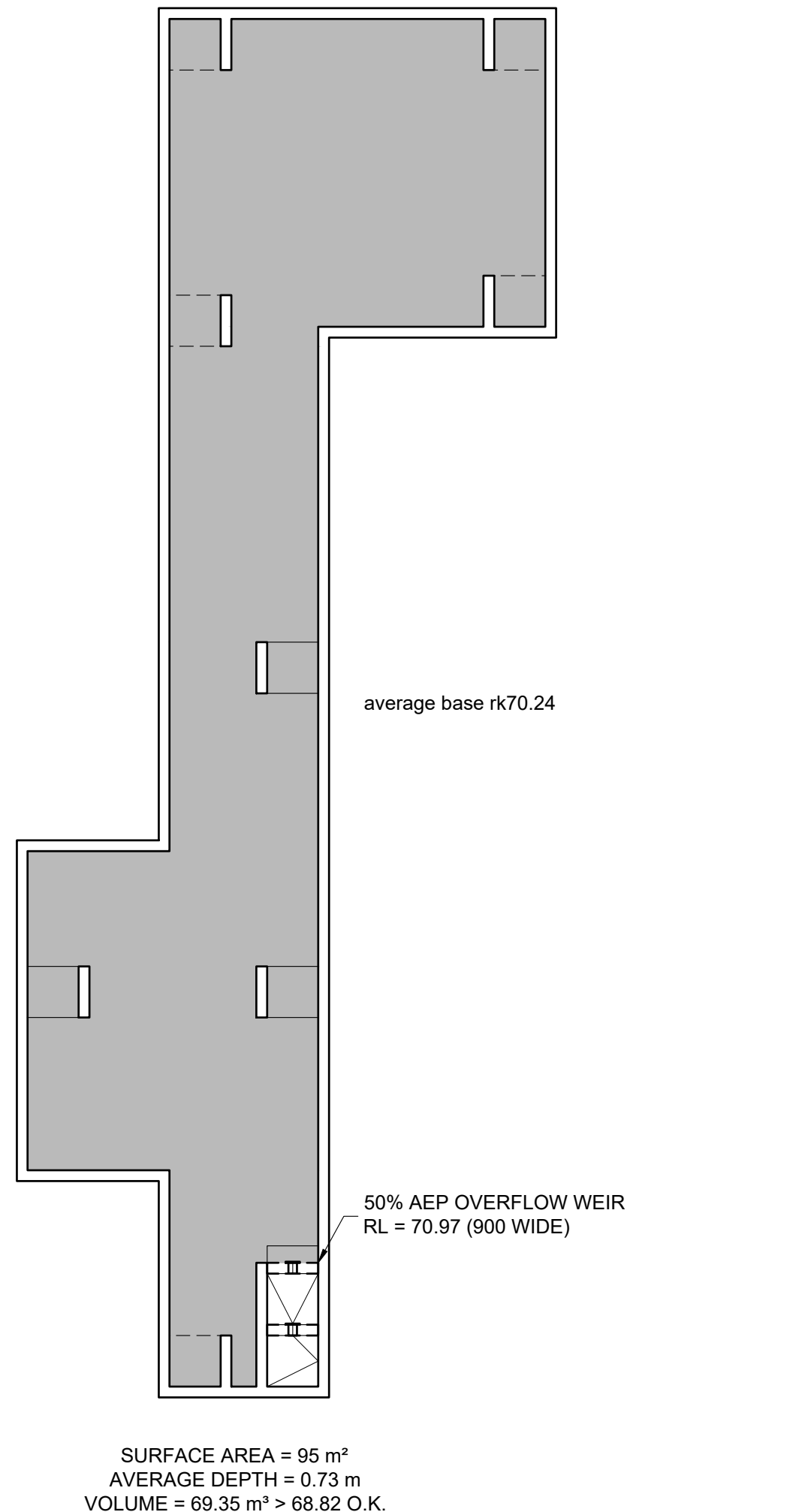
ON-SITE DETENTION TANK LAYOUT PLAN  
1:50



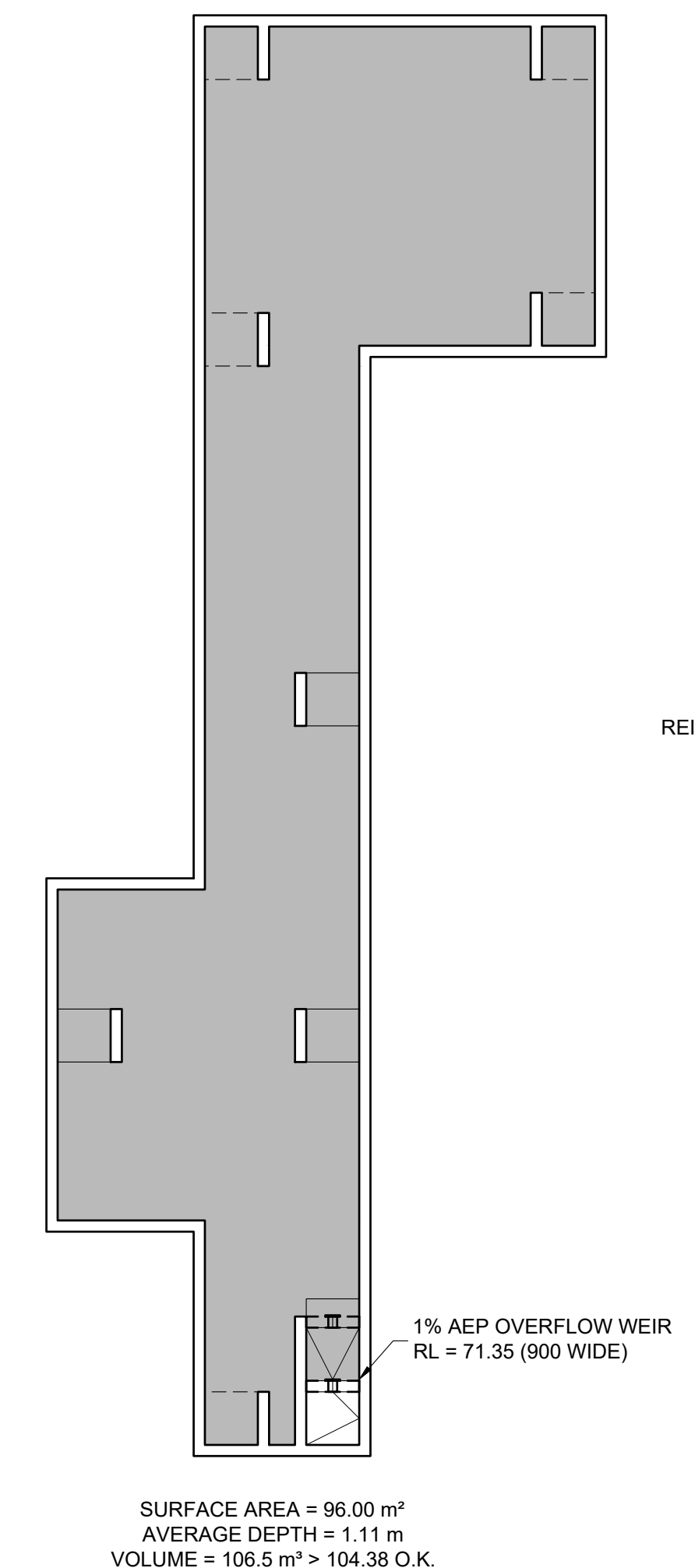
ORIFICE PLATE DETAIL  
NTS  
REFER TO ON-SITE DETENTION SUMMARY FOR ORIFICE DIAMETER



