



ACTIVITY DETERMINATION

Project No. BGV99

Conflict of Interest¹

In this matter:

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

Signed.....

Dated.....

Yolanda Gil
Acting Executive Director, Portfolio Strategy and Origination
Housing Portfolio
Homes NSW

Having regard to the Determination Recommendation Report, the Statement of Compliance and the Review of Environmental Factors for this project addressing matters under Part 5 of the *Environmental Planning and Assessment Act 1979*, I 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

19-23

6

Street or property name

Douglas Street

Neal Place

Suburb, town or locality

Wallsend

Postcode

2287

Local Government Area(s)

Newcastle

Real property description (Lot and DP)

Lots 58 & 59 in DP 35087

Lots C & D in DP 35096

ACTIVITY DESCRIPTION

Provide a description of the activity

Demolition of existing dwellings and associated structures, tree removal, and the construction of a 2-storey residential flat building development containing 10 x 1-bedroom and 10 x 2-bedroom dwellings, with associated landscaping and fencing, parking for 9 cars and consolidation 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.....

Yolanda Gil
Acting Executive Director, Portfolio Strategy and Origination
Housing Portfolio
Homes NSW

SCHEDULE 1

IDENTIFIED REQUIREMENTS

PART A – Standard Identified Requirements

THE DEVELOPMENT

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

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

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Architectural				
Cover Sheet	000	01	08/12/2022	Sam Crawford Architects
Block Analysis Plan	101	01	08/12/2022	Sam Crawford Architects
Site Analysis Plan	102	01	08/12/2022	Sam Crawford Architects
Demolition Plan	103	01	08/12/2022	Sam Crawford Architects
Development Data	104	01	08/12/2022	Sam Crawford Architects
Site Plan	105	01	08/12/2022	Sam Crawford Architects
Ground Floor Plan	106	01	08/12/2022	Sam Crawford Architects
First Floor Plan	107	01	08/12/2022	Sam Crawford Architects
Roof Plan	108	01	08/12/2022	Sam Crawford Architects
Street Elevations	201	01	08/12/2022	Sam Crawford Architects
Elevations 1	202	01	08/12/2022	Sam Crawford Architects
Elevations 2	203	01	08/12/2022	Sam Crawford Architects
Short Sections	301	01	08/12/2022	Sam Crawford Architects
Long Sections	302	01	08/12/2022	Sam Crawford Architects
Shadow Diagrams	401	01	08/12/2022	Sam Crawford Architects
Solar Access 1	402	01	08/12/2022	Sam Crawford Architects
Solar Access 2	403	01	08/12/2022	Sam Crawford Architects
Solar Access 3	404	01	08/12/2022	Sam Crawford Architects
External Materials Palette	501	01	08/12/2022	Sam Crawford Architects

Activity Determination
19-23 Douglas Street & 6 Neal Place, Wallsend

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Landscape				
Landscape Ground Floor Design	3	08	18/03/2024	Place Design Group
Section AA	4	08	18/03/2024	Place Design Group
Section BB and CC	5	08	18/03/2024	Place Design Group
Planting Strategy	6	08	18/03/2024	Place Design Group
Planting Palette	7	08	18/03/2024	Place Design Group
Planting Schedule	8	08	18/03/2024	Place Design Group
Fencing Strategy	9	08	18/03/2024	Place Design Group
Indicative Materials and Furniture	10	08	18/03/2024	Place Design Group
Typical Landscape Details	11	08	18/03/2024	Place Design Group
Typical Landscape Details	12	08	18/03/2024	Place Design Group
Civil/ Stormwater				
Cover Sheet, Locality Plan and Schedule of Drawings	80822046-CI-0001	9	02/05/2024	Stantec
Civil Construction Notes	80822046-CI-0002	4	25/01/2023	Stantec
Stormwater Drainage Plan Ground Floor	80822046-CI-1101	8	02/05/2024	Stantec
Sedimentation and Erosion Control Plan	80822046-CI-1201	7	12/04/2024	Stantec
Cut and Fill Plan	80822046-CI-1301	4	14/02/2024	Stantec
WSUD Catchment Plan	80822046-CI-1401	1	12/04/2024	Stantec
Stormwater Details Sheet 1	80822046-CI-2101	5	12/04/2024	Stantec
Stormwater Details Pit Schedule	80822046-CI-2102	5	02/05/2024	Stantec
Stormwater Details Sheet 2 OSD Tank 1 Details	80822046-CI-2103	6	18/04/2024	Stantec
Stormwater Details Sheet 3 OSD Tank 2 Details	80822046-CI-2104	6	18/04/2024	Stantec
Stormwater Details Sheet 4 OSD Tank 3 Details	80822046-CI-2104	6	18/04/2024	Stantec
Stormwater Details Sheet 4 Typical ESK20 Detail	80822046-CI-2101	1	02/05/2024	Stantec
Sedimentation and Erosion Control Details	80822046-CI-2201	4	25/01/2023	Stantec
Driveway Vertical Clearance Details	80822046-CI-2301	2	28/03/2024	Stantec
Civil Works Details	80822046-CI-2302	1	21/03/2024	Stantec
Survey				
Detail Survey	NA	1	23/11/2018	RPS Australia East

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
BASIX				
BASIX Certificate	1277667M_05	NA	23/04/2024	Northrop Consulting Engineers Pty Ltd
Nationwide house energy rating scheme – class 2 summary	0008336240	NA	28/03/2024	Northrop Consulting Engineers Pty Ltd
Reports				
Traffic Impact Assessment	21148	V06	27/04/2023	The Transport Planning Partnership
Arborist's Report	NA	NA	01/02/2024	Hunter Horticultural Services
Waste Management Plan	NA	NA	19/04/2023	Sam Crawford Architects
DA Access Review (Stage 5/Part 5)	NA	Final V3	09/02/2024	MGAC
Geotechnical Investigation and Acid Sulfate Soil (ASS) Assessment	18/3543	NA	26/11/2018	STS GeoEnvironmental
Design Compliance Assessment	P210198	1	22/05/2024	BCA Vision

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 as required by identified requirement No. 74 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 and 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 City of Newcastle 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 laybacks shall be constructed in accordance with City of Newcastle Council's standard requirements for residential crossings. Council shall be provided with plans for the crossing and laybacks 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 laybacks / driveway shall be borne by the Land and Housing Corporation. Obsolete gutter laybacks shall be constructed as kerb in accordance with City of Newcastle Council's standards.

Note:

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

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

Site Works

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

Building Siting

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

Smoke Detection System(s)

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

Site Soil Contamination

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

Landscaping

18. Landscaping shall be carried out substantially in accordance with the approved landscape plan(s) (as amended by identified requirement No. 75) and maintained for a period of 12 months by the building contractor. City of Newcastle Council shall be consulted in relation to the planting of any street trees.
19. All scheduled plant stock shall be pre-ordered, prior to commencement of construction or 3 months prior to the commencement of landscape construction works, whichever occurs sooner, for the supply to the site on time for installation. The builder shall provide written confirmation of the order to the Land and Housing Corporation.

Tree Removal

20. Removal of trees within the boundaries of the site is to be carried out in accordance with the trees shown for removal on the approved landscape plan and Arborist's 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 and 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. Hunter 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. City of Newcastle 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 and 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 City of Newcastle Council or if this is not practicable to some other council approved management facility.
 - (b) Adequate refuse disposal methods and builders storage facilities. Builders' wastes, materials or sheds shall not to be placed on any property other than that which this approval relates to.
35. Access to the site shall only be provided via an all weather driveway on the property and is not to be provided from any other site.

Protection of Trees

36. Trees and other vegetation that are to be retained on site shall be protected prior to the commencement of works and for the duration of the construction period in accordance with the details provided in the Arborist's Report.

Waste Management

37. A final Waste Management Plan shall be prepared and submitted to the Land and 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 (e.g. Hunter 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. Detailed stormwater drainage plans, substantially in accordance with the approved concept stormwater drainage plan(s), shall be prepared and submitted to the Land and Housing Corporation. Any on-site detention system shall be designed in accordance with the relevant catchment authority's requirements (eg the Upper Parramatta River Catchment Trust On-site Detention Handbook) and/or City of Newcastle Council's drainage code.

DURING DEMOLITION AND CONSTRUCTION WORKS

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

Landfill

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

- 45. Historic and indigenous archaeological sites and relics are protected under the *Heritage Act 1977* and *National Parks and Wildlife Act 1974*, respectively. Should any relics be uncovered during the course of the approved works, work must cease immediately in the affected area. Subsequently, in cases where historical items have been uncovered, the Department of Climate Change, Energy the Environment and Water must be contacted.
- 46. 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 from the Department of Climate Change, Energy the Environment and Water.

Demolition

- 47. Any existing structures identified for demolition shall be demolished prior to commencement of the construction of the activity.
- 48. Demolition shall be carried out in accordance with the appropriate provisions of AS 2601.
- 49. 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.
- 50. 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, 2nd Edition [NOHSC:2002 (2005)].
- 51. Hazardous or intractable wastes, including all asbestos laden waste, arising from the demolition process shall be removed and disposed of in accordance with the requirements of SafeWork NSW and the Department of Planning, Housing & Infrastructure.
- 52. 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 and Housing Corporation demonstrating the appropriate disposal of the asbestos waste.
- 53. Demolition procedures shall maximise the reuse and recycling of demolished materials in order to reduce the environmental impacts of waste disposal.
- 54. 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.
- 55. 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

56. Survey reports shall be submitted by the building contractor to the Land and 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

57. 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

58. 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

59. 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.
60. No fires shall be lit or waste materials burnt on the site.
61. No washing of concrete forms or trucks shall occur on the site.
62. 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.
63. Dust generation during demolition / construction shall be controlled using regular control measures such as on site watering or damp cloth fences.
64. All vehicles transporting loose materials and travelling on public roads shall be secured (ie closed tail gate and covered) to minimise dust generation.
65. 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

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

68. 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.
- (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

69. 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

70. The cost of repairing any damage caused to City of Newcastle 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

71. 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 City of Newcastle 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 and Housing Corporation and City of Newcastle Council.

PART B – Additional Identified Requirements

72. Air Conditioning

Design and Installation

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

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

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

On-Going

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

- (a) emit a noise that is audible within a habitable room in any adjoining residence (regardless of whether any door or window to that room is open):
 - (i) before 8.00 am and after 10.00 pm on any Saturday, Sunday or Public Holiday; or
 - (ii) before 7.00 am or after 10.00 pm on any other day;
- (b) emit a noise that exceeds 5dB(A) above the ambient background noise level measured at any property boundary.

73. Solar (photovoltaic electricity generating) energy system

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

- (a) the system is installed in accordance with the manufacturer's specifications or by a person who is accredited by the Clean Energy Council for the installation of photovoltaic electricity generating systems, and
- (b) the solar energy system must not reduce the structural integrity of any building to which the system is attached, and
- (c) the system must not involve mirrors or lenses to reflect or concentrate sunlight, and
- (d) the system must not protrude more than 0.5m from the wall or roof (as measured from the point of attachment), and
- (e) the system is installed no less than 3m from any adjoining property boundary.

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

74. NatHERS & BASIX Certificates/ stamped plans

Updated BASIX and NatHERS Certificates and stamped plans to be prepared by an appropriately qualified person is to be provided at construction documentation stage detailing the inclusion of air conditioning and solar (photovoltaic electricity generating) energy system.

Site Specific Requirements

75. Revised landscape plan

A revised Landscape Plan shall be prepared at construction documentation stage to address the following:

- (a) delete the direct pathway from the car parking area to the common open space area unless the pathway can made be accessible,
- (b) access to the common open space area is to be from an accessible pathway,
- (c) a seat(s) is to be provided in the common open space area in an accessible location,
- (d) areas of turf are to be minimised or eliminated wherever possible to reduce ongoing maintenance,
- (e) trees within close proximity to buildings and major services are to be appropriately sized to avoid structural damage and reduce maintenance burden, and
- (f) the 4 proposed *Tristanopsis laurina* (Water Gum) along the northern edge of the driveway are to be deleted.

76. Balconies

Balconies are to be appropriately sized to meet the *NSW Land and Housing Corporation Design Requirements*. Balconies to Unit 12 and Unit 15 shall be increased to provide a minimum area of 10m².

77. Additional privacy screening

- Fixed privacy screen to be provided to the northern side of Unit 15 balcony
- Fixed privacy screen to be provided to the eastern side of Unit 20 balcony.

78. Safety barrier

A safety barrier around the car parking area is to be provided where necessary to satisfy the Australian Standards.

Requirements resulting from Council Comments

79. Principal Private Open Space Unit 9—

The western wall enclosing the Principal Private Open Space area of unit 9 shall be a minimum 1.5m in height above the finished level of the adjoining entry pathway.

80. Rainwater tanks

A mains water top-up system is to be installed to maintain a minimum water depth of 100mm within the rainwater tanks; or an electronically activated mechanical valve device installed to switch to mains water when the water level in the tank falls below the minimum depth.

81. Bicycle hoop

One bicycle hoop is to be provided within an external common open area.

82. Conduit for EV charging

Conduit is to be provided for future provision of an electric vehicle (EV) charger, in accordance with City of Newcastle Council's requirements.

83. Kerb outlets for stormwater

The design and construction of the 3 kerb outlets to Douglas Street are to be in accordance with Council's guidelines and design specifications.

84. Bin carting route

The pathway from the bin enclosure to the front property boundary to be widened to 1.8m.

85. House numbering

Prior to commencement of construction, the LAHC must submit a Street Numbering Application to City of Newcastle Council to enable the addressing allocation process to commence. The allocated addressing will be as per City of Newcastle's Addressing Allocation document and in accordance with the NSW Addressing Policy and the Australian/New Zealand Standard: Rural and Urban Addressing (AS/NZS 4819:2011).

Requirements Resulting from Consideration of Adjoining Occupier Responses to Notification

86. Boundary fence with 24 Curry Street

Provide 300mm lattice to the top of the metal fence at the common boundary with 24 Curry Street.

Recommendation for Independent Assessor

87. Unit 19 Solar Access

A skylight or other suitable alternative is to be installed to provide mid-winter solar access to the main living area of Unit 19.

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 or by dialing 1100.

DECISION STATEMENT

SITE IDENTIFICATION	
STREET ADDRESS	
Unit/Street No	Street or property name
19-23 6	Douglas Street Neal Place
Suburb, town or locality	Postcode
Wallsend	2287
Local Government Area(s)	Real property description (Lot and DP)
Newcastle	Lots 58 & 59 in DP 35087 Lots C & D in DP 35096
ACTIVITY DESCRIPTION	
Provide a description of the activity	
Demolition of existing dwellings and associated structures, tree removal, and the construction of a 2-storey residential flat building development containing 10 x 1-bedroom and 10 x 2-bedroom dwellings, with associated landscaping and fencing, surface parking for 9 cars, and consolidation 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 City of Newcastle 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 development will have economic and social benefits and any minor short-term impacts on the environment or surrounding properties can be appropriately mitigated.

- The proposed development will assist in the provision of much needed social and affordable housing and assist in addressing the existing and growing demand for housing in the City of Newcastle 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 to ensure legislative compliance.

Signed.....

Dated.....

Yolanda Gil
Acting Executive Director, Portfolio Strategy and Origination. Housing Portfolio
Homes NSW

	<p>Ground: Double Brick Cavity, R1.5 bulk insulation, plasterboard (as per elevations)</p>  <p>Cavity Wall</p>
External Walls	<p>First Floor: Brick Veneer, R1.5 bulk insulation, plasterboard (as per elevations) : Stud Wall with Fiber Cement Cladding, R1.0 bulk insulation, plasterboard (for Lobby)</p>   <p>Brick Veneer</p>
External Wall Solar absorbance	<p>Alfresco Vino Brick (Dark ~ 0.85) – as per elevation Crushed Grey Brick (Medium ~ 0.50) – as per elevation FC cladding (Medium ~ 0.50) – as per elevation</p>
Internal Partitions	<p>Lightweight Construction – Plasterboard Stud Cavity Wall, No Insulation</p>  <p>Cavity wall, direct to plasterboard single gip</p>
	<p>Lightweight Construction – Plasterboard Stud Cavity Wall, No Insulation</p>
Party Walls – walls to risers, shafts, neighbours	 <p>Stud, plasterboard</p>
Walls to naturally ventilated corridors	<p>Single Brick, Plasterboard Wall</p>  <p>Brick, plasterboard</p>
Ceiling to Roof (ceiling to balcony)	<p>Plasterboard, R3.5 bulk insulation</p>
Roof construction	<p>Corrugated Iron, No Insulation, Skillion roof</p>
Roof Solar absorbance	<p>Solar Absorbance – 0.3 (light grey)</p>
Ground Floor construction	<p>Concrete Slab on ground</p>
Suspended Floor constructions	<p>Concrete Slab, Plasterboard</p>
Floor coverings	<p>Tiles in Dining, study, and living Tiles in wet areas (kitchen, laundry, toilet)</p>
Window system performance	<p>Awnings, Casement - U-Value of 4.3 and SHGC of 0.47 <i>(Sample: Aluminium B Double Glazed Air Fill High Solar Gain low-E-Clear)</i></p> <p>Sliding, Fixed Windows- U-Value of 4.3 and SHGC of 0.53 <i>(Sample: Aluminium B Double Glazed Air Fill High Solar Gain low-E-Clear)</i></p> <p>Glazed Sliding Doors- U-Value of 4.1 and SHGC of 0.52 <i>(Sample: Aluminium B DG Argon Fill High Solar Gain low-E-Clear)</i></p>
Window operability	<p>Window operability according to the plans. Single Pane Awning windows on the ground floor have been modeled to 90% openness. The combination of Awning and fixed windows on the ground floor are modelled to 45% openness. Operable windows above 2m off the ground and not next to balconies or winter garden have been modelled to have a 10% openness in the models.</p>
Ceiling	<p>Surface mounted LED lights.</p>
Penetrations	<p>Weather seals for all exhausts and vents have been assumed in all models.</p>

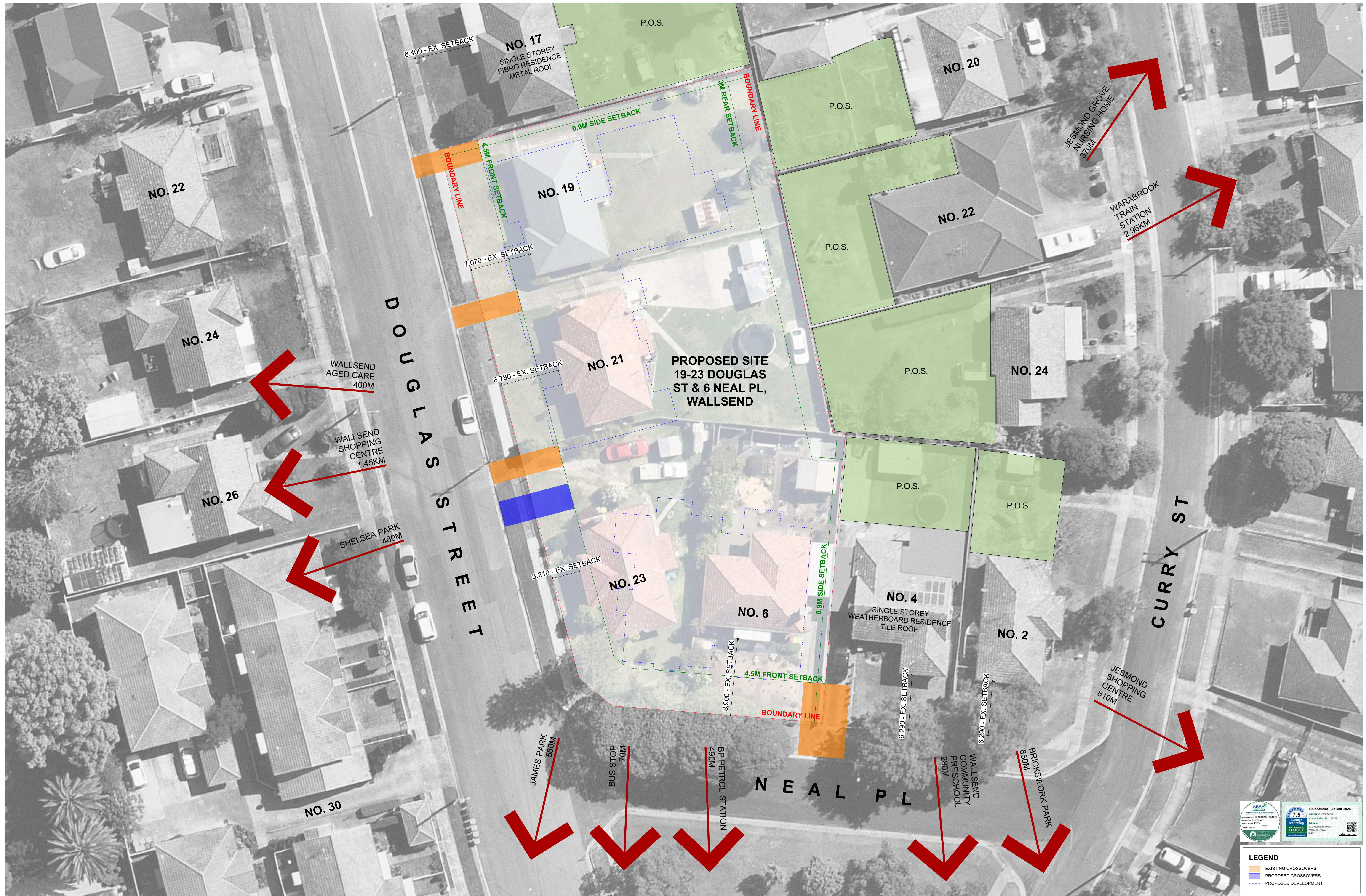
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000 COVER PAGE		
000	COVER SHEET	N.T.S.
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102	SITE ANALYSIS PLAN	1:200
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106	GROUND FLOOR PLAN	1:100
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402	SOLAR ACCESS	N.T.S.
403	SOLAR ACCESS	N.T.S.
404	SOLAR ACCESS	N.T.S.
500 EXTERNAL FINISHES AND MATERIALS		
501	EXT. MATERIALS PALETTE	N.T.S.

ARCHITECT	Sam Crawford Architects Unit 4, 30 Wilson Street, Newtown 2042 P 02 9519 6800
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BCA CONSULTANT	BCA Vision Pty Ltd 6a/43a Florence St, Hornsby 2077 P 02 9476 8613
CIVIL ENGINEER	Stantec Level 9, 203 Pacific Highway, St Leonards 2065 P 02 9496 7700
LANDSCAPE ARCHITECT	Place Design Group 3b/830-832 Elizabeth St, Waterloo 2017 P 02 9290 3300
ELECTRICAL, FIRE, HYDRAULIC, MECHANICAL, STRUCTURAL & BASIX	Northrop Consulting Engineers Level 1, 215 Pacific Highway Charlestown NSW P 02 4943 1777
TRAFFIC ENGINEER	TTTP 22-24 Atchison St, St Leonards 2065 P 02 8437 7800



03 DOUGLAS ST & NEAL PL PERSPECTIVE



LEGEND
EXISTING CROSSOVERS
PROPOSED CROSSOVERS
PROPOSED DEVELOPMENT





NOTE 1:
DEMOLISH SINGLE STOREY FIBRO
RESIDENCE WITH TILED ROOF INCLUDING
SLABS AND FOOTINGS.

 DEMOLISH EXISTING TREE/SHRUB



PROJECT NO. 21.27	STAGE AA	DRAWING NO. 103	REV 01
DRAWING TITLE DEMOLITION PLAN			



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FOR ALL DIMENSIONS ON SITE, REFER TO THE REQUIREMENTS. REPORT ALL DISCREPANCIES WITH REQUIREMENTS TO:

CRAWFORD ARCHITECTS

NSW GOVERNMENT

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DOUGLAS STREET

FENCE LEGEND

- FN-1: BK-2 brick wall (800mm) with aluminium slat fence in Monument (400mm)
- FN-2: Aluminium slat fence in Monument (1200mm)
- FN-3: BK-1 brick wall (800mm) with aluminium slat fence in Monument (400mm)
- FN-4: BK-2 brick wall (1200mm) with aluminium slat fence in Monument (600mm)
- FN-5: Colourbond fence in Monument (1800mm)
- FN-6: Vehicle crash barrier fence (1100mm)
- FN-7: Aluminium slat fence in Monument (1500mm)
- FN-8: Aluminium slat fence in Monument (1500mm)

BLOCK KEY

LEGEND

AC	AIR CONDITIONER UNIT	FL	FIRE CEMENT CLADDING	LI	LIKEN CURBOARD	POS	PRIVATE OPEN SPACE
BA	BALUSTRADE	FR	FIRE RESISTANT FLOOR LEVEL	MB	MESH ROOFING	RF	ROOFING
BR	BROOM CURBOARD	FM	FIRE MASONRY MASONRY	MR	MASONRY ROOFING	RF	REINFORCED CONCRETE
CL	CLOTHES LINE	GN	GAS METER	ND	NO DETENTION	RF	REINFORCED CONCRETE
CP	DOWNPIPE	GM	GAS METER	ND	NO DETENTION	RF	REINFORCED CONCRETE
DS	DOWNPIPE	GM	GAS METER	ND	NO DETENTION	RF	REINFORCED CONCRETE
F	FENCE	LY	LAUNDRY	ND	NO DETENTION	RF	REINFORCED CONCRETE

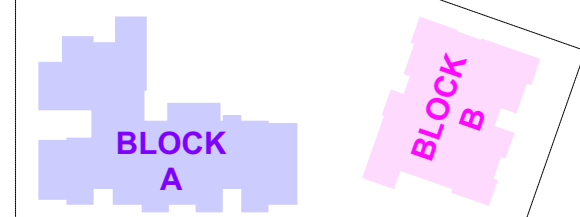


DOUGLAS STREET

BLOCK KEY

LEGEND

- 1 BED UNITS
- 2 BED UNITS
- WET AREA
- PAVING
- LANDSCAPE AREA
- HARDSCAPE AREA



PART 5 SUBMISSION

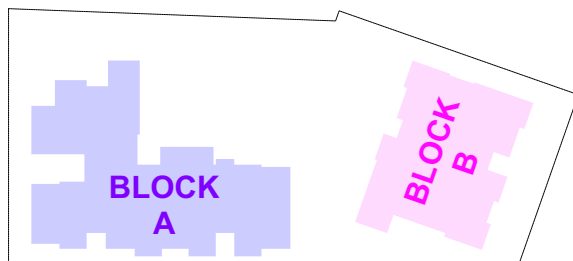


DOUGLAS STREET

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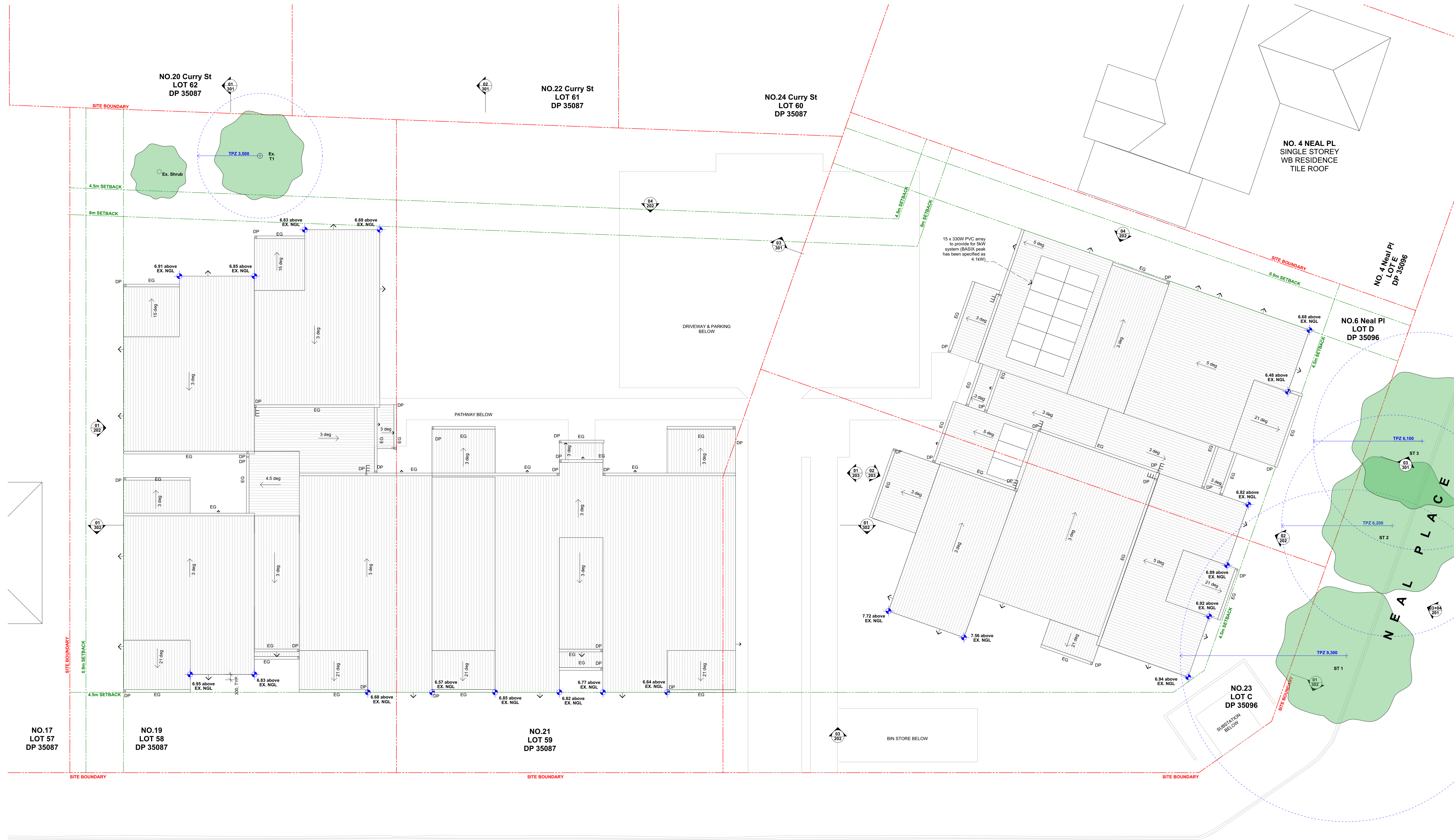
LEGEND

