KU-RING-GAI LOCAL PLANNING PANEL MEETING
TO BE HELD ON MONDAY, 15 SEPTEMBER 2025 AT 10:00 AM
BY ZOOM CONFERENCING

This meeting will be live streamed – click on the link below at 12:30pm on 15 September 2025 to watch the live stream

ITEMS GB.1, GB.2 AND GB.3 WILL BE DETERMINED OFF LINE AS THESE ITEMS DO NOT FIT THE CRITERIA FOR A PUBLIC MEETING (ARE NOT CONTENTIOUS – DO NOT HAVE MORE THAN 10 OBJECTORS). ALL ITEMS WILL BE DETERMINED AND PUBLISHED ON COUNCIL'S WEBSITE AFTER 48 HOURS OF THE CLOSING OF THE DETERMINATION MEETING.

https://www.krg.nsw.gov.au/Council/Council-meetings/Ku-ring-gai-Local-Planning-Panel-KLPP-meetings/Ku-ring-gai-Local-Planning-Panel-meetings-live-stream

IMPORTANT

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AGENDA

** ** ** ** ** **

NOTE: For Full Details, See Council's Website – www.krg.nsw.gov.au under the link to business papers

APOLOGIES

DECLARATIONS OF INTEREST

GENERAL BUSINESS

GB.1 **Planning Proposal for 15 Echo Street Roseville** **5**

File: S14893

To refer the Planning Proposal for 15 Echo Street, Roseville to the KLPP for advice as required by the Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979.*

Recommendation:

That the KLPP advise Council that the Planning Proposal should proceed to Gateway Determination subject to confirmation that the Site Contamination Assessment satisfies the requirements for a *Preliminary Site Investigation* as set out in the relevant State guidelines.

GB.2 **139A Koola Avenue East Killara - Alterations and additions to an existing dwelling house** **244**

File: EDA0259/25

Alterations and additions to an existing dwelling house.

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

A. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, is satisfied that the request submitted under Clause 4.6 to vary the maximum floor space ratio development standard in Clause 4.4(2D) of the KLEP 2015 has met the requirements of Clause 4.6(3). The Panel is also of the opinion that strict compliance with the development standard is unreasonable or unnecessary in

the circumstances of the case and that there are sufficient environmental planning grounds to justify the variation to the development standard.

B. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, is satisfied that the request submitted under Clause 4.6 to vary the maximum building height development standard in Clause 4.3(2) of the KLEP 2015 has met the requirements of Clause 4.6(3). The Panel is also of the opinion that strict compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify the variation to the development standard.

C. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, being satisfied that the proposed development would be in the public interest, grant development consent to eDA0259/25 for alterations and additions to an existing dwelling house at 139A Koola Avenue, East Killara, subject to conditions as recommended in the Development Assessment Report (**Attachment A1)**. Pursuant to Section 4.53 of the Environmental Planning and Assessment Act 1979, this consent lapses if the approved works are not physically commenced within five years of the date of the Notice of Determination.

GB.3 **3-5 Alma Street, Pymble - Demolition of existing swimming pool and tennis courts and alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling** **345**

File: EDA0253/25

Demolition of existing swimming pool and tennis courts and alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling.

RECOMMENDATION

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council as consent authority under Section 4.16 of the Environment Planning and Assessment Act 1979, refuse development consent to No eDA0253/25 for demolition of existing swimming pool and tennis courts with alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling at 3-5 Alma Street, Pymble, for the reasons provided in the Development Assessment Report **(Attachment A1)**.

GB.4 **11 Jefferson Avenue, St Ives - Demolition of existing structures and construction of independent living units** Error! Bookmark not defined.

File: EDA0184/25

Demolition of existing structures and construction of 10 independent seniors living units.

RECOMMENDATION

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council as consent authority under Section 4.16 of the Environment Planning and Assessment Act

1979, refuse development consent to DA No. eDA0184/25 for demolition of existing structures and construction of 10 independent seniors living units at 11 Jefferson Avenue, St Ives, for the reasons provided in the Development Assessment Report **(Attachment A1)**.

GB.5 **130 Killeaton Street, St Ives - Demolition of existing structures and construction of a residential flat building consisting of 37 apartments over seven storeys with basement parking** **617**

File: EDA0170/25

Demolition of existing structures and construction of a residential flat building consisting of 37 apartments over seven storeys, with basement parking.

RECOMMENDATION

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council as consent authority under Section 4.16 of the Environment Planning and Assessment Act 1979, refuse development consent to No eDA0170/25 for demolition of existing structures and construction of a residential flat building consisting of 37 apartments over seven storeys with basement parking at 130 Killeaton Street, St Ives, for the reasons provided in the Development Assessment Report **(Attachment A1)**.

**** ** ** ** ** ****

PLANNING PROPOSAL FOR 15 ECHO STREET ROSEVILLE

EXECUTIVE SUMMARY

PURPOSE OF REPORT:	To refer the Planning Proposal for 15 Echo Street, Roseville to the KLPP for advice as required by the Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979.*
BACKGROUND:	A formal pre-lodgement meeting was held on 26 August 2024 (Attachment A6). The Planning Proposal was submitted on 2 May 2025. The Planning Proposal was incomplete. Following the submission of revised documentation on 15 July 2025, assessment commenced when fees were paid on 30 July 2025.
COMMENTS:	The Planning Proposal seeks to: • Rezone the site from RE2 Private Recreation to R2 Low Density Residential; • Apply a minimum subdivision lot size of 790sqm; • Apply a floor space ratio of 0.3:1; and • Apply a height limit of 9.5m.
RECOMMENDATION: (Refer to the full Recommendation at the end of this report)	That the KLPP advise Council that the Planning Proposal should proceed to Gateway Determination subject to confirmation that the Site Contamination Assessment satisfies the requirements for a *Preliminary Site Investigation* as set out in the relevant State guidelines.

PURPOSE OF REPORT

To refer the Planning Proposal for 15 Echo Street, Roseville to the KLPP for advice as required by the Local Planning Panels Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979.*

BACKGROUND

Site Description

No. 15 Echo Street, Roseville, is legally described as Lot 6 in DP 14906 and has a total area of 758.8 m^2. The site has an east-west orientation with a depth of 33.53 metres and a frontage of 19.2 metres to Echo Street, which is a cul-de-sac. The north-western corner of the site is a splayed edge of 5.17 metres. The site survey is provided as Attachment A2.

The site slopes down from the east to the west (street end). A tennis court built on a concrete slab covers the majority of the site. Its eastern edge is cut into the site, and a sandstone wall and brick piers support the western end. Along the eastern or rear boundary of the site is a high sandstone rock wall with trees above. The tennis court is bounded along its north, south, and west boundaries by a chain wire fence with gates in both the northern and southern sections of the fence.

The southern boundary of the subject site adjoins No. 11 Echo Street, Roseville; a 1-2 storey brick dwelling exists at this site, and the pool and northern verandah associated with this dwelling extend onto the subject site. The north boundary of the site opens onto an unformed footway which is adjacent to the Roseville Golf Course.



Aerial photo showing the site and surrounds

The survey for the site references that Lot 6 is affected by a Covenant created by Transfer A860041 and an Easement created by Transfer R347157. The Covenant was imposed on 19 September 1922 when the land was sold to William Clarke of Willoughby Quarryman, and it prohibited him from quarrying stone from the property. The Easement established on 5 July 1979 was between Harold

Goldstien of 11 Echo Street and Roseville Golf Links Limited. The Easement provided the Transferee (the Roseville Golf Club) and its licencees the full right to enter Lot 6 to retrieve golf balls mis-hit in the course of an ordinary game. The Easement specified that no fence could be erected on Lot 6 without the provision of an unlocked gate.

The Covenant and the Easement are not of a nature that would impede the assessment of the current planning proposal or inhibit the potential for the site to be used for residential purposes.



Looking north towards the cul-de-sac end of Echo Street



No. 11 Echo Street, Roseville with the site and tennis court fence visible in background



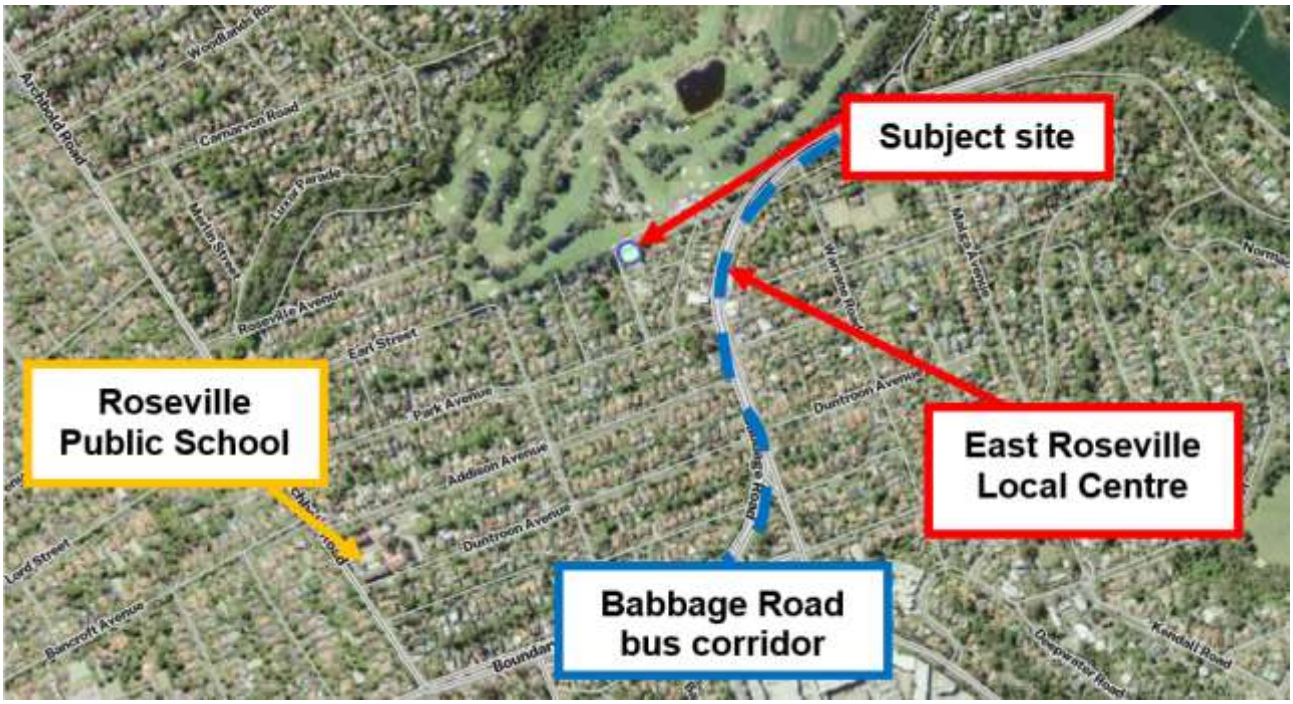
Looking south-east across the site. The white lower residence is the dwelling at 11 Echo Street.



The north-western corner of the tennis court showing the unformed footway between the site and Roseville Golf Course.



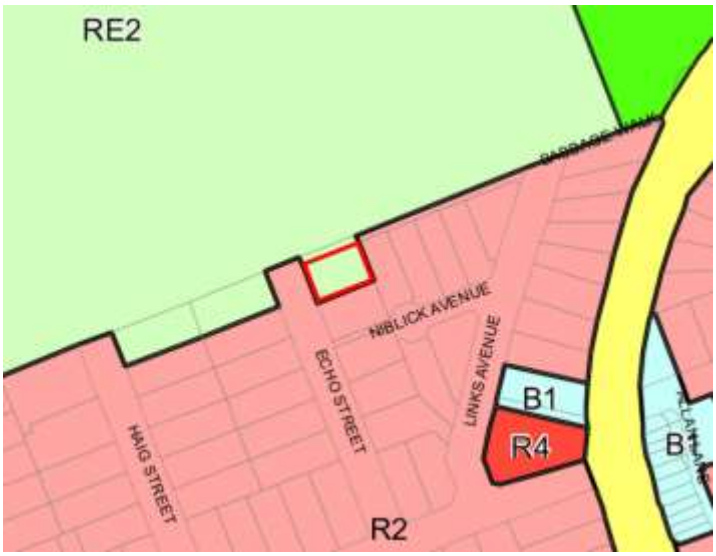
Looking east towards the site, the built-up platform established for the tennis court is visible



Site Context: Existing infrastructure in proximity to No. 15 Echo Street, Roseville

COMMENTS

The Planning Proposal seeks to amend the Ku-ring-gai Local Environmental Plan 2015 (KLEP 2015) to rezone the site from RE2 Private Recreation to R2 Low Density Residential. The site lies between the Roseville Golf Course, which is also zoned RE2 Private Recreation, and the dwelling house located at No. 11 Echo Street, Roseville, which, like the surrounding residential development, is zoned R2 Low Density Residential.



The subject site is currently zoned RE2 Private Recreation.

The proposal seeks an R2 Low-Density Residential zoning

In addition to the rezoning, the Planning Proposal seeks to apply the development standards shown in the table below. These standards apply to the existing R2 Low-Density Residential land surrounding the subject site.

KLEP 2015 – Zoning and Development Standards – 15 Echo Street, Roseville		
	Existing	Proposed
Zoning	RE2 Private Recreation	R2 Low-Density Residential
Minimum Lot Size	Nil	790sqm
Height	Nil	9.5m
Floor Space Ratio	Nil	0.3:1

The subject site has an area of 758.8m^2. The Planning Proposal seeks to apply a minimum subdivision lot size of 790m^2, which means the site, if re-zoned, will remain a single allotment (refer to the section of this report titled Site-Specific Merit for a discussion on the implications of the NSW Government's Low to Mid-rise and dual occupancy provisions).

It must be noted that, despite any mapped FSR, Clause 4.4(2A) of the KLEP 2015 provides a sliding scale for the calculation of FSR for a building in the R2 Low-Density Residential zone. Under this clause, for sites with areas of 800 m^2 or less, an FSR of 0.4:1 applies.

Chronology of Assessment

A pre-lodgement meeting was held on 27 August 2024 (**Attachment A6**). The Planning Proposal was submitted on the Planning Portal on 2 May 2025. The Planning Proposal was incomplete. Revised information was submitted on 15 July 2025. Following the payment of fees, the Planning Proposal was formally lodged and assessment commenced on 30 July 2025.

Merit Assessment

A Planning Proposal is not a Development Application and does not consider the specific detailed matters for consideration under Section 4.15 of the *Environmental Planning and Assessment Act 1979*. A Planning Proposal only relates to an LEP amendment and cannot be tied to a specific development.

A Planning Proposal must demonstrate the site-specific and strategic merit of the proposed amendments. The NSW Government's publication *Local Environmental Plan Making Guideline* (August 2023) outlines the criteria to be used for assessing the site-specific and strategic merit of a planning proposal.

The Planning Proposal and Appendices are included in **Attachments A1-A6.**

Site-Specific Merit Assessment

The NSW Local Environmental Plan Making Guideline (August 2023) specifies that to assess site-specific merit, consideration must be given to how the proposal impacts:

- The natural environment on the site to which the proposal relates and other affected land (including known significant environmental areas, resources, or hazards);
- Existing uses, approved uses, and likely future uses of the land in the vicinity of the land to which the proposal relates; and,
- Services and infrastructure that are or will be available to meet the demands arising from the proposal.

An assessment of the proposal's site-specific merit against the relevant criteria is provided below.

Natural Environment

As part of the rezoning proposal, Martens Environmental Science and Engineering was commissioned to undertake a Site Contamination Assessment of the site (Attachment A3).

Martens undertook a desktop review of available information and, using historic photos, identified that while the site had been in the ownership of Roseville Golf Course it was densely vegetated up until 1961, indicating that it was never part of the actively managed golf course. Around 1961, the site was developed as a tennis court associated with the residence at No. 11 Echo Street, Roseville.

Martens carried out a site visit, where they observed potential fill primarily in the western (street side) of the site. The fill was identified as the main area of environmental concern on the site. Soil samples were taken via bore holes instead of the preferred test pitting, as the concrete tennis court limited options. Due to testing being restricted Martens recommended, an Unexpected Finds Protocol to ensure that any unexpected contamination encountered during future earthworks is appropriately identified, assessed and managed. Martens went on to conclude that - **the site was suitable for the proposed residential zoning.**

Council's *Contaminated Land Policy,* (October 2024), requires that to proceed with a planning proposal a *Preliminary Site Investigation Report* for the land must conclude the land is suitable for the proposed zone.

The requirements for a *Preliminary Site Investigation Report* are set out in the following two applicable documents:

- Contaminated Sites Guidelines for Consultants Reporting on Contaminated Sites (Office of Environment and Heritage 2011); and
- Contaminated Land Planning Guidelines (Draft – NSW Government.)

While Marten's assessment appears to satisfy the form of a *Preliminary Site Investigation Report*, they will be asked to confirm this in a re-submit of their report, prior to the matter being submitted to the Department for Gateway. To address Marten's recommendation for an Unexpected Finds Protocol, the site has been recorded in Council's information system as contaminated land ensuring that prior to any site works the exact nature of the fill on the site is established and dealt with appropriately.

In addition to the Site Contamination Assessment, an Arboricultural Impact Assessment prepared by New Leaf Pty Ltd was submitted with the planning proposal (Attachment A4). The report assessed twenty trees within and adjacent to the site. This included 6 on the subject property, 8 in neighbouring properties (six in Roseville Golf Course, and two in Niblick Avenue), and 6 in the council road reserve. The assessment acknowledged that the rezoning application does not

propose or require any works that will impact trees. However, New Leaf based its evaluation on indicative development plans prepared by Spiral Architects Lab (Attachment A5). These plans were prepared to demonstrate a dwelling could be erected on the site, in full compliance with Council's controls. Using the drawings from Spiral Architects, New Leaf concluded the following:

Future development will allow for the retention of the majority of trees on the site and adjacent land, with likely removal of two trees in the Council verge to allow for future driveway access.

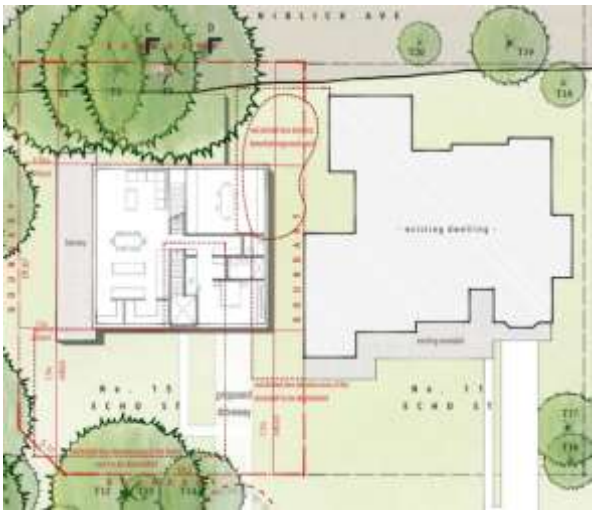
New Leaf also noted that the re-zoning has the potential to increase canopy coverage and deep soil provision on the site due to the removal of the tennis court.

Further to the work undertaken by the consultants Martens and New Leaf, a check was undertaken of both State and Local Government mapping to identify if the site and surrounds were subject to any potential hazards, such as flooding or bushfire, or constraints, such as heritage, critical habitat, or biodiversity. No relevant hazards or constraints were identified.

Existing uses, approved uses, and likely future uses of the land

Under the zoning RE2 Private Recreation, outdoor recreation facilities are permissible but not dwelling houses. As previously discussed, the site is currently being used as an extension of the outdoor living space of No. 11 Echo Street. Under the proposed R2 Low-Density Residential zoning, a dwelling house is a permissible use, and an application could be lodged to erect a dwelling on the site.

In the interest of demonstrating that an R2 Low-Density Residential zoning would be suitable for the site, the applicant provided design drawings to show that a single dwelling could be accommodated on the site in compliance with Council's relevant controls.



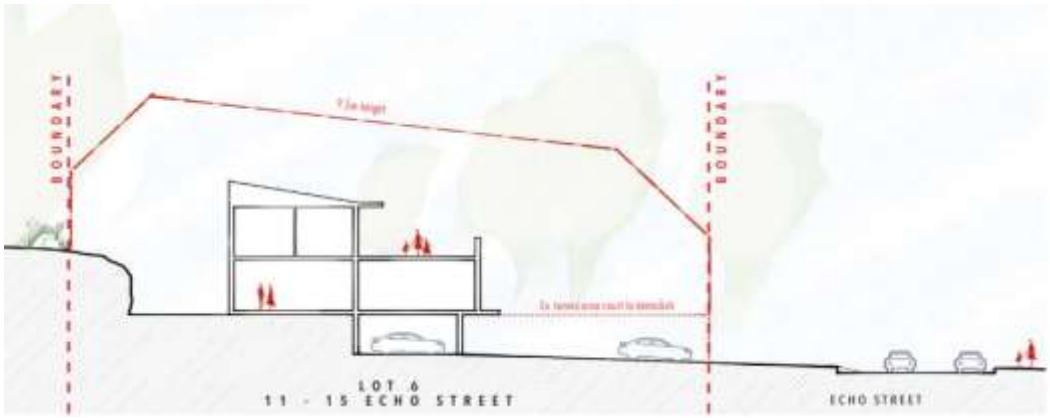
Indicative ground floor plan: 4 bedroom dwg.



Indicative first floor plan: 4 bedroom dwelling



Indicative design showing ability to conform with relevant Council controls



Indicative design showing ability to conform with relevant Council controls

The above design is indicative only; however, it does demonstrate that the site's regular rectangular shape, gentle slope, and perimeter site trees (due to tennis court and pool) would aid in facilitating a development that complied with Council controls and limited impacts on No. 11 Echo Street and the environment.

Low and Mid-Rise Housing Policy – Dual Occupancy

The site is not identified on the NSW Government's Low to Mid-rise indicative map, but if rezoned, it will be subject to the NSW Government's legislation enabling dual occupancy in all R2 Low Density Residential zones. However, the subject site has an area of 758.8m^2 and Council has sought to restrict dual occupancy outside of the Low to Mid Rise areas to sites with an area of 1015m^2 or above.

While dual occupancy may not be possible on the site, there is the potential for the applicant to pursue a secondary dwelling. Under KLEP 2015, secondary dwellings are permitted in R2 low-density residential zones as long as they are established in conjunction with a principal dwelling, are on the same lot of land as the principal dwelling, and do not exceed in area whichever of the following is greater -

a) 60 square metres,
b) 25% of the total floor area of the principal dwelling.

Infrastructure

The Planning Proposal seeks to rezone the land to permit future low-density residential use on the land. A single dwelling house equates to approximately 2.6 additional residents (ABS Census data for NSW average household size within the Roseville area). There is also potential for a secondary dwelling to be accommodated on site, but even considering this, the proposed increase in population resulting from the proposal will be minor. Adding approximately 5 people into the area is a population increase which can be comfortably absorbed by the existing roads, water, sewer, and electricity infrastructure. It is noted that the site is within close proximity to employment zones, shops, public transit, educational establishments, and public open space.

Bus stops within 400m walking distance of the site along Babbage Road to the east are serviced by bus routes 260, 270, 271, 273, 274, 278, 279, 280, 281, 283, and 284. These stops provide regular bus service to the Sydney CBD (Wynyard) with a travel time of approximately 26 minutes and to Chatswood CBD with a travel time of approximately 16 minutes.

Conclusion – Site Specific Merit Assessment

The proposal's site-specific merit has been assessed against the criteria established by the NSW Government. The natural environment of the site and surrounds, the existing and likely future uses of the site, and the capacity of existing infrastructure to service the demands resulting from the proposal are all matters that have been evaluated.

The re-zoning of the site to facilitate low-density residential development is considered an appropriate outcome for the site. The proposal is assessed as having site-specific merit.

Strategic Merit Assessment

A proposal must be aligned with the NSW strategic planning framework and current government policy for it to be assessed as having strategic merit. The proposal's consistency with the relevant State and Local strategic plans is considered below.

Greater Sydney Region Plan and North District Plan (2018)

The Planning Proposal is consistent with the objectives of the *Greater Sydney Region Plan – A Metropolis of Three Cities*, in particular:

- Objective 10. Greater housing supply
- Objective 11. Housing is more diverse and affordable

The Planning Proposal is consistent with the planning priorities of the *North District Plan*, in particular:

- Planning Priority N5. Providing housing supply, choice and affordability, with access to jobs, services and public transport

Ku-ring-gai Local Strategic Planning Statement (2020)

The Planning Proposal is consistent with the following local planning priorities:

- K3. Providing housing close to transport, services and facilities to meet the existing and future requirements of a growing and changing community
- K4. Providing a range of diverse housing to accommodate the changing structure of families and households, and enable ageing in place
- K12. Managing change and growth in a way that conserves and enhances Ku-ring-gai's unique visual and landscape character
- K31. Increasing, managing and protecting Ku-ring-gai's urban tree canopy

Section 9.1 Ministerial Directions and State Environmental Planning Policies (SEPPs)

The Planning Proposal is consistent with the State Environmental Planning Policies (SEPPs) applicable to the site. Many of these SEPPs contain detailed provisions and controls which would only apply at the Development Application stage.

The Planning Proposal is consistent with the applicable s9.1 Ministerial Direction, specifically:

- 3.1 Residential Zones, and
- 5.1 Integrating Land Use and Transport.

Conclusion – Strategic Merit Assessment

The Planning Proposal is aligned with the NSW strategic planning framework, including Council's Local Strategic Planning Statement and it gives effect to the NSW Government's current priority of increasing housing provision. The proposal is assessed as having Strategic Merit.

Amendments required to the Planning Proposal

The Planning Proposal is minor and is well supported by the applicant's planning proposal and supporting technical documents. Additionally, the Planning Proposal is in accordance with the requirements of the NSW Government's Local Environmental Plan Making Guideline (August 2023) and therefore no amendments are required to the Planning Proposal.

INTEGRATED PLANNING AND REPORTING

Theme 3: Places, Spaces and Infrastructure

Community Strategic Plan (2035) Long Term Outcome	Delivery Program Term Achievement	Operational Plan Action
U1-Facilitate a diverse mix of housing options to accommodate the needs of a growing and changing population, including increased density in appropriate locations.	P2.1.1: Land use strategies, plans and processes are in place to protect existing character and effectively manage the impact of new development.	P2.1.1.2 Continue to review the effectiveness of existing strategies, local environmental plans, development controls plans and processes across all programs

GOVERNANCE MATTERS

The process for the preparation and implementation of Planning Proposals is governed by the provisions contained in the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2021*.

Local Planning Panel's Direction – Planning Proposals issued by the Minister for Planning under Section 9.1 of the *Environmental Planning and Assessment Act 1979* requires Council to refer all Planning Proposals prepared after 1 June 2018 to the Local Planning Panel for advice, before the Planning Proposal is forwarded to the Minister for a Gateway Determination.

RISK IMPLICATION STATEMENT

The primary risk associated with the recommendation/s contained in this report is related to Environment.

There are no material risks that arise from the recommendations contained in this report. Minor issues may occur, but these can be managed within Council's current policies, procedures, resources and budget.

FINANCIAL CONSIDERATIONS

The Planning Proposal was subject to the relevant application fee under Councils 2024/2025 Schedule of Fees and Charges. The fee covers the cost of the review and assessment of the Planning Proposal

SOCIAL CONSIDERATIONS

The amendments sought by the Planning Proposal would enable the delivery of one additional low-density residential lot. This would provide the potential for an additional dwelling house and possibly a secondary dwelling. Additional housing is required to meet the needs of a growing and changing community.

ENVIRONMENTAL CONSIDERATIONS

The main environmental concern for the site is the potential for contaminated fill. For a discussion of this matter refer to the section of this report titled Site Specific Assessment – Natural Environment. The Environmental Science and Engineering consultant Martens are to be requested to confirm their Site Contamination Assessment satisfies the requirements for a *Preliminary Site Investigation*.

Altering the zoning of the site from RE2 Private Recreation to R2 Low Density Residential will facilitate the removal of the tennis court and pool on the site, which has the potential to increase deep soil provision and tree canopy.

COMMUNITY CONSULTATION

The Planning Proposal has not been subject to community consultation. In the event that the Planning Proposal is issued a Gateway Determination by the Department of Planning, Housing and Infrastructure, the Planning Proposal would be placed on statutory public exhibition in accordance with the requirements of the Gateway Determination and Council's community participation plan.

INTERNAL CONSULTATION

Relevant Council staff were consulted during the preparation of this report. No objections were raised to the planning proposal.

SUMMARY

A Planning Proposal has been submitted for 15 Echo Street, Roseville, which seeks to make the following amendments to the Ku-ring-gai Local Environmental Plan 2015:

- Rezone from RE2 Public Recreation to R2 Low Density Residential;
- Apply a minimum lot size development standard of 790sqm;
- Apply a height development standard of 9.5m; and,
- Apply a floor space development standard of 0.3:1.

The Planning Proposal has been assessed and found to have sufficient site-specific and strategic merit to recommend it proceed to Gateway Determination and public exhibition.

RECOMMENDATION:

The Ku-ring-gai Local Planning Panel advise Council that:

A. The Planning Proposal, as documented at Attachment A1-A6, be submitted to the Department of Planning, Housing and Infrastructure for a Gateway Determination subject to the proponent re-submitting an amended Site Contamination Assessment (Attachment A3) that satisfies the requirements for a *Preliminary Site Investigation* as set out in the following two documents:

    - Contaminated Sites Guidelines for Consultants Reporting on Contaminated Sites (Office of Environment and Heritage 2011);and
    - Contaminated Land Planning Guidelines (Draft – NSW Government).

Philippa Hayes
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Craige Wyse
Team Leader Urban Planning

Antony Fabbro
Manager Urban & Heritage Planning

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Attachments:			
	A1⇩	Planning Proposal 15 Echo Street	2025/280692
	A2⇩	Survey Plan	2025/280696
	A3⇩	Site Contamination Assessment	2025/280702
	A4⇩	Arboricultural Impact Assessment	2025/280703
	A5⇩	Urban Design Architectural Plans	2025/280706
	A6⇩	Pre-lodgement Consultation Council & Scoping Proposal	2025/280708

Chapman Planning Pty Ltd

Planning Proposal – PP-2025-802

15 Echo Street, Roseville

Amend Ku-ring-gai Local Environmental Plan 2015
Rezone land from RE2 Private Recreation to R2 Low Density Residential

15 July 2025
Prepared by Chapman Planning
Member PIA

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DOCUMENT SIGN-OFF

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Name: Garry Chapman **Designation**: Director – Chapman Planning **Signature**: Garry Chapman. **Date:** 15 July 2025

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APPENDIX E – Pre-lodgement consultation with Council and Scoping Proposal dated 9 August 2024 prepared by Chapman Planning 42

INTRODUCTION

This planning proposal contains an explanation of the intended effect and justification for a proposed amendment to the Ku-ring-gai Local Environmental Plan 2015 (KLEP 2015). The planning proposal has been prepared in accordance with Section 3.33 of the Environmental Planning and Assessment Act 1979 (EPA Act) and the Local Environmental Plan Making Guideline published by the NSW Department of Planning on August 2023.

The Planning Proposal seeks an amendment to the KLEP 2015 applying to land at 15 Echo Street, Roseville – Lot 6 in DP 14906.

The site is currently zoned RE2 Private Recreation zone, and is not subject to any principle development standards pursuant to the LEP. This planning proposal seeks to amend the LEP to rezone the subject site to R2 Low Density Residential zone with a maximum permissible height of 9.5m and a maximum permissible FSR of 0.3:1 pursuant to the LEP maps.

The proposal seeks to amend the LEP so that the zoning and principle development standards for the site are consistent with that of the adjoining property – Lot 7 in DP 14906 (11 Echo Street, Roseville) which currently contains a dwelling house. The subject site at 15 Echo Street is utilized as an extension of the existing dwelling on the adjoining property and contains a swimming pool, tennis court, verandah and garden areas associated with this dwelling.

A Planning Proposal pre-lodgement meeting was held with Ku-ring-gai Council on 27 August 2024 following the submission of a scoping report to Council on 9 August 2024. (**Appendix E –** Scoping Proposal dated 9 August 2024 prepared by Chapman Planning)**.**

In accordance with Section 3.33 of the Environmental Planning & Assessment Act 1979, this planning proposal seeks to explain the intended effect of the proposed instrument and sets out the justification for making the proposed instrument. This planning proposal addresses matters that are intended to be included in the Ku-ring-gai Local Environmental Plan 2015.

Land to which Planning Proposal applies

The subject site is legally described as Lot 6 in DP 14906, also known as 15 Echo Street, Roseville. The subject site is located 100m north of the intersection of Park Avenue and Echo Street, Roseville, and adjoins the southern boundary of the Roseville Golf Course to the north.

The lot has an east-west orientation with a frontage of 19.2m to Echo Street, a splayed corner of 5.17m at its north-western corner adjacent to the Echo Street cul-de-sac, a site depth of 29.87m, and total area of approximately 760m^2.

The site is level created by the cut and fill for the tennis court covering the majority of the site. The tennis court is cut into site with a sandstone wall/retaining wall toward the rear boundary with trees above the retaining walls. The tennis court sits on sand-stone walls on the western portion of the site. The site also contains part of the in-ground swimming pool and verandah used by the adjoining dwelling house at 11 Echo Street, Roseville.

The adjoining property contains a 1- 2 storey brick dwelling house, with vehicular access from Echo Street via driveway at the south-western corner of the site.

The site is within walking distance (500m) of the East Roseville Local Centre zone and well-serviced by public transport – bus stops along Babbage Road serving bus routes to Chatswood, Dee Why, and Warringah Mall.

The subject site and locality are shown in the aerial photographs and map extracts below.



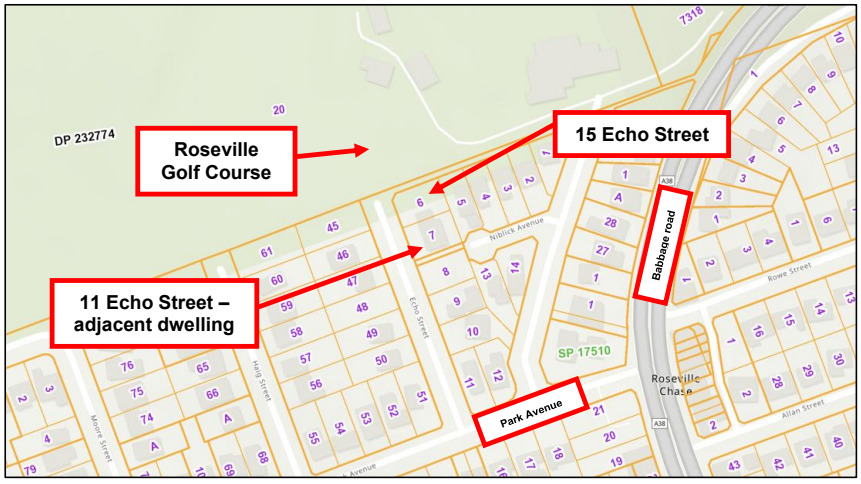


Figure 1 *Aerial photograph and cadastral map of the site and adjoining properties –* ***Source****: NSW Explorer*

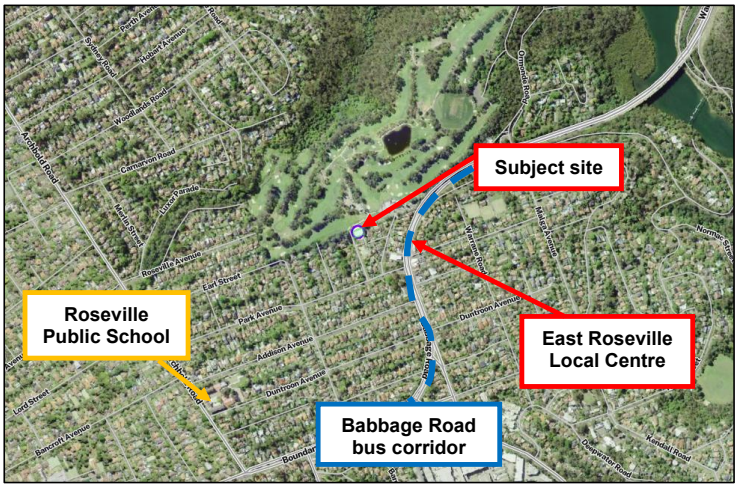


Figure 2 *Aerial photograph of the surrounding locality, transport links and facilities –* ***Source****: NSW Explorer*

Existing KLEP 2015 Planning Controls

- **Zoning**: The subject site is zoned RE2 – Private Recreation under the *Ku-ring-gai LEP 2015*.

  The subject site is surrounded by low density land uses under the LEP with R2 Low Density Residential zoned land to the south, east and west with a building height of 9.5m. The land adjoining the northern boundary is zoned RE2 Private Recreation and contains the Roseville Golf Course and Golf Club.

- **4.1 Minimum Subdivision Lot Size:** Nil

- **4.3 Height of buildings & 4.4 Floor space ratio:** Nil

The site is not identified on the remaining LEP maps with respect to heritage conservation, terrestrial biodiversity, or riparian land. Further, pursuant to the Ku-ring-gai Council Online map viewer the site is not subject to flooding (mainstream or overland flow mapping), greenweb mapped land, or bushfire prone land.

Proposed KLEP 2015 Amendments

- **Zoning**: RE2 (Private Recreation) to R2 (Low Density Residential)

- **4.1 Minimum Subdivision Lot Size:** Nil to R:790sqm

- **4.3 Height:** Nil to J2: 9.5m

- **4.4 Floor Space Ratio:** Nil to A3: 0.3:1

Technical Studies

The Planning Proposal relies on the following plans and reports.

- *Appendix A – Survey Report dated 14 July 2025 prepared by Lawrence Consulting Group*
- *Appendix B – Urban Design Report and Concept Architectural Plans dated June 2025 prepared by Spiral Architects Lab.*
- *Appendix C – Site Contamination Assessment dated 12 March 2025 prepared by Martens & Associates.*
- *Appendix D – Arboricultural Impact Assessment dated 22 April 2025 prepared by New Leaf Arboriculture.*
- *Appendix E – Pre-lodgement consultation with Council & Scoping Proposal dated 9 August 2024 prepared by Chapman Planning*

PART 1 – OBJECTIVES AND INTENDED OUTCOMES

Objective

The objective of the planning proposal is to rezone an existing allotment that is zoned RE2 Private Recreation, that has historically been associated with the low-density residential use of the existing dwelling at 11 Echo Street. The objective of the rezoning is to facilitate future low-density development on the site.

Intended Outcomes

The intended outcomes of the planning proposal are:

- Rezone the site so as to enable redevelopment for the purposes of low-density residential accommodation consistent with the adjoining land and the locality, eastern and western side of Echo Street, Roseville;
- Allow for development of the site for residential development commensurate with the proposed R2 Low Density Residential zone with a maximum permitted height of 9.5m, FSR of 0.3:1, and minimum lot size of 790m^2 consistent with the surrounding locality;
- Provide for the orderly, economic, and prompt development of the site; and
- Ensure that development within the Ku-ring-gai LGA appropriately supports the objectives of planning policies and plans, including Council's Community Strategic Plan 2038, the Greater Sydney Regional Plan A Metropolis of Three Cities, the North District Plan and the Ku-ring-gai Local Strategic Planning Statement.

PART 2 – EXPLANATION OF PROVISIONS

KLEP 2015 Mapping

The planning proposal seeks to:

- **Zoning**: Amend the Ku-ring-gai LEP 2015 Land Zoning Map for the site from RE2 (Private Recreation) to R2 (Low Density Residential)
- **Lot Size:** Nil to R:790sqm
- **Height:** Nil to J2: 9.5m
- **Floor Space Ratio:** Nil to A3: 0.3:1

KLEP 2015 Written Instrument

No additional local or site-specific provisions are sought for the site which require amendment to clauses of the KLEP 2015 written instrument.

The intent of the amendments will achieve the objectives and intended outcomes of the proposal by allowing the future development of the lot for low-density residential uses consistent with the R2 Low Density Residential zone.

PART 3 – JUSTIFICATION OF STRATEGIC AND SITE-SPECIFIC MERIT

The below section addresses the strategic and site-specific merit of the planning proposal in accordance with the requirements of the Local Environmental Plan Making Guideline published by the NSW Department of Planning.

Section A – Need for the planning proposal

Q1 Is the planning proposal a result of an endorsed LSPS strategic study or report?

The planning proposal is not triggered by an endorsed LSPS or strategic study. However, the rezoning seeks to facilitate residential development on an existing allotment which has historically been used in association with an existing dwelling on the adjoining property containing its private open space areas.

The proposal will align the existing zoning of the land with its current use, and facilitate future redevelopment of the site to contain low-density residential development.

The planning proposal achieves the aims of the **Ku-ring-gai Local Strategic Planning Statement** which envisions an increase in housing densities close to transport, services and facilities, specifically:

- ***Planning Priority K3***: Future development of the subject site to contain a low-density residential dwelling typology will be within close proximity to transport (Babbage Road bus corridor), services (East Roseville Local Centre, Chatswood Industrial/Commercial centre Lower Gibbes Street) and facilities (Roseville Public School) within the broader Roseville locality. The additional housing stock provided by the proposal can be accommodated by existing infrastructure within the locality.
- ***Planning Priority K4*****:** The rezoning of the site will permit *dwelling house* and *secondary dwelling* development contributing to a range of housing types within the locality,
- ***Planning Priority K5*****:** The additional dwelling density provided within the locality by the proposal contributes to housing choice and affordability in Roseville.
- ***Planning Priority K21:*** The proposal achieves additional housing and land use improvement that will be serviced by key transport infrastructure enabling 30 minute access to key strategic centres. Bus stops within 400m walking distance of the site along Babbage Road to the east are serviced by bus routes 260, 270, 271, 273, 274, 278, 279, 280, 281, 283, and 284. These stops provide regular bus service to the Sydney CBD (Wynyard) with a travel time of approximately 26 minutes and to Chatswood CBD with a travel time of approximately 16 minutes.
- ***Planning Priorities K31 & K40:*** The future residential development permitted by the proposal would allow for improved canopy cover and deep soil permeability on the site. The existing hard surface area – tennis court on the site currently extends within the front, side and rear setback

areas of the lot, which under future low-density residential development in accordance with the Ku-ring-gai DCP will provide landscaped and deep soil areas in these setbacks.

The **Ku-ring-gai Housing Strategy 2036** identifies Council's response to achieving the housing targets of the Greater Sydney Region Plan of 4,000 new dwellings from 2016-2021. The housing strategy states that "*since 2016, more than half of the required housing supply quota has been met, with the remaining amount fully deliverable through current development approvals and existing capacity within the Ku-ring-gai Local Environmental Plans. This means that the 0-5 year housing supply target of 4,000 dwellings is achievable under Council's existing planning policies and no amendment to the Ku-ring-gai Local Environmental Plan is necessary."*

Nevertheless, the NSW State Government has provided an updated housing target of 7,600 new dwellings in the LGA by 2029. While the Housing Strategy does not identify the need for increased housing density through amendments to the KLEP 2015, the proposal is a responsive rezoning of an underutilised site that will enable development in accordance with its historically anticipated use, achieving reasonable growth for the locality in accordance with the State Government's latest housing target, whilst also being consistent with existing established low density development within Roseville. The rezoning will enable an additional dwelling on the subject site consistent with the Housing Strategy.

Q2 Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The proposal is the best means of achieving the objectives and intended outcomes for the site. The current KLEP 2015 provisions do not allow for residential development of the site due to the RE2 Private Recreation zoning of the land.

Clause 5.3 Development near zone boundaries of the KLEP 2015 generally provides for flexibility in permitting uses on land adjacent to a zone boundary where it would enable a more logical and appropriate development of the site and be compatible with the planning objectives and land uses for the adjoining zone.

Pursuant to subclause 5.3(3)(ab) of the LEP, this Clause does not apply to the R2 Low Density Residential zone or the RE2 Private Recreation zone, and would not allow for the objectives and intended outcomes of the proposal to be achieved. The planning proposal for rezoning of the land is the best, most efficient and most time-effective approach to delivering the desired outcome in this regard.

The current use of the site as part of a residential dwelling will be reflected in the proposed zoning while also giving flexibility for a future separate dwelling to be developed on the site which is a separate lot to the existing dwelling at 11 Echo Street.

Section B – Relationship to Strategic Planning Framework

Q3 Will the planning proposal give effect to the objectives and actions of the applicable regional or district plan or strategy (including any exhibited draft plans or strategies)?

The proposal will give effect to the relevant objectives and actions of the *Greater Sydney Region Plan, North District Plan* as detailed within the below assessment:

Table 1 *Consistency with relevant objectives of the Greater Sydney Regional Plan*

CONSISTENCY WITH GREATER SYDNEY REGION PLAN 2056		
Directions	***Objectives***	***Consistent/Inconsistent***
Liveability		
4. Housing the city	**Objective 10.** Greater housing supply.	The proposal will increase housing supply within the locality through the rezoning of the land to allow for future low-density residential development.
	Objective 11. Housing is more diverse and affordable.	The additional dwelling density provided within the locality by the proposal contributes to housing choice and affordability in Roseville.
5. A city of great places	**Objective 13.** Environmental heritage is conserved and enhanced.	The proposal does not impact upon any nearby state or local heritage items, or conservation areas.
Productivity		
6. A well connected city	**Objective 14.** A metropolis of three cities integrated land use and transport creates walkable 30-minute cities.	The proposal achieves this objective by providing additional housing and land use improvement that will be serviced by key transport infrastructure enabling 30 minute access to key strategic centres. Bus stops within 400m walking distance of the site along Babbage Road to the east are serviced by bus routes 260, 270, 271, 273, 274, 278, 279, 280, 281, 283, and 284. These stops provide regular bus service to the Sydney CBD (Wynyard) with a travel time of approximately 26 minutes and to Chatswood CBD with a travel time of approximately 16 minutes.
Sustainability		
8. A city in landscape	**Objective 27.** Biodiversity is protected, urban bushland, and remnant vegetation is enhanced.	The proposal will not impact upon any significant areas of biodiversity or significant bushland within the locality as detailed by the submitted Arboricultual Impact Assessment. The future residential development permitted by the proposal would allow for improved canopy cover and deep soil permeability on the site as depicted in the submitted concept plans for the site. The existing hard surface area – tennis court on the site currently extends within the
	Objective 30. Urban tree canopy cover is increased.	

		front, side and rear setback areas of the lot, which under future low-density residential development in accordance with the Ku-ring-gai DCP will provide landscaped and deep soil areas in these setbacks.

***Table 2** Consistency with District Plan*

CONSISTENCY WITH THE NORTH DISTRICT PLAN 2056	
Planning Priority	***Consistent/ Inconsistent***
Liveability	
N5. Providing housing supply, choice, and affordability, with access to jobs, services, and public transport.	The site is within walking distance (<500m) of the East Roseville Local Centre zone, and well-serviced by public transport – bus stops within 400m walking distance along Babbage Road with regular bus routes to Chatswood, Dee Why, and Warringah Mall. The proposal allows for additional housing stock within 30 minute travel time of nearby employment and commercial centres in the Sydney and Chatswood CBD's, and is within close proximity to Roseville Public School 950m walking distance south-west of the site.
Sustainability	
N16. Protecting and enhancing bushland and biodiversity.	The proposal will not impact upon any significant areas of biodiversity or significant bushland within the locality.
N19. Increasing Urban tree canopy cover and delivering Green Grid connections.	The future residential development permitted by the proposal would allow for improved canopy cover and deep soil permeability on the site as depicted in the submitted concept plans for the site. The existing hard surface area – tennis court on the site currently extends within the front, side and rear setback areas of the lot, which under future low-density residential development in accordance with the Ku-ring-gai DCP will provide landscaped and deep soil areas in these setbacks.

Q4 Is the planning proposal consistent with a Council LSPS that has been endorsed by the Planning Secretary or GSC, or another endorsed local strategy or strategic plan?

The proposal will give effect to the objectives and actions of the relevant

Table 3 *Consistency with Ku-ring-gai LSPS*

CONSISTENCY WITH THE KU-RING-GAI LOCAL STRATEGIC PLANNING STATEMENT	
Planning Priority	***Consistent/ Inconsistent***
Liveability	
Housing	
K3. Providing housing close to transport, services, and facilities to meet the existing and future requirements of a growing and changing community.	Future development of the subject site to contain a low-density residential dwelling typology will be within close proximity to transport (Babbage Road bus corridor), services (East Roseville Local Centre, Chatswood Industrial/Commercial centre Lower Gibbes Street) and facilities (Roseville Public School) within the broader Roseville locality. The additional housing stock provided by the proposal can be accommodated by existing infrastructure within the locality.
K4. Providing a range of diverse housing to accommodate the changing structure of families and households and enable ageing in place.	The rezoning of the site will permit dwelling house and secondary dwelling development contributing to a range of housing types within the locality,
K5. Providing affordable housing that retains and strengthens the local residential and business community.	The additional dwelling density provided within the locality by the proposal contributes to housing choice and affordability in Roseville.
Local and Neighbourhood Centres	
K6. Revitalising and growing a network of centres that offer a unique character and lifestyle for local residents.	The proposal will provide for additional housing density within the catchment of the East Roseville Local Centre contributing to its vitality and use.
Local Character and Heritage	
K12. Managing change and growth in a way that conserves and enhances Ku-ring-gai's unique visual and landscape character.	The proposal seeks to accommodate future low-density residential development on the site. In accordance with the submitted architectural plans – concept design for the site, the future development of the land will be consistent with the low-density visual character of the surrounding streetscape.
Aboriginal Communities and Cultural Heritage	
K16. Protecting, conserving, and managing Ku-ring-gai's Aboriginal heritage objects, items, and significant places.	A search of the site under the *Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System)* has shown that no Aboriginal sites or places have been recorded or declared in or near the subject site.
Open Space, Recreation and Sport	

K17. Providing a broad range of open space, sporting, and leisure facilities to meet the community's diverse and changing needs.	The proposed rezoning of RE2 Private Recreation zoned land will not detract from the Roseville Golf Course adjoining the site to the north. Whilst the land is zoned RE2, the site has historically been used in association with the existing dwelling at 11 Echo Street, Roseville.
Productivity	
30 Minute City	
K21. Prioritising new development and housing in locations that enable 30-minute access to key strategic centres.	The proposal achieves additional housing and land use improvement that will be serviced by key transport infrastructure enabling 30 minute access to key strategic centres. Bus stops within 400m walking distance of the site along Babbage Road to the east are serviced by bus routes 260, 270, 271, 273, 274, 278, 279, 280, 281, 283, and 284. These stops provide regular bus service to the Sydney CBD (Wynyard) with a travel time of approximately 26 minutes and to Chatswood CBD with a travel time of approximately 16 minutes. The subject site is within 300m north of east-west connecting cycleways along Allan Street and Addison Avenue, Roseville providing active transport access to: - Roseville Railway Station (10 minute ride – 2.3km) to the west, - Cycleways on Penshurst Street and High Street to the south and to Willoughby (19 minute ride – 4.3km), and - Cycleways on Addison Avenue, Archer Street to the south-west to Chatswood Metro Station (17 minute ride – 3.5km).
Sustainability	
Bushland and Biodiversity	
K28. Improving the condition of Ku-ring-gai's bushland and protecting native terrestrial and aquatic flora and fauna and their habitats.	The proposal will not impact upon any significant areas of biodiversity or significant bushland within the locality.
Urban Forest	
K31. Increasing, managing, and protecting Ku-ring-gai's urban tree canopy.	The future residential development permitted by the proposal would allow for improved canopy cover and deep soil permeability on the site. The existing hard surface area – tennis court on the site currently extends within the front, side and rear setback areas of the lot, which under future low-density residential development in accordance with the Ku-ring-gai DCP will provide landscaped and deep soil areas in these setbacks.
Green Grid	

K32. Protecting and improving Green Grid connections.	The site is not identified as forming part of the Ku-ring-gai DCP Greenweb connections map or draft Green Grid Strategy.
Climate Resilience and Adaptation to the Impacts of Urban and Natural Hazards	
K40. Increasing urban tree canopy and water in the landscape to mitigate the urban heat island effect and create greener, cooler places.	The future residential development permitted by the proposal would allow for improved canopy cover and deep soil permeability on the site. The existing hard surface area – tennis court on the site currently extends within the front, side and rear setback areas of the lot, which under future low-density residential development in accordance with the Ku-ring-gai DCP will provide landscaped and deep soil areas in these setbacks.

Table 4 *Consistency with Ku-ring-gai Housing Strategy*

CONSISTENCY WITH HOUSING STRATEGY 2036		
Housing Priority	**Objectives**	**Consistent/ Inconsistent**
H1. Manage and monitor the supply of housing in the right locations.	**1.** To monitor the delivery of housing within areas close to services, cultural and community facilities, and within a 10-minute walking distance to key public transport nodes. **2.** To provide homes in areas that can support the creation and growth of vibrant Local Centres and a thriving local economy. **3.** To ensure the delivery of housing is in coordination with provision of local and state infrastructure and services.	The Ku-ring-gai Housing Strategy 2036 identifies Council's response to achieving the housing targets of the Greater Sydney Region Plan of 4,000 new dwellings from 2016-2021. The housing strategy states that "*since 2016, more than half of the required housing supply quota has been met, with the remaining amount fully deliverable through current development approvals and existing capacity within the Ku-ring-gai Local Environmental Plans. This means that the 0-5 year housing supply target of 4,000 dwellings is achievable under Council's existing planning policies and no amendment to the Ku-ring-gai Local Environmental Plan is necessary."* Nevertheless, the NSW State Government has provided an updated housing target of 7,600 new dwellings in the LGA by 2029. While the Housing Strategy does not identify the need for increased housing density through amendments to the KLEP 2015, the proposal is a responsive rezoning of an underutilised site that will enable development in accordance with its historically anticipated use, achieving reasonable growth for the locality in accordance with the State Government's latest

		housing target, whilst also being consistent with existing established low density development within Roseville. The proposal achieves Housing Priority H1 as the site is within 400m walking distance of the East Roseville local centre and well-serviced bus stops along Babbage Road, and is within 950m walking distance north-east of the Roseville Public School. The proposal does not seek significant residential intensification in the locality, with the additional dwelling density resulting on the site to be negligible and able to be absorbed with respect to surrounding local infrastructure.
H2. Encourage diversity and choice of housing.	**1.** To encourage a mix of dwelling types and sizes. **2.** To investigate housing affordability. **3.** To ensure new homes are accessible and meet mobility needs.	The rezoning of the site will permit dwelling house and secondary dwelling development contributing to a range of housing types within the locality. The additional dwelling density provided within the locality by the proposal contributes to housing choice and affordability in Roseville. The future development of the site for residential purposes can address accessibility in accordance with the KDCP 2015.

Table 5 *Consistency with Local Housing Strategy – Letter of Approval*

CONSISTENCY WITH LOCAL HOUSING STRATEGY – LETTER OF APPROVAL From Department of Planning Industry and Environment	
Consistency with Local Housing Strategy Approval Letter by Department of Planning Industry and Environment.	Consistent The DoP Letter of Approval of the Ku-ring-gai LHS acknowledged the strategy was consistent with the North District Plan, Section 9.1 Directions and addressed housing diversity and affordability. The letter also identified that a commitment to identifying future growth areas was required. The rezoning will enable an additional dwelling on the subject site consistent

	with the Housing Strategy which was supported by the DoP's approval letter.

Table 6 *Consistency with Community Strategic Plan 2030*

CONSISTENCY WITH COMMUNITY STRATEGIC PLAN 2030	
Theme	**Consistent/Inconsistent**
01: Community, People and Culture A healthy, safe, and diverse community that respects our history, and celebrates our differences in a vibrant culture of learning.	Consistent – The proposal allows for residential development that will contribute to the surrounding community.
02: Natural Environment Working together as a community to protect and enhance our natural environment and resources.	Consistent – The proposal will protect and enhance the natural environment.
03: Places, Spaces, and Infrastructure A range of well planned, clean, and safe neighbourhoods and public spaces designed with a strong sense of identity and place.	Consistent – The proposal will contribute an additional dwelling on an underutilised site within the Roseville neighbourhood.
04: Access, Traffic and Transport Access and connection to, from and within Ku-ring-gai is safe, reliable, and affordable.	Consistent - The proposal achieves additional housing that is within the catchment of public transport infrastructure.
05: Local Economy and Employment Creating economic employment opportunities through vital, attractive centres, business innovation and technology.	Consistent – The proposal will contribute to the economic viability of nearby commercial centres through population growth.
06: Leadership and Governance Ku-ring-gai is well led, managed, and supported by ethical organisations which deliver projects and services to the community by listening, advocating, and responding to their needs.	Consistent – The proposal does not contravene this theme.

Q5 Is the planning proposal consistent with any other applicable State and regional studies or strategies?

The proposal is consistent with other relevant State strategies as follows:

- **NSW Future Transport Strategy:** Chapter 3, Priority 2 of this strategy developed by Transport for NSW provides a target for developing '15 minute' neighbourhoods where transport and services are all within close proximity to planned housing.

  In this instance, the subject site is located within an accessible area within 300-400m walking distance (5-7 minute walk) of bus stops at Babbage Road-Park Avenue and Babbage Road-Allan Street to the east. These stops are serviced by bus routes 260, 270, 271, 273, 274, 278, 279, 280, 281, 283, and 284. These stops provide regular bus

services with 10-15 minute frequency to the Sydney CBD (Wynyard) with a travel time of approximately 26 minutes and to Chatswood CBD with a travel time of approximately 16 minutes.

The site is located within close proximity of:

- Public open space (Roseville Chase Oval 515m north-east of the site, Park Avenue Playground 170m south of the site)
- Commercial services (East Roseville Local Centre 170m south-east of the site containing a pharmacy, restaurants, retail, and service station, Chatswood Industrial/Commercial centre Lower Gibbes Street 950m south-east containing Woolworths, Bunnings and recreational facilities)
- Educational establishments (KU The Chase Preschool 350m south-east of the site and Roseville Public School 650m south-west of the site).

- **Staying Ahead: State Infrastructure Strategy 2022-2024:** Chapter 10 of this strategy prepared by Infrastructure NSW establishes a vision to integrate infrastructure, land use and service planning within NSW. Section 10.1 states that "*Priority should be placed on using the capacity of the existing and planned transport network. The NSW Productivity Commission White Paper 2021 notes that the existing transport network and planned investments hold development potential – for example: - Sydney Metro City and Southwest".*

  The infrastructure strategy supports additional residential density in locations such as Roseville under the strategic context for the site, being within the larger catchment of the nearby Chatswood CBD and North-west Metro Line.

  Further, the location of the site in walking distance (400m) of the Babbage Road city-serving transport corridor is consistent with the State Infrastructure Strategy's objective which states "*Higher productivity, such as reduced road congestion and shorter travel times, can be achieved by rezoning transport corridors to accommodate more housing. In doing so, appropriate standards for development are important to minimise adverse amenity impacts and risks of future land use conflicts."*

Q6 Is the planning proposal consistent with applicable State Environmental Planning Policies (SEPPs)?

The Planning Proposal is generally consistent with other the State Environmental Planning Polices (SEPPs) applicable to the site as follows:

Table 7 *Compliance with other applicable SEPPS*

SEPP	Consistency
SEPP (Transport and Infrastructure) 2021	Consistent

Chapter 2 Infrastructure	The future additional residential density proposed on the site does not trigger notification or assessment requirements of the SEPP with respect to traffic generation, proximity to State Classified roads, or other infrastructure provisions. The proposed rezoning will allow for low density residential development on the site that will not result in any significant traffic generation and the proposal will have minimal impacts upon parking and traffic within the locality in this regard. In accordance with the *RMS Guide for Traffic Generating Development*, the traffic generation for a dwelling house land uses is 0.85 vehicle trips per dwelling on weekday peak hours. The proposed rezoning of the subject site to accommodate low density residential development will not substantially increase traffic generation, noting the RMS Guide states *"Traffic generation rates in inner metropolitan areas where public transport is more accessible could be lower".* As detailed previously, the traffic generation of the site is anticipated to be further reduced given active and public transport connectivity, as the subject site is within 300m north of east-west connecting cycleways along Allan Street and Addison Avenue, Roseville providing active transport access to: - Roseville Railway Station (10 minute ride – 2.3km) to the west, - Cycleways on Penshurst Street and High Street to the south and to Willoughby (19 minute ride – 4.3km), and - Cycleways on Addison Avenue, Archer Street to the south-west to Chatswood Metro Station (17 minute ride – 3.5km).
SEPP (Biodiversity and Conservation) 2021 *Chapter 2 Vegetation in non-rural areas*	Consistent This Biodiversity and Conservation SEPP provides planning controls related to conservation and management, to ensure protection of the natural environment. The site is not identified as biodiversity mapped land pursuant to the NSW Department of Planning and Environment – Biodiversity Values Map and Threshold tool, and does not contain significant vegetation communities and as such the proposal does not present a likely significant impact upon endangered species.
SEPP (Resilience and Hazards) 2021 *Chapter 2 Coastal Management* *Chapter 4 Remediation of land*	Consistent The Resilience and Hazard SEPP provides provisions for development in the coastal zone, management of hazardous and offensive development and remediation of contaminated land. Chapter 2 – Coastal Management of this SEPP does not identify the site as a coastal area. Chapter 4 – Remediation of Land of this SEPP requires consent authorities to consider whether land is contaminated prior to granting development consent. The planning proposal is supported by a Site Contamination Assessment dated 12 March 2025 prepared by Martens and Associates. The assessment concludes:

	Based on the findings of this SCA, and considering the limitations of the investigation (Section 9), the risks to human health and ecological receptors posed by potential contamination is considered low. *As such, the Site is considered to be suitable for the proposed rezoning.* *To manage any potential residual risks, the Unexpected Finds Protocol (UFP) provided in Appendix O should be implemented during any future earthworks or construction.*
SEPP (Exempt and Complying Development Codes) 2008	Consistent The Codes SEPP provides provisions for development to be carried out without consent from Council as exempt development or under complying development.
Part 2 Exempt Development Codes	Part 2 provides exempt development that could be carried out on the site following its rezoning. These forms of development are of low-impact being confined to minor alteration works, landscaping, and other ancillary residential works.
Part 3 Housing Code	Part 3 of the SEPP provides standards for dwelling house development up to two storeys to be carried out as complying development. The form and scale of any future dwelling house development would largely be consistent with that envisioned by the KLEP 2015. Section 3.9 of the SEPP provides a maximum GFA of approximately 340sqm for a dwelling house development on the site, noting Clause 4.4(2A) of the KLEP provides a maximum FSR of 0.4:1 which is approximately 304sqm on the site. Whilst there is a minor discrepancy in the maximum density envisioned by the Codes SEPP on the site, the overall scale and character of future development would be consistent with the surrounding locality if the land is developed for dwelling house development pursuant to the Codes SEPP – Part 3.
Part 3B Low Rise Housing Diversity Code	Part 3B of the SEPP allows for dual occupancy and other low rise housing as complying development, provided the development is permissible under another environmental planning instrument pursuant to Clause 1.17A of the SEPP. As such, low-rise development under Part 3B of the Codes SEPP would not be able to be carried out on the site following rezoning to R2 Low Density Residential as the KLEP does not permit dual occupancies or multi-dwelling housing in the R2 zone.

Q7 Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

The Planning Proposal is generally consistent with the applicable Ministerial Directions (Section 9.1 Directions), with relevant directions addressed below:

Table 6 *Compliance with Ministerial Directions*

Directions under S9.1	Objectives	Consistency
1. PLANNING SYSTEMS		
1.3 Approval and Referral Requirements *This direction applies to all relevant planning authorities when preparing a planning proposal.*	*The objective of this direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development.*	Consistent The proposal does not impede upon the efficient and appropriate assessment of future low density residential development on the site.
1.4 Site Specific Provisions *This direction applies to all relevant planning authorities when preparing a planning proposal that will allow a particular development to be carried out.*	*The objective of this direction is to discourage unnecessarily restrictive site specific planning controls.*	Consistent The proposal does not introduce restrictive site specific controls.
3. BIODIVERISTY AND CONSERVATION		
3.1 Conservation zones *This direction applies to all relevant planning authorities when preparing a planning proposal.*	*The objective of this direction is to protect and conserve environmentally sensitive areas.*	Consistent The proposal will not have adverse impact upon environmentally sensitive areas as the site is not identified on the KLEP terrestrial biodiversity map or the NSW Department of Environment Biodiversity Values Map.
3.2 Heritage Conservation *This direction applies to all relevant planning authorities when preparing a planning proposal.*	*The objective of this direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance.*	Consistent The proposal will not have adverse impact upon nearby items of State, local, or Indigenous heritage as the nearest item of heritage pursuant to the KLEP is located within the East Roseville Local Centre adequately separated from the site. A search of the site under the *Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System)* has shown that no Aboriginal sites or places have been recorded or declared in or near the subject site. Future development consents on the site can impose conditions of consent to

Directions under S9.1	Objectives	Consistency
		ensure that in the instance an item of archaeological heritage is found on the site it is preserved and documented in accordance with Heritage Office of NSW guidelines.
4. RESILIENCE AND HAZARDS		
4.1 Flooding *This direction applies to all relevant planning authorities that are responsible for flood prone land when preparing a planning proposal that creates, removes or alters a zone or a provision that affects flood prone land.*	*The objectives of this direction are to:* *(a) ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005, and* *(b) ensure that the provisions of an LEP that apply to flood prone land are commensurate with flood behaviour and includes consideration of the potential flood impacts both on and off the subject land.*	Consistent Pursuant to the Ku-ring-gai Council Online map viewer the site is not subject to flooding (mainstream or overland flow mapping).
4.3 Planning for Bushfire Protection *This direction applies to all local government areas when a relevant planning authority prepares a planning proposal that will affect, or is in proximity to, land mapped as bushfire prone land.* *This applies where the relevant planning authority is required to prepare a bush fire prone land map under section 10.3 of the EP&A Act, or, until such*	*The objectives of this direction are to:* *(a) protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and* *(b) encourage sound management of bush fire prone areas.*	Consistent Pursuant to the Ku-ring-gai Council Online map viewer the site is not identified as bushfire prone land.

Directions under S9.1	Objectives	Consistency
a map has been certified by the Commissioner of the NSW Rural Fire Service, a map referred to in Schedule 6 of that Act.		
4.4 Remediation of Contaminated Land *This direction applies when a planning proposal authority prepares a planning proposal that applies to:* *(a) land that is within an investigation area within the meaning of the Contaminated Land Management Act 1997,* *(b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out,* *(c) the extent to which it is proposed to carry out development on it for residential, educational, recreational or childcare purposes, or for the purposes of a hospital – land:* *i. in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and*	*The objective of this direction is to reduce the risk of harm to human health and the environment by ensuring that contamination and remediation are considered by planning proposal authorities.*	Consistent The planning proposal is supported by a Site Contamination Assessment Site Contamination Assessment dated 12 March 2025 prepared by Martens and Associates. The assessment concludes: *Based on the findings of this SCA, and considering the limitations of the investigation (Section 9), the risks to human health and ecological receptors posed by potential contamination is considered low.* *As such, the Site is considered to be suitable for the proposed rezoning.* *To manage any potential residual risks, the Unexpected Finds Protocol (UFP) provided in Appendix O should be implemented during any future earthworks or construction.*

Directions under S9.1	Objectives	Consistency
ii. on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge (or incomplete knowledge).		
4.5 Acid Sulfate Soils *This direction applies to all relevant planning authorities that are responsible for land having a probability of containing acid sulfate soils when preparing a planning proposal that will apply to land having a probability of containing acid sulfate soils as shown on the Acid Sulfate Soils Planning Maps held by the Department of Planning and Environment.*	*The objective of this direction is to avoid significant adverse environmental impacts from the use of land that has a probability of containing acid sulfate soils.*	Consistent The future development of the site for low-density residential use is unlikely to result in disturbance of acid sulfate soils, noting the site is mapped as Class 5 on the acid sulfate soils map of te LEP and is not within 500m of nearby Class1-4 mapped land.
5. TRANSPORT AND INFRASTRUCTURE		
5.1 Integrating Land Use and Transport *This direction applies to all relevant planning authorities when preparing a planning proposal that will create, alter or remove a zone or a provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes.*	*The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives:* *(a) improving access to housing, jobs and services by walking, cycling and public transport, and* *(b) increasing the choice of available transport and reducing dependence on cars, and*	Consistent The subject site is located within an accessible area 400m walking distance from Babbage Road bus stops – Chatswood to Northern Beaches lines. The proposal achieves additional housing and land use improvement that will be serviced by key transport infrastructure enabling 30 minute access to key strategic centres. Bus stops within 400m walking distance of the site along Babbage Road to the east are serviced by bus routes 260, 270, 271, 273, 274, 278, 279, 280, 281, 283, and 284. These stops provide regular bus service to the Sydney CBD (Wynyard) with a travel time of approximately 26 minutes and to

Directions under S9.1	Objectives	Consistency
	(c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and *(d) supporting the efficient and viable operation of public transport services, and* *(e) providing for the efficient movement of freight.*	Chatswood CBD with a travel time of approximately 16 minutes. The low density residential zoning of the land will not result in an increase of traffic generation that will impact on traffic movement in local and classified road, or impact on the operation of intersections in the locality, noting the future increased residential density on the site is wel-serviced by public transport.
6. HOUSING		
6.1 Residential Zones *This direction applies to all relevant planning authorities when preparing a planning proposal that will affect land within an existing or proposed residential zone (including the alteration of any existing residential zone boundary), or any other zone in which significant residential development is permitted or proposed to be permitted.*	*The objectives of this direction are to:* *(a) encourage a variety and choice of housing types to provide for existing and future housing needs,* *(b) make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services, and* *(c) minimise the impact of residential development on the environment and resource lands.*	The proposal presents an appropriate rezoning of the existing land which currently forms part of a dwelling house land use on the adjoining R2 Low Density Residential zoned land at 11 Echo Street, Roseville. The proposal contributes to additional housing within walking distance of public transport, commercial services and 30 minutes of employment centres. The proposal would contribute to the delivery of additional housing stock – low density residential development within the Roseville locality in a form and scale consistent with that of the surrounding streetscape.

Summary of Strategic Merit

As outlined above it is considered that the Planning Proposal is consistent with the objectives, priorities and strategies of both the Greater Sydney Region Plan and the North District Plan. Further the Planning Proposal is consistent with the priorities established in the LSPS.

While Council's adopted Housing Strategy states that no amendments to the current KLEP are required to achieve the stated housing targets, the proposal is consistent with the State government's recent housing target for the LGA

which will deliver approximately 180 additional new dwellings and thereby assist to meet the LGA's 7,600 dwelling target to 2029. The proposed rezoning and associated future dwelling on the site is well located on an underutilised site that has good access to infrastructure and services. Accordingly it is considered that the Planning Proposal demonstrates strategic merit.

Section C – Environmental, Social and Economic Impact

Q8 Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected because of the proposal?

Part 7 of the Biodiversity Conservation Act 2016 sets out the test for determining whether a proposed development or activity is likely to significantly affect threatened species, ecological communities, or their habitats. For the purposes of Part 5 of the Environmental Planning & Assessment Act 1979, an activity is to be regarded as an activity likely to significantly affect the environment if it is likely to significantly affect threatened species.

The subject site is not within an area declared to be of 'outstanding biodiversity value' as defined in the Environmental Planning & Assessment Act and is not identified as an area on the Biodiversity Values Map pursuant to the NSW Department of Planning and Environment – Biodiversity Values Map and Threshold tool. Further, the site is not identified as a biodiversity stewardship site or biodiversity certified land under the Biodiversity Conservation Act 2016 pursuant to the Section 10.7 certificate for the land.

The architectural concept plans prepared by Spiral Architects – Appendix B and the Arboricultural Impact Assessment – Appendix D confirm that no significant trees or vegetation will be affected by the R2 – Low Density Residential zone, and in this case the proposed rezoning does not present serious or irreversible impacts on biodiversity values (as defined by the Biodiversity Conservation Act) for the site or surrounding locality.

Based on the criteria set out in Section 7.3 of the Biodiversity Conservation Act, the proposal will not affect threatened species, ecological communities, or their habitats and therefore no further assessment is necessary. This is because the land subject of the activity and scope of the proposed works will not impact threatened species, endangered ecological communities or constitute the habitat of threatened species or ecological communities. The proposed activity will not be a key threatening process, and this portion of the park is not part of, or in the direct vicinity of, any declared area of outstanding biodiversity value.

Q9. Are there any other likely environmental effects of the planning proposal and how are they proposed to be managed?

The subject site is not affected by natural hazards including flooding or bushfire hazard.

The Planning Proposal to zone the land R2 – Low Density Residential is supported by a Site Contamination Assessment dated 12 March 2025 prepared by Martens and Associates – Appendix C. The assessment concludes the *Site is considered to be suitable for the proposed rezoning.*

The Urban Design Study prepared by Spiral Architects – Appendix B confirms that the subject site can accommodate low density residential development consistent with the objectives of the R2 – Low Density Residential zone. The

concept plans confirm that a dwelling house can be accommodate on the land (Lot 6 in DP14916) to meet the height of buildings and the floor space ratio development standard as proposed in this planning proposal and as enabled by the relevant clauses of the KLEP 2015.

Additionally, the concept plan confirms the land can accommodate a dwelling house that achieves the relevant objectives and controls at Part 4 – Dwelling Houses of the Ku-ring-gai DCP including:

- Building setbacks.
- Built upon area.
- Access and car parking.
- Building envelopes.
- Private open space.

Q10. Has the planning proposal adequately addressed any social and economic effects?

The proposed R2 – Low Density Residential zoning of the site allows for low density residential development on the land that is consistent with the objectives of the R2 – Low Density Residential zone. The R2 – Low Density Residential zone is consistent with the character of the locality and the existing character of Echo Street, Roseville.

The rezoning will allow for low density residential development contributing to additional housing in Roseville, and contribute to construction employment in the Ku-ring-gai LGA.

The proposed low density residential zone will not impact on existing infrastructure such as schools, health services or retail services being low density residential development accommodating a single dwelling house.

The proposed rezoning from RE2 – Private Recreation to R2 – Low Density Residential does not result in a reduction or impact on private open space. The existing RE2 – Private Recreation private open space zoned land has not been used for private open space associated with the Roseville Golf Course noting the construction of the tennis court associated with the dwelling house at 11 Echo Street that was constructed in approximately 1959.

The public benefit in the rezoning is to allow a R2 – Low Density Residential zone consistent with the use of the site, the character of development in Echo Street and contributes to additional housing.

Section D – Infrastructure (Local, State and Commonwealth)

Q11 Is there adequate public infrastructure for the planning proposal?

The planning proposal relates to an existing site used in association with a dwelling house, and seeks to rezone the land to permit future low-density residential use on the land. The scale of future development enabled by the

proposal is for a single family dwelling house – 2.57 additional residents (in accordance with ABS Census data for NSW average household size) within the locality which is minor and the resultant additional dwelling density can be comfortably absorbed by existing infrastructure within the locality including water, sewer and electricity. It is noted that the site is within close proximity to commercial services, public transit, educational establishments and public open space.

Section E – State and Commonwealth Interests

Q12 What are the views of state and federal public authorities and government agencies consulted in order to inform the Gateway determination?

No consultation has been conducted with any public authorities or government agencies. Formal consultation will occur during the public exhibition in accordance with the requirements of any Gateway Determination.

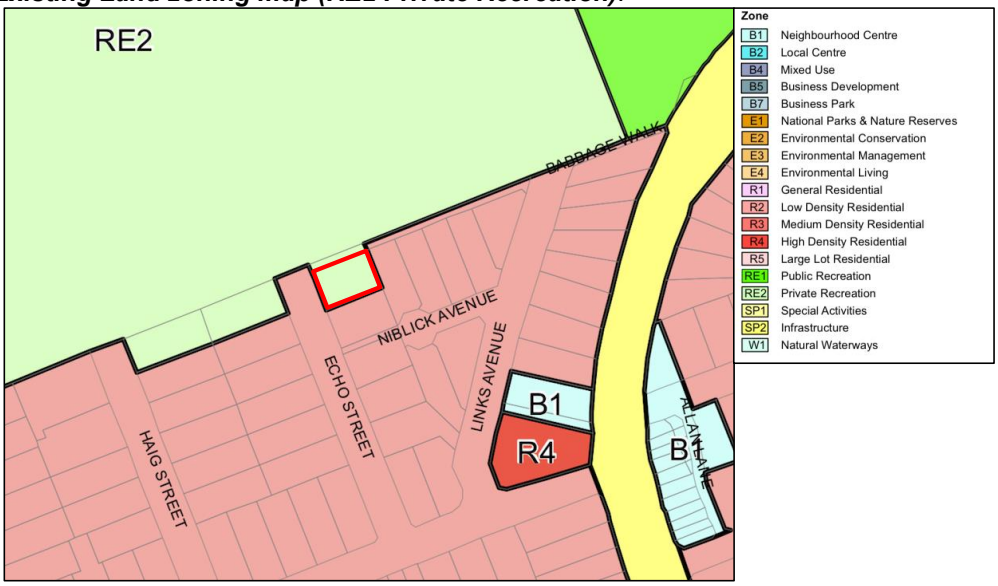
Summary of Site-specific Merit

Pursuant to the above, including an assessment of a concept development scheme for the site it is considered that the site-specific merit of the proposal has been demonstrated confirming the rezoning can comfortably accommodate redevelopment for low-density residential purposes.

PART 4 – MAPS

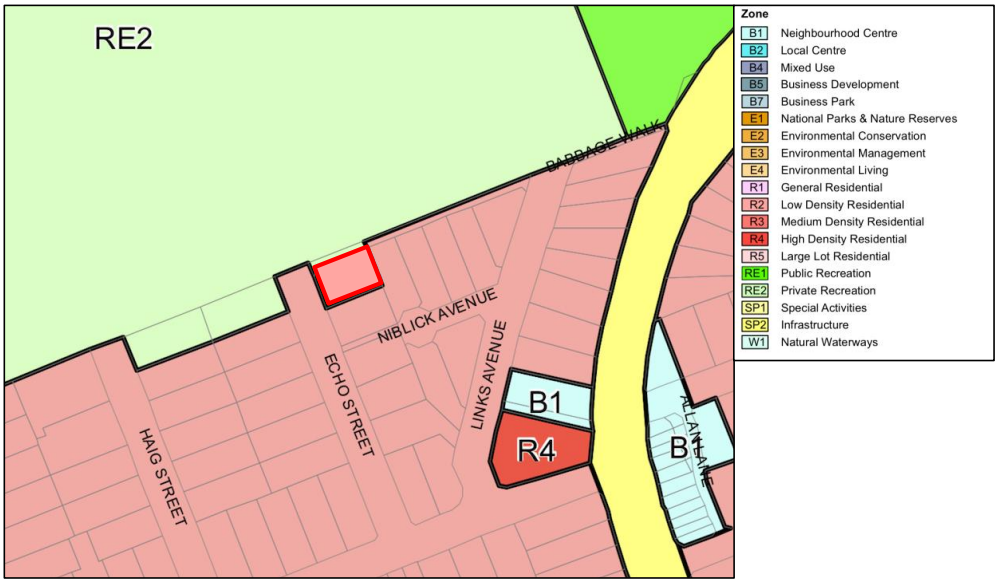
4.1 Proposed KLEP 2015 Mapping

***Existing Land zoning map (RE2 Private Recreation)**:*

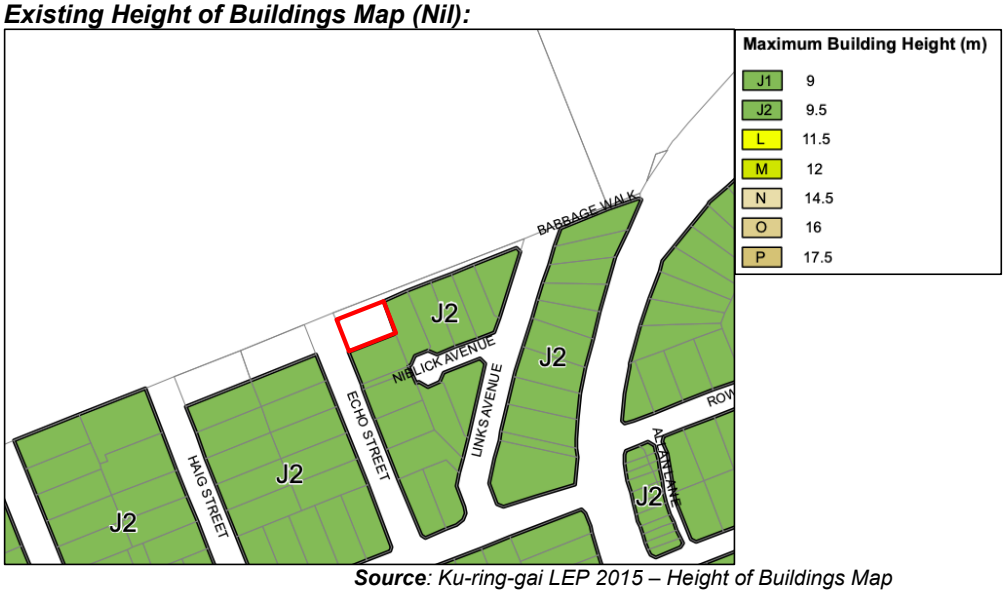


***Source**: Ku-ring-gai LEP 2015 – Zoning Map*

***Proposed Land zoning map (R2 Low Density Residential zone)**:*

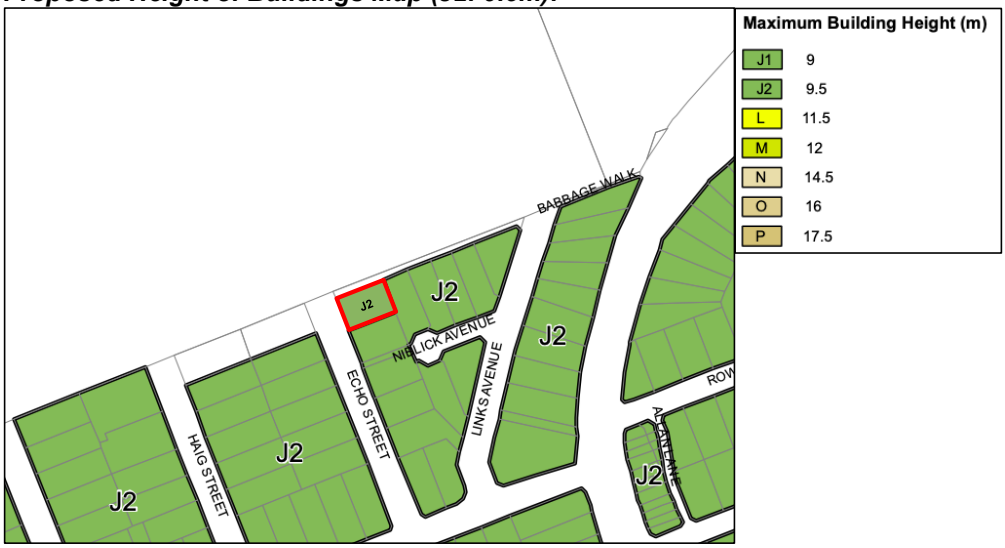


Existing Height of Buildings Map (Nil):

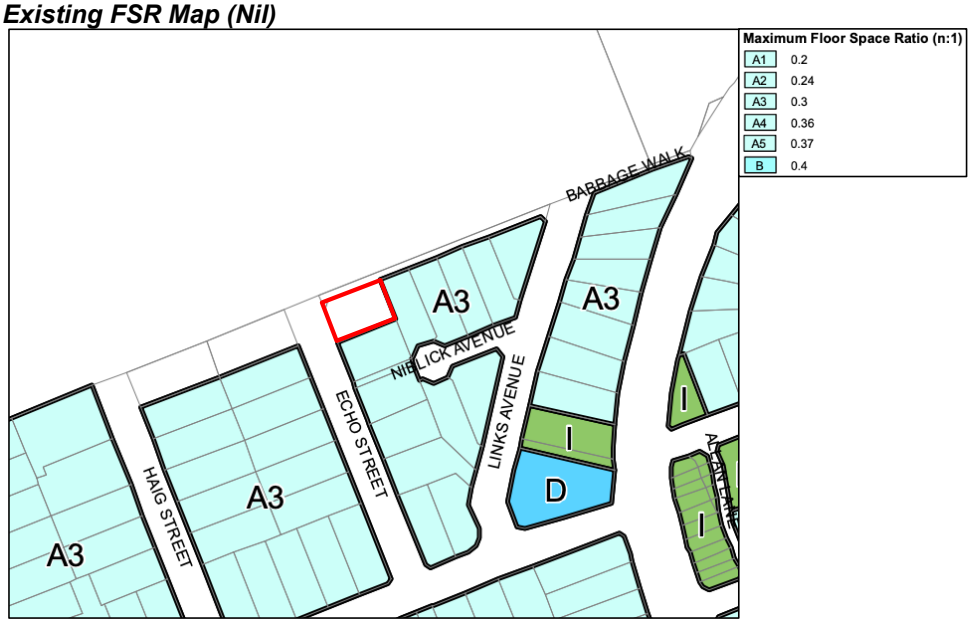


***Source**: Ku-ring-gai LEP 2015 – Height of Buildings Map*

Proposed Height of Buildings Map (J2: 9.5m):

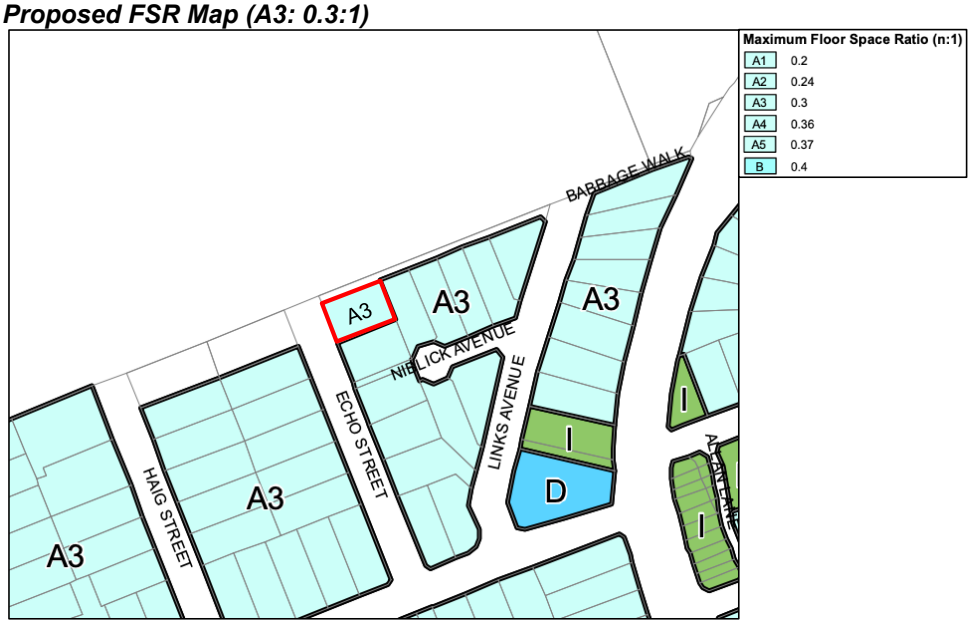


Existing FSR Map (Nil)

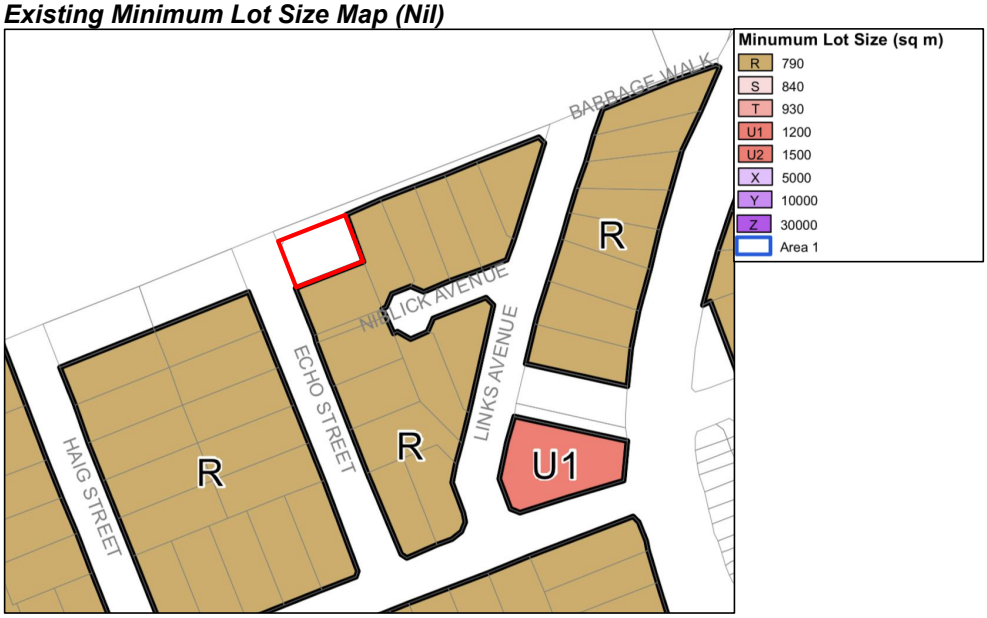


***Source**: Ku-ring-gai LEP 2015 – FSR Map*

Proposed FSR Map (A3: 0.3:1)

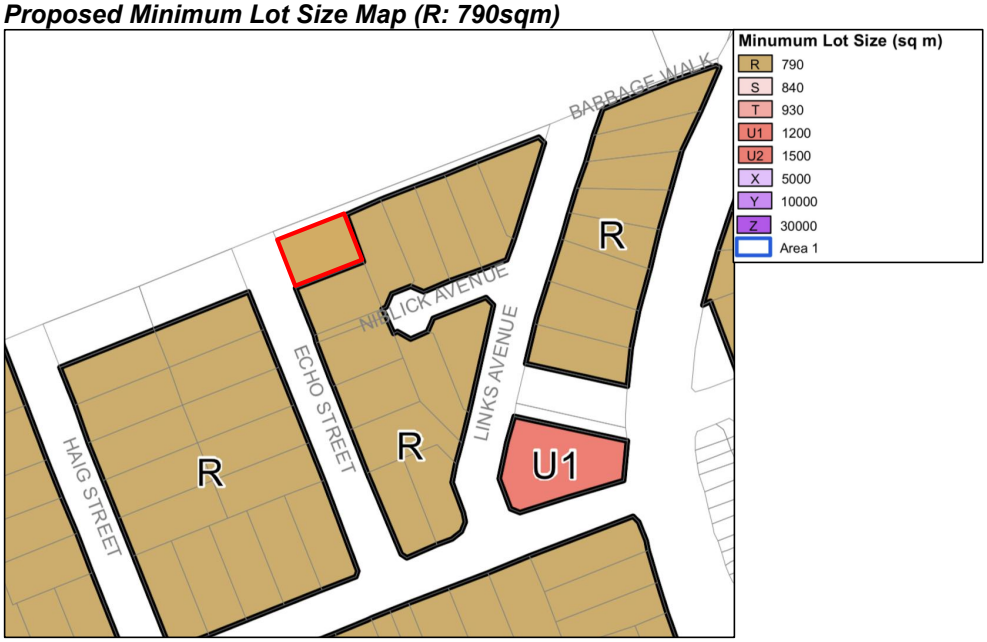


Existing Minimum Lot Size Map (Nil)



***Source**: Ku-ring-gai LEP 2015 – Lot Size Map*

Proposed Minimum Lot Size Map (R: 790sqm)



PART 5 – COMMUNITY CONSULTATION

Consultation with Council

A Pre-planning proposal meeting was held with Ku-ring-gai Council on 27 August 2024. Meeting minutes from the pre-lodgement consultation with Council have been attached to this report at **Appendix E.**

Notification of Occupiers of Adjoining Land and Other Persons

Community consultation on the planning proposal will be undertaken by Ku-ring-gai Council in accordance with the conditions of the Gateway Determination, Council's Community accordance with the conditions of the Gateway Determination, Council's Community Participation Plan and the publication 'A Guide to Preparing Local Environmental Plans', published by the Department of Planning.

PART 6 – PROJECT TIMELINE

Stage	***Timeframe and/or date***
Consideration by council	
Council decision	
Gateway determination	
Pre-exhibition	
Commencement and completion of public exhibition period	
Consideration of submissions	
Post-exhibition review and additional studies	
Submission to the Department for finalisation (where applicable)	
Gazettal of LEP amendment	

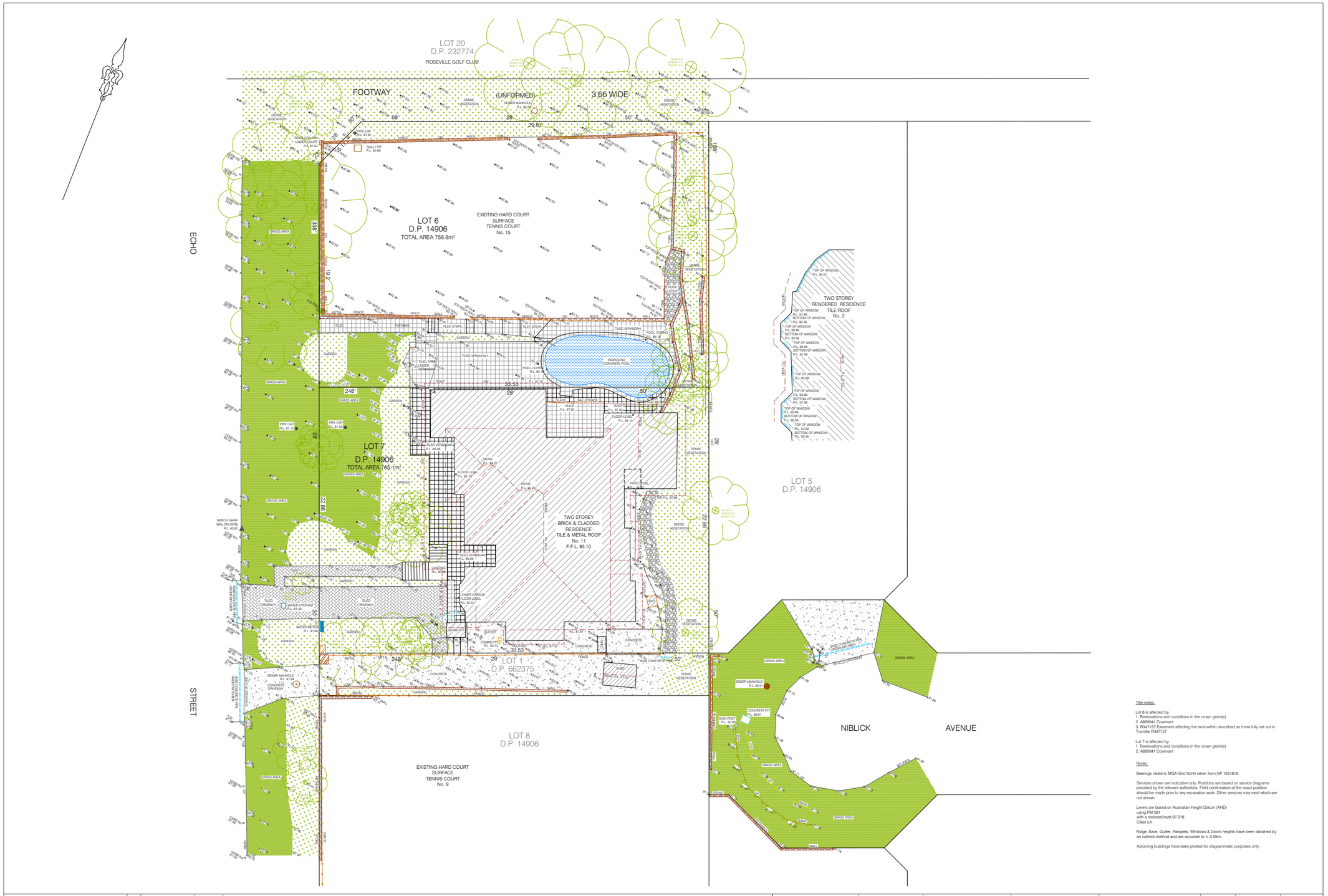
APPENDIX A – Survey Plan dated 14 July 2025 prepared by Lawrence Consulting Group

APPENDIX B – Urban Design Report and Concept Architectural Plans dated June 2025 prepared by Spiral Architects Lab

APPENDIX C – Site Contamination Assessment dated 12 March 2025 prepared by Martens & Associates.

APPENDIX D – Arboricultural Impact Assessment dated 22 April 2025 prepared by New Leaf Arboriculture.

APPENDIX E – Pre-lodgement consultation with Council and Scoping Proposal dated 9 August 2024 prepared by Chapman Planning



Title notes:

Lot 6 is affected by
1. Reservations and conditions in the crown grant(s)
2. A660041 Covenant
3. R347157 Easement affecting the land within described as more fully set out in Transfer R347157

Lot 7 is affected by
1. Reservations and conditions in the crown grant(s)
2. A660041 Covenant

Notes:

Bearings relate to MGA Grid North taken from DP 1031816.

Services shown are indicative only. Positions are based on service diagrams provided by the relevant authorities. Field confirmation of the exact position should be made prior to any excavation work. Other services may exist which are not shown.

Levels are based on Australian Height Datum (AHD)
using PM 581
with a reduced level 97.018
Class LA

Ridge, Eave, Gutter, Parapets, Windows & Doors heights have been obtained by an indirect method and are accurate to ± 0.05m.

Adjoining buildings have been plotted for diagrammatic purposes only.

LCG LAWRENCE CONSULTING GROUP

LEGEND

CLIENT: ECHO CAPITAL

PROJECT: No.11 & 15 ECHO STREET, ROSEVILLE

DRAWING TITLE: DETAIL & LEVEL SURVEY

TITLE INFORMATION	
Lot:	LOT 6 & LOT 7
Plan No:	DP 14906
Title / Folio:	59/9852
L.G.A.	KU-RING-GAI
Parish:	GORDON
County:	CUMBERLAND

QUALITY ASSURANCE		
Surveyor:	KY	
Drawn:	PL	
Checked by:	SL	Date: 14.07.2025
Approved by:	SL	Date: 14.07.2025

Date of Survey:	30.06.2025	Date of Plan:	14.07.2025
Datum:	AHD	Co-ords:	
Scale:	1:100	Original size:	A0
Cad ref:	251887-DETL-001A.dwg	Sheet:	1 of 1

JOB NUMBER: 251887

DRAWING NUMBER / ISSUE: DETL-001 / A

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Site Contamination Assessment

Proposed Rezoning

15 Echo Street, Roseville, NSW

Final Report

P2410640JR01V01

March 2025

Prepared for Chapman Planning Pty Ltd

environmental science & engineering

Project Details

Report Title	Site Contamination Assessment: 15 Echo Street, Roseville, NSW
Client	Chapman Planning Pty Ltd
Document	P2410640JR01V01
Director	Andrew Norris
Manager	Gray Taylor
Principal Author	Bryson Monaghan

Document History

Issue	Issue Date	Status	Description / Comment	Author	Reviewer	Approved
1	7/03/2025	Draft	Draft for Client Review	BTM	BM	GT
2	12/03/2025	Final	Final	BTM	BM	GT

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Glossary of Terms

AEC	Areas of environmental concern
AS	Australian standard
ASS	Acid sulfate soil
AST	Above ground storage tank
BH	Borehole
BoM	Bureau of meteorology
BTEXN	Benzene, toluene, ethylbenzene, xylene, naphthalene
CEMP	Construction environmental management plan
CLM	Contaminated land management
COC	Chain of custody
COPC	Contaminants of potential concern
CSM	Conceptual site model
DCP	Development control plan
DP	Deposited plan
DPE	Department of planning and environment (NSW)
DQI	Data quality indicators
DQO	Data quality objectives
DUAP	Department urban affairs and planning (NSW)
EP&A	Environmental planning and assessment
EPA	Environmental protection authority (NSW)
EQL	Estimated quantitation limit
g	Grams
GDA	Geocentric datum of Australia
GIPA	Government information public access
HIL	Health investigation level
HM	Heavy metals
HSL	Health screening level
kg	Kilograms
km	Kilometre
L	Litres
LEP	Local environmental plan
LGA	Local government area
LOR	Limit of reporting
m	Metre
MA	Martens and Associates Pty Ltd
mAHD	Metres Australian height datum
mBGL	Metres below ground level
mg	Milligrams
mL	Millilitres
NATA	National association of testing authorities
NEPC	National environment protection council
NEPM	National environment protection measure
NSW	New South Wales
OCP	Organochlorine pesticides
OPP	Organophosphorus pesticides
PACM	Potential asbestos containing material
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated biphenyl
PFAS	Per- and polyfluoroalkyl substances
POEO	Protection of the environment operations
QA	Quality assurance
QC	Quality control
RPD	Relative percentage difference
SAC	Site acceptance criteria
SAQP	Sampling, analysis, and quality plan
SCA	Site contamination assessment

SEPP	State environmental planning policy
SIX	Spatial information exchange
SOP	Standard operating procedures
SRA	Sample receipt advice
TPH	Total petroleum hydrocarbons
TRH	Total recoverable hydrocarbons
UCL	Upper confidence limit
UPSS	Underground petroleum storage system
USCS	Unified soil classification system
UST	Underground storage tank
UXO	Unexploded ordinance

1 Introduction

1.1 Overview

Martens and Associates (MA) have been engaged by Chapman Planning Pty Ltd (the Client) to undertake a Site Contamination Assessment (SCA) of land located at 15 Echo Street, Roseville NSW (the 'Site'). MA understand the SCA is required to evaluated land contamination to support a planning proposal to Ku-Ring-Gai Council ('Council') for the proposed rezoning of the Site from RE2 – Private Recreation to R2 – Low Density Residential.

The Site is understood to have historically formed part of Roseville Golf Club before its current use as a tennis court associated with the dwelling at 11 Echo Street, Roseville.

The Site boundary is provided in Appendix A (Map 01). A Site Survey undertaken by LCG (2024) provided in Appendix B.

1.2 Objectives

The investigation objectives include:

- Identify historical and current activities and uses on the Site and adjacent land which could potentially result in land contamination.
- Establish areas of environmental concern (**AEC**) and associated contaminants of potential concern (**COPC**) to assist with the development of a conceptual site model (**CSM**) for the Site.
- Establish the suitability of the Site for the proposed land use, and where required, make recommendations for additional investigation.

1.3 Scope of Works

The scope of works adopted for the investigation included:

- Review of available online mapping resources.
- Review of available online hydrogeological and groundwater information.
- A desktop study, including review of historical aerial photography, historical Council records and information available on relevant regulatory and government databases completed for the Site.
- Inspection of the Site to confirm desktop study findings and make observations of land use and activities on the Site and surrounding land.
- Completion of intrusive investigations to review soil conditions and collect representative soil samples.
- Laboratory analysis of soil samples for COPC identified by the CSM.

- Preparation of a report in accordance with the relevant guidelines.

1.4 Regulatory Guidance Documents

The following regulatory guidelines have been considered for the preparation of this report:

- NSW DUAP (1998) Managing Land Contamination: Planning Guidelines, SEPP 55–Remediation of Land.
- NEPC (2013a), Schedule B1: Guideline on Investigation Levels for Soil and Groundwater.
- NEPC (2013b), Schedule B2: Guideline on site Characterisation.
- NSW EPA (2017) Contaminated Land Management: Guidelines for the NSW Site Auditor Scheme.
- NSW EPA (2020) Contaminated Land: Guidelines for Consultants Reporting on Contaminated Land.
- NSW EPA (2022) Contaminated Land Guidelines: Sampling design part 1 – application. EPA 2022P3915, NSW Environmental Protection Authority, Parramatta.
- SEPP (2021), State Environmental Planning Policy (Resilience and Hazards).
- CLM Act (1997), Contaminated Land Management Act.
- EP&A Act (1979), Environmental Planning and Assessment Act 1979 No 203.
- Ku-ring-gai Development Control Plan 2024
- Ku-ring-gai Local Environmental Plan 2015

2 Site Setting

2.1 Site Identification

Site identification details and general descriptions are summarised in Table 1. The location of the Site and surrounding land is shown in Appendix A (Map 01).

Table 1: Site identification information.

Item	Detail
Site address	15 Echo Street, Roseville NSW
Legal identification	Lot 6 of DP 14906
Approximate site area	760 m^2 (SIX Maps)
Geographic site coordinates	Northern corner of the Site (datum GDA2020 – MGA56): • Easting: 332727 • Northing: 6261076 (Source: SIX Maps)
Local government area (LGA)	Ku-Ring-Gai Council
Zoning	RE2 – Private Recreational (Ku-ring-gai Local Environmental Plan 2015)
Current land use(s)	Private recreational concrete tennis court, veranda and inground pool.
Proposed land use(s)	Rezoning to R2 – Low Density Residential.
Surrounding land use	Roseville Golf Course (private recreational land use) present to the north and northwest of the Site. Low density residential land use present to the south, east and west of the Site. Biodiversity (natural resources) area present 110 m west of the Site (Ka-ring-gai council, 2025). Public recreational land use present to the northeast. High density residential, local centre land use present to the southeast and infrastructure land use present to the southeast and east.

2.2 Environmental Setting

Information relating to the environmental setting of the Site is presented in Table 2.

Table 2: Environmental setting information.

Item	Detail
Topography	The eSPADE (NSW DPE, 2024) platform indicates the topography of the surrounding landscape is characterised by gently undulating plateau. Slopes are usually <10% and local relief ranges <30 m. Elevation of the Site ranges from approximately 81 – 88 mAHD.

Item	Detail
Geology	The eSPADE (NSW DPE, 2024) platform indicates the following geology is mapped within the Site: • Mittagong formation - interbedded shale, laminite and fine to medium grained quartz sandstone. The Mittagong Formation is located stratigraphically between the Ashfield Shale and Hawkesbury Sandstone. It is often relatively shallow. Minor areas of Hawkesbury Sandstone and minor areas of Ashfield Shale may occur. The Ku-ring-gai Council (2025) online map viewer indicates the following geology is mapped within the Site: • Hawkesbury Sandstone (ha) consisting of medium to coarse-grained quartz sandstone with minor shale and laminite lenses. Sandstones are either massive or cross-bedded sheet facies with vertical or subvertical joint sets.
Soil landscapes	The eSPADE (NSW DPE, 2024) platform indicates the following soil landscapes are mapped within the Site: • Lucas Heights Soil Landscape - soils consist of deep (50-150 cm) hard setting yellow Podzolic soils and yellow Soloths with yellow earths on outer edges. The Ku-ring-gai Council (2025) online map viewer indicates Hawkesbury Soil Landscape is mapped within the Site which consist of: • Shallow (>50cm) discontinuous Lithosol/Siliceous Sand associated with rock outcrop • Earthy Sands, Yellow Earths and some Yellow Podzolic Soils on inside of benches and along joints and fractures • Localised Yellow and Red Podzolic Soils associated with shale lenses • Siliceous Sands and secondary Yellow Earths along drainage lines. eSPADE soil modelling covering the Site indicate soil cation exchange capacity (CEC) of the upper 2.0 m of soil ranges between ≤5 and 15 $cmol_c/kg$, while pH values range between pH 4 and pH 5.5.
Acid sulfate soils (ASS)	eSPADE acid sulfate soils (ASS) risk mapping indicates the Site is not mapped as having any probability of ASS occurrence. ASS risk mapping associated with the Ku-ring-ga Local Environmental Plan 2015 indicates the Site is mapped as Class 5 ASS risk (any works within 500m of adjacent Class 1 to 4).
Surface hydrology	Drainage is likely to occur predominantly by overland flow in hardstand areas, directed to stormwater infrastructure that drains either to the municipal stormwater system. Some areas of direct soil infiltration (where permeability allows).
Nearest surface waterbody	Moores Creek, 300 m northwest.
Heritage and Conservation	Review of the Ku-ring-gai Council (2025) online map viewer indicates no heritage items or conservation area are present within the Site

2.3 Hydrogeology and Groundwater Use

As specified in NSW DEC (2007) *Guidelines for the Assessment and Management of Groundwater Contamination,* a preliminary assessment has been conducted to identify hydrogeological conditions and groundwater receptors to support the development of the CSM. Finding of this preliminary assessment are provided in the following subsections.

2.3.1 Hydrogeological Setting

Available hydrogeological information for the Site and local area is summarised below in Table 3.

Table 3: Hydrogeological setting information.

Item	Detail
Aquifer Type	The Bureau of Meteorology Australian Groundwater Insight database (BoM, 2024) indicates the principal hydrogeology of the Roseville area consists of porous, extensive aquifers of low to moderate productivity. Aquifers comprise a lower aquifer in sedimentary rock units.
Hydraulic conductivity	Information not available
Yield	Information not available
Depth to groundwater	Potentially 3.8 mBGL
Groundwater flow direction (inferred)	Northwest, towards Moores Creek.

2.3.2 Groundwater Use and Environmental Receptors

The WaterNSW Real-time Water Database was reviewed to identify local groundwater uses ≤500 m of the Site. A summary of available bore records is provided in Table 4. Groundwater bores records are provided in Appendix C.

Table 4: Groundwater bore records summary.

Bore Identification	Registered Use	Direction (and Distance)	Groundwater Depth (mBGL)	Water bearing Zone Information
GW111006	Monitoring	135 m (southeast)	3.8	Sandstone – 3.5 to 7.5 mBGL
GW111008	Monitoring	135 m (southeast)	3.8	Sandstone – 1.8 to 7.5 mBGL.
GW111007	Monitoring	135 m (southeast)	3.8	Sandstone – 3.0 to 7.5 mBGL.
GW103127	Irrigation, Recreation (groundwater)	280 m (northwest)	18.5	Sandstone – 39.7 to 40.2 mBGL. Yield of 0.2 L/s. Sandstone – 130.5 to 132.2 mBGL. Yield of 3.0 L/s.
GW065075	Irrigation, Recreation (groundwater)	285 m (north)	44.0	Unknown. Yield – 6.00 L/s.

The Groundwater Dependant Ecosystem (GDE) Atlas (BoM, 2024) was reviewed to identify potential environmental receptors within ≤500 m of the Site. The review identified no aquatic or terrestrial GDE within surrounding area of the site. No ecosystem analysis has occurred for subterranean GDE. Unlikely to be inflow dependent ecosystems (IDE).

Beneficial groundwater extraction was not identified within the Site, but extraction for irrigation and recreational purposes occurs on surrounding land to the north. Beneficial reuse of groundwater is not expected as part of the future land use.

3 Desktop Study

3.1 Historical Aerial Photography

Historical aerial photography covering the Site and surrounding land for the period 1943 to 2025 have been reviewed. Observations are summarised in Table 5, with copies of historical aerial photographs provided in Appendix D.

The review indicates that the Site was undeveloped in 1943, with Echo Street established adjacent to the western boundary and minor residential development to the east of the Site. The Site was cleared of major vegetation and a hardstand sports court was constructed sometime between 1951 to 1961. Construction of an inground pool occurred in the south eastern corner of the site sometime between 1961 to 1978.

Table 5: Historical aerial photography observations for the period 1943 to 2025.

Year (Source)	Site Observations	Surrounding Land Observations
1943 (SIX Maps)	The site comprises dense, mature bushland vegetation. No buildings or structures are visible in the image.	Echo Street established adjacent to the western boundary as well as Niblick Ave and Links Ave established to the southeast of the Site. Cleared open land to the north, Roseville golf club area established. Residential developments to the east of the Site.
1951 (HAPE)	Dense vegetation is still present although some trees have been removed. The site appears to remain free of buildings or structures.	Residential developments to the south and southwest. Cleared land to the south of the Site, possible sports court.
1961 (HAPE)	A large portion of previous vegetation appears to have been cleared. Although image quality it poor, a tennis court like structure appears visible across most of the Site area.	Residential development adjacent to southern boundary of the Site as well as to the southwest.
1978 (HAPE)	A swimming pool has been constructed in the southeastern corner of the Site.	Addition of a car park area to the northeast, associated with Roseville Golf Club.
1986 (HAPE)	The tennis court is now clearly visible.	No significant change from previous image.
1991 (HAPE)	Generally little change from the previous image.	No significant change from previous image.
2002 (HAPE)	Generally little change from the previous image.	Additions to residential developments directly to the south and east of the Site.
2009 (Nearmap)	It appears the tennis court has been resurfaced. Otherwise, little change from previous image.	No significant change from previous image.

Year (Source)	Site Observations	Surrounding Land Observations
2017 (Nearmap)	No significant change from previous image.	No significant change from previous image.
2025 (Nearmap)	No significant change from previous image.	Residential development to the southwest of the Site.

3.2 Council Development Records

No development records are available via Council's Online Map Viewer website (Ka-ring-gai, 2025) for the Site. An informal Government Information Public Access (GIPA) application was submitted to Council. In response, Council indicated that no files or plans were found for the Site, noting that Council records only date back to 1974.

However, Council confirmed that the tennis court was constructed sometime between 1956 – 1961 which aligns with the findings of the aerial image review.

Council correspondence is provided in Appendix E.

3.3 Government Register Records

A review of available government register records was completed for the investigation using the following online resources:

- Records of public notices of contaminated land under Section 58 of the Contaminated Land Management Act 1997 (CLM Act).
- Records relating to contaminated land notified to NSW EPA under Section 60 of the CLM Act.
- Records relating to licensed activities, applications, notices, and audits under the Protection of the Environment Operation Act 1997 (POEO Act).
- Records relating to sites listed under the NSW EPA per-and polyfluoroalkyl substances (PFAS) investigation program.
- Records relating to site being investigated and or managed by the Department of Defence for PFAS contamination.
- Records managed by Department of Defence relating to land affected, or suspected of being affected, by unexploded ordinance (UXO).

A summary of information relating to the Site is provided below in Table 6. Applicable records are provided in Appendix F.

Table 6: Summary of government register records.

Record	Onsite	Surrounding Land
Notices under Section 58 of the CLM Act 1997 [1]	No record	No record ≤500 m
Duty to Report Contamination under Section 60 of the CLM Act 1997 [2]	No record	No record ≤500 m

Record	Onsite	Surrounding Land
Records relating to licensed activities, applications, notices, and audits under the POEO Act 1997 [3]	No record	No record ≤500 m
NSW EPA PFAS investigation program [4]	No record	No record ≤500 m
Department of Defence PFAS management and investigation program [5]	No record	No record ≤500 m
Department of Defence records relating to sites suspected or affected by UXO [6]	No record	No record ≤500 m

Notes.

1. Records available at: https://apps.epa.nsw.gov.au/prclmapp/searchregister.aspx.
2. Records available at: https://www.epa.nsw.gov.au/your-environment/contaminated-land/notified-and-regulated-contaminated-land/list-of-notified-sites.
3. Records available at: https://apps.epa.nsw.gov.au/prpoeoapp/.
4. Records available at: https://www.epa.nsw.gov.au/your-environment/contaminated-land/pfas-investigation-program.
5. Records available at: https://www.defence.gov.au/about/locations-property/pfas/pfas-management-sites.
6. Records available at: https://uxo-map.defence.gov.au/.

3.4 Potential Contaminating Activities and Land Uses – Offsite

Review of online mapping and business services registers relating to potential contaminating businesses and activities (e.g., service stations, fire stations, mechanics, dry cleaners, airports, etc.) located ≤500 m of the Site was conducted and identified several industries and activities. Information relating to these locations is provided in Table 7.