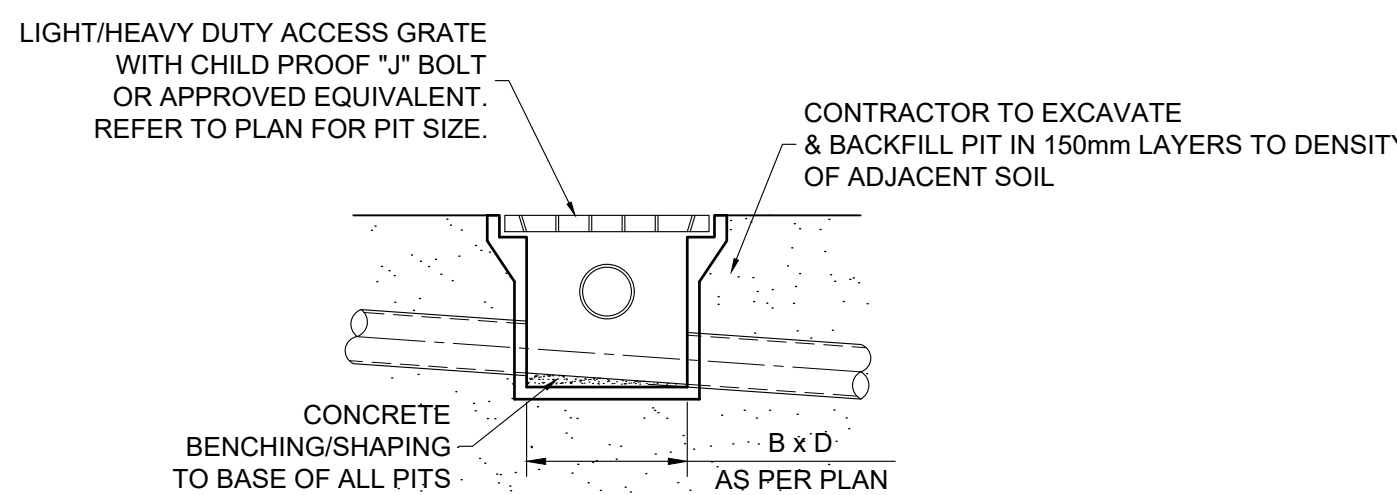
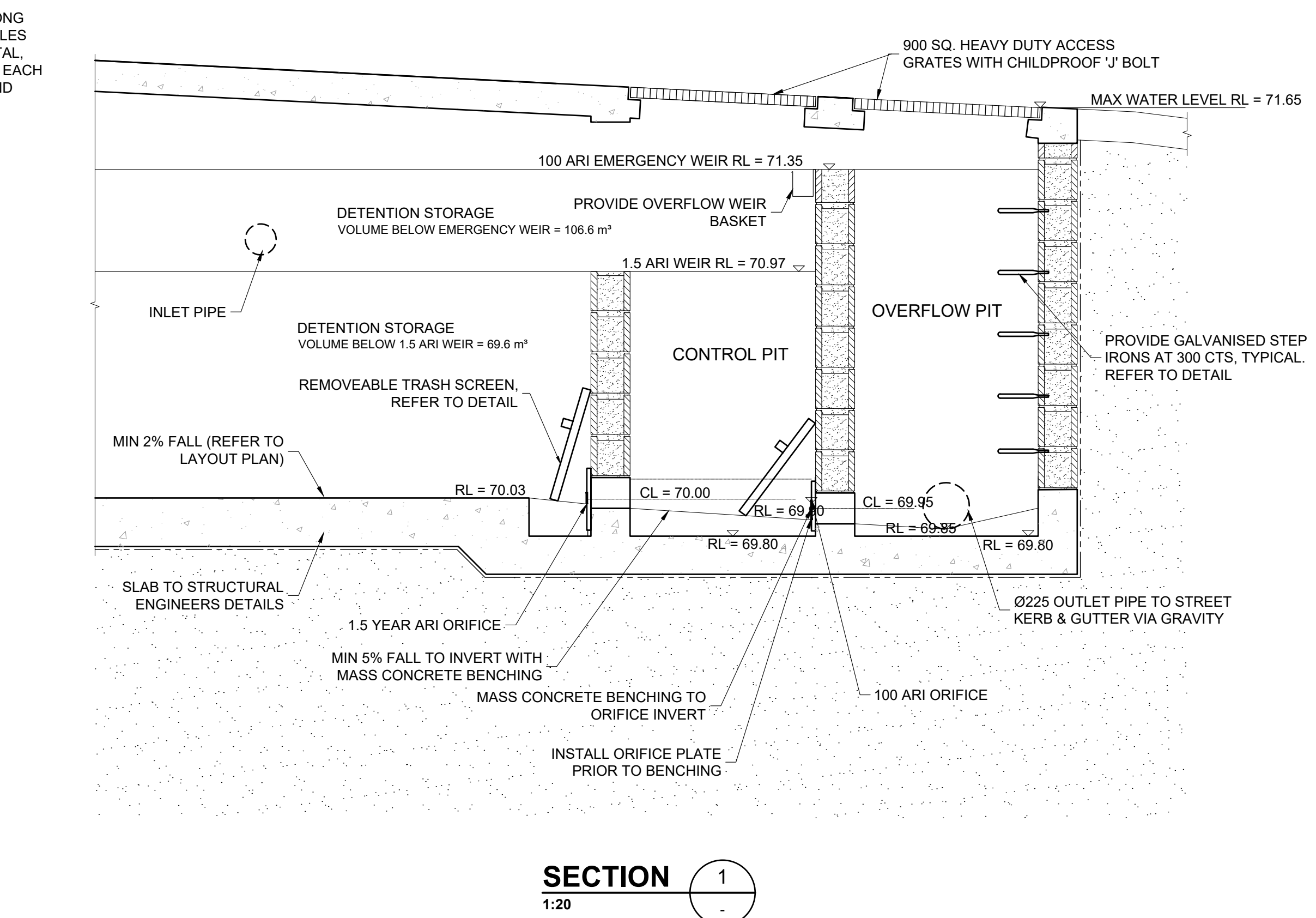
TYPICAL FLAP VALVE DETAIL  
NTS