- 1 BED UNITS
- 2 BED UNITS
- WET AREA
- PAVING
- LANDSCAPE AREA
- HARDSCAPE AREA



PART 5 SUBMISSION

FIRST FLOOR PLAN



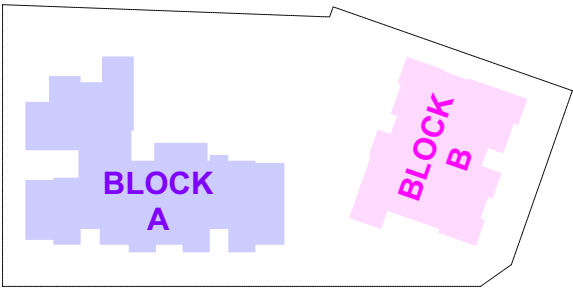
LEGEND

- RF-1 CORRUGATED METAL ROOF
- HEKA HOODS
- EAVES GUTTER AND DOWN PIPE
- DIMENSION AT MAX BUILDING HEIGHT TO NATURAL GROUND LEVEL

LEGEND

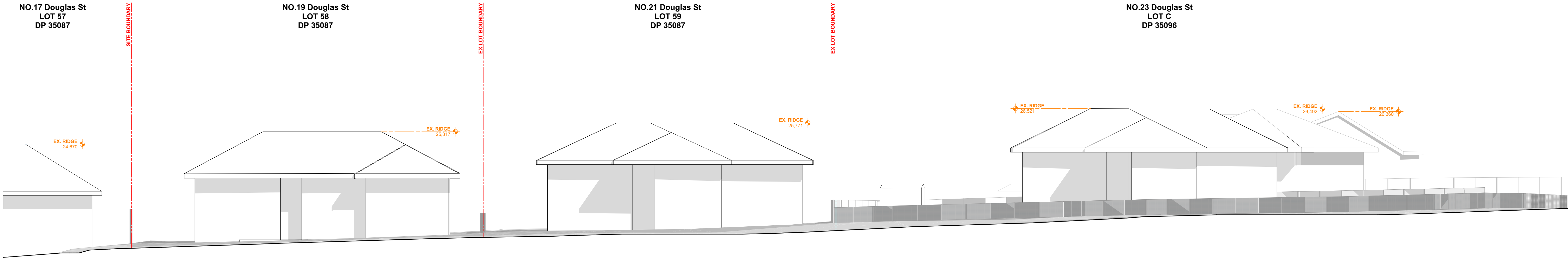
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- 2 BED UNITS
- WET AREA
- PAVING
- LANDSCAPE AREA
- HARDSCAPE AREA

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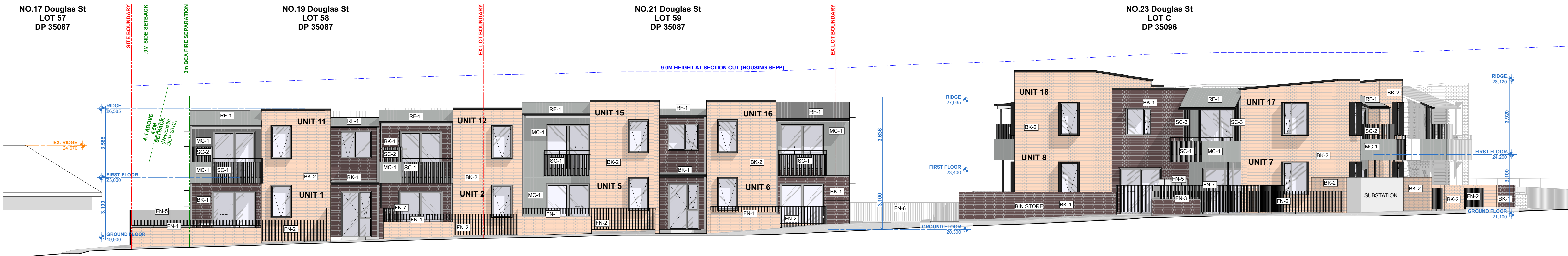


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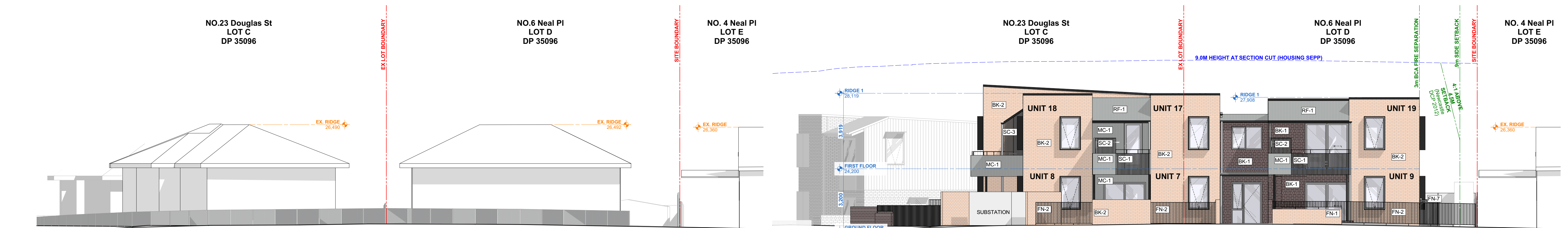
ROOF PLAN



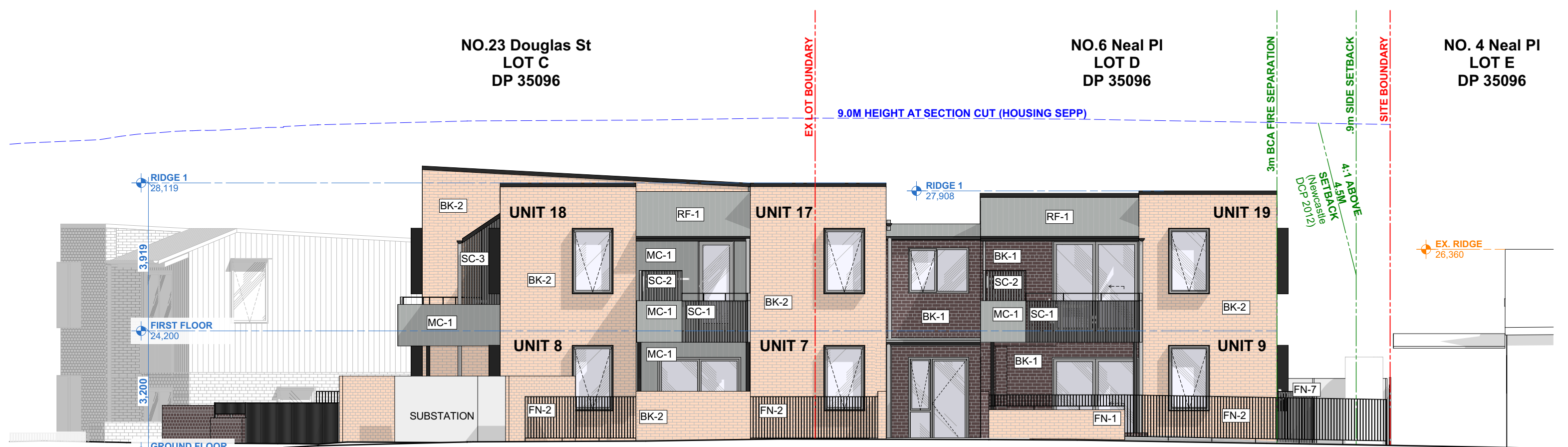
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02 PROPOSED DOUGLAS ST ELEVATION
1:100



03 EXISTING NEAL PL STREET ELEVATION
1:100



04 PROPOSED NEAL PL STREET ELEVATION
1:100

EXTERNAL FINISHES

BK-1	WALLS BRICK - PGH BRICKS 'ALFRESCO' VINO	RF-1	ROOF CORRUGATED METAL ROOF: LYSAGHT CUSTOM ORB WINDSPRAY	FN-3	FENCING BRICK - PGH ALFRESCO 'VINO' UP TO 800H + ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 400H	FN-6	FENCING CRASH BARRIER 1100H	SC-1	SCREEN 1000MM HIGH OPEN BALUSTRADE	SC-4	SCREEN ALUMINIUM VERTICAL BATTEN SCREEN 1600H
BK-2	WALLS BRICK - PGH BRICKS 'BOTANICALS' SANDALWOOD'	FN-1	FENCING BK-2 BRICK - PGH BOTANICALS 'SANDALWOOD' UP TO 800H + ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 400H	FN-4	FENCING BK-2 BRICK - PGH BOTANICALS 'SANDALWOOD' UP TO 1200H + ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 600H	FN-7	FENCING ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 1500H	SC-2	SCREEN ALUMINIUM VERTICAL BATTEN SCREEN 800H		CLEAR & OPAQUE GLASS REFER ELEVATIONS
MC-1	WALLS CORRUGATED METAL CLADDING - LYSAGHT CUSTOM ORB WINDSPRAY	FN-2	FENCING ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 1200H	FN-5	FENCING COLOURBOND FENCING 'MONUMENT' FINISH 1800H	FN-8	FENCING ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 1800H	SC-3	SCREEN FULL HEIGHT ALUMINIUM VERTICAL BATTEN SCREEN		METAL FINISHES: FASCIA, GUTTER, DOWNPIPE, WINDOW HOODS, WINDOW FRAMES Refer A501 for details



PART 5 SUBMISSION

PROJECT NO.	STAGE	DRAWING NO.	REV
21.27	AA	201	01

STREET ELEVATIONS

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ACN 165 400 987 Nominated Architect Sam Crawford 6498

DESCRIPTION
AM2 SUBMISSION TO LAHC

CLIENT
LAND & HOUSING CORPORATION (LAHC)

PROJECT
DOUGLAS ST & NEAL PL
19-23 DOUGLAS STREET & 6 NEAL PLACE, WALLSEND NSW 2287

LOT 58/ DP 35087
LOT 59/ DP 35087
LOT C/ DP35096
LOT D/ DP35096

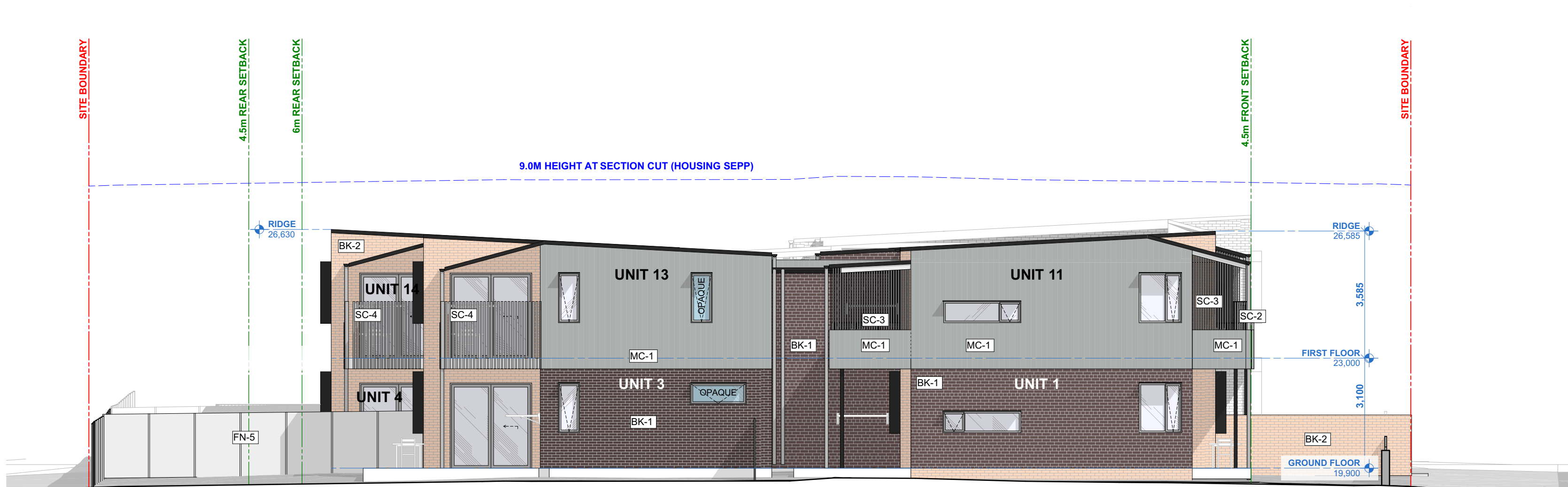
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PROJECT NO.
21.27

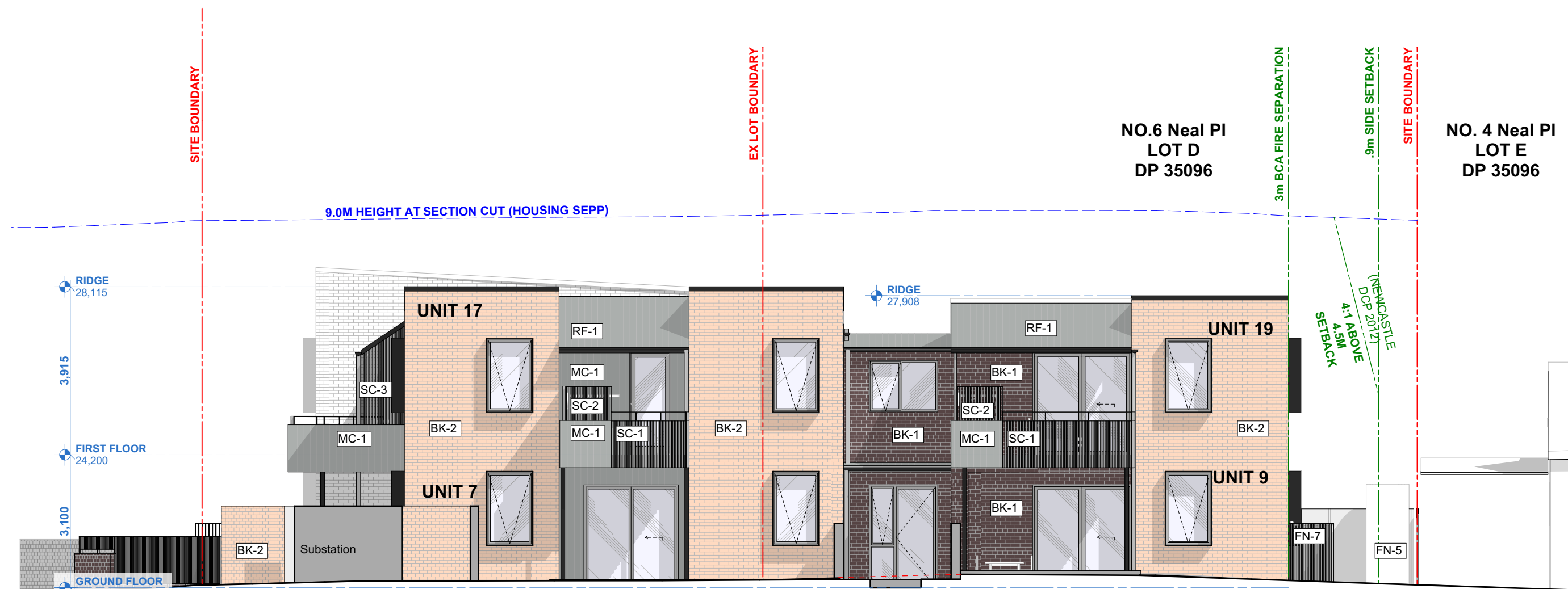
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DRAWING NO.
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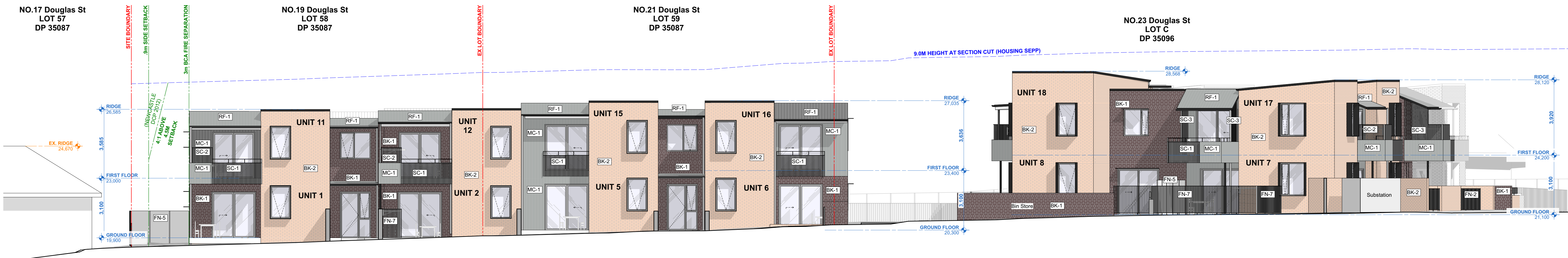
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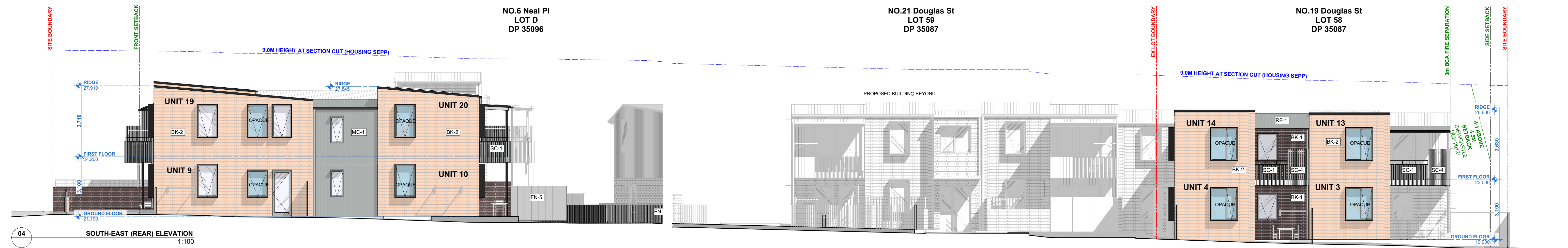
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02 SOUTH ELEVATION UNIT 7, 17, 9 + 19
1:100



03 WEST (STREET) ELEVATION
1:100



04 SOUTH-EAST (REAR) ELEVATION
1:100

EXTERNAL FINISHES

BK-1	WALLS BRICK - PGH BRICKS 'ALFRESCO VINO'
BK-2	WALLS BRICK - PGH BRICKS 'BOTANICALS SANDALWOOD'
MC-1	WALLS CORRUGATED METAL CLADDING - LYSAGHT CUSTOM ORB WINDSPRAY
RF-1	ROOF CORRUGATED METAL ROOF: LYSAGHT CUSTOM ORB WINDSPRAY
FN-1	FENCING BK-2 BRICK - PGH BOTANICALS 'SANDALWOOD' UP TO 800H + ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 400H
FN-2	FENCING ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 1200H
FN-3	FENCING BRICK - PGH ALFRESCO 'VINO' UP TO 800H + ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 400H
FN-4	FENCING BK-2 BRICK - PGH BOTANICALS 'SANDALWOOD' UP TO 1200H + ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 600H
FN-5	FENCING COLOURBOND FENCING 'MONUMENT' FINISH 1800H
FN-6	FENCING CRASH BARRIER 1100H
FN-7	FENCING ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 1500H
FN-8	FENCING ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 1800H
SC-1	SCREEN 1000MM HIGH OPEN BALUSTRADE
SC-2	SCREEN ALUMINIUM VERTICAL BATTEN SCREEN 800H
SC-3	SCREEN FULL HEIGHT ALUMINIUM VERTICAL BATTEN SCREEN
SC-4	SCREEN ALUMINIUM VERTICAL BATTEN SCREEN 1600H
	CLEAR & OPAQUE GLASS REFER ELEVATIONS
	METAL FINISHES: FASCIA, GUTTER, DOWNPIPE, WINDOW HOODS, WINDOW FRAMES Refer A501 for details



PART 5 SUBMISSION

PROJECT NO.	STAGE	DRAWING NO.	REV
21.27	AA	202	01
DRAWING TITLE			
ELEVATIONS 1			

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ACN 165 400 987 Registered Architect Sam Crawford 6498

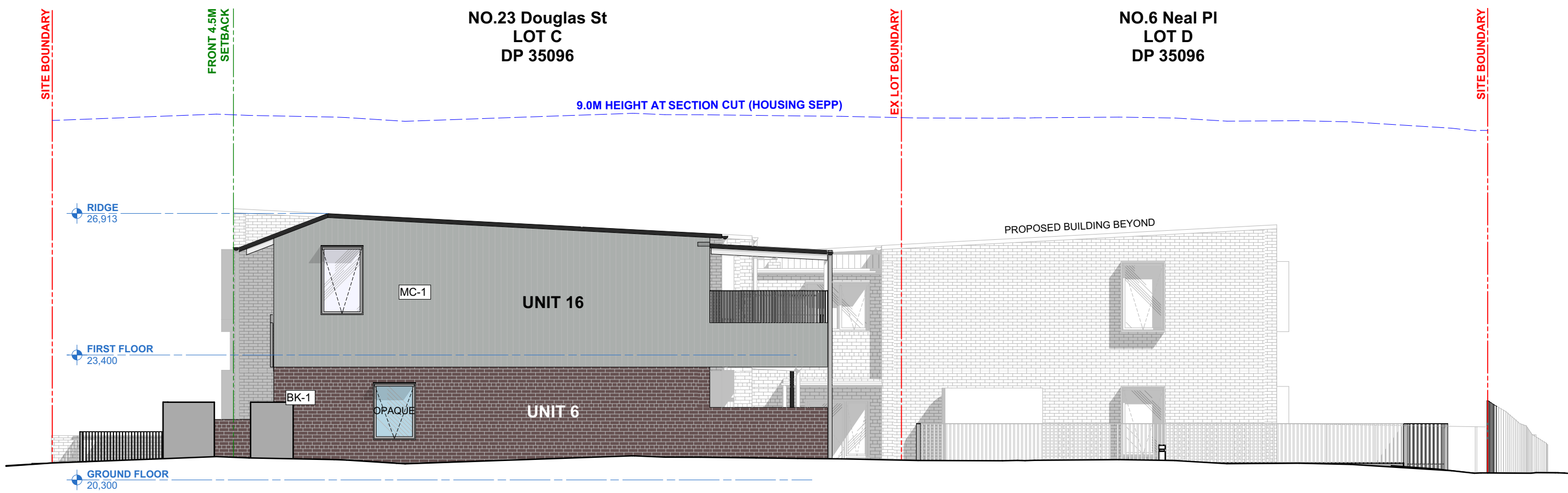
DESCRIPTION
AM2 SUBMISSION TO LAHC

REV APPD DATE CLIENT
01 SC 08-Dec-22 LAND & HOUSING CORPORATION (LAHC)

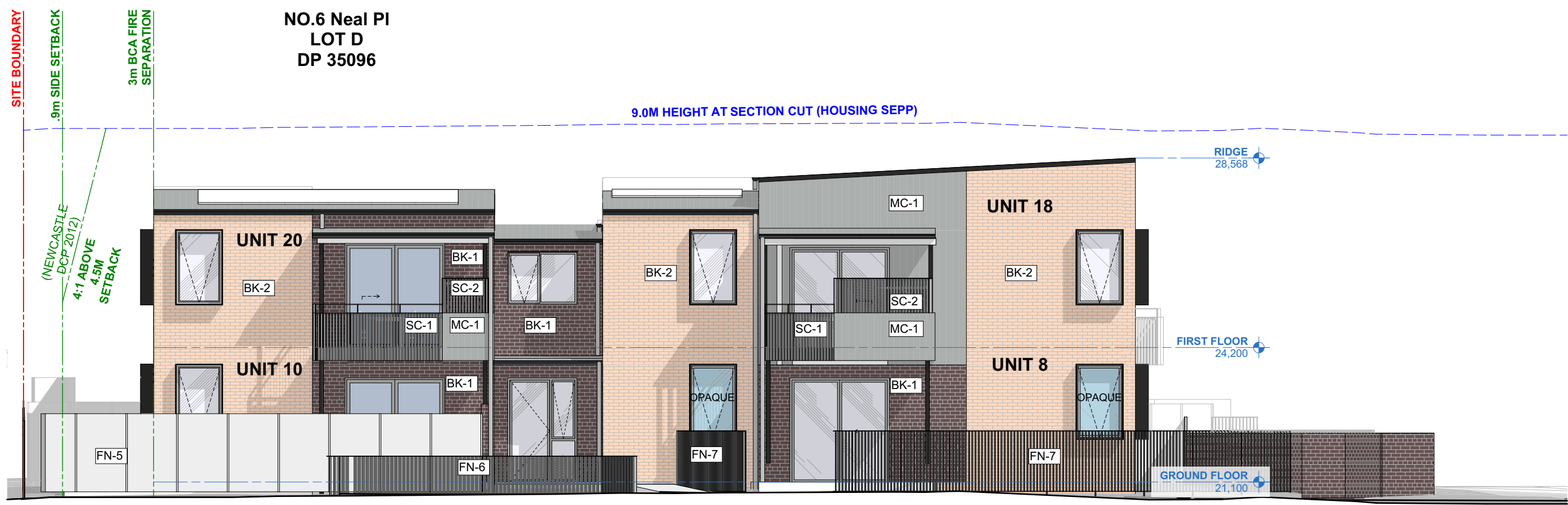
PROJECT
DOUGLAS ST & NEAL PL
19-23 DOUGLAS STREET & 6 NEAL PLACE, WALLSEND NSW 2287

LOT 58/ DP 35087
LOT 59/ DP 35087
LOT C/ DP35096
LOT D/ DP35096

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



01 SOUTH ELEVATION UNIT 4, 14
1:100



02 NORTH ELEVATION 8, 18, 10 + 20
1:100

EXTERNAL FINISHES

BK-1	WALLS BRICK - PGH BRICKS 'ALFRESCO' VINO	RF-1	ROOF CORRUGATED METAL ROOF - LYSAGHT CUSTOM ORB WINDSPRAY	FN-3	FENCING BRICK - PGH ALFRESCO 'VINO' UP TO 800H + ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 400H	FN-6	FENCING CRASH BARRIER 1100H	SC-1	SCREEN 1000MM HIGH OPEN BALUSTRADE	SC-4	SCREEN ALUMINIUM VERTICAL BATTEN SCREEN 1600H
BK-2	WALLS BRICK - PGH BRICKS 'BOTANICALS' SANDALWOOD	FN-1	FENCING BK-2 BRICK - PGH BOTANICALS 'SANDALWOOD' UP TO 800H + ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 400H	FN-4	FENCING BK-2 BRICK - PGH BOTANICALS 'SANDALWOOD' UP TO 1200H + ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 800H	FN-7	FENCING ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 1500H	SC-2	SCREEN ALUMINIUM VERTICAL BATTEN SCREEN 800H	CLEAR & OPAQUE GLASS REFER ELEVATIONS	
MC-1	WALLS CORRUGATED METAL CLADDING - LYSAGHT CUSTOM ORB WINDSPRAY	FN-2	FENCING ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 1200H	FN-5	FENCING COLOURBOND FENCING 'MONUMENT' FINISH 1800H	FN-8	FENCING ALUMINIUM SLAT FENCE 'MONUMENT' FINISH 1800H	SC-3	SCREEN FULL HEIGHT ALUMINIUM VERTICAL BATTEN SCREEN	METAL FINISHES: FASCIA, GUTTER, DOWNPIPE, WINDOW HOODS, V Refer A501 for details	

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ACN 165 400 587 Nominated Architect Sam Crawford 6498

DESCRIPTION
AM2 SUBMISSION TO LAHC

REV	APPD	DATE	CLIENT
01	SC	08-Dec-22	LAND & HOUSING CORPORATION (LAHC)

