

ACTIVITY DETERMINATION

DETERMINED by the New South Wales Land & Housing Corporation on: **Project No. BGJF2**
2/9/2022

Conflict of Interest¹

In this matter:

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

Signed.....

Name..... Emma Nicholson

Dated..... 2/9/2022

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

21-23

5

Street or property name

Phillips Ave

Richardson Ave

Suburb, town or locality

Regents Park NSW

Postcode

2143

Local Government Area(s)

Cumberland City Council

Real property description (Lot and DP)

Lots 53, 54 and 55 in DP 35559

ACTIVITY DESCRIPTION

Provide a description of the activity

Demolition of an existing dwelling house and associated structures, removal of trees and the construction of a seniors housing development comprising 6 x 1 bedroom and 6 x 2 bedroom dwellings, associated landscaping and fencing, parking for 6 cars and consolidation of 3 existing parcels into a single lot.

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



Signed.....

2/9/2022

Dated.....

Emma Nicholson
A/Head of Policy and Innovation
Land and Housing Corporation**SCHEDULE 1****IDENTIFIED REQUIREMENTS****PART A – Standard identified requirements****THE DEVELOPMENT**

The following identified requirements have been imposed to ensure that the development activity is carried out in accordance with the plans / documents and any amendments approved under Part 5 of the Environmental Planning & Assessment Act 1979.

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

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Architectural				
Cover Sheet	1 of 14	2	08/11/2021	Barry Rush & Associates Pty Ltd
Site Analysis	2 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Demolition Plan	3 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Site and Ground Floor Plan	4 of 14	4	16/02/2022	Barry Rush & Associates Pty Ltd
First Floor Plan	5 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Roof Plan	6 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Elevations	7 of 14	2	12/11/2021	Barry Rush & Associates Pty Ltd
Sections	8 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Shadow Diagrams 21 st June (mid-Winter)	9 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Views from Sun Diagrams 21st June (mid-winter)	10 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
External Colour Schedule	11 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Photomontage	12 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Block Plan	13 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Areas of Excavation and Fill	14 of 14	1	26/10/2021	Barry Rush & Associates Pty Ltd
Civil/ Stormwater				
Civil Engineering Package Siteworks & Stormwater	C04.01	E	30.05.2022	Northrop

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Architectural				
Management Plan				
Civil Engineering Package Details - Sheet 01	C07.01	D	13.09.2021	Northrop
Public Domain Works Cover Sheet, Drawing Schedule and Locality Plan	C51.01	02	28.10.2021	Northrop
Public Domain Works Specification Notes - Sheet 01	C51.11	02	28.10.2021	Northrop
Public Domain Works Specification Notes - Sheet 02	C51.12	02	28.10.2021	Northrop
Public Domain Works Sediment Erosion Control Plan	C52.01	02	28.10.2021	Northrop
Public Domain Works Sediment Erosion Control Details	C52.11	01	28.10.2021	Northrop
Public Domain Works Siteworks & Stormwater Management Plan	C54.01	02	28.10.2021	Northrop
Public Domain Works Catchment Plan	C55.01	02	28.10.2021	Northrop
Public Domain Works Stormwater Longitudinal Sections	C55.11	02	28.10.2021	Northrop
Public Domain Works Details Sheet	C57.01	02	28.10.2021	Northrop
Landscape				
Landscape Plan	1 of 2	F	02/06/2022	Greenland Design Pty Ltd
Landscape Details and Specification	2 of 2	F	02/06/2022	Greenland Design Pty Ltd
Survey				
Plan Showing Detail and Levels	1 of 3	2	26/11/2020	YSCO Geomatics
Bus Stop (Plan View)	2 of 3	2	26/11/2020	YSCO Geomatics
Bus Stop Longitudinal Sections	3 of 3	2	26/11/2020	YSCO Geomatics
BASIX				
BASIX Certificate	1142663M_02		8/11/2021	Building Sustainability Assessments
NatHERS Certificate	0005307700		8/11/2021	Building Sustainability Assessments
Reports				
Traffic Impact Assessment			March 2021	Apex Engineers
Arboricultural Impact Assessment			23/11/2020	Creative Planning Solutions
Waste Minimisation and Management Plan			14/12/2020	Barry Rush & Associates Pty Ltd
Access Assessment			30/11/2020	BCA Logic
Site Investigation Report			30/01/2015	SMEC Testing Services
BCA Design Compliance Assessment			27/10/2021	BCA Vision

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

OPERATIONAL MATTERS

These identified requirements pertain to the use of the site and have been imposed to ensure that the development and its operation do not interfere with the amenity of the surrounding area.

Stormwater Run-off

6. Stormwater is to be collected within the site, and conveyed in a pipeline to the appropriate gutter or drain under the control of the 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 must not impede, increase or divert natural surface water runoff, so as to cause a nuisance to adjoining property owners.
8. All driveways are to be graded in such a manner as to provide continuous surface drainage flow paths to appropriate points of discharge.
9. To prevent water from entering buildings surface waters shall be collected and diverted clear of the buildings by a sub-surface / surface drainage system.

Vehicular Access & Parking

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

Note:

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

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

Site Works

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

Building Siting

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

Smoke Detection System(s)

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

Site Soil Contamination

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

Landscaping

- 18.** Landscaping is to be carried out substantially in accordance with the approved landscape plan(s) and maintained for a period of 12 months by the building contractor. The council for the area is to 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 Council and provide a copy to the Land & Housing Corporation.

Tree Removal

- 20.** Removal of trees within the boundaries of the site is to be carried out in accordance with the trees shown for removal on the approved landscape plan and Arborist report and no other trees shall be removed without further approval(s).

Fencing

21. All front fencing and gates are to be constructed wholly within the boundaries of the site. All gates associated with the fencing are to 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 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.

Long Service Levy

- ~~24. The long service levy shall be paid by the Land & Housing Corporation to the Long Service Payments Corporation in accordance with the Building & Construction Industry Long Service Payments Act 1986 prior to the commencement of any building and construction works.~~

Note:

~~Where approval has been granted for development by a Crown body other than a council, the amount payable is 0.35% of the contract inclusive of GST.~~

(Deleted)

Service Authority Clearances

25. A compliance certificate, or other evidence, shall be obtained from the relevant water utility provider (e.g. the local council for the area, Hunter Water or Sydney Water), confirming service availability prior to work commencing.

Note:

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

26. 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.
27. 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.
28. Where the site is to be connected to reticulated gas, a certificate from an approved gas carrier to certify that satisfactory arrangements have been made to ensure the provision of underground gas services to each dwelling in the development is to be obtained prior to work commencing.

Utilities Service Provider Notification

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

Note:

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

Disconnection of Services

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

Demolition

32. The builder shall notify the occupants of premises on either side, opposite and at the rear of the site a minimum of two 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.
33. Prior to the demolition, a Work Plan shall be prepared by a competent person(s) in accordance with AS 2601 and shall be submitted to the Land & Housing Corporation. The Work Plan shall outline the identification of any hazardous materials, including surfaces coated with lead paint, method of demolition, the precautions to be employed to minimise any dust nuisance and the disposal methods for hazardous materials.
34. 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

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

Council Notification

37. The council for the area shall be advised in writing, of the date it is intended to commence work, including demolition. A minimum period of **five (5)** working days notification shall be given.

Landfill

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

- iii. be free of industrial waste and building debris.

Site Facilities

40. The following facilities shall be installed on the site:

- (a) Toilet facilities shall be provided at the rate of 1 toilet for every 20 persons or part thereof employed at the site. Each toilet provided shall be a standard flushing toilet and shall be connected to a public sewer or if connection to a public sewer is not practicable, to an accredited sewerage management facility provided by the council for the area or if this is not practicable to some other council approved management facility.
- (b) Adequate refuse disposal methods and builders storage facilities. Builders' wastes, materials or sheds are not to be placed on any property other than that which this approval relates to.

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

Site Safety

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

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

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

Note:

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

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

Note:

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

44. Building materials are not to be stored on the council for the area's footpath or roadway.

Protection of Trees

45. Trees and other vegetation that is to be retained on site are to be protected prior to the commencement of works and for the duration of the construction period in accordance with the details provided in the arborist report.

Waste Management

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

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 items have been uncovered, the Department of Planning and Environment must be contacted, or if Indigenous items have been uncovered, the Department of Environment, Energy and Science shall 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 the prior approval of the Coordinator-General of the Department of Environment, Energy and Science.

Demolition

- 49.** Any existing structures identified for demolition shall be demolished prior to commencement of the construction of the activity.
- 50.** Demolition is to be carried out in accordance with the appropriate provisions of AS 2601.
- 51.** Where materials containing asbestos are to be removed, demolition is to be carried out by a licensed contractor(s) who have current SafeWork NSW accreditation in asbestos removal.
- 52.** Removal of asbestos-based thermal or acoustic insulation, such as sprayed asbestos and asbestos-based lagging, including friable asbestos boards, shall be carried out in accordance with the National Occupational Health and Safety Commission's Code of Practice for the Safe Removal of Asbestos, 2nd Edition [NOHSC:2002 (2005)].
- 53.** Hazardous or intractable wastes, including all asbestos laden waste, arising from the demolition process shall be removed and disposed of in accordance with the requirements of SafeWork NSW and the Department of Environment, Energy and Science.
- 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 the Land & Housing Corporation 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 footways and the footway 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 the Land & Housing Corporation prior to the placement of the footings / slab and on completion of the dwellings to verify the correct position of the structures in relation to the allotment boundaries.

Hours of Demolition / Construction / Civil Work

- 59.** Demolition / construction / civil work is only permitted on the site between the hours of 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm on 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 construction of the development shall not exceed the limits specified in the July 2009 Interim Construction Noise Guidelines, published by the Department of Environment and Climate Change (now Department of Environment, Energy and Science).
- 62.** No fires are to be lit or waste materials burnt on the site.
- 63.** No washing of concrete forms or trucks is to occur on the site.
- 64.** Any contamination / spills on the site during construction works must be actively managed and reported immediately to 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 must be secured (ie 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.** The Land & 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 use or 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.
- (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 council for the area'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.

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

PART B – Additional identified requirements

Specific Requirements for Seniors Housing

- 74.** The self-contained dwellings in the approved development must comply with the accessibility and useability standards for self-contained dwellings referenced in Clause 41 and set out in Schedule 3 of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004. The requirements of this condition do not apply to the provisions set out under Clauses 2, 7, 8, 9, 10, 11, 12, 13 and 15-20 of Schedule 3 for a self-contained dwelling, or part of such a dwelling, that is located above the ground floor.

- 75.** Only the following kinds of people can be accommodated in the approved development:

- (a) seniors or people who have a disability,
- (b) people who live within the same household with seniors or people who have a disability,
- (c) staff employed to assist in the administration of and provision of services to housing subject of this approval.

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

- (a) people aged 55 or more years,

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

A restriction as to user must be registered against the title of the property on which development is to be carried out prior to occupation, in accordance with Section 88E of the Conveyancing Act 1919 limiting the use of any accommodation to the kinds of people referred to above.

- 76. Pathway lighting is to be designed and located to avoid glare for pedestrians and adjacent dwellings and to provide minimum 20 lux at ground level.
- 77. Access must be provided in accordance with AS 1428.1 so that a person using a wheelchair can use common areas and common facilities associated with the development.
- 78. A 1.2m wide concrete footpath across the site frontages shall be constructed in accordance with the council for the area's specifications to provide an accessible pathway from the site to the nearest bus stops.

Note:

The responsible officer in the council for the area shall be contacted regarding council's specifications and any necessary approvals.

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

Site Specific Requirements

- 80. **Continuous accessible path of travel** – pathway and road reserve upgrading identified in the Access Assessment Report to be undertaken in collaboration with Cumberland City Council and the relevant road authority (if not Cumberland City Council) to provide a continuous accessible path of travel between the site and the nearest bus stops.
- 81. **Give way sign** – a 'Give way to entering vehicles' sign to be erected in a suitable location within the car court.
- 82. **Emergency Evacuation Plan** – an emergency evacuation plan prepared by a suitably qualified flood consultant is to be prepared detailing the evacuation strategy for the occupants of the development in the event of flood.

Requirements resulting from council comments

- 83. **Sight distance** – fence height at the northern and eastern boundary shall not exceed 1.15 metres above finished driveway level for a distance of 2 metres into the site from the front boundary.
- 84. **Boundary fence/ wall** – Any changes to the boundary fence/ wall shall be designed and constructed in consultation with adjoining affected property owner(s) at full cost to the developer. In this regard, owners' written consent from all affected property owner(s) shall be obtained for any proposed changes.
- 85. **Service Authority Requirements** – relevant service providers requirements to be obtained prior to commencement.
- 86. **Construction Works Traffic Management Plan** – Prior to commencement of construction works a Construction Works Traffic Management Plan is to be prepared by a suitably qualified consultant and a copy provided to Council.
- 87. **Dial Before You Dig** – A copy of the Dial Before You Dig search is to be provided to Council.

88. Kerb levels – Existing top of kerb levels shall be transferred clear of the excavation area (approximately 1100mm for the face of kerb) at 5m intervals. This shall be carried out by a registered surveyor and the level sheet shall be forwarded to council.

89. Access to affected properties and road users –

- (a) Arrangements shall be made with residents of all affected properties with respect to the vehicular and pedestrian access to the properties.
- (b) Minimum 7 days notification shall be provided to the affected properties and arrangements shall be negotiated to suit the individual needs of the occupants of the affected properties.
- (c) Vehicular and pedestrian access to all affected properties shall be provided all times with minimal obstructions as per the agreed work time across each access driveways.
- (d) All affected access driveway of adjacent properties shall be reconstructed to adjacent property owner's and Council's satisfaction.

90. Standards and specifications –

- (a) All construction shall comply with Council's standards. All standard drawings associated with the constructions shall be obtained from Cumberland Council prior to commence any construction works.
- (b) Minimum 500mm cover shall be maintained for the pipes any discrepancies shall be notified to Council.
- (c) Drainage extension (pipes) shall be constructed under the kerb & Gutter. Pipe shall be minimum 375mm diameter RCC class 3 pipes.
- (d) All structures shall be cast in-situ except for the lintels. Please note the combined lintel and gutter tray with grate and precast pits are NOT accepted. All pit walls shall be reinforced.
- (e) All kerb inlet pits shall be constructed minimum 1200mm away from new proposed driveways and any exiting adjacent property driveway. And minimum 1200mm lintels shall be provided.
- (f) Minimum width of asphalt saw-cut shall be 500mm (along the lip line) and all trenches shall be temporally reinstated to comply with Councils standard temporary trench restoration drawing.

91. Restoration works (asphalt works) –

- (a) Minimum width of asphalt saw-cut shall be 500mm adjacent to the new concrete works.
- (b) All trenches across the road shall be temporarily reinstated with cold/ hot mix to comply with Councils standard temporary trench restoration drawing.
- (c) All final asphalt restorations works shall be carried out [by] Council. As [sic] engineers estimate will be provided with the road opening permit approval which shall be paid prior to commence street drainage works.

92. Documents to be submitted at completion – At the completion of the street drainage extension works the following shall be submitted

- a. A work as executed plan prepared by a registered surveyor
- b. A professional CCTV camera report clearly identifying the length, diameter of the pipe. The report shall identify any joint displacements and whether the displacements are within tolerance.
- c. Compaction test results for the trench back filling.

93. Requirements as requested by public authorities other than councils

(g) Nil requirements

Requirements resulting from consideration of adjoining occupier responses to notification in the REF / consideration of other public submissions received

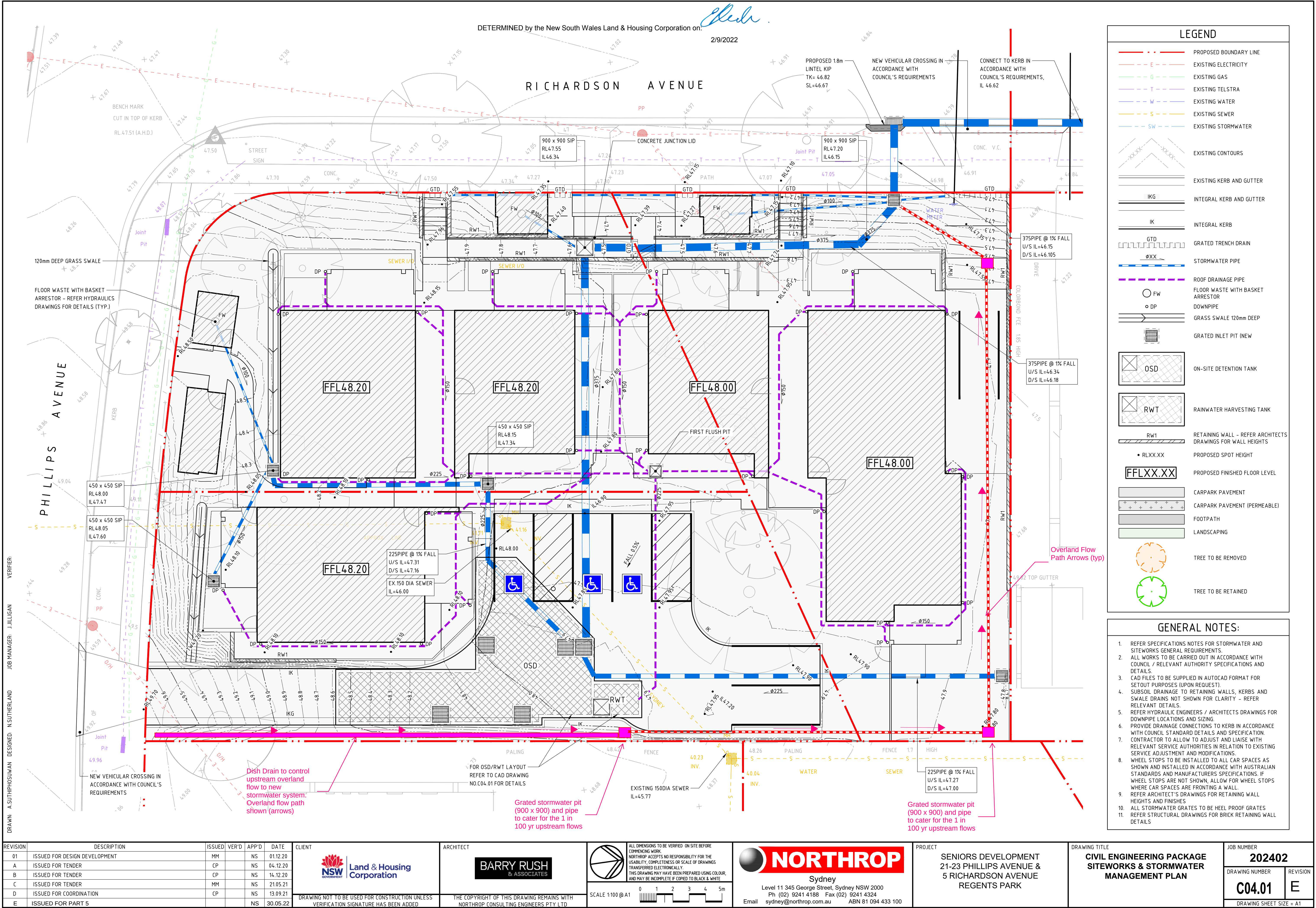
(h) Nil requirements

Specific service / utility agency requirements

(i) Nil requirements

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 dialling 1100.



DRAWN: A SUTHIPHOSUWAN DESIGNED: NSUTHERLAND JOB MANAGER: J.JILLIGAN VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR DESIGN DEVELOPMENT	MM		NS	01.12.20
A	ISSUED FOR TENDER	CP		NS	04.12.20
B	ISSUED FOR TENDER	CP		NS	14.12.20
C	ISSUED FOR TENDER	MM		NS	21.05.21
D	ISSUED FOR COORDINATION	CP		NS	13.09.21

CLIENT



DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

ARCHITECT



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ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:10 @ A1
SCALE 1:50 @ A1



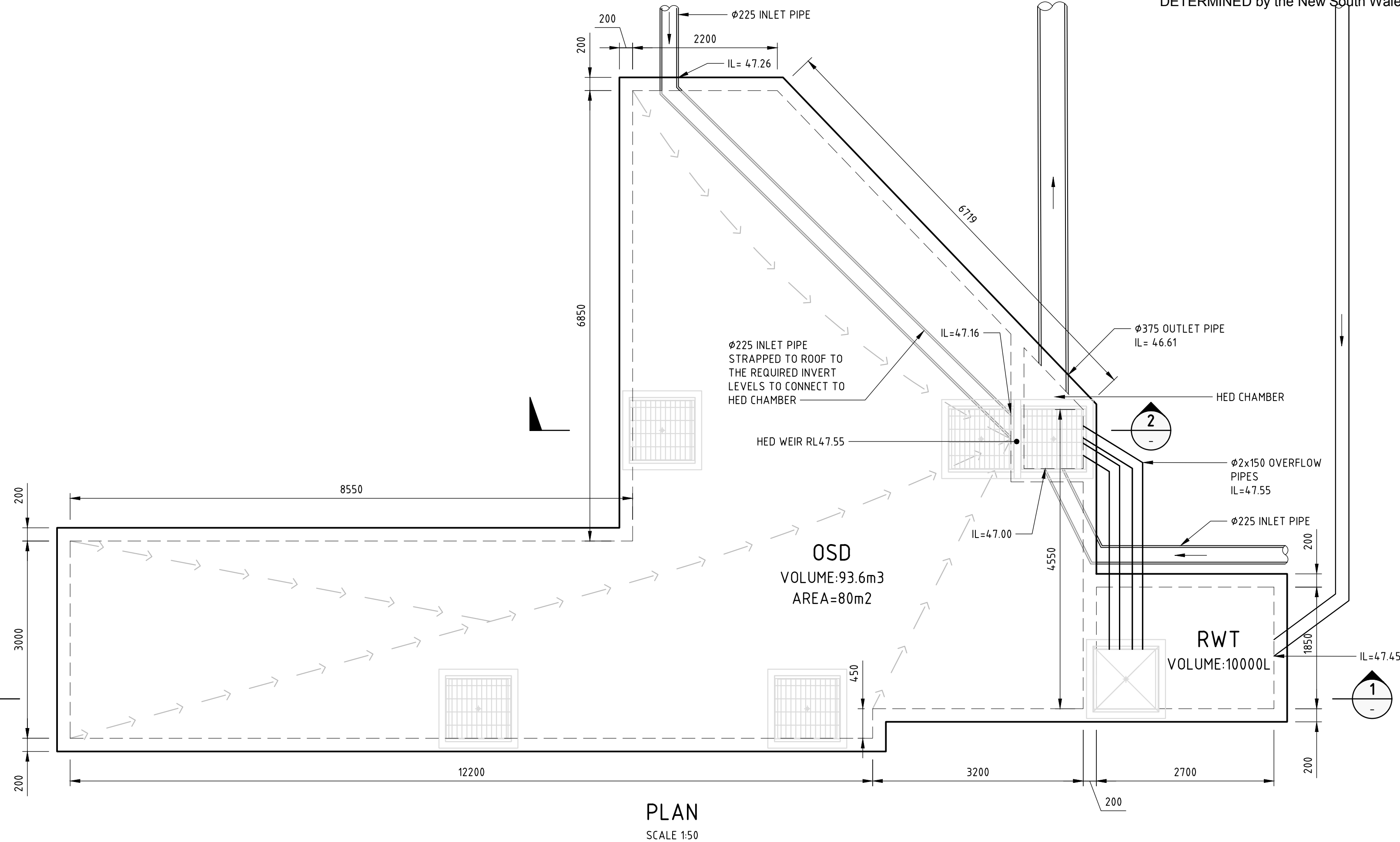
PROJECT

SENIORS DEVELOPMENT
21-23 PHILLIPS AVENUE &
5 RICHARDSON AVENUE
REGENTS PARK

DRAWING TITLE

CIVIL ENGINEERING PACKAGE
DETAILS - SHEET 01

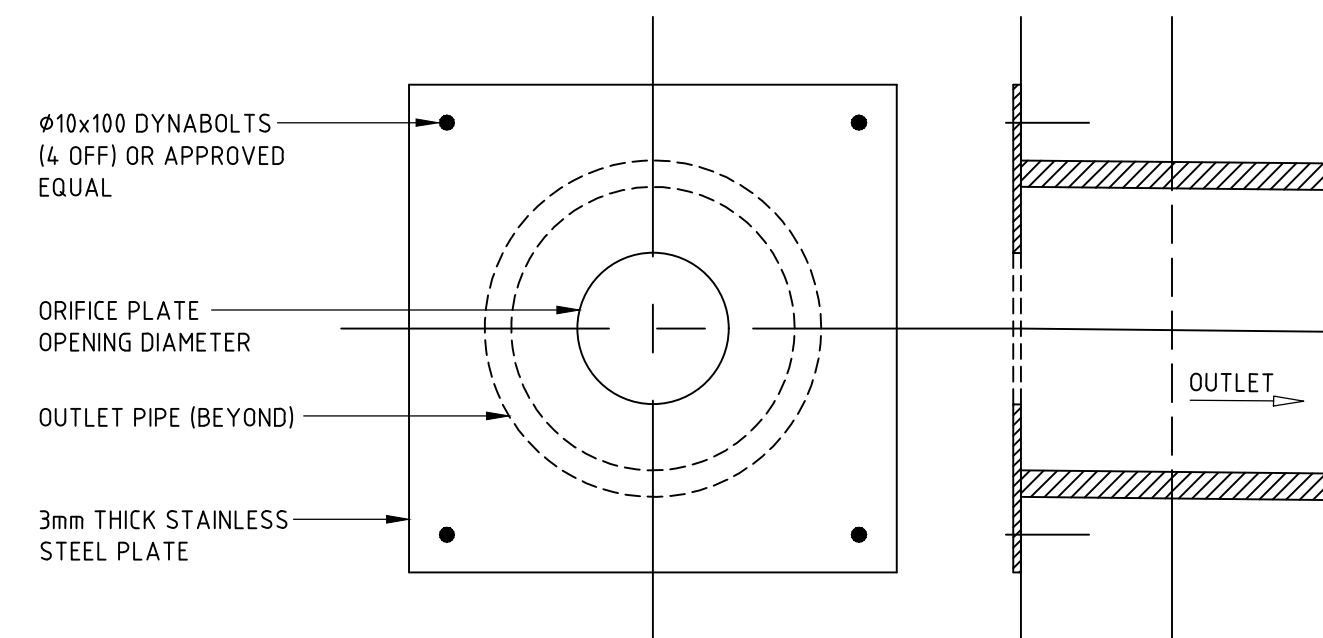
JOB NUMBER	202402
DRAWING NUMBER	REVISION
C07.01	D
DRAWING SHEET SIZE = A1	



2/9/2022

- HANDLE
- OFFICE PLATE (BEYOND)
- GALVANISED STEEL PLATE CLIP WELDED TO BASKET (TYPICAL BOTH SIDES)
- GALVANISED STEEL PLATE BRACKET FIXED TO WALL WITH 2 LOXINS TO SEAT CLIPS INTO
- 'MAXIMESH RH3030' OR APPROVED EQUAL