Table 7: Summary of potential contaminating activities and land uses ≤500 m of the Site.

Business / Activity	Location	Distance & Direction from Site	Inferred Hydraulic Position to Site
Service station and mechanical workshop	20-22 Babbage Rd, Roseville NSW 2069	85 m, southeast	Upgradient

Due to the distance of the potential contaminating activity from the Site, onsite contamination risk is considered to be low.

3.5 PFAS Screening Assessment

Potential risk posed by PFAS contamination at the Site has been evaluated by using available desktop study information, in combination with the preliminary screening assessment developed by EnRiskS (2016). The preliminary PFAS screening assessment for the Site is presented in Table 8.

Table 8: Preliminary PFAS screening assessment.

Preliminary Screening	Probability[1]	Justification
Did fire training occur on-site?	L	It is unlikely that fire training activities occurred on the Site given review of historical aerial photography.

Preliminary Screening	Probability[1]	Justification
Is an airport or fire station on the Site, or located hydraulically upgradient or adjacent to the Site? [2]	L	No airport or fire station are present onsite or within the surrounding area.
Have "fuel" fires ever occurred onsite? (e.g., solvent, petrol, diesel, kerosene)	L	Information does not indicate historical fuel fires onsite.
Have PFAS been used in manufacturing or stored onsite? [3]	L	Evidence of manufacturing of PFAS compounds is not consistent with historic land use. Evidence of PFAS storage was not identified at the Site.

Notes:

1. L = Low, M = Medium, H = High.
2. Runoff from fire training areas may impact surface water, sediment, and groundwater.
3. PFAS is used in a wide range of industrial processes and consumer products, with further information of potential sources provided in Appendix B of the HEPA (2020) *PFAS National Environmental Management Plan*, Version 2.0.

The screening assessment indicates there is low probability for PFAS contaminants to be present at the Site, and further PFAS assessment is unlikely to be required.

4 Site Inspection

A walkover inspection of the Site was completed on 30 January 2025 by a MA environmental consultant. A summary of the inspection findings is provided in Table 9. Photo images from the Site inspection and fieldworks are provided in Appendix I.

Table 9: Site inspection observations

Item	Observation
Buildings and structures	No buildings were observed within the Site during the inspection. Structure present in Site include a veranda, inground pool and tennis court with chain wire fence, retaining walls and stairway.
Ground surfaces and pavements	Site is predominantly comprised of a concrete tennis court with a stairway between the veranda and tennis court. Vegetated areas are present to the eastern and western boundaries of the Site.
Fill material and stockpiles	Evidence of potential filling was observed in the western half of the Site, based on the suspected natural grade of the adjacent property to the north and the presence of a stone retaining wall, suggesting that up to 2 meters of fill may have been used for leveling purposed. No stockpile of concern was observed within the Site during the inspection.
Historic structures	Evidence of former structures was not observed during the inspection.
Chemical storage	Evidence of chemical storage on the Site was not observed during the inspection.
UPSS, USTs and ASTs[1]	Evidence of UPSS, USTs, and ASTs was not observed during the inspection.
Waste materials and storage	Evidence of waste materials and storage areas was not observed during the inspection.
Odours and staining	Evidence of significant odours or staining was not reported or observed during the inspection.
Hazardous building materials	Evidence of hazardous buildings materials was not observed during the inspection.
Electrical substation kiosks	Electrical substation kiosks were not observed on the Site or adjacent land during the inspection.
Vegetation and phytotoxicity	Vegetation at the Site consisted of: • Garden beds with shrubs present in the southwestern corner and adjacent to the southern half of the eastern boundary of the Site. • Grassed area in the southwestern corner of the Site. • Several mature trees adjacent to the eastern boundary of the Site. Vegetation was observed to be in good condition and evidence of potential phytotoxicity effects to vegetation was not identified.

Notes.

1. Underground petroleum storage systems (UPSS), underground storage tanks (USTs), and aboveground storage tanks (ASTs).

5 Conceptual Site Model

5.1 Areas of Environmental Concern

Potential AEC and COPCs have been identified based on the findings of the desktop information review and Site inspection observations. The findings are summarised in Table 10.

Table 10: Potential contamination sources and contaminants of potential concern.

AEC	Potential for Contamination	COPC
AEC A Fill material of unknown origins	The Site inspection observed evidence of potential filling in the western half of the Site. The suspected natural grade of the adjacent property to the north and the presence of a stone retaining wall suggest that up to 2 meters of fill may have been imported for leveling purposes. As of the preparation of this report, no information is available regarding the origin or quality of the fill material. The importation of fill material during previous phases of development has likely occurred to achieve design levels. This is of particular significance if filling material was sourced from locations of heavy industry, is a by-product of industrial processes, or includes demolition debris contaminated with asbestos containing materials (ACM).	Heavy metals (HM), petroleum hydrocarbons (as total recoverable hydrocarbons – TRH), benzene, toluene, ethylbenzene, xylenes, and naphthalene (BTEXN), polycyclic aromatic hydrocarbons (PAH), organochlorine pesticides (OCP), organophosphorus pesticides (OPP), polychlorinated biphenyls (PCB), and asbestos

5.2 Source – Exposure Pathway – Receptor Linkages

A CSM outlining *source – exposure pathway – receptor* linkages have been developed from information gathered by the SCA and is presented in Table 11.

Table 11: Conceptual site model *source – exposure pathway – receptor* linkages.

Item	Description
Potential media affected by AECs and mechanism of contamination	**Soil** is considered to be the primary media of interest at the Site. Potential mechanisms for contamination are considered to include 'top-down' impacts relating to fill placement. **Groundwater** is not considered to be a media of interest requiring further assessment regarding the proposed rezoning,
Potential exposure pathways	*Human health* • Ingestion. • Dermal contact and absorption. • Inhalation (dust). *Ecological* • Biota uptake and intake.

Item	Description
Potential receptors	*Human health* • Construction workers. • Future residence. • Site visitors. *Ecological* • Local biota (soil-dwelling organisms, vegetation, and small fauna).

5.3 Conceptual Site Model Discussion

To address potential risks to future residence and site visitors and confirm the suitability of fill material, a soil sampling program is recommended. This program will provide further insights into the Site's conditions and ensure compliance with health and safety requirements during any future construction phase of work.

Intrusive field investigations to assess the current contamination status of the Site has been undertaken as part of this SCA.

No beneficial reuse of groundwater is currently proposed for the Site's future use. As such, groundwater is not considered a medium of concern that requires further assessment or mitigation.

5.4 Review of Information Data Gaps

A summary of information or data which has not been obtained or considered for inclusion in the SCA is discussed in Table 12. This summary also discusses possible constraints and uncertainty relating to the development of the investigation CSM.

Table 12: Information data gap summary.

Data Gap	Commentary
Safework NSW dangerous goods records	There is no historical evidence of large volume storage of petroleum hydrocarbons in the site, nor of past site uses likely to have required such storage. As such, a search of SafeWork NSW dangerous goods records was not obtained for the investigation.
Section 10.7 planning certificate	Section 10.7 planning certificates were not obtained for review as part of the SCA. It is considered information provided in the planning certificate is unlikely to change the conclusions or recommendations of this report as sufficient historical information relating to former site activities was obtained via historical aerial photography and information available via other sources.
Land title records	Land title records were not reviewed as part of this SCA. This is unlikely to affect the findings of the investigation as sufficient historical information relating to former site activities was obtained historical aerial photography interpretation and information available via other sources.

6 Sampling, Analysis and Quality Plan

The intrusive field investigations targeted the western half of the Site, where fill material of unknown origin is expected to be at its deepest.

A sampling, analysis and quality plan (SAQP) was developed to ensure that limited sampling data collected for this SCA is representative and provides a robust basis for the Site assessment decisions. The SAQP has been prepared in general accordance with NEPC (2013b) methodology, and includes:

- Data quality objectives (DQO).
- Data quality indicators (DQI).
- Sampling methodologies and procedures.
- Field screening methods.
- Sample handling, preservation, and storage procedures.
- Field and laboratory quality assurance (QA) / quality control (QC).

The SAQP is summarised in the following subsections.

6.1 Data Quality Objectives

DQO for the investigation are prepared as statements specifying the qualitative and quantitative data required to support project decisions. DQO have been prepared in general accordance with NEPC (2013b) and NSW EPA (2020) and are presented below in Table 13.

Table 13: Data quality objectives.

Item	Description
Step 1 Stating the problem	• The proposed rezoning of the Site from private recreational land use to low density residential land use. • The CSM identified potential fill material of unknown origin, which may pose risks for future land use within the Site. • Soil assessment is required to determine potential risks to future residents, site visitors and workers during any future residential development.
Step 2 Identifying the decision(s)	To assess the contamination risk of the Site, decisions are to be made based on the following questions: • What is the contaminant exposure pathways? • Has previous or current site use impacted the Site that may pose a risk to humans or the environment for future land use? • Does the Site require remediation or management measures to be undertaken?
Step 3 Identifying inputs to the decision	The inputs to the assessment include: • Soil sampling at nominated locations across the Site. • Laboratory analytical results for relevant COPC.

Item	Description
	• Assessment of analytical results against suitable guidelines for the Site.
Step 4 Defining study boundaries	Study boundaries are as follows: • Lateral – Lateral boundary of the assessment is defined by the investigation area boundary determined based on the lot for proposed rezoning to residential land use. • Vertical – Vertical boundary is governed by the maximum depth reached during subsurface investigations. • Temporal – One sampling event were completed as part of this investigation.
Step 5 Developing decision rules	Evaluation of data will include: • The 95% upper confidence limit (UCL) $\bar{x}$ to be ≤ criterion. • No individual sample >250% of criterion. • The sample standard deviation to be <50% criterion. • No PACM observed on the ground surface or detected in soil. • No laboratory detection of asbestos fibres in soil. The decision rule for this investigation is as follows: • If the concentration of contaminants exceeds the adopted assessment criteria, a risk assessment will be required. • If the risk is deemed unacceptable, further investigations to remediate and / or manage onsite impacts will be undertaken.
Step 6 Specifying limits on decision errors	Guidance found in ASC NEPM (2013) Schedule B2 regarding 95% UCL states that the 95% UCL of the arithmetic mean provides a 95% confidence level that the true population mean will be less than or equal to this value. Therefore, a decision can be made based on a probability that 95% of the data collected will satisfy assessment criteria. A limit on decision error will be 5% that a conclusive statement may be incorrect.
Step 7 Optimising sampling design	Proposed sampling locations aim to provided coverage across the Site and to target identified COPC sources. Soil sampling locations were set subject to access within Site and selected using a judgemental approach focusing on the western half of the Site where fill material is expected to be at its deepest.

6.2 Data Quality Indicators

In accordance with NSW EPA (2017, 2020), the field and laboratory data set obtained for the investigation will be compared with DQI outlined in Table 14 to ensure acquired data meet the needs of the project and DQO have been met.

Table 14: Data quality indicators.

Assessment Measure (DQI)	Comment
Precision – a measure of the variability (or reproducibility) of data.	Precision will be assessed by reviewing blind field duplicate sample collected from discrete sample through the calculation of the relative percent difference (RPD). Data precision is deemed acceptable where results are: • Any RPD (for 0 - 10 x Estimated quantitation limit (EQL)), or • RPD <50% (for 10 - 30 x EQL) or • RPD <30% (for >30 x EQL) Exceedance of this range may still be considered acceptable where heterogeneous materials are sampled.

Assessment Measure (DQI)	Comment
Accuracy – a measure of the closeness of reported data to the "true value."	Data accuracy will be assessed by: • Field spike and filed blank. • Laboratory duplicate samples.
Representativeness – confidence that data is representative of each media present on the site.	To ensure data representativeness, the following field and laboratory procedures will be followed: • Design and implementation of the sampling program completed in accordance with MA standard operating procedures (SOP). • Use of a trip spike for assessing volatile losses during field sampling and a trip blank to ensure no cross contamination or laboratory artefacts. • Laboratory hold times are met, and sample handling and transportation is completed in accordance with the SAQP.
Completeness – a measure of the amount of usable data from a data collection activity.	To ensure data set completeness, the following is required: • Confirmation that the sampling methodology was completed in general accordance with the SAQP. • Provision of chain of custody (COC) and sample receipt advice (SRA) form. • Provision of results from all laboratory QA / QC samples (lab blanks, trip blank, trip spike and lab duplicates). • NATA accreditation stamp on all laboratory reports.
Comparability – confidence that data may be considered to be equivalent for each sampling and analytical event.	Data comparability was maintained by ensuring that: • Single site sampling events is undertaken following methodologies outlined in the MA SOP, SAQP, and published guidelines. • NATA accredited laboratory methodologies are followed for all laboratory analysis.

6.3 Site Assessment Criteria

Site assessment criteria (SAC) adopted for the characterisation of soil for the SCA are summarised in Table 15.

Table 15: Site Assessment Criteria.

Adopted Guidelines	Rationale
Soils	
NEPC (2013a)	Health investigation levels (HIL) Samples are assessed against: • NEPC (2013a) HIL-A investigation levels for residential (with soil access) land use. Health screening levels (HSL) *Petroleum hydrocarbons* Samples are assessed against: • NEPC (2013a) soil HSL-A – low density residential land use (sand dominant soils) has been considered for soil vapour intrusion. *Asbestos* Asbestos HSLs outlined in NEPC (2013a) have not been adopted for this investigation. Alternatively, presence of asbestos in soils or in material samples is

Adopted Guidelines	Rationale
	assessed on a detect / non detect basis. Should asbestos be detected in samples, or evidence of demolition debris be present in fill, further asbestos investigation and quantification may be required. Management Limits NEPC (2013a) management limits have been adopted for the petroleum hydrocarbons for residential, parkland and public open space – course textured soils.
	Ecological Investigation Levels (EIL) EILs for select metals, DDT, and naphthalene are derived from NEPC (2013a) for protection of terrestrial ecosystems in residential & public open space. EILs are calculated using Added Contaminant Levels (ACL) for respective contaminants in NEPC (2013a) using the most conservative pH, CEC, clay content values, and Ambient Background Concentrations (ABC) are derived from NSW - old suburb / low traffic ABCs, tabulated in NEPC (2013d). Contamination is also considered aged (>2 years). Soil parameters adopted for EIL calculations are based on compiled site-specific analytical data, where noted: • 10% clay content • CEC – 2.8 $cmol_c/kg$ (based on laboratory analysis, see Appendix L) • pH – pH 5.0 (based on laboratory analysis, see Appendix L) EIL calculation sheets are provided in Appendix N. Ecological Screening Levels (ESL) TRH and BTEX are assessed against ESLs for urban residential & public open space – coarse textured soils presented in NEPC (2013a).

6.4 Field Investigation Methodology

6.4.1 Soil Investigation

The methodology adopted for field investigation and sampling of soils, and to meet established project DQO, is provided in Table 16.

Table 16: Soil investigation and sampling methodology.

Item	Description
Date of fieldworks	Fieldworks were undertaken on the 20 February 2025 which included: • Site inspection of the Site. • Soil investigation and sampling within the western half of the Site
Investigation method(s)	Soil investigation was conducted by the following methods: • Concrete coring through the existing tennis court surface at three locations. • Advancement of three boreholes (BH101 – BH103) using hand tools to a maximum investigation depth of 1.10 mBGL. • Collection of representative soil samples for laboratory analysis. • Collection of duplicate soil samples for QA / QC purposes. Sampling locations are shown on the testing plan map provided in Appendix G.

Item	Description
Soil logging	Soils were classified in the field with respect to lithological characteristics and texture. Soil classifications and descriptions were based on the unified soil classification system (USCS) and Australian standard (AS) AS1726:2017 - *Geotechnical site Investigations*. Soils were also evaluated qualitatively for odour, visual evidence of contamination, and anthropogenic inclusions. Borehole logs for the investigation are presented in Appendix H. A summary of soil descriptions and field observations is provided in Section 7.2.
Soil sampling	The sampling density adopted for the soil investigation program included sampling at three locations (BH101 – BH103). Soil samples were obtained from fill and natural soils by an experienced MA environmental consultant using a dedicated, clean pair of nitrile gloves for collection of each sample. Each sample obtained from borehole excavations was collected from soils located within the centre of the hand tool or directly from the borehole. Each sample was placed into a laboratory supplied, 250 mL glass jar, with no headspace (to limit volatile loss) and labelled with a unique sample identifier.
Decontamination procedures	Sampling equipment used for sample collection were only used within one location and decontamination procedures were therefore not employed.
Sample preservation	Soil samples were stored in a refrigerated (ice filled) chest, whilst on site and in transit to the laboratory. All samples were submitted and analysed within the required holding period, as documented in laboratory SRA presented in Appendix M.
QC sampling	The following QC sampling rates were proposed for soil investigation: • Intra laboratory duplicate soil samples collected and analysed at a rate 10%. • A laboratory prepared trip blank and trip spike were stored with collected soil samples in the field and during transportation to the analytical laboratory for each analytical sample batch.
Sample handling and transport	Sample storage and transport was conducted according with industry guidance and standards. Samples were placed immediately into an ice chilled cooler box following collection. Primary samples were dispatched to Envirolab Services Pty Ltd (Envirolab), a NATA accredited analytical laboratory, under COC conditions for analysis. COC certificates and SRA documentations was provided to MA for confirmation purposes and is attached in Appendix M.

6.5 Laboratory Analytical Suite

A summary of laboratory analyses for soil samples completed as part of this SCA is provided in Table 17.

Table 17: Summary of soil laboratory analyses.

COPC	Primary Samples Analysed	DQI Samples Analysed
BTEX	6	trip spike and trip blank
TRH	6	trip blank
PAH	6	-
HM [1]	6	1 duplicate
OCP / OPP	3	-

COPC	Primary Samples Analysed	DQI Samples Analysed
PCB	3	-
Asbestos in soil	3	-
CEC	1	-
pH	1	-

Notes.

1. Arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc.

7 Field and Analytical Results

7.1 Investigation Constraints

The proposed scope of works for the investigation was largely completed. However, some physical constraints were encountered during excavations using hand tools, which affected the maximum achievable depths at certain locations:

- BH101 and BH103: Excavation was terminated due to refusal on sandstone boulders.
- BH102: Excavation was limited due to the collapse of the sand profile.

As a result, advancement to a maximum investigation depth of 1.10 mBGL was achieved.

Additionally, the presence of the hardstand tennis court covering most of the Site constrained the ability to conduct test pitting, which is the preferred method for visually assessing fill material for potential signs of contamination. As test pitting allows for a more detailed inspection of fill characteristics, this limitation reduced the ability to fully assess the composition, distribution, and potential contamination of the fill material beneath the hardstand.

7.2 Subsurface Conditions and Field Observations

The following generalised subsurface conditions were observed during the sampling program:

- Concrete slab encountered at all testing locations with a thickness up to 130mm.
- Fill material consisting of predominantly yellow to brown sand encountered up to approximately 0.55 mBGL. This layer was found to be relatively compacted, possibly due to recent tennis court resurfacing works.
- Fill material consisting of sand with black slag inclusions encountered between approximately 0.3 to 0.35 mBGL within BH101 and BH103 and between approximately 0.55 to 0.6 mBGL within BH101.
- Natural material consisting of light brown to brown sand with red, orange and white sandstone cobbles to boulders encountered between approximately 0.3 mBGL to 0.7 mBGL.
- Natural material consisting of brown to pale brown sand encountered up to approximately 1.1 mBGL.
- No anthropogenic inclusions, except for previously mentioned black slag material, were observed within excavated material. No olfactory indications of potential contamination (odours) or staining were observed within excavated material.
- No water inflow was encountered during borehole excavations.

Soil sampling locations are shown on the sampling plan in Appendix G and detailed borehole logs are provided in Appendix H. A selection of photographs taken during the site inspection and intrusive investigation are included in Appendix I.

7.3 Data Quality Assessment

Field and laboratory QA / QC has been reviewed for the investigation and is presented in the Data Quality Assessment provided Appendix J.

Assessment of the field and analytical data produced by the investigation indicated that data adequately satisfies the DQI that were developed for the investigation. It is therefore concluded that the overall data quality is of an acceptable standard to be used for interpretation.

7.4 Soil Results

7.4.1 Soil Analytical Results

A summary of laboratory analytical results for analysed soil samples, compared to adopted SAC, is provided in Table 18. A detailed tabulation of soil analytical results showing individual samples compared to adopted SAC is provided in Appendix K. Laboratory analytical documentation is available in Appendix L.

Table 18: Summary of soil analytical results compared to assessment criteria.

Analyte	Results Compared to SAC
Heavy metals	Heavy metals were reported at concentrations in analysed samples either below limit of reporting (LOR) or below adopted SAC.
BTEX	BTEX was reported in soil samples by the laboratory at concentrations below LOR and below adopted SAC.
TRH	TRH concentrations were reported by the laboratory in soil samples at levels below LOR and below adopted SAC.
PAH	Concentrations of relevant PAH were reported in analysed soil samples at levels below LOR or below adopted SAC.
OCP / OPP	Concentrations of OCP and OPP in analysed soil samples were reported below LOR and below the respective SAC.
PCB	PCB (total) was reported in analysed soil samples by the laboratory at concentrations below LOR and below the adopted SAC.
Asbestos (in soil)	Asbestos was reported in analysed soil samples by the laboratory at concentrations below the LOR on a detect/ non detect basis.

8 Discussion and Conclusion

8.1 General Discussion

A review was undertaken as part of this SCA to evaluate available historical site information. This review identified that the Site has historically comprised dense vegetation (possibly associated with Roseville Golf Club to the north) prior to development of the Site between 1956 to 1961 into existing land use as a hardstand tennis court.

As discussed in Section 3.6, we understand that Council raised concerns that the Site may have historically been maintained as part of Roseville Golf Club and could have been impacted by the application of fertilisers, herbicides, or pesticides. However, a review of historical aerial imagery and site information indicates that the Site was not part of the actively maintained golf course, but rather a vegetated area before being developed into a tennis court. As such, contamination associated with historical golf course maintenance activities is not expected.

During the Site inspection, evidence of potential filling was observed, primarily in the western half of the Site. Fill importation was likely required for leveling purposes.

A CSM was developed as part of this assessment, which identified fill material of unknown origin as the primary AEC. Due to the uncertainty regarding the fill's composition and potential contamination, further investigation was recommended in the form of a soil sampling program to assess potential risks associated with future land use.

8.2 Intrusive Investigation

An intrusive investigation was conducted on 20 February 2025, which involved the excavation of 3 boreholes via hand tools to assess potential contamination at the Site. The investigation area was established based on the findings of the Site inspection which indicated evidence of potential filling, primarily within the western half of the tennis court.

Due to site constraints, including the presence of the hardstand tennis court, the investigation was limited to borehole sampling only, rather than test pitting, which is the preferred method for visually assessing fill material for potential contamination. As a result, the ability to fully characterise the extent, composition, and potential contamination of fill material was somewhat restricted.

Soil samples were collected from various depths, primarily from suspected fill material, and analysed for a range of COPC. Analytical results indicated that all tested samples reported COPC concentrations below the adopted assessment criteria.

8.3 Conceptual Site Model Revision

Based on the findings of this report, the CSM has been reviewed and updated to reflect the following considerations:

- The Site is not expected to pose an easily identifiable risk to human health receptors or ecological receptors during ongoing use and proposed rezoning.

However, given the intrusive investigation constraints and the limited ability to fully characterise the fill material, an Unexpected Finds Protocol (UFP) is recommended to ensure that any unexpected contamination encountered during future earthworks or development activities is appropriately identified, assessed, and managed.

A UFP provides guidance on procedures to follow if unexpected contamination, such as odorous soils, asbestos-containing materials (ACM), or other unanticipated contaminants, are encountered.

The recommended UFP is included as Appendix O to this report.

8.4 Conclusion

Based on the findings of this SCA, and considering the limitations of the investigation (Section 9), the risks to human health and ecological receptors posed by potential contamination is considered low.

As such, the Site is considered to be suitable for the proposed rezoning.

To manage any potential residual risks, the Unexpected Finds Protocol (UFP) provided in Appendix O should be implemented during any future earthworks or construction.

9 Limitations Statement

This SCA was undertaken in line with current industry standards.

It is important, however, to note that no land contamination study can be a complete and exhaustive characterisation of a site, nor can it be guaranteed that any assessment shall identify and characterise all areas of potential contamination or all past potentially contaminating land uses. Therefore, this report should not be read as a guarantee that no contamination shall be found on the site. Should material be exposed in future which appears to be contaminated or inconsistent with natural site soils, additional testing may be required to determine the implications for the site.

Martens & Associates Pty Ltd has undertaken this assessment for the purposes of the current development proposal. No reliance on this report should be made for any other investigation or proposal. Martens & Associates Pty Ltd accepts no responsibility and provides no guarantee regarding the characteristics of areas of the site not specifically studied in this investigation.

10 References

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Appendix A – Maps



Map	Title
Map 01	Overview
Map 02	Topography
Map 03	Historical Aerial: 1943
Map 04	Historical Aerial: 1951
Map 05	Historical Aerial: 1961
Map 06	Historical Aerial: 1978
Map 07	Historical Aerial: 1986
Map 08	Historical Aerial: 1991
Map 09	Historical Aerial: 2002
Map 10	Historical Aerial: 2009
Map 11	Historical Aerial: 2017
Map 12	Historical Aerial: 2025
Map 13	Testing Plan Map

0 10 20 30 40 50 m

1:1250 @ A3

Viewport

Notes:
- Aerial from Nearmap (2025).
- Cadastre and site boundary from NSW Spatial Services Clip and Ship (2025).

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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

Map Title / Figure:
Overview

Map 01 — Map
15 Echo Street, Roseville, NSW — Site
Contamination Assessment — Project
Site Contamination Assessment — Sub-Project
Chapman Planning Pty Ltd — Client
03/03/2025 — Date

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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from Nearmap (2025).
- Cadastre and site boundary from NSW Spatial Services Clip and Ship (2025).
- Contours from ELVIS Lidar (2020).

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Map Title / Figure:
Topography

Map 02	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date

Appendix B – Site Survey

LCG
LAWRENCE CONSULTING GROUP

Date 01st MARCH 2024

Ms Rebecca Flax. **Ref: 241702**

Email: rebeccaa@echo.capital.

Dear Ms Flax,

PROPERTY: 11 ECHO STREET, ROSEVILLE.

As instructed by you we have surveyed, Lots 6 & 7 as shown on a plan deposited at Land Registry Services, Sydney and numbered D.P.14906, being the whole of the land contained in computer Folio Certificate, Reference 6/14906 & 7/14906 and having a total frontage of 42.06 to Echo St, Roseville, in the Local Government Area of Ku-ring-gai, Parish of Gordon, County of Cumberland and report as follows.

We find erected thereon a brick house with a tile and metal roof together with a concrete tennis court, inground pool and a metal shed and all known as No 11 Echo Street, Roseville.

Distances of walls from the boundaries are shown by red figures on the sketch.

A brick pier and concrete slab of the tennis court stands partly over the adjoining footway and a metal shed stands partly over the southern boundary both as shown on the sketch.

The boundaries are partly fenced as shown on the sketch.

Lot 6 is wholly affected by an Easement created by Transfer R347157. Both of the lots are affected by a Covenant created by Transfer A860041.

Title dimensions are indicated on the sketch and other than as shown or stated and fencing irregularities, we find no visable encroachments by or upon the property. This survey is based on a title search dated 23/02/2024.

Yours faithfully,

DOUGLAS LACHLAN MACLEAN BSurv, MIS.

SURVEYOR REGISTERED

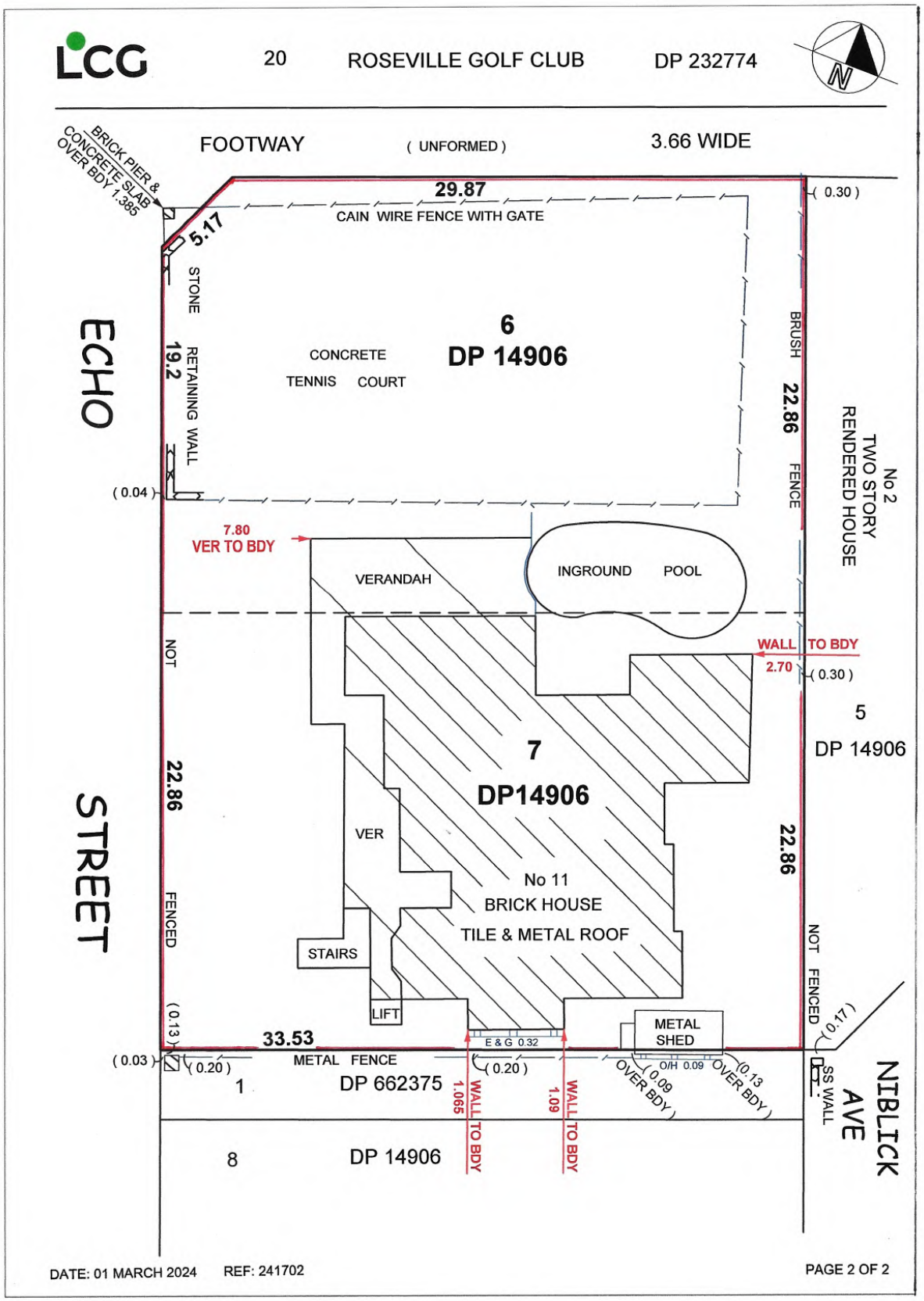
UNDER THE SURVEYING AND SPATIAL INFORMATION ACT, 2002

Melbourne Office
Level 27 Rialto South Tower
525 Collins Street
Melbourne VIC 3000
P: (03) 9935 2700

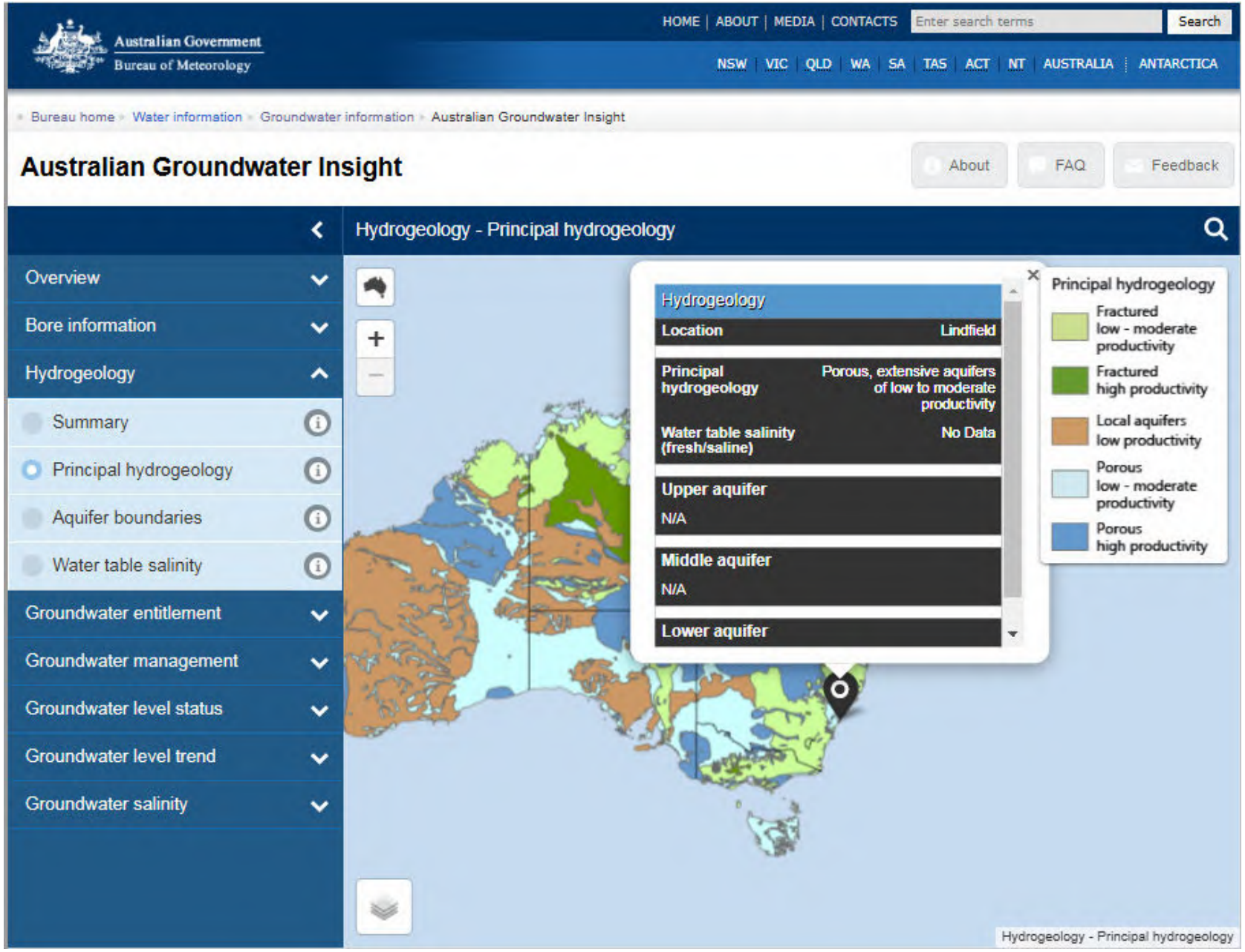
Sydney Office
Suite 106, Level 1
345 Pacific Highway
Lindfield NSW 2070
P: 1300 032 740

LCG GLOBAL PTY LTD
ABN: 93 635 745 710

E: info@lcgsolutions.com.au
W: lcgsolutions.com.au


LCG
20
ROSEVILLE GOLF CLUB
DP 232774
N
FOOTWAY
(UNFORMED)
3.66 WIDE
BRICK PIER & CONCRETE SLAB OVER BDY 1.385
29.87
CAIN WIRE FENCE WITH GATE
(0.30)
5.17
STONE
RETAINING WALL
19.2
6
DP 14906
CONCRETE
TENNIS COURT
BRUSH
22.86
FENCE
No 2
TWO STORY
RENDERED HOUSE
(0.04)
7.80
VER TO BDY
VERANDAH
INGROUND POOL
WALL TO BDY
2.70
(0.30)
5
DP 14906
NOT
22.86
FENCED
7
DP14906
VER
No 11
BRICK HOUSE
TILE & METAL ROOF
22.86
STAIRS
LIFT
METAL SHED
NOT FENCED
(0.17)
(0.13)
33.53
E & G 0.32
(0.03)
(0.20)
METAL FENCE
(0.20)
O/H 0.09
(0.13 OVER BDY)
(0.09 OVER BDY)
SS WALL
1
DP 662375
1.065
WALL TO BDY
1.09
WALL TO BDY
NIBLICK AVE
8
DP 14906
ECHO STREET
DATE: 01 MARCH 2024
REF: 241702
PAGE 2 OF 2

Appendix C – Groundwater Information


Australian Government
Bureau of Meteorology
HOME | ABOUT | MEDIA | CONTACTS
Enter search terms
Search
NSW | VIC | QLD | WA | SA | TAS | ACT | NT | AUSTRALIA | ANTARCTICA
Bureau home » Water information » Groundwater information » Australian Groundwater Insight
Australian Groundwater Insight
About
FAQ
Feedback
Hydrogeology - Principal hydrogeology
Overview
Bore information
Hydrogeology
Summary
Principal hydrogeology
Aquifer boundaries
Water table salinity
Groundwater entitlement
Groundwater management
Groundwater level status
Groundwater level trend
Groundwater salinity
Hydrogeology
Location
Lindfield
Principal hydrogeology
Porous, extensive aquifers of low to moderate productivity
Water table salinity (fresh/saline)
No Data
Upper aquifer
N/A
Middle aquifer
N/A
Lower aquifer
Principal hydrogeology
Fractured low - moderate productivity
Fractured high productivity
Local aquifers low productivity
Porous low - moderate productivity
Porous high productivity
Hydrogeology - Principal hydrogeology

WaterNSW

home | help | contact | customise

State Overview
State Overview

Rivers and Streams
favourites | search | download sites | find a site
⊞ Real Time Data - Rivers And Streams

Daily River Reports
⊞ Daily River Reports

Dams
favourites | search | download sites | find a site
⊞ Real Time Data - Major Dams

Groundwater (Telemetered data)
favourites | search | download sites | find a site
⊞ Real Time Data - Bores

All Groundwater Site details
search | download sites | find a site
search by licence
⊞ All Groundwater Map

Meteorology
favourites | search | download sites | find a site
⊞ Real Time Data - Weather Stations

Hunter River Salinity Trading Scheme
Hunter River Salinity Trading Scheme

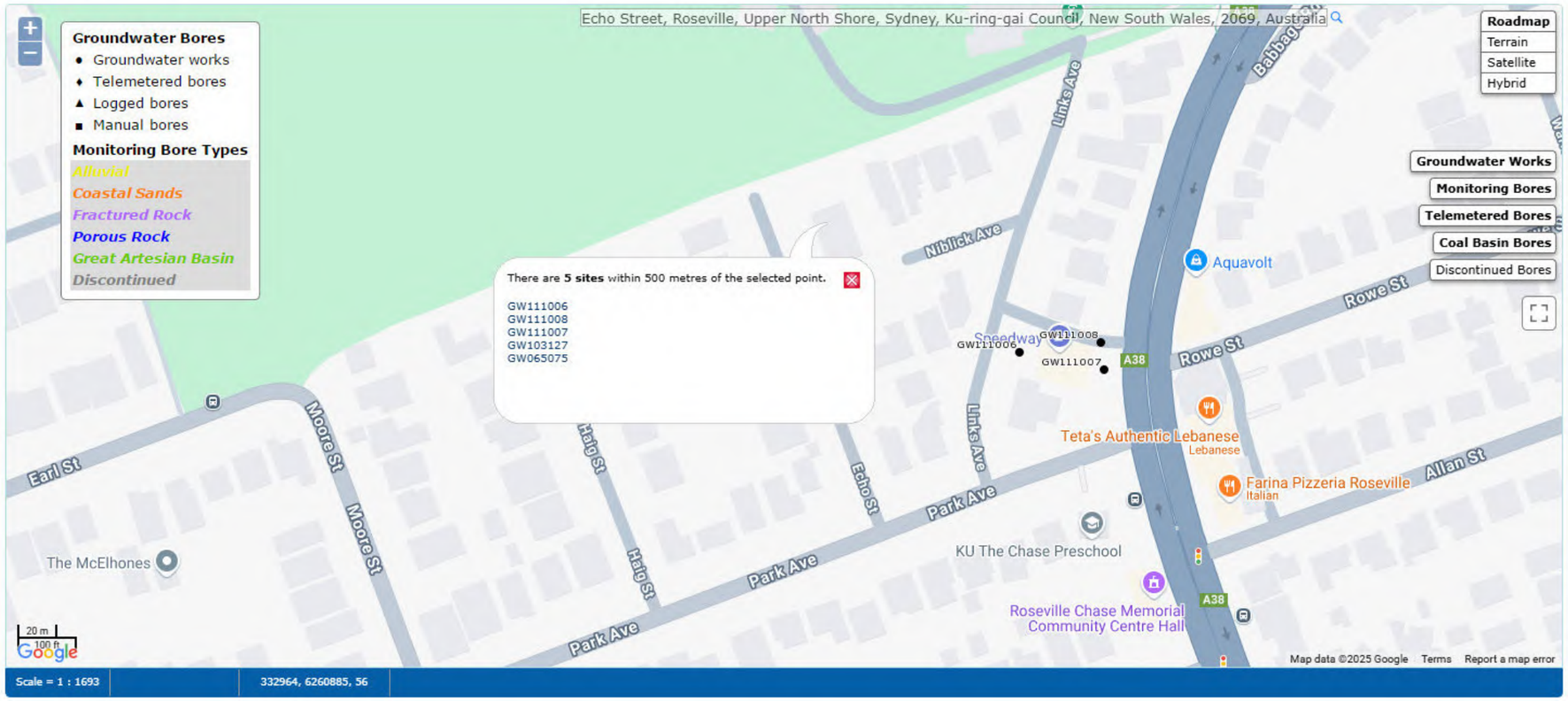
All Groundwater Site Details

ALL GROUNDWATER MAP

bookmark this page

All data times are Eastern Standard Time

Map | Info



WaterNSW
Work Summary

GW111006

Licence: 10BL603947 **Licence Status:** CANCELLED

Authorised Purpose(s): MONITORING BORE
Intended Purpose(s): MONITORING BORE

Work Type: Bore
Work Status: Equipped
Construct.Method: Auger
Owner Type: Private

Commenced Date:
Completion Date: 19/04/2010
Final Depth: 7.50 m
Drilled Depth: 7.50 m

Contractor Name: (None)
Driller: Yoon Fook Chin
Assistant Driller:

Property: ANTELLA 20-22 Babbage Rd ROSEVILLE 2069 NSW
GWMA:
GW Zone:
Standing Water Level (m): 3.800
Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CUMBERLAND	GORDON	1//1028524
Licensed:	CUMBERLA	GORDON	Whole Lot 1//1028524

Region: 10 - Sydney South Coast
River Basin: - Unknown
Area/District:
CMA Map:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6260991.000
Easting: 332810.000
Latitude: 33°46'40.9"S
Longitude: 151°11'39.7"E

GS Map: -
MGA Zone: 56
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	7.50	100			Auger
1		Annulus	Waterworn/Rounded	0.00	0.00				Graded
1	1	Casing	Pvc Class 18	0.00	4.50	50			Seated on Bottom, Screwed
1	1	Opening	Slots - Horizontal	4.50	7.50	55		0	Slotted In Hole, PVC Class 18, SL: 3.0mm, A: 1.50mm

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
3.80	7.50	3.70	Unknown	3.80					

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.20	0.20	CONCRETE	Fill	
0.20	0.40	0.20	FILL,SILTY SANDY CLAY,TRACE OF IRONSTONE	Fill	

Appendix D – Historical Aerial Photography



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from NSW Spatial Services Sixmaps (1943).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Historical Aerial: 1943

Map 03	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from NSW Spatial Services HAPE (1951).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Historical Aerial: 1951

Map 04	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from NSW Spatial Services HAPE (1961).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Historical Aerial: 1961

Map 05	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from NSW Spatial Services HAPE (1978).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Historical Aerial: 1978

Map 06	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from NSW Spatial Services HAPE (1986).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Historical Aerial: 1986

Map 07	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from NSW Spatial Services HAPE (1991).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Historical Aerial: 1991

Map 08	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from NSW Spatial Services HAPE (2002).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Historical Aerial: 2002

Map 09	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from Nearmap (2009).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

martens
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Map Title / Figure:
Historical Aerial: 2009

Map 10	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from Nearmap (2017).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Historical Aerial: 2017

Map 11	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from Nearmap (2025).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Historical Aerial: 2025

Map 12	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date

Appendix E – Council Correspondence

RE: Request for Informal Access to Council information - 15 Echo Street {{3524012}} Roseville

CG

Chris Galletti <cgalletti@krg.nsw.gov.au>
To Bryson Monaghan

Reply | Reply All | Forward

Fri 21/02/2025 9:30 AM

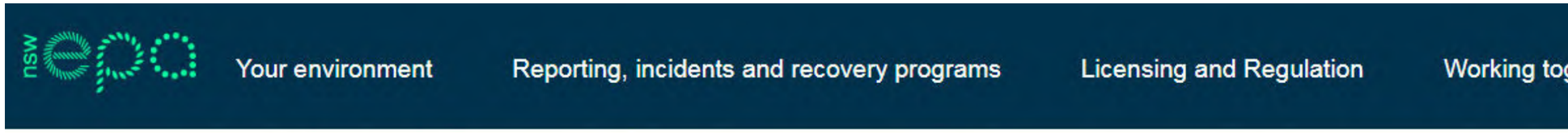
Follow up. Completed on Friday, 21 February 2025.

Bryson thank you for your request, after a thorough search of Council records no files or plans were found for the site.

The house and tennis court were constructed sometime between **1956 & 1961** and Council records only reach back to **1974.**

Regards

Appendix F – Government Register Records



Public registers

+ POEO Public Register
– Contaminated land record of notices
About the record of notices
List of notified sites
Tips for searching
Disclaimer
Dangerous goods licences
Pesticide licences
Radiation licences

Home Public registers Contaminated land record of notices

Search results

Your search for: Suburb: ROSEVILLE

Search Again Refine Search

did not find any records in our database.

If a site does not appear on the record it may still be affected by contamination. For example:

- Contamination may be present but the site has not been regulated by the EPA under the Contaminated Land Management Act 1997 or the Environmentally Hazardous Chemicals Act 1985.
- The EPA may be regulating contamination at the site through a licence or notice under the Protection of the Environment Operations Act 1997 (POEO Act).
- Contamination at the site may be being managed under the planning process.

Search TIP

To search for a specific site, search by LGA (local government area) and carefully review all sites listed.

... more search tips

More information about particular sites may be available from:

- The POEO public register
- The appropriate planning authority: for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act.

See What's in the record and What's not in the record.

If you want to know whether a specific site has been the subject of notices issued by the EPA under the CLM Act, we suggest that you search by Local Government Area only and carefully review the sites that are listed.
This public record provides information about sites regulated by the EPA under the Contaminated Land Management Act 1997, including sites currently and previously regulated under the Environmentally Hazardous Chemicals Act 1985. Your inquiry using the above search criteria has not matched any record of current or former regulation. You should consider searching again using different criteria. The fact that a site does not appear on the record does not necessarily mean that it is not affected by contamination. The site may have been notified to the EPA but not yet assessed, or contamination may be present but the site is not yet being regulated by the EPA. Further information about particular sites may be available from the appropriate planning authority, for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act. In addition the EPA may be regulating

Your environment | Reporting, incidents and recovery programs | Licensing and Regulation | Working tog

Public registers

+ POEO Public Register
– Contaminated land record of notices
  - About the record of notices
  - List of notified sites
  - Tips for searching
  - Disclaimer
+ Dangerous goods licences
+ Pesticide licences
+ Radiation licences

Home Public registers Contaminated land record of notices

Search results

Your search for: Suburb: ROSEVILLE CHASE

Search Again Refine Search

did not find any records in our database.

If a site does not appear on the record it may still be affected by contamination. For example:

- Contamination may be present but the site has not been regulated by the EPA under the Contaminated Land Management Act 1997 or the Environmentally Hazardous Chemicals Act 1985.
- The EPA may be regulating contamination at the site through a licence or notice under the Protection of the Environment Operations Act 1997 (POEO Act).
- Contamination at the site may be being managed under the planning process.

Search TIP

To search for a specific site, search by LGA (local government area) and carefully review all sites listed.

... more search tips

More information about particular sites may be available from:

- The POEO public register
- The appropriate planning authority: for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act.

See What's in the record and What's not in the record.

If you want to know whether a specific site has been the subject of notices issued by the EPA under the CLM Act, we suggest that you search by Local Government Area only and carefully review the sites that are listed.
This public record provides information about sites regulated by the EPA under the Contaminated Land Management Act 1997, including sites currently and previously regulated under the Environmentally Hazardous Chemicals Act 1985. Your inquiry using the above search criteria has not matched any record of current or former regulation. You should consider searching again using different criteria. The fact that a site does not appear on the record does not necessarily mean that it is not affected by contamination. The site may have been notified to the EPA but not yet assessed, or contamination may be present but the site is not yet being regulated by the EPA. Further information about particular sites may be available from the appropriate planning authority, for example, on a planning certificate issued by the local council under section 149 of the Environmental Planning and Assessment Act. In addition the EPA may be regulating

Suburb	SiteName	Address	ContaminationActivityType	ManagementClass	Latitude	Longitude
ROSEVILLE	Mobil Service Station	2 Boundary STREET	Service Station	Regulation under CLM Act not required	-33.78769177	151.1796011
ROSEVILLE CHASE	Coles Express Roseville Chase	388 Eastern Valley WAY	Service Station	Regulation under CLM Act not required	-33.78337722	151.1973901

Public registers

– POEO Public Register

Licences, applications and notices search

Penalty notices search

Enforceable undertakings search

Enforceable undertakings media releases

Exemptions and approvals search

Prosecutions or civil proceedings search

Terms of use: POEO public register

Licensing FAQs

List of licences

Unlicensed premises regulated by the EPA

+ Contaminated land record of notices

Dangerous goods licences

Home Public registers POEO Public Register Licences, applications and notices search

Search results

Your search for: **General Search** with the following criteria

Suburb - Roseville

returned 0 result

Search Again

Public registers

- POEO Public Register
  - Licences, applications and notices search
  - Penalty notices search
  - Enforceable undertakings search
  - Enforceable undertakings media releases
  - Exemptions and approvals search
  - Prosecutions or civil proceedings search
  - Terms of use: POEO public register
  - Licensing FAQs
  - List of licences
  - Unlicensed premises regulated by the EPA
- + Contaminated land record of notices
- Dangerous goods licences

Search results

Your search for: **General Search** with the following criteria

Suburb - Roseville Chase

returned 0 result

Search Again

Contaminated land

- Managing contaminated land
- Notified and regulated contaminated land
- NSW site auditor scheme
- Statutory guidelines
- Non-statutory guidance documents
- Underground petroleum storage systems
- PFAS in NSW
- PFAS investigation program
  - NSW PFAS Expert Panel
  - PFAS investigation process
  - PFAS investigation program FAQs
- Regulation of PFAS firefighting foams
- Other contamination issues
- Stay up to date
- Amendments to CLM Act and Regulation

The NSW Government PFAS Investigation Program

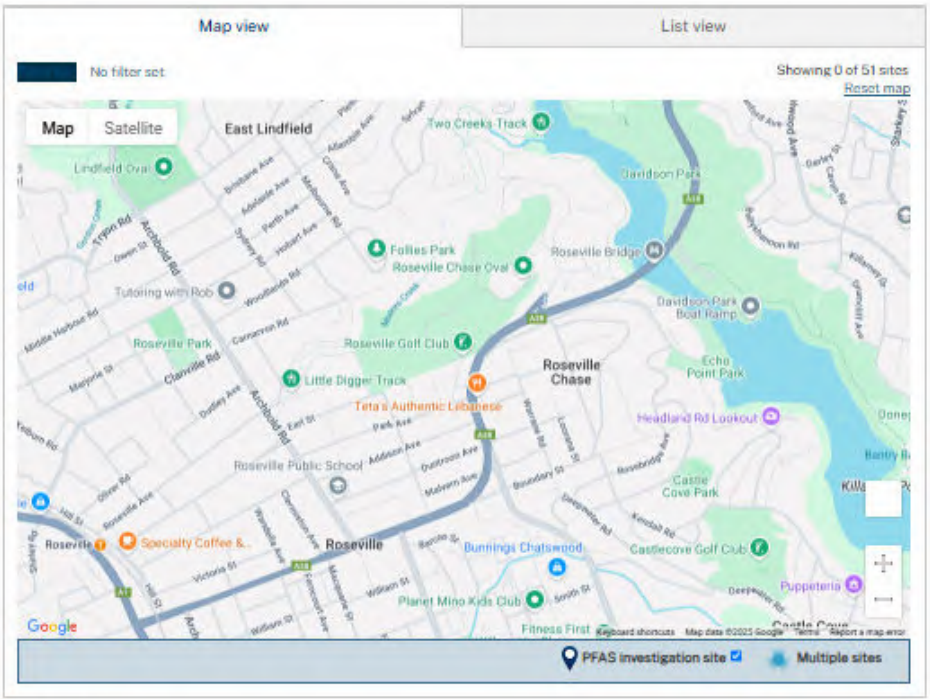
View a map of the sites in NSW that may be contaminated with PFAS, learn how to reduce your exposure to these dangerous chemicals, and read about our investigation of the issue.

The EPA is leading an investigation program to assess the legacy of PFAS use across NSW. With the assistance of the NSW PFAS Technical Advisory Group, which includes NSW Health, Department of Primary Industries and the Office of Environment and Heritage, we provide impacted residents with tailored, precautionary dietary advice to help them reduce any exposure to PFAS.

Medlow Bath

WaterNSW is conducting targeted PFAS-related investigations on the presence of PFAS in the Medlow Bath sub-catchment. More information is available at Blue Mountains PFAS investigations.

Current investigations are focused on sites where it is likely that large quantities of PFAS have been used. The EPA is currently investigating PFAS at these sites:



Tags: PFAS

Australian Government
Defence

PFAS INVESTIGATION AND MANAGEMENT PROGRAM

SERVICE
COURAGE
RESPECT
INTEGRITY
EXCELLENCE

PFAS INVESTIGATION AND MANAGEMENT PROGRAM SNAPSHOT – October 2024

REMEDIATION ACTIVITIES

Remediation works targeting contaminated water, soil and other materials are underway or completed at Swartz Barracks, HMAS *Cerberus*, Jervis Bay Range Facility and RAAF Bases East Sale, Williamtown, Edinburgh, Richmond, Tindal, Wagga, Darwin, Pearce and Townsville.

Remediation works are scheduled to commence in the coming months at HMAS *Albatross*, Blamey Barracks, Lavarack Barracks, Bandiana Military Area and RAAF Bases Darwin and Amberley.

KEY STATISTICS

Properties connected to town water **378**

160 rainwater tanks provided to **117** properties

Community engagement events conducted **183**

869 properties have water assistance extended from 6 to 8 years

REMEDIATION

Treated or removed over **160,000** tonnes of contaminated soil

Installed **11** water treatment plants

Treated over **11.5** billion litres of water

FINANCIAL FACTS

$807m invested to manage, remediate and conduct research

INCLUDING

provided to **$27m** other government agencies for research into health and remediation

$165.4m allocated in 2024-2025 to manage and remediate PFAS

ONGOING MONITORING

Defence regularly monitors for PFAS on and around impacted sites. Monitoring results help Defence understand how PFAS is moving in the environment. This information also guides Defence's remediation and management actions.

RESEARCH ACTIVITIES

Defence collaborates internationally to share its learnings and to ensure the best remedial actions are implemented on its PFAS impacted bases.

Since 2016, Defence has supported trials of new remediation technologies. Trials such as soil stabilisation form part of Defence's remediation approach on some bases.

COMMUNITY EVENTS

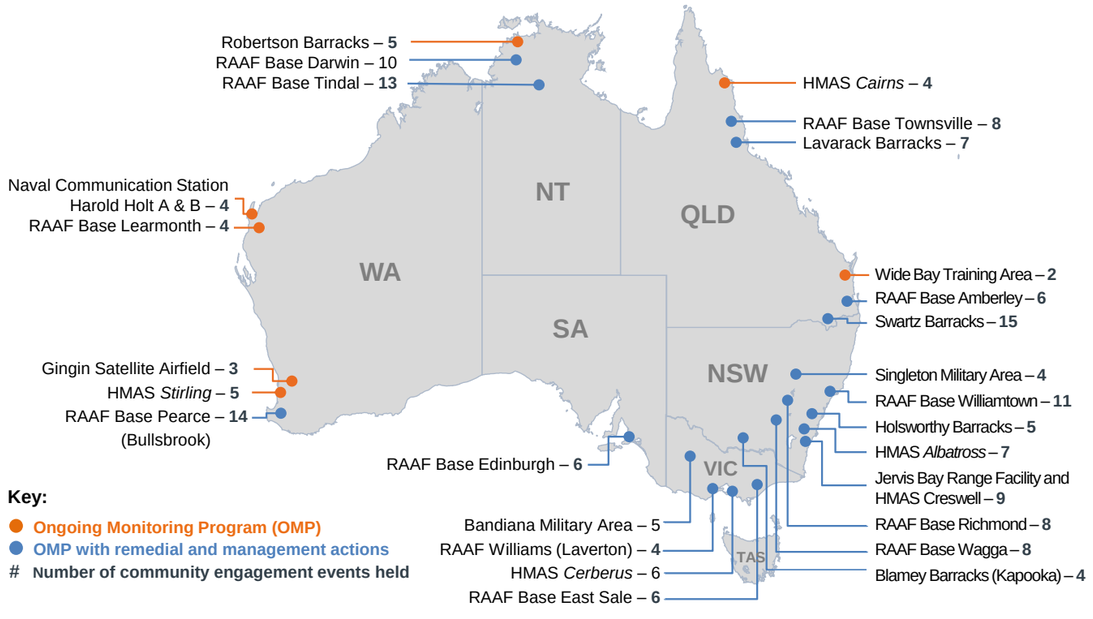
Defence has held 183 information sessions to keep communities informed.

Recent events

- 16 October 2024 – RAAF Base Tindal
- 15 October 2024 – RAAF Base Darwin
- 6 August 2024 – RAAF Base Amberley
- 19 June 2024 – HMAS *Cerberus*
- 18 June 2024 – Bandiana Military Area

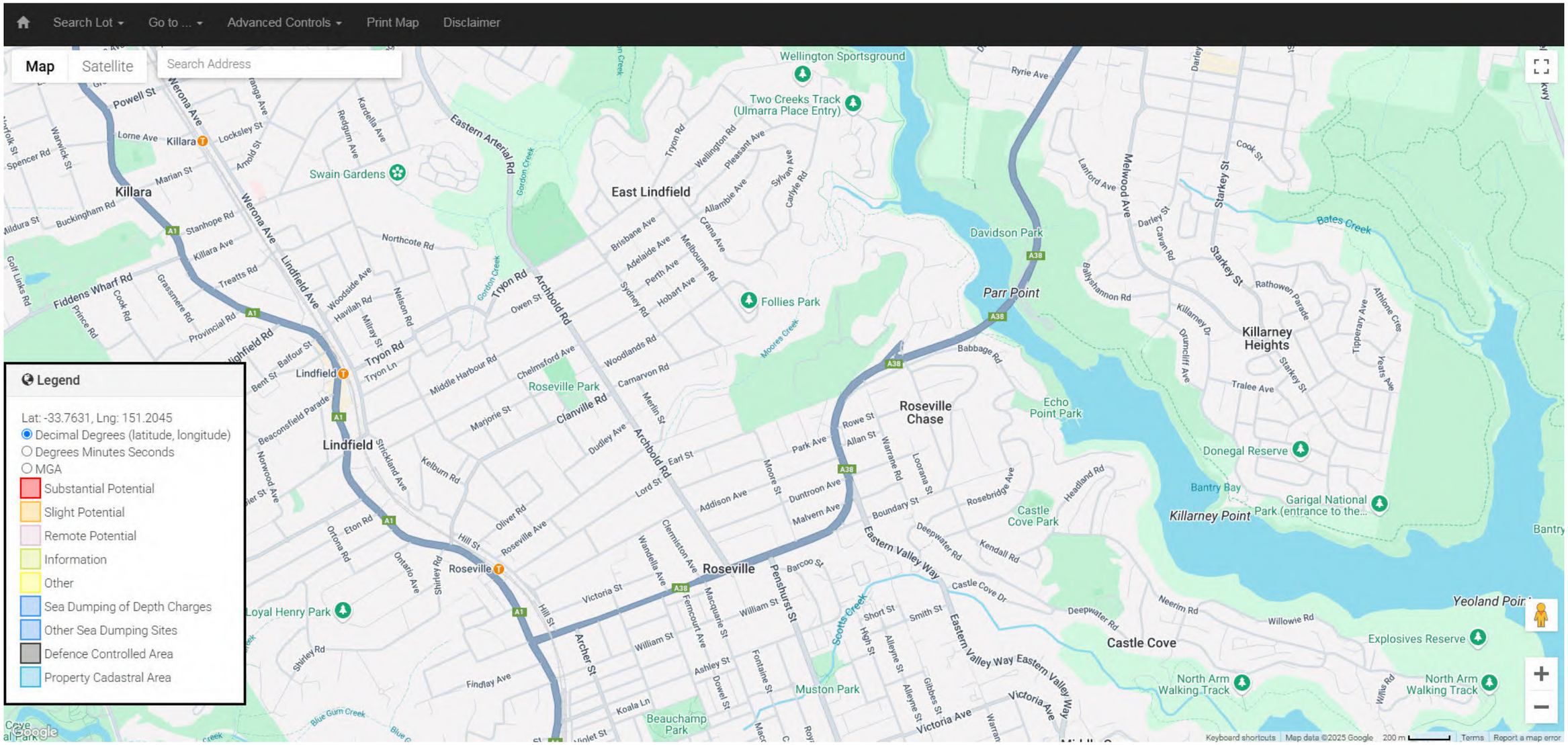
Upcoming events

- Latest information is available on the Defence website.



RESEARCH FUNDING

- Defence has provided approximately $26 million in funding for 21 research and technology programs to support PFAS investigation and remediation activities.
- Defence provided over $27 million in additional funding to other government agencies to support PFAS-related health and remediation research.


Search Lot
Go to ...
Advanced Controls
Print Map
Disclaimer
Map
Satellite
Search Address
Legend
Lat: -33.7631, Lng: 151.2045
Decimal Degrees (latitude, longitude)
Degrees Minutes Seconds
MGA
Substantial Potential
Slight Potential
Remote Potential
Information
Other
Sea Dumping of Depth Charges
Other Sea Dumping Sites
Defence Controlled Area
Property Cadastral Area
Killara
Swain Gardens
East Lindfield
Wellington Sportsground
Two Creeks Track (Ulmarra Place Entry)
Follies Park
Davidson Park
Parr Point
Killarney Heights
Roseville Chase
Roseville Park
Lindfield
Roseville
Echo Point Park
Donegal Reserve
Bantry Bay
Killarney Point
Garigal National Park (entrance to the...
Castle Cove Park
Castle Cove
Muston Park
Beauchamp Park
Loyal Henry Park
Explosives Reserve
North Arm Walking Track
Yeoland Point
Bates Creek
Gordon Creek
Moores Creek
Scotts Creek
Blue Gum Creek
Google
Keyboard shortcuts
Map data ©2025 Google
200 m
Terms
Report a map error

Appendix G – Testing Plan Map



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Project No: P2410640 Map Set: MS01-R01 EPSG: 7856

0 6 12 18 24 30 m

1:500 @ A3

Viewport A

Notes:
- Aerial from Nearmap (2025).
- Site Boundary from NSW Spatial Services Clip and Ship (2025).

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Map Title / Figure:
Testing Plan Map

Map 13	Map
15 Echo Street, Roseville, NSW	Site
Contamination Assessment	Project
Site Contamination Assessment	Sub-Project
Chapman Planning Pty Ltd	Client
03/03/2025	Date

Appendix H – Borehole Logs

CLIENT	Chapman Planning Pty Ltd	COMMENCED	20/02/2025	COMPLETED	20/02/2025	**REF BH101**
PROJECT	Site Contamination Assessment	LOGGED	BTM	CHECKED	BM	
SITE	15 Echo St, Roseville NSW 2069	GEOLOGY	Hawkesbury (ha)	VEGETATION	NA	PROJECT NO. P2410640
EQUIPMENT	Hand Auger	LONGITUDE	151.19329	RL SURFACE	82	DATUM mAHD
OPERATOR	BTM	LATITUDE	-33.77744	ASPECT	West	SLOPE <2%

Drilling Method	Water	Elevation / Depth (m)	Graphic Log	Samples: Jar Sample	Classification Code	Material Description	Comments and Observations
Hand Auger	N/A	81.9 / 0.08			CCT	Concrete	
				P2410640/BH101/0.1-0.2 + Dup01	SP	FILL: SAND, brown, yellow, with rootlets.	No odour, no staining, no anthropogenic inclusions.
	Not Encountered			P2410640/BH101/0.2-0.3			
		81.7 / 0.3		P2410640/BH101/0.3-0.4	SP	FILL: SAND, brown, with black slag inclusion.	No odour, no staining.
		81.7 / 0.35		P2410640/BH101/0.4-0.5	SP	SAND: brown, with sandstone cobbles to boulders.	No odour, no staining, no anthropogenic inclusions.
						BH101 refusal at 0.55m (Sandstone Boulders)	

EXCAVATION LOG TO BE READ IN CONJUNCTION WITH ACCOMPANYING REPORT NOTES AND ABBREVIATIONS

martens
MARTENS & ASSOCIATES PTY LTD
Suite 201, 20 George St. Homsby, NSW 2077 Australia
Phone: (02) 9476 9999 Fax: (02) 9476 8767
mail@martens.com.au WEB: http://www.martens.com.au

Engineering Log - BOREHOLE

CLIENT	Chapman Planning Pty Ltd	COMMENCED	20/02/2025	COMPLETED	20/02/2025	**REF BH102**	
PROJECT	Site Contamination Assessment	LOGGED	BTM	CHECKED	BM		
SITE	15 Echo St, Roseville NSW 2069	GEOLOGY	Hawkesbury (ha)	VEGETATION	NA	PROJECT NO. P2410640	
EQUIPMENT	Hand Auger	LONGITUDE	151.19322	RL SURFACE	82	DATUM	mAHD
OPERATOR	BTM	LATITUDE	-33.77744	ASPECT	West	SLOPE	<2%

Drilling Method	Water	Elevation / Depth (m)	Graphic Log	Samples: Jar Sample	Classification Code	Material Description	Comments and Observations
Hand Auger	N/A	81.9 / 0.1			CCT	Concrete	
	Not Encountered			P2410640/BH102/0.1-0.2	SP	FILL: SAND, brown, light brown, with rootlets.	No odour, no staining, no anthropogenic inclusions.
		81.5 / 0.55			SW	FILL: SAND, brown, with black slag inclusion.	No odour, no staining.
		81.4 / 0.6			SP	SAND: brown, with sandstone cobbles to boulders.	No odour, no staining, no anthropogenic inclusions.
		81.3 / 0.7		P2410640/BH102/0.7-0.8 + Dup02	SP	SAND: brown, pale brown.	No odour, no staining, no anthropogenic inclusions.
						BH102 refusal at 1.1m (Hole Collapse)	

EXCAVATION LOG TO BE READ IN CONJUNCTION WITH ACCOMPANYING REPORT NOTES AND ABBREVIATIONS

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Suite 201, 20 George St. Homsby, NSW 2077 Australia
Phone: (02) 9476 9999 Fax: (02) 9476 8767
mail@martens.com.au WEB: http://www.martens.com.au

Engineering Log - BOREHOLE

CLIENT	Chapman Planning Pty Ltd	COMMENCED	20/02/2025	COMPLETED	20/02/2025	**REF BH103**
PROJECT	Site Contamination Assessment	LOGGED	BTM	CHECKED	BM	
SITE	15 Echo St, Roseville NSW 2069	GEOLOGY	Hawkesbury (ha)	VEGETATION	NA	PROJECT NO. P2410640
EQUIPMENT	Hand Auger	LONGITUDE	151.19318	RL SURFACE	82	DATUM mAHD
OPERATOR	BTM	LATITUDE	-33.77736	ASPECT	West	SLOPE <2%

Drilling Method	Water	Elevation / Depth (m)	Graphic Log	Samples: Jar Sample	Classification Code	Material Description	Comments and Observations
Hand Auger	N/A	81.9			CCT	Concrete	
		0.13		P2410640/BH103/0.15-0.2	SP	FILL: SAND, brown, yellow, orange, with rootlets.	No odour, no staining, no anthropogenic inclusions.
	Not Encountered	81.7					
		0.3			SP	FILL: SAND, brown, with black slag inclusions.	No odour, no staining.
		81.7		P2410640/BH103/0.3-0.4			
		0.35			SP	SAND: brown, with sandstone cobbles to boulders.	No odour, no staining, no anthropogenic inclusions.
						BH103 refusal at 0.5m (Sandstone Boulders)	

EXCAVATION LOG TO BE READ IN CONJUNCTION WITH ACCOMPANYING REPORT NOTES AND ABBREVIATIONS

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MARTENS & ASSOCIATES PTY LTD
Suite 201, 20 George St. Homsby, NSW 2077 Australia
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mail@martens.com.au WEB: http://www.martens.com.au

Engineering Log - BOREHOLE

Appendix I – Site Photographs



Plate 1: View adjacent to the western corner of the Site. Stone retaining wall. Dated 30 January 2025.



Plate 2: View of majority of the Site, facing the northern corner. Exposed sandstone adjacent to the eastern boundary of the Site. Suspected natural grade of the adjacent property to the north of the Site. Dated 30 January 2025.



Plate 3: View of stone retaining wall along western boundary and half of the southern boundary of the Site. Dated 30 January 2025.



Plate 4: View of general soil profile identified onsite. Dated 20 February 2025.

Appendix J – Data Quality Assessment

Data Quality Assessment

An assessment of the quality of data acquired by the investigation, compared against the designated investigation DQI defined in Section 6.2, is provided in the table below.

Completeness			
Field Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Critical locations in SAQP sampled?	Yes	Yes	Pass
Critical samples in SAQP collected?	Yes	Yes	Pass
Sampling methods and equipment in SAQP used and complied with?	Yes	Yes	Pass
Sampling by experienced environmental consultant(s)?	Yes	Yes	Pass
Field documentation complete? (i.e., test location logs, field records, calibration records, etc.)	Yes	Yes	Pass Borehole logs provided in Appendix H.
COC complete?	Yes	Yes	Pass
Laboratory Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Critical samples analysed according to SAQP?	Yes	Yes	Pass
Analysis of samples for COPC according to SAQP?	Yes	Yes	Pass
Appropriate laboratory analytical methods and LOR used by laboratory?	Yes	Yes	Pass See Appendix L – Laboratory Analytical Documentation.
SRA and COC complete?	Yes	Yes	Pass See Appendix L – Laboratory Analytical Documentation.
Sample extraction and holding times complied with?	Yes	Yes	Pass See Appendix L – Laboratory Analytical Documentation.
Comparability			
Field Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Same sampling methods used on each occasion?	Yes	Yes	Pass
Sampling by same environmental consultant(s)?	Yes	Yes	Pass
Climatic conditions conducive for sampling?	Yes	Yes	Pass
Same types of samples collected, handled, and preserved in same manner?	Yes	Yes	Pass
Laboratory Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Same laboratory used for primary sample analysis?	Yes	Yes	Pass

Comparability			
			See Appendix L – Laboratory Analytical Documentation.
Same analytical methods used by primary laboratory?	Yes	Yes	Pass See Appendix L – Laboratory Analytical Documentation.
Same LOR adopted by primary laboratory?	Yes	Yes	Pass See Appendix L – Laboratory Analytical Documentation.
Same analytical measurement units adopted?	Yes	Yes	Pass See Appendix L – Laboratory Analytical Documentation.
Representativeness			
Field Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Media sampled according to SAQP?	Yes	Yes	Pass
All media identified in SAQP sampled?	Yes	Yes	Pass
Laboratory Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Samples analysed according to SAQP?	Yes	Yes	Pass
Precision			
Field Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Appropriate sampling procedures used and complied with?	Yes	Yes	Pass
Min. 10% intra-laboratory duplicates collected and analysed?	Yes	Yes	Pass
RPD (%) values within acceptance limits? • No limit for analytical results <10 x LOR • 50% for analytical results 10-30 x LOR • 30% for analytical results >30 x LOR	Yes	Yes	Pass
Laboratory Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Laboratory duplicates within acceptance limits?	Yes	Yes	Pass
Accuracy			
Field Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Trip spike(s) used and analysed? (Recoveries between 60% and 140%)	Yes	Yes	Pass
Trip blank(s) used and analysed? (Analyte concentration <LOR)	Yes	Yes	Pass
Equipment rinsate(s) collected and analysed?	No	No	Comment

Accuracy			
(Analyte concentration <LOR)			Each sample was collected using a fresh pair of nitrile gloves. The risk of cross contamination during sampling is considered to be negligible and analytical results are considered suitable for interpretation.
Laboratory Considerations	*Target*	*Result*	*Pass | Fail | Comment*
Laboratory method blank(s) within acceptable limits?	Yes	Yes	Pass
Matrix spike recovery within acceptable limits?	Yes	Yes	Pass
Surrogate spike recovery within acceptable limits?	Yes	Yes	Pass
Laboratory control sample recovery within acceptable limits?	Yes	Yes	Pass

Appendix K – Laboratory Results Summary Tables

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Site Contamination Assessment
Proposed Rezoning: 15 Echo Street, Roseville, NSW

P2410640JR01V02

		Metals							
		Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		4	0.4	1	1	1	0.1	1	1
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil									
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand (>=0m, <1m)									
NEPM 2013 Table 1B(5) Generic and Site Specific EIL - Urban Res & Public Open Space		100		410	70	1100		15	170
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil									
NEPM 2013 Table 1A(1) HILs Res A Soil		100	20	100	6,000	300	40	400	7,400
Field ID	**Date**								
10640/BH101/0.1-0.2	**20 Feb 2025**	<4	<0.4	1	2	5	<0.1	<1	9
10640/BH102/0.1-0.2	**20 Feb 2025**	5	<0.4	3	2	4	<0.1	<1	20
10640/BH103/0.15-0.2	**20 Feb 2025**	<4	<0.4	8	7	24	<0.1	2	72
10640/BH101/0.3-0.4	**20 Feb 2025**	<4	<0.4	13	1	6	<0.1	3	7
10640/BH101/0.4-0.5	**20 Feb 2025**	<4	<0.4	6	5	6	<0.1	6	12
10640/BH103/0.3-0.4	**20 Feb 2025**	<4	<0.4	7	4	4	<0.1	8	20
10640/BH102/0.7-0.8	**20 Feb 2025**								
Statistics									
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Number of Detects		**1**	**0**	**6**	**6**	**6**	**0**	**4**	**6**
Minimum Concentration		**<4**	**<0.4**	**1**	**1**	**4**	**<0.1**	**<1**	**7**
Maximum Concentration		**5**	**<0.4**	**13**	**7**	**24**	**<0.1**	**8**	**72**
% of Detects		**17**	**0**	**100**	**100**	**100**	**0**	**67**	**100**

Environmental Standards
NEPM, NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil
2013, NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil
2013, NEPM 2013 Table 1A(1) HILs Res A Soil

		PAH																		
		Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of positives)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.2	0.1	0.1	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.5	0.05
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																				
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand (>=0m, <1m)														3						
NEPM 2013 Table 1B(5) Generic and Site Specific EIL - Urban Res & Public Open Space														170						
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil							0.7													
NEPM 2013 Table 1A(1) HILs Res A Soil																	3	3	3	300
Field ID	**Date**																			
10640/BH101/0.1-0.2	**20 Feb 2025**	<0.2	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.05
10640/BH102/0.1-0.2	**20 Feb 2025**	<0.2	<0.1	<0.1	<0.1	<0.1	0.06	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.5	<0.5	<0.5	0.3
10640/BH103/0.15-0.2	**20 Feb 2025**	<0.2	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.05
10640/BH101/0.3-0.4	**20 Feb 2025**	<0.2	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.05
10640/BH101/0.4-0.5	**20 Feb 2025**	<0.2	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.05
10640/BH103/0.3-0.4	**20 Feb 2025**	<0.2	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.05
10640/BH102/0.7-0.8	**20 Feb 2025**																			
Statistics																				
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
Minimum Concentration		**<0.2**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.05**	**<0.1**	**<0.1**	**<0.1**	**0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0.1**	**<0.5**	**<0.5**	**<0.5**	**<0.05**
Maximum Concentration		**<0.2**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0.06**	**<0.1**	**<0.1**	**<0.1**	**0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0.1**	**<0.5**	**<0.5**	**<0.5**	**0.3**
% of Detects		**0**	**0**	**0**	**0**	**0**	**17**	**0**	**0**	**0**	**17**	**0**	**0**	**0**	**0**	**17**	**0**	**0**	**0**	**17**

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NEPM, NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil
2013, NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil
2013, NEPM 2013 Table 1A(1) HILs Res A Soil

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Site Contamination Assessment
Proposed Rezoning: 15 Echo Street, Roseville, NSW

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		BTEX							TRH							TPH				
		Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		1	0.2	0.5	1	2	1	1	25	25	50	50	100	100	50	25	50	100	100	50
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil									700		1,000		2,500	10,000						
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand (>=0m, <1m)		3	0.5	160	55			40		45		110								
NEPM 2013 Table 1B(5) Generic and Site Specific EIL - Urban Res & Public Open Space		170																		
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil			50	85	70			105		180	120	120	300	2,800						
NEPM 2013 Table 1A(1) HILs Res A Soil																				
Field ID	**Date**																			
10640/BH101/0.1-0.2	**20 Feb 2025**	<1	<0.2	<0.5	<1	<2	<1	<1	<25	<25	<50	<50	<100	<100	<50	<25	<50	<100	<100	<50
10640/BH102/0.1-0.2	**20 Feb 2025**	<1	<0.2	<0.5	<1	<2	<1	<1	<25	<25	<50	<50	<100	<100	<50	<25	<50	<100	<100	<50
10640/BH103/0.15-0.2	**20 Feb 2025**	<1	<0.2	<0.5	<1	<2	<1	<1	<25	<25	<50	<50	<100	<100	<50	<25	<50	<100	<100	<50
10640/BH101/0.3-0.4	**20 Feb 2025**	<1	<0.2	<0.5	<1	<2	<1	<1	<25	<25	<50	<50	<100	<100	<50	<25	<50	<100	<100	<50
10640/BH101/0.4-0.5	**20 Feb 2025**	<1	<0.2	<0.5	<1	<2	<1	<1	<25	<25	<50	<50	<100	<100	<50	<25	<50	<100	<100	<50
10640/BH103/0.3-0.4	**20 Feb 2025**	<1	<0.2	<0.5	<1	<2	<1	<1	<25	<25	<50	<50	<100	<100	<50	<25	<50	<100	<100	<50
10640/BH102/0.7-0.8	**20 Feb 2025**																			
Statistics																				
Number of Results		**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**<1**	**<0.2**	**<0.5**	**<1**	**<2**	**<1**	**<1**	**<25**	**<25**	**<50**	**<50**	**<100**	**<100**	**<50**	**<25**	**<50**	**<100**	**<100**	**<50**
Maximum Concentration		**<1**	**<0.2**	**<0.5**	**<1**	**<2**	**<1**	**<1**	**<25**	**<25**	**<50**	**<50**	**<100**	**<100**	**<50**	**<25**	**<50**	**<100**	**<100**	**<50**
% of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Environmental Standards
NEPM, NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil
2013, NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil
2013, NEPM 2013 Table 1A(1) HILs Res A Soil

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Site Contamination Assessment
Proposed Rezoning: 15 Echo Street, Roseville, NSW

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		Organochlorine Pesticides																			
		4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan (total)	Endosulfan sulphate	Endrin	Endrin aldehyde	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																					
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand (>=0m, <1m)																					
NEPM 2013 Table 1B(5) Generic and Site Specific EIL - Urban Res & Public Open Space											180										
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																					
NEPM 2013 Table 1A(1) HILs Res A Soil					6							240		270		10			6		300
Field ID	**Date**																				
10640/BH101/0.1-0.2	**20 Feb 2025**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
10640/BH102/0.1-0.2	**20 Feb 2025**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
10640/BH103/0.15-0.2	**20 Feb 2025**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
10640/BH101/0.3-0.4	**20 Feb 2025**																				
10640/BH101/0.4-0.5	**20 Feb 2025**																				
10640/BH103/0.3-0.4	**20 Feb 2025**																				
10640/BH102/0.7-0.8	**20 Feb 2025**																				
Statistics																					
Number of Results		**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Maximum Concentration		**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
% of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Environmental Standards
NEPM, NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil
2013, NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil
2013, NEPM 2013 Table 1A(1) HILs Res A Soil

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Site Contamination Assessment
Proposed Rezoning: 15 Echo Street, Roseville, NSW

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		Organophosphorous Pesticides																	
		Azinophos methyl	Bromophos-ethyl	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethion	Fenitrothion	Fenthion	Malathion	Methidathion	Methyl parathion	Mevinphos (Phosdrin)	Phorate	Ronnel
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																			
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand (>=0m, <1m)																			
NEPM 2013 Table 1B(5) Generic and Site Specific EIL - Urban Res & Public Open Space																			
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																			
NEPM 2013 Table 1A(1) HILs Res A Soil				160															
Field ID	**Date**																		
10640/BH101/0.1-0.2	**20 Feb 2025**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
10640/BH102/0.1-0.2	**20 Feb 2025**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
10640/BH103/0.15-0.2	**20 Feb 2025**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
10640/BH101/0.3-0.4	**20 Feb 2025**																		
10640/BH101/0.4-0.5	**20 Feb 2025**																		
10640/BH103/0.3-0.4	**20 Feb 2025**																		
10640/BH102/0.7-0.8	**20 Feb 2025**																		
Statistics																			
Number of Results		**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
Maximum Concentration		**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
% of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Environmental Standards
NEPM, NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil
2013, NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil
2013, NEPM 2013 Table 1A(1) HILs Res A Soil

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Site Contamination Assessment
Proposed Rezoning: 15 Echo Street, Roseville, NSW

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		Pesticides			PCBs								Asbestos
		Fenamiphos	Mirex	Parathion	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	Asbestos fibres
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	Detect
EQL		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil													
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand (>=0m, <1m)													
NEPM 2013 Table 1B(5) Generic and Site Specific EIL - Urban Res & Public Open Space													
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil													
NEPM 2013 Table 1A(1) HILs Res A Soil			10									1	
Field ID	**Date**												
10640/BH101/0.1-0.2	**20 Feb 2025**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
10640/BH102/0.1-0.2	**20 Feb 2025**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
10640/BH103/0.15-0.2	**20 Feb 2025**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
10640/BH101/0.3-0.4	**20 Feb 2025**												
10640/BH101/0.4-0.5	**20 Feb 2025**												
10640/BH103/0.3-0.4	**20 Feb 2025**												
10640/BH102/0.7-0.8	**20 Feb 2025**												
Statistics													
Number of Results		**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0**
Maximum Concentration		**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0**
% of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Environmental Standards
NEPM, NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil
2013, NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil
2013, NEPM 2013 Table 1A(1) HILs Res A Soil

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Site Contamination Assessment
Proposed Rezoning: 15 Echo Street, Roseville, NSW

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		Other	Halogenated Benzenes	Inorganics						
		Phosalone	Hexachlorobenzene	Moisture Content	Exchangeable Calcium	pH 1:5 soil:water	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity
		mg/kg	mg/kg	%	meq/100g	-	meq/100g	meq/100g	meq/100g	meq/100g
EQL		0.1	0.1	0.1	0.1		0.1	0.1	0.1	1
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil										
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand (>=0m, <1m)										
NEPM 2013 Table 1B(5) Generic and Site Specific EIL - Urban Res & Public Open Space										
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil										
NEPM 2013 Table 1A(1) HILs Res A Soil			10							
Field ID	**Date**									
10640/BH101/0.1-0.2	**20 Feb 2025**	<0.1	<0.1	0.6						
10640/BH102/0.1-0.2	**20 Feb 2025**	<0.1	<0.1	6.9						
10640/BH103/0.15-0.2	**20 Feb 2025**	<0.1	<0.1	11						
10640/BH101/0.3-0.4	**20 Feb 2025**			5.2						
10640/BH101/0.4-0.5	**20 Feb 2025**			5						
10640/BH103/0.3-0.4	**20 Feb 2025**			5.5						
10640/BH102/0.7-0.8	**20 Feb 2025**				2.4	5.0	0.3	<0.1	<0.1	2.8
Statistics										
Number of Results		**3**	**3**	**6**	**1**	**1**	**1**	**1**	**1**	**1**
Number of Detects		**0**	**0**	**6**	**1**	**1**	**1**	**0**	**0**	**1**
Minimum Concentration		**<0.1**	**<0.1**	**0.6**	**2.4**	**5**	**0.3**	**<0.1**	**<0.1**	**2.8**
Maximum Concentration		**<0.1**	**<0.1**	**11**	**2.4**	**5**	**0.3**	**<0.1**	**<0.1**	**2.8**
% of Detects		**0**	**0**	**100**	**100**	**100**	**100**	**0**	**0**	**100**

Environmental Standards
NEPM, NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil
2013, NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand
2013, NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil
2013, NEPM 2013 Table 1A(1) HILs Res A Soil

Appendix L – Laboratory Analytical Documentation

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CERTIFICATE OF ANALYSIS 373701

Client Details

Client	Martens & Associates Pty Ltd
Attention	Bryson Monaghan
Address	Suite 201, 20 George St, Hornsby, NSW, 2077

Sample Details

Your Reference	**P2410640: 15 Echo Street, Roseville, NSW**
Number of Samples	10 Soil
Date samples received	21/02/2025
Date completed instructions received	24/02/2025

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	28/02/2025
Date of Issue	28/02/2025

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Asbestos Approved By
Analysed by Asbestos Approved Analyst: Lucy Zhu
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Dragana Tomas, Senior Chemist
Giovanni Agosti, Group Technical Manager
Josh Williams, Senior R&D Chemist
Liam Timmins, Organics Supervisor
Lucy Zhu, Asbestos Supervisor
Nancy Zhang, Laboratory Manager, Sydney

Authorised By
Nancy Zhang, Laboratory Manager

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		373701-1	373701-2	373701-3	373701-5	373701-7
Your Reference	UNITS	10640/BH101/0.1-0.2	10640/BH101/0.4-0.5	10640/BH102/0.1-0.2	10640/BH103/0.15-0.2	Trip Spike
Date Sampled		20/02/2025	20/02/2025	20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	24/02/2025	24/02/2025	24/02/2025	24/02/2025	24/02/2025
Date analysed	-	24/02/2025	24/02/2025	24/02/2025	24/02/2025	24/02/2025
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	[NA]
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	[NA]
vTRH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	[NA]
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	100%
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	99%
Ethylbenzene	mg/kg	<1	<1	<1	<1	100%
m+p-xylene	mg/kg	<2	<2	<2	<2	100%
o-Xylene	mg/kg	<1	<1	<1	<1	100%
Naphthalene	mg/kg	<1	<1	<1	<1	[NA]
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	[NA]
Surrogate aaa-Trifluorotoluene	%	97	98	95	93	90

vTRH(C6-C10)/BTEXN in Soil				
Our Reference		373701-8	373701-9	373701-10
Your Reference	UNITS	Trip Blank	10640/BH101/0.3-0.4	10640/BH103/0.3-0.4
Date Sampled		20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil
Date extracted	-	24/02/2025	24/02/2025	24/02/2025
Date analysed	-	24/02/2025	27/02/2025	27/02/2025
TRH C_6 - C_9	mg/kg	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25
vTRH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	100	90	95

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

svTRH (C10-C40) in Soil						
Our Reference		373701-1	373701-2	373701-3	373701-5	373701-9
Your Reference	UNITS	10640/BH101/0.1-0.2	10640/BH101/0.4-0.5	10640/BH102/0.1-0.2	10640/BH103/0.15-0.2	10640/BH101/0.3-0.4
Date Sampled		20/02/2025	20/02/2025	20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	24/02/2025	24/02/2025	24/02/2025	24/02/2025	24/02/2025
Date analysed	-	24/02/2025	24/02/2025	24/02/2025	24/02/2025	26/02/2025
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	73	70	66	69	85

svTRH (C10-C40) in Soil		
Our Reference		373701-10
Your Reference	UNITS	10640/BH103/0.3-0.4
Date Sampled		20/02/2025
Type of sample		Soil
Date extracted	-	24/02/2025
Date analysed	-	26/02/2025
TRH C_{10} - C_{14}	mg/kg	<50
TRH C_{15} - C_{28}	mg/kg	<100
TRH C_{29} - C_{36}	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C_{10} -C_{16}	mg/kg	<50
TRH >C_{10} -C_{16} less Naphthalene (F2)	mg/kg	<50
TRH >C_{16} -C_{34}	mg/kg	<100
TRH >C_{34} -C_{40}	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	88

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

PAHs in Soil						
Our Reference		373701-1	373701-2	373701-3	373701-5	373701-9
Your Reference	UNITS	10640/BH101/0.1-0.2	10640/BH101/0.4-0.5	10640/BH102/0.1-0.2	10640/BH103/0.15-0.2	10640/BH101/0.3-0.4
Date Sampled		20/02/2025	20/02/2025	20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	24/02/2025	24/02/2025	24/02/2025	24/02/2025	24/02/2025
Date analysed	-	25/02/2025	25/02/2025	25/02/2025	25/02/2025	26/02/2025
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	0.06	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	0.3	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	101	84	98	95	110

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

PAHs in Soil		
Our Reference		373701-10
Your Reference	UNITS	10640/BH103/0.3-0.4
Date Sampled		20/02/2025
Type of sample		Soil
Date extracted	-	24/02/2025
Date analysed	-	26/02/2025
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate p-Terphenyl-d14	%	104

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

Organochlorine Pesticides in soil				
Our Reference		373701-1	373701-3	373701-5
Your Reference	UNITS	10640/BH101/0.1-0.2	10640/BH102/0.1-0.2	10640/BH103/0.15-0.2
Date Sampled		20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil
Date extracted	-	24/02/2025	24/02/2025	24/02/2025
Date analysed	-	25/02/2025	25/02/2025	25/02/2025
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Mirex	mg/kg	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Total Positive Aldrin+Dieldrin	mg/kg	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	106	101	98

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

Organophosphorus Pesticides in Soil				
Our Reference		373701-1	373701-3	373701-5
Your Reference	UNITS	10640/BH101/0.1-0.2	10640/BH102/0.1-0.2	10640/BH103/0.15-0.2
Date Sampled		20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil
Date extracted	-	24/02/2025	24/02/2025	24/02/2025
Date analysed	-	25/02/2025	25/02/2025	25/02/2025
Dichlorvos	mg/kg	<0.1	<0.1	<0.1
Mevinphos	mg/kg	<0.1	<0.1	<0.1
Phorate	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1
Disulfoton	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1
Parathion-Methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1
Fenthion	mg/kg	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Methidathion	mg/kg	<0.1	<0.1	<0.1
Fenamiphos	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Phosalone	mg/kg	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1
Coumaphos	mg/kg	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	106	101	98

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

PCBs in Soil				
Our Reference		373701-1	373701-3	373701-5
Your Reference	UNITS	10640/BH101/0.1-0.2	10640/BH102/0.1-0.2	10640/BH103/0.15-0.2
Date Sampled		20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil
Date extracted	-	24/02/2025	24/02/2025	24/02/2025
Date analysed	-	25/02/2025	25/02/2025	25/02/2025
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1
Surrogate 2-Fluorobiphenyl	%	102	97	95

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

Acid Extractable metals in soil						
Our Reference		373701-1	373701-2	373701-3	373701-5	373701-6
Your Reference	UNITS	10640/BH101/0.1-0.2	10640/BH101/0.4-0.5	10640/BH102/0.1-0.2	10640/BH103/0.15-0.2	DUP01
Date Sampled		20/02/2025	20/02/2025	20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/02/2025	24/02/2025	24/02/2025	24/02/2025	24/02/2025
Date analysed	-	27/02/2025	27/02/2025	27/02/2025	27/02/2025	27/02/2025
Arsenic	mg/kg	<4	<4	5	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	1	6	3	8	1
Copper	mg/kg	2	5	2	7	2
Lead	mg/kg	5	6	4	24	5
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	<1	6	<1	2	<1
Zinc	mg/kg	9	12	20	72	8

Acid Extractable metals in soil			
Our Reference		373701-9	373701-10
Your Reference	UNITS	10640/BH101/0.3-0.4	10640/BH103/0.3-0.4
Date Sampled		20/02/2025	20/02/2025
Type of sample		Soil	Soil
Date prepared	-	27/02/2025	27/02/2025
Date analysed	-	27/02/2025	27/02/2025
Arsenic	mg/kg	<4	<4
Cadmium	mg/kg	<0.4	<0.4
Chromium	mg/kg	13	7
Copper	mg/kg	1	4
Lead	mg/kg	6	4
Mercury	mg/kg	<0.1	<0.1
Nickel	mg/kg	3	8
Zinc	mg/kg	7	20

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

Moisture						
Our Reference		373701-1	373701-2	373701-3	373701-5	373701-6
Your Reference	UNITS	10640/BH101/0.1-0.2	10640/BH101/0.4-0.5	10640/BH102/0.1-0.2	10640/BH103/0.15-0.2	DUP01
Date Sampled		20/02/2025	20/02/2025	20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/02/2025	24/02/2025	24/02/2025	24/02/2025	24/02/2025
Date analysed	-	25/02/2025	25/02/2025	25/02/2025	25/02/2025	25/02/2025
Moisture	%	0.6	5.0	6.9	11	0.8

Moisture			
Our Reference		373701-9	373701-10
Your Reference	UNITS	10640/BH101/0.3-0.4	10640/BH103/0.3-0.4
Date Sampled		20/02/2025	20/02/2025
Type of sample		Soil	Soil
Date prepared	-	24/02/2025	24/02/2025
Date analysed	-	25/02/2025	25/02/2025
Moisture	%	5.2	5.5

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

Asbestos ID - soils				
Our Reference		373701-1	373701-3	373701-5
Your Reference	UNITS	10640/BH101/0.1-0.2	10640/BH102/0.1-0.2	10640/BH103/0.15-0.2
Date Sampled		20/02/2025	20/02/2025	20/02/2025
Type of sample		Soil	Soil	Soil
Date analysed	-	25/02/2025	25/02/2025	25/02/2025
Sample mass tested	g	Approx. 40g	Approx. 35g	Approx. 30g
Sample Description	-	Brown sandy soil	Brown sandy soil	Brown sandy soil
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	Nil	Nil	Nil
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

Misc Inorg - Soil		
Our Reference		373701-4
Your Reference	UNITS	10640/BH102/0.7 -0.8
Date Sampled		20/02/2025
Type of sample		Soil
Date prepared	-	24/02/2025
Date analysed	-	24/02/2025
pH 1:5 soil:water	pH Units	5.0

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

CEC		
Our Reference		373701-4
Your Reference	UNITS	10640/BH102/0.7 -0.8
Date Sampled		20/02/2025
Type of sample		Soil
Date prepared	-	26/02/2025
Date analysed	-	26/02/2025
Exchangeable Ca	meq/100g	2.4
Exchangeable K	meq/100g	<0.1
Exchangeable Mg	meq/100g	0.3
Exchangeable Na	meq/100g	<0.1
Cation Exchange Capacity	meq/100g	2.8

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
Inorg-001	pH - Measured using pH meter and electrode. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES. Total Phosphate determined stochiometrically from Phosphorus (assumed to be present as Phosphate). Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.
Metals-020	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-OES analytical finish.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021/022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD and/or GC-MS/GC-MSMS. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.

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Method ID	Methodology Summary
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

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QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
Date analysed	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	117	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	117	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	107	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	112	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	120	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	122	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	124	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	81	[NT]	[NT]	[NT]	[NT]	104	[NT]

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QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
Date analysed	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	86	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	84	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	86	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	84	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
Surrogate o-Terphenyl	%		Org-020	82	[NT]	[NT]	[NT]	[NT]	72	[NT]

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
Date analysed	-			26/02/2025	[NT]	[NT]	[NT]	[NT]	25/02/2025	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	80	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	76	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	76	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	76	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	76	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	117	[NT]	[NT]	[NT]	[NT]	89	[NT]

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QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
Date analysed	-			25/02/2025	[NT]	[NT]	[NT]	[NT]	25/02/2025	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
HCB	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	82	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	82	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Endrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Mirex	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	102	[NT]	[NT]	[NT]	[NT]	96	[NT]

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QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
Date analysed	-			25/02/2025	[NT]	[NT]	[NT]	[NT]	25/02/2025	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Mevinphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Phorate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Disulfoton	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Parathion-Methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Malathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Fenthion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Methidathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fenamiphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Phosalone	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Coumaphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	102	[NT]	[NT]	[NT]	[NT]	96	[NT]

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QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
Date analysed	-			25/02/2025	[NT]	[NT]	[NT]	[NT]	25/02/2025	[NT]
Aroclor 1016	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	80	[NT]
Aroclor 1260	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate 2-Fluorobiphenyl	%		Org-021/022/025	97	[NT]	[NT]	[NT]	[NT]	93	[NT]

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QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date prepared	-			27/02/2025	[NT]	[NT]	[NT]	[NT]	27/02/2025	[NT]
Date analysed	-			27/02/2025	[NT]	[NT]	[NT]	[NT]	27/02/2025	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	108	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	100	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	102	[NT]

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QUALITY CONTROL: Misc Inorg - Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
Date analysed	-			24/02/2025	[NT]	[NT]	[NT]	[NT]	24/02/2025	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	[NT]	[NT]	[NT]	[NT]	102	[NT]

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QUALITY CONTROL: CEC						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			26/02/2025	[NT]	[NT]	[NT]	[NT]	26/02/2025	[NT]
Date analysed	-			26/02/2025	[NT]	[NT]	[NT]	[NT]	26/02/2025	[NT]
Exchangeable Ca	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Exchangeable K	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Exchangeable Mg	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Exchangeable Na	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	89	[NT]

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Result Definitions	
NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Client Reference: P2410640: 15 Echo Street, Roseville, NSW

Report Comments

Asbestos: A portion of the supplied sample was sub-sampled for asbestos according to ASB-001 asbestos subsampling procedure. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab/MPL recommends supplying 40-60g or 500ml of sample in its own container.
Note: Samples 373701-1, 3, 5 were sub-sampled from jars provided by the client.

Appendix M – COC and SRA

Anna Bui

From: Bryson Monaghan <bmonaghan@martens.com.au>
Sent: Monday, 24 February 2025 12:13 PM
To: Envirolab Sydney Sample Receipt
Cc: Gray Taylor; Ben McGiffin
Subject: RE: [10640] Envirolab Ref 373701 amend COC
Attachments: P2410640COC01V02 250224.pdf; P2410640COC01V01.docx

CAUTION: This email originated from outside of the organisation. Do not act on instructions, click links or open attachments unless you recognise the sender and know the content is authentic and safe.

Hi Envirolab,

Amended COC attached.

Please let me know if sample 10640/BH101/ 0.4-0.5 testing is unable to be changed.

Thank you,

From: Bryson Monaghan
Sent: Monday, 24 February 2025 11:58 AM
To: Envirolab Sydney Sample Receipt <Samplereceipt@envirolab.com.au>
Cc: Gray Taylor <gtaylor@martens.com.au>; Ben McGiffin <bmcgiffin@martens.com.au>
Subject: [10640] Envirolab Ref 373701 amend COC

Hi Envirolab,

In regards to P10640 / Envirolab Ref 373701; **two additional samples** for **Combo 3**, delivered this afternoon.

- 10640/BH101/0.3-0.4
- 10640/BH103/0.3-0.4

Would it be possible to change sample **10640/BH101/ 0.4-0.5** testing to **Combo 3** instead of previous COC requesting Combo 6a.

Thank you,

Bryson Monaghan
Environmental Consultant

T + 61-2-9476-9999 | **M** + 61-424-842-663
E bmonaghan@martens.com.au
Suite 201, 20 George Street, Hornsby, NSW 2077

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martens
environmental science & engineering

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Coc 21/2/25 1009

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ANALYSIS CHAIN OF CUSTODY FORM

Project											
Name	P2410640: 15 Echo Street, Roseville, NSW										
Martens Contact Officer	Bryson Monaghan				**Contact Email**	bmonaghan@martens.com.au					
Sampling and Shipping	**Sample Date**	20/02/2025	**Dispatch Date**		21/02/2025	**Turnaround Time**			standard		
	Our Reference	P2410640COC01V01			**Shipping Method (X)**	**Hand**		**Post**		**Courier**	X
	On Ice (X)		**No Ice (X)**		**Other (X)**	X	Ice Bricks				
Laboratory											
Name	Envirolab Services Pty Ltd										
Sample Delivery Address	12 Ashley Street, Chatswood New South Wales 2067										
Instructions											
Delivery Contact	**Name**		**Phone**	02 99106200	**Fax**		**Email**	Samplereceipt@envirolabservices.com.au			
Please Send Report By (X)	**Post**		**Fax**		**Email**	X	**Reporting Email Address**	bmonaghan@martens.com.au; bmcgiffin@martens.com.au			

	Sample ID	Combo 6a	pH	CEC	8 HMs	BTEX	TRH
1	10640/BH101/0.1-0.2	X					
2	10640/BH101/0.4-0.5	X					
3	10640/BH102/0.1-0.2	X					
4	10640/BH102/0.7-0.8		X	X			
5	10640/BH103/0.15-0.2	X					
6	DUP01				X		
7	Trip Spike					X	
8	Trip Blank					X	X

Envirolab Services
ENVIROLAB 12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200
Job No. 377701
Date Received: 21/02/25
Time Received: 1200
Received By:
Temp: Cool/Ambient
Cooling: Ice/Icepack 12 °C
Security: Intact/Broken/None

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Suite 201, 20 George St
Hornsby NSW 2077, Australia
Ph 02 9476 9999 **Fax** 02 9476 8767

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> www.martens.com.au
MARTENS & ASSOCIATES P/L
ABN 85 070 240 890 ACN 070 240 890

Updated: 24/2/25 1213

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ANALYSIS CHAIN OF CUSTODY FORM

Project											
Name	P2410640: 15 Echo Street, Roseville, NSW										
Martens Contact Officer	Bryson Monaghan				**Contact Email**	bmonaghan@martens.com.au					
Sampling and Shipping	**Sample Date**	20/02/2025	**Dispatch Date**	21-24/02/2025	**Turnaround Time**	standard					
	Our Reference	P2410640COC01V02			**Shipping Method (X)**	**Hand**		**Post**		**Courier**	X
	On Ice (X)		**No Ice (X)**		**Other (X)**	X	Ice Bricks				
Laboratory											
Name	Envirolab Services Pty Ltd										
Sample Delivery Address	12 Ashley Street, Chatswood New South Wales 2067										
Instructions											
Delivery Contact	**Name**		**Phone**	02 99106200	**Fax**		**Email**	Samplereceipt@envirolabservices.com.au			
Please Send Report By (X)	**Post**		**Fax**		**Email**	X	**Reporting Email Address**	bmonaghan@martens.com.au; bmcgiffin@martens.com.au			

	Sample ID	Combo 6a	pH	CEC	8 HMs	BTEX	TRH	Combo 3	
1	10640/BH101/0.1-0.2	X							
9	10460/BH101/0.3-0.4							X	
2	10640/BH101/0.4-0.5							X	
3	10640/BH102/0.1-0.2	X							
4	10640/BH102/0.7-0.8		X	X					
5	10640/BH103/0.15-0.2	X							
10	10460/BH103/0.3-0.4							X	
6	DUP01				X				
7	Trip Spike					X			
8	Trip Blank					X	X		

373701

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ABN 85 070 240 890 ACN 070 240 890

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ANALYSIS CHAIN OF CUSTODY FORM

Project											
Name	P2410640: 15 Echo Street, Roseville, NSW										
Martens Contact Officer	Bryson Monaghan				**Contact Email**	bmonaghan@martens.com.au					
Sampling and Shipping	**Sample Date**	20/02/2025	**Dispatch Date**	21-24/02/2025	**Turnaround Time**	standard					
	Our Reference	P2410640COC01V02			**Shipping Method (X)**	**Hand**		**Post**		**Courier**	X
	On Ice (X)		**No Ice (X)**		**Other (X)**	X	Ice Bricks				
Laboratory											
Name	Envirolab Services Pty Ltd										
Sample Delivery Address	12 Ashley Street, Chatswood New South Wales 2067										
Instructions											
Delivery Contact	**Name**		**Phone**	02 99106200	**Fax**		**Email**	Samplereceipt@envirolabservices.com.au			
Please Send Report By (X)	**Post**		**Fax**		**Email**	X	**Reporting Email Address**	bmonaghan@martens.com.au; bmcgiffin@martens.com.au			

Sample ID	Combo 6a	pH	CEC	8 HMs	BTEX	TRH	Combo 3	
10640/BH101/0.1-0.2	X							
10460/BH101/0.3-0.4							X	
10640/BH101/0.4-0.5	*X* Change						X	
10640/BH102/0.1-0.2	X							
10640/BH102/0.7-0.8		X	X					
10640/BH103/0.15-0.2	X							
10460/BH103/0.3-0.4							X	
DUP01				X				
Trip Spike					X			
Trip Blank					X	X		

373701
241115
AW

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ABN 85 070 240 890 ACN 070 240 890

SOIL ANALYSIS CHAIN OF CUSTODY

Page of

	Amended COC – Envirolab Ref 373701 - two additional samples for Combo 3 (10640/BH101/0.3-0.4 and 10640/BH103/0.3-0.4). - 10640/BH101/ 0.4-0.5 change testing to Combo 3.

373701
24/11/25

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details	
Client	Martens & Associates Pty Ltd
Attention	Bryson Monaghan

Sample Login Details	
Your reference	P2410640: 15 Echo Street, Roseville, NSW
Envirolab Reference	373701
Date Sample Received	21/02/2025
Date Instructions Received	24/02/2025
Date Results Expected to be Reported	28/02/2025

Sample Condition	
Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	10 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	12
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments
Additional samples arrived in lab 24/02/2025 1715, updated COC provided as well

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Acid Extractable metalsin soil	Asbestos ID - soils	Misc Inorg - Soil	CEC
10640/BH101/0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		
10640/BH101/0.4-0.5	✓	✓	✓				✓			
10640/BH102/0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		
10640/BH102/0.7-0.8									✓	✓
10640/BH103/0.15-0.2	✓	✓	✓	✓	✓	✓	✓	✓		
DUP01							✓			
Trip Spike	✓									
Trip Blank	✓									
10640/BH101/0.3-0.4	✓	✓	✓				✓			
10640/BH103/0.3-0.4	✓	✓	✓				✓			

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info
Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

Appendix N – EIL Calculation Sheets

Inputs
Select contaminant from list below
As
Below needed to calculate fresh and aged ACLs
Below needed to calculate fresh and aged ABCs
or for fresh ABCs only
or for aged ABCs only

Outputs		
Land use	Arsenic generic EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	20	40
Urban residential and open public spaces	50	100
Commercial and industrial	80	160

Inputs
Select contaminant from list below
Cr_III
Below needed to calculate fresh and aged ACLs
Enter % clay (values from 0 to 100%)
10
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
7
or for aged ABCs only
Enter State (or closest State)
NSW
Enter traffic volume (high or low)
low

Outputs		
Land use	Cr III soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	130	140
Urban residential and open public spaces	230	410
Commercial and industrial	340	670

Inputs
Select contaminant from list below
Cu
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
2.8
Enter soil pH (calcium chloride method) (values from 1 to 14)
5
Enter organic carbon content (%OC) (values from 0 to 50%)
10
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
7
or for aged ABCs only
Enter State (or closest State)
NSW
Enter traffic volume (high or low)
low

Outputs		
Land use	Cu soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	35	35
Urban residential and open public spaces	45	70
Commercial and industrial	60	90

Inputs
Select contaminant from list below
DDT
Below needed to calculate fresh and aged ACLs
Below needed to calculate fresh and aged ABCs
or for fresh ABCs only
or for aged ABCs only

Outputs		
Land use	DDT generic EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	3	3
Urban residential and open public spaces	180	180
Commercial and industrial	640	640

Inputs
Select contaminant from list below
Naphthalene
Below needed to calculate fresh and aged ACLs
Below needed to calculate fresh and aged ABCs
or for fresh ABCs only
or for aged ABCs only

Outputs		
Land use	Naphthalene generic EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	10	10
Urban residential and open public spaces	170	170
Commercial and industrial	370	370

Inputs
Select contaminant from list below
Ni
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
2.8
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
7
or for aged ABCs only
Enter State (or closest State)
NSW
Enter traffic volume (high or low)
low

Outputs		
Land use	Ni soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	25	6
Urban residential and open public spaces	30	15
Commercial and industrial	30	20

Inputs
Select contaminant from list below
Pb
Below needed to calculate fresh and aged ACLs
Below needed to calculate fresh and aged ABCs
or for fresh ABCs only
or for aged ABCs only

Outputs		
Land use	Lead generic EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	110	470
Urban residential and open public spaces	270	1100
Commercial and industrial	440	1800

Inputs
Select contaminant from list below
Zn
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
2.8
Enter soil pH (calcium chloride method) (values from 1 to 14)
5
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
7
or for aged ABCs only
Enter State (or closest State)
NSW
Enter traffic volume (high or low)
low

Outputs		
Land use	Zn soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	40	95
Urban residential and open public spaces	65	170
Commercial and industrial	85	210

Appendix O – Unexpected Finds Protocol

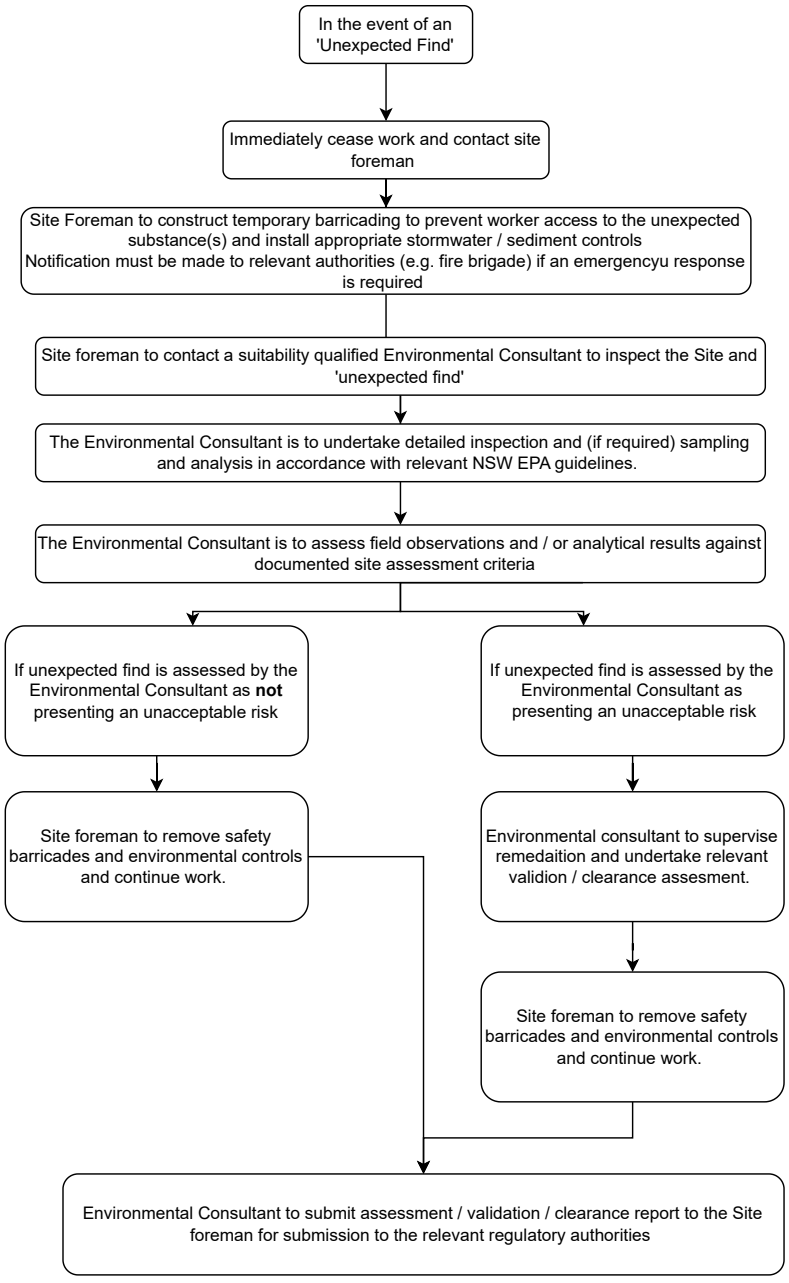
All site personnel are to be aware of their responsibilities under the unexpected finds protocol and are to report any potential signs of contamination (e.g., observed PACM, petroleum and / or oil spills, chemical odours or staining) to the site foreman immediately.

In the event of uncovering unexpected finds during remedial works, the following steps are to be undertaken by the contractor:

1. Cease all work in the area and notify site foreman / manager and environmental consultant.
2. Notify any relevant authorities (e.g., fire brigade) if an emergency response is required.
3. Construct temporary barricading to prevent worker / public access to any unexpected and / or unknown substances.
4. Install appropriate stormwater diversion and sediment controls as required.
5. Notify relevant authorities that the contractor is legally required to notify (e.g., NSW EPA and / or Council).
6. Site foreman / manager is to arrange site inspection by the environmental consultant to assess the unexpected find and determine if any further investigation, management or remedial action is required in the area.
7. The environmental consultant is to prepare an assessment and, if required, validation of each unexpected find to the contractor prior to the recommencing of works ceased as a result of the unexpected find.

A flow chart outlining general procedures to be adopted is provide below.

martens & Associates Pty Ltd





Arboricultural Impact Assessment

15 Echo Street Roseville

Proposed Rezoning Application

Prepared for Chapman Planning Pty Ltd

Prepared 17 April 2025, updated 2 May 2025

by
Jacki Brown
Arboricultural Consultant
BA, Dip. Hort (Arb), Dip. Hort (Landsc.),
Cert. III Cons. & Land Mgmt (Nat. Area Restoration)
Accredited Member Institute of Australian Consulting Arboriculturists (IACA)
Member International Society of Arboriculture (ISA)

Issue Date	Revision Description	Issue No.	Ref.
17/04/2025	Arboricultural Impact Assessment completed & issued	1	NL_15 Echo_AIA_170425
22/04/2025	Arboricultural Impact Assessment updated & issued	2	NL_15 Echo_AIA_2204255
2/05/2025	Arboricultural Impact Assessment amended & issued	3	NL_15 Echo_AIA_020525

Executive Summary

This Arboricultural Impact Assessment (AIA) report has been prepared for Chapman Planning Pty Ltd, to assist in the assessment of a Rezoning Application to be submitted to Ku-Ring-Gai Council in relation to a rezoning application of one lot (Lot 6 in DP 14906) from RE2 Private Recreation to R2 Low Density Residential at 15 Echo Street, Roseville.