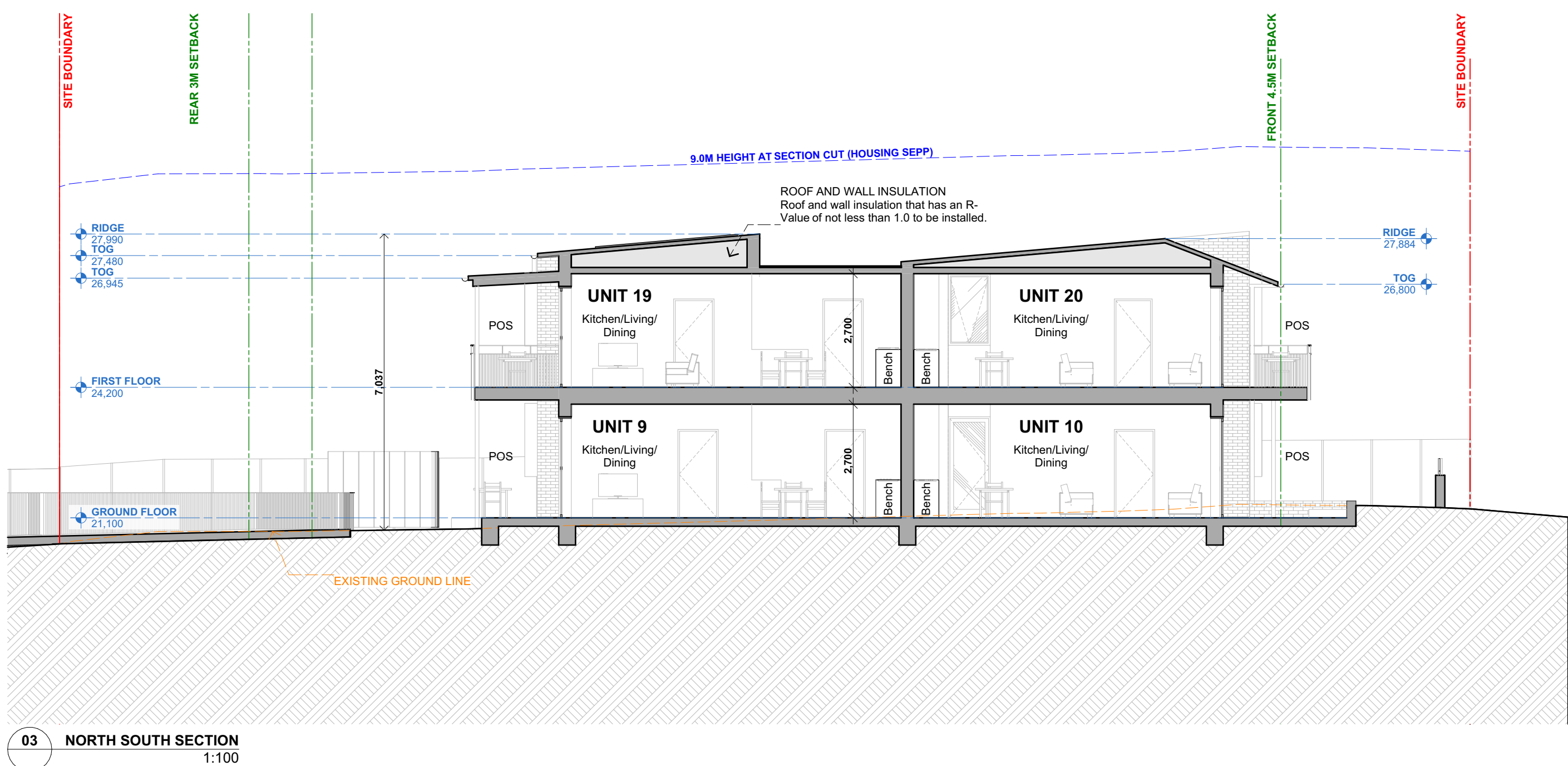
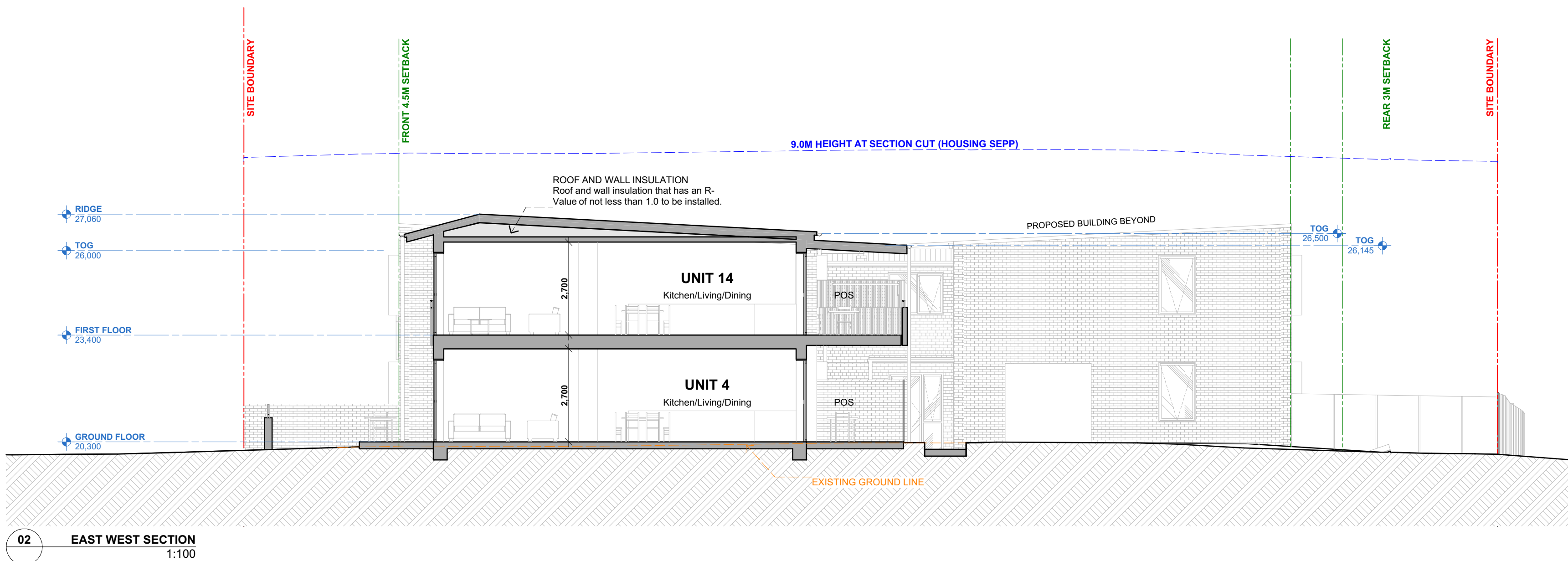
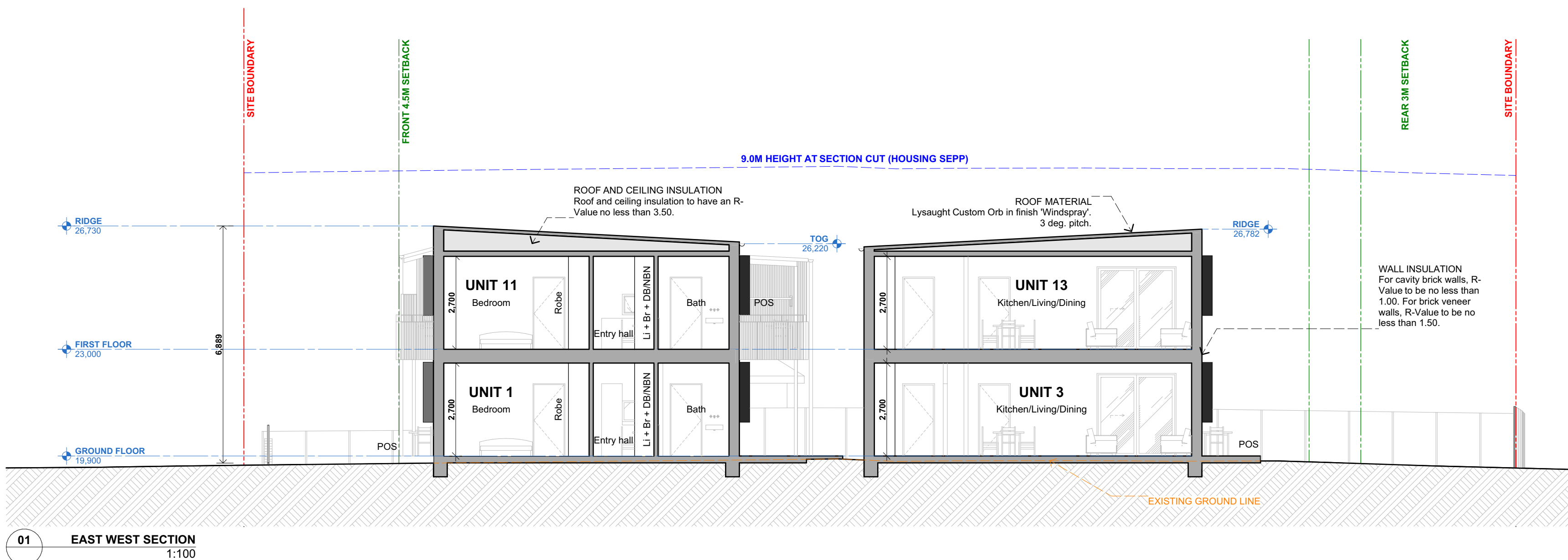
PROJECT
DOUGLAS ST & NEAL PL
19-23 DOUGLAS STREET & 6 NEAL PLACE, WALLSEND NSW 2287

LOT 58/ DP 35087
LOT 59/ DP 35087
LOT G2/ DP35096
LOT D/ DP35096

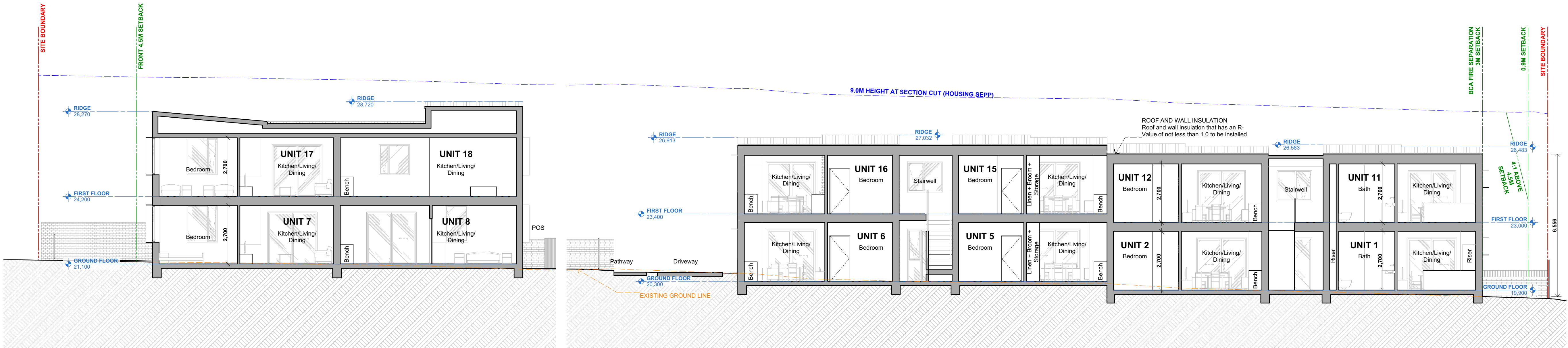
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SCALE @ A3	DRAWING TITLE			
1:200	ELEVATIONS 2			



PART 5 SUBMISSION



PART 5 SUBMISSION



Revised: 6/02/2024 - 12 Mar 24

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ACN 165 400 587 Nominated Architect Sam Crawford 6498

DESCRIPTION
AM2 SUBMISSION TO LAHC

REV	APPRO	DATE
01	SC	06-Dec-22

CLIENT
LAND & HOUSING CORPORATION (LAHC)
PROJECT
DOUGLAS ST & NEAL PL
19-23 DOUGLAS STREET & 6 NEAL PLACE, WALLSEND NSW 2287

LOT 58/ DP 35087
LOT 59/ DP 35087
LOT 62/ DP35096
LOT 63/ DP35096

NORTH POINT
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1:100
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1:200

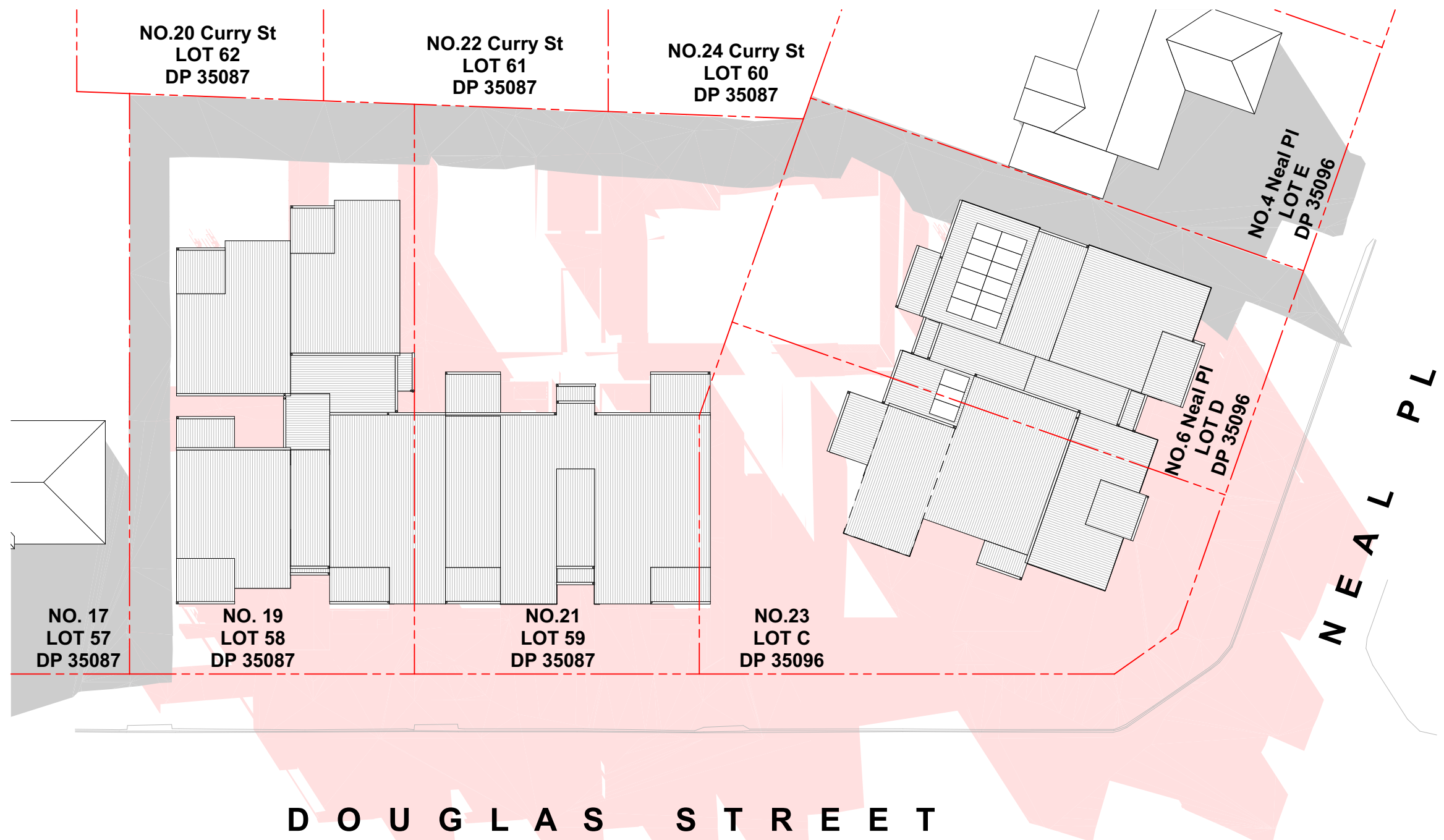
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21.27	AA	302	01
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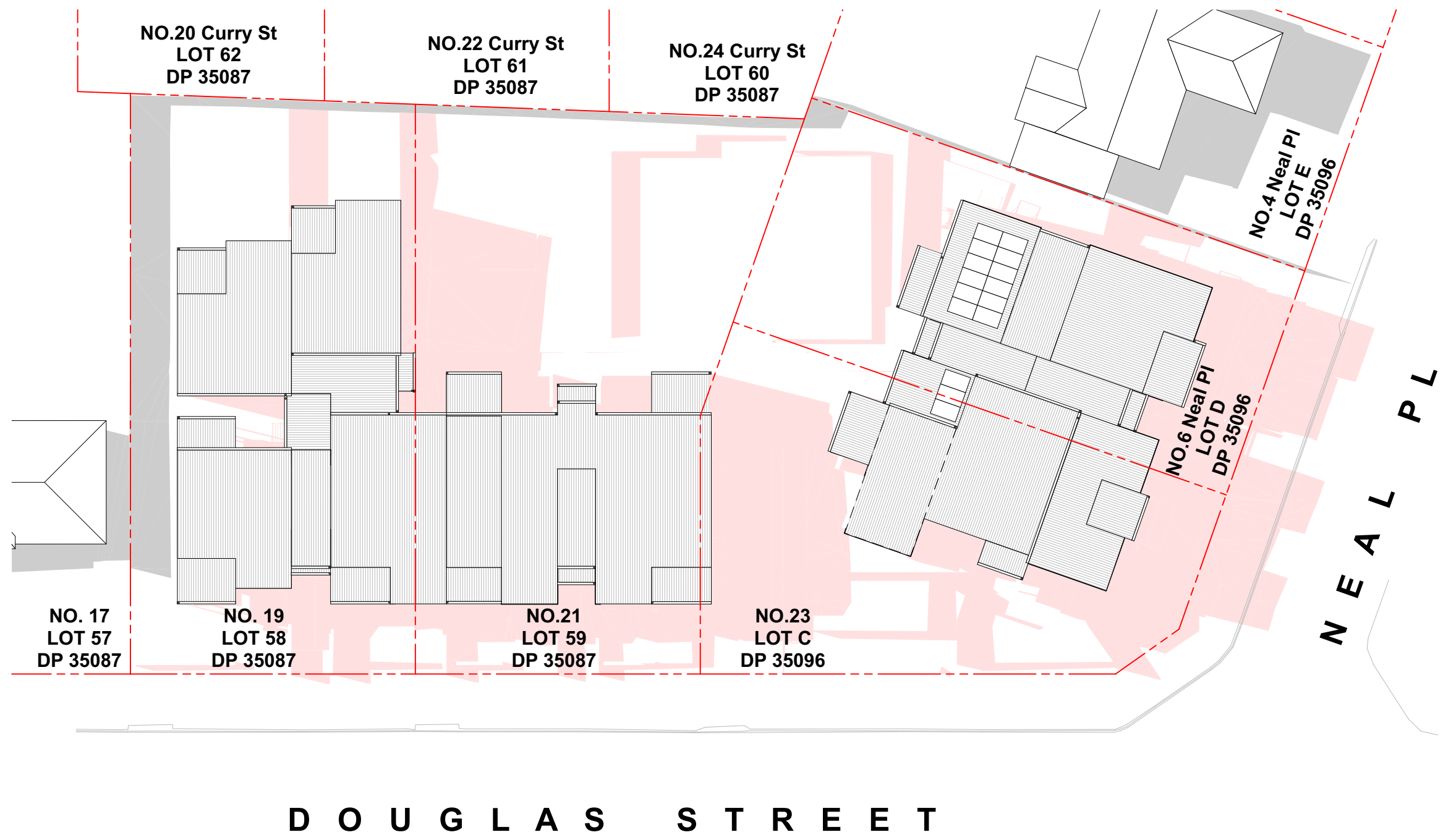
PART 5 SUBMISSION

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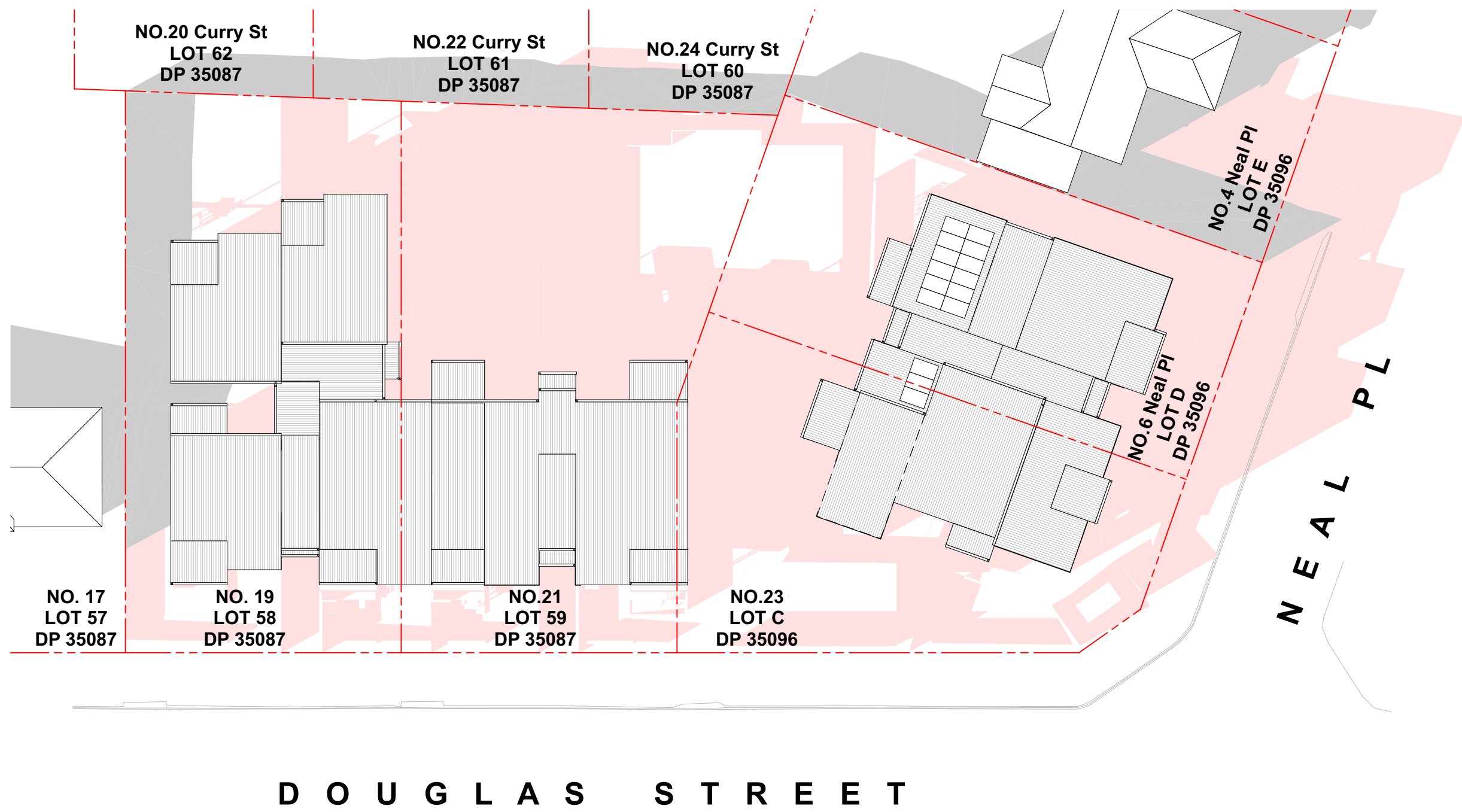
DETERMINED by the NSW Land and Housing Corporation on:



01 JUN 21 9AM
1:300



02 JUN 21 12PM
1:300



03 JUN 21 3PM
1:300

LEGEND

- SHADOWS CAST BY EXISTING STRUCTURES
- SHADOWS CAST BY PROPOSED DWELLING

Revised: 6/02/2024 - 12/04/24

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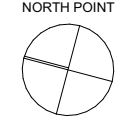
samcrawfordarchitects
Unit 4, 30 Wilson Street, Newmarket, Australia NSW 2042
TELEPHONE +612 9519 8800
EMAIL: studio@samcrawfordarchitects.com.au WEB: samcrawfordarchitects.com.au
ACN: 165 400 587 Nominated Architect Sam Crawford 6498

DESCRIPTION
AM2 SUBMISSION TO LAHC

REV	APPRO	DATE
01	SC	06-Dec-22

CLIENT
LAND & HOUSING CORPORATION (LAHC)
PROJECT
DOUGLAS ST & NEAL PL
19-23 DOUGLAS STREET & 6 NEAL PLACE, WALLSEND NSW 2227

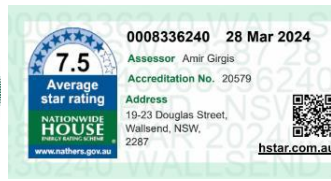
LOT 58/ DP 35087
LOT 59/ DP 35087
LOT 61/ DP 35087
LOT 62/ DP 35087
LOT 60/ DP 35087
LOT 57/ DP 35087
LOT 59/ DP 35096
LOT 61/ DP 35096
LOT 62/ DP 35096



SCALE @ A1
1:300
SCALE @ A3
1:600

PROJECT NO.	STAGE	DRAWING NO.	REV
21.27	AA	401	01

DRAWING TITLE
SHADOW DIAGRAMS (PLAN)



PART 5 SUBMISSION

[illegible]

14 / 20 units receive minimum 3 hours of sun to both their external POS and Living Space between 9am to 3pm
2 / 20 units do not receive any sun at all



ABSA
Accredited Assessor

Accreditation No: 310502029 31/05/2024

Assessor Name: Anna Gorgis

Assessor Number: 20579

Assessor Signature: _____







7.5
Average
star rating

NATIONAL
ENERGY
HOUSE
RATING

www.tollfree.gov.au

0008336240 28 Mar 2024

Assessor: Anna Gorgis

Accreditation No: 20579

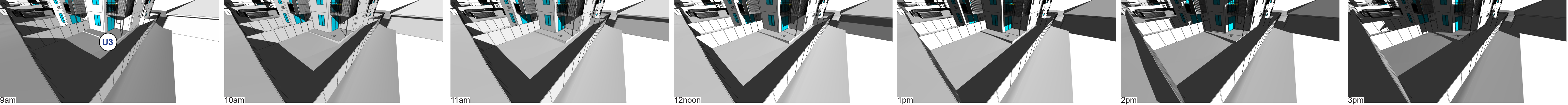
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16-23 Douglas Street,
Wailstein, NSW,
2287



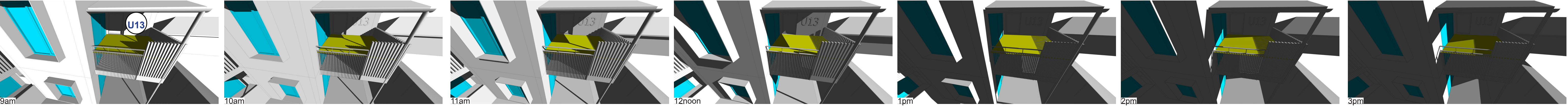
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NORTH BLOCK “A” - UNITS 1/11, 2/12, 3/13, 4/14, 5/15, 6/16 (CONTINUED)

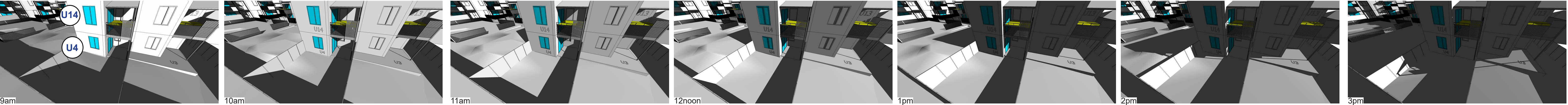
Unit 3



Unit 13

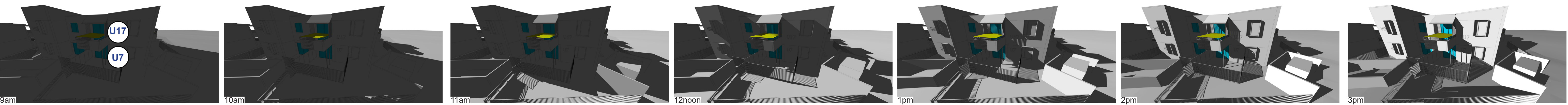


Units 4/14

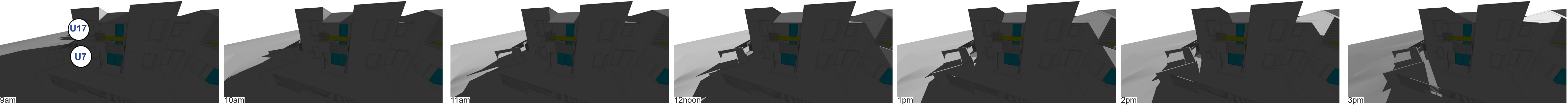


SOUTH BLOCK “B” - UNITS 7/17, 8/18, 9/19, 10/20

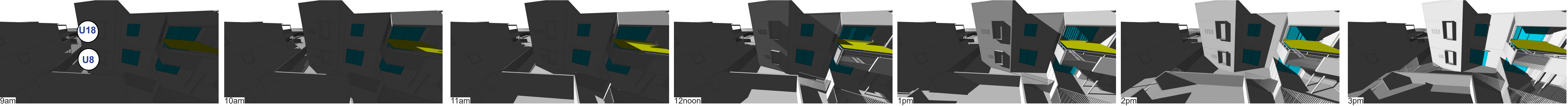
Unit 7/17 - west



Unit 7/17 - south



Unit 8/18 - west



SOLAR ACCESS AT 21 JUNE

	9am - 10am		10am to 11am		11am - 12noon		12noon - 1pm		1pm - 2pm		2pm - 3pm	
	POS	Living	POS	Living	POS	Living	POS	Living	POS	Living	POS	Living
Unit 1	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Unit 2	No	No	No	No	No	No	Yes	No	Yes	Yes	Yes	Yes
Unit 3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unit 4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Unit 5	No	No	No	No	No	No	No	No	No	No	No	No
Unit 6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	No
Unit 7	No	No	No	No	No	No	Yes	No	No	Yes	Yes	Yes
Unit 8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unit 9	Yes	No	Yes	No	No	No	No	No	No	No	No	No
Unit 10	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Unit 11	Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes
Unit 12	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Unit 13	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unit 14	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Unit 15	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
Unit 16	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Unit 17	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Unit 18	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unit 19	No	No	No	No	No	No	No	No	No	No	No	No
Unit 20	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table legend

Green highlight indicate both external POS and Living space gets 1 hour of sun
Units in red highlight indicates a unit which receives no sun
Units in green highlight indicates a unit which receives minimum 3 hours of sun to both their external POS and Living Space between 9am to 3pm in mid-winter

Summary


14 / 20 units receive minimum 3 hours of sun to both their external POS and Living Space between 9am to 3pm
2 / 20 units do not receive any sun at all


3D VIEW LEGEND

GLAZING TO LIVING ROOMS

1F PRIVATE OPEN SPACES

3D VIEW LEGEND

 GLAZING TO LIVING ROOMS

 1F PRIVATE OPEN SPACES

[illegible]

Green highlight indicate both external POS and Living space gets 1 hour of sun
Units in red highlight indicates a unit which receives no sun
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14 / 20 units receive minimum 3 hours of sun to both their external POS and Living Space between 9am to 3pm
2 / 20 units do not receive any sun at all

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ACN 165 409 587 Nominated Architect Sam Crawford 6498

DESCRIPTION	REV	APPD	DATE	CLIENT	LOT 58/ DP 35087	NORTH POINT	SCALE @ A1	PROJECT NO.	STAGE	DRAWING NO.	REV
AM2 SUBMISSION TO LAHC	01	SC	08-Dec-22	LAND & HOUSING CORPORATION (LAHC)	LOT 58/ DP 35087 LOT C DP35096 LOT D1 DP35096		VARIABLES	21.27	AA	404	01
				PROJECT			SCALE @ A3	DRAWING TITLE			
				DOUGLAS ST & NEAL PL			VARIES	SOLAR ACCESS			
				19-23 DOUGLAS STREET & 6 NEAL PLACE, WALLSEND NSW 2287							



ABSA
Accredited Assessor

Accreditation No: 216040500-2160504

Assessor Name: Anir Gargi

Member Number: 00570

Member Signature: 



7.5
Average
star rating

NATIONAL
HOUSE

www.nathouse.co.uk

0008336240 28 Mar 2024

Assessor: Anir Gargi

Accreditation No: 20570

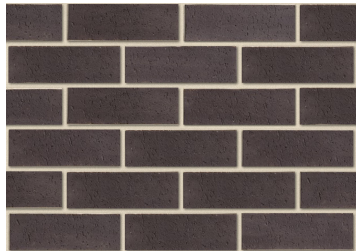
Address:
18-23 Douglas Street,
Rushmore, NW9,
2287

 nathouse.co.uk

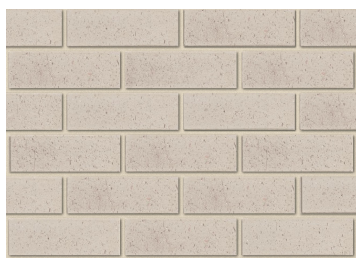
PART 5 SUBMISSION

SCALE @ A1 VARIES	PROJECT NO. 21.27	STAGE AA	DRAWING NO. 404	REV 01
SCALE @ A3 VARIES	DRAWING TITLE SOLAR ACCESS			

MATERIALS LEGEND



BK - 1 / FN - 3 (PARTIAL)
PGH Brick Alfresco - Vino



BK - 2 / FN - 1 (PARTIAL)
PGH Brick Pure Velvets - Crushed Grey



MC - 1
Lysaght Custom Orb in 'Windspray'.



