




ACTIVITY DETERMINATION

Project No. BGZDY

Conflict of Interest¹

In this matter:

1. I have declared any possible conflict of interests (real, potential or perceived) to the Acting Chief Executive, 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 Chief Executive, Housing Portfolio, Homes NSW as soon as I become aware of a possible conflict of interest.

Signed.......... Dated.....**27.05.24**.....
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.

64-70

Street or property name

Stapleton Avenue

Suburb, town or locality

Casino, NSW

Postcode

2470

Local Government Area(s)

Richmond Valley

Real property description (Lot and DP)

Lots 8, 9, 10 & 11 in Deposited Plan 31850

ACTIVITY DESCRIPTION

Provide a description of the activity

Demolition of 4 existing dwellings and structures, removal of trees, and construction of a residential flat building development comprising 13 dwellings (6 x 2 bedroom and 7 x 3 bedroom units) and a multi dwelling housing development comprising 5 dwellings (3 x 2 bedroom and 2 x 3 bedroom units), with associated landscaping and fencing, surface parking for 23 cars, and consolidation of 4 lots into a single lot.

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



27.05.24

Signed.....

Dated.....

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

SCHEDULE 1

Recommended Identified Requirements

PART A – Standard Identified Requirements

THE DEVELOPMENT

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

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

Title / Name:	Drawing No. / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Architectural Plans – Appendix A				
Coversheet	DA00	F	19/03/2024	Brewster Murray Pty Ltd
Block Analysis Plan	DA01	C	19/09/2023	Brewster Murray Pty Ltd
Site Analysis Plan	DA02	C	19/09/2023	Brewster Murray Pty Ltd
Demolition Plan	DA03	E	22/02/2024	Brewster Murray Pty Ltd
Site Plan	DA04	F	19/03/2024	Brewster Murray Pty Ltd
Ground Floor Plan	DA05	F	19/03/2024	Brewster Murray Pty Ltd
First Floor Plan	DA06	E	22/02/2024	Brewster Murray Pty Ltd
Roof Plans	DA07	E	22/02/2024	Brewster Murray Pty Ltd
Elevations – Sheet 1	DA08	F	19/03/2024	Brewster Murray Pty Ltd
Elevations – Sheet 2	DA09	E	22/02/2024	Brewster Murray Pty Ltd
Sections	DA10	D	17/10/2023	Brewster Murray Pty Ltd
Cut & Fill & Retaining Walls	DA11	D	17/10/2023	Brewster Murray Pty Ltd
Shadow Diagrams	DA12	D	17/10/2023	Brewster Murray Pty Ltd
Shadow Diagrams – View from Sun	DA13	D	17/10/2023	Brewster Murray Pty Ltd
Material and Finishes	DA14	C	19/09/2023	Brewster Murray Pty Ltd
Landscape Plan – Appendix B				
Landscape Plan	LA 1 of 1	D	18/03/2024	Greenland Design Pty Ltd

Activity Determination –
64-70 Stapleton Avenue, Casino, NSW 2470

Title / Name:	Drawing No. / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Landscape Details and Specification	LA 2 of 2	D	18/03/2024	Greenland Design Pty Ltd
Civil Stormwater Plans – Appendix C				
Notes & Legends	C01	9	19/03/2024	Greenview Consulting
Ground Floor Drainage Plan	C02	10	19/03/2024	Greenview Consulting
Level 1 Drainage Plan	C03	2	19/03/2024	Greenview Consulting
Site Stormwater Details Sheet 1	C04	9	19/03/2024	Greenview Consulting
Site Stormwater Details Sheet 2	C05	7	19/03/2024	Greenview Consulting
Detail and Level Survey – Appendix D				
Detail and Level Survey	Sheet 1 of 2	3	27/10/2023	RPS Australia East Pty Ltd
Detail and Level Survey	Sheet 2 of 2	3	27/10/2023	RPS Australia East Pty Ltd
Notification Plans – Appendix E				
Cover Page	N01	E	9/11/2023	Brewster Murray Pty Ltd
Site & Landscape Plan	N02	E	9/11/2023	Brewster Murray Pty Ltd
Development Data	N03	E	9/11/2023	Brewster Murray Pty Ltd
Elevation 1	N04	E	9/11/2023	Brewster Murray Pty Ltd
Elevations 2	N05	E	9/11/2023	Brewster Murray Pty Ltd
Shadow Diagrams	N06	E	9/11/2023	Brewster Murray Pty Ltd
Specialist Reports				
Accessibility Assessment Report & Adaptable Housing Assessment Report – Appendix H	Accessibility Assessment Report	5	25/10/2023	Nest Consulting Group
	Adaptable Housing Assessment Report 22073.5-AS4299	5	25/10/2023	Nest Consulting Group
Arboricultural Impact Assessment Report – Appendix J	-	-	17/10/2023	Arbor Ecological
BASIX Certificate – Appendix K	Certificate No._02	-	31/10/2023	-
BCA Compliance Assessment - Appendix L	P230133 and P230133(4)	-	24/10/2023	BCA vision
NatHERS Certificate – Appendix N	Summary Certificate No: 0009000920 (individual unit certificate numbers inclusive)	-	31/10/2023	-
Geotechnical Investigation Assessment - Appendix P	Report No: 22/3045A	-	August 2022	Geotechnics Pty Ltd
Waste Management Plan - Appendix R	22-6412	2	5/10/2023	Brewster Murray Pty Ltd
Traffic and Parking Impact Assessment Appendix S	GT22053	5	10/11/2023	Genesis Traffic
Environmental Site Management Plan – Appendix T	ESM1 and ESM2	2	9/11/2023	Greenview Consulting
Safety in Design Report – Appendix U	-	2	5/10/2023	Brewster Murray Pty Ltd

Title / Name:	Drawing No. / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Fire Hydrant Coverage Plan and Certification – Appendix V	Hydraulic Design Site Plan – SK01	1	28/03/2024	Greenview Consulting
	Hydraulic Design Ground Floor Plan – SK02	1	28/03/2024	Greenview Consulting
	Hydraulic Design Ground Floor Plan – SK03	1	28/03/2024	Greenview Consulting
	Advice Note – 220996	-	28/03/2024	Greenview Consulting

2. All building work is to be undertaken in accordance with the National Construction Code and referenced Australian Standards.
3. All commitments listed in the BASIX certificate and stamped plans shall be implemented.
4. All construction documentation and building work are 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 NSW 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 the Richmond Valley Council for the area substantially in accordance with the approved concept stormwater drainage plans.
7. Alterations to the natural surface contours or surface absorption characteristics of the site shall not impede, increase or divert natural surface water runoff so as to cause a nuisance to adjoining property owners.
8. All driveways shall be graded in such a manner as to provide continuous surface drainage flow paths to the appropriate points of discharge.
9. To prevent water from entering buildings, surface waters shall be collected and diverted clear of the buildings by a sub-surface / surface drainage system.

Vehicular Access and Parking

10. Concrete vehicular crossings and laybacks shall be provided at the entrances/exits to the property. The crossings and laybacks shall be constructed in accordance with the Richmond Valley Council's standard requirements for residential crossings. Council shall be provided with plans for the crossings and laybacks together with the payment of any council inspection fees.
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/driveways shall be borne by the NSW Land and Housing

Corporation. Obsolete gutter laybacks shall be constructed as kerb in accordance with the council's standards.

Note: It is recommended that discussions be held with the relevant authorities before construction works commence.

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

Site Works

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 and until all the disturbed areas are restored by turfing, paving or revegetation. Soil erosion and sediment control measures shall be designed in accordance with the guidelines set out in the Blue Book *Managing Urban Stormwater: Soils and Construction* (4th edition, Landcom, 2004).
14. An appropriately qualified person shall design any retaining walls or other methods necessary to prevent the movement of excavated or filled ground, including associated stormwater drainage measures.

Building Siting

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

Smoke Detection System(s)

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

Site Soil Contamination

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

Landscaping

18. Landscaping shall be carried out substantially in accordance with the approved landscape plans and maintained for a period of 12 months by the building contractor. The Richmond Valley 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 NSW Land and Housing Corporation.

Tree Removal

20. Removal of 78 trees (except for Tree 67 and 78 and shrub T13) 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 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 shall 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 building contractor.

PRIOR TO ANY WORK COMMENCING ON THE SITE

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

Service Authority Clearances

24. A compliance certificate, or other evidence, shall be obtained from the relevant water utility provider, 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.

25. 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.
26. 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.
27. Where the site is to be connected to reticulated gas, a certificate from an approved gas carrier certifying that satisfactory arrangements have been made for the provision of underground gas services, to the site and to each dwelling, shall be obtained prior to work commencing.

Utilities Service Provider Notification

28. The demolition / construction plans shall be submitted to the appropriate water utility's 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.

Disconnection of Services

29. 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.
30. All existing services within the boundary to remain live shall be identified, pegged and made safe.

Demolition

31. The builder shall notify the occupants of premises on either side, opposite and at the rear of the site a minimum of **5** 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.
32. 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 NSW 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.
33. 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.

Stormwater Disposal

34. A detailed stormwater drainage plan(s), substantially in accordance with the approved concept stormwater drainage plan(s), shall be prepared and submitted to NSW Land and Housing Corporation. Any on-site detention system shall be designed in accordance with the relevant catchment authority's requirements and/or the Richmond Valley Council's drainage code.
35. The stormwater works within Stapleton Avenue road reserve must be designed in accordance with the approved civil plans, except where amended to comply with Richmond Valley Council's relevant stormwater and drainage policies.

Council Notification

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

Landfill

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

Site Facilities

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

Site Safety

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

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

Note:

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

42. 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.
43. Access to the site shall be restricted to authorised persons only and the site shall be secured against unauthorised entry when demolition / construction work is not in progress or the site is otherwise unoccupied.

Note:

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

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

Protection of Trees

45. Trees and other vegetation (Tree 67 and 78 and shrub T13) 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 recommendations provided in the Arboricultural Impact Assessment Report prepared by Arbor Ecological and dated 17 October 2023.

Waste Management

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

DURING DEMOLITION / CONSTRUCTION

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

Heritage

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

Demolition

49. Any existing structures identified for demolition shall be demolished prior to commencement of the construction of the activity.
50. Demolition shall be carried out in accordance with the appropriate provisions of AS 2601.
51. Where materials containing asbestos are to be removed, demolition shall be carried out by a licensed contractor(s) that has a current SafeWork NSW accreditation in asbestos removal.
52. Removal of asbestos-based thermal, or acoustic insulation such as sprayed asbestos and asbestos-based lagging and including friable asbestos boards, shall be carried out in accordance with the National Occupational Health and Safety Commission's Code of Practice for the Safe Removal of Asbestos, 2nd Edition [NOHSC:2002 (2005)].
53. Hazardous and intractable waste, including all asbestos laden waste arising from the demolition process shall be removed and disposed of in accordance with the requirements of SafeWork NSW.
54. Documentary evidence, in the form of tip receipts from an approved Waste Management Facility, shall be obtained by the demolition contractor and submitted to NSW demonstrating the appropriate disposal of the asbestos waste.
55. Demolition procedures shall maximise the reuse and recycling of demolished materials in order to reduce the environmental impacts of waste disposal.
56. 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.
57. 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

58. Survey reports shall be submitted by the building contractor to NSW 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

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

Excavation & Backfilling

60. 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

61. Any noise generated during the carrying out of the activity shall not exceed the limits specified in the July 2009 Interim Construction Noise Guidelines published by the former Department of Environment and Climate Change.
62. No fires shall be lit, or waste materials burnt, on the site.
63. No washing of concrete forms or trucks shall occur on the site.
64. Any contamination / spills on the site during construction works shall be actively managed and reported immediately to the appropriate regulatory authorities to minimise any potential damage to the environment.
65. Dust generation during demolition / construction shall be controlled using regular control measures such as on site watering or damp cloth fences.
66. All vehicles transporting loose materials and travelling on public roads shall be secured (i.e. closed tail gate and covered) to minimise dust generation.
67. 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

68. NSW Land and Housing Corporation shall bear the cost of any necessary adjustments to utility mains and services.
69. 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.

PRIOR TO OCCUPATION OF THE DEVELOPMENT

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

General

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

Termite Protection

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

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

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

Council Infrastructure Damage

72. The cost of repairing any damage caused to the Richmond Valley 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

73. 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.

Where required by Richmond Valley Council a positive covenant and restriction-as-to-user shall be placed over the onsite detention system in accordance with the Richmond Valley 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 NSW Land and Housing Corporation and Richmond Valley Council.

PART B – Additional Identified Requirements

Site Specific requirements

74. Construction of the footings/piers associated with fencing within the TPZ of Tree #82 (located on the eastern adjoining property of 72 Stapleton Avenue) must be supervised and certified by the Project Arborist in accordance with AS4970 (2009).

Requirements resulting from Council Comments

Privacy

75. All the first floor balcony balustrades of Dwellings 13 to 18 must be designed to be fixed 45-degree angled balustrading with narrow spacing between vertical slats to ensure an appropriate privacy relationship between the subject units and the proposed single storey dwellings at the rear of the site.

76. The first floor balcony of Dwelling 18 must have a 1.7m fixed privacy screen along the eastern elevation of the balcony. The privacy screen must be fixed 45-degree horizontal panels orientated in a skyward direction.

Sewer

77. Prior to the commencement of construction works, an investigative survey is to be undertaken to identify the location of the sewer pipeline. This pipeline is to remain and there is to be no structure, footing, overhang or new tree planting within 1.5m of the centreline of the sewer main, except for the portion of the car parking area shown in the Site Plan DA04.
78. Existing sewer connections no longer used must be capped at the boundary. If sewer junctions are not utilised, they must be removed.
79. A 3m wide easement (1.5m either side of the sewer pipe) is to be created over the existing sewer main and registered with the consolidation of the 4 allotments. The terms of the easement must state that the car parking area and its associated works are allowed within the easement.
80. The sewer line must be provided with an encasement to protect from any damage due to the location of the car parking area.

Stormwater

81. Access to the stormwater detention tank and rainwater storage must be locked to prevent unauthorised access.

Water

82. The water connection line to the site shall be designed in accordance with the water utility provider's requirement to ensure it is appropriately sized for the proposed development.
83. A master water meter that records the total water usage for all dwellings shall be provided within the site in a safe and accessible location to allow for Council to read the meter. 18 individual metres for each dwelling may be privately read and located adjacent to the master meter.

Fire Hydrant Coverage

84. Prior to the commencement of construction, an enquiry is to be lodged with Richmond Valley Council to determine the pressure and flow data for the Fire Hydrant coverage.

Driveway crossing and works in the road reserve

85. All driveway crossings are to have a splay at the point of connection with the road pavement to protect the edge of the pavement from vehicle movements.

Waste storage area

86. The bin storage area within the site must be constructed with a wall height of no more than 1.2m from the NGL. This area must be roofed with an overall height of maximum 2.7m and a minimum clearance height of 2.1m from the NGL to the underside of the roof. The roof, guttering, overhang and any other associated roof parts must be contained within the walled bin area footprint and not overhang into the car park area or parking spaces.

Developer Contributions

87. In accordance with Section 64 of the Local Government Act (1993) and Chapter 6 Part 2 Division 5 of the Water Management Act (2000) for Water and Sewer Headworks Services, contributions will be made to Richmond Valley Council (RVC) prior to the commencement of works.

Section 64 Contributions payable are:

Activity Determination –
64-70 Stapleton Avenue, Casino, NSW 2470

Section 64 Local Govt Act & Water Management Act 2000 Levy Area - Casino	TechOne Code	No. of ET's	\$ / ET for 2023-2024	Amount Payable (\$)
RVC Water Headworks	WatS64Hwks	8.6	\$ 9,630.50	\$ 82,822.30
RVC Sewerage Headworks	SewS64Hwks	11.75	\$ 8,000.00	\$ 94,000.00
Rous Water # Water Headworks	Rous64Hwks	N/A	N/A	\$ NIL
Total Section 64 contributions (current @ 9/1/2024 but generally applicable for payment 1/7/2023 to 30/6/2024) Payments will be in accordance with Council's Revenue Policy at the time of payment				\$176,822.30

Others

88. A dilapidation survey must be prepared and submitted to the Richmond Valley Council by the building contractor prior to the commencement of demolition, tree removal and construction. The plan shall detail the condition of the infrastructure with photographic evidence.
89. Prior to the commencement of works, the structural integrity of Dwelling 11 due to its proximity from the OSD, rainwater tanks and associated stormwater infrastructure must be confirmed to be acceptable and in accordance with the relevant standards, as assessed by the Geotechnical consultant. This written advice / confirmation must be provided to NSW Land and Housing Corporation.

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

Project No BGZDY

SITE IDENTIFICATION	
STREET ADDRESS	
Unit/Street No	Street or property name
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Suburb, town or locality	Postcode
Casino, NSW	2470
Local Government Area(s)	Real property description (Lot and DP)
Richmond Valley	Lots 8, 9, 10 & 11 in Deposited Plan 31850
ACTIVITY DESCRIPTION	
Provide a description of the activity	
Demolition of 4 existing dwellings and structures, removal of trees, and construction of a residential flat building development comprising 13 dwellings (6 x 2 bedroom and 7 x 3 bedroom units) and a multi dwelling housing development comprising 5 dwellings (3 x 2 bedroom and 2 x 3 bedroom units), with associated landscaping and fencing, surface parking for 23 cars, and consolidation of 4 lots into a single lot.	

NSW Land and Housing Corporation 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 Richmond Valley 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 Richmond Valley 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.....

27.05.24
Dated.....

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



BGZDY

DEPARTMENT OF PLANNING & ENVIRONMENT

NSW LAND & HOUSING CORPORATION

AT: 64-70 STAPLETON AVENUE, CASINO NSW LOTS, 8, 9, 10, 11 IN DP 3185

LOCATION PLAN



STAPLETON AVENUE PHOTOMONTAGE



SK SHEET LIST

DA00	COVER SHEET	F
DA01	BLOCK ANALYSIS	C
DA02	SITE ANALYSIS	C
DA03	DEMOLITION PLAN	E
DA04	SITE PLAN	F
DA05	GROUND FLOOR PLAN	F
DA06	FIRST FLOOR PLAN	E
DA07	ROOF PLAN	E
DA08	ELEVATIONS 1	F
DA09	ELEVATIONS 2 + MATERIAL LIST	E
DA10	SECTIONS	D
DA11	CUT & FILL & RETAINING WALLS	D
DA12	SHADOW DIAGRAMS	D
DA13	VIEW FROM SUN	D
DA14	MATERIALS & FINISHES	C

DEVELOPMENT DATA TABLE

JOB REFERENCE	BGZDY		
LOCALITY / SUBURB	CASINO		
STREET ADDRESS	64-70 STAPLETON AVENUE		
LOTS	LOTS 8, 9, 10, 11 DP 31850		
SITE AREA	3558m ²		
NO. EXISTING LOTS	4		
PROPOSED GFA*	GROUND	1102m ²	
	FIRST	561m ²	
	TOTAL	1663m ²	
TOTAL DWELLINGS	18 (9 x 2 BED + 9 x 3 BED)		
	UNIT NO.	TYPE	P.O.S. (m ²)
	01	GROUND	96
	02	GROUND	78
	03	GROUND	97
	04	GROUND	97
	05	GROUND	71
	06	GROUND	77
	07	GROUND	93
	08	GROUND	70
	09	GROUND	70
	10	GROUND	70
	11	GROUND	97
	12	GROUND	97
	13	FIRST	78
	14	FIRST	97
	15	FIRST	97
	16	FIRST	71
	17	FIRST	77
	18	FIRST	93