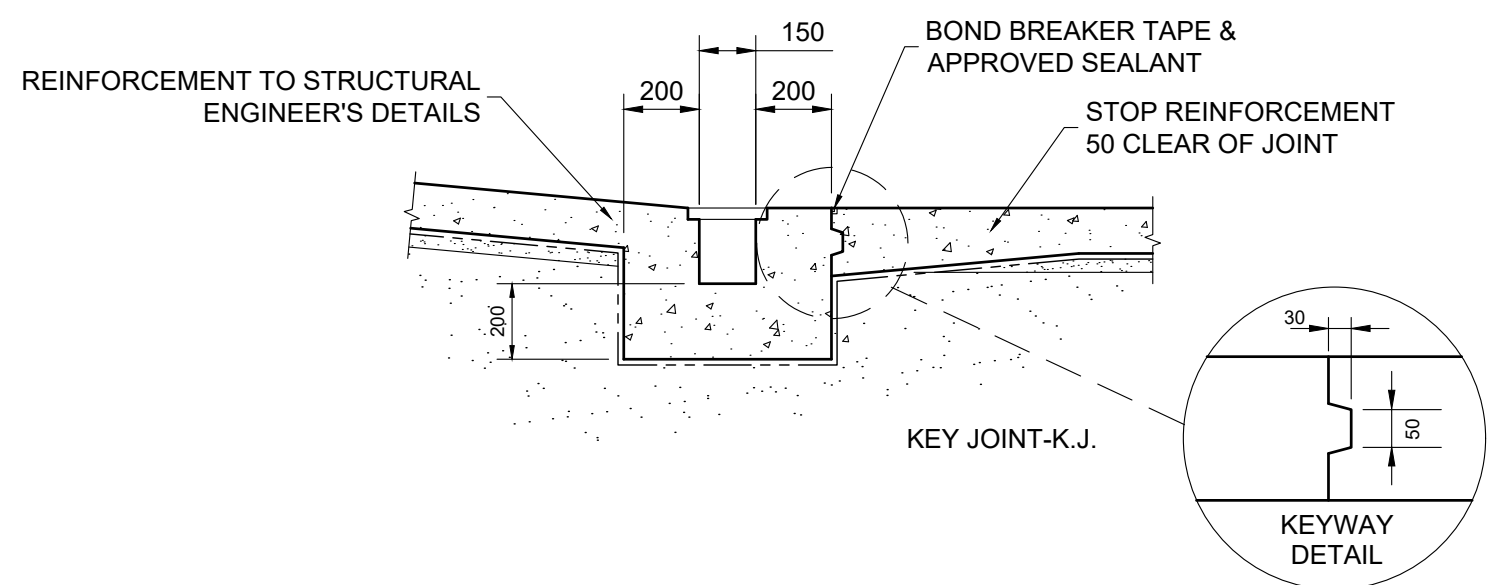
OSD TANK 50% AEP STORAGE  
1:100



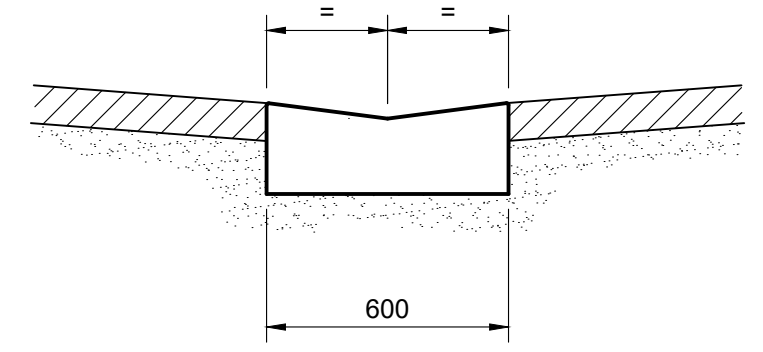
OSD TANK 1% AEP STORAGE  
1:100



TYPICAL SURFACE INLET PIT 'SIP' DETAIL  
1:20



TYPICAL GRATED DRAIN DETAIL  
1:20



TYPICAL CONCRETE V DRAIN DETAIL  
1:20

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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E	14.03.23	RE-ISSUED FOR APPROVAL	O.G.
D	14.03.23	RE-ISSUED FOR SUIT ARBORIST COMMENTS	O.G.
C	16.01.23	RE-ISSUED FOR SUIT ARCHITECTURAL	O.G.
B	23.11.22	RE-ISSUED FOR APPROVAL	O.G.

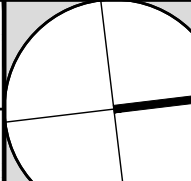
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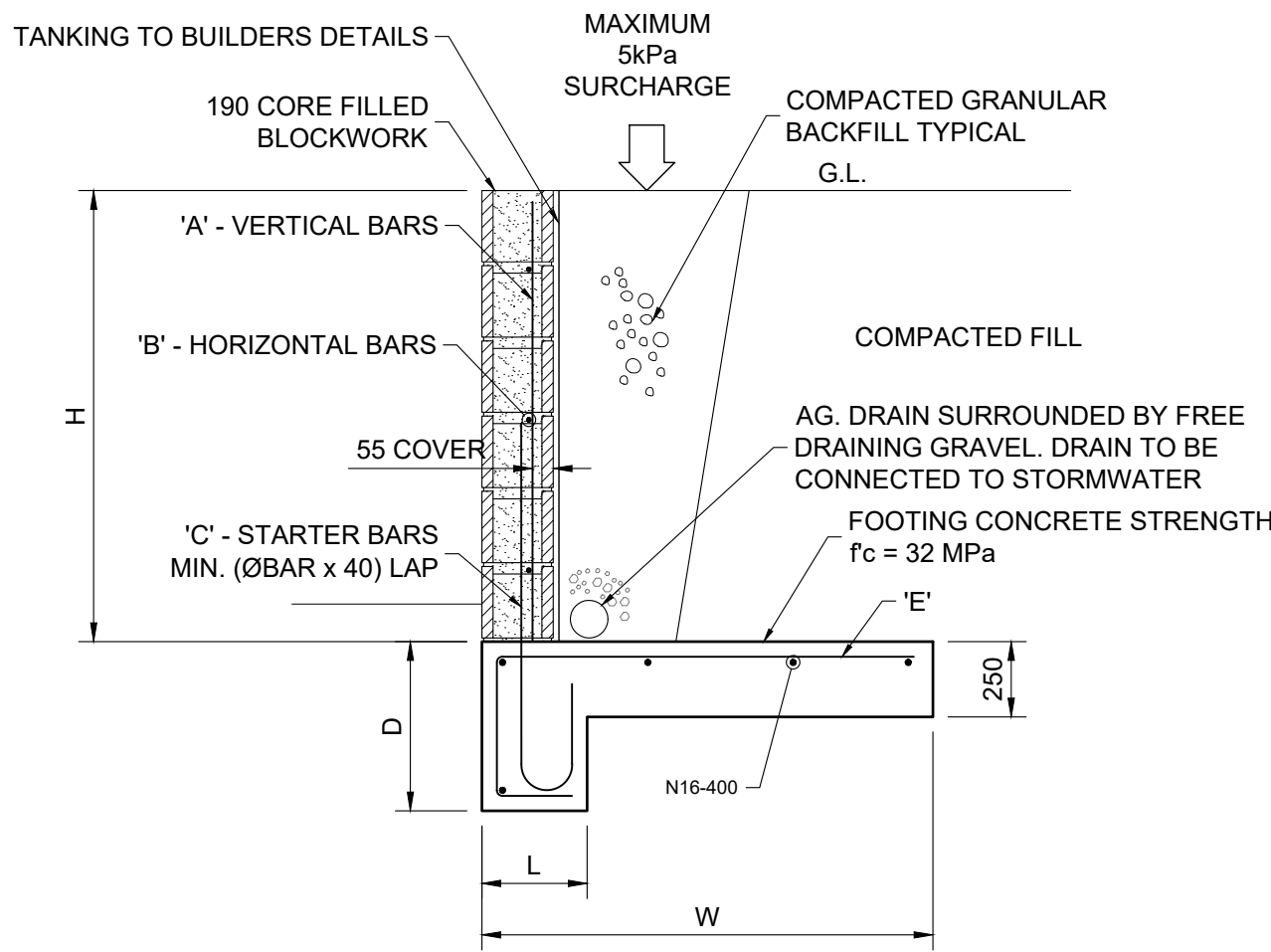
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**PROPOSED DEVELOPMENT**  
AT 16-22 FUNDA CRESCENT, LALOR PARK  
FOR MODE DESIGN