The proposal consists of rezoning only, from RE2 Private Recreation to R2 Low Density Residential, to allow for future redevelopment of the lot as low density residential (to separate development application/s) as described by Chapman Planning Pty Ltd and shown on concept plans by Spiral Architects Lab (which have been prepared for reference to confirm that the site can be developed for low density housing). No building works are proposed in this application.

This report assesses twenty (20) trees within and adjacent to the site, including eight (8) in neighbouring properties (six in Roseville Golf Course, and two in 2 Niblick Ave) and six (6) in the Council road reserve. Details of the species, dimensions, health, and condition of the assessed trees are contained in the **Tree Survey Information Table** (page 8).

In the context of the proposed rezoning, no trees are proposed for removal. Future development will allow for retention of the majority of trees on the site and adjacent land, with likely removal of two (2) trees in the Council verge to allow for future driveway access, as shown on the **Tree Protection Plan** (page 9) and specified in the **Recommendations** (page 7).

The following are the outcomes of the arboricultural impact assessment regarding the trees in the context of the currently proposed works.

	Tree No.'s	Trees Retained in this application	Trees Removed in future application
Trees within the proposed future development footprint	14, 15 (2)	14, 15 (2)	14, 15 (2)
Trees with minor future encroachments	1, 2, 3, 5, 12, and 13 (6)	1, 2, 3, 5, 12, and 13 (6)	12, 13 (possible) (2)
Trees with no / minimal future encroachments	4, 6, 7, 8, 9, 10, 11, 16, 17, 18, 19 and 20 (12)	4, 6, 7, 8, 9, 10, 11, 16, 17, 18, 19 and 20 (12)	-
	20 trees in total	20 trees retained	2 trees removed (up to 4 trees)

Tree Sensitive Planning and Design Recommendation

Engage an AQF Level 5 arborist to provide detailed Arboricultural Impact Assessment during the preliminary planning stage of any future development on the site, with the aim to retain as many trees as possible on and adjacent the site, and protect trees on adjoining properties.

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1.3 The Site 3
1.4 The Trees 3
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1. Introduction

1.1 Summary

This Arboricultural Impact Assessment (AIA) report has been prepared for Chapman Planning Pty Ltd, to assist in the assessment of a Rezoning Application to be submitted to Ku-Ring-Gai Council in relation to a rezoning application of one lot (Lot 6 in DP 14906) from RE2 Private Recreation to R2 Low Density Residential at 15 Echo Street, Roseville. The report is prepared in accordance with Australian Standard *AS4970-2009 – Protection of trees on development sites*.

1.2 Purpose

The purpose of this report is to assess the potential impacts of the proposal on the trees on and adjacent the site, and detail tree protection measures required for retained trees including tree sensitive design and construction measures.

1.3 The Site

The site is a single lot zoned RE2 Private Recreation, located on the eastern side of Echo Street, and is surrounded by low density residential properties to the south, east and west, and Roseville Golf Course to the north, separated by a Council-managed unformed accessway. The property contains a tennis court, verandah and landscaping associated with the residence at 11 Echo Street.

1.4 The Trees

This report assesses twenty (20) trees within and adjacent to the site, including eight (8) in neighbouring properties (six in Roseville Golf Course, and two in 2 Niblick Ave) and six (6) in the Council road reserve. Details of the species, dimensions, health, and condition of the assessed trees are contained in the **Tree Survey Information Table** (page 8).

1.5 The Proposal

The proposal consists of rezoning only, from RE2 Private Recreation to R2 Low Density Residential, to allow for future redevelopment of the lot as low density residential (to separate development application/s) as described by Chapman Planning Pty Ltd and shown on concept plans by Spiral Architects Lab (which have been prepared for reference to confirm that the site can be developed for low density housing). No building works are proposed in this application.

2. Background

2.1 Tree management controls

Ku-ring-gai Development Control Plan (DCP) 2024 Part 13.2 Tree and Vegetation Works applies to any perennial plant 5m or more in height; and plants with a trunk diameter of 150mm or more at ground level. The DCP also applies to natural vegetation. Exemptions include trees within 3m of an existing dwelling or basement where the tree is on the same property as the building, exempt species listed at section 13.2 (11) and pruning of branches over the roof of a dwelling. The trees assessed in this report are subject to the DCP.

2.2 Reference Documents

The following documents were referred to in the preparation of this report:

- Survey Plan: Lawrence Consulting Group, Ref. 241702, 01st March 2024.
- Architectural Concept Plans, Spiral Architects Lab, 26 March 2025.
- Australian Standard *AS4373-2007 Pruning of amenity trees*.
- Australian Standard *AS4970-2009 Protection of trees on development sites*.
- Ku-ring-gai Development Control Plan (DCP) 2024 Part 13.2 *Tree and Vegetation Works*
- Ku-ring-gai Local Environmental Plan (LEP) 2015
- *IACA Significance of a Tree, Assessment Rating System (STARS),* Institute of Australian Consulting Arboriculturists, www.iaca.org.au, 2010.
- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017.

3. Tree Assessment Methodology

3.1 Limitations and Assumptions

The recommendations in this report rely on the provided information, including architectural plans and documents, limited to those listed in section 2.2 (**Reference Documents**).

Care has been taken to obtain all information from reliable sources; however, the author makes no representations, guarantees or warranties as to the accuracy of information provided by others. Similarly, no warranties are made as to the accuracy or completeness of any reproduction of this report. This report is only valid in its entirety and for the purpose for which it was prepared.

Conditions on the site may change after the tree assessment. Liability will not be accepted for damage or injury as a result of unforeseeable events or natural processes.

This report does not constitute or include a tree risk assessment. Where defects are noted, these are recommended for further investigation where warranted. Other tree defects may be present which have not been noted.

3.2 Tree Assessment

Visual tree assessment or "tree survey" was carried out by Jacki Brown, Arboricultural Consultant, in November 2024. The tree inspection was limited to a visual assessment from ground level, without excavation, coring, drilling, climbing or other testing. Trunk diameters were measured at "breast height" (1.4m above ground) and above the root buttress, to the nearest 10mm, using a standard tape measure, crown spreads were paced out on site and recorded in metre diameters or cardinal radii (N, S, E & W) where relevant, and tree heights were estimated by eye and recorded in metres.

The Arboricultural Impact Assessment utilises the Australian Standard *AS4970-2009 Protection of trees on development sites*.

3.3 Tree Survey Data Definitions

Refer to the **Tree Survey Information Table** (page 8).

Retention Values are assigned using the IACA STARS (2010) method and matrix. The method combines the factors of Significance and Estimated or Useful Life Expectancy to provide a value of High, Medium, Low or Remove/Very Low which should form the main metric to inform decision making and prioritising of tree retention.

Useful Life Expectancy (ULE) ranges are estimated for each tree, as either Long (40+ years), Medium (15-40 years), Short (5-15 years) or Remove (less than 5 years). The ratings are based on the assessed health, condition and structure of each tree at the time of assessment, in its specific location and growing context. The ULE does not imply a risk or "safety" measure, or a statement of a tree's retention value. The ratings are not static, and may be revised during future assessments if conditions change.

Significance ratings are given for each tree, based on their Amenity Value, Ecological Value, size and location, and are broadly based on the Tree Significance Assessment Criteria in the IACA STARS (2010) method. While High significance trees provide substantial values to their surroundings, Low and Medium significance trees also contribute to the Urban Forest and in many cases may grow to become High significance trees, given the opportunity.

An ***Amenity Value*** rating of High, Medium or Low has been assigned to each tree, based on the visual, aesthetic, scenic, cultural, heritage, social, and health benefits provided by the tree in its context.

An ***Ecological Value*** rating of High, Medium or Low has been assigned to each tree, based on the species and potential habitat or native animal browsing values, however this should not be taken as ecological advice.

4. Observations and Discussion

4.1 Trees within the Potential Future Development Footprint

Two (2) trees (**Trees 14 and 15**) are located in the Council verge, within the indicative footprint of a future driveway crossover for site access to enable development of the site. These trees are not proposed for removal in the current rezoning application.

4.1.1 Medium Retention Value Trees

One (1) tree (**Trees 14**) is a semimature *Ficus benjamina* (Weeping Fig) located in close proximity to the stone boundary wall at the front of 15 Echo St. This tree's useful life expectancy is limited by its proximity to the wall, as it will increasingly interact with the wall. There are a number of large surface roots within the nature strip/verge, which create a trip hazard at present.

Given the location and eventual size of this species, it is considered that it could, in future, be removed and replaced with a suitable native tree species, further from the property boundary, to replace the urban forest canopy and amenity within the short to medium term. There are currently street tree planting opportunities in the vicinity. Removal and replacement would be subject to future development application and is not proposed within the rezoning application.

One (1) tree (**Trees 15**) is a *Cupressus* (Cypress) tree approaching overmaturity, in average health and condition with sparse foliage and a short to medium useful life expectancy. This tree could also be removed and replaced with a suitable native street tree, to replace the canopy within the short to medium term, as described for Tree 14 above.

4.2 Trees with Minor Encroachment from the Potential Future Development

Six (6) trees (**Trees 1, 2, 3, 5, 12, and 13**) are likely to have minor encroachments from the proposed future residence development, and will require detailed Arboricultural Impact Assessment and tree sensitive design and construction measures at the planning stage of that development, as well as tree protection throughout the works. There is no impact on these trees from the rezoning.

4.2.1 Medium Retention Value Trees Proposed to be Retained

Three (3) large *Cupressus macrocarpa* (Monterey Cypress) trees (**Trees 1, 2 and 3**) will have nominal minor encroachments from the proposed future development of a residential building in place of the current tennis court. These trees are located above a high rock retaining wall over solid rock, and are not considered to have roots existing at the depth of future development (3.5m below the trees' soil surface). Provided that no excavation occurs beyond the retaining wall, these trees will not be impacted by future development.

One (1) *Cinnamomum camphora* (Camphor Laurel) tree (**Tree 5**) will have a nominal minor encroachment from the proposed future development of a residential building. However, the roots of this tree are likely to be mostly constrained by the existing rock wall approximately 1 metre inside the boundary of 15 Echo St. The impacts to this tree could be managed within the future development by maintaining the soil levels behind the existing retaining wall, or carrying out tree sensitive excavation with Project Arborist attendance, to ascertain any roots located behind the wall, and whether pruning of those roots could be done without significant impact on the tree's health or stability. It should be noted that this tree is a nuisance weed species, and weed of bushland.

One (1) large spreading *Ficus benjamina* (Weeping Fig) tree (**Tree 12**) in the Council verge is growing in close proximity to, and has large structural roots growing directly against and along the existing stone retaining wall beneath the tennis court. There are a network of large surface roots in the verge that present trip hazards. As with Tree 14, this tree's useful life expectancy is limited in its current context by the location and eventual size and likely impacts on the stone wall. Future demolition of the tennis court and wall, and development of the site, may result in this tree requiring removal.

One (1) medium sized *Radermachera sinica* (China Doll) tree (**Tree 13**) located in the Council verge, is located less than 1 metre from Tree 12 and approximately 1.5m from the boundary wall. This non-native tree is in average condition, provides a medium amount of amenity, and is being suppressed by Tree 12. This tree may require removal in the context of future development of the site, and can be replaced in the short term with a suitable native tree planting.

4.3 Trees with No Encroachments from the Proposed Development

Twelve (12) trees (**Trees 4, 6, 7, 8, 9, 10, 11, 16, 17, 18, 19 and 20**) are located in positions that will not be impacted by the proposed rezoning, and will have minor or no encroachments from future development of the site, due to their TPZ areas being mostly or wholly outside the subject site.

Tree protection measures will be required to exclude all works access from the retained trees' TPZ areas throughout future works, and further Arboricultural Impact Assessment will be needed during planning stage for future development of the site.

4.4 Conclusion

The proposed rezoning application does not propose or require any works which will impact trees. The indicative plans demonstrate that a dwelling can be designed on the Lot with minimal impacts on trees, and could increase canopy coverage of the site by removing the tennis court.

4.5 Summary

	Tree No.'s	Trees Retained in this application	Trees Removed in future application
Trees within the proposed future development footprint	14, 15 (2)	14, 15 (2)	14, 15 (2)
Trees with minor future encroachments	1, 2, 3, 5, 12, and 13 (6)	1, 2, 3, 5, 12, and 13 (6)	12, 13 (possible) (2)
Trees with no / minimal future encroachments	4, 6, 7, 8, 9, 10, 11, 16, 17, 18, 19 and 20 (12)	4, 6, 7, 8, 9, 10, 11, 16, 17, 18, 19 and 20 (12)	-
	20 trees in total	20 trees retained	2 trees removed (up to 4 trees)

5. Outcomes & Recommendations

5.1 Potential Future Tree Removal

- Two (2) trees (**Tree 14 and 15**) are likely to require removal as part of future site development, as they are within the indicative future driveway crossover, subject to future development consent.
- Two (2) trees (**Trees 12 and 13**) may require removal in the context of future site development, but will be subject to further assessment at the time of planning for the development (to separate application).

5.2 Tree Retention

- Retain and protect all other assessed trees.

5.3 Tree Sensitive Planning and Design

- Engage an AQF Level 5 arborist to provide detailed Arboricultural Impact Assessment during the preliminary planning stage of any future development on the site, with the aim to retain as many trees as possible on and adjacent the site, and protect trees on adjoining properties.

The recommendations of this report do not constitute consent to carry out works. Approval is required in the form of Development Application to prune or remove trees, as well as the consent of the tree owner where trees are on neighbouring properties.

Further information and clarification can be obtained from the author.

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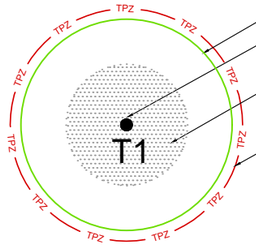
Member of International Society of Arboriculture (ISA)

	Botanical & Common Name	Location	Height	Spread	Calc-ulated Multi Stem DBH (mm)	DBH (mm)	DRB (mm)	Age	Health	Condition	ULE	Significance	Amenity Value	Ecological Value	SRZ	TPZ	Retention Value (STARS)	Site Notes	Development Encroachment	Future Site Development Impact	Outcome
1	*Cupressus macrocarpa* Monterey Cypress	On site	20	6N 3S 3E 6W	970	350/ 900	900	M-O M	G-Av	Av	M	M	H	L	3.2	11.6	Med	Along boundary @ top of high retaining wall & rock fence. Low branches pruned. 2.5m centre to back of wall. Crownlifted. 1 large branch leaning over tennis court 350ø - prune? Soil slumping? In neighbouring property above.	8%	Nominal minor encroachment, but trees are separated from future development area by solid rock 3.5m high wall.	Ret
2	*Cupressus macrocarpa* Monterey Cypress	On site	20	2N 3S 4E 6W		800	850	M-O M	Av	Av	M	M	H	L	3.1	9.6	Med	Along boundary @ top of high retaining wall & rock fence. Large branches pruned. Wound @ base N side - some occlusion, with decay. Crownlifted. Wound on high branch N side. Some dieback. Damage to low branch S side 150ø.	7%	Nominal minor encroachment, but trees are separated from future development area by solid rock 3.5m high wall.	Ret
3	*Cupressus macrocarpa* Monterey Cypress	On site	20	3N 3S 3E 8W		900	900	M-O M	G-Av	Av	M	M	H	L	3.2	10.8	Med	Along boundary @ top of high retaining wall & rock fence. Large rock between T2&3. Termite? E side @ base - possible basal decay. Low branches pruned. Torn collars. Over-extending branch to W over tennis court.	10%	Nominal minor encroachment, but trees are separated from future development area by solid rock 3.5m high wall.	Ret
4	*Lophostemon confertus* Brush Box	Neighbouring	12	8	790	500/ 600	750	M	Av	G	M	M-H	M-H	M	2.9	9.5	Med	4.7m from boundary fence (to N). Somewhat sparse. Deadwood. Wounds on stem S side. Decay @ junction. Exposed roots damaged. Birds nest SE side.	0%	No impact.	Ret
5	*Cinnamomum camphora* Camphor Laurel	Neighbouring	16	10		800	1000	M	G-Av	Av	L	L	M-H	L-W	3.3	9.6	Med	Congested branches & suckers. 4.8m from boundary fence. Surface roots.	9%	Nominal minor encroachment from future proposed dwelling.	Ret
6	*Grevillea robusta* Silky Oak	Neighbouring	18	8		450	550	M	Av	G-Av	M	M	M	M	2.6	5.4	Med	6m from boundary/tennis fence, just W of SMH.	0%	No impact.	Ret
7	*Lophostemon confertus* Brush Box	Neighbouring	10	12	690	500/ 350/ 300/ 100	700 est	OM	P	Av	S	M	M	M	2.8	8.3	Low	1.2m from golf fence & 5m from tennis wall. 2m E of corner of wall. Sparse. Multistem. Lot of deadwood.	0%	No impact.	Ret
8	*Araucaria heterophylla* Norfolk Island Pine	Council verge	9	6		250	300	SM	G	G	L	M	M	M	2.0	3.0	High	1.2m W of brick pillar corner & 3.3m N.	0%	No impact.	Ret
9	*Lophostemon confertus* Brush Box	Neighbouring	11	12		700 est	800 est	M-O M	Av	G	M	M-H	H	M	3.0	8.4	Med	In golf course, somewhat sparse, small foliage size. Surface roots. Deadwood.	0%	No impact.	Ret
10	*Lophostemon confertus* Brush Box	Neighbouring	12	12		800 est	900 est	M	Av	G	M-L	M-H	H	M	3.2	9.6	High	Large branches pruned. Epicormics. Sparse. Dieback. Deadwood - moderate. Small foliage size.	0%	No impact.	Ret

	Botanical & Common Name	Location	Height	Spread	Calc-ulated Multi Stem DBH (mm)	DBH (mm)	DRB (mm)	Age	Health	Condition	ULE	Significance	Amenity Value	Ecological Value	SRZ	TPZ	Retention Value (STARS)	Site Notes	Development Encroachment	Future Site Development Impact	Outcome
11	*Eucalyptus microcorys* Tallowwood	Council verge	15	6		300	350	SM	G-Av	G-Av	M-L	M	M	M	2.1	3.6	High	Lot of large surface roots from T12 populating the verge. Stone kerb, informal gutter.	0%	No impact.	Ret
12	*Ficus benjamina* Weeping Fig	Council verge	10	12	740	400/ 500/ 200/ 300	700	M	G-Av	Av	M	M-H	M-H	M	2.8	8.9	Med	Large exposed roots throughout verge & large buttress parallel against base of stone wall & around corner. Deadwood. Congested branches from 1m. (Trip hazards).	9%	Against existing stone retaining wall. No impact from current proposal if retaining wall is maintained in situ.	Ret
13	*Radermachera sinica* China Doll Tree	Council verge	9	4	250	200/ 150	400	SM	G-Av	Av	M	M	M	L	2.3	3.0	Med	2 stems from base, crossing. Suppressed by T12. Camphor sapling 2m S.	<10%	Nominal minor encroachment from indicative proposed future entry path. No impact from current proposal.	Ret
14	*Ficus benjamina* Weeping Fig	Council verge	8	6	340	200/ 150/ 200/ 100	400	SM	G-Av	Av	M	M	M	M	2.3	4.1	Med	Close to stone wall. Large surface roots toward T15. Branch tearout & large dead branch @ 2m W side (road). Congested branches. Roots around small PVC pipe.	100%	Within future driveway crossover for site access.	Rem
15	*Cupressus funebris* Chinese Weeping Cypress *(or similar)*	Council verge	9	3N 4S 3E 3W	400	300/ 150/ 200	500	M-O M	Av	Av	S-M	M	M	L	2.5	4.8	Med	Sparse. Bulge on trunk. Small girdling Ficus roots.	100%	Within future driveway crossover for site access.	Rem
16	*Lagerstroemia indica* Crepe Myrtle	On site	2.5	4	200	100/ 100/ 100/ 100	300	M	Av	Av-P	S-M	L-M	L-M	L	2.0	2.4	Low	Lopped.	0%	No impact.	Ret
17	*Tibouchina lepidota* Tibouchina	On site	8	5		400	500	OM	Av-P	Av-P	S	L-M	L-M	L	2.5	4.8	Low	Dieback, sparse.	0%	No impact.	Ret
18	*Glochidion ferdinandi* Cheese Tree	On site	6	4	360	250/ 250	450	SM	G	G-Av	M-L	M-H	M	H	2.4	4.3	High	On embankment above shed - not accessible.	0%	No impact.	Ret
19	*Glochidion ferdinandi* Cheese Tree	Neighbouring	8	6		400	500	M	Av	Av	M	H	M-H	H	2.5	4.8	High	Above embankment - location not determined. Not accessible.	0%	No impact.	Ret
20	*Archontophoenix sp.* Palm	Neighbouring	12	3		250	350	M	G	G	M-L	M-H	M-H	M	2.1	3.0	High	Above embankment - location not determined. Not accessible.	0%	No impact.	Ret

Key: Height (in metres) ; Spread (crown spread diameter in metres) ; DBH (Diameter at Breast Height / 1.4m) in millimetres ; DRB (Diameter above Root Buttress) in millimetres ; Age (Semi-mature, Mature, Overmature, or Senescent) ; Health (Good, Average or Poor) ; Condition (Good, Average or Poor) ; Useful Life Expectancy (ULE) (Short, Medium or Long) ; Significance (High, Medium or Low) ; Amenity Value (High, Medium or Low) ; Ecological Value (High, Medium or Low) ; SRZ (Structural Root Zone) radius in metres ; TPZ (Tree Protection Zone) radius in metres

LEGEND



Approximate crown spread.

Numbered tree as shown on Site Survey, trunk diameter as measured on site.

Nominal Structural Root Zone (SRZ) - structural stability would potentially be compromised by root damage within this area.

Tree Protection Zone (TPZ) - the nominal area roots are expected to be located.

Tree to be removed in the context of the proposed development

Tree recommended for removal and replacement in the context of future development, but retained at current stage

Site boundary line

Location of existing dwelling

Exempt tree or shrub

All retained trees (trees not approved for removal) should be protected (with Exclusion/Protection Zone). The following categories are indicative of the relative significance of the trees.

TPZ of High Retention Value tree (Exclusion/Protection Zone)

Works in this area must:
*be above existing soil grades
*avoid excavation as much as possible
*minimise fill
Otherwise may require further investigation such as root mapping prior to main works.
Consult with Project Arborist.

TPZ of Medium Retention Value tree (Exclusion/Protection Zone)

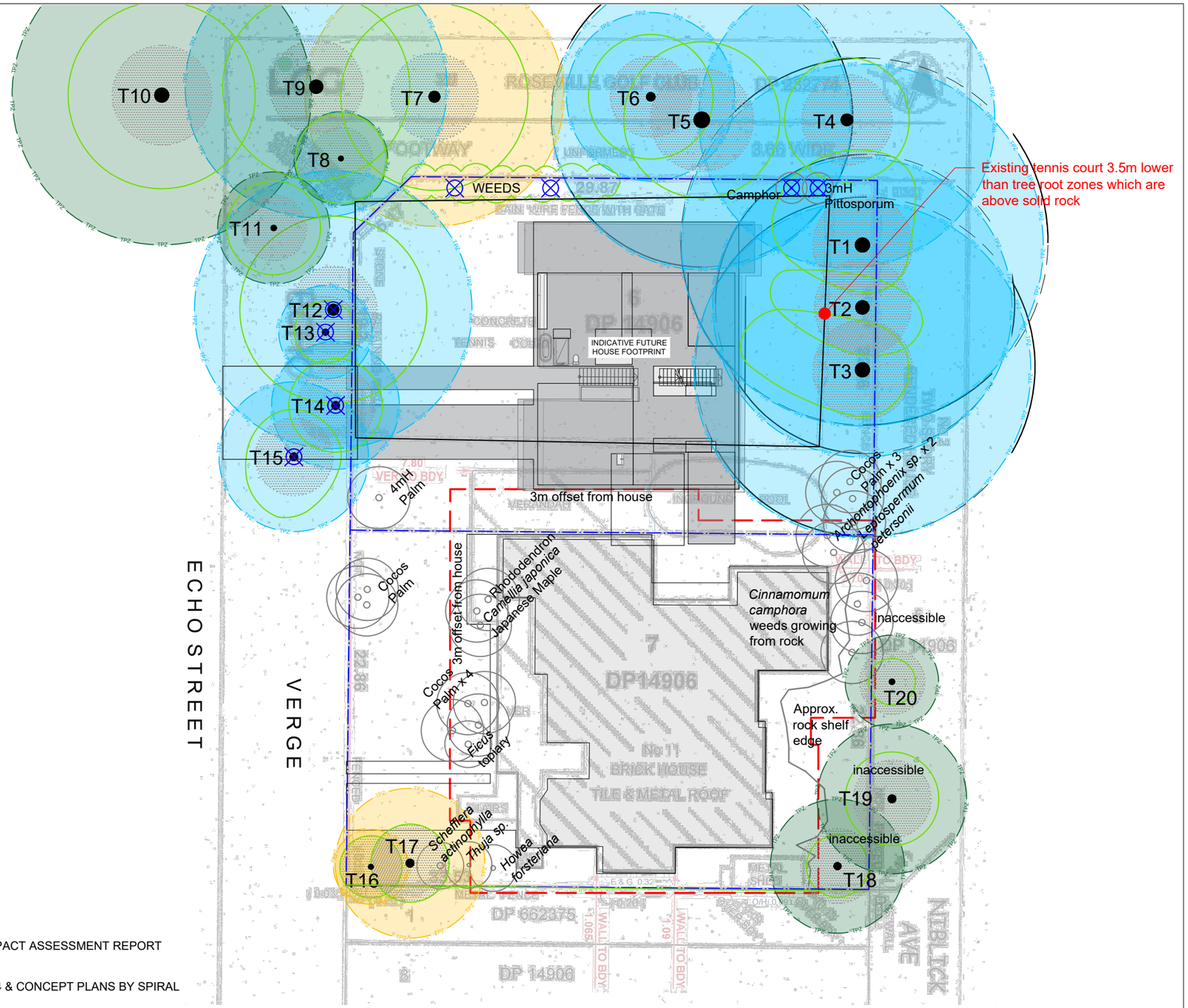
Works in this area must:
*be above existing soil grades
*avoid excavation as much as possible
*minimise fill
Otherwise may require further investigation such as root mapping prior to main works.
Consult with Project Arborist.

TPZ of Low Retention Value tree

Protect unless otherwise approved. Exclusion/ Protection Zone if tree is owned by another party

TPZ of "Remove"/Very Low Retention Value tree

This tree is not recommended for retention, but if retained, should be protected to avoid destabilisation or other impacts, particularly if tree is owned by another party.



MUST BE READ IN CONJUNCTION WITH ARBORICULTURAL IMPACT ASSESSMENT REPORT

BASED ON SURVEY BY LCG GLOBAL PTY. LTD. DATED 01/03/24 & CONCEPT PLANS BY SPIRAL ARCHITECTS LAB 26 MARCH 2025.

REV	DESCRIPTION	DRAWN	REVIEW	DATE
A	PRELIMINARY SITE ANALYSIS - TREE CONSTRAINTS PLAN - FOR COORDINATION	HM	JB	26-11-24
B	PRELIMINARY SITE ANALYSIS - TREE IMPACT PLAN - FOR COORDINATION	HM	JB	04-04-25
C	TREE PROTECTION PLAN - FOR REPORT	HM	JB	04-04-25
D	TREE PROTECTION PLAN AMENDED - FOR REPORT	JB	JB	28-04-25

NewLeaf ARBORICULTURE

SYDNEY

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Member of the International Society of Arboriculture

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2. Verify all measurements on site.
3. Notify New Leaf Arboriculture of any inconsistencies.
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ADDRESS: 15 ECHO STREET, ROSEVILLE
PROJECT: PROPOSED RESIDENTIAL REZONING
CLIENT: CHAPMAN PLANNING PTY LTD

DRAWING: TREE PROTECTION PLAN
DRAWN: HM | REVIEW: JB | DATE: 04-04-25
SCALE: 1:250 @ A3 | ISSUE: DA | SHEET: T - 01 | REVISION: D

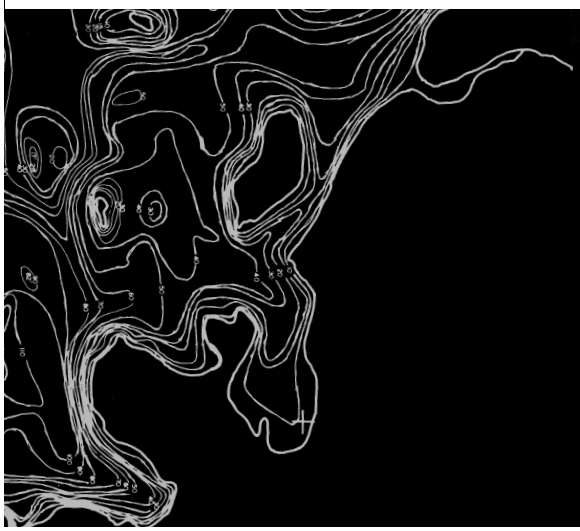


DESIGN REPORT

Planning proposal, Rezoning

15 Echo Street, Roseville

June 2025



SPIRAL ARCHITECTS LAB

Design Report:
Planning Proposal, Rezoning. 15 Echo Street, Roseville.
June 2025.

Prepared by:

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Introduction

This Design Report has been prepared to support the planning proposal for the rezoning of 15 Echo Street, Roseville. It outlines the design rationale used to integrate the relevant planning controls into the building form, orientation, internal layout, relation between indoor and outdoor areas and landscape strategies.

This document must be read in conjunction with the Concept Options drawings set prepared by Spiral Architects Lab dated 12 June 2025. The set includes conceptual floor plans, elevations and sections that illustrate the design strategies presented in this report.

1. Site Design (Ku-ring-gai DCP, Part 4, Section 4A)

- Local Character and Streetscape.
  Concept Options were designed with careful consideration of the following principles: maintaining generous setbacks between buildings, preserving the majority of existing trees, minimising work on the front setback to allow greenery to thrive, respecting the natural slope of the terrain, and ensuring a consistent perception of low-scale construction. These elements were prioritised to seamlessly integrate the project into the local character.

- Building Setbacks.
  The new proposed dwellings respect the setback requirements, with the basement placed under the building footprint to maximise the landscape area. This design prioritises solar access, daylight access, ventilation, and privacy while ensuring harmony with the adjoining properties.

- Built-Upon Area
  The proposal simplifies the building's form to reduce impervious surfaces and maximise the presence of soft ladscape.

- Landscaping
  In addition to the above, the building's form preserves the predominant views of nature from the street and enhances the indoor experience by integrating natural surroundings while reducing the impact on the existing trees within the site and adjoining properties.

2. Access and Parking (Ku-ring-gai DCP, Part 4, Section 4B)

- Vehicle Access.
  The dwellings are designed with a functional double garage below the building footprint and set back from the building line to hide and minimise its visual presence from the street, hard surfaces and impact on the landscape.
  The generous front setback allows for a clear separation between the driveway and the pedestrian access.

3. Building Design and Sustainability (Ku-ring-gai DCP, Part 4, Section 4C)

- Building Envelopes.

  The proposed building forms were carefully conceived to mimic the up-to-two-storey character of the local streetscape and ensure greenery dominates the site and surrounds the living areas, while benefiting the living areas with privacy, daylight and ventilation.

  The building envelope for the site will be subject to an increased FSR of 0.4:1 pursuant to Clause 4.4(2A) of the KLEP 2015. The concept plans demonstrate that the area of the lot can comfortably accommodate an FSR of 0.4:1 consistent with the LEP for smaller lots, whilst also achieving compliance with KDCP building envelope controls.

- Density.

  The scale of future development enabled by the proposal is for a single family dwelling house – 2.57 additional residents (in accordance with ABS Census data for NSW average household size) within the locality which is minor and the resultant additional dwelling density can be comfortably absorbed by existing infrastructure within the locality including water, sewer and electricity. It is noted that the site is within close proximity to commercial services, public transit, educational establishments and public open space.

- Building Facades.

  The compact form of the dwellings, combined with the presence of balconies and terraces, allows for a playful, dynamic, simple but tranquil facade composition on each elevation. Furthermore, the generous setback invites natural elements such as shrubs and trees to complement the building's outlook.

- Private Open Space.

  The private open space area is maximised through the building's form and is strategically located to benefit from the northern and eastern sun. The main living areas are adjacent to these open spaces fostering a strong connection between indoor and outdoor living.

- Solar Access.

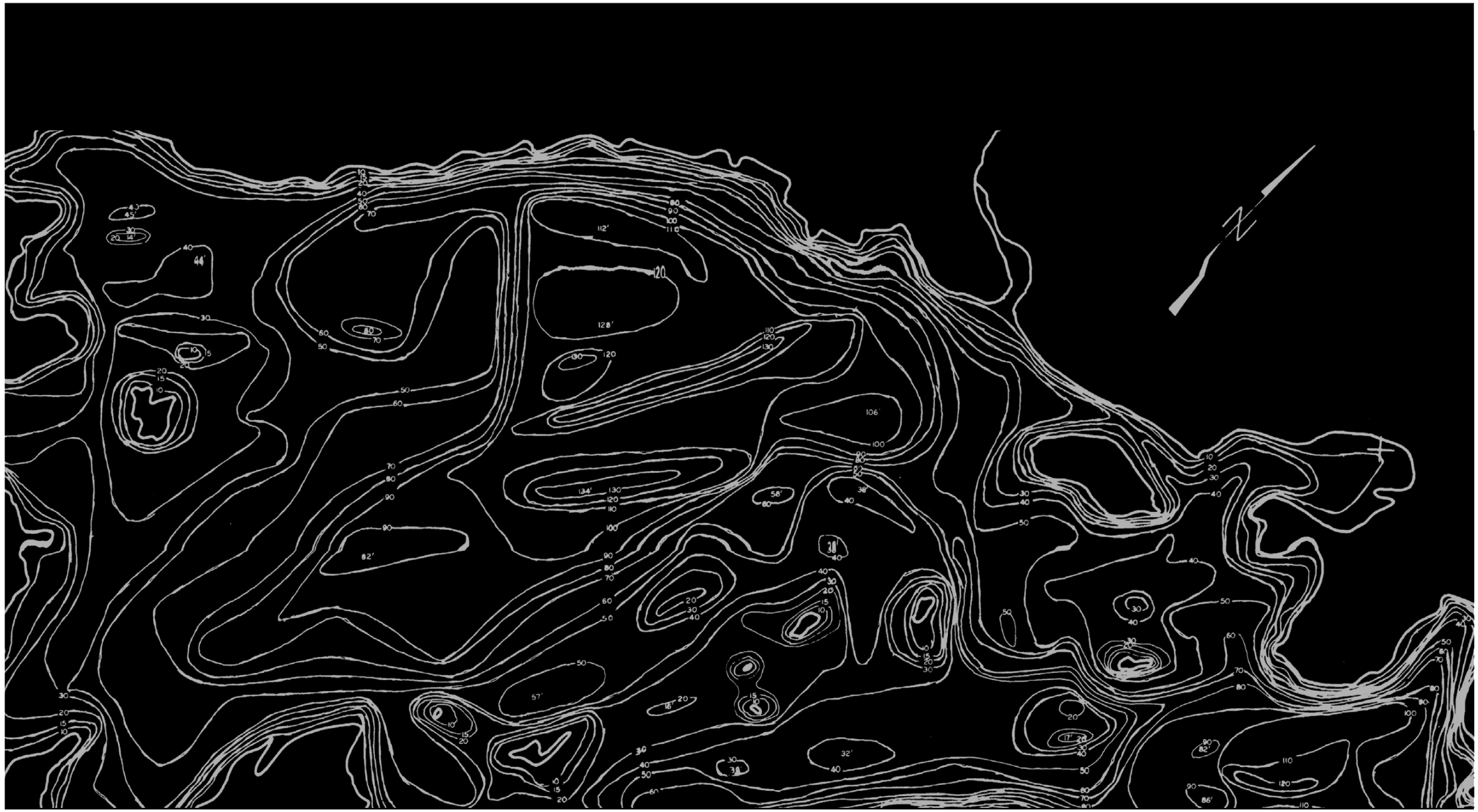
  The main living areas are oriented to capture the northern sunlight, while outdoor areas such as balconies and terraces are integrated to complement indoor living and provide shade from the summer sun.

- Natural Ventilation.

  Recognising natural ventilation as essential for the dwellings' comfort and energy efficiency, the main living areas have been designed to capture breezes from at least two different directions.

- Fencing.

  The generous front setback and the site's slope provide adequate indoors privacy while reducing the need for fencing to the front boundary on Echo Street, aligning with the existing street's character.



15 Echo Street, Roseville, NSW

Concept Options

12 June 2025

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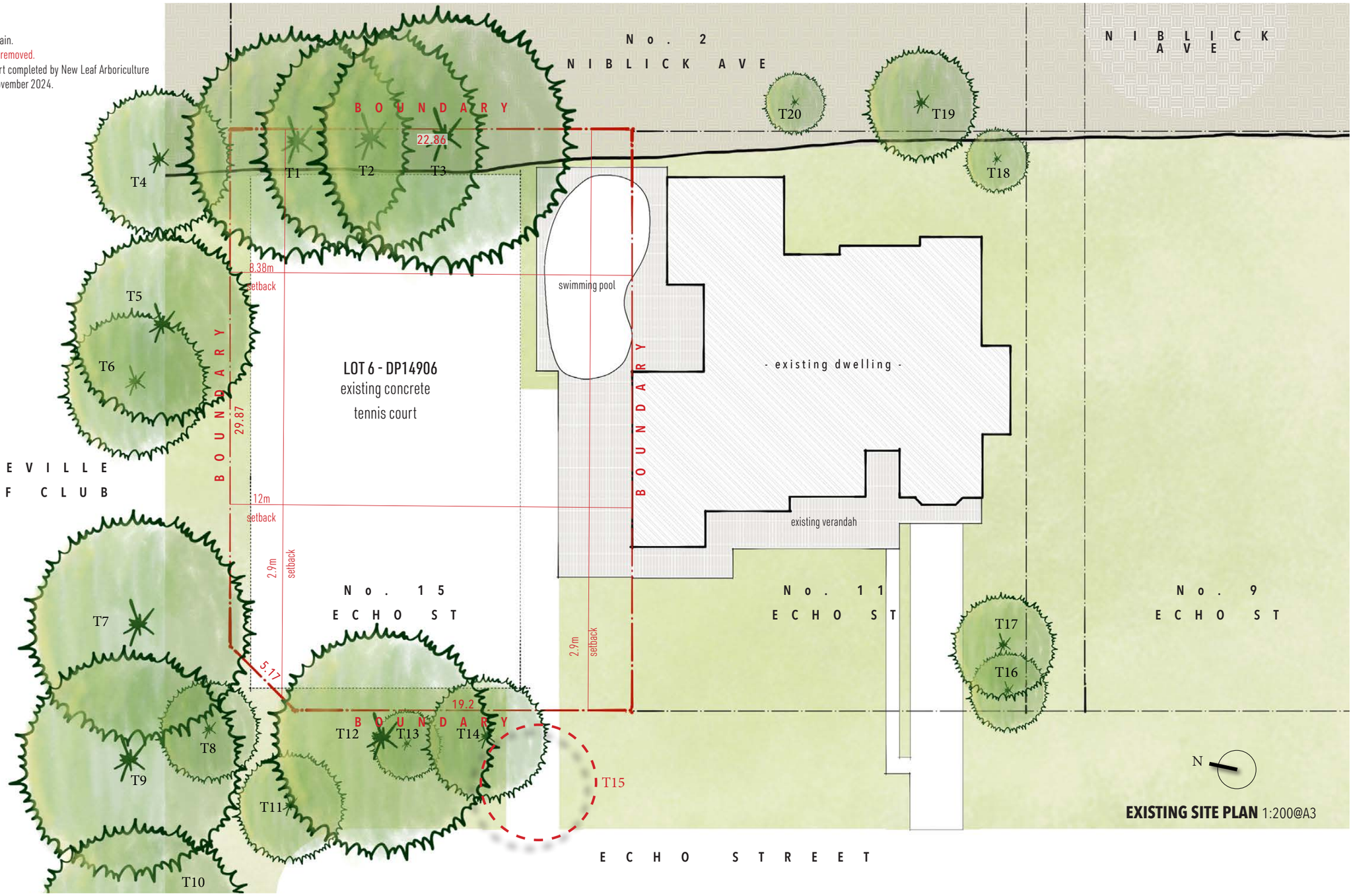
Tree legend

- T (xx): Tree to retain.
- T (xx): Tree to be removed.

Refer to arborsist report completed by New Leaf Arboriculture Pty Ltd dated 25-26 November 2024.



EXISTING SITE PLAN

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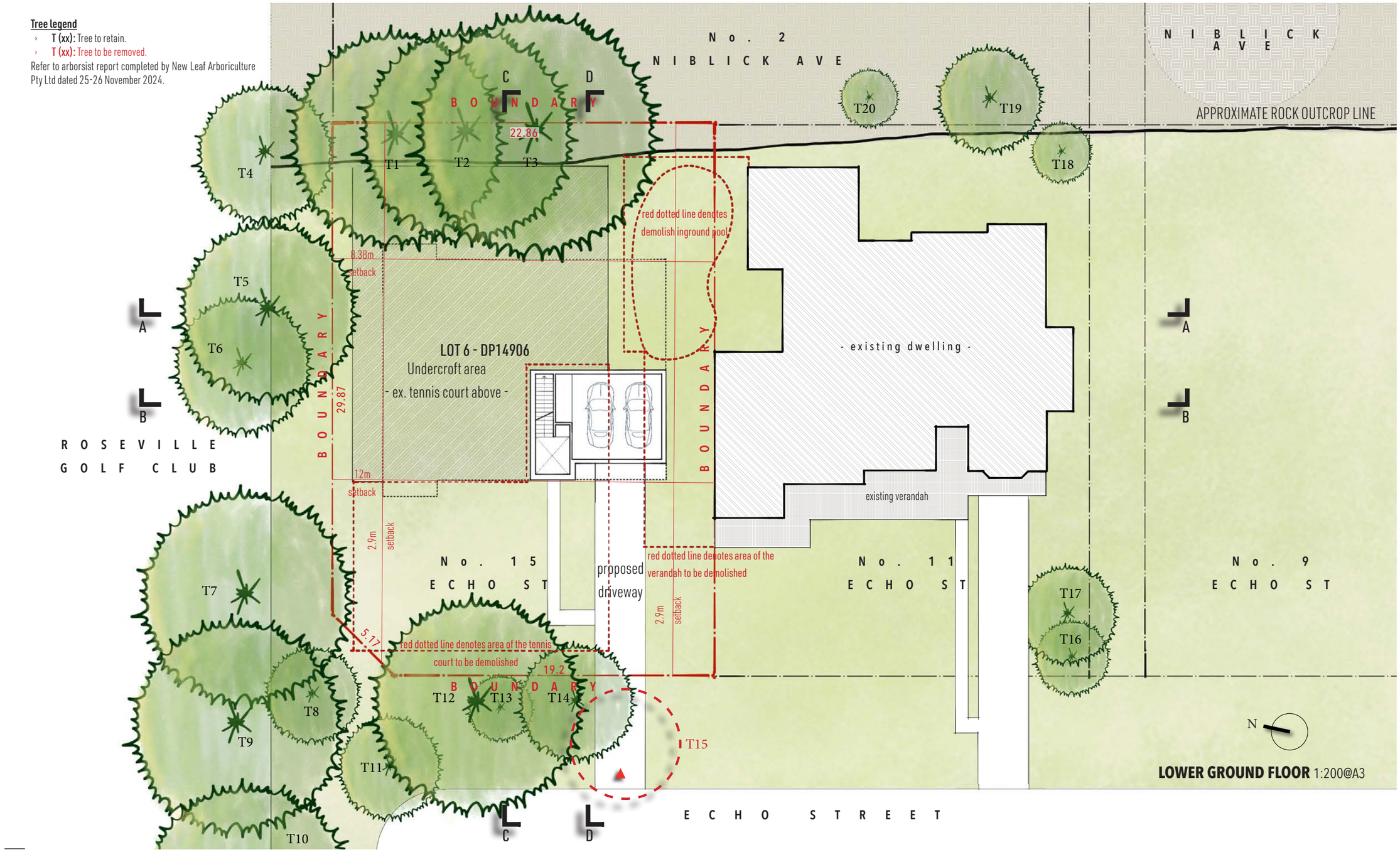
Tree legend

- T (xx): Tree to retain.
- T (xx): Tree to be removed.

Refer to arborsist report completed by New Leaf Arboriculture Pty Ltd dated 25-26 November 2024.



PROPOSED

NEW DWELLING AT 15 ECHO ST, ROSEVILLE. (Lot 6)

New Dwelling

- Lot size: 766m²
- FSR: 0.37:1 (282 m²)
- Built Upon Area: 39% (300m²)

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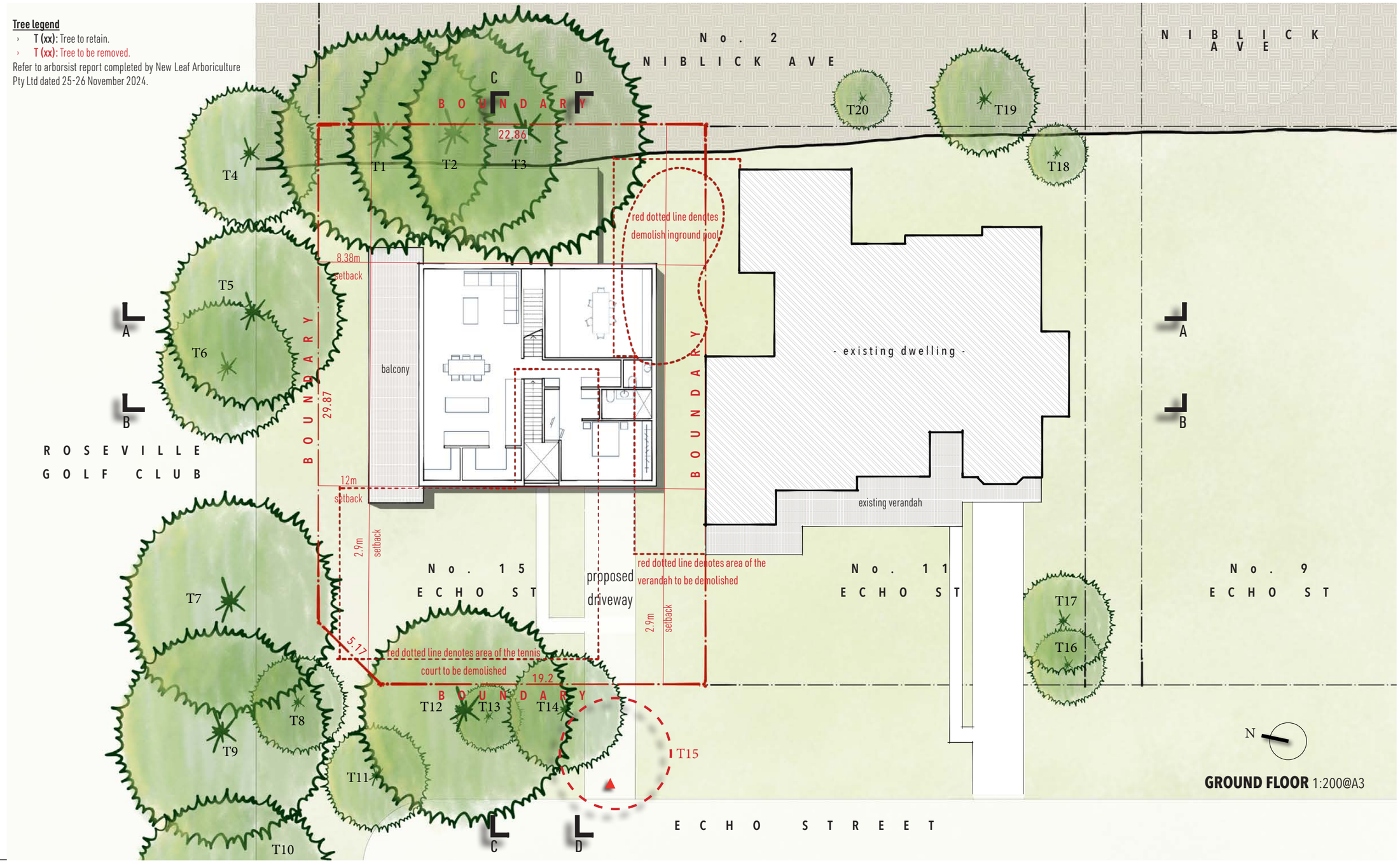

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Tree legend

- T (xx): Tree to retain.
- T (xx): Tree to be removed.

Refer to arborsist report completed by New Leaf Arboriculture Pty Ltd dated 25-26 November 2024.



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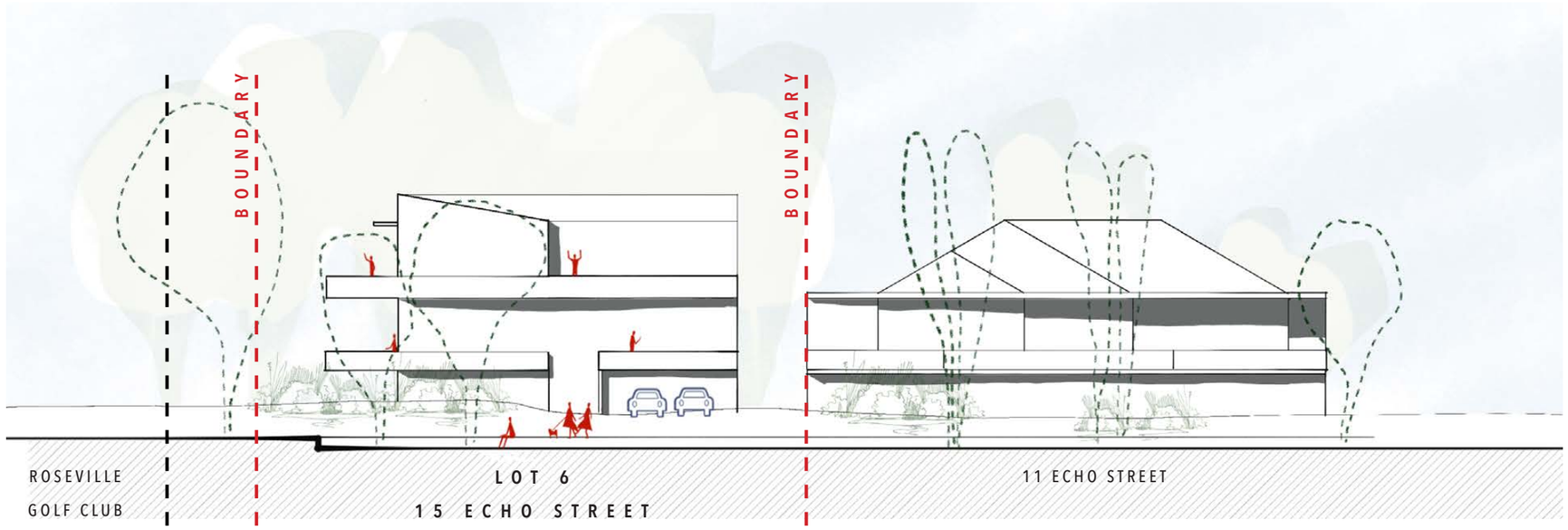
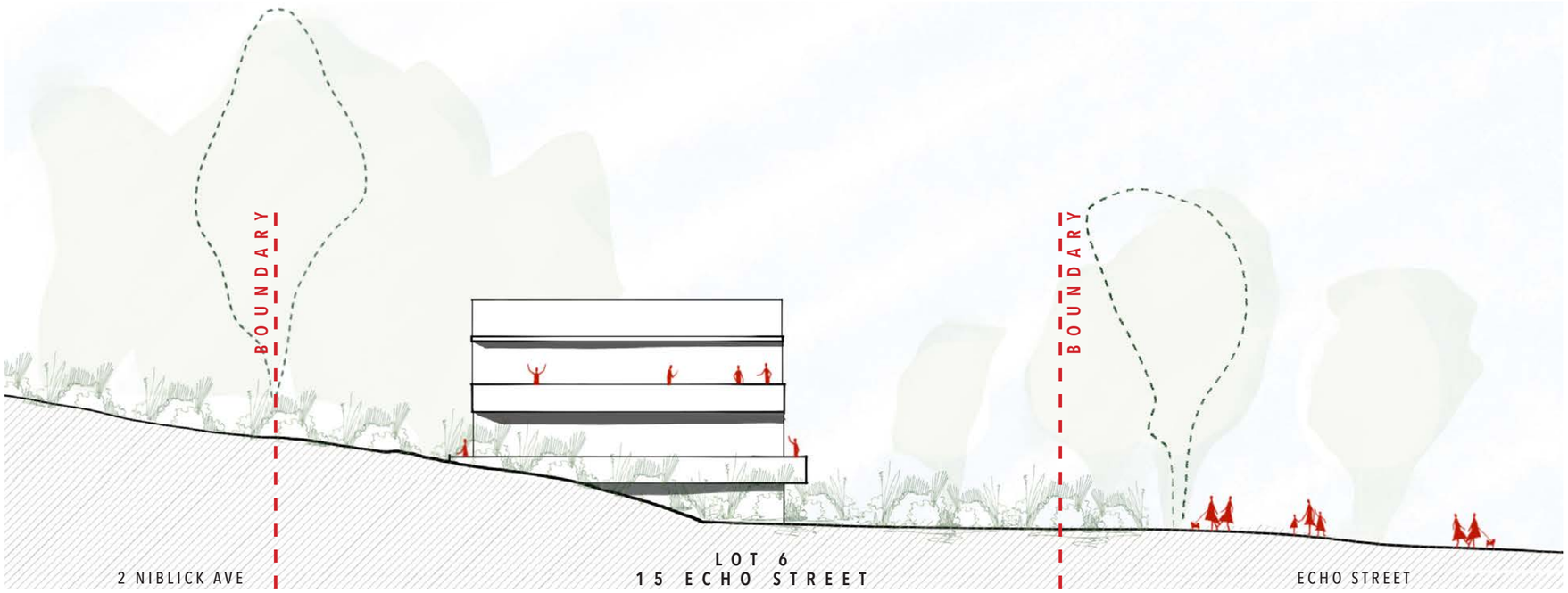


STREETSCAPE ECHO ST 1:200@A3



NORTH ELEVATION 1:200@A3

PROPOSED

NEW DWELLING AT 15 ECHO ST,
ROSEVILLE. (Lot 6)

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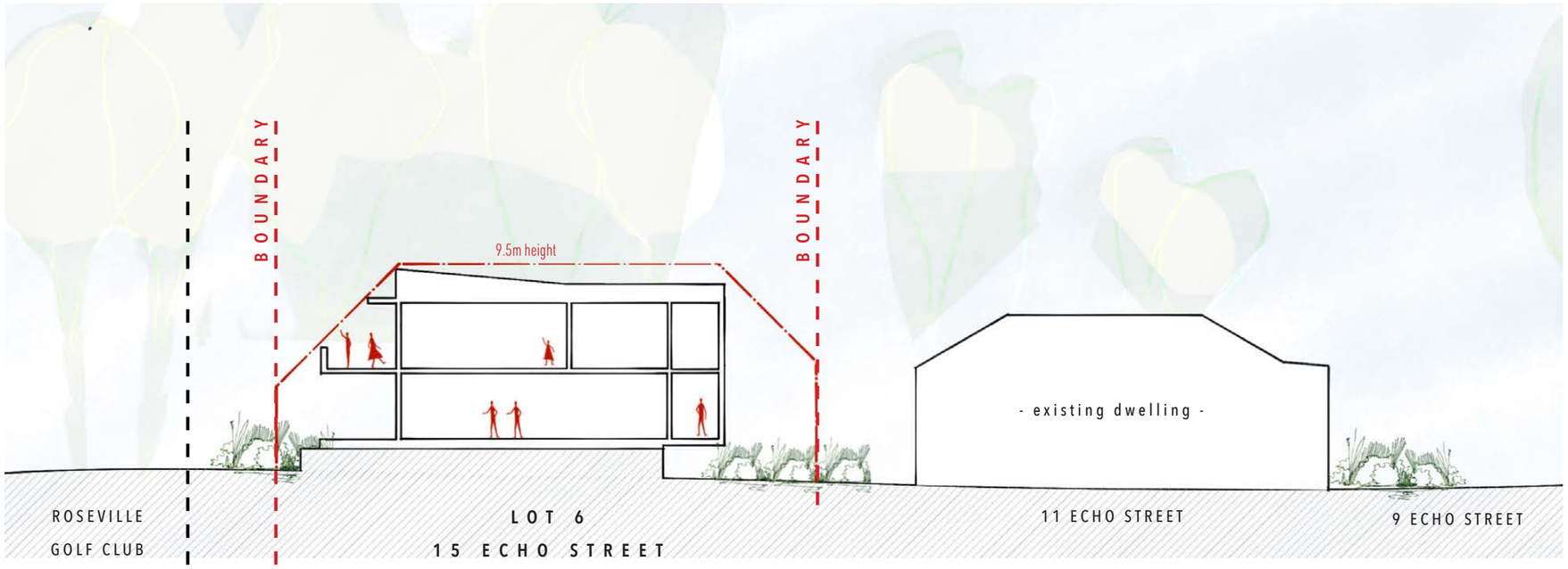
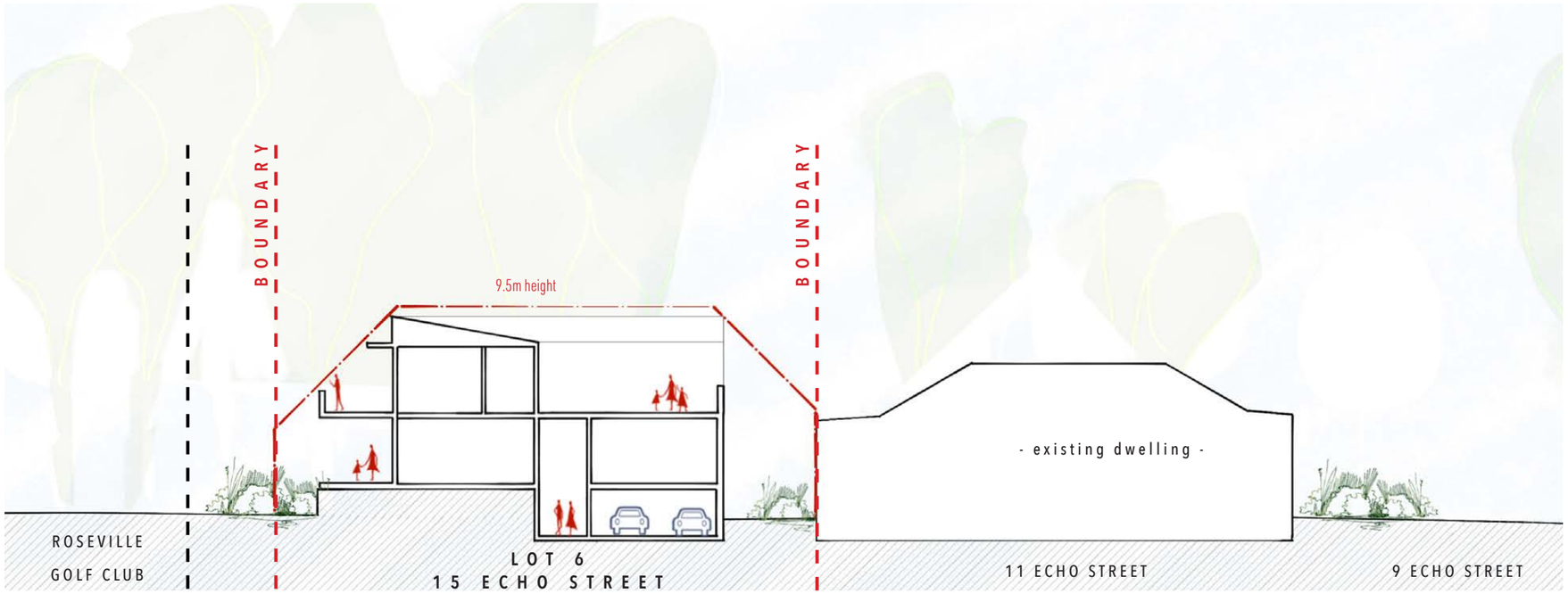


SECTION A-A 1:200@A3



SECTION B-B 1:200@A3

PROPOSED

NEW DWELLING AT 15 ECHO ST,
ROSEVILLE. (Lot 6)

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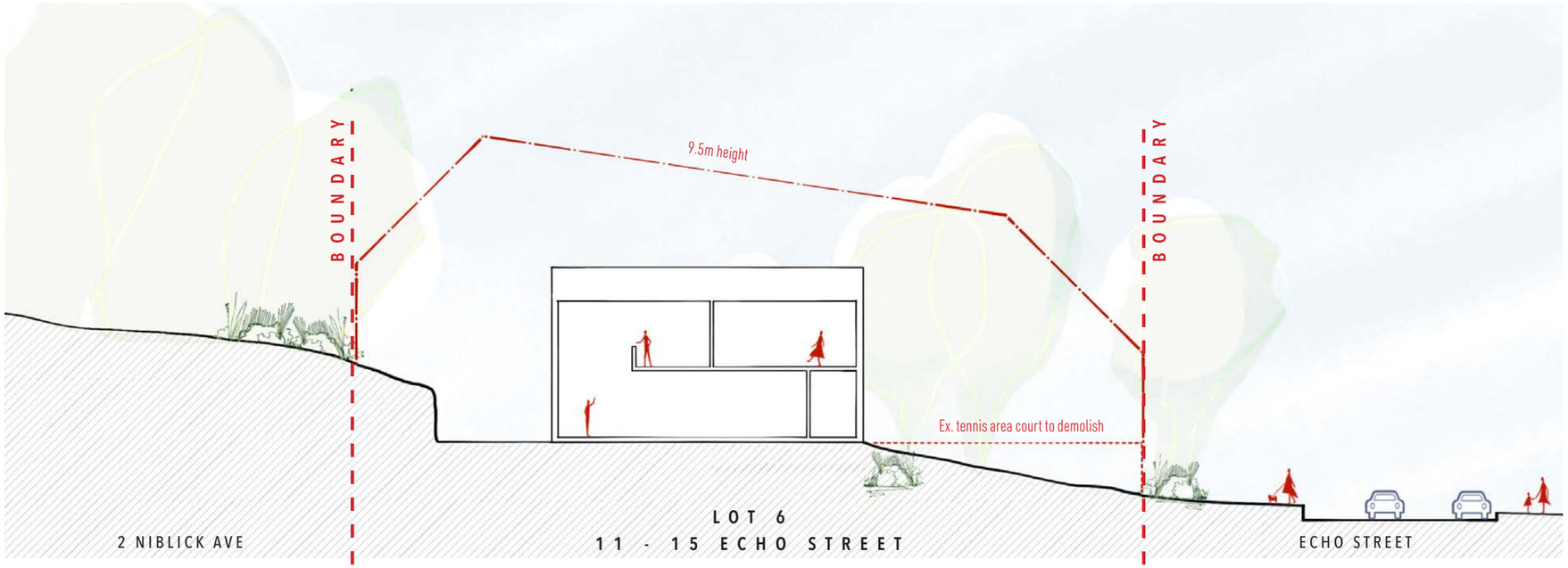

SECTION C-C 1:200@A3



SECTION D-D 1:200@A3

PROPOSED

NEW DWELLING AT 15 ECHO ST,
ROSEVILLE. (Lot 6)

SPIRAL ARCHITECTS LAB

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PLANNING PROPOSAL PRE-LODGEMENT MEETING NOTES

SITE ADDRESS:	**15 Echo Street, Roseville - Lot 6, DP 14906**		
PROPOSAL:	Amend the Ku-ring-gai LEP 2015 to rezone land at 15 Echo Street, Roseville from RE2 Private Recreation to R2 Low Density Residential and include standards for a maximum 9.5m height and 0.4:1 FSR.		
DATE OF MEETING:	Tuesday 27 August 2024		
PRESENT AT MEETING:	**Council**		
	Craige Wyse	*Team Leader Urban Planning*	
	Rathna Rana	*Senior Urban Planner*	
	Joseph Piccoli	*Strategic Traffic Engineer*	
	Nicholas Howarth	*Student Urban Planner*	
	Applicant / Representative		
	Garry Chapman	*Chapman Planning*	
	Gary Ulman	*Land owner (son-in-law)*	
	Rebecca Flax	*Land owner (grand daughter)*	
DOCUMENTS/ REPORTS:	**Document(s)**	**Dated**	**Reference**
	Application form	8 July 2024	2024/280627
	Scoping Report	9 August 2024	
	Survey	1 March 2024	
	Land Transfer Documents	1 March 2024	
	DPHI Attachment C - Supporting Technical Information list		
AFFECTED PLANNING INSTRUMENT:	• Ku-ring-gai Local Environmental Plan 2015		
KEY ISSUES:	• Strategic and site specific merit • Zoning • Urban Study • Traffic and transport • Surrounding trees • Contamination		

DISCLAIMER

The information contained in this pre-planning proposal meeting report does not bind Council officers; the elected Council members or other bodies in any way whatsoever and does not guarantee that a planning proposal will be endorsed by Council.

PLANNING PROPOSAL PRE-LODGEMENT MEETING NOTES

PROPONENT DESCRIPTION OF PROPOSAL

The proponent presented an overview of the proposal:

- 11 Echo Street (Lot 7, DP 14906) and 15 (Lot 6, DP 14906) operate as a single residential property owned by Ulman/Braham.
- 15 Echo Street houses a swimming pool and tennis court and is utilised as an extension to the garden area of the adjacent home on 11 Echo Street. It has no direct access to the Roseville Golf course.
- 15 Echo Street was subject to a 99 year lease from the adjacent Roseville Golf Club to Harold Goldstein, the owner of 11 Echo Street during the 1950s. The lease was transferred to subsequent owners of 11 Echo Street.
- Both 11 and 15 Echo Street have now been transferred to the executors of the Estate (daughter and son-in-law of the previous owners).
- The current RE2 Private Recreation is an anomaly associated with the historical leasing arrangement. The planning proposal seeks to rezone 15 Echo Street from the current RE2 Private Recreation to R2 Low Density Residential and apply associated standards consistent with those of 11 Echo Street and the surrounding area.
- The locality has a minimum subdivision lot size control of 790sqm applied to the R2 zoning. 15 Echo Street has a lesser area of approximately 760sqm, however there are other sites in the locality (5 Niblick Ave and 9 Echo St) with small lot sizes, confirming low density residential accommodation can be accommodated on the subject site.

PREPARATION OF THE PLANNING PROPOSAL

General

- The planning proposal and all supporting documentation must be submitted via the Planning Portal.
- The application must include:
  - **Application Form**; and
  - **Political Donations & Gifts Disclosure** which is required for everyone who has a financial interest in the proposal.

  Both forms are available, with instructions, on Council's Planning Proposal Website under the planning proposal drop down tab.
- Council's **Planning Proposal Template**, based on the *Department's Local Environmental Plan Making Guideline* has been attached. The proponent must use the template and retain the titles, format and page breaks of the template.
- Please do not copy paste slabs of your evidential studies into the planning proposal. Each Part and each answer to the specific Question is to be succinct, direct, factually detailed and avoid motherhood statements that have no evidential backing.
- The planning proposal must be evidence-based to justify the proposed amendment. Evidence is to be provided in the planning proposal appendices, and quoted in the relevant section of the planning proposal Parts in answer to the specific Question.
- Please see recent planning proposals (GB 14 and GB 15) that were reported to Council at OMC 13 August 2024. These will demonstrate the layout, information and evidential studies that will be expected.

  It is noted that your proposal is not as complex as these examples, and therefore does not require the extensive studies; however, it is still important that you provide full and evidenced responses to the Questions.

You can also see the Table of Assessment attached to the Council Report indicating the basis on which your proposal will be reported to Council. Below is a link to Council's Business Paper:
GB 14 and GB 15 Council Reports 13 August 2024

- The planning proposal process flowchart illustrating the various stages has been attached for your information. In general, the process can take from 6 months for very simple, non-controversial proposals to 18 months for complex proposals.
- Your proposal only seeks to amend the zoning and standards of 15 Echo Street; therefore the planning proposal should only refer to this single site. References to 11 Echo Street should only be made in explanation of the history and context.
- Recent planning proposals in the locality include Council's land at Warrane Road. This was rezoned from RE1 Public Recreation to R2 Low Density Residential to enable new housing on the site; however, Council has recently reclassified it to Community land so that it may be retained as public open space for community recreation purposes.
- The RE2 zoning of 15 Echo Street is understood to be a carry over from the previous Ku-ring-gai Planning Scheme Ordinance mapping; however, it is unclear when the site was purchased from the Roseville Golf Club. This needs to be stated in the planning proposal.
- If there are any burdens or easements on the site relating back to its association with the Roseville Golf Course, they should be included in the site description with clarification if they are to be extinguished.
- Council will seek to complete this planning proposal under delegation. This will enable quicker processing of the proposal as we will oversee the legislative amendments instead of the Department.
- In its Gateway determination, the Department may consider this proposal as low impact and reduce the exhibition period to 14 days.

Fees

- Fees are NOT to be paid at lodgement of the planning proposal.
- Council will undertake a completeness check of the documentation submitted and will formally request the fees once the documentation is complete.
- Proposal lodgement fees and additional meeting fees are outlined on Council's Planning Proposal Website.
- The fee to lodge this planning proposal will be: **Standard Amendment - Minor - $35,000.00** plus advertising costs.
- Where an application results in additional assessment or review of the planning proposal at any stage of the process, an hourly rate of $220/hour will be charged for extra work undertaken by Council staff.
- Second and subsequent meetings, following the initial pre-lodgement meeting, required by the proponent have a fee of $2000.00.

  Note: second and subsequent meetings can only continue to clarify requirements and process of the planning proposal. No endorsement will be provided until formal assessment and reporting to Council occurs on the submitted planning proposal.

Strategic / Site Specific merit of the proposal

- As stated in the attached planning proposal Template, all justification of strategic and site specific merit must be placed in response to the relevant Question and utilise facts and figures (including those from your evidential studies) to demonstrate the justifications.
- The planning proposal must demonstrate it meets the strategic requirements including those of:

- Greater Sydney Region Plan—A Metropolis of Three Cities
- North District Plan
- Ku-ring-gai Local Strategic Planning Statement (LSPS)
- Ku-ring-gai Local Housing Strategy 2020 and Approval Letter and Advisory Notes 2021
- Ku-ring-gai Community Strategic Plan

Each relevant objective, priority, theme etc is to be individually stated and then present your case on the consistency/inconsistency of your proposal. This information is to be provided within the relevant Question response.

- Specific justification will be required to address any inconsistency with any Plans, Strategies, Policies.
- The planning proposal must also demonstrate site specific merit in addressing its surrounding context and environmental, social, economic and infrastructure considerations to ensure the site has capacity and is suitable for the proposal.

Evidential Studies

The proponent should consider including studies that will give evidence to the arguments in the planning proposal including but not limited to the following:

1. Urban Design Study

- The change of zoning will enable new residential development on the site.
- Indicative site layout plans, based on relevant controls, are required to show the site's development potential and the maximum number of dwelling that could be delivered under the proposed R2 zoning.
- The potential dwelling number would inform your traffic and transport study and provide factual numbers of dwelling increase in response to the various Questions in the body of the planning proposal.
- An Urban Design Report is required to demonstrate:
    - Potential bulk and scale (including any basement levels) and how these will sit in the broader context of the area.
    - Consideration of built form options including landscape and streetscape.
    - How the built form outcomes can meet the requirements of the KDCP.
- The report diagrams are to include elevations and sections and be to scale, provide RLs indicating ground and building levels on the site and on adjacent sites and key dimensions.
- Plans should clearly indicate proposals for public domain areas including the retention or new tree planting within the footpath areas.

2. Traffic and Transport

- Matters of strategic transport merit – North District Plan
    - Productivity / Integration of land use and transport theme:
        - Provide analysis of journey to work characteristics of where surrounding residents travel to work, mode of travel etc;
        - Carry out assessment of level of access to public transport from the site.
        - Assess degree of access to/number of nearest employment/strategic centres from the site (noting goal of 30-minute city by public transport).

- Liveability theme
  - Undertake assessment of access to local services (retail/supermarket, medical, educational) within 15 minutes/1,000m walking distance.
  - Provide an assessment of access to recreational, leisure, cultural and community facilities within 15 minutes/1,000m walking distance.
  - Assess the level of access to active transport networks (walking and cycling links).

- Matters of strategic transport merit – Ku-ring-gai Local Strategic Planning Statement (LSPS), Future Transport Strategy and site-specific matters

  Transport infrastructure capacity

  - Consider new transport proposals/strategies or capacity improvements foreshadowed in Future Transport Strategy, and its impacts to the proposal in terms of travel behaviour.

    In particular, consideration should be given to the following (where relevant):

    - Greater Sydney Strategic Road Network 2056.
    - Greater Sydney 2056 indicative future rail network.
    - 2036 Rapid bus lines, and
    - Strategic Cycleway Corridors - Eastern Harbour City.

3. Arborist Report

- An Arboriculture assessment is required that includes all trees present on the site and trees on adjacent land parcels that have Tree protection Zones extending into the subject site.

4. Contamination Report

- A Phase 1 Site Investigation Report will be required due to
  - the proposal seeking a rezoning to allow residential uses on a site historically zoned for recreation uses;
  - the site would have previously been maintained as part of the Roseville Golf course and may have potential contamination due to the use of fertiliser and weed management chemicals.

NEXT STEPS

We look forward to receiving your planning proposal. Please do not hesitate to call me if you have any questions.

Rathna Rana
Senior Urban Planner | Urban and Heritage Planning
Strategy and Environment | Ku-ring-gai Council
P: 9424 0000 E: rrana@krg.nsw.gov.au | www.krg.nsw.gov.au
Ku-ring-gai - Sydney's green heart 💚

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Phone: 9560 1718
Email: garry@chapmanplanning.com.au

9 August 2024

Ku-ring-gai Council
818 Pacific Highway
GORDON NSW 2072

Property: 15 Echo Street, Roseville
Re: Planning Proposal Pre-Lodgement Meeting Request

Dear Sir/Madam,

Chapman Planning has been engaged by the owners of 11-15 Echo Street, Roseville (the subject site) to prepare a planning proposal for the site. The planning proposal is for the rezoning of land at 15 Echo Street, Roseville – Lot 6 in DP 14906.

This letter serves as a scoping proposal for the rezoning of the site and is prepared in accordance with the NSW Department of Planning and Environment *Local Environmental Plan Making Guideline* dated August 2023 and Attachment A – *Scoping Proposal Template*.

Additionally, this letter supports the pre-planning proposal (scoping proposal) application to Ku Ring Gai Council.

This scoping report has reviewed the relevant planning documents and other relevant strategies to inform the strategic merit for the rezoning of the site, including:

- **Greater Sydney Region Plan** – *A Metropolis of Three Cities*
- **Our Greater Sydney 2056 –** North District Plan
- **The Six Cities Region** – *Discussion Paper*
- **Ku-ring-gai Local Strategic Planning Statement**
- **Ku-ring-gai Local Housing Strategy to 2036 –** *Ku-ring-gai's Housing Future* (Note: Council Resolution November 2021 rejected conditions of Department of Planning's Letter of Approval for LHS)
- **Ku-ring-gai Local Character Study**

Introduction and Background

The subject site currently consists of two allotments – Lots 6 and 7 in DP 14906, also known as 11 and 15 Echo Street, Roseville. The subject site is located 100m north of the intersection of Park Avenue and Echo Street, Roseville, and adjoins the southern boundary of the Roseville Golf Course to the north.

A survey of Lot 6 prepared by LCG, a copy of the transfer that created the easement affecting Lot 6 (R347157) and a copy of the transfer that affects Lots 6 and 7 are attached.

Lot 6 in DP 14906 (15 Echo Street, Roseville) is currently zoned RE2 Private Recreation pursuant to the *Ku-ring-gai Local Environmental Plan 2015*. This planning proposal seeks to amend the LEP to rezone the subject site to R2 Low Density Residential zone with a maximum permissible height of 9.5m and a maximum permissible FSR of 0.4:1, consistent with that of the adjoining property – Lot 7 in DP 14906 (11 Echo Street, Roseville).

The planning proposal seeks to rezone the subject land to permit low density residential development on the site. The planning context for the site and surrounding locality provides strategic merit for the rezoning of the subject site and associated increased residential density, being consistent with the R2 – Low Density zoning of the adjoining property and the zoning of Echo Street, the site is within walking distance (500m) of the East Roseville Local Centre zone and well-serviced by public transport – bus stops along Babbage Road serving bus routes to Chatswood, Dee Why, and Warringah Mall.

The subject site (11 and 15 Echo Street) currently contains a dwelling house, with the RE2 zoned portion of the land containing private open space areas – tennis court, inground swimming pool, and veranda of the dwelling.

The sites where part of an original Deposited Plan – plan of subdivision excising Lot 6 in DP14906 for residential development.

It is understood that Lot 6 (15 Echo Street) was subject to a 99 year lease from the Roseville Golf Club to Mr. Harold Goldstein, and his eldest daughter believes the tennis court was built in approximately 1959 and the verandah to the dwelling house (Lot 7 – 11 Echo Street) building is 1964.

Site and Locality

The subject site consists of two allotments – Lots 6 and 7 in DP 14906, also known as 11-15 Echo Street, Roseville. The subject site is located 100m north of the intersection of Park Avenue and Echo Street, Roseville, and adjoins the southern boundary of the Roseville Golf Course to the north.

The lots have a combined frontage of 42.06m to Echo Street, with a total site area of approximately 1,650m^2. The southern portion of the site (Lot 7) currently contains a 1- 2 storey brick dwelling house, with vehicular access from Echo Street via driveway at the south-western corner of the site.

The northern portion of the site (Lot 6) contains a verandah, inground swimming pool, tennis court and mature canopy trees along the northern boundary adjacent to the Roseville Golf Course.

Lot 6 subject of the proposed rezoning has a frontage of 19.2m to Echo Street, a splayed corner of 5.17m at its north-western corner adjacent to the Echo Street cul-de-sac, a site depth of 29.87m, and total area of approximately 760m^2.

The subject site and locality are shown in the aerial photograph below.

Figure 1 *– Aerial photograph*



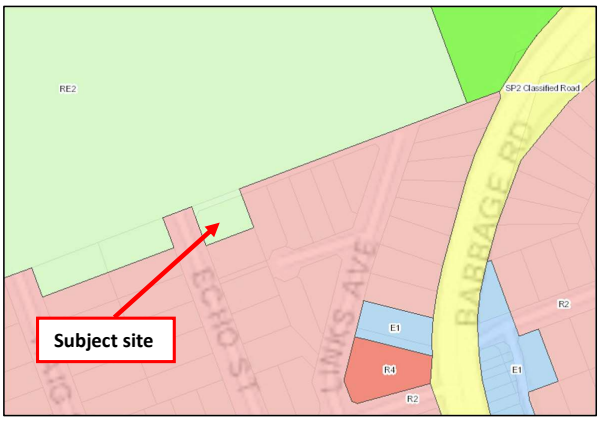
Source*: SIXMaps*

Current Planning Instruments and Controls

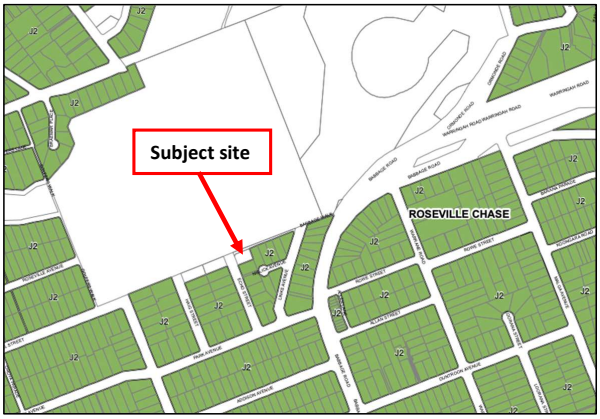
The subject site is zoned RE2 – Private Recreation under the *Ku-ring-gai LEP 2015*.

The subject site is surrounded by low density land uses under the LEP with R2 Low Density Residential zoned land to the south, east and west with a building height of 9.5m. The land adjoining the northern boundary is zoned RE2 Private Recreation and contains the Roseville Golf Course and Golf Club.

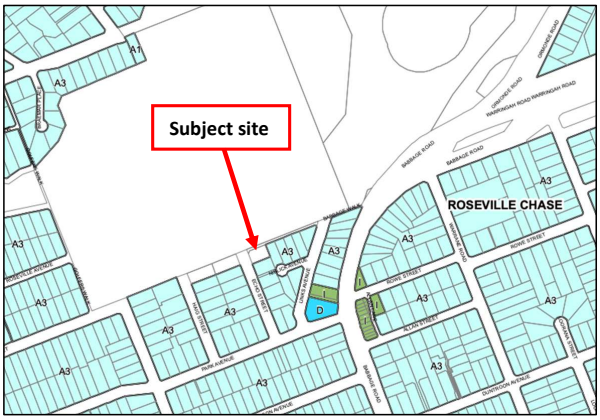
The site is not subject to a maximum height or FSR standard pursuant to the LEP as depicted in the mapping below.



***Source**: Ku-ring-gai LEP 2015 – Zoning Map*



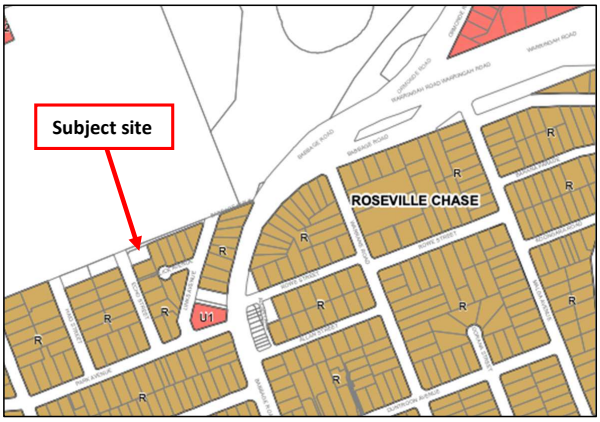
***Source**: Ku-ring-gai LEP 2015 – Height of Buildings Map*



***Source**: Ku-ring-gai LEP 2015 – FSR Map*

The site is not identified on the remaining LEP maps with respect to heritage conservation, terrestrial biodiversity, or riparian land. Further, pursuant to the Ku-ring-gai Council Online map viewer the site is not subject to flooding (mainstream or overland flow mapping), greenweb mapped land, or bushfire prone land.

Clause 4.1 of the LEP contains a minimum subdivision lot size control of 790m^2 which applies to the surrounding Roseville locality – R2 zone. The land subject of the rezoning application has an area of approximately 760m^2, notwithstanding, the site width (dimension) and area is consistent with 5, 7 and 9 Echo Street confirming low density residential accommodation can be accommodated on the subject site.



***Source**: Ku-ring-gai LEP 2015 – Minimum Lot Size Map*

Development Concept

The planning proposal seeks a R2 Low Density Residential zoning for the subject site with a maximum 9.5m – two storey building height (under Clause 4.3 of the LEP) and maximum FSR of 0.3:1 (under Clause 4.4 of the LEP), noting that Clause 4.4(2A) of the LEP permits an FSR of 0.4:1 for development within the R2 zone which would prevail over the mapped FSR.

As a guide, development for the site is summarised as follows:

- ***Built form:*** 2-storey built form consistent with the established streetscape within Echo Street.
- ***Deep soil/Landscaping:*** Private open space area and landscaping within the site boundaries, contributing to landscaped setting of existing canopy trees north of the site within the Roseville Golf Course boundaries.
- ***Private open space:*** The existing lot has a south-west – north-east orientation which provides good opportunity for the location of private open space and living areas within future development which achieves a good level of solar access and natural light, while locating outdoor areas away from adjoining properties' private open space.
- ***Parking and access:*** New driveway crossing and vehicular access to Echo Street cul-de-sac.

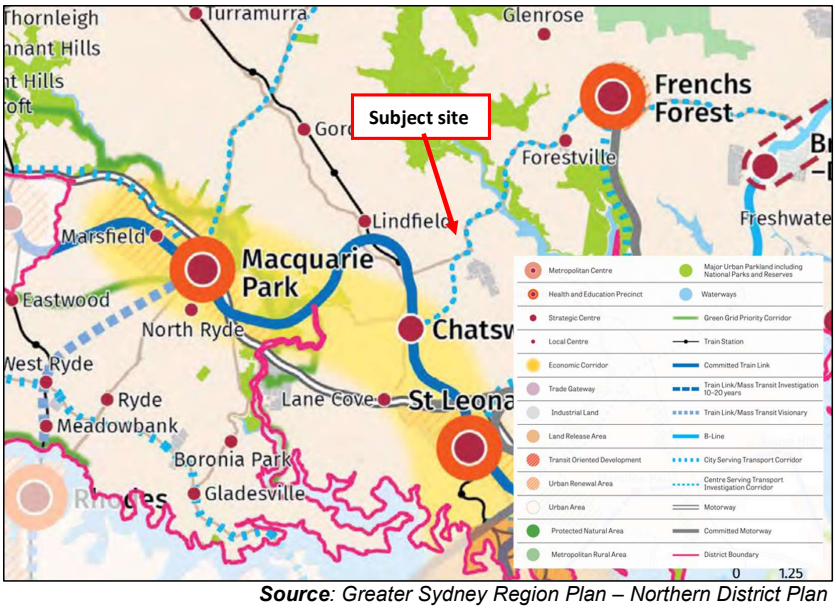
The proposed rezoning application can include indicative building footprints depicting the future development of 15 Echo Street in accordance with the low density residential zoning of the land and established streetscape. The existing dwelling at 11 Echo Street would require alterations and additions to accommodate the future development of the subject site (No. 15 Echo Street) which is to be indicated on the submitted planning proposal documentation.

The proposal presents an appropriate rezoning of the existing land which currently forms part of a *dwelling house* land use on the adjoining R2 Low Density Residential zoned land at 11 Echo Street, Roseville. Unlike the RE2 Private Recreation zoned lots opposite the site to the west, the subject site does not form part of the Roseville Golf Course site. As such, the proposal would contribute to the delivery of additional housing stock – low density residential development within the Roseville locality in a form and scale consistent with that of the surrounding streetscape.

Strategic Merit

The following provides a summary of high level strategic documents which apply to the site:

- ***Greater Sydney Region Plan:*** The Greater Sydney Region Plan prepared in 2018 identifies Roseville within the Northern District Plan boundary of the 'Eastern Harbour City'. The site and the broader Roseville Locality is within close proximity to identified train links and 'city-serving transport corridors' being within 1.5km of the Roseville railway station, 2.2km north-west of Chatswood CBD and the North-West Metro line, and within walking distance of bus stops on Babbage Road providing regular services between the Northern Beaches and Chatswood CBD.



***Source**: Greater Sydney Region Plan – Northern District Plan*

The rezoning of the site to accommodate low density residential development will achieve Objective 10 *Greater Housing Supply* and Objective 14 *Integrated land use and transport creates walkable and 30-minute cities* of the plan, by allowing for the use of a remnant parcel of land to be repurposed to contribute to housing stock within the locality within close proximity to public transport and local commercial centres.

Further, the proposal is consistent with the planning priorities of the Northern District Plan (N5 & N12) as the increase in residential density on

the site resulting from the proposed rezoning will be well-serviced by local centres, public transport, and existing public open space.

The rezoning of the land does not present a significant intensification of development within the Roseville R2 zone, but rather appropriately zones the subject site the same as the adjoining property (11 Echo Street) and is consistent with the zoning of Echo Street, and allows for housing within close proximity to the East Roseville Local Centre and Babbage Road transport corridor.

- ***Ku-ring-gai Local Strategic Planning Statement:*** Council's Local Strategic Planning Statement envisions increase in housing densities close to transport, services and facilities. The proposal is a responsive rezoning of the subject site that will enable development in accordance with anticipated growth for the locality whilst also being consistent with existing established low density development within the Roseville locality.

  The size and dimensions of the land to be rezoned (760m^2 and 22.86m lot width) is consistent with 5, 7 and 9 Echo Street, Roseville. The rezoning applies to an existing subdivided parcel of land currently used for residential purposes in association with an existing dwelling house, and would allow for the orderly and economic development of the land by rezoning an existing parcel of land to accommodate residential development, noting the current use of the site is incongruous with its RE2 Private Recreation zoning.

- ***The Six Cities Region Discussion Paper:*** Released by the Minister for Cities in September 2022, this plan presents a broader strategic vision for NSW incorporating the Illawara, Central Coast and Newcastle regions in addition to the existing districts within the Greater Sydney Area. *Chapter 3 Housing supply, diversity and affordability* of the document provides an increased emphasis on achieving housing targets and increased densities within close proximity to public transport which would be achieved by the proposal.

- ***NSW Future Transport Strategy:*** Chapter 3, Priority 2 of this strategy developed by Transport for NSW provides a target for developing '15 minute' neighbourhoods where transport and services are all within close proximity to planned housing. In this instance, the subject site is located within an accessible area - <400m walking distance from Babbage Road bus stops – Chatswood to Northern Beaches lines, and is located within close proximity of public open space, commercial services, and educational establishments.

- ***Staying Ahead: State Infrastructure Strategy 2022-2024:*** Chapter 10 of this strategy prepared by Infrastructure NSW establishes a vision to integrate infrastructure, land use and service planning within NSW. Section 10.1 states that "*Priority should be placed on using the capacity of the existing and planned transport network. The NSW Productivity Commission White Paper 2021 notes that the existing transport network and planned investments hold development potential – for example: - Sydney Metro City and Southwest"*.

  The infrastructure strategy supports additional residential density in locations such as Roseville under the strategic context for the site, being within the larger catchment of the nearby Chatswood CBD and North-west Metro Line.

  Further, the location of the site in walking distance (500m) of the Babbage Road city-serving transport corridor is consistent with the State Infrastructure Strategy's objective which states "*Higher productivity, such as reduced road congestion and shorter travel times, can be achieved by rezoning transport corridors to accommodate more housing. In doing so, appropriate standards for development are important to minimise adverse amenity impacts and risks of future land use conflicts."*

Based on the above, in our opinion the strategic context for the site supports the opportunity for the orderly and economic development of the subject site for low density residential purposes.

The strategic merit for the proposal is summarised as follows:

- The subject site is 290m walking distance from a 'city-serving transport corridor' identified within the Greater Sydney Region Plan being bus stops along Babbage Road providing regular services to and from the Chatswood CBD and the Northern Beaches. The connectivity of the site to Chatswood CBD presents an opportunity for the activation of a previously subdivided parcel of land for additional residential density in an appropriate location that will benefit from existing infrastructure.

- The subject site adjoins R2-Low Density Residential zoned land and the rezoning would present a consistent zoning of land in Echo Street and allow for residential development consistent with the desired future character of Echo Street.

- The site is within walking distance of the East Roseville local centre. The rezoning of the subject site would allow for the timely and orderly delivery of additional housing within close proximity to public transport and a nearby commercial centre on a lot that can accommodate a built form consistent with that established within the street.

- A 2 storey built form would be suitable for the allotment directly adjoining the Roseville Golf Course, and the lot size and dimensions of the land would comfortably accommodate residential development, noting the site has been historically subdivided for residential purposes.

- The proposal includes public benefit through the activation of an existing portion of land zoned for Private Recreation that has historically been used for residential purposes, providing additional housing opportunities for the broader locality.

- The proposal contributes to housing choice and affordability in Roseville within walking distance of well-serviced bus stops, achieving additional housing and land use improvement that will be serviced by key infrastructure.

- The proposed rezoning presents an appropriate increase in residential density within the *Lower East Character Area* identified within the *Ku-ring-gai Local Character Study* noting Echo Street is not within the vicinity of any heritage items or heritage conservation areas which are a key feature of the broader locality.

- The subject site currently contains a residential land use (existing dwelling's tennis court, pool and landscaping) in a private recreation zone. The rezoning will ensure a more compatible land use for the subject site and surrounding zoning.

- The orientation and corner position of the subject site ensures that a 1-2 storey building form will not result in unreasonable amenity impacts to the adjoining residential properties, and the increased density on the site can be comfortably accommodated with respect to landscaping, private open space, vehicular access, and residential amenity.

- A recent proposal within the locality – Proposal PP-2021-4662 for the rezoning of land at 47 Warrane Road, Roseville Chase from RE1 Public Recreation to R2 Low Density Residential zone was approved on 11 May 2022 by the Department of Planning. This proposal sought the rezoning of defunct public recreation land – East Roseville Bowling Club for residential use to allow for additional housing opportunities within the established low-density locality.

  The proposed for the subject site similarly seeks the rezoning of recreation zoned land which is not utilised for its intended purpose to contribute to residential housing opportunities within the locality. The site being within close proximity to the Roseville Chase local centre, well-serviced public transport, and currently containing a residential land use associated with an

existing dwelling is well-suited for an analogous rezoning as that approved under PP-2021-4662. The proposal will not detract from private recreation opportunities within the RE2 zone noting the site does not form part of the Roseville Golf Course, but rather contains a tennis court and pool area associated with the existing dwelling at 15 Echo Street, Roseville.

Site-specific Considerations

The following is a summary of matters likely to be relevant to the assessment and evaluation of the rezoning of the subject site:

- **Existing development and uses:** The subject site currently contains a residential land use – private open space of an existing dwelling house within RE2 Private Recreation zone relying upon existing use rights. A preliminary site investigation and other contamination investigations confirming the site is, or can be made suitable for residential development will form part of a future planning proposal.

- **Surrounding development and uses:** The site adjoins R2 Low Density Residential zoned land to the south, east and west, and RE2 Private Recreation zoned land to the north. The proposed rezoning of the site would be compatible with the zoning of land in Echo Street, and future development of land in context of the immediate surrounds of the site and broader locality which is characterised by low density residential areas, public open space and educational infrastructure, and the nearby East Roseville Local Centre.

- **Access and Transport:** The rezoning of the land to R2 – Low Density Residential will not result in significant traffic generation. A new vehicular crossing accessing the site is to be considered as part of a future planning proposal in demonstrating the suitability of the site for increased density.

- **Ecological characteristics:** The site is not identified as riparian land or terrestrial biodiversity mapped land pursuant to the KLEP 2015.

- **Major infrastructure:** The site is not within proximity of any major infrastructure.

- **Services:** The site contains existing residential development and has been historically serviced by utilities.

- **Heritage:** The site is not within the visual catchment of any nearby heritage items or conservation areas,

- **Opportunities and constraints:** As detailed previously, the opportunity for rezoning of the site is for the provision of additional housing in line with

current and proposed planning, infrastructure, and transport strategies for the State on a remnant parcel of land which has historically been used for residential purposes.

Preliminary Environmental Considerations

The following requiring further assessment as part of a future planning proposal:

- Built form / concept building envelope for the site
- Traffic-generation and access
- Acoustic/Visual Privacy Impacts
- Residential Amenity
- Site Contamination
- Stormwater Management
- Landscaping and Ecology
- Social and Community Impacts

Investigation for community consultations is proposed to be carried out prior to the preparation of the planning proposal.

Discussion Points and Conclusion

- Any consideration required of Council-led strategic planning within the locality – updates of the Ku-ring-gai Local Housing Strategy
- Technical reporting to support the rezoning and address environmental matters beyond those detailed previously.
- Confirm requirement for reporting to other agencies. In accordance with Appendix B of the LEP Making Guideline, pre-lodgement engagement is not required with any identified government agencies.

We appreciate Council's review of the scoping proposal for the subject site and are seeking advice on the procedures and information required with the submission of the planning proposal.

If you would like to discuss the matters addressed in this letter or require further information, please contact Garry Chapman on 9560 1718 or email garry@chapmanplanning.com.au

Yours faithfully,

Prepared by Mr. Jason Lambropoulos
Senior Town Planner

Reviewed by



Garry Chapman
Director
Chapman Planning Pty Ltd

Cc: Ms. Rebecca Flax – Echo Capital
603/83 Mount Street
North Sydney NSW 2060

Attachment – Survey report prepared by LCG, Lot 6 easement and transfer

DEVELOPMENT APPLICATION

SUMMARY SHEET

REPORT TITLE:	139A KOOLA AVENUE EAST KILLARA - ALTERATIONS AND ADDITIONS TO AN EXISTING DWELLING HOUSE
ITEM/AGENDA NO:	GB.2

APPLICATION NO:	eDA0259/25
ADDRESS:	139A Koola Avenue, East Killara
WARD:	Gordon
DESCRIPTION OF PROPOSAL:	Alterations and additions to an existing dwelling house
APPLICANT:	Andre Wyzenbeek
OWNER:	Mr A Wyzenbeek, Mrs AM Wyzenbeek
DATE LODGED:	2 June 2025
SUBMISSIONS:	1
ASSESSMENT OFFICER:	Susteni Fonmudeh
RECOMMENDATION:	Approval

KLPP REFERRAL CRITERION:	Greater than 10% departure from a development standard.

PURPOSE OF REPORT

To determine Development Application No eDA0259/25 for 139A Koola Avenue, East Killara.

This application is reported to the Ku-ring-gai Local Planning Panel for determination, in accordance with the Minister's Section 9.1 Local Planning Panels Direction, as it proposes a departure from development standards in excess of 10%.

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

A. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, is satisfied that the request submitted under Clause 4.6 to vary the maximum floor space ratio development standard in Clause 4.4(2D) of the KLEP 2015 has met the requirements of Clause 4.6(3). The Panel is also of the opinion that strict compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify the variation to the development standard.

B. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, is satisfied that the request submitted under Clause 4.6 to vary the maximum building height development standard in Clause 4.3(2) of the KLEP 2015 has met the requirements of Clause 4.6(3). The Panel is also of the opinion that strict compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify the variation to the development standard.

C. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, being satisfied that the proposed development would be in the public interest, grant development consent to eDA0259/25 for alterations and additions to an existing dwelling house at 139A Koola Avenue, East Killara, subject to conditions as recommended in the Development Assessment Report (**Attachment A1)**. Pursuant to Section 4.53 of the Environmental Planning and Assessment Act 1979, this consent lapses if the approved works are not physically commenced within five years of the date of the Notice of Determination.

Susteni Fonmudeh
Development Assessment Officer

Luke Donovan
Acting Team Leader

Shaun Garland
Manager Development Assessment Services

Michael Miocic
Director Development & Regulation

Attachments:

A1⇩	Development Assessment Report	2025/264546
A2⇩	Location Sketch	2025/269236
A3⇩	Zoning Sketch	2025/269230
A4⇩	Architectural, Stormwater and Landscape Plans	2025/276133
A5⇩	Survey Plan	2025/161853
A6⇩	Clause 4.6 variation request – Floor Space Ratio	2025/276144
A7⇩	Clause 4.6 Variation Request – Building Height	2025/276146

DEVELOPMENT APPLICATION

ASSESSMENT REPORT

REPORT TITLE	139A Koola Avenue, East Killara - Alterations and additions to an existing dwelling house

APPLICATION NO	eDA0259/25
PROPERTY DETAILS	139A Koola Avenue Lot 9 Sec 93 DP 242796 1388.00m^2 C4 Environmental Living
WARD	GORDON
PROPOSAL/PURPOSE	Alterations and additions to an existing dwelling house
TYPE OF DEVELOPMENT	Local
APPLICANT	Andre Wyzenbeek
OWNER	Mr A Wyzenbeek, Mrs AM Wyzenbeek
DATE LODGED	2 June 2025
RECOMMENDATION	Approval

PURPOSE OF REPORT

To determine Development Application No. eDA0259/25 for alterations and additions to an existing dwelling house.

This application is reported to the Ku-ring-gai Local Planning Panel for determination in accordance with the Minister's Section 9.1 Local Planning Panels Direction as it proposes a departure from a development standard in excess of 10%.

INTEGRATED PLANNING AND REPORTING

Places, Spaces & Infrastructure

Community Strategic Plan Long Term Objective	Delivery Program Term Achievement	Operational Plan Task
P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai.	Applications are assessed in accordance with state and local plans.	Assessments are of a high quality, accurate and consider all relevant legislative requirements.

EXECUTIVE SUMMARY

Issues	Clause 4.6 variation request – Floor Space Ratio
Submissions	1 submission (in support)
Land and Environment Court	N/A
Recommendation	Approval

HISTORY

Site history

The site has a history of residential use.

Previous applications history

Type	Application	Description	Decision	Date
BA	0419/77	Front fence	Approved	25/03/1977
BA	0418/77	Swimming Pool	Approved	11/07/1978
DA	512/99	Additions and alteration to dwelling, new entry and extension to garage	Approved	17/09/1999
CDC	PCDC0276/23	Alterations to existing dwelling	Issued	08/06/2023

Current Development Application History

A pre-DA consultation was not undertaken with Council.

Date	Action
2 June 2025	Application lodged.
10 June 2025	The application was notified to neighbouring property owners for a period of 14 days and 1 submission in support of the application was received.
29 July 2025	The applicant provided amendments to the application specifically removing the habitable areas at basement floor level.
22 August 2025	The applicant provided an amended Clause 4.6 request to vary the floor space ratio standard and minor corrections to architectural plans.

THE SITE



Figure 1 – Aerial photograph of the subject site and surrounding development (Source: Geocortex Viewer)

Site description

The subject site comprises a battle axe block, is legally described as Lot 9, Sec 93 in DP 242796 and is commonly known as 139A Koola Avenue, Killara. The site is located on the southern side of the street towards the eastern end. The site has a total area of 1,388m^2 and is zoned C4 Environmental Living under the Ku-ring-gai Local Environmental Plan 2015. The site is predominantly rectangular in shape, with a battle axe handle providing secondary street access from Murrumba Place at the rear (southern boundary). The site has a significant fall of over 21 metres from the northern side (Koola Avenue) to its southern (Murrumba Place) side, offering expansive views of Garigal National Park to the south-east.

The site has the following key dimensions:

- Koola Avenue (north) frontage: 25.91 metres
- side boundaries (east and west): 46.94 metres
- Southern (rear)) frontage: an arc of 4.705 metres
- access handle average length of 35.46 metres

The site contains a contemporary, architect-designed dwelling constructed of brick and concrete with a flat roof. The dwelling presents as single storey to Koola Avenue but comprises three habitable levels and a subfloor area. The layout of the existing dwelling comprises the following:

- Street level: garage, entry foyer, study, and guest room
- Ground level: kitchen, living room, family room, and main bedroom
- Lower ground level: bedrooms and a rumpus room, with direct access to a swimming pool and pool deck
- Externally: steps provide access from the lower ground floor deck towards a predominantly terraced rear yard with perimeter landscaping.

Constraint:	Application:
Visual character study category	Post - 1968
Easements/rights of way	No
Heritage Item - Local	No
Heritage Item - State	No
Heritage conservation area	No
Within 100m of a heritage item	No
Bush fire prone land	Yes
Natural Resources Biodiversity	Yes
Natural Resources Greenweb	Yes
Natural Resources Riparian	Yes
Within 25m of Urban Bushland	Yes
Contaminated land	No

Surrounding development

The surrounding area is characterised by low-density residential development, with a variety of architectural styles and building heights responding to the area's steep topography and bushland outlook. Development surrounding the subject site comprises the following -

- To the east at 139B Koola Avenue – a large, contemporary concrete and masonry dwelling that appears as two storeys to the street, with two additional levels stepping down the slope. This is a smaller site being approximately 668.5m^2 in area.
- To the west at 139 Koola Avenue – a two-storey brick and tile dwelling likely constructed in the 1980s.
- To the south-east at 18 Murrumba Place – a battle axe lot with a split-level residence.
- On the opposite (northern) side of Koola Avenue - a series of three-storey dwelling houses elevated above street level with balconies that overlook the subject site towards the views of Garigal National Park.

THE PROPOSAL

The application proposes alterations and addition to the dwelling house, specifically -

a) Installation of an external lift

A new external lift to provide improved vertical access between the lower ground

floor, ground floor and first floor of the dwelling.

b) Subfloor level

Removal of some brickwork to improve cross ventilation through the subfloor area of the dwelling.

c) Lower Ground Floor

i. an upgraded laundry and a new powder room;
ii. an enlargement of the lower ground floor to accommodate a home theatre, a plant room and a garden store room; and
iii. external deck extension.

d) Ground Floor

i. extension to main bedroom;
ii. extension to dresser in main bedroom;
iii. removal of some sections of internal walls to improve access; and
iv. deck extension over part of swimming pool area.

e) Externally

i. removal of existing dilapidated stairs at rear of dwelling providing access between the lower ground floor and rear yard;
ii. landscaping works across parts of the site;
iii. minor deck extension to the rear at lower ground floor level;
iv. update of stormwater system; and
v. refurbishment of stairs adjacent to eastern boundary.

CONSULTATION

Community

In accordance with Appendix 1 of the Ku-ring-gai Community Participation Plan, owners of surrounding properties were given notice of the application. In response, 1 submission in support of the application was received.

Amended information dated 29 July 2025 and 22 August 2025

In accordance with the criteria in Part 3 of the Community Participation Plan, Council's Development Assessment Team Leader determined that notification of the amended plans/additional information was not required as the amendments were unlikely to detrimentally affect the enjoyment of adjoining or neighbouring land.

Internal Referrals

Landscaping

Council's Senior Landscape and Tree Assessment Officer commented on the proposal as follows:

SEPP (Building Sustainability Index: BASIX) 2004		
Part 3 Aims	***Proposed***	***Complies***
To encourage sustainable residential development	*Certificate A1782036_02 dated 30th May 2025 is submitted with the application.* *No landscape outcomes are required.*	**YES**

KDCP COMPLIANCE TABLE		
Control	***Proposed***	***Complies***
Part 4A.2 Building Setbacks		
C12. Side setbacks are to accommodate a pathway and at least 0.6 metres of landscaping width for single storey houses, and 1.1 metres for 2 storey houses.	*The existing side setbacks are remaining as existing for the most part except for a minor/ small addition to the main bedroom located on the eastern side of the site. The existing garden beds will essentially remain. There is no other opportunity to extend to enable more landscaping, the works will result in a significant or detrimental impact contrary to the objectives of this provision and as the site is located within a bushfire prone area and rows of screening planting is not suitable.*	**YES**
C13. Side setbacks are to accommodate shrubs to a height of 3-4m for 2 storey houses, and 2-3m for single storey houses.	*Refer to above commentary.*	**YES**
Part 4A.4 Landscaping and Part 13 Tree and Vegetation Preservation		
C1. Landscape proposals are to retain existing trees where possible	*The proposal does not involve the removal of any trees, and no tree impacts are anticipated as a result of the proposed works.*	**YES**
C2. Tree replenishment and planting to be provided.	*The proposal does not satisfy this part.* ***Lot size*** / ***Number of trees*** *Less than 850m2* / *3* *850m2 to 1,000m2* / *5* *1,001 m2 to 1,500m2* / *7* *Over 1,500m2* / *10 or as directed* *For a site area of 1,388m^2, the proposal is required to attain a total of seven (7) trees. The site does not include trees capable of attaining 13 metres in height. A condition is recommended requiring 1 replacement tree which is acceptable as the site is identified as bushfire prone land and the site is significantly constrained which reduces opportunities for any additional tree plantings* **(see Condition 33).**	**YES**

C3. Landscaping to include tall trees, small trees, shrubs and ground cover. Continuous rows of monoculture planting and high hedging to boundaries is to be avoided.	*The landscape plan satisfies this control.* *The landscape includes groundcovers and small trees which are considered fire retardant suitable for the bushfire prone areas, which has been certified by the applicant's bushfire expert.* *Refer to comments above Part 4A4 C2, and Part 4A.2 C12.*	**YES**
C4. Landscape designs are to reflect the prevailing landscape character of the area.	*The landscape plan satisfies this control.* *Refer to comments above Part 4A4 C2, and Part 4A.2 C12.*	**YES**
C5. New trees are to be distributed across the site and are to be located to accommodate the mature growth of both new and existing trees.	*The landscape plan satisfies this control.* *Refer to comments above in response to Part 4A4 C2, and Part 4A.2 C12.*	**YES**
C6. Hedges near boundaries are not to impact the amenity of adjoining properties by blocking sunlight, bushland or water views or unreasonably shading neighbours' private open space or living areas in winter. Hedges are not to grow to excessive height and are to be maintained at a height below 2 metres.	*The landscape plan satisfies this control.*	**YES**
Part 4C.7 Ancillary Services		
Swimming Pools *C2. The pool/spa/enclosure is to be designed and located so that there is sufficient area adjacent to the property boundary for substantial landscape planting to:*		

i) minimise potentially adverse impacts such as glare and visual intrusion *ii) minimise the impact on existing trees both on the site and on adjoining properties.*	*The proposal satisfies this part.* *The proposal satisfies this part.*	**YES** **YES**
C3. The pool/spa coping, decking, paving or the like is to be sited a minimum of 2 metres from a property boundary and not be more than 0.5 metres above existing ground level at any point. On steeply sloping sites, levels greater than 0.5m will be considered subject to increased setbacks and landscaping to protect the amenity and privacy of neighbouring properties. ***Note:** Refer to AS1926.1 2012 Part 1: Swimming pool safety for requirements on landscaping to non-climbable zones.*	*The swimming pool and its surroundings are existing.*	**YES**
C4. Pool excavation should not be beneath the canopy of trees protected by Part 13 of this DCP.	*The swimming pool is existing.*	**YES**
Part 16 Bushfire Risk		
16.1 Bushfire Risk Management	*Bushfire report prepared by Bushfire Planning Services and dated 31st March 2025 has certified the landscape plan prepared by Stephen Grech and Associates, Architects dated 18th May 2025.*	**YES**

Part 21.1 Earthworks and Slope		
C5. Existing ground level is to be maintained for a distance of 2 metres from any boundary.	*Existing ground level has not been maintained for 2 metres from the eastern and western boundary. This is an existing setting, no modifications are proposed.*	**YES**
C8. Retaining walls, excavated and filled areas are to be located and constructed to have no adverse impact on iii) trees and vegetation to be retained on site or on adjoining sites.	*The proposal satisfies this control.*	**YES**
Part 21.2 Landscape Design		
21.2 Landscape Design *To ensure the landscape design and species selection is suitable to the site its context and considers the amenity of residents and neighbours.*	*The landscape plan is acceptable.*	**YES**

The landscaping comments provided in the above table are concurred with.

Engineering

Council's Development Engineer commented on the proposal as follows:

KDCP COMPLIANCE TABLE		
Control	***Proposed***	***Complies***
Part 24A. Site Design for Water Management		
24A.1 Development Type 1	*The increase in built-upon area is < 20 m^2*	**YES**
24A.2 Location	*Location A. The site has a fall of approximately 22 metres from property frontage to the rear lane.*	**YES**
Part 24B. Stormwater Disposal from Location A Properties		
24B.2 Discharge to kerb and Gutter/Table Drain	*Runoff from the property to be directed to the existing kerb and gutter to Murrumba Place.* *The submitted stormwater management plans indicate that the existing drainage system that services the property is to be upgraded with new pits and pipes that discharge to the kerb & gutter on Murrumba Place. The proposed works are to remediate current seepage and surface runoff*	**YES**

	issues.	
Part 24C.4 On-site Stormwater Management		
Part 24C.4 Mandatory Rainwater Tank Requirements *Type 1* *Alts & Adds < 20m2* *A rainwater tank is strongly recommended but not mandatory.*	*The extent of additions are over existing impervious areas and therefore a rainwater tank is not mandatory.*	**YES**
Part 24C.6 Stormwater Quality Control		
Development Type 1 *N/A however it is recommended that the captured stormwater must be treated to the standards set out in Table 24C.6-1*	*Water quality measures have been addressed by providing the runoff from the existing impervious areas via a boundary pit that will be a sediment control pit before discharging to the kerb & gutter via a RHS (Rectangular Hollow Section) pipe. These impervious and pervious areas are filtered via the boundary pit as shown. Any uncontrolled surface runoff can be directed to rain-scaping. The requirements of Part 24C.6 of the DCP are satisfied.*	**YES**

Geotechnical Investigation		
The proposed development will result in substantial excavation greater than 2 metres in cut. According to Council's DA Guide, a geotechnical report is to be submitted with the DA.	*Morrow Geotechnics Pty Ltd Reference: P3358_02 dated 20 May 2025 has undertaken a geotechnical investigation to provide geotechnical advice and recommendations for proposed alterations and additions at the subject site. The excavation of three test pits (TP1, TP2 and TP3) to assess the depth of bedrock on site were undertaken. The subsurface conditins at the site are characterised by fill and residual soils overlying sandstone bedrock.* *Prior to excavation and construction, it is recommended that detailed dilapidation surveys be carried out on all structures and infrastructures surrounding the site that falls within the zone of influence of the excavation to allow assessment of the recommended vibration limits.* *Groundwater seepage monitoring should be carried out during bulk excavation works and prior to finalising the design of a pump out facility. Outlets into the stormwater system will require Council approval.*	**YES**

	The geotechnical recommendations regarding excavation support, vibration monitoring, dilapidation reporting of adjoining buildings and foundation design shall be carried out during construction as specified within the report. These forms recommended Condition 21.	

The landscaping comments provided in the above table are concurred with.

Ecology

Council's Ecological Assessment Officer commented on the proposal as follows:

LEP 2015 COMPLIANCE TABLE		
Part 5 Miscellaneous provisions	***Proposed***	***Complies***
Clause 5.23 Public Bushland *(1) The objective of this clause is to protect and ensure the ecological viability of bushland, including rehabilitated areas in urban areas, by—* *(a) preserving biodiversity, habitat corridors and links between public bushland and other nearby bushland, and* *(b) preserving bushland as a natural stabiliser of the soil surface, and* *(c) preserving existing hydrological landforms, processes and functions, including natural drainage lines, watercourses, wetlands and foreshores, and* *(d) preserving the recreational, educational, scientific, aesthetic, environmental, ecological and*	***Clause 5.23 Public bushland*** *The subject property does not adjoin 'Public Bushland", the proposal is unlikely to directly or indirectly impact upon Public Bushland. The proposal is considered to be consistent with the aims and objectives of this clause.*	**YES**

cultural values and potential of bushland, and *(e) mitigating disturbance caused by development.*		
Part 6 Additional local provisions	***Proposed***	***Complies***
Clause 6.3 – Biodiversity Protection *The objective of this clause is to protect maintain and improve the diversity and condition of native vegetation and habitat*	*The rear portion of the subject development has been mapped as 'Terrestrial biodiversity'.* *The proposed development will not result in the direct removal of native vegetation from lands mapped 'Terrestrial biodiversity' and will not result in adverse environmental impacts upon Terrestrial biodiversity.*	**YES**
Clause 6.4 – Riparian land *The objective of this clause is to protect riparian lands and adjoining waterways*	*The proposed development will not result in the removal of native vegetation from lands mapped as riparian land.* *The proposal has been sited outside land mapped riparian, the proposal is consistent with the objectives of this clause under the LEP.*	**YES**

Part 17 Biodiversity Controls		
17.1 Category – General Controls *17.2 Category 1– Environmental Corridor*	*The proposed development will not result in the removal of native vegetation from lands mapped as Category 1* *The proposal has been sited to outside of lands mapped Category 1, the proposal is consistent with the objectives and controls under this part.*	**YES**
Part 18 Biodiversity Controls		
18.3 Category – Support for Core Biodiversity Lands. *18.5 Category – Biodiversity Corridor and consolidation*	*The proposed development will not result in the removal of native vegetation from lands mapped under these parts.* *The proposal has been sited outside land mapped under these parts, the proposal is consistent with the objectives and controls under these parts.* *The proposal seeks to retain the existing landscape character within the mapped land as such no enhancement planting is deemed necessary in this instance.*	**YES**

The landscaping comments provided in the above table are concurred with.