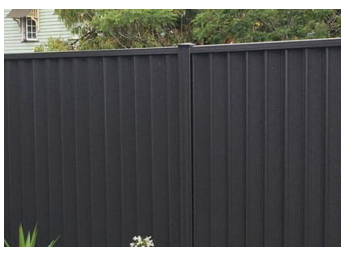
RF - 1
Lysaght Custom Orb in 'Windspray'. Steel Columns, Fascia, Gutter, Downpipe to be in 'Windspray'.



ALUMINIUM WINDOW FRAMES & AWNING HOODS (HEKA HOODS OR SIMILAR)
Medium grey



FN-1: BK-2 brick wall (800mm) with aluminium slat fence in Monument (400mm)
FN-2: Aluminium slat fence in Monument (1200mm)
FN-3: BK-1 brick wall (800mm) with aluminim slat fence in Monument (400mm)
FN-4: BK-2 brick wall (1200mm) with aluminium slat fence in Monument (600mm)



FN-5: Colourbond fence in 'Monument' (1800mm)



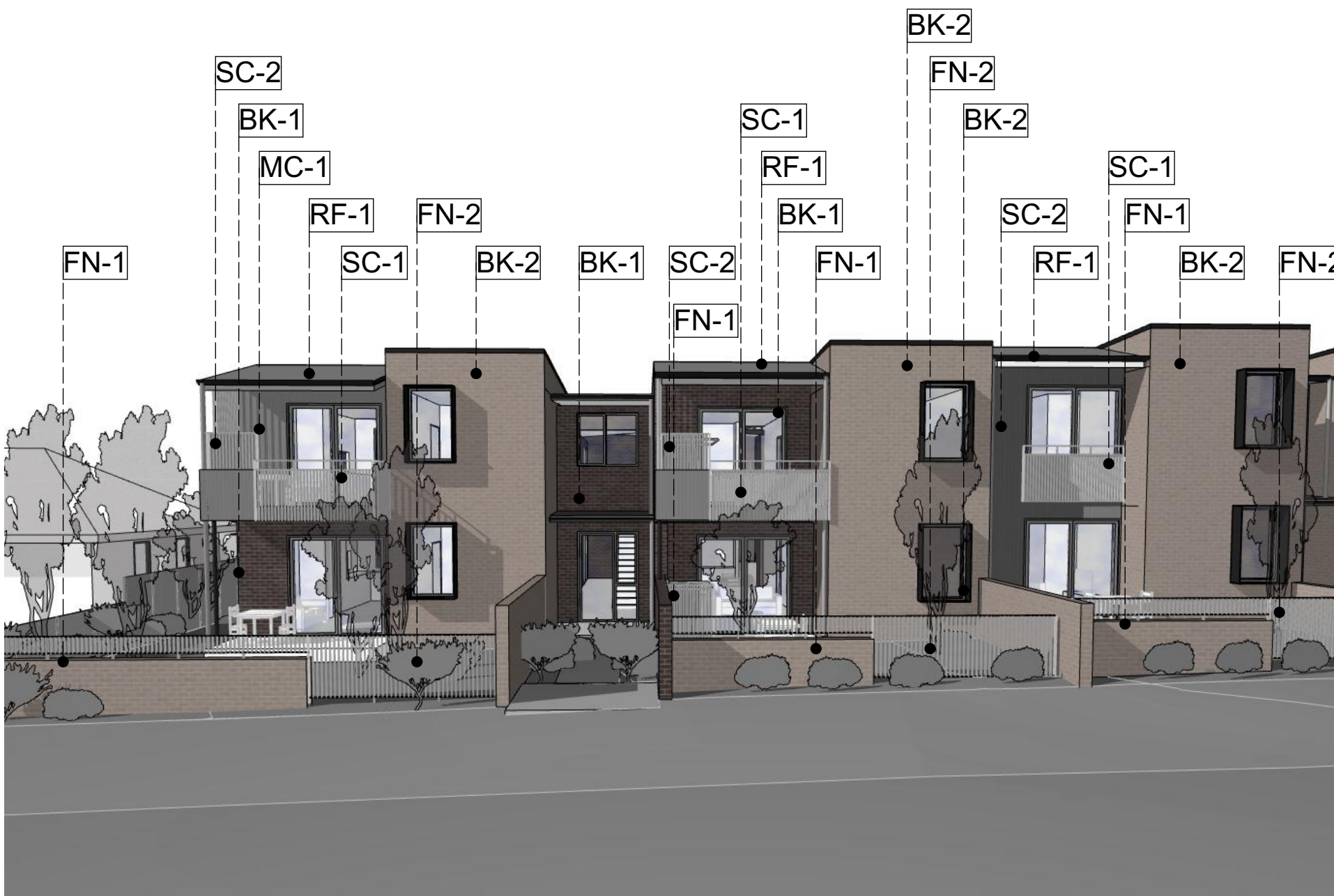
FN-6: Vehicle crash barrier fence (1100mm)



FN-7: Aluminium slat fence in Monument (1500mm)
FN-8: Aluminium slat fence in Monument (1800mm)



SC-1 through SC-4
Aluminium batten privacy screen in 'Shale Grey' or similar finish



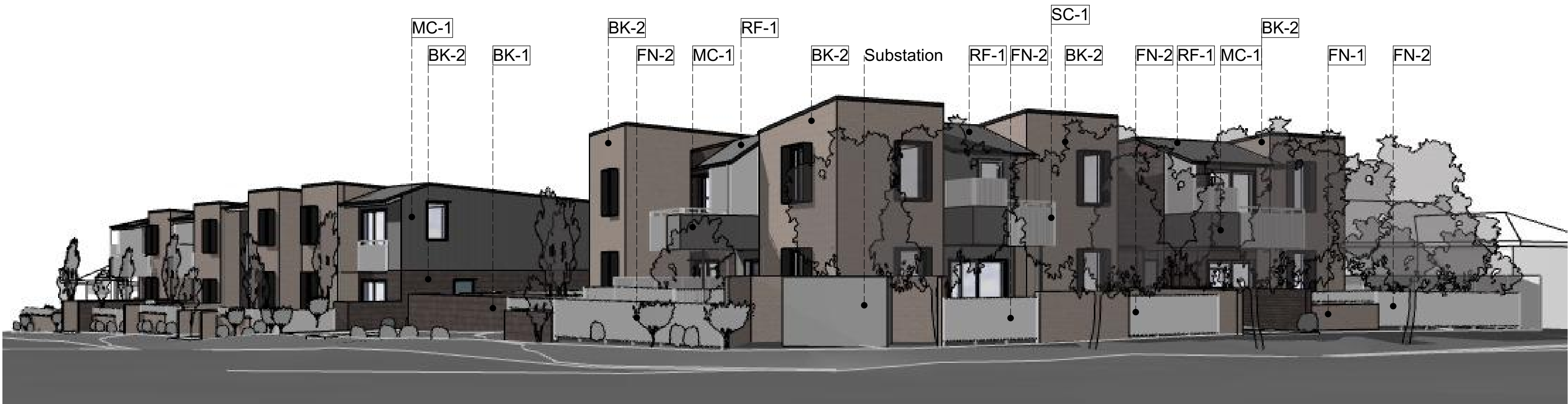
02 Douglas St at No. 19



03 Douglas St at No. 21



04 Douglas St at No. 23



05 Site Perspective



06 Neal Place

Revised: 6/02/2024 - 12/04/24



LAHC WALLSEND - DOUGLAS STREET 19-23 DOUGLAS STREET & 6 NEIL PLACE DEVELOPMENT APPLICATION

Prepared for

LAND AND HOUSING CORPORATION

MARCH 2024

Handwritten signature



Australia
China
South East Asia

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Report title	LAHC Wallsend, Douglas Street
Prepared for	Land And Housing Corporation
Authors	Anna McFarlane
Revision number	08
Revision issue date	March 2024
Approved	Nick Ison
Reason for revision	N/A

Disclaimer: This report has been prepared in accordance with the scope of services described in the contract or agreement between Place Design Group Pty Ltd ACN 082 370063 and the Client. The report relies upon data, surveys, measurements and results taken at or under the particular times and conditions specified herein. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client and Place Design Group accepts no responsibility for its use by other parties.

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INDICATIVE MATERIALS AND FURNITURE	10
TYPICAL LANDSCAPE DETAILS	11
TYPICAL LANDSCAPE DETAILS	12

LANDSCAPE GROUND FLOOR DESIGN

- LEGEND
- Site Extent

Existing Tree - Retained

Existing Tree - Removed

Proposed Trees

Concrete Paving

Steppers

Turf

Shrubs + Ground covers (Mix 1)

Shrubs + Ground covers (Mix 2)

Shrubs + Ground covers (Mix 3)

Hedge Planting (Mix 4)

Shrubs + Ground covers (Mix 5)

Decomposed Granite

Stormwater Pit

Underground OSD Tank

01

Street frontage feature tree

02

Plant hedging and screening

03

Bench seating

04

Proposed bin store location

05

Screen hedge to car park

06

Potential substation location

07

Vehicle Access - Entry and exit

08

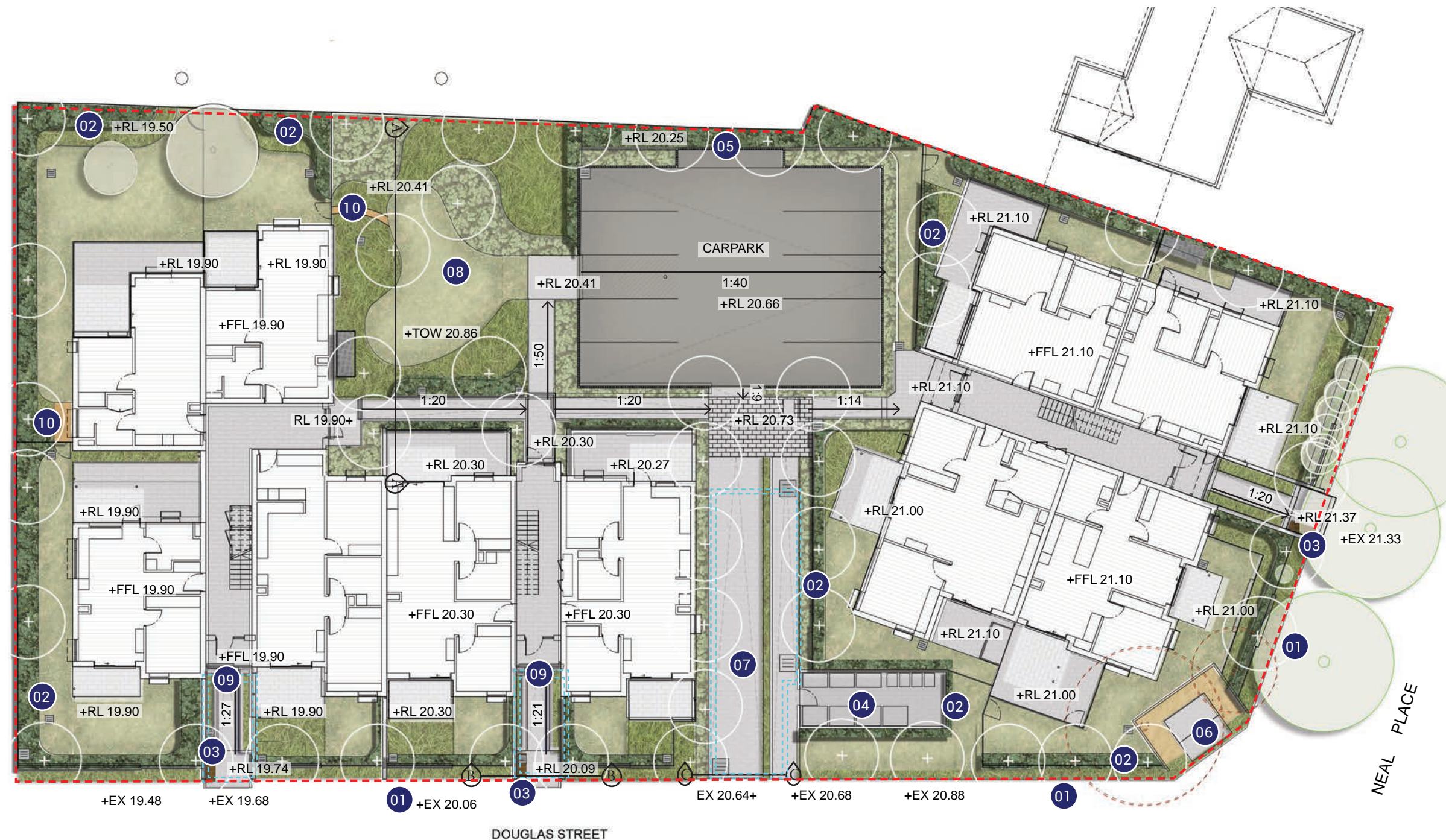
Community Garden

09

600mm raised concrete planters at building entrance

10

Deco granite Access Paths

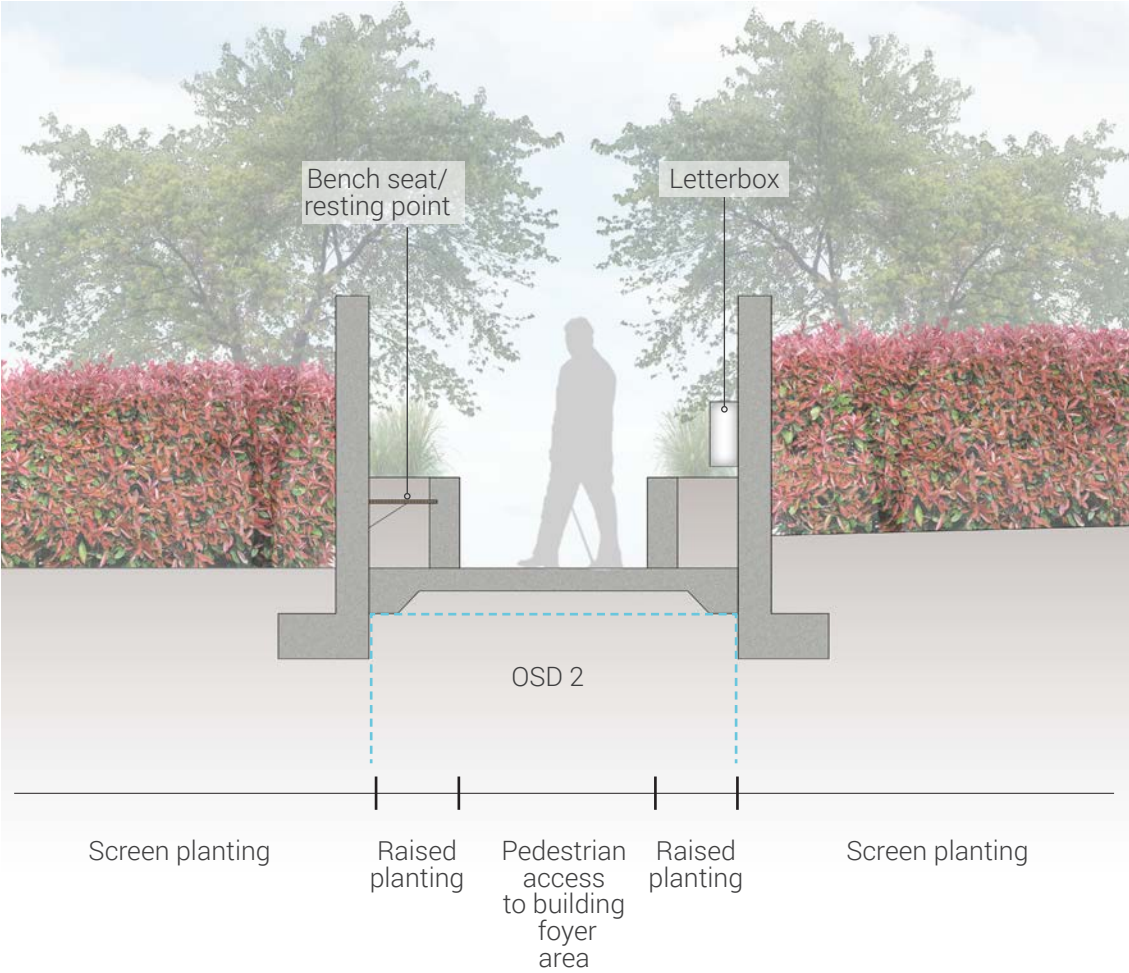




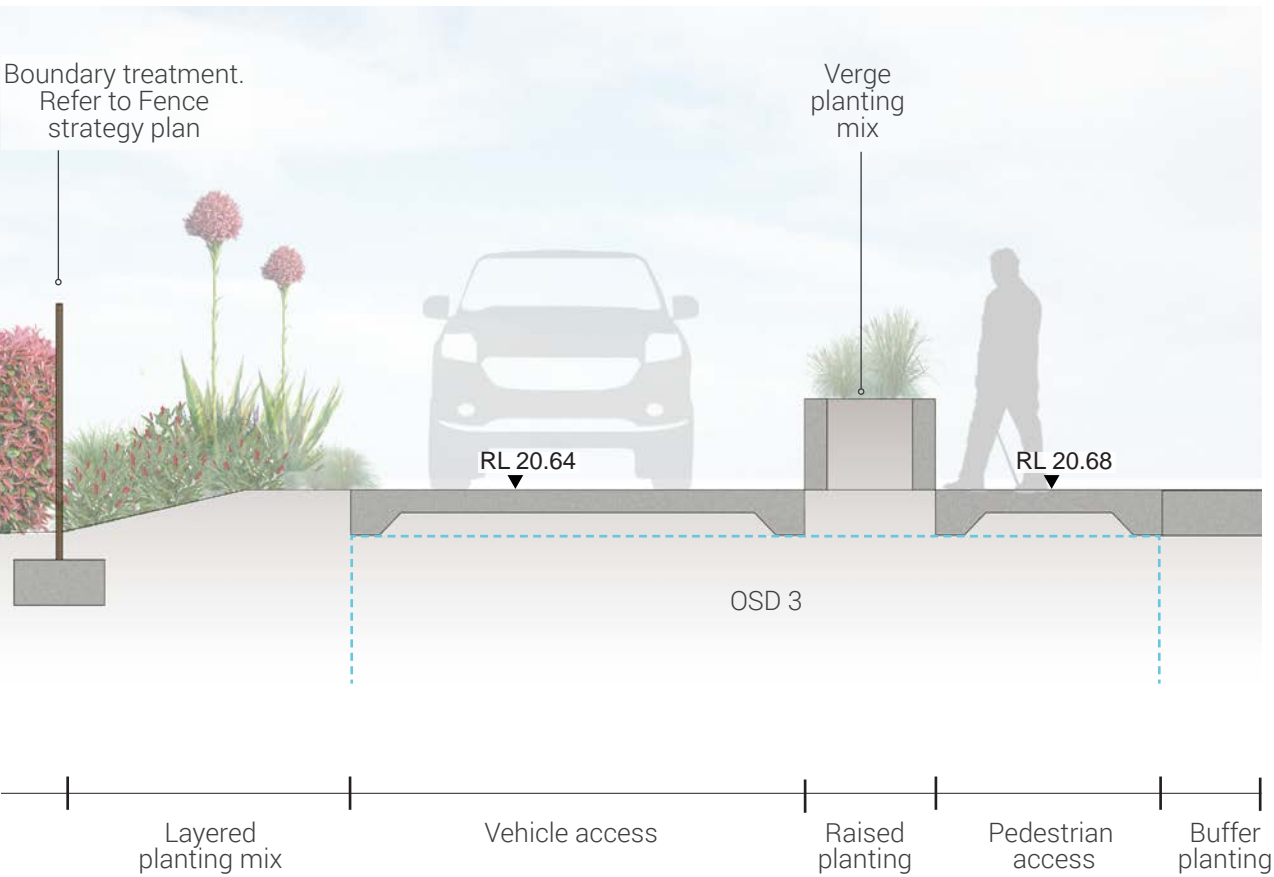
Refer to Landscape Ground Floor Design (pg3) for section locations.

SECTION BB AND CC

SECTION BB



SECTION CC



Refer to Landscape Ground Floor Design (pg3) for section locations.

PLANTING STRATEGY

LEGEND

- Site Extents
- Existing Tree - Retained
- Existing Tree - Removed
- Backhousia citriodora*
- Elaeocarpus eumundi*
- Lagerstroemia indica*
- Magnolia 'Little Gem'*
- Malus ioensis 'plena'*
- Melaleuca styphelioides*
- Pittosporum angustifolium*
- Tristaniopsis laurina*
- Mix 1
- Mix 2
- Mix 3
- Mix 4
- Mix 5
- Turf



PLANTING PALETTE

MIX 1



Callistemon viminalis



Callistemon 'White Anzac'



Melaleuca 'Claret Tops'



Myoporum parvifolium

MIX 2



Liriope muscari 'Just Right'



Lomandra 'Tanika'



Ozothamnus diosmifolius
'Coral Flush'



Gazania tomentosa



Phormium 'Bronze Baby'

MIX 3



Liriope muscari 'Just Right'



Pandorea pandorana
'Flat White'



Dianella caerulea



Doryanthes excelsa



Syzygium australe

MIX 5



Alpinia caerulea 'Atherton'



Atriplex nummularia



Chamelaucium uncinatum



Microseris lanceolata



Lomandra longifolia



Prostanthera incisa



Salvia rosmarinus



Viola hederacea

TREES



Backhousia citriodora



Elaeocarpus eumundi



Lagerstroemia indica



Magnolia 'Little Gem'



Malus ioensis 'plena'



Melaleuca styphelioides



Pittosporum
angustifolium











Tristaniopsis laurina

PLANTING SCHEDULE

SYM	Botanical Name	Common Name	Mature HxW	Pot Size	Spacing /m2	Qty
TREES						
BC	Backhousia citriodora	Lemon Myrtle	20m x 5m	100L	As shown	1
EE	Elaeocarpus eumundi	Native Quandong Tree	25m x 6m	100L	As shown	7
LI	Lagerstroemia indica	Crepe Myrtle	8m x 6m	100L	As shown	5
ML	Magnolia ‘Little Gem’	Magnolia ‘Little Gem	4m x 2.5m	100L	As shown	13
MI	Malus ioensis ‘plena’	Crab Apple	6m x 5m	100L	As shown	1
MS	Melaleuca styphelioides	Prickly Paperbark	15m x 3m	100L	As shown	4
PA	Pittosporum angustifolium	Weeping Pittosporum	8m x 5m	100L	As shown	2
TL	Tristaniopsis laurina	Water Gum	12m x 6m	100L	As shown	10
Mix 1						
Cv	Callistemon viminalis	Weeping Bottlebrush	9m x 5m	150mm	1.5	32
Cwa	Callistemon ‘White Anzac’	Bottlebrush ‘White Anzac’	1.5m x 3m	150mm	1.5	32
Mct	Melaleuca ‘Claret Tops’	Honey Myrtle	1.2m x 1m	150mm	1.5	32
Mp	Myoporum parvifolium	Boobialla	0.3m x 3m	150mm	1.5	32
Mix 2						
Gt	Gazania tomentosa	Silver Leaf Gazania	0.3m x 1.5m	150mm	8	166
Lm	Liriope muscari ‘Just Right’	Lilyturf	0.5m x 0.5m	150mm	6	125
LI	Lomandra ‘Tankia’	Mat Rush	0.6m x 0.65m	150mm	6	125
Od	Ozothamnus diosmifolius ‘Coral Flush’	Rice Flower	2m x 1m	150mm	6	125
Pb	Phormium ‘Bronze Baby’	Dwarf New Zealand Flax	1m x 1m	150mm	6	125
Mix 3						
Dc	Dianella caerulea	Blue Flax-lily	1m x 2m	150mm	4	134
De	Doryanthes excelsa	GyMEA Lily	4m x 3m	200mm	2	67
Lm	Liriope muscari ‘Just Right’	Just Right	0.5m x 0.5m	150mm	6	200
Pp	Pandorea pandorana ‘Flat White’	Wonga Wonga Vine	3m x 0.6m	150mm	4	134
Mix 4						
Sa	Syzygium australe	Brush Cherry	6m x 3m	200mm	1.5	446
Mix 5						
Ac	Alpinia caerulea ‘Atherton’	Native Ginger	2m x 1m	200mm	4	57
An	Atriplex nummularia	Salt Bush	3m x 5m	150mm	4	57
Cu	Chamelaucium uncinatum	Geraldton Wax Flower	5m x 6m	200mm	2	28
LI	Lomandra longifolia	Mat Rush	1.2m x 1m	150mm	4	57
MI	Microseris lanceolata	Yam Daisy	0.3m x 0.3m	150mm	8	112
Pi	Prostanthera incisa	Native Thyme	3m x 3m	150mm	4	57
Sr	Salvia rosmarinus prostratus	Creeping Rosemary	0.3m x 2m	150mm	6	84
Vh	Viola hederacea	Native Violet	0.2m x 1m	150mm	8	112
TURF						
-	Stenotaphrum secundatum	Buffalo	-	-	-	285m2

FENCING STRATEGY

LEGEND

-  Fence Type 1: 400mm aluminium slats over 800 BK-2 brick wall
Height: 1200mm total
-  Fence Type 2: Aluminum Slats
Height: 1200mm
-  Fence Type 3: 400mm aluminium slats over 800 BK-1 brick wall
Height: 1200mm
-  Fence Type 4: 600mm aluminium slats over 1200mm brick wall
Height: 1800mm
-  Fence Type 5: colorbond solid fence
Height: 1800mm
-  Fence Type 6: Vehicle Crash Barrier
Height: 1100mm
-  Fence Type 7: Aluminium slats
Height: 1500mm
-  Fence Type 8: Aluminium slats
Height: 1800mm



INDICATIVE MATERIALS AND FURNITURE



Colorbond steel fence. Colour: Monument
2356mm (L) x 1800mm (H)