TRASH SCREEN DETAIL SCALE 1:10



ORIFICE PLATE DETAIL

ORIFICE PLATE No 1 - ϕ 64mm SCALE 1:10

DESIGN SUMMARY:

TOWN CENTRE= REGENTS PARK
CATCHMENT NAME=DUCK RIVER CATCHMENT(ZONE 1)

CATCHMENT CALCULATIONS:
SITE AREA = 1724m²
PSD = 80 l/s/Ha
SSR = 530 m³/Ha

THEREFORE SITE PSD= 13.79 l/s/Ha
SSR = 91.37m³

BASED ON SITE RESTRICTION AN ALLOWANCE OF 15% OF THE SITE BYPASSES THE OSD TANK.
ADJUST PSD = 8.24 l/s

ADJUSTMENT FOR THE HED
WEIR HEIGHT = 0.75m
HED=7.611/s
MEAN DISCHARGE = 7.93 l/s
MEAN DISCHARGE PER HECTARE = 53.52 l/s/Ha
SSR = 634.64 m³/Ha
FINAL STORAGE VOLUME NEEDED = 94m³

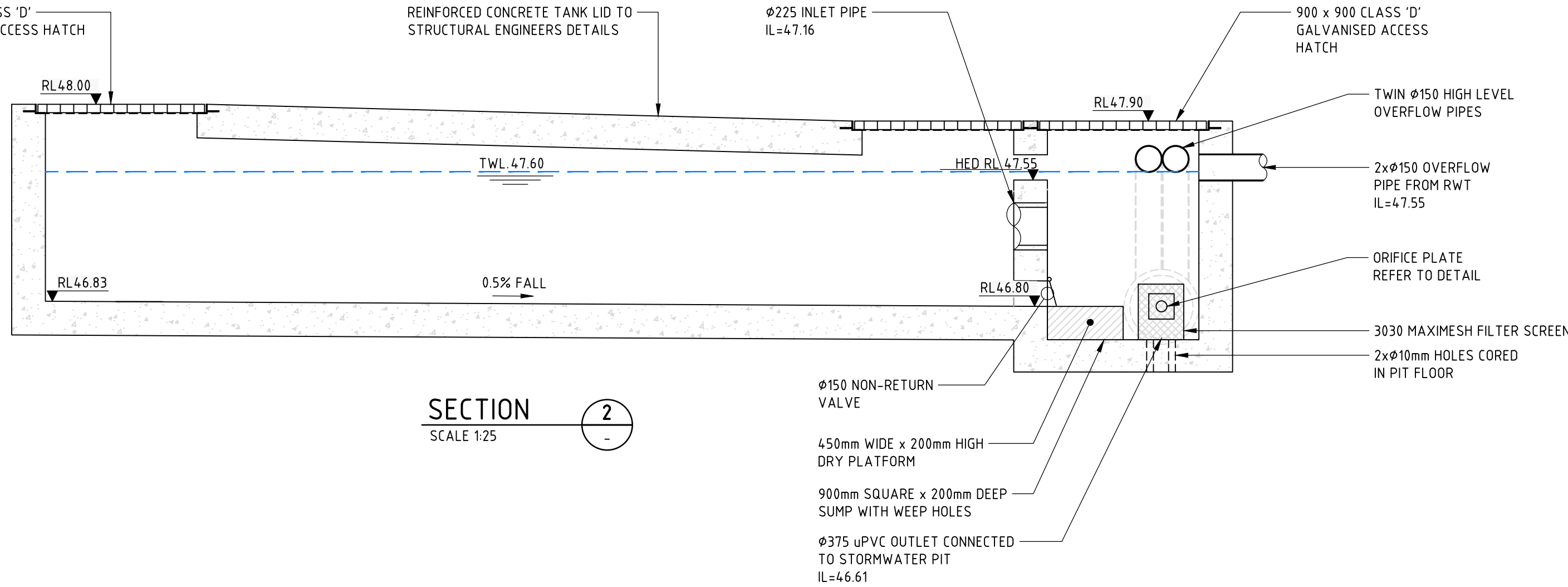
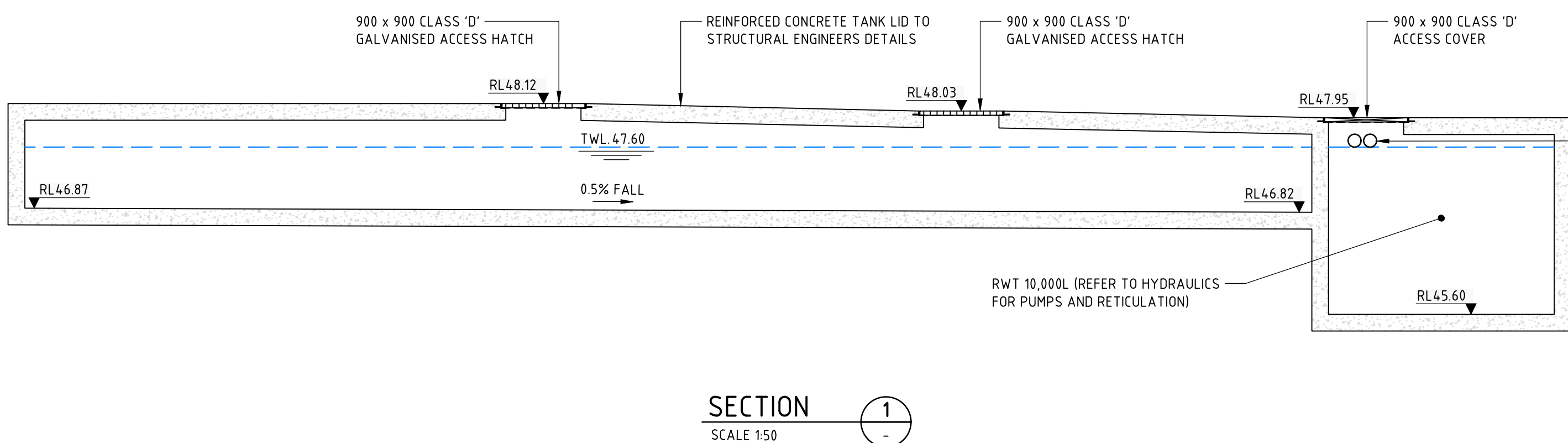
ON-SITE DETENTION SUMMARY:
• BELOW GROUND BLOCK WORK TANK

TOP OF WATER LEVEL = RL47.6
ORIFICE CENTRELINE = RL46.80
ORIFICE DIAMETER = 64mm DIA
HED =RL47.55

RAINWATER RE-USE
IN ACCORDANCE WITH BASIX/COUNCIL REQUIREMENTS.
RAINWATER RE-USE STORAGE REQUIRED =10m³

RAINWATER RE-USE TO BE USED FOR THE FOLLOWING:
• TOILET FLUSHING;
• WASHING MACHINES;
• ONE(1) OUTDOOR TAP.

A $\frac{1}{3}$ OF THE RAINWATER REUSE VOLUME CAN OFFSET THE OSD VOLUME IN ACCORDANCE WITH COUNCILS POLICY.
THEREFORE ONSITE DETENTION STORAGE VOLUME =94-3.33=90.67m³



21-23 PHILLIPS AVE & 5 RICHARDSON AVE, REGENTS PARK

SENIORS DEVELOPMENT PUBLIC DOMAIN WORKS - STORMWATER EXTENSION



LOCALITY PLAN

SOURCE : NEARMAP.COM.AU (©2020)

CIVIL DRAWING SCHEDULE

DWG No.	DRAWING TITLE
C51.01	COVER SHEET, DRAWING SCHEDULE AND LOCALITY PLAN
C51.11	SPECIFICATION NOTES - SHEET 01
C51.12	SPECIFICATION NOTES - SHEET 02
C52.01	SEDIMENT EROSION CONTROL PLAN
C52.11	SEDIMENT EROSION CONTROL DETAILS
C54.01	SITeworks & STORMWATER MANAGEMENT PLAN
C55.01	CATCHMENT PLAN
C55.11	STORMWATER LONGITUDINAL SECTIONS
C57.01	DETAILS SHEET

2/9/2022

Handwritten signature

DETERMINED by the New South Wales Land & Housing Corporation on:

DRAWN: BMAZZA
DESIGNED: SHONG
JOB MANAGER: N SUTHERLAND
VERIFIER:

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	SCALE	PROJECT	DRAWING TITLE	JOB NUMBER
01	ISSUED FOR REVIEW	SH		NS	30.08.21	 Land & Housing Corporation	 BARRY RUSH & ASSOCIATES	 NORTHROP Sydney Level 11 345 George Street, Sydney NSW 2000 Ph (02) 9241 4188 Fax (02) 9241 4324 Email sydney@northrop.com.au ABN 81 094 433 100	SENIORS DEVELOPMENT 21-23 PHILLIPS AVENUE & 5 RICHARDSON AVENUE REGENTS PARK	PUBLIC DOMAIN WORKS COVER SHEET, DRAWING SCHEDULE AND LOCALITY PLAN	202402
02	ISSUED FOR APPROVAL	MM		NS	28.10.21						
-											
-											
DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED						THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD					

NOTE: ALL CIVIL ENGINEERING CONSTRUCTION WORKS TO BE CARRIED OUT IN ACCORDANCE WITH CUMBERLAND CITY COUNCIL DEVELOPMENT GUIDELINES .THE FOREMENTIONED GUIDELINES INCLUSIVE OF ALL SPECIFICATIONS TAKE PRECEDENCE OVER NOTES PROVIDED BELOW.

JOB MANAGER: N. SUTHERLAND DESIGNED: S. HONG DRAWN: B. MAZZA	VERIFIER:	ACCESS AND SAFETY					STORMWATER DRAINAGE					SITEWORKS					EXISTING SERVICES					EARTHWORKS (cont)				
		1. THE CONTRACTOR SHALL COMPLY WITH ALL STATUTORY AND INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL. 2. THE CONTRACTOR SHALL PROVIDE TRAFFIC MANAGEMENT PLANS FOR THE PROPOSED WORKS COMPLETED BY A SUITABLY QUALIFIED PERSON AND APPROVED BY COUNCIL / REGULATORY AUTHORITY. WORK IS NOT TO COMMENCE ON SITE PRIOR TO APPROVAL OF TRAFFIC MANAGEMENT SCHEME. 3. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO BUILDINGS ADJACENT THE WORKS IS NOT DISRUPTED. 4. WHERE NECESSARY THE CONTRACTOR SHALL PROVIDE SAFE PASSAGE OF VEHICLES AND/OR PEDESTRIANS THROUGH OR BY THE SITE. 5. THE CONTRACTOR SHALL ENSURE PUBLIC ACCESS EXTERNAL TO THE SITE IS IN ACCORDANCE WITH COUNCILS / AUTHORITY / SITE MANAGERS REQUIREMENTS.					1. ALL PIPES SHALL BE CLASS 2 RUBBER-RING JOINTED RCP U.N.O. WHERE uPVC PIPES HAVE BEEN SPECIFIED, THE FOLLOWING CLASS PIPEWORK IS TO BE ADOPTED U.N.O. ø100mm OR LESS TO BE CLASS 'SN10' AND ABOVE ø100mm TO BE CLASS 'SN8'. CLASS 4 PIPES ARE TO BE USED WHERE COVER OVER THE PIPE IS BELOW 600mm AND BENEATH A TRAFFICABLE PAVEMENT. 2. uPVC STORMWATER LINES PASSING UNDER FLOOR SLABS TO BE CONCRETE ENCASED. 3. FRC PIPES EQUAL TO THAT OF THE STEEL REINFORCED CONCRETE PIPE CLASS SPECIFIED ON THE DRAWINGS MAY BE USED SUBJECT TO APPROVAL FROM THE SUPERINTENDENT. 4. ALL PIPE ARE TO BE LAID AT 10% MIN GRADE U.N.O. 5. <u>COVERS</u> 5.1. USE HOT DIPPED GALVANISED COVERS AND GRATES COMPLYING WITH RELEVANT COUNCIL AND AUSTRALIAN STANDARDS. 5.2. ALL COVERS AND GRATES TO BE POSITIONED IN A FRAME AND MANUFACTURED AS A UNIT. 5.3. ALL COVERS AND GRATES TO BE FITTING WITH POSITIVE COVER LIFTING KEYS 5.4. OBTAIN SUPERINTENDENTS APPROVAL FOR THE USE OF CAST IRON SOLID COVERS AND GRATES. CAST IRON SOLID COVERS (IF APPROVED) TO CONSIST OF CROSS-WEBBED, CELLULAR CONSTRUCTION WITH THE RIBS UPPERMOST TO ALLOW INFILLING WITH CONCRETE. INSTALL POSITIVE COVER LIFTING KEYS AND PLASTIC PLUGS. 5.5. UNLESS DETAILED OR SPECIFIED OTHERWISE, COVERS AND GRATES TO BE CLASS 'D' IN VEHICULAR PAVEMENTS AND CLASS 'B' ELSEWHERE. 5.6. ALL GRATED TRENCH DRAINS SHOULD BE 'CLASS D' CAST IRON WITHIN VEHICULAR PAVEMENTS AND CLASS 'B' HEEL SAFE WITHIN PEDESTRIAN PAVEMENTS. 6. ALL PIPE BENDS, JUNCTIONS, ETC ARE TO BE PROVIDED USING PURPOSE MADE FITTINGS OR STORMWATER PITS. 7. ALL CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND CEMENT RENDERED TO ENSURE A SMOOTH FINISH. 7. ENSURE PIPEWORK DOES NOT PROTRUDE BEYOND THE INSIDE FACE OF THE PIT WALL. PIPEWORK IS TO FINISH FLUSH WITH INTERNAL WALL (UNLESS OTHERWISE NOTED OR DETAILED). CONNECTION TO BE RENDERED AND MADE NEAT ON THE INSIDE FACE OF THE PIT 8. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK. 9. U.N.O. MATERIAL USED FOR BEDDING OF PIPES SHALL BE APPROVED NON-COHESIVE GRANULAR MATERIAL HAVING HIGH PERMEABILITY AND HIGH STABILITY WHEN SATURATED AND FREE OF ORGANIC AND CLAY MATERIAL. 10. BEDDING SHALL BE U.N.O TYPE HS2 UNDER ROADS AND H2 UNDER GENERAL AREAS IN ACCORDANCE WITH CURRENT RELEVANT INDUSTRY STANDARDS AND GUIDELINES. 11. THE CONTRACTOR SHALL ENSURE AND PROTECT THE INTEGRITY OF ALL STORMWATER PIPES DURING CONSTRUCTION. ANY AND ALL DAMAGE TO THESE PIPES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AND AT NO EXTRA COST TO THE CONTRACT. 12. NOTE THAT THE PIT COVER LEVEL NOMINATED IN GUTTERS ARE TO THE INVERT OF THE GUTTER WHICH ARE 40mm LOWER THAN THE PAVEMENT LEVEL AT LIP OF GUTTER. REFER KERB DETAILS FOR CONFIRMATION. <u>SUBSOIL DRAINAGE</u> 13. ø100mm SUBSOIL DRAINAGE LINES WITH NON-WOVEN GEOTEXTILE FILTER SOCK SURROUND SHALL BE CONNECTED TO A STORMWATER DRAINAGE PIT (AT MIN 1% LONGITUDINAL GRADE) AND PROVIDED IN THE FOLLOWING LOCATIONS: 13.1. THE HIGH SIDE OF PROPOSED TRAFFICKED PAVEMENT AREAS. 13.2. ALL PLANTER AND TREE BEDS PROPOSED ADJACENT TO PAVEMENT AREAS. 13.3. BEHIND RETAINING WALLS (IN ACCORDANCE WITH RETAINING WALL DETAILS). 13.4. UPSTREAM OF STORMWATER PITS 13.5. BENEATH FLEXIBLE PAVEMENT ALONG A SAG PROFILE 13.6. ALL OTHER AREAS SHOWN ON DRAWINGS. 13.7. CONTRACTOR IS TO MAKE ALLOWANCE IN BOTH TENDER AND CONSTRUCTION COSTING TO ALLOW FOR SUBSURFACE DRAINAGE BEHIND ALL RETAINING WALLS / ABOVE LOCATIONS AND TO MAKE CONNECTION TO STORMWATER SYSTEM. 14. WHERE SUBSOIL DRAINAGE PASSES BENEATH BUILDINGS / PAVED AREAS AND/OR PAVEMENTS, CONTRACTOR TO ENSURE ø100mm CLASS 'SN10' uPVC DRAINAGE LINE IS USED AND THAT PROPRIETARY FITTINGS ARE USED TO RECONNECT SUBSOIL DRAINAGE LINE. 15. THE CONTRACTOR SHALL INSTALL INSPECTION OPENINGS / CLEAROUTS TO ALL SUBSOIL DRAINAGE LINES AND DOWNPIPE LINES AS SPECIFIED ON DRAWINGS AND IN ACCORDANCE WITH COUNCIL SPECIFICATIONS. HOWEVER AS A MINIMUM THEY ARE TO BE PLACED AT MAXIMUM 30m CENTRES AND AT ALL UPSTREAM ENDPOINTS. 16. PROVIDE 3.0m LENGTH OF ø100 SUBSOIL DRAINAGE LINE WRAPPED IN NON-WOVEN GEOTEXTILE FILTER FABRIC TO THE UPSTREAM SIDE OF STORMWATER PITS, LAID IN STORMWATER PIPE TRENCHES AND CONNECTED TO DRAINAGE PIT. 17. IN AREAS WHERE DUMPED / HAND PLACED ROCK IS USED AS A MEANS OF SCOUR PROTECTION, CONTRACTOR IS TO EXCAVATE A MINIMUM OF 100mm FROM PROPOSED SURFACE, LEVEL AND COMPACT SUBGRADE AS SPECIFIED. ROCK TO THEN BE PLACED ON GEOTEXTILE FILTER FABRIC A34. 18. THE CONTRACTR IS TO ENSURE THAT A MINIMUM 150mm CLEARANCE IS PROVIDED BETWEEN THE INTERNAL FACE OF PIPE AND ADJACENT INTERNAL PIT WALLS 19. WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN 50mm CONCRETE BED (OR 75mm THICK BED OF 12mm BLUE METAL) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK. (E.G. CLEAN 5-12mm AGGREGATE)					1. ALL WORKS TO BE IN ACCORDANCE WITH RELEVANT LOCAL COUNCIL / REGULATORY AUTHORITIES REQUIREMENTS, ALL SPECIFICATIONS AND AUSTRALIAN STANDARDS. CONFLICTS BETWEEN SAID DOCUMENTS SHALL BE REFERRED TO THE SUPERINTENDENT FOR DIRECTION. 2. THE CONTRACTOR IS TO REVIEW THE DRAWINGS PRIOR TO PRICING AND COMMENCEMENT AND REPORT ANY DISCREPANCIES TO NORTHROP 3. ANY PRODUCTS SPECIFIED OR USED TO BE VERIFIED BY THE CONTRACTOR AS BEING SAFE AND APPROPRIATE FOR USE. NORTHROP DO NOT TAKE ANY RESPONSIBILITY FOR THE USE OF UNSAFE PRODUCTS 4. THE CONTRACTOR IS TO DESIGN, OBTAIN APPROVALS AND CARRY OUT REQUIRED TEMPORARY TRAFFIC CONTROL PROCEDURES DURING CONSTRUCTION IN ACCORDANCE WITH ALL REGULATORY AUTHORITIES, INCLUSIVE OF LOCAL COUNCIL REGULATIONS AND REQUIREMENTS. 5. THE CONTRACTOR IS TO OBTAIN ALL AUTHORITY APPROVALS AS REQUIRED PRIOR TO COMMENCEMENT OF WORKS. 6. RESTORE ALL PAVED, COVERED, GRASSED AND LANDSCAPED AREAS TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE SITE SUPERINTENDENT ON COMPLETION OF WORKS. WHERE PLANTING OF NEW GRASS IS NECESSARY REFER TO LANDSCAPE ARCHITECT AND / OR ARCHITECT DOCUMENTATION. 7. ON COMPLETION OF ANY TRENCHING WORKS, ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE SITE SUPERINTENDENT, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL, GRASSED AREAS AND ROAD PAVEMENTS. 8. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR PRIOR TO COMMENCEMENT OF WORKS. THE CONTRACTOR IS TO ENSURE THAT SURVEY BOUNDARIES ARE DERIVED FROM A CADASTRAL SURVEY RATHER THAN A DETAIL SURVEY. 9. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING LEVELS ONSITE PRIOR TO LODGMENT OF TENDER AND ONSITE WORKS. THE PRICE AS TENDERED SHALL BE INCLUSIVE OF ALL WORKS SHOWN ON THE TENDER PROJECT DRAWINGS. ADDITIONAL PAYMENTS FOR WORKS SHOWN ON THE TENDER PROJECT DRAWINGS WILL NOT BE APPROVED. 10. DO NOT OBTAIN DIMENSIONS BY SCALING DRAWINGS. 11. IN CASE OF DOUBT OR DISCREPANCY REFER TO SUPERINTENDENT FOR CLARIFICATION OR CONFIRMATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. 12. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED. MAKE SMOOTH TRANSITION TO EXISTING FEATURES AND MAKE GOOD WHERE JOINED. 13. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING. 14. ALL CIVIL ENGINEERING DESIGN HAS BEEN DOCUMENTED UNDER THE ASSUMPTION THAT ALL NECESSARY SITE CONTAMINATION REMEDIATION WORKS HAVE BEEN SATISFACTORILY COMPLETED (IF APPLICABLE) AND THAT THE SITE IS NOT AFFECTED BY ANY SOIL STRATA OR GROUNDWATER TABLE CONTAMINATION. 15. NOTES ON DETAILS PROVIDED TAKE PRECEDENCE OVER SPECIFICATION NOTES UNLESS IN CONTRADICTION WITH COUNCIL/AUTHORITY SPECIFICATIONS/DETAILS. CONTRACTOR TO CONSULT WITH NORTHROP FOR ANY DISCREPANCIES. 16. IF THE CONTRACTOR DISCOVERS HAZARDOUS/CONTAMINATED MATERIAL THE CONTRACTOR SHALL CONSULT WITH AN ENVIRONMENTAL SPECIALIST. 17. THE CONTRACTOR IS RESPONSIBLE FOR DEALING WITH COMMUNITY COMPLAINTS ASSOCIATED WITH THE WORKS UNDER THE CONTRACT AND TO COMPENSATE FOR/RECTIFY ANY DAMAGE REASONABLY CAUSED BY THE CONTRACTOR. 18. THE TERM 'MAKE GOOD' OR 'MAKE NEAT' IS IN REFERENCE TO THE SATISFACTION OF NORTHROP OR CERTIFYING ENGINEER. THE CONTRACTOR IS TO SEEK CLARIFICATION FROM NORTHROP OR THE CERTIFYING ENGINEER IF NECESSARY. 19. TOLERANCES TO BE IN ACCORDANCE WITH COUNCIL/AUTHORITY REQUIREMENTS. <u>SERVICE TRENCHES</u> 20. SAWCUT EXISTING SURFACES PRIOR TO EXCAVATION. BACKFILL ALL TRENCHES UNDER EXISTING ROADS, PAVEMENTS AND PATHS WITH STABILISED SAND 5% CEMENT OR DGS40 MATERIAL (5% CEMENT) COMPACTED IN 200mm THICK LAYERS TO 98% MMD TO UNDERSIDE OF PAVEMENT. 21. BACKFILL ALL TRENCHES NOT UNDER ROADS, PAVEMENTS, PATHS AND BUILDINGS WITH APPROVED EXCAVATED OR IMPORTED MATERIAL COMPACTED TO 95% SMDD.					1. ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA OR DIAL BEFORE YOU DIG SEARCHES, THEREFORE THEIR ACCURACY AND COMPLETENESS IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY. NOTE SERVICE AUTHORITY REQUIREMENTS FOR LOCATING OF SERVICES PRIOR TO COMMENCEMENT OF WORKS. 2. CARE TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATION, GAS OR ELECTRICAL SERVICES. HAND EXCAVATION ONLY IN THESE AREAS. 3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING SERVICES THAT ARE TO BE RETAINED IN THE VICINITY OF THE PROPOSED WORKS. ANY AND ALL DAMAGE TO THESE SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AT THE CONTRACTORS EXPENSE. 4. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE ADJUSTMENT (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS. 5. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS UNLESS DIRECTED OTHERWISE ON THE DRAWINGS OR BY THE SUPERINTENDENT. 6. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS ARE NOT AFFECTED BY THE WORKS AND ARE MAINTAINED AND NOT DISRUPTED. 7. PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF THE PROGRAM FOR THE RELOCATION AND/OR CONSTRUCTION OF TEMPORARY SERVICES AND FOR ANY ASSOCIATED INTERRUPTION OF SUPPLY. 8. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT. 9. THE CONTRACTOR IS TO ALLOW TO POTHOLE ANY SERVICES WITHIN A PUBLIC RESERVE WITHIN THE EXTENT OF WORKS (E.G. STORMWATER CROSSINGS).					12. WHERE THERE IS INSUFFICIENT EXCAVATED MATERIAL SUITABLE FOR FILLING OR SUBGRADE REPLACEMENT, THE CONTRACTOR IS TO ALLOW TO IMPORT FILL. IMPORTED FILL SHALL COMPLY WITH THE FOLLOWING; 11. BE OF VIRGIN EXCAVATED NATURAL MATERIAL OR 12. CONTRACTOR TO PROVIDE EVIDENCE IMPORT IS SUITABLE FOR USE 13. PLASTICITY INDEX BETWEEN 2-15% AND CBR > 8 14. FREE FROM ORGANIC AND PERISHABLE MATTER 15. MAXIMUM SIZE 50mm, PASSING 75 MICRON SIEVE (+25%) 2. THE CONTRACTOR SHALL PROGRAM THE EARTHWORKS OPERATION SO THAT THE WORKING AREAS ARE ADEQUATELY DRAINED DURING THE PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLERS MARKS AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL. ANY DAMAGE RESULTING FROM THE CONTRACTOR NOT OBSERVING THESE REQUIREMENTS SHALL BE RECTIFIED AT THEIR COST. 12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE AND MAINTAIN THE INTEGRITY OF ALL SERVICES, CONDUITS AND PIPES DURING CONSTRUCTION, SPECIFICALLY DURING THE BACKFILLING AND COMPACTION PROCEDURE. ANY AND ALL DAMAGE TO NEW OR EXISTING SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST. DEEP EXCAVATIONS 13. PRIOR TO THE COMMENCEMENT OF EXCAVATION WORKS GREATER THAN 15m IN DEPTH, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO DETERMINE THE STABILITY OF MATERIAL BEING EXCAVATED AND BENCHING REQUIREMENTS / MINIMUM BATTER SLOPES. 14. THE CONTRACTOR MUST PROVIDE THE SUPERINTENDENT AND OR THE DESIGN ENGINEER WITH A COPY OF THE GEOTECHNICAL ENGINEERS REPORT PRIOR TO PRACTICAL COMPLETION. 15. THE CONTRACTOR IS TO PROVIDE SAFETY BARRIERS, FENCING AND THE LIKE IN ACCORDANCE WITH OH&S AND REGULATORY AUTHORITY REQUIREMENTS AND TO ENSURE THE WORK SITE IS SAFE AT ALL TIMES.				
		PRECAST STORMWATER PITS 1. THE USE OF PRE-CAST STORMWATER DRAINAGE PITS IS NOT ACCEPTED WITHOUT CONFIRMATION BETWEEN NORTHROP ENGINEERS AND THE CONTRACTOR REGARDING QUALITY CONTROL AND CERTIFICATION OF FINISHES. 2. REFER MANUFACTURERS SPECIFICATIONS FOR INSTALLATION GUIDELINES. 3. PRECAST PIT TO BE PLACED ON MINIMUM 150mm THICK CONCRETE PAD AND BED MINIMUM 50mm WHILST CONCRETE IS STILL PARTIALLY WET. 4. ENSURE PENETRATION IS CORED THROUGH PIT FACE TO ALLOW CONNECTION AND IS NOT OVERSIZED. 5. ENSURE A SEALED FINISH AT PIPE CONNECTIONS BY HAND-APPLYING MINIMUM 150mm THICK CONCRETE AROUND PIPE AT THE EXTERNAL FACE OF THE PIT. ENSURE CONCRETE DOES NOT AFFECT THE INTEGRITY OF THE SUBSOIL DRAINAGE CONNECTED TO THE PIT. 6. ENSURE A SMOOTH SEALED FINISH AT PIPE CONNECTIONS BY HAND APPLYING CONCRETE AROUND THE PIPE ON THE INTERNAL FACE OF THE PIT TO FILL IN ANY VOIDS CREATED WHEN PENETRATION FOR THE PIPE WAS CORED. 7. ENSURE PIPEWORK DOES NOT PROTRUDE BEYOND THE INSIDE FACE OF THE PIT WALL. PIPEWORK IS TO FINISH FLUSH WITH INTERNAL WALL (UNLESS OTHERWISE NOTED OR DETAILED). CONNECTION TO BE RENDERED AND MADE NEAT ON THE INSIDE FACE OF THE PIT. 8. ENSURE THE OUTLET PIPE IS CONNECTED AT THE INVERT LEVEL OF THE PIT TO DRAIN. ALTERNATIVELY FILL THE BASE OF THE PIT WITH MASS CONCRETE (MIN 50mm THICK) OR APPROVED GROUTING COMPOUND (LESS THAN 50mm THICK) TO DRAIN. 9. PROVIDE CONCRETE BENCHING TO SIDES OF PIT TO SUIT PIPE DIAMETER. HEIGHT TO MATCH MINIMUM 1/3 PIPE DIAMETER.																								
		 DETERMINED by the New South Wales Land & Housing Corporation on: 2/9/2022																								