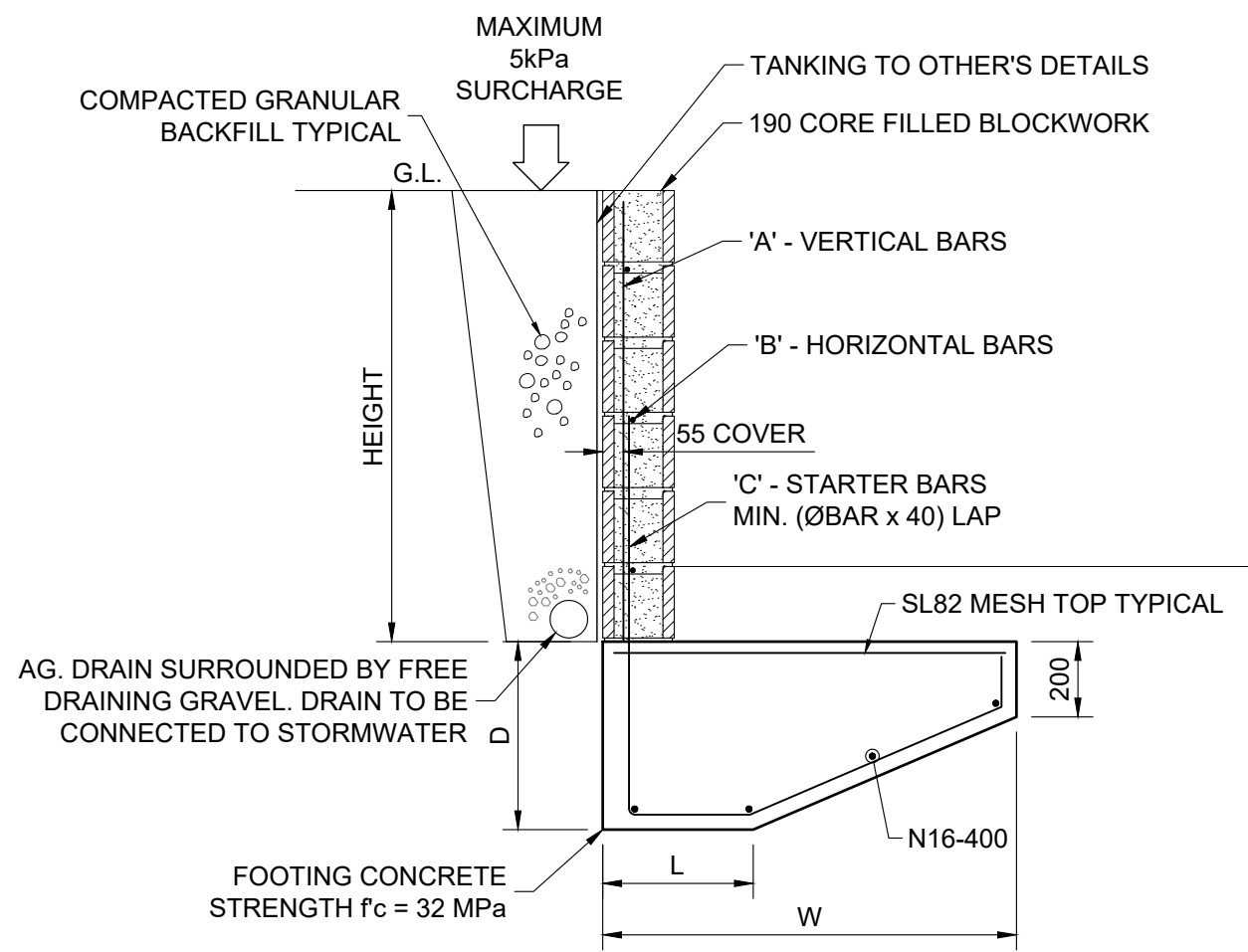
STORMWATER DETAILS SHEET 1		
JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
220109	C02.02	A1
DESIGNED BY:	DATE:	
O.G.	SEPTEMBER 2022	
DRAWN BY:	SCALE:	
O.G.	1:20 U.N.O.	

18 December 2023



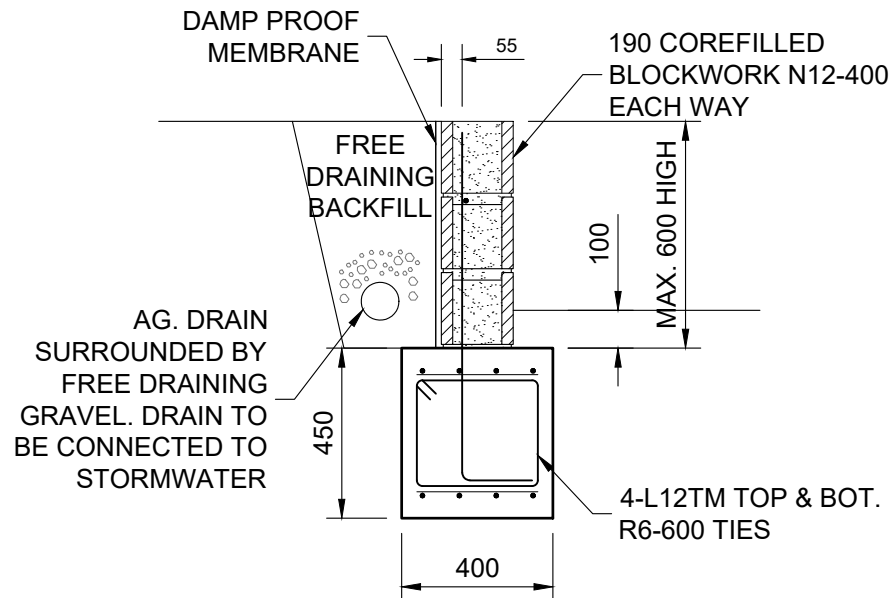
**TYPICAL RETAINING WALL DETAILS 'RW1' - TYPE 1**  
1:20

SCHEDULE FOR RETAINING WALL RW1 - TYPE 1							
HEIGHT	'D'	'W'	'L'	A	B	C	E
800	450	800	230	N12-400	N12-400	N12-400	N12-400
1000	450	900	230	N12-400	N12-400	N12-400	N12-400
1200	450	1000	230	N12-400	N12-400	N12-400	N12-400
1400	450	1100	230	N16-400	N16-400	N16-400	N16-400
1600	450	1200	230	N16-400	N16-400	N16-400	N16-400
1800	450	1400	230	N16-400	N16-400	N16-400	N16-400
2000	450	1600	230	N16-400	N16-400	N20-400	N16-400