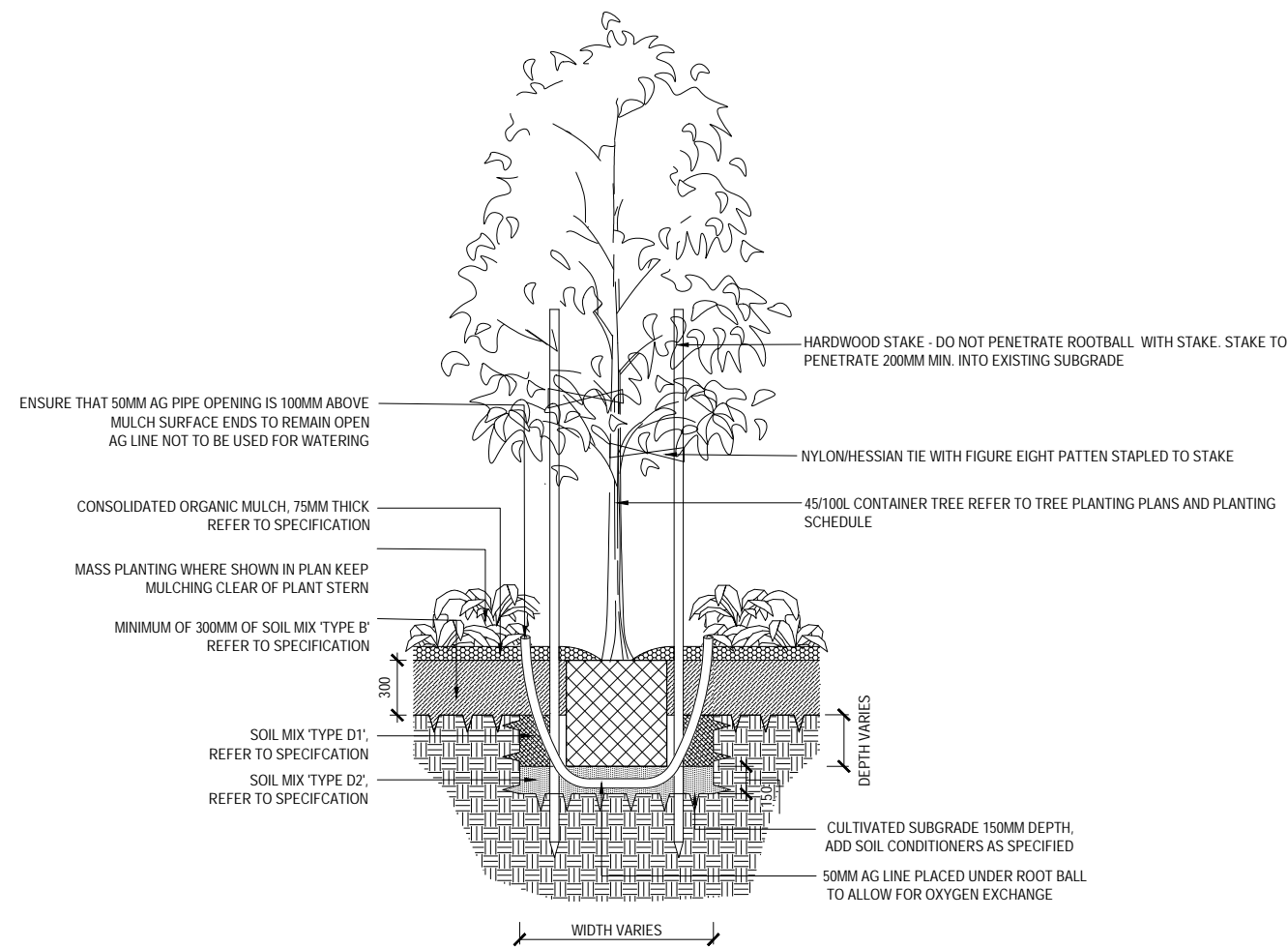
Aluminium slat fence. Colour: Monument
1200mm (H)



Concrete Pavers. Type and Colour to be confirmed

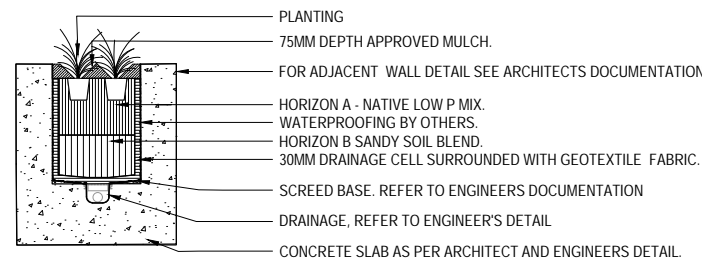
ation on: *Yolanda Gil*

TYPICAL LANDSCAPE DETAILS

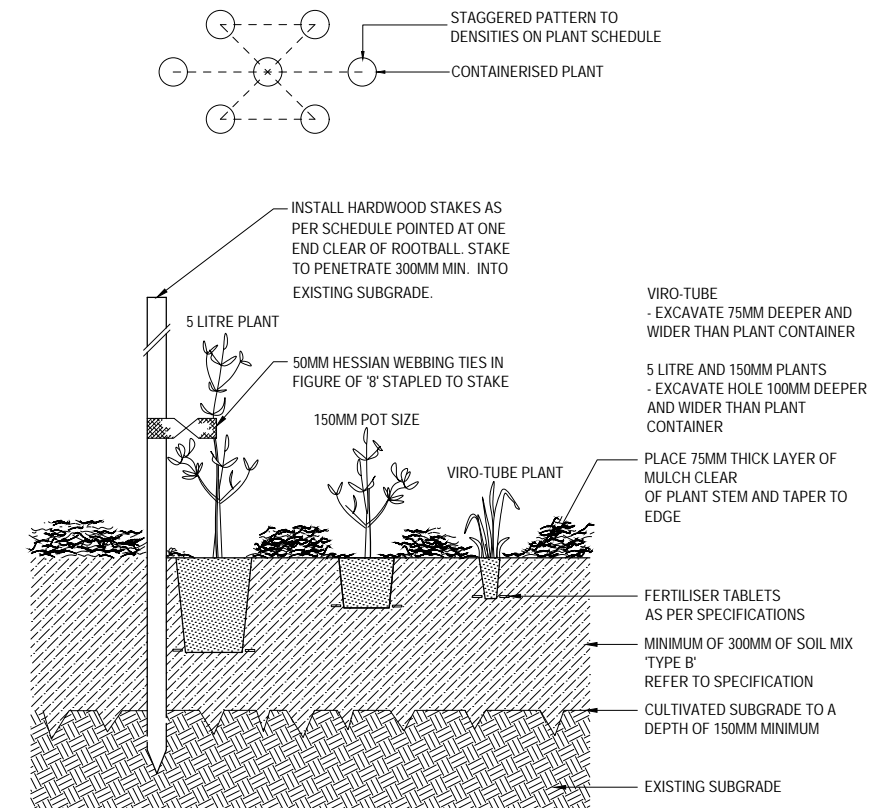


NOTE: TREE PLANTING HOLE DIMENSIONS ACCORDING TO CONTAINER SIZE: WIDTH MIN. 3X ROOT BALL DIAMETER (MIN. 820 / 1100 / 1400mm FOR 45/75/100L CONTAINERS) AND DEPTH MIN. 150mm BELOW ROOT BALL DEPTH.

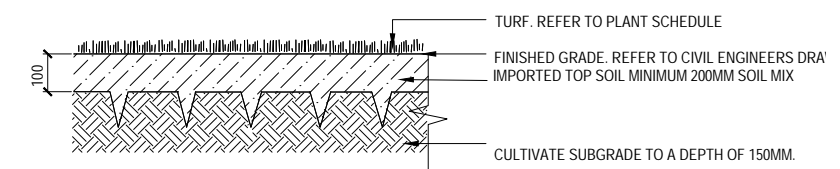
01 TREE IN MASS PLANTING
SCALE 1:20



02 CONCRETE PLANTER WALL DETAIL
SCALE 1:20



03 TYPICAL MASS PLANTING
SCALE 1:20



GENERAL NOTES:

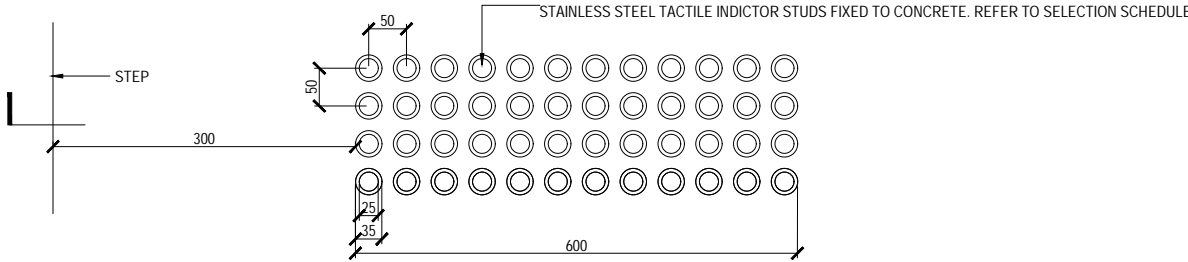
REGULARLY REMOVE WEED GROWTH THROUGHOUT PLANTED AND MULCHED AREAS DURING THE COURSE OF PROJECT CONTRUCTION.

LIGHTLY TAMP OR ROLL SURFACE OF TURF AFTER INSTALLATION TO ENSURE THAT TURF ROOTS ARE IN CONTACT WITH TOPSOIL.

TURF ON LOW SIDE OF ANY PATH OR EDGE TO
FINISH 10MM BELOW FINISHED PATH/EDGE LEVEL.

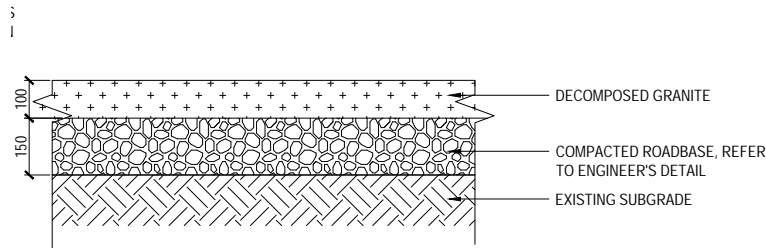
04 TYPICAL TURF DETAIL
SCALE 1:10

TYPICAL LANDSCAPE DETAILS



05

TYPICAL TACTILE INDICATOR DETAIL
SCALE 1:20



06

TYPICAL DECOMPOSED GRANITE DETAIL
SCALE 1:20

DATE PLOTTED: 2 May, 2024 4:49 PM BY: DE PASQUALE, PHILIP



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Suite 3.01, Level 3, 3 Horwood Place
Parramatta, NSW 2150
Tel: 02 9496 7700
Web: www.stantec.com/au

LAHC & SAMCRAWFORD ARCHITECTS

PROPOSED DEVELOPMENT AT
19-23 DOUGLAS STREET AND 6 NEAL PLACE
WALLSEND 2287

COVER SHEET,
LOCALITY PLAN AND
SCHEDULE OF DRAWINGS

SCHEDULE OF DRAWINGS	
DRAWING No.	DESCRIPTION
	GENERAL
80822046-CI-0001	COVER SHEET, LOCALITY PLAN AND SCHEDULE OF DRAWINGS
80822046-CI-0002	CIVIL CONSTRUCTION NOTES
	PLANS AND SCHEDULES
80822046-CI-1101	STORMWATER DRAINAGE PLAN GROUND FLOOR
80822046-CI-1201	SEDIMENTATION AND EROSION CONTROL PLAN
80822046-CI-1301	CUT AND FILL PLAN
80822046-CI-1401	WSUD CATCHMENT PLAN
	STANDARD DETAILS
80822046-CI-2101	STORMWATER DETAILS SHEET 1
80822046-CI-2102	STORMWATER PIT SCHEDULE
80822046-CI-2103	STORMWATER DETAILS SHEET 2 - OSD TANK 1 DETAILS
80822046-CI-2104	STORMWATER DETAILS SHEET 3 - OSD TANK 2 DETAILS
80822046-CI-2105	STORMWATER DETAILS SHEET 4 - OSD TANK 3 DETAILS
80822046-CI-2106	STORMWATER DETAILS SHEET 4 - TYPICAL ESK20 DETAIL
80822046-CI-2201	SEDIMENTATION AND EROSION CONTROL DETAILS
80822046-CI-2301	DRIVEWAY VERTICAL CLEARANCE DETAILS
80822046-CI-2302	CIVIL WORKS DETAILS



INDICATIVE AREA
OF WORKS

LOCALITY PLAN
N.T.S

XREFs:
CAD File: C:\Users\dpasquale\OneDrive - Stantec\Douglas Street WallSEND\80822046-CI-0001.dwg

9	02/05/2024	COORDINATION ISSUE	PDP	JMB	JMB
8	28/03/2024	COORDINATION ISSUE	PDP	JMB	JMB
7	08/03/2024	COORDINATION ISSUE	PDP	JMB	JMB
6	14/02/2024	COORDINATION ISSUE	PDP	JMB	JMB
5	30/11/2023	COORDINATION ISSUE	PDP	JMB	JMB
4	25/01/2023	COORDINATION ISSUE	A.L.	R.O.	R.O.
3	26/09/2022	AM2 ISSUE	G.M.	C.F.	C.F.
2	17/08/2022	DRAFT 70% ISSUE	G.M.	C.F.	C.F.
1	10/02/2021	PRELIMINARY ISSUE	G.M.	K.P.	C.F.
Rev.	Date	Description	Des.	Verif.	Appd.



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Drawn A.L.	Date JAN' 2023	Status	FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Checked R.O.	Date JAN' 2023				
Designed A.L.	Date JAN' 2023				
Verified R.O.	Date JAN' 2023	Datum AHD	Scale AS SHOWN	Size A1	
Approved		Drawing Number 80822046-CI-0001		Revision 9	

DATE PLOTTED: 12 April 2024 8:51 AM BY: DE PASQUALE, PHILIP

GENERAL CIVIL NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS DRAWINGS, SPECIFICATIONS, STANDARDS, LOCAL GOVERNMENT ORDINANCES AND ADDITIONAL WRITTEN INSTRUCTIONS THAT MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
2. THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR CIVIL ENGINEERING PURPOSES ONLY.
3. ALL DISCREPANCIES THAT COULD RESULT IN CHANGES TO THE CIVIL DETAILS SHALL BE REFERRED TO THE CIVIL ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
4. THE CONTRACTOR SHALL CHECK AND BE RESPONSIBLE FOR THE CORRECTNESS OF ALL DIMENSIONS AND ANY DISCREPANCY SHALL BE REPORTED IMMEDIATELY TO THE SUPERINTENDENT. DIMENSIONS SHALL NOT BE OBTAINED (INCLUSIVE OF ELECTRONIC COPIES) BY SCALING FROM THE DRAWINGS.
5. ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES U.N.O.
6. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THE SAFETY AND STABILITY OF NEW AND EXISTING STRUCTURES, TEMPORARY STRUCTURES, EXCAVATIONS, SHORING AND THE LIKE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER FORTY EIGHT (48) HOURS BEFORE ANY SITE INSPECTION IS REQUIRED.
8. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
9. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH ALL WORKCOVER REQUIREMENTS AND OCCUPATIONAL HEALTH AND SAFETY ACT REGULATIONS.
10. ALL PROPRIETARY PRODUCTS AND APPROVED EQUIVALENTS NOTED ON THE DRAWINGS SHALL BE SUPPLIED AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
11. SUBSTITUTIONS OF NOMINATED PRODUCTS AND MATERIALS SHALL ONLY OCCUR IF APPROVED BY STANTEC. NO SUBSTITUTIONS SHALL BE MADE OR SIZES OF STRUCTURAL MEMBERS VARIED WITHOUT OBTAINING THE APPROVAL OF THE ENGINEER. THE APPROVAL OF A SUBSTITUTION FROM THE ENGINEER SHALL NOT BE AN AUTHORISATION FOR AN EXTRA EXPENSE CLAIM. ANY EXTRA COST INVOLVED SHALL BE TAKEN UP WITH THE SUPERINTENDENT BEFORE THE WORK COMMENCES.
12. NO CHANGES SHALL BE MADE WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.
13. CONSTRUCTION FROM THESE DRAWINGS AND ASSOCIATED CONSULTANTS' DRAWINGS SHALL NOT COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES AND PRINCIPAL CERTIFYING AUTHORITY.
14. CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS OR PROPERTIES WITHOUT THE PERMISSION OF THE OWNERS AND SUPERINTENDENT.
15. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL WHICH COMPLIES WITH AS1742.3 - 2018. A COPY OF THE PLAN SHOWING LAYOUT OF PROPOSED TRAFFIC CONTROL FOR THE COMMENCEMENT OF WORK AND CERTIFIED BY A SUITABLY QUALIFIED PERSON IS TO BE SUBMITTED TO COUNCIL PRIOR TO COMMENCEMENT OF ANY WORK. FURTHER PLANS ARE TO BE SUBMITTED IF WORK SITE ALTERS.
16. ANY QUANTITIES GIVEN ARE FOR GUIDANCE ONLY.

STORMWATER DRAINAGE NOTES

1. STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH AS3500.3-2018.
2. PIPES Ø675mm AND LARGER SHALL BE CLASS 3 APPROVED SPIGOT AND SOCKET REINFORCED CONCRETE PIPES WITH RUBBER RING JOINTS U.N.O. IN ACCORDANCE WITH AS/NZS3725-2007.
3. PIPES Ø375mm TO Ø600mm SHALL BE CLASS 2 APPROVED SPIGOT AND SOCKET REINFORCED CONCRETE PIPES WITH RUBBER RING JOINTS U.N.O. IN ACCORDANCE WITH AS/NZS3725-2007.
4. PIPES UP TO AND INCLUDING Ø300mm SHALL BE uPVC DWV (GRADE CLASS SN8) U.N.O. IN ACCORDANCE WITH AS/NZS1260-2017. ENLARGERS, CONNECTIONS, TAPERS, JUNCTIONS ETC TO BE PREFABRICATED PURPOSE MADE FITTINGS WITH SOLVENT WELDED JOINTS.
5. SUBSOIL PIPES AND FITTINGS TO BE PERFORATED PLASTIC IN ACCORDANCE WITH AS2439.1-2007. LAY PIPES ON FLOOR OF TRENCH WITH MINIMUM 1% GRADE AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL.
6. HEAVY DUTY uPVC PIPES TO BE IN ACCORDANCE WITH AS/NZS1254-2010 MAY BE USED WITHIN ALLOTMENTS.
7. EQUIVALENT STRENGTH FIBROUS REINFORCED CONCRETE (F.R.C.) AND/OR HIGH DENSITY POLYETHYLENE (H.D.P.E.) MAY BE USED SUBJECT TO APPROVAL BY THE SUPERINTENDENT.
8. CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
9. ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH WITH NO PROTRUSIONS.
10. BEDDING MATERIAL SHALL BE TYPE H2 U.N.O. FOR PIPES NOT UNDER PAVEMENTS, AND TYPE HS2 FOR PIPES UNDER PAVEMENTS IN ACCORDANCE WITH AS/NZS3725-2007.
11. ALL PIPES ARE TO BE UNIFORMLY SUPPORTED ALONG THE LENGTH OF THE BARREL BY SUITABLE FILL MATERIAL. PIPES WITH SOCKETS SHALL BE LAID WITH RECESSES IN BEDDING MATERIAL TO ENSURE PIPES DO NOT BEAR ON THEIR SOCKETS.
12. MINIMUM GRADE TO STORMWATER LINES TO BE 1% U.N.O.
13. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS.
14. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
15. PROVIDE 3m LENGTH OF Ø100mm SUBSOIL DRAINAGE LINE OR 200mm 'NYLEX' STRIP DRAIN SURROUNDED WITH 150mm OF 20mm BLUE METAL OR GRAVEL, AND WRAPPED IN 'BIDIM' A24 GEOTEXTILE FILTER FABRIC OR APPROVED EQUIVALENT, AT INVERT OF EACH INCOMING UPSTREAM PIPE TRENCH ON EACH PIT.
16. ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
17. WHERE SUBSOIL DRAINAGE LINES PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC DWV (GRADE CLASS SN8) PIPE SHALL BE USED.
18. UNLESS NOTED OTHERWISE ON THE PLANS, PROVIDE THE FOLLOWING MINIMUM COVER TO ALL STORMWATER PIPES:
UNDER LANDSCAPE & PAVEMENT - 300mm
UNDER ROAD (TRAFFIC) - 600mm
19. REFER TO AS/NZS3725-2007 TABLE B1 FOR REQUIRED FILL DEPTHS ABOVE PIPE BARREL PRIOR TO USE OF COMPACTION MACHINERY OR TRAVERSING OF PIPES BY GENERAL SITE EQUIPMENT. THE CONTRACTOR IS TO ENSURE COMPACTION EQUIPMENT IS APPROPRIATE FOR THE PIPE CLASS USED. WHERE WORKING METHODS REQUIRE HIGHER CLASS PIPE, THE CONTRACTOR SHALL REFER TO AS3725-2007 TO DETERMINE THE APPROPRIATE PIPE CLASS. PROPOSED CHANGES TO PIPE CLASS SHALL BE REVIEWED BY STANTEC PRIOR TO INSTALLATION.
18. BACKFILL PIPE TRENCHES WITH SANDY LOAM OR APPROVED GRANULAR BACKFILL TO MINIMUM COVER ABOVE THE PIPE. WHERE THE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO PAVEMENT SUBGRADE WITH SAND OR APPROVED GRAVEL SUB-BASE COMPACTED IN 150mm LAYERS TO 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75).
19. FOR ALL IN-SITU CONCRETE ELEMENTS REFER TO CIVIL CONCRETE NOTES FOR CONCRETE STRENGTH AND COVER.
20. PRECAST CONCRETE PITS MAY BE INSTALLED IN LIEU OF CAST IN-SITU PITS, WHEN PIPE JUNCTIONS ARE ACCOMMODATED WITHIN THE OVERALL DIMENSIONS OF THE PIT, AND APPROVED BY STANTEC.
21. PITS DEEPER THAN 1200mm, MEASURED FROM TOP OF GRATE TO INVERT OF PIT, SHALL HAVE STEP IRONS INSTALLED IN ACCORDANCE WITH THE LOCAL OR STATUTORY AUTHORITY REQUIREMENTS.
22. ACCESS COVERS AND GRATES TO BE INSTALLED IN ACCORDANCE WITH AS3996-2019.
23. ALL GRATES IN PAVEMENTS TO BE CYCLE SAFE AND WHERE IN ROADWAYS TRAFFICABLE HEAVY DUTY.
24. ALL BOX CULVERTS SHALL BE STRUCTURALLY DESIGNED BY THE MANUFACTURER AND DELIVERED TO SITE AS FIT FOR PURPOSE.
25. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
26. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

EROSION AND SEDIMENT CONTROL NOTES

1. ALL WORKS SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH:
a. LOCAL AUTHORITY REQUIREMENTS
b. EPA REQUIREMENTS
c. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004 (THE BLUE BOOK).
2. EROSION AND SEDIMENT CONTROL DRAWINGS AND NOTES ARE PROVIDED FOR THE WHOLE OF THE WORKS. SHOULD THE CONTRACTOR STAGE THESE WORKS THEN THE DESIGN MAY REQUIRE TO BE MODIFIED. VARIATIONS TO THESE DETAILS MAY REQUIRE TO BE APPROVED BY THE RELEVANT AUTHORITIES. THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE IMPLEMENTED AND ADOPTED TO MEET THE VARYING SITUATIONS AS WORK ON SITE PROGRESSES.
3. MINIMISE THE AREA OF SITE BEING DISTURBED AT ANY ONE TIME.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONTROL OF EROSION AND SEDIMENTATION AND THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED OR AS OTHERWISE DIRECTED BY THE SUPERINTENDENT.
5. ALL SOIL AND WATER CONTROL MEASURES ARE TO BE PUT BACK IN PLACE AT THE END OF EACH WORKING DAY AND MODIFIED TO BEST SUIT SITE CONDITIONS.
6. PREVENT SITE RUNOFF ENTERING NEWLY CONSTRUCTED STORMWATER PITS UNLESS SEDIMENT FENCES ARE ERECTED AROUND THEM.
7. MAINTAIN ALL STORMWATER PIPES AND PITS CLEAR OF DEBRIS AND SEDIMENT. INSPECT STORMWATER SYSTEM AND CLEAN OUT AS REQUIRED PARTICULARLY FOLLOWING EACH STORM EVENTS.
8. MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES, ENSURING THEY ARE IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND/OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED PARTICULARLY FOLLOWING EACH STORM EVENTS.
9. WHERE PRACTICAL, THE SOIL EROSION HAZARDS ON THE SITE ARE TO BE KEPT AS LOW AS POSSIBLE AND WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE TO MINIMISE THE RISKS:
a. INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
b. CONSTRUCT STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA AT THE LOCATION SHOWN ON THE DRAWINGS OR AS DETERMINED BY SUPERINTENDENT/ENGINEER. REFER DETAIL.
c. INSTALL ANY SEDIMENT BASINS AND SEDIMENT TRAPS AS SHOWN ON DRAWINGS. REFER DETAIL.
d. UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.
10. DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
11. CONTROL WATER FROM UPSTREAM OF THE SITE SUCH THAT IT DOES NOT ENTER THE DISTURBED SITE.
12. ALL CONSTRUCTION VEHICLES SHALL ENTER THE SITE VIA THE TEMPORARY CONSTRUCTION ENTRY/EXIT.
13. ALL VEHICLES LEAVING THE SITE SHALL BE CLEANED AND INSPECTED BEFORE LEAVING.
14. STOCKPILES ARE NOT TO BE LOCATED IN ROADWAYS, WITHIN 2 METRES OF HAZARD AREAS OR DRAINAGE PITS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS, WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS. SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE SCOUR AND EROSION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
15. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
16. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE OR DEVICE.
17. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.
18. ACCEPTABLE RECEPTACLES WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHTWEIGHT WASTE MATERIALS AND LITTER.
19. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
a. PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE
b. ENSURING THAT NOTHING IS NAILED TO THEM
c. PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS.
d. ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICHEVER IS THE GREATER
e. A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300mm DEPTH
f. CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.
20. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.
21. ANY REVEGETATED AREAS WHICH FAIL TO ESTABLISH WITHIN THREE MONTHS MUST BE RE-SOWN.

XREF's:
CAD File C:\Users\depasquale\OneDrive - Stantec\Douglas Street Wallsend\80822046-CI-0002.dwg

4	25/01/2023	COORDINATION ISSUE		A.L.	R.O.	R.O.
3	26/09/2022	AM2 ISSUE		G.M.	C.F.	C.F.
2	17/08/2022	DRAFT 70% ISSUE		G.M.	C.F.	C.F.
1	10/02/2021	PRELIMINARY ISSUE		K.P.	K.P.	C.F.
Rev.	Date	Description		Des.	Verif.	Appd.

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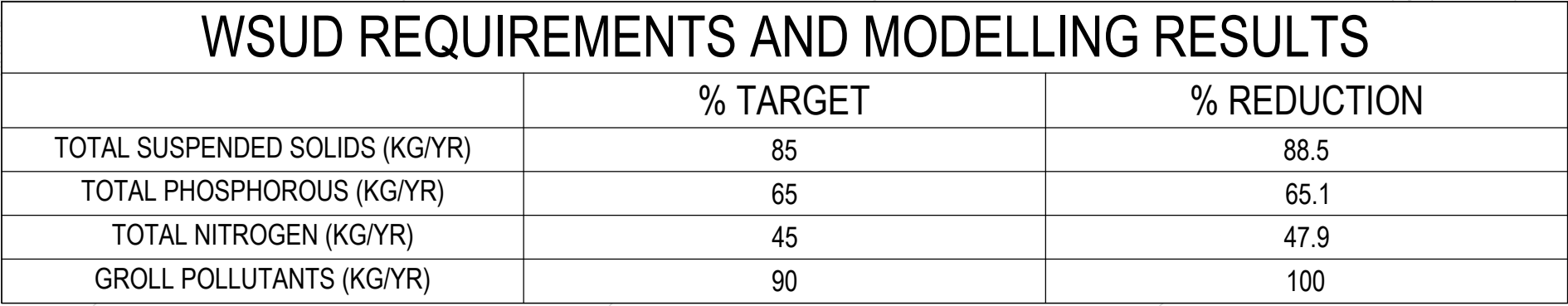
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Drawn A.L.	Date JAN' 2023	Client LAHC & SAMCRAWFORD ARCHITECTS
Checked R.O.	Date JAN' 2023	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287
Designed A.L.	Date JAN' 2023	Status NOT TO BE USED FOR CONSTRUCTION PURPOSES
Verified R.O.	Date JAN' 2023	Datum AHD
Approved		Scale N/A
		Size A1
		Drawing Number 80822046-CI-0002
		Revision 4



8	02/05/2024	COORDINATION ISSUE	PDP	JMB	JMB
7	22/03/2024	COORDINATION ISSUE	PDP	JMB	JMB
6	14/02/2024	COORDINATION ISSUE	PDP	JMB	JMB
5	30/11/2023	COORDINATION ISSUE	PDP	JMB	JMB
4	25/01/2023	COORDINATION ISSUE	A.L.	R.O.	R.O.
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2	17/08/2022	DRAFT 70% ISSUE	G.M.	C.F.	C.F.
1	10/02/2021	PRELIMINARY ISSUE	K.P.	K.P.	C.F.
Rev.	Date	Description	Des.	Verif.	Appd.

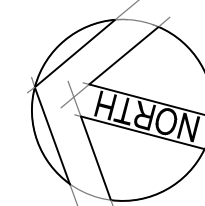


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Checked R.O.	Date JAN 2023	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287
Designed A.L.	Date JAN 2023	Title STORMWATER DRAINAGE PLAN GROUND FLOOR
Verified R.O.	Date JAN 2023	
Approved		

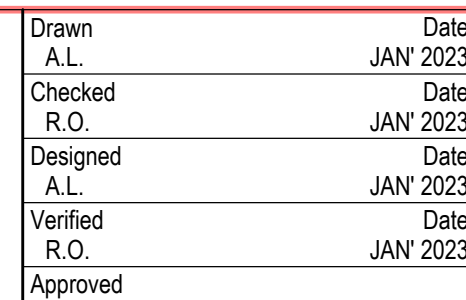
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Datum		Scale					
AHD		1:100		A1			
Drawing Number						Revision	
80822046-CI-1101						8	



SITE ACCESS AND STOCKPILE LOCATION MAY CHANGE DEPENDING ON CONSTRUCTION PREFERENCE



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Status		PRELIMINARY	
NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Date		Scale	Size
AHD		1:100	A1
Drawing Number			Revision
80822046-CI-1201			7

THIS LAYOUT PRESENTS ONE OF A NUMBER OF POSSIBLE SOLUTIONS FOR THE EROSION AND SEDIMENTATION CONTROL ON THE SITE DURING THE CONSTRUCTION PERIOD. FINAL LAYOUT MAY BE ALTERED BY THE CONTRACTOR TO SUIT THEIR SITE LAYOUT, OPERATIONS SEQUENCE, STAGING ETC. ANY SUCH CHANGES MUST BE IN ACCORDANCE WITH THE GUIDELINES OF LANDCOM MANAGING URBAN STORMWATER MANUAL, 2004 ("BLUE BOOK") SHOULD THE STRIPPED AREA AT ANY STAGE EXCEED 2500 m². SEDIMENTATION POND INCL. ASSOCIATED BERMS, CUT OFF TRENCHES ETC. IS TO BE PROVIDED IN ACCORDANCE WITH THE GUIDELINES OF LANDCOM MANAGING URBAN STORMWATER MANUAL.