STATUTORY PROVISIONS

State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 Remediation of land

The provisions of Chapter 4 require Council to consider the potential for a site to be contaminated. The subject site has a history of residential use and as such, it is unlikely to contain any contamination, and further investigation is not warranted in this case.

State Environmental Planning Policy (Sustainable Buildings) 2022 – Chapter 2 Standards for residential development – BASIX

A valid BASIX Certificate has been submitted and the proposal is consistent with commitments identified in the Certificate. As per the requirements of Clause 2.1(5) the consent authority may be satisfied that the application includes information in which the embodied emissions attributable to the development have been quantified.

Ku-ring-gai Local Environmental Plan 2015

Clause 1.2 Aims of the plan

The proposal has been assessed against the relevant aims of the plan. The proposal is consistent with the aims for the reasons given within the assessment report.

Zoning and permissibility

The site is zoned C4 Environmental Living. The proposed development is defined as alterations and additions to a dwelling house which is a permissible form of development.

Zone objectives

The objectives of this zone are:

- To provide for low-impact residential development in areas with special ecological, scientific or aesthetic values.
- To ensure that residential development does not have an adverse effect on those values.
- To ensure development does not result in further fragmentation of ecological communities, biodiversity corridors or other significant vegetation or habitat.
- To minimise direct and indirect risks to life, property and the environment from bushfire events.
- To ensure that development in this zone on land that adjoins land in Zone C1 National Parks and Nature Reserves or Zone C2 Environmental Conservation is compatible with the objectives of those zones.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.

The development:

- is compatible with the existing and built character of the locality including the C4 Environmental Living zone wherein the site is located;
- allows for the retention of biodiversity significant vegetation and minimises risk from bushfire events; and
- is largely with the existing building footprint and will therefore be a low impact form of residential development.

The proposed development therefore upholds the zone objectives.

Development standards:

Ku-ring-gai Local Environmental Plan 2015

Development standard	Proposed	Complies
Cl 4.3 - Height of buildings: Maximum Building Height - 9.5 metres	10.3 metres **(8.4% variation)**	**NO**
Cl 4.4 - Floor space ratio (FSR): Subclause 2D Calculation 0.32:1 Gross Floor Area = 441.16 m2	509.08m^2 0.3668:1 **(14.62% variation)**	**NO**

Cl 4.4 - Floor space ratio

Clause 4.6 Exceptions to development standards

The proposed development breaches the maximum floor space ratio development standard contained in Clause 4.4(2D) of LEP 2015. The applicant has made a submission pursuant to Clause 4.6 seeking to vary that development standard. Clause 4.6 provides flexibility in applying certain development standards and an assessment of the request to vary the development standard is provided below:

(1) The objectives of this clause are as follows—

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,
(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.

(3) Development consent must not be granted to development that contravenes a development standard unless the consent authority is satisfied the applicant has demonstrated that—

(a) compliance with the development standard is unreasonable or unnecessary in the circumstances, and
(b) there are sufficient environmental planning grounds to justify the contravention of the development standard.

Whether compliance with the development standard is unreasonable or unnecessary in the circumstances of the case

The applicant states that compliance with the development standard is unreasonable or unnecessary for the following reasons:

"Floor space ratio objectives analysis

This clause 4.6 variation request establishes that compliance with the maximum permissible FSR standard is unreasonable. The zoning objectives are consistent in their intent to facilitate low-impact residential development in areas with ecological, scientific, or aesthetic values, while ensuring that the natural qualities of the land are preserved. The FSR standard, however, does not adequately account for unique site conditions, such as steeply sloping land and irregular building envelopes, where the strict application of the control can result in an unreasonable restriction on modest and otherwise compliant residential additions. In this case, the proposed breach arises solely from a minor addition within an area of the site that can be described as a "void" — the space between the existing dwelling and the adjoining rock face as shown below:

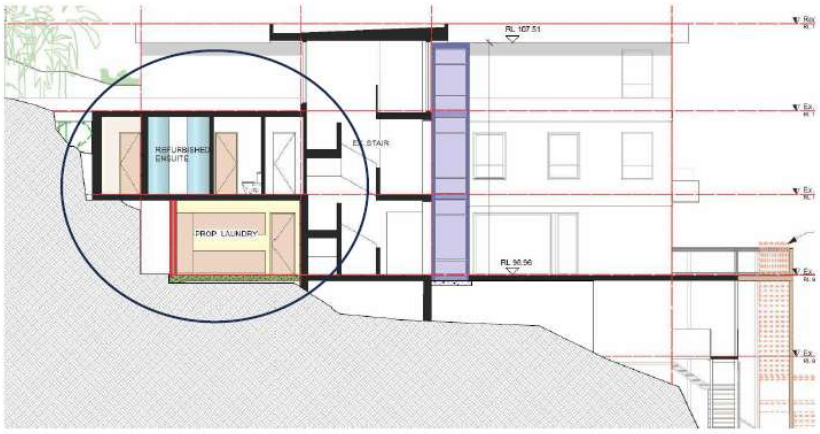


Image 5: Extract of the section plan showing the subject addition

Figure 2: Applicant's image showing the extract of the section plan referred to in the Clause 4.6 request.

This is the least impact portion of the site available for development, as it avoids disturbance to landscaped areas, ecologically significant vegetation, or areas that contribute to the natural character of the land. The proposed addition is objectively modest and does not represent an overdevelopment of the site.

Furthermore, this intentionally located area ensures that the adjoining amenity is also protected as it mitigates any potential solar access loss, loss of acoustic amenity.

Objective (a) explores the contextual relationship of a building in relation to buildings within the immediate vicinity. This notion aims to ensure a consistent pattern of dwelling typology is achieved through harmonious and complementary building design. This extends to bulk/scale, architectural typology, building massing, open space, landscape area, built upon area and building setbacks. The increase floor area does not result in any noticeable or impactful digressions from any of the aforementioned planning principles as the subject area of building increase is hidden and cannot be seen from any public space. In this regard the resulting building physically presents as an almost identical structure when viewed from the streetscape, it is a similar concept to that of a basement.

……. the dwellings located on the northern side of Koola Avenue presents as 2 and 3 storey dwellings of significant mass towards the primary road facing portion of the

land while on the southern side of Koola Avenue the dwellings present as 1 and 2 storey dwellings with majority of the bulk located to the southern portion of the lot. The proposed additional building footprint is concealed within the "void space" located at the front of the lot.

It is important to consider that the RL at street level is roughly RL106 and the top of the rock face being RL 105.84. The proposed building footprint has a maximum RL of 105 that extends down to an RL of 98.96 and is therefore entirely below the street level. Furthermore, there is existing building bulk located behind this subject area meaning that there is no increase to the building bulk when viewed from the rear, for all intents and purposes the footprint is "invisible" meaning that the base dwelling physical presents as the same from all viewable locations.

Accordingly, the proposed additions achieve a built form and density that are contextually appropriate and compatible with the existing development pattern along Koola Avenue. The variation does not present as additional bulk to the street or adjoining properties, maintains consistency with the prevailing character, and respects the environmental and physical constraints of the site and the variation does not result in a building density on the site that is uncharacteristic of the surrounding locality. For these reasons, the proposal satisfies Objective (a) of Clause 4.4 by delivering a modest, well-sited and harmonious built form outcome.

Accordingly, the proposed additions achieve a built form and density that are contextually appropriate and compatible with the existing development pattern along Koola Avenue. The variation does not present as additional bulk to the street or adjoining properties, maintains consistency with the prevailing character, and respects the environmental and physical constraints of the site and the variation does not result in a building density on the site that is uncharacteristic of the surrounding locality. For these reasons, the proposal satisfies Objective (a) of Clause 4.4 by delivering a modest, well-sited and harmonious built form outcome.

A fundamental purpose of the FSR control is to ensure an appropriate balance between built form, open and natural space, protecting amenity, ecological values, and landscape character. When viewed in this context, the numerical variation achieves the intent of the standard because:

- *The addition is confined to an area that has no ecological or landscaping value.*
- *The development maintains a high level of open space and natural site character.*
- *The proposal achieves compliance with all other key development standards, including height, setbacks, landscaping, and design quality.*
- *The built form outcome remains low-impact, consistent with zone objectives, and compatible with surrounding development.*
- *The proposal is modest in nature and results in the best use of land at no detriment to all other considerations both prescriptively and objectively.*

Rigid adherence to FSR standard in this circumstance would impose an unnecessary restriction that does not lead to better planning outcomes. Rather, it would prevent a modest and well-sited addition that satisfies the objectives of the zone by:

- *Supporting the ongoing use of the land for low-impact residential purposes.*
- *Ensuring no adverse effect on ecological, scientific, or aesthetic values of the site.*
- *Locating new floor area in the least impactful position available, thereby preserving significant landscape qualities.*

- *Providing additional amenity and functionality for residents while respecting environmental constraints.*
- *Maintaining compatibility with adjoining land uses and broader neighbourhood character.*

Accordingly, the proposed variation is both reasonable and justified, as the development achieves the intent of the standard and fully satisfies the strategic objectives of the planning framework."

An assessment of the applicant's justification is provided below –

- The proposed additions will achieve consistency with the objectives of the C4 Environmental Living zone. The addition will continue to be a low impact form of residential development that will not affect any special values associated with the site.
- The proposed addition will not result in any further fragmentation of any ecological communities or significant vegetation on the site.
- It is agreed that the location of the proposed addition at lower ground floor is in one of the "least impactful" environmental parts of the site given it is located between an existing and previously excavated rock face and the existing building line.
- Furthermore, the location of the proposed addition at lower ground floor level will not result in any amenity impacts given it is located well below street level and largely obscured from view from adjoining properties by the existing rock face and concrete retaining structures.
- The proposed additions would not result in a built form that is contextually inappropriate with existing development on adjoining properties. The increase in built form will not be easily discernible from adjoining properties and will not affect the relationship of the built form to Koola Avenue. The resulting built form will largely remain the same as existing and therefore remain contextually appropriate having regard to the existing streetscape character.
- The examples provided at pages 16 and 17 of the Clause 4.6 variation request, showing nearby approvals with GFA and FSR exceedance are acknowledged. This further demonstrates that the proposed built form and density is contextually appropriate for East Killara wherein the site is located.
- Requiring compliance for the FSR development standard or no increase above existing FSR is considered unreasonable and unnecessary for the reasons advanced above. The proposed FSR achieves consistency with the relevant objectives of Clause 4.4 in KLEP.
- The steep topography has necessitated the built form to be spread across the site, so it is not concentrated on one part of the site, this requires more floor space to account for this need. This has dictated the location of the proposed work given the existing built form.

Whether there are sufficient environmental planning grounds to justify contravening the development standard

The applicant states that the following environmental planning grounds justify contravening the development standard:

1. ***"Topographical context** – the breach arises only because of the steep slope and rock face on the lot, creating a "void" where floor space can be added without disturbing landscape or ecological values.*
2. ***Non-sensitive location** – the additional floor space is confined entirely to an area with no ecological significance or landscaped function, ensuring no loss of biodiversity, tree cover, or natural site character.*

3. ***Visual containment and mitigated streetscape impacts*** *– the addition is located below street level and concealed by the rock face and existing built form, meaning it does not present as additional bulk or scale to the public domain or adjoining properties.*
4. ***Amenity protection*** *– the siting of the additional floor area ensures there is no adverse impact on privacy, overshadowing, solar access, or acoustic amenity for neighbouring dwellings.*
5. ***Preservation of open space*** *– large portions of the site remain landscaped and unbuilt upon, ensuring a high ratio of open space to built form and the retention of the site's natural qualities.*
6. ***Compliance with other controls*** *– the proposal meets all other key LEP and DCP standards, including height, setbacks, and landscaping, demonstrating that the development is orderly and balanced.*
7. ***Efficient and reasonable use of land*** *– the addition supports the ongoing residential use of the site, providing modes amenity improvements in the most logical and least impactful location available.*
8. ***Zone consistency*** *– the proposal is compatible with the objectives of the C4 Environmental Living zone by maintaining low-impact residential development while protecting ecological and aesthetic values.*
9. ***Public interest*** *– flexibility in this instance achieves a better outcome than strict compliance, as it allows a modest residential addition without any detriment to environmental or planning objectives.*
10. ***Consistency with prevailing built form*** *– the proposed FSR (0.365:1) falls comfortably within the range of other approvals in East Killara (0.31:1 to 0.416:1), reinforcing that the development does not exceed the scale commonly supported in the locality."*

Assessment of the applicant's justification

The environmental planning grounds advanced in the Clause 4.6 variation request, specifically grounds 1, 2, 3, 4, 5, 8 and 10, are sufficient to warrant the proposed additional breach to the FSR standard. These are site specific grounds that are relevant to the FSR standard. The variation is supported in this instance.

Authority to determine variation

Any variation to a numerical standard that exceeds 10% or relates to a non-numerical standard must be considered by the Ku-ring-gai Local Planning Panel. As the variation to the numerical standard is greater than 10% (specifically 14.62%) the application is required to be referred to the Ku-ring-gai Local Planning Panel for determination.

Development standards that cannot be varied

The variation to the development standard is not contrary to the requirements in subclauses (6) or (8) of Clause 4.6.

Cl 4.3 – Building height

The applicant has made a submission pursuant to Clause 4.6 seeking to vary the maximum building height development standard in Clause 4.3(2) of KLEP 2015. Clause 4.6 provides flexibility in applying certain development standards and an assessment of the request to vary the development standard is provided below.

The objectives of this clause are detailed in the above Clause 4.6 variation request to the FSR control. Please refer to this part of the report for the objectives.

Whether compliance with the development standard is unreasonable or unnecessary in the circumstances of the case

The applicant states that compliance with the development standard is unreasonable or unnecessary for the following reasons:

> *"The compliance with the height of buildings standard is unreasonable and unnecessary as the objectives of this development standard are achieved notwithstanding the non-compliance.*
>
> *Addressing each of the objectives listed:*
>
> ***(a) to ensure that the height of buildings is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai centres,***
>
> *The proposed lift is sited within the existing building footprint and lower than the roof of the existing building. As such, this proposed lift will not be visible from the street (North) or Eastern boundary. The overall streetscape and public domain will remain unchanged and is appropriate within the Ku ring gai centre.*
>
> ***BULK AND MASS CONSIDERATIONS***
>
> ***(1)** New External Lift on southern elevation of the existing dwelling. The proposed new lift improves access and movement through the house for a person in a wheelchair. The decision to locate it externally was determined by the conclusion that it could not be located within the existing building envelope without significant and substantial modification to the existing floor plans which compromised amenity, utility and accommodation.*
>
> *While the new lift adds to the mass and bulk of the house, mitigating factors supporting its proposed location are:*
>
> *- Lower in height than the main dwelling;*
> *- Lightweight construction;*
> *- Compact footprint;*
> *- No additional shadow cast;*
> *- Not visible from the north and east;*
> *- When viewed from the south and west, the lift tower is always seen against the main building as its backdrop. There is no additional visual bulk or mass; and*
> *- Environmental merit as the works to install the lift within the existing building shall require significant demolition and rebuilding work which would produce waste even with recycling/upcycling measures in place.*

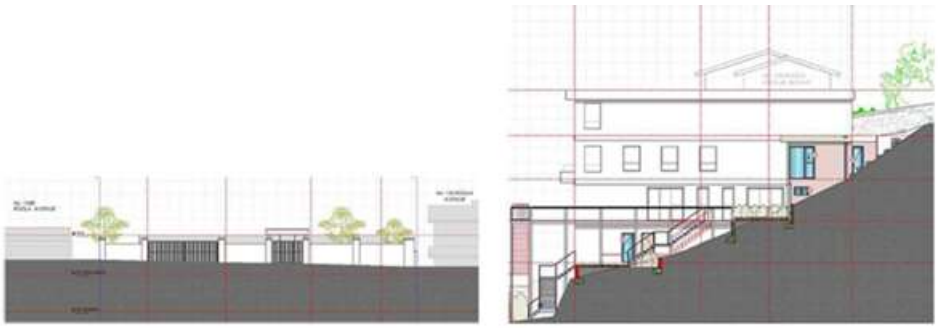


Figure 3 – North and East Elevation indicating lift is not visible



Figure 4 – South and west elevation indicating lift is visible

*As demonstrated in the images below, the overall height of the current existing building is **LOWER** than both the properties adjoining to the east and west sides and appears very recessive in the context of the streetscape.*

This proposal does not seek to alter the current street elevation in any way with none of the proposed works visible from the street. The proposal is therefore suitable within its immediate context.



Figure 5 – Extract from cl 4.6 – red line indicates height of neighbour and blue lines subject dwelling – front elevation – Source Google



Figure 6 - Extract from cl 4.6 – red line indicates height of neighbour and blue lines subject dwelling – front elevation of dwelling to west of site – Source Google

(b) to establish a transition in scale between the centres and the adjoining lower density residential and open space zones to protect local amenity,

As the proposed development does not exceed the height of the existing building, there will be no impact upon the transition in scale between the centres and adjoining lower density residential and open spaces. The development currently is and remains appropriate for the streetscape and residential zone.

(c) to enable development with a built form that is compatible with the size of the land to be developed.

As shown above, the proposed lift remains within the existing building plan footprint, and is not exceeding the existing building height, therefore the overall height of buildings and appropriate scale of built form is unaltered. As such, the development standard is unreasonable and unnecessary in the circumstances of this particular case.

In addition to the new works not being visible by the public domain, the proposed lift is only in breach of the numerical non-compliance to a very minor extent of approximately 8%.

An assessment of the applicant's justification is provided below –

The proposed lift is within the existing building footprint (over a small portion of the existing deck) and lower than the roof of the existing building. This proposed lift is located at the rear of the dwelling and will therefore not be visible from Koola Avenue.

The lift is centrally located within the site width and well setback from both the western and southern boundaries. The lift is glass and metal framed with minimal dimensions ensuring no significant increase in bulk or scale when viewed from these adjoining properties.

The lift will provide improved access across the existing 3 habitable levels of the dwelling without any changes to existing building height of 10.9 metres

The applicant has demonstrated that strict compliance with the building height development standard is unreasonable and unnecessary in the circumstances.

Whether there are sufficient environmental planning grounds to justify contravening the development standard

The applicant states that the following environmental planning grounds justify contravening the development standard:

"This proposed lift of this development aims to address the steep topography of the site, without impacting the public domain. As the proposed lift will not be higher than the existing development, there will be no negative impacts on streetscape and existing built form.

This proposal will provide substantial amenity and ease of circulation to the dwelling, with no impact on neighbours, and only an approximate 8% height breach of the development standard.

The overall building height remains unchanged. The visible bulk of the proposed lift tower is visible from the south and the west. When viewed from these aspects, the lift tower has the existing main dwelling as its backdrop and is always lower than the existing roof parapet RL.

The additional bulk and mass of the external lift is reasonable, unimposing, and most importantly has no adverse environmental amenity impact.

All the objectives for height control listed in the LEP have been met and approval of this proposal will not set a new precedent as the existing building form is fundamentally unaltered."

Assessment of the applicant's justification

The environmental planning grounds advanced within the Clause 4.6 relate to (in summarised form) –

i. the need to provide improved access and circulation to address the steep topography of the site;
ii. no increase in existing building height;
iii. lack of environmental impact;
iv. building form remaining largely unaltered; and
v. consistency with the objectives of the building height standard

These environmental planning grounds are site specific and sufficient to justify the breach to the building height development standard. The variation request is accepted in this instance.

Authority to determine variation

Any variation to a numerical standard that exceeds 10% or relates to a non-numerical standard must be considered by the Ku-ring-gai Local Planning Panel. As the variation to the numerical standard is less than 10% (8.4% to be specific) the application is not required to be referred to the Ku-ring-gai Local Planning Panel for determination. The application is however required to be reported to the Ku-ring-gai Local Planning Panel for determination due to the proposed variation to the floor space ratio standard, which exceeds 10%, as detailed earlier within this report.

Development standards that cannot be varied

The variation to the development standard is not contrary to the requirements in subclauses (6) or (8) of clause 4.6.

Part 5 Miscellaneous provisions

Clause 5.10 – Heritage conservation

The subject site does not contain a heritage item, is not located within 100 metres of an Item, and is not within a heritage conservation area. The proposed works do not affect any known archaeological or Aboriginal objects or Aboriginal places of heritage significance.

Part 6 Additional local provisions

Clause 6.1 – Acid sulphate soils

The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage. The land is mapped as Class 5 Acid sulfate soils. Development consent is required for works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the water-table is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land. The proposal is not subject to this clause as the works are more than 500m of adjacent Class 1, 2, 3 or 4 land.

Clause 6.2 - Earthworks

The proposed development will not restrict the existing or future use of the site, adversely impact on neighbouring amenity, the quality of the water table or disturb any known relics.

Clause 6.3 - Biodiversity protection

The site is mapped as land comprising biodiversity significance.

The proposed development has been designed to minimise impacts on the diversity and condition of native vegetation, fauna and habitat as per the requirements of the LEP. The proposal is acceptable in this regard.

Clause 6.4 – Riparian land and waterways

The site is mapped as riparian land and waterways.

The proposed development has been designed to minimise impacts on riparian land and waterways, as per the requirements of the LEP. The proposal is acceptable in this regard.

Clause 6.5- Stormwater and water sensitive urban design

The stormwater design would adequately manage water quality and control discharge volumes and frequency, subject to conditions (**Conditions 28, 30 and 40**).

Ku-ring-gai Development Control Plan

Part 1A.5 General aims of the DCP

The proposed development has been assessed against the general aims of this DCP and is found to be acceptable in all relevant respects for the reasons given throughout this report.

Part 2: Site analysis

A site analysis which identifies the existing characteristics of the site and the surrounding area has been provided as part of the development application. The site analysis is considered to satisfy the objectives of this part of the DCP.

Part 4: Dwelling Houses

The table below addresses the assessment criteria contained under Part 4 of the DCP.

DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses		
Development control	**Proposed**	**Complies**
4A – Site Design		
4A.1 Local Character and Streetscape		
Visual Character Design components of new development are to be based on the existing predominant and high-quality visual character of the local neighbourhood.	The proposed additions complement the existing dwelling and the visual character of the area.	**YES**
The appearance of the dwelling is to maintain the local visual character by considering the following elements: i) visibility of on-site development when viewed from the street, public reserves and adjacent properties; and ii) relationship to the scale, layout and character of the tree dominated streetscape of Ku-ring-gai.	The proposed additions will not be visible from Koola Avenue given their location either significantly below street level and/or at the rear of the dwelling and below the existing gutter line of the dwelling. Further, the minor nature of the works will have little impact if visible from the adjoining development.	**YES**
The prominent and high-quality characteristics of the neighbourhood are to be identified and considered as part of the site analysis.	Considered as part of the site analysis.	**YES**
Public Domain and Communal Space Development is to integrate with surrounding sites by: i) being of an appropriate scale retaining consistency with the surrounds when viewed from the street, public domain or adjoining development and not exceeding two storeys; ii) minimising overshadowing; and iii) integrating built form and soft landscaping (gardens and trees) within the tree canopy that links the public and private domain throughout Ku-ring-gai.	The proposed additions integrate with the existing dwelling and there is no significant change to the existing scale of the dwelling. There will be no increase in overshadowing to adjoining properties.	**YES**
Colours of materials used in sites adjoining or in close proximity to bushland areas and conservation areas must be in harmony with	The colours of the materials complement the	**YES**

DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses		
Development control	**Proposed**	**Complies**
the built and natural landscape elements of the area.	existing dwelling and nearby bushland.	
4A.2 - Building Setbacks		
Building Line (Front Setback)		
The location of development on the site is to demonstrate its consideration of: i) The existing setback of adjoining properties; ii) The setback patterns of its street block; and iii) Council's minimum and average setback requirements.	No changes are proposed to the existing front setback of the dwelling house.	
Building Line (Rear Setbacks)		
Where sites have a depth of less than 48 metres, a minimum rear setback of 25% of the average site depth is to be provided. Required = **11.735 metres**	The proposed deck extension is set back 15.2 metres from the rear boundary and compliant with this control	**YES**
Building Line (Side Setbacks)		
>20m width - 9% of site width (single storey elements) **Required side setback: 2.33 metres**	The proposed additions relate only to single storey elements of the dwelling. The proposed setbacks are as follows: <u>West Boundary</u> 4.8 metres (proposed home theatre – lower ground floor) 1.66 metres (new extension to rear deck – ground floor) 0.68 metres (replacement deck to front of dwelling) <u>Eastern boundary</u> 1.6 metres (main bed extension to boundary)	 **YES** **NO** **NO CHANGE** **NO**
Side setbacks are to accommodate a pathway and at least 0.6m of landscaping width for single storey buildings, and 1.1m for 2 storey houses. Where sites are of greater widths (over 20m) larger side setbacks should be progressively provided.	Existing deck/staircase within eastern side setback partially re-built due to its dilapidated state. No further opportunities to provide the landscaping as required by the control.	**YES**

DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses		
Development control	**Proposed**	**Complies**
Side setbacks are to accommodate shrubs to a height of 3-4 metres for two storey houses, and 2-3 metres for single storey houses.	No further opportunities to provide the landscaping as required by the control.	**NO**
4A.3 - Built-Upon Area (BUA)		
Max BUA **41.7% (579.2m²)**	The existing BUA is 835.6m²	**NO**
For alterations and additions, on sites where the existing BUA is greater than the maximum permitted by control 1, the maximum BUA is the existing BUA, however, a reduction in BUA is desirable.	The proposed BUA is 753.4m² which is a reduction on existing BUA.	**YES**
4A.4 Landscaping		
The landscape plan includes groundcovers and small trees which are considered fire retardant suitable for the Bushfire prone areas. The non-compliance with the tree replenishment requirements under Control 2 in Part 4A.4 in KDCP are acceptable given the constraints of the site. The landscape plan has been certified by the applicant's bushfire expert.		**YES**
4C – Building Design and Sustainability		
4C.1 Building Envelopes		
The maximum height of a dwelling is 9.5 metres (including any garage, basement or the like) and present as a 2-storey dwelling house.	The dwelling has a maximum existing building height of 10.9 metres and presents as part 2, part 3 storeys. This is due to the steeply sloping nature of the site and is acceptable. The overall height is not changing, notwithstanding the proposed lift height, which is acceptable on merit.	**YES**
The following matters are to be considered with regard to the potential impact on neighbouring properties and local character: i) opportunities to minimise overshadowing of living and private open space areas and solar panels; ii) opportunities to minimise overlooking of living and private open space areas; iii) opportunities to minimise adverse impacts on any significant bushland, or distant views; iv) the relationship with the streetscape.	The proposed additions will not result in any impacts on neighbouring properties and the local character.	**YES**
Development is to avoid the creation of an overbearing effect upon adjoining development by:	The proposed additions do not have an overbearing effect on adjoining	**YES**

DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses		
Development control	**Proposed**	**Complies**
i) ensuring appropriate side setbacks and landscaping are incorporated in the design; ii) ensuring all built structures are within the building height plane as illustrated in Figure 4C.1-2 of the DCP (4m @ 45°); iii) the relationship with the streetscape.	properties. There will likely be no impacts on the streetscape.	
4C.2 Building facades		
Alterations and additions to an existing dwelling are to be: i) designed so that they are integrated into the existing building; ii) result in the new and old structures appearing as one building from the street. This may be achieved through the choice of materials, detailing, building proportion and configuration.	The proposed additions to the east side of the building match the existing dwelling. All other external changes will also match the existing dwelling, such as the deck extensions and lift for example.	**YES**
Roof line		
Roof structures are to be designed to minimise bulk and overshadowing of neighbouring buildings and open spaces by: i) considered selection of material, colour and pitch; ii) use of low-angled pitched roofs providing that they are compatible with existing development and the streetscape character; or iii) inclusion of habitable rooms within the roof space.	The proposed parapet roof structure over the main bedroom extension matches the roof form of the existing dwelling.	**YES**
4C.4 Private open space		
At least one area of useable private open space which has a minimum depth of 5 metres and a minimum area of 50m^2 is to be provided on each site. On steep sites Council may consider a reduction in the minimum depth requirement. On constrained sites (biodiversity, riparian, steep topography) Council may consider decks as open space.	Due to the steeply sloping nature of the site, a majority of the private open space is contained on the existing and proposed decks at the lower ground and ground floor levels which is acceptable. There is no significant change from the existing situation.	**YES**
4C.5 Solar access		
A building is to be designed and sited to maintain solar access to adjoining properties	The proposal will maintain existing levels of solar	**YES**

DCP COMPLIANCE TABLE SECTION A - Part 4 Dwelling houses		
Development control	**Proposed**	**Complies**
of at least 4 hours between 9am and 3pm on 21st June to north facing windows and all living areas (family rooms, rumpus, lounge and kitchen) and the principal private open space recreational areas, such as swimming pools and patios	access for adjoining properties.	
Dwelling design and orientation is to provide at least 4 hours between 9am and 3pm on 21st June to north facing windows and all living areas (family rooms, rumpus, lounge and kitchen) and the principal private open space including swimming pools and patios, to the proposed dwelling.	The proposed additions will provide for a new replacement deck on the northern side of the existing kitchen/dining which will increase opportunities for solar access.	**YES**
4C.6 Natural ventilation		
Building design is to incorporate measures for natural cross ventilation.	The design incorporates acceptable measures for natural cross ventilation within habitable rooms.	**YES**
4C.9 Waste Management		
During the design of the development, construction waste is to be minimised by: i) using recycled materials, selecting materials that reduce waste or do not require disposal, or can be reused or recycled in the future; ii) designing with minimal site disturbance by avoiding unnecessary excavation or fill.	A waste management plan included with the application.	**YES**
4C.10 Materials and Finishes		
Where additions and alterations are proposed, external materials and finishes must complement the existing building.	The materials and finishes proposed for the new areas of work generally match the existing building.	**YES**

An assessment of the variations to the controls identified in the above compliance table is provided below.

Part 4A.2 'Building Setbacks'

The objectives of Part 4A.2 are:

1. *To ensure that the appearance of new development is of a high visual quality, enhances the streetscape and complements good quality surrounding development.*
2. *To ensure development is appropriately located on site and*

    i) maintains streetscape character;
    ii) ensures the amenity of neighbouring properties is maintained or enhanced;
    iii) allows for the provision of landscaping and provide room for additional tree plantings to grow to maturity;

iv) facilitates solar access, daylight access and ventilation;
v) protects significant vegetation;
vi) facilitates efficient use of the site; and
vii) minimises bush fire hazard by preserving a "fuel free" zone (where development is adjacent to high bush fire hazard areas).

3. *To enable landscaping to be provided between neighbouring buildings, particularly where there are two storey structures.*
4. *To provide privacy and soften the visual appearance when viewed from the street and from the neighbouring property.*
5. *To maintain visual amenity and solar access of private open space.*
6. *To ensure that side setbacks provide adequate solar access and day light access.*

The application seeks to vary Part 4A.2, Control 11 of the KDCP, which requires a minimum 2.33 metres side setback based on the site width. The following single storey elements are non-compliant with this control –

a) extension to rear deck at ground floor, set back 1.66 metres to western boundary
b) replacement deck to front of dwelling at ground floor, setback 0.68 metres to the western side boundary
c) Main bedroom extension at ground floor, set back 1.6 metres to eastern side boundary

For the following reasons, the proposed departures from the controls are considered acceptable and meet objectives of the controls because:

i. The non-complying elements are single storey, would not be visually prominent and would be hidden for the most part from the public domain and neighbouring properties.
ii. The non-complying elements do not result in overshadowing, visual bulk, or privacy impacts to adjoining properties.
iii. Separation to the neighbouring dwellings remains adequate to ensure sunlight access, ventilation, and maintenance of residential amenity.
iv. The proposed siting responds to site constraints, notably the presence of a rock outcrop which limits the available development footprint and restricts numerical compliance with the control.
v. There are no detrimental bushfire impacts.

Part 15 – Land Contamination

The site is not mapped as being contaminated and has a history of residential use, as such, it is unlikely to contain contamination and further investigation is not warranted.

Part 16 – Bushfire Risk

The site is mapped as bush fire prone land.

In accordance with the provisions of Section 4.14 of the *Environmental Planning and Assessment Act 1979*, Council has been provided with a certificate by a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment stating that the development conforms to the relevant specifications and requirements. The Bushfire Risk Assessment states that the development conforms to the relevant specifications and requirements. As such, the application does not require a referral to Rural Fire Services.

Council has considered the measures to be taken with respect to the protection of persons, property and the environment from danger that may arise from a bush fire. Appropriate

conditions that adopt the recommendations of the bush fire risk assessment report and certificate are recommended **(Conditions 15, 41 and 42)**.

Part 17 – Riparian Lands

The rear part of the site (access handle) is mapped as riparian land.

The proposed development has been designed to minimise impacts on the riparian area.

Part 18 – Biodiversity

The rear part of the site (access handle) is mapped as land comprising biodiversity significance.

The proposed development will not result in a significant detrimental impact contrary to the objectives of these provisions in relation to the diversity and condition of native vegetation, fauna and habitat.

Part 19 – Heritage and Heritage Conservation Areas

The subject site does not contain a heritage item, is not located within close proximity to an Item nor is it within a heritage conservation area. The proposed works do not affect any archaeological or Aboriginal objects or Aboriginal places of heritage significance.

DCP Section C

The table below addresses the assessment criteria contained under Section C of the DCP which is not addressed above.

DCP COMPLIANCE TABLE SECTION C		
Development control	**Proposed**	**Complies**
21.1 Earthworks and Slope		
Development is to be accommodated within the natural slope of the land. Level changes across the site are to be primarily resolved within the building footprint. This may be achieved by: i) stepping buildings down a site; and ii) locating the finished ground floor level as close to existing ground level as practicable.	The proposed additions at lower ground floor level would be accommodated within the area of the site that was previously excavated.	**YES**
Development is to minimise earthworks on steeply sloping sites. Sites with a slope in excess of 15% may require certification from a geotechnical engineer as to the stability of the slope in regard to the proposed design	Satisfactory, subject to conditions **(Condition 21)**, including requiring compliance with the recommendations of the geotechnical report.	**YES**
Existing ground level is to be maintained for a distance of 2 metres from any boundary.	Existing ground levels are not maintained for a distance of 2 metres from the eastern and western side boundaries. Refer to merit discussion	**NO**

	below the table.	
Fill and excavation is to be avoided within sensitive environments, such as riparian lands, bushland, vegetation or natural rock outcrops.	No additional fill or excavation proposed as part of this application.	**YES**
The design of the proposal is to consider the impacts of altered subsurface/groundwater flows or direction on groundwater dependent ecosystems or species.	Satisfactory, subject to conditions.	**YES**
23.7 General Acoustic Privacy		
Buildings are to be designed to minimise noise transmission by, but not limited to: i) careful siting and orientation of the building; ii) locating bedrooms away from both internal and external noise generators of a development, e.g. by using storage or circulation areas as a buffer	The building is designed to minimise noise transmission, with bedrooms located away from primary areas of private open space.	**YES**
When designing and siting active open space areas (e.g. BBQ areas, swimming pools, communal areas etc) regard is to be paid to potential noise impacts on adjacent rooms and buildings, such as bedrooms.	Active areas of private open space are predominantly located to the rear of the dwelling away from noise sensitive rooms.	**YES**
Noise levels associated with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and plant either as an individual piece of equipment or in combination is not be audible within any habitable room in any residential premises before 7am and after 10pm. Outside of these restricted hours noise levels associated with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and plant either as an individual piece of equipment or in combination is not to emit a noise level greater than 5dB(A) above the background noise (LA90, 15 min) when measured at the boundary of the nearest potentially affected neighbouring properties. The background (LA90, 15 min) level is to be determined without the source noise present.	The proposal includes new mechanical plant; conditions which seek to minimise potential acoustic impacts have been included in the recommendation in accordance with the Minister's Section 9.1 Local Planning Panels Direction. **(Conditions 43 and 44)**.	**YES**

23.8 General Visual Privacy		
Private open spaces and principal living spaces of the proposed dwelling/s and adjacent dwellings are to be protected from direct or unreasonable overlooking from all new residential and non-residential developments. Siting and design measures to achieve this include: i) Use of distance or slope; ii) Appropriate dwelling layout; iii) Off-setting windows in relation to adjacent windows; iv) Use of obscure glass or highlight windows; v) Screening devises such as fences, louvres, translucent screens, perforated panels, trellises and courtyard walls; vi) Using louvres. Screen panels to windows and balconies; vii) Using solid or semi-transparent balustrades or screens to balconies or terraces; viii) Off-setting balconies in relation to adjacent balconies; ix) Using recessed balconies and/ or vertical fins between adjacent private balconies; x) Using deep sills with planter boxes or incorporating planter boxes into walls or balustrades; xi) Providing vegetation as a screen between spaces; xii) Utilising pergolas or shading devices to limit overlooking of lower building levels or communal and private open space.	No new windows with the potential to directly or unreasonably overlook adjacent dwellings are proposed. The proposed rear deck extensions would not result in any unreasonable overlooking of the adjacent properties at 18 Murrumba Place or 139 Koola Avenue. The proposed front deck would not likely result in any further/ additional and therefore unreasonable overlooking of the adjacent property at 139 Koola Avenue as it replaces an existing deck in the same location and size.	**YES**
For low density residential development first floor decks, balconies and roof top terraces are not permitted where they unreasonably overlook or would directly overlook principal living spaces or private open space and the impact cannot be adequately mitigated.	Refer to discussion above.	**YES**
23.9 Construction, Demolition and Disposal		
Site disturbance during construction or demolition is to be minimised by: i) avoiding excavation beyond the building area; ii) restricting machinery and vehicle movement to the building footprint and access corridor; iii) locating service lines close to the building or within previously excavated areas where possible; and	Conditions concerning storage of materials and tree protection are recommended, **(Conditions 7, 20, 22, 29, 31, 32 and 35)**.	**YES**

iv) locating storage areas to areas outside the tree protection zones of trees to be retained.		
An environmental site management plan showing tree protection areas, machinery usage zones, storage areas, site sheds and location of stormwater pollution barriers is to be submitted with the application as per Councils DA Guide.	**Conditions 7, 20, 22, 29, 31, 32 and 35** concerning provision of sediment controls and storage of materials are recommended.	**YES**
A Waste Management Plan (WMP) is to be submitted with the application, in accordance with Part 23R.8 of the DCP and controls 3 and 4 of Part 23.10.	An adequate waste management plan has been submitted.	**YES**
All development applications are to be accompanied by an 'Erosion and Sediment Control Plan' (ESCP) that describes the measures undertaken at development sites to minimise land disturbance and to control sediment pollution. The ESCP is to be prepared in accordance with "Managing Urban Stormwater, Soil and Construction, 2006 (Landcom)".	Conditions are recommended to ensure that erosion control measures and maintenance of the site are undertaken **(Conditions 7, 20, and 29)**.	**YES**
24 Water Management		
This Part facilitates development in achieving the requirements of the clause titled '*Stormwater and water sensitive urban design' in* KLEP 2015.	An assessment of the proposal against the controls in Part 24 has been undertaken.	**YES**

An assessment of the variations to the controls identified in the compliance table is provided below.

Part 21.1 'Earthworks and slope'

Control 5 states that the existing ground level is to be maintained for a distance of 2 metres from any boundary. The proposed main bedroom extension at ground floor technical does not maintain existing ground levels within 2 metres of the eastern side boundary.

The objectives of Part 21.1 are:

1. *To respect the natural topography of a site.*
2. *To maintain the health of existing trees.*
3. *To maintain subsurface and groundwater flows and direction.*
4. *To minimise downstream impacts from erosion and sedimentation or altered water flows due to site earthworks or retaining walls.*
5. *To ensure that development is designed considering the stability of the land on which it is located.*
6. *To prevent damage to buildings and structures on adjoining land.*
7. *To minimise excavated materials going off site.*
8. *To minimise land degradation, water pollution and damage to infrastructure from erosion and accumulated sediment.*
9. *To preserve the visual amenity and privacy of neighbouring properties.*

For the following reasons, the proposed departure from the control is acceptable because it

meets objectives of the controls because:

- The site is steeply sloping, the proposed extension is necessary to create a workable and more highly useable main bedroom to the dwelling.
- The extension to the main bedroom replaces a former deck in this location.
- The proposed development is supported by a geotechnical report which indicates that the ground conditions of the site are suitable for the proposed additions subject to recommendations with respect to foundation design and excavation methods. **Condition 21** has been recommended to ensure these requirements are met.
- The extension will not impact existing trees. There is no opportunity for landscape screening adjacent to this extension
- The extension will not result in streetscape impacts as it is significantly below street level.
- This part of the site was previously excavated to resolve drainage issues.
- The proposed extension will not result in visual amenity or privacy impacts to the adjoining property at 139B Koola Avenue detailed in Part 4A.2 'Building Setbacks' above.

Ku-ring-gai Contributions Plan 2023

The development attracts a Section 7.12 contribution of $7,052.81 which is required to be paid prior to the issue of any Construction Certificate. This contribution is included as a condition of consent **(Condition 16)**.

REGULATION

Section 61(1) of the Environmental Planning & Assessment Regulation 2021 requires the consent authority to consider the provisions of *Australian Standard AS 2601-2001: The demolition of structures.* The partial demolition of the existing structure(s) will be carried out in accordance with a work plan and statement of compliance that will be required to be submitted to the Principal Certifier prior to the commencement of any works. A condition (**Condition 11**) to this effect has been included within the recommendation.

LIKELY IMPACTS

The likely impacts of the development have been considered within this report and are deemed to be acceptable, subject to conditions.

SUITABILITY OF THE SITE

The site is suitable for the proposed development.

PUBLIC INTEREST

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by the Panel ensuring that any adverse effects on the surrounding area and the environment are minimized. The proposal has been assessed against the relevant environmental planning instruments and is deemed to be acceptable. On this basis, the proposal is not considered to raise any issues that are contrary to the public interest.

CONCLUSION

Having regard to the provisions of Section 4.15 of the Environmental Planning and Assessment Act 1979, the proposed development is satisfactory.

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

A. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, is satisfied that the request submitted under Clause 4.6 to vary the maximum floor space ratio development standard in Clause 4.4(2D) of the KLEP 2015 has met the requirements of Clause 4.6(3). The Panel is also of the opinion that strict compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify the variation to the development standard.

B. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, is satisfied that the request submitted under Clause 4.6 to vary the maximum building height development standard in Clause 4.3(2) of KLEP 2015 has met the requirements of Clause 4.6(3). The Panel is also of the opinion that strict compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify the variation to the development standard.

C. THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, being satisfied that the proposed development would be in the public interest, grant development consent to eDA0259/25 for alterations and additions to an existing dwelling house at 139A Koola Avenue East Killara subject to conditions. Pursuant to Section 4.53 of the Environmental Planning and Assessment Act 1979, this consent lapses if the approved works are not physically commenced within five years of the date of the Notice of Determination.

The conditions of the consent are set out as follows:

CONDITIONS THAT IDENTIFY APPROVED PLANS:

1. Approved architectural plans and documentation (alterations and additions)

The development must be carried out in accordance with work shown in colour on the plans and as described or depicted in the documentation listed below and endorsed with Council's stamp, except as amended by other conditions of this Development Consent.

Plan no.	Drawn by	Dated
Architectural Plans		
DA/001 Revision A DA/002 Revision A DA/003 Revision A	SUPERSOMA	21.08.2025 21.08.2025 21.08.2025

DA/004 Revision A DA/005 Revision A DA/103 Revision A DA/200 Revision A DA/201 Revision A DA/202 Revision A DA/203 Revision A DA/204 Revision A DA/205 Revision A		21.08.2025 21.08.2025 21.08.2025 21.08.2025 21.08.2025 21.08.2025 21.08.2025 21.08.2025 21.08.2025
Landscape Plans		
Landscape Plan – B, DA/300 Revision A Landscape Plan – G, DA/301 Revision A	SUPERSOMA	21.08.2025 21.08.2025
Stormwater Management Plans		
DA/103 Revision A	SUPERSOMA	21.08.2025

Document(s)	**Dated**
Basix certificate No. A1782036_02 Ref: 139a Koola avenue Killara	30.05.2025
Bush fire risk assessment and certification prepared by Bushfire Planning Services Pty Ltd Ref: 139a Koola avenue Killara	31.03.2025
Colours and finishes schedule prepared by SUPERSOMA Ref: DA/400 Revision A	21.08.2025
Waste Management Plan prepared by SUPERSOMA Ref: 139a Koola avenue Killara	04.02.2025

Reason: To ensure that the development is in accordance with the Development Consent.

2. Inconsistency between documents

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this Development Consent prevail.

Reason: To ensure that the development is in accordance with the Development Consent.

CONDITIONS TO BE SATISFIED PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION:

3. Asbestos works

All work involving asbestos products and materials, including asbestos-cement-sheeting (ie. fibro), must be carried out in accordance with the guidelines for asbestos work published by Safework NSW.

Reason: To ensure public safety.

4. Notice of commencement

At least 48 hours prior to the commencement of any demolition, excavation or building works, a notice of commencement of building works or subdivision lodgement form and

appointment of the Principal Certifier form shall be submitted to Council.

Reason: Statutory requirement.

5. Notification of builder's details

Prior to the commencement of any works, the Principal Certifier shall be notified in writing of the name and contractor licence number of the owner/builder intending to carry out the approved works.

Reason: Statutory requirement.

6. Structural adequacy (alterations and additions)

Prior to commencement of any works, the Principal Certifier shall be satisfied that those components of the building to be retained and/or altered will be structurally sound and able to withstand the excavation and demolition process.

Evidence from a qualified practising structural engineer, demonstrating compliance with the above and detailing, where relevant, means of support for those parts of the retained building shall be provided to the Principal Certifier.

Reason: To ensure that the development can be undertaken in accordance with accepted construction practices as indicated on the endorsed development plans, without the need for modification of the Development Consent.

7. Sediment controls

Prior to any works commencing, sediment and erosion control measures shall be installed along the contour immediately downslope of any future disturbed areas.

The form of the sediment controls to be installed on the site shall be determined by reference to the Landcom manual '*Managing Urban Stormwater: Soils and Construction*'. The erosion controls shall be maintained in an operational condition until the development activities have been completed and the site is fully stabilised. Sediment shall be removed from the sediment and erosion control measures following each heavy or prolonged rainfall period.

Reason: To protect and enhance the natural environment.

8. Swimming pool maintenance

Prior to the commencement of any works the Principal Certifier is to be satisfied that, if any water is held within the swimming pool:

a) the quantity of water in the pool is maintained at a minimum of 50% of the capacity of the pool; and

b) the clarity of the water in the pool is maintained through chlorination either by automatic or manual dosing; and

c) a swimming pool barrier is in place and maintained in accordance with the NSW Swimming Pools Act 1992.

Reason: To ensure the swimming pool does not present a risk to health or safety.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE:

9. Amendments to approved landscape plan

Prior to the issue of any Construction Certificate, the Certifier shall be satisfied that the approved landscape plan(s), listed below and endorsed with Council's stamp, have been amended in accordance with the requirements of this condition as well as other conditions of this Development Consent:

Plan no.	Drawn by	Dated
Landscape Plan - B Dwg No. 300 & Landscape Plan - G Dwg No. 301	Supersoma	21/08/2025

The above landscape plan(s) shall be amended as follows:

1. Tree Canopy Enhancement: To preserve and enhance the site's tree canopy, the landscape plan must include at least one new tall tree species capable of attaining a minimum mature height of 13 metres under local conditions. The selected tree shall be *Angophora costata* (Sydney Red Gum), to be planted:

    i. a minimum of 3.5 metres from any structure;
    ii. at least 2 metres from any property boundary; and
    iii. at a minimum 25-litres pot size at the time of planting.

2. Plant Species Substitution: The proposed *Actinotus helianthi* (Flannel Flower) shall be replaced with a species more appropriate for the site conditions and Bushfire Asset Protection Zone (APZ), such as *Scaevola aemula, Lomandra 'Tanika', Myoporum spp.,* or another suitable low-growing, fire-resistant plant species.

3. Minimum Planting Sizes:

    i. Groundcovers and shrubs are to be supplied in a minimum 200 millimetres pot size.
    ii. Small trees are to be supplied in a minimum 300 millimetres pot size.
    iii. Tall trees are to be supplied in a minimum 25 litres pot size.

An amended plan, prepared by a landscape architect or qualified landscape designer and certified by a bushfire consultant shall be submitted to the Certifier.

Reason: To ensure adequate landscaping of the site.

10. Compliance with BASIX Certificate

Prior to the issue of any Construction Certificate, the Certifier shall be satisfied that all commitments listed in the approved BASIX Certificate (referred to under Condition 1) are detailed on the plans forming the Construction Certificate.

Reason: Statutory requirement.

11. Statement of compliance with Australian Standards

The demolition work shall comply with the provisions of Australian Standard AS2601: 2001 The Demolition of Structures. The applicant must provide work plans required by AS2601:

2001 and a written statement from a suitably qualified person that the proposal contained in the work plan comply with the safety requirements of the Standard. The work plan and the statement of compliance shall be submitted to and approved by the Certifier prior to the commencement of any demolition works.

Reason: To ensure compliance with the Australian Standards.

12. Long service levy

A Construction Certificate shall not be issued until any long service levy payable under Section 34 of the *Building and Construction Industry Long Service Payments Act 1986* (or where such levy is payable by instalments, the first instalment of the levy) has been paid. In order to pay your levy, you will need to register an account with The Long Service Corporation on the online portal at www.longservice.nsw.gov.au.

Reason: Statutory requirement.

13. Utility provider requirements

Prior to issue of any Construction Certificate, the Applicant must make contact with all relevant utility providers whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifier, must be obtained. All utility services or appropriate conduits for the same must be provided in accordance with the specifications of the utility providers.

Reason: To ensure compliance with the requirements of relevant utility providers.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF ANY CONSTRUCTION CERTIFICATE, OR PRIOR TO DEMOLITION, EXCAVATION OR BUILDING WORKS (WHICHEVER COMES FIRST):

14. Infrastructure damage security bond and inspection fee

To ensure that any damage to Council property as a result of construction activity is rectified in a timely manner:

(a) All work or activity undertaken pursuant to this development consent must be undertaken in a manner to avoid damage to Council property and must not jeopardise the safety of any person using or occupying the adjacent public areas.

(b) The applicant, builder, developer or any person acting in reliance on this consent shall be responsible for making good any damage to Council property and for the removal from Council property of any waste bin, building materials, sediment, silt, or any other material or article.

(c) The Infrastructure damage security bond and infrastructure inspection fee must be paid to Council by the applicant prior to both the issue of any Construction Certificate and the commencement of any earthworks or construction.

(d) In consideration of payment of the infrastructure damage security bond and infrastructure inspection fee, Council will undertake such inspections of Council Property as Council considers necessary and will also undertake, on behalf of the applicant, such restoration work to Council property, if any, that Council considers necessary as a consequence of the development. The provision of such restoration work by the Council does not absolve any person of the responsibilities contained in

(a) to (b) above. Restoration work to be undertaken by Council referred to in this condition is limited to work that can be undertaken by Council at a cost of not more than the Infrastructure damage security bond payable pursuant to this condition.

(e) **Release of the bond** – Upon receipt by Council of an Occupation Certificate, Council will undertake an inspection of Councils Infrastructure and release the bond if no damage is found.

For development relating to more than 2 dwellings, there will be a six months holding period after the receipt by Council of the final occupation certificate, after which you may request Council to return any bond monies.

If there is damage found to Council property the bond will not be released until the damage has been rectified to Council's satisfaction.

(f) In this condition:

"Council property" includes any road, footway, footpath paving, kerbing, guttering, crossings, street furniture, seats, letter bins, trees, shrubs, lawns, mounds, bushland, and similar structures or features on any road or public road within the meaning of the Local Government Act 1993 (NSW) or any public place; and

"Infrastructure damage security bond and infrastructure inspection fee" means the Infrastructure damage security bond and infrastructure inspection fee as calculated in accordance with the Schedule of Fees & Charges adopted by Council as at the date of payment and the cost of any inspections required by the Council of Council property associated with this condition.

Reason: To maintain public infrastructure.

15. Bush fire risk certification

In the carrying out of the approved development, bush fire protection measures shall be carried out and implemented in accordance with the following bush fire risk assessment, report and certificate, listed below and endorsed with Council's stamp, except where amended by other conditions of this Development Consent:

Document title	Prepared by	Dated
Bushfire Report- Landscaping -139a Koola Avenue Killara	Bushfire Planning Services Pty Ltd	31.03.2025

Prior to the issue of any Construction Certificate, the Certifier must be satisfied that the Construction Certificate incorporates and demonstrates the recommendations of the report and certificate as listed above.

Reason: To ensure that the development is in accordance with the Development Consent.

16. Section 7.12 fixed development consent levy contributions

In accordance with Section 4.16 of the Environmental Planning and Assessment Act 1979 and Ku-ring-gai Council s7.12 Local Levy Contributions Plan 2023, $7,052.81 based on the estimated development costs of $705,281.00 shall be paid to Council to provide for additional local infrastructure improvements in accordance with the works programme listed

in the s7.12 Contributions Plan.

Contributions payable will be adjusted in accordance with the provisions of the Ku-ring-gai Council s7.12 Local Levy Contributions Plan 2023 and inflated by the Consumer Price Index (All Groups Sydney) until they are paid. Contact Council to ensure your payment is current prior to payment. See Council's website for more information about inflation and paying contributions.

(a) prior to the issue of the Subdivision Certificate where the development is for subdivision; or
(b) prior to the issue of the first Construction Certificate where the development is for building work; or
(c) prior to issue of the Subdivision Certificate or first Construction Certificate, whichever occurs first, where the development involves both subdivision and building work; or
(d) prior to the works commencing where the development does not require a Construction Certificate or Subdivision Certificate.

It is the professional responsibility of the Principal Certifier to ensure that the monetary contributions have been paid to Council in accordance with the above timeframes.

Ku-ring-gai Council s7.12 Local Levy Contributions Plan 2023 may be viewed at on Council's webpage at www.krg.nsw.gov.au or a copy may be inspected at Council's Administration Centre during normal business hours.

Reason: To cater for the increased demand for upgrades in the public domain resulting from cumulative developments in accordance with Ku-ring-gai Council s7.12 Local Levy Contributions Plan 2023.

CONDITIONS TO BE SATISFIED DURING THE DEMOLITION, EXCAVATION AND CONSTRUCTION PHASES:

17. Prescribed conditions

The work shall comply with any relevant prescribed conditions of development consent under Sections 69, 70, 71,72, 73, 74 and 75 of the Environmental Planning and Assessment Regulation 2021. For the purposes of section 4.17 (11) of the Environmental Planning and Assessment Act, the following conditions are prescribed in relation to a development consent for development that involves any building work:

Compliance with Building Code of Australia and insurance requirements under Home Building Act 1989

1) It is a condition of a development consent for development that involves building work that the work must be carried out in accordance with the requirements of the *Building Code of Australia*.
2) It is a condition of a development consent for development that involves residential building work for which a contract of insurance is required under the *Home Building Act 1989*, Part 6 that a contract of insurance is in force before building work authorised to be carried out by the consent commences.
3) It is a condition of a development consent for a temporary structure used as an entertainment venue that the temporary structure must comply with Part B1 and NSW Part H102 in Volume 1 of the *Building Code of Australia*.

4) In subsection (1), a reference to the *Building Code of Australia* is a reference to the Building Code of Australia as in force on the day on which the application for the construction certificate was made.

5) In subsection (3), a reference to the *Building Code of Australia* is a reference to the Building Code of Australia as in force on the day on which the application for development consent was made.

6) This section does not apply -

(a) to the extent to which an exemption from a provision of the *Building Code of Australia* or a fire safety standard is in force under the *Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021*, or

(b) to the erection of a temporary building, other than a temporary structure to which subsection (3) applies.

7) ***Relevant date*** has the same meaning as in the *Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021*, section 19.

Erection of signs

1) This section applies to a development consent for development involving building work, subdivision work or demolition work.

2) It is a condition of the development consent that a sign must be erected in a prominent position on a site on which building work, subdivision work or demolition work is being carried out -

(a) showing the name, address and telephone number of the principal certifier for the work, and

(b) showing the name of the principal contractor, if any, for the building work and a telephone number on which the principal contractor may be contacted outside working hours, and

(c) stating that unauthorised entry to the work site is prohibited.

3) The sign must be -

(a) maintained while the building work, subdivision work or demolition work is being carried out, and

(b) removed when the work has been completed.

4) This section does not apply in relation to -

(a) building work, subdivision work or demolition work carried out inside an existing building, if the work does not affect the external walls of the building, or

(b) Crown building work certified to comply with the *Building Code of Australia* under the Act, Part 6.

Notification of Home Building Act 1989 requirements

1) This section applies to a development consent for development involving residential building work if the principal certifier is not the council.

2) It is a condition of the development consent that residential building work must not be carried out unless the principal certifier for the development to which the work relates has given the council written notice of the following -

(a) for work that requires a principal contractor to be appointed -

i. the name and licence number of the principal contractor, and

ii. the name of the insurer of the work under the *Home Building Act 1989*, Part 6,

(b) for work to be carried out by an owner-builder -

i. the name of the owner-builder, and

ii. if the owner-builder is required to hold an owner-builder permit under the *Home Building Act 1989* - the number of the owner-builder permit.

3) If the information notified under subsection (2) is no longer correct, it is a condition of the development consent that further work must not be carried out unless the principal certifier has given the council written notice of the updated information.

4) This section does not apply in relation to Crown building work certified to comply with the *Building Code of Australia* under the Act, Part 6.

Shoring and adequacy of adjoining property

1) This section applies to a development consent for development that involves excavation that extends below the level of the base of the footings of a building, structure or work on adjoining land, including a structure or work in a road or rail corridor.

2) It is a condition of the development consent that the person having the benefit of the development consent must, at the person's own expense -

(a) protect and support the building, structure or work on adjoining land from possible damage from the excavation, and

(b) if necessary, underpin the building, structure or work on adjoining land to prevent damage from the excavation.

3) This section does not apply if -

(a) the person having the benefit of the development consent owns the adjoining land, or

(b) the owner of the adjoining land gives written consent to the condition not applying.

Fulfilment of BASIX commitments

It is a condition of a development consent for the following that each commitment listed in a relevant BASIX certificate is fulfilled -

a) BASIX development,

b) BASIX optional development, if the development application was accompanied by a BASIX certificate.

Reason: Statutory requirement.

18. Hours of work

Demolition, construction work and deliveries of building material and equipment must not take place outside the hours of 7.00am to 5.00pm Monday to Friday and 8.00am to 12 noon

Saturday. No work and no deliveries are to take place on Sundays and public holidays.

Demolition and/or excavation using machinery of any kind must be limited to between 7.00am and 5.00pm Monday to Friday, with a respite break of 45 minutes between 12 noon and 1.00pm. No demolition and/or excavation using machinery of any kind is to occur on Saturdays, Sundays or public holidays.

Where it is necessary for works to occur outside of these hours (ie placement of concrete for large floor areas on large residential/commercial developments or where building processes require the use of oversized trucks and/or cranes that are restricted by Transport for NSW (TfNSW) from travelling during daylight hours to deliver, erect or remove machinery, tower cranes, pre-cast panels, beams, tanks or service equipment to or from the site), approval for such activities will be subject to the issue of an "outside of hours works permit" from Council as well as notification of the surrounding properties likely to be affected by the proposed works.

Failure to obtain a permit to work outside of the approved hours will result in regulatory action.

Reason: To ensure reasonable standards of amenity for occupants of neighbouring properties.

19. Site notice

A site notice shall be erected on the site prior to any work commencing and shall be displayed throughout the works period.

The site notice must:

- be prominently displayed at the boundaries of the site for the purposes of informing the public that unauthorised entry to the site is not permitted
- display project details including, but not limited to the details of the builder, Principal Certifier and structural engineer
- be durable and weatherproof
- display the approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice
- be mounted at height of 1.6 metres above natural ground on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted

Reason: To ensure public safety and public information.

20. Dust control

During excavation, demolition and construction, adequate measures shall be taken to prevent dust from affecting the amenity of the neighbourhood. The following measures must be adopted:

i. physical barriers shall be placed around or over dust sources to prevent wind or activity from generating dust
ii. earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed

iii. all materials shall be stored or stockpiled at the best locations
iv. the ground surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs
v. all vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust
vi. all equipment wheels shall be washed before exiting the site using manual or automated sprayers and drive-through washing bays
vii. gates shall be closed between vehicle movements and shall be fitted with shade cloth
viii. cleaning of footpaths and roadways shall be carried out at least daily
ix. no advertising or signage is permitted to be attached to dust cloth material.

Reason: To protect the environment and the amenity of surrounding properties.

21. Compliance with submitted geotechnical report

A contractor with specialist excavation experience must undertake the excavations for the development and a suitably qualified consulting geotechnical engineer must oversee the excavation.

Geotechnical aspects of the development work, namely:

I. appropriate excavation method and vibration control
II. support and retention of excavated faces
III. hydro-geological considerations

must be undertaken in accordance with the recommendations of the Geotechnical Report prepared by Morrow Geotechnics Pty Ltd Reference: P3358_02 dated 20 May 2025

Prior approval must be obtained from all affected property owners, including Council, where rock anchors (both temporary and permanent) are proposed below adjoining properties.

Reason: To ensure the safety and protection of property.

22. Use of road or footpath

During excavation, demolition and construction phases, no building materials, plant or the like are to be stored on the road or footpath without written approval being obtained from Council beforehand. The footpath shall be kept in a clean, tidy and safe condition during building operations. Council reserves the right, without notice, to rectify any such breach and to charge the cost of rectification against the applicant/owner/builder or any other responsible person, as the case may be.

Reason: To ensure safety and amenity of the area.

23. Toilet facilities

Toilet facilities must be available or provided at the work site before works begin and must be maintained until the works are completed. One toilet, plus one additional toilet for every 20 persons working at the site are to be provided. Each toilet must:

a) be a standard flushing toilet connected to a public sewer, or
b) have an on-site effluent disposal system approved under the Local Government Act 1993 https://www.legislation.nsw.gov.au/, or

c) be a temporary chemical closet approved under the Local Government Act 1993 https://www.legislation.nsw.gov.au/.

Reason: Statutory requirement.

24. Recycling of building material (general)

During demolition and construction, the Principal Certifier shall be satisfied that building materials suitable for recycling have been forwarded to an appropriate registered business dealing in recycling of materials. Materials to be recycled must be kept in good order.

Reason: To facilitate recycling of materials.

25. Construction signage

All construction signs must comply with the following requirements:

i. are not to cover any mechanical ventilation inlet or outlet vent
ii. are not illuminated, self-illuminated or flashing at any time
iii. are located wholly within a property where construction is being undertaken
iv. refer only to the business(es) undertaking the construction and/or the site at which the construction is being undertaken
v. are restricted to one such sign per property
vi. do not exceed 2.5m^2
vii. are removed within 14 days of the completion of all construction works

Reason: To ensure compliance with Council's controls regarding signage.

26. Road reserve safety

All public footways and roadways fronting and adjacent to the site must be maintained in a safe condition at all times during the course of the development works. Construction materials must not be stored in the road reserve. A safe pedestrian circulation route and a pavement/route free of trip hazards must be maintained at all times on or adjacent to any public access ways fronting the construction site. Where public infrastructure is damaged, repair works must be carried out when and as directed by Council officers. Where pedestrian circulation is diverted on to the roadway or verge areas, clear directional signage and protective barricades must be installed in accordance with AS1742-3 (2009) “Manual for Uniform Traffic Control Devices for Work on Roads”. If pedestrian circulation is not satisfactorily maintained across the site frontage, and action is not taken promptly to rectify the defects, Council may take actions to stop work, which may include the bringing of proceedings.

Reason: To ensure safe public footways and roadways during construction.

27. Services

Where required, the adjustment or inclusion of any new utility service facilities must be carried out in accordance with the requirements of the relevant utility authority. These works shall be at no cost to Council. It is the applicant’s responsibility to make contact with the relevant utility authorities to ascertain the impacts of the proposal upon utility services (including water, phone, gas and the like). Council accepts no responsibility for any matter arising from its approval to this application involving any influence upon utility services provided by another authority.

Reason: Provision of utility services.

28. Temporary disposal of stormwater

During construction, stormwater runoff must be disposed of in a controlled manner that is compatible with the erosion and sediment controls on the site. Immediately upon completion of any impervious areas on the site (including roofs, driveways, paving) and where the final drainage system is incomplete, the necessary temporary drainage systems must be installed to manage and control runoff as far as the approved point of stormwater discharge. Such measures shall be to the satisfaction of the Certifier.

Reason: To protect the natural environment.

29. Erosion control

Temporary sediment and erosion control and measures are to be installed prior to the commencement of any works on the site. These measures must be maintained in working order during construction works up to completion. All sediment traps must be cleared on a regular basis and after each major storm and/or as directed by the Principal Certifier and Council.

Reason: To protect the environment from erosion and sedimentation.

30. Drainage to existing system

Stormwater runoff from all new impervious areas and subsoil drainage systems shall be piped to the existing site drainage system. The installation of new drainage components must be completed by a licensed contractor in accordance with AS3500.3 (Plumbing Code) and the NCC (BCA). No stormwater runoff is to be placed into the Sydney Water sewer system. If an illegal sewer connection is found during construction, the drainage system must be rectified to the satisfaction of Council and Sydney Water.

Reason: To protect the environment.

31. No storage of materials beneath trees

No activities, soil compaction, storage or disposal of materials shall take place beneath the canopy of any tree protected under Council's Development Control Plan at any time unless specified in other conditions of this consent.

Reason: To protect existing trees.

32. Removal of refuse

All builders' refuse, spoil and/or material unsuitable for use in landscape areas shall be removed from the site on completion of the building works.

Reason: To protect the environment.

33. Canopy replenishment trees to be planted

The 1 canopy replenishment tree to be planted shall be maintained in a healthy and vigorous condition until it attains a height of 5 metres when they will be protected by Council's Development Control Plan. Any of the trees found faulty, damaged, dying or dead shall be

replaced with the same species.

Reason: To maintain the treed character of the area.

34. On site retention of waste dockets

All demolition, excavation and construction waste dockets are to be retained on site, or at suitable location, in order to confirm which facility received materials generated from the site for recycling or disposal.

I. each docket is to be an official receipt from a facility authorised to accept the material type, for disposal or processing
II. this information is to be made available at the request of an authorised Council officer.

Reason: To protect the environment.

35. Maintenance of site

All materials and equipment must be stored wholly within the work site unless an approval to store them elsewhere is held.

Waste materials (including excavation, demolition and construction waste materials) must be managed on the site and then disposed of at a waste management facility.

Any run-off and erosion control measures required must be maintained within their operating capacity until the completion of the works to prevent debris escaping from the site into drainage systems, waterways, adjoining properties and roads.

During construction:

i. all vehicles entering or leaving the site must have their loads covered, and
ii. all vehicles, before leaving the site, must be cleaned of dirt, sand and other materials, to avoid tracking these materials onto public roads.

At the completion of the works, the work site must be left clear of waste and debris.

Reason: To ensure the site is appropriately maintained.

36. Swimming pool maintenance

During demolition, excavation or construction if water is held within the swimming pool:

a) the quantity of water in the pool is maintained at a minimum of 50% of the capacity of the pool; and
b) the clarity of the water in the pool is maintained through chlorination either by automatic or manual dosing; and
c) a swimming pool barrier is in place and maintained in accordance with the NSW Swimming Pools Act 1992.

Reason: To ensure the swimming pool does not present a risk to health or safety.

37. Site fencing

The site must be secured and fenced prior to works commencing. All excavation, demolition and construction works shall be properly guarded and protected with hoardings or fencing to prevent them from being dangerous to life and property.

If the work involved in the excavation, demolition or construction of the development is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or building involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place.

If necessary, a hoarding is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place (note that separate approval is required prior to the commencement of works to erect a hoarding or temporary fence on public property).

The work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons on public property.

The site shall be secured/locked to prevent access at the end of each day.

Any hoarding, fence or awning is to be removed when the construction work has been completed.

Reason: To ensure public safety.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE:

38. Compliance with BASIX Certificate

Prior to the issue of an Occupation Certificate, the Principal Certifier shall be satisfied that all commitments listed in approved BASIX Certificate (referred to under Condition No 1) have been complied with.

Reason: Statutory requirement.

39. Completion of landscape works

Prior to the issue of an Occupation Certificate, the Principal Certifier is to be satisfied that all landscape works have been undertaken in accordance with the approved plan(s) and conditions of this development consent.

Reason: To ensure that the landscape works are consistent with the Development Consent.

40. Certification of drainage works (alterations and additions)

Prior to issue of an Occupation Certificate, the Principal Certifier is to be satisfied that:

1. The components of the new drainage system have been installed by a licensed contractor in accordance with the National Plumbing and Drainage Code AS3500.3 and the Building Code of Australia.
2. The stormwater drainage works have been completed in accordance with the approved Construction Certificate drainage plans, the nominated BASIX

commitments and Ku-ring-gai DCP Part 24 'Water Management'.

Evidence from the plumbing contractor or a qualified civil/hydraulic engineer confirming compliance with this condition is to be provided to Council prior to the issue of an Occupation Certificate.

Reason: To ensure appropriate stormwater management.

41. Compliance with bush fire assessment, report and certificate

Prior to the issue of an Occupation Certificate, the Principal Certifier shall be satisfied that all recommendations listed in the bush fire risk assessment and report below have been complied with:

Document title	Prepared by	Dated
Bushfire Report- Landscaping -139a Koola Avenue Killara	Bushfire Planning Services Pty Ltd	31.03.2025

Reason: Statutory requirement.

CONDITIONS TO BE SATISFIED AT ALL TIMES:

42. Compliance with bush fire assessment report and certificate

All ongoing recommendations listed in the bush fire risk assessment and report below, must be complied with at all times.

Document title	Prepared by	Dated
Bushfire Report- Landscaping -139a Koola Avenue Killara	Bushfire Planning Services Pty Ltd	31.03.2025

Reason: To ensure the continual implementation of measures to manage bushfire risk.

43. Noise control – mechanical plant

Noise levels associated with mechanical plant installed on the premises must not be audible within any habitable room in any other neighbouring residential premises before 7.00am and after 10.00pm. Outside of these restricted hours noise levels associated with rainwater re-use system(s) installed on the premises either as an individual piece of equipment or in combination must not emit a noise level greater than 5dB(A) above the background noise (LA90, 15 min) when measured at the nearest adjoining property boundary. The background (LA90, 15 min) level is to be determined without the source noise present.

Reason: To protect the amenity of neighbouring residential occupants and neighbouring properties.

44. Noise Control - mechanical exhaust ventilation (single dwellings)

Noise levels associated with mechanical exhaust ventilation installed on the premises must not be audible within any habitable room in any other neighbouring residential premises before 7.00am and after 10.00pm. Outside of these restricted hours noise levels associated with mechanical exhaust ventilation installed on the premises either as an individual piece of equipment or in combination must not emit a noise level greater than 5dB(A) above the background noise (LA90, 15 min) when measured at the nearest adjoining property

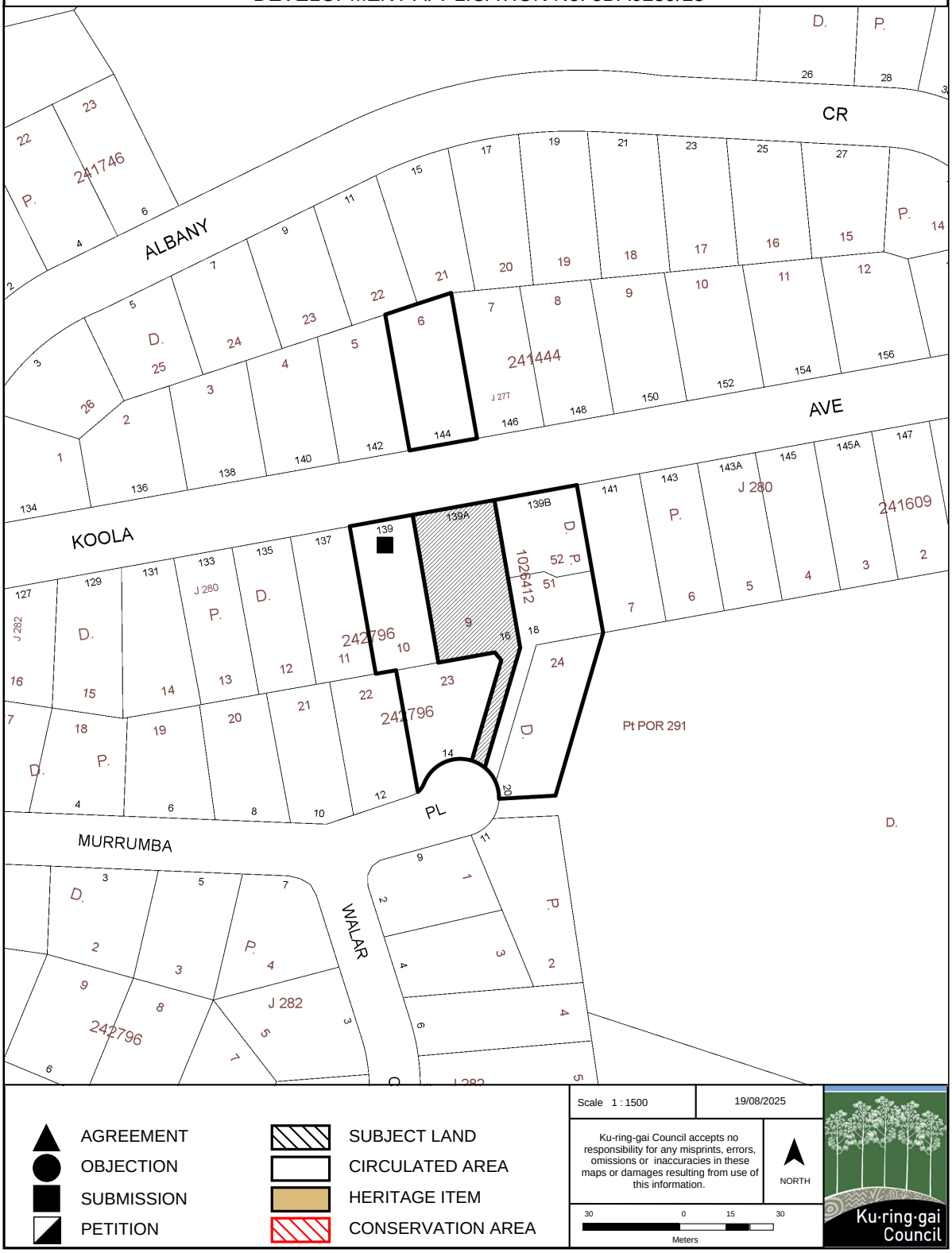
boundary. The background (LA90, 15 min) level is to be determined without the source noise present.

Reason: To protect the amenity of neighbouring residential occupants and neighbouring properties**.**

LOCATION SKETCH

139A Koola Avenue EAST KILLARA NSW 2071

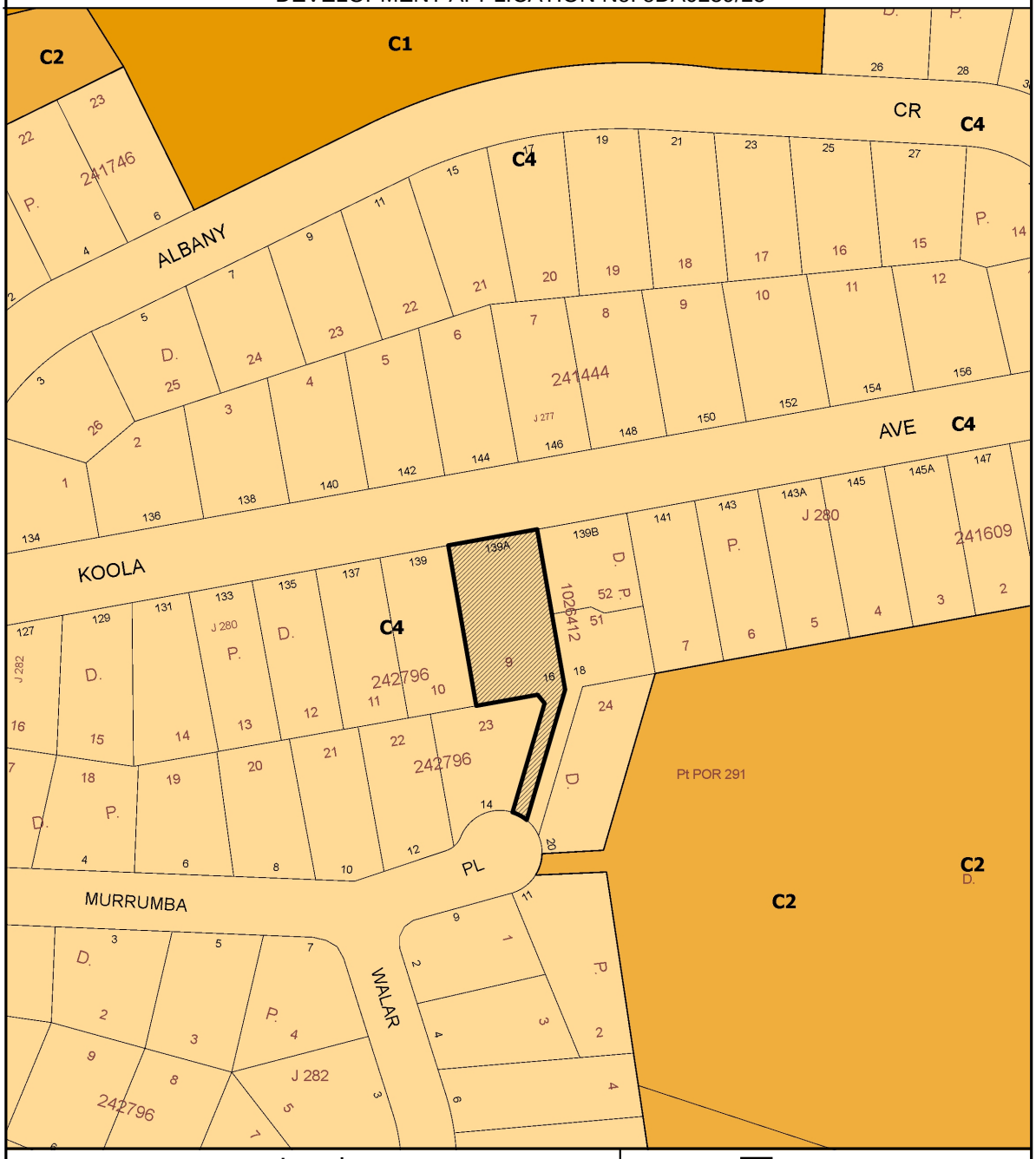
DEVELOPMENT APPLICATION No. eDA0259/25



KU-RING-GAI LEP 2015 ZONING EXTRACT

139A Koola Avenue EAST KILLARA NSW 2071

DEVELOPMENT APPLICATION No. eDA0259/25



Legend

Subject Land

Zoning

E1	Local Centre	C4	Environmental Living	RE1	Public Recreation
E3	Productivity Support	R1	General Residential	RE2	Private Recreation
MU	Mixed Use	R2	Low Density Residential	SP1	Special Activities
C1	National Parks & Reserves	R3	Medium Density Residential	SP2	Infrastructure
C2	Environmental Conservation	R4	High Density Residential	W1	Natural Waterways
C3	Environmental Management	R5	Large Lot Residential		

Scale 1 : 1500

Date: 19/08/2025

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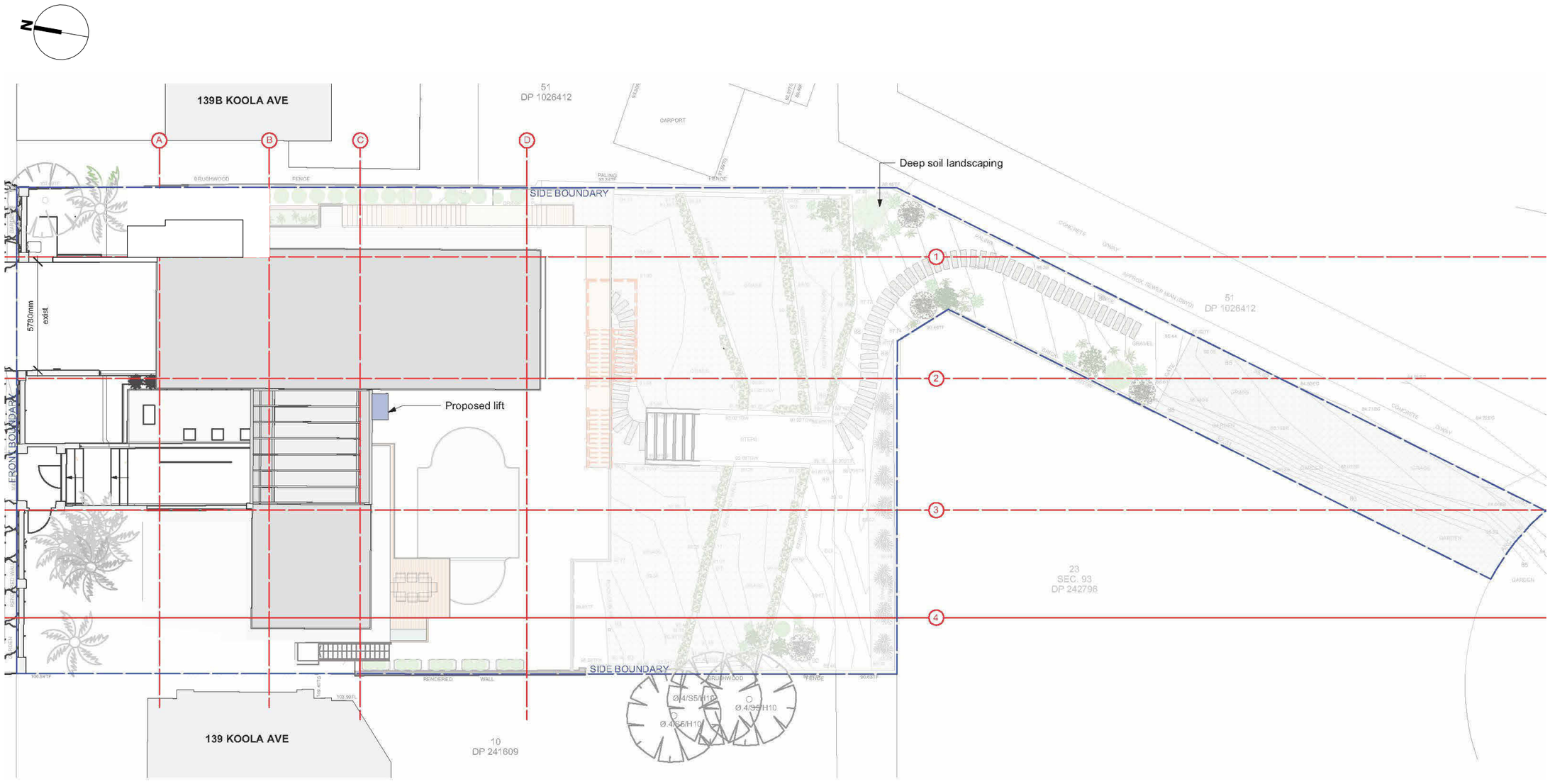
NORTH

0 30 60

Meters

Ku·ring·gai Council



1 Site Plan

1 : 200 @A3

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Project Title
ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL
Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
SITE PLAN

Scale 1 : 200 @A3 Dwg No. DA/001 Rev: A Date 21/08/2025 BN

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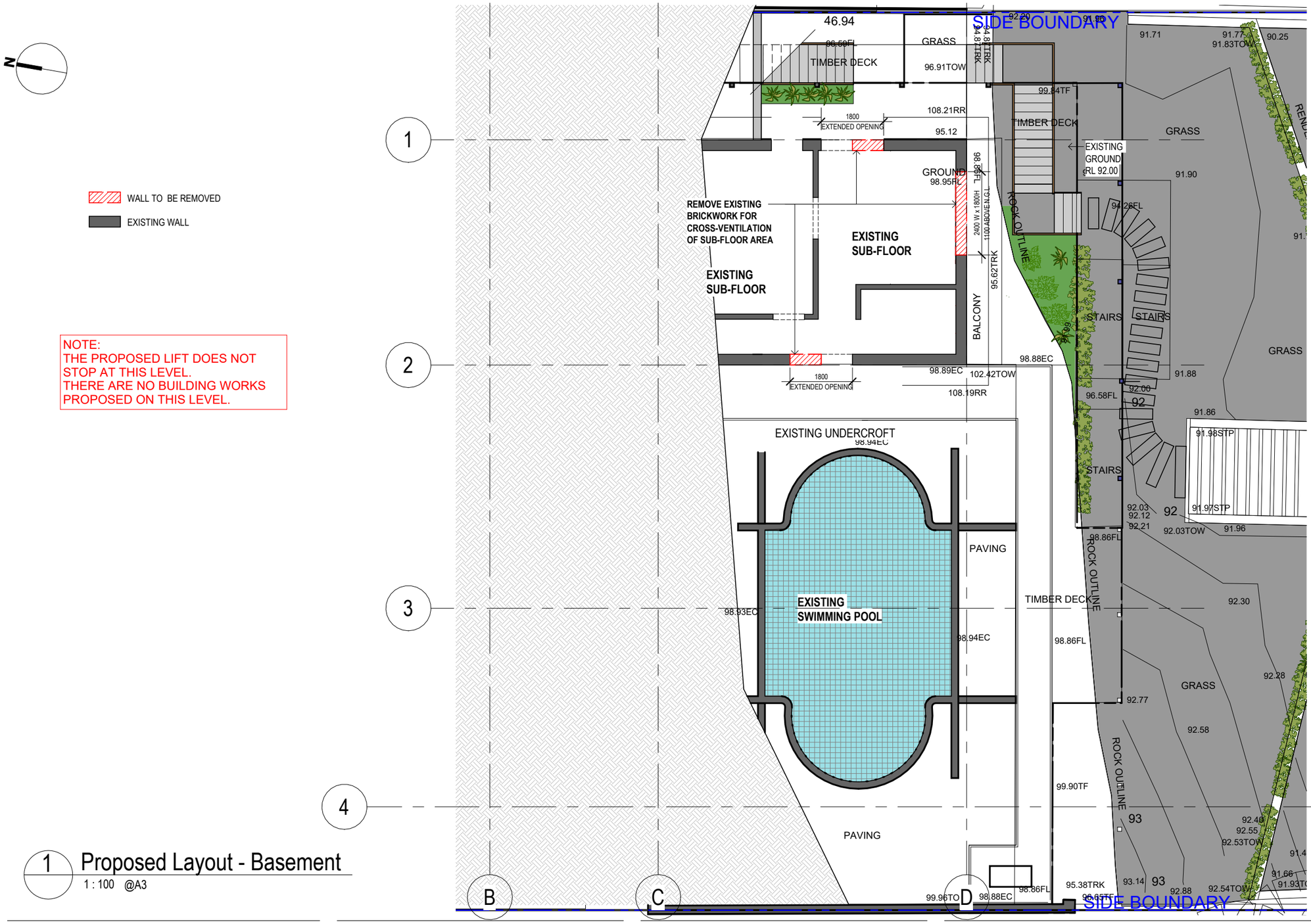

1 Proposed Layout - Basement

1 : 100 @A3

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ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL
Project No. 25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
BASEMENT LEVEL FLOOR PLAN

Scale 1 : 100 @A3 Dwg No. DA/002 Rev: A Date 21/08/2025 BN

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1 Proposed Layout - Lower Ground

1 : 100 @A3

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KU-RING-GAI COUNCIL

Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
LOWER GROUND FLOOR PLAN

Scale 1 : 100 @A3 Dwg No. DA/003 Rev: A Date 21/08/2025 BN

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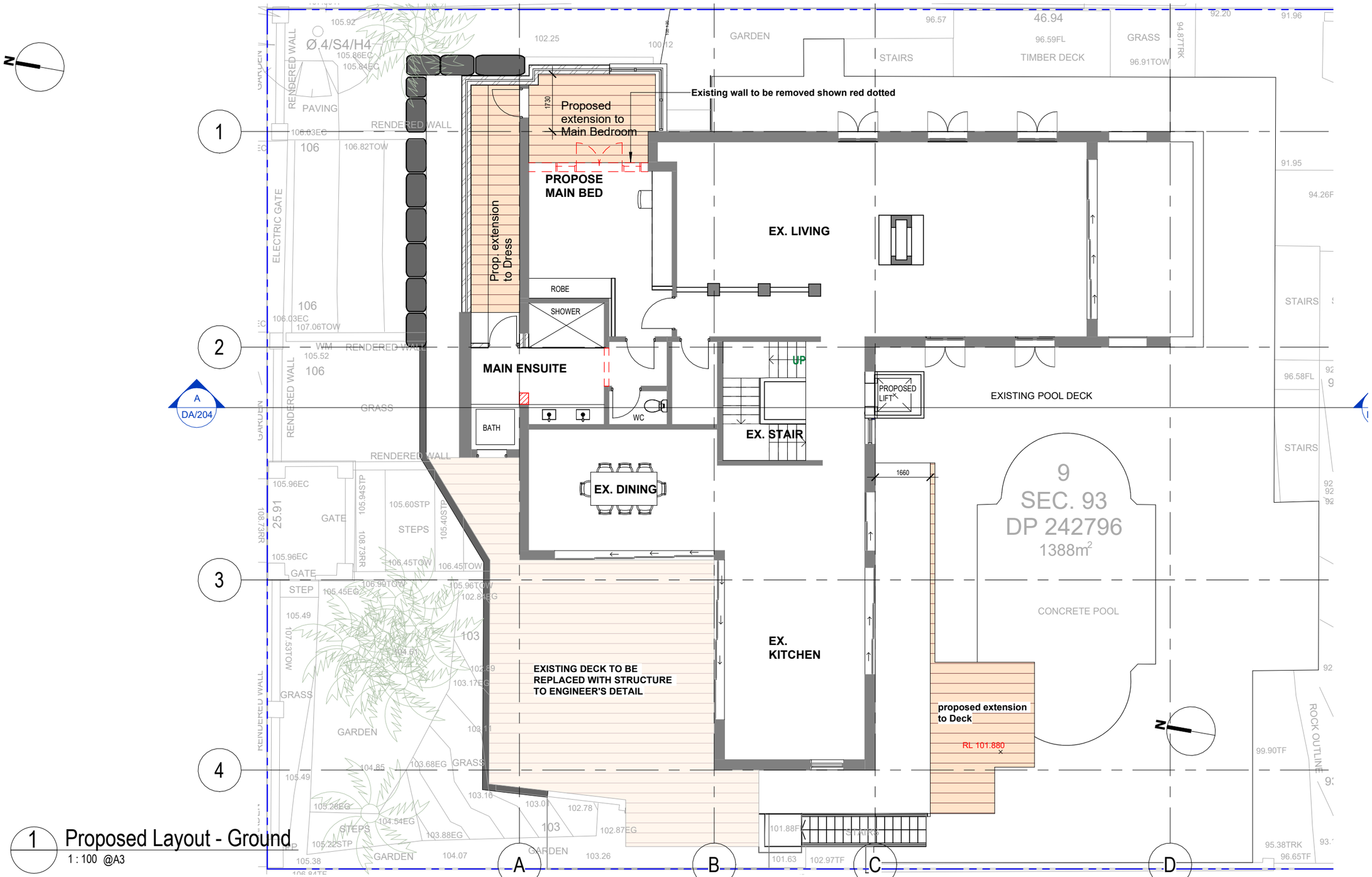

1 Proposed Layout - Ground
1 : 100 @A3

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KU-RING-GAI COUNCIL
Project No. 25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
GROUND FLOOR PLAN

Scale 1 : 100 @A3 | Dwg No. DA/004 | Rev: A | Date 21/08/2025 BN

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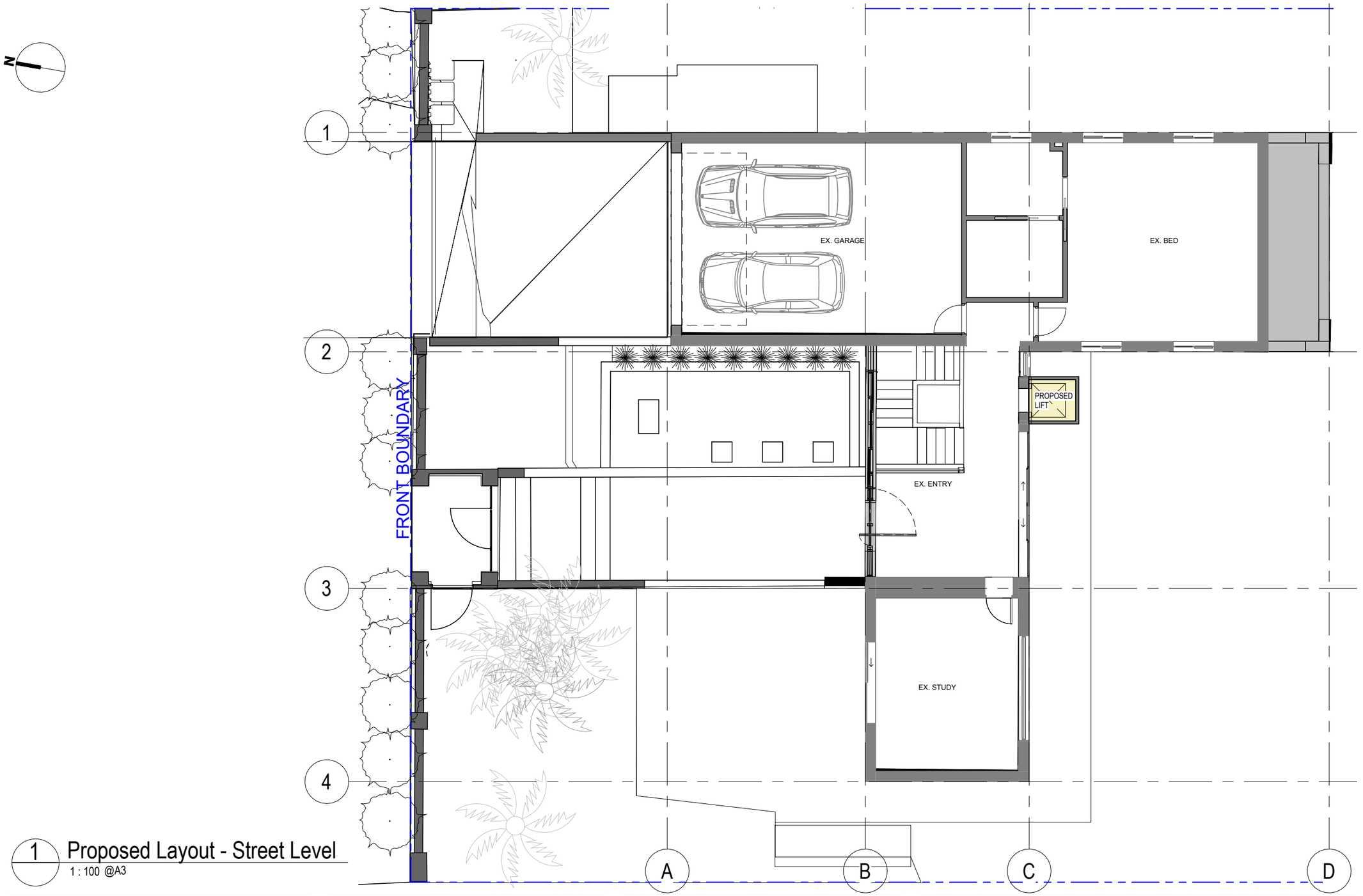

1 Proposed Layout - Street Level
1 : 100 @A3

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Project No. 25-01AAW

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Andre & Amanda Wyzenbeek

Drawing Title
STREET LEVEL PLAN

Scale 1 : 100 @A3 | Dwg No. DA/005 | Rev: A | Date 21/08/2025 BN

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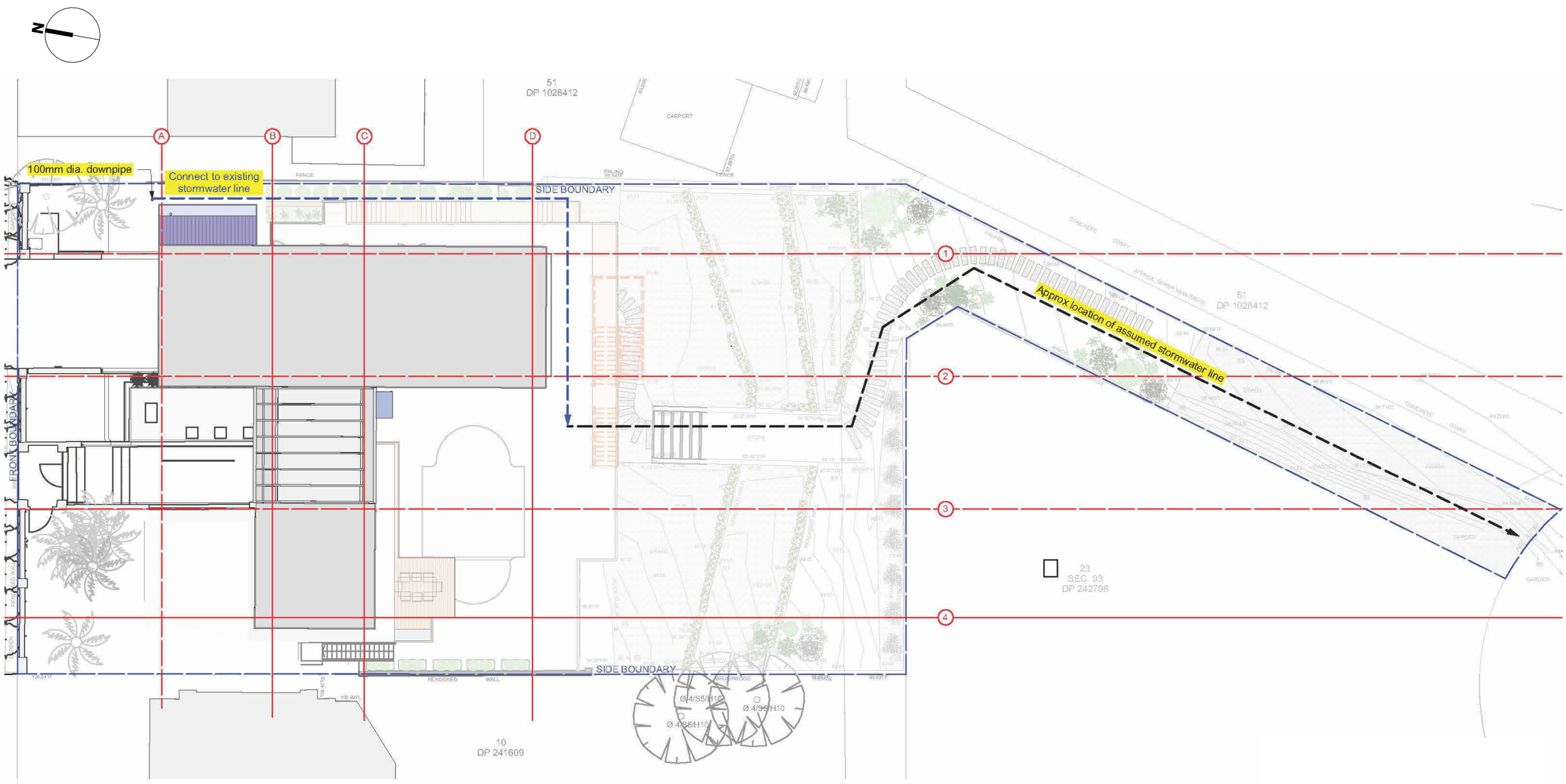

1 Stormwater Concept Plan

1 : 200 @A3

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139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL
Project No. 25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
STORMWATER CONCEPT PLAN

Scale 1 : 200 @A3 | Dwg No. DA/103 | Rev: A | Date 21/08/2025 BN

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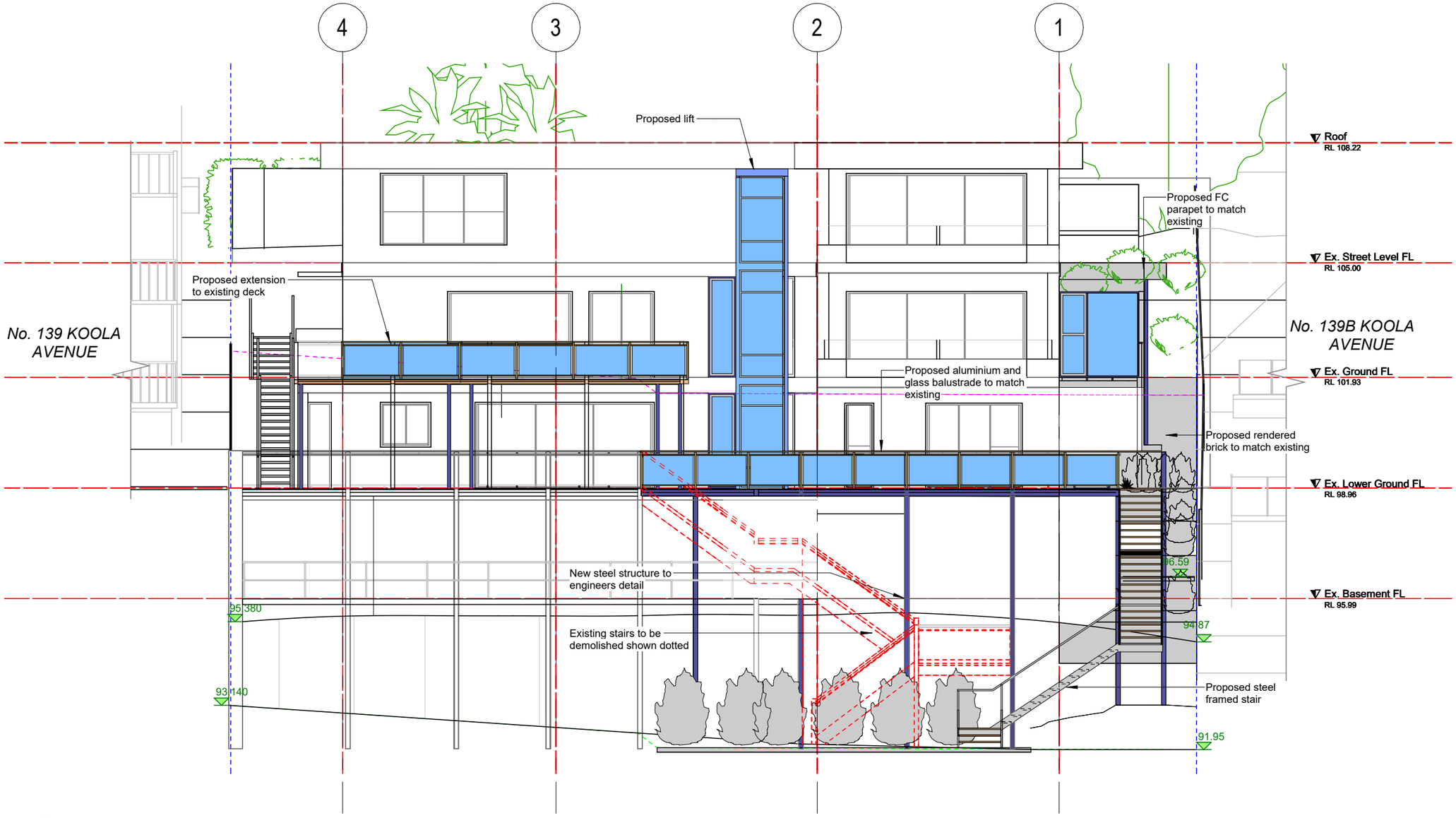

1 SOUTH
1 : 100 @A3

WALL TO BE REMOVED

EXISTING WALL

NOTE:
THE PROPOSED LIFT DOES NOT STOP AT BASEMENT LEVEL.
THERE ARE NO BUILDING WORKS PROPOSED ON BASEMENT LEVEL.

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ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL
Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
SOUTH ELEVATION

Scale 1 : 100 @A3 | Dwg No. DA/200 | Rev: A | Date 21/08/2025 BN

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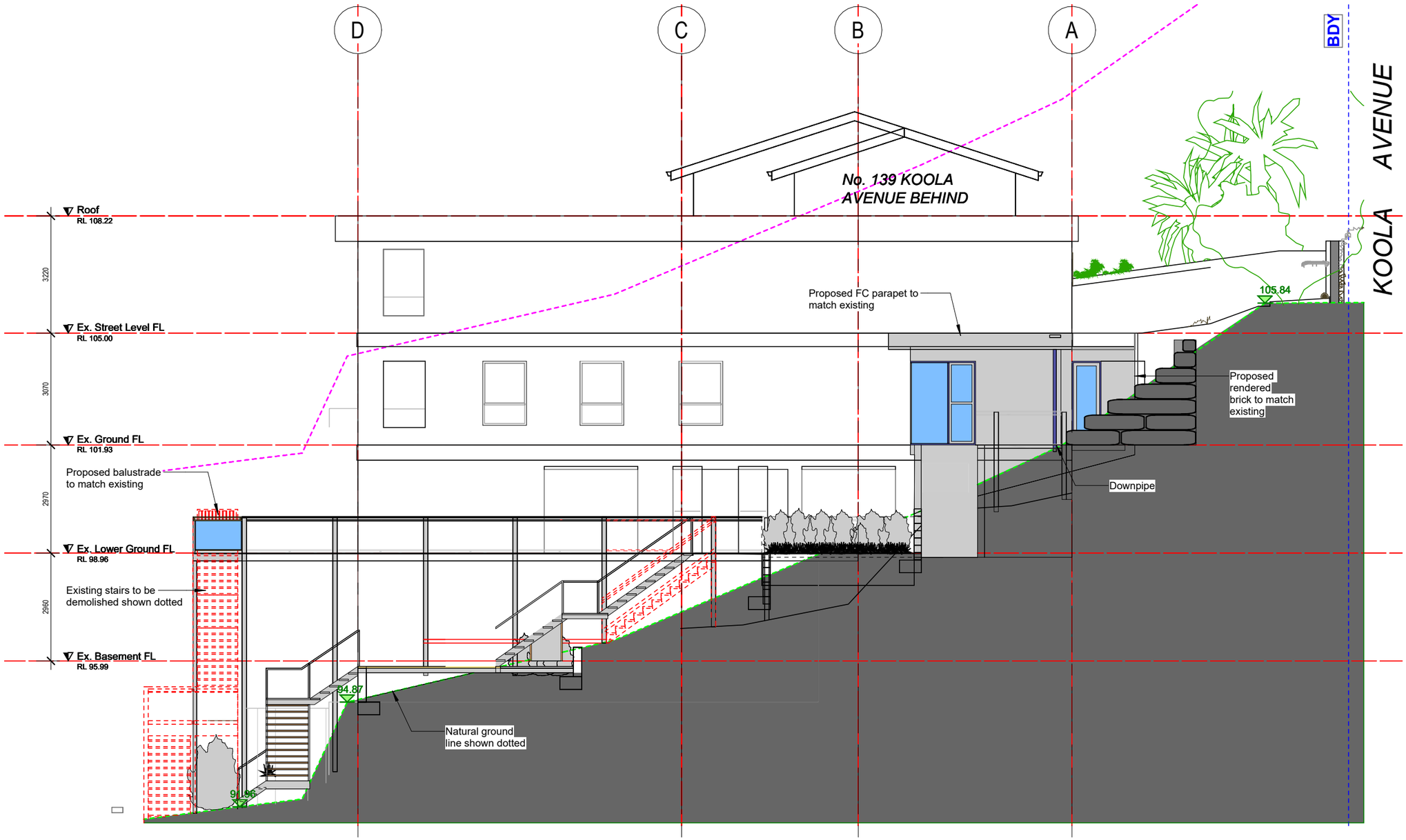

1 EAST
1 : 100 @A3

WALL TO BE REMOVED

EXISTING WALL

NOTE:
THE PROPOSED LIFT DOES NOT STOP AT BASEMENT LEVEL.
THERE ARE NO BUILDING WORKS PROPOSED ON BASEMENT LEVEL.

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KU-RING-GAI COUNCIL
Project No. 25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
EAST ELEVATION

Scale 1 : 100 @A3 | Dwg No. DA/201 | Rev: A | Date 21/08/2025 BN

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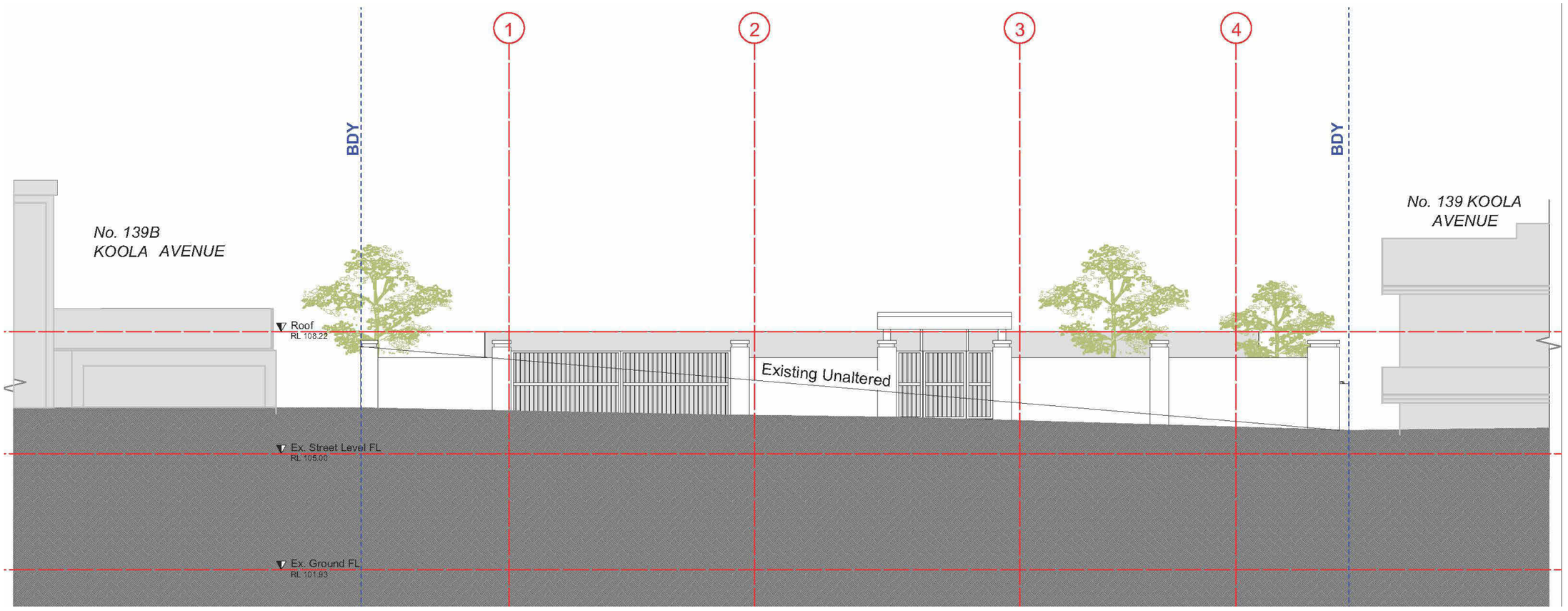

1 Street (North) Elevation

1 : 100 @A3

WALL TO BE REMOVED

EXISTING WALL

NOTE:
THE PROPOSED LIFT DOES NOT STOP AT BASEMENT LEVEL.
THERE ARE NO BUILDING WORKS PROPOSED ON BASEMENT LEVEL.