RESIDENTIAL FLAT BUILDING

	CONTROL	REQUIREMENT	PROPOSED
BUILDING HEIGHT	LRHDG	5.4m - REAR 40% OF SITE	FRONT BUILDINGS (RFB) = 7.7m
	RV-LEP	8.5m	REAR BUILDINGS = 3.5m
CAR PARKING	RV-DCP	1 SPACE PER DWELLING < 150m ² , 1.5 SPACES PER DWELLING > 150m ² , 1 VISITOR SPACE PER 4 DWELLINGS	1.0 x 9 + 1.5 x 9 = 22.5 SPACES (INCL 2 ACCESSIBLE)
	H-SEPP	2 BEDROOM UNITS - 1.0 SPACES 3 BEDROOM UNITS - 1.5 SPACE 1 ACCESSIBLE SPACE PER ADAPTABLE UNIT	
BICYCLE PARKING	LRHDG	1 BICYCLE SPACE PER DWELLING	WITHIN UNITS / POS
FSR	H-SEPP	*0.5:1	*0.47:1
	RV-DCP	NOT APPLICABLE TO RFB IN M1 ZONED AREA	
SETBACKS	RV-DCP	FRONT = 6.0m (GARAGE/CARPORT 1m BEHIND BUILDING LINE)	6.0m
		SIDES = HEIGHT OF BUILDING - 3.0m (WHERE DEVELOPMENT IS 10m BEHIND FRONT BUILDING LINE AND > 4.5m ABOVE GROUND LEVEL	1.5m (<4.5m ABOVE GROUND LEVEL)
	BCA (RFB)	SIDE = 3.0m	3.0m
	LRHDG	REAR = 6.0m (WHERE NO DCP REAR SETBACK)	6.0m
LANDSCAPED AREA	RV-DCP	30 % OF LOT AREA = 1067.4m ²	1107m ² = 31.1%
	LRHDG	50 % OF AREA FORWARD OF BUILDING LINE	318m ² = 66%
DEEP SOIL	H-SEPP	15% OF SITE AREA, MIN DIMENSION 3m = 533.6m ² MIN TOTAL 66% OF REQUIRED DEEP SOIL AT REAR = 346.8m ² MIN AT REAR	633m ² TOTAL 351m ² AT REAR
SOLAR ACCESS	LRHDG	2 HOURS MINIMUM IN LIVING ROOM/POS OF EACH DWELLING BETWEEN 9AM-3PM ON WINTER SOLSTICE	18/18 = 100%
	LAHC	2 HOURS TO 70% UNITS	
CROSS-VENTILATION	LRHDG	EACH DWELLING TO BE NATURALLY CROSS VENTILATED	18/18 = 100%
POS	LAHC	1 BED - 8m ² 2 BED - 10m ² 3 BED - 12m ²	SEE TABLE ABOVE
	RV-DCP	1 AND 2 BED - 16m ² WITH 3m DIMENSION 3 BED - 25m ² WITH 3m DIMENSION	
	LRHDG	45m ² WITH 5m DIMENSION FOR EACH DWELLING 12m ² PAVED AREA WITH 3m DIMENSION BEHIND THE FRONT BUILDING LINE	
UNIT SIZE AND LAYOUT	LAHC	1 BED - 50m ² 2 BED - 70m ² 3 BED - 90m ²	SEE TABLE ABOVE
	LRHDG	1 BED - 65m ² 2 BED - 90m ² 3 BED - 115m ²	
LOT SIZE AND WIDTH	RV-DCP	MINIMUM LOT SIZE - 1000m ² MINIMUM LOT WIDTH - 20m	LOT SIZE = 3558m ² LOT WIDTH - 80.5m
ADAPTABLE HOUSING		10% OF UNITS	2/18 = 11%

* GROSS FLOOR AREA CALCULATION FOR H-SEPP EXCLUDES EXTERIOR WALLS BUT INCLUDES COMMON VERTICAL CIRCULATION SPACE

RV-LEP = RICHMOND VALLEY LOCAL ENVIRONMENTAL PLAN 2012
RV-DCP = RICHMOND VALLEY DEVELOPMENT CONTROL PLAN 2021
H-SEPP = HOUSING SEPP
LRHDG = LOW RISE HOUSING DIVERSITY GUIDE
LAHC = LAND AND HOUSING CORPORATION DWELLING REQUIREMENTS



NOMINATED ARCHITECT:	SIGNATURE:	F	19/03/24	FOR REVIEW
MICHAEL BULLEN		E	22/02/24	FOR REVIEW
		D	17/10/23	FOR REVIEW
		C	19/09/23	FOR REVIEW
		B	03/07/23	FOR REVIEW
REV	DATE	NOTATION/AMENDMENT		
DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.				

ARCHITECT
BREWSTER MURRAY PTY LTD

BCA CONSULTANT

CONSULTING ENGINEERS

LANDSCAPE CONSULTANT

CLIENT
HOMES NSW

PROJECT
RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING DEVELOPMENT UNDER NSW HOUSING SEPP 2021

64-70 STAPLETON AVENUE, CASINO 2470
LOTS 8, 9, 10, 11 IN DP31850

TITLE
COVER SHEET


FILE

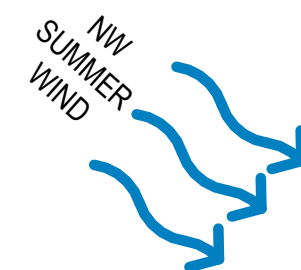
PLOTTED

STATUS
SKETCH DESIGN

DATE	SCALE	PROJ	PROJECT NO
19/03/24	NTS	MB	BGZDY
STAGE	SHEET SIZE	DESIGNER	CHECKED
A	A1	AG	
SHEET	DA00		REV
			F



 NSW GOVERNMENT	NOMINATED ARCHITECT:	SIGNATURE:				ARCHITECT	CONSULTING ENGINEERS	CLIENT HOMES NSW	PROJECT RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING DEVELOPMENT UNDER NSW HOUSING SEPP 2021 64-70 STAPLETON AVENUE, CASINO 2470 LOTS 8, 9, 10, 11 IN DP31850	TITLE BLOCK ANALYSIS	STATUS SKETCH DESIGN				
	MICHAEL BULLEN		C	19/09/23	FOR REVIEW	BREWSTER MURRAY PTY LTD					DATE 19/09/23	SCALE NTS	PROJ MB	PROJECT No BGZDY	
			B	03/07/23	FOR REVIEW						STAGE A	SHEET SIZE A1	DESIGNER AG	CHECKED	
			A	23/06/23	FOR REVIEW	BCA CONSULTANT	LANDSCAPE CONSULTANT								
			REV	DATE	NOTATION/AMENDMENT										
			DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.												
									FILE	PLOTTED	TYPE	SHEET	DA01	REV	C



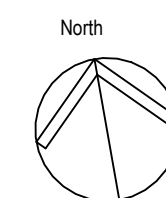
- SETBACKS:**

- MULTI DWELLING HOU

- | | |
|--------------------|--|
| PRIMARY ROAD FRONT | 6m |
| SIDE | BUILDING HEIGHT - 3m (WHERE DEVELOPMENT IS 10m BEHIND FRONT BUILDING LINE AND GREATER THAN 4.5m ABOVE GROUND LEVEL.) |
| REAR | 6m (NO DCP REAR SETBACK) |

- SURROUNDING DEVELOPMENTS CONSISTS OF SINGLE STOREY DETACHED RESIDENTIAL BUILDINGS (M1 - LOW-MEDIUM DENSITY RESIDENTIAL)
- LOW TRAFFIC LEVELS, BUT CLOSE TO LOCAL AIRPORT (1.3km)
- LOCATED IN CLOSE PROXIMITY TO BUS STOPS AND LOCAL SHOPS
- SITE SLOPES FROM WESTERN TO EASTERN SIDES
- LARGE BLOCKS MINIMISE OVERSHADOWING FROM NEIGHBOURING HOUSES - LARGE BACK GARDENS
- NORTH IS AT THE BACK OF THE SITE, ALLOWING FOR CONSISTENT SOLAR ACCESS
- 90 DEGREE BOUNDARIES, RECTANGULAR SITE

- LARGE NUMBER OF TREES - AWAITING ARBORIST REPORT
- NO FOOTPATH IN STREET
- DRAINAGE PIT LOCATED FAR FROM SITE
- CLOSE PROXIMITY OF EASTERN NEIGHBOUR, WITH VIEWS DIRECTLY INTO SITE
- LOCATION OF GARDEN SHEDS ALONG NORTHERN BOUNDARY - IMPACT SOLAR ACCESS
SITE IS NOT DEEMED AN ACCESSIBLE AREA - LACK OF FREQUENT BUS SERVICES



NOMINATED ARCHITECT:		SIGNATURE:		ARCHITECT		CONSULTING ENGINEERS		CLIENT		PROJECT		TITLE		STATUS			
MICHAEL BULLEN				BREWSTER MURRAY PTY LTD PH (02) 9299 0988		GREENVIEW CONSULTING		HOMES NSW		RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING DEVELOPMENT UNDER NSW HOUSING SEPP 2021		SITE ANALYSIS		SKETCH DESIGN			
		C	19/09/23	FOR REVIEW								SCALE		PRJ	PROJECT No		
		B	03/07/23	FOR REVIEW								1:200		MB	BGZDY		
		A	23/06/23	FOR REVIEW		BCA CONSULTANT		LANDSCAPE CONSULTANT		64-70 STAPLETON AVENUE, CASINO 2470 LOTS 8, 9, 10, 11 IN DP31850		SHEET SIZE		DESIGNER	CHECKED		
		REV	DATE		NOTATION/AMENDMENT		GREENLAND DESIGN				FILE		PLOTTED	TYPE	SHEET	REV	
		DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.												DA02		C	

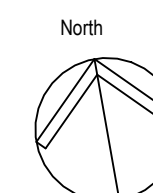


- LEGEND:**
- EXISTING BOUNDARY LINE
 - BUILDINGS / STRUCTURES TO BE DEMOLISHED
 - EXISTING TREES TO BE REMOVED
- EXISTING MEDIUM VALUE TREE TO BE RETAINED
- TREE No. FROM ARBORIST REPORT
- STRUCTURAL ROOT ZONE
- TREE PROTECTION ZONE (REFER TO ARBORIST REPORT FOR DIMENSIONS)
- REFER TO ARBORIST REPORT FOR TEMPORARY PROTECTION MEASURES TO TREES

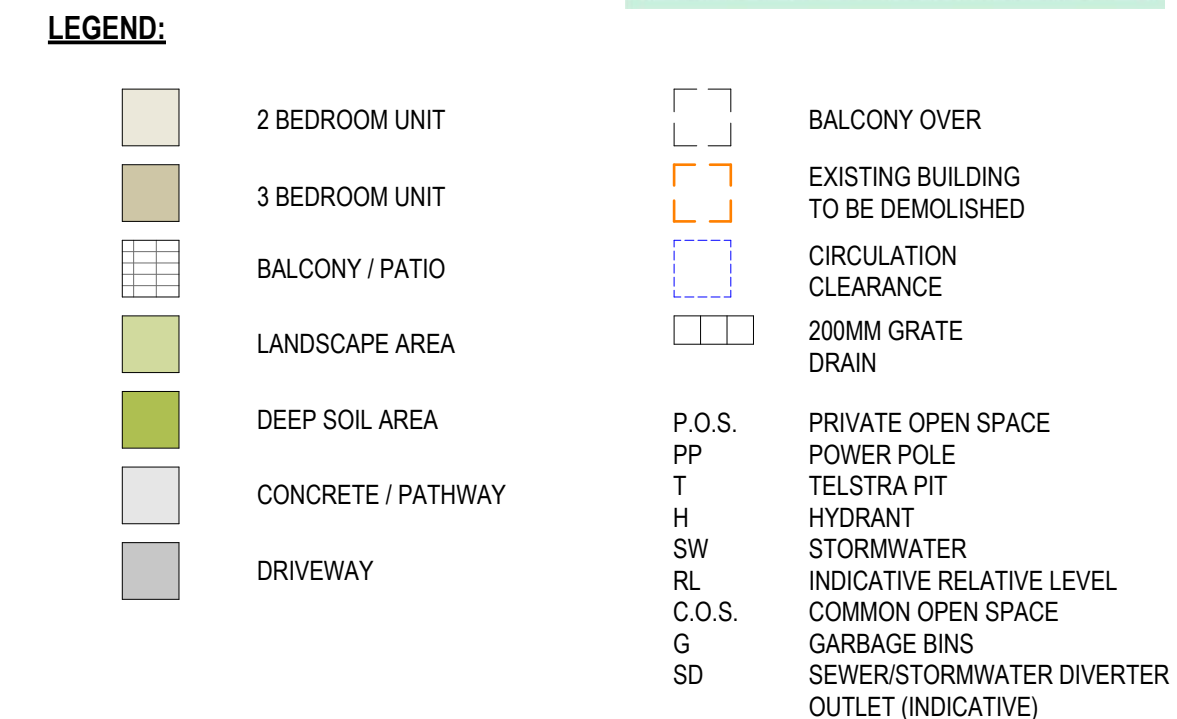
DEMOLITION NOTES:

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS INCLUDING AS3601 (2001 + AS AMENDED) THE DEMOLITION OF STRUCTURES, CODES AND LOCAL AUTHORITY REQUIREMENTS.
2. ALL EXISTING SERVICES ON & ADJACENT TO THE SITE TO BE VERIFIED ON SITE BEFORE COMMENCEMENT OF ANY WORK. CONFIRM EXISTING LOCATION OF SERVICES WITH DIAL BEFORE YOU DIG!
3. PROVIDE TEMPORARY FENCING AND STAGING FOR SAFETY AND SECURITY. PROVIDE LOCKABLE GATES FOR THE FULL DURATION OF CONSTRUCTION WORK UNTIL HAND OVER. FENCE SPECIFICATION TO BE IN-ACCORDANCE WITH COUNCIL AND WH&S STANDARDS. PROVIDE SIGNAGE TO COMPLY WITH COUNCIL REQUIREMENTS.
4. REFER TO LAHC REFERENCE SPECIFICATION FOR HOUSING CONSTRUCTION, SECTIONS (BUT NOT LIMITED TO): PRELIMINARIES & 01-DEMOLITION
5. DEMOLISH AND REMOVE FROM SITE STRUCTURES AS NOTED, MATERIALS ON SITE, INCLUDING ALL BUILDING STRUCTURES UNDERGROUND AND ANY UNDERGROUND INSPECTION AND PITS AND THEIR ASSOCIATED SERVICES LINES. MAKE SAFE ALL SERVICES.
6. ALLOW FOR ALL REMOVAL OF ALL ASBESTOS AND ANY HAZARDOUS MATERIALS ON SITE. DISPOSE HAZARDOUS MATERIAL IN-ACCORDANCE WITH EPA AND LOCAL COUNCIL'S REQUIREMENT. PAY FOR FEES ASSOCIATED WITH REMOVAL & DISPOSAL OF WASTE.
7. DEMOLISH & REMOVE FENCES AS NOTED BUT NOT LIMITED TO: WATER TANKS, SEPTIC TANKS, CLOTHES LINES, BBQ & ASSOCIATED AREAS, LANDSCAPING, DECKS, STAIRS, ANTENNAS, PONDS & ASSOCIATED SERVICES & EQUIPMENT.
8. TERMINATE, CAP OFF OR DIVERT OF ALL EXISTING SERVICES WHERE SO REQUIRED AND/OR ARE NECESSARY TO CARRY OUT NEW WORKS. PERFORM ALL WORKS IN BEST TRADESMAN-LIKE MANNER AND TO THE SATISFACTION OF RELEVANT AUTHORITIES.
9. ALL EXISTING STORMWATER & SEWERAGE DRAIN CONNECTIONS TO EXISTING MAINS TO BE CAPPED
10. WHOLE SITE TO BE MADE SECURE BY SUITABLE METAL FENCING/ HOARDINGS TO PREVENT ANY UNAUTHORISED ACCESS. SITE SECURITY AND SAFETY TO BE UNDERTAKEN BY BUILDING CONTRACTOR.
11. REMOVE ALL SPOIL & DEMOLISHED MATERIAL FROM SITE.
12. DISCONNECT ALL EXISTING ON SITE SERVICES TO THE SITE BOUNDARIES CLEAR OF WORKS. MAKE SAFE TO AUTHORITIES REQUIREMENTS.
13. ALL TREES SHOWN DOTTED TO BE REMOVED, ALL OTHER EXISTING TREES SHOWN TO REMAIN ARE TO BE PROTECTED DURING CONSTRUCTION WORK IN-ACCORDANCE WITH ARBORIST AND COUNCIL'S RECOMMENDATION. REFER TO LANDSCAPE DESIGN FOR ADDITIONAL INFORMATION.
14. CLEAR THE SITE OF ALL VEGETATION AND TOPSOIL, LEFT BEHIND MATERIALS, SPOIL, ETC
15. DEMOLISH EXISTING CROSSINGS TO COUNCIL'S REQUIREMENTS. MAKE GOOD TO SURROUNDS WHERE DISTURBED BY NEW WORKS TO COUNCIL ENGINEER'S SPECIFICATION. OBTAIN ALL COUNCIL APPROVALS AND PAY ALL AUTHORITIES' FEES / BONDS.
16. ALL DIMENSIONS SHOWN IN METRES

1 | DEMOLITION PLAN



NOMINATED ARCHITECT:	SIGNATURE:	E	22/02/24	FOR REVIEW	ARCHITECT	CONSULTING ENGINEERS	CUSTOMER	PROJECT	TITLE	STATUS	SKETCH DESIGN			
MICHAEL BULLEN		D	17/10/23	FOR REVIEW			HOMES NSW	RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING DEVELOPMENT UNDER NSW HOUSING SEPP 2021	DEMOLITION PLAN	DATE	SCALE	PROJ	PROJECT No	
		B	19/09/23	FOR REVIEW	BREWSTER MURRAY PTY LTD	GREENVIEW CONSULTING				22/02/24	1:200	MB	BGZDY	
		C	19/09/23	FOR REVIEW										
		B	03/07/23	FOR REVIEW										
		A	23/06/23	FOR REVIEW	BCA CONSULTANT	LANDSCOPE CONSULTANT								
		REV	DATE	NOTATION/AMENDMENT		GREENLAND DESIGN		64-70 STAPLETON AVENUE, CASINO 2470 LOTS 8, 9, 10, 11 IN DP31850	FILE	PLOTTED	TYPE	SHEET	REV	
			DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.									DA03	E	



- GENERAL NOTES:
- REFER TO CIVIL ENGINEERS DOCUMENTATION FOR PROPOSED STORMWATER
 - REFER TO SURVEY FOR ALL EXISTING SERVICES
 - REFER TO LANDSCAPE PLAN FOR PLANTING TYPES
 - ALL SLOPE ARROWS SHOW SLOPE UP UNLESS ANNOTATED 'FALL'
 - READ IN CONJUNCTION WITH CUT & FILL PLAN AND RETAINING WALLS SECTIONS
 - FENCE FEN-1 TYPICAL HEIGHT 1.2m AT FRONT, 1.8m AT REAR & WHERE PRIVACY REQUIRED
 - FENCE FEN-2 TYPICAL HEIGHT 1.8m (BOUNDARY FENCE)
 - FENCE FEN-3 TYPICAL HEIGHT 1.2m AT FRONT, 1.8m AT REAR, EXCEPT AS NOTED
 - FENCE FEN-4 TYPICAL HEIGHT 1.4m (GARBAGE BIN AREA BRICK WALLS)

DEEP SOIL ZONES CALCULATION

DSZ-1	71m ²
DSZ-2	22m ²
DSZ-3	41m ²
DSZ-4	114m ²
DSZ-5	34m ²
DSZ-6	60m ² (AT REAR)
DSZ-7	37m ² (AT REAR)
DSZ-8	147m ² (AT REAR)
DSZ-9	107m ² (AT REAR)
TOTAL	633m ²