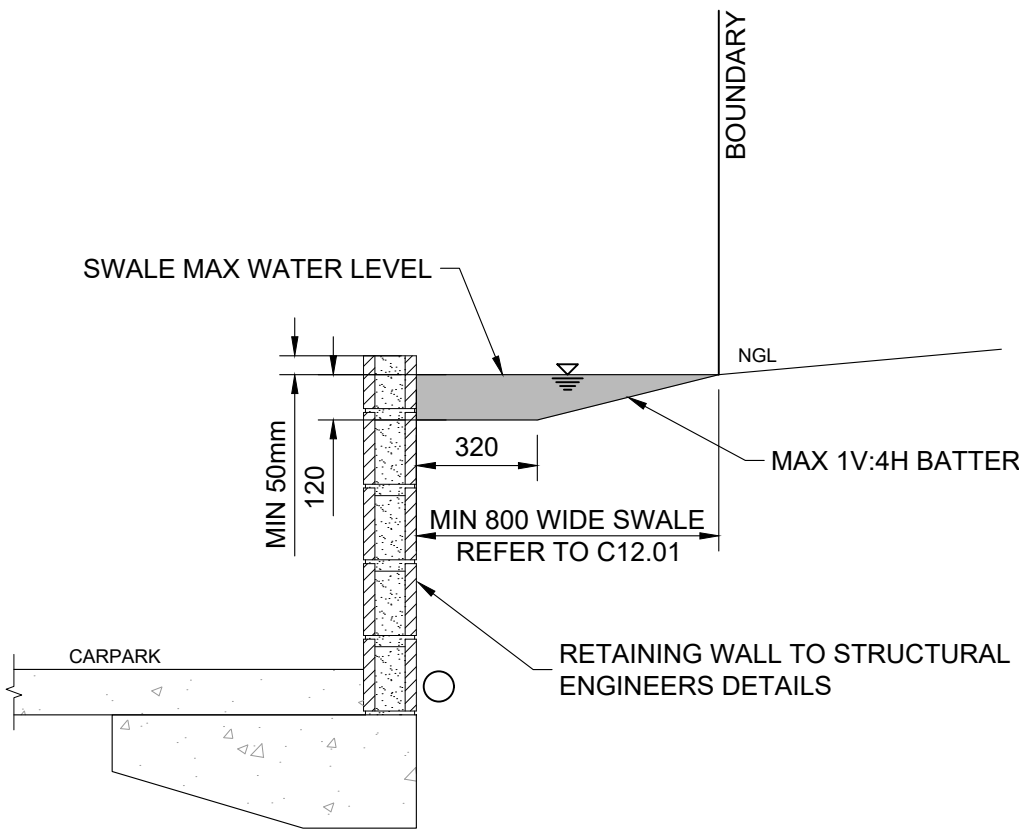


**TYPICAL RETAINING WALL 'RW1' DETAIL- TYPE 2**  
1:20

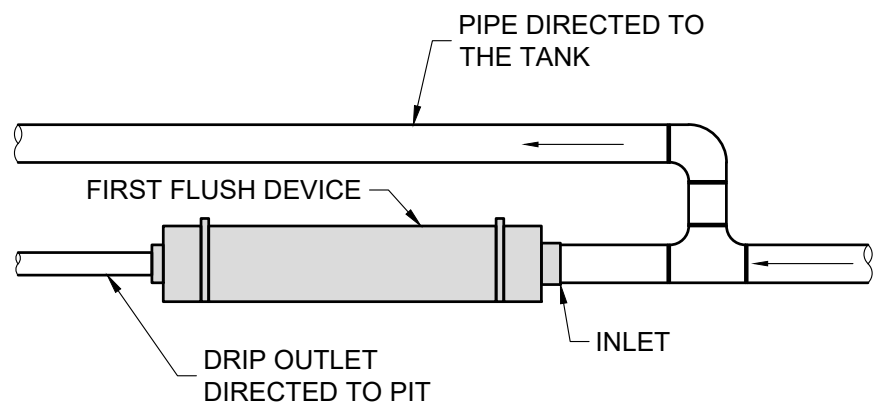
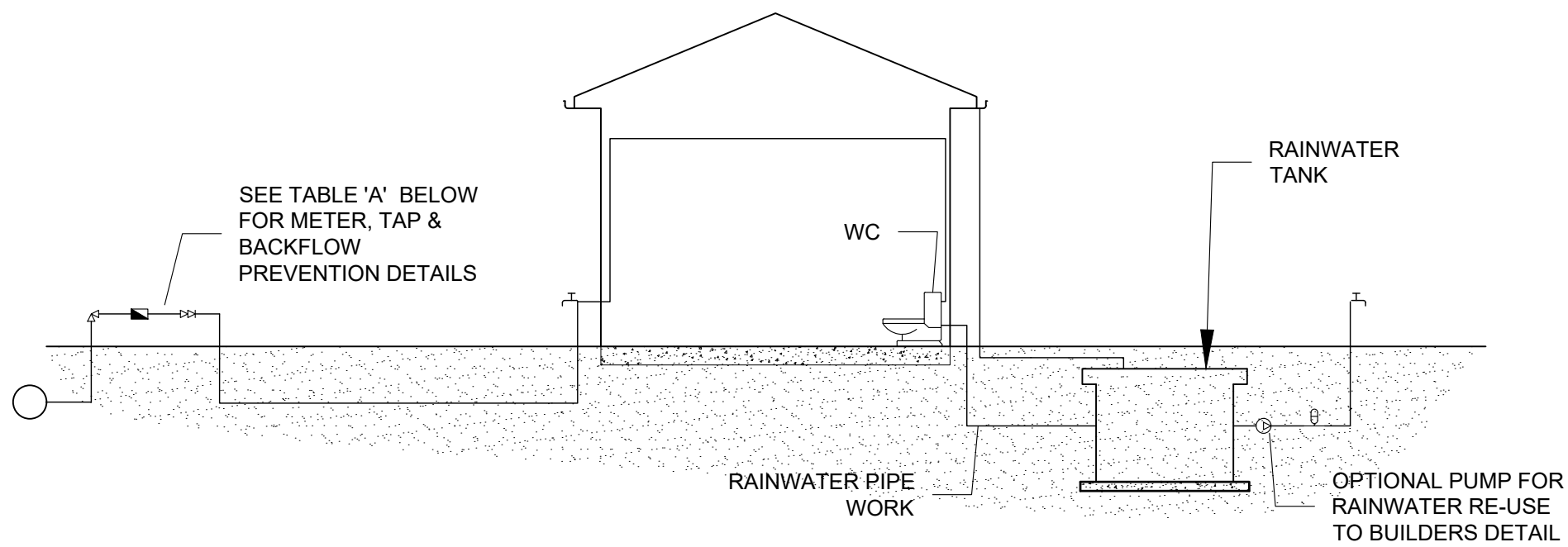
SCHEDULE FOR RETAINING WALL RW1 - TYPE 2						
HEIGHT	'D'	'W'	'L'	A	B	C
800	300	700	300	N12-400	N12-400	N12-400
1000	300	800	300	N12-400	N12-400	N12-400
1200	300	900	300	N12-400	N12-400	N12-400
1400	500	1000	400	N16-400	N16-400	N16-400
1600	500	1100	400	N16-400	N16-400	N16-400
1800	600	1300	400	N16-400	N16-400	N16-400
2000	650	1400	450	N16-400	N16-400	N20-400



**RETAINING WALL 'RW1' DETAIL**  
1:20  
ENSURE ALL STARTER BARS FOR WALLS ARE PLACED PRIOR TO POURING FOOTING












**TYPICAL SWALE SECTION DETAIL**  
1:20



**TYPICAL FIRST FLUSH DETAIL**  
N.T.S.

TABLE A			
RAINWATER TANK LOCATION	METER SIZE (mm)	TYPE OF TAP	TYPE OF BACKFLOW PREVENTION
ABOVE GROUND	20	BALL VALVE	DUAL CHECK VALVE (COMBINED WITH METER)
	25	BALL VALVE	DUAL CHECK VALVE
	> 32	BALL VALVE	DUAL CHECK VALVE
BELOW GROUND	20	BALL VALVE	TESTABLE DOUBLE CHECK VALVE
	25	BALL VALVE	TESTABLE DOUBLE CHECK VALVE
	> 32	BALL VALVE	TESTABLE DOUBLE CHECK VALVE

LEGEND	
	PRESSURE VESSEL
	METER
	BALL VALVE RIGHT ANGLE TYPE
	DUAL CHECK VALVE
	PUMP
	GARDEN TAP
	DRINKING WATER SUPPLY PIPES
	RAINWATER SUPPLY PIPES
	DOWN PIPES