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Project Title
ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071

KU-RING-GAI COUNCIL

Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
NORTH ELEVATION

Scale 1 : 100 @A3 | Dwg No. DA/202 | Rev: A | Date 21/08/2025 BN

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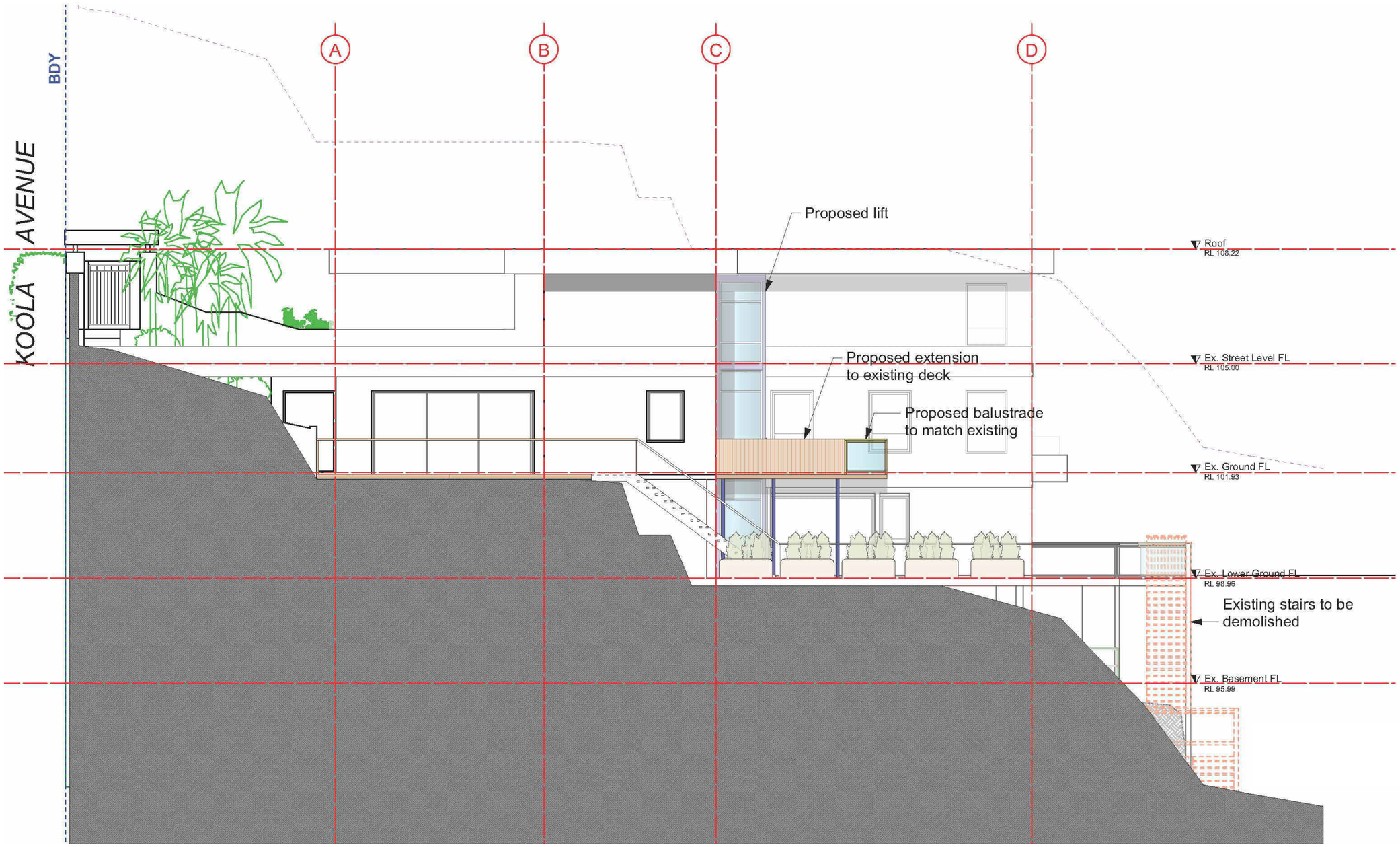

1 West Elevation
1 : 100 @A3

WALL TO BE REMOVED

EXISTING WALL

NOTE:
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ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL

Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
WEST ELEVATION

Scale 1 : 100 @A3 Dwg No. DA/203 Rev: A Date 21/08/2025 BN

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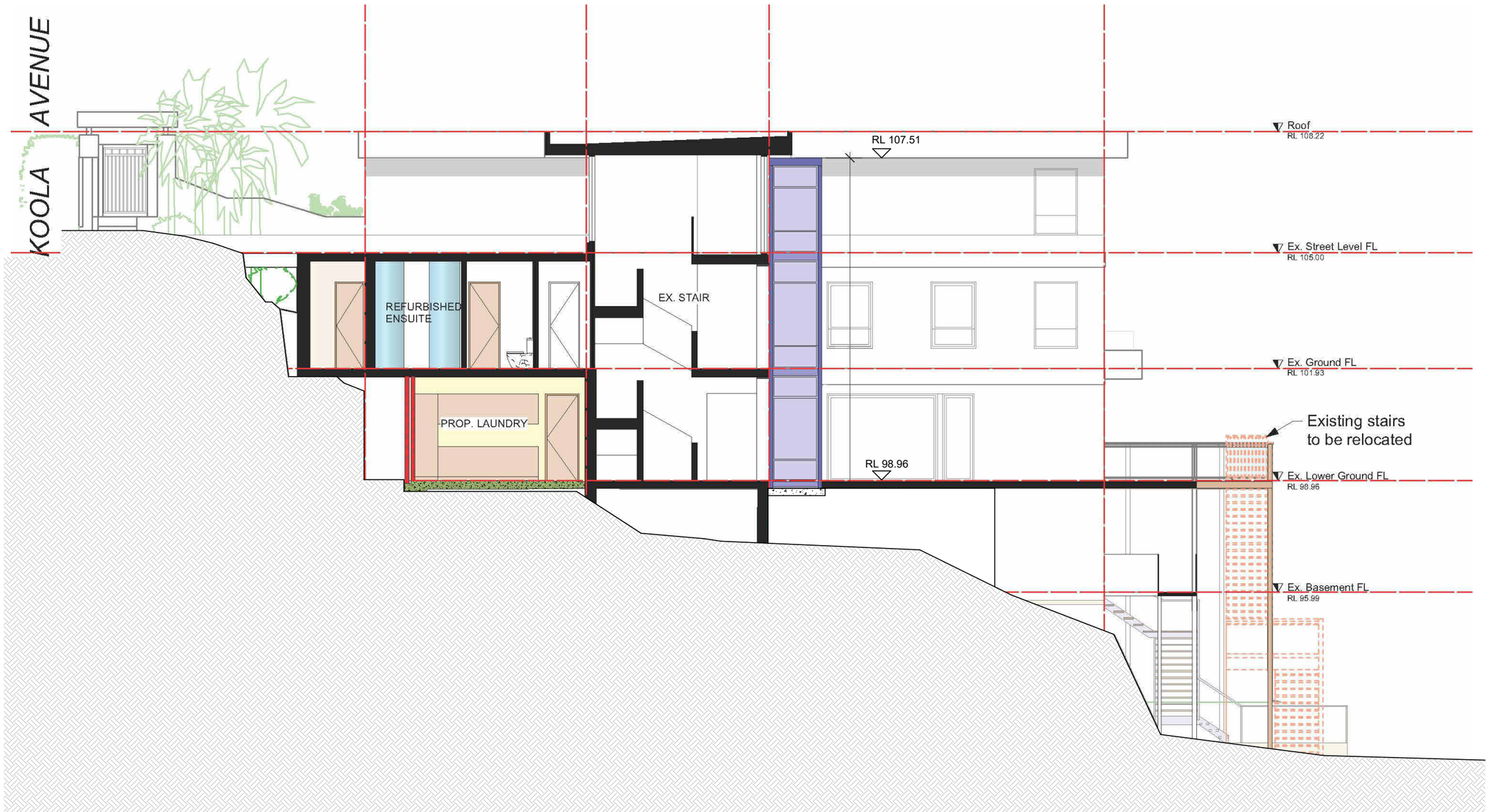

A DA/004 SECTION A-A

1 : 100 @A3

WALL TO BE REMOVED

EXISTING WALL

NOTE:
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Project Title
ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL

Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
SECTION A

Scale 1 : 100 @A3 | Dwg No. DA/204 | Rev: A | Date 21/08/2025 BN

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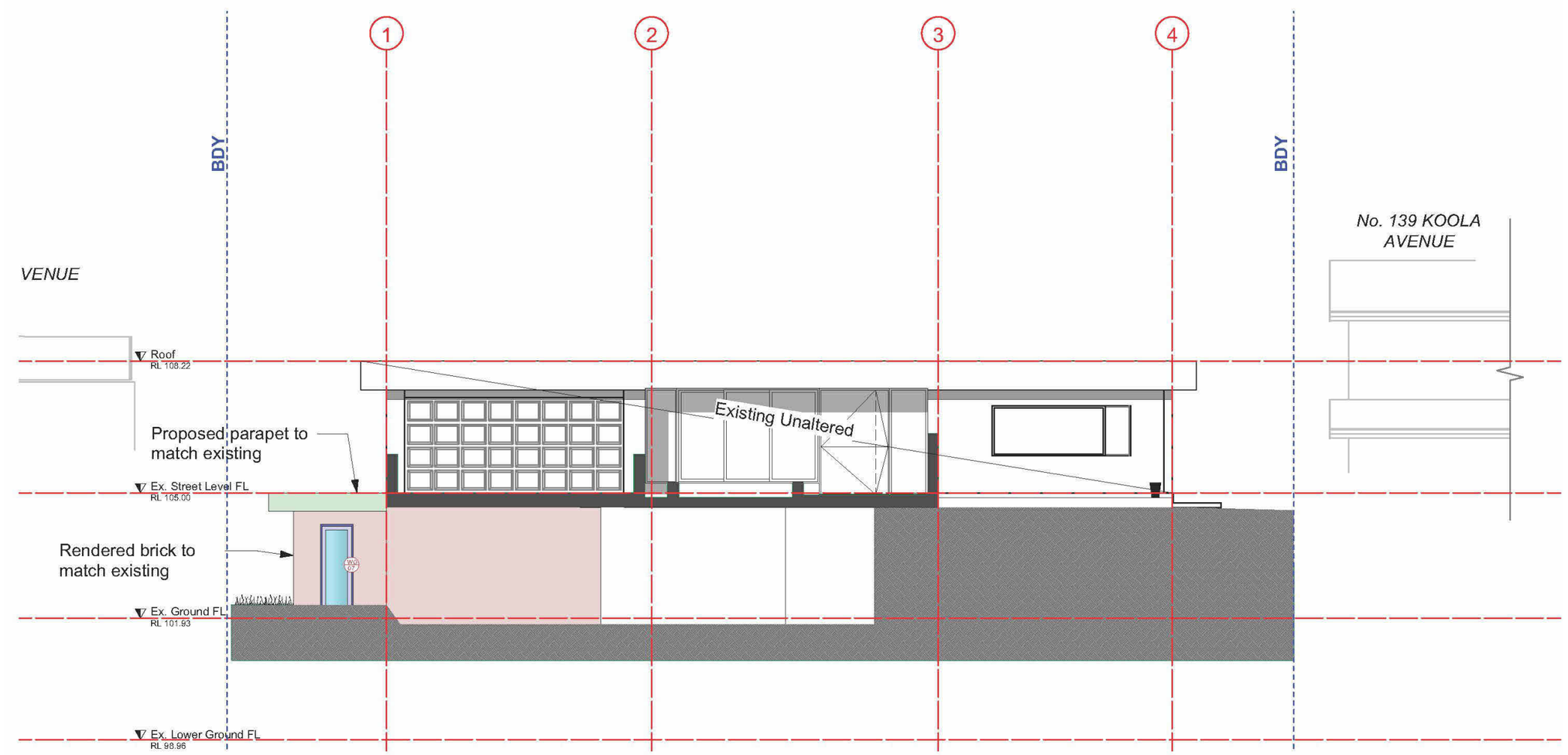

1 SECTION B-B
1 : 100 @A3

WALL TO BE REMOVED

EXISTING WALL

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Project Title
ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL

Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
SECTION B

Scale 1 : 100 @A3 | Dwg No. DA/205 | Rev: A | Date 21/08/2025 BN

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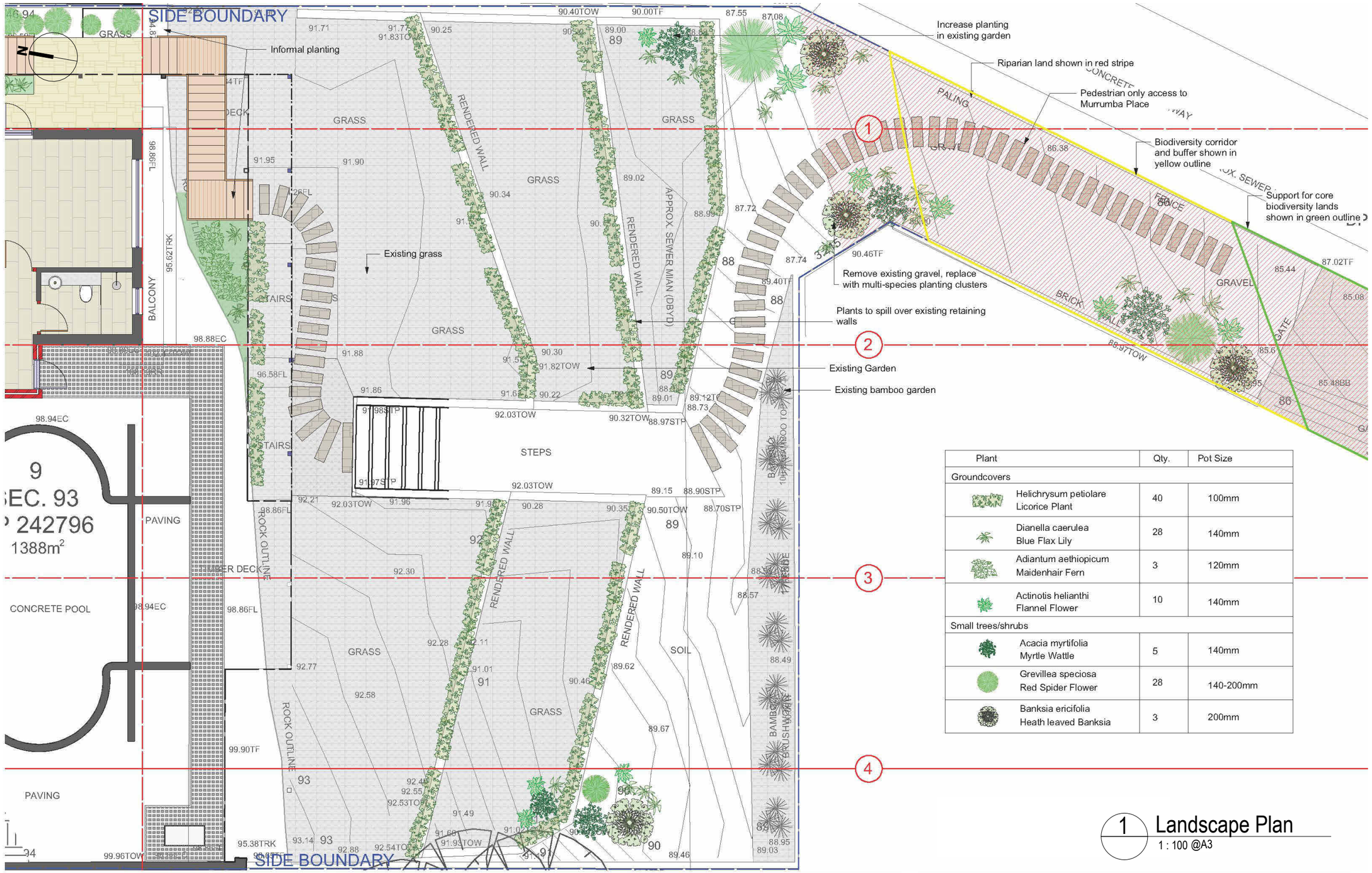

Plant	Qty.	Pot Size
Groundcovers		
Helichrysum petiolare Licorice Plant	40	100mm
Dianella caerulea Blue Flax Lily	28	140mm
Adiantum aethiopicum Maidenhair Fern	3	120mm
Actinotis helianthi Flannel Flower	10	140mm
Small trees/shrubs		
Acacia myrtifolia Myrtle Wattle	5	140mm
Grevillea speciosa Red Spider Flower	28	140-200mm
Banksia ericifolia Heath leaved Banksia	3	200mm

1 Landscape Plan
1 : 100 @A3

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Project Title
ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL

Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
LANDSCAPE PLAN - B

Scale 1 : 100 @A3 Dwg No. DA/300 Rev: A Date 21/08/2025 BN

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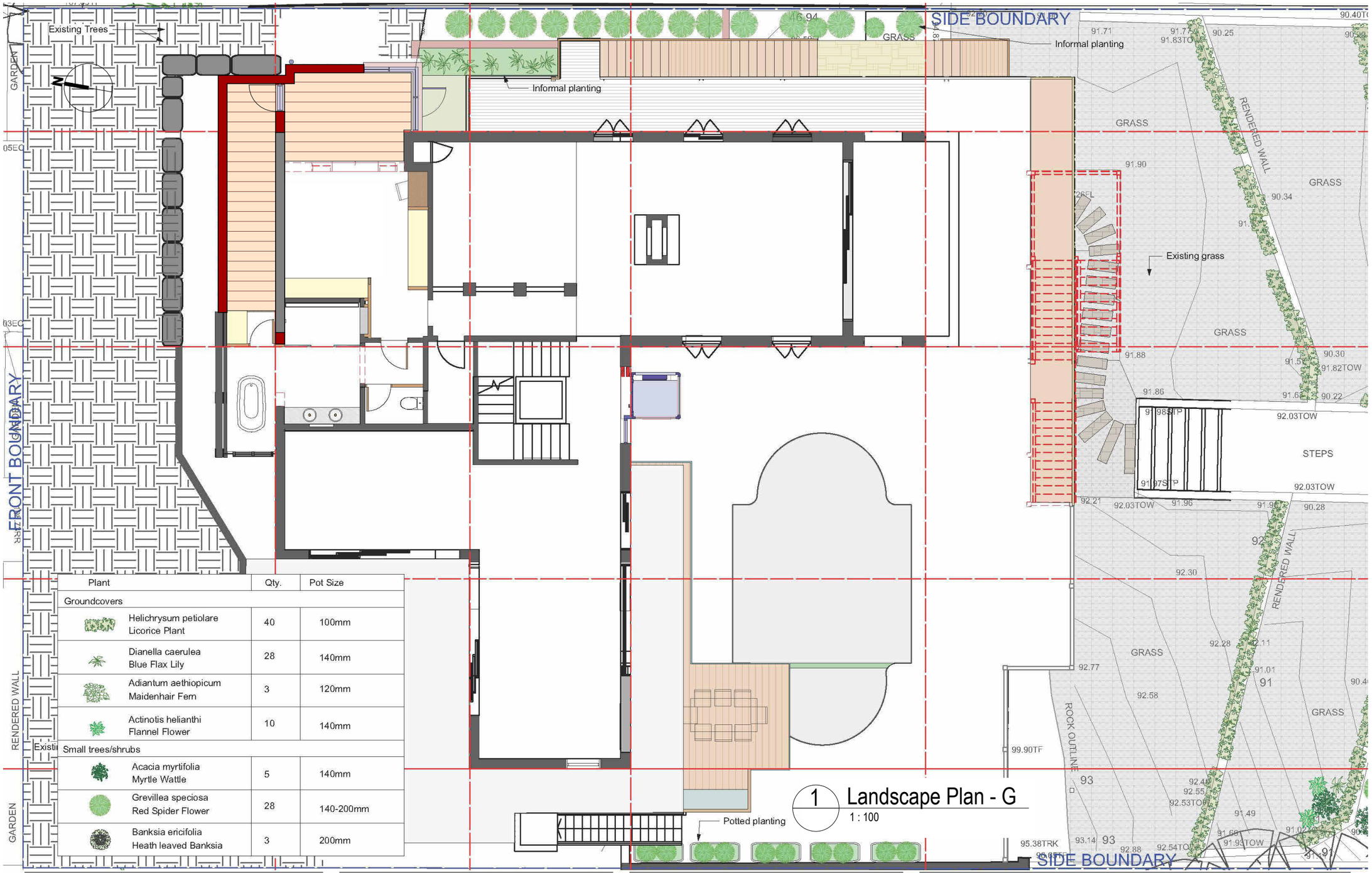

Plant		Qty.	Pot Size
Groundcovers			
	Helichrysum petiolare Licorice Plant	40	100mm
	Dianella caerulea Blue Flax Lily	28	140mm
	Adiantum aethiopicum Maidenhair Fern	3	120mm
	Actinotis helianthi Flannel Flower	10	140mm
Small trees/shrubs			
	Acacia myrtifolia Myrtle Wattle	5	140mm
	Grevillea speciosa Red Spider Flower	28	140-200mm
	Banksia ericifolia Heath leaved Banksia	3	200mm

1 Landscape Plan - G
1 : 100

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Project Title
ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL
Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
LANDSCAPE PLAN - G

Scale 1 : 100 @A3 Dwg No. DA/301 Rev: A Date 21/08/2025 BN

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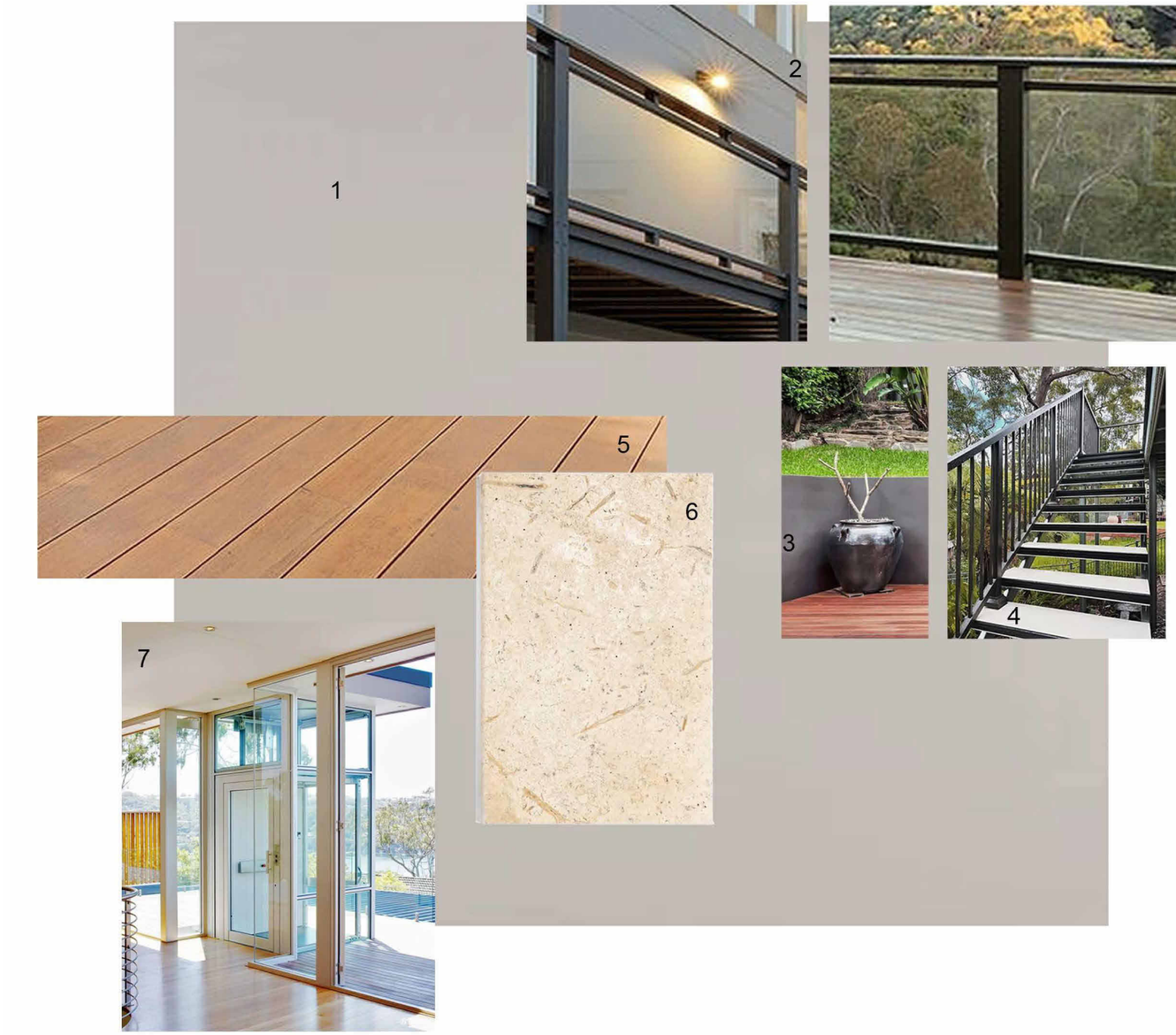

1. Parapet and rendered brick colour to match existing

2. Metal and glass balustrades to match existing

3. Retaining walls to match existing

4. Metal framed open riser external stair

5.Replacement decking to meet requirements of bushfire report

6. External pavers

7. Glass and metal framed external lift

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Project Title
ALTERATIONS & ADDITIONS
139A Koola Ave, East Killara NSW 2071
KU-RING-GAI COUNCIL

Project No.
25-01AAW

Client
Andre & Amanda Wyzenbeek

Drawing Title
FINISHES SCHEDULE

Scale @A3 | Dwg No. DA/400 | Rev: A | Date 21/08/2025 BN

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THE BOUNDARY INFORMATION SHOWN ON THIS PLAN REGARDING THE LOCATION OF THE PROPERTY BOUNDARIES HAS BEEN TAKEN FROM THE TITLE DEPOSITED PLAN. IT HAS BEEN PLOTTED AS REQUIRED UNDER *DIVISION 1, SECTION 9 (1)* OF THE "SURVEYING AND SPATIAL INFORMATION REGULATION 2017" AND IS ACCURATE TO ABOUT ±0.05m. IT HAS NOT BEEN DETERMINED BY AN ACCURATE BOUNDARY SURVEY.

A DETAIL & LEVEL SURVEY IS NOT A "LAND SURVEY" AS DEFINED BY THE SURVEYING AND SPATIAL INFORMATION ACT, 2002. IF ANY CONSTRUCTION OR DESIGN WORK, WHICH RELIES ON CRITICAL SETBACKS FROM THE STREET OR BOUNDARIES IS PLANNED, IT WOULD BE IMPERATIVE TO CARRY OUT FURTHER SURVEY WORK TO DETERMINE THE BOUNDARY DIMENSIONS.

PRIOR TO ANY CONSTRUCTION WORK, SURVEY MARKS SHOULD BE PLACE TO DEFINE THE PROPERTY BOUNDARIES.

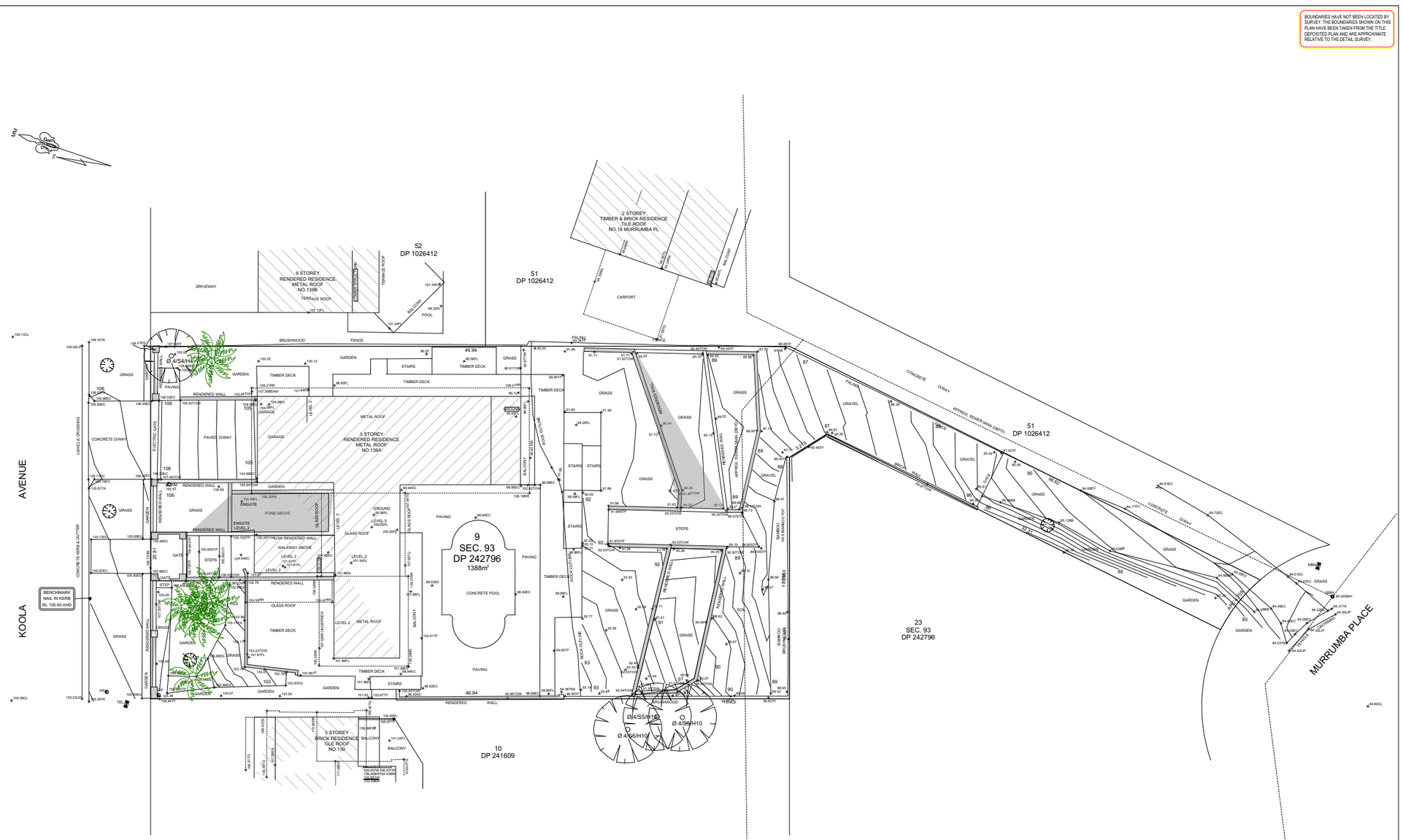
SERVICES SHOWN ARE INDICATIVE ONLY. POSITIONS ARE BASED ON SURFACE INDICATOR(S) LOCATED DURING FIELD SURVEY. CONFIRMATION OF THE EXACT POSITION SHOULD BE MADE PRIOR TO ANY EXCAVATION WORK. OTHER SERVICES MAY EXIST WHICH ARE NOT SHOWN.

LEVELS ARE BASED ON AUSTRALIAN HEIGHT DATUM (AHD) USING SSM 12308 WITH RL 87.092 (AHD).

RIDGE & GUTTER HEIGHTS HAVE BEEN OBTAINED BY INDIRECT METHOD AND ARE ACCURATE TO ± 0.05m.

CONTOURS SHOWN DEPICT THE TOPOGRAPHY, EXCEPT AT SPOT LEVELS SHOWN THEY DO NOT REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT. THE SPOT LEVELS ARE TRUE FOR THEIR POSITION, AND ARE INTENDED TO BE USEFUL TO REPRESENT THE GENERAL TERRAIN. CARE SHOULD BE TAKEN IF EXTRAPOLATING.

BOUNDARIES HAVE NOT BEEN LOCATED BY SURVEY. THE BOUNDARIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM THE TITLE DEPOSITED PLAN AND ARE APPROXIMATE RELATIVE TO THE DETAIL SURVEY.



LEGEND

BENCH MARK	
TELSTRA PIT	TEL
ELECTRIC LIGHT POLE	LP
POWER POLE	PP
SIGN POST	SP
SEWER INSPECTION PIT	SIP
SEWER VENT	SEWER
MANHOLE	MH
SEWER MANHOLE	SMH
STOP VALVE	SV
WATER HYDRANT	HYD
WATER METER	WM
GAS METER	GM
STATE SURVEY MARK	SSM

TSS TOTAL SURVEYING SOLUTIONS

LANE COVE | CAMDEN | MANLY VALE | CENTRAL COAST

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REVISION No.	REVISION DATE:	COMMENT:

LEGEND:
EB - EDGE OF BITUMEN
EC - EDGE OF CONCRETE
TB - TOP OF BANK
BB - BOTTOM OF BANK
TW - TOP OF WINDOW
BW - BOTTOM OF WINDOW
TG - TOP OF GUTTER
RR - ROOF RIDGE
FL - FLOOR LEVEL
TF - TOP OF FENCE

BAR SCALE
PLOTTED SCALE 1:100 (A0 SIZE SHEET)
0 1 2 3 5 10m

PLAN SHOWING DETAIL & LEVELS
OVER LOT 9 SECTION 93 IN DP242796

CLIENT: AMANDA & ANDRE WYZENBEEK		JOB No.: 211267	LGA: KU-RING-GAI
PROJECT: EAST KILLARA		PLAN No.: 211267-1	DATUM: AHD
ADDRESS: 139A KOOLA AVENUE, EAST KILLARA		DATE: 17/08/2021	SCALE: 1:100@A0
		DRAWN: DF	CONT. INTERVAL: 0.2m
		CHK: AE	SHEET 1 OF 1

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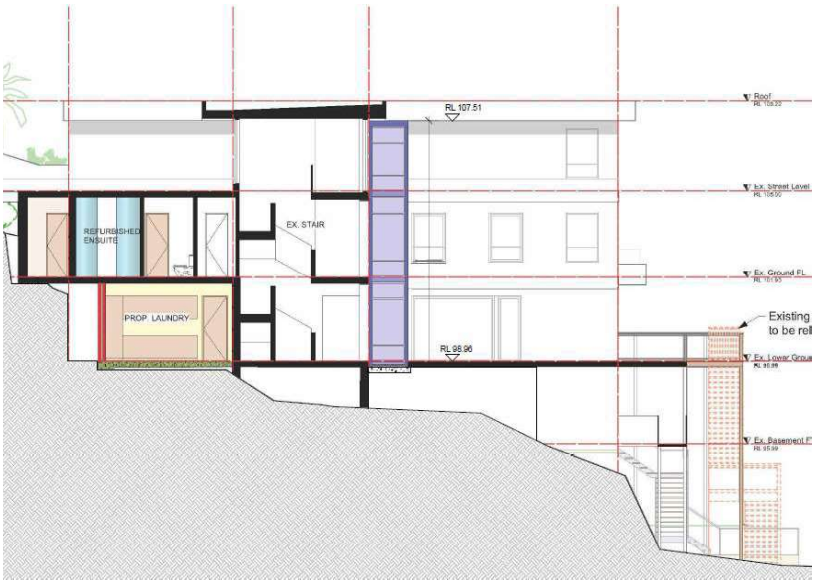
Clause 4.6 Exemption Analysis (FSR)

139A Koola Avenue East Killara NSW



Alterations and additions to an existing dwelling house

Prepared by: Strategic Approvals
Date: 21/08/2025
Version: V3
Project No.: 25/0067

StrategicApprovals

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1.0 Report Purpose

This Clause 4.6 exemption justification accompanies the Development Application for the Alterations and additions to an existing dwelling houselocated at 139A Koola Ave, East Killara NSW. The purpose of this report is to justify specific variations from the LEP that have arisen due to the development sought for approval under the subject Development Application. This report specifically analyses these variations in accordance with clause 4.6 of the Standard Instrument - Principal Local Environmental Plan and Kuring-Gai Local Environmental Plan 2015. In accordance with the KLEP 2015, this written clause 4.6 variation request:

- Identifies the relevant development standard requested to be varied.
- Identifies the extent of the variation.
- Justifies that compliance with the development standard is unreasonable given the matters of the proposal.
- Justifies that the proposal is in line with the objectives of the development standard.

2.0 Applicable Legislation and Controls

- Environmental Planning and Assessment Act 1979 referred to as EP&A (1979).
- Environmental Planning and Assessment Regulation 2021 referred to as EP&R (2021).
- Standard Instrument - Principal Local Environmental Plan referred to as the Standard Instrument.
- Kuring-Gai Local Environmental Plan 2015 referred to as the KLEP (2015)

3.0 Document Schedule

3.1 Survey

Prepared By	Reference Number	Revision	Date
Total Surveying Solutions	211267-1	-	17 August 2021

3.2 Architectural Plans

Drawings Prepared by:	Supersoma	
Drawing Title / Number	**Revision**	**Date**
25-01AAW-DA/000 - 25-01AAW-DA/005	A	20th August 2025
25-01AAW-DA/100 - 25-01AAW-DA/103	A	20th August 2025
25-01AAW-DA/200 - 25-01AAW-DA/205	A	20th August 2025
25-01AAW-DA/300 - 25-01AAW-DA/301	A	20th August 2025
25-01AAW-DA/400	A	20th August 2025
25-01AAW-DA/500 - 25-01AAW-DA/503	A	20th August 2025

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4.0 Site Location

The subject site is located at 139A Koola Ave, East Killara. The property is legally identified as Lot 93 DP 242796 and consists of a irregular shaped battle-axe lot that has a lot size of 1388m^2

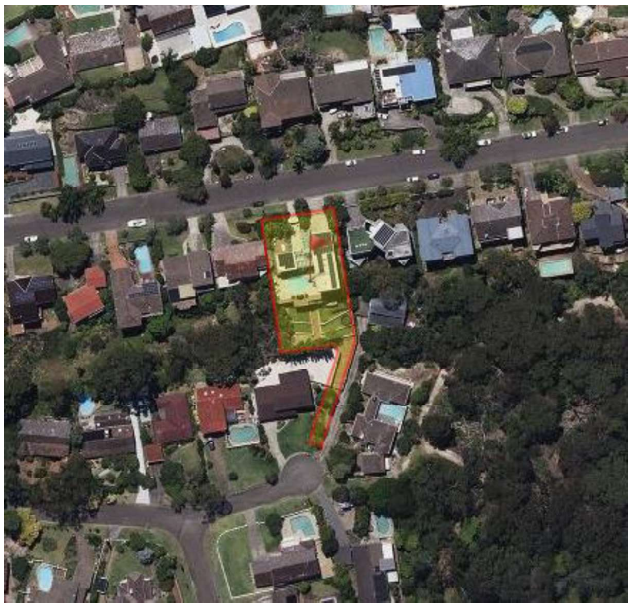

Image 1: Aerial image showing the subject site and its general surroundings (Sixmaps, 2025)



Image 2: Road Map Image showing the subject site and its general surroundings (Sixmaps, 2025)

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5.0 Description of Development Proposal and Context

The development proposal is categorised as alterations and additions to an existing dwelling house and consists of the following elements:

- Additions to the dwelling footprint
- Minor external alterations ie new openings and amendments to external walls
- New lift
- New plant room
- Proposed home theatre
- Proposed Laundry
- Proposed powder room
- Demolition of externals stairs
- Extension of multiple decks

5.1 Description of Non-Compliance

The proposed development does not meet the provisions of the maximum permissible Floor space ratio pertaining to a dwelling house that is contained within clause 4.4 of part 4 of Ku-ring-gai Local Environmental Plan 2015.

4.4 Floor space ratio

(1) The objectives of this clause are as follows—

(a) to enable development with a built form and density that is compatible with the size of the land to be developed, its environmental constraints and its contextual relationship,

(b) to provide for floor space ratios compatible with a range of uses,

(c) to ensure that development density is appropriate for the scale of the different centres within Ku-ring-gai,

(d) to ensure that development density provides a balanced mix of uses in buildings in the employment and mixed use zones.

(2) The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map.

(2A) Despite subclause (2), the floor space ratio for a building on land in Zone R2 Low Density Residential where the site area is within a specified range in Column 1 of the table to this subclause must not exceed the ratio specified opposite in Column 2 of the table.

Column 1	Column 2
More than 1,700 square metres	0.3:1
More than 1,000 square metres but not more than 1,700 square metres	((170 + (0.2 × site area)) / site area):1
More than 800 square metres but not more than 1,000 square metres	((120 + (0.25 × site area)) / site area):1
800 square metres or less	0.4:1

(2B) Despite subclause (2A), if a dual occupancy (detached) is permissible on the land, the floor space ratio for the dual occupancy (detached) must not exceed 0.4:1.

(2C) Despite subclause (2), the floor space ratio for a building on land in Zone R4 High Density Residential where the site area is within a specified range in Column 1 of the table to this subclause must not exceed the ratio specified opposite in Column 2 of the table.

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Column 1	Column 2
More than 1,800 square metres but not more than 2,400 square metres	1.0:1
1,800 square metres or less	0.8:1

(2D) Despite subclause (2), the floor space ratio for a building on land in Zone C4 Environmental Living where the site area is within a specified range in Column 1 of the table to this subclause must not exceed the ratio specified opposite in Column 2 of the table.

Column 1	Column 2
More than 1,500 square metres	((250 + (0.15 × site area)) / site area):1
More than 1,000 square metres but not more than 1,500 square metres	((170 + (0.20 × site area)) / site area):1
More than 800 square metres but not more than 1,000 square metres	((120 + (0.25 × site area)) / site area):1
800 square metres or less	0.4:1

(2E) Despite subclause (2), the floor space ratio for a building used for the purposes specified in Column 2 of the table to this subclause in an area specified opposite in Column 1 of the table and identified on the Floor Space Ratio Map *must not exceed the floor space ratio in relation to the land use specified opposite in Column 3 of the table.*

Column 1 Area	Column 2 Land use	Column 3 Floor space ratio
Area 1	Retail premises	1.0:1
Area 2	Retail premises	2.0:1
Area 3	Commercial premises	1.0:1
Area 4	Commercial premises	1.2:1

Under clauses 4.4 2D, the permissible FSR is therefore calculated as follows: ((170 + (0.2 x site area)) / site area: 1 = **0.322**

FSR Compliance table

Site Area	Allowable FSR	Proposed FSR	Allowable Floor area	Proposed Floor area	% Breach
1388m^2	0.322:1	0.367:1	447.6m^2	509.08m^2	13.7%

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6.0 LEP Analysis

Under the KLEP 2015 the property is identified to be in an C4 Environmental Living Zone

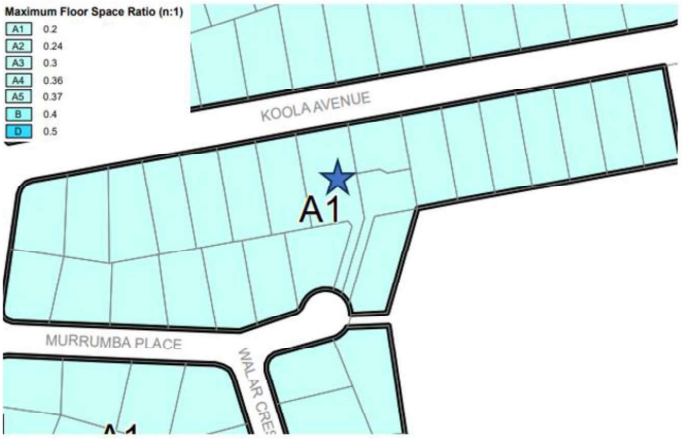
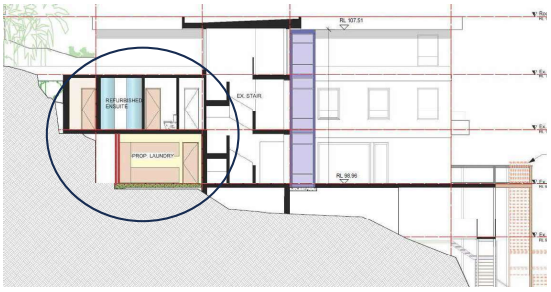


Image 3: KLEP (2015) Land Zoning Map. (Source: KLEP 2015)

6.1 LEP Objectives Analysis

Zone C4 - Environmental Living **Objectives of zone**	
To provide for low-impact residential development in areas with special ecological, scientific or aesthetic values.	**Complies.** The proposed development as a whole is objectively modest and does not represent overdevelopment of the land at the expense of any ecological aspects of the lot. The proposed FSR breach is a result of minor additions to a portion of land that is essentially in a "void" area of the lot. This is a crucial acknowledgement as the land being utilised for increased floor area is not of ecological importance and therefore the numerical non compliance does not result at the expense of any natural or landscaped area.  Image 4: Extract of the section plan showing the subject addition

To ensure that residential development does not have an adverse effect on those values.	**Complies.** As shown in the analysis of objective 1, the proposed addition does not reduce any ecologically significant elements afforded to the lot and as such this objective is achieved.
To ensure development does not result in further fragmentation of ecological communities, biodiversity corridors or other significant vegetation or habitat.	**Complies.** The application does not result in any fragmentation of ecological communities, biodiversity corridors, vegetation or habitat in any form. The additions are minor in nature and are proposed in a "void" area of the lot, therefore mitigating any significant impact that could occur as the result of an increased footprint of the dwelling.
To minimise direct and indirect risks to life, property and the environment from bushfire events.	**Compliance readily achievable.** The proposal is to comply with AS3959 and any bushfire requirements.
To ensure that development in this zone on land that adjoins land in Zone C1 National Parks and Nature Reserves or Zone C2 Environmental Conservation is compatible with the objectives of those zones.	**Not applicable.** The lot does not directly adjoin reserves, parks or the C2 zone. In any case the proposed addition is minor in nature and situated in a 'void' area of the lot.
To enable other land uses that provide facilities or services to meet the day to day needs of residents.	**Complies.** The proposed development supports this objective by ensuring that the land remains suitable for residential use and can accommodate growing families and general residential amenity whilst maintaining a modest scale and confining works to a non-sensitive area of the lot, the development preserves the ecological values of the site and in doing so, the proposal results in valuable floor area that is situated in the least impactful location afforded to the lot.

7.0 Clause 4.6 Analysis

This section of the report specifically analyses the requirements of clause 4.6 of the KLEP 2015 directly against the development proposal.

7.1 Clause 4.6 Preamble

Clause 4.6 exists within the KLEP 2015 and Standard Instrument to allow the consideration of variations to specific development standards contained within an LEP. NSW consists of a vast topography and many differing locales that contain unique attributes. Situations arise where the LEP requirements may be considered overbearing or impose unreasonable restrictions on potential development of land that prevents best use. Clause 4.6 allows the consideration for these developments to come to fruition if there is solid justification to do so in accordance with the requirements of clause 4.6 and relevant objectives of the KLEP 2015.

Clause 4.6 states: *(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.*

Development standards are defined in the Environmental Planning and Assessment Act 1979 as ***development standards*** *means provisions of an environmental planning instrument or the regulations in relation to the carrying out of development, being provisions by or under which requirements are specified or standards are fixed in respect of any aspect of that development, including, but without limiting the generality of the foregoing, requirements or standards in respect of—*

(a) the area, shape or frontage of any land, the dimensions of any land, buildings or works, or the distance of any land, building or work from any specified point,

(b) the proportion or percentage of the area of a site which a building or work may occupy,

(c) the character, location, siting, bulk, scale, shape, size, height, density, design or external appearance of a building or work,

(d) the cubic content or floor space of a building,

(e) the intensity or density of the use of any land, building or work,

(f) the provision of public access, open space, landscaped space, tree planting or other treatment for the conservation, protection or enhancement of the environment,

(g) the provision of facilities for the standing, movement, parking, servicing, manoeuvring, loading or unloading of vehicles,

(h) the volume, nature and type of traffic generated by the development,

(i) road patterns,

(j) drainage,

(k) the carrying out of earthworks,

(l) the effects of development on patterns of wind, sunlight, daylight or shadows,

(m) the provision of services, facilities and amenities demanded by development,

(n) the emission of pollution and means for its prevention or control or mitigation, and

(o) such other matters as may be prescribed.

In this scenario development consent is being sought for a deviation from the macximum permissible FSR for a residential dwelling that are contained within clause 4.4 of part 4 of the KLEP 2015.

7.2 Clause 4.6(3)(a) Unreasonable or Unnecessary

Preston CJ identified five typical scenarios justifications to justify the "unreasonable and unnecessary" requirement of Clause 4.6 of the KLEP 2015 contained in the dealings of *Wehbe v Pittwater Council* [2007]. While it is noted that these 5 justifications were not an exhaustive list of all possible justifications, and that the case dealings were specific to *State Environmental Planning Policy No. 1 – Development Standards (SEPP 1),* it provides a widely accepted methodology in determining the validity of a written clause 4.6 variation request. The five methodologies established in *Wehbe v Pittwater Council* [2007] to determine the justification of a clause 4.6 variation request can be surmised as follows:

1. *The objectives of the standard are achieved notwithstanding non-compliance with the standard* (methodology 1).
2. *The underlying objective or purpose of the standard is not relevant to the development and therefore compliance is unnecessary* (methodology 2).
3. *The underlying object or purpose would be defeated or thwarted if compliance was required and therefore compliance is unreasonable* (methodology 3).
4. *The development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable* (methodology 4).
5. "*The zoning of the particular land" was "unreasonable or inappropriate" so that "a development standard appropriate for that zoning is also unreasonable and unnecessary as it applies to the land" and that "compliance with the standard would be unreasonable or unnecessary"* (methodology 5).

The objectives of clause 4.4 of Part 4 of the Ku-ring-gai Local Environmental Plan 2015 are as follows:

> *(1) The objectives of this clause are as follows—*
> *(a) to enable development with a built form and density that is compatible with the size of the land to be developed, its environmental constraints and its contextual relationship,*
> *(b) to provide for floor space ratios compatible with a range of uses,*
> *(c) to ensure that development density is appropriate for the scale of the different centres within Ku-ring-gai,*
> *(d) to ensure that development density provides a balanced mix of uses in buildings in the employment and mixed use zones.*

An analysis of these objectives is provided below, with the exception of objectives (c) and (d) as they are not relevant to this proposal:

Floor space ratio Objectives analysis

This clause 4.6 variation request establishes that compliance with the maximum permissible FSR standard is unreasonable. The zoning objectives are consistent in their intent to facilitate low-impact residential development in areas with ecological, scientific, or aesthetic values, while ensuring that the natural qualities of the land are preserved. The FSR standard, however, does not adequately account for unique site conditions, such as steeply sloping land and irregular building envelopes, where the strict application of the control can result in an unreasonable restriction on modest and otherwise compliant residential additions.

In this case, the proposed breach arises solely from a minor addition within an area of the site that can be described as a "void" — the space between the existing dwelling and the adjoining rock face as shown below:

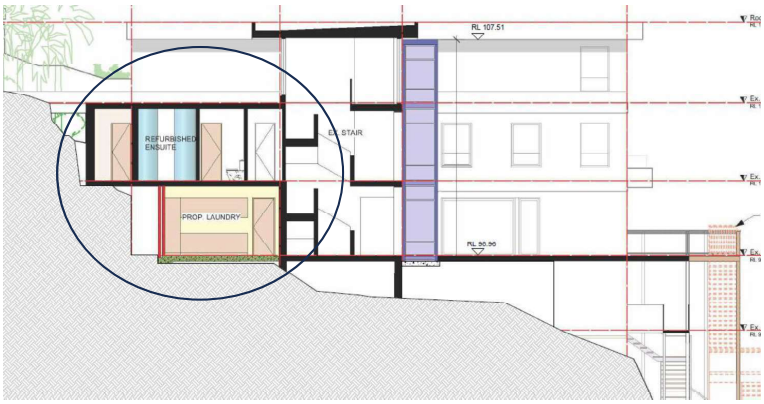


Image 5: Extract of the section plan showing the subject addition

This is the least impactful portion of the site available for development, as it avoids disturbance to landscaped areas, ecologically significant vegetation, or areas that contribute to the natural character of the land. The proposed addition is objectively modest and does not represent an overdevelopment of the site.

Furthermore, this intentionally located area ensures that the adjoining amenity is also protected as it mitigates any potential solar access loss, loss of privacy amenity and loss of acoustic amenity.

Objective (a) explores the contextual relationship of a building in relation to buildings within the immediate vicinity. This notion aims to ensure a consistent pattern of dwelling typology is achieved through harmonious and complementary building design. This extends to bulk/scale, architectural typology, building massing, open space, landscape area, built upon area and building setbacks. The increase floor area does not result in any noticeable or impactful digressions from any of the aforementioned planning principles as the subject area of building increase is hidden and cannot be seen from any public space. In this regard the resulting building physically presents as an almost identical structure when viewed from the streetscape, it is a similar concept to that of a basement.

Below is a demonstration of the subject dwelling when compared to directly adjoining properties provided as a contextual comparison:

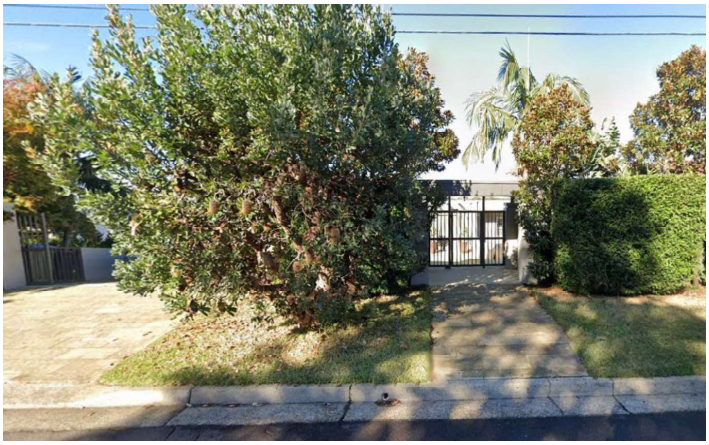


Image 6: The subject dwelling as viewed from street level

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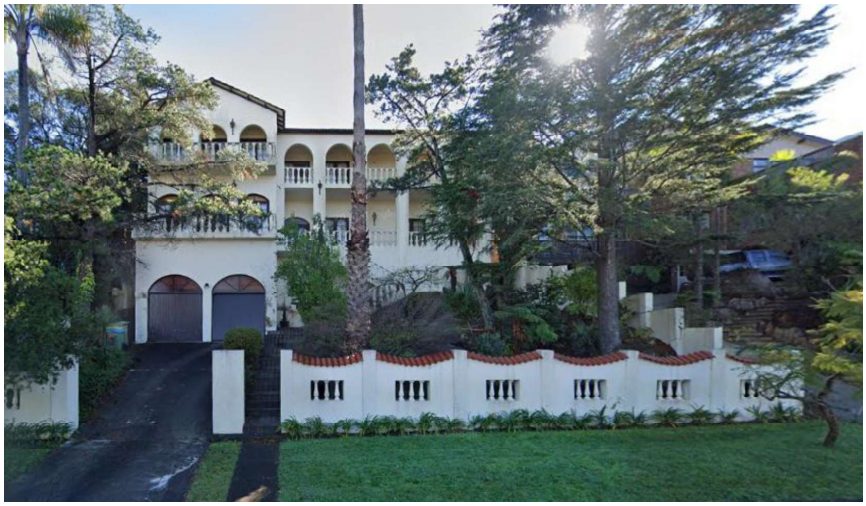

Image 7: The directly opposing property on the northern side of Koolah Avenue



Image 8: Opposing properties on the northern side of Koolah Avenue

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Image 9: An opposing property on the northern side of Koolah Avenue



Image 10: Opposing properties on the northern side of Koolah Avenue

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Image 11: The directly adjoining properties revealing a larger bulk and scale as viewed from street level



Image 12: The directly adjoining properties revealing a larger bulk and scale as viewed from street level

In the above examples it can be seen that the dwelling located on the northern side of Koolah Avenue presents as 2 and 3 storey dwellings of significant mass towards the primary road facing portion of the land while on the southern side of Koolah Avenue the dwellings present as 1 and 2 storey dwellings with majority of the bulk located to the southern portion of the lot. The proposed additional building footprint is concealed within the “void space” located at the front of the lot.

It is important to consider that the RL at street level is roughly RL106 and the top of the rock face being RL 105.84. The proposed building footprint has a maximum RL of 105 that extends down to an RL of 98.96 and is therefore entirely below the street level. Furthermore, there is existing building bulk located behind this subject area meaning that there is no increase to the building bulk when viewed from the rear, for all intensive purposes the footprint is “invisible” meaning that the base dwelling physical presents as the same from all viewable locations.

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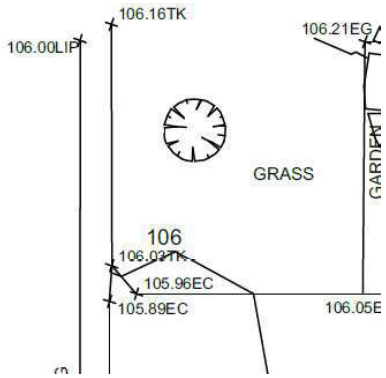

Image 13: Extract of the survey revealing the RL's at street level

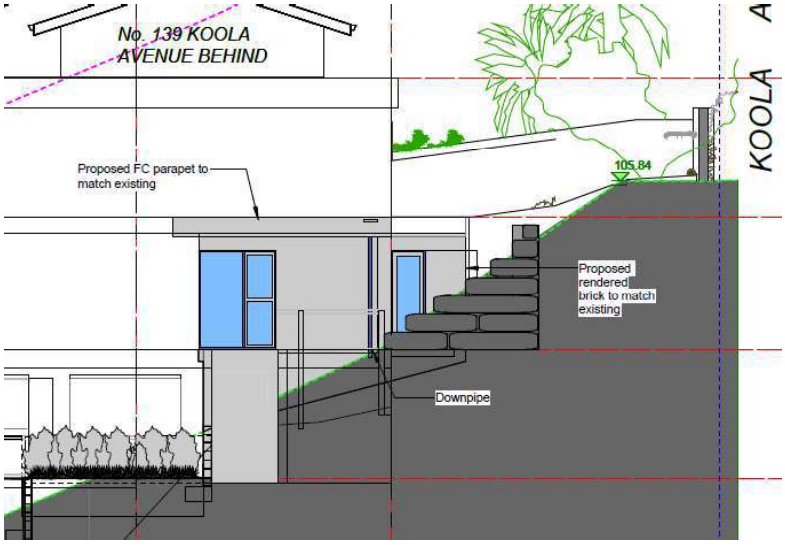

Image 14: Extract of the elevations plan showing the location of the subject addition in the context of the existing building and street level.

To further determine contextual appropriateness below is comparative prescriptive GFA Analysis of relevant proposals in the immediate vicinity of the subject dwelling:

1. 38 Koola Avenue, East Killara

- Development: Alterations & Additions to Dwelling House
- FSR: 0.39:1 (proposed)
- GFA: 342m²
- Percentage: 101.6%
- Lot size: 866.3m²
- Date Approved: 15/09/2022

2. 143 Springdale Road, East Killara

- Development: Demolition of existing dwelling and construction of two-storey dwelling with garage level below
- FSR: 0.365:1
- GFA: 370.48m²
- Percentage: 99.3%
- Lot size: 1015m²
- Date Approved: 5/08/2022

3. 89 Barrie Street, East Killara

- Development: Proposed Alterations and Additions to existing dwelling
- FSR: 0.37:1 (proposed)
- GFA: 316.45m²
- Percentage: 85.9%
- Lot size: 992.8m²
- Date Approved: 20/12/2024

4. 25 Kimberley Street, East Killara

- Development: Demolition of existing dwelling & garage and construction of new two-storey residential dwelling
- FSR: 0.35:1
- GFA: 292.25m²
- Percentage: 89.7%
- Lot size: 835m²
- Date Approved: 18/10/2022

5. 2 Warrington Avenue, East Killara

- Development: Alteration and addition to existing dwelling house with attached secondary dwelling and new swimming pool
- FSR: 0.389:1
- GFA: 332.3m²
- Percentage: 99.7%
- Lot size: 853.6m²
- Date Approved: 13/08/2021

6. 52 Churchill Road, East Killara

- Development: New dwelling
- FSR: 0.3935:1
- GFA: 329m²
- Percentage: 100.0%
- Lot size: 836m²
- Date Approved: 15/01/2022

7. 10 Walar Crescent, East Killara

- Development: Alterations and additions to existing dwelling, mini basketball court and spa
- FSR: 0.31:1
- GFA: 322.76m²
- Percentage: 86.1%
- Lot size: 1045.5m²
- Date Approved: 30/09/2024

8. 52 Saiala Road, East Killara

- Development: Completion of dwelling
- FSR: 0.416:1 (proposed)
- GFA: 357.07m²
- Percentage: 106.7%
- Lot size: 857.8m²
- Date Approved: 26/03/2024

It is evident that from a prescriptive point of view, the proposed FSR sits within the presented range that varies from 0.31 to 0.416.

Accordingly, the proposed additions achieve a built form and density that are contextually appropriate and compatible with the existing development pattern along Koola Avenue. The variation does not present as additional bulk to the street or adjoining properties, maintains consistency with the prevailing character, and respects the environmental and physical constraints of the site and the variation does not result in a building density on the site that is uncharacteristic of the surrounding locality. For these reasons, the proposal satisfies Objective (a) of Clause 4.4 by delivering a modest, well-sited and harmonious built form outcome.

A fundamental purpose of the FSR control is to ensure an appropriate balance between built form, open and natural space, protecting amenity, ecological values, and landscape character. When viewed in this context, the numerical variation achieves the intent of the standard because:

- The addition is confined to an area that has no ecological or landscaping value.
- The development maintains a high level of open space and natural site character.
- The proposal achieves compliance with all other key development standards, including height, setbacks, landscaping, and design quality.
- The built form outcome remains low-impact, consistent with the zone objectives, and compatible with surrounding development.
- The proposal is modest in nature and results in the best use of land at no detriment to all other considerations both prescriptively and objectively.

Rigid adherence to the FSR standard in this circumstance would impose an unnecessary restriction that does not lead to better planning outcomes. Rather, it would prevent a modest and well-sited addition that satisfies the objectives of the zone by:

- Supporting the ongoing use of the land for low-impact residential purposes.
- Ensuring no adverse effect on ecological, scientific, or aesthetic values of the site.
- Locating new floor area in the least impactful position available, thereby preserving significant landscape qualities.
- Providing additional amenity and functionality for residents while respecting environmental constraints.
- Maintaining compatibility with adjoining land uses and broader neighbourhood character.

Accordingly, the proposed variation is both reasonable and justified, as the development achieves the intent of the standard and fully satisfies the strategic objectives of the planning framework.

7.4 Environmental Planning Grounds Assessment

In accordance with Clause 4.6(3)(b) of the Ku-ring-gai Local Environmental Plan 2015, development consent must not be granted unless there are sufficient environmental planning grounds to justify contravening the standard. These grounds must be particular to the site and demonstrate that strict compliance with the standard would not result in a better planning outcome. In this case, the subject site's unique topography, irregular configuration, and existing building siting establish clear planning grounds that justify the proposed variation. The following points summarise how the environmental planning grounds are satisfied in this report.

- **Topographical context** – the breach arises only because of the steep slope and rock face on the lot, creating a "void" where floor space can be added without disturbing landscape or ecological values.
- **Non-sensitive location** – the additional floor space is confined entirely to an area with no ecological significance or landscaped function, ensuring no loss of biodiversity, tree cover, or natural site character.
- **Visual containment and mitigated streetscape impacts** – the addition is located below street level and concealed by the rock face and existing built form, meaning it does not present as additional bulk or scale to the public domain or adjoining properties.
- **Amenity protection** – the siting of the additional floor area ensures there is no adverse impact on privacy, overshadowing, solar access, or acoustic amenity for neighbouring dwellings.
- **Preservation of open space** – large portions of the site remain landscaped and unbuilt upon, ensuring a high ratio of open space to built form and the retention of the site's natural qualities.
- **Compliance with other controls** – the proposal meets all other key LEP and DCP standards, including height, setbacks, and landscaping, demonstrating that the development is orderly and balanced.
- **Efficient and reasonable use of land** – the addition supports the ongoing residential use of the site, providing modest amenity improvements in the most logical and least impactful location available.
- **Zone consistency** – the proposal is compatible with the objectives of the C4 Environmental Living zone by maintaining low-impact residential development while protecting ecological and aesthetic values.
- **Public interest** – flexibility in this instance achieves a better outcome than strict compliance, as it allows a modest residential addition without any detriment to environmental or planning objectives.
- **Consistency with prevailing built form** – the proposed FSR (0.365:1) falls comfortably within the range of other approvals in East Killara (0.31:1 to 0.416:1), reinforcing that the development does not exceed the scale commonly supported in the locality.

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7.5 Clause 4.6 Assessment Table

4.6 Exceptions to development standards [compulsory]	Compliance Comment
1) The objectives of this clause are as follows— a. to provide an appropriate degree of flexibility in applying certain development standards to particular development, b. to achieve better outcomes for and from development by allowing flexibility in particular circumstances.	Objectives (a) and (b) acknowledge the importance of flexibility where strict compliance with numerical standards would prevent reasonable development that has no adverse impacts and is consistent with the broader planning framework. Such flexibility should be exercised where a proposal maintains amenity, preserves environmental values, is in the public interest, and aligns with the objectives of the zone. In this case, the proposed addition warrants flexibility because the outcomes for the site, the residents, and the surrounding area are positive and reasonable. The variation arises only due to the unique slope of the land and the siting of the existing dwelling, with the additional floor area located in an otherwise unusable "void" space between the house and the cliff. The proposal delivers the following benefits: - A modest and functional increase in floor space, improving residential amenity without the overdevelopment of the land. - A siting response that preserves landscaped areas and avoids impact on ecologically significant parts of the site. - A built form outcome that remains low-impact, maintaining compatibility with surrounding development and the natural character of the land. - Efficient and orderly development of land that

	responds to the site's constraints while maximising its potential in the least impactful way. - Compliance with all other relevant controls and objectives, ensuring the development is environmentally responsible and consistent with the planning framework.
2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.	**Noted** This application seeks development consent for a proposal that is contravening a development standard in relation to the maximum permissible FSR.
3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating— a. that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and b. that there are sufficient environmental planning grounds to justify contravening the development standard.	**Complies.** This justification provides a written request in relation to seeking approval for development that contravenes a development standard. This report provides specific analysis in relation to how the development standard in question is unreasonable as well as providing planning grounds to justify the proposed development.
4) Development consent must not be granted for development that contravenes a development standard unless— a. the consent authority is satisfied that— i. the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and ii. the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and b. the concurrence of the Secretary has been obtained.	**Council is to determine compliance with this clause and consider it in their decision**
5) In deciding whether to grant concurrence, the Secretary must consider— a. whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and b. the public benefit of maintaining the development standard, and c. any other matters required to be taken into consideration by the Secretary before granting concurrence.	**The secretary is to determine compliance with this clause and consider it in their decision**
6) Development consent must not be granted under this clause for a subdivision of land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if—	**Not applicable**

a. the subdivision will result in 2 or more lots of less than the minimum area specified for such lots by a development standard, or b. the subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.	
7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).	**Council are to comply with this clause**
8) This clause does not allow development consent to be granted for development that would contravene any of the following— a. a development standard for complying development, b. a development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 applies or for the land on which such a building is situated, c. clause 5.4. Direction. Additional exclusions may be added.	**Not applicable**

8.0 Conclusion

After detailed consideration, this written request demonstrates that compliance with the maximum FSR standard is both unreasonable and unnecessary in the circumstances of this case. The proposed variation is modest in scale, arises only due to the unique topography of the site, and is confined to a "void" area between the existing dwelling and the adjoining rock face. This location is the least impactful portion of the lot available for development, ensuring there is no adverse effect on landscaped areas, ecological values, or the broader character of the locality.

There are sufficient environmental planning grounds to justify the proposed exception, as the development achieves the intent of the FSR control by balancing built form with natural space, protecting amenity, and ensuring compatibility with the surrounding context.

Having regard to the above assessments, the proposed alterations and additions are considered acceptable and should be supported by Council for the following reasons:

- The objectives and prescriptive measures of Clause 4.6 are satisfied.
- There are no adverse impacts on adjoining properties in relation to privacy, overshadowing, or acoustic amenity.
- The variation is minor and results in an orderly and efficient use of the land.
- The proposed development is contextually appropriate and does not represent a departure from similar building typologies within the local context.
- The additions are concealed below street level and integrated into the slope of the land, ensuring the dwelling presents as unchanged from the public domain.
- The proposal sits comfortably within the range of floor space ratios already approved in the immediate locality, reinforcing compatibility with the prevailing character of East Killara.
- The additions are located in an area that is not environmentally sensitive and represent the least impactful part of the site available for development.
- The proposal maintains a high level of open space, landscaping, and natural character consistent with the objectives of the C4 Environmental Living zone.
- The built form outcome is modest, low-impact, and harmonises with the bulk, scale, and massing of nearby dwellings.
- The development contributes positively to residential amenity and functionality without detriment to ecological or aesthetic values.

Accordingly, the proposed variation is well-founded, in the public interest, and warrants approval by Council.

REQUEST TO VARY THE HEIGHT STANDARD IN KU RING GAI LEP 2015

Clause 4.6 Ku Ring Gai 2015

139a Koola Avenue, East Killara

Amended August 2025

Amendment Authored by

Sidney W M Koh, Architect NSW Reg 6895
Supersoma Pty Ltd

Request to Vary the Buildings Height Standard

(Ku Ring Gai **LEP** 2015 Under Clause 4.6 Exception to Development Standards)

This statement accompanies a development application for alterations and additions to No 139A Koala Avenue, East Killara. It should be read in conjunction with the Statement of Environmental Effects submitted and drawings prepared by Stephen Grech and Associates, Architects.

Site and Proposed Development

1) Site

The Site of 139a Koala Avenue is roughly rectangular in shape, with a "battle axe handle" providing access to Murrumba Place. The site is steeply sloped, falling in excess of 21m from the Northern boundary (Koala Ave) to south boundary at Murrumba Place and benefits from views of Garigal National Park to the southeast.

The street frontage (north) is 25.91m and side boundaries (east and west) are each of 46.94m. The boundary with Murrumba Place is an arc of 4.705m. The total site area is 1388sqm

This site contains a contemporary designed brick and concrete home with a flat roof. The house presents to the street as a single storey residence but contains 2 additional habitable levels below street level as well as an existing basement undercroft space which contains storage and services.

2) Proposed development

The proposed development involves alterations and additions to the existing dwelling including:

a) The addition of an external lift to connect the existing three habitable levels.
b) The lift does not stop at the Basement level.
c) Alterations and Additions to the existing Lower ground floor level to include altered laundry, proposed powder room, Proposed Home Theatre and Proposed Workshop and reconfiguration of existing subfloor space to provide plant and equipment room.
d) Alterations and Additions to the existing Ground floor level to include internal reconfiguration of existing Main Bedroom suite incorporating area of existing subfloor space and small single level extension to eastern side to improve natural light and ventilation for bedroom. Replacement and reconfiguration of existing decks outside of kitchen to include BBQ and outdoor dining area overlooking existing swimming pool.

Planning instrument, development standard and proposed variation

3) Environmental planning instrument to be varied

The Environmental planning instrument to be varied is the Ku Ring Gai Council Local Environment Plan 2015

4) Site's zoning

The site at 139A Koola Avenue is zoned C4 Environmental Living.

5) Development standard to be varied

The development standard to be varied is Clause 4.3 Height of Buildings.

The LEP identifies the objectives of the Height of buildings control as being:

(1) The objectives of this clause are as follows-
(a) to ensure that the height of buildings is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai centres,
(b) to establish a transition in scale between the centres and the adjoining lower density residential and open space zones to protect local amenity,
(c) to enable development with a built form that is compatible with the size of the land to be developed.

(2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.
(2A) Despite subclause (2), the height of a building on land in Zone R4 High Density Residential where the site area is within a range specified in Column 1 of the table to this subclause must not exceed the height specified opposite in Column 2 of the table.

Column 1	***Column 2***
1,800square metres or less	*11.5metres*
More than 1,800 square metres but less than 2,400 square metres	*14.5metres*

(2B) Despite subclause (2), the height of a building used for the purposes of commercial premises on land identified as "Area1" on the Height of Buildings Map must not exceed 26.5 metres.

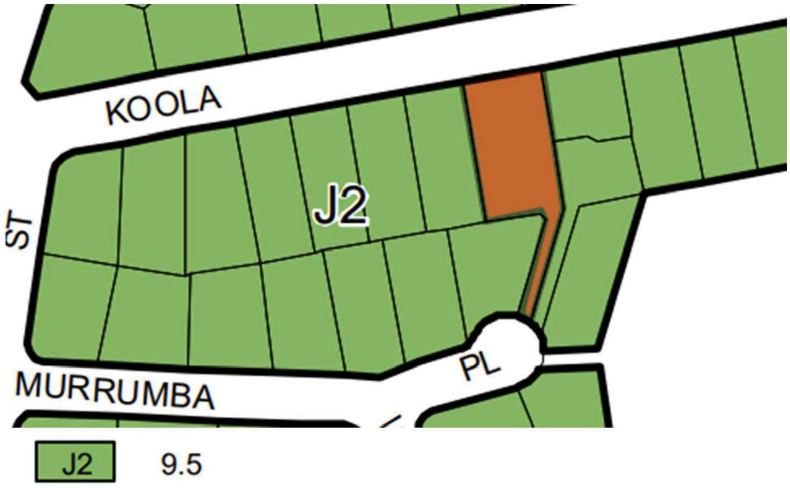
building height *(or height of building) means-*
(a) in relation to the height of a building in metres-the vertical distance from ground level (existing) to the highest point of the building, or
(b) in relation to the RL of a building-the vertical distance from the Australian Height Datum to the highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

6) Type of development standard

The development standard to be varied is numeric.

7) Numeric value of the development standard in the EPI

The permissible height of buildings at 139A Koola Avenue is 9.5m, as shown on the Height of Buildings map.



8) Difference between existing and proposed numeric values

The proposal is for alterations and additions to a dwelling spread over the existing 3 habitable levels being the Street Level, Ground Floor Level, and Lower Ground Floor Level. Due to the steep slope of the site, all levels apart from the Street Level Plan have been cut into the natural ground level. The northern sides of the Lower Ground and Basement Level are both partially underground.

Whilst this building is existing, part of the proposal includes the addition of a lift to connect the 3 habitable levels of the home, which at its peak height is 10.3m above the existing ground level. The top of the lift tower is at RL+107.51 which is 710mm lower than the existing roof parapet at RL+108.22.

Due to the sloped and excavated nature of the site, parts of the existing building height currently exceed the permissible building height limit, despite appearing lower than both of its adjacent neighbours from street level.

By measuring the overall height from the existing ground condition, the proposal exceeds the maximum height development standard by 0.8m, which is a percentage variation of 8.4%.

The top of the roof parapet of the existing residential dwelling stands at RL+108.22. The top of the proposed lift tower shall be at RL+107.51. This is lower by 710mm. Even

when visible from the south, the new lift tower will not project above the existing building.

9) Visual representation of proposed variation

Please refer to Supersoma drawing no. DA/204 Rev A dated 10/08/2025 for Diagrammatic representation of this height condition.

Justification for proposed variation

10) How is compliance with the development standard unreasonable or unnecessary in the circumstances of this particular case?

The compliance with the height of buildings standard is unreasonable and unnecessary as the objectives of this development standard are achieved notwithstanding the non-compliance.

Addressing each of the objectives listed:

(a) to ensure that the height of buildings is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai centres,

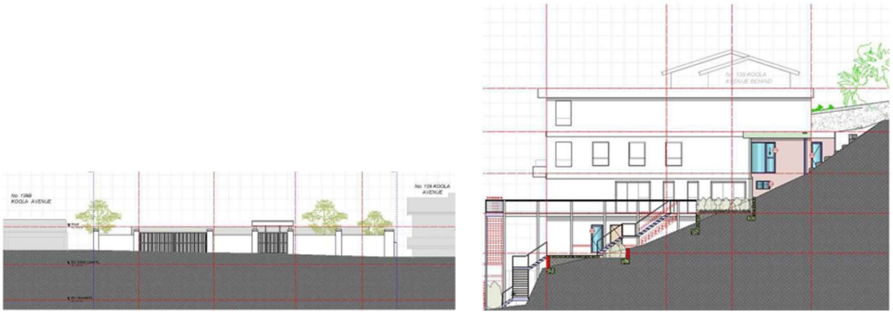
The proposed lift is sited within the existing building footprint and lower than the roof of the existing building. As such, this proposed lift will not be visible from the street (North) or Eastern boundary. The overall streetscape and public domain will remain unchanged and is appropriate within the Ku ring gai centre.

BULK AND MASS CONSIDERATIONS

(1) **New External Lift on Southern elevation of the existing dwelling**. The proposed new lift improves access and movement through the house for a person in a wheelchair. The decision to locate it externally was determined by the conclusion that it could not be located within the existing building envelope without significant and substantial modification to the existing floor plans which compromised amenity, utility and accommodation.

While the new lift adds to the mass and bulk of the house, mitigating factors supporting its proposed location are:

- Lower in height than the main dwelling;
- Lightweight construction;
- Compact footprint;
- No additional shadow cast;
- Not visible from the north and east;
- When viewed from the south and west, the lift tower is always seen against the main building as its backdrop. There is no additional visual bulk or mass; and
- Environmental merit as the works to install the lift within the existing building shall require significant demolition and rebuilding work which would produce waste even with recycling/upcycling measures in place.



Figures 2 & 3 : North Elevation, East Elevation, Proposed lift is not visible



Figure 4 & 5 : South Elevation, West Elevation, Proposed lift is visible

As demonstrated in the images below, the overall height of the current existing building is **LOWER** than both the properties adjoining to the east and west sides and appears very recessive in the context of the streetscape.

This proposal does not seek to alter the current street elevation in any way with none of the proposed works visible from the street. The proposal is therefore suitable within its immediate context.



Figure 2 :Street view showing eastern neighbour - source *Google*

Photo showing subject site in the context of the streetscape with the adjjoining property to the east at **No 1398** Koola Avenue. The red line indicates the overall height of the neighbours property, and the blue line indicates the existing (unchanged) overall height of the subject site



Figure 3 :Street view showing western neighbour - *source Google*

Photo showing subject site in the context of the streetscape with the adjoining property to the west at **No 139** Koola Avenue. The red line indicates the overall height of the neighbours property, and the blue line indicates the existing (unchanged) overall height of the subject site

(b) ***to establish a transition in scale between the centres and the adjoining lower density residential and open space zones to protect local amenity,***

As the proposed development does not exceed the height of the existing building, there will be no impact upon the transition in scale between the centres and adjoining lower density residential and open spaces. The development currently is and remains appropriate for the streetscape and residential zone.

(c) ***to enable development with a built form that is compatible with the size of the land to be developed.***

As shown above, the proposed lift remains within the existing building plan footprint, and is not exceeding the existing building height, therefore the overall height of buildings and appropriate scale of built form is unaltered. As such, the development standard is unreasonable and unnecessary in the circumstances of this particular case.

In addition to the new works not being visible by the public domain, the proposed lift is only in breach of the numerical non-compliance to a very minor extent of approximately 8%.

11) Are there sufficient environmental planning grounds to justify contravening the development standard?

This proposed lift of this development aims to address the steep topography of the site, without impacting the public domain. As the proposed lift will not be higher than the existing development, there will be no negative impacts on streetscape and existing built form.

This proposal will provide substantial amenity and ease of circulation to the dwelling, with no impact on neighbours, and only an approximate 8% height breach of the development standard.

The overall building height remains unchanged. The visible bulk of the proposed lift tower is visible from the south and the west. When viewed from these aspects, the lift tower has the existing main dwelling as its backdrop and is always lower than the existing roof parapet RL.

The additional bulk and mass of the external lift is reasonable, unimposing, and most importantly, has no adverse environmental amenity impact.

All the objectives for height control listed in the **LEP** have been met and approval of this proposal will not set a new precedent as the existing building form is fundamentally unaltered.

12) Is there any other relevant information relating to justifying a variation of the development standard?

The existing building includes a swimming pool and surrounding deck area which exist at natural ground level at the east and west sides of the site. If measured at this level, the proposed lift would NOT exceed the height limit.

However, the excavated space directly below the pool deck at the location of the new lift shaft which would be regarded as the "existing" ground line is lower than the pool deck. This results in the non compliance with height.

The top of the proposed lift tower is 8.55m above the existing pool deck.

END

DEVELOPMENT APPLICATION

SUMMARY SHEET

REPORT TITLE:	3-5 ALMA STREET, PYMBLE - DEMOLITION OF EXISTING SWIMMING POOL AND TENNIS COURTS AND ALTERATIONS AND ADDITIONS TO THE EXISTING DWELLING, CONSTRUCTION OF 9 INDEPENDENT LIVING UNITS AND CHANGE OF USE OF THE EXISTING HERITAGE LISTED DWELLING
ITEM/AGENDA NO:	GB.3

APPLICATION NO:	eDA0253/25
ADDRESS:	3-5 Alma Street, Pymble.
WARD:	St Ives
DESCRIPTION OF PROPOSAL:	Demolition of existing swimming pool and tennis courts and alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling.
APPLICANT:	Ali Ghafari
OWNER:	S Bakhtiari, A Ghafari
DATE LODGED:	28 May 2025
SUBMISSIONS:	2 submissions
ASSESSMENT OFFICER:	Brodee Gregory
RECOMMENDATION:	Refusal

KLPP REFERRAL CRITERION:	Sensitive development proposing partial demolition of a heritage item which results in more than a minimal impact on the integrity of the item.

PURPOSE OF REPORT

To determine Development Application No eDA0253/25 for demolition of existing swimming pool and tennis courts and alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling at 3-5 Alma Street, Pymble.

This application is reported to the Ku-ring-gai Local Planning Panel in accordance with the Minister's section 9.1 Local Planning Panels Direction, as it is considered sensitive development proposing partial demolition of a heritage item which results in more than a minimal impact on the integrity of the item.

RECOMMENDATION

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council as consent authority under Section 4.16 of the Environment Planning and Assessment Act 1979, refuse development consent to No eDA0253/25 for demolition of existing swimming pool and tennis courts with alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling at 3-5 Alma Street, Pymble, for the reasons provided in the Development Assessment Report **(Attachment A1)**.

Brodee Gregory
Executive Assessment Officer

Selwyn Segall
Team Leader - Development Assessment

Shaun Garland
Manager Development Assessment Services

Michael Miocic
Director Development & Regulation

Attachments:

A1⇩	Development Assessment Report	2025/277210
A2⇩	Location Sketch	2025/278671
A3⇩	Zoning Sketch	2025/278672
A4⇩	Architectural Plans	2025/172342
A5⇩	Landscape Plans	2025/212976
A6⇩	Stormwater Plans	2025/172389
A7⇩	Heritage Impact Statement	2025/172374

DEVELOPMENT APPLICATION

ASSESSMENT REPORT

REPORT TITLE	3-5 Alma Street, Pymble - Demolition of existing swimming pool and tennis courts and alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling

APPLICATION NO	eDA0253/25
PROPERTY DETAILS	3-5 Alma Street, Pymble Lots 2 and 3 DP 331914 2,422m^2 R2 Low Density Residential
WARD	St Ives
PROPOSAL/PURPOSE	Demolition of existing swimming pool and tennis courts and alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling pursuant to Part 5 of SEPP (Housing) 2021
TYPE OF DEVELOPMENT	Local
APPLICANT	Ali Ghafari
OWNER	Ms S Bakhtiari, A Ghafari
DATE LODGED	28 May 2025
RECOMMENDATION	Refusal

PURPOSE OF REPORT

To determine Development Application No eDA0253/25 for demolition of existing swimming pool and tennis courts and minor alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling.

This application is reported to the Ku-ring-gai Local Planning Panel in accordance with the Minister's section 9.1 Local Planning Panels Direction, as it is considered sensitive development which proposes demolition which will have more than a minimal impact on the integrity of the heritage item.

INTEGRATED PLANNING AND REPORTING

Places, Spaces & Infrastructure

Community Strategic Plan Long Term Objective	Delivery Program Term Achievement	Operational Plan Task
P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai	Applications are assessed in accordance with state and local plans	Assessments are of a high quality, accurate and consider all relevant legislative requirements

EXECUTIVE SUMMARY

Issues

Owner's consent
Access provisions
Floor Space Ratio non-compliance
Solar access and design for climate
Private open space
SEPP Housing Design requirements
Heritage impacts
Water management
Tree impacts
Visual and acoustic privacy
Pedestrian access and crime prevention
Vehicular access and parking
Construction Traffic Management
Landscape amenity and design
Waste management
BASIX
Insufficient information

Submissions	2
Land and Environment Court	Yes (Deemed Refusal)
Recommendation	Refusal

HISTORY

Site history

The site has a history of low density residential use.

Previous applications history

A Pre-DA consultation was not undertaken with Council.

Council's records show no relevant previous applications relating to the site.

Current Development Application History

Date	Action
28/05/2025	Application lodged.
18/06/2025 – 18/07/2025	The application was notified to neighbouring property owners for a period of 30 days. Two submissions were received.
14/07/2025	A deemed refusal appeal was filed with the Land & Environment Court.

Land and Environment Court appeal history

There is a current Class 1 appeal against the deemed refusal of the subject Development Application, which was filed with the Land and Environment Court (Court) on 14 July 2025. The Statement of Facts and Contentions (SOFAC) was filed with the Court on 19 August

2025. The Section 34 Conciliation Conference is scheduled for 11 November 2025.

THE SITE



Figure 1: Aerial photograph of the subject site and surrounding properties

Site description

The site comprises two allotments, Lots 2 and 3 in DP 331914, and is known as No. 3-5 Alma Street, Pymble **(Figure 1)**. The site is an irregular shaped allotment located on the eastern side of Alma Street. The site has a combined frontage of 45.72 metres and a variable depth of 54.14 metres to 64.2 metres. The site has a total area of 2,422m^2 per the Deposited Plan.

The site is situated on the low side of the street, having a fall of approximately 5 metres from its front north-western corner to its (rear) south-eastern corner.

Development currently on the site comprises a part two, part three storey dwelling house, with an attached garage ('Claverton'). The dwelling house has a facebrick finish with a tiled roof. The site is listed under Schedule 5 of Ku-ring-gai LEP as an item of local significance.

To the rear of the dwelling house, is a tennis court. Within the southern (side) setback of the dwelling house, is an inground swimming pool. Along the front property boundary, is a low stone wall. Vehicular access to the site is via a stone paved driveway located centrally within the site frontage.

There are several significant canopy trees situated on the site, most notably in the south-western corner of the front setback. Of particular prominence are Trees 1, 9 and 12 *Araucaria heterophylla* (Norfolk Island Pine), which are each over 30 metres tall **(Figure 2)**.

The site is burdened by drainage easements with Council's trunk drainage system traversing across the site (Lot 3) **(Figure 3)**. The easements are designated for "road water only" and inter-allotment drainage for upstream lots. The site is identified as being affected by flooding during a 1% AEP overland flow storm event.

The site is situated with a heritage conservation area ('C46 Athol Conservation Area').



Figure 2: Site as viewed from 'Robert Pymble Park' showing Trees 1 and 9 in the foreground and Tree 12 in the background

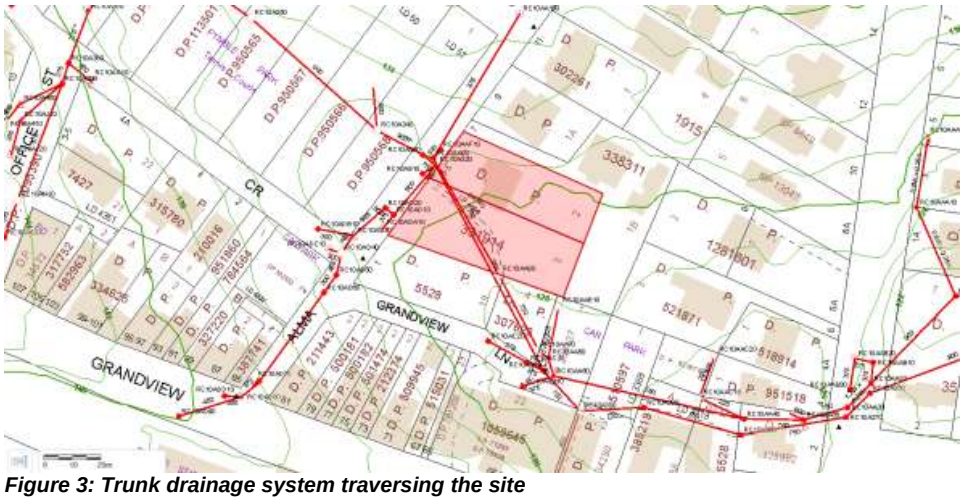


Figure 3: Trunk drainage system traversing the site

Constraint:	Application:
Visual character study category	Pre - 1920
Easements/rights of way	Yes – drainage easements located on Lot 3
Heritage Item - Local	Yes
Heritage Item - State	No
Heritage conservation area	Yes – 'C46 Athol Conservation Area'
Within 100 m of a heritage item	Yes – No. 19 Alma Street No. 36 Park Crescent No. 3-5 Post Office Street Pymble Station
Bush fire prone land	No
Natural Resources Biodiversity	Yes – part of street frontage mapped
Natural Resources Greenweb	Yes - part of street frontage mapped as 'Landscape remnant'
Natural Resources Riparian	No
Within 25m of Urban Bushland	No
Contaminated land	No
Within 25m of Classified Road	No
Within 25m of a rail corridor/tunnel	No

Surrounding development

The site is surrounded by a mixture of development types in the immediate vicinity.

To the north and east of the site, is land zoned R2 Low Density Residential. The adjoining property at No. 7 Alma Street (a battle-axe allotment) contains a two storey dwelling house with a detached cabana, swimming pool and tennis court. Further north of the battle-axe handle, No. 9 Alma Street is developed with a part single storey, part two storey dwelling house. Both properties are located within the C46 Athol Heritage Conservation Area.

To the west, across Alma Street, the land is zoned RE1 Public Recreation and forms part of Robert Pymble Park. This park is situated within the C7 Park Estate Heritage Conservation Area and contributes to its identified heritage significance as described in Council's inventory form.

To the south of the site lies No. 1 Alma Street, a Council owned property zoned E1 Local Centre. The site is currently vacant and contains several mature canopy trees. Immediately east of this vacant land is a Council owned carpark, accessed via Grandview Lane.

THE PROPOSAL

The application proposes the following works:

i. demolition of existing ancillary structures including a tennis court and swimming pool,
ii. change of use and alterations and additions to the existing dwelling (Block A) to accommodate 2 x dwellings including:

- partial demolition of internal walls and internal reconfiguration to form Units 1 and 2,
- demolition of the existing stairs and entry to the northern side of the dwelling house,
- demolition of the existing roof over ground floor to the rear,
- alterations to the existing garage and construction of a new garage floor slab to

provide a single garage for Dwellings 1 and 2,
- installation of a new passenger lift
- construction of a new first floor terrace.

iii. construction of a new building (Block B) comprising Dwellings 3 to 9 over a single level basement comprising 14 x resident car spaces and 2 x visitor spaces,
iv. stormwater works including relocation of the existing Council drainage easement,
v. landscaping works, and
vi. consolidation of existing lots.

The proposed new building (Block B) is of masonry construction, with a combination of finishes including rendered and painted walls and stone cladding. A combination of flat and pitched metal roofs is proposed for this building.

Vehicular access to the proposed development is via a new 5.5 metres wide driveway and crossover which would replace the existing driveway.

The proposed development includes the realignment of Council's trunk drainage system within the subject site along the southern boundary. The existing 900 millimetres and 750 millimetres pipes are proposed to be replaced with a new 1200 millimetres pipe, realigned to the southern boundary.

The stormwater documentation presents an inconsistency:

i. The stormwater plan indicates that the new 1200 millimetres pipe will be located within the subject site.
ii. The architectural plans, however, show the pipe being relocated on No. 1 Alma Street (Council-owned land).

A section of the realigned pipe is proposed to be installed via directional drilling, whilst a 3 metres wide drainage easement is proposed to contain the new pipe.

CONSULTATION

Community

In accordance with Appendix 1 of the Ku-ring-gai Community Participation Plan, owners of surrounding properties were given notice of the application. In response, submissions from the following were received.

1. W. and M. Collins – No. 7 Alma Street, Pymble
2. B. Yu – No. 15 Alma Street, Pymble

The submissions raised the following issues:

a) Excavation – depth and proximity to boundary with No. 7 Alma Street
b) Bulk, scale and visual impact – perceived excessive massing concentrated adjacent to shared property boundaries with No. 7 Alma Street
c) Inaccuracies in architectural plans including the porte cochere of No. 7 Alma Street incorrectly labelled as a carport, and errors regarding the visibility of windows
d) Vegetation removal – proposed removal of camellias along the shared boundary with No. 7 Alma Street, which were not identified in the arborist's report
e) Privacy impacts to dwelling house of No. 7 Alma Street – overlooking of the front entrance, living room, study, bathroom (frosted) and two bedrooms; concern that the

removal of camellias would exacerbate privacy impacts

f) Privacy impacts to tennis court of No. 7 Alma Street – potential amenity conflicts arising from views from Block B
g) Noise impacts – associated with the construction phase
h) Traffic impacts during construction – concerns that Alma Street, being one way street would experience exacerbated congestion
i) Pedestrian safety – potential dangers to pedestrians from construction traffic, including concern that pedestrian pathway may be obstructed
j) Parking impacts - restriction of kerbside parking displacing vehicles further along Alma Street; requests that 'No Parking' zones be extended north to the end of Park Crescent;
k) Inaccuracies in Construction Traffic Management Plan (CTMP) – omissions and errors including:

    i. driveway to 'Robert Pymble Park' not shown
    ii. no assessment is made of Alma Street intersections
    iii. lack of consultation with adjoining land owners
    iv. assumptions regarding on-street parking use
    v. swept path diagrams overlapping driveways

l) Stormwater design – existing open drain at No. 3-5 Alma Street (to the rear of the tennis court) is not identified on the stormwater plans
m) Excavation impacts on drainage patterns – potential adverse effects on adjoining properties
n) Utility supply – history of electrical supply interruptions not addressed in detail within the Proposed Development
o) Building Code of Australia (BCA) compliance – compliance report identifies multiple non-compliances, including concerns with fire safety at property boundaries
p) Construction access – request for a condition ensuring adjoining properties are not used for construction access
q) Boundary fencing – insufficient detail regarding the design and construction of new boundary fences
r) Statement of Environmental Effects – concerns raised as to its accuracy

The issues raised by the community, where they align with Council's concerns are reflected in the Statement of Facts and Contentions (Reasons for Refusal).

Internal referrals

Heritage

Council's Heritage Advisor raised concerns with impacts to the heritage item, impacts to the heritage conservation area and inadequate heritage documentation. These issues are agreed with and form part of the recommended Reasons for Refusal.

In the opinion of Council's Heritage Advisor, the proposed partial demolition works will have more than a minimal impact on the integrity of the heritage item.

Urban design

Council's Urban Design Consultant raised concerns with inadequate solar access and design for climate, inadequate consideration of SEPP Housing Design requirements, impacts to neighbour amenity and streetscape, visual and acoustic privacy, pedestrian access and crime prevention, inadequate waste management, and inadequate site analysis and architectural plans. These issues are agreed with and form part of the recommended

Reasons for Refusal.

Landscaping

Council's Senior Landscape and Tree Assessment Officer raised concerns with tree removal and impacts, landscape design and amenity, BASIX inconsistencies and inadequate information in relation to tree impacts and deep soil provision. These issues are agreed with and form recommended Reasons for Refusal.

Engineering

Council's Senior Development Engineer raised concerns with site access, water management, overflow assessment, vehicle access and parking, construction traffic management and waste management. These issues are agreed with and form part of the recommended Reasons for Refusal.

Drainage Engineer

Council's Operations Drainage Engineer has reviewed the proposed development and has raised concerns in relation to stormwater management and flood planning. These issues are agreed with and form part of Reasons for Refusal.

Strategic Traffic Engineer

Council's Strategic Traffic Engineer has reviewed the proposed development and raises concerns in relation to vehicular access and parking and construction traffic management. These issues are agreed with and form part of the recommended Reasons for Refusal.

Environmental Health

Council's Senior Environmental Health Officer has reviewed the proposed development and raised concerns in relation to waste management, inadequate information regarding acoustic impacts and insufficient information regarding air conditioning condensers. These issues are agreed with and form part of Reasons for Refusal.

Property

Council's Property Program Co-ordinator has reviewed the proposed development and raised concerns in relation to the proposed drainage works on Council property (No. 1 Alma Street), for which consent from Council as the land owner has not been granted.

No easement may be granted over Community Land without amending the respective Plan of Management. In accordance with Council's *Easement Management Policy*, where the relocation of an easement results in an uplift in the value of the land, Council is to be paid fair compensation to be determined by independent valuation. No offer of compensation has been made. This issue is agreed with and forms part of the recommended Reasons for Refusal.

Building

Council's Senior Building Surveyor has reviewed the proposed development and has not raised concerns. Conditions concerning access and fire safety provisions would ordinarily be recommended if the application were recommended for approval. These conditions are agreed with.

STATUTORY PROVISIONS

State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 Remediation of land

The provisions of Chapter 4 require Council to consider the potential for a site to be contaminated. The subject site has a history of residential use and as such, it is unlikely to contain any contamination and further investigation is not warranted in this case.

State Environmental Planning Policy (Biodiversity & Conservation) 2021 - Chapter 6 Water Catchments

The provisions of Clause 6.6 'Water quality and quantity' and Clause 6.7 'Aquatic ecology' have been considered in the assessment of the proposal. The stormwater system includes design measures to address the requirements of Clause 6.6. The proposal is also found to be consistent with the requirements of Clause 6.7 as it is unlikely to impact on aquatic ecology and appropriate erosion and sediment control measures are proposed. Clause 6.8 'Flooding', 6.9 'Recreation and public access' and 6.10 'Total catchment management' are not directly relevant to the merits of the proposal.

State Environmental Planning Policy (Sustainable Buildings) 2022 – Chapter 2 Standards for residential development – BASIX

BASIX certificates have been submitted but do not appear to be valid as they are not for the correct development type. Additionally, there are inconsistencies between the commitments made in the BASIX Certificate and the landscape plans. This issue forms part of the recommended Reasons for Refusal.

State Environmental Planning Policy (Housing) 2021

SEPP Housing contains several principles including the promotion of the planning and delivery of housing in locations where it will make good use of existing and planned infrastructure and services.

Part 5 Housing for seniors and people with a disability

The proposed development is permissible with consent pursuant to Part 5, Division 1.

The provisions of Part 5, Divisions 3, 4 and 7 of SEPP Housing are considered below.

SEPP SENIORS 2021 COMPLIANCE TABLE			
Section	**Provision**	**Proposed**	**Complies**
Division 3 Development standards			
84 Development standards —general	(2) Development consent must not be granted for development to which this section applies unless—		
	(a) the site area of the development is at least 1,000m^2, and	2,422m^2	**YES**
	(b) the frontage of the site area of the development is at least 20m	45.22 metres	**YES**

	measured at the building line, and (c) for development on land in a residential zone where residential flat buildings are not permitted— (i) the development will not result in a building with a height of more than 9.5m, excluding servicing equipment on the roof of the building, and	9.415 metres	**YES**
85 Development standards for hostels and independent living units	(1) Development consent must not be granted for development for the purposes of a hostel or an independent living unit unless the hostel or independent living unit complies with the relevant standards specified in Schedule 4.	Compliance with Schedule 4 is addressed below.	**NO**
88 Restrictions on occupation of seniors housing	(1) Development permitted under this Part may be carried out for the accommodation of only the following— (a) seniors or people who have a disability, (b) people who live in the same household with seniors or people who have a disability, (c) staff employed to assist in the administration and provision of services to housing provided under this Part.	A condition could be included if the application was recommended for approval.	**YES**
	(2) Development consent must not be granted under this Part unless the consent authority is satisfied that only the kinds of people referred to in subsection (1) will occupy accommodation to which the development relates.	A condition could be included if the application was recommended for approval.	**YES**
Division 4 Site-related requirements			
93 Location and access to facilities and services— independent living units	(1) Development consent must not be granted for development for the purposes of an independent living unit unless the consent authority has considered whether residents will have adequate access to facilities and services—	On-site facilities are not proposed. A transport service is to be utilised.	**YES**

	(a) by a transport service that complies with subsection (2), or (b) on-site.		
	(2) The transport service must— (a) take the residents to a place that has adequate access to facilities and services, and (b) for development on land in the Eastern Harbour City, Central River City, Western Parkland City or Central Coast City— (i) not be an on-demand booking service for the transport of passengers for a fare, and (ii) be available both to and from the site at least once between 8am and 12pm each day and at least once between 12pm and 6pm each day, and (c) for development on other land— be available both to and from the site during daylight hours at least once each weekday.	The site is within 200 metres of Pymble Station and accessible bus stops at Grandview Avenue (Stop ID: 207332) and Pymble Station (Stop ID: 207311).	**YES**

	(3) For the purposes of subsections (1) and (2), access is adequate if— (a) the facilities and services are, or the transport service is, located at a distance of not more than 400m from the site, and (b) the distance is accessible by means of a suitable access pathway, and (c) the gradient along the pathway complies with subsection (4)(c). (4) In subsection (3)— (a) a ***suitable access pathway*** is a path of travel by means of a sealed footpath or other similar and safe means that is suitable for access by means of an electric wheelchair, motorised cart or the like, and (b) the distance is to be measured by reference to the length of the pathway, and (c) the overall average gradient must be not more than 1:14 and the gradients along the pathway must be not more than— (i) 1:12 for a maximum length of 15m at a time, or (ii) 1:10 for a maximum length of 5m at a time, or (iii) 1:8 for a maximum length of 1.5m at a time.	The access report indicates that the existing footpath does not meet SEPP Housing requirements for gradients between the site and Pymble train station/bus stop. Further, the applicant has not submitted any plans which demonstrate how compliant access will be provided (Reason for Refusal 2).	**NO**
	(5) In this section— ***facilities and services*** means— (a) shops and other retail and commercial services that residents may reasonably require, and (b) community services and recreation facilities, and (c) the practice of a general medical practitioner. ***provide a booking service*** has the same meaning as in the *Point to Point Transport (Taxis and Hire Vehicles) Act 2016*, section 7. **Note—** Provide a booking service is defined as carrying on a business taking bookings for taxis or hire vehicles to provide passenger	Satisfactorily demonstrated.	**YES**

	services, whether immediately or at a later time, and communicating the bookings to drivers for passenger services or providers of passenger services.		
95 Water and sewer	(1) A consent authority must not consent to development under this Part unless the consent authority is satisfied the seniors housing will— (a) be connected to a reticulated water system, and (b) have adequate facilities for the removal or disposal of sewage.	Satisfactory.	**YES**
	(2) If the water and sewerage services will be provided by a person other than the consent authority, the consent authority— (a) must consider the suitability of the site in relation to the availability of reticulated water and sewerage infrastructure, or (b) if reticulated services are not available—must satisfy the responsible authority that the provision of water and sewerage infrastructure, including environmental and operational considerations, is satisfactory for the development.	Satisfactory.	**YES**
	(3) In this section— ***responsible authority*** means the public authority responsible for water and sewerage services in the area in which the seniors housing is located.	Noted.	
Division 5 Design requirements			
97 Design of in-fill self-care housing	(1) In determining a development application for development for the purposes of seniors housing, a consent authority must consider the *Seniors Housing Design Guide*, published by the Department in December 2023. (2) Development consent must not be granted to development for the purposes of seniors housing unless the consent authority is satisfied the design of the seniors housing demonstrates that adequate consideration has been given to the design	The proposed development is inconsistent with Schedule 8 as detailed in the below table.	**NO**

	principles for seniors housing set out in Schedule 8.		
Division 7 Non-discretionary development standards			
106 Interrelationship of Division with design principles in Division 6	Nothing in this division affects the operation of section 97(2).	Noted.	
108 Non-discretionary development standards for independent living units—the Act, s 4.15	(1) The object of this section is to identify development standards for particular matters relating to development for the purposes of independent living units that, if complied with, prevent the consent authority from requiring more onerous standards for the matters. **Note—** See the Act, section 4.15(3), which does not prevent development consent being granted if a non-discretionary development standard is not complied with. (2) The following are non-discretionary development standards in relation to development for the purposes of independent living units— (a) no building has a height of more than 9.5m, excluding servicing equipment on the roof of a building, (c) the density and scale of the buildings when expressed as a floor space ratio is 0.5:1 or less, (d) a minimum landscaped area that is the lesser of— (i) 35m^2 per dwelling, or (ii) 30% of the site area, (e) (Repealed)	Building height does not exceed 9.5 metres. GFA is stated as 1,211m^2, however the applicant has failed to calculate FSR and GFA in accordance with section 82 of SEPP Housing (Reason for Refusal 3). Landscaped area is calculated 1007.2m^2 which exceeds the minimum requirement of 315m^2.	**YES** **NO** **YES**

	(f) a deep soil zone on at least 15% of the site area, where each deep soil zone has minimum dimensions of 3m and, if practicable, at least 65% of the deep soil zone is located at the rear of the site,	A deep soil zone of 363m^2 is required. The applicant has not demonstrated compliance with this requirement; an amended deep soil plan is required (Reason for Refusal 25).	**NO**
	(g) at least 70% of the dwellings receive at least 2 hours of direct solar access between 9am and 3pm at mid-winter in living rooms and private open spaces.	The submitted shadow diagrams indicate that only 55% of dwellings receive 2 hours solar access. Additionally, the solar access diagrams contain inconsistencies (Reasons 4 and 23).	**NO**

SCHEDULE 4 STANDARDS CONCERNING ACCESSIBILITY AND USABILITY FOR HOSTELS AND INDEPENDENT LIVING UNITS - COMPLIANCE TABLE			
Section	**Provision**	**Proposed**	**Complies**
Part 1 Standards applying to hostels and independent living units			
1 Application of standards in this Part	The standards set out in this Part apply to any seniors housing that consists of hostels or independent living units.	Noted.	
2 Siting standards	(1) **Wheelchair access** If the whole of the site has a gradient of less than 1:10, 100% of the dwellings must have wheelchair access by a continuous accessible path of travel to an adjoining public road. (2) If the whole of the site does not have a gradient of less than 1:10— (a) the percentage of dwellings that must have wheelchair access must equal the proportion of the site that has a gradient of less than 1:10, or 50%, whichever is the greater, and (b) the wheelchair access provided must be by a continuous accessible path of travel to an adjoining public road or an internal road or a driveway that is accessible to all residents. **Note.**	The Access report indicates that the site has an overall gradient of less than 1:10 and that the proposal complies with this requirement.	**YES**

	For example, if 70% of the site has a gradient of less than 1:10, then 70% of the dwellings must have wheelchair access as required by this subsection. If more than 50% of the site has a gradient greater than 1:10, development for the purposes of seniors housing is likely to be unable to meet these requirements. (3) **Common areas** 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.		
3 Letterboxes	(1) Letterboxes— (a) must be located on a hard standing area, and (b) must have wheelchair access by a continuous accessible path of travel from the letterbox to the relevant dwelling, and (c) must be lockable by a lock that faces a wheelchair accessible path. (2) If a structure contains multiple letterboxes, the structure must be in a prominent location. (3) At least 20% of the letterboxes on the site must be more than 600mm and less than 1,200mm above ground level (finished).	Letterboxes are provided adjacent to the site entrance on a hardstand area. The Access report indicates that the proposal complies with this requirement.	**YES**
4 Car parking	(1) If parking spaces attached to or integrated with a class 1 building under the *Building Code of Australia* are provided for use by occupants who are seniors or people with a disability, at least 1 parking space must— (a) be at least 3.2m wide, and (b) be at least 2.5m high, and (c) have a level surface with a maximum gradient of 1:40 in any direction, and (d) be capable of being widened to 3.8m without requiring structural modifications to a building. (2) If parking spaces associated with a class 1, 2 or 3 building under the *Building Code of Australia* are provided in a common area for use by occupants who are seniors or people with a disability, the following applies—	The shaded area next to car space 1 appears comprise a shared zone, however access to the shared zone is limited by a wall (Reason for Refusal 14).	**NO**

	(a) for a parking space not in a group—the parking space must comply with AS/NZS 2890.6, (b) for a group of 2–7 parking spaces— (i) at least 1 of the parking spaces must comply with AS/NZS 2890.6, and (ii) 50% of the parking spaces must— (A) comply with AS/NZS 2890.6, or (B) be at least 3.2m wide and have a level surface with a maximum gradient of 1:40 in any direction, (c) for a group of 8 or more parking spaces— (i) at least 15% of the parking spaces must comply with AS/NZS 2890.6, and (ii) at least 50% of the parking spaces must— (A) comply with AS/NZS 2890.6, or (B) be at least 3.2m wide and have a level surface with a maximum gradient of 1:40 in any direction. (3) To avoid doubt, a parking space that complies with AS/NZS 2890.6 is only counted toward 1 of the requirements in subsection (2)(b)(i) or (ii) or (c)(i) or (ii). (4) At least 5% of any visitor parking spaces must comply with AS/NZS 2890.6. (5) A parking space required by this section to comply with AS/NZS 2890.6, other than a visitor parking space, is not required to include the international symbol of access. (6) If multiple parking spaces are accessible by a common access point, the access point must be secured by a power-operated garage door, vehicle gate, vehicle barrier or similar device. (7) A parking space, other than a parking space under subsection (6), must be— (a) secured by a power-operated door, or (b) capable of accommodating the installation of a power-operated door, including by having— (i) access to a power point, and (ii) an area for motor or control rods for a power-operated door. (8) A requirement in this section for a parking space to comply with AS/NZS 2890.6 extends to the associated shared area within the meaning of AS/NZS 2890.6. (9) In this section, a parking space is in a ***common area*** if it is not attached to		

	or integrated with a hostel or independent living unit.		
5 Accessible entry	(1) The main entrance to a dwelling must have— (a) a clear opening that complies with AS 1428.1, and (b) a circulation space in front of the door and behind the door that complies with AS 1428.1. (2) This section does not apply to an entry for employees.	Capable of compliance.	**YES**
6 Interiors	(1) An internal doorway must have an unobstructed opening that complies with AS 1428.1. (2) An internal corridor must have an unobstructed width of at least 1,000mm. (3) The circulation spaces in front of and behind an internal doorway in the following areas must comply with AS 1428.1— (a) a kitchen, (b) a laundry, (c) a bathroom, (d) a toilet, (e) a bedroom, (f) a living area, (g) the main area of private open space. (4) To avoid doubt, subsection (3)(b) does not apply to laundry facilities in a cupboard.	Capable of compliance.	**YES**
7 Bedroom	At least one bedroom in a dwelling must have the following— (a) a clear area, not including a circulation space, sufficient to accommodate— (i) for a hostel—a wardrobe and a single-size bed, or (ii) for an independent living unit—a wardrobe and a queen-size bed, (b) a clear area around the area for the bed of at least— (i) 1,200mm at the foot of the bed, and (ii) 1,000mm on each side of the bed, (c) at least 2 double general power outlets on the wall where the head of the bed is likely to be, (d) at least one general power outlet on the wall opposite the wall where the head of the bed is likely to be.	Capable of compliance.	**YES**
8 Bathroom	(1) At least one bathroom in a dwelling must be located on—	Capable of compliance.	**YES**

	(a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The bathroom must have the following— (a) a slip resistant floor surface that achieves a minimum rating of P3 in accordance with AS 4586—2013, (b) a washbasin with tap ware capable of complying with AS 1428.1, including by future adaptation if the washbasin and tap ware continue to use existing hydraulic lines, (c) a shower that— (i) is accessible without a shower-hob or step, and (ii) complies with the requirements of AS 1428.1 for the entry, circulation space, floor gradient to the wastewater outlet and location of the mixer tap, and (iii) is in the corner of a room, and (iv) has a wall capable of accommodating the installation of a grab rail, portable shower head with supporting grab rail and shower seat, in accordance with AS 1428.1, (d) a wall cabinet with shelving illuminated by an illumination level of at least 300 lux, (e) a double general power outlet in an accessible location, in accordance with AS 1428.1. (3) Subsection (2)(c) does not prevent the installation of a shower screen that can easily be removed to enable compliance with that paragraph.		
9 Toilet	(1) At least one toilet in a dwelling must be located on— (a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The toilet must have the following— (a) a water closet pan— (i) in the corner of the room, and (ii) with a centreline set-out in accordance with AS 1428.1, (b) a circulation space in front of the water closet pan that is— (i) at least 1,200mm long and at least 900mm wide, and	Capable of compliance.	**YES**

	(ii) clear of door swings and fixtures, other than a toilet paper dispenser or grab rails, (c) a circulation space around the water closet pan that complies with AS 1428.1, (d) a slip resistant floor surface that achieves a minimum rating of P3 in accordance with AS 4586—2013, (e) a wall capable of accommodating the installation of a back rest and grab rail that will comply with AS 1428.1. (3) A removable shower screen may be located in the circulation space specified in subsection (2)(c).		
10 Surfaces of balconies and external paved areas	Balconies and external paved areas must have surfaces that are slip resistant and comply with— (a) the *Building Code of Australia,* or (b) the Standards Australia Handbook SA HB 198:2014*, Guide to the specification and testing of slip resistance of pedestrian surfaces*, published on 16 June 2014.	Capable of compliance.	**YES**
11 Door hardware	(1) Door handles and hardware for all doors, including entry doors and external doors, must comply with AS 1428.1. (2) To avoid doubt, subsection (1) does not apply to cabinetry.	Capable of compliance.	**YES**
12 Switches and power points	(1) Switches and power points must— (a) comply with AS 1428.1, or (b) be capable of complying with AS 1428.1 through future adaptation. (2) Subsection (1) does not apply to— (a) remote controls, or (b) power points likely to serve appliances that are not regularly moved or turned off.	Capable of compliance.	**YES**
13 Private passenger lifts	(1) This section applies to a private passenger lift that is required by this schedule to be accessible only from inside a particular dwelling. (2) The private passenger lift must— (a) be at least 1,100mm wide and at least 1,400mm long, measured from the lift car floor, and (b) have a clear indoor landing on all floors serviced by the lift, other than the floor on which the main area of private open	Capable of compliance.	**YES**

	space is located, at least 1,540mm long and at least 2,070mm wide, and (c) have controls that comply with— (i) AS 1735.12:2020*, Lifts, escalators and moving walks, Part 12: Facilities for persons with disabilities*, published on 26 June 2020, or (ii) AS 1735.15:2021*, Lifts, escalators and moving walks, Part 15: Safety rules for the construction and installation of lifts — Special lifts for the transport of persons and goods — Vertical lifting platforms intended for use by persons with impaired mobility*, published on 23 July 2021. (3) The width of the door opening of the private passenger lift must be at least 900mm. (4) The private passenger lift must not be a stairway platform lift.		
Part 2 Additional standards for independent living units			
14 Application of standards in this Part	The standards set out in this Part apply in addition to the standards set out in Part 1 to any seniors housing consisting of independent living units.	Noted.	
15 Bedroom	At least one bedroom in an independent living unit that complies with this schedule, section 7 must be located on— (a) the same floor as the entry to the unit, or (b) a floor serviced by a private passenger lift accessible only from inside the unit.	Capable of compliance.	**YES**
16 Living room	(1) A living room in an independent living unit must be located on— (a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The living room must have— (a) a circulation space that— (i) is clear of all fixtures, and (ii) has a diameter of at least 2,250mm, and (b) a telecommunications or data outlet adjacent to a general power outlet.	Capable of compliance.	**YES**
17 Main area of private open space	The main area of private open space for an independent living unit must be located on— (a) the same floor as the entry to the dwelling, or	The private open space is located on the same floor as the entry for	**YES**

	(b) a floor serviced by a private passenger lift accessible only from inside the dwelling.	Dwellings 1, 2, 3, 5 and 6 and is serviced by a lift in Dwellings 4 and 7.	
18 Kitchen	(1) A kitchen in an independent living unit must be located on— (a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The kitchen must have a circulation space with a diameter of at least 1,200mm between each bench top, cupboard or large appliance and each other bench top, cupboard or large appliance. (3) Each circulation space specified in subsection (2) must be capable of being increased to a diameter of 1,550mm without— (a) relocating the sink, or (b) moving a load-bearing wall, or (c) breaching another circulation requirement. (4) The kitchen must have the following fittings— (a) a bench that includes at least one work surface that is— (i) at least 800mm long, and (ii) clear of obstructions, and (iii) not in the corner of the room, (b) a lever tap set with the lever and water source that is within 300mm of the front of the bench, (c) a cooktop next to the work surface, (d) an isolating switch for the cooktop, (e) an oven that— (i) has operative elements between 450mm and 1,250mm above the finished floor level, and (ii) is next to the work surface, (f) at least one double general power outlet located within 300mm of the front of a work surface. (5) The cupboards must— (a) not be entirely located in the corner of the bench or the corner of the room, and (b) face where the user of the fixture is likely to be. (6) An overhead cupboard in the kitchen must be capable of being fitted with “D”	Capable of compliance.	**YES**

	pull cupboard handles towards the bottom of the cupboard. (7) A below-bench cupboard in the kitchen must be capable of being fitted with "D" pull cupboard handles towards the top of the cupboard. (8) The lever tap set, cooktop, isolating switch, oven and double general power outlet must— (a) not be in the corner of the bench or the corner of the room, and (b) face where the user of the fixture is likely to be. (9) Cabinetry below a work surface must be able to be easily removed to allow wheelchair access to the work surface.		
19 Laundry	(1) A laundry in an independent living unit must be located on— (a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The laundry must have the following— (a) a circulation space that complies with AS 1428.1 at the approach to any external doors, (b) an appropriate space for an automatic washing machine and a clothes dryer, (c) a clear space in front of each appliance of at least 1,550mm, (d) a slip resistant floor surface that achieves a minimum rating of P3 in accordance with AS 4586—2013, (e) a continuous accessible path of travel to the main area of private open space or any clothes line provided for the dwelling. (3) The space specified in subsection (2)(c) may overlap with a door swing or the circulation space for a door. (4) For laundry facilities in a cupboard, the cupboard must be capable of being fitted with "D" pull cupboard handles in the following locations— (a) for below-bench cupboards—towards the top, (b) for overhead cupboards—towards the bottom, (c) for floor-to-ceiling doors—between 900mm and 1,100mm above the finished floor level. (5) In this section—	Capable of compliance.	**YES**

	laundry includes laundry facilities in a cupboard.		
20 Linen storage	An independent living unit must have a floor-to-ceiling linen storage cupboard that— (a) is at least 600mm wide, and (b) has adjustable shelving.	Capable of compliance.	**YES**
21 Lifts access in multi-storey developments	An independent living unit on a storey above the ground storey must be accessible by a lift that complies with the BCA, Volume 1, Part E3.	Lift access is provided to Dwellings 2, 8 and 9. The Access report indicates that the lifts are capable of compliance.	**YES**
22 Garbage and recycling	A garbage storage area and a recycling storage area provided for an independent living unit must be accessible by a continuous accessible path of travel from the dwelling entrance.	A bin storage area is proposed within the shared basement for Dwellings 3-9. A bin storage area is not proposed for Dwellings 1 and 2 and it is unclear how the basement storage area would be accessed by residents of Dwellings 1 and 2 (Reason for Refusal 17).	**NO**

Section 97(1) of SEPP Housing states that development consent must not be granted for the purposes of seniors housing unless the consent authority is satisfied that adequate consideration has been given to the design principles of Seniors Housing as set out in Schedule 8. The requirements of Schedule 8 are considered below.