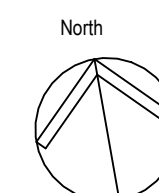
TREE 72
SILKY OAK

1 | SITE PLAN

SCALE 1 : 200

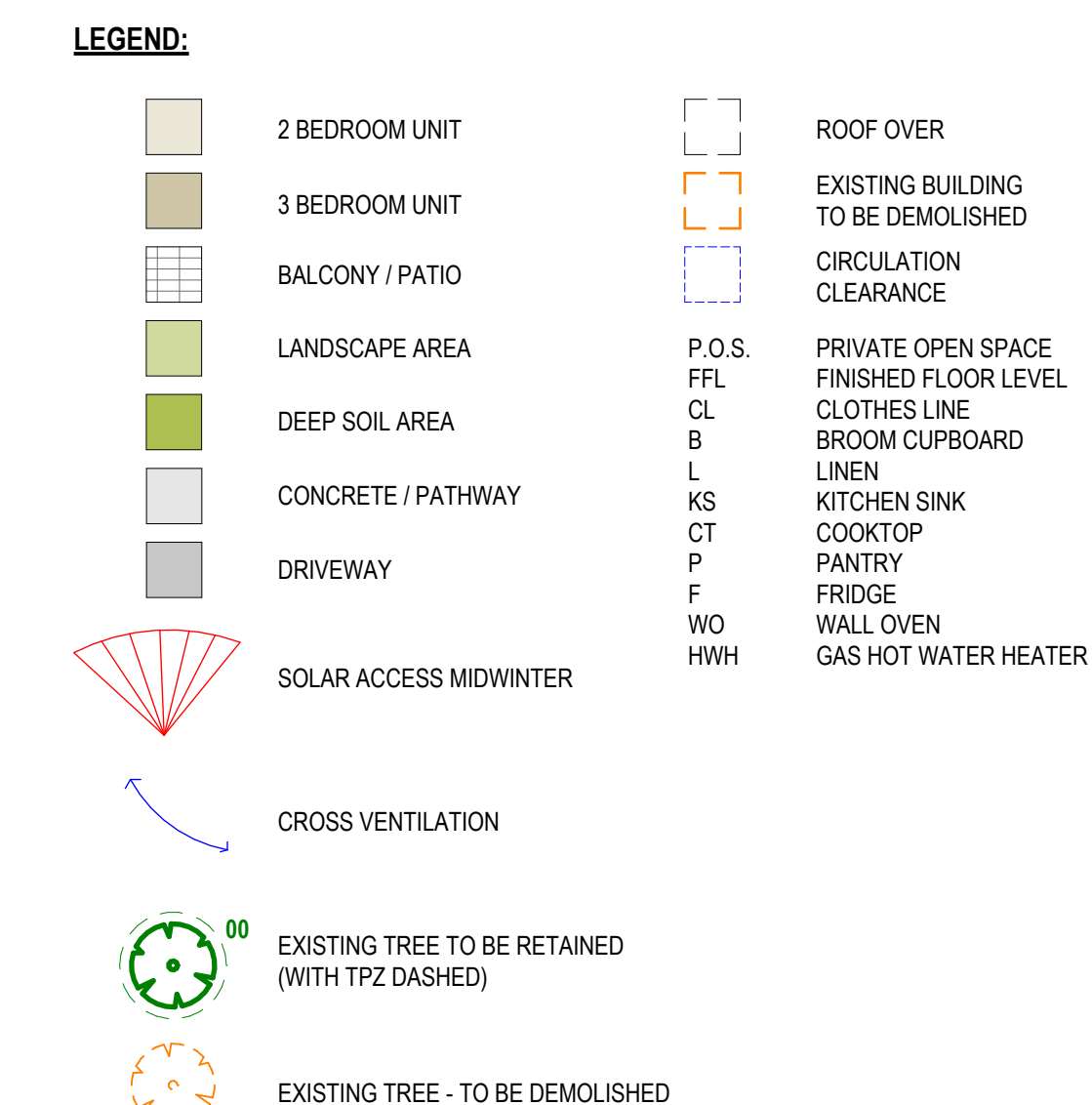


NOMINATED ARCHITECT:	SIGNATURE:	F 19/03/24 FOR REVIEW	ARCHITECT	CONSULTING ENGINEERS	CLIENT HOMES NSW	PROJECT RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING DEVELOPMENT UNDER NSW HOUSING SEPP 2021 64-70 STAPLETON AVENUE, CASINO 2470 LOTS 8, 9, 10, 11 IN DP31850	TITLE SITE PLAN	STATUS SKETCH DESIGN			
MICHAEL BULLEN		E 22/02/24 FOR REVIEW	BREWSTER MURRAY PTY LTD	GREENVIEW CONSULTING				DATE 19/03/24	SCALE 1:200	PROJ MB	PROJECT No BGZDY
		D 17/10/23 FOR REVIEW						STAGE	SHEET SIZE A1	DESIGNER AG	CHECKED MB
		C 19/09/23 FOR REVIEW									
		B 03/07/23 FOR REVIEW	BCA CONSULTANT	LANDSCAPE CONSULTANT							
		REV DATE NOTATION/AMENDMENT		GREENLAND DESIGN		FILE	PLOTTED	TYPE	SHEET	REV	
		DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.							DA04	F	




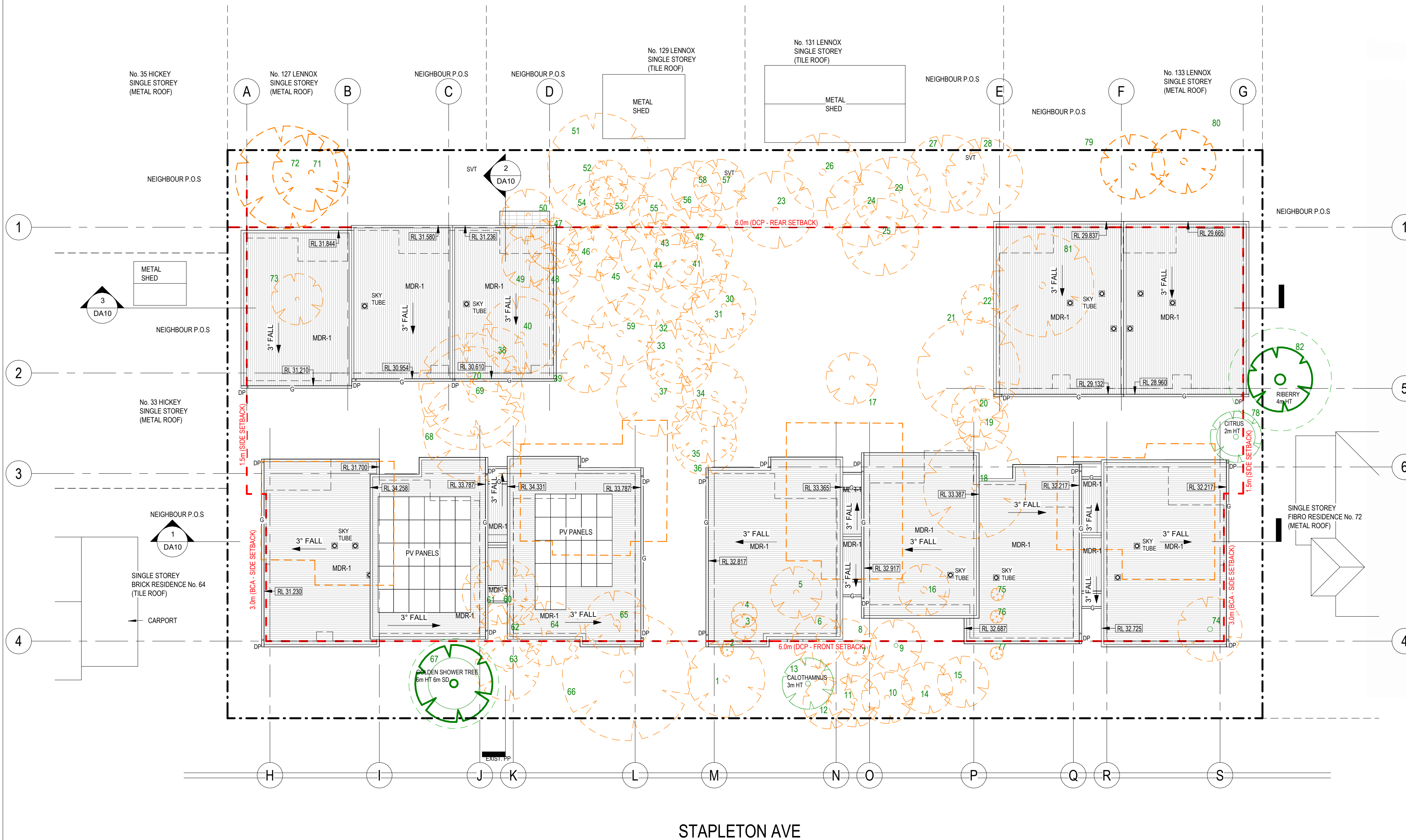


NOMINATED ARCHITECT:		SIGNATURE:		F	19/03/24	FOR REVIEW	ARCHITECT	CONSULTING ENGINEERS	CLIENT HOMES NSW	PROJECT RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING DEVELOPMENT UNDER NSW HOUSING SEPP 2021 64-70 STAPLETON AVENUE, CASINO 2470 LOTS 8, 9, 10, 11 IN DP31850	TITLE GROUND FLOOR PLAN	STATUS SKETCH DESIGN			
MICHAEL BULLEN				E	22/02/24	FOR REVIEW						DATE 19/03/24	SCALE 1:100	PROJ MB	PROJECT No BGZDY
				D	17/10/23	FOR REVIEW	BREWSTER MURRAY PTY LTD PH (02) 9239 0088	GREENVIEW CONSULTING				STAGE	SHEET SIZE A1	DESIGNER AG	CHECKED MB
				C	19/09/23	FOR REVIEW									
				B	03/07/23	FOR REVIEW	BCA CONSULTANT	LANDSCAPE CONSULTANT							
				REV	DATE	NOTATION/AMENDMENT		GREENLAND DESIGN			FILE	PLOTTED	TYPE	SHEET DA05	REV F
				DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. EQUIPED DIMENSIONS TAKE PRECEDENCE											



North

[illegible]



NCC 2022 NatHERS Thermal Performance Specification - Casino			
External Walls			
Wall Type	Insulation	Colour	Comments
Cavity Brick	R0.7	Light - SA < 0.475	Throughout, as per elevations
Fibre Cement Sheeting	R2.5	Dark - SA > 0.70	Throughout, as per elevations
SA - Solar Absorbance			
Internal Walls			
Wall Type	Insulation	Comments	
Single skin brick	None	Internally in units (Ground floor)	
Plasterboard stud	None	Internally in units (Level 1)	
Cavity Brick	None	Shared walls with units/lobbies	
Floors			
Floor Type	Insulation	Comments	
Concrete slab on ground	None	Ground floor	
Concrete	None	Level 1 (units above)	
Ceilings			
Ceiling Type	Insulation	Comments	
Plasterboard	None	Unit above	
Plasterboard	R2.5	Roof/air above	
Insulation loss due to downlights has been modelled in this assessment. A sealed exhaust fan has been included in every kitchen, bathroom, laundry and ensuite.			
Roof			
Roof Type	Insulation	Colour	Comments
Metal	R1.3 foil-faced blanket	Light - SA < 0.475	Throughout (unventilated cavity)
SA - Solar Absorbance			
Glazing			
Opening type	U-Value	SHGC	Glazing & Frame Type
Sliding + Fixed (Throughout)	6.7	0.70	e.g. Single glazed clear Aluminium frame
Awning (Throughout)	6.7	0.57	e.g. Single glazed clear Aluminium frame
U and SHGC values are based on the AFRC Default Windows Set. Glazing systems to be installed must have an equal or lower U value and a SHGC value ± 10% of the above specified values.			
Skylights			
Skylight Type	Frame Type	Comments	
Tubular	Timber and aluminium	Single glazed clear, Bathrooms in Units: 1, 9-12, 16-18, WCs in Units: 1, 11 & 12, Laundrys in Units: 1, 11-12, 18	
Ceiling fan			
Size	Location	Comments	
1200mm in diameter	Living	Throughout	
900mm in diameter	Bedrooms	Throughout	

Certificate Prepared by

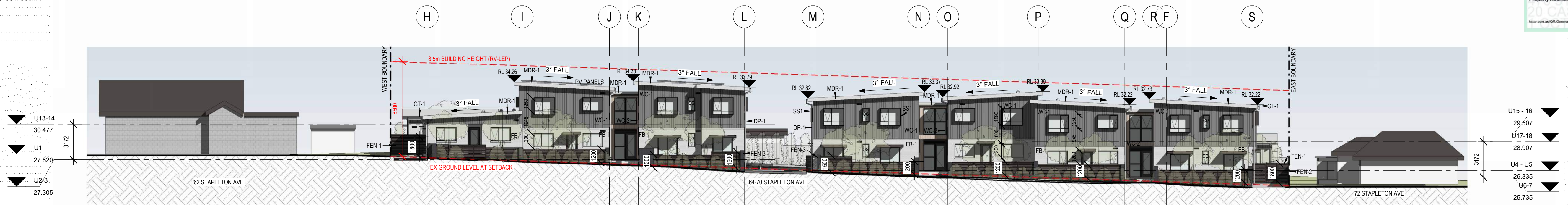
greenview
CONSULTING

Greenview Consulting Pty Ltd
ABN: 32600067338
Email: dean@greenview.net.au Phone: 0404 649 762

1 | ROOF PLAN
SCALE 1 : 200

LEGEND:
DP DOWNPIPE
G COLORBOND GUTTER
MDR-1 COLORBOND METAL DECK ROOF

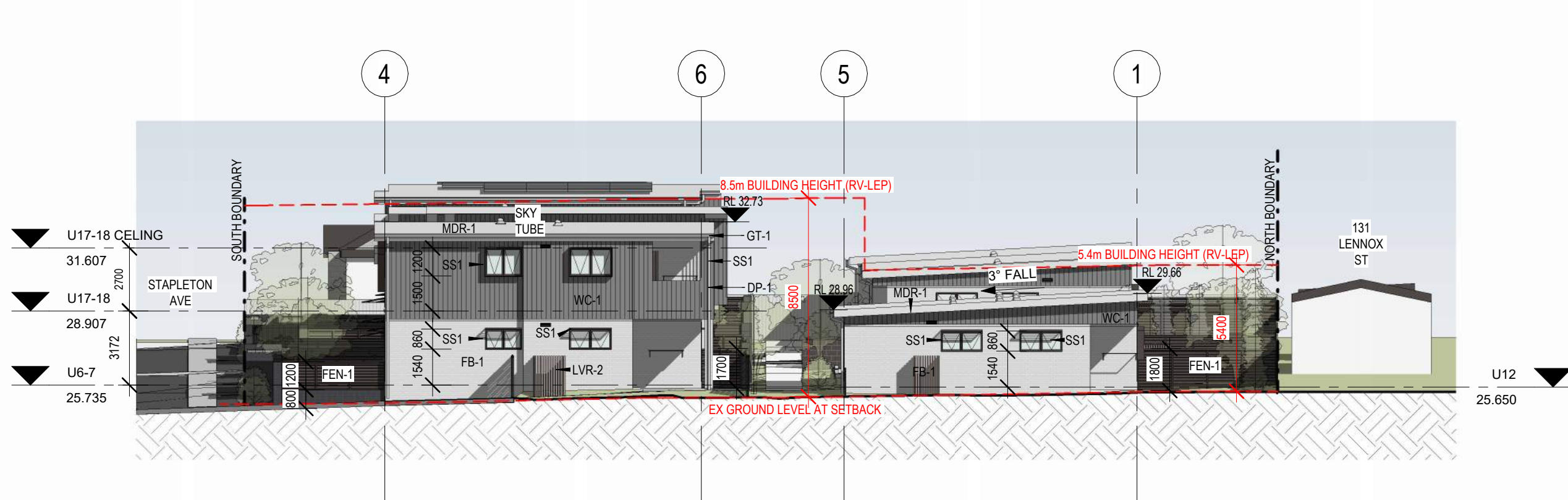
NOTE:
REFER TO FINISHES SCHEDULE FOR MATERIALS



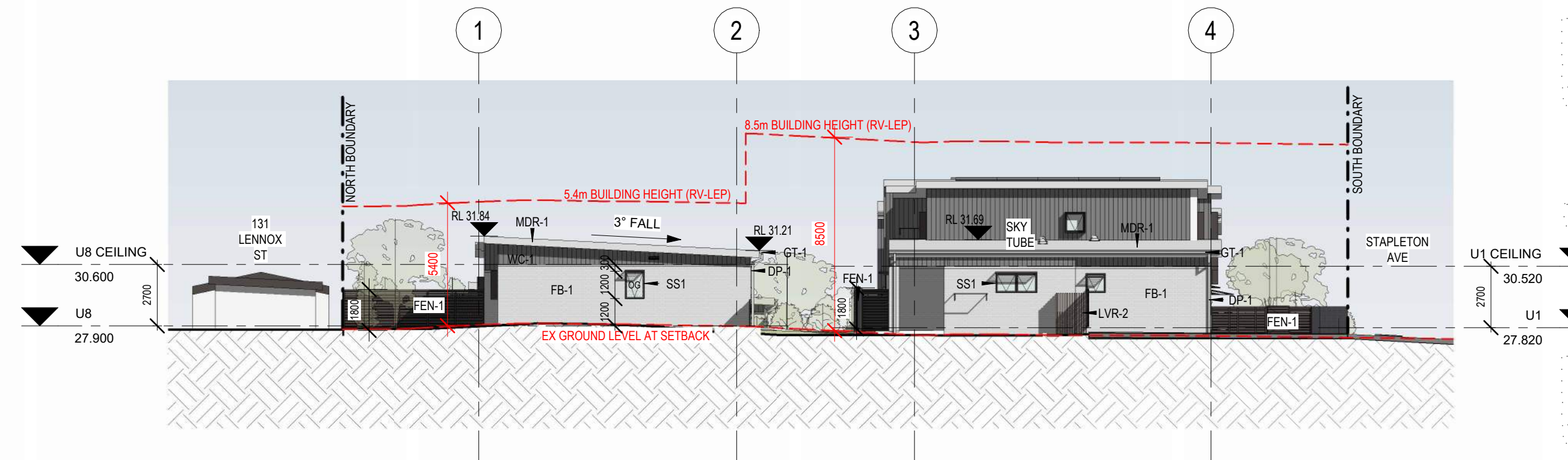
1 SOUTH ELEVATION (STAPLETON AVE)
SCALE 1 : 200



2 NORTH ELEVATION
SCALE 1 : 200



3 EAST ELEVATION
SCALE 1 : 200



4 WEST ELEVATION
SCALE 1 : 200



NOMINATED ARCHITECT:	SIGNATURE:	F 19/03/24 FOR REVIEW
MICHAEL BULLEN		E 22/02/24 FOR REVIEW
		D 17/10/23 FOR REVIEW
		C 19/09/23 FOR REVIEW
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REV	DATE	NOTATION/AMENDMENT
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ARCHITECT	BREWSTER MURRAY PTY LTD
BCA CONSULTANT	

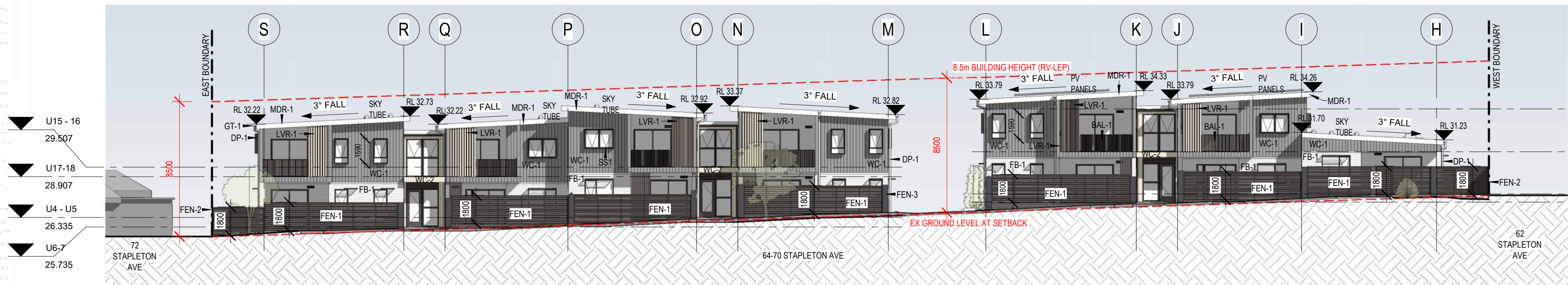
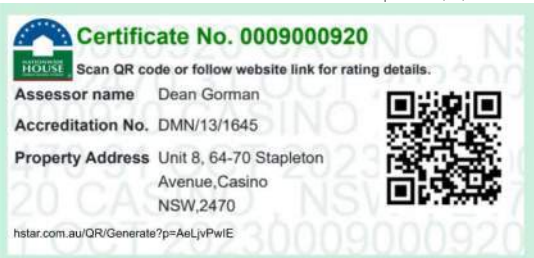
CONSULTING ENGINEERS	
LANDSCAPE CONSULTANT	

CLIENT	HOMES NSW
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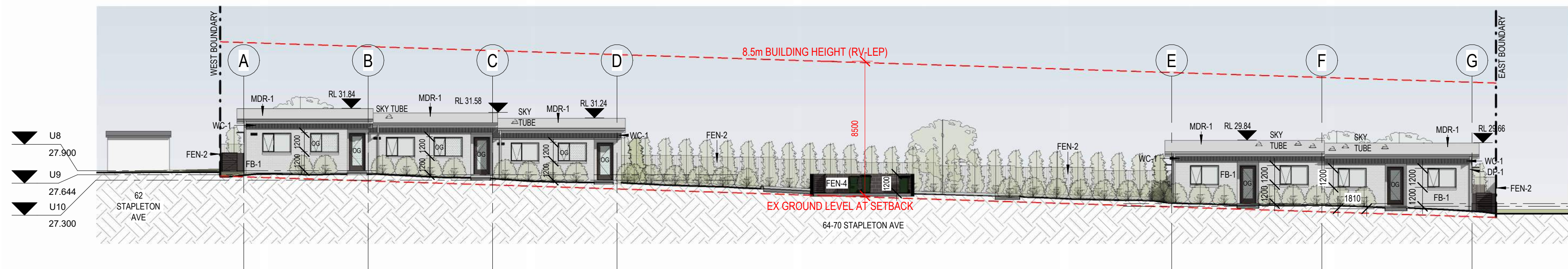
PROJECT	RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING DEVELOPMENT UNDER NSW HOUSING SEPP 2021
64-70 STAPLETON AVENUE, CASINO 2470	LOTS 8, 9, 10, 11 IN DP31850