LEGEND			
	CUT BETWEEN 1.5m AND 2.0m		FILL LESS THAN 0.25m
	CUT BETWEEN 1.0m AND 1.5m		FILL BETWEEN 0.25m AND 0.5m
	CUT BETWEEN 0.5m AND 1.0m		FILL BETWEEN 0.5m AND 1.0m
	CUT BETWEEN 0.25m AND 0.5m		FILL BETWEEN 1.0m AND 1.5m
	CUT LESS THAN 0.25m		

CUT VOLUME = -248.17m³
FILL VOLUME = 141.28m³
BALANCE = -106.89m³

Rev.	Date	Description	Des.	Verif.	Appd.
4	14/02/2024	COORDINATION ISSUE	PDP	JMB	JMB
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2	26/09/2022	AM2 ISSUE	G.M.	C.F.	C.F.
1	17/08/2022	DRAFT 70% ISSUE	G.M.	C.F.	C.F.



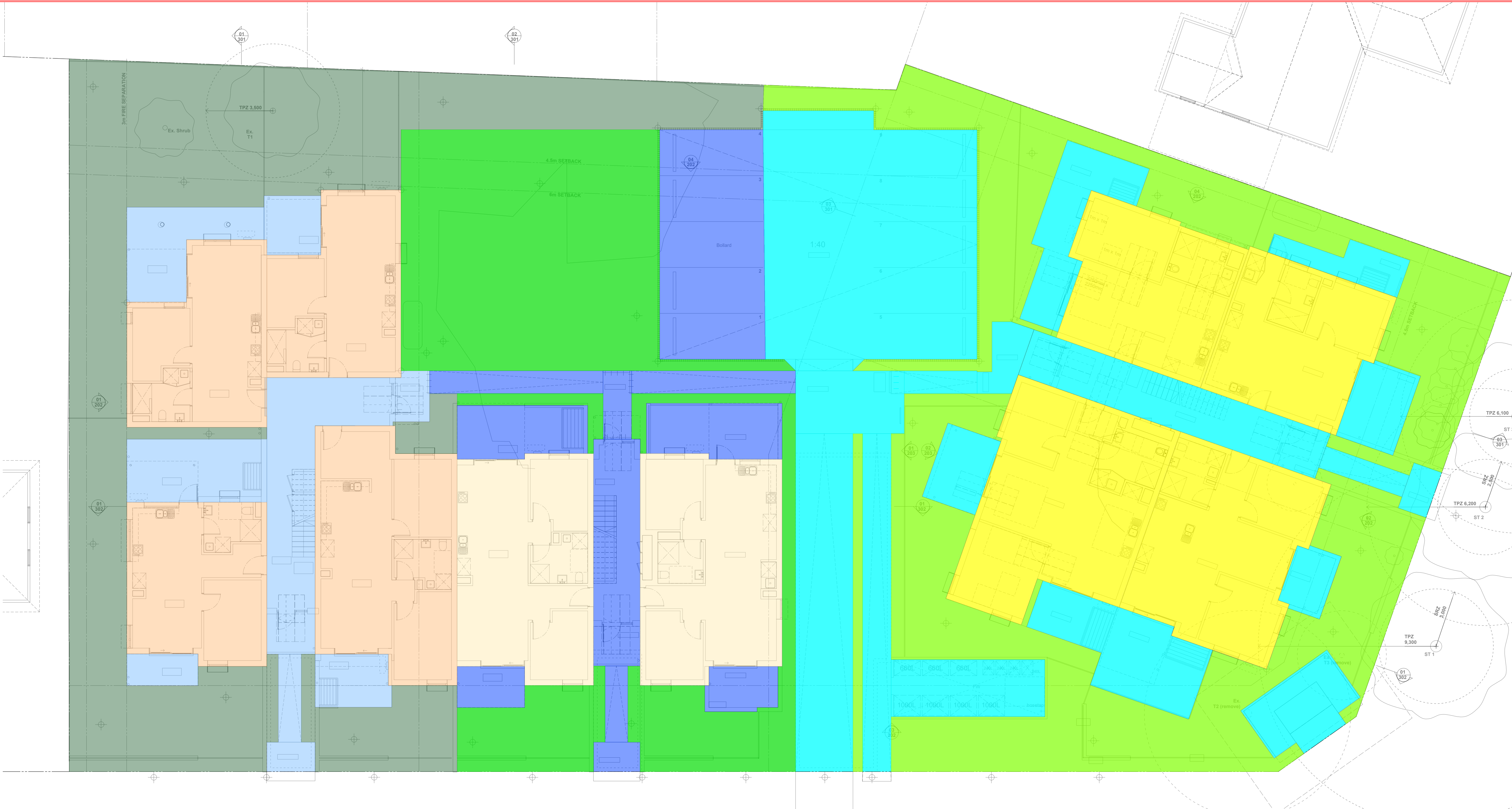
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Checked R.O.	Date JAN' 2023	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287
Designed A.L.	Date JAN' 2023	Title CUT AND FILL PLAN
Verified R.O.	Date JAN' 2023	
Approved		

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Drawing Number 80822046-CI-1301	Size A1
Revision 4	

DATE PLOTTED: 12 April 2024 2:45 PM BY: DE PASQUALE, PHILIP



WSUD CATCHMENT PLAN COLOUR KEY

OSD 1		OSD 2		OSD 3	
HARDSTAND = 0.013 Ha		HARDSTAND = 0.018 Ha		HARDSTAND = 0.045 Ha	
ROOF = 0.027 Ha		ROOF = 0.017 Ha		ROOF = 0.030 Ha	
LANDSCAPE = 0.035 Ha		LANDSCAPE = 0.026 Ha		LANDSCAPE = 0.035 Ha	

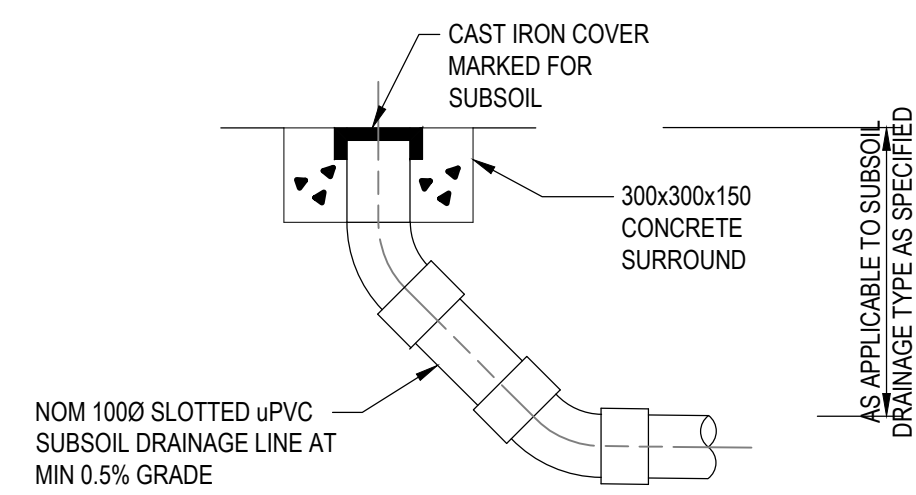
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1	12/04/2024	COORDINATION ISSUE			

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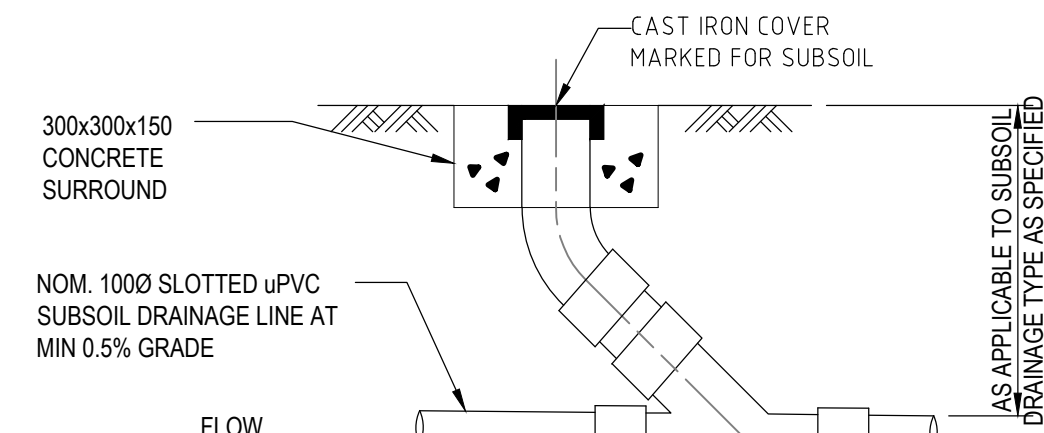
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Drawn PDP	Date APR' 2024	Client LAHC & SAMCRAWFORD ARCHITECTS
Checked JMB	Date APR' 2024	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287
Designed JMB	Date APR' 2024	Title WSUD CATCHMENT PLAN
Verified JMB	Date APR' 2024	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES
Approved		Datum AHD
		Scale 1:100
		Size A1
		Drawing Number 80822046-CI-1401
		Revision 1

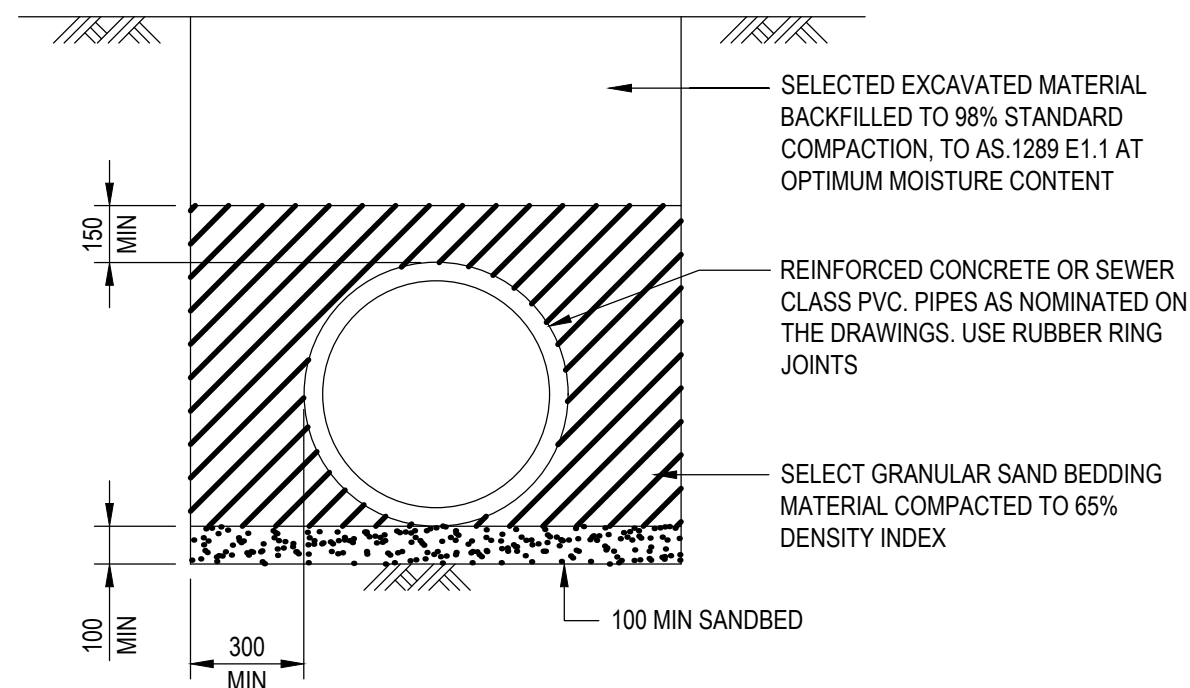


HIGH END RISER
N.T.S.



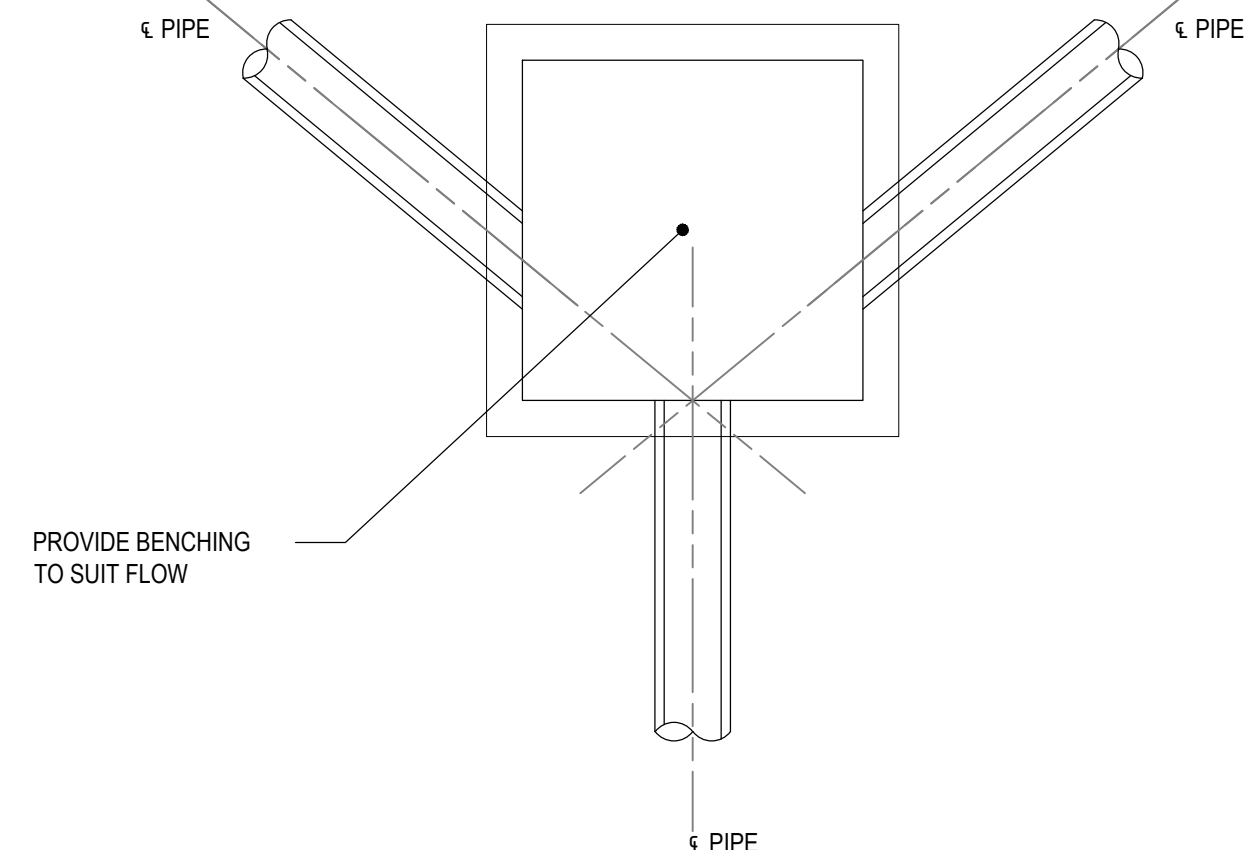
INTERMEDIATE RISER

(TYPICAL AT 25m. INTERVALS UNLESS OTHERWISE NOTED ON PLAN)



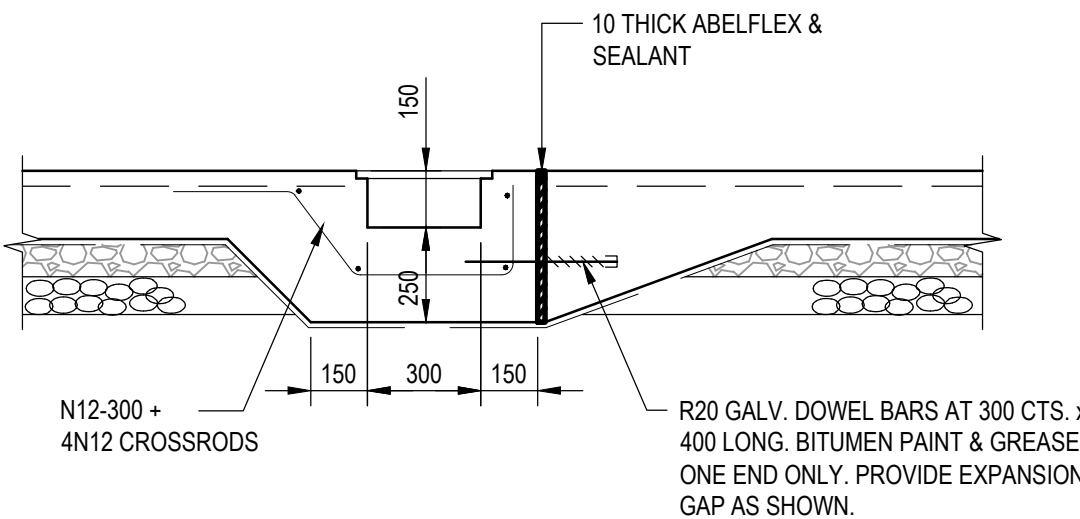
TYPICAL PIPE LAYING DETAIL U.N.O.

NOTE:
ALLOW TO BUILD 100Ø AG. DRAIN IN THE LAST 3.0m OF DRAINAGE PIPE, UPSTREAM OF ALL DRAINAGE PITS.



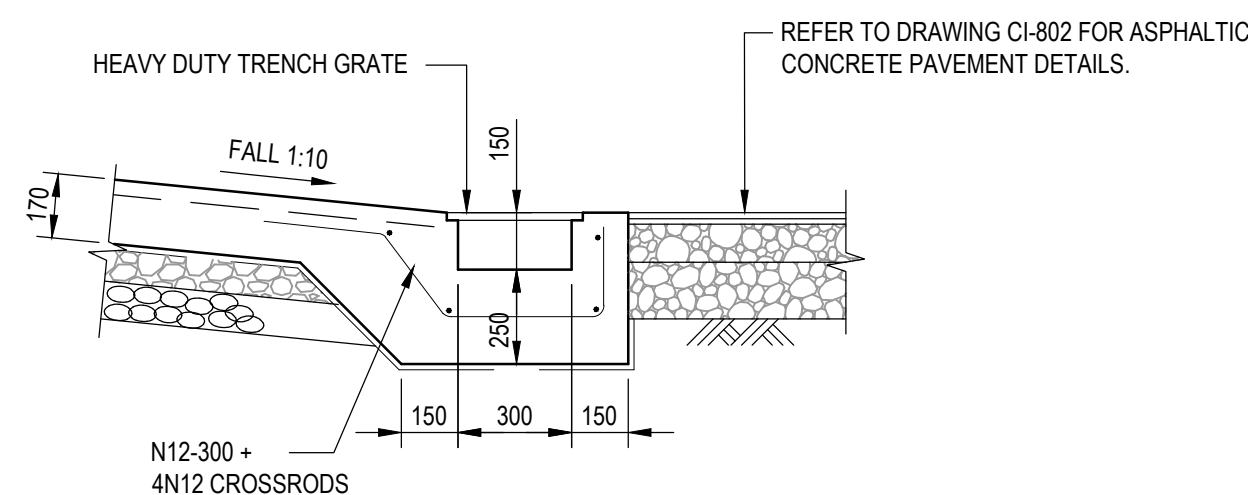
JUNCTION PIT SET OUT DETAILS

N.T.S.



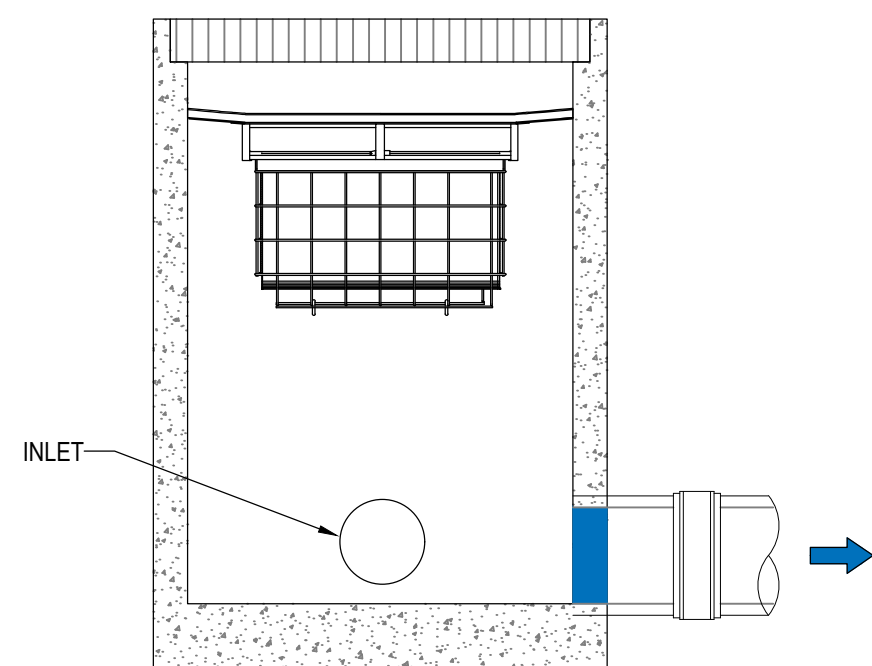
GRATED DRAIN DETAIL

SCALE 1:20



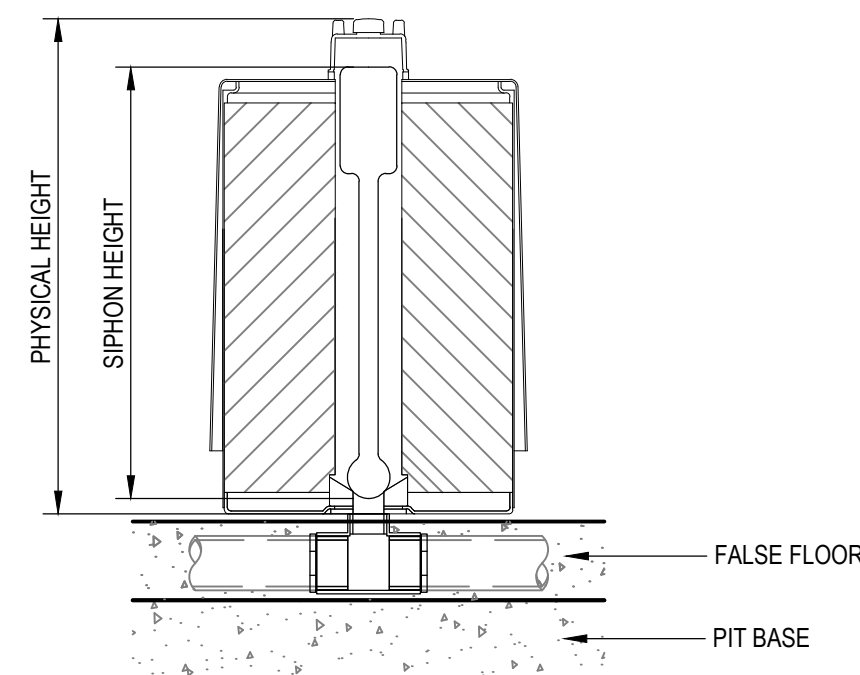
GRATED DRAIN DETAIL AT ENTRY ROAD

SCALE 1:20



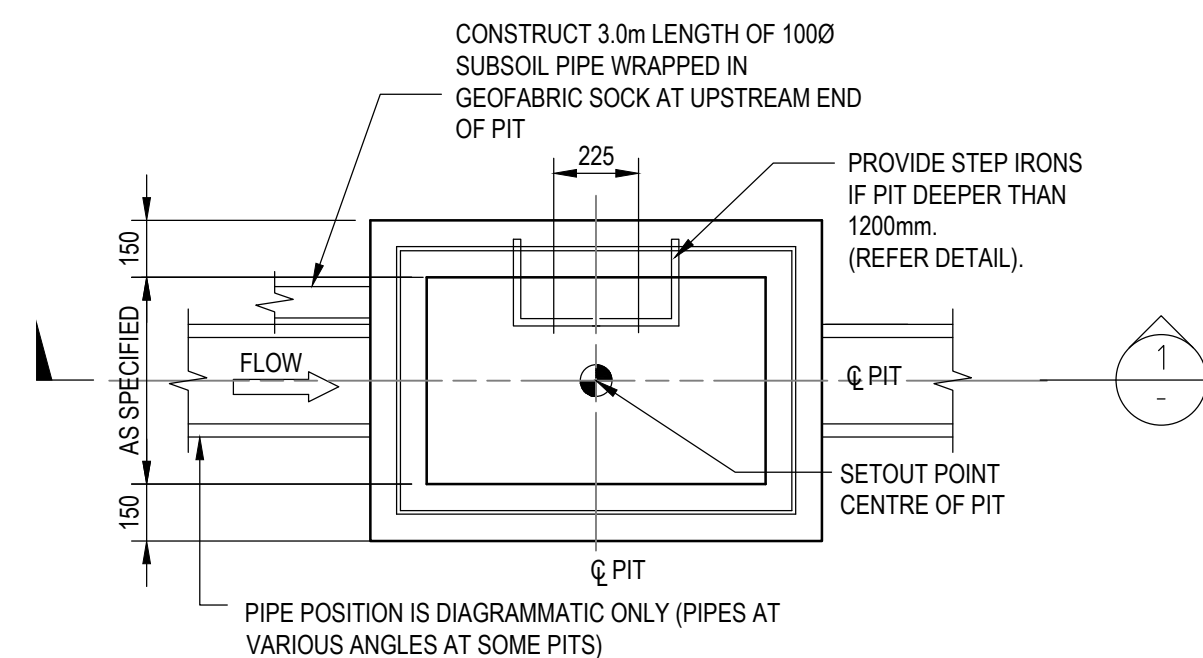
PIT OCEAN GUARD FILTER BASKET STANDARD PIPE FLOW CONFIGURATION

SCALE 1:20



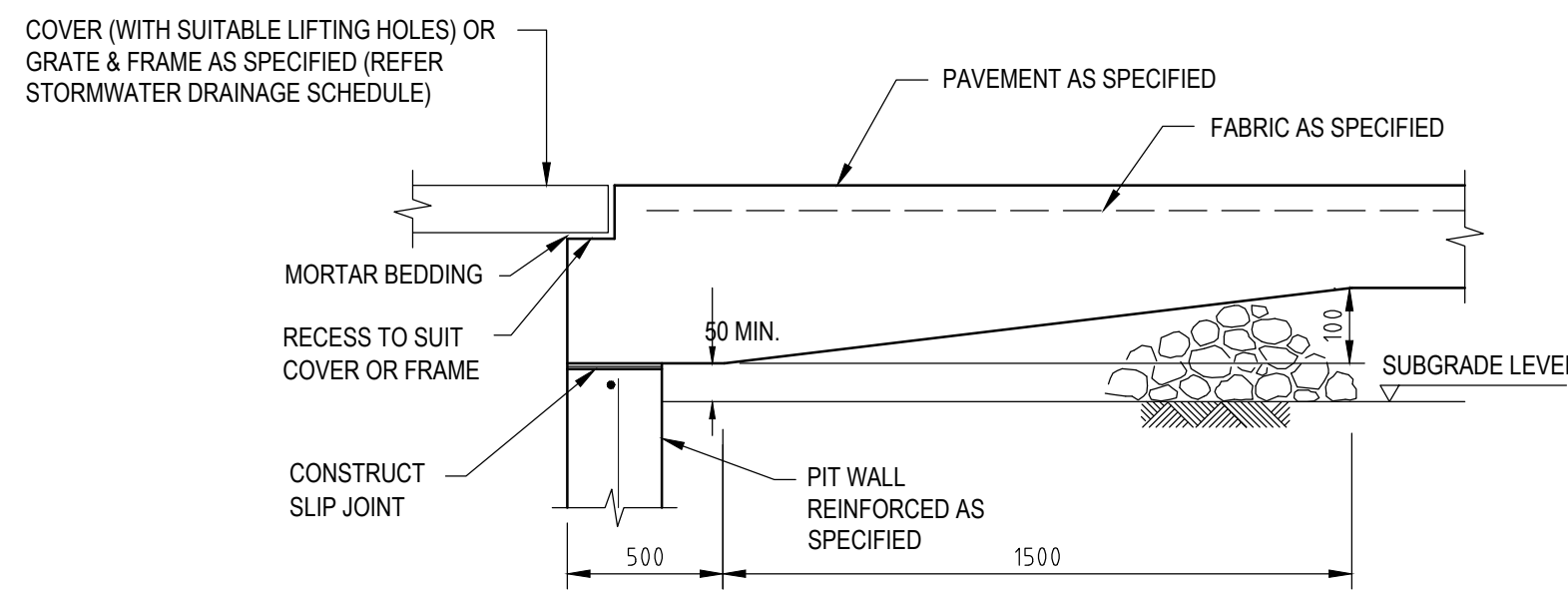
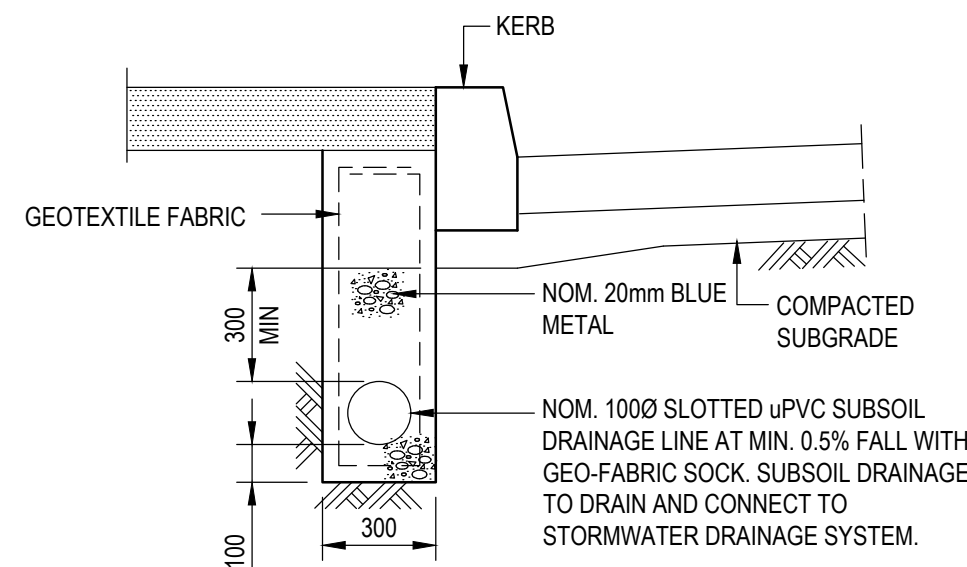
STANDARD 460 PSORB STORMFILTER CARTRIDGE DETAIL

SCALE NTS



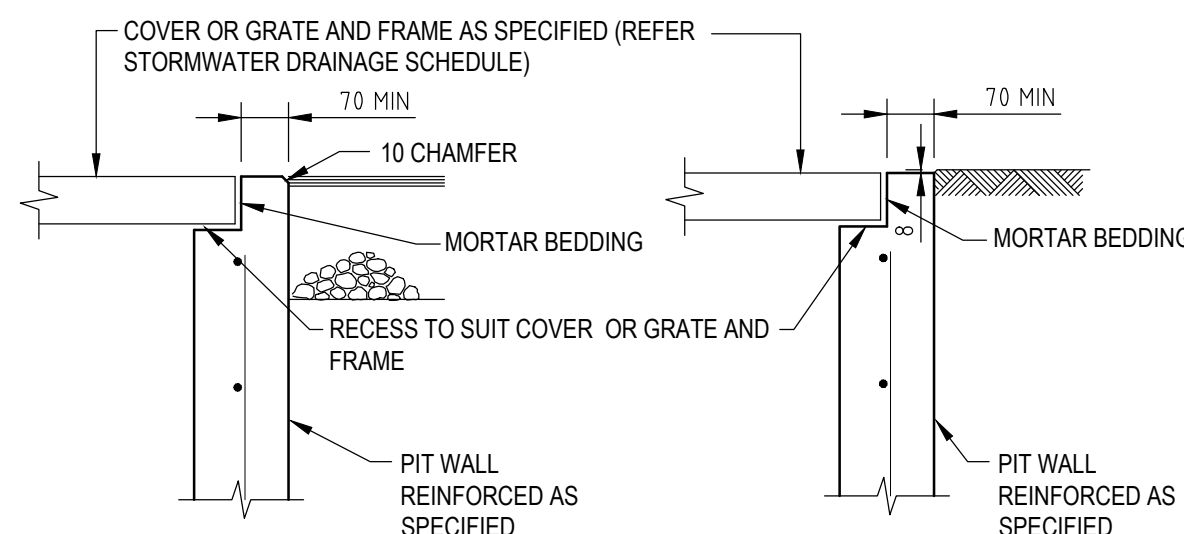
PLAN

NTS



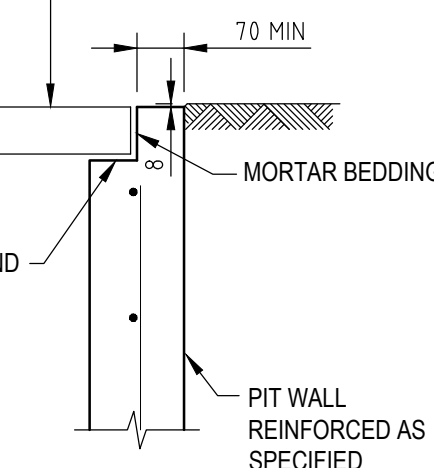
DETAIL "A"

N.T.S.