SCHEDULE 8 Design Principles for Seniors Housing - COMPLIANCE TABLE			
Section	**Provision**	**Proposed**	**Complies**
1 Neighbourhood amenity and streetscape	Seniors housing should be designed as follows— (a) to recognise the operational, functional and economic requirements of residential care facilities, which typically require a different building shape from other residential accommodation,	The proposal is inconsistent with the character of the area and does not complement the heritage item or heritage conservation area.	**NO**

	(b) to recognise the desirable elements of— (i) the location's current character, or (ii) for precincts undergoing a transition—the future character of the location so new buildings contribute to the quality and identity of the area, (c) to complement heritage conservation areas and heritage items in the area, (d) to maintain reasonable neighbourhood amenity and appropriate residential character by— (i) providing building setbacks to reduce bulk and overshadowing, and (ii) using building form and siting that relates to the site's land form, and (iii) adopting building heights at the street frontage that are compatible in scale with adjacent buildings, and (iv) considering, where buildings are located on the boundary, the impact of the boundary walls on neighbours, (e) to set back the front building on the site generally in line with the existing building line, (f) to include plants reasonably similar to other plants in the street, (g) to retain, wherever reasonable, significant trees, (h) to prevent the construction of a building in a riparian zone.	Further, the proposal does not maintain reasonable neighbourhood amenity (Reasons for Refusal 6, 8 and 11).	
2 Visual and acoustic privacy	Seniors housing should be designed to consider the visual and acoustic privacy of adjacent neighbours and all residents of the seniors housing by— (a) using appropriate site planning, including considering the location and design of windows and balconies, the use of screening devices and landscaping, and (b) ensuring acceptable noise levels in bedrooms of new dwellings by locating them away from	The proposal has not been designed to maintain amenity to adjoining sites (Reasons 11 and 12). Further, the proposal does not include appropriate site planning to minimise noise to all proposed bedrooms of Dwellings 1, 4, 5	**NO**

	driveways, parking areas and paths.	and 7 (Reason for Refusal 12).	
3 Solar access and design for climate	The design of seniors housing should— (a) for development involving the erection of a new building—provide residents of the building with adequate daylight in a way that does not adversely impact the amount of daylight in neighbouring buildings, and (b) involve site planning, dwelling design and landscaping that reduces energy use and makes the best practicable use of natural ventilation, solar heating and lighting by locating the windows of living and dining areas in a northerly direction.	The proposed development does not utilise appropriate site planning to reduce energy use (Reason for Refusal 4).	**NO**
4 Stormwater	The design of seniors housing should aim to— (a) control and minimise the disturbance and impacts of stormwater runoff on adjoining properties and receiving waters by, for example, finishing driveway surfaces with semi-pervious material, minimising the width of paths and minimising paved areas, and (b) include, where practical, on-site stormwater detention or re-use for second quality water uses.	The proposed stormwater design is not satisfactory and insufficient information has been provided to undertake a full assessment (Reasons for Refusal 9 and 26).	**NO**
5 Crime prevention	Seniors housing should— (a) be designed in accordance with environmental design principles relating to crime prevention, and (b) provide personal property security for residents and visitors, and (c) encourage crime prevention by— (i) site planning that allows observation of the approaches to a dwelling entry from inside each dwelling and general observation of public areas, driveways and streets from a dwelling that adjoins the area, driveway or street, and (ii) providing shared entries, if required, that serve a small	The proposed development does not have adequate regard to crime prevention, and provides lobbies and pathways with poor visibility (Reason for Refusal 13).	**NO**

	number of dwellings and that are able to be locked, and (iii) providing dwellings designed to allow residents to see who approaches their dwellings without the need to open the front door.		
6 Accessibility	Seniors housing should— (a) have obvious and safe pedestrian links from the site that provide access to transport services or local facilities, and (b) provide safe environments for pedestrians and motorists with convenient access and parking for residents and visitors.	The proposed development does not provide obvious and safe pedestrian links and provides lobbies/stairs with poor visibility. Further, the proposed secondary entrance to Block B requires users to cross a driveway and is unsafe (Reason for Refusal 13).	**NO**
7 Waste management	Seniors housing should include waste facilities that maximise recycling by the provision of appropriate facilities.	Appropriate waste facilities are not proposed for the residents of Dwellings 1 and 2 (Reason for Refusal 17).	**NO**

Section 97(2) of SEPP Housing states that in determining an application for seniors housing, a consent authority must consider the Seniors Housing Design Guide. The Seniors Housing Design Guide is considered below.

Seniors Housing Design Guide

Part 2 Care for the planet			
Objective	**Design Guide**	**Proposal**	**Compliance**
2.1.1 To demonstrate initiatives for implementing sustainable design and construction practices. 2.1.2 To take responsibility for minimising harmful outcomes on the natural environment and its resources. 2.1.3 To reduce long term running costs. 2.1.4 To reduce carbon emissions	2.1.5 Implement technologies and systems that reduce the demand and costs of energy	The proposed rendered finish is not low maintenance and is unacceptable in the heritage context of the site (Reason 8). Further, the proposed development does not utilise appropriate site planning to minimise energy use (Reason for Refusal 4).	**NO**

2.2.1 To implement actions for sustainable construction practices that reduce environmental degradation, and depletion of essential natural resources of energy, water, land, air and raw materials. 2.2.2 To reduce environmental pollution and to minimise waste.	2.2.3 Apply construction processes to cut down on waste during construction and manage the use of building materials and resources economically. 2.2.4 Choose sustainably manufactured building materials. 2.2.5 Source locally manufactured building materials over imported products. 2.2.6 Reduce plastic use during construction. 2.2.7 Protect existing on-site vegetation. 2.2.8 Recycle demolition and construction waste.	Satisfactory.	**YES**
2.3.1 To create buildings that have longevity and are comfortable, liveable and safe throughout their life cycle. 2.3.2 To extend the natural life cycle of buildings. 2.3.3 To provide safe access for regular maintenance and upkeep. 2.3.4 To preserve the integrity of the building and prevent deterioration.	2.3.5 Use pre-finished and low maintenance robust materials. 2.3.6 Use quality and sustainable products such as door hardware for continued ease of use. 2.3.7 Use quality materials that endure to reduce landfill, replacement costs and wastage. 2.3.8 Design for end of life; disassembly, recycling and minimising waste from demolition	The proposed render finish is not low maintenance and is unacceptable in the heritage context of the site (Reason for Refusal 8).	**NO**
2.4.1 To make building environments that are healthily connected to the outdoors, and that use natural passive principles to reduce the demand on energy by applying sustainable design features. 2.4.2 To manage water usage and avoid depletion of fresh water resources for maintenance and services. 2.4.3 To reduce the impact on the environment, by recycling materials and/or reusing existing buildings that may be suitable for adaptation or reuse.	2.4.4 Design buildings that have operable windows, other measures may include high performance insulation, double glazing and generous shading to glazed windows and doors. 2.4.5 Design for natural cross ventilation and provide ceiling fans. 2.4.6 Design systems that capture and recycle rainwater for use in landscape irrigation as well as for building services.	The proposed dwellings have operable windows and provide an acceptable level of cross ventilation.	**YES**

	2.4.7 Where possible adapt or reuse existing buildings, in particular those with heritage values to lower the impact on the environment.		
Part 3 Site analysis – environmental response			
Objective	**Design Guide**	**Proposal**	**Compliance**
3.1.1 To fully understand the natural physical characteristics of a site in order to formulate an appropriate built response for the development of the land. 3.1.2 To provide increased protection from extreme climatic or environmental events in buildings occupied by people who are particularly vulnerable because of age, illness and acute disability. 3.1.3 To manage and preserve existing natural features such as trees, overland flow paths, riparian corridors, and sensitive environments. 3.1.4 To identify the historical character of the site and preserve the heritage significance of the area. 3.1.5 To deliver seniors housing that acknowledges and respects Aboriginal cultural heritage.	3.1.6 Engage expert consultants for specific advice (bushfire, flooding, riparian, arborist, heritage and traditional knowledge holders etc), reports and actions affecting and informing the initial design as part of the primary site analysis. 3.1.7 Identify and map the size and required protection zone for flood and bushfire safety. 3.1.8 Identify and map the size and required protection zone of all mature and valuable trees, with the intent to keep as many mature trees as possible. Aim to achieve a generous, mature tree canopy cover over the site for the completed development. 3.1.9 Provide opportunity for regeneration of natural environments by allowing suitably sized setbacks to accommodate restorative planting to a scale that reflects the original treescape. 3.1.10 Consider existing stormwater systems and overland flow paths and provide robust stormwater management strategies to protect ecosystems, manage run-off and pollutants, and to protect vulnerable residents from flooding.	An adequate site analysis has not been undertaken, resulting in a deficient and unsatisfactory site layout (Reason 23). Further, the proposed development does not fully consider the environmental sensitivities of the site and adjoining sites and is inconsistent with the character of the area (Reasons for Refusal 8 and 11).	**NO**

Part 3 Site analysis – urban response			
Objective	**Design Guide**	**Proposal**	**Compliance**
4.1.1 To take cues from the surrounding neighbourhood to introduce a materiality and articulated built form that is complimentary but provides a building with its own unique character and identity. 4.1.2 To acknowledge any heritage values in the surrounding environment, and respond with a considered design solution.	4.1.3 Provide design excellence that inspires and is proudly integrated with the local neighbourhood. 4.1.4 Design to uplift existing and future qualities and character of the neighbourhood. 4.1.5 The design response should create a relationship between the existing context, heritage significant site or building and the proposed new work.	The proposal does not provide an appropriate response to the heritage item and heritage conservation area (Reasons for Refusal 7 and 8).	**NO**
4.2.1 To complement the existing surrounding built character. 4.2.2 To sensitively integrate a new development into its surrounding area and to ensure the building scale and form supports the local context and future character of the area. 4.2.3 To determine the significance of land surrounding a heritage item or place, and the extent of curtilage that is essential to retain for the interpretation of its heritage significance.	4.2.4 Map the pattern of existing adjacent development and key features surrounding the site and determine their influence on the articulation of the built form. 4.2.5 Reference front setbacks of neighbouring development and acknowledge the established street pattern. 4.2.6 Manage the scale of large building floorplates with pragmatic internal planning that sensibly informs the façade and external articulation. 4.2.7 With expert guidance, identify any heritage significant sites or buildings and consider how heritage significant view corridors or curtilages can be preserved.	An adequate site analysis has not been undertaken, resulting in a deficient and unsatisfactory site layout (Reason for Refusal 23). The development is situated behind the building line established on site and by adjacent development to the north. The proposed Block B is not of an appropriate scale and overwhelms the heritage item (Reason for Refusal 7). The proposed development does not maintain an appropriate curtilage around the heritage item (Reason for Refusal 7).	**NO** **YES** **NO** **NO**
4.3.1 To maximise the landscape curtilage around the site for quality planting, establishment of tree	4.3.3 Determine setbacks from the location of neighbouring properties, their private outside open	The proposed development fails to provide high quality landscaped areas	**NO**

canopies and creation of useful outdoor spaces in addition to boundary screen planting. 4.3.2 To develop new buildings in an established historic context, within a heritage conservation area, adjacent to a heritage item, or on a heritage site, that complements the existing urban character and adds value.	space and primary views to and from the development. 4.3.4 Provide setbacks to respect neighbours privacy, overshadowing and existing amenity. 4.3.5 Investigate and respond to any heritage context or values, and provide considered setbacks that are complimentary to significant buildings, views or natural features, and that preserve curtilages needed for heritage interpretation	which are characteristic of the heritage setting (Reason for Refusal 16).	
4.4.1 To provide variance of roof forms and screened service areas to provide articulation and modulation of the building envelope. 4.4.2 To conceal services located on the roof and the exposure of plant machinery to the street. 4.4.3 To provide acoustic screening to soften the impact of plant noise and vibration.	4.4.4 Design articulated roofs that add visual interest to the building outline. 4.4.5 Define screened service enclosures for plant equipment that can also be safely accessed for maintenance. 4.4.6 Take into consideration any adjacencies to heritage significant items and their relationship to building envelope, roof articulation and character	The proposed roof form for Block B is not adequately articulated and results in adverse visual impacts to neighbouring properties and the streetscape (Reason for Refusal 11).	**NO**
4.5.1 To prevent overlooking, and to preserve the privacy of neighbouring properties. 4.5.2 To provide a generous side and rear setback for landscaping and creation of meaningful outdoor space. 4.5.3 To avoid overshadowing to neighbouring properties.	4.5.4 A third storey must be set back within a 45 degree plane measured from the ground line on the side and rear boundaries. 4.5.5 All storeys can align with the setback of the third to provide a generous landscaped space.	A third storey is not proposed.	**YES**
4.6.1 To provide development that is acceptable to neighbours and the local community, considers existing and desired future character.	4.6.2 Research and obtain informed feedback regarding local traffic patterns, community expectations and insights.	It is unclear whether the applicant undertook community research. This issue is not of sufficient weight to	**NO**

	4.6.3 Be informed about and integrate new development with future developments and local community projects. 4.6.4 Understand the social context and consult the local community.	warrant refusal of the application.	
4.7.1 To deliver new facilities within established suburbs and to provide a diversity of retirement living and aged care options for senior residents. 4.7.2 To support Culturally and Linguistically Diverse and Indigenous people. 4.7.3 To make it possible for older people to remain living in their familiar neighbourhood near known health and community services, friends and family. 4.7.4 To give older people a variety of choice in where they live. 4.7.5 Observe and understand the uniqueness of the character, identity, and heritage values of the surrounding built environment.	4.7.6 Ensure that the development has a point of difference and individual identity. 4.7.7 Avoid the 'cookie cutter' or 'one size fits all' generalist type of seniors housing. 4.7.8 The design should respond to any heritage values whether natural, built, or cultural	The proposed development overwhelms the heritage item and does not respond appropriately to the context of the heritage conservation area (Reasons for Refusal 7 and 8).	**NO**
Part 5 Heritage			
Objective	**Design Guide**	**Proposal**	**Compliance**
5.1 To identify and protect items with heritage significance and value that are listed on the State Heritage Register or in a local environmental plan. 5.2 To investigate and understand what is important about a place, by undertaking an analysis of a place, building, archaeological site, garden, landscape, or place of heritage or Aboriginal cultural significance, and to identify significant fabric. 5.3 To determine the significance of land surrounding a heritage item or place, and the extent of curtilage that is essential to	5.8 Identify and protect the heritage values of identified heritage significant items. 5.9 Research and understand the heritage significance, era and importance of maintaining detailing and materiality. 5.10 Identify and map the heritage curtilage and sightline view corridors to and from heritage items, and develop a strategy to retain significant views and landscape buffers between the existing and proposed.	The proposed development overwhelms the heritage item and does not respond appropriately to the context of the heritage conservation area (Reasons for Refusal 7 and 8).	**NO**

retain for the interpretation of its heritage significance. 5.4 To develop new buildings in an established historic context, within a heritage conservation area, adjacent to a heritage item, or on a heritage site with heritage values, that complement the existing urban character and adds value. 5.5 To preserve the integrity, character and fine detail of heritage significant buildings. Adaptation or adaptive reuse offers new uses for heritage or culturally significant places. The new use needs to be compatible with the heritage values, retain its heritage character and conserve significant fabric, while still being able to introduce new services, as well as modifications and additions. 5.6 To refurbish heritage buildings to extend their useful life, and reduce the environmental impact of new construction. 5.7 To repurpose heritage buildings and places to be accessible, safe and to meet required compliance standards without compromising the existing built character	5.11 Design with expert guidance to establish an appropriate strategy for the preservation of heritage significant items or places and the appropriate design response for new developments. 5.12 Refer to The Burra Charter – the Australia ICOMOS charter for the conservation of places of cultural significance for appropriate conservation strategies that aim to retain relationships that contribute or are sympathetic to the heritage or cultural significance of the site, place or building. 5.13 New developments in a heritage conservation area, adjacent to or on a heritage significant site should address the predominant scale (height, bulk, density, grain) of the setting and then respond sympathetically. Consider reducing scale by breaking long stretches of wall with openings, or indentation that reflects the general surrounding typology. Understanding existing street setbacks, and in particular setbacks on upper levels could help reduce bulk and create a transitional link between different building scales. 5.14 The design response needs to take into consideration the identified heritage values, context, character, setting, form, scale, bulk, massing etc and cross reference the design guidance provided in the		

	relevant chapters and parts of this document. 5.15 The design response should seek to adapt a heritage place or item to a new use while conserving the heritage values and significance. 5.16 With expert guidance, appropriately and sensitively overlay new work, so as to differentiate between old and new. Consider the connection between the heritage significant fabric and the new development and provide a clear and sympathetic transition that allows for the interpretation of where the heritage component begins and ends		
Part 6 Care, wellbeing and community			
Objective	**Design Guide**	**Proposal**	**Compliance**
6.1.1 To realise the purpose of the building and the development. 6.1.2 To provide contemporary buildings for residential care or independent living units that support ageing in place. 6.1.3 To understand and translate the care model into spatial and organisational maps to optimise utilisation of the site. 6.1.4 To meet regulatory compliance for safety and accessibility as well as to provide high quality design and building character. 6.1.5 To provide culturally appropriate accommodation for care and supportive services	6.1.6 Design buildings that promote health and have good cross ventilation, access to sunlight and fresh air. 6.1.7 Integrate landscape planting with the building to capture the positive health benefits of nature. 6.1.8 Design for social connection and opportunities for people to meet and interact easily. 6.1.9 Design to exceed minimum standards to achieve optimal living and working environments. 6.1.10 Acknowledge the specific identity of the organisation	The proposed development is not designed for social connection and opportunities for interaction. This issue is not of sufficient weight to warrant refusal of the application.	**NO**
6.2.1 To design buildings that reduce stress and promote wellbeing to support physical and mental health. 6.2.2 To provide opportunities and places for residents to be	6.2.3 Design generous spaces that offer comfort, can adapt to flexible furnishing layouts and ease of movement and	The proposed development is not of an appropriate scale and results in adverse bulk impacts to the heritage item	**NO**

socially connected, to reduce loneliness and isolation.	have abundant daylight and views out. 6.2.4 Create buildings that balance proportion and scale with enduring materiality and performance.	and heritage conservation area (Reasons for Refusal 7 and 8).	
6.3.1 To encourage mobility of residents outside of their immediate private space. 6.3.2 To design for all levels of ability focusing on what people can do and not what they cannot.	6.3.3 Design to maintain positive connections between resident communities and the outdoor environment. 6.3.4 Design for safe and barrier free access to encourage residents to get outside. 6.3.5 Circulation paths and corridors are also places for social interaction and should include places to sit and gather in small groups.	Adequate regard has not been given to the pedestrian access. The secondary access path to Block B is unsafe as it crosses the driveway (Reason for Refusal 13).	**NO**
6.4.1 To provide healthy interior environments that provide good daylight, natural ventilation and that support connections with the outside environment	6.4.2 Design for optimal connection to the outside environment for views, daylight and for residents to be able to experience atmospheric and sensory changes in the outdoor world. 6.4.3 Design for good solar orientation, openable windows and access to terraces, balconies and roof gardens	The proposal does not comply with the minimum requirements for solar access under the Housing SEPP (Reason for Refusal 4).	**NO**
6.5.1 To provide buildings that promote dignity, respect and pride of place. 6.5.2 To provide equitable design for all. 6.5.3 To de-institutionalise the character of the building with good design. 6.5.4 To provide a place that inspires joy and offers moments of delight.	6.5.5 Provide frequent rest points in corridors, lift lobbies and on outside walking paths. 6.5.6 Public and shared communal areas should have toilets that are easy to identify and reach. 6.5.7 Promote quality interior design using a variety of materials, colours and textures. 6.5.8 Provide clearly legible and identifiable signage. 6.5.9 Provide level thresholds between inside and outside.	The proposed development does not provide frequent rest stops in corridors, lift lobbies and external pathways. This issue is not of sufficient weight to warrant refusal of the application.	**NO**

	6.5.10 Provide good lighting and luminance of signage and graphics.		
Part 13 Design principles for independent living			
Objective	**Design Guide**	**Proposal**	**Compliance**
13.1 To provide housing to accommodate for a mix of older people who may be active and independent and others who may be frail and in need of 'at home' care. 13.2 To create environments where owner/occupants of the units can get together for activities, socialising, events and celebrations. 13.3 To provide a place of safety, wellbeing and connection. 13.4 Provide a wide variance of character and densities of developments for seniors communities to find a suitable place to choose to belong to.	13.5 Places where 'like-minded people' can live together will help build social cohesion and strong connections.	The proposal does not include communal open space. This issue is not of sufficient weight to warrant refusal of the application.	**NO**
Part 14 Independent living for low density - design principles			
Objective	**Design Guide**	**Proposal**	**Compliance**
14.1.1 To provide single storey villa style accommodation with on grade carparking in a generous landscaped setting. 14.1.2 To integrate with the surrounding built form context and local character.	14.1.3 Introduce a high standard of design quality to the neighbourhood.	The proposed development does not maintain the landscape character of the locality due to excessive ramping and hard surface areas in the front setback. In addition, the proposal includes works likely to result in tree impacts, inappropriate species selection and insufficient area for screen planting (Reasons for Refusal 15 and 16).	**NO**
14.2.1 To provide separation between communal open space and private open space.	14.2.2 Provide generous landscape buffers for screening and acoustic privacy.	The proposed landscape buffer to the northern boundary is insufficient for amenity planting (Reason for Refusal 15).	**NO**

14.3.1 To design dwellings that reduce the demand on energy.	14.3.2 The design and location of windows and shading should respond to the building orientation, site constraints or opportunities in order to maximise good solar access and meaningful cross ventilation. 14.3.3 Provide natural, passive ventilation, well insulated building envelope, and avoid using dark roof colours to reduce heat absorbance. 14.3.4 Consider the use of overhangs, eaves, awnings, pergolas or verandahs to provide shading to reduce heat gain in summer.	No sun shading is proposed to the north-east and north-west facing windows (Reason for Refusal 4).	**NO**
14.4.1 To safely manage stormwater run-off and drainage systems without compromising pedestrian safety. 14.4.2 To minimise erosion and the potentially damaging effects from stormwater run-off on landscape and stability of pathways. 14.4.3 To provide effective filtration of stormwater to remove some sediment and pollutants. 14.4.4 To prevent flooding. 14.4.5 To slow the flow of fast moving water and debris.	14.4.6 Provide grates and drainage pits away from pedestrian pathways. 14.4.7 Manage stormwater with landscape design and gentle gradients of hard surfaces.	The proposed stormwater design is not satisfactory and insufficient information has been provided to undertake a full assessment (Reasons for Refusal 9 and 26).	**NO**
14.5.1 To observe and implement the design standards for accessibility in new building design. 14.5.2 To understand the specific needs of older people and people with a disability. 14.5.3 To de-stigmatise environments that cater for disabilities and that need considered design features to support mobility, wayfinding and safety.	14.5.4 Meet the required accessibility standards with compliant but non-institutional design solutions. 14.5.5 Integrate accessible design requirements with public access and pedestrian pathways for all, and not create the duality of 'us and them' access routes.	The proposed ramping within the front setback will detract from the landscape amenity of the heritage item (Reason for Refusal 16).	**NO**
14.6.1 To provide waste management systems that	14.6.4 Provide appropriately sized	The proposed waste and recycling room is	**NO**

manage health, safety and environmental issues. 14.6.2 To provide easy to access waste disposal points for independent residents to use. 14.6.3 To facilitate recycling of waste.	disposal points that can accommodate bins for the various waste types including recyclables. 14.6.5 Ensure that waste collection points are safely located away from resident areas, should be screened, easy to access and preferably covered	not readily accessible by the residents of Dwellings 1 and 2 (Reason for Refusal 17).	

Ku-ring-gai Local Environmental Plan 2015

Clause 1.2 Aims of the Plan

The proposal has been assessed against the relevant Aims of the Plan. The proposal is inconsistent with the Aims for the reasons given within the assessment report.

Zoning and permissibility

The site is zoned R2 Low Density Residential under KLEP 2015. The proposed development is for the purposes of seniors housing, which is prohibited in an R2 Low Density Residential zone under KLEP 2015. However, seniors housing is permitted development in an R2 Low Density Residential zone under Section 81(a) of SEPP (Housing) 2021.

Zone objectives

The objectives of this zone are:

- *To provide for the housing needs of the community within a low density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide for housing that is compatible with the existing environmental and built character of Ku-ring-gai.*

The development does not provide for housing that is compatible with the existing environmental and built character of Ku-ring-gai and does not uphold the zone objectives.

Development standards:

Development standard	Proposed	Complies
Cl 4.3 - Height of buildings: Maximum Building Height - 9.5 metres	9.415 metres	**YES**
Cl 4.4 - Floor space ratio (FSR): Maximum Floor Space Ratio per subclause 2A - 0.3:1 Maximum Gross Floor Area = 726.6m^2	The stated FSR is 0.499:1 (GFA 1,210.96m^2) however FSR has not been correctly calculated.	**NO**

Floor Space Ratio

The proposed development does not comply with Clause 4.4 of the KLEP.

Section 108(2)(c) of SEPP Housing overrides Clause 4.4 to the extent of any inconsistency and permits a maximum Floor Space Ratio of 0.5:1.

Under SEPP (Housing) 2021, Section 108(2)(c) is a non-discretionary development standard that, if met, the consent authority cannot require a more onerous standard. Section 108(2)(c) specifies a FSR of 0.5:1 or 1,211m² Gross Floor Area (GFA). The proposed GFA is stated as 1,210.96m² which is incorrect when evaluated against the definition of GFA in Section 82 of SEPP (Housing) 2021. The Proposed Development incorrectly excludes the following areas from GFA:

i. The ground floor lobby of the existing building,
ii. Storage areas at lower ground floor level of the existing building, and
iii. Subfloor areas within the existing building which have a height in excess of 1.4m, and
iv. Internal walls between multi-unit dwellings and internal walls surrounding voids.

Correctly calculated, the proposed development results in a departure from the Floor Space Ratio (FSR) development standard which has not been supported by a Clause 4.6 variation request. This issue forms a recommended reason for refusal.

Part 5 Miscellaneous provisions

Clause 5.10 – Heritage conservation

The subject site contains a heritage item and is located within the vicinity of items at No. 36 Park Crescent, No. 3-5 Post Office Street and Pymble Station. The site is located within C46 Athol Heritage Conservation Area and is within the vicinity of C7 Park Estate Heritage Conservation Area.

The proposed development results in adverse impacts upon the heritage item, C46 Athol Conservation Area, items in the vicinity and C7 Park Estate Conservation Area. These issues form recommended reasons for Refusal 8 and 9. In addition, the submitted Heritage Impact Statement contains errors and inconsistencies. This issue forms part of recommended Reason for Refusal.

The proposed works do not affect any known archaeological or Aboriginal objects or Aboriginal places of heritage significance.

Clause 5.21 Flood planning

The site is mapped as being within the flood planning area.

The objectives of this clause are to minimise the flood risk to life and property associated with the use of land, to allow development on land that is compatible with the flood function and behaviour on the land, taking into account projected changes as a result of climate change, to avoid adverse or cumulative impacts on flood behaviour and the environment and to enable the safe occupation and efficient evacuation of people in the event of a flood.

Council's Development Engineer is satisfied that the proposed development meets the objectives of the control and has not raised any specific concerns in relation to flooding.

Part 6 Additional local provisions

Clause 6.1 - Acid sulfate soils

The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage. The land is mapped as Class 5 Acid sulfate soils. Development consent is required for works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land. The proposal is not subject to this clause as the works are more than 500 metres of adjacent Class 1, 2, 3 or 4 land.

Clause 6.2 - Earthworks

The proposed development, as it relates to earthworks, will not restrict the existing or future use of the site, the quality of the water table or disturb any known relics. Concerns are raised in relation to the changes to soil levels proposed within the northern setback of Dwelling 7. This issue forms a recommended Reason for Refusal.

Clause 6.3 - Biodiversity protection

A small portion of the western site (front) boundary is identified 'Terrestrial Biodiversity' on the Terrestrial Biodiversity Map.

The proposed development has been designed to minimise impacts on the diversity and condition of native vegetation, fauna and habitat as per the requirements of the KLEP.

Clause 6.5 - Stormwater and water sensitive urban design

The stormwater design does not take all reasonable management actions to avoid, minimise or mitigate adverse impacts to adjoining properties. This issue forms recommended Reasons for Refusal.

Policy Provisions (DCPs, Council policies, strategies and management plans)

Ku-ring-gai Development Control Plan

Part 1A.5 General aims of the DCP

The proposed development has been assessed against the general aims of this DCP and is not found to be acceptable in all relevant respects for the reasons given throughout this report.

Part 2: Site analysis

The site analysis has not adequately identified existing site conditions and considerations within the KDCP. This issue forms a recommended Reason for Refusal.

Part 3: Land consolidation and subdivision

The proposed development proposes consolidation of the two existing lots and satisfies the requirements of this Part.

Ku-ring-gai Development Control Plan

Section B

Part 18 – Biodiversity

A small portion of the western site (front) boundary is identified as 'Terrestrial Biodiversity' on the Terrestrial Biodiversity Map.

Council's Ecological Assessment Officer is satisfied that the proposed development will not result in a significant detrimental impact contrary to the objectives of these provisions in relation to the diversity and condition of native vegetation, fauna and habitat.

Part 19 – Heritage items and heritage conservation areas

The subject site contains a heritage item and is located within the vicinity of items at No. 36 Park Crescent, No. 3-5 Post Office Street and Pymble Station. The site is located within C46 Athol Heritage Conservation Area and is within the vicinity of C7 Park Estate Heritage Conservation Area.

The proposed development results in adverse impacts upon the heritage item, C46 Athol Heritage Conservation Area, items in the vicinity and C7 Park Estate Heritage Conservation Area. These issues form recommended Reasons for Refusal. In addition, the submitted Heritage Impact Statement contains errors and inconsistencies. This issue forms a recommended Reason for Refusal.

Ku-ring-gai Development Control Plan

Section C

Development Control	Proposed	Complies
Part 21 General Site Design		
21.1 – Earthworks and slope		
Development consider site topography, drainage, soil landscapes, flora, fauna and bushfire hazard by: • Stepping buildings down the site • Locate finished ground level as close to the natural ground level as practicable • Level changes to occur primarily within building footprint • Minimum 0.6 metres width between retaining walls • Maintain existing ground level within 2m from any boundary • Limit slope for embankments to 1:6 (grassed) and 1:3 (soil stabilising vegetation) • No fill and excavation within sensitive environments • Minimise altered groundwater flows	Ground levels are not maintained for a distance of 2 metres from the site boundaries, consequently insufficient area for screen planting is proposed adjacent to the northern boundary (Reason for Refusal 15).	**NO**

21.2 – Landscape Design		
Appropriate and sensitive site planning and design Existing appropriate screen planting is retained	Appropriate site planning is not proposed. The proposed boundary setbacks are inadequate and provide insufficient area for screen planting (Reason for Refusal 15).	**NO**
Part 22 - General access and parking		
22.1 – Equitable Access		
Compliance with DDA demonstrated Entry access ramps located within the site and does not dominate the front façade Access ways for pedestrians and for vehicles are separated	The proposed entry ramp within the front setback dominates the site frontage (Reason for Refusal 16).	**NO**
Residential only Multi Dwelling Housing, Residential Flat Buildings and Shop Top Housing within Mixed Use developments provide access to, and between, dwellings and parking in accordance with the Livable Housing Guidelines as stipulated in Part 6 Multi Dwelling Housing, Part 7 Residential Flat Buildings and Part 8 Mixed Use Development.	Accessible car spaces are proposed, though clarification is required as to how the shaded area next to car parking space 1 is intended to operate (Reason for Refusal 14).	**NO**
22.2 – General vehicle access		
• Minimise width and number of vehicle access points • Access driveways set back at least 10 metres from street intersections and 3 metres from pedestrian entrances • Vehicle and pedestrian access to buildings clearly distinguished and separated • Vehicle crossing width is acceptable for intensity of use proposed • Vehicles must exit in a forward direction • Vehicle entries are integrated into the external façade and are finished in a high quality material • Retaining walls associated with driveways maximum height of 1.2 metres • No driveways are longer than 30 metres unless a passing bay is provided	The proposed secondary pedestrian path to Block B conflicts with the driveway and is unsafe (Reason for Refusal 13).	**NO**

22.3 – Basement car parking		
Logical and efficient basement design AS2890.1	Satisfactory.	**YES**
Appropriate ceiling floor to ceiling heights and ventilation provided: • 2.5m for parking area for people with a disability; • 2.6m for residential waste collection and manoeuvring area • 4.5m for commercial waste collection and manoeuvring area	Satisfactory.	**YES**
Basement is fully tanked	Basement tanking is not proposed but is capable of being resolved via condition.	**YES**
Unimpeded access to visitor parking and waste recycling rooms	Unimpeded access to the waste room is proposed. An intercom system could be used to manage visitor access.	**YES**
Vehicles access ways are not in close proximity to doors and windows of habitable rooms	Site planning has not been utilised to locate bedrooms away from the driveway (Reason for Refusal 12).	**NO**
Safe and accessible intercom access provided	Capable of compliance.	**YES**
22.4 – Visitor parking		
Visitor parking located behind a security grille with an intercom system to gain entry At least one visitor space is accessible and designed in accordance with AS2890.6	One visitor space is required for every 5 units, therefore 2 spaces are required. Only one visitor space (shared with a loading bay) is proposed (Reason for Refusal 14).	**NO**

22.5 – Parking for people with a disability		
Accessible spaces are signposted and have a continuous path of travel to the principal entrance or a lift	Capable of compliance.	**YES**
22.6 – Pedestrian Movement within Car Parks		
Pathways designed in accordance with AS1428.1	Satisfactory.	**YES**
Marked pedestrian pathways have clear sightlines, appropriate lighting, are visible, conveniently located and constructed of non-slip material	Satisfactory.	**YES**
22.7 – Bicycle Parking and facilities		
Bicycle parking and storage facilities satisfy AS2890.3	Bicycle parking is not required to be provided by SEPP Housing. Bicycles could be stored within the basement storage rooms for each unit.	**YES**
Part 23 – Building Design and Sustainability		
23.3 – Sustainability of Building Materials and 23.4 – Materials and Finishes		
External walls constructed of high quality and durable materials	External finishes comprise painted render.	**YES**
Use of materials and colours creates well-proportioned facades and minimises visual bulk	Proposed materials do not complement local character (Reason for Refusal 8).	**NO**
23.6 – Building Services		
Air-conditioning units are well screened and do not create adverse noise impacts	Insufficient information has been provided regarding air conditioning condensers (Reason for Refusal 21).	**NO**
23.7 – Acoustic Privacy		
Design minimises impact of internal and external noise sources	Site planning has not been utilised to locate	**NO**

	bedrooms away from the driveway and paths (Reason for Refusal 12).	
Noise levels associated with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and plant either as an individual piece of equipment or in combination shall not be audible within any habitable room in any residential premises before 7am and after 10pm. Outside of these restricted hours noise levels associated with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and plant either as an individual piece of equipment or in combination shall not emit a noise level greater than 5dB(A) above the background noise (LA90, 15 min) when measured at the boundary of the nearest potentially affected neighbouring properties. The background (LA90, 15 min) level is to be determined without the source noise present.	Insufficient information has been provided regarding air conditioning condensers (Reason for Refusal 21).	**NO**
23.8 – Visual Privacy		
Visual privacy maintained for occupants and for neighbouring dwellings	The proposal includes inadequate information to make a definite assessment of building separation and does not demonstrate that adequate consideration has been given to maintaining the privacy of adjoining properties (Reasons for Refusal 12 and 23).	**NO**
23.9 – Construction, Demolition and Disposal		
Satisfactory Environmental Site Management Plan	Capable of resolution by condition.	**YES**

The specific departures from the requirements of Section C of the KDCP are identified in the table above. The departures are not acceptable as the objectives of the controls have not

been achieved. The following reasons for refusal relate to the issues identified in the above Compliance Table:

Reason 8. Adverse impacts to heritage conservation area and items in the vicinity
Reason 12. Visual and acoustic privacy
Reason 13. Pedestrian access and crime prevention
Reason 14. Vehicle access and parking
Reason 15. Landscape amenity impacts on adjoining properties
Reason 16. Unacceptable landscape proposal
Reason 21. Insufficient information regarding air conditioning condensers
Reason 22. Insufficient information regarding waste storage facilities and management
Reason 23. Inadequate site analysis and architectural plans

Part 24 – Water management

The proposed development does not satisfy the requirements of Part 24 of KDCP. This issue forms part of the recommended reasons for refusal (Reasons 9 and 26).

Ku-ring-gai Contributions Plan 2010

The development, if approved, would attract a Section 7.11 contribution. If the application were recommended for approval, a condition requiring payment of the required contribution would be included in the recommendation.

REGULATION

Section 23(1) of *Environmental Planning & Assessment Regulation 2021* (Regulation) states that a Development Application may be made by the owner of the land to which the Development Application relates, or another person with the written consent of the owner of the land.

The Development Application proposes re-alignment of a Council trunk drainage system and easement located on the subject site. In addition, the architectural plans show works including a new pipe and junction pit proposed on the adjoining property, No. 1 Alma Street. No. 1 Alma Street is owned by Council and is classified as Community Land. The applicant has not submitted owner's consent from Council as the owner of No. 1 Alma Street, Pymble for lodgement of the Development Application. This issue forms a recommended reason for refusal.

Section 61(1) of the Regulation requires the consent authority to consider the provisions of *Australian Standard AS 2601-2001: The demolition of structures.* Conditions to manage demolition would be included in the event the application were to be approved.

LIKELY IMPACTS

The likely impacts of the development have been considered and are deemed to be unacceptable for the reasons outlined in this report.

SUITABILITY OF THE SITE

The site is not suitable for the proposed development for the reasons given throughout this report.

PUBLIC INTEREST

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by the Panel ensuring that any adverse effects on the surrounding area and the environment are minimised. The proposal has been assessed against the relevant environmental planning instruments and is deemed to be unacceptable.

CONCLUSION

Having regard to the provisions of section 4.15 of the Environmental Planning and Assessment Act 1979, the proposed development is considered to be satisfactory.

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, refuse development consent to eDA0253/25 for demolition of existing swimming pool and tennis courts and minor alterations and additions to the existing dwelling, construction of 9 independent living units and change of use of the existing heritage listed dwelling on land at 3-5 Alma Street Pymble, for the following reasons:

1. Owner's consent

The proposed development includes works on an adjoining property and owner's consent has not been provided for lodgement of the Development Application.

Particulars:

a) The Development Application proposes re-alignment of a Council trunk drainage system and easement located on the Subject Site. In addition, the architectural plans show works including a new pipe and junction pit proposed on the adjoining property, No. 1 Alma Street. No. 1 Alma Street is owned by Council and is classified as Community Land.

b) The applicant has not submitted owner's consent from Council as the owner of No. 1 Alma Street, Pymble for lodgement of the Development Application, contrary to section 23(1) of the *Environmental Planning and Assessment Regulation 2021.*

c) The applicant has not submitted documentation from Council confirming that consent is granted for the proposed drainage works as required by Control 5(iv) of Part 24B.4 of the Ku-ring-gai Development Control Plan (KDCP).

d) No easement may be granted over Community Land without amending the respective Plan of Management. In accordance with Council's *Easement Management Policy*, where the relocation of an easement results in an uplift in the value of the land, Council is to be paid fair compensation to be determined by independent valuation. No offer of compensation has been made.

e) For the reasons outlined in particulars b), c) and d), there is no certainty regarding

lawful drainage for the proposed development. Refer also to Reason for Refusal 8.

2. Non-compliance with access provisions

The proposed development fails to comply with the requirements of Section 93 of State Environmental Planning Policy (Housing) 2021 (SEPP Housing) as adequate access to facilities and services is not provided. In these circumstances, the consent authority has no jurisdiction to grant development consent.

Particulars:

a) Section 93(1) of SEPP Housing states that development consent must not be granted unless the consent authority is satisfied that residents will have adequate access to facilities and services. Subclause (3) states that for the purposes of subclause (1), the transport service/facilities are to be located not more than 400 metres from the site, the distance is to be accessible by means of a suitable access pathway and the gradient along the pathway is to comply with the requirement of subclause (4). Subclause (4) states that the overall average gradient must not be more than 1:14 along the pathway and that the gradients along the pathway must not be more than –

   i. 1:12 for a maximum length of 15 metres at a time, or
   ii. 1:10 for a maximum length of 5 metres at a time, or
   iii. 1:8 for a maximum length of 1.5 metres at a time.

The access report (prepared by Purple Apple Access, dated 12 March 2025), states that the gradient of the existing footpath exceeds the SEPP allowable requirements over a distance of 50 metres.

b) The Civil Engineering plans prepared by Hydracor Consultants (dated 14 May 2025) show *existing* gradients for the path of travel between the development site and the public transport service. No plans showing proposed upgrade works have been provided and it is unclear how a compliant design could be achieved given the gradient of the path.

c) For the reasons listed above, the consent authority cannot be satisfied that adequate access will be provided as per clause 93(4) of SEPP Housing.

3. Floor space ratio non-compliance

The proposed development exceeds the maximum permitted Floor Space Ratio (FSR) specified in section 108(2)(c) of SEPP Housing. In these circumstances, the consent authority has no jurisdiction to grant development consent.

Particulars:

a) The proposed development does not demonstrate compliance with Section 108(2)(c) which, if complied with, permits a FSR of 0.5:1.

b) The applicant has failed to calculate 'Gross Floor Area' (GFA) in accordance with the definition contained within section 82 of SEPP Housing.

c) The proposed development incorrectly excludes the following areas from GFA:

   i. The ground floor lobby of the existing building,

ii. Storage areas at lower ground floor level of the existing building, and
iii. Subfloor areas within the existing building which have a height in excess of 1.4 metres, and
iv. Internal walls between multi-unit dwellings and internal walls surrounding voids.

d) Section 108(2)(c) comprises a non-discretionary development standard and the consent authority may not grant consent to the development as proposed as a Clause 4.6 variation request has not been provided.

4. Inadequate solar access and design for climate

The proposed development does not provide dwellings with adequate daylight and is contrary to Section 108(2)(g) of SEPP Housing.

Particulars:

a) The proposed development does not demonstrate compliance with Section 108(2)(g) which requires at least 70% of dwellings to receive at least 2 hours of direct solar access between 9am and 3pm at mid-winter in living rooms and private open spaces.

b) The shadow diagrams provided on architectural plan DA13 are incomplete and in error. Refer to Reason 23.

c) Based on the 'Views from the sun diagrams' in architectural plan DA14:

i. 4/9 dwellings (Dwellings 4 ,5 ,6, 9) do not receive at least 2 hours of direct solar access between 9am and 3pm at mid-winter in living rooms.
ii. only 55% of the dwellings receive at least 2 hours of direct solar access between 9am and 3pm at mid-winter to their living rooms.
iii. 4/9 dwellings (Dwellings 2, 4 ,6, 9) do not receive at least 2 hours of direct solar access between 9am and 3pm at mid-winter in their private open spaces.
iv. only 55% of the dwellings receive at least 2 hours of direct solar access between 9am and 3pm at mid-winter to their private open spaces.

d) Section 108(2)(g) comprises a non-discretionary development standard and the consent authority cannot grant consent to the development as proposed. The Proposed Development is also contrary to Schedule 8(3)(a) of SEPP Housing as it does not provide residents with adequate light.

e) Additionally, the proposed development has not been appropriately designed for climate. No sun-shading has been provided to the north-east and north-west facing windows as required by Design Guidance 15.2.6 of SHDG.

5. Inadequate private open space

The proposed development does not provide adequate private open space as required by Section 108(2)(h) of SEPP Housing.

Particulars:

a) The proposed development does not demonstrate compliance with Section 108(2)(h) which requires a dwelling located, wholly or in part, on the ground floor of a multi-storey building to have:

i. at least 15m^2 of private open space per dwelling, and

ii. at least 1 private open space with minimum dimensions of 3 metres accessible from a living area located on the ground floor.

b) Dwelling 1 is located on the ground floor of the existing building. The proposed development does not propose an area of private open space which has a minimum dimension of 3 metres and is accessible from the living area. The proposed terraces are accessed via the foyer and do not meet the requirements of Section 108(2)(h) (Figure 1).

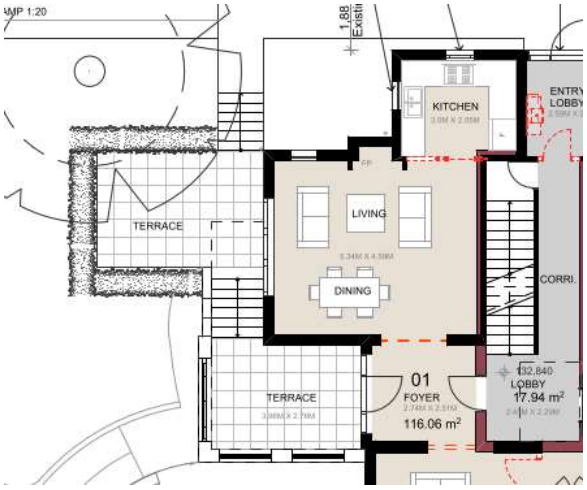


Figure 1: Proposed terraces to Unit 1

c) Section 108(2)(h) comprises a non-discretionary development standard and the consent authority may not grant consent to the development as a Clause 4.6 variation request has not been provided.

6. Inadequate consideration of SEPP Housing Design requirements

The proposed development does not demonstrate that consideration has been given to the design principles of Schedule 8 of SEPP Housing. In these circumstances, the consent authority does not have jurisdiction to grant development consent.

Particulars:

a) Section 97(2) of SEPP Housing states that development consent for the purposes of seniors housing must not be granted unless the consent authority is satisfied the design of the seniors housing demonstrates that adequate consideration has been given to the design principles as set out in Schedule 8 of the SEPP.

b) The applicant has not demonstrated that consideration has been given to the design principles as set out in Schedule 8 of the SEPP. The submitted Statement of Environmental Effects, prepared by Minto Planning Services, dated 16 May 2025, does not consider the design principles of Schedule 8 nor does it provide any consideration of the proposed development against the Seniors Housing Design Guide, dated December 2023.

7. Adverse impacts on heritage item

The proposed development would create adverse heritage impacts on the dwelling, setting and curtilage of the heritage item and is contrary to clause 5.10 of Ku-ring-gai Local Environmental Plan (KDCP) and Part 19 of KDCP.

Particulars:

a) The proposed development would have an adverse impact on the heritage values of the site and is inconsistent with Clause 5.10(1) (a), (b) of KLEP which seeks to conserve the heritage significance of heritage items.

b) The subject site is an item of heritage significance as identified in Schedule 5 of the KLEP2024. The dwelling ('Claverton') was designed by the prominent interwar architect, E. C. Pitt, in the Stockbroker Tudor style. The heritage item commands a prominent position at the eastern end of Pymble Park.

c) The extent of demolition required to the dwelling to facilitate the proposed works is excessive and unacceptable. The proposed development includes demolition of approximately 60% of the lower ground floor, 25% of the ground floor, and 75% of the first-floor internal walls, together with the removal of all ceilings, cornices, and floors. Such works would effectively erase the original layout of the dwelling, resulting in a significant adverse impact on the heritage significance of the item. For these reasons, the proposed demolition is inconsistent with KDCP 19B.1 Control 4(i) + (ii), 19B.2 Control 1(i) + (ii) and 19B.2 Control 4(i) + (ii) + (iii). It is also inconsistent with Objective 1 of Part 19B.2 which aims to ensure that heritage items and all significant elements of heritage items are retained and conserved.

d) The demolition of the sandstone driveway and gardens is unacceptable and adversely impacts the heritage significance of the item. The proposed demolition is inconsistent with KDCP 19B.1 Control 4(i) + (ii) + (iii) which requires consideration of the significance of the building, its contribution to the street and potential for modifying and/or removing neutral and uncharacteristic elements. The proposed demolition works are also inconsistent with Control 1 and objectives 1 and 2 of Part 19D.3.

e) The proposed two dwellings to be inserted into the existing dwelling (one apartment per level) require extensive works to facilitate this change which will adversely and irreversibly impact the heritage significance of the dwelling house. It is not possible to transform a grand double storey dwelling into a multi-dwelling building without severe and adverse impacts to its heritage significance. The proposed lift, ground and first floor foyers, and extensive construction works to achieve BCA compliance, are inappropriate and unacceptable. The proposed construction works are inconsistent with KDCP 19D.5 Control 11 which states that major internal alterations resulting in the loss of significant interior details, finishes, built fabric, room layout and original floor plan are unlikely to be supported unless it can be demonstrated that there is no adverse impact on heritage significance. The proposed development is also inconsistent with 19D.5 Control 12 and Objective 5 which require all significant interior spaces and fabric of heritage items are to be retained.

f) The proposed seven apartments to be constructed at the rear and side of the dwelling house completely overwhelm the site and suffocate the dwelling. The proposed Block B is located too close to the dwelling - adversely impacting the heritage significance of the site and the heritage conservation area. The proposed construction is inconsistent with KDCP 19D.2 Control 1(i) (building separation

requirement - minimum 6 metres for two levels). The proposed development is also inconsistent with Objectives 1-3 of Part 19D.2 which aim to ensure new works respect heritage significance, provide an appropriate interface and do not visually dominate the heritage item.

8. Adverse impacts to heritage conservation area and items in the vicinity

The proposed development creates heritage adverse impacts on heritage conservation areas (HCA) and heritage items in the vicinity and is contrary to Clause 5.10 of KLEP and Part 19 of KDCP.

Particulars:

a) The subject site is located within the Athol Heritage Conservation Area as identified in Schedule 5 of the KLEP. The Athol Heritage Conservation Area includes dwellings dating from the 1890s through to the interwar period, containing a few examples of later development. The Conservation Area contributes to the heritage values and the setting of existing Park Estate Heritage Conservation Area. The dwelling house and its setting form an important contribution to the Athol Heritage Conservation Area as it is the largest site in the HCA. The grand dwelling on a large parcel of land surrounded by landscaping also contributes to the Park Estate Heritage Conservation Area, particularly the landscaping and the feeling of open space of Pymble Park. The proposed development significantly reduces landscaping on the site and adversely impacts upon both heritage conservation areas.

b) The proposed excessive use of painted render for Block B is inappropriate. The proposed large areas of render will dominate the nearby HCA and are inconsistent with Control 2 and Objectives 4 and 5 in 19F.1 in the KDCP which aims to ensure that new development does not visually dominate the adjoining or nearby HCA.

c) The subject site is also located near three heritage listed properties including No. 36 Park Crescent, No. 3-5 Post Office Street and Pymble Station, as identified in Schedule 5 of the KLEP, which will be adversely impacted by the proposal's visual intrusion. Further, the submitted Statement of Heritage Impact does not adequately consider the impact of the proposed development on these items.

d) For the reasons outlined in a), b) and c), the proposed development would have an adverse impact on the heritage values of the subject site and its surrounds, and is inconsistent with Clause 5.10(1) (a), (b) of the KLEP which seeks to conserve the heritage significance of heritage conservation areas and heritage items in the vicinity.

9. Water management

The development proposal does not take all reasonable management actions to avoid, minimise or mitigate adverse impacts to adjoining properties, contrary to Clause 6.5 of KLEP. In the alternative, the Development Application is not accompanied by sufficient particulars to enable an assessment against Clause 6.5 of the KLEP.

Particulars:

a) Clause 6.5 of the KLEP provides that, before granting development consent to development on any land to which the KLEP applies, the consent authority must be satisfied that, relevantly:

    i. the stormwater management system includes all reasonable management

actions to avoid any adverse impacts on the land to which the development is to be carried out, adjoining properties, native bushland, waterways and groundwater systems; and

ii. if a potential adverse environmental impact cannot be feasibly avoided, the development minimises and mitigates the adverse impacts of stormwater runoff on adjoining properties, native bushland, waterways and groundwater systems.

b) The stormwater plans and architectural plans fails to show consistency of the exact alignment of the pipe within the proposed drainage easement. The stormwater plan shows the pipe to be within the subject site, but the architectural plans show the pipe to be relocated to No. 1 Alma Street, which is a Council owned land.

c) No supporting hydraulic calculations have been submitted to verify the correct pipe size, grade and that the proposed 1200mm Reinforced Concrete Pipe (RCP) pipe in the proposed drainage easement has sufficient capacity to handle the post development flows as well as including all properties draining to the easement.

d) The proposed pipe size within the easement has not been designed in accordance with Part 24R.6 Control 30 of the KDCP. The capacity of the system within the easement must be sufficient in the event of a blockage failure or overflow of the detention system. A DRAINS analysis including electronic file has not been submitted.

e) Portions of the proposed building are located close to a Council Easement. No structural certificate prepared by a suitably qualified civil/structural engineer has been provided confirming that the building lies outside the 'Zone of Influence' of the Council's drainage infrastructure as per the requirements of Figure 10 of the Ku-ring-gai Technical Guideline for Water Management.

f) No supporting calculations to demonstrate compliance for the pump-out tank has been submitted to demonstrate compliance with the required 100-year, 2-hour storm event, as outlined in Part 24B.5 of the KDCP.

g) Clarification is sought as to whether a surcharge pit located within the boundary of the subject site has been provided.

10. Adverse tree impacts

The proposed development fails to demonstrate that trees designated for retention and subject to major encroachment of the Tree Protection Zone (TPZ) will remain healthy and viable, thereby failing to comply with the relevant provisions under SEPP (Housing) and contravening the objectives under the SHDG. Additionally, the proposed development does not meet the objectives and controls of Part 13.1 of the KDCP, or the standards set out in AS 4970-2009 – Protection of Trees on Development Sites and AS4373-2007 – Pruning of amenity trees.

Particulars:

a) The Arboricultural Impact Assessment (the Report) relies on outdated plans and fails to consider the full suite of documentation to adequately quantify the extent of impacts to existing trees. On this basis, the information contained within the Report with respect to the tree impacts and nominations for tree removal and retention cannot be relied upon.

b) The impacts of the proposed development, particularly the stormwater realignment, on Tree 9 are significant and unacceptable. Tree 9 is over 30 metres in height with a Diameter at Breast Height (DBH) of 1.3 metres. It is likely to have been planted around the time the existing heritage item was constructed in 1938 and, as such, holds both heritage and landscape significance.

c) The proposed driveway and Dwelling 3 will encroach into the Tree Protection Zone (TPZ) of Tree 9 by 21% which is a major TPZ encroachment under AS4970-2009. Additionally, the proposed realignment of the stormwater will encroach into the TPZ a further 17.4% and within the Structural Root Zone (SRZ). The combined TPZ encroachment is 38.4%.

d) The arborist encroachment calculation of 15% is lower than the above calculation as it excludes Dwelling 3 which can be constructed on an elevated slab supported on isolated piers. While this construction method may reduce the overall impact, it will not be sufficient to reduce the encroachment to an acceptable level.

e) The Report does not include an Arboricultural Impact Assessment (AIA) of the proposed stormwater works on Tree 9. The stormwater details are as follows:

   i. The proposed stormwater realignment, including excavation for junction pits, launch and receiving pits, and directional drilling for a 1.2 metre diameter pipe, will result in an additional 17.4% encroachment into the TPZ, extending beneath the trunk and through the SRZ. This represents a major encroachment under AS 4970–2009. The launch and receiving pits will be approximately 7m long x 4m wide x 4m deep and 4m long x 3m wide x 3 m deep.

   ii. The root depth of Tree 9 may exceed typical expectations. Its exceptional height of over 30 metres is uncharacteristic of trees in the Ku-ring-gai area and reflects the presence of a deep, moist soil profile at the site. Similarly, the substantial height and good condition of other trees on the site, including Tree 1, Tree 3, and Tree 12, suggest that optimal soil conditions exist throughout the area. Consequently, the roots of Tree 9 may extend to a greater depth than normally anticipated.

f) Root mapping within the SRZ is unlikely to be feasible; therefore, the arborist cannot provide certainty that the installation of the stormwater pipe beneath the trunk and within the SRZ will not result in significant impacts to the stability and long-term viability of Tree 9.

g) The Report indicates that a further (5) trees nominated for retention (Trees 7, 11, 12, 15 and 22) are subject to 'major' TPZ encroachments from the proposed development including works within the SRZ. Despite this, there has been no further investigations, evidence, or discussion to qualify and demonstrate why the level of impact to be sustained will be tolerable or the trees will remain viable in the long-term.

11. Adverse impacts on amenity and the streetscape

The proposed development is inconsistent with the character of the locality and results in adverse amenity impacts to adjoining properties, contrary to the requirements of Section 97(2) and Schedule 8 of SEPP Housing and the SHDG.

Particulars:

a) Section 97(2) of SEPP Housing requires that the consent authority be satisfied the design of seniors housing demonstrates that adequate consideration has been given to the design principles for seniors housing set out in Schedule 8 of SEPP Housing.

b) The proposed development does not recognise the desirable elements of the location's current character and does not maintain residential amenity. Consequently, the proposed development does not meet the requirements of Schedule 8(1)(b), (c) and (d) of SEPP Housing, specifically:

   i. ***Typology*** - The proposed development does not meet Objective 15.1.1 of SHDG which aims to provide housing clusters where the scale and massing is articulated and separated to respect the character and pattern of the suburban surroundings. Clusters of smaller buildings with slimmer proportions would be more in character with the area.

   ii. ***Roof form*** – The proposed development features extensive areas of flat roof and is contrary to Objective 4.4.1 of SHDG which aims to take cues from the surrounding neighbourhood, and Design Guidance 4.1.3 which seeks to provide design excellence which is integrated with the local neighbourhood. The Proposed Development is also contrary to Design Guidance 4.4.4 which requires articulated and varied roof forms to provide visual interest. The proposed building reads as one large flat roofed facility and overwhelms the heritage building and the Site.

   iii. ***Building setbacks*** – The proposed development provides insufficient setbacks to the side and rear property boundaries and is contrary to Objective 4.3.2 of the SHDG which is to develop new buildings in an established historical context that complements existing urban character and adds value. The proposed building setbacks are contrary to Design Guidance 4.4.3, 4.3.4 and 4.3.5 which require consideration of views, privacy, overshadowing, amenity and context.

   iv. ***Materiality*** – The proposed finishes (acrylic render, stone veneer, black roofs and black aluminium framing) do not meet Objective 4.11 of the SHDG which aims to take cues from the surrounding neighbourhood to introduce a materiality and built form which is complementary but provides a building with its own unique character and identity.

   v. ***Fenestration*** – The proposed fenestration does not meet Objective 4.11 of SHDG as the proposed windows are typically square or horizontal in format, contrary to the vertically proportioned fenestration in the surrounding neighbourhood.

   vi. ***Environmental conditions*** – The proposed development fails to respond to the existing contours of the site to reduce bulk and scale. The proposed development is inconsistent with Objectives 3.1.1, 3.1.3 and 3.14 of SHDG as it does not respond appropriately to the site's natural features and historical character. The proposed basement garage is poorly located with respect to natural flow paths.

12. Visual and acoustic privacy

The proposed development achieves poor outcomes in relation to visual and acoustic privacy and is contrary to Section 97(2) and Schedule 8(2) of SEPP Housing.

Particulars:

a) Section 97(2) of SEPP Housing requires that the consent authority be satisfied that adequate consideration has been given to the design principles for seniors housing set out in Schedule 8 of SEPP Housing. The proposed development does not utilise appropriate site planning for the location and design of windows and balconies and is inconsistent with Schedule 8(2)(a) of SEPP Housing. The following specific concerns are raised:

   i. The design of Block A proposes a setback of approximately 8-10 metres between Dwellings 1 and 2 and habitable rooms of No. 9 Alma Street.

   ii. The design of Block B proposes a setback of approximately 9 metres between Dwelling 7 and habitable rooms of No. 7 Alma Street.

   iii. The proposed development includes poor internal separation, with only 4.8 metres proposed between Units 1 and 2 of Block A and Units 6 and 9 of Block B (see Figure 2).

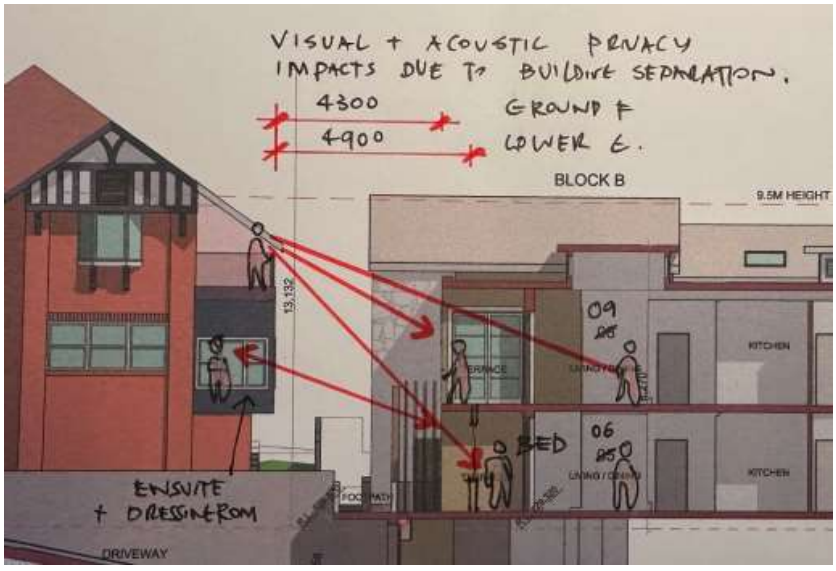


Figure 2: Proposed internal separation

b) Having regard to particular a), the architectural plans contain insufficient detail to make a definite assessment of setbacks and privacy impacts as insufficient information is provided. Refer to Reason 23.

c) The proposed development does not ensure acceptable noise levels in bedrooms by locating them away from driveways, parking areas and paths and is inconsistent with Schedule 8(2)(b) and section 97(2) of SEPP Housing. The following specific concerns are raised:

   i. Proposed Bed 1 of Dwelling 1, Bed 1 of Dwelling 4, Bed 2 and 3 of Dwelling 5 and Bed 1 of Dwelling 7 are adjacent to the proposed access path.

   ii. Bed 2 and 3 of Dwelling 5, and Bed 1 of Dwelling 7 are adjacent to the proposed

car park entry and driveway and will be impacted by the noise of car traffic and door operations as well as being impacted by car headlights at night.

iii. Bed 3 of Dwelling 7 overlooks the proposed car park entry and driveway and will be impacted by the noise of car traffic and door operations as well as being impacted by car headlights at night.

iv. Six of the proposed 24 bedrooms or 25% would be thus noise affected.

13. Pedestrian access and crime prevention

The proposed development does not provide satisfactory pedestrian access, does not have adequate regard to crime prevention, and is contrary to Section 97(2), Schedule 8(5) and Schedule 8(6) of SEPP Housing and the SHDG.

Particulars:

a) Section 97(2) of SEPP Housing requires that the consent authority be satisfied the design of seniors housing demonstrates that adequate consideration has been given to the design principles for seniors housing set out in Schedule 8 of SEPP Housing. The proposed development does not satisfy Schedule 8(5) SEPP Housing for the following reasons:

   i. The entrance path to Blocks A and B is only 1000mm wide and alongside a fence.

   ii. The entry lobby to Block A is located to the side of the building and is not visible from the street.

   iii. The entry lobby to Block A is 22 metres from the footpath of Alma Street.

   iv. The entry lobby to Block A is not visible from any units or areas of communal open space.

   v. The entrance path to Block B continues down 11 steps and past a narrow, awkward landing.

   vi. The entry lobby to Block B is 55 metres from the footpath of Alma Street.

   vii. The entry lobby to Block B is not visible from any communal open space and is only partially visible from three units.

   viii. The proposed alternative entrance path is 57 metres from the footpath of Alma Street and requires users to cross a driveway.

b) The proposed development does not include obvious and safe pedestrian links and does not satisfy Schedule 8(6) and section 97(2) of SEPP Housing for the following reasons:

   i. The proposed alternative entrance path to Block B requires users to cross a driveway.

   ii. All four sets of lift doors are not visible from within the Block B carpark.

   iii. The door to the north-eastern fire stair is not visible from the Block B carpark.

iv. The lift doors to the ground floor lobby to Block B are not visible from the pedestrian path.

c) The proposed development does not meet Objective 15.1.5 of the SHDG which is to provide clearly identifiable and accessible shared pedestrian entries, driveways and paths. The proposed pedestrian path network is also inconsistent with Design Guidance 6.3.5 of SHDG as the pathways do not include sufficient places to sit and gather.

d) The proposed development does not meet Objective 15.4.1 of the SHDG which is to encourage crime awareness and passive community surveillance to deter crime.

14. Vehicular access, parking and construction traffic management

The proposed development fails to comply with AS2890.1:2004 Parking facilities Part 1: Off-street car parking.

Particulars:

a) The proposed provision of one visitor car parking space (which is to be shared with the loading bay) does not meet the on-site visitor parking requirements of Resident-Funded Seniors Housing as per Part 22R.1 of the KDCP.

b) The proposal to replace 11 metres of 2P parking conditions on the western side of Alma Street (opposite the site) with No Parking restrictions from 9am to 5pm, Monday - Saturday, is not acceptable due to the need for short stay parking in the vicinity of the park.

c) The proposed temporary removal of 54 metres of existing kerbside parking on the western side of Alma Street is not acceptable due to the need for short stay parking in the vicinity of the park.

d) Due to manoeuvrability issues, the proposed departure route for construction vehicles, as identified in the Construction Traffic Management Plan (CTMP), is not acceptable. In particular, the right turn from Alma Street and the subsequent left turn from Grandview Street onto the Pacific Highway (as shown on page 14 of the CTMP) are unlikely to be achievable.

e) Clarification is required as to how the shaded area next to car parking space 1 is intended to operate. The shaded area appears to serve the purpose of a shared zone, but a wall blocks access to the parking aisle, which limits access from the shaded area to the rear of a vehicle in the car space.

f) Access and manoeuvrability of the swept path of the vehicle reversing into the external garage facing Alma Street needs to be reviewed and clarified.

g) Clarification is required as to whether there are adequate sight lines between the basement car park and ground level.

h) Electric Vehicle (EV) readiness is to be provided for all car parking spaces within the development and depicted on the plans.

15. Landscape amenity impacts

The proposed development will negatively impact on the amenity of the adjoining property

(No. 7 Alma Street). As such, it fails to comply with the relevant provisions under SEPP Housing and the SHDG.

Particulars:

a) The northern side setback of Dwelling 7 is significantly constrained due to changes in soil levels, requiring the construction of retaining structures and paving to enable access. Consequently, there is insufficient space within the proposed raised planter bed along the northern boundary adjacent to Dwelling 7 to accommodate effective screen planting resulting in amenity impacts on the adjoining property.

b) The proposed planter bed has a width of only 400 millilmetres, which does not provide adequate deep soil area to support vegetation capable of screening the proposed development from adjoining properties.

c) The proposed excavation in within 2 metres of the northern boundary and is contrary to Control 5 and Objective 9 of Part 21.1 of KDCP and Clause 6.2(1) of KLEP.

16. Unacceptable landscape proposal

The proposed development fails to provide sustainable, high-quality landscaped areas with adequate amenity and is not characteristic of the heritage landscape setting. As a result, it does not comply with the relevant provisions under SEPP Housing, the SHDG, and Parts 19D.3 and 21.2 of the KDCP.

Particulars:

a) The proposed access ramps within the front setback will detract from the landscape amenity of the heritage item by reducing opportunities for soft landscaping and introducing visually intrusive, utilitarian built elements into the setting. These works do not satisfy Objective 1 of KDCP Part 19D.3, which seeks to retain and conserve the significance of a heritage item in its setting.

b) The proposed terrace (RL131.60) forward of the heritage item will also reduce the soft landscaped area within the front setback and adversely impact Tree 11 which is nominated for retention.

c) The removal of the Leighton Green hedge along the front boundary, forward of the heritage item, is supported as this species has the potential to attain a height that could significantly obstruct views to the heritage item. The proposed replacement monoculture planting of 10 x *Westringia fruticosa 'Blue Gem'* and 3 x *Pyrus calleryana 'Capital'* along the street frontage does not satisfy Part 19D.3 Control 3 of the KDCP, which encourages the use of a variety of plant species to enhance visual interest and landscape character.

d) The proposed native groundcovers and grasses within the front setback are not characteristic of the planting palette of the heritage item. The native species are to be replaced with exotic species characteristic of the heritage item.

e) The proposed planting of 2 x *Acer palmatum* is not supported as they will spatially conflict with Tree 11, which is proposed for retention. More broadly, the extent of proposed tree planting within the front garden adjacent to the heritage item is considered excessive and, over time, will obscure views of the item from the public domain. The proposed *Magnolia 'Exmouth'* and 3 x *Pyrus calleryana* 'Capital' shall be deleted and replaced with a mix of small shrubs and groundcovers that maintain

visual permeability and complement the heritage setting.

f) The proposed planting of *Acmena smithii* and *Pistachia chinensis* will spatially conflict with Tree 7 *Cryptomeria species* and Tree 9 *Araucaria heterophylla*, which are proposed for retention.

g) Tree 18 *Grevillea robusta* (Grevillea) is in poor health and is recommended for removal. All plans, including architectural and stormwater plans, must be amended for consistency.

17. Inadequate waste management

The proposed waste management room is poorly designed and located and is contrary to the requirements of Section 14.6 of SHDG and Part 25 of the KDCP.

Particulars:

a) The proposed development includes no waste management room for Dwellings 1 and 2 and the waste management room for Dwellings 3-9 is poorly located adjacent to the communal lift. The proposed waste management system is contrary to the SHDG Design Guidance 14.6.4 and 14.6.5 and objectives 14.6.1 and 14.6.2. Further, the proposed waste room is not conveniently located for all dwellings and is contrary to Control 1 and Objective 1 of Part 25A.3 of the KDCP.

18. Invalid BASIX Certificates

The BASIX Certificates are of the wrong type and the Development Application has not been made in accordance with section 27 of the *Environmental Planning and Assessment Regulation 2021* (Regulations). Additionally, the BASIX certificates are not consistent with the submitted plans.

Particulars:

a) Section 27 of the Regulation states that a development application for BASIX development must be accompanied by a relevant BASIX Certificate.

b) BASIX Certificate 1787446 dated 14 March 2025 is for alterations and additions to a dwelling house (detached). This is not the correct certificate type for Block A which comprises two dwellings.

c) BASIX Certificate 1787449M dated 14 March 2025 is for a residential flat building of four dwellings and a multi-dwelling housing development of three dwellings. This is not the correct certificate type for Block B which is not a residential flat building (as defined).

d) The following inconsistencies between the BASIX Certificate 1787449M and the architectural plans and landscape plans have been identified.

   i. The lawn and garden areas described in the BASIX Certificate do not appear to be consistent with the areas shown on the submitted architectural and landscape plans.
   ii. A detailed site plan is required, clearly identifying both common and private open space areas, including accurate calculations (in square metres) of each space.

19. Insufficient information regarding tree impacts

Insufficient information has been provided to properly access the impacts of the proposed development on Trees 7, 11 and 12.

Particulars:

a) Insufficient information has been provided to enable a full assessment of the impacts on Tree 11 *Magnolia champaca* (Magnolia).

   i. The proposed access paths and terrace would encroach into the TPZ by 29.3% and within the SRZ which constitutes a major encroachment under AS4970-2009. The proposed open pergola above the path may require pruning of Tree 11. Details of the pruning works are required to be submitted.

   ii. Amendments are required to delete the terrace area forward of the heritage item. In addition, the arborist shall provide specific tree sensitive measures for the construction of the proposed new access paths, particularly within the designated SRZ.

b) Insufficient information has been provided to enable a full assessment of the impacts on Tree 7 *Cryptomeria japonica* (Japanese Cedar).

   i. The proposed driveway would encroach into the TPZ by 17% which is a major encroachment under AS4970-2009. Architectural plan DA12 only indicates the proposed driveway levels. Amended driveway long sections are required indicating existing levels.

   ii. Furthermore, the proposed stormwater realignment, including the 2 x 2m junction pit and launch pit for the installation of the stormwater pipe, would result in additional encroachment within the TPZ.

c) Insufficient information has been provided to enable a full assessment of the impacts on Tree 12 *Araucaria heterophylla* (Norfolk Island Pine).

   i. Tree 12 is over 30 metres in height with a DBH of 1.3 metres. Similarly to Tree 9, it is likely that this tree was planted around the time the existing heritage item was constructed in 1938 and, as such, holds both heritage and landscape significance.

   ii. The arborist has calculated the TPZ encroachment of 19%; however, no adequate justification has been provided to support this level of major encroachment. The recommendation to simply supervise works within the TPZ is not sufficient to safeguard the long-term health and structural stability of the tree.

   iii. The canopy of Tree 12 would spatially conflict with Dwelling 4 resulting in impacts on the health and visual appearance of the trees canopy as a result of inappropriate pruning that does not comply with AS4373-2007. To preserve the canopy amended plans are required to relocate the dwelling a minimum distance of 7 metres from the tree's trunk.

20. Insufficient information regarding acoustic impacts

An acoustic impact assessment has not been provided.

Particulars:

a) An acoustic impact assessment that assesses and provides recommendations to attenuate (where applicable) the likely noise impacts on neighbouring properties and future occupants of the proposed development is required. The acoustic impact assessment is to be based on noise monitoring at the site over period of 7 days (minimum) to establish the background noise for the day and nighttime periods at applicable locations. An intrusive noise assessment of applicable noise sources for future inhabitants of the development and external noise emission assessment for neighbouring properties is to be undertaken. An assessment is be made against the *Australian Standard 2107: 2016* Acoustics- Recommended design sound levels and reverberation times for building interiors, the State Environmental Planning Policy (Transport and Infrastructure) 2021, *The Protection of the Environment Operations Act 1997* and associated noise Regulation and KDCP.

21. Insufficient information regarding air conditioning condensers

Insufficient information regarding the location and impacts of the proposed air conditioning condensers has been provided.

Particulars:

a) The architectural plans must be updated to display the location of the proposed air conditioning condensers. Air conditioning condensers must be located as per Part 23.6 of KDCP.

b) The acoustic consultant must also be informed of the location of the proposed air conditioning condensers and provide acoustic recommendations where applicable to ensure the condensers meet the following acoustic criteria when in operation either as an individual piece of equipment or in combination with other equipment. Specifically:

   i. The Condensers Must Not Be Audible Within Any Habitable Room In Any Other Residential Occupancy Before 7.00am And After 10.00pm; And

   ii. Outside Of These Restricted Hours Noise From An Individual Piece Of Equipment Or In Combination Shall Not Be Greater Than 5db(A) Above The Background Noise (La90, 15 Min) When Measured At The Nearest Adjoining Property Boundary. The Background (La90, 15 Min) Level Is To Be Determined Without The Source Noise Present.

   iii. Where air conditioning condensers are to be located within the basement, certification from a mechanical engineer is to be provided confirming that the nominated area/plantroom will be large enough to accommodate the number of proposed condenser units. This certification is also to indicate the likely required supply/extraction air flow within the plant room to demonstrate that ventilation requirements have been sufficiently incorporated into basement design. Additionally, there is to be sufficient service ducting incorporated into the development so that the system operates efficiently.

22. Insufficient information regarding waste storage facilities and management

Insufficient information regarding the proposed waste storage facilities and ongoing waste management has been provided.

Particulars:

a) The architectural plans must be updated to indicate that the waste storage facilities floors will be graded and appropriately drained to the sewer and that a tap with hot and cold water is to be located in close proximity to facilitate cleaning.

b) No Waste Management Plan has been prepared by a qualified consultant in accordance with Part 25A.5 and 25R.5 of the KDCP.

c) No swept path analysis has been submitted to demonstrate that Council's Waste Collection Vehicle, a 6.7 metre Mitsubishi Canter, can enter and depart the garbage/recycling storage area in a forward direction.

d) The longitudinal section on architectural plan DA12 shows the driveway ramp along the north and south edge driveway at a grade of 25% which exceed the maximum 20% grade for Council's waste collection vehicle, required under Part 25A.5 of the KDCP.

23. Inadequate site analysis and architectural plans

The submitted site analysis and architectural plans do not contain sufficient detail.

Particulars:

a) The submitted site analysis does not meet the requirements outlined in Part 2 of KDCP, which requires the site analysis to address the following:

   i. Site topography and drainage
   ii. Heritage items and heritage conservation areas
   iii. Existing structures and vegetation adjoining the site
   iv. Key features of adjoining sites – solar access, overlooking windows, view lines etc.
   v. Views to surrounding areas and important public or private views to the site (e.g. from Robert Pymble Park and Park Crescent).
   vi. The future character and amenity of No. 1 Alma Street when it forms part of an expanded public carpark as per Council's Pymble Public Domain Plan (see Figure 7 above).

b) The architectural plans lack detail and are inconsistent with Appendix 1 of Council's *DA Guide*. The following additional detail is required:

   i. Adjoining dwelling houses (including window locations), outbuildings and other structures are to be shown on the architectural plans. Habitable rooms of Nos. 9 and 11 Alma Street are to be shown to enable assessment of amenity impacts.
   ii. A minimum of two sections is required for Block A.
   iii. The north point is to be shown on all plans and noted as true north or magnetic north.
   iv. A bar scale is to be shown on all plans.
   v. A streetscape elevation (including fencing and other structures, clearly indicating existing elements and proposed work) is required.
   vi. A cover sheet and drawing schedule with drawings numbers and revisions / issue numbers for all DA documents including documents provided by all consultants is to be provided.

c) The architectural plans contain errors and inconsistencies and do not accurately

depict existing and proposed works. These errors include but are not limited to:

i. Proposed demolition of garden elements is not shown.
ii. Proposed demolition of the existing roof over ground floor family room to the east is not noted.
iii. Extent of demolition of existing floor to lower ground level of the existing garage is not noted accurately on drawings.
iv. Proposed terrace to the east of the first floor of the Block A is not shown as new work.
v. Proposed new pathways, ramps and fencing are not shown as new work.
vi. The elevations are not labelled consistently with the BASIX Certificates.
vii. Two new roller doors are proposed but are not noted as new wok on DA05, DA09 or DA10.
viii. The existing roller door to Block A is proposed to be widened by 1.4 metres however this is not shown on the architectural plans or the heritage grading diagram.
ix. Proposed accessible ensuite to Bed 1 Dwelling 1 is shown as retaining all existing glazing. The sill heights are approximately 400mm which would result in the side of the hand basin and the rear of the toilet cistern being visible through the windows. The ends of the proposed new walls will also be visible through the glazing.
x. The existing terrace to the first floor north of the existing dwelling house is inaccurately drawn (and much closer to the boundary) on DA07 and DA10.
xi. Proposed work to the “East Elevation” and the “South Elevation” on DA10 is not accurately noted.
xii. Additional stairs required to adapt to new lower ground floor levels are not noted.
xiii. The shadow diagrams provided on DA13 are incomplete and incorrect. E.g., errors include that there are two diagrams for “Existing shadow diagram June 21 9:00am” and no diagram for “Existing shadow diagram March 21 12 noon”.
xiv. The Sun-eye diagrams DA14 show different shadow impacts to the shadow diagrams than DA13.
xv. Section BB is labelled incorrectly.
xvi. Pergola at pedestrian entrance is not shown.

24. Inadequate heritage documentation

The submitted Statement of Heritage Impact is inadequate and contains inconsistencies.

Particulars:

a) The Statement of Heritage Impact, prepared by GBA Heritage, dated February 2025, rev B contains errors and inconsistencies, including but not limited to:

i. The grading diagram does not consider all works on site including works to the lower ground floor to accommodate the parking area, sandstone driveway, brick wall across the middle of the site, swimming pool, trees and landscape.
ii. The ramifications of converting the existing dwelling into a Class 2 building have not been detailed or assessed.
iii. The impacts of the proposed roller door opening widening in Block A have not been considered.
iv. The impacts of the proposed new roller door opening widening in Block A have not been considered.
v. It is unclear if any new window openings to Block A are proposed; if proposed, these must be assessed.
vi. The impacts of the proposed terrace to the east of Block A have not been

assessed.

vii. The impacts of the proposed new ensuite to Bed 1 Dwelling 1 have not been assessed.

viii. The impacts of the proposed demolition of the existing roof existing roof over the ground floor family room to the east have not been assessed.

ix. Photographic images within the report have been incorrectly labelled.

b) The subject site is also located near three heritage listed properties, including No. 36 Park Crescent, No. 3-5 Post Office Street and Pymble Station, as identified in Schedule 5 of the KLEP. The submitted Statement of Heritage Impact does not adequately consider the impact of the proposed development on these items.

25. Inadequate information concerning deep soil zones

The information provided with the Development Application is inconsistent with the site conditions in relation to Clause 108(f) of SEPP Housing.

Particulars:

a) The deep soil zone calculation on drawing DA15 indicates 852m^2 or 35.2% which complies with the standard however, there are areas of non-compliance that should also be excluded from the deep soil zone calculation. The areas of deep soil zone that are less than 3 metres are:

   i. The 1.2 metres diameter stormwater pipe and associated pits within the front setback and the southern side boundary (100.65m^2).
   ii. The retaining wall and associated garden areas less than 3 metres wide within the north-eastern corner of the site (22.5m^2).

b) An amended compliance plan consistent with the requirements of the SEPP is required.

26. Inadequate information regarding water management

Inadequate information has been provided in relation to water management.

Particulars:

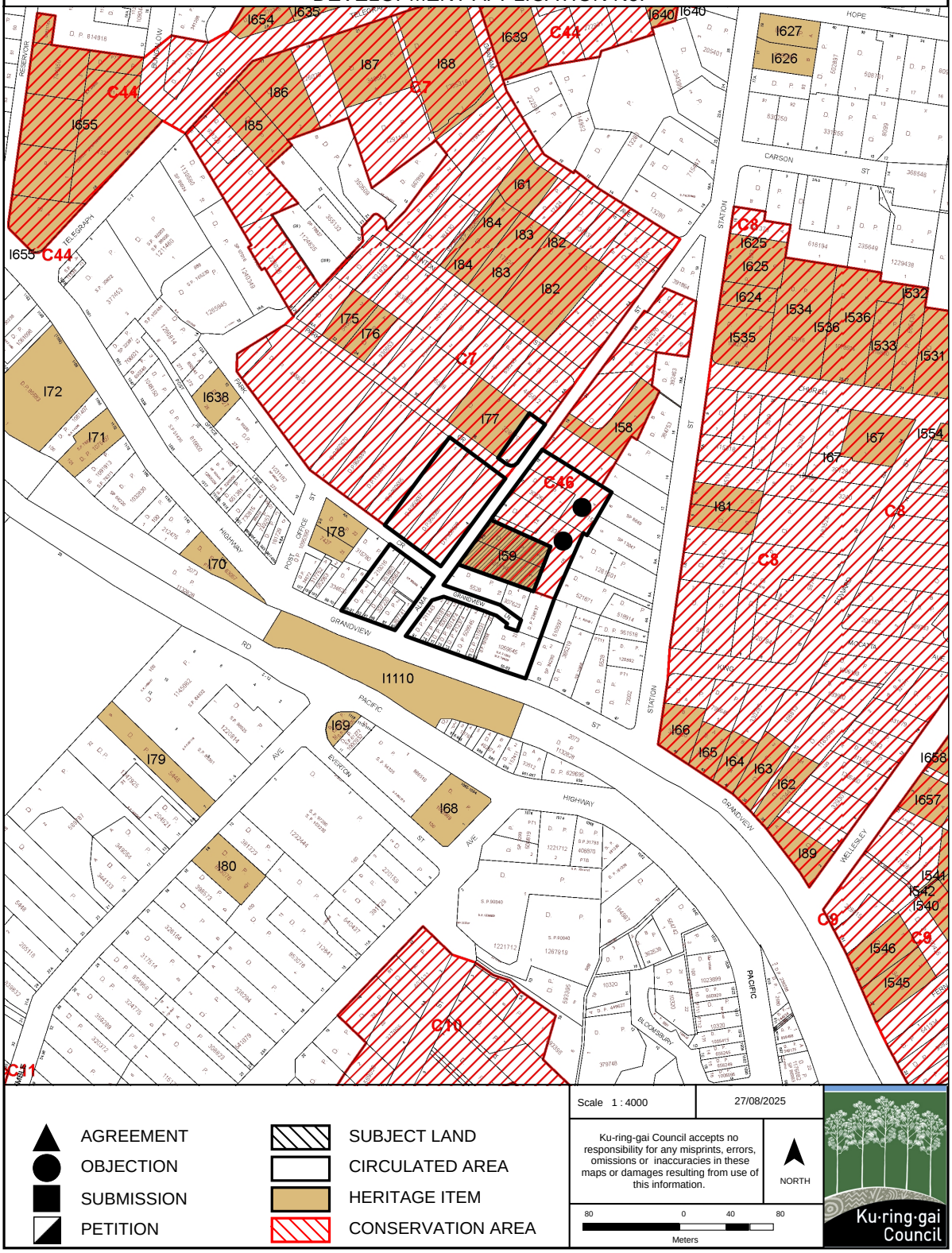
a) According to Council records, the drainage easement within the subject site is designated for “road water only.” Any connection to the Council’s drainage easement would require amendments to the terms of the easement to benefit the subject site.

b) A drainage easement shall be established over the proposed new pipeline to burden the subject property and benefit Council and any other existing beneficiaries to protect Council’s infrastructure as part of this development application. Any abandoned drainage easement shall be extinguished.

LOCATION SKETCH

3-5 Alma Street PYMBLE NSW 2073

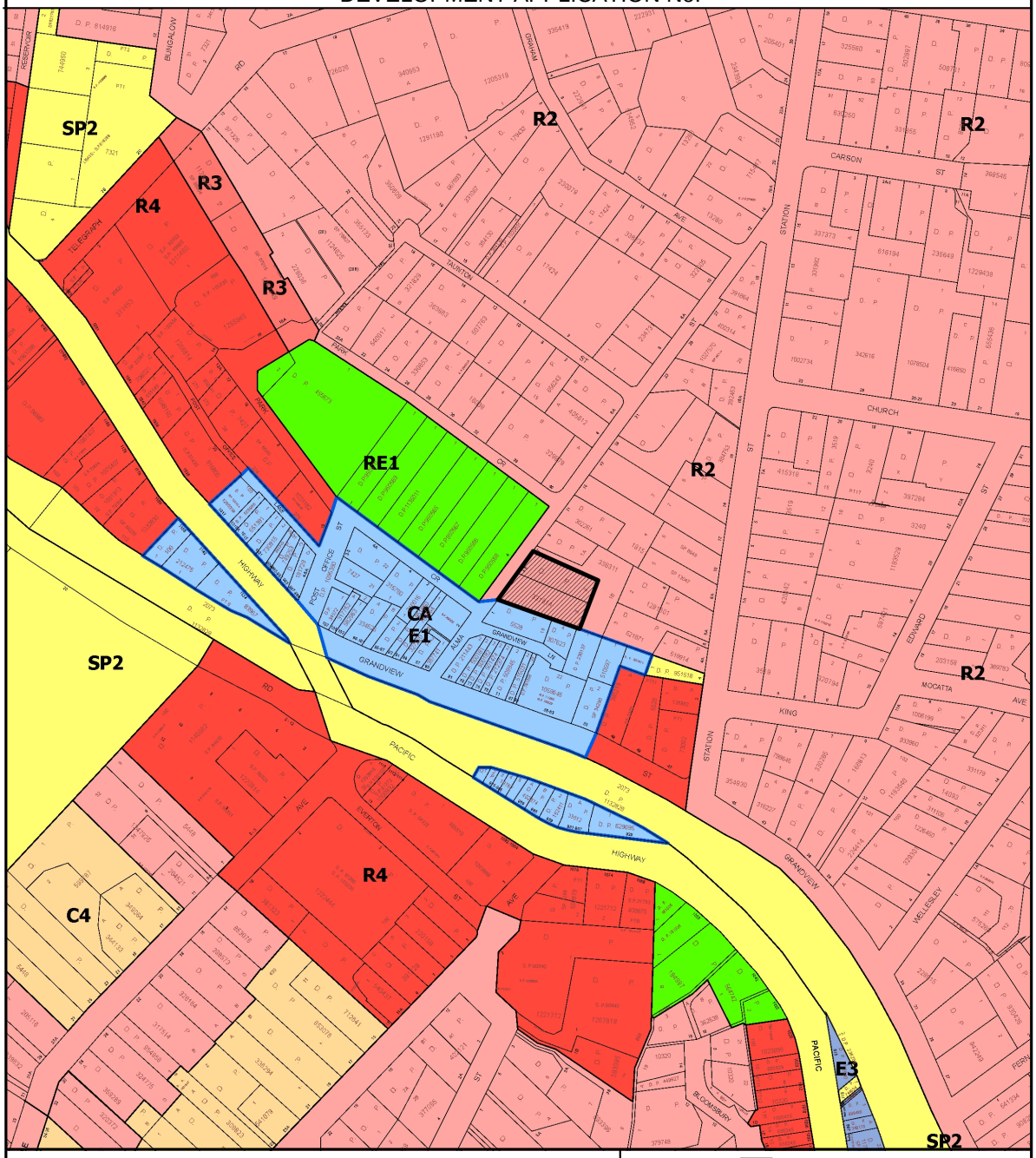
DEVELOPMENT APPLICATION No.



KU-RING-GAI LEP 2015 ZONING EXTRACT

3-5 Alma Street PYMBLE NSW 2073

DEVELOPMENT APPLICATION No.



Legend

Subject Land

Zoning

E1	Local Centre	C4	Environmental Living	RE1	Public Recreation
E3	Productivity Support	R1	General Residential	RE2	Private Recreation
MU	Mixed Use	R2	Low Density Residential	SP1	Special Activities
C1	National Parks & Reserves	R3	Medium Density Residential	SP2	Infrastructure
C2	Environmental Conservation	R4	High Density Residential	W1	Natural Waterways
C3	Environmental Management	R5	Large Lot Residential		

Scale 1 : 4000

Date: 27/08/2025

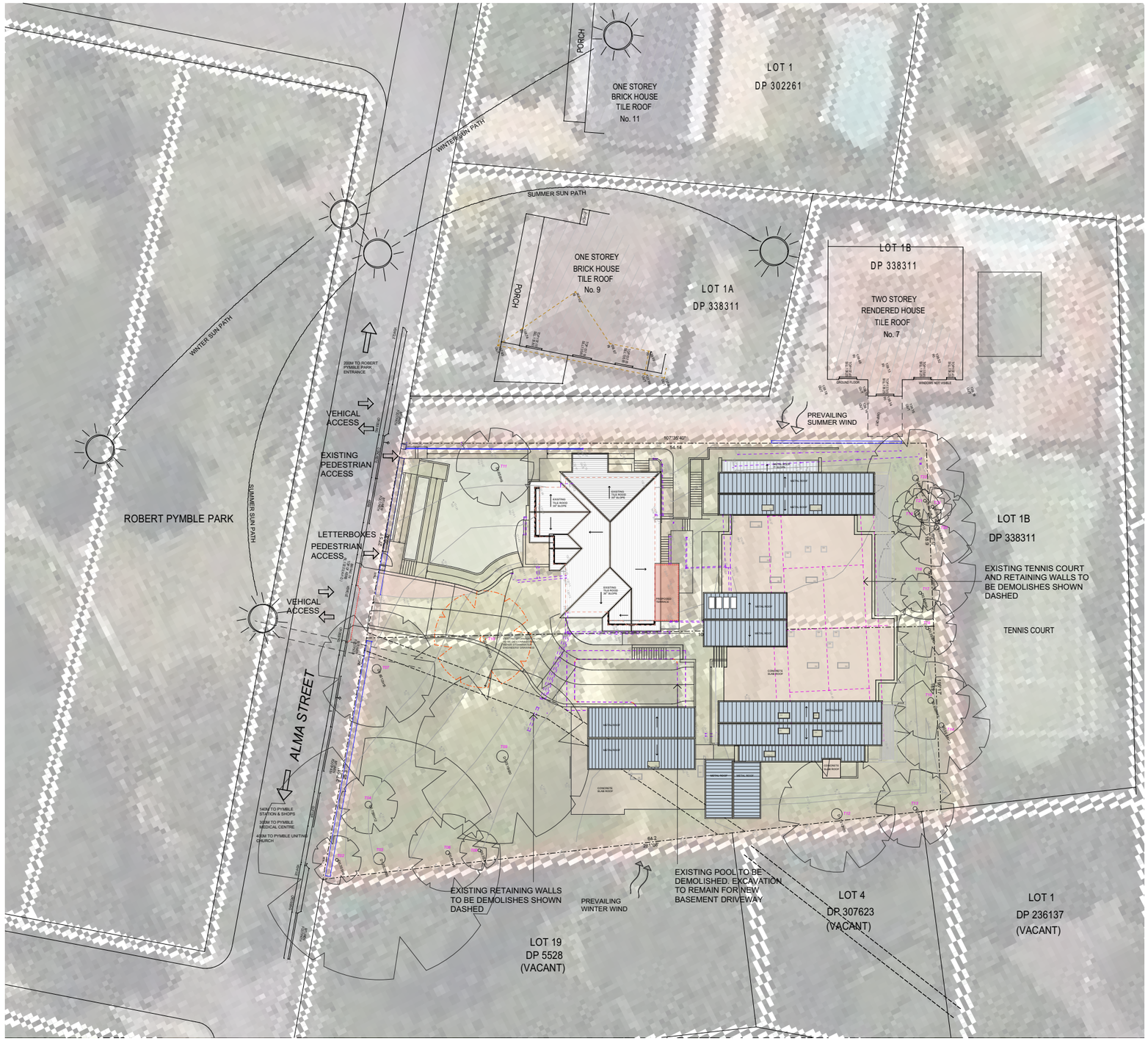
Ku-ring-gai Council accepts no responsibility for any misprints, errors, omissions or inaccuracies in these maps or damages resulting from use of this information.

NORTH

0 80 160

Meters

Ku·ring·gai Council





LOCATION PLAN
NOT TO SCALE
SOURCE : SIXMAPS.NSW.GOV.AU

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

CLAVERTON

GGA
GELDER GROUP ARCHITECTS

Level 2 19-23 Bridge Street PYMBLE NSW 2073 AUSTRALIA
t: (02) 9440 2455 **e:** info@gelder.com.au **w:** gelder.com.au
ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

SITE ANALYSIS / SITE PLAN

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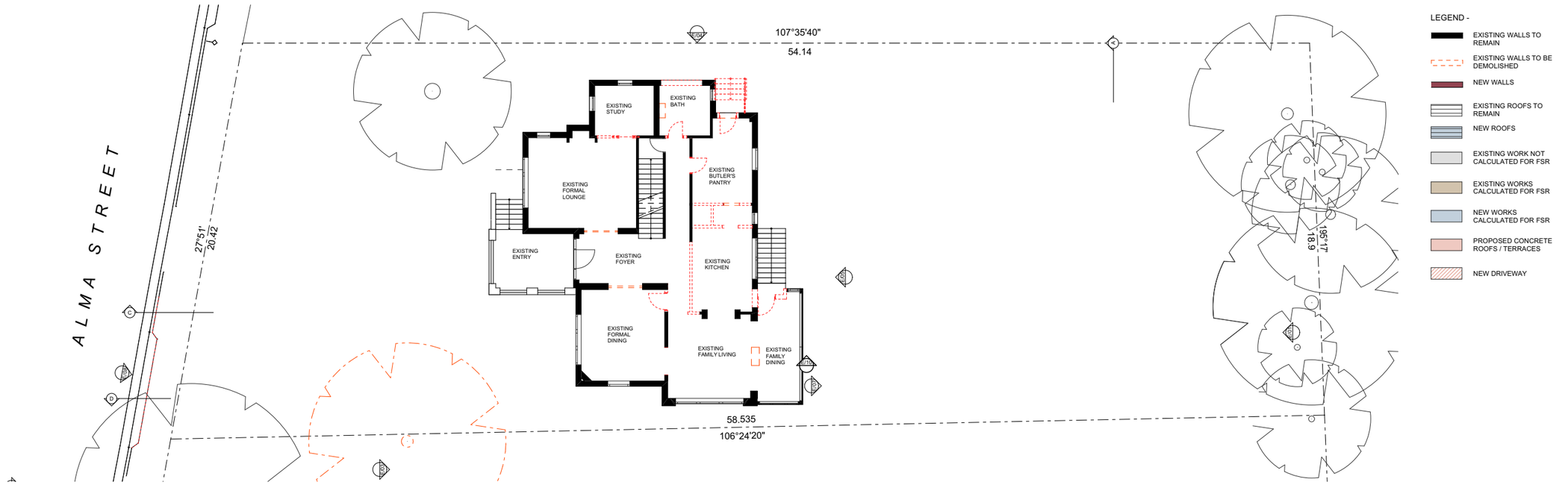
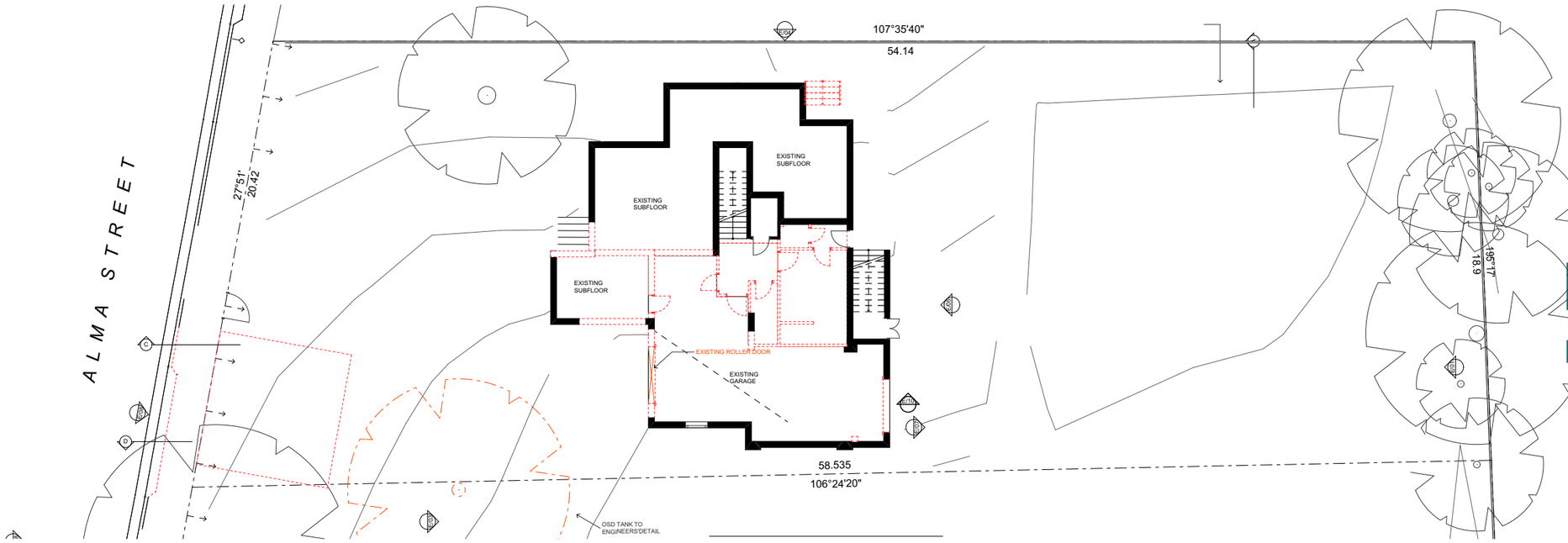
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA01	1:200	
	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



GROUND FLOOR PLAN - EXISTING
1:100



LOWER GROUND FLOOR PLAN - EXISTING
1:100

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT
at
3 - 5 ALMA STREET, PYMBLE NSW 2073
for
CLAVERTON

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EXISTING LOWER GROUND / GROUND FLOORS

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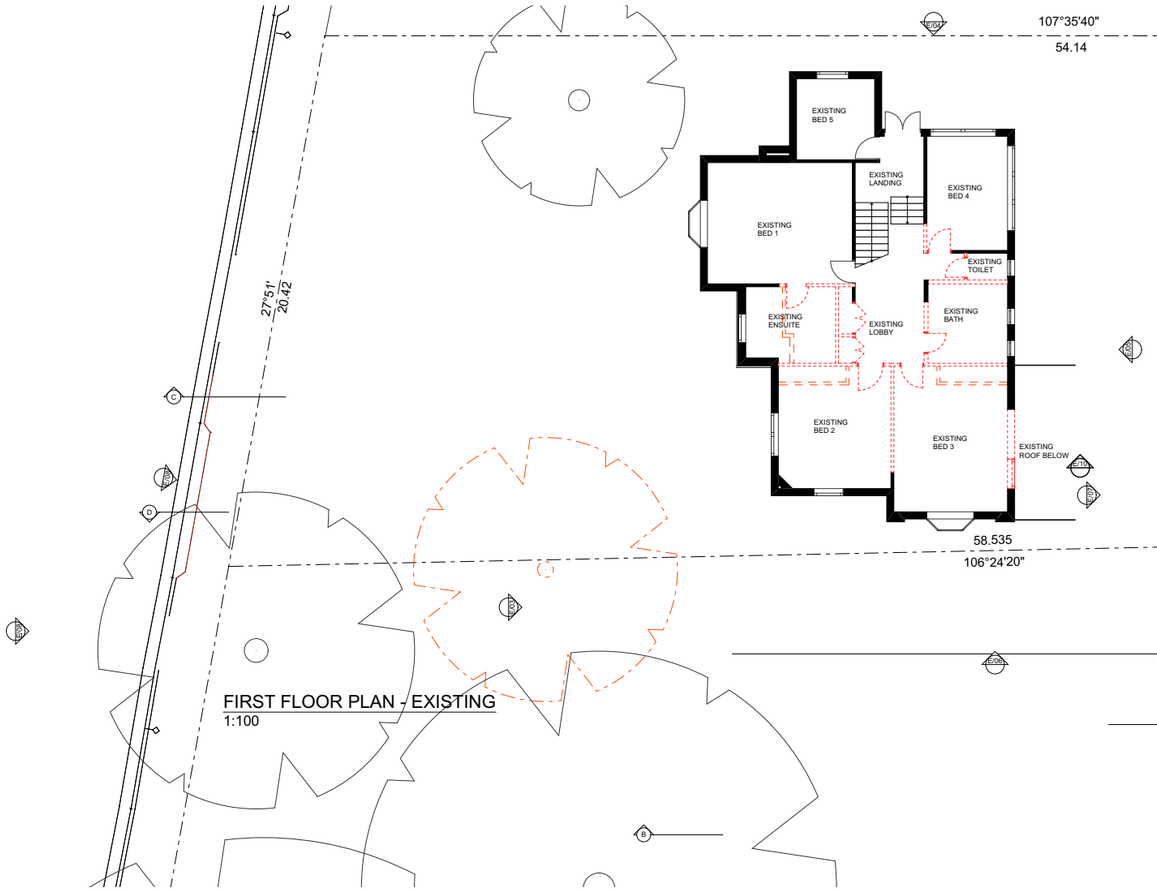
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA02	1:100	
	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



FIRST FLOOR PLAN - EXISTING
1:100

LEGEND -

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE DEMOLISHED
- NEW WALLS
- EXISTING ROOFS TO REMAIN
- NEW ROOFS
- EXISTING WORK NOT CALCULATED FOR FSR
- EXISTING WORKS CALCULATED FOR FSR
- NEW WORKS CALCULATED FOR FSR
- PROPOSED CONCRETE ROOFS / TERRACES
- NEW DRIVEWAY

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

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EXISTING FIRST FLOOR

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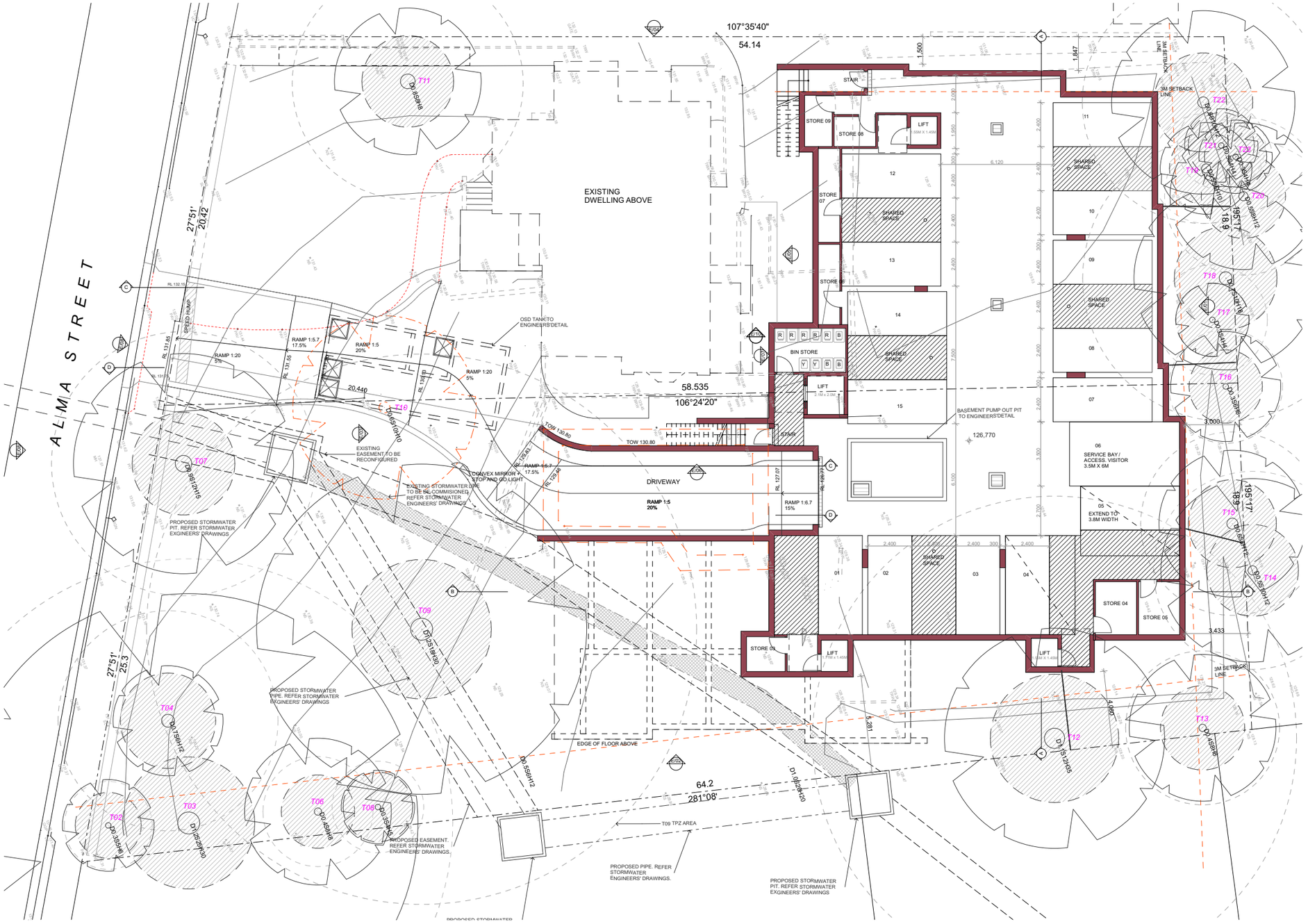
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA03	1:100	
	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



LEGEND -

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE DEMOLISHED
- NEW WALLS
- EXISTING ROOFS TO REMAIN
- NEW ROOFS
- EXISTING WORK NOT CALCULATED FOR FSR
- EXISTING WORKS CALCULATED FOR FSR
- NEW WORKS CALCULATED FOR FSR
- PROPOSED CONCRETE ROOFS / TERRACES
- NEW DRIVEWAY

PARKING CALCULATIONS:

0.5 CAR SPACES PER BEDROOM

UNIT 01 & 02 - 2 BED EACH
1 CAR SPACES PER UNIT REQUIRED

PROPOSED: 1 CAR SPACE OF 6.3M X 3.8M EACH PER UNIT = 2 SPACES

UNITS 03 - 09 7 x 3 BED EACH
1.5 CAR SPACES FOR EACH UNIT
TOTAL - 11 CAR SPACES REQUIRED

14 RESIDENT SPACES PROVIDED IN BASEMENT WITH ONE NOT ACCESSIBLE.

TOTAL RESIDENT CAR SPACES PROVIDED = 16 CAR SPACES

SERVICE VEHICLE - 1 SPACE OF 6M X 3.5M REQUIRED.

PROVIDED COMBINED WITH VISITOR PARKING.

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

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ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

BASEMENT PLAN

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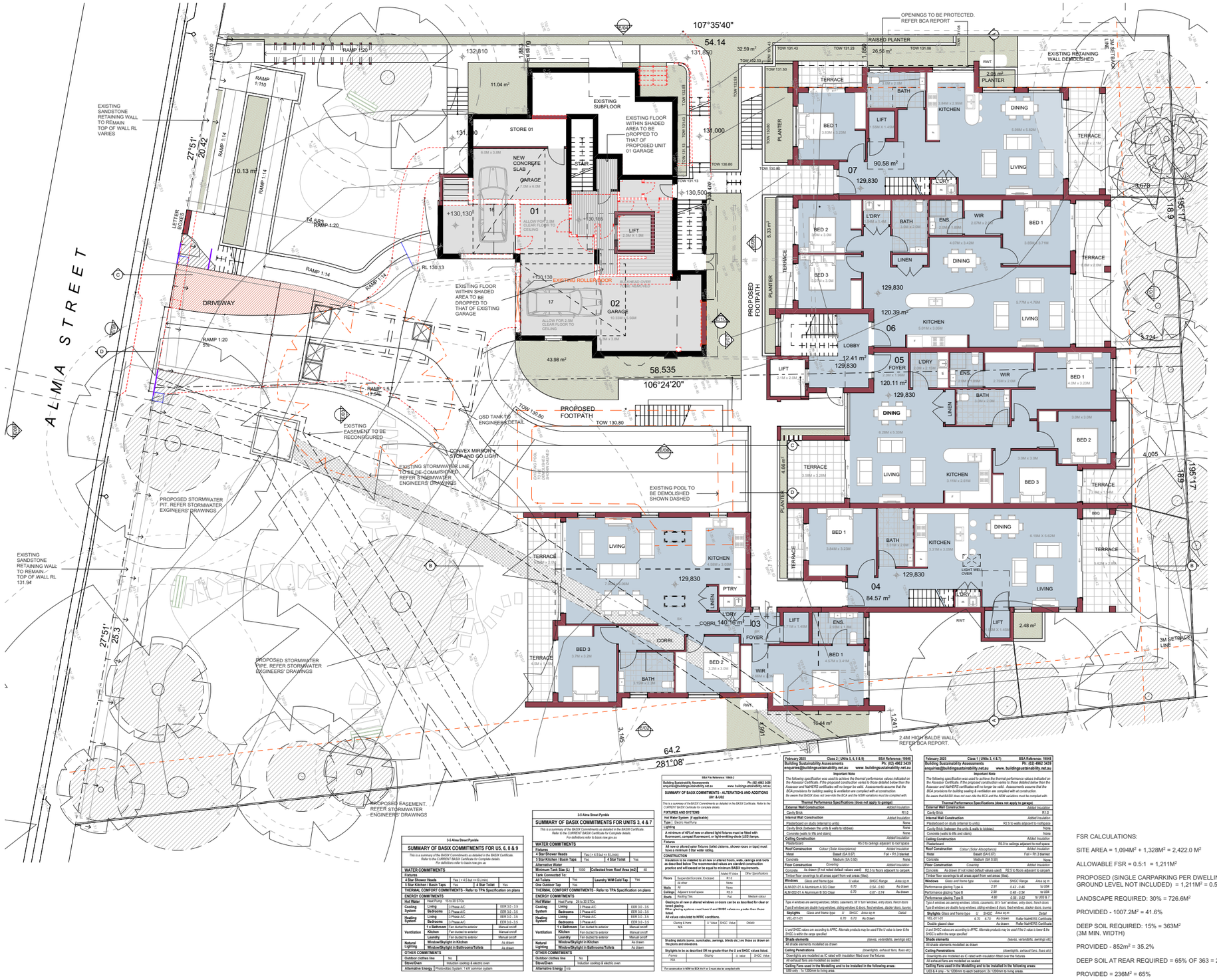
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA04	1:100	
	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



LEGEND -

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE DEMOLISHED
- NEW WALLS
- EXISTING ROOFS TO REMAIN
- NEW ROOFS
- EXISTING WORK NOT CALCULATED FOR FSR
- EXISTING WORKS CALCULATED FOR FSR
- NEW WORKS CALCULATED FOR FSR
- PROPOSED CONCRETE ROOFS / TERRACES
- NEW DRIVEWAY

AREA CALCULATIONS	
UNIT NO	AREA
LOBBY FF	10.06
LOBBY GF	12.41
LOBBY GF 1 & 2	17.94
UNIT 01	116.06
UNIT 02	130.77
UNIT 03 GF	140.16
UNIT 04 FF	60.44
UNIT 04 GF	84.57
UNIT 05	120.11
UNIT 06	120.39
UNIT 07 FF	61.20
UNIT 07 GF	90.58
UNIT 08	125.89
UNIT 09	120.38
	1,210.96 m²

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

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ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

LOWER GROUND FLOOR PLAN

FSR CALCULATIONS:

SITE AREA = 1,094M² + 1,328M² = 2,422.0 M²

ALLOWABLE FSR = 0.5:1 = 1,211M²

PROPOSED (SINGLE CARPARKING PER DWELLING AT GROUND LEVEL NOT INCLUDED) = 1,211M² = 0.5:1

LANDSCAPE REQUIRED: 30% = 726.6M²

PROVIDED - 1007.2M² = 41.6%

DEEP SOIL REQUIRED: 15% = 363M² (3M MIN. WIDTH)

PROVIDED - 852m² = 35.2%

DEEP SOIL AT REAR REQUIRED = 65% OF 363 = 236M²

PROVIDED = 236M² = 65%

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Project No:	2089
Drawing No:	DA05
Date:	AUGUST 2023
Scale:	1:100, 1:1
Date Plotted:	5/05/2025
Issue	D

A1 ORIGINAL SIZE

3-5 Alma Street Pymble

SUMMARY OF BASIX COMMITMENTS FOR U5, 6, 8 & 9

This is a summary of the BASIX Commitments as detailed in the BASIX Certificate. Refer to the CURRENT BASIX Certificate for Complete details. For definitions refer to basix.nsw.gov.au

WATER COMMITMENTS			
Fixtures			
4 Star Shower Heads	Yes (> 4.5 but <= 6 L/min)		
5 Star Kitchen / Basin Taps	Yes	4 Star Toilet	Yes
THERMAL COMFORT COMMITMENTS - Refer to TPA Specification on plans			
ENERGY COMMITMENTS			
Hot Water	Heat Pump	16 to 20 STCs	
Cooling System	Living	3 Phase A/C	EER 3.0 - 3.5
	Bedrooms	3 Phase A/C	EER 3.0 - 3.5
Heating System	Living	3 Phase A/C	EER 3.0 - 3.5
	Bedrooms	3 Phase A/C	EER 3.0 - 3.5
Ventilation	1 x Bathroom	Fan ducted to exterior	Manual on/off
	Kitchen	Fan ducted to exterior	Manual on/off
	Laundry	Fan ducted to exterior	Manual on/off
Natural Lighting	Window/Skylight in Kitchen		As drawn
	Window/Skylight in Bathrooms/Toilets		As drawn
OTHER COMMITMENTS			
Outdoor clothes line	No		
Stove/Oven	Induction cooktop & electric oven		
Alternative Energy	Photovoltaic System: 1 kW common system		

3-5 Alma Street Pymble

SUMMARY OF BASIX COMMITMENTS FOR UNITS 3, 4 & 7

This is a summary of the BASIX Commitments as detailed in the BASIX Certificate. Refer to the CURRENT BASIX Certificate for Complete details. For definitions refer to basix.nsw.gov.au

WATER COMMITMENTS			
Fixtures			
4 Star Shower Heads	Yes (> 4.5 but <= 6 L/min)		
5 Star Kitchen / Basin Taps	Yes	4 Star Toilet	Yes
Alternative Water			
Minimum Tank Size (L)	1000	Collected from Roof Area (m2)	40
Tank Connected To:			
All Toilets	Yes	Laundry W/M Cold Tap	Yes
One Outdoor Tap	Yes		
THERMAL COMFORT COMMITMENTS - Refer to TPA Specification on plans			
ENERGY COMMITMENTS			
Hot Water	Heat Pump	26 to 30 STCs	
Cooling System	Living	3 Phase A/C	EER 3.0 - 3.5
	Bedrooms	3 Phase A/C	EER 3.0 - 3.5
Heating System	Living	3 Phase A/C	EER 3.0 - 3.5
	Bedrooms	3 Phase A/C	EER 3.0 - 3.5
Ventilation	1 x Bathroom	Fan ducted to exterior	Manual on/off
	Kitchen	Fan ducted to exterior	Manual on/off
	Laundry	Fan ducted to exterior	Manual on/off
Natural Lighting	Window/Skylight in Kitchen		As drawn
	Window/Skylight in Bathrooms/Toilets		As drawn
OTHER COMMITMENTS			
Outdoor clothes line	No		
Stove/Oven	Induction cooktop & electric oven		
Alternative Energy	n/a		

BSA FA Reference: 19048-2

Building Sustainability Assessments Ph: (02) 4862 3439
enquiries@buildingsustainability.net.au www. buildingsustainability.net.au

SUMMARY OF BASIX COMMITMENTS - ALTERATIONS AND ADDITIONS UNIT & U02

This is a summary of the BASIX Commitments as detailed in the BASIX Certificate. Refer to the CURRENT BASIX Certificate for complete details.