TITLE	ELEVATIONS 1
FILE	
PLOTTED	

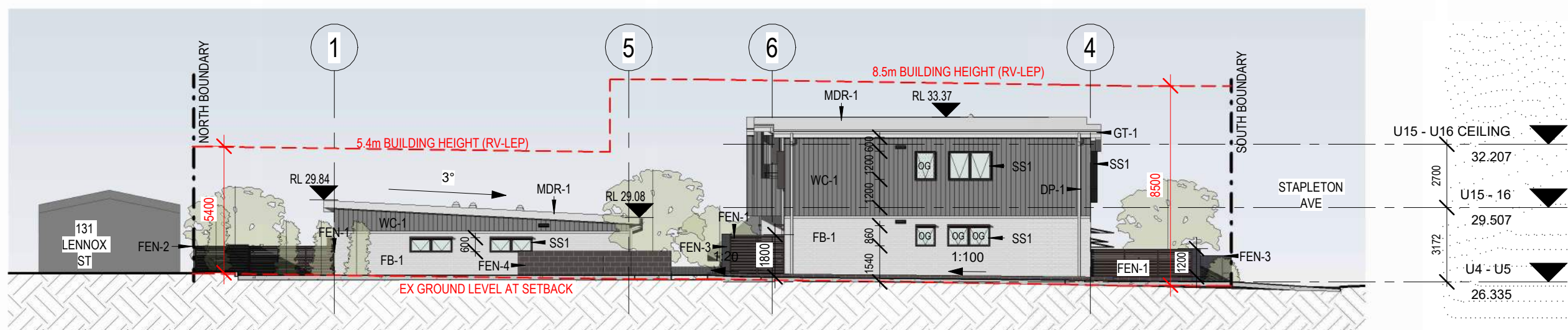
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DATE	19/03/24	SCALE	1:200
STAGE	A	PROJ	MB
		DESIGNER	AG
		CHECKED	
		TYPE	
		SHEET	DA08
		REV	F



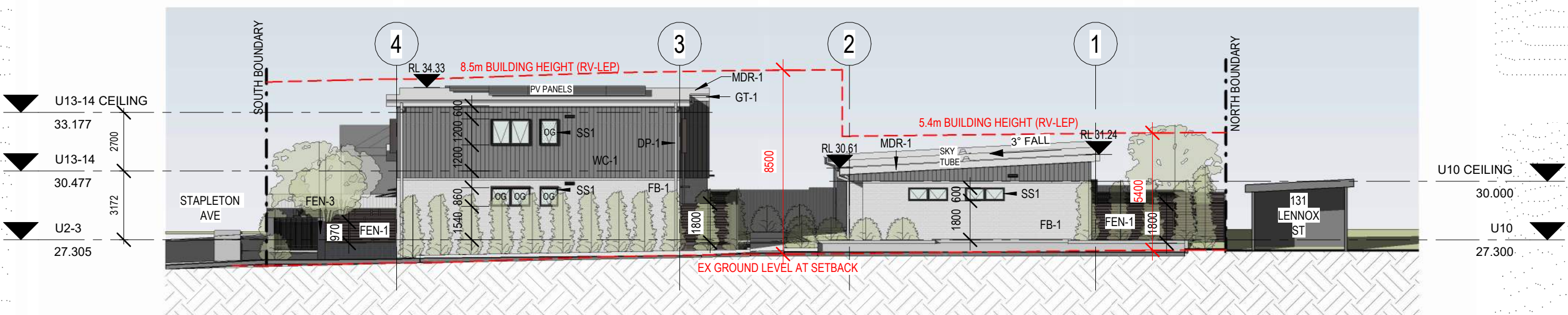
5 FRONT UNITS NORTH ELEVATION
SCALE 1 : 200



6 REAR UNITS SOUTH ELEVATION
SCALE 1 : 200



7 WEST ELEVATION (FROM CARPARK)
SCALE 1 : 200



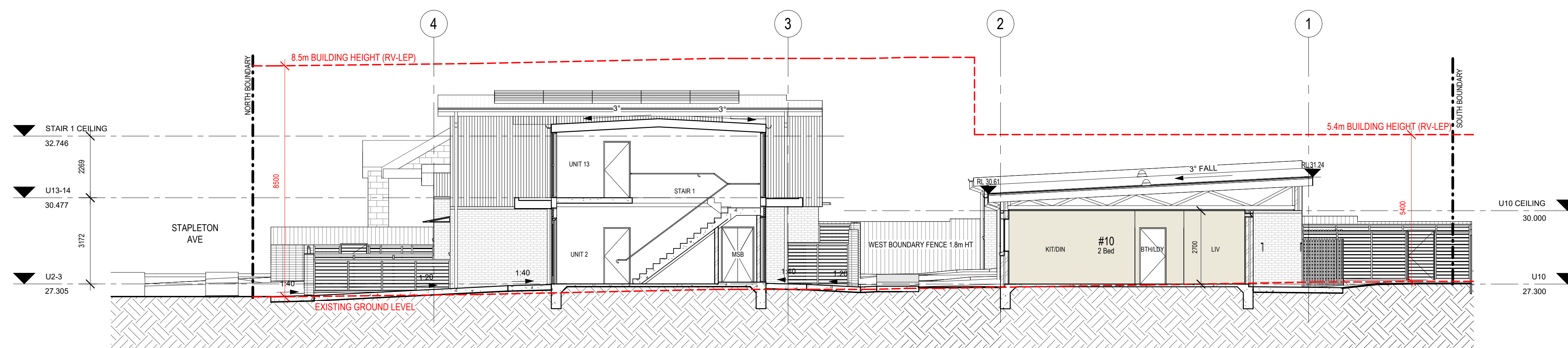
8 EAST ELEVATION (FROM CARPARK)
SCALE 1 : 200

EXTERIOR FINISHES

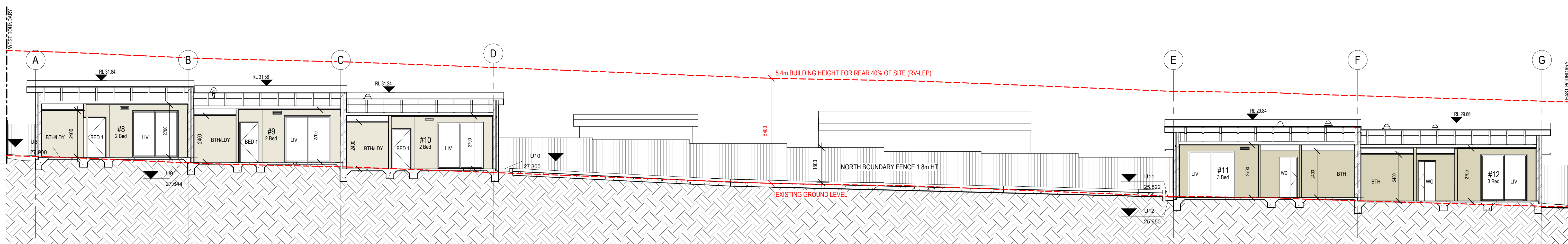
CODE	MATERIAL	DESCRIPTION	FINISH
FB-1		FACE BRICK	LIGHT GREY WITH NATURAL VARIATION
WC-1		WALL CLADDING	FIBRE CEMENT SHEETING DARK GREY
MDR-1 DP-1, GT-1		METAL ROOF	SIMILAR TO COLORBOND SHALE GREY
SS1, VT, BAL-1, FEN-1, DP-2, GT-2		ALUMINIUM WINDOW & DOOR FRAMES, VENTS, METAL FLASHINGS, ALUMINIUM PRIVACY FENCING, GUTTERS, DOWNPIPES, METAL FLASHINGS	SIMILAR TO COLORBOND WOODLAND GREY
WC-2		METAL CLADDING	SIMILAR TO SAND

CODE	MATERIAL	DESCRIPTION	FINISH
CONC-1		PATHWAYS	LIGHT GREY CONCRETE
CONC-2		DRIVEWAYS	DARK GREY CONCRETE
FEN-3		FENCE PIERS	DARK GREY
FEN-4		SPLIT FACE BLOCK	DARK GREY
LVR-1, LVR-2		PRIVACY LOUVRES	WOOD-LOOK ALUMINIUM

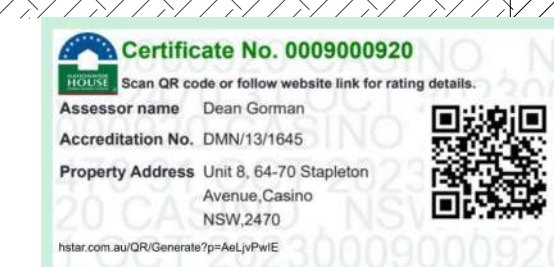
1 | SECTION 01
SCALE 1 : 100



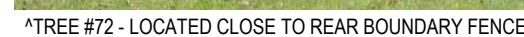
2 | SECTION 02
SCALE 1 : 100



3 | SECTION 03
SCALE 1 : 100



NOMINATED ARCHITECT:	SIGNATURE:			ARCHITECT	CONSULTING ENGINEERS	CLIENT	PROJECT	TITLE	STATUS				
MICHAEL BULLEN		D	17/10/23	FOR REVIEW		HOMES NSW	RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING DEVELOPMENT UNDER NSW HOUSING SEPP 2021	SECTIONS	SKETCH DESIGN				
		C	19/09/23	FOR REVIEW	BREWSTER MURRAY PTY LTD					DATE	SCALE	PROJ	PROJECT No
		B	03/07/23	FOR REVIEW						17/10/23	1:100	MB	BGZDY
		A	23/06/23	FOR REVIEW	BCA CONSULTANT					STAGE	SHEET SIZE	DESIGNER	CHECKED
					LANDSCAPE CONSULTANT					A	A1	AG	
		REV	DATE	NOTATION/AMENOMENT			64-70 STAPLETON AVENUE, CASINO 2470	FILE	PLOTTED	TYPE	SHEET	REV	
				DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE.			LOTS 8, 9, 10, 11 IN DP31850				DA10	D	



- AREA OF FILL (APPROX)

AREA OF CUT (APPROX)

OUTLINE OF BUILDING SLABS

EXISTING BUILDINGS TO BE DEMOLISHED

EXISTING TREES TO BE DEMOLISHED

TREE NUMBER FROM ARBORIST REPORT

EXISTING TREES TO REMAIN

SW DRAINAGE (REFER TO CIVIL PLAN)

SWP STORMWATER PIT

U/S 00.000 PROPOSED UNDERSIDE OF SLAB LEVEL (APPROX)

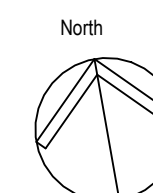
RL 00.000 PROPOSED FINISH GROUND RL (APPROX)

EXISTING GROUND LEVELS (FROM SURVEY)

NOTES:

1. BUILDER TO VERIFY ALL PROPOSED LEVELS FOR EXCAVATION, ALL SURVEY INFORMATION, INCLUDING SEVERALS AND LEVELS, AND MAKE ADJUSTMENTS TO SUIT FINISHED REDUCED LEVELS PRIOR TO EXCAVATION COMMENCING
2. BUILDER TO VERIFY ALL ABOVE GROUND / INGROUND POND, POOLS, WATER TANKS & SEPTIC TANKS ON SITE. AFTER DEMOLITION & REMOVAL OF THESE ITEMS, BUILDER TO INFILL HOLE TO NATURAL GROUND LEVEL OR INFILL TO REQUIRED LEVEL FOR CONSTRUCTION.
3. EXTENT OF CUT AND FILL AREAS SHOWN SHADED ARE INDICATIVE FOR BULK EXCAVATION ONLY. CONTRACTOR TO VERIFY ON SITE.

1 | CUT AND FILL PLAN

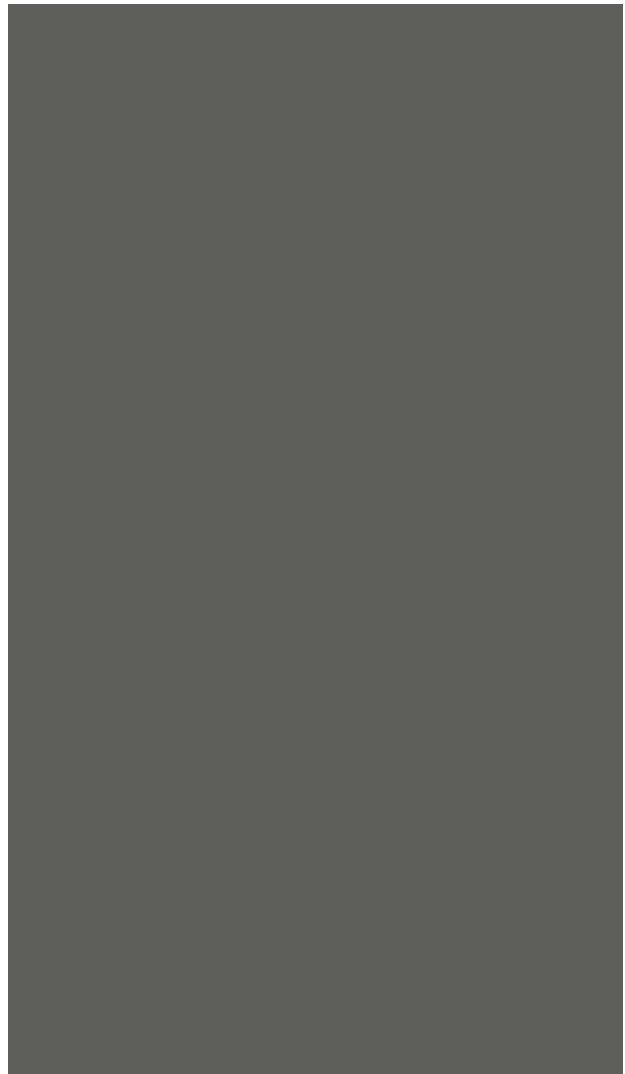


NOMINATED ARCHITECT:		SIGNATURE:		CLIENT		PROJECT		TITLE		STATUS	
MICHAEL BULLEN				HOMES NSW		RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING DEVELOPMENT UNDER NSW HOUSING SEPP 2021		CUT & FILL & RETAINING WALLS		SKETCH DESIGN	
		D 17/10/23 FOR REVIEW		ARCHITECT						DATE 17/10/23	
		B 19/09/23 FOR REVIEW		BREWSTER MURRAY PTY LTD		GREENVIEW CONSULTING				SCALE	
		C 03/07/23 FOR REVIEW		PH (02) 9299 0908						PROJ MB	
		A 23/06/23 FOR REVIEW		BCA CONSULTANT		LANDSCAPE CONSULTANT				SHEET No	
		REV DATE NOTATION/AMENDMENT				GREENLAND DESIGN				DESIGNER AG	
		DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.				64-70 STAPLETON AVENUE, CASINO 2470 LOTS 8, 9, 10, 11 IN DP31850		FILE		CHECKED MB	
								PLOTTED		PROJECT No	
								TYPE		BGZDY	
								SHEET		DA11	
										REV D	