- DIAGRAM NOTES:
- DRAWING TO BE READ IN CONJUNCTION WITH SYDNEY WATER PLUMBING REQUIREMENTS
  - FOR TANKS 10,000 LITRES OR LESS, COUNCIL DEVELOPMENT CONSENT IS NOT REQUIRED, IF THEIR CONDITIONS FOR INSTALLATION ARE FOLLOWED
  - FOR TANKS GREATER THAN 10,000 LITRES COUNCIL DEVELOPMENT CONSENT IS GENERALLY REQUIRED
  - FOR TANKS MORE THAN 10,000 LITRES APPROVAL IS REQUIRED FOR BUILDING OVER SEWERS.
  - SYDNEY WATER'S APPROVAL IS REQUIRED FOR ANY TOP UP FROM DRINKING WATER SUPPLY, REGARDLESS OF TANK SIZE. NO DIRECT CONNECTION IS ALLOWED BETWEEN THE DRINKING WATER SUPPLY AND THE RAINWATER TANK SUPPLY.
  - RAINWATER PIPEWORK IS SHOWN ON THE DIAGRAM AS SUPPLYING INTERNAL AND EXTERNAL RAINWATER USES. CUSTOMERS MAY WANT ONE OR THE OTHER.
  - ANY DESIGNED ACCESS LID INTO RAINWATER RE-USE TANK IS TO HAVE A LOCKABLE LID. IF THE LID IS DESIGNED TO BE ACCESSED BY A MAINTENANCE PERSON, IT MUST BE AT LEAST 600 mm x 900 mm IN SIZE.

**DUAL DRINKING WATER & RAINWATER SUPPLY DIAGRAM**  
N.T.S.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

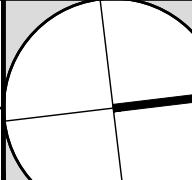
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E	14.03.23	RE-ISSUED FOR APPROVAL	O.G.
D	14.03.23	RE-ISSUED FOR SUIT ARBORIST COMMENTS	O.G.
C	16.01.23	RE-ISSUED FOR SUIT ARCHITECTURAL	O.G.
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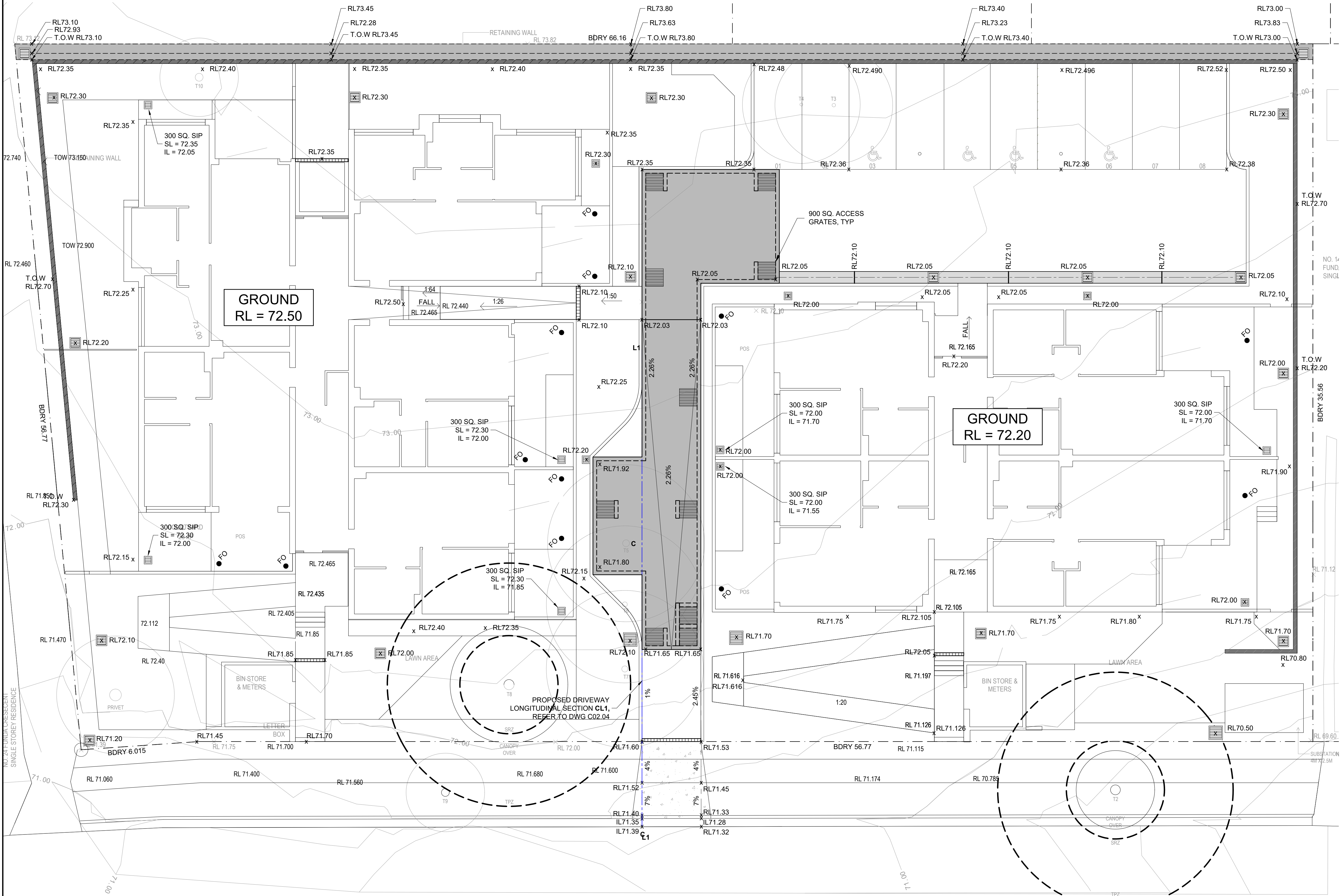
  
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**PROPOSED DEVELOPMENT**  
**AT 16-22 FUNDA CRESCENT, LALOR PARK**  
**FOR MODE DESIGN**

**TYPICAL DETAILS SHEET 2**

JOB NUMBER: 220109	DWG NUMBER: C02.03	ORIGINAL SIZE: A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: 1:200 U.N.O.	