NOT FOR CONSTRUCTION

NOTE: ALL CIVIL ENGINEERING CONSTRUCTION WORKS TO BE CARRIED OUT IN ACCORDANCE WITH CUMBERLAND CITY COUNCIL DEVELOPMENT GUIDELINES .THE AFOREMENTIONED GUIDELINES INCLUSIVE OF ALL SPECIFICATIONS TAKE PRECEDENCE OVER NOTES PROVIDED BELOW.

ENGINEERING CERTIFICATION

1.

TO CERTIFY THE CONSTRUCTED CIVIL WORKS, A QUALIFIED EXPERIENCED ENGINEER IS TO VISIT THE SITE TO OBSERVE CONSTRUCTION TECHNIQUES AND VARIOUS ELEMENTS THAT MAY BE CONCEALED WHEN THE WORKS ARE COMPLETE.

2.

THIS SPECIFICATION ALLOWS FOR CERTIFICATION OF WORKS CONTROLLED BY A PRIVATE CERTIFIER FOR LAND DEVELOPMENT WORKS. THIS SPECIFICATION DOES NOT COVER CERTIFICATION REQUIREMENTS FOR AUTHORITIES SUCH AS COUNCIL, RMS OR OFFICE OF WATER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND PROVIDE ALL PROJECT SPECIFIC CONSTRUCTION COMPLIANCE (WORKS AS EXECUTED) INFORMATION TO THE SATISFACTION OF THE STAKEHOLDER / AUTHORITY. DISCREPANCIES BETWEEN THIS SPECIFICATION AND SPECIFICATIONS OF OTHER EXTERNAL STAKEHOLDERS / AUTHORITIES IS TO BE REPORTED TO THE SUPERINTENDENT FOR CLARIFICATION.

3.

THE CONTRACTOR IS TO AGREE WITH THE ENGINEER AN APPROPRIATE SITE VISIT SCHEDULE AND FEE ARRANGEMENT PRIOR TO COMMENCEMENT OF THE WORKS. THE CONTRACTOR SHALL ENSURE THAT THE ENGINEER CAN SAFELY ACCESS ALL CIVIL ELEMENTS TO BE REVIEWED. SITE VISITS ARE CONDUCTED DURING NORMAL BUSINESS HOURS. WE REQUIRE TWO (2) WORKING DAY NOTICE FOR ANY SITE VISIT.

4.

TO PROVIDE CERTIFICATION THE ENGINEER MUST VISIT THE SITE TO OBSERVE.

4.1.

PAVEMENTS

4.1.1.

POOR SUBGRADE CONDITIONS

4.1.2.

PROOF ROLLING OF SUB-GRADE

4.1.3.

PLACEMENT OF SUB-BASE COURSE, BASE COURSE AND WEARING COURSE.

4.1.4.

PLACEMENT OF STEEL REINFORCEMENT , DOWELS AND JOINT CRADLES PRIOR TO POURING OF CONCRETE

4.2.

EARTHWORKS

4.2.1.

TOPSOIL STRIP

4.2.2.

EARTHWORKS BATTER

4.2.3.

FILLING

4.3.

STORMWATER DRAINAGE

4.3.1.

DRAINAGE TRENCHES PRIOR TO BACKFILLING

4.3.2.

LEGAL POINT OF CONNECTION PRIOR TO BACKFILLING

4.3.3.

ANY OTHER DRAINAGE STRUCTURE THAT MAY BE CONCEALED DURING THE COURSE OF THE WORKS

4.4.

CONCRETE STRUCTURES

4.4.1.

PLACEMENT OF ANY STEEL REINFORCEMENT PRIOR TO CONSTRUCTION.

5.

THE CONTRACTOR SHALL PROVIDE SURVEYED LEVELS, PREPARED BY A QUALIFIED SURVEYOR FOR SUBGRADE, SUB-BASE COURSE, BASE COURSE AND WEARING COURSE.

6.

THE CONTRACTOR SHALL PROVIDE WORKS AS EXECUTED (WAE) DOCUMENTATION PREPARED BY A QUALIFIED PRACTISING SURVEYOR. THE WAE DRAWINGS SHALL CLEARLY SHOW STORMWATER GRATE/ COVER LEVELS, STORMWATER PIT INVERT LEVELS AND CORRESPONDING INVERT LEVELS OF ANY INCOMING OR OUTGOING PIPES, DIAMETER OF ALL PIPES, DIMENSIONS AND VOLUME OF ON-SITE DETENTION FACILITIES, INVERT LEVELS OF ORIFICE PLATES, OVERFLOW WEIRS, BASE OF TANK FINISHED LEVELS OF PAVEMENTS. THE WAE SHALL SHOW WHERE THE SIZE OR ALIGNMENT OF CIVIL ENGINEERING ELEMENTS WHEN THEY DEVIATE FROM THE DESIGN DOCUMENTATION.

7.

THE WAE DRAWINGS SHALL BE STAMPED WITH THE FOLLOWING STATEMENT "THESE WAE DRAWINGS HAVE BEEN PREPARED BY [COMPANY NAME] AND ARE A TRUE AND ACCURATE REPRESENTATION OF THE CONSTRUCTED WORKS". EACH DRAWING SHALL BE SIGNED AND DATED BY THE SURVEYOR WHO PREPARED THE DRAWINGS.

THESE WAE DRAWINGS HAVE BEEN PREPARED BY [COMPANY NAME] AND ARE A TRUE AND ACCURATE REPRESENTATION OF THE CONSTRUCTED WORKS.

SIGNED..... DATE.....

NAME.....

POSITION.....

8.

WAE SHALL BE PROVIDED IN BOTH AUTOCAD AND PDF FORMAT. NORTHROP CONSULTING ENGINEERS WILL PROVIDE ENGINEERING PLANS TO THE CONTRACTOR IN AUTOCAD FORMAT TO AID PREPARATION OF WAE DOCUMENTATION.

9.

IF THE WORKS ARE SUBJECT TO APPROVAL BY THE UPPER PARRAMATTA RIVER CATCHMENT TRUST (UPRCT) THE CONTRACTOR IS TO ABIDE BY THE UPRCT APPROVAL CHECKLIST.

10.

CONTRACTOR IS TO UNDERTAKE A CCTV INSPECTION OF ALL STORMWATER DRAINAGE PIPELINES AND PROVIDE TO THE ENGINEER FOR APPROVAL.

11.

THE CONTRACTOR SHALL PROVIDE ALL RELEVANT TEST CERTIFICATES PROGRESSIVELY THROUGHOUT THE DURATION OF THE WORKS. ALL TEST CERTIFICATES SHALL BE PREPARED BY A NATA REGISTERED LABORATORY. TEST CERTIFICATES ARE REQUIRED FOR PROOF ROLLING, SUBGRADE COMPACTION, COMPACTION OF PAVEMENT LAYERS, COMPACTION OF FILLING OPERATIONS, CONCRETE SLUMP TEST, AND CONCRETE STRENGTH TESTS. THE CONTRACT SHALL PROVIDE ALL RELEVANT VALIDATIONS BY A GEOTECHNICAL ENGINEER FOR ALL IMPORTED FILL

12.

EACH TEST CERTIFICATE WILL NOMINATE THE DATE AND TIME OF THE TEST AND PROVIDE A LOCATION OF WHERE THE TEST SAMPLE WAS TAKEN FROM.

13.

THE CONTRACTOR SHALL ARRANGE FOR THE ENGINEER TO CONDUCT A FINAL VISIT TO REVIEW OF THE CONSTRUCTED WORKS. THIS WILL REVIEW WILL NOT TAKE PLACE UNTIL THE WAE DOCUMENTATION AND RELEVANT TEST CERTIFICATES HAVE BEEN RECEIVED.

14.

IF DEFECTIVE OR INCOMPLETE WORK IS FOUND DURING THE FINAL INSPECTION ANOTHER INSPECTION MAY BE REQUIRED AT THE CONTRACTORS EXPENSE TO VERIFY THE RECTIFICATION WORKS HAVE BEEN COMPLETED.

3D INFORMATION DISCLAIMER

PLEASE BE ADVISED 12D DESIGN FILE, IF SUPPLIED, IS DEEMED TO BE AN ACCURATE REFLECTION OF NORTHROP'S DESIGN AT THE TIME OF FINAL DESIGN DEVELOPMENT AND MAY NOT FULLY REFLECT THE DESIGN SURFACE AS PRESENTED. HOWEVER THIS INFORMATION SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO INCORPORATION IN THE CONSTRUCTION WORKS.

YOU ARE FURTHER ADVISED THAT ISSUED HARDCOPY/PDF PLANS AND DOCUMENTS TAKE PRECEDENCE OVER THE SUPPLIED ELECTRONIC INFORMATION AND ANY INCONSTANCIES SHOULD IMMEDIATELY BE REPORTED TO NORTHROP CONSULTING ENGINEERS FOR VERIFICATION PRIOR TO THEIR INCORPORATION IN THE WORKS.

NORTHROP CONSULTING ENGINEERS TAKES NO RESPONSIBILITY FOR USE OF NON-VERIFIED 3D DESIGN INFORMATION USED IN THE WORKS.

THE USE OF THE 3D MODEL INFORMATION SHALL CONSTITUTE ACKNOWLEDGMENT AND ACCEPTANCE OF THE ABOVE STATEMENTS BY THE RECIPIENT.

SAFETY IN DESIGN

!

S01

ELECTRICAL SERVICES OVERHEAD

S02

VEHICULAR TRAFFIC

2/9/2022

DETERMINED by the New South Wales Land & Housing Corporation on:

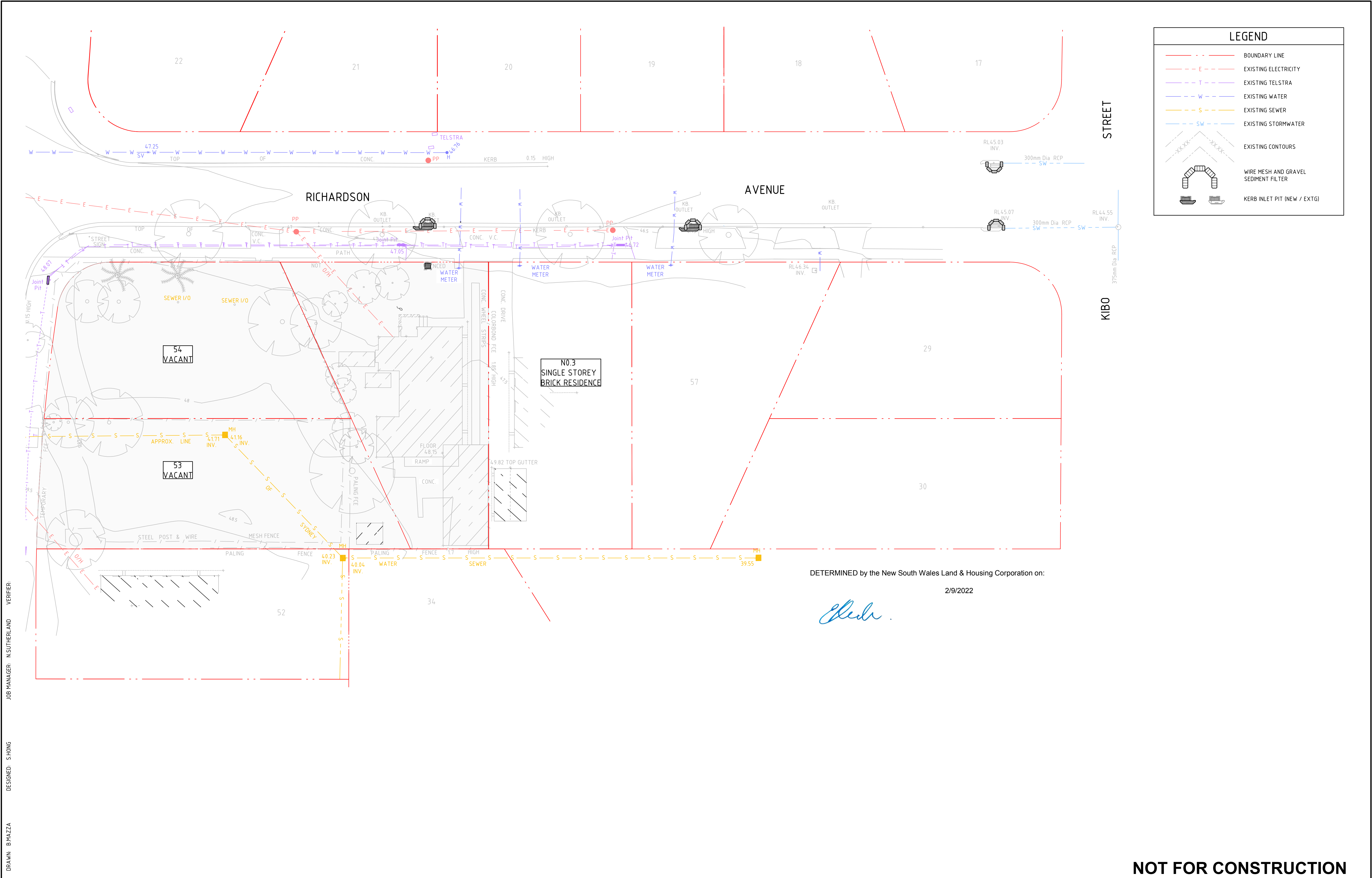
VERIFIER:

JOB MANAGER: N SUTHERLAND

DESIGNED: S HONG

DRAWN: B MAZZA

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.	PROJECT	DRAWING TITLE	JOB NUMBER	
01	ISSUED FOR REVIEW	SH		NS	30.08.21			 Sydney Level 11 345 George Street, Sydney NSW 2000 Ph (02) 9241 4188 Fax (02) 9241 4324 Email sydney@northrop.com.au ABN 81 094 433 100	SENIORS DEVELOPMENT 21-23 PHILLIPS AVENUE & 5 RICHARDSON AVENUE REGENTS PARK	PUBLIC DOMAIN WORKS SPECIFICATION NOTES - SHEET 02	202402	
02	ISSUED FOR APPROVAL	MM		NS	28.10.21						DRAWING NUMBER	REVISION
-											C51.12	02
-											DRAWING SHEET SIZE = A1	
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LEGEND

BOUNDARY LINE

EXISTING ELECTRICITY

EXISTING TELSTRA

EXISTING WATER

EXISTING SEWER

EXISTING STORMWATER

EXISTING CONTOURS

WIRE MESH AND GRAVEL SEDIMENT FILTER

KERB INLET PIT (NEW / EXTG)

JOB MANAGER: N SUTHERLAND VERIFIER: SHONG
DESIGNED: SHONG
DRAWN: BMAZZA

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR REVIEW	SH		NS	30.08.21
02	ISSUED FOR APPROVAL	MM		NS	28.10.21



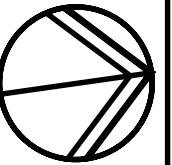
Land & Housing Corporation

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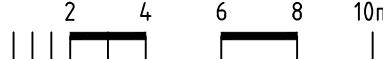
BARRY RUSH & ASSOCIATES

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NORTHROP

Sydney

Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

SENIORS DEVELOPMENT
21-23 PHILLIPS AVENUE &
5 RICHARDSON AVENUE
REGENTS PARK

DRAWING TITLE

PUBLIC DOMAIN WORKS
SEDIMENT EROSION CONTROL
PLAN

JOB NUMBER

202402

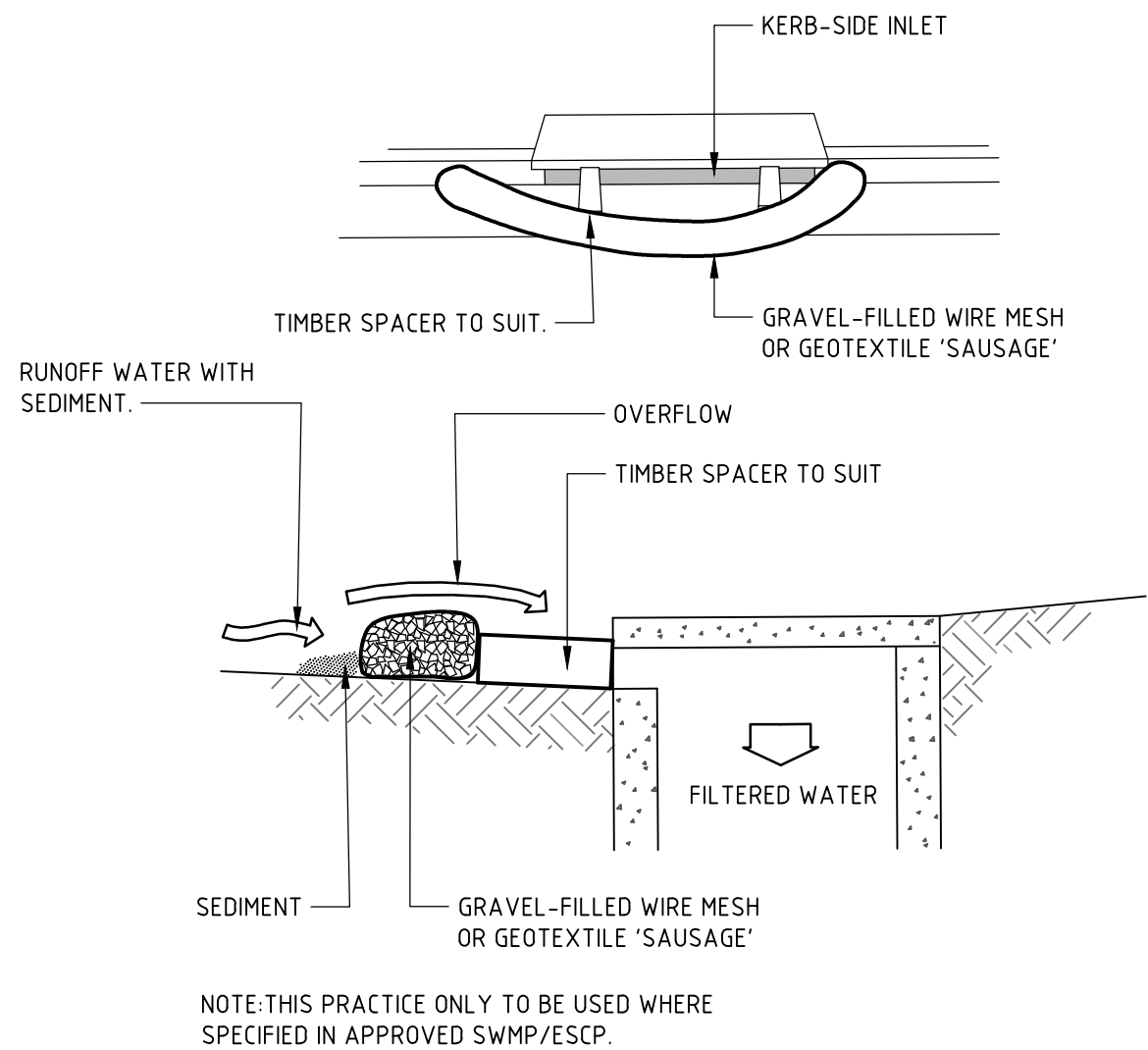
DRAWING NUMBER

REVISION

C52.01

02

DRAWING SHEET SIZE = A1



DETERMINED by the New South Wales Land & Housing Corporation on:

2/9/2022

[Signature]

CONSTRUCTION NOTES

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

WIRE MESH AND GRAVEL SEDIMENT FILTER

VERIFIER:

JOB MANAGER:

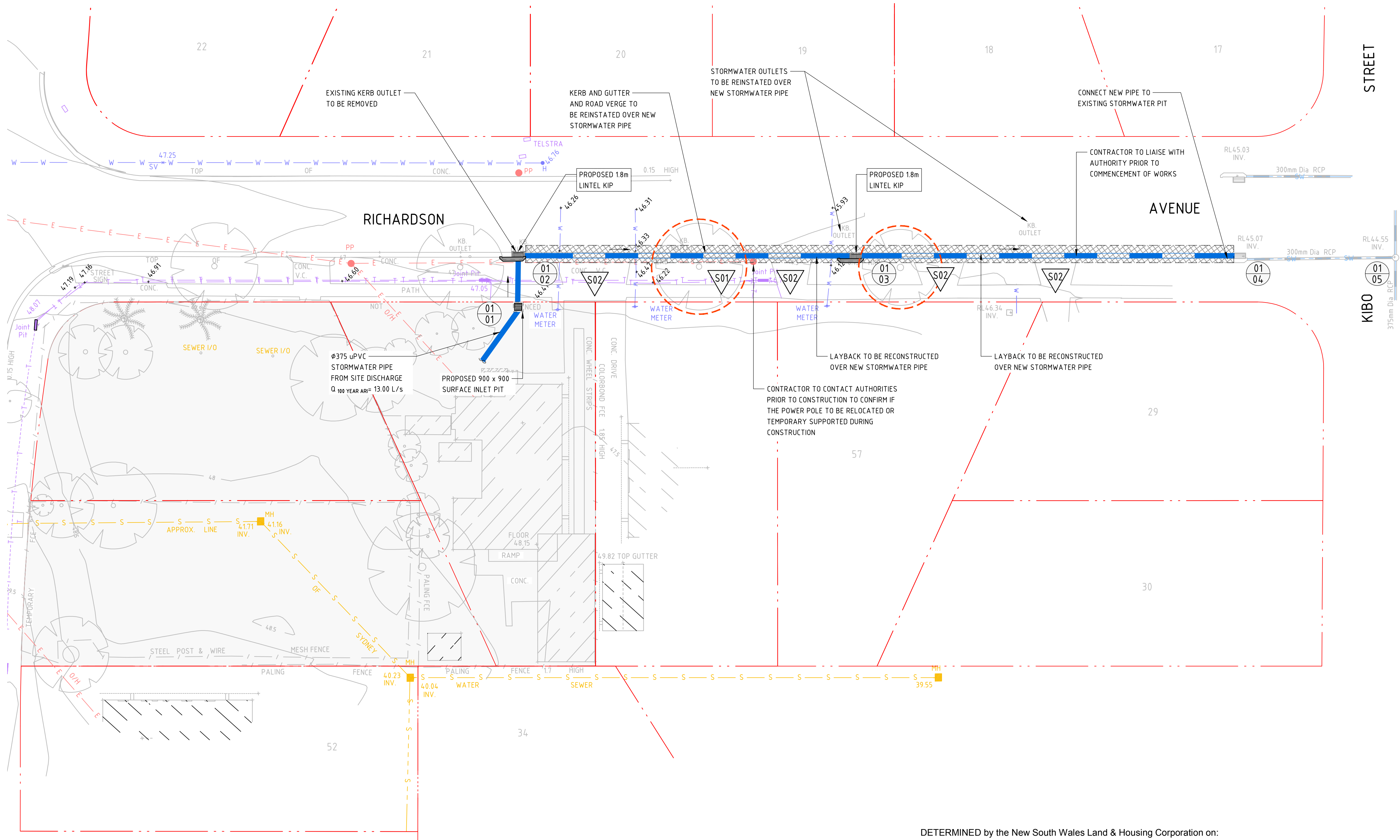
DESIGNED:

DRAWN:

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT		PROJECT	DRAWING TITLE	JOB NUMBER	
01	ISSUED FOR APPROVAL	SH		NS	28.10.21			ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.	 Sydney Level 11 345 George Street, Sydney NSW 2000 Ph (02) 9241 4188 Fax (02) 9241 4324 Email sydney@northrop.com.au ABN 81 094 433 100	SENIORS DEVELOPMENT 21-23 PHILLIPS AVENUE & 5 RICHARDSON AVENUE REGENTS PARK	PUBLIC DOMAIN WORKS SEDIMENT EROSION CONTROL DETAILS	202402
					DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD	NOT TO SCALE				DRAWING NUMBER	REVISION
											C52.11	01
											DRAWING SHEET SIZE = A1	

JOB MANAGER: N SUTHERLAND VERIFIER:
DESIGNED: SHONG
DRAWN: BMAZZA



LEGEND

- BOUNDARY LINE
- EXISTING ELECTRICITY
- EXISTING TELSTRA
- EXISTING WATER
- EXISTING SEWER
- EXISTING STORMWATER
- EXISTING KERB AND GUTTER
- EXISTING CONTOURS
- KERB INLET PIT (NEW / EXTG)
- STORMWATER PIPE
- STORMWATER PIT TAG
STRUCTURE No / LINE ID
- SAWCUT AND PAVEMENT INFILL
- TREES TO BE PROTECTED DURING CONSTRUCTION WORKS

LEGEND

- ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA OR DIAL BEFORE YOU DIG SEARCHES, THEREFORE THEIR ACCURACY AND COMPLETENESS IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
NOTE SERVICE AUTHORITY REQUIREMENTS FOR LOCATING OF SERVICES PRIOR TO COMMENCEMENT OF WORKS.
- POTHOLE AREA PRIOR TO COMMENCEMENT OF WORKS.

DETERMINED by the New South Wales Land & Housing Corporation on:

Handwritten signature

2/9/2022

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR REVIEW	SH		NS	30.08.21
02	ISSUED FOR APPROVAL	MM		NS	28.10.21

CLIENT

Land & Housing Corporation

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ARCHITECT

BARRY RUSH & ASSOCIATES

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Sydney

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Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

SENIORS DEVELOPMENT
21-23 PHILLIPS AVENUE &
5 RICHARDSON AVENUE
REGENTS PARK

DRAWING TITLE

PUBLIC DOMAIN WORKS

SITEWORKS & STORMWATER MANAGEMENT PLAN

JOB NUMBER

202402

DRAWING NUMBER

C54.01

REVISION

02

DRAWING SHEET SIZE = A1

VERIFIER:
JOB MANAGER:
DESIGNED:
DRAWN:



LEGEND

EXISTING BOUNDARY LINE

EXISTING CONTOURS

CATCHMENT BOUNDARY

CATCHMENT AREA

CATCHMENT TAG

EXISTING DRAINAGE STRUCTURE

NEW DRAINAGE STRUCTURE

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
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-					
-					

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ARCHITECT

BARRY RUSH
& ASSOCIATES

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Sydney

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Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT

SENIORS DEVELOPMENT
21-23 PHILLIPS AVENUE &
5 RICHARDSON AVENUE
REGENTS PARK

DRAWING TITLE

PUBLIC DOMAIN WORKS

CATCHMENT PLAN

JOB NUMBER

202402

DRAWING NUMBER

C55.01

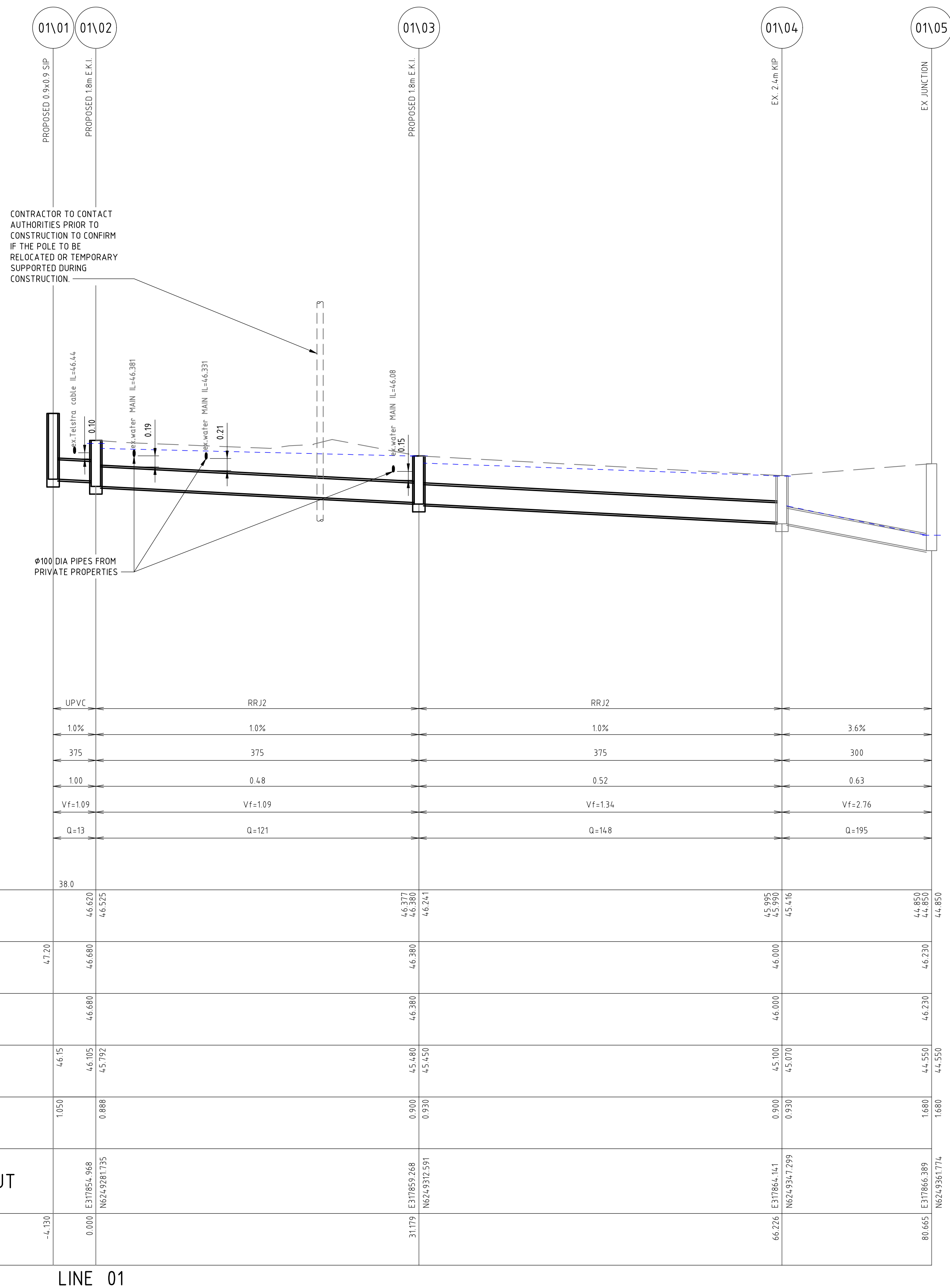
REVISION

02

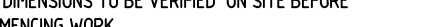
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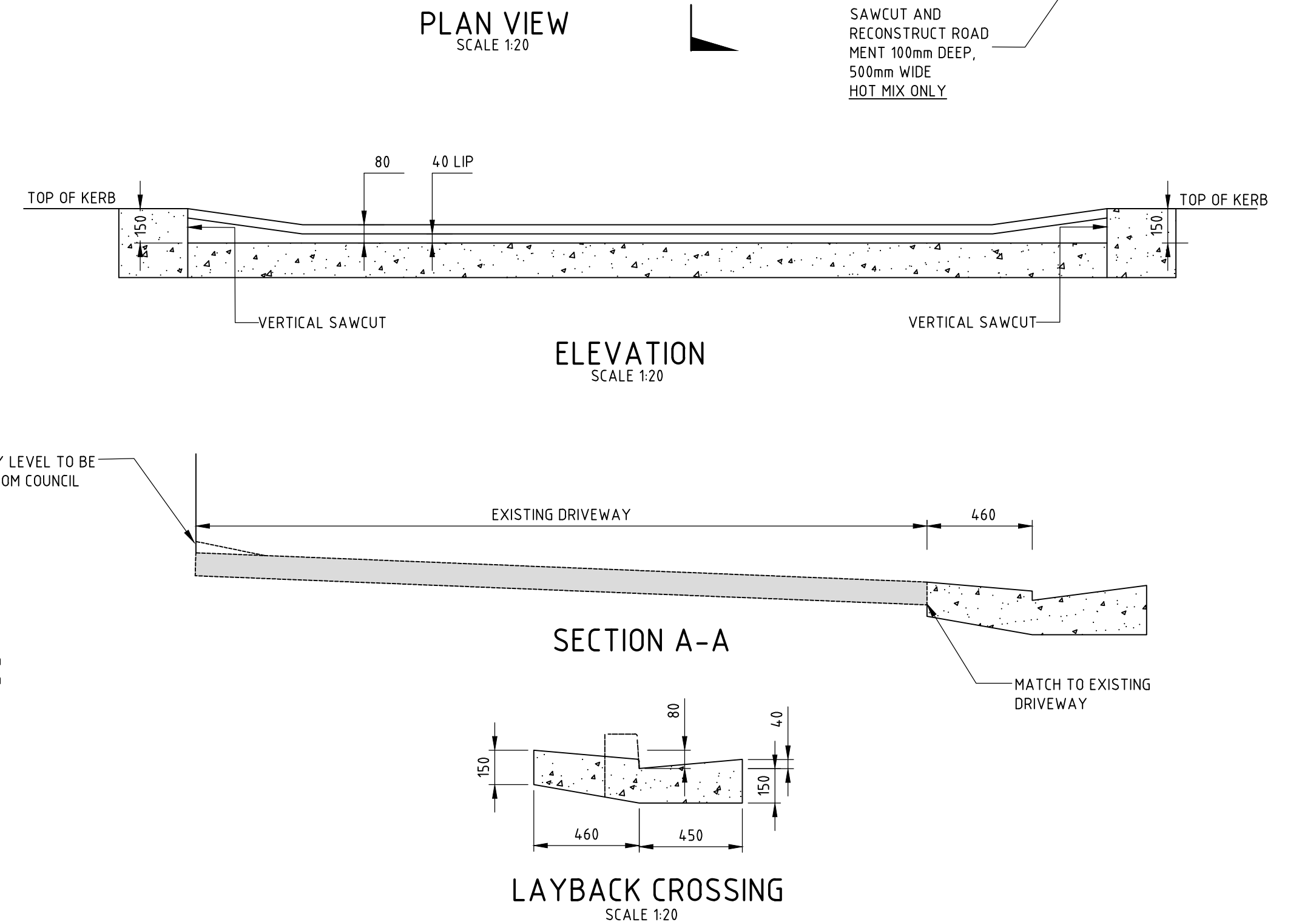
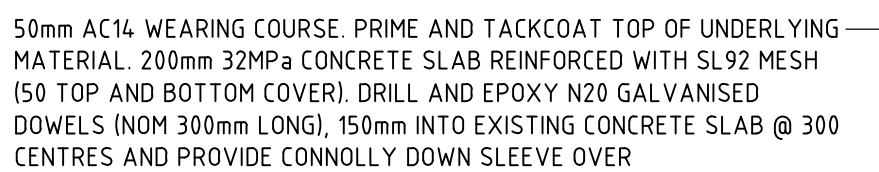
2/9/2022

Heck.



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02	ISSUED FOR APPROVAL			MM	NS	28.10.21	DRAWING NUMBER						REVISION		
-							C55.11						02		
-							DRAWING SHEET SIZE = A1								
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1. TRENCH WIDTH MAY NEED TO BE INCREASED SUBJECT TO ACHIEVING COMPACTION. ENSURE MINIMUM 300mm CLEARANCE BETWEEN, WHEN USING MULTIPLE PIPES TO ACHIEVE ADEQUATE COMPACTION.
2. MINIMUM PIPE COVER UNDER ROADS TO BE 600mm U.N.O. FOR CLASS '2' PIPES.
3. THE CONTRACTOR SHALL ENSURE THAT SHORING OF TRENCHES IS INSTALLED AS REQUIRED BY STATUTOR REQUIREMENTS.
4. ENSURE BACKFILLING COMPACTION MEETS THE FOLLOWING STANDARDS;
 - 4.1. TRENCHES UNDER PAVED AREAS / BUILDING - 100% SMDD

SCALE 1:10

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02	ISSUED FOR APPROVAL	MM		NS	28.10.21							DRAWING NUMBER	REVISION
-												C57.01	02
-												DRAWING SHEET SIZE = A1	
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							SCALE 1:10 @ A1 SCALE 1:20 @ A1						



2/9/2022

DA PLANS

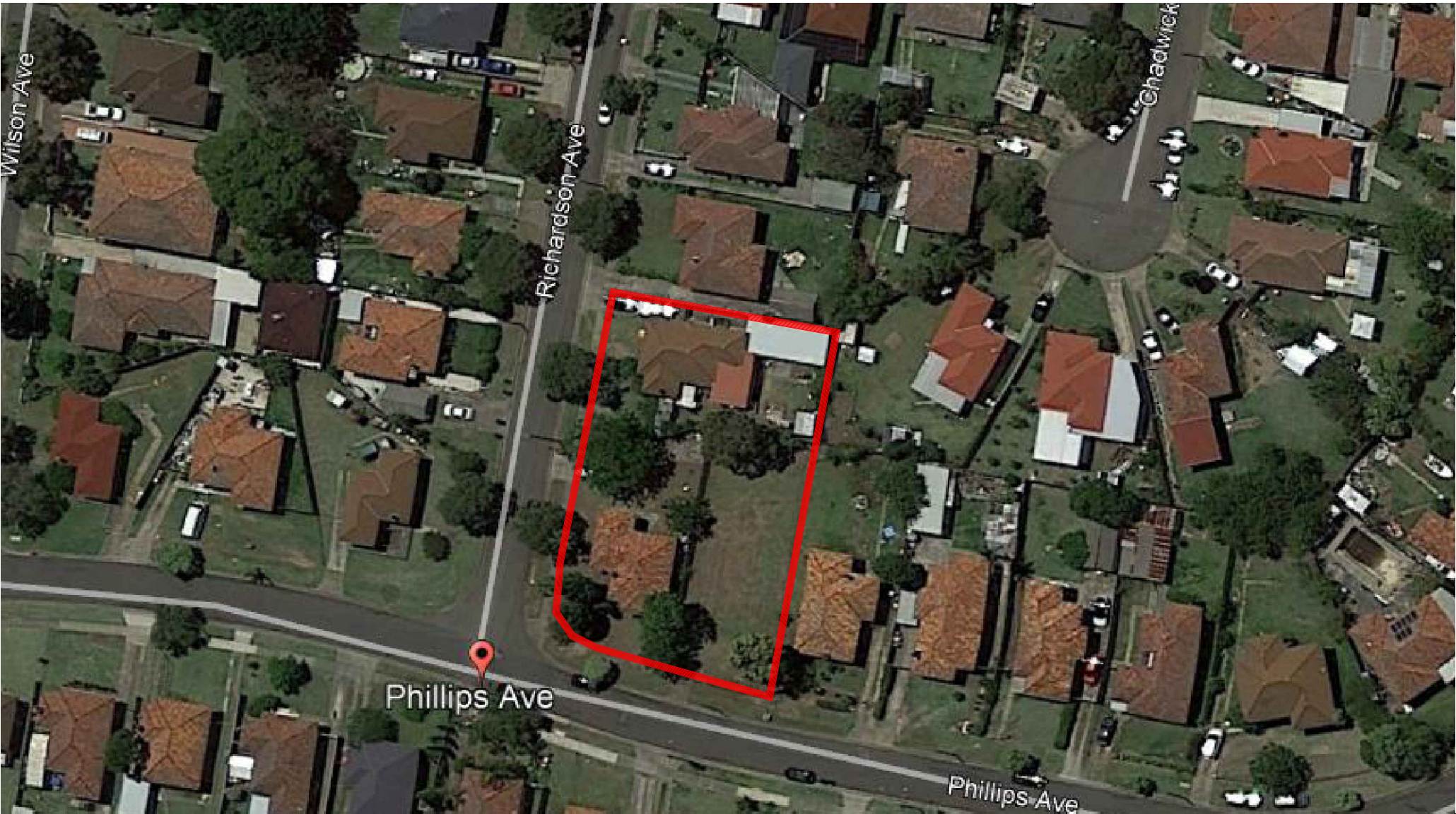
SENIORS HOUSING DEVELOPMENT

21-23 PHILLIPS AVE & 5 RICHARDSON AVE, REGENTS PARK

Lots 53, 54 & 55 in DP 35559

LEGEND

AML	ADJUSTABLE METAL LOUVRES
BH	BULKHEAD
BOE	BRICK ON EDGE
BR	BROOM CUPBOARD
CAP	CEILING ACCESS PANEL
CC	COLOURED CONCRETE COLOUR
CL	CLOTHES LINE
CP	CONCRETE PAVING BROOM FINISH
CPD	CUPBOARD
CPT	CARPET
CT	CERAMIC TILE
GPO	DOUBLE POWER POINT
DP	DOWNPIPE
F1	FENCE METAL GAL. STEEL POWDERCOAT TO DETAIL
F2	FENCE SLATTED METAL VARYING HEIGHT
F3	FENCE VERTICAL METAL SLATS TO DETAIL
F4	COLORBOND FENCE 1800mm HIGH TO BOUNDARIES
FB1	FACE BRICK 1 BOWRAL MURRAY GREY
FB2	FACE BRICK 2 BOWRAL SIMMENTAL
FB3	FACE BRICK 3 BORAL ESCURA VELOUR VOLCANIC
FC	PAINTED FLUSH FINISH FIBRE CEMENT SHEET
FCL	FINISHED CEILING LEVEL
FFL	FINISHED FLOOR LEVEL
FW	FLOOR WASTE
G	GATE
GB	GAS BAYONET POINT
GD	GRATED STRIP DRAIN
HP	HOTPLATE
HT	GARDEN HOSE TAP
HWU	HOT WATER UNIT
LB	LETTERBOXES - RECESSED INTO WALL
L	LINEN CUPBOARD
MC1	METALCLADDING COLORBOND STANDING SEAM
MDR	METAL DECK ROOF
MSB	MAIN SWITCH BOARD
MW	MICROWAVE SPACE
OHC	OVERHEAD CABINETS
P	PANTRY
PP	POROUS PAVEMENT
PR1	PAINT TO SKIM COAT RENDER COLOUR 1
PR2	PAINT TO SKIM COAT RENDER COLOUR 1
PVC	PHOTOVOLTAIC CELLS
REF	REFRIGERATOR LOCATION
RHD	RANGEHOOD
RL	RELATIVE LEVEL
RW	RETAINING WALL
RWO	RAIN WATER OUTLET
RWT	RAINWATER TANK
S	KITCHEN SINK
SB	STAIR BALUSTRADE
SC	STEEL COLUMN
SHR	SHOWER
SK	SKYLIGHT
STC	STEEL TROWEL CONCRETE FINISH
SWP	STORMWATER PIT
T	LAUNDRY TUB
TOK	TOP OF KERB
TOW	TOP OF WALL
TOP	TOP OF PARAPET
TPZ	TREE PROTECTION ZONE
UBO	UNDER BENCH OVEN
VJ	VERTICAL JOINT
VTY	VANITY
WC	TOILET SUITE
WM	WASHING MACHINE
WO	WALL OVEN
WR	WARDROBE
WS	WHEEL STOP
WA	WINDOW AWNING
WH	WINDOW HOOD



DRAWING SCHEDULE

ARCHITECTURAL

A 01 of 14	COVER SHEET	2	03/11/21
A 02 of 14	SITE ANALYSIS	1	26/10/21
A 03 of 14	DEMOLITION PLAN	1	26/10/21
A 04 of 14	SITE & GROUND FLOOR PLAN	2	03/11/21
A 05 of 14	FIRST FLOOR PLAN	1	26/10/21
A 06 of 14	ROOF PLAN	1	26/10/21
A 07 of 14	ELEVATIONS	1	26/10/21
A 08 of 14	SECTIONS	1	26/10/21
A 09 of 14	SHADOW DIAGRAMS	1	26/10/21
A 10 of 14	VIEWS FROM SUN DIAGRAM	1	26/10/21
A 11 of 14	EXTERNAL COLOUR SCHEDULE	1	26/10/21
A 12 of 14	STREETSCAPE PHOTOMONTAGE	1	26/10/21
A 13 of 14	BLOCK PLAN	1	26/10/21
A 14 of 14	AREAS OF EXCAVATION & FILL	2	12/11/21

CIVIL

C04.01	SITWORKS & STORMWATER MANAGEMENT PLAN	D	13/09/21
C07.01	DETAILS SHEET 01	D	13/09/21
C51.01	COVER SHEET, DRAWING SCHEDULE AND LOCALITY PLAN	2	28/10/21
C51.11	SPECIFICATION NOTES - SHEET 01	2	28/10/21
C51.12	SPECIFICATION NOTES - SHEET 02	2	28/10/21
C52.01	SEDIMENT EROSION CONTROL PLAN	2	28/10/21
C52.11	SEDIMENT EROSION CONTROL DETAILS	1	28/10/21
C54.01	SITWORKS & STORMWATER MANAGEMENT PLAN	2	28/10/21
C55.01	CATCHMENT PLAN	2	28/10/21
C55.11	STORMWATER LONGITUDINAL SECTIONS	2	28/10/21
C57.01	DETAILS SHEET	2	28/10/21

LANDSCAPE

LA 1 OF 2	LANDSCAPE PLAN	D	03/11/21
LA 2 OF 2	LANDSCAPE DETAILS & SPECIFICATION	D	03/11/21

SURVEY

S 1 of 3	PLAN SHOWING DETAIL AND LEVELS	3	21/06/21
S 2 of 3	BUS ROUTE (PLAN VIEW)	2	26/11/20
S 3 of 3	BUS STOP LONGITUDINAL SECTIONS	2	26/11/20