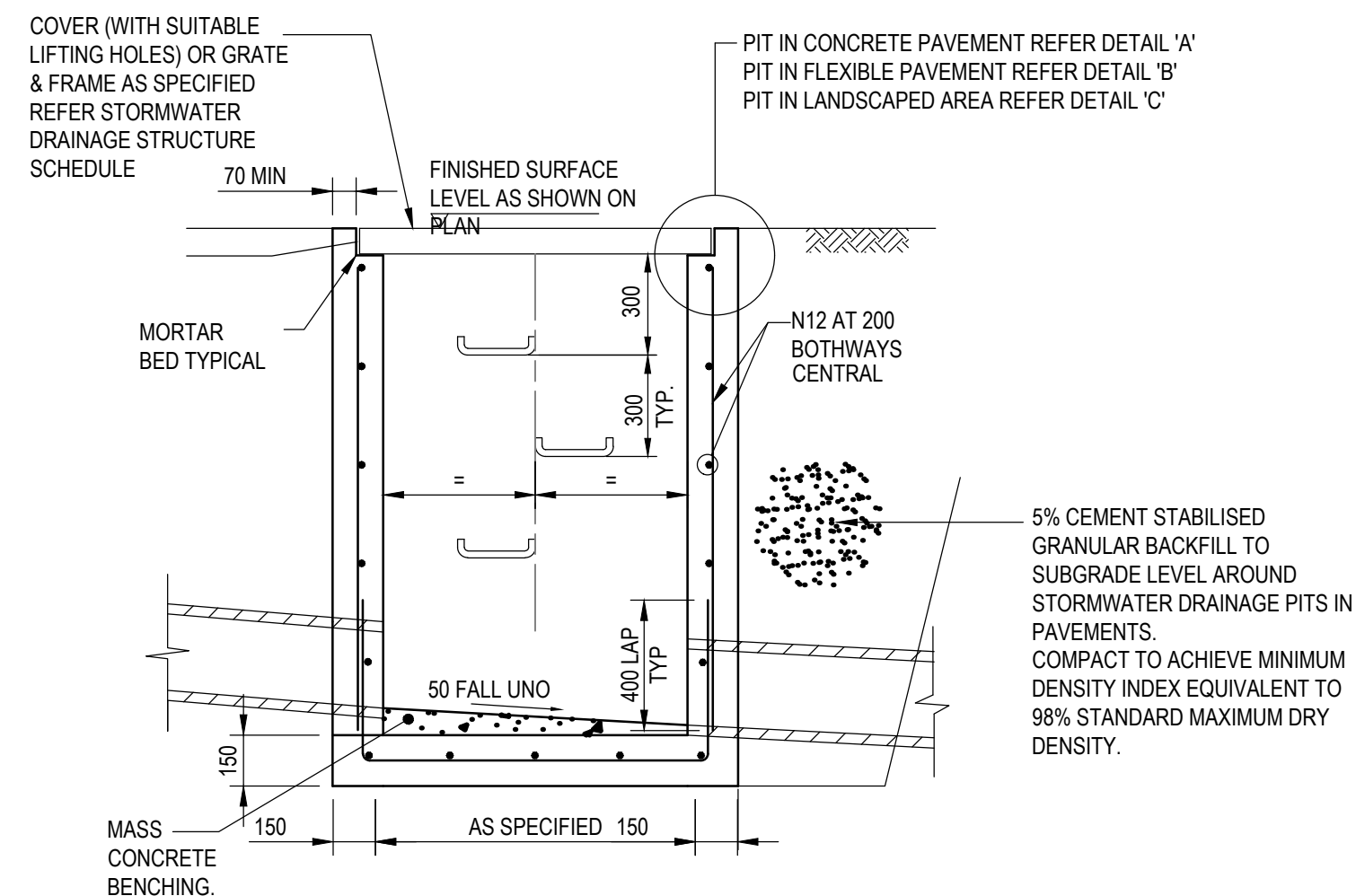
DETAIL "B"

SCALE 1:10



DETAIL "C"

SCALE 1:10



SECTION

SCALE 1:20

SURFACE INLET/JUNCTION PIT (SIP/JP)

[illegible]

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Drawn A.L.	Date JAN 2023	Client LAHC & SAMCRAWFORD ARCHITECTS			
Checked R.O.	Date JAN 2023	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287	Status NOT TO BE USED FOR CONSTRUCTION PURPOSES	FOR APPROVAL	
Designed A.L.	Date JAN 2023		Datum AHD		
Verified R.O.	Date JAN 2023	Title STORMWATER DETAILS SHEET 1	Drawing Number 80822046-CI-2101	Revision 5	
Approved					

STORMWATER PIT SCHEDULE								
SWP No.	PIT COVER LEVEL RL.	PIT INVERT LEVEL IL.	DEPTH (mm)	INTERNAL PIT SIZE	PIT TYPE	COVER TYPE	COVER CLASS	REMARKS
GF-1	20.20	19.75	450	450X450	SIP	GRATE	C	
GF-2	20.28	19.69	590	900X900	SIP	GRATE	C	
GF-3	20.10	19.66	440	450X450	SIP	GRATE	B	
GF-4	20.40	19.76	640	600X600	SIP	GRATE	D	
GF-5	20.00	19.61	390	450X450	SIP	GRATE	B	
GF-6	19.85	19.47	380	450X450	SIP	GRATE	B	
GF-7	19.85	19.32	530	450X450	SIP	GRATE	B	
GF-8	19.60	19.18	420	900X900	SIP	GRATE	B	
GF-9	19.42	18.97	450	600X600	SIP	GRATE	B	
GF-10	20.10	19.39	710	600X600	SIP	GRATE	B	
GF-11	19.80	19.13	670	600X600	SIP	GRATE	B	
GF-12	20.30	20.00	300	450X450	SIP	GRATE	B	
GF-13	21.23	20.57	660	600X600	SIP	GRATE	B	
GF-14	20.90	20.41	490	450X450	SIP	GRATE	B	
GF-15	20.85	20.35	500	450X450	SIP	GRATE	B	
GF-16	21.00	20.26	740	600X600	SIP	GRATE	B	
GF-17	20.70	20.20	500	450X450	SIP	GRATE	C	
GF-18	21.05	20.34	710	600X600	SIP	GRATE	B	
GF-19	21.050	20.240	810	600X600	SIP	GRATE	B	
GF-20	21.050	20.110	940	900X900	SIP	GRATE	B	
GF-21	20.842	19.962	880	600X600	SIP	GRATE	B	
GF-22	20.380	19.580	800	900x900	JIP	CONCRETE	D	

5	02/05/2024	COORDINATION ISSUE	PDP	JMB	JMB	
4	25/01/2023	COORDINATION ISSUE	A.L.	R.O.	R.O.	
3	26/09/2022	AM2 ISSUE	G.M.	C.F.	C.F.	
2	17/08/2022	DRAFT 70% ISSUE	G.M.	C.F.	C.F.	
1	10/02/2021	PRELIMINARY ISSUE	K.P.	K.P.	C.F.	
Rev.	Date	Description	Des.	Verif.	Appd.	

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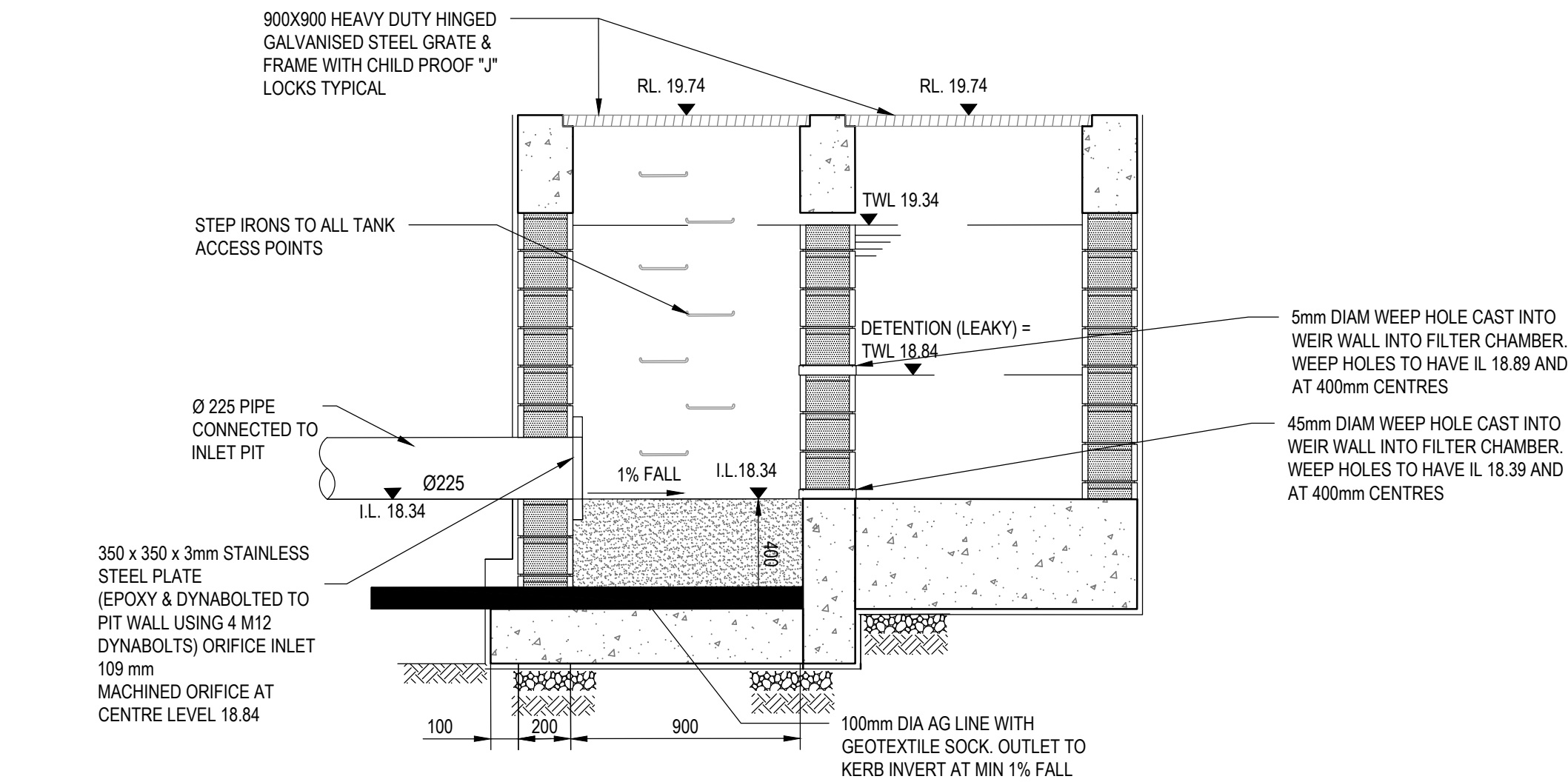
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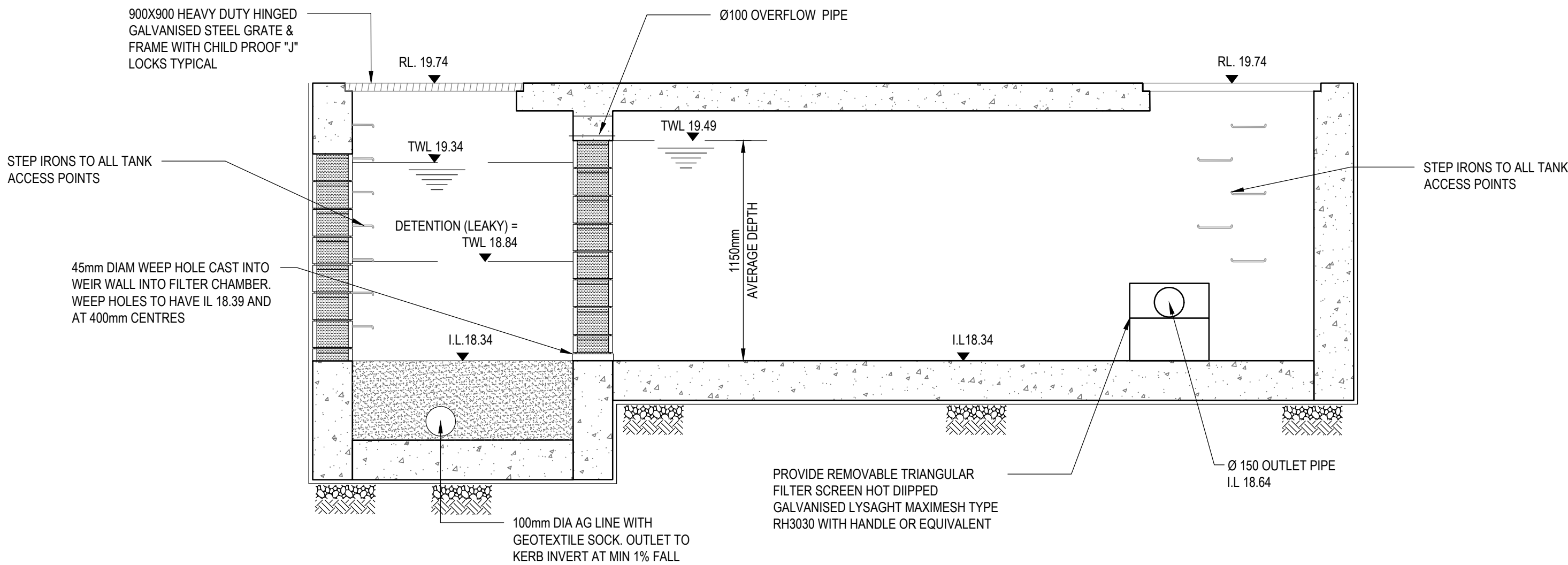
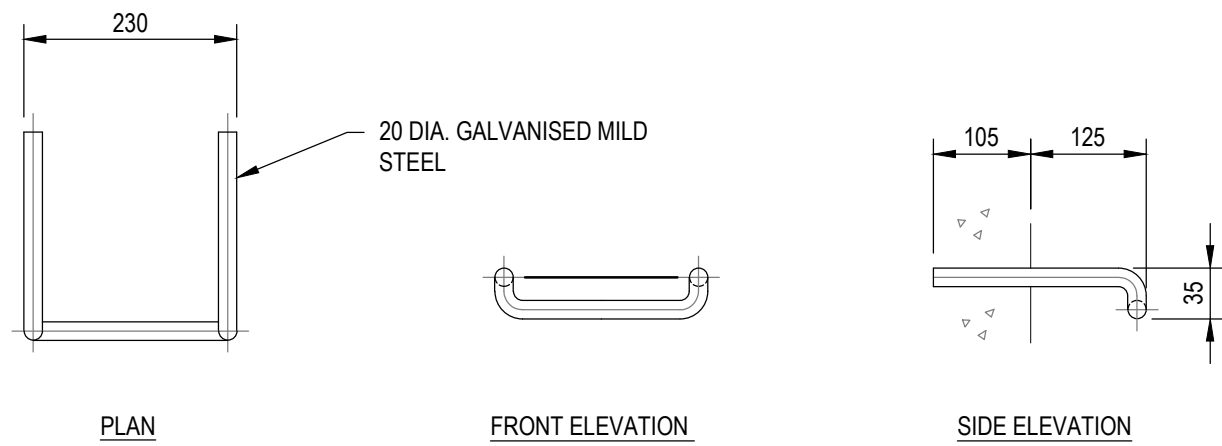
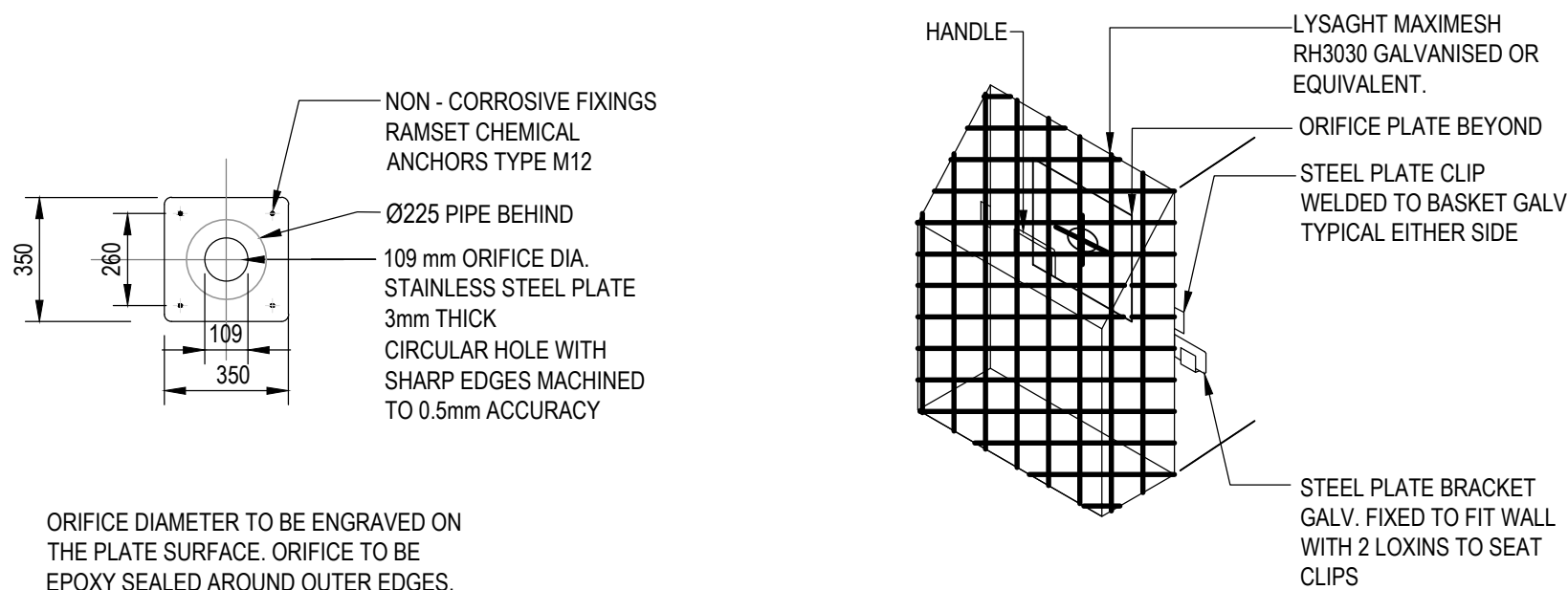
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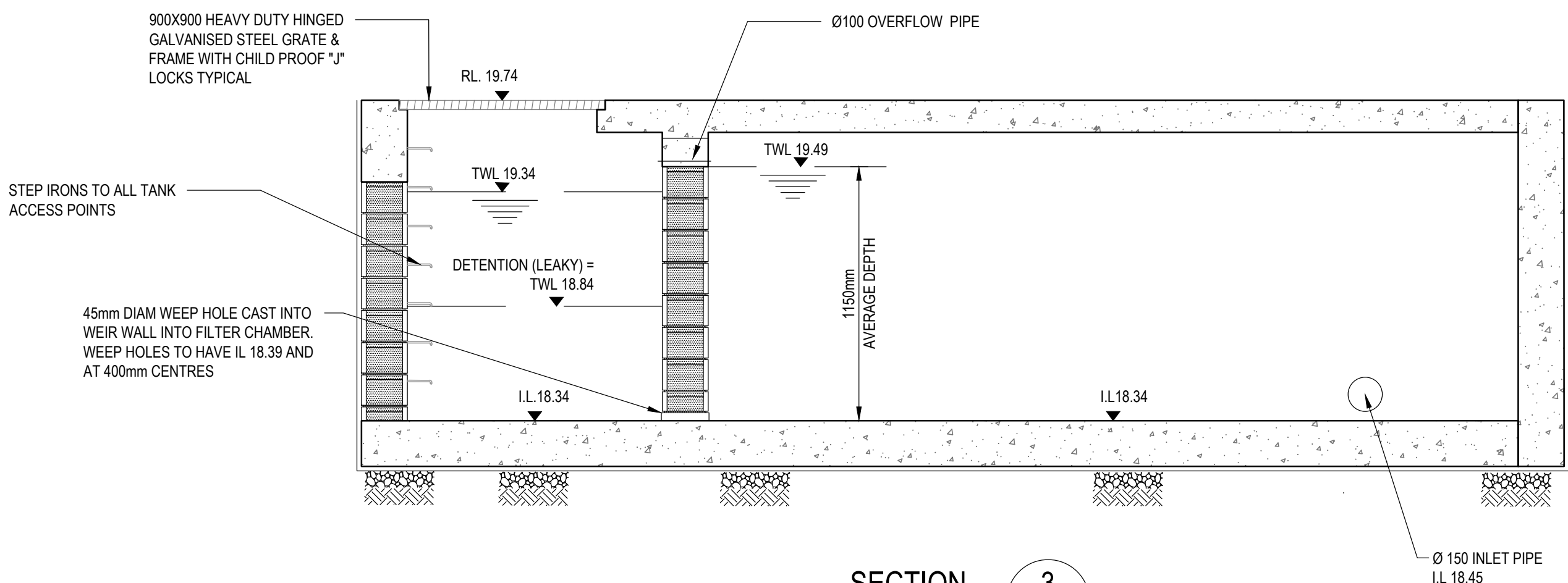
Drawn A.L.	Date JAN' 2023	Client LAHC & SAMCRAWFORD ARCHITECTS
Checked R.O.	Date JAN' 2023	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287
Designed A.L.	Date JAN' 2023	Title STORMWATER DETAILS PIT SCHEDULE
Verified R.O.	Date JAN' 2023	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES
Approved		Datum AHD
		Scale N/A
		Size A1
		Drawing Number 80822046-CI-2102
		Revision 5



SECTION 1
NOT TO SCALE 2103



SECTION 2
NOT TO SCALE 2103



SECTION 3
NOT TO SCALE 2103

OSD SYSTEM DESIGN 1 PARAMETER
AS PER THE NEWCASTLE CITY COUNCIL SECTION 7.06 STORMWATER GUIDELINES, MINIMUM STORAGE REQUIRED FOR,

SITE AREA = 2421.9m²
IMPERVIOUS AREA = 1533.7m² = 63.32 % IMPERVIOUS,

RWT STORAGE REQUIRED FOR SITE = 30 m³
OSD STORAGE REQUIRED FOR SITE = 11.8 m³
PSD 5 MIN 5 YEAR ARI = 23 L/s

RWT STORAGE PROVIDED IN THIS TANK = 10m³
OSD STORAGE PROVIDED IN THIS TANK = 3.21m³

OSD TANK DETAIL
TOP WATER LEVEL = 19.34
DEPTH OF WATER = 1.0m
TANK AREA = 2.29 m² INCLUDING 0.454m² OF FILTER CHAMBER
ORIFICE DIAMETER = 109mm

Rev.	Date	Description	Des.	Verif.	Appd.
6	18/04/2024	COORDINATION ISSUE	PDP	JMB	JMB
5	30/11/2023	COORDINATION ISSUE	PDP	JMB	JMB
4	25/01/2023	COORDINATION ISSUE	A.L.	R.O.	R.O.
3	26/09/2022	AM2 ISSUE	G.M.	C.F.	C.F.
2	17/08/2022	DRAFT 70% ISSUE	G.M.	C.F.	C.F.
1	10/02/2021	PRELIMINARY ISSUE	K.P.	K.P.	C.F.