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REV	DATE	DESCRIPTION	BY
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E	14.03.23	RE-ISSUED FOR APPROVAL	O.G.
D	14.03.23	RE-ISSUED FOR SUIT ARBORIST COMMENTS	O.G.
C	16.01.23	RE-ISSUED FOR SUIT ARCHITECTURAL	O.G.
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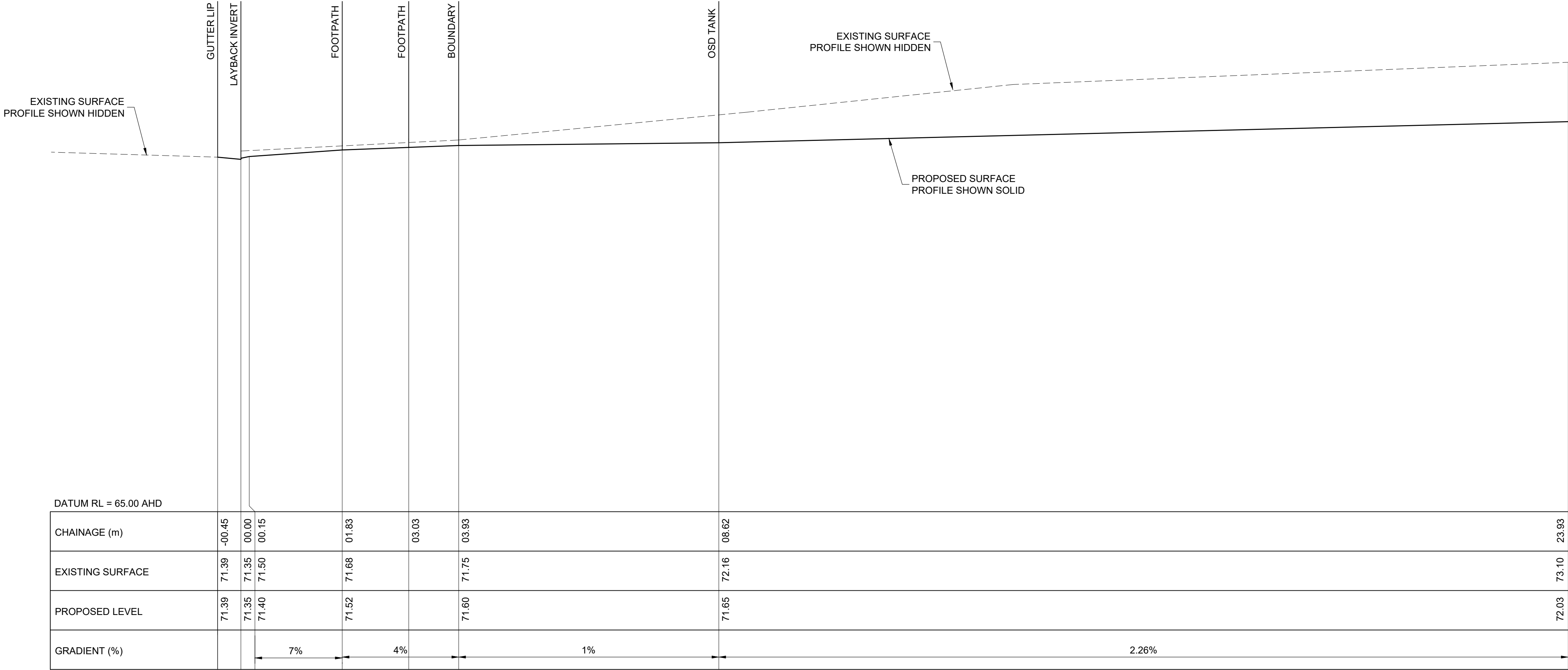
**PROPOSED DEVELOPMENT**  
**AT 16-22 FUNDA CRESCENT, LALOR PARK**  
**FOR MODE DESIGN**

**PROPOSED DESIGN LEVELS**

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
220109	C02.04	A1
DESIGNED BY:	DATE:	
O.G.	SEPTEMBER 2022	
DRAWN BY:	SCALE:	
O.G.	1:200 U.N.O.	

FUNDA CRESCENT  
**PROPOSED DESIGN LEVELS**  
1:100

18 December 2023



**PROPOSED DRIVEWAY LONGSECTION CL1**  
1:50

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

F	30.08.23	ISSUED FOR 75% CO-ORDINATION	O.G.
E	14.03.23	RE-ISSUED FOR APPROVAL	O.G.
D	14.03.23	RE-ISSUED FOR SUIT ARBORIST COMMENTS	O.G.
C	16.01.23	RE-ISSUED FOR SUIT ARCHITECTURAL	O.G.
B	23.11.22	RE-ISSUED FOR APPROVAL	O.G.
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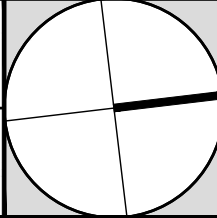


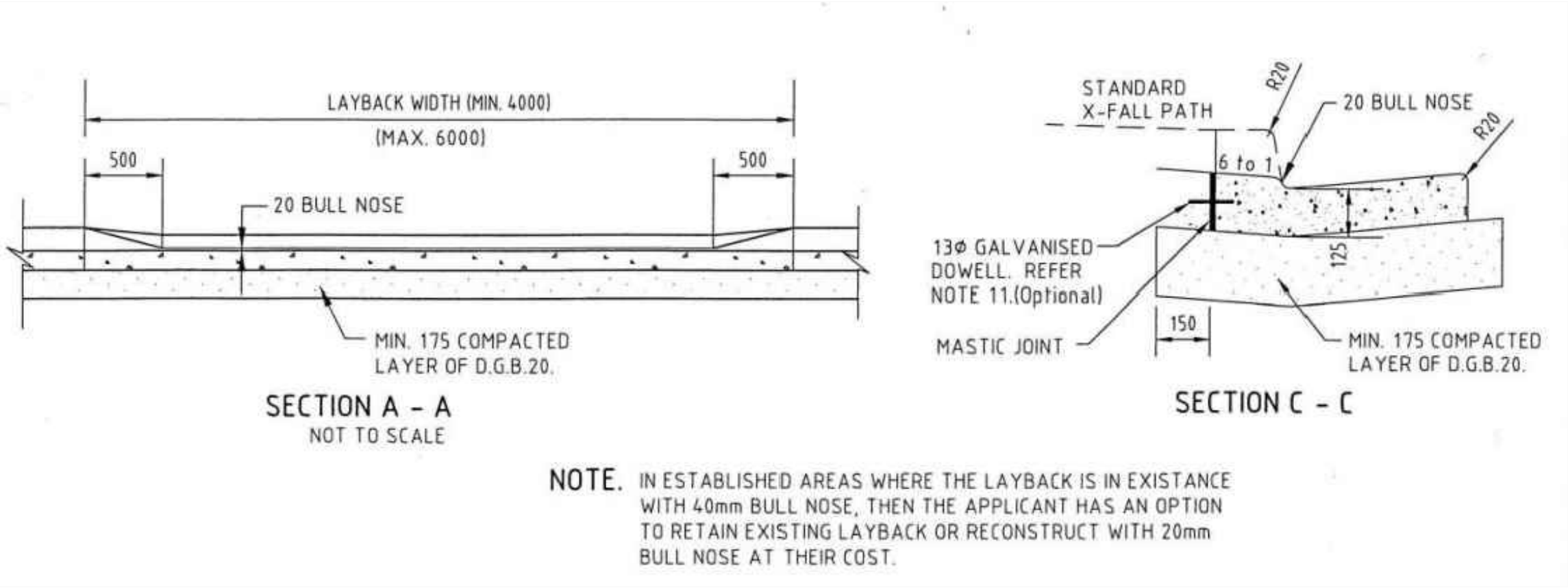
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**PROPOSED DEVELOPMENT**  
**AT 16-22 FUNDA CRESCENT, LALOR PARK**  
**FOR MODE DESIGN**

**DRIVEWAY LONGSECTION**

JOB NUMBER: 220109	DWG NUMBER: C02.05	ORIGINAL SIZE: A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: 1:200 U.N.O.	



**TYPICAL DRIVEWAY LAYBACK DETAIL**  
1:50  
IN ACCORDANCE WITH BLACKTOWN CITY COUNCIL SPECIFICATIONS



18 December 2023

EXTERNAL CATCHMENT CALCULATIONS

COUNCIL: BLACKTOWN CITY COUNCIL  
100 YEAR, 5 MIN STORM = 225 mm/h  
20 YEAR, 5 MIN STORM = 172 mm/h

CRITICAL UPSTREAM CATCHMENT A1 & A2 = 770 m²

DETERMINED RUNOFF COEFFICIENT: C = 0.80  
RAINFALL INTENSITY 100 YEAR, 5 MIN STORM: I<sub>100</sub> = 225 mm/h  
CATCHMENT AREA: A = 770 m²  
DETERMINED UPSTREAM FLOW RATE (AS PER COUNCIL ASSESSMENT): Q = 38.5 l/s

PROPOSED SWALE CAPACITY: Q<sub>SWALE</sub> = 59.8 l/s

THEREFORE UPSTREAM RUNOFF FULLY CONTAINED WITHIN PROPOSED DRAINAGE SWALE. REFER TO C02.01 FOR DETAILS.