PINK AREA INDICATES EXTENT SHADOWS CAST BY PROPOSED DEVELOPMENT

NOTE: NEIGHBOURING PROPERTIES OUTLINES ARE SHOWN INDICATIVE ONLY



PREFINISHED STEEL
- SIMILAR TO COLORBOND
WOODLAND GREY
WINDOW & DOOR FRAMES, SUN
SHADES, FENCING, TRIMS

FEN-1 G DP2 SS1



CERAMIC TILES - PRIVATE OPEN
SPACE - LIGHT GREY

CT-1



METAL WALL CLADDING
- SAND COLOUR

WC-2



PREFINISHED METAL ROOFING
- SIMILAR TO COLORBOND SHALE GREY

MDR-1 DP1



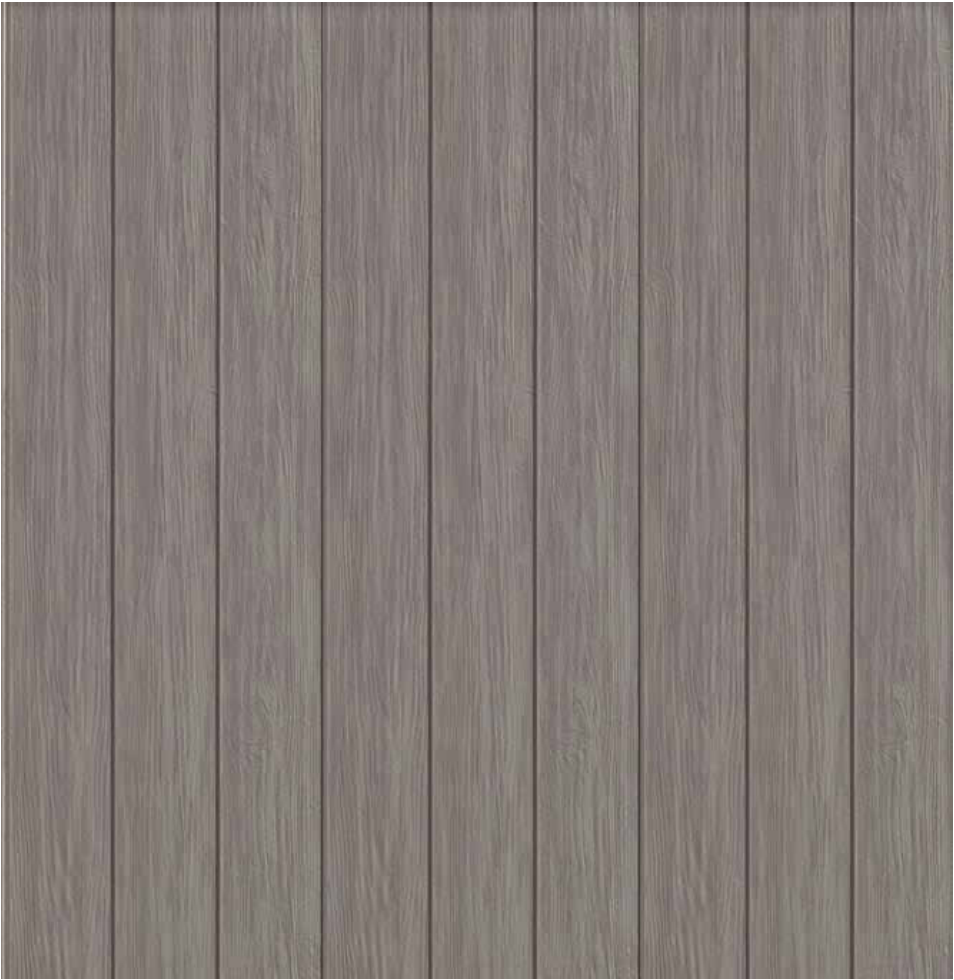
FACE BRICK - BRICK PIERS
- DARK GREY

FEN-3



FACE BRICK
- LIGHT GREY

FB-1



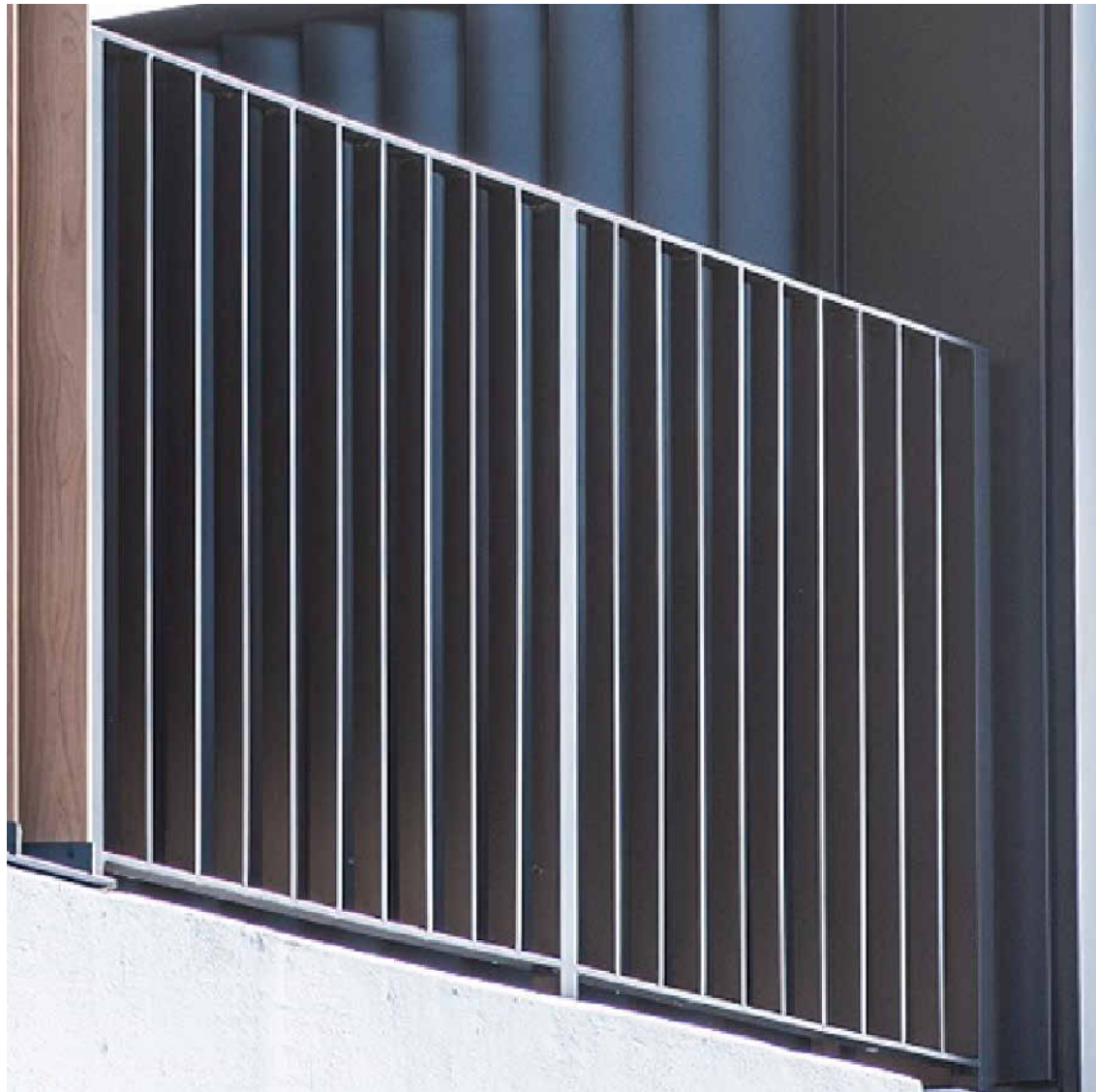
PREFINISHED FIBRE CEMENT CLADDING
- DARK GREY WITH WOODGRAIN

WC-1



SPLIT FACE BLOCKWORK
- DARK GREY
RETAINING WALLS, GARBAGE AREA

FEN-4



METAL BALUSTRADING
- DARK GREY

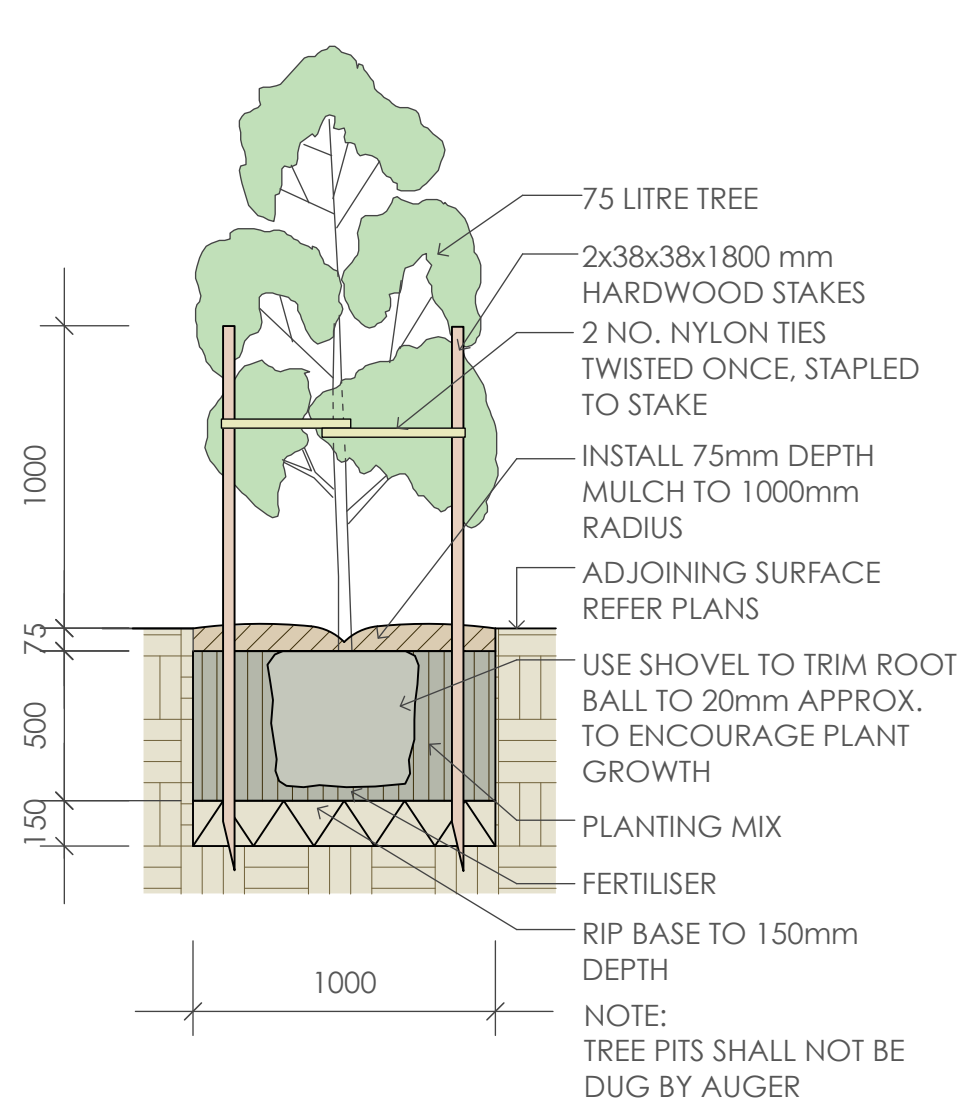
BAL-1



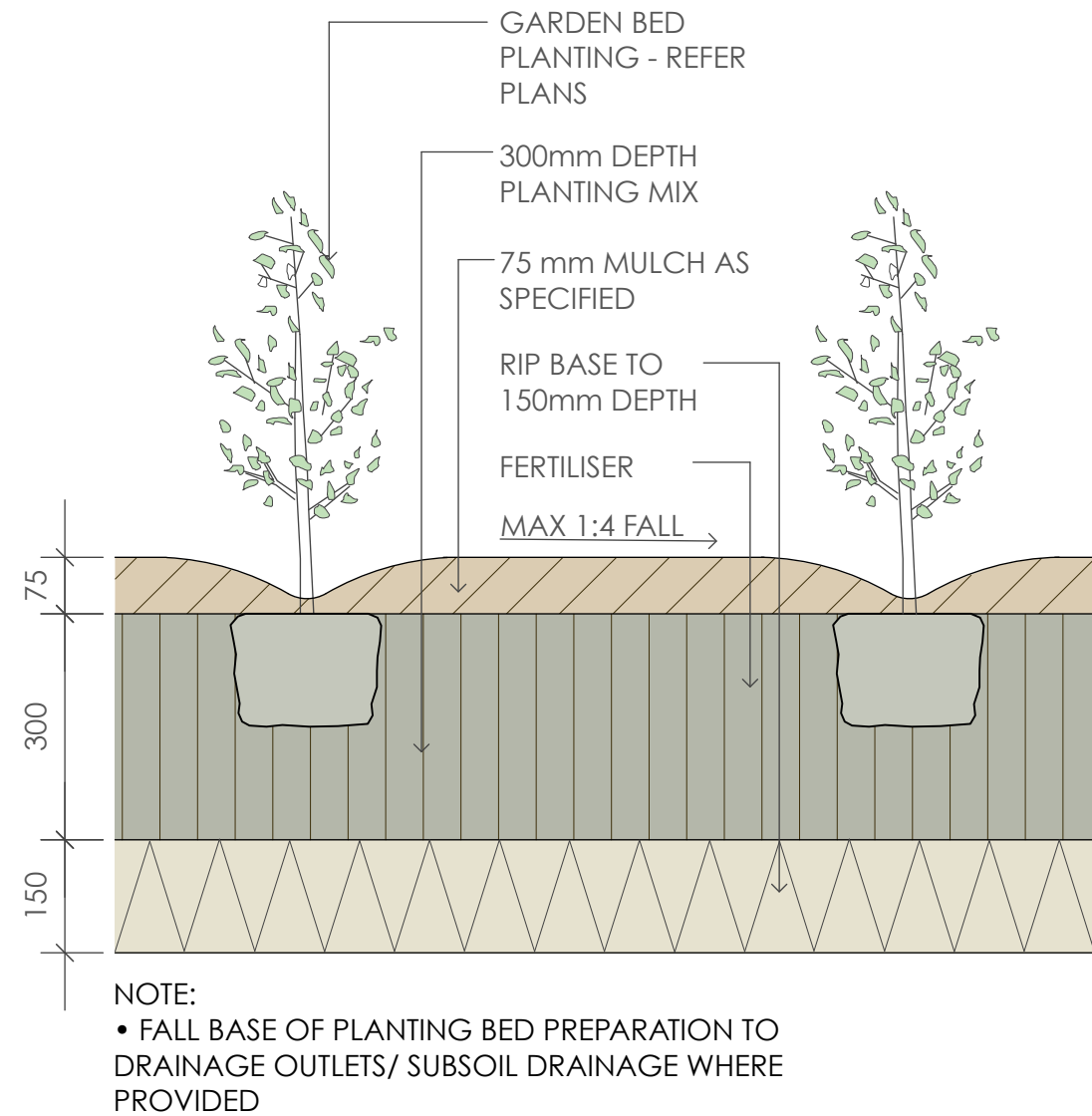
ALUMINIUM PRIVACY SCREENING
- WOOD-LOOK

LVR-1

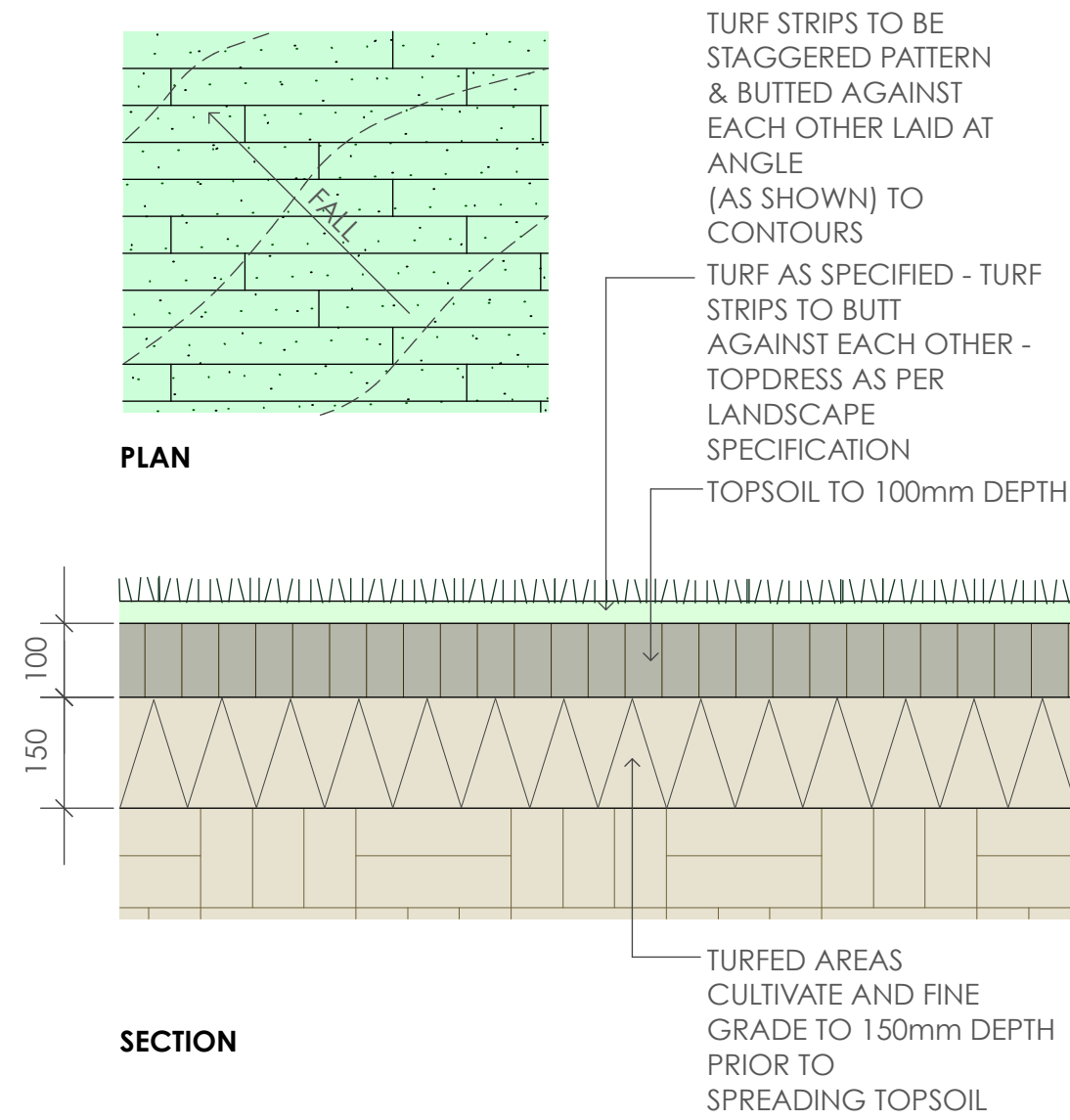




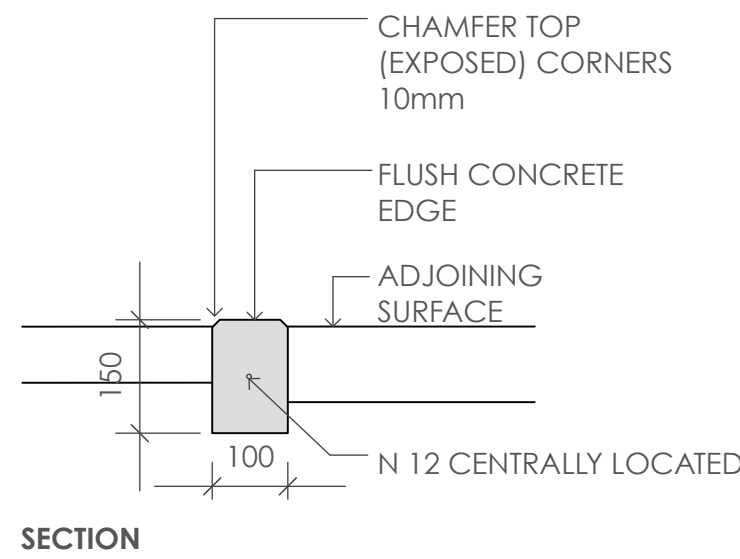
1 75 Litre Tree Planting
scale 1:25



2 Planting Bed Detail
scale 1:10



3 Turfing
scale as shown



4 Concrete Edge
scale 1:10

Plant Schedule							
ID	Qty	Common Name	Botanical Name	Size	Mature Height	Mature Spread	Native (N)
Trees							
BacCit	1	Lemon Scented Myrtle	Backhousia citriodora	75Litre	6 - 8m	4 - 5m	N
ElaRet	6	Blueberry Ash	Elaeocarpus reticulatus	75Litre	8 - 10m	3 - 4m	N
Trilus	11	Water Gum	Tristania laurina 'Luscious'	75Litre	6 - 8m	3.5 - 6m	N
Shrubs							
AcaGree	14	Green Mist	Acacia cognata 'Green Mist'	200mm	1.0 - 1.5m	0.8 - 1.0m	N
AcmAlly	153	Allyn Magic	Acmena 'Allyn Magic'	200mm	0.6 - 0.8m	0.6 - 0.8m	N
AcmChe	30	Forest Flame	Acmena 'Cherry Surprise'	200mm	3.0 - 5.0m	1.2 - 1.5m	N
BanSpi	10	Hairpin Banksia	Banksia spinulosa	200mm	2.0 - 3.0m	1.5 - 2.0m	N
CalAnz	19	White Bottle Brush	Callistemon citrinus 'White Anzac'	200mm	0.9 - 1.1m	2.0 - 3.0m	N
CallLit	45	Little John	Callistemon 'Little John'	200mm	0.9 - 1.5m	0.9 - 1.2m	N
CalRed	48	Red Alert Bottle Brush	Callistemon 'Red Alert'	200mm	1.0 - 1.5m	2.0 - 3.0m	N
CorAlb	48	White Correa	Correa alba	200mm	0.9 - 1.5m	0.9 - 1.2m	N
CorStri	14	Narrow Palm Lily	Cordylina stricta congesta	200mm	1 - 2m	0.8 - 1.0m	N
CosEve	76	Evening Glow Mirror Plant	Coprosma 'Evening Glow'	200mm	1.2 - 1.5m	0.9 - 1.2m	N
CriPed	35	Swamp Lily	Crinum pedunculatum	200mm	1.5 - 2m	1.2 - 2.0m	N
GreHon	7	Honey Gem Grevillea	Grevillea 'Honey Gem'	200mm	3.0 - 4.0m	2.0 - 3.0m	N
GreRob	45	Robyn Gordon Grevillea	Grevillea Robyn Gordon	200mm	1.0 - 1.5m	1.0 - 1.2m	N
GreSer	29	Pink Spider Flower	Grevillea sericea	200mm	0.9 - 1.5m	0.9 - 1.2m	N
LepGree	74	Green Screen Leptospermum	Leptospermum 'Green Screen'	200mm	1.2 - 1.5m	1.2 - 1.5m	N
SH	9	Heath-leaved Banksia	Banksia ericifolia	200mm	3 - 5m	3.5 - 6m	N
SyzCas	25	Cascade Lilly Pilly	Syzygium 'Cascade'	200mm	2 - 3m	1.5 - 2.0m	N
SyzRes	50	Resilience Lilly Pilly	Syzygium 'Resilience'	200mm	2 - 3m	1.2 - 2.0m	N
WesFru	4	Jervis Gem	Westringia fruticosa 'Jervis Gem'	200mm	0.8 - 1.2m	0.8 - 1.2m	N
Ground Covers							
LamTan	297	Spiny-headed mat rush	Lomandra longifolia 'Tanika'	150mm	0.45 - 0.6m	0.6 - 0.9m	N
WesMun	83	Mundi	Westringia fruticosa 'Mundi'	150mm	0.45 - 0.6m	0.9 - 1.2m	N
DiaTas	270	Flax Lily	Dianella tasmanica 'Tasred'	150mm	0.4 - 0.5m	0.4 - 0.5m	N
DicEme	134	Emerald Falls Dichondra	Dichondra 'Emerald Falls'	150mm	0.0 - 0.3m	0.9 - 1.2m	N
MyoYar	145	Carpet Spreading Myoporum	Myoporum parvifolium 'Yareena'	150mm	0.05 - 0.1m	0.8 - 1.0m	N
HypGol	59	Gold Nugget	Hymenoporum flavum 'Gold Nugget'	150mm	0.10 - 0.15m	0.8 - 1.0m	N
CosCou	34	Cousin It	Casuarina 'Cousin It'	150mm	0.10 - 0.15m	0.8 - 1.0m	N
VioHed	156	Native Violet	Viola hederacea	150mm	0.0 - 0.3m	1.2 - 2.0m	N
BraMul	19	Break O Day	Brachyscome multifida	150mm	0.2 - 0.3m	0.4 - 0.5m	N
BanBir	10	Birthday Candle	Banksia spinulosa 'Birthday Candle'	150mm	0.45 - 0.6m	0.9 - 1.2m	N

SPECIFICATION NOTES

PLANTING MATERIALS

Planting Mix:

Planting mix for tree pit backfill shall be "Organic Garden Mix" consisting of

- 50% Black Soil
- 20% Coarse Sand
- 30% Organic Material

as available from Australian Native Landscapes, Phone: [02] 9450 1444, or approved equivalent. Samples shall be provided to the Superintendent prior to ordering or delivery to site. Any material delivered to site, that is rejected by the Superintendent, shall be removed by the contractor at his own expense. Minimum depths of mix to all planting bed areas is as specified on details.

Mulch:

Mulch to garden bed:

Mulch shall mean hardwood mulch (25mm grade), free from material derived from Privet, Willow, Poplar, Coral trees, or other noxious weeds. Any mulch exceeding the 25mm grade shall be rejected / removed from the site. Graded hardwood mulch to be supplied by Australian Native Landscapes Pty Ltd Phone (02) 9450 1444, or approved equivalent.

Spread mulch so that after settling, it is:

- smooth and evenly graded between design surface levels;
- flush with adjacent finished levels;
- of the required depths (75mm); and
- sloped towards the base of plant stems in plantation beds, but not in contact with the stem (not closer than 50mm in the case of gravel mulches).

Place after the preparation of the planting bed, planting and all other work.

Plant Material:

All plant material must be true to the species. No substitutes will be allowed. All plants shall be free of fungus and insect damage. All plants shall be healthy, well shaped, not soft or force grown and not root bound. Plants are available from **Andreasens Green** wholesale nursery, contact Darren (02) 8777 4713, email darren@andreasensgreen.com.au or approved equivalent.

Turfed areas:

All new turf areas are to be selected weed free Sir Walter DNA Certified Buffalo. Turf shall be laid neatly butted with staggered joints, flush with adjacent surfaces and have even running falls to all drainage points. All new turf area shall have a minimum 150mm depth of weed free top soil, placed and levelled prior to turfing.

PREPARATION AND HARDWORKS

Excavating for Spot Planting

To planting areas, excavate a hole for each plant large enough to provide not less than twice the depth and twice the diameter than the root ball of species to be planted.

Staking

Use durable hardwood, straight, free from knots or twists, pointed at one end. Drive stakes into the ground a minimum one third of their length, avoiding damage to the root system.

- 75 Litre trees in 2 x 38x38x1800mm Hardwood Stake with double Nylon tie TIES: Provide a 50mm wide Nylon webbing tie per stake, fixed securely to the stakes, one tie at half the height of the main stem and the other as necessary to stabilise the plant.