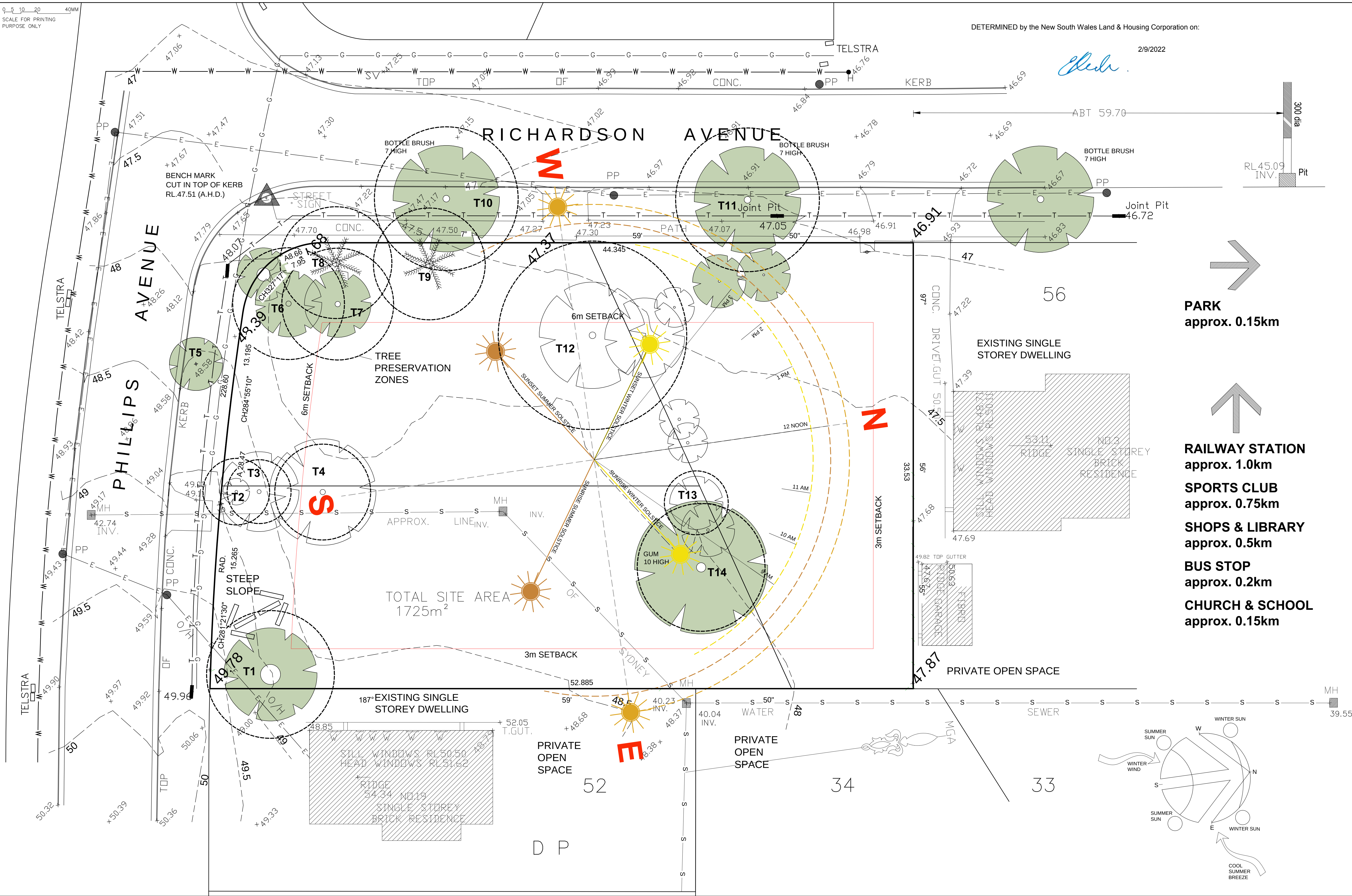
DEVELOPMENT DATA

Job Reference	BGJF2						
Locality / Suburb	Regents Park						
Street Address	21-23 Phillips Ave & 5 Richardson Ave						
Lot & DP	Lots 53, 54, 55 IN DP 35559						
Site Area	1725 m ²						
Existing Lots	3						
Proposed GFA	879.6 m ²						
No. of Dwellings	6 x 1 Bed + 6 x 2Bed = 12 Dwellings						
DWELLINGS						SOLAR ACCESS	
	Number	Type*	Beds	Area* (m ²)	POS*	LIVING	POS
	1	Ground	2	75	39	6 hr	6 hr
	2	Ground	2	75	23	2 hr	3 hr
	3	Ground	1	55	35	6 hr	6 hr
	4	Ground	1	55	35	3 hr	5 hr
	5	Ground	2	75	48	6 hr	6 hr
	6	Ground	1	60	78	6 hr	6 hr
	7	First	2	75	18	6 hr	6 hr
	8	First	2	75	12	3 hr	3 hr
	9	First	1	55	10	6 hr	6 hr
	10	First	1	55	10	3 hr	5 hr
	11	First	2	75	12	6 hr	6 hr
	12	First	1	60	9	6 hr	6 hr

	Control		Requirement	Proposed
HEIGHT	Auburn Council - LEP ARH SEPP		9m 8.5m	6.3m to ceiling 7.8m to top of roof
FSR	Auburn Council - LEP		N/A	0.51:1
	SL SEPP		0.5:1	0.58:1
PARKING	SL SEPP		0.2 x (no dwellings) = 2.4	3 accessible
	ARH SEPP (Division 6)	accessible site	0.4 x(no. 1 Beds) = 2.4 0.5 x (no. 2 Beds) = 3	6 car spaces
SETBACK	Auburn Council DCP	Street	6m (single dwelling setback)	6.0m average
		Side/Rear Rear	0.9m (single dwelling setback) 3m (fire seperation)	3m
LANDSCAPING	SL SEPP	Seniors	35 m ² per Dwelling = 420 m ²	536 m ²
DEEP SOIL	SL SEPP	Seniors	15% = 259 m ²	18% = 317 m ²
SOLAR ACCESS	SL SEPP	Seniors	70% for 3hrs in Mid-Winter = 8.4	92% = 11

LAHC* - development data for LAHC new housing supply. For details refer to Current version of LAHC Design Requirements.
GFA* - gross floor area calculated as per relevant Planning Instrument
AREA* - dwelling floor area includes internal walls but excludes external walls
POS* - private open space

Chick



PARK
approx. 0.15km

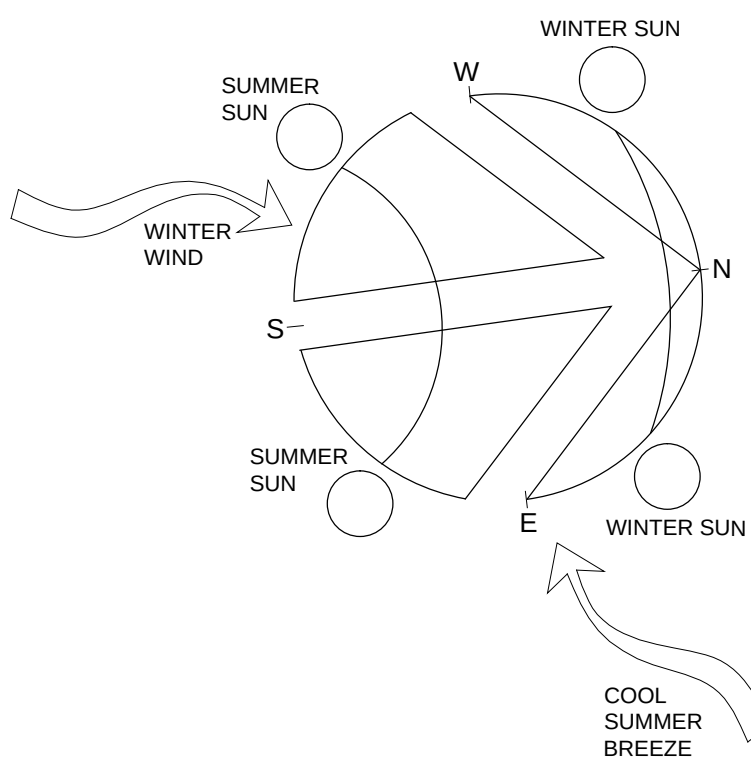
RAILWAY STATION
approx. 1.0km

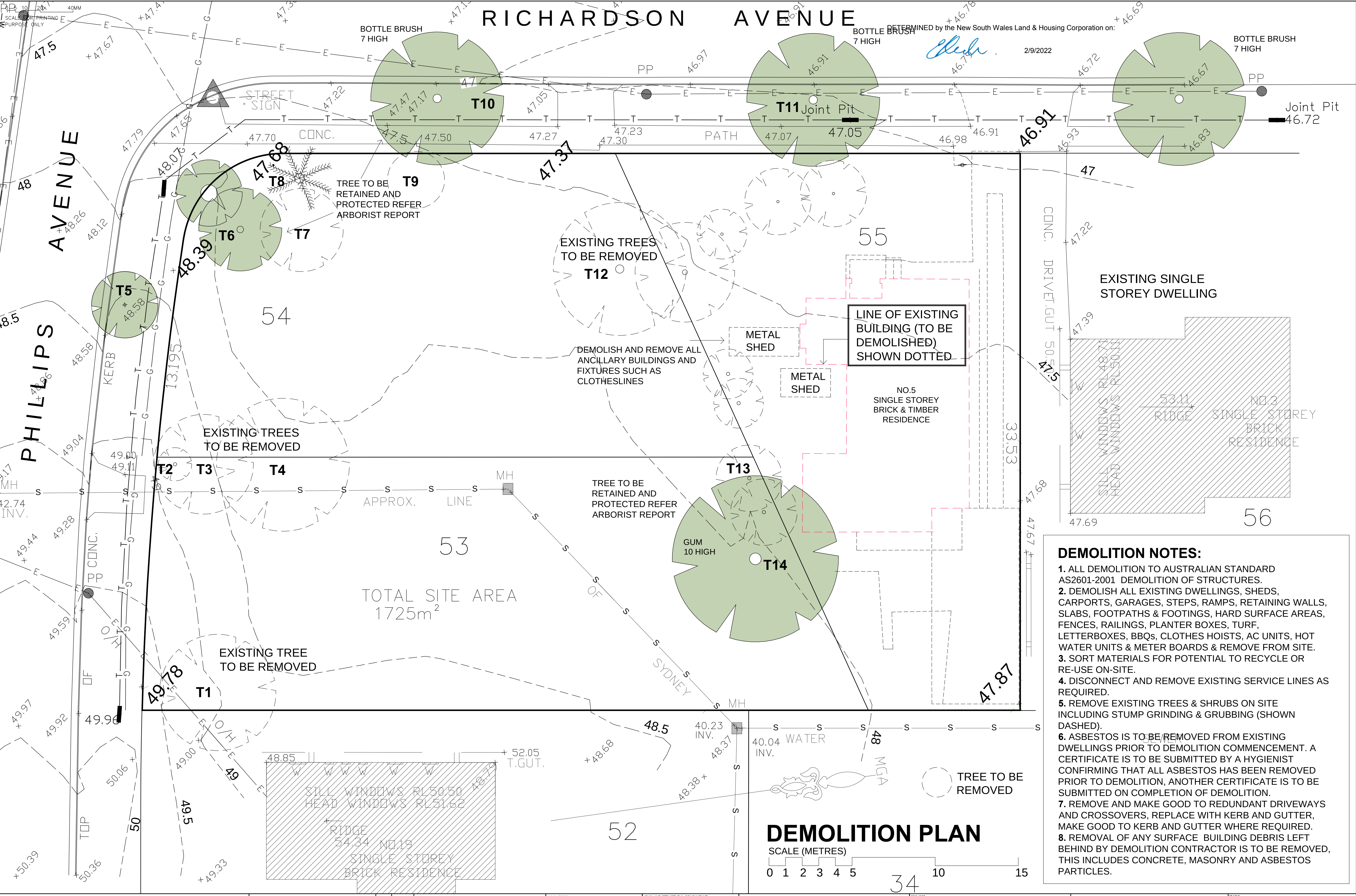
SPORTS CLUB
approx. 0.75km

SHOPS & LIBRARY
approx. 0.5km

BUS STOP
approx. 0.2km

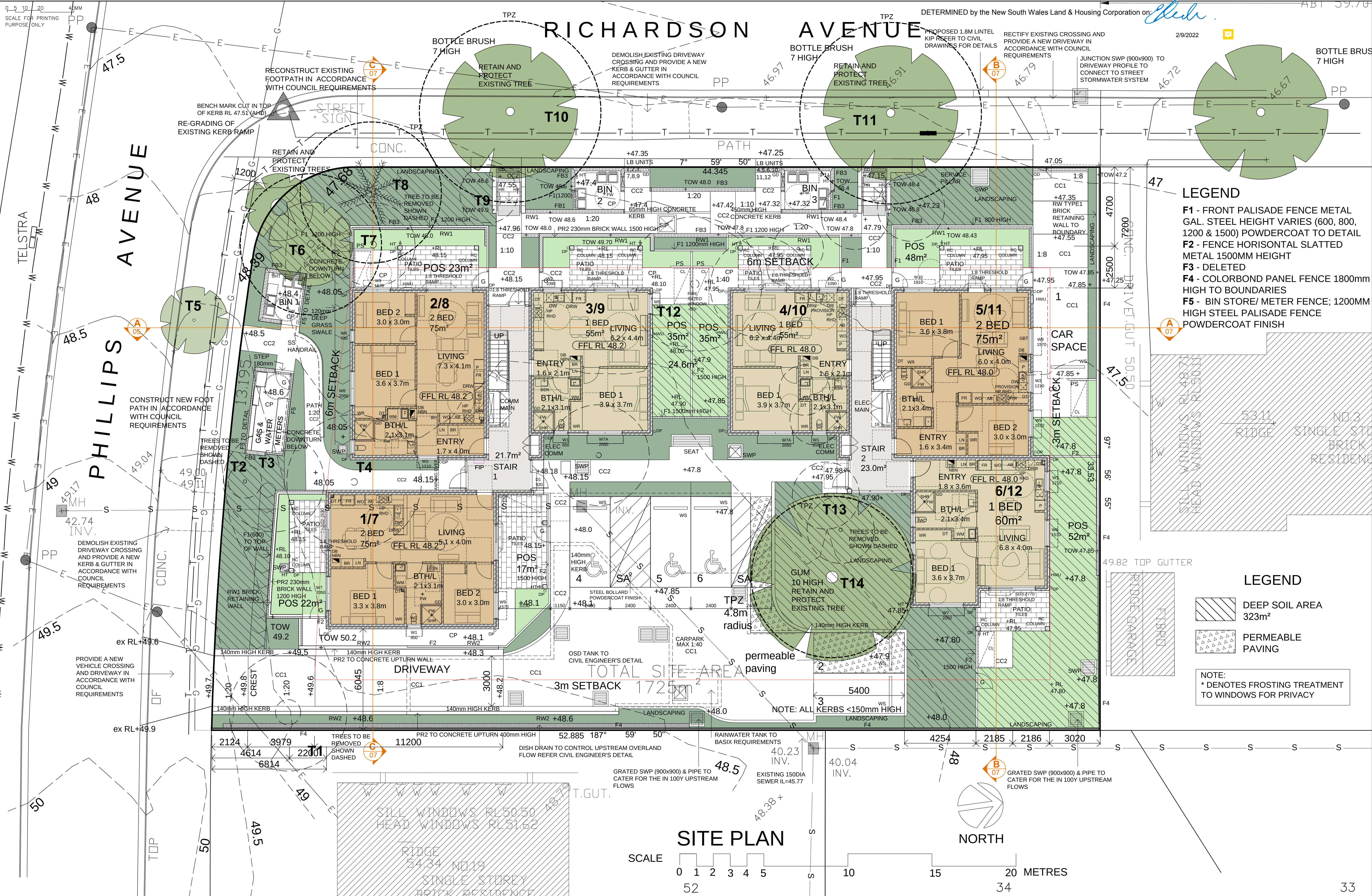
CHURCH & SCHOOL
approx. 0.15km





DEMOLITION NOTES:

1. ALL DEMOLITION TO AUSTRALIAN STANDARD AS2601-2001 DEMOLITION OF STRUCTURES.
2. DEMOLISH ALL EXISTING DWELLINGS, SHEDS, CARPORTS, GARAGES, STEPS, RAMPS, RETAINING WALLS, SLABS, FOOTPATHS & FOOTINGS, HARD SURFACE AREAS, FENCES, RAILINGS, PLANTER BOXES, TURF, LETTERBOXES, BBQs, CLOTHES HOISTS, AC UNITS, HOT WATER UNITS & METER BOARDS & REMOVE FROM SITE.
3. SORT MATERIALS FOR POTENTIAL TO RECYCLE OR RE-USE ON-SITE.
4. DISCONNECT AND REMOVE EXISTING SERVICE LINES AS REQUIRED.
5. REMOVE EXISTING TREES & SHRUBS ON SITE INCLUDING STUMP GRINDING & GRUBBING (SHOWN DASHED).
6. ASBESTOS IS TO BE REMOVED FROM EXISTING DWELLINGS PRIOR TO DEMOLITION COMMENCEMENT. A CERTIFICATE IS TO BE SUBMITTED BY A HYGIENIST CONFIRMING THAT ALL ASBESTOS HAS BEEN REMOVED PRIOR TO DEMOLITION, ANOTHER CERTIFICATE IS TO BE SUBMITTED ON COMPLETION OF DEMOLITION.
7. REMOVE AND MAKE GOOD TO REDUNDANT DRIVEWAYS AND CROSSOVERS, REPLACE WITH KERB AND GUTTER, MAKE GOOD TO KERB AND GUTTER WHERE REQUIRED.
8. REMOVAL OF ANY SURFACE BUILDING DEBRIS LEFT BEHIND BY DEMOLITION CONTRACTOR IS TO BE REMOVED, THIS INCLUDES CONCRETE, MASONRY AND ASBESTOS PARTICLES.



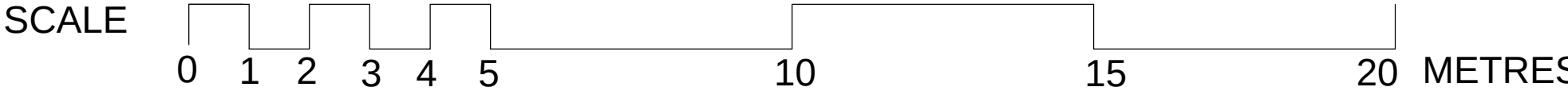
- LEGEND**
- F1 - FRONT PALISADE FENCE METAL GAL. STEEL HEIGHT VARIES (600, 800, 1200 & 1500) POWDERCOAT TO DETAIL
 - F2 - FENCE HORIZONTAL SLATTED METAL 1500MM HEIGHT
 - F3 - DELETED
 - F4 - COLORBOND PANEL FENCE 1800MM HIGH TO BOUNDARIES
 - F5 - BIN STORE/ METER FENCE; 1200MM HIGH STEEL PALISADE FENCE POWDERCOAT FINISH

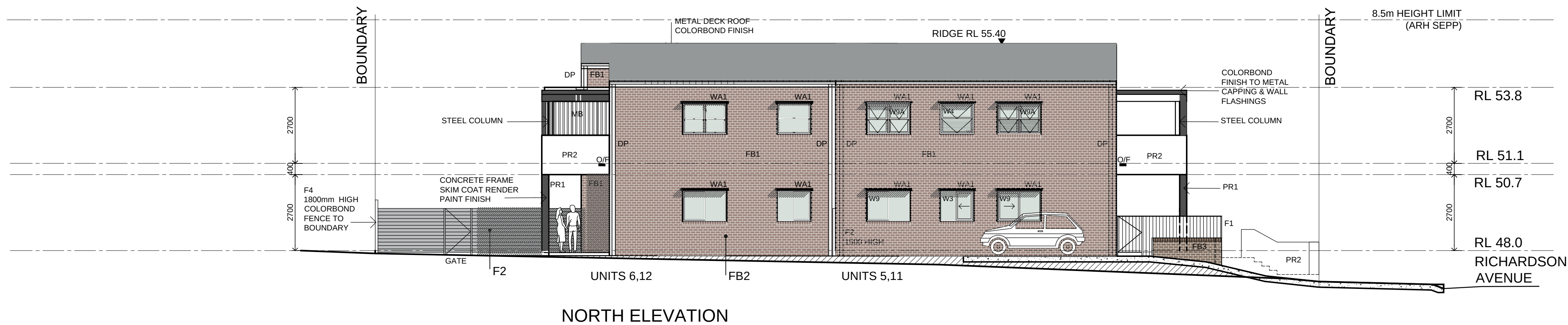
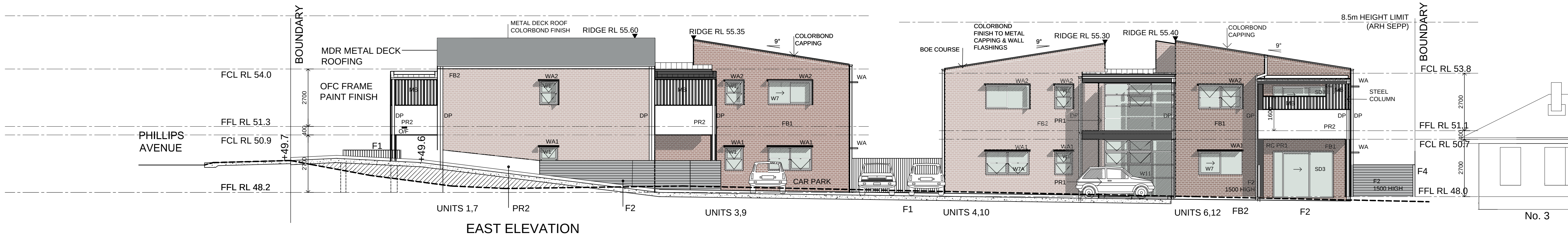
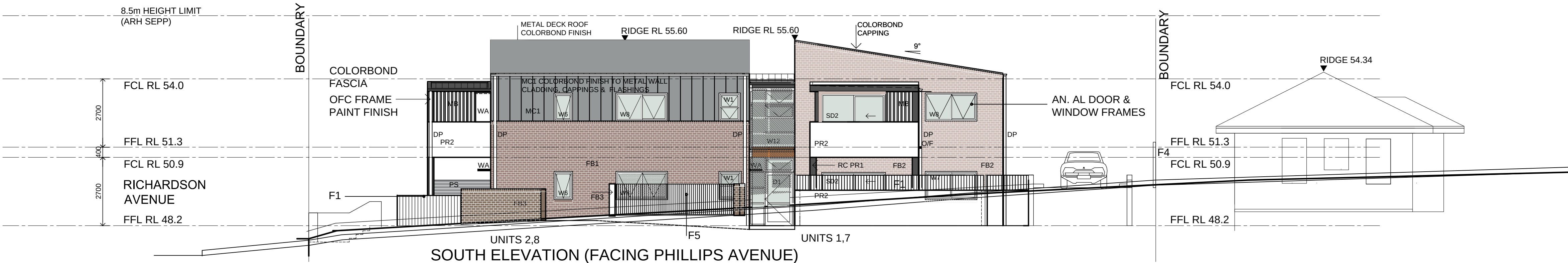
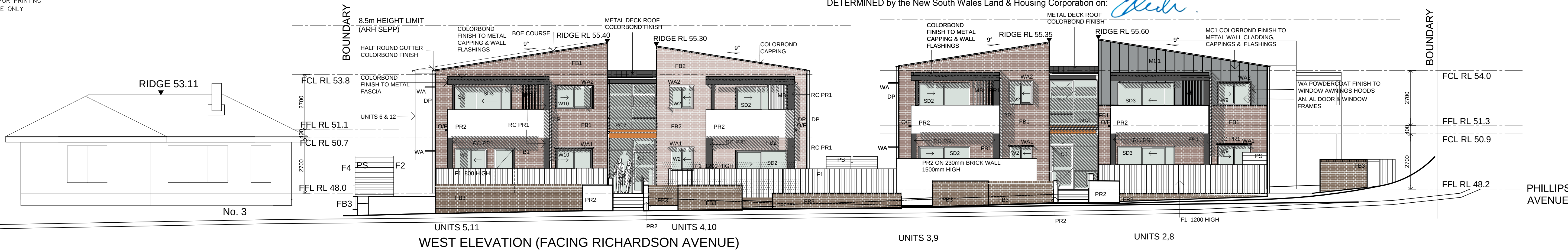
- LEGEND**
- DEEP SOIL AREA 323m²
 - PERMEABLE PAVING
- NOTE:**
* DENOTES FROSTING TREATMENT TO WINDOWS FOR PRIVACY





ROOF PLAN



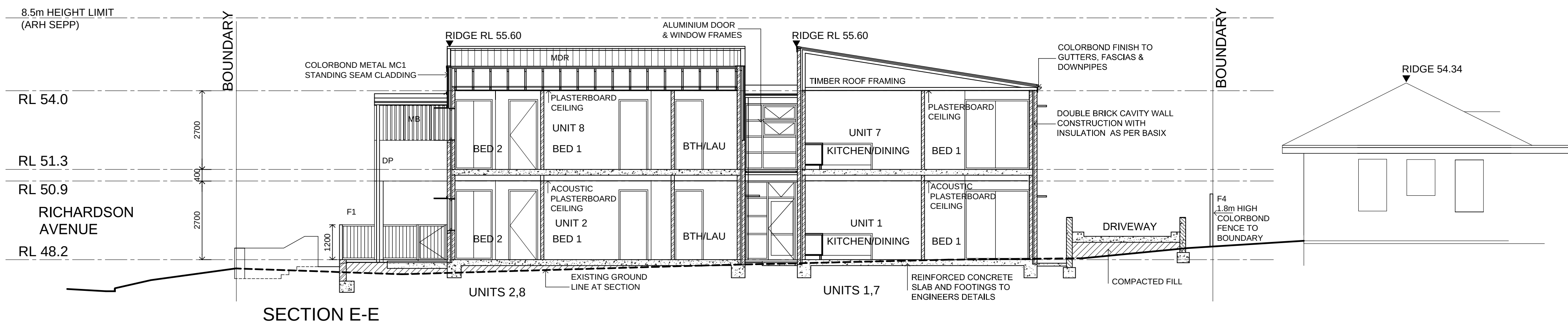
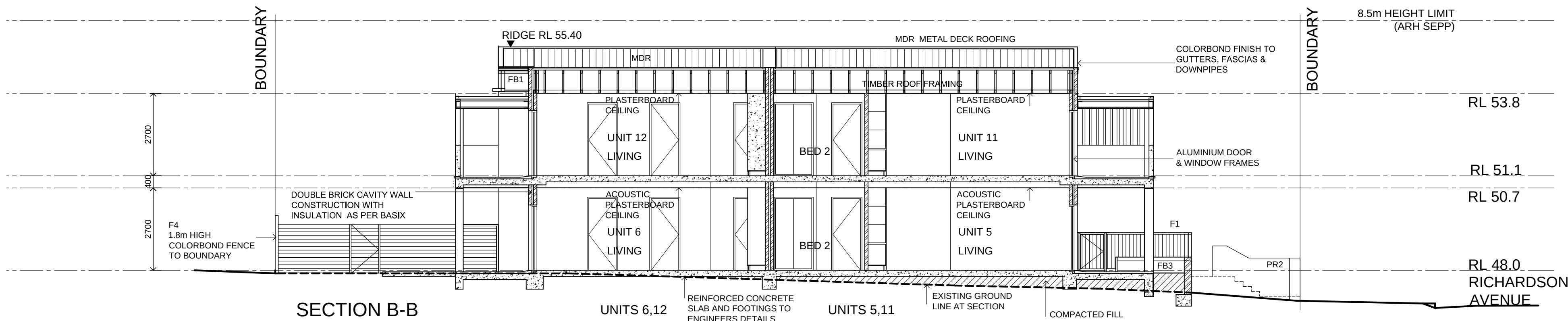
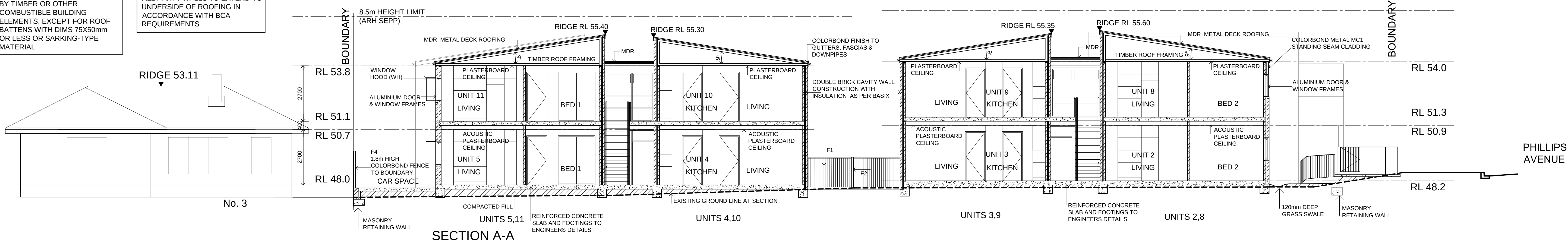


Check.