Manning Open Channel			
Trapezoid Channel			
Required Capacity	38.5	l/s	
Total Width of Channel	0.8	m	
Base Width of Channel B	0.32	m	
Depth of Channel	0.12	m	
Channel Bed Slope 1:	2.00		
Wetted Perimeter Pw	0.86	m	
Area A	0.0672	m²	
Hydraulic Radius R	0.08	m	
Channel Length	33.5	m	
U/S RL	73.6		
D/S	73		
Gradient	1.5%		
Channel Bed Material	Short Grass		
Mannings 'n'	0.025		
Flow Capacity Q	0.06	m³/s	
Flow Capacity Q	59.8	l/s	OK
Velocity V	0.89	m³/s	
Velocity x D	0.11		OK

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

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REV	DATE	DESCRIPTION	BY

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PROPOSED DEVELOPMENT  
AT 16-22 FUNDA CRESCENT, LALOR PARK  
FOR MODE DESIGN

EXTERNAL CATCHMENT SWALE ANALYSIS

JOB NUMBER: 220109	DWG NUMBER: C02.06	ORIGINAL SIZE: A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: 1:200 U.N.O.	

EXTERNAL CATCHMENT SWALE ANALYSIS

1:500



*Chish*

18 December 2023

BULK EXCAVATION SUMMARY

TOTAL CUT = 1632.2 m<sup>3</sup>  
TOTAL FILL = 70.1 m<sup>3</sup>  
BALANCE = 1562.1 m<sup>3</sup>

NOTE:

- CUT AND FILL BASED ON FINISHED GROUND SURFACES APART FROM OSD TANK BASE AND BUILDING PAD LEVELS. BULK EXCAVATION LEVEL HAS BEEN SET 250mm BELOW THE PROPOSED FINISHED FLOOR LEVEL FOR THE BUILDING. BULK EXCAVATION LEVELS HAVE BEEN SET 100mm BELOW THE OSD TANK BASE SLAB LEVELS.
- NO ALLOWANCE FOR STRIPPING AND REPLACEMENT OF TOPSOIL.
- NO ALLOWANCE FOR EXCAVATION OF DRAINAGE TRENCHES OR STRUCTURAL FOUNDATIONS.
- NO ALLOWANCE FOR ANY UNSUITABLE MATERIAL FOUND ANYWHERE ON SITE.

EARTHWORKS VOLUME TABLE

	LOWER VALUE	UPPER VALUE	CUT VOLUME (m <sup>3</sup> )	FILL VOLUME (m <sup>3</sup> )
	-3.50	-3.00	3.4	-
	-3.00	-2.50	39.4	-
	-2.50	-2.00	54.2	-
	-2.00	-1.50	54.4	-
	-1.50	-1.00	138	-
	-1.00	-0.50	468	-
	-0.50	0.00	874.9	-
	0.00	0.50	-	62.0
	0.50	1.00	-	8.0
	1.00	1.50	-	0.00

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE

F	30.08.23	ISSUED FOR 75% CO-ORDINATION	O.G.
E	14.03.23	RE-ISSUED FOR APPROVAL	O.G.
D	14.03.23	RE-ISSUED FOR SUIT ARBORIST COMMENTS	O.G.
C	16.01.23	RE-ISSUED FOR SUIT ARCHITECTURAL	O.G.
B	23.11.22	RE-ISSUED FOR APPROVAL	O.G.
REV	DATE	DESCRIPTION	BY

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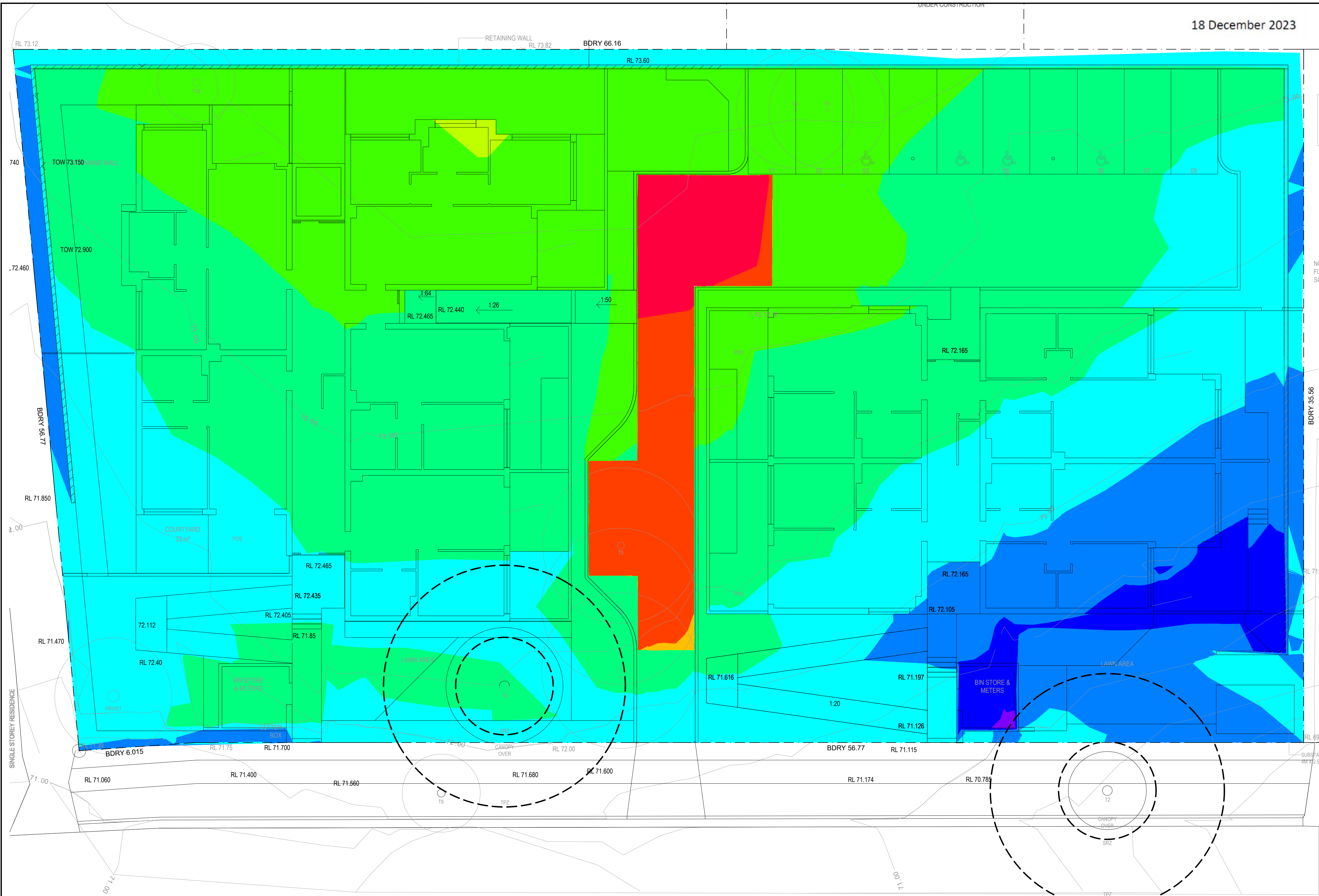
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PROPOSED DEVELOPMENT  
AT 16-22 FUNDA CRESCENT, LALOR PARK  
FOR MODE DESIGN

BULK EXCAVATION PLAN

JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
220109	C03.01	A1
DESIGNED BY: O.G.	DATE: SEPTEMBER 2022	
DRAWN BY: O.G.	SCALE: 1:200 U.N.O.	



FUNDA CRESCENT

BULK EXCAVATION PLAN

1:100