Concrete Edge

MATERIALS: Concrete to be off white colour.

INSTALLATION: Supply and install 150 x 100mm (width) reinforced flush concrete kerb to locations as approved on site by the Superintendent. Provide flexible joints at maximum 3 metre intervals in colour to match concrete. Lightly expose aggregate through rinsing / sponging. Tool finish exposed edges with 10mm pencil round to prevent chipping.

MAINTENANCE / PLANT ESTABLISHMENT

Maintenance shall apply to all hard and soft landscape materials installed prior to the "handover" and acceptance by Principles Representative and the Site Superintendent. The maintenance period shall convenience at the granting of practical completion and shall extend for 12 months.

Maintenance shall consist of the following works:

- Follow a daily watering programme to be approved by Superintendent. Water all plants individually, twice per week or when necessary to ensure constant plant growth. Water all turf and native grassed areas, twice per week.
- Apply appropriate weed control sprays and hand weed as required to maintain planting areas, native grassing bed areas, turf areas, paved areas, and tree pits in turf free of weed or rogue grass growth.
- Regularly tidy and top up mulch and trim edges to prevent spill over onto paved / grassed areas.
- Spray to control pests and diseases.
- Replace plants, which fail with plants of a similar size and quality as originally specified to approval of Superintendent. Costs of replacement shall be the responsibility of the Contractor. Replacement planting will be undertaken within 2 weeks of identification of dead material or instruction be the Superintendent.
- Report any incidence of plants stolen or destroyed by vandalism.
- Adjust stakes and ties to plants as necessary. Ensure that strangulation of plants does not occur.
- Prune and shape plants as directed or where necessary.
- Make good any defects or faults arising out of defective workmanship or materials.
- Fertilise lawn areas to maintain healthy growth.
- Make good any erosion or soil subsidence, which may occur including soft areas in pathways.
- Mow lawn to maintain neat healthy growth.
- A final inspection shall be made by the Superintendent before handover. Any items requiring rectification shall be repaired before the works are finally approved, and retention moneys released.

NOTE:

- All finished levels are to be verified by Contractor on site.
- All landscape works be in strict accordance with Council's landscape code and guidelines
- This plan to be used in conjunction with all other submitted architectural, hydraulics and engineering drawing where applicable.

GREENLAND DESIGN												
TWELVE MONTHS MAINTENANCE SCHEDULE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plant Care												
Monitoring												
Pruning as required												
Deadhead /tip pruning												
Slow release fertilise												
Rapid suluble fertilise as required												
Cut back perennials and grasses												
Watering as required												
Garden Bed												
Edging												
Remove weeds and herbicide spraying as required												
Top up mulch as required												
Dead foliage removal												
Pest Management												
Monitoring and herbicide spraying as required												
Turfed Area												
Fertilise												
Make good turf as required												
Winter clean up												
Remove dead foliage and pruning as required												



LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718

D	18/03/2024	DA	ARCHITECT BREWSTER MURRAY PTY LTD PH (02) 9299 0988
C	24/10/2023	DA	PROJECT MANAGER HOMES NSW
B	16/08/2023	SKETCH	
A	23/06/2023	SKETCH	
REV	DATE	NOTATION/AMENDMENT	LANDSCAPE CONSULTANT GREENLAND DESIGN PTY LTD PH 0403 164 198
DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.			

PROJECT:	RESIDENTIAL FLAT BUILDING AND MULTI DWELLING HOUSING UNDER HOUSING SEPP 2021
TITLE:	64-70 STAPLETON AVENUE, CASINO 2470 LOTS 8, 9, 10, 11 IN DP31850

STATUS:	DA	DATE:	18/03/2024	SCALE:	Varies	PROJ:		PROJECT NO:	BGZDY
STAGE:		DRAWN:	CL	CHECKED:	GD	HOUSING ARCHITECT:		REV:	D
FILE:	2754	PLOTTED:		TYP:	LA	SHEET:	2 of 2		

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PROPOSED DEVELOPMENT

64-70 Stapleton Avenue, Casino, NSW

greenview Job No: 220996

GENERAL NOTES

- ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION.
- THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN.
- IT IS THE RESPONSIBILITY OF THE TENDERER TO SEEK CLARIFICATION WHERE DOCUMENTATION IS CONFLICTING OR UNCLEAR, WHERE NO CLARITY IS OBTAINED, THE TENDERER IS TO ALLOW FOR BOTH INTERPRETATIONS IN THEIR PRICES.
- CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER.
- SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE.
- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- ALL DRAINAGE LINES THOUGH ADJACENT LOTS SHALL BE CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S STANDARDS.
- PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE A TRAFFIC MANAGEMENT PLAN PREPARED BY AN ACCREDITED PERSON IN ACCORDANCE WITH RMS REQUIREMENTS, FOR ANY WORK ON OR ADJACENT TO PUBLIC ROADS, PLAN TO BE SUBMITTED TO COUNCIL & RMS AS REQUIRED.
- THESE PLANS SHALL BE A READ IN CONJUNCTION WITH OTHER RELEVANT CONSULTANTS' PLANS, SPECIFICATIONS, CONDITIONS OF DEVELOPMENT CONSENT AND CONSTRUCTION CERTIFICATE REQUIREMENTS.
- THE BUILDER/CONTRACTOR SHALL LOCATE ALL EXISTING PUBLIC UTILITY SERVICES WITHIN THE SITE, FOOTPATH AREA AND ROAD RESERVE PRIOR TO THE COMMENCEMENT OF ANY WORKS, ALL LOCATIONS AND LEVELS OF SERVICES SHALL BE REPORTED TO THE STORMWATER ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS TO ENSURE THERE ARE NO OBSTRUCTIONS IN THE LINE OF THE DRAINAGE DISCHARGE PIPES.
- THE BUILDER IS TO VERIFY ALL LEVELS ON SITE PRIOR TO COMMENCING CONSTRUCTION.
- ALL THE CLEANING EYES (OR INSPECTION EYES) FOR THE UNDERGROUND PIPES HAVE TO BE TAKEN UP TO THE FINISHED GROUND LEVEL FOR EASY IDENTIFICATION AND MAINTENANCE PURPOSES.
- ALL TERRACE FLOOR AND PLANTER GRATES TO HAVE FIRE COLLARS FITTED EXCEPT FOR CLASS 1 BUILDINGS.
- ALL PITS HAVING AN INTERNAL DEPTH THAT EXCEEDS 1.0m SHALL BE PROVIDED WITH GALVANIZED STEP IRONS AT 300 mm CENTRES PLACED IN A STAGGERED PATTERN AND SHALL BE IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS AS1498-1994.
- ALL MULCHING TO BE USED WITHIN THE AREA DESIGNATED AS ON SITE DETENTION STORAGE SHALL BE OF A NON-FLAMMABLE MATERIAL, SUCH AS DECORATIVE RIVER GRAVEL, BARK MULCHING SHALL NOT BE USED WITHIN THE DETENTION STORAGE AREA.
- PRIOR TO COMMENCING ANY WORKS ON THE SITE, THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTION INTO COUNCIL'S KERB/DRAINAGE SYSTEM MATCH THE DESIGN LEVELS. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER IMMEDIATELY.
- GREENVIEW IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY SURVEY INFORMATION PROVIDED ON THIS DRAWING.
- ALL LEVELS SHOWN ARE EXPECTED TO BE TO A.M.S.L.
- ALL CHAINAGES AND LEVELS ARE IN METERS, AND DIMENSIONS IN MILLIMETRES, UNLESS NOTED OTHERWISE.
- THE SURVEY INFORMATION ON THIS DRAWING HAS BEEN PROVIDED BY THE ARCHITECT.
- CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A REGISTERED SURVEYOR.
- W.A.E DRAWINGS BY A REGISTERED SURVEYOR ARE REQUIRED PRIOR TO CERTIFICATION OF DRAINAGE.
- WHERE THESE PLANS ARE NOTED FOR DEVELOPMENT APPLICATION PURPOSES ONLY, THEY SHALL NOT BE USED FOR OBTAINING A CONSTRUCTION CERTIFICATE NOR USED FOR CONSTRUCTION PURPOSES WITHOUT WRITTEN APPROVAL.
- WATER TREATMENT DEVICES TO STRICTLY COMPLY WITH MANUFACTURING SPECIFICATIONS.

RAINWATER REUSE SYSTEM NOTES

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

SAFETY IN DESIGN NOTES

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

EARTHWORK NOTES

- IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS
- THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS ETC. TO THE EXTENT OF THE PROPOSED DEVELOPED AREA.
- PROVIDE PROTECTION BARRIERS TO PROTECTED/SENSITIVE AREAS PRIOR TO ANY BULK EXCAVATION.
- OVER FULL AREA OF EARTHWORKS, CLEAR VEGETATION, RUBBISH, SLABS ETC. AND STRIP TOP SOIL. AVERAGE 200mm THICK. REMOVE FROM SITE, EXCEPT TOP SOIL FOR REUSE.
- CUT AND FILL OVER THE SITE TO LEVELS REQUIRED.
- PRIOR TO ANY FILLING IN AREAS OF CUT OR IN EXISTING GROUND, PROOF ROLL THE EXPOSED SURFACE WITH A ROLLER OF MINIMUM WEIGHT OF 5 TONNES WITH A MINIMUM OF 10 PASSES.
- EXCAVATE AND REMOVE ANY SOFT SPOTS ENCOUNTERED DURING PROOF ROLLING AND REPLACE WITH APPROVED FILL COMPACTED IN LAYERS. THE WHOLE OF THE EXPOSED SUBGRADE AND FILL SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT $\pm 2\%$.
- FOR ON SITE FILLING AREAS, THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
- WHERE HARD ROCK IS EXPOSED IN THE EXCAVATED SUB-GRADE, THIS WILL BE INSPECTED AND A DECISION MADE ON THE LEVEL TO WHICH EXCAVATION IS TAKEN.
- FILL IN 200mm MAXIMUM (LOOSE THICKNESS) LAYERS TO UNDERSIDE OF BASECOURSE USING THE EXCAVATED MATERIAL AND COMPACTED TO 98% STANDARD (AS 1289 S.1.1). MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT $\pm 2\%$ SHOULD THERE BE INSUFFICIENT MATERIAL FROM SITE EXCAVATIONS, IMPORT AS NECESSARY CLEAN GRANULAR FILL TO APPROVAL.
- THE COST OF THIS MATERIAL SHALL BE CARRIED OUT AT THE RATE OF 2 TESTS PER 1000SQ METRES PER LAYER BY A REGISTERED NATA LABORATORY. THE COSTS OF TESTING AND RE-TESTING ARE TO BE ALLOWED FOR BY THE BUILDER.
- BATTERS TO BE AS SHOWN, OR MAXIMUM 1 VERT : 4 HORIZ.
- ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING FINAL PAVEMENT.
- ALL BATTERS AND FOOTPATHS ADJACENT TO ROADS SHALL BE TOP SOLED WITH 150mm APPROVED LOAM AND SEEDED UNLESS OTHERWISE SPECIFIED.

DRAINAGE INSTALLATION

RCP CONVENTIONAL

INSTALLATIONS & ROAD CROSSINGS

- SUPPLY & INSTALLATION OF DRAINAGE WORKS TO BE IN ACCORDANCE WITH THESE DRAWINGS, THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN STANDARDS.
- BACKFILL SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. A GRANULAR GRAVEL AGGREGATE MATERIAL (<10mm) BACKFILL IS RECOMMENDED FOR THE BEDDING, HAUNCH SUPPORT AND SIDE ZONE DUE TO ITS SELF COMPACTING ABILITY.
- A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARREL AND THE TRENCH WALL FOR PIPES <600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA AND D10 CLEARANCE FOR PIPES > 1200 DIA.
- BEDDING OF THE PIPELINES IS TO BE TYPE 'HS2' IN ACCORDANCE WITH THE STANDARDS AND AS FOLLOWS:

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

M	19	2.3600	0.6000	0.3000	0.1500	0.0750
% MASS PASSING	100	50-100	20-30	10-60	0-25	0-10

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

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

c. BEDDING MATERIAL TO BE EXTENDED FROM THE TOP OF THE BEDDING ZONE UP TO 0.3 TIMES PIPE OUTSIDE DIAMETER. THIS REPRESENTS THE HAUNCH ZONE.

d. THE BEDDING & HAUNCH ZONE MATERIAL IS TO BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 98% WITHIN ROAD RESERVES AND TRAFFICABLE AREAS AND 95% ELSEWHERE FOR COHESIVE MATERIAL OR A MINIMUM DENSITY INDEX OF 70% IN ACCORDANCE WITH THE STANDARDS FOR COHESIONLESS MATERIAL.

e. COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED ORGANISATION WITH A NATA CERTIFIED LABORATORY FOR ALL DRAINAGE LINES LAID WHOLLY OR IN PART UNDER THE KERB & GUTTER OR PAVEMENT

ROOF DRAINAGE

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

STORMWATER DRAINAGE NOTES

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

TABLE 7.5.2.1 MINIMUM INTERNAL DIMENSIONS FOR STORMWATER AND INLET PITS			
Depth to invert of outlet	Minimum internal dimensions mm		
	Rectangular		Circular
	Width	Length	Diameter

≤450	350	350	—
≤600	450	450	600
>600 ≤900	600	600	900
>900 ≤1200	600	900	1000
>1200	900	900	1000

- PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC
- PIPES OF 300mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO
- ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE CLASS 3 U.N.O. BY COUNCIL'S SPECIFICATION.
- PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE DRAWINGS
- MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS UNO.
- ALL PIPES LOCATED IN LANDSCAPE AREAS TO HAVE 300mm COVER, WHERE NOT POSSIBLE AND COVER IS BETWEEN 150mm AND 300mm USE SEWER GRADE PIPE.
- PIPES 225mm DIA. AND OVER SHALL BE LAID AT 0.5% MIN. GRADE U.N.O.
- PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O
- BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY.
- ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS
- THE MINIMUM SIZES OF THE STORMWATER DRAINAGE PIPES SHALL NOT BE LESS THAN 90mm DIA FOR CLASS 1 BUILDINGS AND 100mm DIA FOR OTHER CLASSES OF BUILDING OR AS REQUIRED BY THE REGULATORY AUTHORITY
- BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERTS.
- ALL LANDSCAPED PITS TO BE MIN 450 SQUARE U.N.O OR LARGER AS REQUIRED BY AS3500.3 TABLE 7.5.2.1
- GREENVIEW RECOMMENDS ALL COURTYARDS TO HAVE 450 SQUARE PLASTIC PIT INSTALLED WITH A 150mm DIA. CONNECTION TO FORMAL DRAINAGE SYSTEM U.N.O.
- ALL DRIVEWAY PITS TO BE MIN 600 SQUARE U.N.O OR LARGER AS REQUIRED BY AS3500.3 TABLE 7.5.2.1
- ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
- ALL STORMWATER DRAINAGE WORK TO AVOID TREE ROOTS, WHERE NOT POSSIBLE, ALL EXCAVATIONS IN VICINITY OF TREE ROOTS ARE TO BE HAND JOINTS
- GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR PROTECTION WHERE APPLICABLE.
- ALL BASES OF PITS TO BE BENCHED (TO HALF PIPE DEPTH) TO THE INVERT OF THE OUTLET PIPE AND PROVIDE GALVANIZED ANGLE SURROUNDINGS TO GRATE.
- ANY VARIATION TO THAT WORKS AS SHOWN ON THE APPROVED DRAWINGS ARE TO BE CONFIRMED BY THE ENGINEER PRIOR TO THE COMMENCEMENT.
- ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- GREENVIEW RECOMMENDS ALL ACCESSIBLE GRATES TO BE FITTED WITH CHILDPROOF LOCKS.
- ALL WORK WITHIN COUNCIL RESERVE AREAS TO BE INSPECTED BY COUNCIL PRIOR TO BACKFILLING.
- COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
- WATER PROOF ALL CONCRETE BALCONIES & ROOFS TO ARCHITECTS DETAILS
- ALL BALCONIES TO HAVE FLOOR WASTE AND 1% FALL WITH SAFETY OVERFLOW
- ALL SUBSOIL DRAINAGE SHALL BE A MINIMUM OF 605mm AND SHALL BE PROVIDED WITH A FILTER SOCK. THE SUBSOIL DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS TO BE PROVIDED BY THE LANDSCAPE CONSULTANT.
- SUBSOIL DRAINAGE PIPES AND FITTINGS SHALL BE PERFORMED PLASTIC TO CURRENT AUSTRALIAN STANDARDS. LAY PIPES ON FLOOR OF TRENCH GRADED AT 1% MIN. AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL. PROVIDE FLUSHING EYES AT HIGH POINTS OR TO COUNCILS REQUIREMENTS.
- ALL GRATES IN AREAS OF FREQUENT PEDESTRIAN TRAFFIC (IE FOOTPATHS, WALKWAYS, ETC.) TO BE HEELPROOF GRATE.
- REFER ARCHITECTS DETAIL FOR GRATE FINISH (IE STAINLESS STEEL OR GALVANISED).
- GRATES TO BE IN ACCORDANCE WITH TABLE BELOW:

PIT GRATE INLINE TYPE

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

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

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

COVER TABLE

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

STORMWATER DRAINAGE NOTES CONTINUED

- GREENVIEW'S STORMWATER SYSTEM HAS BEEN DESIGNED TO CAPTURE SURFACE RUNOFF FROM THE SITE ITSELF BUT DOES NOT INCORPORATE SPECIFIC GROUNDWATER CAPTURE MECHANISMS. IN SOME CASES, GROUNDWATER INUNDATION MAY BE A SIGNIFICANT SOURCE OF WATER DURING A STORM EVENT. GREENVIEW RECOMMENDS THAT ALL RETAINING WALLS CLOSE TO HABITABLE AREAS BE FITTED WITH AN IMPERMEABLE MEMBRANE AND SUBSOIL DRAINAGE TO PREVENT GROUNDWATER INGRESS.
- GREENVIEW RECOMMENDS ALL IN-GROUND STORMWATER PIPE RUNS ARE SET OUT BY THE BUILDER PRIOR TO COMMENCEMENT OF WORKS. WHERE 300MM COVER IS NOT ACHIEVED, NOTIFY ENGINEER.
- WHERE STORMWATER DRAINAGE WORKS ARE TO BE UNDERTAKEN PRIOR TO THE CONSTRUCTION OF THE BUILDING, THE BUILDER IS TO SET OUT THE FLOOR LEVELS AND ENSURE PROPOSED STORMWATER DRAINAGE LEVELS AND BUILDING LEVELS ARE COMPATIBLE. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.
- ON-SITE DETENTION (OSD) TANKS ARE TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CURRENT APPLICABLE AUSTRALIAN STANDARDS INCLUDING AS3500.3, NCC AND COUNCIL'S SPECIFICATIONS.
- IT IS CRITICAL THAT THE MINIMUM OSD VOLUME AS CALCULATED BY THE DESIGN AND NOTED ON THESE PLANS IS ACHIEVED ON SITE. VOLUMES TO BE VERIFIED BE REGISTERED SURVEYOR AND NOTED IN THE WAE SURVEY PRIOR TO CERTIFICATION.
- OSD VOLUME MAY BE ACHIEVED IN BELOW GROUND TANK, OR ABOVE GROUND PONDING, OR RAINWATER TANK OFFSET, OR INFILTRATION/ABSORPTION SYSTEM. EACH COUNCIL HAS SPECIFIC GUIDELINES FOR HOW STORMWATER FLOWS ARE TO BE CONTROLLED AND DISCHARGED.
- PONDING AND OVERFLOW LEVELS FROM THE OSD SHALL BE NOT LESS THAN 300mm ABOVE THE EXISTING HABITABLE FLOOR LEVELS OF BUILDINGS AND NOT LESS THAN 150mm BELOW NON-HABITABLE FLOOR LEVELS (AS3500.1 CLAUSE 7.10.1)