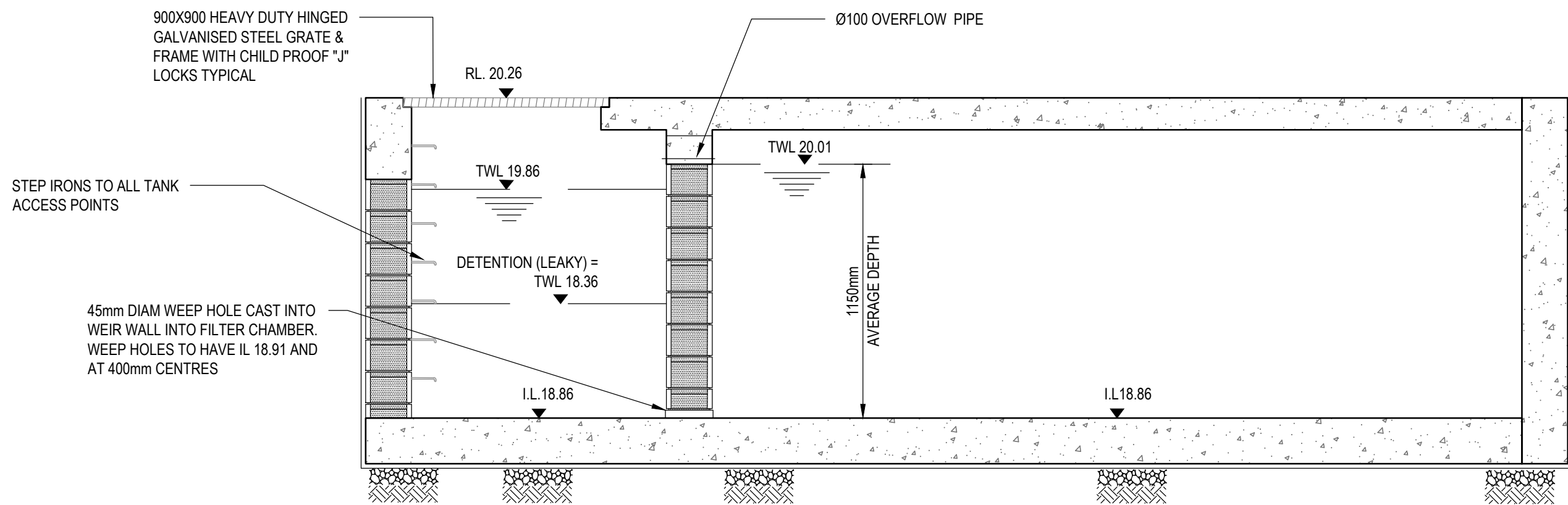
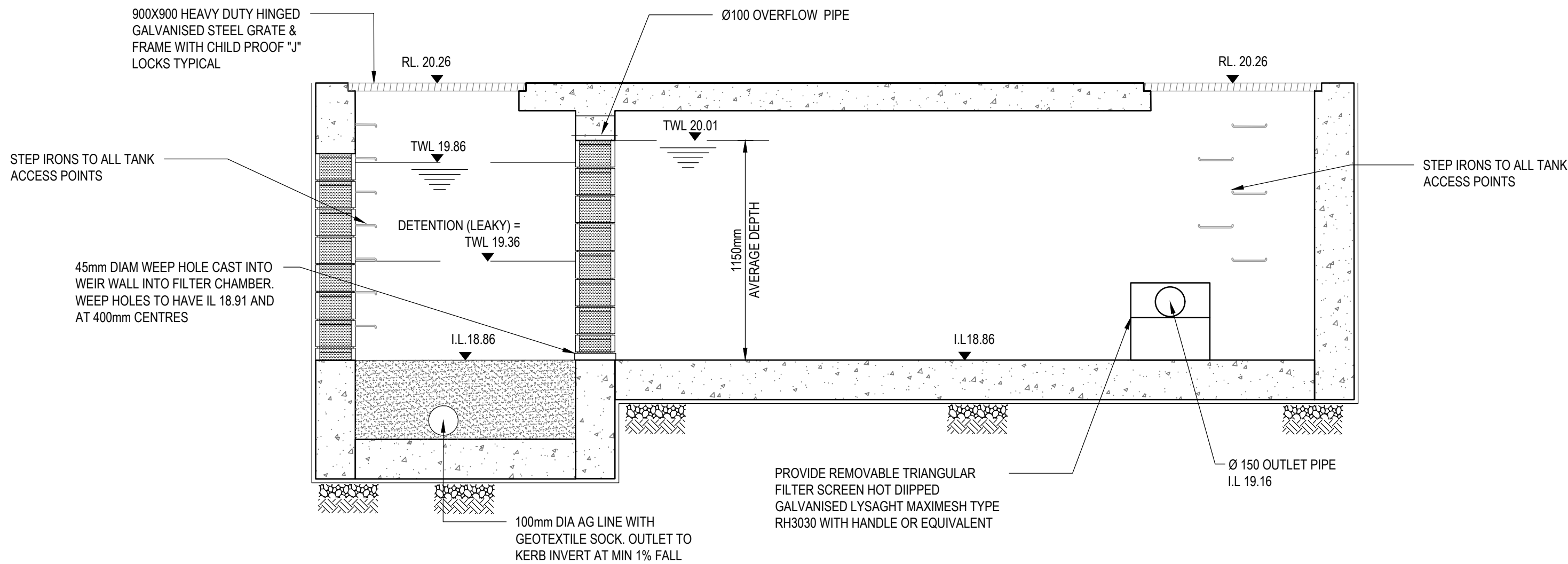
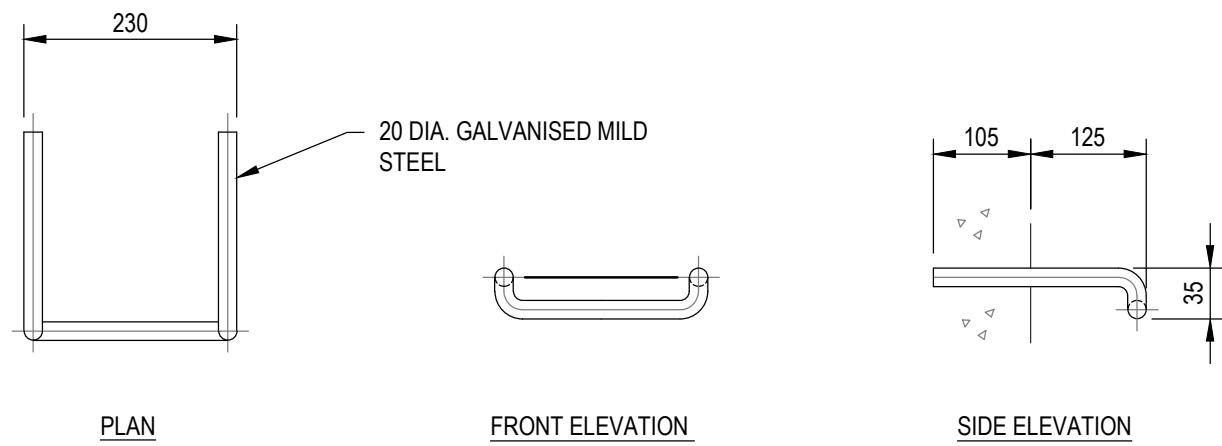
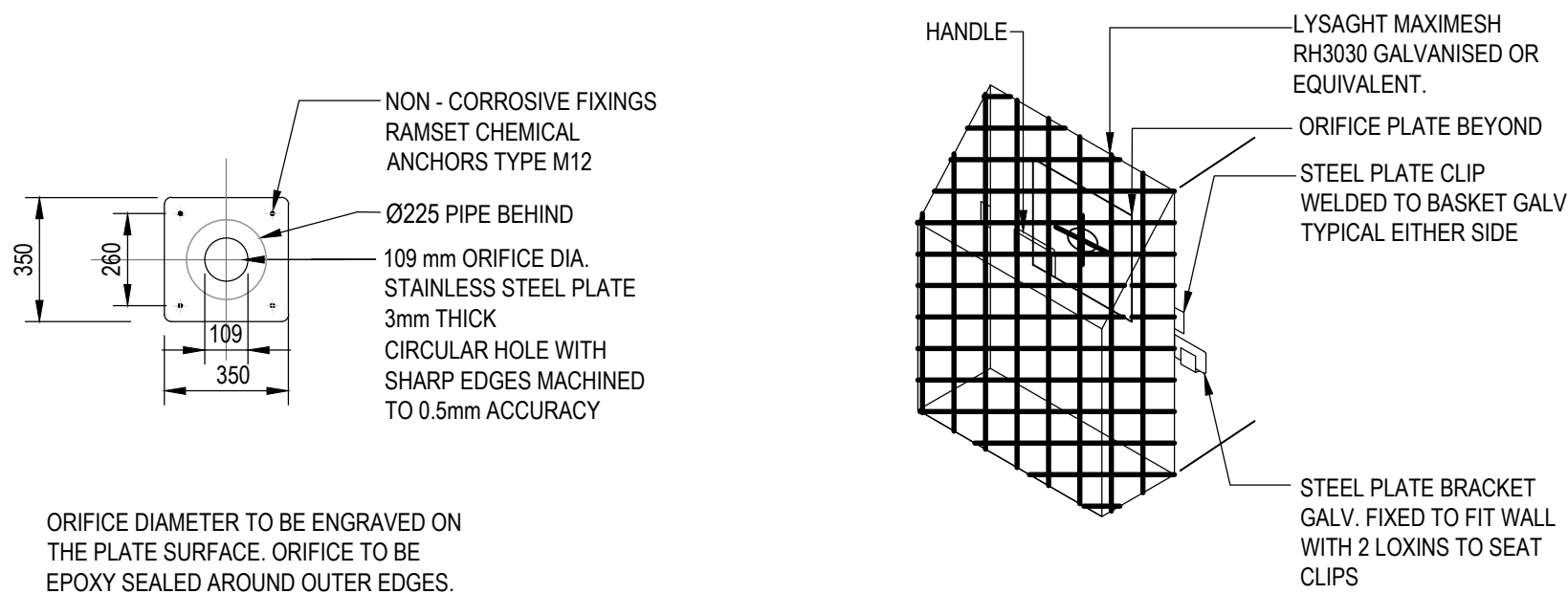
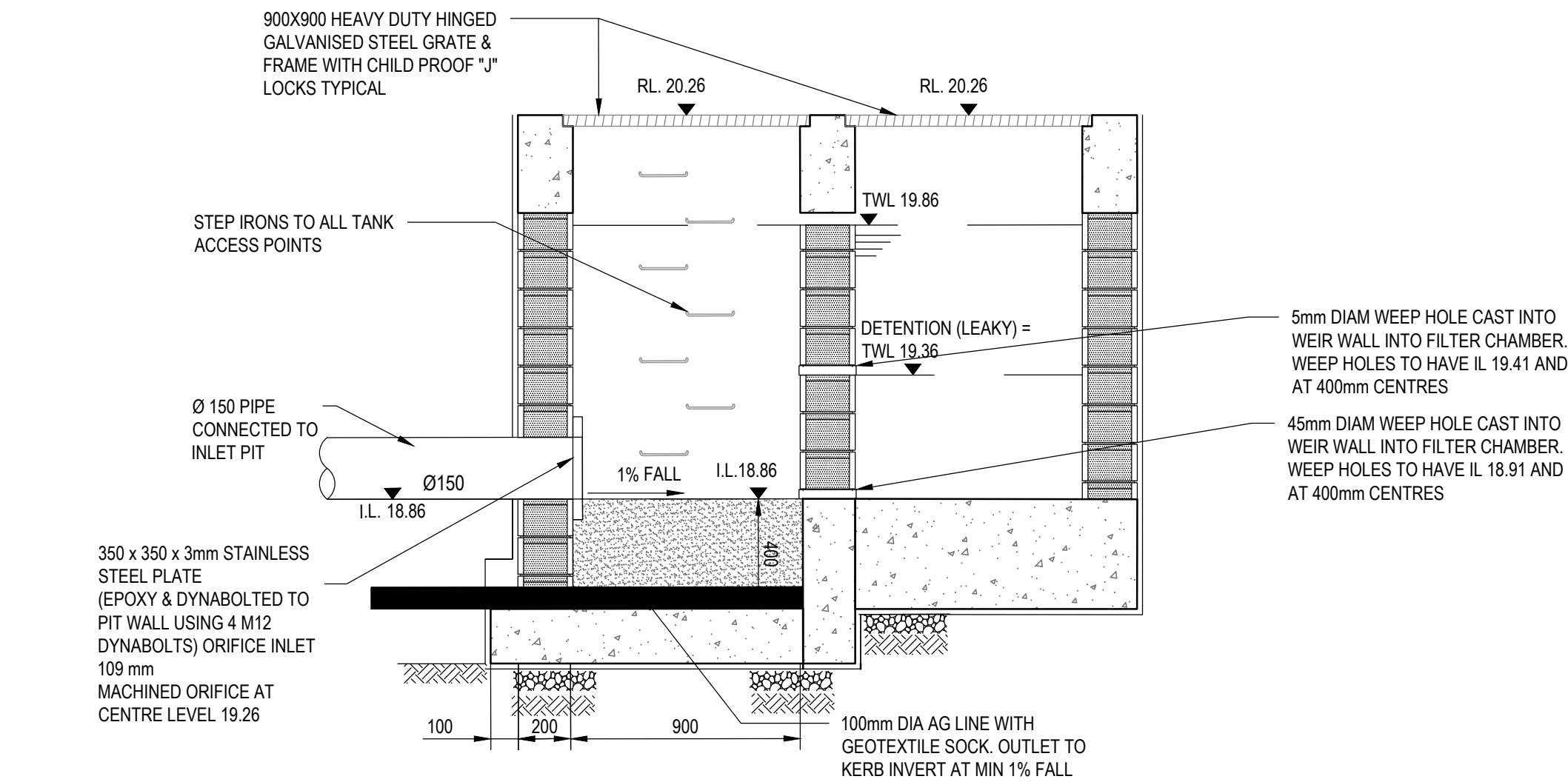
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Designed A.L.	Date JAN' 2023	Title STORMWATER DETAILS SHEET 2 OSD TANK 1 DETAILS
Verified R.O.	Date JAN' 2023	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES
Approved		Datum AHD
		Scale AS SHOWN
		Size A1
		Drawing Number 80822046-CI-2103
		Revision 6



OSD SYSTEM DESIGN 2 PARAMETER AS PER THE NEWCASTLE CITY COUNCIL SECTION 7.06 STORMWATER GUIDELINES, MINIMUM STORAGE REQUIRED FOR,

SITE AREA = 2421.9m²
IMPERVIOUS AREA = 1533.7m² = 63.32 % IMPERVIOUS,

RWT STORAGE REQUIRED FOR SITE = 30 m³
OSD STORAGE REQUIRED FOR SITE = 11.8 m³
PSD 5 MIN 5 YEAR ARI = 23 L/s

RWT STORAGE PROVIDED IN THIS TANK = 10m³
OSD STORAGE PROVIDED IN THIS TANK = 3.21m³

OSD TANK DETAIL
TOP WATER LEVEL = 19.34
DEPTH OF WATER = 1.0m
TANK AREA = 2.29 m² INCLUDING 0.454m² OF FILTER CHAMBER
ORIFICE DIAMETER = 109mm

Rev.	Date	Description	Des.	Verif.	Appd.
6	18/04/2024	COORDINATION ISSUE	PDP	JMB	JMB
5	30/11/2023	COORDINATION ISSUE	PDP	JMB	JMB
4	25/01/2023	COORDINATION ISSUE	A.L.	R.O.	R.O.
3	26/09/2022	AM2 ISSUE	G.M.	C.F.	C.F.
2	17/08/2022	DRAFT 70% ISSUE	G.M.	C.F.	C.F.
1	10/02/2021	PRELIMINARY ISSUE	K.P.	K.P.	C.F.

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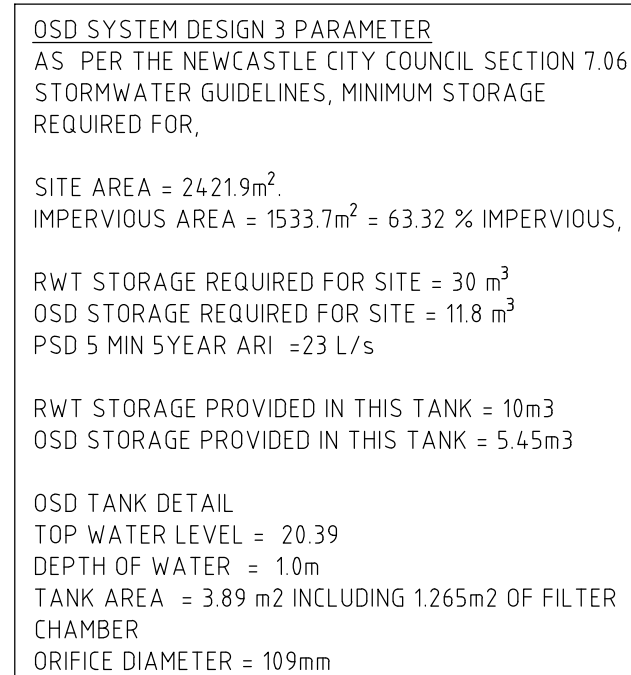


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Drawn A.L.	Date JAN' 2023	Client LAHC & SAMCRAWFORD ARCHITECTS
Checked R.O.	Date JAN' 2023	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287
Designed A.L.	Date JAN' 2023	Title STORMWATER DETAILS SHEET 3 OSD TANK 2 DETAILS
Verified R.O.	Date JAN' 2023	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES
Approved		Datum AHD
		Scale AS SHOWN
		Size A1
		Drawing Number 80822046-CI-2104
		Revision 6

XREF's:
CAD File:



Drawn A.L.	Date JAN 2023	Client LAHC & SAMCRAWFORD ARCHITECTS			
Checked R.O.	Date JAN 2023	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287	Status FOR APPROVAL		
Designed A.L.	Date JAN 2023		NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Verified R.O.	Date JAN 2023	Title STORMWATER DETAILS SHEET 4 OSD TANK 3 DETAILS	Datum AHD	Scale AS SHOWN	Size A1
Approved			Drawing Number 80822046-CI-2105		Revision 6



THE ESK IS A PASSIVE HIGH EFFICIENCY COALESCING SEPARATOR THAT REMOVES FREE OIL FROM CONTAMINATED STORMWATER RUNOFF AND HAS A BUILT-IN SHUTOFF VALVE TO PREVENT SPILLS AND STORAGE CAPACITY EXCESS EXITING THE DEVICE. THE DEVICE IS IDEALLY SUITED FOR SITES WHERE SPECIFIC EFFLUENT TARGETS ARE SPECIFIED, OR FOR SITES WHERE REMOVAL OF OIL AND GREASE IS THE GREATEST CONCERN E.G. FUEL STATION, AROUND TRANSFORMERS, CAR SERVICING WORKSHOPS, ETC. IT IS TYPICALLY SIZED TO REMOVE OIL DROPLETS AS SMALL AS 10 MICRONS AND ACHIEVE AN EFFLUENT CONCENTRATION OF 5MG/L OR LESS.

STRUCTURE ID	XXX
TREATMENT FLOW RATE	20L/S
CATCHMENT AREA	XXX
HYDROCARBON SPECIFIC GRAVITY (SG)	0.85_OR_LESS
PEAK FLOW RATE (L/s)	XXX
MINIMUM OIL STORAGE (L)	650
EXTERNAL INLET/OUTLET PIPE SIZE	DIA.200

GENERAL NOTES:

1. OCEAN PROTECT TO PROVIDE ALL MATERIAL AND TANK PENETRATIONS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWING WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR OCEAN PROTECT CONSULTANT VIA www.OCEANPROTECT.com.au, or 1300 354 722.
3. PRECAST STRUCTURE TO BE CONSTRUCTED BY OCEAN PROTECT IN ACCORDANCE WITH AS3600.
4. STRUCTURE AND ACCESS COVERS DESIGNED TO MEET AUSTRROADS T44 LOAD RATING WITH 0.0m TO 2.0M FILL MAXIMUM (CLASS D).
5. THE STRUCTURE THICKNESS MEASUREMENTS SHOWN ARE FOR REPRESENTATIONAL PURPOSES ONLY.
6. DEVICE IS TO CONTAIN A COALESCENCE SEPARATION COLUMN TOGETHER WITH AUTOMATIC OUTFLOW CLOSURE VALVE THAT ACTIVATES WHEN THE LIMIT OF OIL STORED IN THE SEPARATOR IS REACHED.
7. ESK SYSTEM IS DESIGNED AS A CLASS1 COALESCENCE SEPARATOR AS PER BNES858-1:2002.
8. OIL ALARM INCLUDED AS REQUESTED

A. SIZE AND CLASS OF PIPE OR SQUARE KNOCKOUT SIZE TO BE SPECIFIED ON DRAWING BY CLIENT / CONTRACTOR.

B. ADDITIONAL RISERS TO BE PROVIDED BY CONTRACTOR (IF REQUIRED)

C. ANY BACKFILL DEPTH, SUB-BASE, AND OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS SHALL BE SPECIFIED BY THE ENGINEER OF RECORD.

D. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE

E. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.

F. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPES.

G. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT DEVICE FROM CONSTRUCTION-RELATED EROSION RUNOFF.

1	02/05/2024	COORDINATION ISSUE	PDP	JMB	JMB
Rev.	Date	Description	Des.	Verif.	Appd.

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Checked R.O.	Date JAN 2023	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287	Status <div>FOR APPROVAL</div>	NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Designed A.L.	Date JAN 2023				
Verified R.O.	Date JAN 2023	Title STORMWATER DETAILS SHEET 4 TYPICAL ESK20 DETAIL	Datum AHD	Scale AS SHOWN	Size A1
Approved			Drawing Number 80822046-CI-2101		Revision 1



4	25/01/2023	COORDINATION ISSUE						A.L.	R.O.	R.O.
3	26/09/2022	AM2 ISSUE						G.M.	C.F.	C.F.
2	17/08/2022	DRAFT 70% ISSUE						G.M.	C.F.	C.F.
1	10/02/2021	PRELIMINARY ISSUE						K.P.	K.P.	C.F.
Rev.	Date	Description					Des.	Verif.	Appd.	

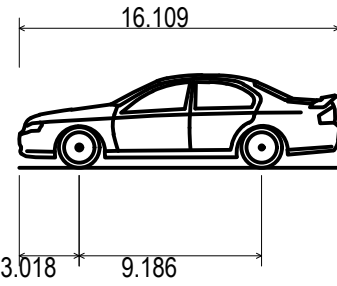
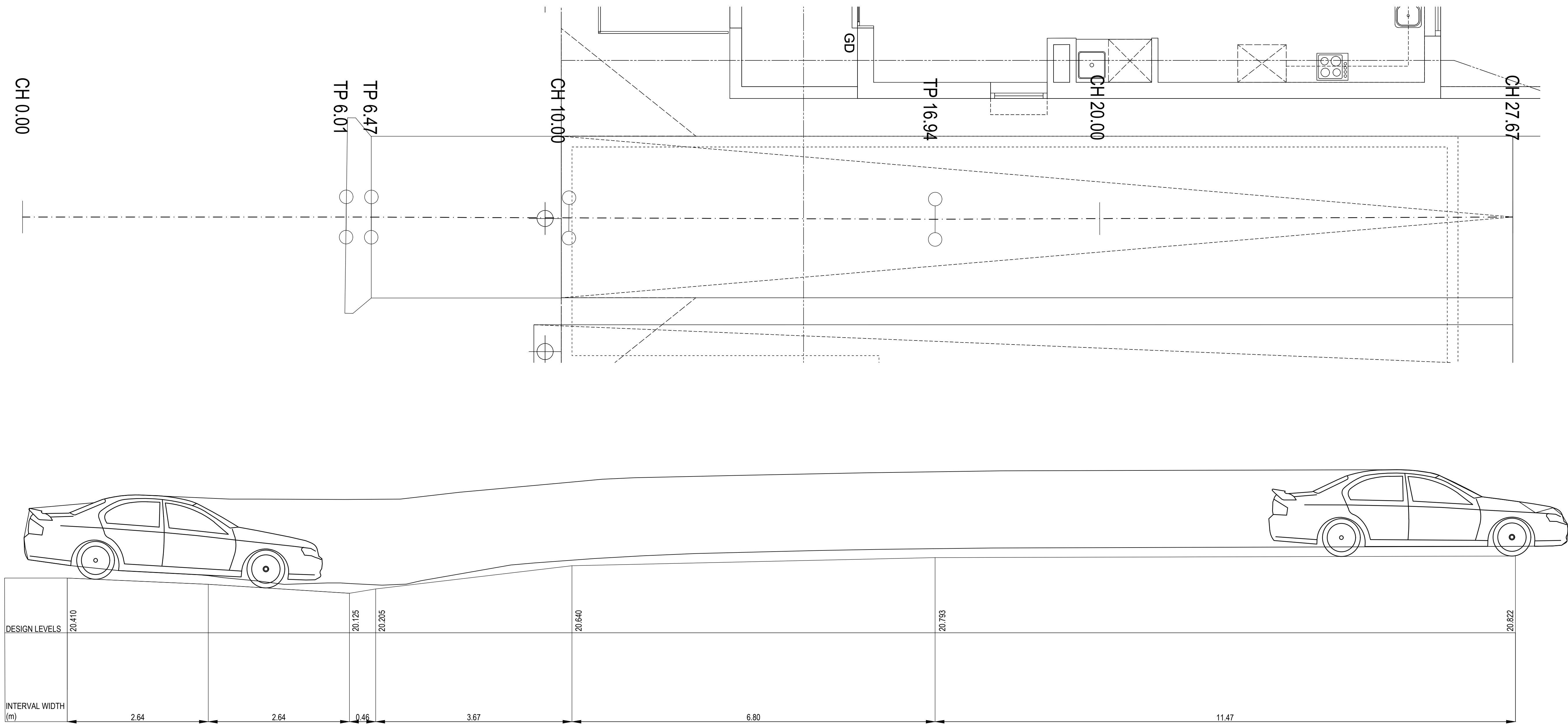
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Checked R.O.	Date JAN 2023	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287	Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Designed A.L.	Date JAN 2023	Title SEDIMENTATION AND EROSION CONTROL DETAILS	Datum AHD	Scale AS SHOWN	Size A1
Verified R.O.	Date JAN 2023		Drawing Number 80822046-CI-2201	Revision 4	
Approved					

DATE PLOTTED: 12 April 2024 10:22 AM BY: DE PASQUALE, PHILIP

XREFs: X-GROUND FLOOR: X-GROUND FLOOR-VERT-CLEARANCE
CAD File: C:\Users\dpasquale\OneDrive - Stantec\Douglas Street Wallsend\80822046-CI-2301.dwg



B85 Vertical Clearance (2004)	
Overall Length	16.109ft
Overall Width	6.135ft
Overall Body Height	4.662ft
Min Body Ground Clearance	0.521ft
Track Width	5.807ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	18.865ft

Rev.	Date	Description	Des.	Verif.	Appd.
2	28/03/2024	COORDINATION ISSUE	PDP	JMB	JMB
1	08/03/2024	COORDINATION ISSUE	PDP	JMB	JMB

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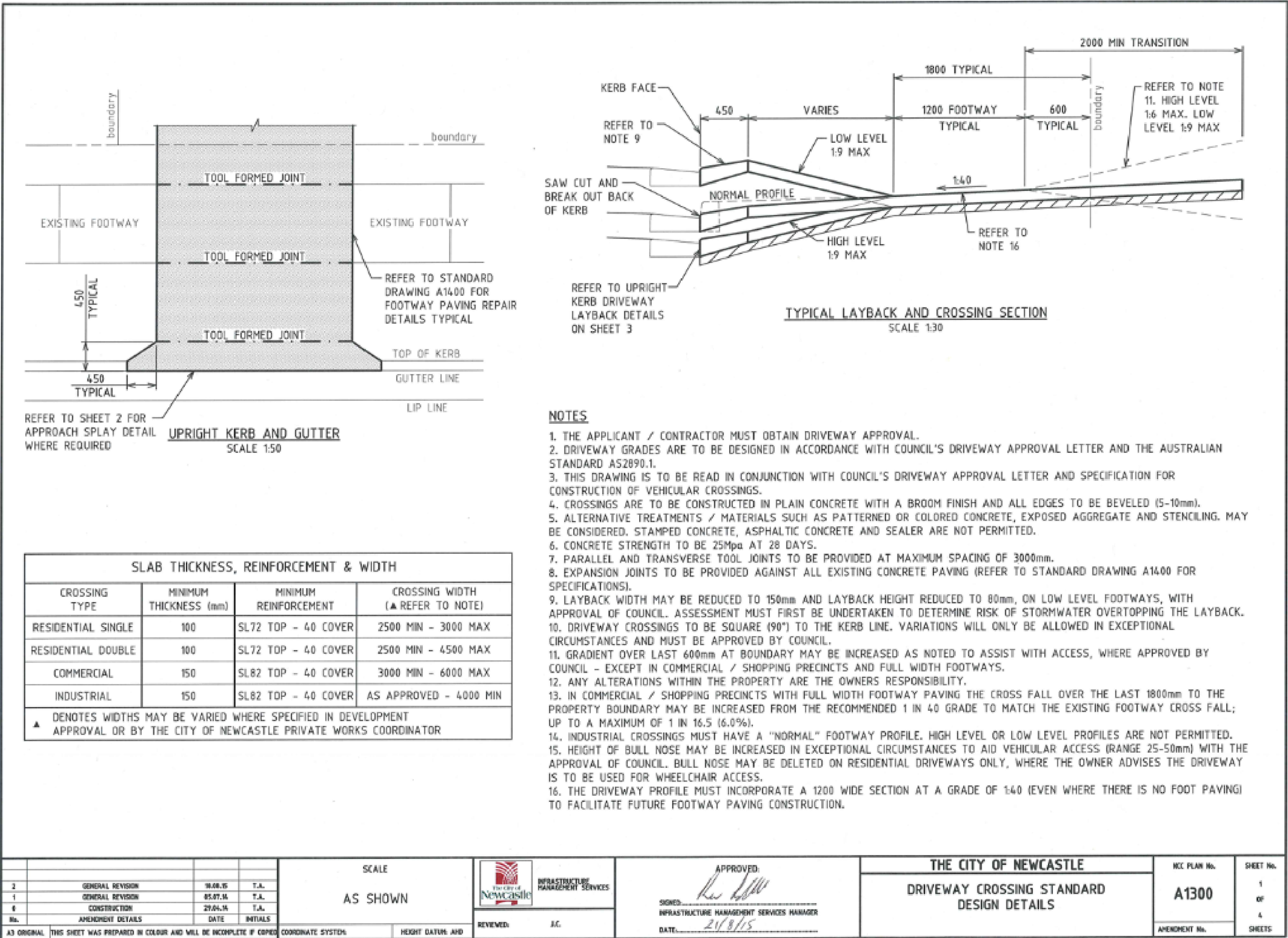
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Drawn P.D.	Date MAR' 2024	Client LAHC & SAMCRAWFORD ARCHITECTS
Checked J.B.	Date MAR' 2024	Project PROPOSED DEVELOPMENT AT 19-23 DOUGLAS STREET AND 6 NEAL PLACE WALLSEND 2287
Designed P.D.	Date MAR' 2024	Title DRIVEWAY VERTICAL CLEARANCE DETAILS
Verified J.B.	Date MAR' 2024	
Approved		
Status NOT TO BE USED FOR CONSTRUCTION PURPOSES		FOR APPROVAL
Datum AHD	Scale AS SHOWN	Size A1
Drawing Number 80822046-CI-2301		Revision 2



NOTES:
1. REFER TO THE CITY OF NEWCASTLE
DRAWING NO. A1300 DRIVEWAY
CROSSING STANDARD DESIGN DETAILS.