FIXTURES AND SYSTEMS

Hot Water System (if applicable)

Type | Electric Heat Pump

Lighting

A minimum of 40%of new or altered light fixtures must ie fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.

Fixtures

All new or altered water fixtures (toilet cisterns, shower roses or taps) must have a minimum 3 Star water rating.

CONSTRUCTION

Insulation to be installed to all new or altered floors, walls, ceilings and roofs as described below The recommended values are standard construction practice and will exceed or be equal to minimum BASIX requirements.

		Added R Value	Other Specifications
Floors	Suspended Concrete, Enclosed	R1.0	
	All other	None	
Walls	All	None	
Ceilings	Adjacent to/of space	R3.0	
	Skillion/Tiles	Full	Medium colour

Glazing to all new or altered windows or doors can be as described for clear or tinted glass.
Note: glazing systems must have U and SHGC values no greater than those listed.
All values calculated to NFRC conditions.

Glazing & frame	U Value	SHGC Value	Details
N/A			

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

Shading details (eaves, sunshades, awnings, blinds etc.) are those as drawn on the plans and elevations.

Skylights to be as described OR no greater than the U and SHGC values listed.

Frames	Glazing	U value	SHGC Value
N/A			

For construction in NSW the BCA Vol 2 or J must also be complied with

February 2023 **Class 2 (Units 3, 6, 8 & 9)** **BSA Reference: 19048**

Building Sustainability Assessments Ph: (02) 4862 3439
enquiries@buildingsustainability.net.au www. buildingsustainability.net.au

Important Note

The following specification was used to achieve the thermal performance values indicated on the Assessor Certificate. If the proposed construction varies to those detailed below than the Assessor and NatHERS certificates will no longer be valid. Assessments assume that the BCA provisions for building sealing & ventilation are complied with at construction. Be aware that BASIX does not over-ride the BCA and the NSW variations must be complied with.

Thermal Performance Specifications (does not apply to garage)

		Added Insulation
External Wall Construction		
Cavity Brick		R1.0
Internal Wall Construction		Added Insulation
Plasterboard on studs (internal to units)		None
Cavity Brick (between the units & walls to lobbies)		None
Concrete (walls to lifts and stairs)		None
Ceiling Construction		Added Insulation
Plasterboard		R5.0 to ceilings adjacent to roof space
Roof Construction	Colour: (Solar Absorptance)	Added Insulation
Metal	Basalt (SA 0.67)	Foil + R1.3 blanket
Concrete	Medium (SA 0.50)	None
Floor Construction	Covering	Added Insulation
Concrete	As drawn (if not noted default values used)	R2.5 to floors adjacent to carpark
Timber floor coverings to all areas apart from wet areas (tiles).		

Windows	Glass and frame type	U value	SHGC Range	Area sq m
ALM-001-01 A Aluminium A SG Clear		6.70	0.54 - 0.60	As drawn
ALM-002-01 A Aluminium B SG Clear		6.70	0.67 - 0.74	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, bi-folds

Skylights	Glass and frame type	U	SHGC	Area sq m	Detail
VEL-01-01		6.70	0.70	As drawn	

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

Shade elements	(eaves, verandahs, awnings etc)
All shade elements modelled as drawn	
Ceiling Penetrations	(downlights, exhaust fans, flues etc)
Downlights are modelled as IC rated with insulation fitted over the fixtures	
All exhaust fans are modelled as sealed	
Ceiling Fans used in the Modelling and to be installed in the following areas:	
1200 utility - 1x 1200mm to living area.	

February 2023 **Class 1 (Units 3, 4 & 7)** **BSA Reference: 19048**

Building Sustainability Assessments Ph: (02) 4862 3439
enquiries@buildingsustainability.net.au www. buildingsustainability.net.au

Important Note

The following specification was used to achieve the thermal performance values indicated on the Assessor Certificate. If the proposed construction varies to those detailed below than the Assessor and NatHERS certificates will no longer be valid. Assessments assume that the BCA provisions for building sealing & ventilation are complied with at construction. Be aware that BASIX does not over-ride the BCA and the NSW variations must be complied with.

Thermal Performance Specifications (does not apply to garage)

		Added Insulation
External Wall Construction		
Cavity Brick		R1.0
Internal Wall Construction		Added Insulation
Plasterboard on studs (internal to units)		R2.5 to walls adjacent to roofspace
Cavity Brick (between the units & walls to lobbies)		None
Concrete (walls to lifts and stairs)		None
Ceiling Construction		Added Insulation
Plasterboard		R5.0 to ceilings adjacent to roof space
Roof Construction	Colour: (Solar Absorptance)	Added Insulation
Metal	Basalt (SA 0.67)	Foil + R1.3 blanket
Concrete	Medium (SA 0.50)	None
Floor Construction	Covering	Added Insulation
Concrete	As drawn (if not noted default values used)	R2.5 to floors adjacent to carpark
Timber floor coverings to all areas apart from wet areas (tiles).		

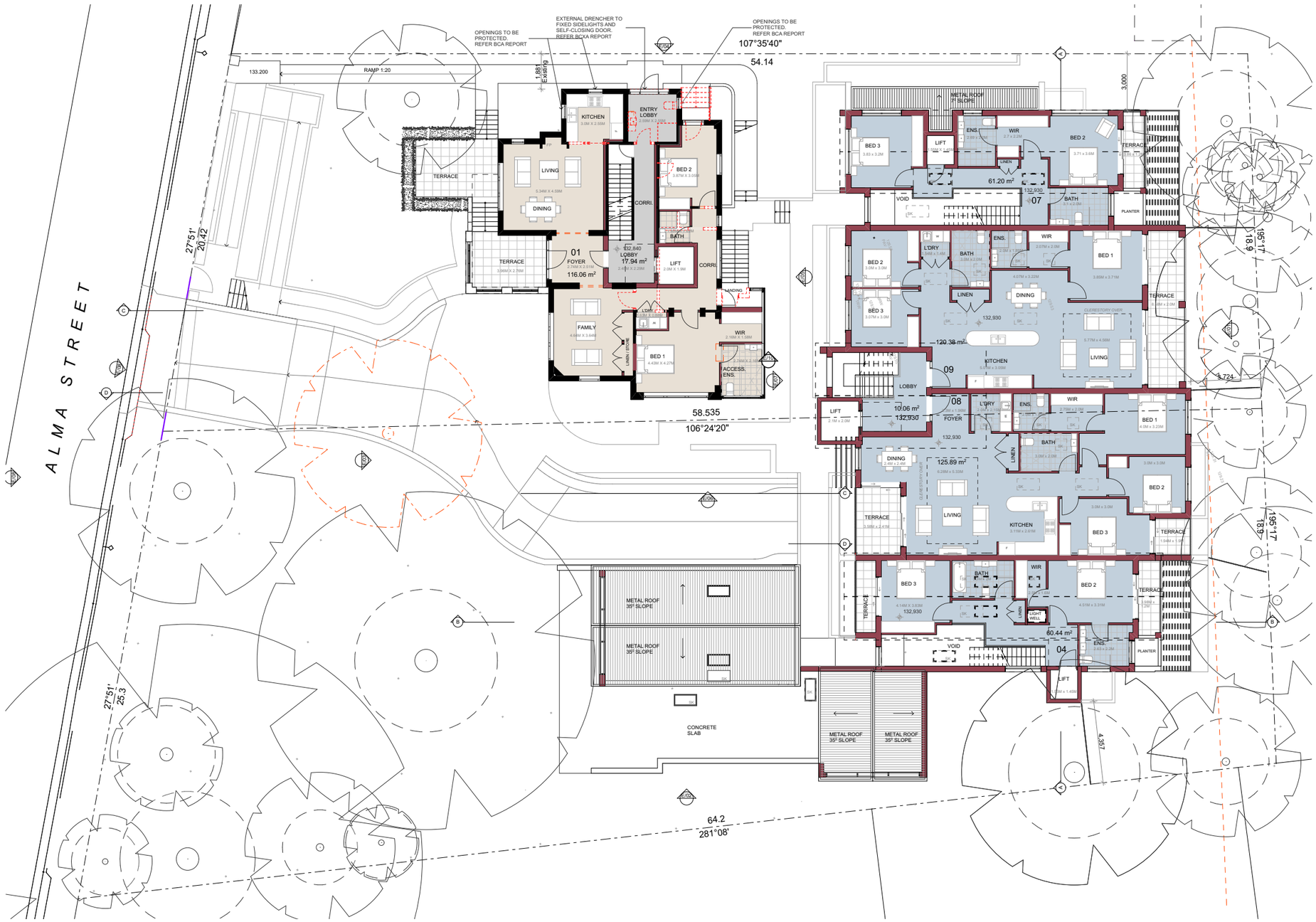
Windows	Glass and frame type	U value	SHGC Range	Area sq m
Performance glazing Type A		2.91	0.42 - 0.46	to U06
Performance glazing Type B		2.90	0.48 - 0.54	to U06
Performance glazing Type B		4.80	0.35 - 0.62	to U05 & 7

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, bi-folds

Skylights	Glass and frame type	U	SHGC	Area sq m	Detail
VEL-01-01		6.70	0.70	As drawn	Refer NatHERS Certificate
Double glazed clear			As drawn	Refer NatHERS Certificate

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

Shade elements	(eaves, verandahs, awnings etc)
All shade elements modelled as drawn	
Ceiling Penetrations	(downlights, exhaust fans, flues etc)
Downlights are modelled as IC rated with insulation fitted over the fixtures	
All exhaust fans are modelled as sealed	
Ceiling Fans used in the Modelling and to be installed in the following areas:	
1200 & 3 only - 1x 1200mm to each bedroom 2x 1200mm to living areas.	



LEGEND -

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE DEMOLISHED
- NEW WALLS
- EXISTING ROOFS TO REMAIN
- NEW ROOFS
- EXISTING WORK NOT CALCULATED FOR FSR
- EXISTING WORKS CALCULATED FOR FSR
- NEW WORKS CALCULATED FOR FSR
- PROPOSED CONCRETE ROOFS / TERRACES
- NEW DRIVEWAY

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

CLAVERTON

GGA
GELDER GROUP ARCHITECTS

Level 2 19-23 Bridge Street PYMBLE NSW 2073 AUSTRALIA
t: (02) 9440 2455 e: info@gelder.com.au w: gelder.com.au
ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

GROUND FLOOR PLAN

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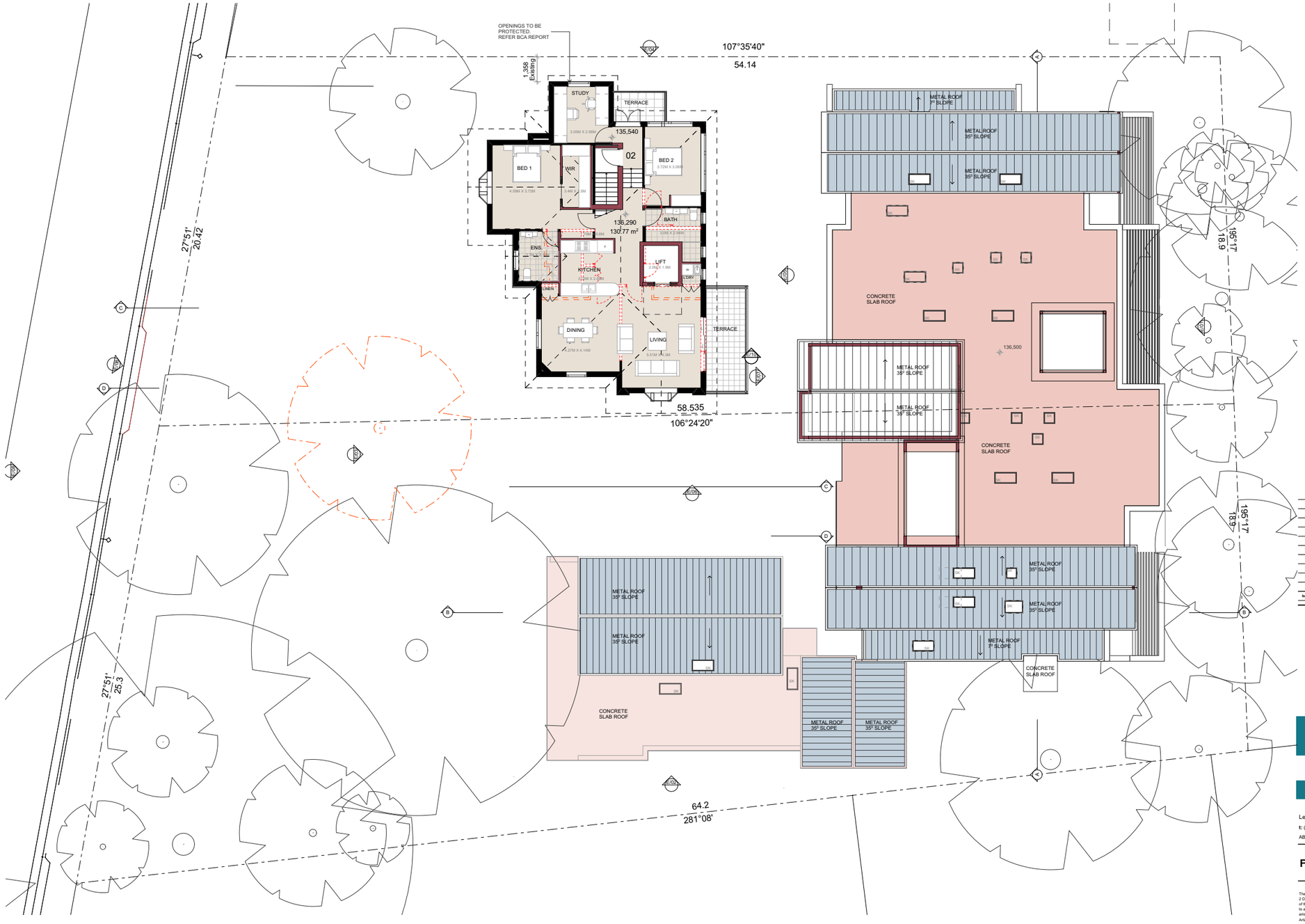
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA06	1:100	
	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



LEGEND -

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE DEMOLISHED
- NEW WALLS
- EXISTING ROOFS TO REMAIN
- NEW ROOFS
- EXISTING WORK NOT CALCULATED FOR FSR
- EXISTING WORKS CALCULATED FOR FSR
- NEW WORKS CALCULATED FOR FSR
- PROPOSED CONCRETE ROOFS / TERRACES
- NEW DRIVEWAY

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

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GELDER GROUP ARCHITECTS

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t: (02) 9440 2455 **e:** info@gelder.com.au **w:** gelder.com.au
ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

FIRST FLOOR PLAN

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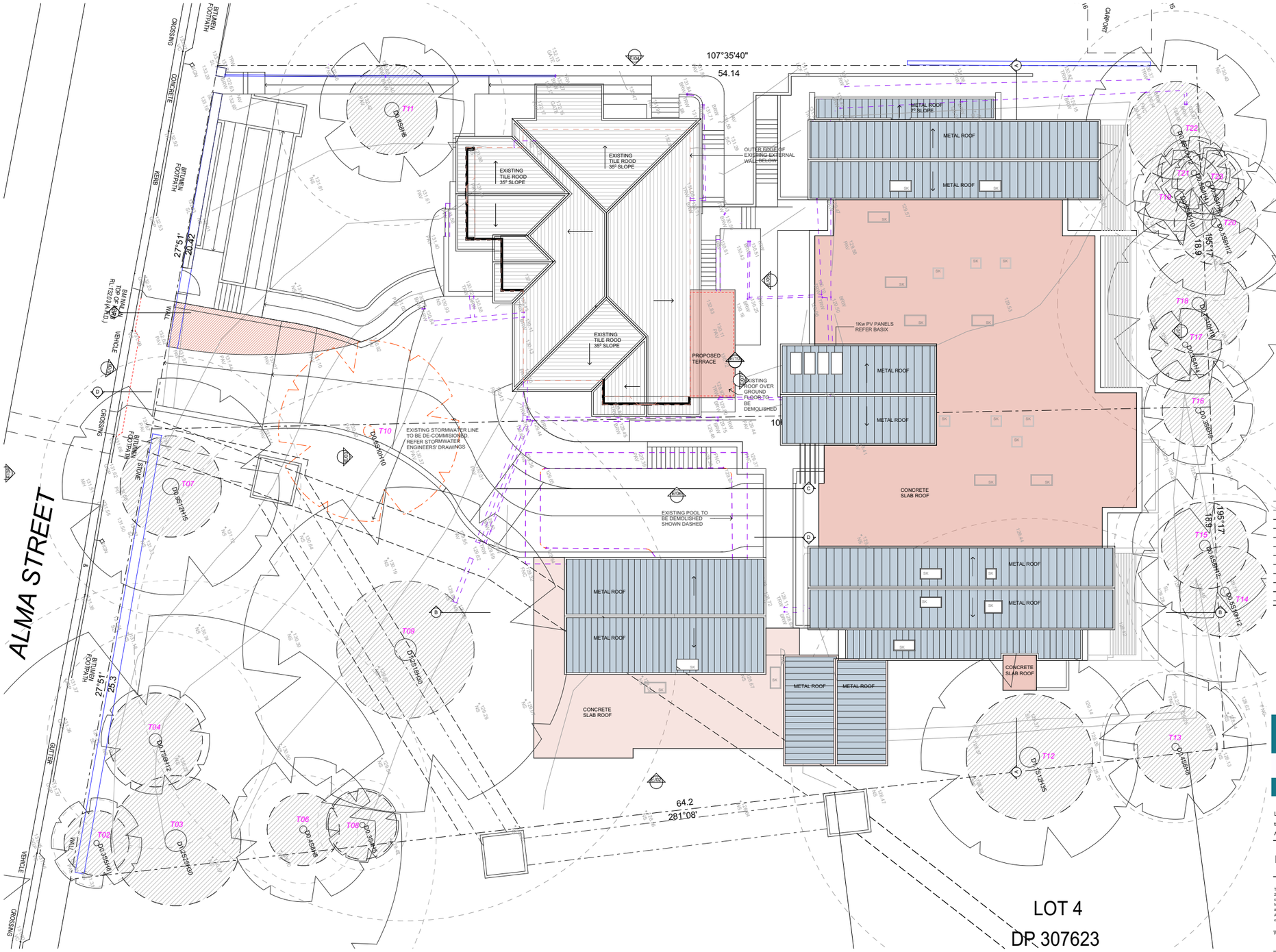
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale: 1:100	
DA07	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE C:\pro\2089 3 - 5 Alma Street, PYMBLE\2-D Plans\1/2D DA_2089 DA 44Ch1 to V22 - 2025.pln



LEGEND -

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE DEMOLISHED
- NEW WALLS
- EXISTING ROOFS TO REMAIN
- NEW ROOFS
- EXISTING WORK NOT CALCULATED FOR FSR
- EXISTING WORKS CALCULATED FOR FSR
- NEW WORKS CALCULATED FOR FSR
- PROPOSED CONCRETE ROOFS / TERRACES
- NEW DRIVEWAY

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

CLAVERTON

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ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

ROOF PLAN

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Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA08	1:100	
	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



SOUTH ELEVATION
1:100

EXTERNAL FINISHED SCHEDULE -

- WALLS - RENDER PAINT C1 DULUX 'EAVES - S18D2'
- WALLS - RENDER PAINT C1 DULUX 'OLIVE LEAF - S19C5'
- STONE CLADDING - ECOOUTDOORS 'RANDOM ASHLAR - APOLLO'
- ROOF - LYSAGHT WIDE PAN 'ENSEAM 465' COLORBOND 'BASALT'
- DOORS AND WINDOWS - FRAME - POWDERCOAT DURALLOY 'BASALT SATIN - 2727865S'; SASHES AND CASINGS - DURALLOY 'WHITE SATIN 2721139S
- EXISTING BRICKWORK
- EXISTING TIMBER CLADDING PAINT FINISH
- EXISTING WINDOWS
- EXISTING TERRACOTTA ROOF TILES



EAST ELEVATION
1:100



WEST ELEVATION
1:100

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

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ELEVATIONS - 1

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Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA09	1:100	
	Date Plotted: 5/05/2025	

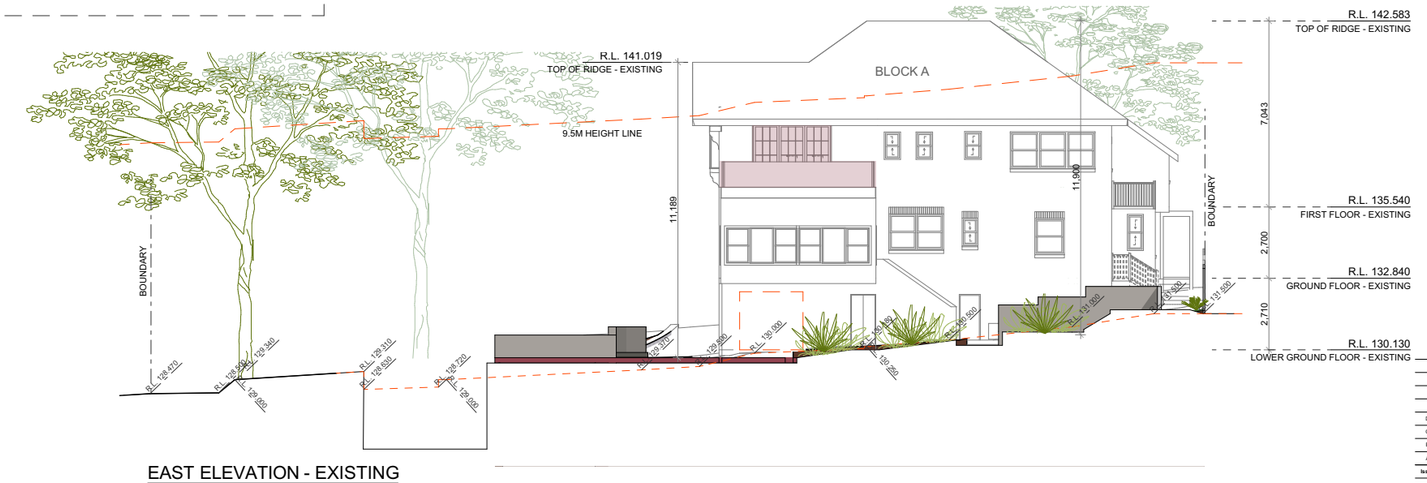
A1 ORIGINAL SIZE



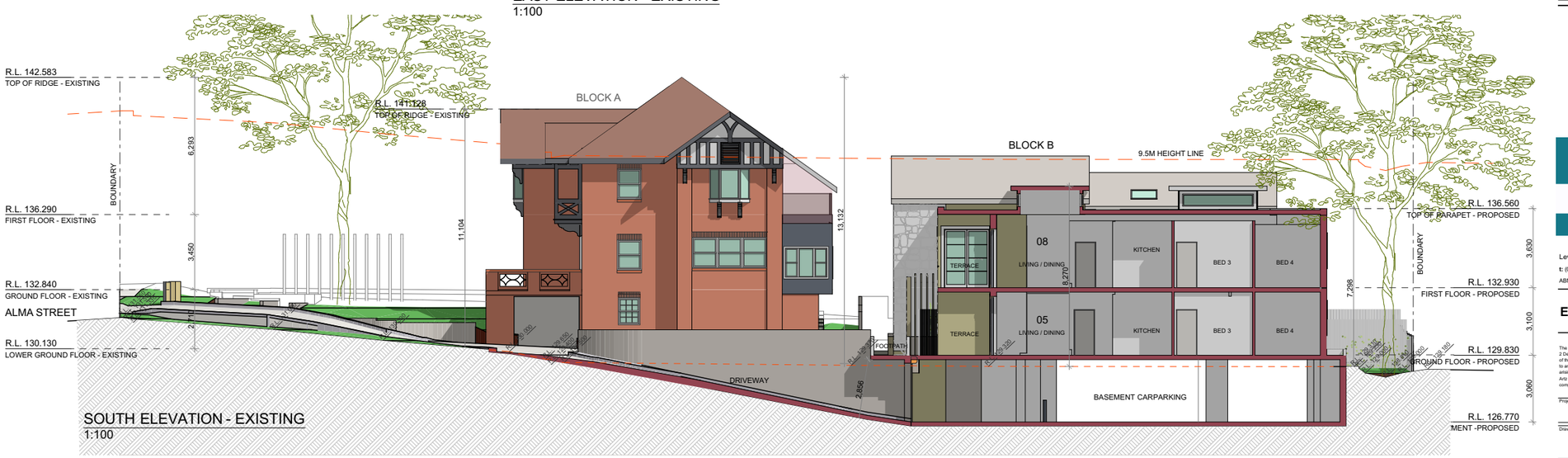
NORTH ELEVATION
1:100

EXTERNAL FINISHED SCHEDULE -

- WALLS - RENDER PAINT C1 DULUX 'EAVES - S18D2'
- WALLS - RENDER PAINT C1 DULUX 'OLIVE LEAF - S19C5'
- STONE CLADDING - ECOOUTDOORS 'RANDOM ASHLAR - APOLLO'
- ROOF - LYSAGHT WIDE PAN 'ENSEAM 465' COLORBOND 'BASALT'
- DOORS AND WINDOWS - FRAME - POWDERCOAT DURALLOY 'BASALT SATIN - 272786SS' SASHES AND CASINGS - DURALLOY 'WHITE SATIN 2721139S
- EXISTING BRICKWORK
- EXISTING TIMBER CLADDING PAINT FINISH
- EXISTING WINDOWS
- EXISTING TERRACOTTA ROOF TILES



EAST ELEVATION - EXISTING
1:100



SOUTH ELEVATION - EXISTING
1:100

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

CLAVERTON

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GELDER GROUP ARCHITECTS

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t: (02) 9440 2455 e: info@gelder.com.au w: gelder.com.au
ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

ELEVATIONS - 2

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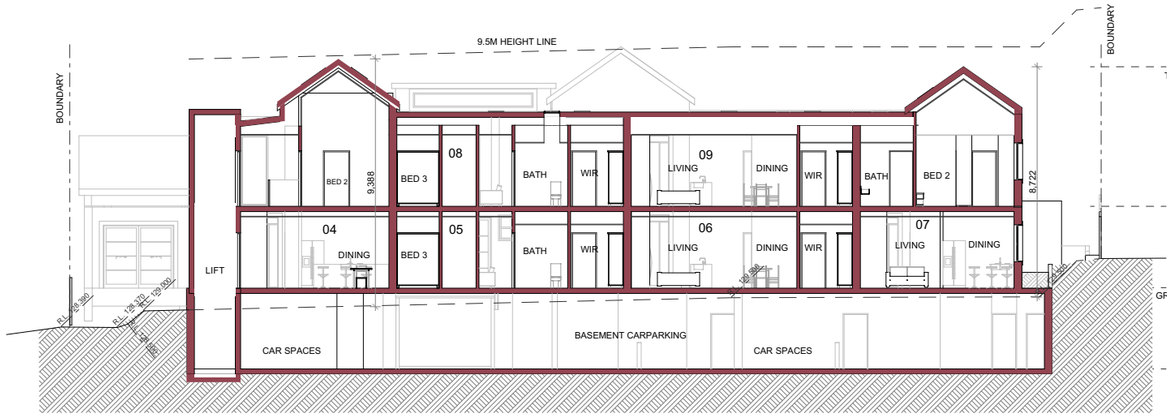
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA10	1:100	
	Date Plotted: 5/05/2025	

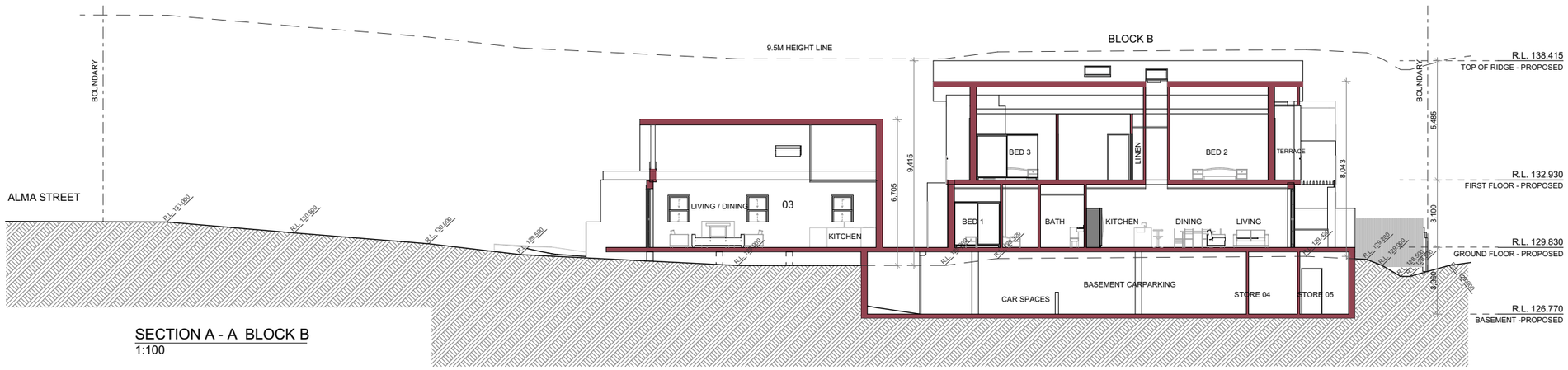
A1 ORIGINAL SIZE



WEST ELEVATION - BLOCK B
1:100



SECTION A - A BLOCK B
1:100



SECTION A - A BLOCK B
1:100

EXTERNAL FINISHED SCHEDULE -

- WALLS - RENDER PAINT C1 DULUX 'EAVES - S18D2'
- WALLS - RENDER PAINT C1 DULUX 'OLIVE LEAF - S19C5'
- STONE CLADDING - ECOOUTDOORS 'RANDOM ASHLAR - APOLLO'
- ROOF - LYSAGHT WIDE PAN 'ENSEAM 465' COLORBOND 'BASALT'
- DOORS AND WINDOWS - FRAME - POWDERCOAT DURALLOY 'BASALT SATIN - 27278655' SASHES AND CASINGS - DURALLOY 'WHITE SATIN 2721139S
- EXISTING BRICKWORK
- EXISTING TIMBER CLADDING PAINT FINISH
- EXISTING WINDOWS
- EXISTING TERRACOTTA ROOF TILES

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

CLAVERTON

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t: (02) 9440 2455 e: info@gelder.com.au w: gelder.com.au
ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

ELEVATION + SECTIONS

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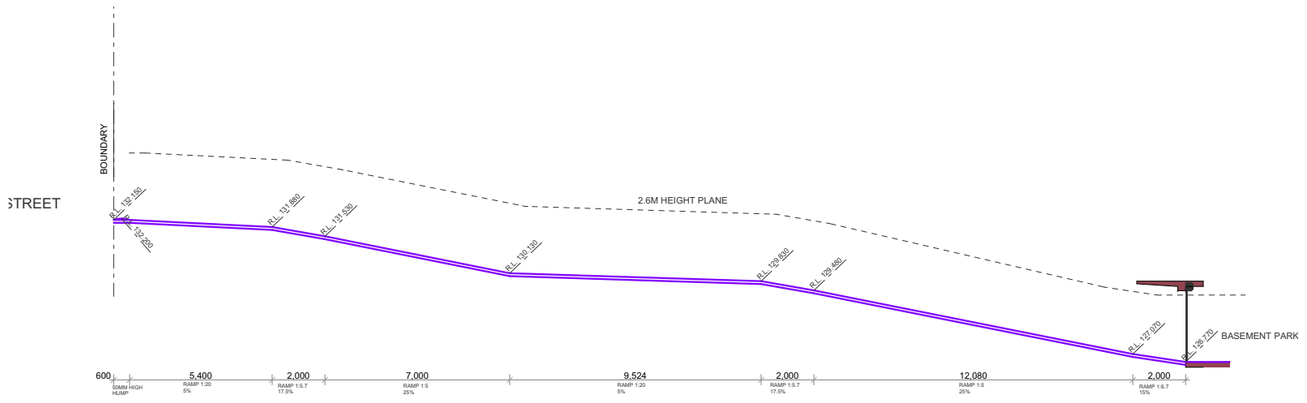
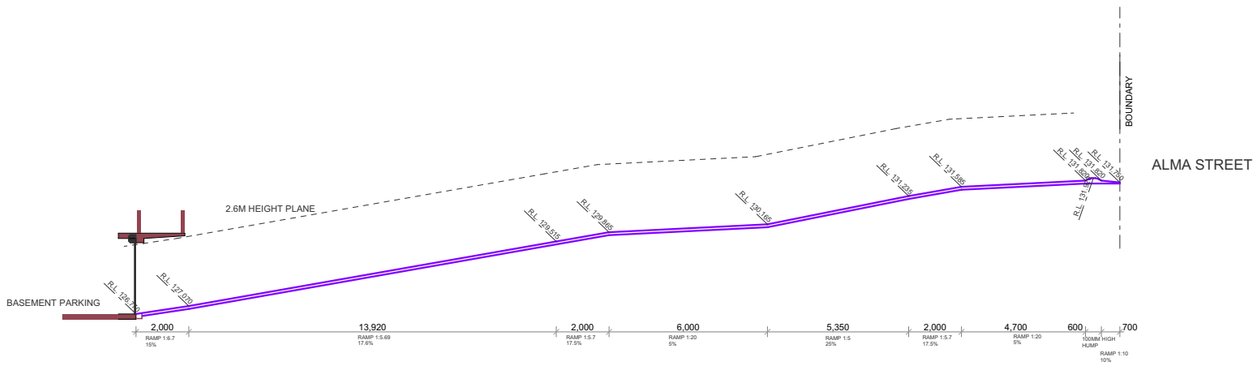
Project No: 2089
Date: AUGUST 2023
Drawing No: DA11
Scale: 1:100
Date Plotted: 5/05/2025
Issue: D

A1 ORIGINAL SIZE



SECTION C-C DRIVEWAY RAMP NORTH EDGE
1:100



SECTION D-D DRIVEWAY RAMP SOUTH EDGE
1:100



ELEVATION TO ALMA STREET - FRONT FENCE DETAIL
1:100

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

CLAVERTON

GGA
GELDER GROUP ARCHITECTS

Level 2 19-23 Bridge Street PYMBLE NSW 2073 AUSTRALIA
t: (02) 9440 2455 **e:** info@gelder.com.au **w:** gelder.com.au
ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

DRIVEWAY RAMP SECTIONS & STREET ELEVATION

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Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA12	1:100	
	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



EXISTING SHADOW DIAGRAM JUNE 21 9AM
1:500



EXISTING SHADOW DIAGRAM JUNE 21 9AM
1:500



EXISTING SHADOW DIAGRAM JUNE 21 3PM
1:500



SHADOW DIAGRAM JUNE 21 9AM
1:500



SHADOW DIAGRAM JUNE 21 12 NOON
1:500



SHADOW DIAGRAM JUNE 21 3PM
1:500



SHADOW DIAGRAM MARCH 21 9AM
1:500



SHADOW DIAGRAM MARCH 21 12 NOON
1:500



SHADOW DIAGRAM MARCH 21 3PM
1:500

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

CLAVERTON

GGA
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t: (02) 9440 2455 e: info@gelder.com.au w: gelder.com.au
ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

SHADOW DIAGRAMS JUNE 21 & MARCH 21

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Project No:	2089	Date: AUGUST 2023	Issue: D
Drawing No:	DA13	Scale: 1:500	
		Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE Graphic\2089 3 - 5 Alma Street, Pymble\2-23 Plans\CD Set\2089 DA ARCH-ver VCD - 2025.pln



SOLAR ACCESS - JUNE 21 9AM



SOLAR ACCESS - JUNE 21 10AM

APPENDIX: VIEWS FROM THE SUN

The table has been reproduced from referencing to hourly views of solar access projections on June 21st as shown. The projections were prepared by Gelder Group Architects office from a 3d digital model using ArchiCAD v22 software.

SOLAR STUDY - EXTERNAL LIVING AREAS - (PRIVATE OPEN SPACES)

	9AM	10AM	11AM	12PM	1PM	2PM	3PM	MIMINUM 2 HOURS
UNIT 01	√	√	√	√	√	√	√	√
UNIT 02	√	√	√	X	X	X	X	√
UNIT 03	X	X	X	√	√	√	√	√
UNIT 04	√	√	√	X	X	X	X	√
UNIT 05	X	X	√	X	X	√	√	√
UNIT 06	√	√	√	X	X	X	X	√
UNIT 07	√	√	√	√	√	√	√	√
UNIT 08	√	√	√	√	√	√	√	√
UNIT 09	√	√	√	X	X	X	X	√

9 OUT OF 9 (100%) UNITS ACHIEVE 2 HOURS SOLAR ACCESS TO THE EXTERNAL LIVING AREAS ON JUNE 21 BETWEEN 9AM AND 3PM



SOLAR ACCESS - JUNE 21 11AM



SOLAR ACCESS - JUNE 21 12NOON

SOLAR STUDY - INTERNAL LIVING AREAS

	9AM	10AM	11AM	12PM	1PM	2PM	3PM	MIMINUM 2 HOURS
UNIT 01	√	√	√	√	√	√	√	√
UNIT 02	X	X	X	√	√	√	√	√
UNIT 03	X	X	√	√	√	√	√	√
UNIT 04	X	X	X	X	√	√	√	√
UNIT 05	X	X	X	X	X	√	√	X
UNIT 06	√	X	X	X	X	X	X	X
UNIT 07	X	√	√	√	√	√	√	√
UNIT 08	√	X	X	X	√	√	√	√
UNIT 09	√	√	√	√	√	√	√	√

7 OUT OF 9 (78%) UNITS ACHIEVE 2 HOURS SOLAR ACCESS TO THE INTERNAL LIVING AREAS ON JUNE 21 BETWEEN 9AM AND 3PM



SOLAR ACCESS - JUNE 21 1PM



SOLAR ACCESS - JUNE 21 2PM



SOLAR ACCESS - JUNE 21 3PM

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

CLAVERTON

GGA
GELDER GROUP ARCHITECTS

Level 2 19-23 Bridge Street PYMBLE NSW 2073 AUSTRALIA
t: (02) 9440 2455 e: info@gelder.com.au w: gelder.com.au
ABN 48 090 878 827 NSW ARB REG ARCHITECT: GELDER # 6126

SOLAR ACCESS

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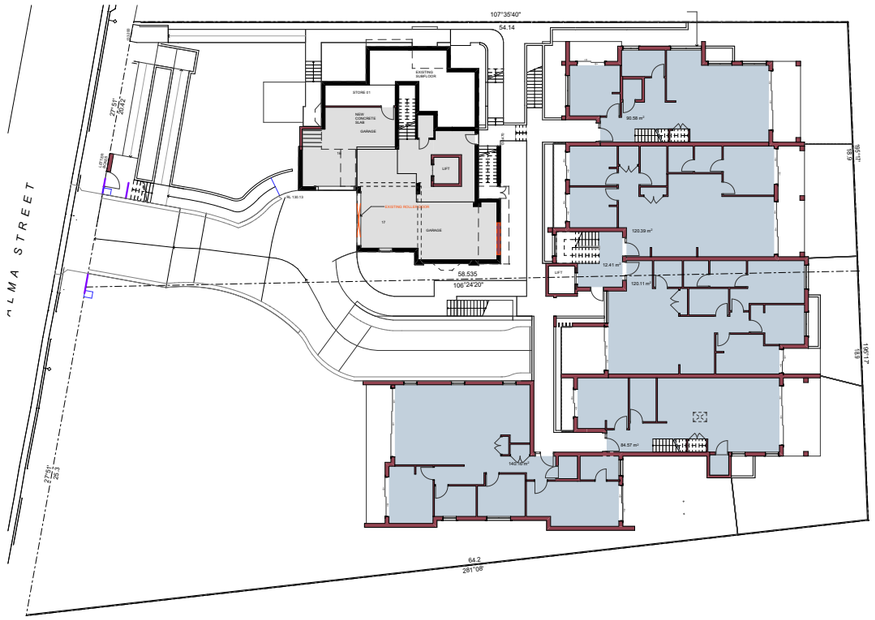
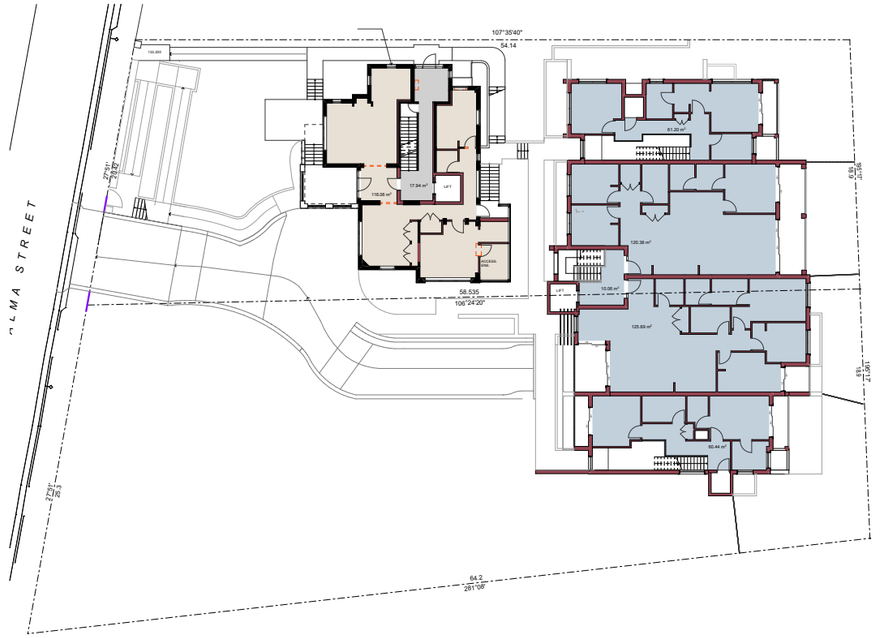
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA14	Date Plotted: 5/05/2025	

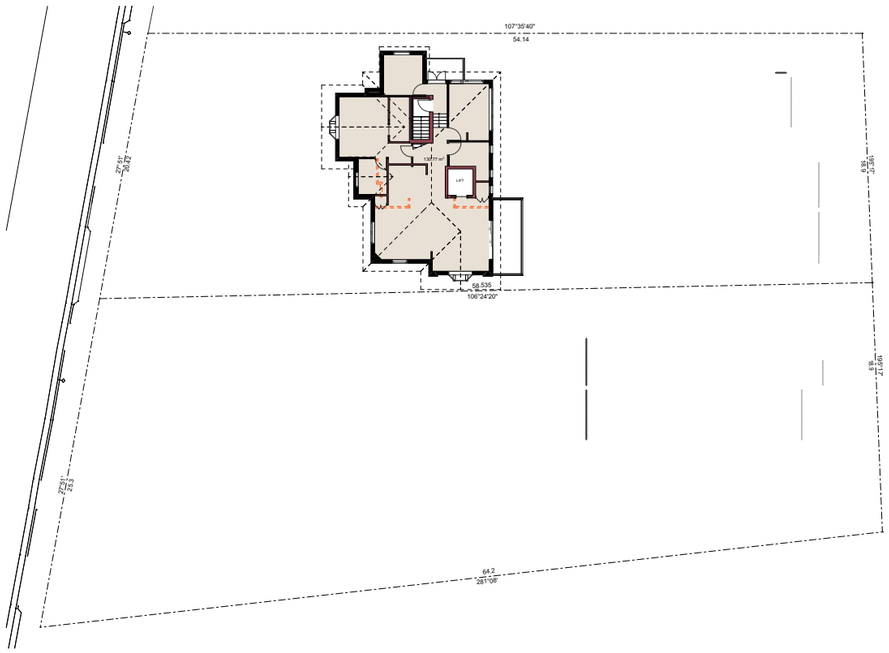
A1 ORIGINAL SIZE



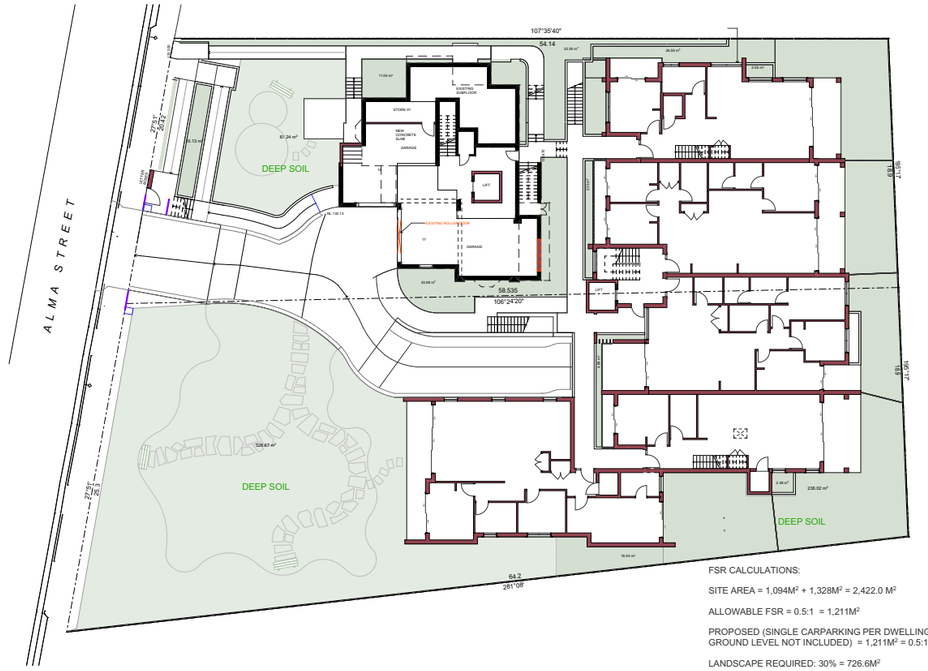
FSR CALCULATION - LOWER GOUND FLOOR
1:200



FSR CALCULATION - GOUND FLOOR
1:200



FSR CALCULATION - FIRST FLOOR
1:200



FSR CALCULATIONS:

SITE AREA = 1,094M² + 1,328M² = 2,422.0 M²

ALLOWABLE FSR = 0.5:1 = 1,211M²

PROPOSED (SINGLE CARPARKING PER DWELLING AT GROUND LEVEL NOT INCLUDED) = 1,211M² = 0.5:1

LANDSCAPE REQUIRED: 30% = 726.6M²

PROVIDED - 1007.2M² = 41.6%

DEEP SOIL REQUIRED: 15% = 363M²
(3M MIN. WIDTH)

PROVIDED - 852m² = 35.2%

DEEP SOIL AT REAR REQUIRED = 65% OF 363 = 236M²

PROVIDED = 236M² = 65%

LEGEND -

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE DEMOLISHED
- NEW WALLS
- EXISTING ROOFS TO REMAIN
- NEW ROOFS
- EXISTING WORK NOT CALCULATED FOR FSR
- EXISTING WORKS CALCULATED FOR FSR
- NEW WORKS CALCULATED FOR FSR
- PROPOSED CONCRETE ROOFS / TERRACES
- NEW DRIVEWAY

AREA CALCULATIONS	
UNIT NO	AREA
LOBBY FF	10.06
LOBBY GF	12.41
LOBBY GF 1 & 2	17.94
UNIT 01	116.06
UNIT 02	130.77
UNIT 03 GF	140.16
UNIT 04 FF	60.44
UNIT 04 GF	84.57
UNIT 05	120.11
UNIT 06	120.39
UNIT 07 FF	61.20
UNIT 07 GF	90.58
UNIT 08	125.89
UNIT 09	120.38
	1,210.96 m²

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT
at
3 - 5 ALMA STREET, PYMBLE NSW 2073
for
CLAVERTON

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AREA CALCULATIONS

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Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA15	1:200, 1:1, 1:100	
	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE

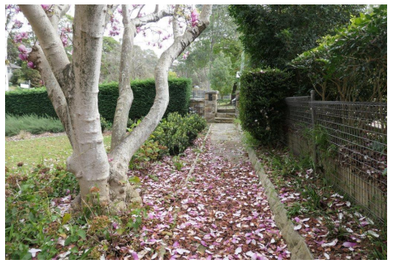


STREET VIEW LOOKING TOWARDS





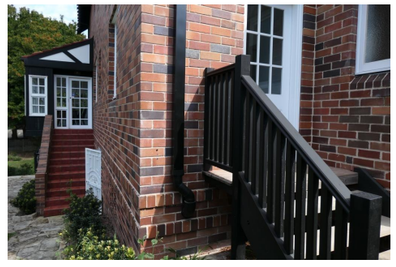






























D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023
Issue	**Amendment**	**Date**

PROPOSED SENIOR LIVING DEVELOPMENT

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SITE PHOTOS

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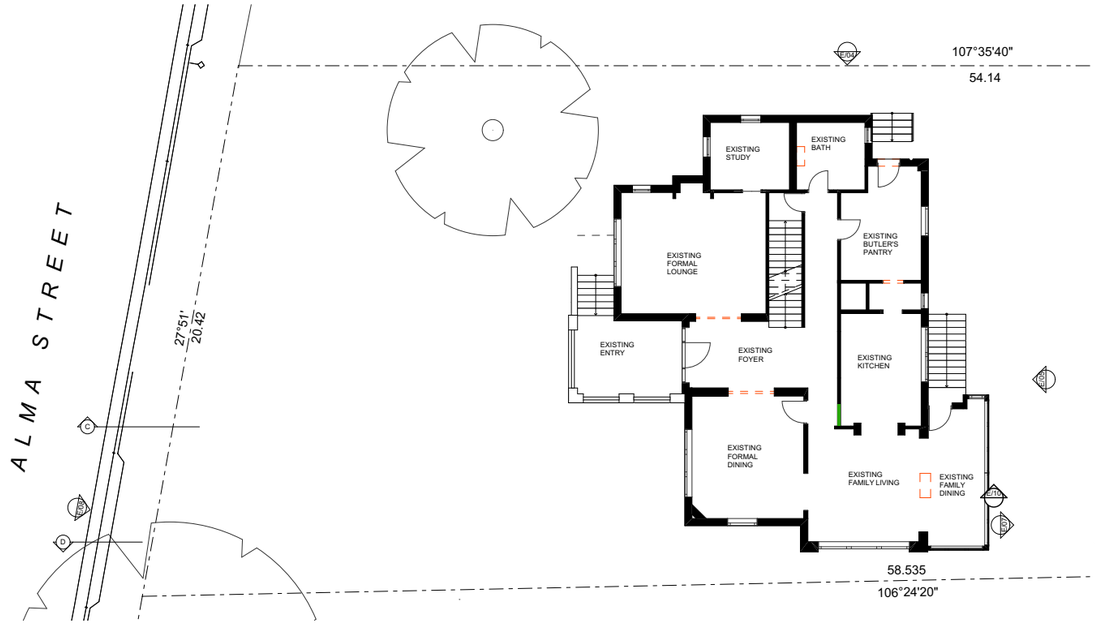
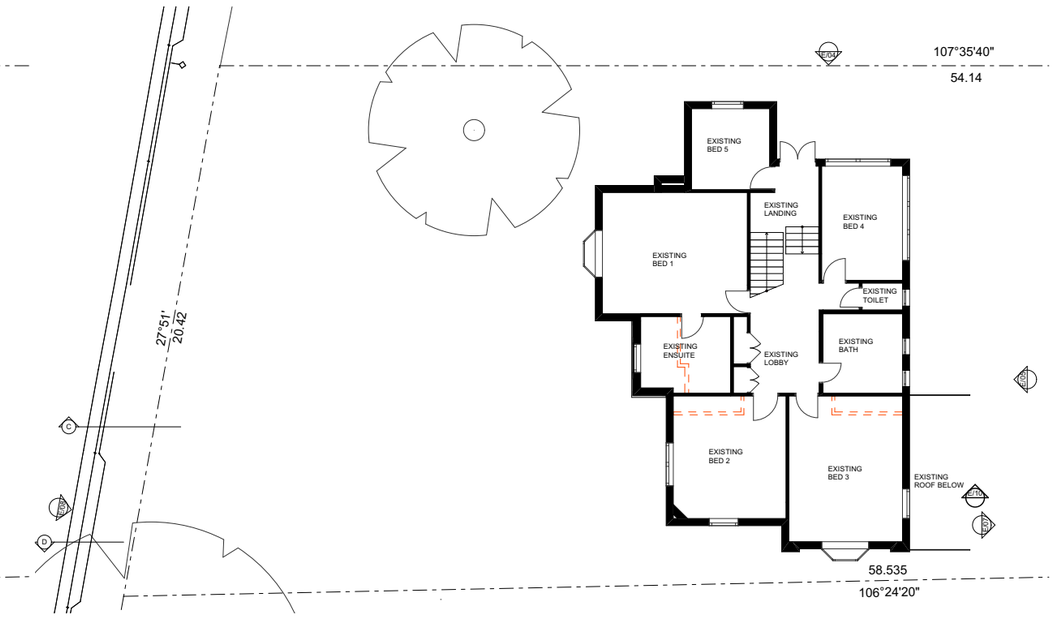
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA16	Date Plotted: 5/05/2025	

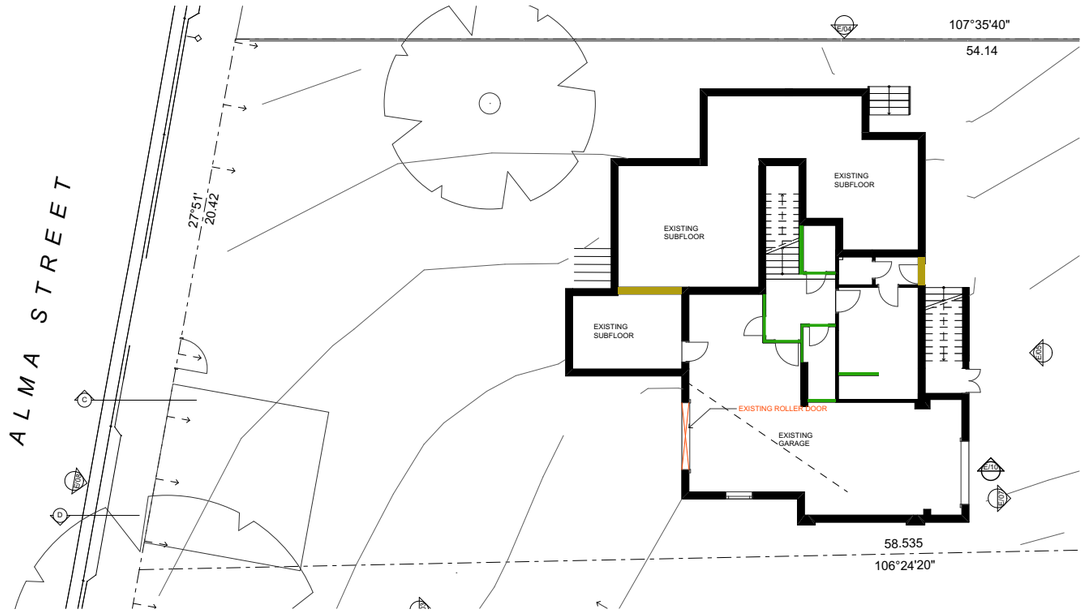
A1 ORIGINAL SIZE Date:Fri,2025 2 3 Alma Street PYmble,D Rev:D,D Del,2089 DA AR



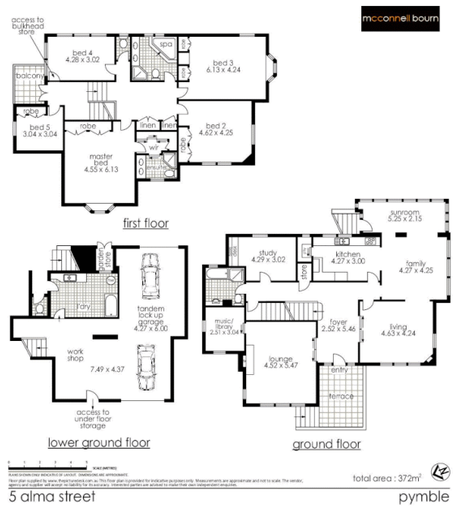
GROUND FLOOR PLAN



FIRST FLOOR PLAN



LOWER GROUND FLOOR PLAN



FLOOR PLANS 2011
NOT TO SCALE
SOURCE: DOMAIN.COM.AU

LEGEND -

- ORIGINAL WALLS
- ORIGINAL WALLS DEMOLISHED
- ALTERATIONS AND ADDITIONS SINCE 2011 NEW PLASTERBOARD LINED STUD WALLS
- ALTERATIONS AND ADDITIONS SINCE 2011 NEW MASONARY WALLS. FACEBRICK TO MATCH EXISTING TO EXTERNAL.

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
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EVOLUTIONARY PLANS - EXISTING

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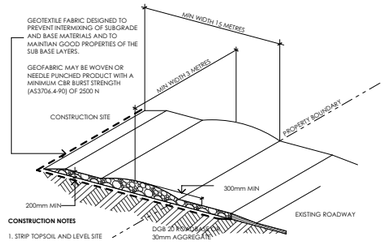
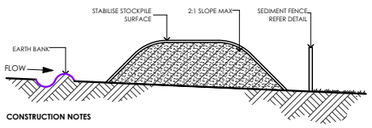
Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA17	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



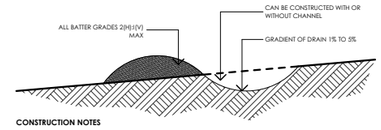
CONSTRUCTION NOTES

1. STRIP TOPSOIL AND LEVEL SITE
2.COMPACT SUBGRADE
3.COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
4.CONSTRUCT 200mm THICK PAD OVER GEOTEXTILED USING ROADBASE OR 30mm AGGREGATE. MINIMUM LENGTH 15m OR TO BUILDING ALIGNMENT. MINIMUM WIDTH 3m.
5.CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO IVERT WATER TO A SEDIMENT FENCE OR OTHER TRAP



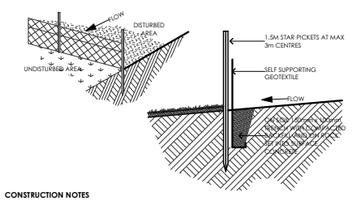
CONSTRUCTION NOTES

1. WHERE POSSIBLE LOCATE STOCKPILE AT LEAST 5 METERS FROM EXISITNG VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS
2.CONSTRUCT ON THE CONTOUR AS A LOW FLAT ELONGATED MOUND
3.WHERE THERE IS SUFFICIENT AREA TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT
4.REHABILATATE IN ACCORDANCE WITH SWMP/ESCP
5.CONSTRUCT EARTH BANK ON THE UPSLOPE SIDE TO DIVERT RUNOFF AROUND THE STOCK PILE AND A SEDIMENT FENCE 1 TO 2m DOWNSLOPE OF THE STOCKPILE



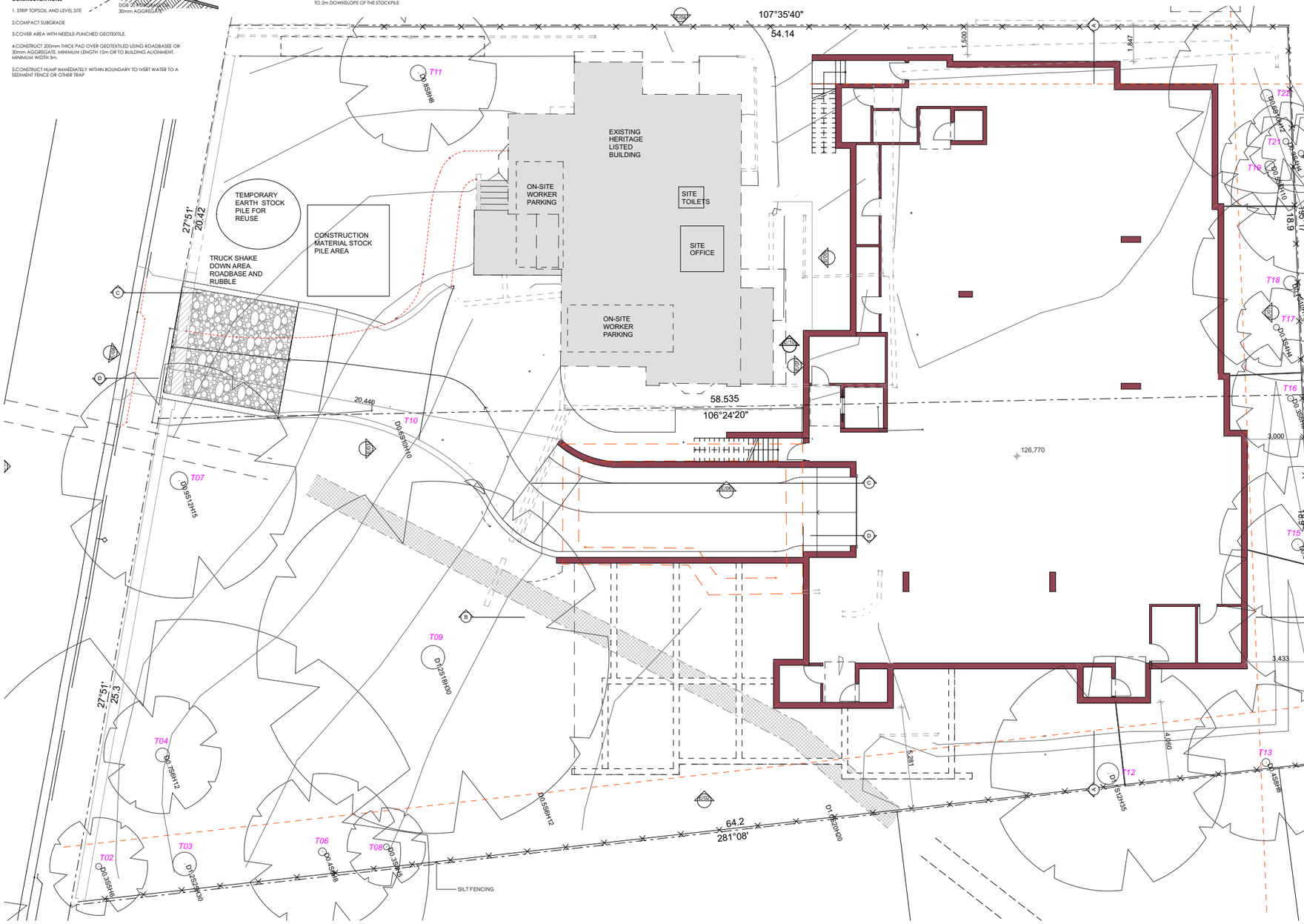
CONSTRUCTION NOTES

1.CONSTRUCT WITH A GRADIENT OF 1% TO 5%
2.AVOID REMOVING TREES AND SHRUBS IF POSSIBLE
3.DRAINS TO BE CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTION NOT v SHAPED
4.EARTH BANKS TO BE ADEQUATELY COMPACTED IN ORDER TO PREVENT FAILURE
5.PERMANENT OR TEMPORARY STABILISATION OF THE EARTH BANK TO BE COMPLETED WITHIN 10 DAYS OF CONSTRUCTION
6.ALL OUTLETS FROM DISTURBED LANDS ARE TO FEED INTO A SEDIMENT BASIN OR SIMILAR
7.DISCHARGE RUNOFF COLLECTED FROM UNDISTURED LANDS ONTO EITHER A STABILISED OR AN UNDISTURBED DISPOSAL SITE WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED.
8.COMPACT BANK WITH A SUITABLE IMPLEMENT IN SITUATIONS WHERE THEY ARE REQUIRED TO FUNCTION FOR MORE THAN FIVE DAYS.
9.EARTH BANKS TO BE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT WILL IMPEDE NORMAL FLOW



CONSTRUCTION NOTES

1.CONSTRUCTION SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARRALLEL TO THE CONTOURS OF THE SITE
2.DRIVE 1.5m LONG STAR PICKETS INTO GROUND 2.5m APART (MAX)
3.DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
4.FIX SELF-SUPPORTING GOOTEXTILE TO THE UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
5.JOIN SECTION OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6.BACKFILL THE TRENCHOVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE



Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

PROPOSED SENIOR LIVING DEVELOPMENT

at

3 - 5 ALMA STREET, PYMBLE NSW 2073

for

CLAVERTON

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ENVIRONMENTAL SITE MANAGEMENT PLAN

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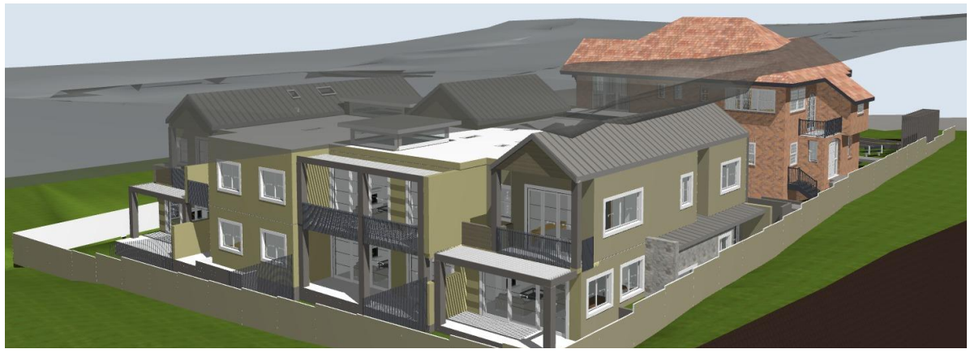
Project No: 2089	Date: AUGUST 2023	Issue: D
Drawing No: DA18	Scale:	
	Date Plotted: 5/05/2025	

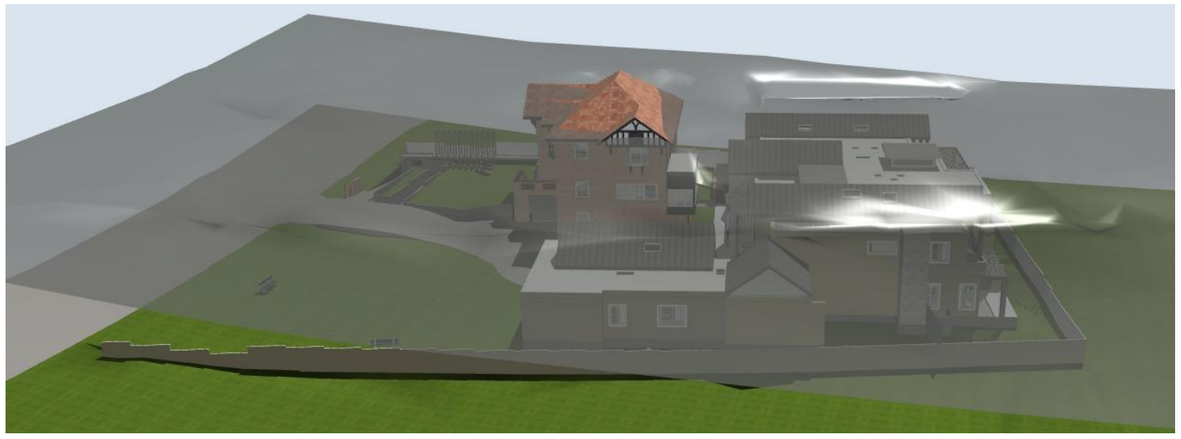
A1 ORIGINAL SIZE



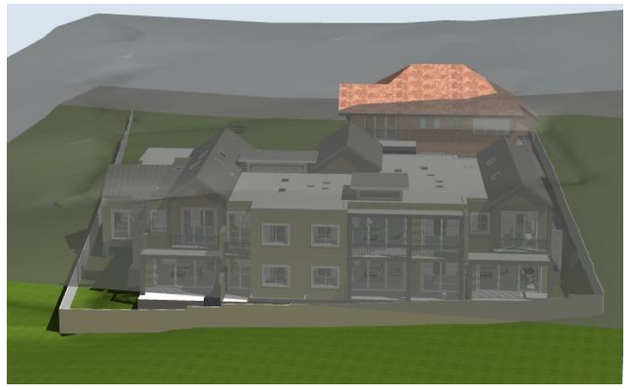
EXISTING HERITAGE DWELLING ABOVE 9.5M HEIGHT PLANE



9.5M HEIGHT PLANE OVER PROPOSED DEVELOPMENT



9.5M HEIGHT PLANE OVER PROPOSED DEVELOPMENT



9.5M HEIGHT PLANE OVER PROPOSED DEVELOPMENT



9.5M HEIGHT PLANE OVER PROPOSED DEVELOPMENT

ALL PROPOSED STRUCTURES WITHIN 9.5M HEIGHT PLANE

Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

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HEIGHT PLANE DIAGRAMS

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Project No:	Date:	Issue
2089	AUGUST 2023	D
Drawing No:	Scale:	
DA19	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



Issue	Amendment	Date
D	DA ISSUE	05.05.2025
C	DA ISSUE	12.02.2025
B	CONSULTANT ISSUE	12.01.2024
A	PRELIMINARY CONSULTANT ISSUE	15.12.2023

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EXCAVATION PLAN - TPZ

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Project No: 2089	Date: AUGUST 2023	Issue: D
Drawing No: **DA20**	Scale: 1:100	
	Date Plotted: 5/05/2025	

A1 ORIGINAL SIZE



Existing trees as per Arborist Report

Proposed Deciduous tree

Private terraces

Stone walls

Privacy screen

Proposed evergreen trees

Turfed lawn areas

Common open space paving

Retaining Walls

Amendments

D	14.5.25	
C	7.3.25	--
B	6.2.24	--
A	15.1.24	DA review

PAUL SCRIVENER LANDSCAPE

PO Box 4050. ACT 2602
ABN: 16 949 100 279
Phone: 02 9907 8011
www.scrivener-design.com
Email: paul@scrivener-design.com

Project: Senior Living Develpment at 3-5 alma street, Pymble NSW 2073

DWG: Landscape site plan

Date: 14.5.25 Scale: 1:100 @A1

Job Ref: 2617/23

Builder must verify all dimensions of the site before work commences
Figured dimensions should be used in preference to those scaled off

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NORTH

1 of 5 DA ISSUE-D

Detail plan 1:150 @ A1

0 1 2 3 4 5 10

Note: 'Ground floor' above shown here

Ex. ground floor level R.L 131.43

Unit 1 George entry below ground floor terrace

Modify end of ex. stone wall to match existing. Install new gate.

Maintain ex. ground levels & landscape character

Timber seating bench in garden

Stepping stones in grass at existing ground level.

Existing embankment / wall. Maintain ex. ground levels unchanged.

Existing embankment / wall. Maintain ex. ground levels unchanged.

Terrace R.L 131.60

Terrace R.L 132.64

Garage 1 R.L 130.13

Garage 2 R.L 130.13

Lift

ramp 1:14

Unit 7 R.L 129.83

Unit 6 R.L 129.83

Unit 5 R.L 129.83

Unit 4 R.L 129.83

Unit 3 R.L 129.83

2 Detail # (See sheet 5 for details)

4 Existing trees to be retained (Refer to Arborists report)

Garden soil (See detail 6 sheet 5)

Turfed area (See detail 7 sheet 5)

Raised planter (See detail 5 sheet 5)

Arborist: Tree survey
Version 1. Dated 13 October 2023

Stormwater Engineer:
ACCOR Engineers.
Ref: CC230201. Dated: 21.11.2023

Amendments

D	14.5.25	
C	7.3.25	--
B	6.2.24	--
A	15.1.24	DA review

PAUL SCRIVENER LANDSCAPE

PO Box 4050. ACT 2602
ABN: 16 949 100 279
Phone: 02 9907 8011
www.scrivener-design.com
Email: paul@scrivener-design.com

Project: Senior Living Develpment at 3-5 alma street, Pymble NSW 2073

DWG: Detail plan

Date: 14.5.25 Scale: 1:150 @A1

Job Ref: 2617/23

NORTH

2 of 5
DA
ISSUE-D

Builder must verify all dimensions of the site before work commences.
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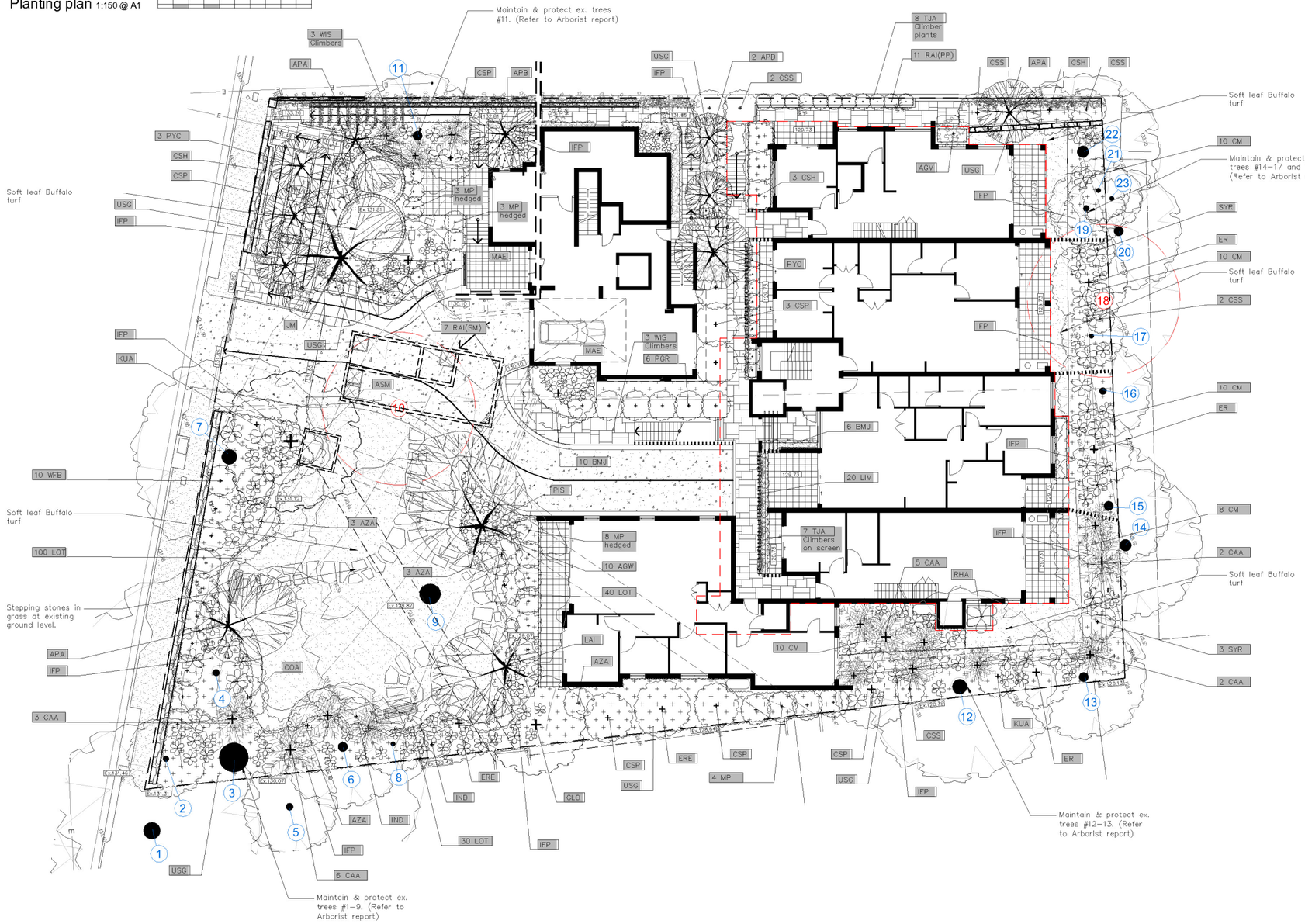
Planting plan 1:150 @ A1

0 1 2 3 4 5 10



Typical planting palette



Existing trees to be removed

Existing trees to be retained

ER — Planting symbol (See schedule, sheet 4)

Arborist: Tree survey
Version 1. Dated 13 October 2023

Stormwater Engineer:
ACCOR Engineers.
Ref: CC230201. Dated: 21.11.2023

Amendments

D	14.5.25	
C	7.3.25	--
B	6.2.24	--
A	15.1.24	DA review

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Project: Senior Living Development at 3-5 alma street, Pymble NSW 2073

DWG: Planting plan

Date: 14.5.25 Scale: 1:100 @A1

Job Ref: 2617/23

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NORTH

3 of 5

DA

ISSUE-D

Planting schedule

Symbol	Botanical name	Common name	Cont. size	Staking	Mature height	No. req.
Trees						
APA	Acer palmatum	Japanese Maple (Versatile small deciduous garden tree)	75Lt	3x50x50x1800	5-7.0M	3
APB	Acer palmatum	Bloodgood Maple (Purple red foliage small deciduous tree)	45Lt	3x50x50x1800	4-5.0M	1
ASM	Acmena smithii	Lilly Pilly (Indigenous tree in dep soil. Prune lower branches)	75Lt	3x50x50x1800	8-10.0M	1
ER	Elaeocarpus reticulatus	Blueberry Ash (indigenous small tree)	45Lt	3x50x50x1800	6-8.0M	3
ERE	Elaeocarpus eumundii	QLD Qondong (native vertical narrow screen tree)	45Lt	2x50x50x1800	7-10.0M	2
GLO	Glochidion ferdinandi	Cheese Tree (Indigenous medium tree)	75Lt	3x50x50x1800	8-12.0M	11
JM	Jacaranda minosifolia	Jacaranda (deciduous feature tree)	100Lt	3x50x50x1800	12-15.0M	1
LAI	Lagerstroemia indica	Crepe Myrtle (small deciduous tree)	45Lt	3x50x50x1800	5-6.0M	1
MAE	Magnolia Exmouth	Magnolia (flowering evergreen small tree)	45Lt	3x50x50x1800	6-8.0M	2
PIS	Pistachia chinensis	Chinese Pistachio (Hardy deciduous tree)	150Lt	3x50x50x1800	7-10.0M	1
PYC	Pyrus calleryana 'Çapital'	Ornamental Pear (medium deciduous narrow tree)	75Lt	2x50x50x1800	12-18.0M	4
Shrubs / standards / small feature trees						
APD	Acer palmatum Dissectum Atropurpureum	Dwarf Cut Leaf Maple (Low deciduous garden tree)	300mm	nil	1.52-2.0M	1
AZA	Azalea spp.	Selected Azalea species (Flowering low shrubs)	200mm	nil	1-1.5M	7
BMJ	Buxus microphylla 'Japonica'	Japanese Box Hedge (formal low hedging plant)	200mm	nil	0.4-1.2M	10
CKS	Callistemon Kings Park Special'	Bottlebrush small (native tree for planterbox)	300mm	2x50x50x1800	3-3.5M	
COA	Correa alba	White Correa (hardy salt wind tolerant coastal shrub)	200mm	nil	1.5-2.0M	1
CSH	Camellia sasanqua 'Hiryu'	Camellia sasanqua (small flowering tree)	45Lt	2x50x50x1800	3-4.5M	5
CSP	Camellia sasanqua 'Plantation Pink'	Camellia sasanqua (semi hedged Camellia)	300mm	2x50x50x1800	2.5-3.0M	8
CSS	Camellia sasanqua 'Setsugekka'	Camellia sasanqua (semi hedged Camellia)	300mm	2x50x50x1800	2-2.5M	7
IND	Indigofera australis	Australian Indigo (small flowering native shrub)	200mm	nil	1.5-2.0M	2
KUA	Kunzea ambigua	Tick Bush (flowering native shrub)	250mm	nil	2-3.0M	2
MP	Murraya paniculata	Orange Jessamine (flowering screening plant)	300mm	hedged	2-3.0MM	18
PGR	Photinia 'Glabra Rubens'	Small Leaved Photinia (bright red foliage screening)	300mm	hedged	1.5-2.0M	6
RAI (PP)	Raphiolepis indica PP	Pink Pearl (hedging dense flowering plant)	300mm	nil	1.0M	11
RAI (SM)	Raphiolepis indica SM	Snow Maiden (hedging dense flowering plant)	300mm	nil	1.0M	7
SYR	Syzygium 'Resilience'	Resilience Lilly Pilly (native screen plant. Can be hedged)	300mm	hedged	2.8-3.5M	4
WFB	Westringia fruticosa 'Blue Gem'	Dwarf Blue Westringia (hardy low gorwing plant)	150mm	hedged	1.2-1.5M	10
Ferns / Palms / Succulents / shade tolerant understorey						
AGV	Agave attenuata	Century plant (striking spiky leaved succulent)	300mm	nil	0.5M	1
CAA	Cyathea australis	Tree Fern (Native tree ferns)	300mm	nil	2-4.0M	18
RHA	Raphis excelsor	Lady Finger Palm	300mm	nil	2-2.5M	1
Climbers on screens						
TJA	Trachelospermum asiaticum	Flatmat Star Jasmine (FT01 Ozbbreed hyvrid groundcover)	300mm	nil	0.2M	15
WIS	Wisteria sinensis	Chinese Wisteria (deciduous climber over pergola)	300mm	over pergola	5.0M	6
Strappy leaved plants						
AGW	Agapanthus orientalis 'Blue'	Blue Lily of the Nile (Hardy strappy leaved groundcover)	200mm	nil	0.5M	10
CM	Clivia miniata	Red Clivia (shade tolerant groundcover)	200mm	nil	0.5M	48
LIM	Liriope Evergreen Giant	Turf Lily (shade tolerant groundcover)	150mm	nil	0.4M	20
LOT	Lomandra Tanika	Dwarf Lomandra (ornamental grass)	150mm	nil	0.4M	170
Understorey groundcovers						
USG	Casuarina glauca Çousin It'	aa (low spreading groundcover	150mm	nil	0.15M	
USG	Dichondra 'Silver Falls	Silver Falls (cascading groundcover in roof garden)	200mm	nil	0.15M	
USG	Grevillea 'Poorinda Royal Mantle'	Grevillea Groundcover (native low groundcover)	150mm	nil	0.2M	
USG	Hardenbergia violacea	Native sarsaparilla (native groundcover)	200mm	nil	2.0M	
USG	Myoporum parvifolium	Creeping Boobliala (native cascading groundcover)	150mm	nil	0.2M	
USG	Pandorea pandorana	Wonga Wonga Vine (native climbing/cascading groundcover)	200mm	over pergola	2.5M	
USG	Senicia serpens	Blue Chalk Sticks (silver blue low succulent groundcover)	200mm	nil	0.2M	
USG	Viola hederacea	Native Violets (native low groundcover)	tubes	nil	0.1M	
Infill ornamental grasses / strappy leaved plans						
IFP	Arthropodium cirratum	Renga Renga Lilly	150mm	nil	0.8M	
IFP	Dianella caerulea	Blue Flax Lilly (native ornamental grass)	100mm	nil	0.4M	
IFP	Dietes grandiflora 'Grand Star'	Grand Star Dietes (ozbreed hybrid. Low seeding variety)	150mm	nil	0.7M	
IFP	Isolepsis (Finicia) nodosa	Knobby Club Rush (native ornamental grass)	150mm	nil	0.6M	
IFP	Lomandra Tanika	Dwarf Lomandra (ornamental grass)	150mm	nil	0.4M	
IFP	Pennisetum alopecuroides Nafray	NAFRAY® 'PA300' PBR (flowering ornamental grass)	150mm	nil	0.8-1.0M	

Landscape contractor is to check all plant numbers on plan against the schedule prior to submitting tender price. Contact landscape architect if any number discrepancies are found. Council compliance controls require that any substitution of species variety or container size MUST be confirmed with landscape architect to ensure a compliance certificate can be issued that's meets the specific development consent conditions of the project.

General construction notes

1.Site preparation
Any existing trees and vegetation to be retained shall be preserved and protected from damage of any sort during the execution of landscape work. In particular, root systems of existing plants must not be disturbed if possible. Any nearby site works should be carried carefully using hand tools.

To ensure the survival and growth of existing trees during landscaping works, protect by fencing or armoring where necessary. Trees shall not be removed or lopped unless specific written approval to do so is given or is indicated on plan. Storage of materials, mixing of materials, vehicle parking, disposal of liquids, machinery repairs and refueling, site office and sheds, and the lighting of fires shall not occur within the dripline of any existing trees to be retained on or adjacent to the site. Do not stockpile soil, rubble or other debris cleared from the site, or building materials, within the drip line of existing trees. Vehicular access shall not be permitted within three (4) metres of any tree.

2.Soil preparation
All proposed planting areas to be ripped (by hand in tree protection zones) to 200mm and clay soils to be treated with clay breaker. Harvested existing top soil from site and store on site and mix with 25% A.N.L. Greenlife compost or approved equivalent. Apply at least 150mm soil depth to planting areas. All additional soil to be 100mm depth of good quality planting mix to be imported and combined with 50mm A.N.L. Greenlife compost or approved equivalent. To be worked in with rotary hoe or by hand in tree protection zones. In general all care to be taken to hand cultivate in any area where existing tree roots exist to preserve health of trees.

3.New plantings
Newly planted trees and large shrubs should be secured to stakes with hessian ties to prevent rocking by wind. Planting holes for plant material should be large enough in size to take root ball with additional space to take back filling of good quality planting mix. Mature heights of planting as shown on planting schedule show the greatest height possible in ideal conditions. These heights are subject to particular site conditions, possible container environments and intended hedging or pruning for functional requirements such as available planting width, intended access under branches and solar access.

4.Planter boxes & waterproofing.
All slab areas to be waterproofed and 'Atlantis' drainage cell installed with geotextile fabric . Refer Engineer's details for structural details for planter box drainage & construction. All internal planter slab levels to fall to drainage outlets as detailed by Hydraulic Engineer. Ensure minimum 50mm cavity between planter box and building wherever planter joins building. Keep cavity clear of debris by providing capping row butted against building. Exterior finishes as per Architect's detail. Ensure base of cavity is able to drain via weep holes in event water seeps into cavity so as to not build up against building wall. Containers to be at height as indicated on Architects' drawing. All planting containers or over slab planting to have the following:

- Water proofing as specified by Architects. To extend along base and up to top of soil level of containers
- 'Atlantis' drainage cell at base to be connected to drainage system of development (see typical detail sheet 2)
- A.N.L. planter box soil mix or equivalent to be installed in all containers and over slab planting situation
- Contractor to install all planter box finishes after other site works are completed to ensure no deterioration of waterproof membrane . Contractor to be responsible for the integrity of the waterproofing of the planter boxes
- All planter boxes are to have automatic dripline irrigation system. Connecting pipes to installed in slab structures prior to slab pour. Irrigation supply lines to be installed by building contractor prior to waterproofing and internal planter box finishes

5.Mulching
All planting areas to be mulched with a minimum 100mm thick cover of woodchip mulch and then all plant areas to be thoroughly soaked with water. All mulch shall be free of vegetative reproductive parts of all weed species

6.Irrigation
Automatic dripline system supplied by harvested rainwater to be incorporated.To extend to all common area landscaped areas included in works (excluding turfed areas and street trees that are to be hand watered as part of ongoing maintenance program). Include all over slab planting areas and all planter boxes where applicable. Hose cosks supplied to all private garden as well as common garden areas. Full irrigation scope to future Construction Certificate details

7.Fertliser
All planting areas to be fertilised with 9 month 'NPK' slow release fertiliser.
Mass planted areas: allow one slow release Agriform pellet per 5-25 litre plant. All fertilisers to be applied in accordance with the manufacturers instructions.
Turfed areas: Supply and install Agriform slow release fertiliser or approved equivalent lawn start fertiliser applied at the rate recommended by the manufacturer

8.Staking
To those plants indicated on the planting schedules provide: hardwood stakes as nominated and driven into ground to a depth able to achieve rigid support and to finish a minimum of 800-1000mm above finished levels

9.Engineering
All structural and hydraulic details whatsoever to Engineer's details.

10. Maintenance
The Landscape Contractor shall maintain the contract areas by accepted horticultural practices as well as rectifying any defects that become apparent in the works under normal use. The Landscape Contractor shall maintain the works and make good all defects for a period of thirteen (13) weeks after the date of practical completion. Practical completion of the landscape works shall include but not be limited to the replacement of plants which have failed or been damaged or stolen during work under the contract. Landscape maintenance shall include but not be limited to the following: watering, rubbish removal, spraying and wiping leaf surfaces, replacing failed plants, maintaining mulch, pruning, insect and disease control, cleaning of surrounding areas. Mow the turf when it is established at regular intervals to maintain an average height of 50mm.

Irrigation notes

Automatic drip line watering system to be selected. To extend to ALL garden areas nominated on the deep soil and planter box areas and is to include all raised planter boxes over slab. (all lawn areas to be excluded) Water supply tap hosecocks as indicated on CC stage drawings.(To be coordinated with Hydraulic and Structural Engineer's details). Dripline supply system only to be incorporated.

Prior to approval by the project manager and prior to installation the Contractor responsible for the irrigation installation is to provide an irrigation design to meet the following requirements.

Generally: Supply an automatic drip line irrigation system. To include all piping to solenoids either PVC lines and/or class 12 pressure pipe or low density, rubber modified polypropeyline reticulation as required to provide water supply to the nominated areas. To be coordinated with Hydraulic engineers plans. To include all bends, junctions, ends, ball valves, solenoids and all other ancillary equipment. Backwash valve: An approved backwash prevention valve is to be located at the primary water source for top up valves to rainwater tanks (where applicable).

Ensure rain sesnsor is installed for common area garden zones connected to timers

Root inhibiting system. Driplines to be 'Netafim Techline AS XR' drip tubing or approved equivalent
.
Automatic Controller: Provide automatic 2 week timer with hourly multi-cycle operation for each zone as noted on the irrigation areas plan on sheet …. . Battery timers to isolated planter boxes is acceptable and to maintained by the owners corporation as part of the ongoing property maintenanace.

Performance: It shall be the Landscape Contractor's responsibility to ensure and guarantee satisfactory operation of the irrigation system. The system is to be fit for the purpose and should utilize sufficient solenoids to provide for the varying watering requirements of landscape areas to allow all plants and lawn areas to thrive and attain long term viability.

Testing: After the system has been installed to the satisfaction of the project manager, the installation shall be tested under working conditions. Acceptance of the installed plant and equipment shall be subject to these being satisfactory.

Warranty: A twelve month warranty is to be provided in writing by the Landscape Contractor, which shall commit the Landscape Contractor to rectify the system (the items they have installed) to the satisfaction of the project manager or nominated representative. This will apply should any fault develop, or the capacity or efficiency fall below that guaranteed, or should the discharge or pressure be inadequate, or should defects develop in the filter unit or control heads, or any blockages that may develop in the system.

Approvals: The Landscape Contractor is to liaise as necessary, to ensure that the irrigation system conforms with all Water Board, Council and Australian standards (AS)

Maintenance schedule

The Landscape Contractor shall maintain the contract areas by accepted horticultural practices as well as rectifying any defects that become apparent in the works under normal use. The Landscape Contractor shall maintain the works and make good all defects for a period of twenty six (26) weeks after the date of practical completion. Practical completion of the landscape works shall include but not be limited to the replacement of plants which have failed or been damaged or stolen during work under the contract. Landscape maintenance shall include but not be limited to the following: watering, rubbish removal, spraying and wiping leaf surfaces, replacing failed plants, maintaining mulch, pruning, insect and disease control, cleaning of surrounding areas. Mow the turf when it is established at regular intervals to maintain an average height of 50mm.

The owners of the residence are responsible for the ongoing maintenance and viability of the gardens and ongoing maintenance shall include the following:

- Regular hand watering of gardens if installed drip line irrigation system is turned off. Irrigation to be installed and maintained as per manufacturers specifications including regular checks for function of system, to check for leaks and to ensure general good working operation.
- Mulch is to be regularly topped up every 6 months to ensure an even 75mm coverage in all garden beds
- Regular pruning of plants is to be undertaken to ensure continued uniform growth of canopy and foliage of trees and shrubs.
- Regular assessment of plants for evidence of insect attack or disease. Appropriate pest oil, white oil of Yates pest spray or equivalent is to be employed if required
- Garden/lawn edging to be inspected regularly after practical completion to ensure it is maintained in good order. Replace where required if defective sections are discovered
- All garden refuse, rubbish and associated items that arise from the regular garden maintenance procedures are to be collected and stored in appropriate general waste or green waste containers as is appropriate. Excess waste unable to be stored in Council waste containers is to be removed from the site is a timely manner.

Amendments

D	14.5.25	
C	7.3.25	--
B	6.2.24	--
A	15.1.24	DA review

PAUL SCRIVENER LANDSCAPE

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Project: Senior Living Develpment at 3-5 alma street, Pymble NSW 2073

DWG: Details & Notes

Date: 14.5.25 Scale: -

Job Ref: 2617/23

Builder must verify all dimensions of the site before work commences.
Figured dimensions should be used in preference to those scaled off.

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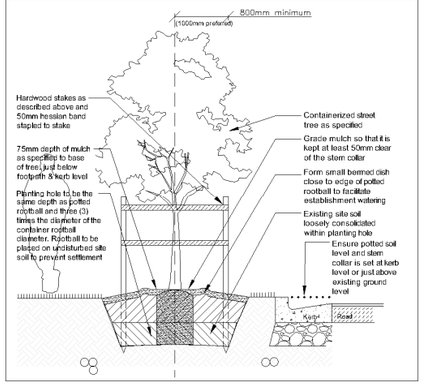
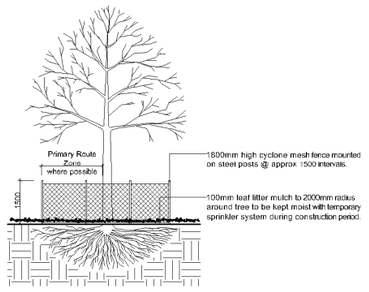
NORTH

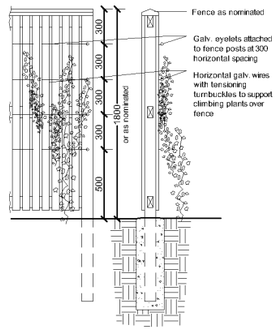
Detail 01 — PSLA 68
Tree planting details



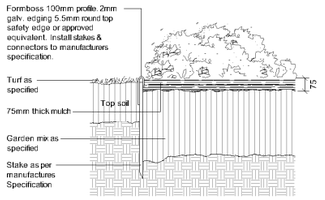
Detail 02 — PSLA 2
Tree protection measure Type 2 n.t.s.



Detail 03 — PSLA 50
Wire supports for climbers on fence n.t.s

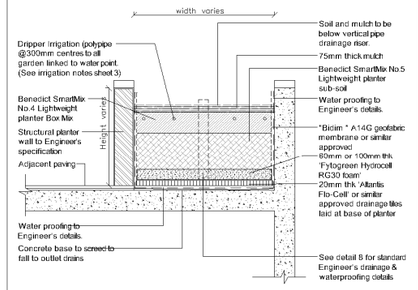


Detail 04 — PSLA 18
Metal edging typical detail n.t.s

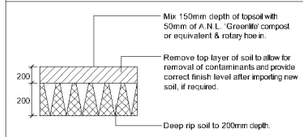


Detail 05 — PSLA 17
On structure planter typical soil installation detail n.t.s

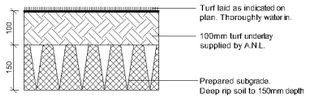
For soil & irrigation methodology only Structural & drainage to relevant Engineers details



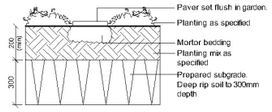
Detail 06 — PSLA 8
Soil preparation detail n.t.s.



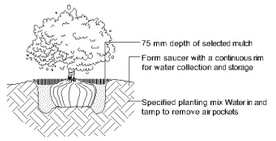
Detail 07 — PSLA 12
Turf over soil n.t.s



Detail 08 — PSLA 29
Stepping stones in garden n.t.s



Detail 09 — PSLA 4
Shrub planting detail n.t.s



Detail 10 Stacked stone wall to replace ex. wall



Detail 11 Privacy screen to side of pergola



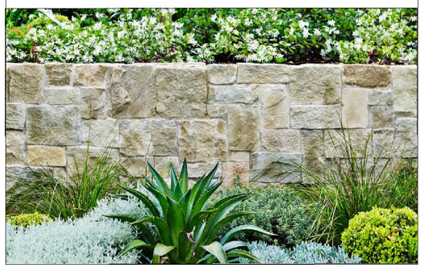
Detail 12 Open screen



Detail 13 Painted timber paling fence & climbers



Detail 14 Stone garden wall



Detail 15 Garden seat



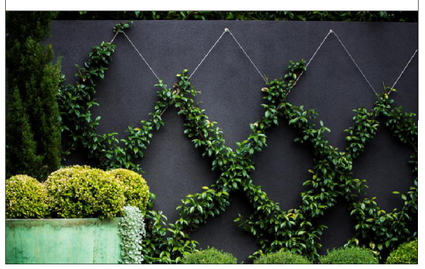
Detail 16 Pergola & climbers



Detail 17 Circular lawn



Detail 18 Climbing plants on wall on wire supports



Detail 19 Recessed timber seat under pergola



Detail 20 Stepping stones in lawn at ex. ground level.



Amendments		
D	14.5.25	
C	7.3.25	--
B	6.2.24	--
A	15.1.24	DA review

PAUL SCRIVENER LANDSCAPE

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Project: Senior Living Development at 3-5 alma street, Pymble NSW 2073

DWG: Details

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NORTH

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DA
ISSUE-D

PROPOSED DEVELOPMENT
Lot 2 & 3 (No.3 - 5) ALMA STREET, PYMBLE
STORMWATER MANAGEMENT PLANS

LEGEND

- DENOTES ON-SITE DETENTION TANK
- DENOTES ON-SITE RETENTION TANK
- DENOTES DWELLING FOOTPRINT
- SW — DENOTES 100mm DIA. STORMWATER/SURFACE WATER SYSTEM PIPE AT 1% MIN. GRADE U.N.O.
- RW — DENOTES 100mm DIA. FULLY SEALED RAINWATER SYSTEM PIPE U.N.O.
- 150 RW — DENOTES RAINWATER PIPE AND DIA. WHEN PIPE EXCEEDS 100mm DIA.
- 150 SW — DENOTES STORMWATER/SURFACE WATER PIPE AND DIA. WHEN PIPE EXCEEDS 100mm DIA.
- W/RM — DENOTES RISING MAIN AND PIPE DIA. U.N.O.
- 100 SS — DENOTES SUBSOIL DRAINAGE LINE AND DIA. WRAPPED IN GEOFABRIC U.N.O.
- DP — DENOTES DOWNPIPE
- IO — DENOTES INSPECTION OPENING WITH SCREW DOWN LID AT FINISHED SURFACE LEVEL
- CO — DENOTES INSPECTION OPENING WITH SCREW DOWN LID AT FINISHED SURFACE LEVEL FOR SYSTEM FLUSHING PURPOSES
- STORMWATER PIT - SOLID COVER
- STORMWATER PIT - GRATED INLET
- DENOTES GRATED DRAIN
- DENOTES ABSORPTION TRENCH
- NON RETURN VALVE
- PUMP
- STOP VALVE (ISOLATION VALVE)
- 240v REQUIRED
- IL23.31 — DENOTES LEVEL OF INLET /OUTLET OF STORMWATER PIPE. NOTE: UNLESS NOTED OTHERWISE, THE BASE OF THE PIT IS THE SAME AS THE PIPE INLET/OUTLET.

DIAL BEFORE YOU DIG

BEFORE YOU DIG byda.com.au

IMPORTANT: THE CONTRACTOR IS TO MAINTAIN A CURRENT SET OF "DIAL BEFORE YOU DIG" DRAWINGS ON SITE AT ALL TIMES.

GENERAL NOTES

1. THESE PLANS SHALL BE READ IN CONJUNCTION WITH OTHER RELEVANT CONSULTANTS' PLANS, SPECIFICATIONS, CONDITIONS OF DEVELOPMENT CONSENT AND CONSTRUCTION CERTIFICATE REQUIREMENTS. WHERE DISCREPANCIES ARE FOUND HYDRACOR CONSULTING ENGINEERS PTY LTD MUST BE CONTACTED IMMEDIATELY FOR VERIFICATION
2. WHERE THESE PLANS ARE NOTED FOR DEVELOPMENT APPLICATION PURPOSES ONLY, THEY SHALL NOT BE USED FOR OBTAINING A CONSTRUCTION CERTIFICATE NOR USED FOR CONSTRUCTION PURPOSES
3. SUBSOIL DRAINAGE SHALL BE DESIGNED AND DETAILED BY THE STRUCTURAL ENGINEER. SUBSOIL DRAINAGE SHALL NOT BE CONNECTED INTO THE STORMWATER SYSTEM IDENTIFIED ON THESE PLANS UNLESS APPROVED BY HYDRACOR CONSULTING ENGINEERS PTY LTD.

STORMWATER CONSTRUCTION NOTES

1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500 (CURRENT EDITION) AND THE REQUIREMENTS OF THE LOCAL COUNCIL'S POLICIES AND CODES
2. THE MINIMUM SIZES OF THE STORMWATER DRAINS SHALL NOT BE LESS THAN DN90 FOR CLASS 1 BUILDINGS AND DN100 FOR OTHER CLASSES OF BUILDING OR AS REQUIRED BY THE REGULATORY AUTHORITY
3. THE MINIMUM GRADIENT OF STORMWATER DRAINS SHALL BE 1%, UNLESS NOTED OTHERWISE
4. COUNCIL'S TREE PRESERVATION ORDER IS TO BE STRICTLY ADHERED TO. NO TREES SHALL BE REMOVED UNTIL PERMIT IS OBTAINED
5. PUBLIC UTILITY SERVICES ARE TO BE ADJUSTED AS NECESSARY AT THE CLIENT'S EXPENSE
6. ALL PITS TO BE BENCHED AND STREAMLINED. PROVIDE STEP IRONS FOR ALL PITS OVER 1.2m DEEP
7. MAKE SMOOTH JUNCTION WITH ALL EXISTING WORK
8. VEHICULAR ACCESS AND ALL SERVICES TO BE MAINTAINED AT ALL TIMES TO ADJOINING PROPERTIES AFFECTED BY CONSTRUCTION
9. SERVICES SHOWN ON THESE PLANS HAVE BEEN LOCATED FROM INFORMATION SUPPLIED BY THE RELEVANT AUTHORITIES AND FIELD INVESTIGATIONS AND ARE NOT GUARANTEED COMPLETE NOR CORRECT. IT IS THE CLIENT & CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL PRIOR TO CONSTRUCTION
10. ANY VARIATION TO THE WORKS AS SHOWN ON THE APPROVED DRAWINGS ARE TO BE CONFIRMED BY HYDRACOR CONSULTING ENGINEERS PTY LTD PRIOR TO THEIR COMMENCEMENT

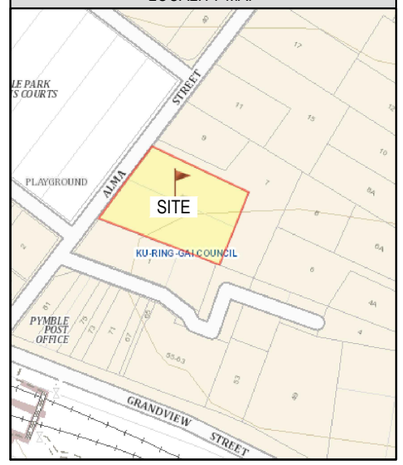
RAINWATER RE-USE SYSTEM NOTES

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

SHEET INDEX

COVER SHEET & NOTES	SHEET C1
STORMWATER DRAINAGE SUMMARY	SHEET C2
STORMWATER MANAGEMENT PLAN - BASEMENT	SHEET C3
STORMWATER MANAGEMENT PLAN - GROUND	SHEET C4
STORMWATER MANAGEMENT DETAILS SHEET No.1	SHEET C5
STORMWATER MANAGEMENT DETAILS SHEET No.2	SHEET C6
STORMWATER QUALITY REPORT SHEET No.1	SHEET C7
STORMWATER QUALITY REPORT SHEET No.2	SHEET C8
STORMWATER QUALITY REPORT SHEET No.3	SHEET C9
EROSION & SEDIMENT CONTROL PLAN	SHEET C10
EROSION & SEDIMENT CONTROL NOTES & DETAILS	SHEET C11

LOCALITY MAP



DEVELOPMENT APPLICATION ISSUE
NOT FOR CONSTRUCTION

DRAWINGS MUST BE PRINTED IN COLOUR

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Issue	Description	Date	Drawn	Approved
B	ISSUE FOR DEVELOPMENT APPLICATION	14.05.25	LW	BK
A	DRAFT ISSUE FOR REIVEW	02.05.25	LW	BK

North

Client: SA ENGINEERING GROUP PTY LTD

Architect: GELDER GROUP ARCHITECTS

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ENGINEERS | CIVIL | FLOOD STUDIES | STORMWATER | HYDRAULIC

Project: PROPOSED SENIORS LIVING
No.3 - 5
ALMA STREET
PYMBLE

Drawing Title: COVER SHEET & NOTES

Drawn	Date	Scale A1	Q.A. Check	Date
LW	FEB 2025	AS SHOWN	-	-

Designed	Project No.	Dwg. No.	Issue
BK	CC230201	C1	B

KU-RING-GAI DCP PART 24 STORMWATER DRAINAGE SUMMARY

SITE AREA . . . . . 2422 m²

PRE-DEVELOPED IMPERVIOUS AREA . . . . . N/A m²

POST DEVELOPED IMPERVIOUS AREA . . . . . 1515 m²

DESIGN SUMMARY IN RESPONSE TO THE KU-RING-GAI DCP PART 24 - WATER MANAGEMENT:

- STORMWATER DISCHARGE (24B.5)

  ON-SITE DETENTION / RAINWATER TANK OVERFLOW AND SURFACE

  PITS TO DISCHARGE TO PROPOSED EASEMENT

- STREAM FLOW CONTROLS PART 24 CLAUSE 24.C3

  PROPOSAL

  PROVISION OF 25,000 LITRE RAINWATER TANK.

  REFER TO SHEET C3, C4 & C5

- ON-SITE DETENTION PART 24 CLAUSE 24.C5

  REFER TO CALCULATION SHEET.