BELOW GROUND OSD TANKS

- THE HYDRAULIC CONTROL FOR THE STORAGE (USUALLY ORIFICE PLATE) SHALL BE FIRMLY FIXED IN PLACE TO PREVENT REMOVAL OR TAMPERING. A PLATE OF 3mm TO 5mm THICK STAINLESS STEEL WITH A CIRCULAR HOLE SHALL BE USED, PROVIDED:
 - IT IS MACHINED TO 0.5mm ACCURACY
 - IT RETAINS A SHARP EDGE, AND
 - THE ORIFICE DIAMETER IS NOT LESS THAN 25mm (AS 3500.3 CLAUSE 7.10.2
- INSPECTION / ACCESS OPENINGS SHALL BE PROVIDED ABOVE THE LOCATION OF THE OUTLET WITH DIMENSIONS AT LEAST 600mm x 600mm OR 600mm DIAMETER FOR STORAGES UP TO 800mm DEEP AND 600mm x 900mm FOR DEEPER STORAGES. THERE SHALL BE NO IMPEDIMENTS TO THE REMOVAL OF DEBRIS THROUGH THIS OPENING. INSPECTION SHALL BE POSSIBLE WITHOUT RESIDENTS OR OWNERS HAVING TO REMOVE HEAVY ACCESS COVERS (AS3500.3 CLAUSE 7.10.2.b.i)
- WHERE STORAGES ARE NOT DEEP ENOUGH TO WORK IN (<1.5m DEEP), ACCESS SHALL BE PROVIDED AT INTERVALS OF APPROXIMATELY 1m TO ALLOW THE SYSTEM TO BE FLUSHED TO THE STORAGE OUTLET/ ACCESS SHALL BE PROVIDED AT THE OUTLET (AS3500.3 CLAUSE 7.10.2.b.ii)
- A SUMP SHALL BE PROVIDED AT THE OUTLET POINT. SET BELOW THE LEVEL OF THE MAIN STORAGE TO COLLECT DEBRIS. WHERE A DISCHARGE CONTROL PIT IS INCLUDED IN THE STORAGE, THIS SHALL CONTAIN A SUMP SET A MINIMUM OF 1.5 TIMES THE DIAMETER OF THE ORIFICE OF THE OUTLET BELOW THE CENTRE OF THE ORIFICE. SUMPS SHALL BE PROVIDED WITH WEEP HOLES TO DRAIN OUT TO THE SURROUNDING SOIL, AND SHALL BE FOUNDED ON A COMPACTED GRANULAR BASE.
- WHERE THE DEPTH OF THE TANK EXCEEDS 1.2m, A LADDER IN ACCORDANCE WITH AS3500.3 CLAUSE 7.5.5.4 SHALL BE INSTALLED.
- BELOW GROUND OSD SYSTEMS SHALL CONFORM WITH AS2865.
- IN ACCORDANCE WITH AS3500.3 CLAUSE 7.10.2.D SCREENS (TRASH RACKS) WITH THE FOLLOWING CHARACTERISTICS SHOULD BE PROVIDED TO COVER EACH ORIFICE OUTLET:
 - FOR ORIFICES UP TO 150mm DIA., A FINE APERTURE-EXPANDED METAL MESH SCREEN WITH A MINIMUM AREA OF 50 TIMES THE AREA OF THE ORIFICE. FOR LARGER DIA. ORIFICES, A COARSER GRID MESH WITH A MINIMUM AREA OF 20 TIMES THE ORIFICE AREA MAY BE USED AS AN ALTERNATIVE.
 - STEEL SCREENS SHOULD BE STAINLESS STEEL OR HOT-DIP GALVANIZED
 - WHERE APERTURE-EXPANDED MESH SCREENS ARE EMPLOYED, THEY SHOULD BE POSITIONED SO THAT THE OVAL-SHAPED HOLES ARE HORIZONTAL, WITH THE PROTRUDING LIP ANGLED UPWARDS AND FACING DOWNSTREAM. A HANDLE MAY BE FITTED TO ENSURE CORRECT ORIENTATION AND EASY REMOVAL FOR MAINTENANCE.
 - SCREENS SHOULD BE PLACED NO FLATTER THAN 45 DEGREES TO THE HORIZONTAL. IN SHALLOW STORAGES UP TO 600mm DEEP, IN DEEPER OR MORE REMOTE LOCATIONS, THE MINIMUM ANGLE SHOULD BE 60 DEGREES TO THE HORIZONTAL.
- IF THE BELOW GROUND OSD STORAGE IS SEALED, A VENT SHOULD BE PROVIDED TO EXPEL ANY NOXIOUS GASES (AS3500.3 CLAUSE 7.10.2.D.B).
- THE STORAGE SHOULD BE DESIGNED TO FILL WITHOUT CAUSING OVERFLOWS IN UPSTREAM CONDUITS DUE TO BACKWATER EFFECTS (AS3500.3 CLAUSE 7.10.2.D.C)
- BELOW GROUND STORAGES SHALL BE CONSTRUCTED OF CONCRETE, MASONRY, ALUMINIUM/ZINC AND ALUMINIUM/ZINC/MAGNESIUM ALLOY-COATED STEEL, ZINC-COATED STEEL, GALVANIZED IRON OR PLASTICS (AS3500.3 7.10.3)

MAINTENANCE SCHEDULE: ON SITE DETENTION (OSD)

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

6 MONTHLY

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

ANNUALLY

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

5-YEARLY

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

COLOUR LEGEND

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

GREENVIEW CIVIL SHEET LIST		
No.	SHEET NAME	REV.
C01	NOTES & LEGENDS	9
C02	GROUND FLOOR DRAINAGE PLAN	10
C03	LEVEL 1 DRAINAGE PLAN	2
C04	SITE STORMWATER DETAILS SHEET 1	9
C05	SITE STORMWATER DETAILS SHEET 2	7

RECOMMENDED SAFETY SIGNS



CONFINED SPACE DANGER SIGN

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

EXISTING SERVICES



ABBREVIATIONS

DP	DOWN PIPE
FFL	PROPOSED FINISHED FLOOR LEVEL
GL	PROPOSED PIT SURFACE LEVEL
IL	PROPOSED PIT INVERT LEVEL
IO	INSPECTION OPENING
K&G	KERB & GUTTER
P	FINISHED PAVEMENT LEVEL
RPC	REINFORCED CONCRETE PIPE
RKG	ROLL KERB & GUTTER
RL	FINISHED SURFACE LEVEL
RWO	RAINWATER DRAINAGE OUTLET
UPVC	PROPOSED RAINWATER TANK
TK	TOP OF NEW KERB LEVEL
TOW	TOP OF NEW RETAINING WALL LEVEL
TWL	TOP OF WATER LEVEL
UPVC	RIGID PVC PIPE
VD	VERTICAL DROPPER



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9	19.03.24	JPS	PART 5 ISSUE	ARCHITECT
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3	14.08.23	JPS	FOR COORDINATION	HOMES NSW
2	31.07.23	JPS	FOR COORDINATION	
1	30.06.23	NO	FOR COORDINATION	ELECTRICAL CONSULTANT
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PROJECT:

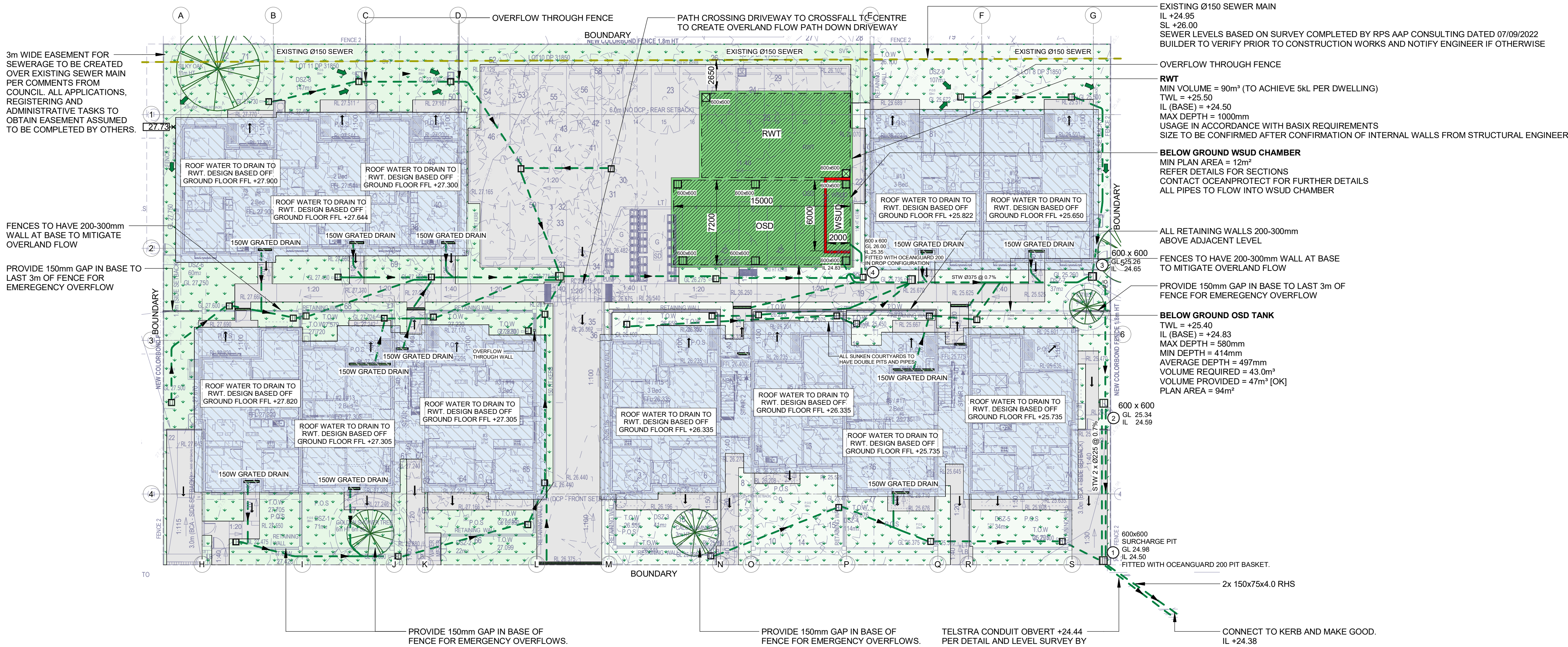
PROPOSED DEVELOPMENT

AT

64-70 Stapleton Avenue, Casino, NSW

STATUS: PRELIMINARY

Handwritten signature/initials.



GENERAL LEGEND

	LANDSCAPE
	BYPASS LANDSCAPE
	HARDSTAND
	ROOF AREA TO DRAIN
	OSD/RWT

CIV - FIXTURES SCHEDULE		
	TYPE	DESCRIPTION
		GRATED DRAIN
		GRATED STORMWATER PIT
		SEALED STORMWATER PIT
	IO	INSPECTION OUTLET
	RWO	RAINWATER OUTLET

CIV - STANDARD SYMBOLS	
	DESCRIPTION
	FALL ARROW
	OVERLAND FLOW PATH

CIV - STORMWATER SERVICES		
	TYPE	DESCRIPTION
	STW	STORMWATER

GROUND FLOOR DRAINAGE PLAN

Scale: 1 : 200

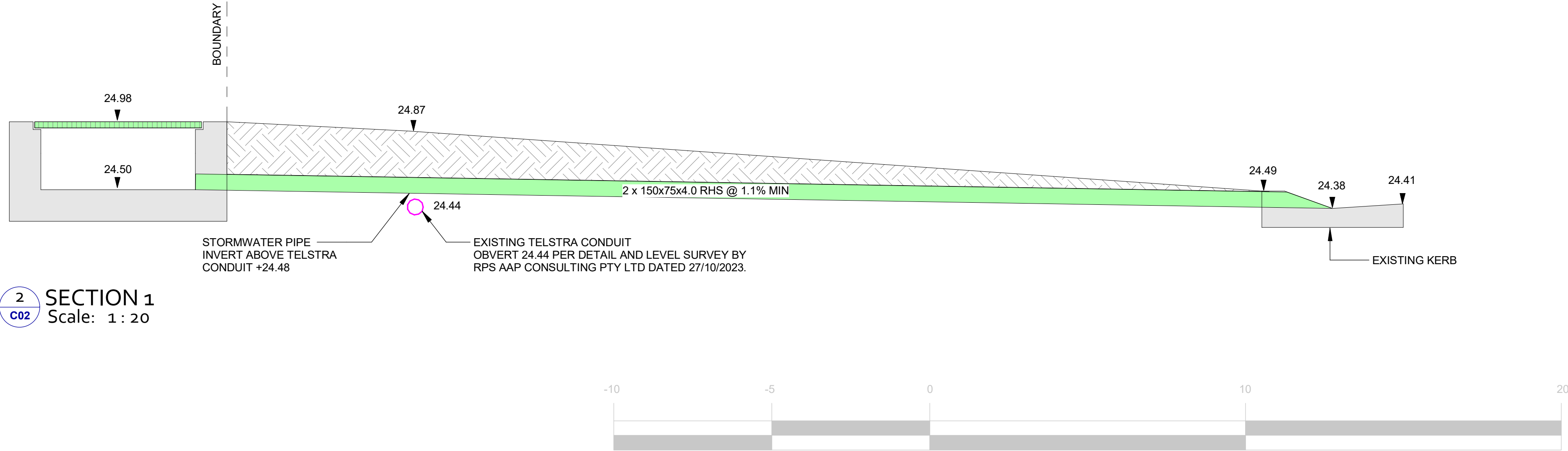
- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- THE BUILDER/CONTRACTOR SHALL LOCATE ALL EXISTING PUBLIC UTILITY SERVICES WITHIN THE SITE. FOOTPATH AREA AND ROAD RESERVE PRIOR TO THE COMMENCEMENT OF ANY WORKS. ALL LOCATIONS AND LEVELS OF SERVICES SHALL BE REPORTED TO THE STORMWATER ENGINEER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

OSD CALCULATIONS

- DESIGN CRITERIA: REDUCE 100YR (1%AEP) POST-DEVELOPMENT BACK TO PRE-DEVELOPMENT FLOWRATES
- SITE AREA = 3541m²
- PRE-DEVELOPMENT IMPERVIOUS AREA: 625m² [18%]
- POST-DEVELOPMENT AREAS:
 - AREA BYPASSING OSD = 1001m² [420m² IMP] @ 42% IMP.
 - POST-DEVELOPMENT AREA TO OSD: 2540m² [1940m² IMP] @ 76% IMP.
- LONGEST FLOW PATH = 90m @ 3% GRADE

USE DRAINS RUNOFF-ROUTING MODEL TO ARR2019 METHODOLOGY (10 PATTERNS PER DURATION)



- DRAINS PARAMETERS: IL = 0mm, CLR = 0.4*2.0 = 0.80 mm/tr, N* (HARD) = 0.015, N* (GRASS) = 0.170
- SSR100 (1%AEP) = 43.0m³
- Q5 PRE / POST = 102 / 102 L/s
- Q100 PRE / POST = 195 / 171 L/s
- ORIFICE CONTROL = Ø295mm BASED ON 0.58m MAX PONDING DEPTH [DRAINS]





Q = 3.0 L/s (15mm HEAD /

OSD/RWT

CIV - STANDARD SYMBOLS	
	DESCRIPTION
	FALL ARROW
	OVERLAND FLOW PATH

CIV - STORMWATER SERVICES		
	TYPE	DESCRIPTION
	STW	STORMWATER



ARCHITECT	BREWSTER MURRAY PTY LTD
PROJECT MANAGER	HOMES NSW
ELECTRICAL CONSULTANT	GREENVIEW CONSULTING Pty Ltd

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

BUSINESS PARTNER:




Homes NSW

Locked Bag 5022
Parramatta NSW 2124
Ph: 1800 738 718 (voicemail)
www.nsw.gov.au/homes-nsw

PROJECT:

**PROPOSED
DEVELOPMENT**

AT

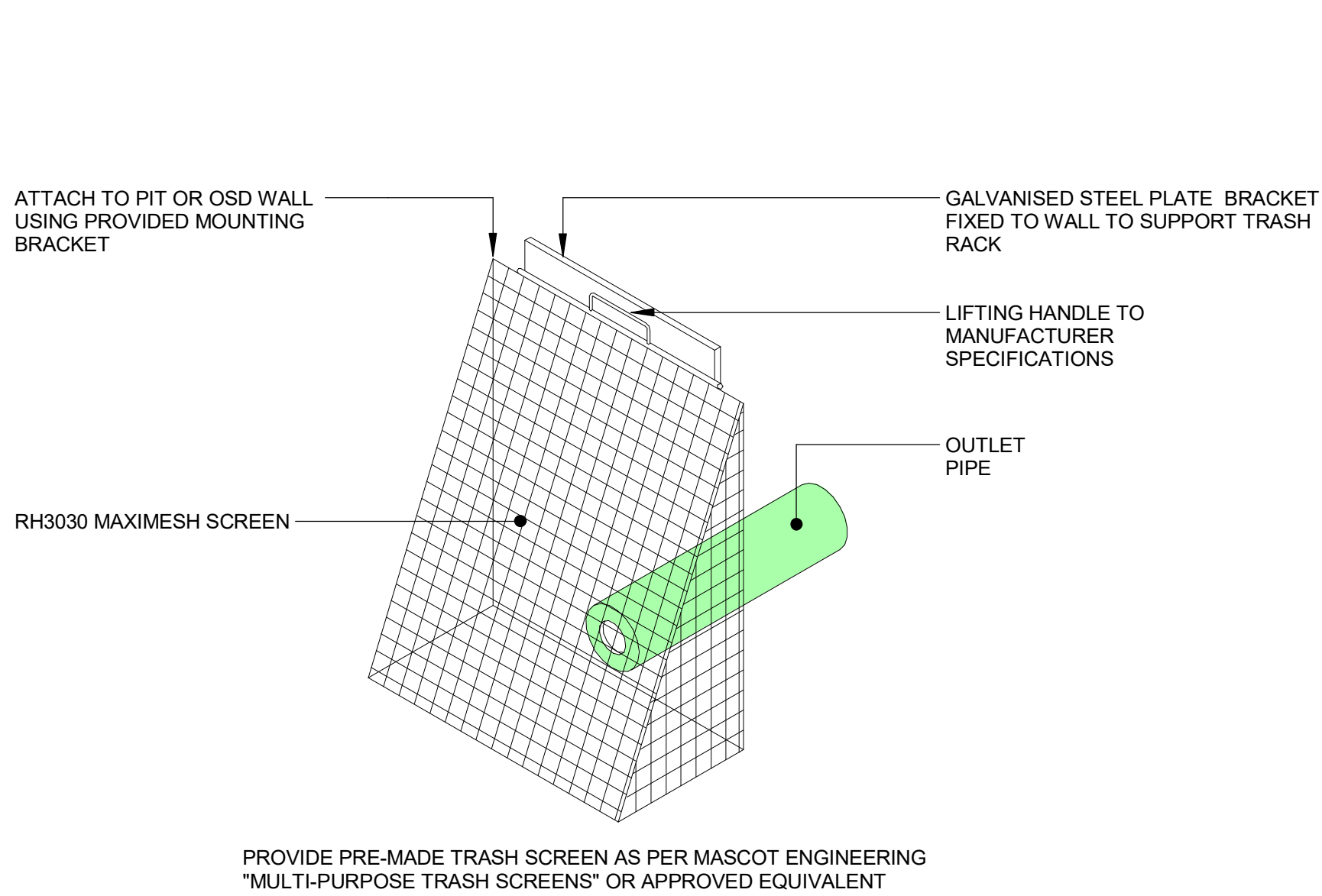
64-70 Stapleton Avenue, Casino, NSW

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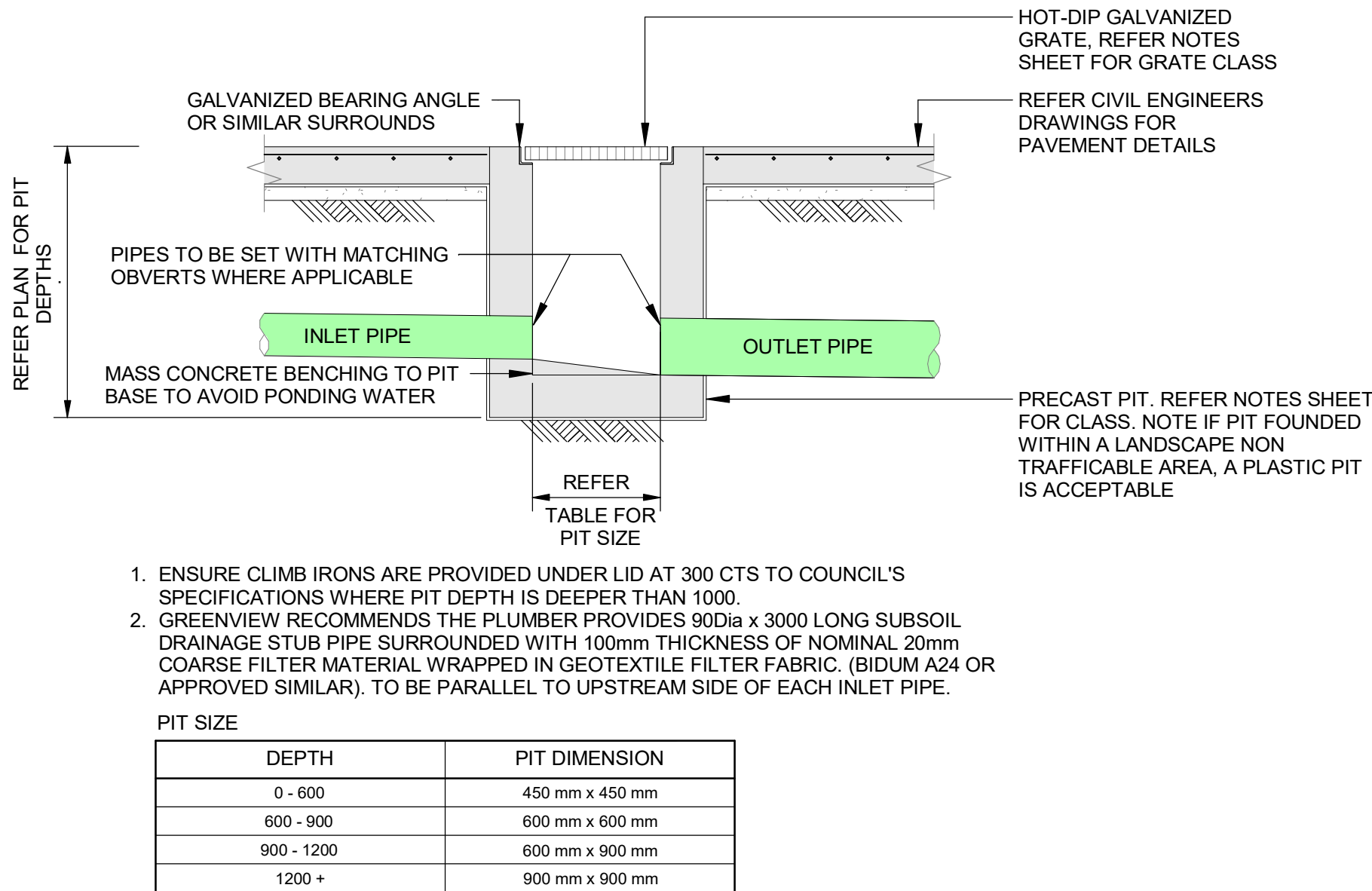
LEVEL 1 DRAINAGE PLAN