2/9/2022

**PARTY WALLS:
WALLS MUST NOT BE CROSSED
BY TIMBER OR OTHER
COMBUSTIBLE BUILDING
ELEMENTS, EXCEPT FOR ROOF
BATTENS WITH DIMS 75X50mm
OR LESS OR SARKING-TYPE
MATERIAL**

NOTE: FRL 60/60/60
ALL PARTY WALLS TO EXTEND TO
UNDERSIDE OF ROOFING IN
ACCORDANCE WITH BCA
REQUIREMENTS



October 2021	BSA Reference: 16181
Building Sustainability Assessments enquiries@buildingsustainability.net.au	Ph: (02) 4962 3439 www.buildingsustainability.net.au

The following specification was used to achieve the thermal performance values indicated on the Assessor Certificate and takes precedence over any other specification.
If different construction elements are applied then the Assessor Certificate is no longer valid.

Thermal Performance Specifications (does not apply to garage)		
External Wall Construction		<i>Added Insulation</i>
Cavity Brick		R1.0
Reverse Brick Veneer (Unit 8 only)		R2.0
Internal Wall Construction		<i>Added Insulation</i>
Brick		none
Cavity Brick (party walls)		none
Cavity Brick (walls adjacent to lobbies)		R1.0
Ceiling Construction		<i>Added Insulation</i>
Plasterboard	R3.5 to ceilings adjacent to roof space	
Roof Construction	<i>Colour</i>	<i>Added Insulation</i>
Metal	Any	Foil + R1.0 blanket
Floor Construction		<i>Added Insulation</i>
Concrete	As drawn	None

Windows	<i>Glass and frame type</i>	<i>U Value</i>	<i>SHGC Range</i>	<i>Area sq m</i>
ALM-001-01 A	Aluminium Type A Single clear	6.70	0.51 - 0.63	As drawn
ALM-002-01 A	Aluminium Type B Single clear	6.70	0.63 - 0.77	As drawn

Type A windows are awning windows, bifolds, casements, tilt 'n' turn windows, entry doors, french doors

Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louveres

Skylights	Glass and frame type	U Value	SHGC	Area sq m
-----------	----------------------	---------	------	-----------

U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower and the SHGC is within the range specified

External Window Shading	<i>(eaves, verandahs, pergolas, awnings etc)</i>
All shade elements modelled as drawn	
Ceiling Penetrations	<i>(downlights, exhaust fans, flues etc)</i>
No adjustment has been made for losses to insulation arising from ceiling penetrations.	

DETERMINED by the New South Wales Land & Housing Corporation on:
RICHARDSON AVE

9 AM

10 AM

11 AM

12 NOON

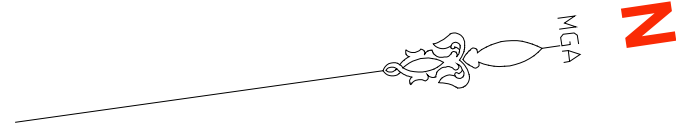
1 PM

2 PM

3 PM

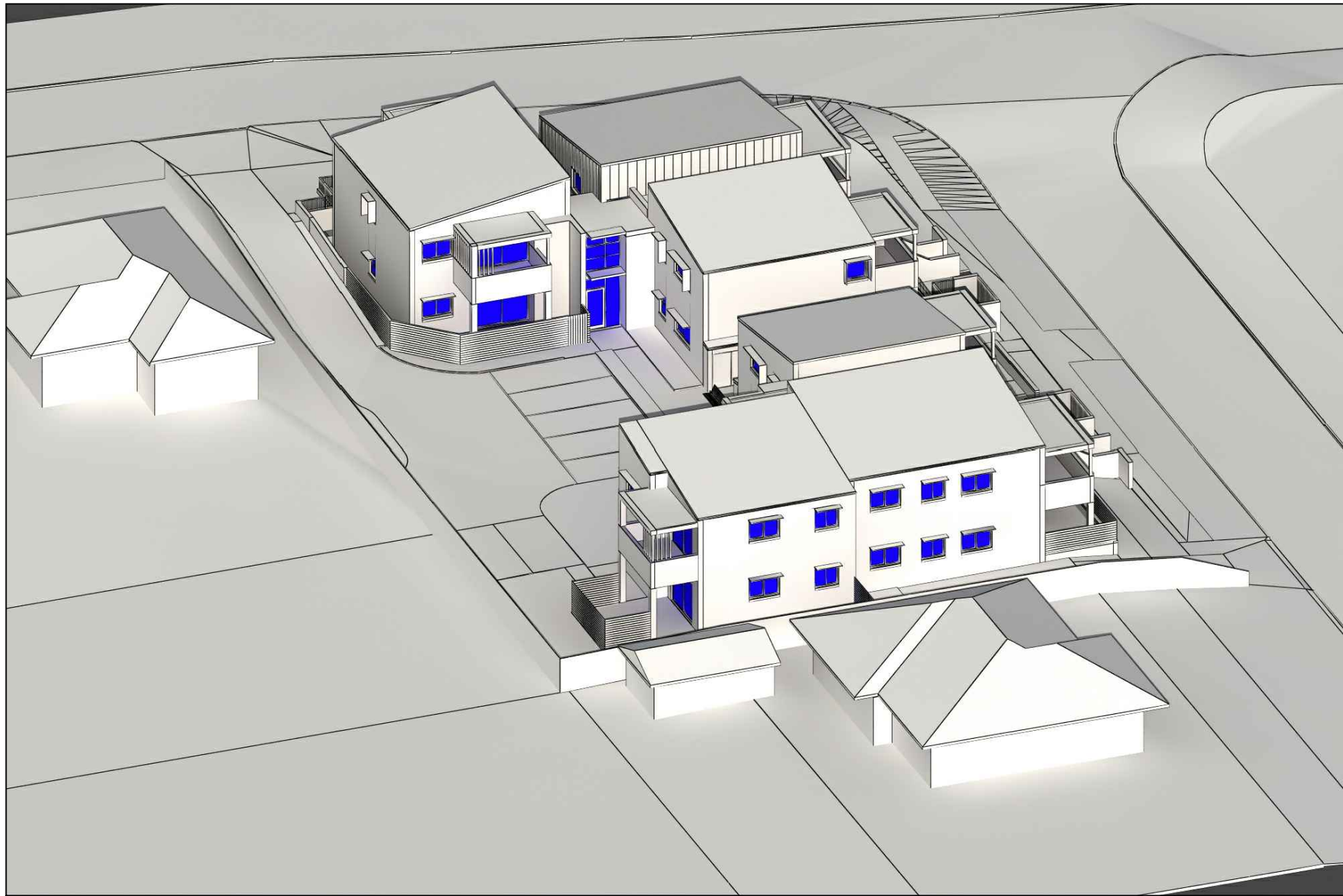
SHADOW DIAGRAMS AT 21st June (Mid Winter)

- Grey area indicates existing shadows cast by neighbouring properties
- Pink area indicates shadows cast by proposed development

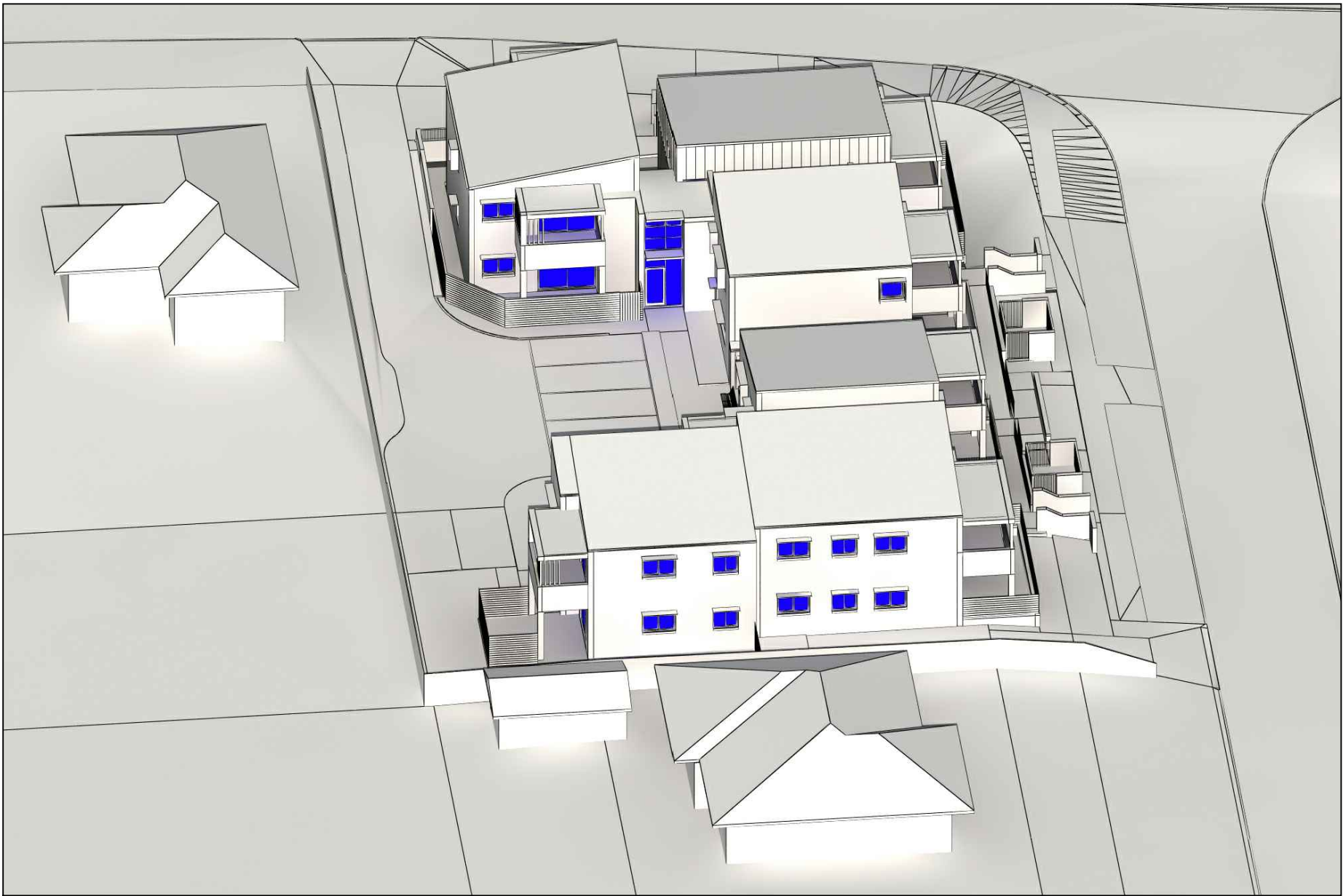




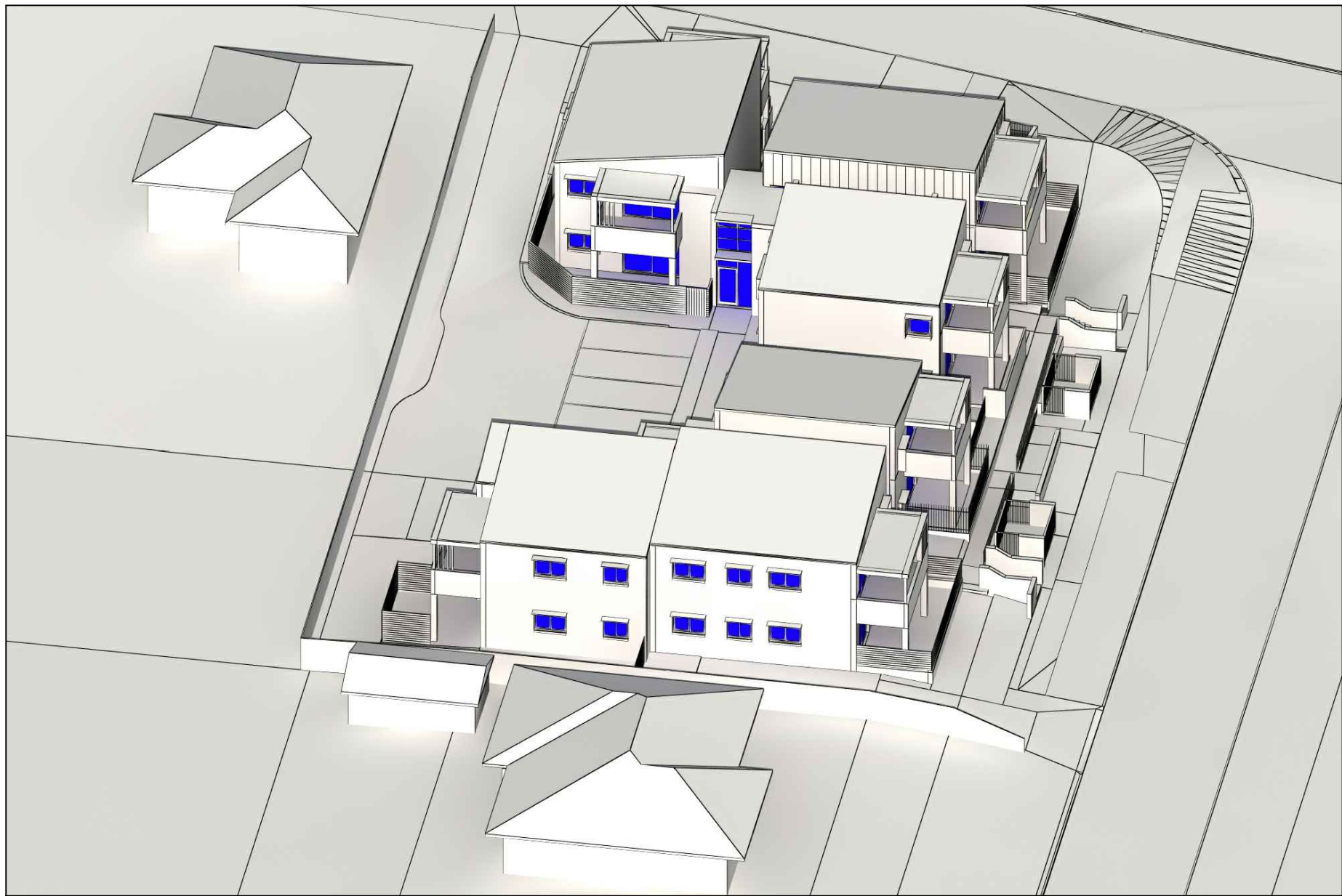
9 AM



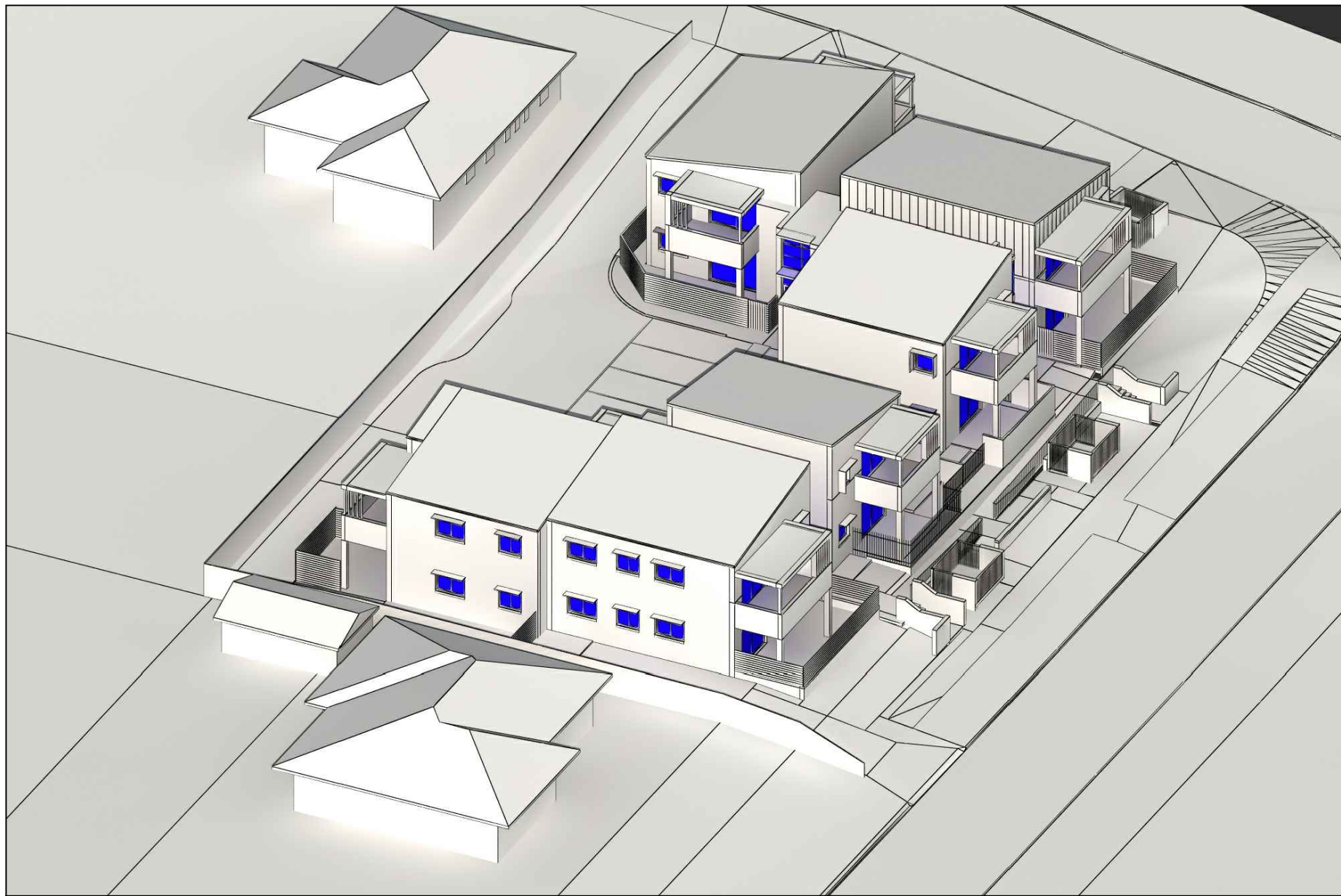
10 AM



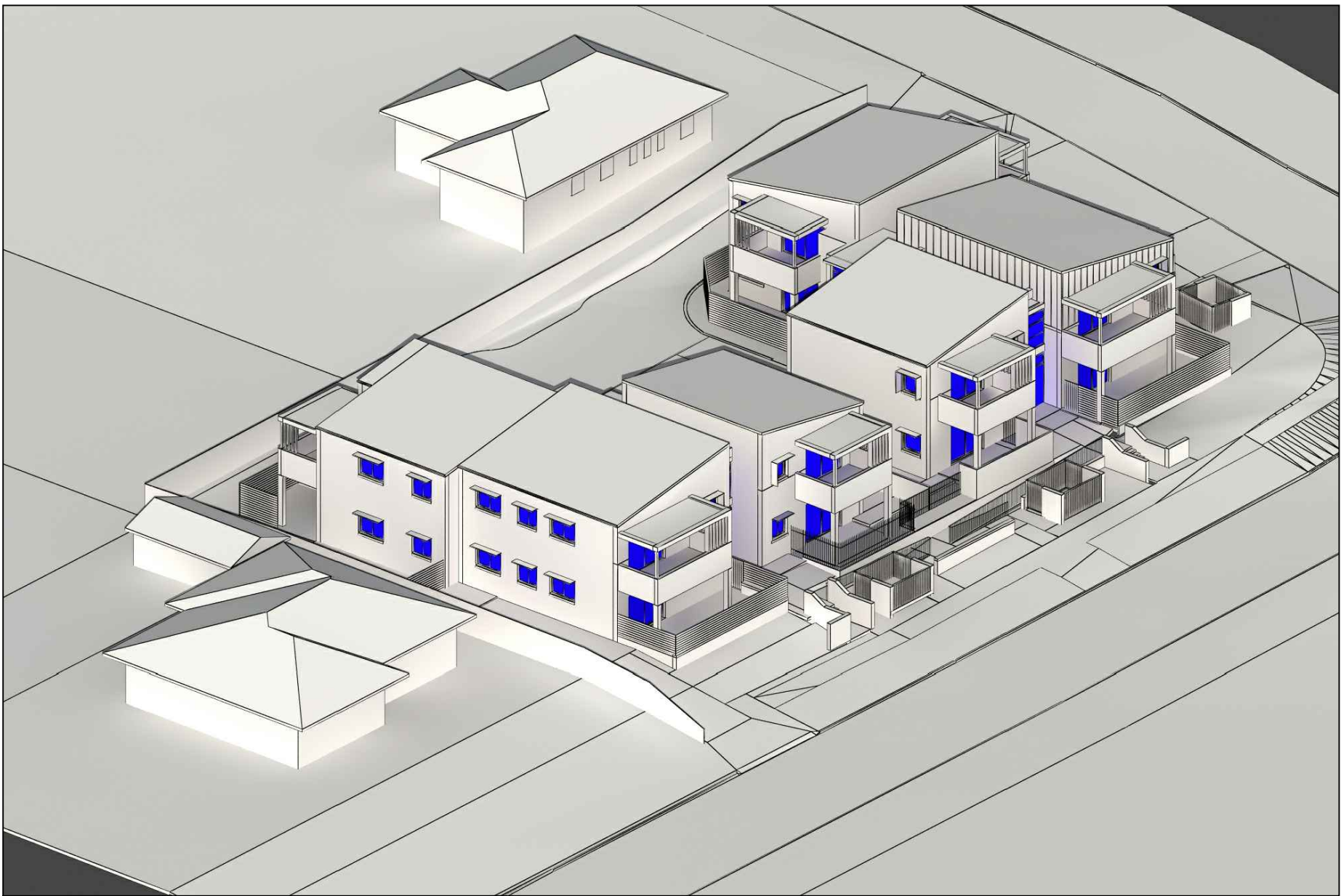
11 AM



12 NOON



1 PM



2 PM



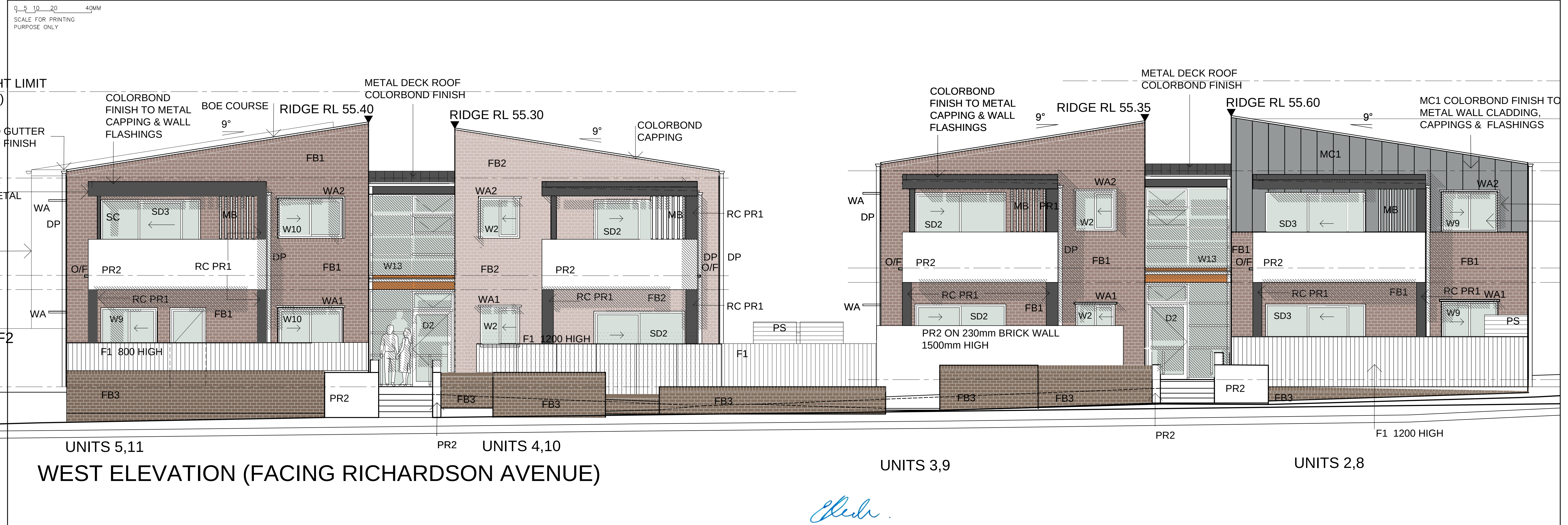
3 PM

DETERMINED by the New South Wales Land & Housing Corporation on:

John

2/9/2022

**VIEWS FROM THE SUN
DIAGRAMS
AT 21st June (Mid Winter)**



DETERMINED by the New South Wales Land & Housing Corporation on:

2/9/2022

FINISHES SCHEDULE

CODE	LOCATION		DESCRIPTION	COLOUR
CDR/ MC2	ROOFING/ GUTTER/ DOWNPIPE/		METAL DECK/ MC2 FLASHING	BASALT
	FASCIA & BARGE		METAL	SURFMIST
FB1	WALLS		FACE BRICK	BOWRAL MURRAY GREY
FB2	WALLS		FACE BRICK	BOWRAL SIMMENTAL
FB3	LOW SITE WALLS		FACE BRICK	BORAL ESCURA VELOUR VOLCANIC
MC1	WALLS		METAL WALL CLADDING STANDING SEAM	BASALT
PR1	BALCONY/ COLUMNS STRUCTURE		OFF-FORM CONCRETE SKIM COAT RENDER + GRANOSITE SMOOTH PAINT	MONUMENT
PR2	BALCONY'S & SITE WALLS		OFF-FORM CONCRETE SKIM COAT RENDER + GRANOSITE SMOOTH PAINT	WATTYL ASTOR WHITE
	BALCONY COLUMNS & SCREEN		POWDER COATED	MONUMENT

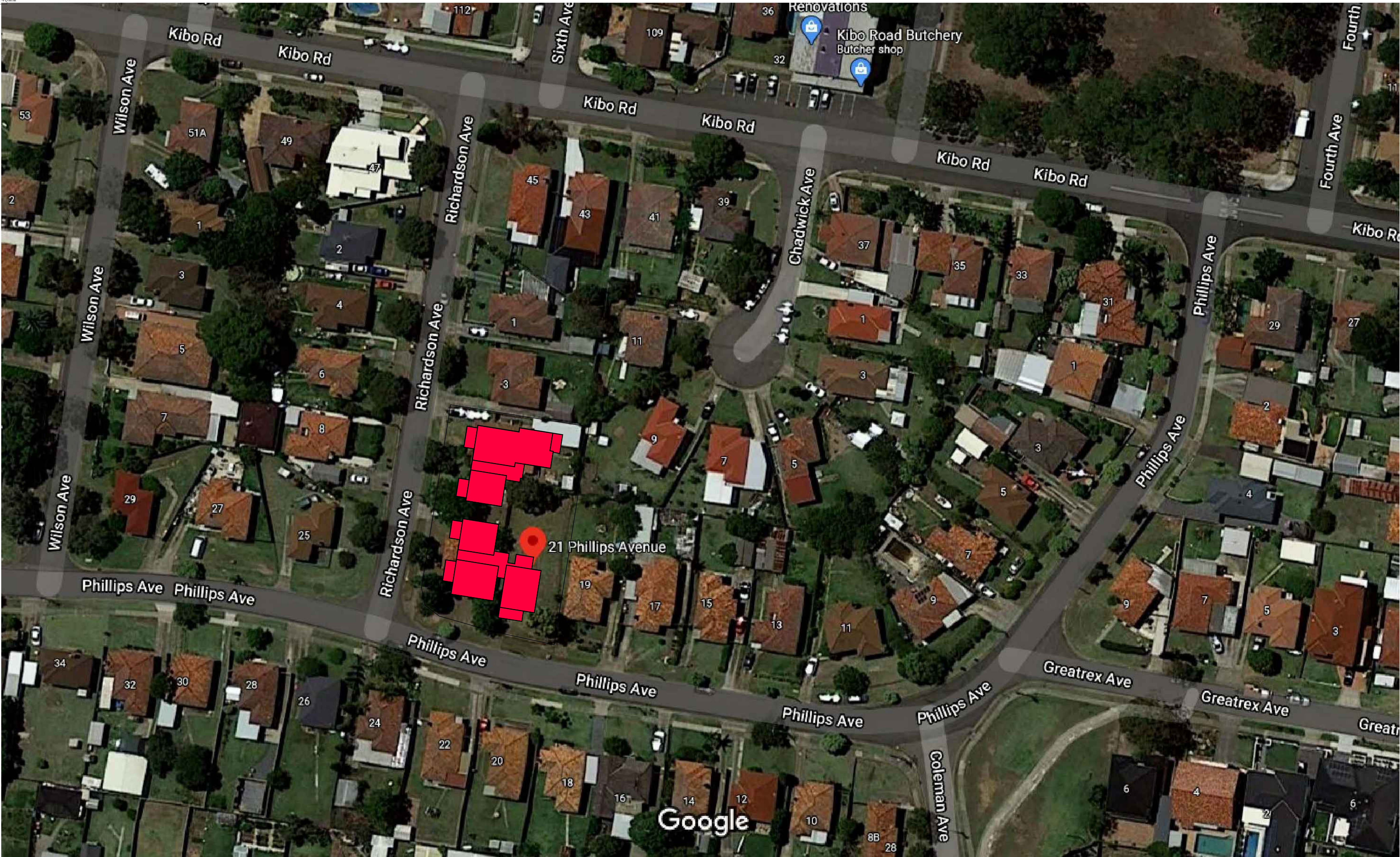
CODE	LOCATION		DESCRIPTION	COLOUR
WH	WINDOW HOODS		METAL POWDERCOATED	MONUMENT
ANODISED AL	WINDOWS & DOORS		ANODISED ALUMINIUM	SATIN CHARCOAL GREY
SS	HANDRAILS		STAINLESS STEEL	SS MATT
AWNING/ WA	AWNING ABOVE ENTRIES		COLORBOND	TERRAIN
FC1	BALCONY LINING & SOFFIT		PAINTED FIBER CEMENT SHEETING	WATTYL ASTOR WHITE
F1/F5	METAL FENCE 600,1200 & 1500 HIGH		METAL FENCING TO DETAIL	DULUX MONUMENT
F2	FENCE		SLATTED METAL FENCE	DULUX SHALE GREY
F3	FENCE		FEATURE LASER CUT METAL FENCE TO DETAIL	DUNE
F4	FENCE		METAL FENCE 1800mm HIGH TO BOUNDARIES	COLORBOND SHALE GREY



DETERMINED by the New South Wales Land & Housing Corporation on:

2/9/2022

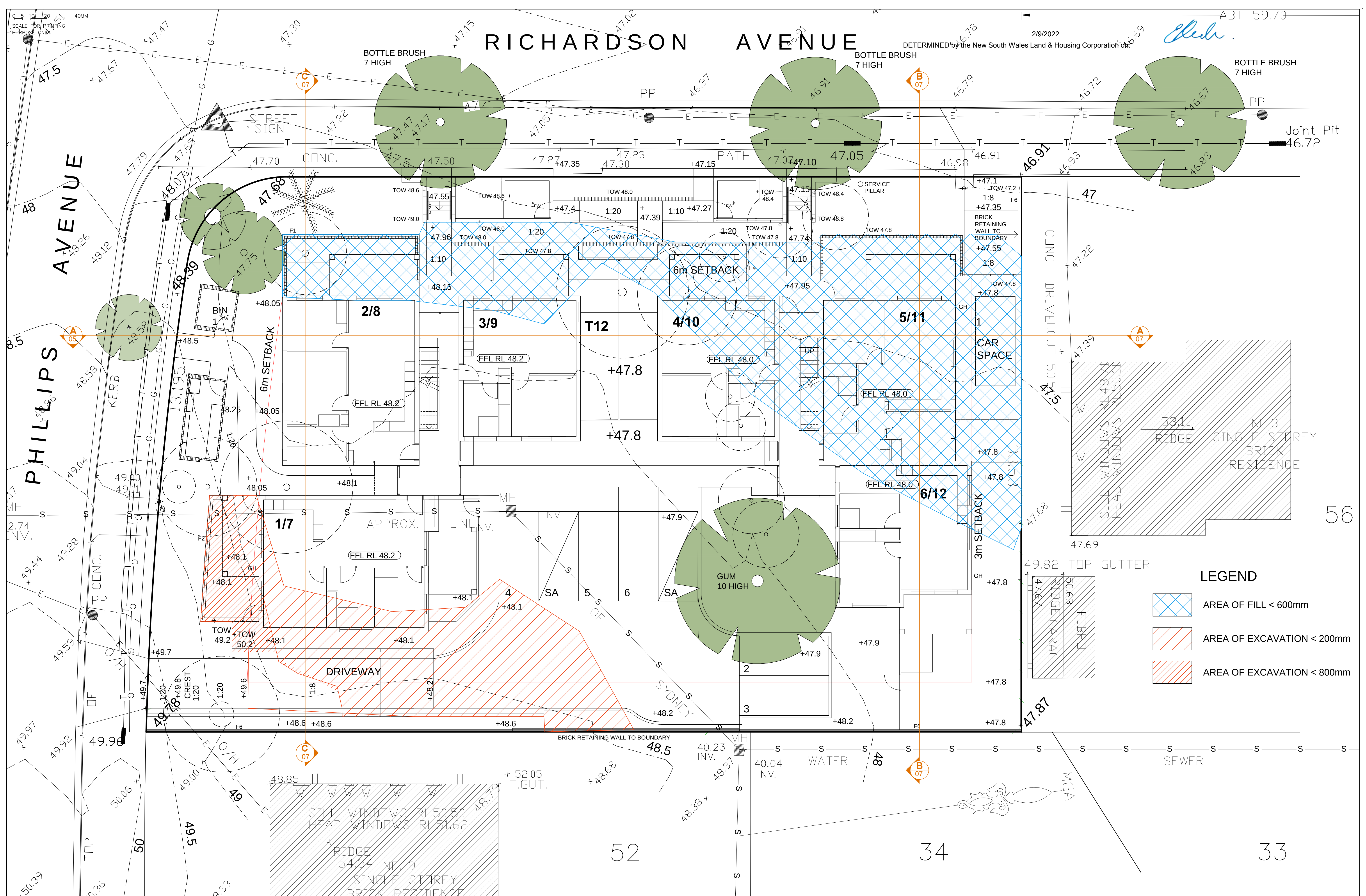
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DETERMINED by the New South Wales Land & Housing Corporation on:

Chad

2/9/2022



LEGEND

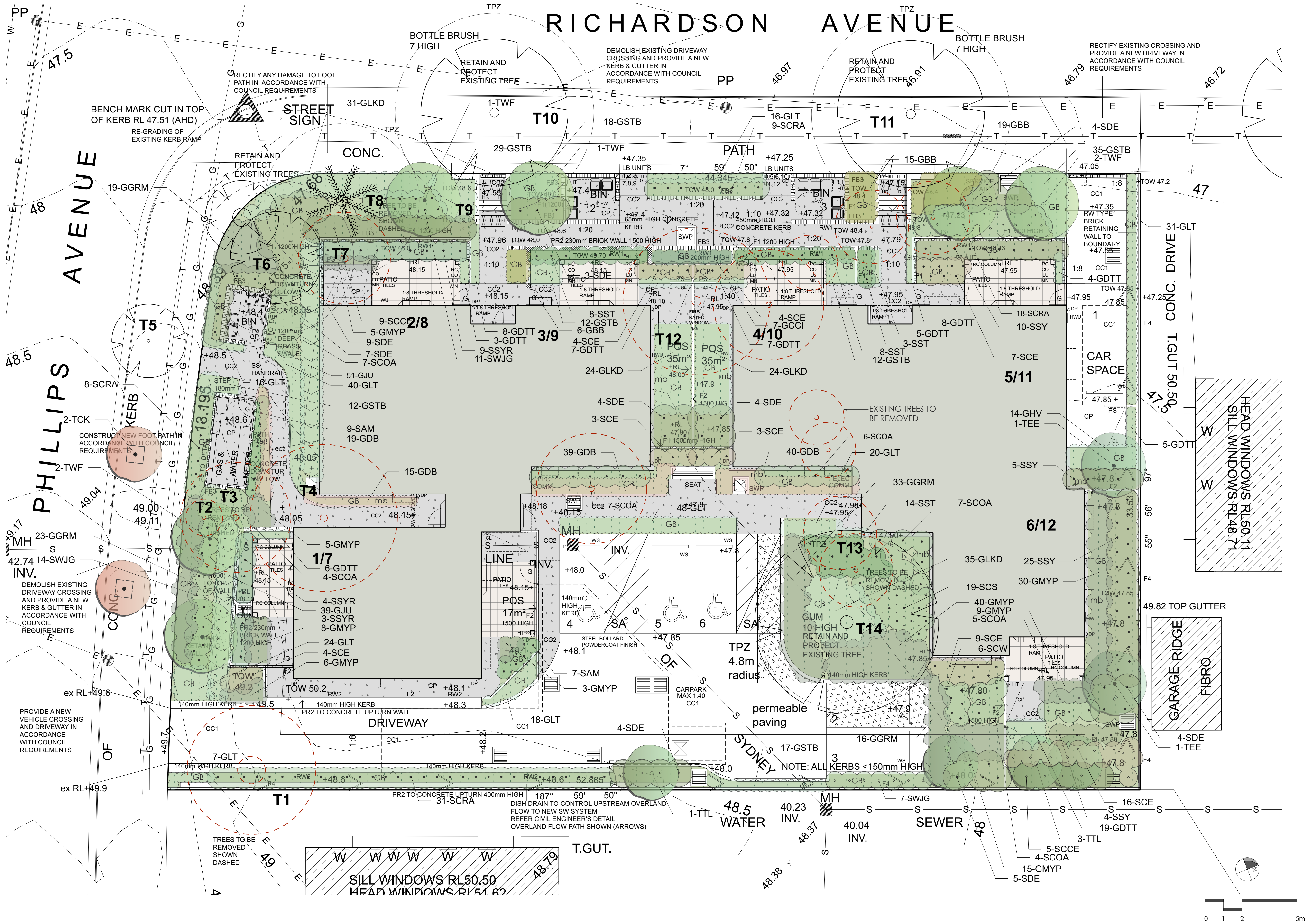
- AREA OF FILL < 600mm
- AREA OF EXCAVATION < 200mm
- AREA OF EXCAVATION < 800mm

- LEGEND**
- Existing trees to be retained
 - Existing trees to be removed
 - Proposed tree plantings
 - Proposed screen shrub plantings
 - Proposed groundcover plantings
 - Concrete path pavement
 - Non slip tiles pavement
 - Proposed garden bed
 - Proposed turf area
 - Concrete garden edge
 - Concrete moisture barrier adjoining building

DETERMINED by the New South Wales Land & Housing Corporation on:

Chubb

2/9/2022



LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718
<https://www.dpie.nsw.gov.au/land-and-housing-corporation>

NOMINATED ARCHITECT:
Barry Rush & Associates Pty Ltd
Architects
Suite 25A, 2 Beattie Street, Balmain, NSW, 2041
Phone: (012) 8555 9028 Fax: (012) 9810 0161
Email: info@barryrush.com.au
www.barryrush.com.au

F 02/06/2022 DISH DRAIN AND OVERFLOW PATH ADDED
E 16/02/2022 SOUTHERN SWALES ADDED
D 03/11/2021 PART 5 REVISION
C 25/10/2021 PART 5 RE-ISSUED
B 04/05/2021 FOR TENDER
REV DATE NOTATION/AMENDMENT
DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE.
FIGURED DIMENSIONS TAKE PRECEDENCE.

PROJECT MANAGER
LAND & HOUSING CORPORATION
PH (02) 8753 8000 FAX (02) 8753 8888
STRUCTURAL CONSULTANT
MECHANICAL CONSULTANT

HYDRAULIC CONSULTANT
ELECTRICAL CONSULTANT
LANDSCAPE CONSULTANT
GREENLAND DESIGN PTY LTD
PH 0403 164 188

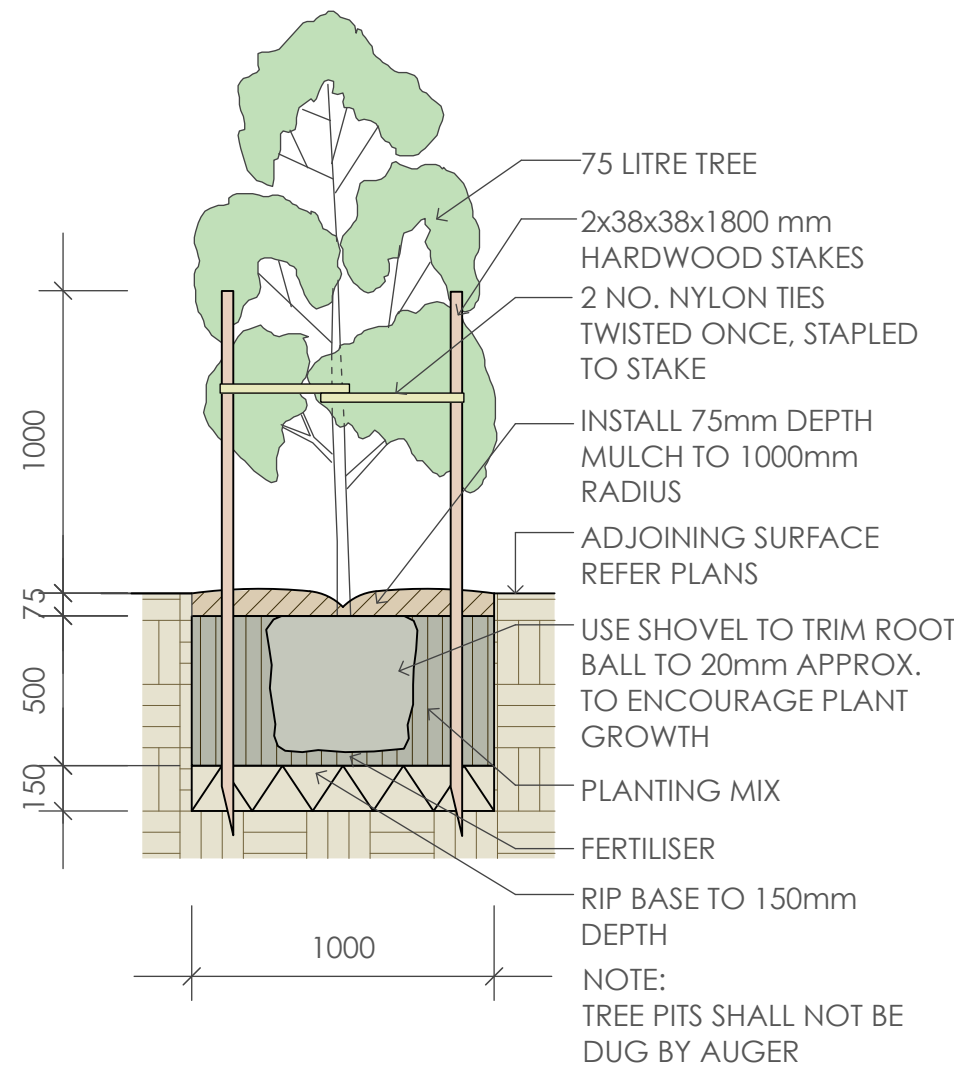
PROJECT:
SENIORS DEVELOPMENT
21-23 PHILLIPS AVENUE & 5 RICHARDSON AVENUE
REGENTS PARK
LOTS 53, 54 & 55 IN DP35559

TITLE:
LANDSCAPE PLAN
FILE: 2227

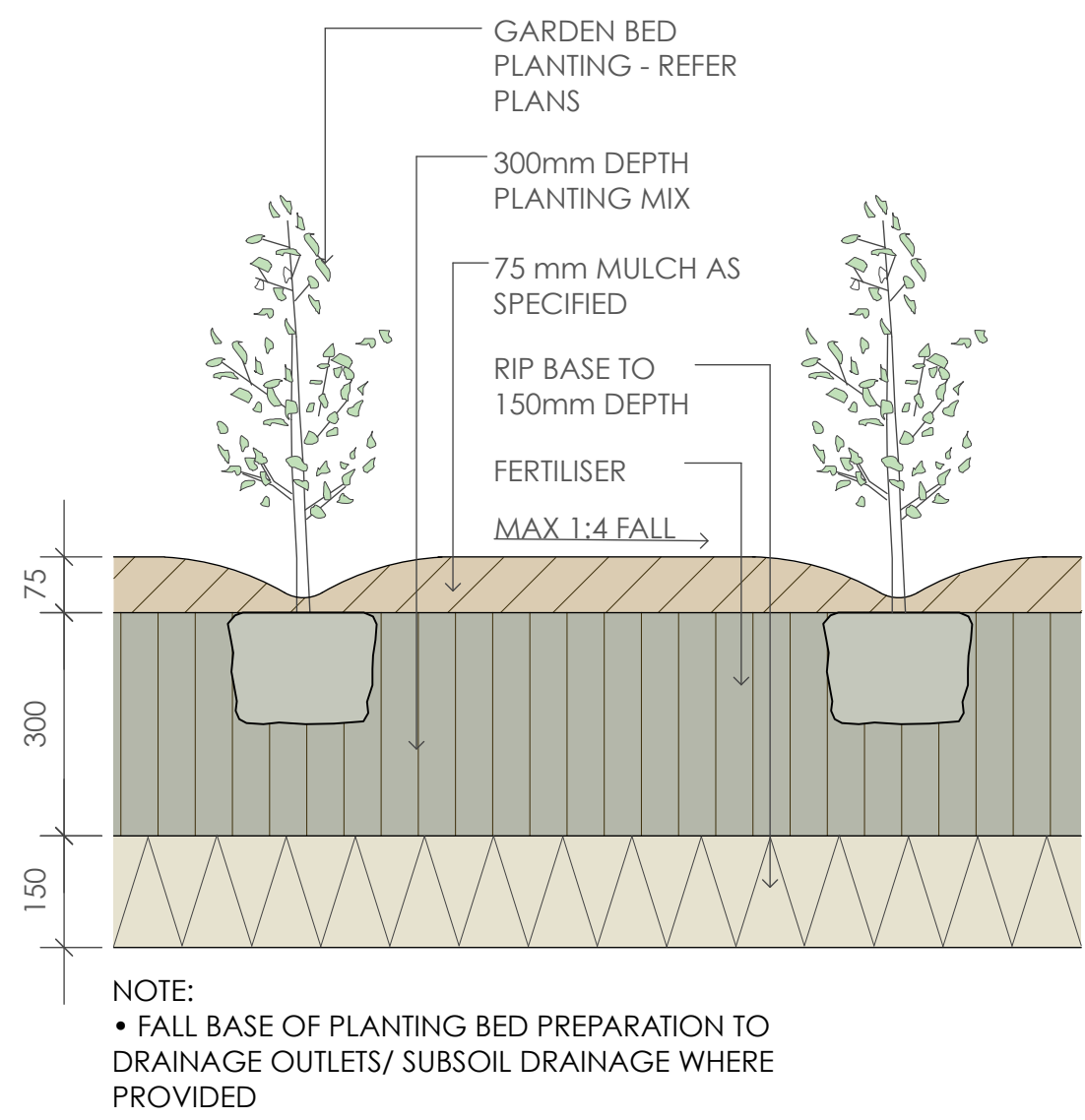
STATUS:
PART 5 APPROVAL
DATE: 02/06/2022 SCALE: 1:100 PROJ: - PROJECT NO: BGJF2
STAGE: PART 5 DRAWN: CL CHECKED: GD LANDSCAPE ARCH
TYPE: LA SHEET: 1 of 2 REV: F