STATUS: PRELIMINARY			
DATE: 19.03.24	SCALE: As indicated	PRJ:	JOB: 220996
STAGE: P	DRAWN: AO	DESIGN: AO	CHECKED: AO
TYPE: C	SHEET: C03		REV: 2

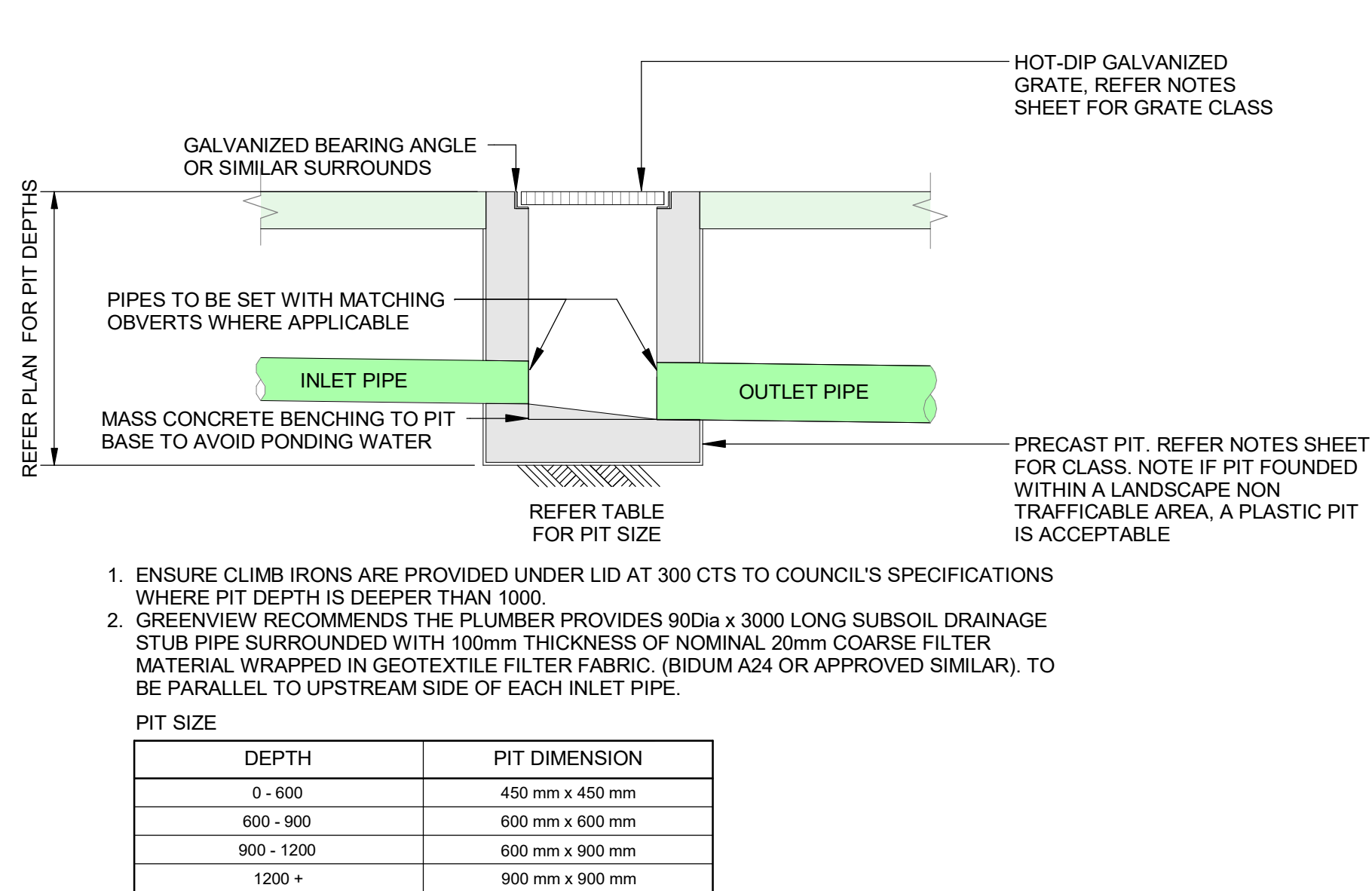
4/20/24 JPL



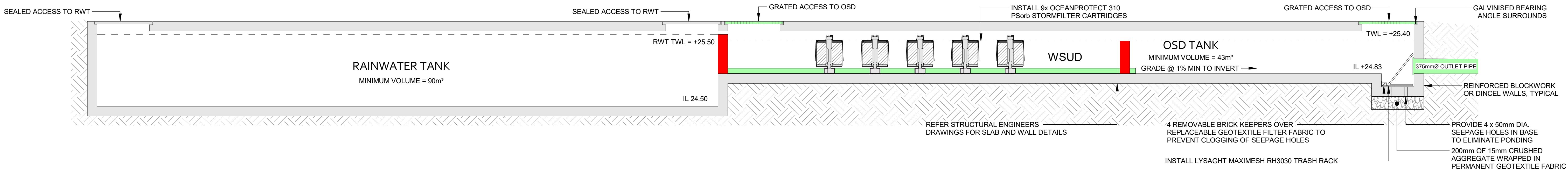
TYPICAL TRASH SCREEN DETAIL
Scale: 1 : 10



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

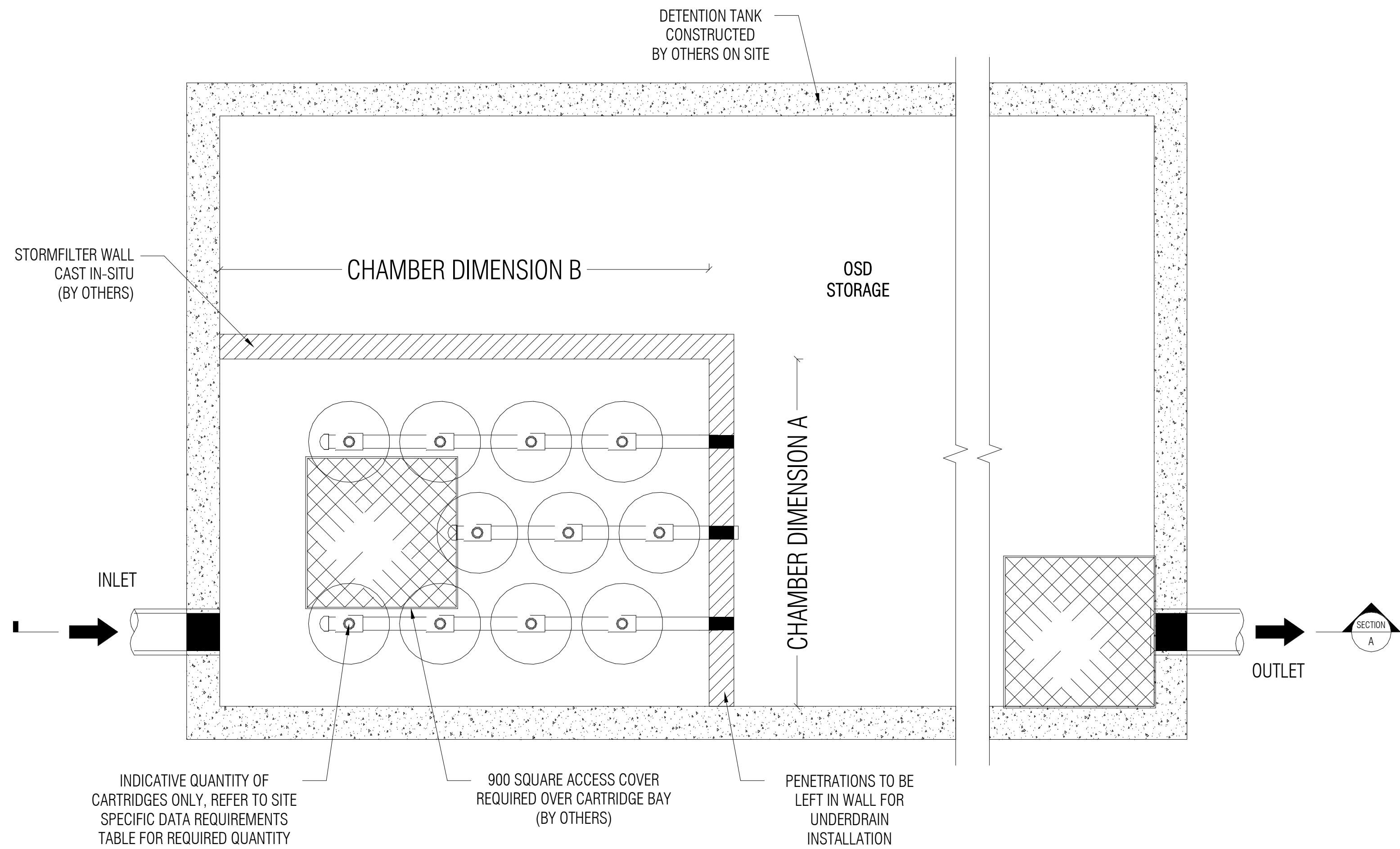


TYPICAL CONCRETE INLET PIT - LANDSCAPE SURFACE
Scale: 1 : 20

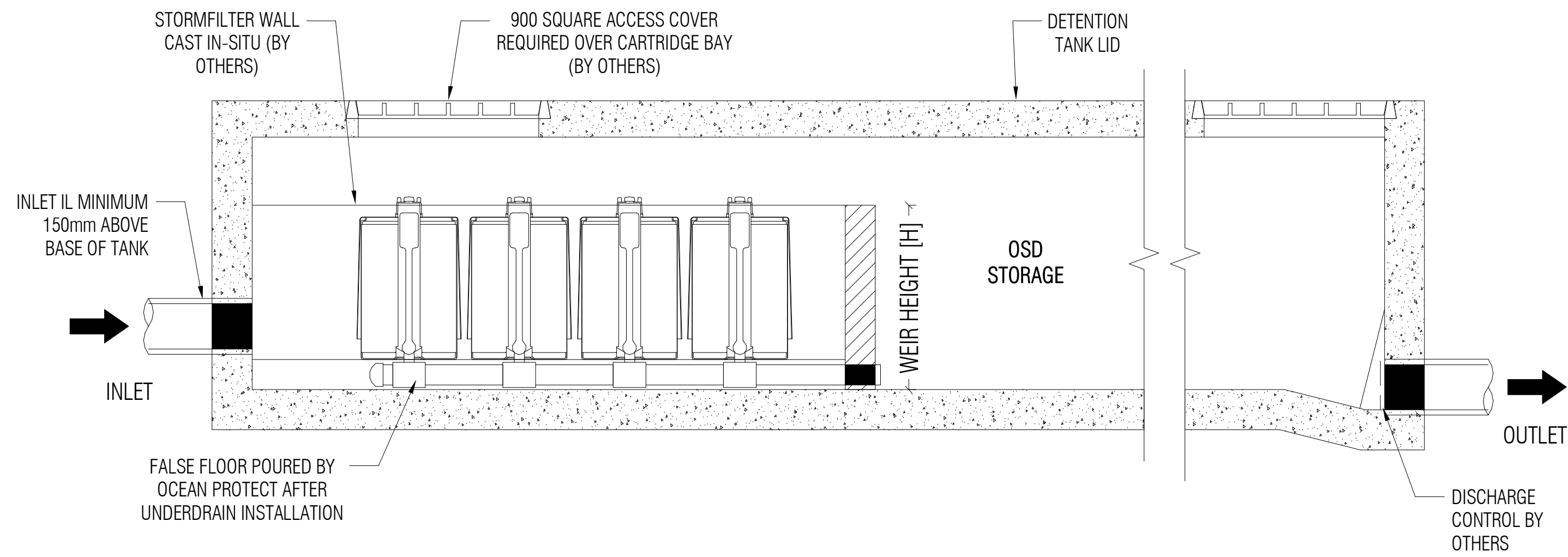


OSD/RWT SECTION
Scale: 1 : 30

Handwritten signature

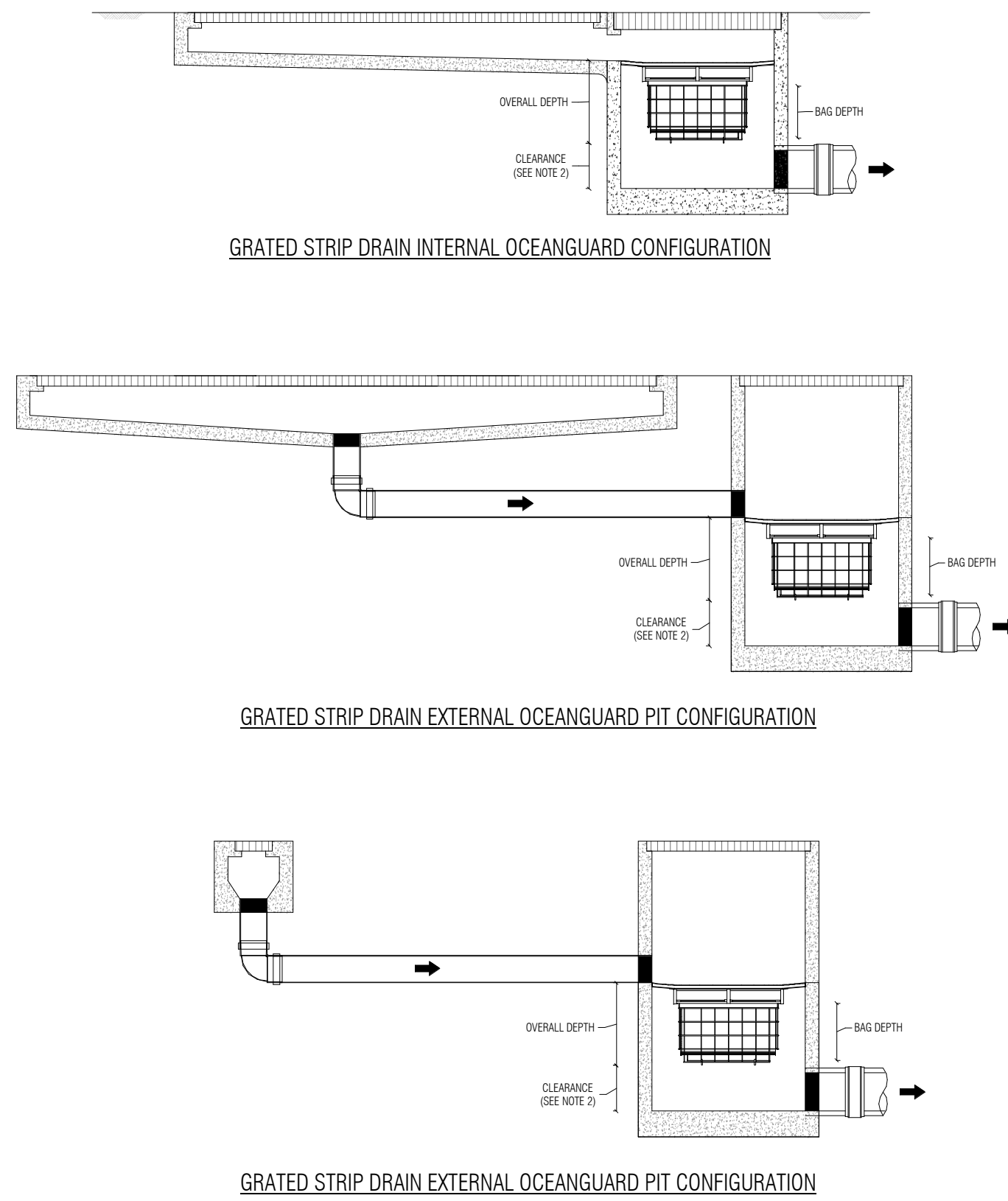


PLAN LAYOUT

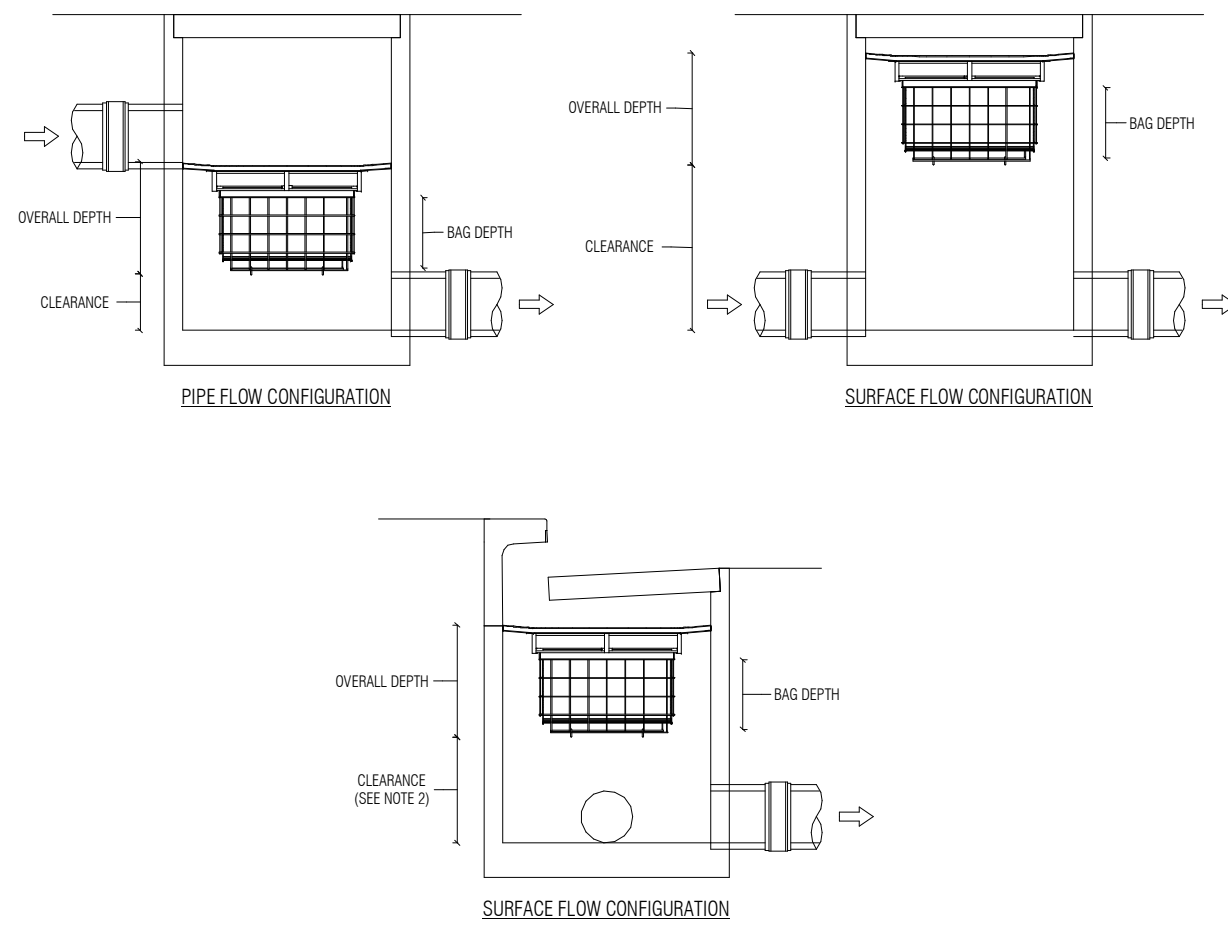


SECTION A

SF-OSD-SD
Scale: 1 : 20



OG-SD STRIP DRAINS
Scale: 1 : 20



OG-SD
Scale: 1 : 20