Dish

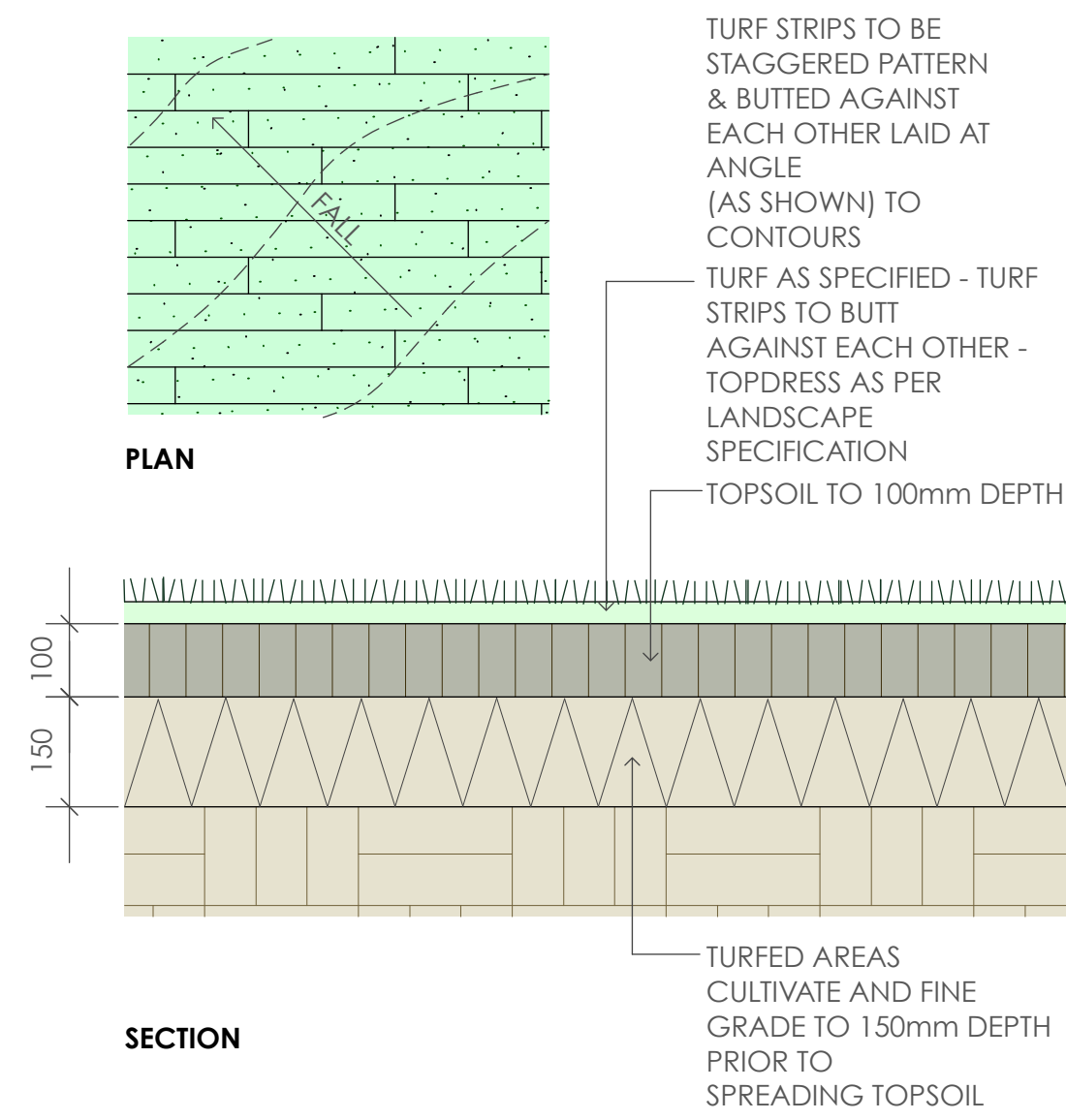
2/9/2022



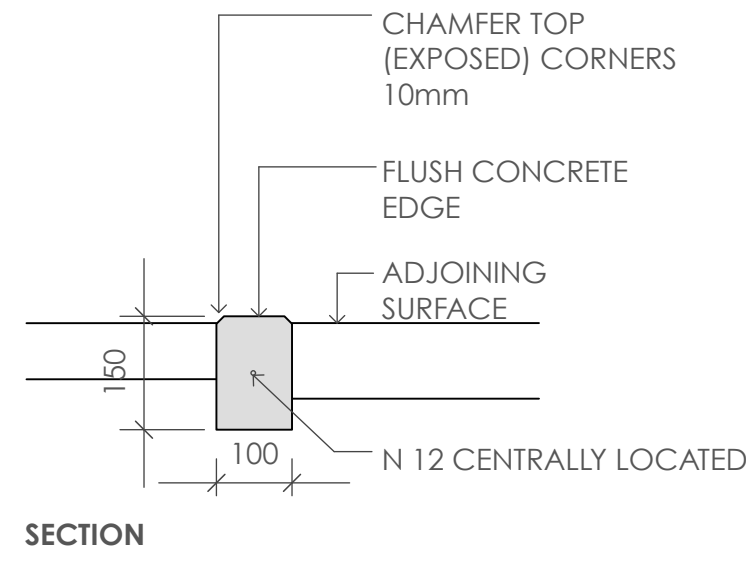
1 75 Litre Tree Planting
scale 1:25



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							
TCK	2	Bottlebrush	Callistemon 'Kings Park Special'	75Litre	3 - 6m	2.0 - 3.5m	N
TEE	2	Eumundi Quandong	Elaeocarpus eumundi	75Litre	6 - 8m	3.5 - 6m	N
TTL	4	Water Gum	Tristaniopsis laurina 'Luscious'	75Litre	6 - 8m	3.5 - 6m	N
TWF	6	Weeping Lilly Pilly	Waterhousia floribunda	75Litre	6 - 8m	3.5 - 6m	N
Shrubs							
SAM	16	Ailyn Magic	Acmena 'Ailyn Magic'	200mm	0.6 - 0.8m	0.6 - 0.8m	N
SCCE	14	Scarlet Bottlebrush	Callistemon citrinus 'Endeavour'	200mm	3 - 5m	2.0 - 3.5m	N
SCE	50	Evening Glow Mirror Plant	Coprosma 'Evening Glow'	200mm	0.9 - 1.5m	0.9 - 1.2m	N
SCOA	40	New Zealand Cabbage Tree	Cordyline australis 4m	200mm	3 - 4m	1.0 - 2.0m	N
SCRA	66	Red Alert Bottle Brush	Callistemon 'Red Alert'	200mm	1.0 - 1.5m hedge	2.0 - 3.0m	N
SCS	19	Narrow Palm Lily	Cordyline stricta congesta	200mm	1 - 2m	0.8 - 1.0m	N
SCW	6	White Correa	Correa alba	200mm	0.9 - 1.5m	0.9 - 1.2m	N
SDE	44	Gymea Lily	Doryanthes excelsa	200mm	1.5 - 2m	1.2 - 2.0m	N
SST	33	Tiny Trev	Syzygium australe 'Tiny Trev'	200mm	0.5 - 0.8m	0.6 - 0.8m	N
SSY	44	Cascade Lilly Pilly	Syzygium 'Cascade'	200mm	2 - 3m	1.2 - 2.0m	N
SSYR	16	Resilience Lilly Pilly	Syzygium 'Resilience'	200mm	2 - 3m	1.2 - 2.0m	N
SWJG	32	Jervis Gem	Westringia fruticosa 'Jervis Gem'	200mm	0.8 - 1.2m	0.8 - 1.2m	N
Ground Covers							
GLT	220	Spiny-headed mat rush	Lomandra longifolia 'Tanika'	150mm	0.45 - 0.6m	0.6 - 0.9m	N
GDTT	72	Flax Lily	Dianella tasmanica 'Tasred'	150mm	0.4 - 0.5m	0.4 - 0.5m	N
GSTB	135	Trident Blue	Senecio Trident Blue	150mm	0.4 - 0.5m	0.4 - 0.5m	N
GCCI	7	Cousin It	Casuarina 'Cousin It'	150mm	0.10 - 0.15m	0.8 - 1.0m	N
GLKD	114	Katrinus Deluxe Mat-Rush	Lomandra longifolia 'Katrinus Deluxe'	150mm	0.75 - 0.9m	0.9 - 1.2m	N
GHV	14	Meema	Hardenbergia violacea 'Meema'	150mm	0.4 - 0.6m	1.5 - 2.0m	N
GJU	90	Tussock Rush	Juncus usitatus	150mm	0.5 - 0.7m	0.8 - 1.0m	N
GDB	113	Flax Lily	Dianella tasmanica 'Blaze'	150mm	0.4 - 0.5m	0.4 - 0.6m	N
GBB	40	Birthday Candle	Banksia spinulosa 'Birthday Candle'	150mm	0.45 - 0.6m	0.9 - 1.2m	N
GMYP	121	Carpet Spreading Myoporum	Myoporum parvifolium 'Yareena'	150mm	0 - 0.1m	2.0 - 3.0m	N
GGRM	91	Royal Mantle Grevillea	Grevillea 'Poorinda Royal Mantle'	150mm	0 - 0.1m	2.0 - 3.0m	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 turfed areas are to be selected weed free Soft Leaf Buffalo. Turf shall be laid neatly butted with staggered joins, flush with adjacent surfaces and have even running falls to all drainage points. All new turfed 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 / Moisture Barrier

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, turfed 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	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TWELVE MONTHS MAINTENANCE SCHEDULE												
Plant Care												
Monitoring												
Pruning as required												
Deadhead / tip pruning												
Slow release fertilise												
Rapid soluble 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
https://www.dpie.nsw.gov.au/land-and-housing-corporation

NOMINATED ARCHITECT:

Barry Rush & Associates Pty Ltd
Architects
Suite 25A, 2 Beattie Street, Balmain NSW, 2041
Phone: (612) 8555 8028 Fax: (612) 9810 0161
Email: info@barryrush.com.au
www.barryrush.com.au

F	02/06/2022	DISH DRAIN AND OVERFLOW PATH ADDED
E	16/02/2022	SOUTHERN SIVALES ADDED
D	03/11/2021	PART 5 REVISION
C	25/10/2021	PART 5 RE-ISSUED
B	04/05/2021	FOR TENDER
REV	DATE	NOTATION/AMENDMENT
DO NOT SCALE DRAWINGS, CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.		

PROJECT MANAGER
LAND & HOUSING CORPORATION
PH (02) 8753 8000 FAX (02) 8753 8888

STRUCTURAL CONSULTANT

MECHANICAL CONSULTANT

HYDRAULIC CONSULTANT

ELECTRICAL CONSULTANT

LANDSCAPE CONSULTANT
GREENLAND DESIGN PTY LTD
PH 0403 164 188

PROJECT:

SENIORS DEVELOPMENT
21-23 PHILLIPS AVENUE & 5 RICHARDSON AVENUE
REGENTS PARK
LOTS 53, 54 & 55 IN DP35559

TITLE:

LANDSCAPE DETAILS AND SPECIFICATION

FILE: 2227

STATUS: **PART 5 APPROVAL**

DATE: 02/06/2022	SCALE: 1:100	PROJ: -	PROJECT NO: BGJF2
SHEET: PART 5	DRAWN: CL	CHECKED: GD	LANDSCAPE ARCH <i>[Signature]</i>
TYPE: LA	SHEET: 2 of 2	REV: F	

L.G.A. OF CUMBERLAND CITY

124

DETERMINED by the New South Wales Land & Housing Corporation on:

2020



NOTES

1. SPOT LEVELS SHOWN THUS: $+36.10$
2. CONTOURS SHOWN THUS: 36.5
3. CONTOUR INTERVAL 0.5 METRE
4. SIGNIFICANT TREES SHOWN THUS: 

THE SPREAD OF EACH TREE IS INDICATIVE ONLY AND CANNOT BE SHOWN ACCURATELY WITHOUT VERY DETAILED FURTHER SURVEY. THE SHAPE AND SIZE OF SPREAD OF THE TREE MAY VARY DUE TO LACK OF UNIFORMITY OF THE BRANCHES, TRUNK AND OTHER REASONS.

5. VISIBLE SERVICES ONLY HAVE BEEN LOCATED BY SURVEY.

6. BOUNDARY INFORMATION HAS BEEN COMPILED FROM INFORMATION SHOWN ON PLANS ON PUBLIC RECORD AT OFFICE OF N.S.W. LAND REGISTRY SERVICES.

7. BOUNDARIES PLOTTED ARE ACCURATE FOR D.A. PURPOSES.
BOUNDARIES SHOULD BE MARKED ON THE GROUND PRIOR TO ANY
FURTHER DEVELOPMENT OF THE LAND.

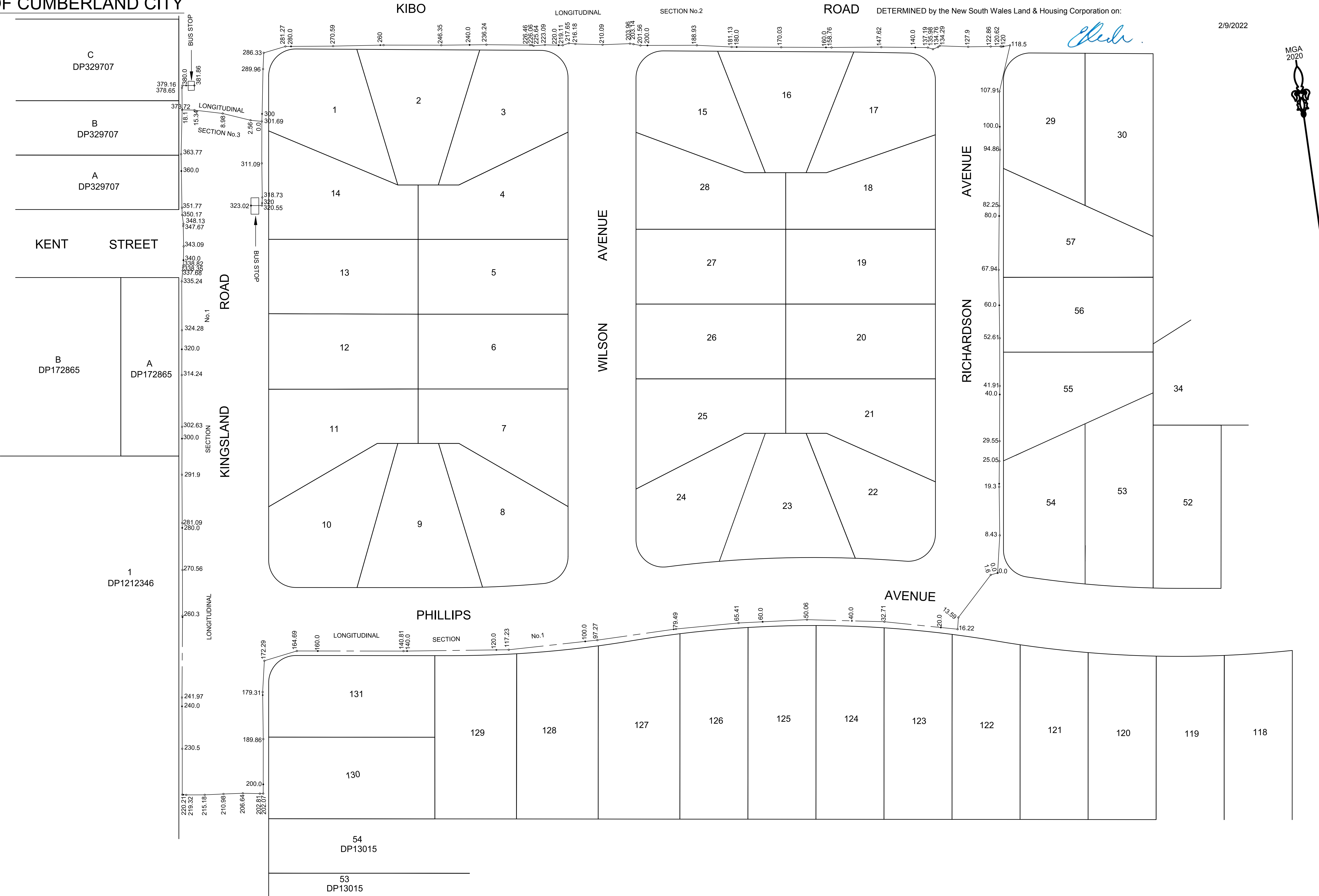
8. SERVICING INFORMATION OBTAINED FROM INFORMATION PROVIDED BY SERVICES AUTHORITIES (TELSTRA/SYDNEY WATER).

⑦ DENOTES PHOTO NO. & DIRECTION

No.	EASTING	NORTHING
1	317 893.32	6 249 283.315
2	317 885.96	6 249 230.945
3	317 858.24	6 249 237.35
4	317 853.945	6 249 244.04
5	317 860.115	6 249 287.95

[illegible]

L.G.A. OF CUMBERLAND CITY

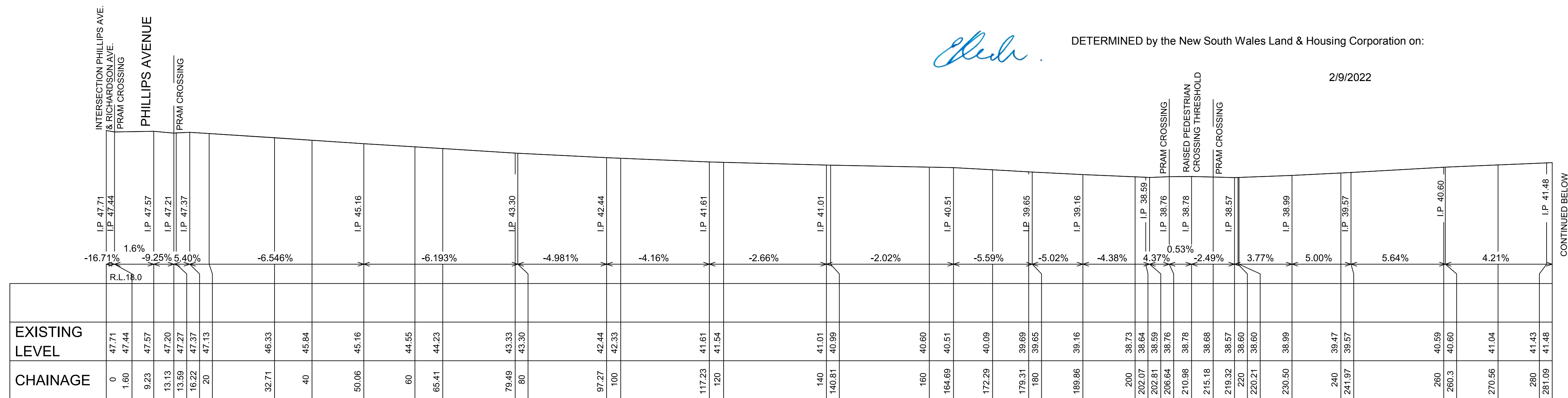


L.G.A. OF CUMBERLAND CITY

Check.

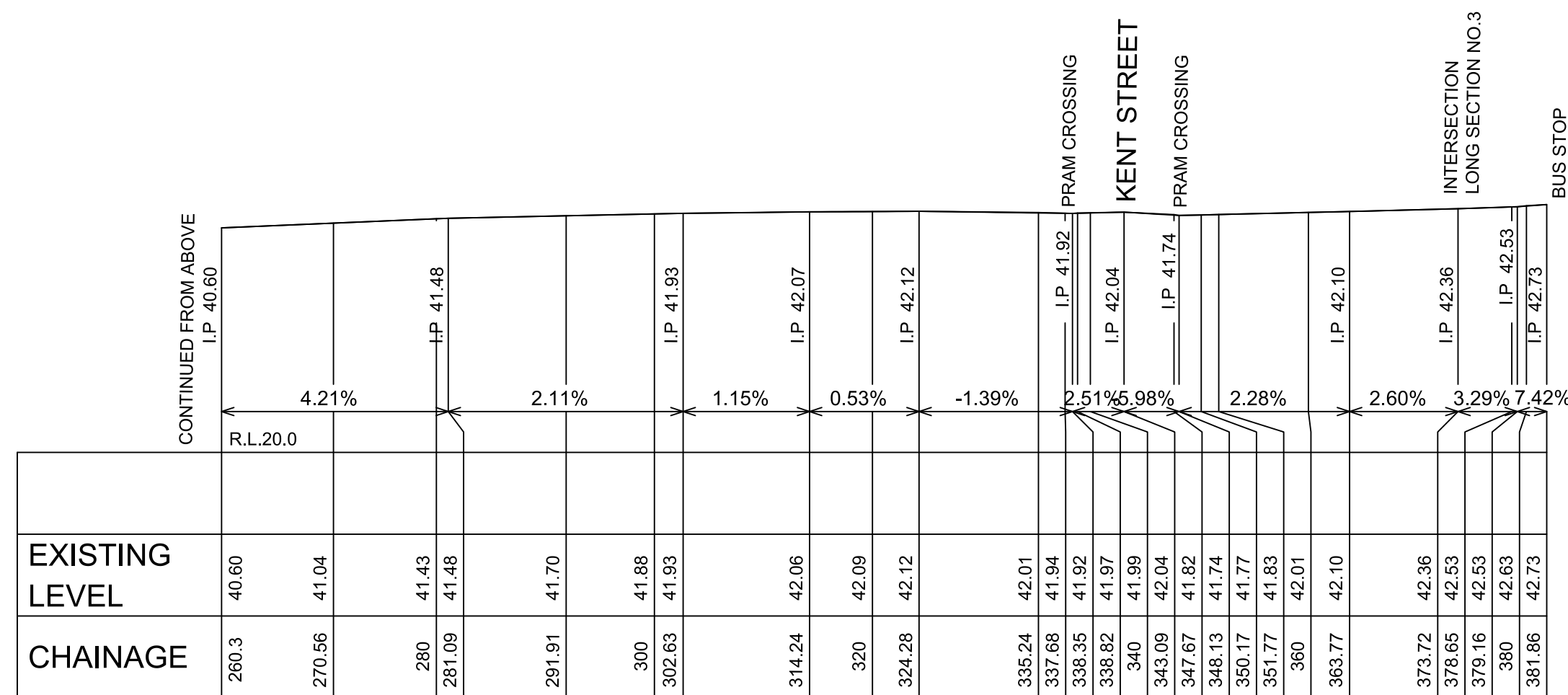
DETERMINED by the New South Wales Land & Housing Corporation on:

2/9/2022



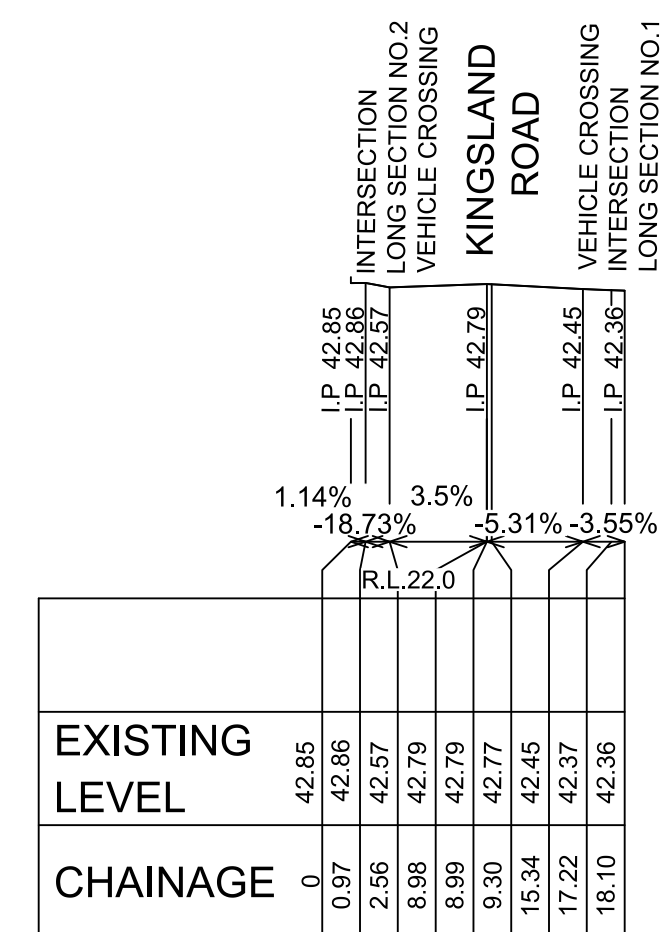
LONGITUDINAL SECTION NO.1

H=1:500 V=1:500



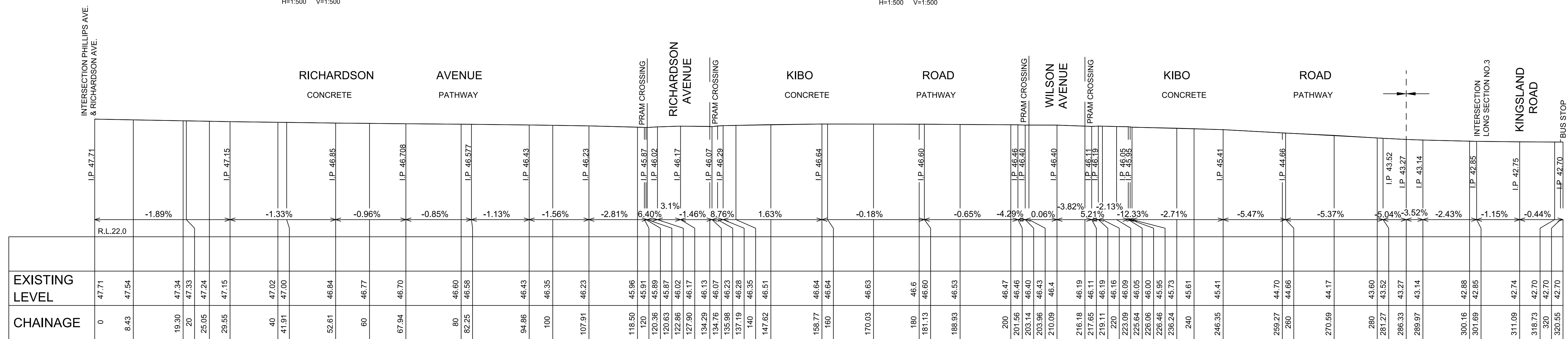
LONGITUDINAL SECTION NO.1 (CONTINUED)

H=1:500 V=1:500



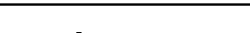
LONGITUDINAL SECTION NO.3

H=1:500 V=1:500



LONGITUDINAL SECTION NO.2

H=1:500 V=1:500

No.	DATE	NOTATION/AMENDMENT	No.	DATE	NOTATION/AMENDMENT	CONTOUR INTERVAL: 0.5m		LEGEND OF COMMONLY USED SYMBOLS		REDUCTION RATIO 1 : 500 @ A1		DATE OF SURVEY: 4 / 12 / 2014		 Planning, Industry & Environment HOUSING AND PROPERTY GROUP - Land & Housing Corporation	LOCATION				
			1.	28/08/20	REVISED DETAIL LOT 54 & AMENDED BUS ROUTE	DATUM: A.H.D.		WATER		0 5 10 15 20 25 30 35 40 45 50		SURVEY CONSULTANT: YSCO GEOMATICS SUITE 4, 114 HAMPDEN ROAD, ARTARMON PH. 94198222			STREET ADDRESS		TYPE		
			2.	26/11/20	TREE REMOVED LOT 54	ORIGIN OF DATUM:SSM 97760 RL 43.66		ELECTRICITY		LAND TITLE INFORMATION		PH. 94198222			21 - 23 PHILLIPS AVENUE & 5 RICHARDSON AVENUE			S	
			FILE		FILE SIZE (MB)	CHECKED BY	100 YEAR FLOOD RL:		TELECOM		LOTS: 53, 54, 55				DRAWING TITLE		SHT. 3		
							RECOMMENDED MINIMUM FLOOR RL:		GAS		PLAN NOS : DP 35559				BUS STOP LONGITUDINAL SECTIONS				OF 3
							SOURCE OF FLOOD INFO:		DRAINAGE		OTHER:		SURVEYORS						
									BENCH MARK		AREA: 1725m²		REF : 10614						