  PROPOSAL

  PROVISION OF 50,000 LITRE MIN. ON-SITE DETENTION TANK

  REFER TO SHEET C3, C4 & C5

- WATER QUALITY PART 24 CLAUSE 24.C6

  PROPOSAL

  PROVISION OF: 25,000 LITRE RAINWATER TANK

  6 x ATLAN FILTERS

  REFER TO SHEETS C5

CATCHMENT DETAIL ON-SITE DETENTION CALCULATION SHEET - 24R.4

1. CATCHMENT NAME RC1
2. CATCHMENT DISCHARGE RATE 0.0124 l/sec/m² **A**
3. CATCHMENT STORAGE RATE 0.0345 m³/m² **B**

SITE DETAILS

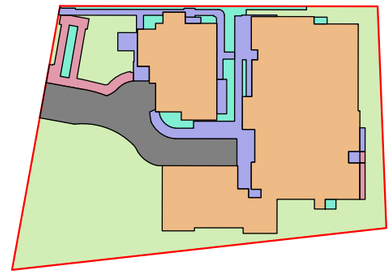
4. SITE AREA (m²) 2422 60% OF SITE AREA m² 1453 **C**
5. AREA(S) NOT DRAINING TO THE DETENTION SYSTEM N/A m²
6. TOTAL IMPERVIOUS AREA (ROOFS, DRIVEWAYS, PAVING, FUTURE DEV.) 1515 m² **D**
7. IMPERVIOUS AREA BYPASSING DETENTION SYSTEM 65 m² **E**

PERMITTED SITE DISCHARGE

8. C[1453 m²] x A [0.0124 l/sec/m²] = 18.01 l/sec **Flow 1**
9. ADJUSTMENT FOR ANY UNCONTROLLED IMPERVIOUS FLOW E / D= 0.04 (<0.25) **F**
10. FLOW 1 [18.01 l/sec x F [0.04] = 0.72 l/sec **Flow 2**
11. FLOW 1 [18.01] - FLOW 2 [0.72] = 17.29 l/sec **PSD**

SITE STORAGE REQUIREMENT

12. C [1453 m²] x B [0.0345 m³/m²] = 50.12 m³ **SSR1**
13. IF THE STORAGE IS IN A LANDSCAPED BASIN, SSR1 x 1.2 = m³ N/A **SSR2**



IMPERVIOUS PAVEMENT AREAS DIRECTED TO OSD TANK INCLUDING **LANDSCAPE PLANTERS OVER SLABS** (AREA = 198m²)

BASEMENT PUMP-OUT AREA DIRECTED TO OSD TANK (AREA = 214m²)

ROOF AREA DIRECTED TO OSD TANK VIA OSR (RAINWATER) TANK (AREA = 938m²)

PLANTERS TO OSD TANK (AREA = 100m²)

LANDSCAPE AREA BYPASSING OSD SYSTEM (AREA = 908m²)

IMPERVIOUS AREA BYPASSING OSD SYSTEM PATHS / COURTYARDS (AREA = 65m²)

SUMMARY

SITE AREA = 2422m²

TOTAL IMPERVIOUS AREA = 1515m² (62%)

TOTAL AREA BEING DIRECTED TO OSD SYSTEM = 1450m² (60% OF SITE)

TOTAL IMPERVIOUS CATCHMENT AREA BYPASSING OSD SYSTEM = 65m² (2%)

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-	NIL ISSUE	-	-	-

from at full size 10cm

North

Client: SA ENGINEERING GROUP PTY LTD

Architect: GELDER GROUP ARCHITECTS

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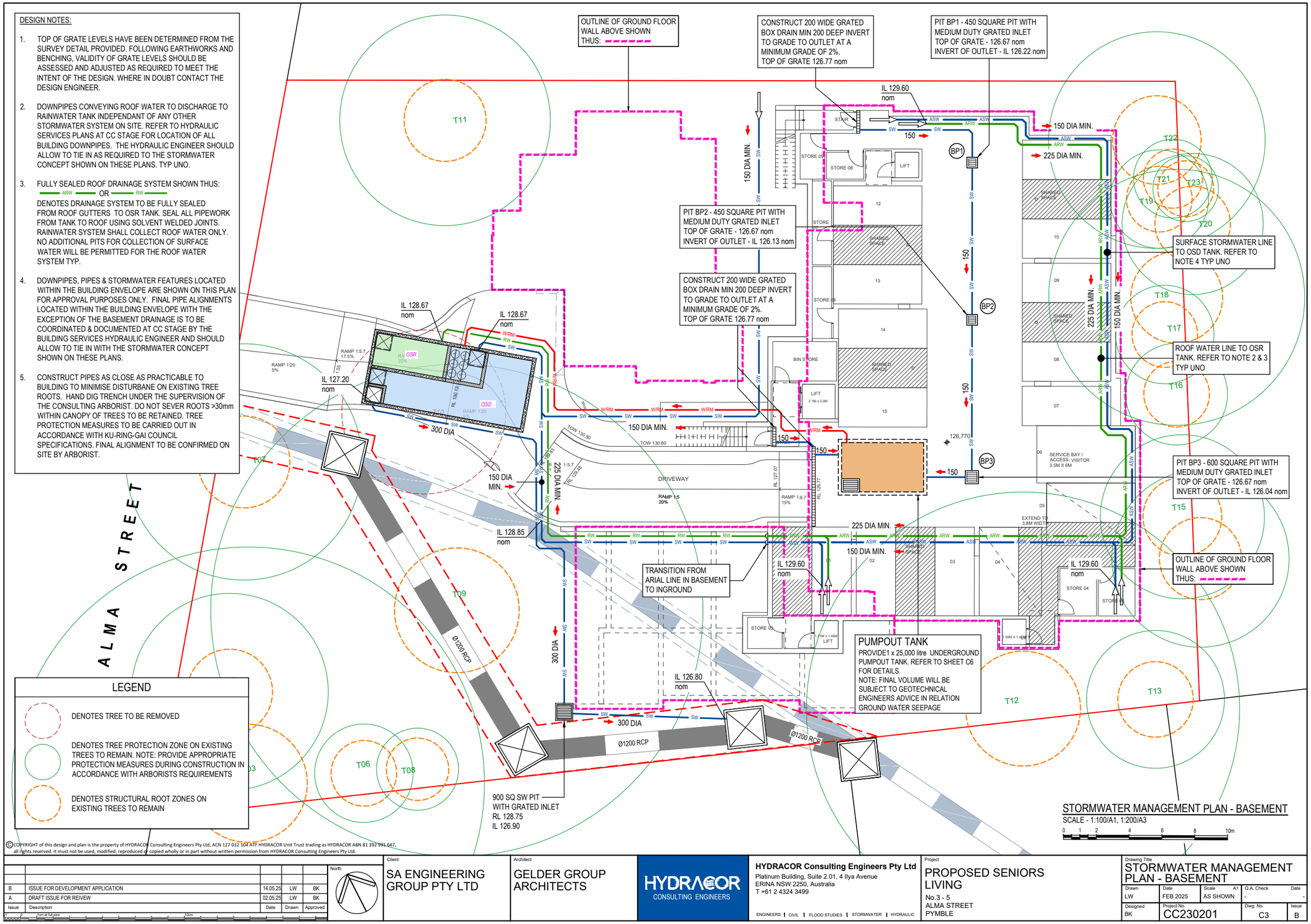
Project: PROPOSED SENIORS LIVING
No.3 - 5
ALMA STREET
PYMBLE

Drawing Title: STORMWATER DRAINAGE SUMMARY

Drawn	Date	Scale A1	Q.A. Check	Date
LW	FEB 2025	AS SHOWN	-	-

Designed	Project No.	Dwg. No.	Issue
BK	CC230201	C2	B


DESIGN NOTES:
1. TOP OF GRATE LEVELS HAVE BEEN DETERMINED FROM THE SURVEY DETAIL PROVIDED. FOLLOWING EARTHWORKS AND BENCHING, VALIDITY OF GRATE LEVELS SHOULD BE ASSESSED AND ADJUSTED AS REQUIRED TO MEET THE INTENT OF THE DESIGN. WHERE IN DOUBT CONTACT THE DESIGN ENGINEER.
2. DOWNPIPES CONVEYING ROOF WATER TO DISCHARGE TO RAINWATER TANK INDEPENDANT OF ANY OTHER STORMWATER SYSTEM ON SITE. REFER TO HYDRAULIC SERVICES PLANS AT CC STAGE FOR LOCATION OF ALL BUILDING DOWNPIPES. THE HYDRAULIC ENGINEER SHOULD ALLOW TO TIE IN AS REQUIRED TO THE STORMWATER CONCEPT SHOWN ON THESE PLANS. TYP UNO.
3. FULLY SEALED ROOF DRAINAGE SYSTEM SHOWN THUS: ARW OR RW
DENOTES DRAINAGE SYSTEM TO BE FULLY SEALED FROM ROOF GUTTERS TO OSR TANK. SEAL ALL PIPEWORK FROM TANK TO ROOF USING SOLVENT WELDED JOINTS. RAINWATER SYSTEM SHALL COLLECT ROOF WATER ONLY. NO ADDITIONAL PITS FOR COLLECTION OF SURFACE WATER WILL BE PERMITTED FOR THE ROOF WATER SYSTEM TYP.
4. DOWNPIPES, PIPES & STORMWATER FEATURES LOCATED WITHIN THE BUILDING ENVELOPE ARE SHOWN ON THIS PLAN FOR APPROVAL PURPOSES ONLY. FINAL PIPE ALIGNMENTS LOCATED WITHIN THE BUILDING ENVELOPE WITH THE EXCEPTION OF THE BASEMENT DRAINAGE IS TO BE COORDINATED & DOCUMENTED AT CC STAGE BY THE BUILDING SERVICES HYDRAULIC ENGINEER AND SHOULD ALLOW TO TIE IN WITH THE STORMWATER CONCEPT SHOWN ON THESE PLANS.
5. CONSTRUCT PIPES AS CLOSE AS PRACTICABLE TO BUILDING TO MINIMISE DISTURBANE ON EXISTING TREE ROOTS. HAND DIG TRENCH UNDER THE SUPERVISION OF THE CONSULTING ARBORIST. DO NOT SEVER ROOTS >30mm WITHIN CANOPY OF TREES TO BE RETAINED. TREE PROTECTION MEASURES TO BE CARRIED OUT IN ACCORDANCE WITH KU-RING-GAI COUNCIL SPECIFICATIONS. FINAL ALIGNMENT TO BE CONFIRMED ON SITE BY ARBORIST.
OUTLINE OF GROUND FLOOR WALL ABOVE SHOWN THUS:
CONSTRUCT 200 WIDE GRATED BOX DRAIN MIN 200 DEEP INVERT TO GRADE TO OUTLET AT A MINIMUM GRADE OF 2%. TOP OF GRATE 126.77 nom
PIT BP1 - 450 SQUARE PIT WITH MEDIUM DUTY GRATED INLET TOP OF GRATE - 126.67 nom INVERT OF OUTLET - IL 126.22 nom
PIT BP2 - 450 SQUARE PIT WITH MEDIUM DUTY GRATED INLET TOP OF GRATE - 126.67 nom INVERT OF OUTLET - IL 126.13 nom
CONSTRUCT 200 WIDE GRATED BOX DRAIN MIN 200 DEEP INVERT TO GRADE TO OUTLET AT A MINIMUM GRADE OF 2%. TOP OF GRATE 126.77 nom
SURFACE STORMWATER LINE TO OSD TANK. REFER TO NOTE 4 TYP UNO
ROOF WATER LINE TO OSR TANK. REFER TO NOTE 2 & 3 TYP UNO
PIT BP3 - 600 SQUARE PIT WITH MEDIUM DUTY GRATED INLET TOP OF GRATE - 126.67 nom INVERT OF OUTLET - IL 126.04 nom
OUTLINE OF GROUND FLOOR WALL ABOVE SHOWN THUS:
TRANSITION FROM ARIAL LINE IN BASEMENT TO INGROUND
PUMPOUT TANK
PROVIDE1 x 25,000 litre UNDERGROUND PUMPOUT TANK. REFER TO SHEET C6 FOR DETAILS.
NOTE: FINAL VOLUME WILL BE SUBJECT TO GEOTECHNICAL ENGINEERS ADVICE IN RELATION GROUND WATER SEEPAGE
900 SQ SW PIT WITH GRATED INLET RL 128.75 IL 126.90
IL 129.60 nom
IL 128.67 nom
IL 127.20 nom
IL 128.85 nom
IL 126.80 nom
126.770
150 DIA MIN.
225 DIA MIN.
300 DIA
Ø1200 RCP
ALMA STREET
DRIVEWAY
OSR
OSD
BP1
BP2
BP3
T02
T03
T06
T08
T09
T11
T12
T13
T15
T16
T17
T18
T19
T20
T21
T22
T23
LEGEND
DENOTES TREE TO BE REMOVED
DENOTES TREE PROTECTION ZONE ON EXISTING TREES TO REMAIN. NOTE: PROVIDE APPROPRIATE PROTECTION MEASURES DURING CONSTRUCTION IN ACCORDANCE WITH ARBORISTS REQUIREMENTS
DENOTES STRUCTURAL ROOT ZONES ON EXISTING TREES TO REMAIN
STORMWATER MANAGEMENT PLAN - BASEMENT
SCALE - 1:100/A1, 1:200/A3
0 1 2 4 6 8 10m
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B ISSUE FOR DEVELOPMENT APPLICATION 14.05.25 LW BK
A DRAFT ISSUE FOR REIVEW 02.05.25 LW BK
Issue Description Date Drawn Approved
North
Client SA ENGINEERING GROUP PTY LTD
Architect GELDER GROUP ARCHITECTS
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ENGINEERS | CIVIL | FLOOD STUDIES | STORMWATER | HYDRAULIC
Project PROPOSED SENIORS LIVING
No.3 - 5
ALMA STREET
PYMBLE
Drawing Title STORMWATER MANAGEMENT PLAN - BASEMENT
Drawn LW
Date FEB 2025
Scale A1 AS SHOWN
Q.A. Check -
Date -
Designed BK
Project No. CC230201
Dwg. No. C3
Issue B

DESIGN NOTES:

1. TOP OF GRATE LEVELS HAVE BEEN DETERMINED FROM THE SURVEY DETAIL PROVIDED. FOLLOWING EARTHWORKS AND BENCHING, VALIDITY OF GRATE LEVELS SHOULD BE ASSESSED AND ADJUSTED AS REQUIRED TO MEET THE INTENT OF THE DESIGN. WHERE IN DOUBT CONTACT THE DESIGN ENGINEER.
2. DOWNPIPES CONVEYING ROOF WATER TO DISCHARGE TO RAINWATER TANK INDEPENDANT OF ANY OTHER STORMWATER SYSTEM ON SITE. REFER TO HYDRAULIC SERVICES PLANS AT CC STAGE FOR LOCATION OF ALL BUILDING DOWNPIPES. THE HYDRAULIC ENGINEER SHOULD ALLOW TO TIE IN AS REQUIRED TO THE STORMWATER CONCEPT SHOWN ON THESE PLANS. TYP UNO.
3. FULLY SEALED ROOF DRAINAGE SYSTEM SHOWN THUS: ARW OR RW
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ON SITE RETENTION
PROVIDE OSR WITH :-
OSR STORAGE VOLUME: 26.30m³
TOP STORED WATER LEVEL - RL 129.82
REFER TO SHEET C5 FOR DETAILS

ON-SITE DETENTION (OSD) & WATER QUALITY TANK
PROVIDE OSD WITH :-
OSD STORAGE VOLUME: 52.30m³
TOP STORED WATER LEVEL - 129.30
REFER TO SHEET C5 FOR DETAILS

OUTLINE OF BASEMENT WALL UNDER SHOWN THUS: - - - - - -

ROOF WATER LINE TO OSR TANK. REFER TO NOTE 2 & 3 TYP UNO

NOTE: ANY OUTLETS / PITS OR GRATED DRAINS CONSTRUCTED AT A FINISHED SURFACE LEVEL EQUAL OR LOWER THAN RL 129.60 SHOULD BE DESIGNED AND CONSTRUCTED TO BYPASS THE ON SITE DETENTION.

SURFACE STORMWATER LINE TO OSD TANK. REFER TO NOTE 4 TYP UNO

TRANSITION FROM ARIAL LINE IN BASEMENT TO INGROUND

900 SQ SW PIT WITH GRATED INLET RL 128.75 IL 126.90

IL U/S 127.20 300Ø 1.0% MIN 27.85m IL D/S 126.90

IL U/S 126.90 300Ø 1.0% MIN 9.45m IL D/S 126.80

LEGEND

- DENOTES TREE TO BE REMOVED
- DENOTES TREE PROTECTION ZONE ON EXISTING TREES TO REMAIN. NOTE: PROVIDE APPROPRIATE PROTECTION MEASURES DURING CONSTRUCTION IN ACCORDANCE WITH ARBORISTS REQUIREMENTS
- DENOTES STRUCTURAL ROOT ZONES ON EXISTING TREES TO REMAIN

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STORMWATER MANAGEMENT PLAN - GROUND
SCALE - 1:100/A1, 1:200/A3

Issue	Description	Date	Drawn	Approved
B	ISSUE FOR DEVELOPMENT APPLICATION	14.05.25	LW	BK
A	DRAFT ISSUE FOR REIVEW	02.05.25	LW	BK

Client: SA ENGINEERING GROUP PTY LTD

Architect: GELDER GROUP ARCHITECTS

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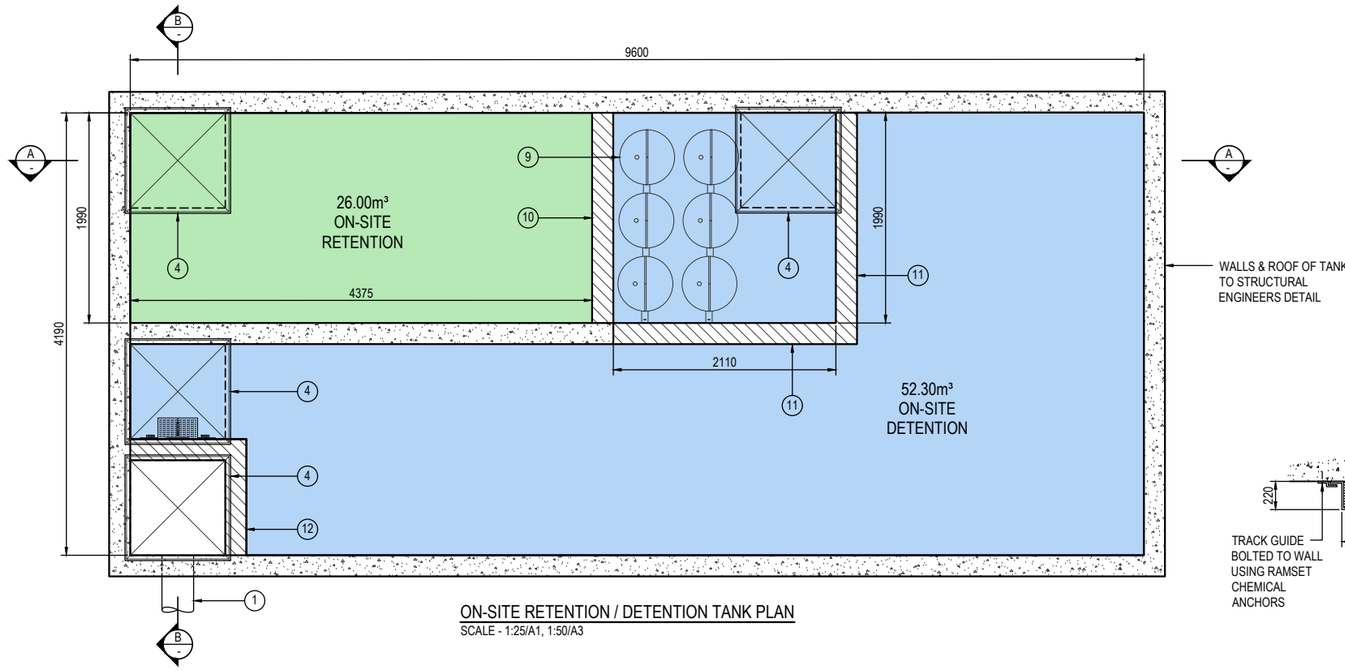
ENGINEERS | CIVIL | FLOOD STUDIES | STORMWATER | HYDRAULIC

Project: PROPOSED SENIORS LIVING
No.3 - 5
ALMA STREET
PYMBLE

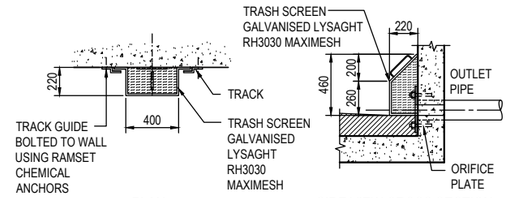
Drawing Title: STORMWATER MANAGEMENT PLAN - GROUND

Drawn	Date	Scale	Q.A. Check	Date
LW	FEB 2025	AS SHOWN	-	-
Designed	Project No.		Dwg. No.	Issue
BK	CC230201		C4	B

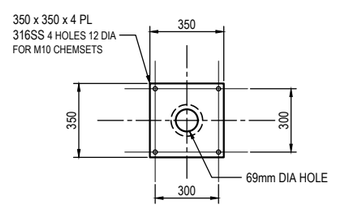


ON-SITE RETENTION / DETENTION TANK PLAN
SCALE - 1:25/A1, 1:50/A3

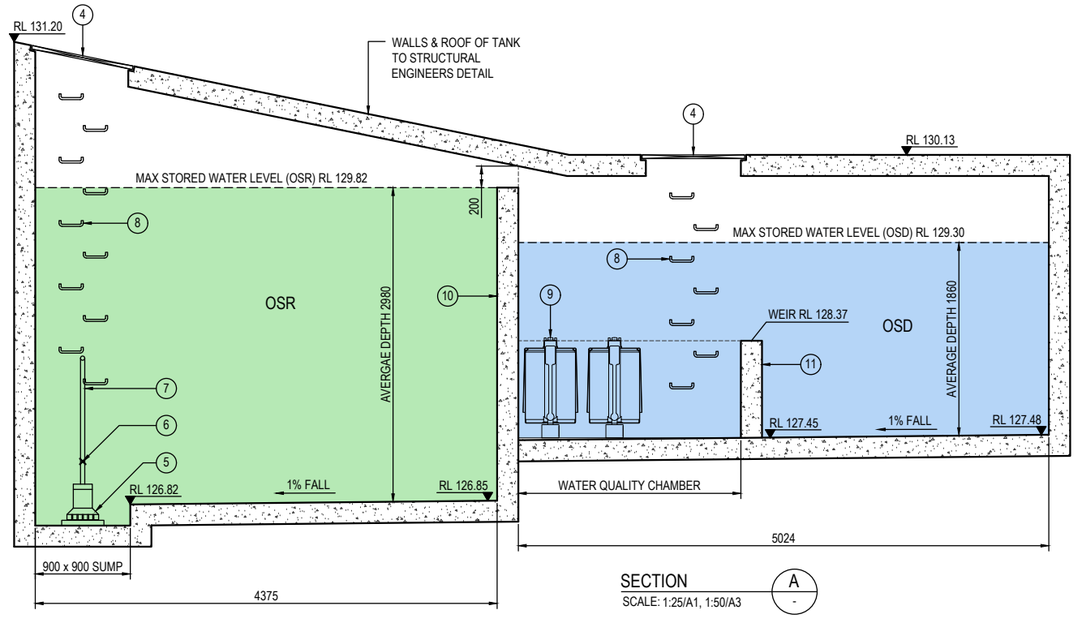
LEGEND			
1	300 DIA OUTLET PIPE	8	PROVIDE GALVANISED STEP IRONS AT 300mm CENTRES WHERE DEPTH EXCEEDS 1100mm IN ACCORDANCE WITH THE AUST. STANDARDS AT ALL ACCESS POINTS OF THE TANK, TYP.
2	350 x 350 x 4 PL 316SS 4 HOLES 12 DIA FOR M10 CHEMSETS	9	6 x 690 HIGH OCEAN PROTECT FILTERS
3	TRASH SCREEN LYSAGHT RH3030 GALV. REMOVABLE WITH HANDLE	10	1.9m LONG OSR OVERFLOW WEIR
4	900 x 900 SOLID COVER BOLTED DOWN	11	WATER QUALITY CHAMBER WEIR
5	RE-USE PUMP TO MANUFACTURERS SPECIFICATIONS	12	OSD OVERFLOW CHAMBER WEIR
6	NON-RETURN VALVE		
7	PVC PIPE CLASS '16' RISING MAIN BY OTHERS		



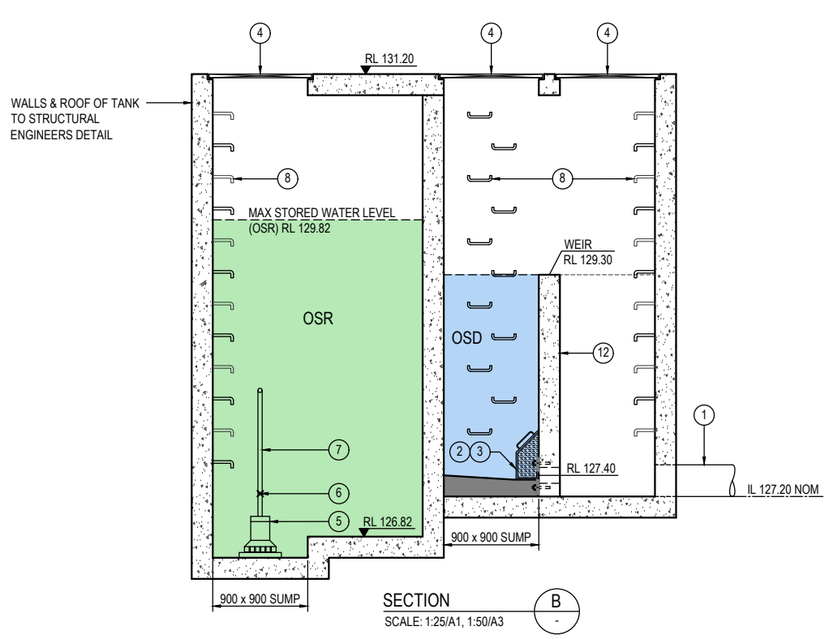
TRASH SCREEN
SCALE NTS



ORIFICE PLATE DETAIL
NTS



SECTION A
SCALE: 1:25/A1, 1:50/A3



SECTION B
SCALE: 1:25/A1, 1:50/A3

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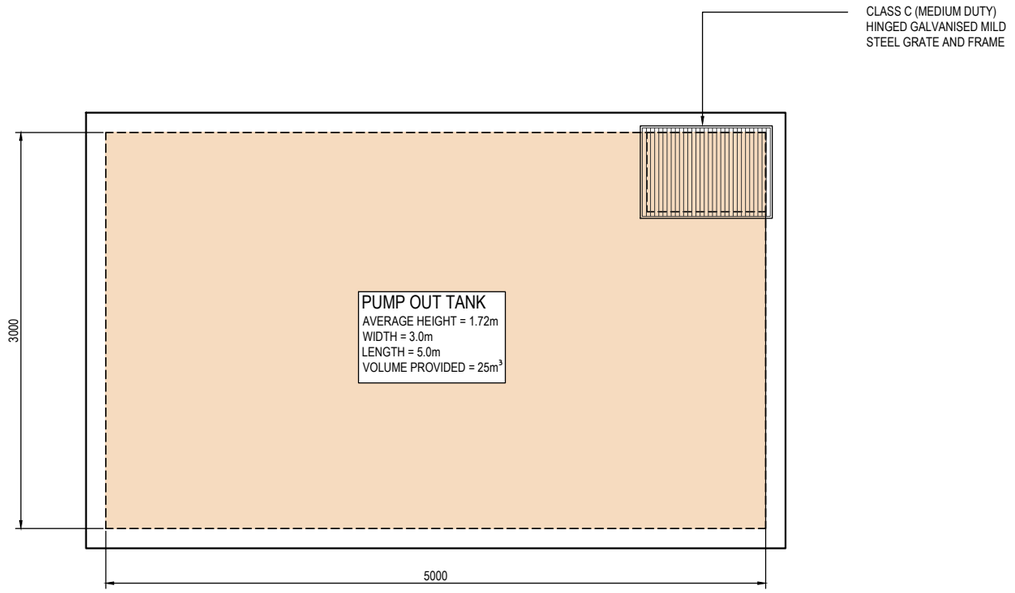
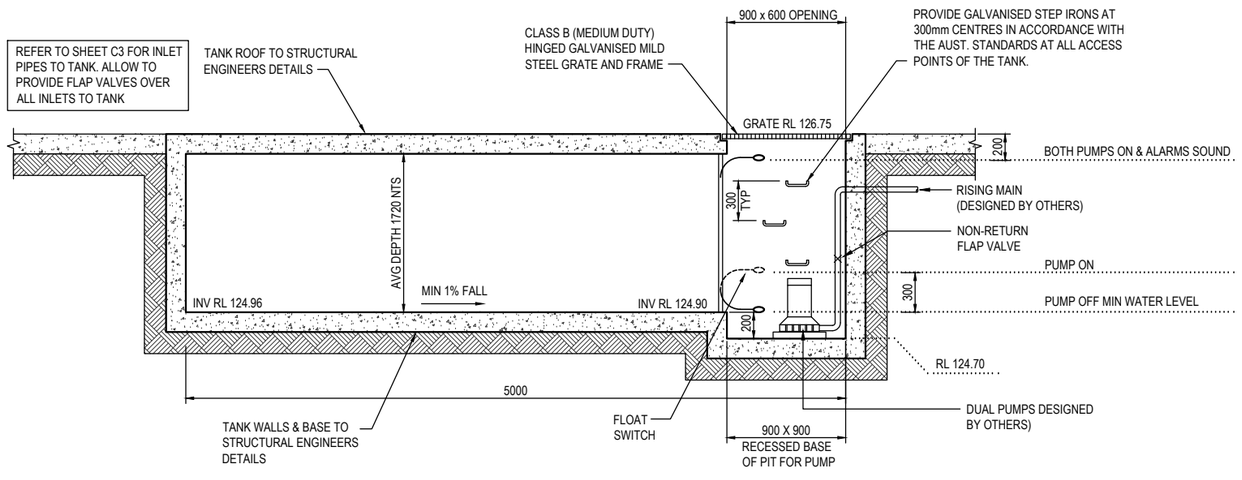
Project: PROPOSED SENIORS LIVING
No.3 - 5
ALMA STREET
PYMBLE

Drawing Title: STORMWATER MANAGEMENT DETAILS - SHEET No.1

Drawn	Date	Scale A1	Q.A. Check	Date
LW	FEB 2025	AS SHOWN	-	-
Designed	Project No.		Dwg. No.	Issue
BK	CC230201		C5	B



PUMP OUT TANK PLAN
SCALE 1:20/A1, 1:40/A3



TYPICAL SECTION THROUGH PUMP OUT TANK
SCALE 1:20/A1, 1:40/A3

STANDARD PUMP OUT DESIGN NOTES

THE PUMP SYSTEM SHALL BE OPERATED IN THE FOLLOWING MANNER:-

1. THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE
2. A FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS AT THE MINIMUM WATER LEVEL. THE SAME FLOAT SHALL BE SET TO TURN ONE OF THE PUMPS ON UPON WATER LEVEL IN THE TANK RISING TO APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL. THE PUMP SHALL OPERATE UNTIL THE TANK IS DRAINED TO THE MINIMUM WATER LEVEL.
3. A SECOND FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHALL START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.
4. AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.
5. A CONFINED SPACE DANGER SIGN SHALL BE PROVIDED AT ALL ACCESS POINTS TO THE PUMP OUT STORAGE TANK.

PUMP-OUT TANK MAINTENANCE SCHEDULE

MAINTENANCE CONTRACT

NOTE: A 24 HOUR X 12 MONTHLY EMERGENCY AND MAINTENANCE CONTRACT SHALL BE OBTAINED FROM A COMPANY CAPABLE OF EXECUTING THE WORK AND SHALL BE KEPT IN FORCE BY THE PROPERTY OWNER(S) FOR THE LIFE OF THE BUILDING.

THE MAINTENANCE CONTRACT SHALL BE CARRIED OUT EVERY THREE (3) MONTHS AND SHALL INCLUDE THE FOLLOWING ACTIVITIES:

1. CLEAN OUT ALL PITS OF SILT AND DEBRIS.
2. CHECK AND CLEAN OUT, IF NECESSARY, ALL PIPELINES.
3. CHECK:
   - 3.1. PUMPS FOR WEAR
   - 3.2. PUMP OIL SEALS
   - 3.3. PUMP STRAINER AND CLEAN
4. CARRY OUT ROUTINE MAINTENANCE TO PUMPS AS RECOMMENDED BY THE MANUFACTURER.
5. CHECK OPERATIONAL SEQUENCE OF LEVEL SWITCHES, PUMPS AND CONTROL PANEL.
6. THE EMERGENCY CONTRACT SHALL PROVIDE FOR A 24 HOUR X 7 DAY PER WEEK SERVICE.

THE CONTRACTOR SHALL PROVIDE A NAME PLATE STATING NAME, WORKING HOURS, TELEPHONE NUMBER AND OUT OF HOURS NUMBER AND SUCH NAME PLATE SHALL BE FIXED TO THE FRONT OF THE CONTROL PANEL.

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Issue	Description	Date	Drawn	Approved
B	ISSUE FOR DEVELOPMENT APPLICATION	14.05.25	LW	BK
A	DRAFT ISSUE FOR REIVEW	02.05.25	LW	BK

North

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Project: PROPOSED SENIORS LIVING
No.3 - 5
ALMA STREET
PYMBLE

Drawing Title: STORMWATER MANAGEMENT DETAILS - SHEET No.2

Drawn	Date	Scale A1	Q.A. Check	Date
LW	FEB 2025	AS SHOWN	-	-

Designed	Project No.	Dwg. No.	Issue
BK	CC230201	C6	B

STREAM FLOW CONTROL REPORT

INTRODUCTION & METHODOLOGY

WE REFER TO KU-RING-GAI COUNCIL DEVELOPMENT CONTROL PLAN AND SPECIFICALLY CLAUSE 24C.3 SECTION 4 WHICH REQUIRES THE ASSESSMENT OF A RAINWATER TANK SYSTEM WHICH PROVIDES A 50% REDUCTION IN RUNOFF DAYS. IN ORDER TO DETERMINE THE RAINWATER TANK VOLUME REQUIRED TO MEET THE 50% REDUCTION TARGET A WATER BALANCE MODEL WAS DEVELOPED TO REPRESENT THE WATER TRANSPORTATION PROCESS IDENTIFIED IN FIGURE 1 BELOW.

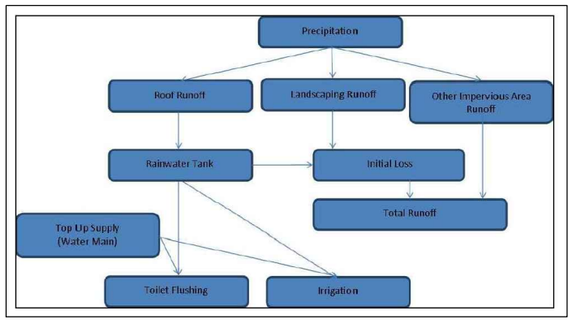

FIGURE 1. WATER BALANCE MODEL SUMMARY

THE METHODOLOGY ADOPTED, ASSESSES THE STORMWATER RUNOFF DIRECTED TO THE TANK ON A DAILY BASIS AND THE DAILY DRAWDOWN ASSOCIATED WITH DOMESTIC USAGE. THE MODELLING PRODUCES A DAILY TIME SERIES FOR THE AVAILABLE STORAGE IN THE TANK, DAILY MAINS WATER TOP UP, SPILL DURING STORMS, AND THE STORAGE LEVEL IN THE TANK.

WATER BALANCE SUMMARY

Post-development site (no management measures)	
areas	
total area	2422 m^2
impervious area draining to re-use	0 m^2
pervious area	907 m^2
impervious area graded to landscaping	0 m^2
impervious area bypassing reuse & landscapin	1515 m^2
reuse	
reuse tank volume	0 m^3
initial fraction full of reuse tanks	1
daily reuse	0 m^3
irrgiation use per week	0 m
losses	
pervious area loss (mm)	15 mm
impervious area loss (mm) **	1 mm
area to re-use loss (mm) *	0.5 mm
statistics	
Number of runoff days	3070
number of tank spill days	0
total runoff volume	68,867.94
number of simulated days	11323
number of rain events	4595
days reuse demand met	0
number of irrigation days	0

Post-development site (with management measures)		
areas		
total area	2422 m^2	
impervious area draining to re-use	938 m^2	
pervious area	907 m^2	
impervious area graded to landscaping	577 m^2	
impervious area bypassing reuse & landscapin	0 m^2	
reuse		
reuse tank volume	25 m^3	
initial fraction full of reuse tanks	1	
daily reuse (other than irrigation)	0 m^3	
irrgiation use per week	0.02 m	
losses		
pervious area loss (mm)	15 mm	
impervious area loss (mm) **	1 mm	
area to re-use loss (mm) *	0.5 mm	
statistics		
Number of runoff days	1531	
number of tank spill days	1121	
total runoff volume	49,475.54	
number of simulated days	11323	
number of rain events	4595	
days reuse demand met	10308	91.036%
number of irrigation days	1618	
reduction in runoff days	**50.1%**	
reduction in runoff volume	**28.2%**	

WATER BALANCE DATA SUMMARY

AS SHOWN ABOVE REUSE IS ONLY REQUIRED TO CONNECT TO IRRIGATION ONLY TO ACHIEVE COMPLIANCE WITH COUNCIL'S REQUIREMENTS FOR RUNOFF REDUCTION.

CONCLUSION

BASED ON THE FOREGOING A MINIMUM TOTAL RAINWATER TANK VOLUME OF 25kL IS REQUIRED TO REDUCE RUNOFF DAYS BY 50.1%. WE NOTE THAT 91% OF REUSE DEMAND IS MET.

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Architect: GELDER GROUP ARCHITECTS

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Drawing Title: STORMWATER QUALITY REPORT - SHEET No.1

Drawn	Date	Scale A1	Q.A. Check	Date
LW	FEB 2025	AS SHOWN	-	-

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BK	CC230201	C7	B

STORMWATER QUALITY REPORT

1 INTRODUCTION

A CATCHMENT BASED WATER QUALITY MODEL WAS DEVELOPED TO ASSESS THE STORMWATER RUNOFF QUALITY IN ACCORDANCE WITH THE REQUIREMENTS OF KU-RING-GAI DEVELOPMENT CONTROL PLAN PART 24 CLAUSE 24C.6 'STORMWATER QUALITY CONTROL.' IN THIS REGARD WE REFER TO THE PRESCRIBED TARGETS TABLED FOLLOWING:

TABLE 1 - STORMWATER POLUTANT REDUCTION TARGETS (MUSIC v6.3.0)

STORMWATER POLLUTANT	REDUCTION TARGETS
GROSS POLLUTANT	70%
TOTAL SUSPENDED SOLIDS (TSS)	85%
TOTAL PHOSPHORUS (TP)	65%
TOTAL NITROGEN (TN)	45%

2 STUDY METHODOLOGY

THE OBJECTIVES OF THIS REPORT ARE TO:

- ASSESS THE RUNOFF QUALITY FOR THE UNTREATED POST DEVELOPED SCENARIO AND IDENTIFY STORMWATER QUALITY CONTROLS LIKELY TO IMPACT ON RUNOFF QUALITY.
- ASSESS THE STORMWATER QUALITY FOR THE POST DEVELOPED SCENARIO INCLUDING THE MEASURES PROPOSED TO MEET THE POLLUTANT REMOVAL TARGETS .

THE REPORT IS BASED ON THE APPLICATION OF MUSIC SOFTWARE (MODEL FOR URBAN STORMWATER IMPROVEMENT CONCEPTUALISATION). IN THIS REGARD THE MODEL IS DEFINED AS FOLLOWS:

- A STORMWATER QUALITY MODEL TO CONVERT RAINFALL AND EVAPOTRANSPIRATION INTO RUNOFF.
- ESTIMATION OF STORMWATER FLOW AND POLLUTION GENERATION BY SIMULATING THE PERFORMANCE OF STORMWATER TREATMENT DEVICES INDIVIDUALLY AND AS PART OF A TREATMENT TRAIN.

THE MODEL DEFINES WATER QUALITY PROFILES FOR BOTH TREATED AND UNTREATED POST DEVELOPED SCENARIOS. THE TREATED POST DEVELOPED MODEL INCLUDES PARAMETERS WHICH REPRESENT THE WATER QUALITY MEASURES.

3 STORMWATER QUALITY MODELLING

3.1 GENERAL

THE FOLLOWING PARAMETERS WERE ASSESSED FOR THE HYDROLOGICAL MODELLING ASSOCIATED WITH THE CATCHMENT.

- RAINFALL/RUNOFF AND EVAPOTRANSPIRATION.
- SUB CATCHMENT DIVERSIONS.
- LAND USE (PERVIOUS AND IMPERVIOUS)

3.2 RAINFALL/RUNOFF AND EVAPOTRANSPIRATION

COUNCIL'S MUSIC-LINK DATA VERSION 6.35 WAS UTILISED IN THIS STUDY. THEREFORE DAILY RAINFALL DATA WAS OBTAINED FROM THE SYDNEY OBSERVATORY HILL RAINFALL STATION WITH 6 min TIMESTEP, STATION NO. 066062. THE DEFAULT KU-RING-GAI COUNCIL MUSIC LINK MONTHLY AVERAGE POTENTIAL EVAPOTRANSPIRATION DATA WAS ALSO UTILISED IN THIS STUDY.
THE DETAILS ARE SUMMARISED IN TABLE 3.1 AND 3.2

TABLE 3.1 - DETAILS OF DAILY RAINFALL DATA			
STATION	NAME	PERIOD	TIMESTEP
066062	SYDNEY OBSERVATORY HILL	01/01/1963-31/12/1993	6 min

TABLE 3.2 - SUMMARY OF POTENTIAL EVAPOTRANSPIRATION (PET)					
JAN	FEB	MAR	APR	MAY	JUN
180	135	128	85	58	43
JUL	AUG	SEP	OCT	NOV	DEC
43	58	88	127	152	163

3.3 CATCHMENT DEFINITION

THE POST DEVELOPED CATCHMENT CHARACTERISTICS ARE IDENTIFIED IN TABLE 3.3.

TABLE 3.3 - POST DEVELOPMENT SUB CATCHMENT DETAILS			
SUB CATCHMENT ID	SUB CATCHMENT AREA (ha)	% IMPERVIOUS AREA	% PERVIOUS AREA
ROOF TO RWT	0.094	100	0
PAVED AREAS TO TREATEMENT	0.02	100	0
DRIVEWAY TO TREATMENT	0.021	100	0
PLANTERS NOT OVER SLAB TO TREATMENT	0.010	0	100
IMPERVIOUS AREA BYPASSING TREATMENT AND OSD	0.006	100	0

4 MUSIC MODEL

THE MUSIC MODEL IS BASED ON A 6 min RAINFALL-RUNOFF MODEL IN CONJUNCTION WITH REPRESENTATIVE BASEFLOW AND STORMFLOW EVENT MEAN CONCENTRATIONS (EMCs).

4.1 WATER QUALITY PARAMETERS

THE ADOPTED VALUES OF VARIOUS MUSIC RAINFALL AND RUNOFF PARAMETERS ARE SUMMARISED IN TABLE 4.1 AS PER THE DEFAULT NODE VALUES WHEN ADOPTING THE KU-RING-GAI COUNCIL MUSIC LINK.

TABLE 4.1 - ADOPTED MUSIC RAINFALL/RUNOFF PARAMETERS	
PARAMETER	VALUE
IMPERVIOUS AREA PROPERTIES	
RAINFALL THRESHOLD (mm/DAY)	1.0 (0.3 ROOFS)
PERVIOUS AREA PROPERTIES	
SOIL STORAGE CAPACITY (mm)	170
SOIL INITIAL STORAGE (% OF CAPACITY)	30
FIELD CAPACITY (mm)	70
INFILTRATION CAPACITY COEFFICIENT - a	210
INFILTRATION CAPACITY EXPONENT - b	4.70
GROUNDWATER PROPERTIES	
INITIAL DEPTH (mm)	10
DAILY RECHARGE RATE (%)	50
DAILY BASEFLOW RATE (%)	5
DAILY DEEP SEEPAGE RATE (%)	0

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4.1 WATER QUALITY PARAMETERS CONT.

STORMWATER QUALITY IS CHARACTERISED USING EVENT MEAN CONCENTRATION (EMCs) UNDER STORM AND BASE FLOW CONDITIONS. THE VALUE OF WATER QUALITY PARAMETERS ADOPTED IN THIS STUDY IS SUMMARISED IN TABLE 4.2

TABLE 4.2 - ADOPTED MUSIC WATER QUALITY PARAMETERS

LAND-USE CATEGORY		Log_{10}TSS (mg/L)		Log_{10}TP (mg/L)		Log_{10}TN (mg/L)	
		STORM FLOW	BASE FLOW	STORM FLOW	BASE FLOW	STORM FLOW	BASE FLOW
GENERAL URBAN	MEAN	2.15	1.20	-0.60	-0.85	0.30	0.11
	STD DEV	0.32	0.17	0.25	0.19	0.19	0.12
ROADS	MEAN	2.43	1.20	-0.3	-0.85	0.34	0.11
	STD DEV	0.32	0.17	0.25	0.19	0.19	0.12
ROOFS	MEAN	1.30	1.10	-0.89	-0.82	0.30	0.32
	STD DEV	0.32	0.17	0.25	0.19	0.19	0.12

4.2 STORMWATER TREATMENT MEASURES

THE PROPOSED STORMWATER TREATMENT MEASURES INCLUDED IN THE POST DEVELOPED MODEL ARE AS FOLLOWS:

- 25,000 LITRE OSR TANK (FOR IRRIGATION ONLY)
- 6 X ATLAN FILTERS (FIL-3.0)
- 1 X STORMSACK THE SCHEMATIC LAYOUT FOR THE POST DEVELOPED MUSIC MODEL IS DEPICTED IN FOLLOWING FIGURE 1

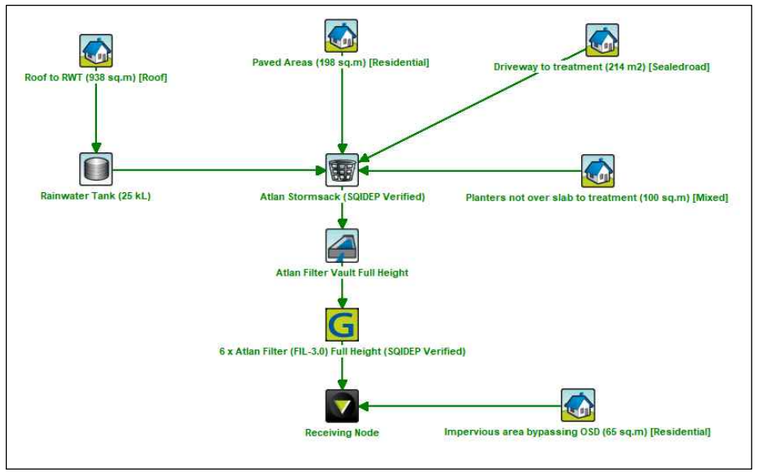


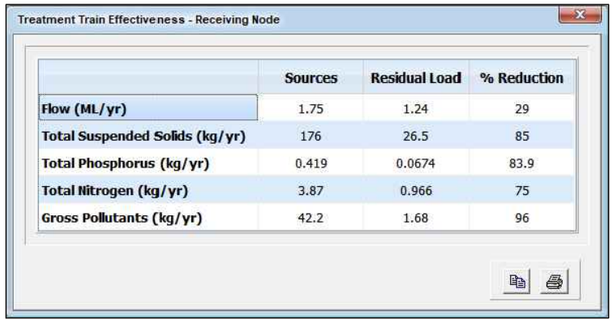
FIGURE 1 - MUSIC MODEL SCHEMATIC

5 RESULTS & CONCLUSION

BASED ON THE FOREGOING THE PROPOSED STORMWATER QUALITY TREATMENT MEASURES MEET THE REQUIRED TARGETS OF KU-RING-GAI COUNCIL.

REFER TO THE ASSOCIATED MUSIC LINK REPORT: 'CC230201 musicLink Report.pdf' AS PREPARED BY HYDRACOR CONSULTING ENGINEERS PTY LTD FOR FURTHER INFORMATION.

TABLE 5.1 - TREATMENT TRAIN EFFECTIVENESS



	Sources	Residual Load	% Reduction
Flow (ML/yr)	1.75	1.24	29
Total Suspended Solids (kg/yr)	176	26.5	85
Total Phosphorus (kg/yr)	0.419	0.0674	83.9
Total Nitrogen (kg/yr)	3.87	0.966	75
Gross Pollutants (kg/yr)	42.2	1.68	96

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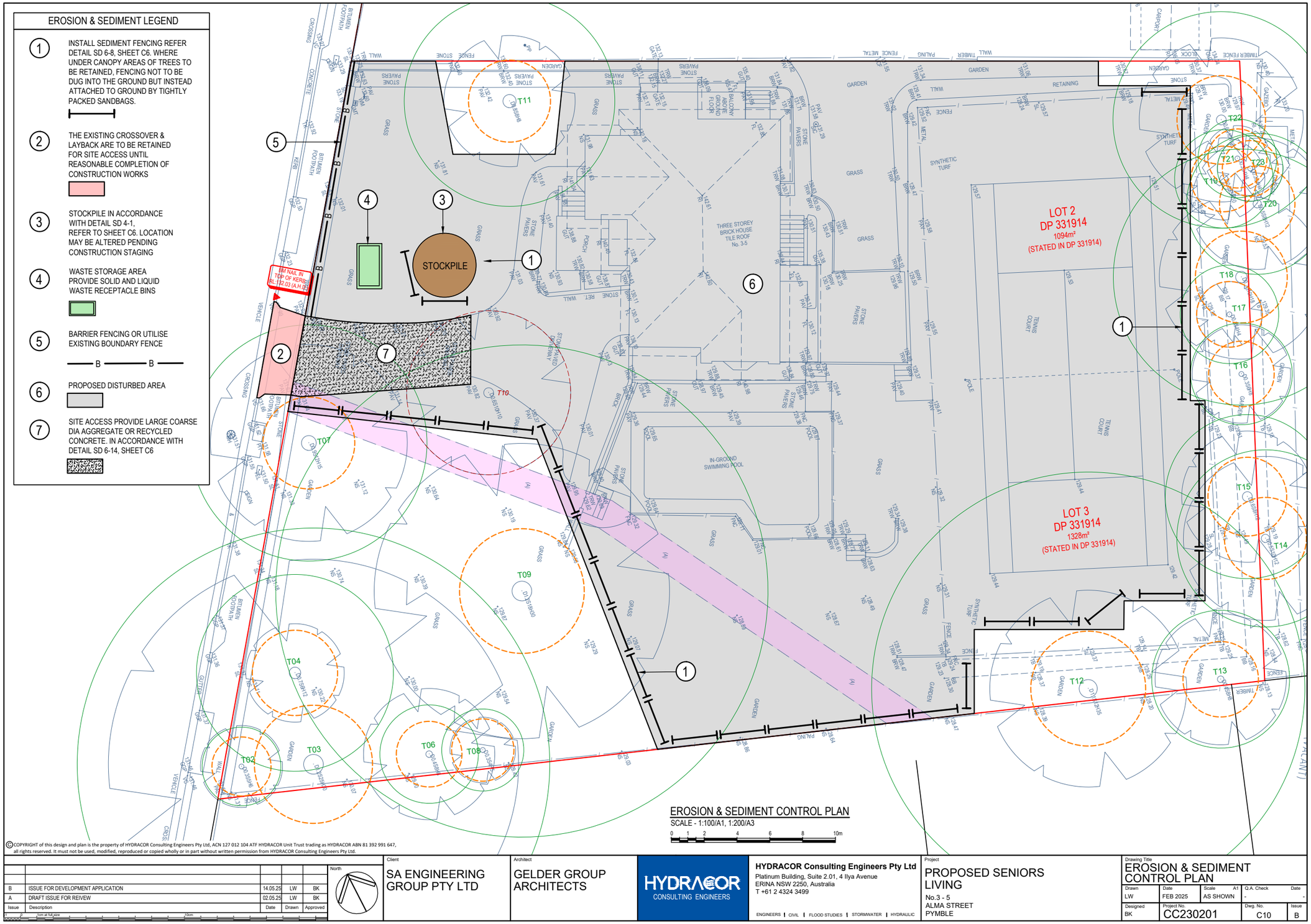

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0 10cm at full size 10cm

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EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

1. THIS SOIL AND WATER MANAGEMENT PLAN IS TO BE READ IN CONJUNCTION WITH OTHER ENGINEERING PLANS RELATING TO THIS DEVELOPMENT.
2. CONTRACTORS WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE UNDERTAKEN AS INSTRUCTED IN THIS SPECIFICATION AND CONSTRUCTED FOLLOWING THE GUIDELINES OF "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION", DEPT OF HOUSING, 1998 (BLUE BOOK).
3. ALL SUBCONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN REDUCING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE AREAS.

LAND DISTURBANCE INSTRUCTIONS

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

SITE MAINTENANCE INSTRUCTIONS

7. THE SITE SUPERINTENDENT WILL INSPECT THE SITE AT LEAST WEEKLY AND AT THE CONCLUSION OF EVERY STORM EVENT TO:
   - A) ENSURE THAT DRAINS OPERATE PROPERLY AND TO EFFECT ANY NECESSARY REPAIRS.
   - B) REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING LANDS CLOSER THAN 5 METRES FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS AND PAVED AREAS.
   - C) REMOVE TRAPPED SEDIMENT WHENEVER THE DESIGN CAPACITY OF THAT STRUCTURE HAS BEEN EXCEEDED.
   - D) ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND TO INITIATE UPGRADING OR REPAIR AS NECESSARY.
   - E) CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS. MAKE ONGOING CHANGES TO THE PLAN WHERE IT PROVES INADEQUATE IN PRACTICE OR IS SUBJECTED TO CHANGES IN CONDITIONS ON THE WORK-SITE OR ELSEWHERE IN THE CATCHMENT.
   - F) MAINTAIN EROSION AND SEDIMENT CONTROL STRUCTURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
8. THE SITE SUPERINTENDENT WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL. ENTRIES WILL INCLUDE:
   - A) THE VOLUME AND INTENSITY OF ANY RAINFALL EVENTS.
   - B) THE CONDITION OF ANY SOIL AND WATER MANAGEMENT WORKS.
   - C) THE CONDITION OF VEGETATION AND ANY NEED TO IRRIGATE.
   - D) THE NEED FOR DUST PREVENTION STRATEGIES.
   - E) ANY REMEDIAL WORKS TO BE UNDERTAKEN.

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

SOIL EROSION CONTROL INSTRUCTIONS

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

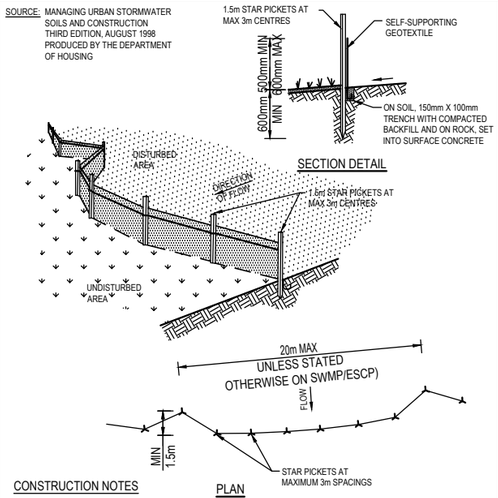
SEDIMENT CONTROL INSTRUCTIONS

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

WASTE CONTROL INSTRUCTIONS

24. ACCEPTABLE BINS WILL BE PROVIDED FOR ANY CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHING, LIGHTWEIGHT WASTE MATERIALS AND LITTER. CLEARANCE SERVICES WILL BE PROVIDED AT LEAST WEEKLY. DISPOSAL OF WASTE WILL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT.
25. ALL POSSIBLE POLLUTANT MATERIALS ARE TO BE STORED WELL CLEAR OF ANY POORLY DRAINED AREAS, FLOOD PRONE AREAS, STREAMBANKS, CHANNELS AND STORMWATER DRAINAGE AREAS. STORE SUCH MATERIALS IN A DESIGNATED AREA UNDER COVER WHERE POSSIBLE AND WITHIN CONTAINMENT BUNDS.
26. ALL SITE STAFF AND SUB-CONTRACTORS ARE TO BE INFORMED OF THEIR OBLIGATION TO USE WASTE CONTROL FACILITIES PROVIDED.
27. ANY DE-WATERING ACTIVITIES ARE TO BE CLOSELY MONITORED TO ENSURE THAT WATER IS NOT POLLUTED BY SEDIMENT, TOXIC MATERIALS OR PETROLEUM PRODUCTS.
28. PROVIDE DESIGNATED VEHICULAR WASHDOWN AND MAINTENANCE AREAS WHICH ARE TO HAVE CONTAINMENT BUNDS.

SOURCE: MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION THIRD EDITION, AUGUST 1998 PRODUCED BY THE DEPARTMENT OF HOUSING

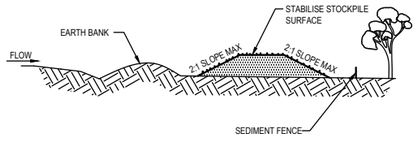


CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND, 3 METRES APART.
3. DIG A 150 MM DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
4. BACKFILL TRENCH OVER BASE OF FABRIC.
5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
6. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150 MM OVERLAP.

SEDIMENT FENCE SD 6-8

SOURCE: MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION THIRD EDITION, AUGUST 1998 PRODUCED BY THE DEPARTMENT OF HOUSING

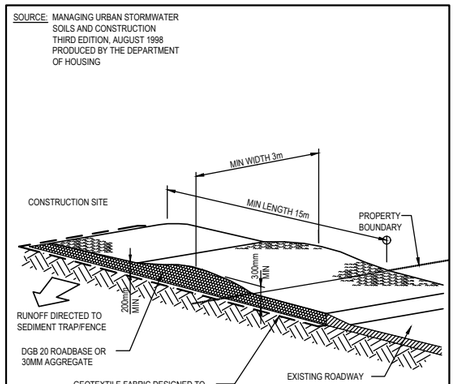


CONSTRUCTION NOTES:

1. LOCATE STOCKPILE AT LEAST 5 METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOWS, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS A LOW, FLAT, ELONGATED MOUND.
3. WHERE THERE IS SUFFICIENT AREA TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METERS IN HEIGHT.
4. REHABILITATE IN ACCORDANCE WITH THE SWMP/ESCP.
5. CONSTRUCT EARTH BANK (STANDARD DRAWING 5-2) ON THE UPSLOPE SIDE TO DIVERT RUN OFF AROUND THE STOCKPILE AND A SEDIMENT FENCE (STANDARD DRAWING 6-7) 1 TO 2 METRES DOWNSLOPE OF STOCKPILE.

STOCKPILES SD 4-1

SOURCE: MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION THIRD EDITION, AUGUST 1998 PRODUCED BY THE DEPARTMENT OF HOUSING



CONSTRUCTION NOTES:

1. STRIP TOPSOIL AND LEVEL SITE.
2. COMPACT SUBGRADE.
3. COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
4. CONSTRUCT 200MM THICK PAD OVER GEOTEXTILE USING ROADBASE OR 30MM AGGREGATE. MINIMUM LENGTH 15M OR TO BUILDING ALIGNMENT. MINIMUM WIDTH 3 METRES.
5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT TRAP.

STABILISED SITE ACCESS SD 6-14

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Issue	Description	Date	Drawn	Approved
B	ISSUE FOR DEVELOPMENT APPLICATION	14.05.25	LW	BK
A	DRAFT ISSUE FOR REIVEW	02.05.25	LW	BK

North

Client: SA ENGINEERING GROUP PTY LTD

Architect: GELDER GROUP ARCHITECTS

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Project: PROPOSED SENIORS LIVING
No.3 - 5
ALMA STREET
PYMBLE

Drawing Title: EROSION & SEDIMENT CONTROL NOTES & DETAILS

Drawn	Date	Scale	A1	Q.A. Check	Date
LW	FEB 2025	NTS		-	-
Designed	Project No.			Dwg. No.	Issue
BK	CC230201			C11	B

GBA Heritage

STATEMENT OF HERITAGE IMPACT

3 - 5 Alma Street, Pymbe (Claverton)

Proposed Works: Alterations and Additions
Prepared For: Gelder Group Architects

February 2025
Issue B



ACKNOWLEDGEMENT OF COUNTRY

GBA Heritage acknowledges the Traditional Custodians of the land that includes the subject site, and pay our respects to Elders past and present.

AUTHORSHIP

This report has been prepared by Dr Shabnam Yazdani Mehr, Senior Heritage Consultant (PhD, M.Sc, BArch, M.ICOMOS), of GBA Heritage and has been reviewed by the Director, Graham Brooks. Unless otherwise noted, all of the photographs and drawings in this report are by GBA Heritage.

LIMITATIONS

This report only addresses the relevant heritage planning provisions and does not address general planning or environmental management considerations.

Recommendations have been made on the basis of documentary evidence viewed and inspection of the subject site. Archaeological assessment of the subject site is outside the scope of this report.

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3 - 5 ALMA STREET, PYMBLE

ISSUE	DESCRIPTION	DATE	ISSUED BY
A	Draft for Review	19/02/2025	SM
B	**Issued for DA submission**	**19/02/2025**	**SM**

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1.0
THE HERITAGE CONTEXT

1.1 REPORT OVERVIEW

This report has been prepared to accompany a development application for proposed construction of senior living accommodation on the existing site at 3 - 5 Alma Street, Pymble, and incorporating the existing historic house into the new development.

This report evaluates the proposed development, designed by Gelder Group Architects.

This report provides information, analysis and recommendations to enable Council to evaluate the project in terms of Clause 5.10(4) of the *Ku-ring-gai Local Environmental Plan 2015* (the KLEP).[1]

This report concludes that the proposal will have an acceptable heritage impact.

1.2 HERITAGE ITEM

The subject site at 3 - 5 Alma Street, Pymble, is located on the south side of Alma Street, near the corner of Alma and Grandview streets. The subject site comprises two lots which are described by NSW Land Registry Services (LRS) as Lots 2 and 3, DP 331914.

The subject heritage item contains a Tudor/Old English Revival style dwelling house with a large and mature garden. The subject item is currently in use as a private residence. It is in good condition internally and externally.

The following information regarding the subject site is sourced from the Ku-ring-gai Council:

> *The block slopes gently down to the south which accommodates a garage underneath the house on the right-hand side. The house is setback from the street.*



Figure 1.1
Location map showing the subject Site outlined in red and shaded in yellow..
Source: NSW LRS SIX Maps.



Figure 1.2
Aerial showing the subject site outlined in blue.
Source: NSW LRS SIX Maps.

1 Heritage NSW, *Guidelines for Preparing a Statement of Heritage Impact*, Department of Planning and Environment, 2023.

1.3 STATUTORY HERITAGE LISTINGS

The subject site at 3 - 5 Alma Street, Pymble, is listed in Schedule 5 of the KLEP, as an item of local heritage significance, being *Item 59 - "Claverton", dwelling house*. It is also located within the *Athol Heritage Conservation Area (C46)*, listed under the same LEP.

The subject site is located in the vicinity of several heritage items listed in the same LEP, the closest being:

- *I58 - "Athol", dwelling house*, 19 Alma Street
- *I77 - Dwelling house*, 36 Park Crescent
- *I78 - Dwelling house*, 4A Park Crescent

The subject site is also located opposite the *Park Estate Heritage Conservation Area (C7)*.

Given that the subject site is a heritage listed item, is located within the HCA, and is also located in the vicinity of heritage listed items, the property is subject to the heritage provisions of the KLEP and the *Ku-ring-gai Development Control Plan 2024* (the KDCP) under the *Environmental Planning and Assessment Act 1979*. Ku-ring-gai Council must take into consideration the potential impact of any proposed development on the heritage significance of the heritage items.



Figure 1.3
Excerpt from the KLEP Heritage Map 007 showing the subject site outlined in blue.
Source: Ku-ring-gai Council, KLEP 2015, Heritage Map Sheet 007.

1.4 SITE CONTEXT

1.4.1 URBAN CONTEXT

The subject site is located in the suburb of Pymble, which is located on the Upper North Shore of Sydney, 15 kilometres north of the Sydney CBD.

The following information about Pymble is sourced from the Ku-ring-gai Historical Society:

> *Pymble is made up of two suburbs, Pymble and West Pymble. West Pymble commences west of Inverallan Avenue, and now includes a section to the south of Ryde Road which used to be known as Gordon West. There is a small, geographically isolated pocket around Beechworth Road but still part of Pymble. When the railway went through, a station was planned approximately at the junction of Beechworth Road and the Pacific Highway. This never eventuated, so Beechworth Road remained separated from Turramurra by Sheldon Forest and from Pymble proper by a valley. In 1980 two last subdivisions took place at the end of Beechworth Road, the Quadrant Close and Ingham subdivisions.*

The subject site is located in Alma Street which has a residential and leafy character. The street is mainly occupied by single or two-storey houses on varied architectural styles some of which are contemporary developments. The buildings are separated from the main street by ample front gardens and fences of varied styles. Some larger lots in the locality have been subdivided recently.

Views to the buildings are partially blocked by tall trees and high shrubs which are on either side of the street. The subject site is located opposite Robert Pymble Park.

Pymble train station is opposite Alma Street. There are a couple of local markets and cafes along Grandview Street, opposite the railway.

1.4.2 VISUAL CONTEXT

Views to the existing buildings along Alma Street are partially blocked by tall trees, high front fences, and high shrubs.

Although there is an ample front garden and high shrubs in front of the existing building, it is almost visible from the public domain. However, its distant views are largely blocked by tall trees and high shrubs.

1.4.3 THE EXISTING SITE

The subject site is located within the *Athol Heritage Conservation Area (C46)*, the boundaries of which commences from the subject site at 3-5 Alma Street and ends at No. 27 Alma Street. The buildings on the east side of the street are mainly located within the boundaries of the HCA.

The *Athol Heritage Conservation Area* is described as follows:[2]

> *The Athol Conservation Area includes dwellings dating from the 1890s through to the interwar period, containing a few examples of later development. The Athol Conservation Area contributes to the heritage values and the setting of the existing Park Estate Conservation Area.*

Many of the existing buildings within the HCA have experienced alterations and additions.

The subject site at 3 - 5 Alma Street comprises two lots which are located on the south side of the street, falling away southward and eastward. The vehicular and pedestrian access to the building is via Alma Street. The subject site is separated from the main street by a low stone fence. Medium height shrubs are behind the front brick fence, partially obscuring views to the lower levels of the building. There is a large landscaped garden in front of the subject building.

There is a narrow walkway on the north end of the subject site which is accessed via a small gate.

There is a garden with tall trees on the south side of the subject building. A pool is also located next to the building on its south side. A tennis court is located on the east side of the building. A vacant area is located on the south side of the subject site.



Figure 1.4
Looking northward to Alma Street from Grandview Street. Note the local markets and cafes along Grandview Street.
Source: Google Streetview, 2021



Figure 1.5
Looking northward along Alma Street. Distant views to the subject site, shown by a red arrow, are largely blocked by tall trees. Note the topography of Alma Street.
Source: Google Streetview, 2020



Figure 1.6
Looking northward along Alma Street. The subject site is on the right, which is largely blocked by tall trees. Robert Pymble Park is opposite the subject site, on the left.
Source: Google Streetview, 2020



Figure 1.7
Looking southward along Alma Street. The subject site is on the left, which is largely blocked by high shrubs and trees.
Source: Google Streetview, 2020

2 Ku-ring-gai Council; Heritage Conservation Areas: https://www.krg.nsw.gov.au/Planning-and-development/Heritage/Heritage-conservation-areas

1.4.4 PROPOSED WORKS AREA

The following plans (Figures 1.8 - 1.9) show the proposed works area. As it can be seen, the proposed works are mainly to the building's interior and the rear of the property.

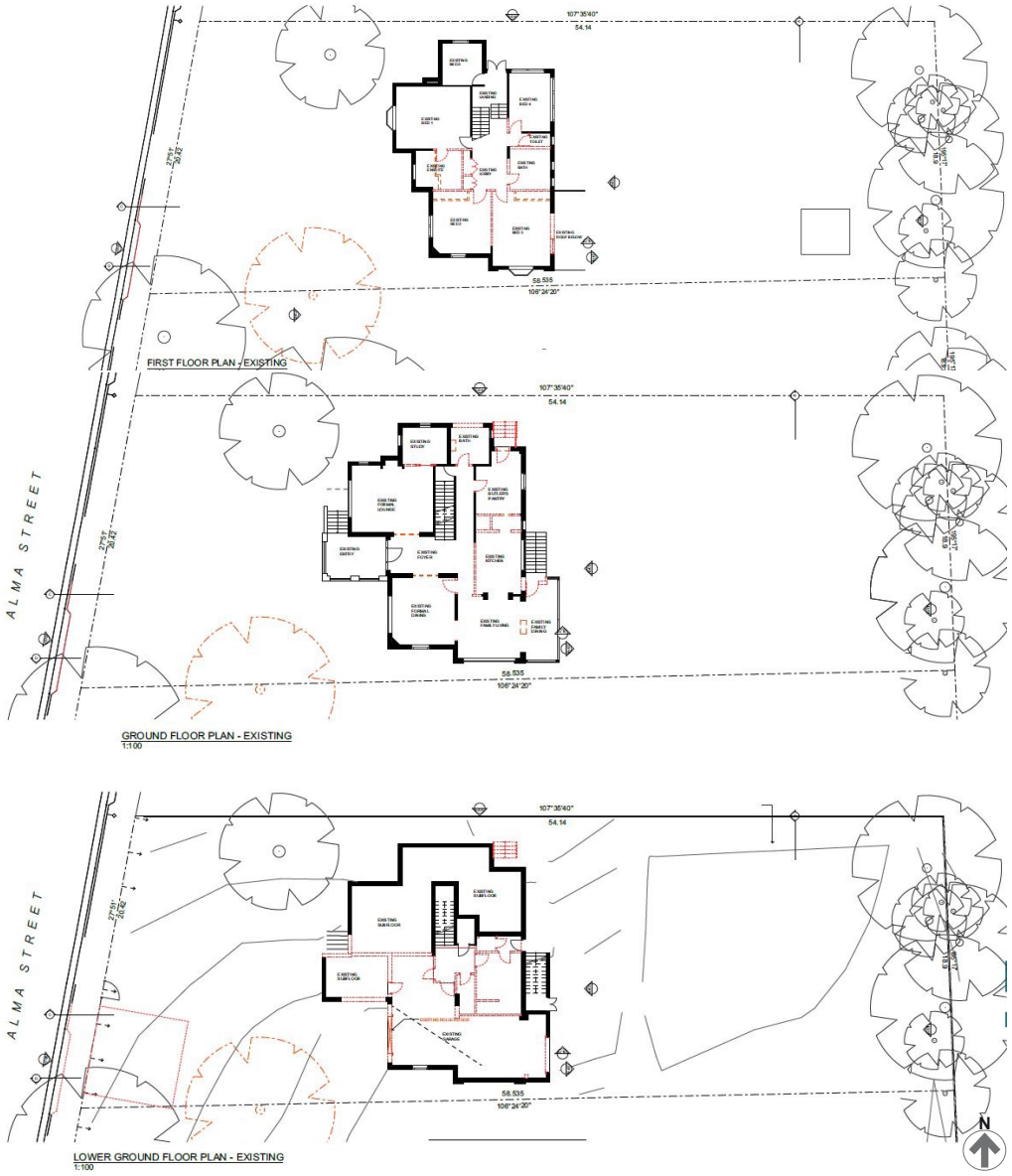


Figure 1.8
Demolition plans, showing the area of proposed works to the building's interior.
Source: Gelder Group Architects, 2025.



Figure 1.9
Site plan, showing the area of proposed works to the landscape and at the rear of the property.
Source: Gelder Group Architects, 2025.

1.5 HISTORICAL OVERVIEW

1.5.1 HISTORY OF THE HERITAGE ITEM

Although the subject site is a heritage listed item, the NSW Heritage Inventory has no information about it. The following history of the subject site has been provided by Ku-ring-gai Council through a GIPA request:

The subject site is part of the 600-acre Crown Grant to Robert Pymble in 1823. Pymble had arrived in Sydney with his wife Mary and six children in 1821. He had been a farmer with a silk weaving business in Herefordshire before starting a new life in Sydney, and it is thought he chose his land based on the fine timber available in the area. Station Street and Merrivale Lane mark the boundary between the Pymble grant and the 1824 grant to Daniel Dering Mathew. The southern boundary was on Lane Cove Road (Pacific Highway), and the western boundary midway between Bobbin Head Road and Warrangi Street. To the north, the land was bordered by Kokoda Avenue, Wahroonga.

The subject site is part of the 600-acre Crown Grant to Robert Pymble in 1823. Pymble had arrived in Sydney with his wife Mary and six children in 1821. He had been a farmer with a silk weaving business in Herefordshire before starting a new life in Sydney, and it is thought he chose his land based on the fine timber available in the area. Station Street and Merrivale Lane mark the boundary between the Pymble grant and the 1824 grant to Daniel Dering Mathew. The southern boundary was on Lane Cove Road (Pacific Highway), and the western boundary midway between Bobbin Head Road and Warrangi Street. To the north, the land was bordered by Kokoda Avenue, Wahroonga.

James Pymble built a second cottage for himself close to his father's home on the 15 acres he had acquired in 1856. In 1865 he sold a triangular area of 5 acres at the northern end to his brother-in-law Robert McIntosh and sold the remaining ten acres to him in 1876, containing the subject site.

In 1881 Robert McIntosh transferred to his son Edwin the 5 acres 2 roods 34 perches at the northern end, followed by the 10 acres containing the orchard and the residence, and the subject site. The construction of the railway in 1890, the consequent realignment of Lane Cove Road and the creation of Grandview Street resulted in the loss of almost 6 acres. The remaining 6 acres 2 roods and ½ perch were subdivided as the Dalcross Estate in 1907 (DP 5528). After Edwin's death in 1909, the property was transferred to various members of his family (Land Property Information Volume 29 Folio 105).

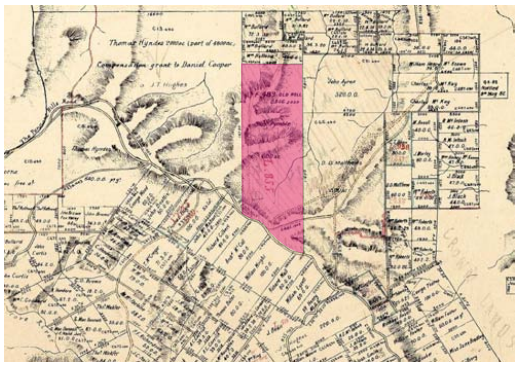


Figure 1.10
Map of Parish of Gordon, showing 600 acre Crown Grant to Robert Pymble in 1823, shaded in pink.
Source: HLRV, Parish of Gordon County of Cumberland, 1883.

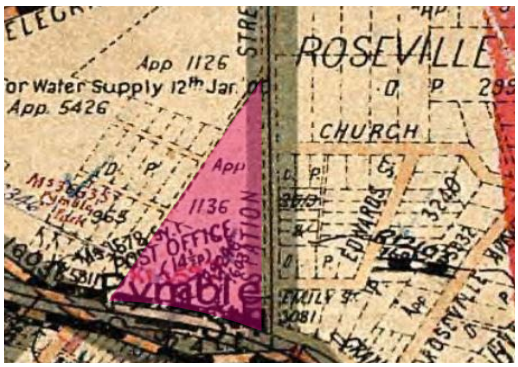


Figure 1.11
Map of Parish of Gordon in 1906. At this time, land was subdivided and streets were formed. Land comprising the subject site is shaded in pink.
Source: HLRV, Certificate of Title, Volume 29 Folio 105.

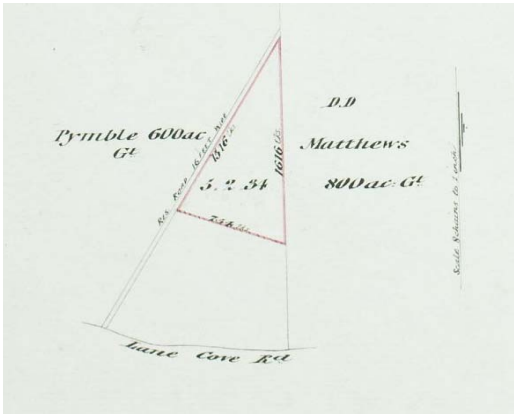


Figure 1.12
A plan attached to a Certificate of Title, showing over 5 acres comprising the subject site, outlined in red, which was in possession of Robert McIntosh in 1869.
Source: HLRV, Certificate of Title, Volume 29 Folio 105.



Figure 1.13
In 1909, 6 acres comprising the subject site was in possession of Edwin Archbold McIntosh. Note at this time, Alma and Station streets were formed.
Source: HLRV, Certificate of Title, Volume 1960 Folio 139.

1.5.2 BRIEF HISTORY OF THE LOCALITY

The following information about the history of the locality is sourced from the Ku-ring-gai Historical Society:[3]

Robert Pymble was not the first, but was certainly the most influential, early settler for the suburb eventually named after him. He arrived in Sydney in 1821, and petitioned Governor Macquarie for a land grant which was not honoured until 1823. This grant ran from the present Bobbin Head Road in the north, bordering Thomas Hyndes' 2000 acre Big Island Estate, down to Station Street in the south, bordering Daniel Dering Mathew's property. Fred Pymble, a descendant of Robert Pymble, recalled that Pymble bought up unwanted grants for a token 1/- (a shilling or about 10c) an acre. Pymble, Hyndes and Mathew began, as did so many others, feeding the near-insatiable market demand for timber. Hyndes and Pymble went into partnership in the timber-getting business, and employed hundreds of convicts.

Blackbutt, stringy and iron bark and blue gum were felled to become piles, posts, rails, palings, girders and shingles for the wharves and housing in Sydney. There was a large saw pit on Bannockburn Road and two smaller ones on each side of the Pymble Golf Club dam. The timber was sawn into lengths carted by bullocks, later draft horses, down the dirt tracks of Mona Vale Road and the Pacific Highway to Fiddens Wharf, which was situated at the end of Fiddens Wharf Road, Killara. From there the timber was ferried to Sydney.

Orchards were eventually established, with much labour. Pymble's soil was rich, suitable for citrus fruits, plums, peaches, apples, pears and grapes. There was no fruit fly then to ruin the crops – it was not until the turn of the century that this pest brought about the demise of orchards in Ku-ring-gai. The native birds were actually beneficial, as they ate the insects, including the dreaded codlin moth, able to ruin a crop of apples. The codlin moth was also controlled by tying a sugar bag around the base of apple and pear trees. As the larva attempted to climb up to the fruit, they would get caught in the bag and be squashed before they could do any damage.

3 Ku-ring-gai Historical Society: https://www.khs.org.au/pymble-local-history/

Other orchardists in the area were Richard Porter, who had 100 acres around Beechworth Road, and Buckingham and Bloodworth, both of whom worked orchards around Pymble Ladies College.

'Irish Town', so named simply because Irish settlers congregated there, lies mostly in modern North Turramurra, but there is a segment in modern Pymble. It ran from Merrivale Road in the east to Bobbin Head Road in the west, and a short distance south of Pentecost Avenue, including the area around Reely Street to Reynolds Street. Johann Henri Rhule, a German, who changed his name to John Henry Reely when World War I broke out, settled in Irish Town in 1854, and established a fine orchard. Pentecost Avenue went through Reely land, which meant demolition of the weatherboard house he built, but its brick and slate replacement still stands. Another orchardist in Irish Town was the Irishman Samuel King from Northern Ireland.

A real community spirit developed amongst Pymble's settlers, and the centre of community was frequently the place of worship. The establishment of permanent churches meant a long and combined struggle. Pastors slogged through mud tracks to hold services for their flocks. The Presbyterian Church was one of the late arrivals, being built only in 1895, with Samuel King donating stone from his quarry for its construction. Sunday service was a full family outing, with everyone in their best, in highly polished buggies. The family trees so comprehensively traced by Gay Halstead in The Story of St Ives (NSW) and some of its Neighbours demonstrate just how tightly intermarried the major founding families were in this tiny population. Thomas Henry Reely (son of the strict Lutheran John Henry Reely) married a daughter of the Irish Presbyterian Samuel King, demonstrating a religious tolerance in this new land, and perhaps also the centrality of the church to the community. Samuel King remained a stalwart of his church until he died, only two days after the dedication of its new building, in March 1908.

1.5.3 EARLY OWNERSHIP AND USE OF THE SITE

The subject site was part of 600 acre Crown Grant to Robert Pymble in 1823, that was subdivided and changed ownership over time.

In 1907, 6 acres comprising the subject site were subdivided as the "Dalcross Estate". The subject site comprises two lots; Lot 17 and Lot 18 (Figure 1.15). Lot 17 was sold to Stanley Archibald McIntosh in 1909, while Lot 18 was sold to Olive McIntosh in 1910. In 1935, both lots were transferred to Reginald Percy Lane. At this time, Lot 17 was subdivided into two lots, and the subject site was formed. The Lots were retitled as Lots 1, 2, and 3 annexed to Transfer No. C362747.

Lots 2 and 3 remained in possession of the Lanes until 1955, when it was transferred to Gilbert Dowry Elliott of Pymble, company director, and then to a succession of owners before the present day.

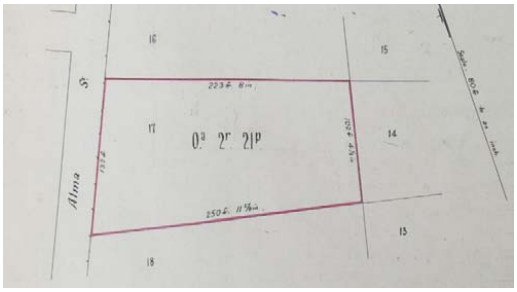


Figure 1.14
In 1909, Lot 17 was owned by Stanley Archibald McIntosh..
Source: HLRV, Certificate of Title, Volume 1991 Folio 55.



Figure 1.15
In 1910, Lot 18 was owned by Olive McIntosh.
Source: HLRV, Certificate of Title, Volume 2077 Folio 48.

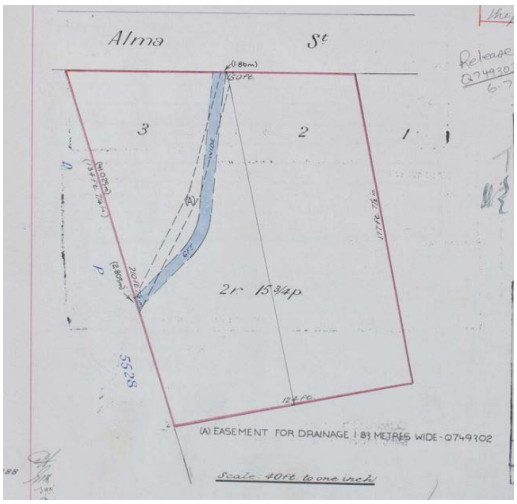


Figure 1.16
In 1935, the subject site was owned by Reginald Percy Lane.
Source: HLRV, Certificate of Title, Volume 4730 Folio 172.

1.5.4 INITIAL CONSTRUCTION OF THE BUILDING

The following information regarding the initial construction of the building has been provided by Council:

> *The residence was built for Reginald (Rex) Percy Lane of Sydney, Dental surgeon, who acquired lots 2 and 3 of DP331914 (representing the current subject site) in December 1935, shortly after they had been created from a re-subdivision of the surrounding land in June 1935.*
>
> *Reginald (Rex) Percy Lane married Elsie Winifred Blunt in 1916. On 2 November 1935 the Sydney Morning Herald reported that HI Cross in conjunction with Hankins and Agnew had sold a home site in Alma Street, Pymble for £950. Dr R. Lane's application to Ku-ring-gai Council to construct a brick two-storey dwelling and garage in Alma Street was approved on 10 December 1935 (BA 1935/628). JS Macgregor was the builder of "Claverton", No 3-5 Alma Street, consisting of six rooms and estimated to cost £2,170. The previous year, JS Macgregor had built local architect Douglas Agnew's spec Tudor-style home at No. 10 King Edward Street.*
>
> *Agnew's son Brian recalls that his father was friends with Rex Lane and possibly designed the house in Alma Street. Like his house in King Edward Street this house is a mixture of Tudor Revival and California Bungalow styles. However, having been custom built rather than speculative, externally it has more interesting and probably more expensive detailing as seen in the brick coursing and the window heads, the Tudor elements in the gables and the overhanging storey above the front door.*
>
> *The name "Claverton" appears to have originated under Lane's ownership; a social column in 1947, for example, advertises a card party to be held at "Claverton", Alma Street, the home of Mrs R P Lane.*
>
> *The Lanes retained the property until 1955, by which time the two lots had been retitled as Lots 2 and 3 annexed to Transfer No. C362747, when it was transferred to Gilbert Dowry Elliott of Pymble, company director, and then to a succession of owners before the present day.*

Although no original plans or photos of the building have been found in the online resources of Council or Council's archives, the following Waterboard plan (Figure 1.17) shows the general form and footprint of the building. However, the exact date of the plan is unknown.

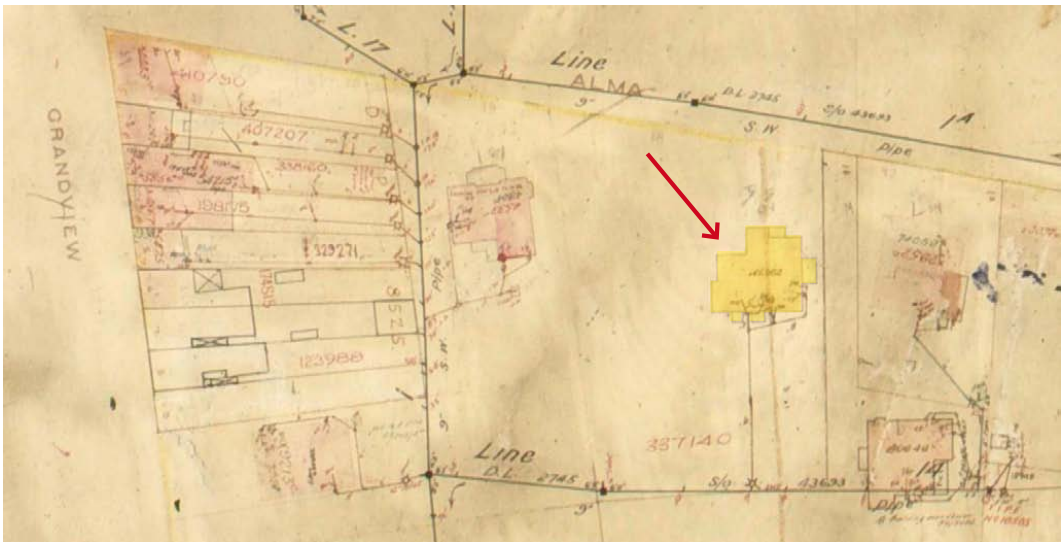


Figure 1.17
Waterboard plan showing the footprint of the building, shaded in yellow and indicated by a red arrow. Note a building on the left side of the subject building, which has been demolished.
Source: Sydney Water/WaterNSW Historical Research Archive, BLKWTL2123

1.5.5 SUBSEQUENT MAJOR PHASES OF DEVELOPMENT

No Development Applications related to the subject site have been found in Council's archives and Council's online resources.

The following information regarding the changes to the building has been provided by Ku-ring-gai Council:

Modifications and Dates

2020 - 21

- *Work carried out without DA approval:*
- *Garage door replaced with Tudor style door*
- *Original internal timber work painted white (doors and frames, skirting, windows and frames, board-and-batten wall panelling)*
- *Removal of light fittings*
- *Removal of decorative glass in front door side lights*
- *Replacement of kitchen and extension into previous bedroom 6*
- *Addition of kitchenette to lower ground floor*
- *Original floorboards bleached, sanded and polished*
- *All bathrooms replaced, including some original tiled floors*
- *Removal of internal wall to sunroom to create larger family room*
- *Removal of original fireplaces and mantles and replacement with Victorian style*
- *Addition of air conditioning and vents in timber floors*
- *Removal of mature garden*

The following 2019 and 2022 plans (Figures 1.18- 1.23) sourced from the realestate.com.au, show changes to the building during this time. The following plans show that although the overall footprint and form of the building has remained unchanged, it has experienced internal changes.

From the Old English architectural style of the building, it is likely that a porte-cochere was originally on the south side of the building, which was later converted to a garage.

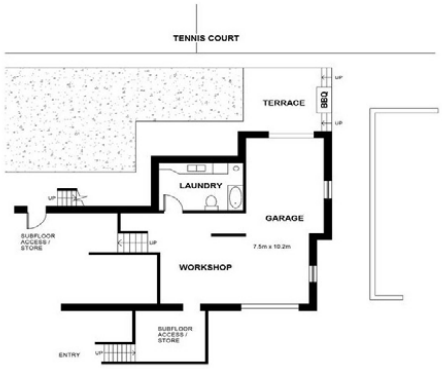


Figure 1.18
Lower ground floor plan in 2019.
Source: realestate.com.au

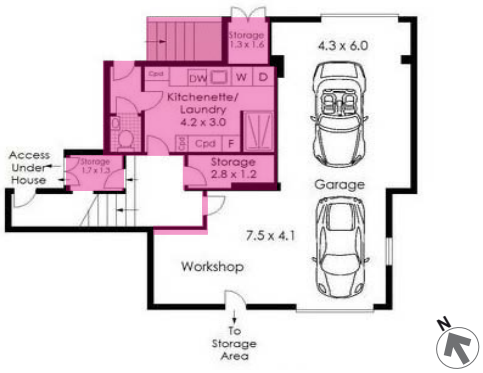


Figure 1.19
Lower ground floor plan in 2022. The areas that have experienced changes are highlighted in pink.
Source: realestate.com.au



Figure 1.20
Ground floor plan in 2019.
Source: realestate.com.au



Figure 1.21
Ground floor plan in 2022. The areas that have experienced change are highlighted in pink.
Source: realestate.com.au



Figure 1.22
First floor plan in 2019.
Source: realestate.com.au



Figure 1.23
First floor plan in 2022. The areas that have experienced change are highlighted in pink.
Source: realestate.com.au

1.5.6 BUILT EVOLUTION

The following floor plans (Figure 1.24) show the changes to the subject building after 2011. Given that there are no DAs or BAs related to the subject site, early changes to the building are unknown. However, from the footprint of the subject building in the Waterboard plan (Figure 1.17), it appears that the existing sunroom and stairs at the rear of the building are later additions.

The existing stairs and entry to the building on the north side appear to be later additions and are not original.

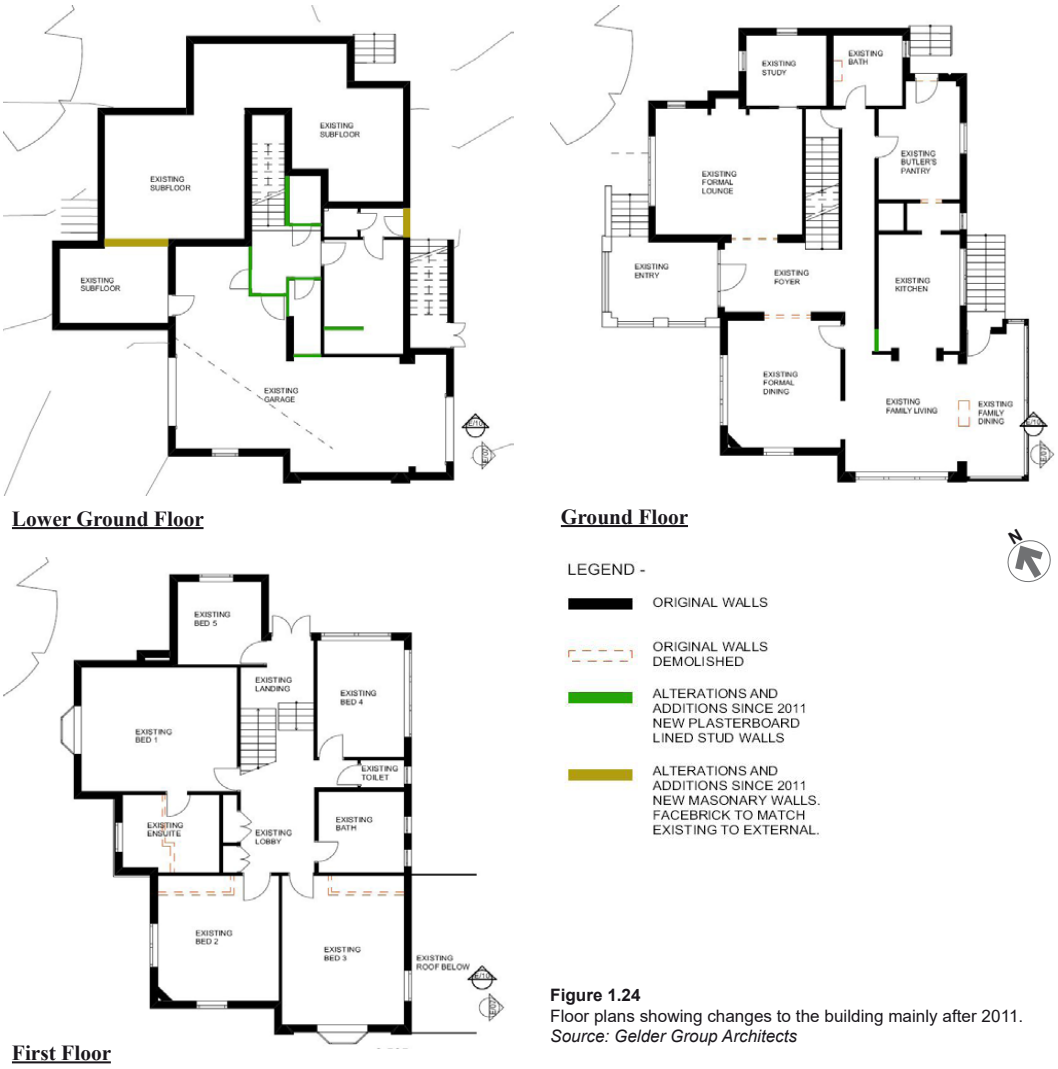


Figure 1.24
Floor plans showing changes to the building mainly after 2011.
Source: Gelder Group Architects

1.5.7 LANDSCAPE EVOLUTION

The following aerial photos (Figures 1.25 - 1.27) and street views (Figures 1.28 - 1.31) show the landscape around the subject site has substantially changed over time.



Figure 1.25
1930 aerial photo showing the subject site, indicated by a yellow arrow. Note that at this time, the subject site was vacant.
Source: NSW Historical Imagery.



Figure 1.26
1943 aerial photo showing the subject site outlined in red and shaded in yellow. Note the footprint of the subject building. At this time, a tennis court was at the rear of the house. The landscape around the house remained almost undeveloped.
Source: NSW LRS SIX Maps.

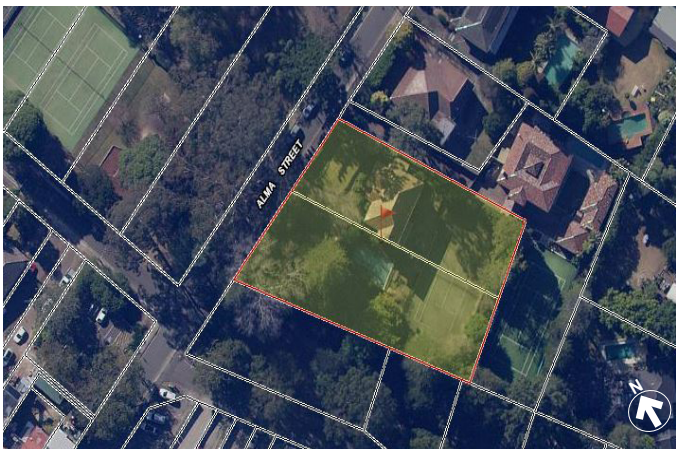


Figure 1.27
Recent aerial photo showing the subject site shaded in yellow. Note landscape changes to the site including the construction of a pool next to the house on its south side.
Source: NSW LRS SIX Maps.



Figure 1.28
Looking to the subject site in 2007. Note the curved stone fence and entry to the subject site. At this time, there were no front boundary hedges and the subject house was partially visible from the street.
Source: Google Streetview, 2007



Figure 1.29
Looking to the subject site in 2013. Note the curved stone fence was demolished and the driveway was widened. Hedges and trees were planted in the front garden, some of which partially blocked views to the lower levels of the house. The pool area and back garden were separated from the front garden by brick fence. A corrugated aluminium fence was installed in front of the house.
Source: Google Street view, 2013



Figure 1.30
Looking to the subject site in 2020. Note changes to the front fence and front garden.
Source: Google Street view, 2020.



Figure 1.31
Looking to the subject site in 2023. Note the landscape changes to the front garden. The pool area and back garden are separated from the front garden by a medium height brick fence and a door. Currently, the building is highly visible from the main street. Note changes to the door of the garage.
Source: GBA Heritage, 2023.

1.6 PHYSICAL ANALYSIS

1.6.1 DESCRIPTION OF THE BUILDING EXTERIOR

Although the subject site is a heritage listed item, the NSW Heritage Inventory has no information about it. The following history of the subject site has been provided by Ku-ring-gai Council through a GIPA request:

> *The property at 3-5 Alma Street contains an Interwar Stockbroker Tudor or Old English Revival style dwelling, set in a large and mature garden. The block slopes gently down to the south which accommodates a garage underneath the house on the right-hand side. The house is setback from the street. The house features clinker brick work and the front façade is asymmetrical with imitation half-timbering in the two gables.*
>
> *The windows on the ground level are highlighted by distinctive brick coursing of the window heads. The left-hand protruding wing features an oriel bay window on the upper level. The central section features an entry verandah, accessed by stone stairs from the front path, and recessed main entry door within a Tudor arch, with a jettied floor above. The right-hand section has a single garage at street level, accessed via a long flagstone driveway.*

The subject site is designed and constructed in the Inter-war Old English architectural style. Although the building has undergone changes, its original form and presentation has remained intact. The building features the ley characteristics of the style including:

- Asymmetrical massing
- Gable with tiles and timber bargeboards
- Texture, clinker brickwork
- Tall brick chimney with brick pot
- Casement windows with leadlight glazing
- Corbelled brickwork
- Jettying
- Oriel

The following photos (Figures 1.32 - 1.44) taken by GBA Heritage in August 2023, and also sourced from the realestate.com.au show the building exterior and its condition.



Figure 1.32
View of main (front) and side (south-west) elevation. Note the brick fence separating the back garden and pool area from the front garden. The front garden has substantially changed.
Source: realestate.com.au, 2022



Figure 1.33
View of the main elevation of the subject house, showing the key characteristics of its Inter-war Old English architectural style, all of which have remained unchanged.
Source: realestate.com.au, 2022



Figure 1.34
Looking to the main (front) elevation of the subject building facing Alma street. Note the key characteristics of the Inter-war Old English architectural style. Note the brick fence on the right, separating the back garden and pool area from the front garden. Note the flagstone driveway. This elevation has remained almost unchanged. Note the Tudor style garage door which has been added recently.



Figure 1.35
View of the main (front) elevation of the building, which has remained unchanged. Note the key characteristics of its architectural style including half-timbered gable with timber bargeboard, oriel, recessed main entry with Tudor arch and a jettied floor above, front verandah with decorative brick balustrade and stone stairs, and corbelled brickwork.



Figure 1.36
View of the entry verandah and garage on the ground floor level. Note the decorative brickwork.

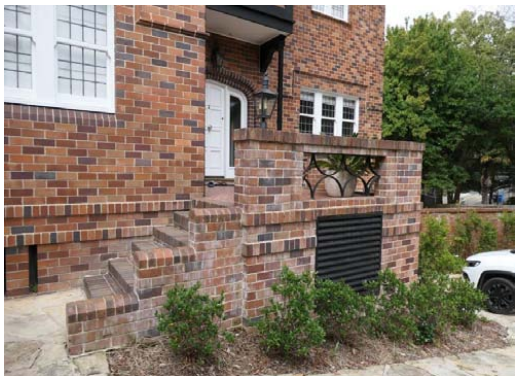


Figure 1.37
View of main front entry and front verandah. Note the decorative texture and clinker brickwork.



Figure 1.38
Looking to the side (south) and rear (south-east) elevations of the building. It appears that the building has experienced sympathetic rear addition.



Figure 1.39
View of the rear (south-east) elevation. The building has experienced alterations on this side. It appears that the timber structure with staircase were added later to the building.



Figure 1.40
View of the rear (south-east elevation). Note the tennis court at the rear of the main house. Note the topography of the subject site.



Figure 1.41
View of the south-east (rear) elevation. Note the topography of the subject site.

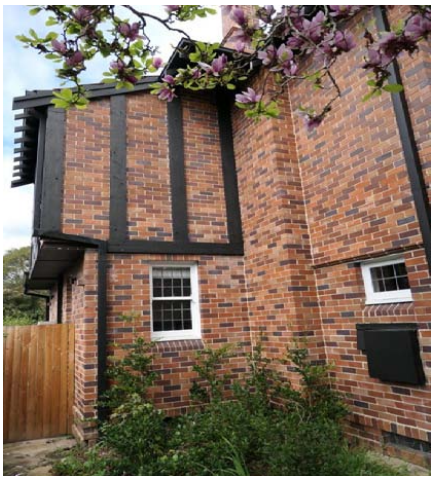


Figure 1.42
View of the north-east elevation. Note the brick chimney.

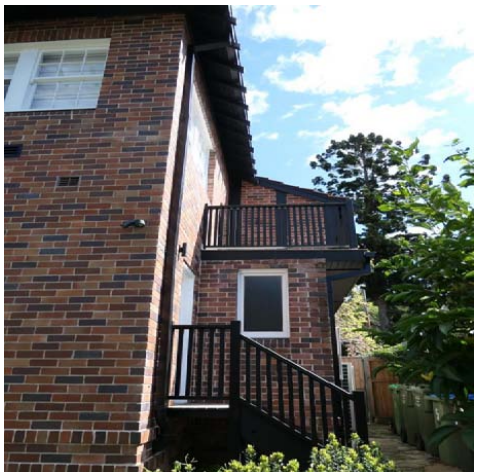


Figure 1.43
View of the north-east elevation. This elevation has undergone changes. The stairs to the ground floor level were added later.

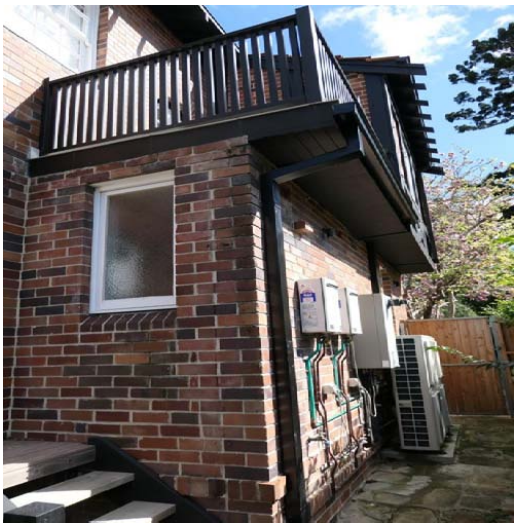


Figure 1.44
View of the north-east elevation, which is used as a service area.

1.6.2 DESCRIPTION OF THE BUILDING INTERIOR

The building has undergone internal changes over time, mainly between 2020 and 2021, resulted in the loss of its original architectural integrity and intactness. Some internal features of the building have been removed including the original fireplace and windows. The internal layout of the building, mainly at the rear of the house and the lower ground floor has undergone extensive changes. The building interior including internal timber works have been painted. T

The following photos (Figures 1.45 - 1.79) taken by GBA Heritage in August 2023, and sourced from the realestate.com.au show the internal condition of the building.



Figure 1.45
View of the garage and workshop on the lower ground floor.



Figure 1.46
Internal view of the garage. This space has undergone substantial changes including the addition of kitchenette.



Figure 1.47
Timber stairs from the lower ground floor to the ground floor level. The door to the storage on the right was added later.

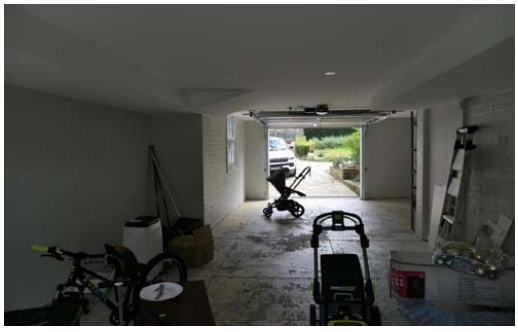


Figure 1.48
Internal view of the garage.



Figure 1.49
Internal view of the existing sub-floor underneath the entry terrace, which is currently used as a storage and service area..



Figure 1.50
View of the entry hall and stair to the upper floor level. Note the original timberwork, the decorative glass in front door side lights, and floorboards.
Source: realestate.com.au, 2019

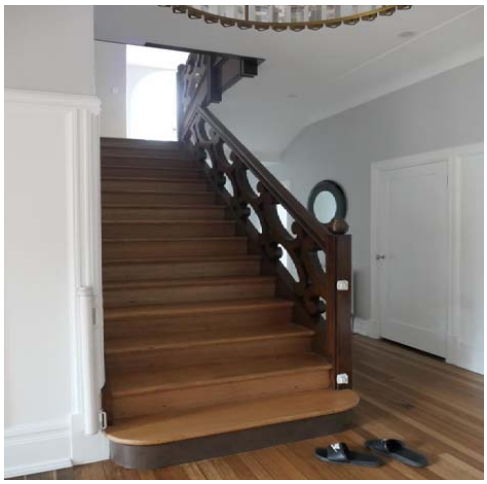


Figure 1.51
View of the timber stair to the upper floor level. Note internal changes to the building including painting the timber work and changing the floorboards.



Figure 1.52
View of the lounge room in 2020. Note the original brick fireplace and timberworks. Note the colour of cornices.
Source: realestate.com.au, 2019



Figure 1.53
View of the lounge room, which has undergone changes. Note the original fireplace has been removed and replaced with a Victorian style fireplace. Original timber work and cornices have been painted white. The floorboards have been renovated.



Figure 1.54
View of the original dining room on the front section of the house facing Alma Street. Note the original timber work and floorboards.
Source: realestate.com.au, 2019



Figure 1.55
View of the dining room (currently the living room) in the front section of the house. Note all the timber work, cornices and skirting have been painted white.



Figure 1.56
View of the original front entry door. Note the decorative glass in side lights.
Source: realestate.com.au, 2019



Figure 1.57
View of the main entry door. Note the timber work has been painted in white and the decorative glasses have been removed from the front door side lights.



Figure 1.58
View of the family room/ dining room and sunroom on the left. Note the tiled floors.
Source: realestate.com.au, 2019



Figure 1.59
View of the family/dining room. The sunroom is now used as dining room. Note changes to the floor. Timber work and cornices have been painted white. Note the original wall between sunroom and dining room has been demolished.



Figure 1.60
View of sunroom at the rear of the house, facing tennis court. It appears that this space was added later.
Source: realestate.com.au, 2019



Figure 1.61
View of sunroom which is currently used as dining room. Note the timber work and skirting have been painted white and the floor tiles have been changed.



Figure 1.62
View of the kitchen on the ground floor level at the rear of the building.
Source: realestate.com.au, 2019



Figure 1.63
View of the kitchen. Note the extension of kitchen to the bedroom on the corner of the building. The kitchen has been renovated and altered.



Figure 1.64
View of the bathroom on the ground floor level.
Source: realestate.com.au, 2019



Figure 1.65
View of the bathroom on the ground floor level. Note it has been altered and renovated.



Figure 1.66
Hallway on the first floor level.
Source: realestate.com.au, 2019



Figure 1.67
Hallway on the first floor level. Note all the timber works including architraves, doors, and skirting have been painted white. The walls and cornices have been painted. Note changes to the floor.

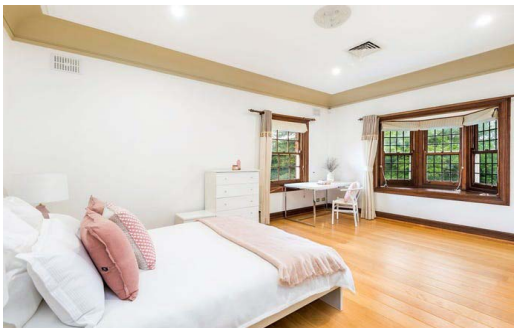


Figure 1.68
View of the bedroom 2 on the south corner of the building.
Source: realestate.com.au, 2019



Figure 1.69
View of the bedroom on the south corner of the building. Note the bedroom has undergone renovations in which all the timber works have been painted white, the floor has been replaced, walls and cornices have been painted.



Figure 1.70
View of the bathroom on the first floor level.
Source: realestate.com.au, 2019



Figure 1.71
View of the bathroom on the first floor level. Note substantial changes and renovations to this area.



Figure 1.72
View of the master bedroom with ensuite on the first floor level, facing Alma Street.
Source: realestate.com.au, 2019



Figure 1.73
View of the master bedroom with ensuite on the first floor level, facing Alma Street. Note changes to the room in form of painting the walls, cornices, timber works and skirting. Note changes to the floor.



Figure 1.74
View of the ensuite on the front section of the building facing Alma Street.
Source: realestate.com.au, 2019

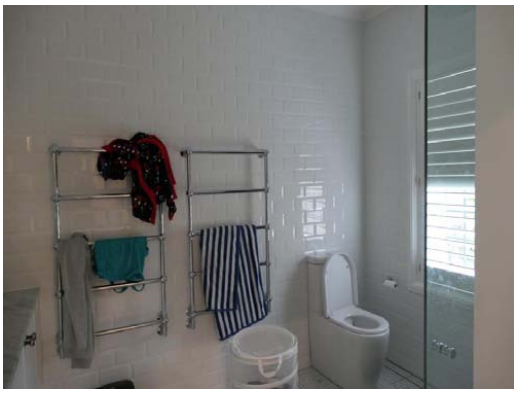


Figure 1.75
View of the ensuite. This area has undergone substantial alterations and renovations.



Figure 1.76
View of the bathroom on the first floor level, on the south-west corner of the building, facing Alma Street.
Source: realestate.com.au, 2019



Figure 1.77
View of the bathroom on the first floor level, on the south-west corner of the building, facing Alma Street. Note this room has undergone renovations.



Figure 1.78
View of the bathroom on the first floor level, at the rear of the building.
Source: realestate.com.au, 2019



Figure 1.79
View of the bathroom on the first floor level, at the rear of the building. Note the bathroom has experienced renovations.

1.6.3 CONDITION AND INTEGRITY

Between 2019 and 2021, the building has undergone extensive renovations in the form of painting all the timber works, architraves, skirtings, walls and cornices. The floor has been replaced. In some spaces walls have been demolished/removed and in some areas walls have been added.

Given the extent of the recent renovations, the building is in good condition internally and externally.

2.0 SIGNIFICANCE ASSESSMENT

Article 1.0 of the Burra Charter states:

> *Cultural significance means aesthetic, historic, scientific or social or spiritual value for past, present or future generations.*[1]

To ascribe cultural or heritage significance to an item, whether a place, building, object or custom, is to deem it to be valuable to our present and evolving society: something that should be part of future generations' heritage.

Heritage significance may be contained within and demonstrated by: the fabric of an item; its setting and relationship with other items; its recorded historical context; and its importance to certain groups of people. The assessed significance of an item may vary as more is learnt about the past, as its degree of rarity changes or as the value of its relationship to certain people or social values evolves.

Determining cultural significance is at the basis of all planning for places of historic value. A clear understanding of significance permits informed decisions about which items or parts of items should be retained and conserved, enhanced or at least not unduly altered, and thus guides the assessment of proposals for development and change.

Significance is assessed by comparing the item to a relevant sample of similar items, and by applying standard evaluation criteria to it. This section undertakes a comparative analysis of the subject item and assesses its significance against the criteria established by the Heritage Council of NSW.[2]

1 Australia ICOMOS, The Australia ICOMOS Burra Charter, 2013
2 Heritage NSW, *Assessing Heritage Significance*, 2023



Figure 2.1
Excerpt from the KLEP Heritage Map 007 showing the subject site outlined in blue.
Source: Ku-ring-gai Council, KLEP 2015, Heritage Map Sheet 007.

2.1 ESTABLISHED SIGNIFICANCE OF THE SUBJECT SITE

The following Statement of Significance for the subject site has been sourced from the NSW Heritage Inventory.[3]

> ***Statement of Significance:***
> *Reasons for listing; cultural, architectural, municipal significance.*

The following updated Statement of Significance for the subject site is sourced from Ku-ring-gai Council:

> ***Statement of Significance***
> *The item is of historical importance as adjoining intact lots from the original 1907 Dalcross subdivision of Robert Pymble's land grant, with the two lots remaining together, under the ownership of the Pymble and related McIntosh families and though to their eventual purchase by the builder of the house in 1935.*
>
> *The house is an aesthetically significant example of the Stockbroker Tudor style of architecture and features many landmark qualities of the style. The site is significant for its association with the Pymble Family, for whom the suburb is named. The item is significant as a fine representation of the Stockbroker Tudor style of architecture, enhanced by the retention of its original setting on two generous lots within the original subdivision.*
>
> *The item is of local heritage significance in terms of its historical, aesthetic, social and representative values. This satisfies four of the Heritage Council criteria of local heritage significance for local listing.*

3 State Heritage Inventory, https://www.environment.nsw.gov.au/topics/heritage/search-heritage-databases/state-heritage-inventory

2.2 CURTILAGE ANALYSIS

Heritage NSW (in the NSW Department of Planning and Environment) defines "heritage curtilage" as the area of land surrounding an item or area of heritage significance which is essential for retaining and interpreting its heritage significance.[4] Heritage curtilage can be classified as one of four types:

- Lot Boundary Heritage Curtilage
- Reduced Heritage Curtilage
- Expanded Heritage Curtilage
- Composite Heritage Curtilage

The curtilage of the subject site is the 'Lot Boundary Heritage Curtilage', which reaches to the edge of the property lot.

2.3 ESTABLISHED SIGNIFICANCE OF THE ATHOL CONSERVATION AREA

2.3.1 STATEMENT OF SIGNIFICANCE

The NSW Heritage Inventory contains no Statement of Significance for the *Athol Conservation Area*, database entry number 1882679.

The following information about the HCA is sourced from Ku-ring-gai Council:

> ***Athol Conservation Area - C46 (KLEP (LC) 2012)***
> *The Athol Conservation Area includes dwellings dating from the 1890s through to the interwar period, containing a few examples of later development. The Athol Conservation Area contributes to the heritage values and the setting of existing Park Estate Conservation Area.*

2.3.2 CONTRIBUTION OF THE SITE TO THE HCA

Section B, Part 19 of the KDCP defines contribution accordingly:

> ***What is a Contributory Property?***
> *Contributory properties are buildings and sites within a HCA which are deemed to exhibit one or more of the following characteristics:*
>
> *i) buildings and sites that make an important contribution to the character and significance of the HCA. They can be from a key historical layer, true to an architectural type, style or period, or highly or substantially intact including their garden setting. Where subdivision has occurred, the subdivision is within the key historical period or the area.*
>
> *ii) buildings and sites which are altered from their original form but are recognisable and could be reasonably reinstated to that condition or the alterations are not considered to be detrimental to the integrity of the building; for example, a building that has been rendered or painted or where the roof cladding has been replaced but the form is otherwise legible.*
>
> *iii) buildings and sites with new layers/additions sensitive to the style, form, bulk, scale and materials of the original building.*

The subject building, constructed in 1935, is an Inter-war Old English Revival building. The overall form and streetscape presentation of the building has remained intact, which contributes to the character and significance of the HCA.

Based upon the Statement of Significance, the following elements of the subject site are identified as contributory elements of the Athol HCA:

CONTRIBUTORY ELEMENTS

- The Inter-war Old English Revival presentation of the dwelling to Alma Street, including the gabled roof with tiles, half-timbering and timber bargeboards, timber decorative detailing, texture/ clinker brickwork, tall brick chimney with brick pot, leadlight glazing, corbelled brickwork, oriel, and jettying;
- The setback from Alma Street with extensive garden setting and low sandstone fence;
- Timber framed openings and materials consistent with the architectural style, including face brick, sandstone and timber; and
- The allotment boundaries reflect the original 1907 Dalcross subdivision of Robert Pymble's land grant.

4 Warwick Mayne-Wilson, *Heritage Curtilages*, NSW Heritage Office and the Department of Urban Affairs and Planning, NSW, 1996

2.4 ESTABLISHED SIGNIFICANCE OF THE HERITAGE ITEMS IN THE VICINITY OF THE SUBJECT SITE

There are a number of individually listed heritage items in the vicinity of the subject site. These are listed as items of local heritage significance on Schedule 5 of the KLEP. The NSW Heritage Inventory contains the following information for heritage items in the vicinity.

The NSW Heritage Inventory contains the following Statements of Significance for these items.

Athol, Dwelling House
19 Alma Street, Pymble
Database entry number 1880330

Statement of Significance
Reasons for listing; historic, social, architectural, municipal significance.



Figure 2.2
View of the heritage listed house at 19 Alma Street.
Source: www.realestate.com.au

Dwelling house
36 Park Crescent, Pymble
Database entry number 1880326

Statement of Significance
Reasons for listing; cultural, architectural, municipal significance Note: fine garden.



Figure 2.3
View of the heritage listed house at 36 Park Crescent.
Source: www.domain.com.au

Dwelling house
4A Park Crescent, Pymble
Database entry number 1882512

The NSW Heritage Inventory contains no Statement of Significance for this item.



Figure 2.4
View of the heritage listed house at 4A Park Crescent.
Source: Google Streetview, 2020

2.5 ESTABLISHED SIGNIFICANCE OF THE PARK ESTATE HERITAGE CONSERVATION AREA

The subject site is located opposite the Park Estate Heritage Conservation Area. The NSW Heritage Inventory contains no Statement of Significance for the *Park Estate Conservation Area (C7)*, database entry number 1882712.

The following information about the HCA is sourced from Ku-ring-gai Council:

> ***Park Estate Conservation Area - C7 (KLEP 2015)***
> *The Park Estate Heritage Conservation Area is historically and aesthetically significant as an intact portion of the Park Estate subdivision associated with Robert Pymble and his descendants, for Robert Pymble Park, and as an area of fine substantial houses of the Federation, Inter-war and mid to late twentieth century periods, in a variety of architectural styles.*

2.6 COMPARATIVE ANALYSIS

Assessment of the subject site has included comparison with, but was not limited to, the following heritage listed buildings in Ku-ring-gai constructed in the same period and architectural style.

I316 - The Tudors, dwelling house
29 Lynwood Avenue, Killara
Heritage Item ID: 1880529

The following statement of significance for the above building is sourced from the NSW Heritage Inventory:

> ***Statement of Significance***
> *Reasons for listing; cultural, architectural, State significance. Designed in 1934 by John Brogan. 'Brandywine' Note: fine garden setting.*

The building was designed and constructed in the Old English Architectural style, featuring the key characteristics of the style including gable roof with tiles and timber bargeboards, texture, clinker brickwork, corbelling and arched forms, tall brick chimney and timber joinery. Although externally the building appears to have been retained substantially intact, it has undergone extensive alterations and sympathetic additions. A tennis court was added on the south-east side of the side by 1989. Recently a DA has been approved for significant alterations and additions to the building.



Figure 2.5
View of the heritage listed house at 29 Lynwood Avenue, Killara. Note the porte-cocher on the left.
Source: www.realestate.com.au

Item 84 - Dwelling House
7 Taunton Street, Pymble
Heritage Item ID: 1882574

The following Statement of Significance is sourced from the NSW State Heritage Inventory form for the subject site:

> ***Statement of Significance***
> *No. 7 Taunton Street, Pymble, is significant as part of the early residential development of the suburb of Pymble during the 1930s when the construction of large houses on large landscaped allotments was at its peak. The house remains largely intact externally with its original Inter-War Old English stylistic detailing and is an excellent example of the fine detailing of a large scale residential building of this style within Ku-ring-gai Local Government Area. The largely intact and mature gardens at the front of the house are significant to the contribution this building makes to the streetscape character as the original curtilage to this early 20th Century Inter-War style residence. Together with No. 5 Taunton Street, these two buildings make a strong contribution to the character of the immediate area as a fine and largely intact pair of large scale Inter-War residences.*

It appears that the building externally has been retained substantially intact. However, the building has experienced alterations and additions.



Figure 2.6
View of the heritage listed house at 7 Taunton Street, Pymble. Note the porte-cocher on the right.
Source: www.realestate.com.au

Item 675 - Taylor, dwelling house
15 Clermiston Avenue, Roseville
Heritage Item ID: 1880781

The following Statement of Significance is sourced from the NSW Heritage Inventory for the subject site:

> ***Statement Of Significance***
> *Reasons for listing; architectural, Municipal significance.*

Although in the Heritage Inventory it is stated that the subject site has been substantially retained intact, from the aerial photos it appears that the building has undergone extensive rear additions.



Figure 2.7
View of the heritage listed house at 15 Clermiston Avenue, Roseville.
Source: www.realestate.com.au

Item 75 - Dwelling House
22 Park Cresent, Pymble
Heritage Item ID: 1882513

The NSW Heritage Inventory contains no information about the property. The building was designed and constructed in the Old English Architectural style, featuring the key characteristics of the style. From the aerial photos of the subject site, the building was originally constructed on a generous lot with a tennis court on its west side. However, the site was subdivided into two lots. Two storey residential buildings were constructed on the west side of the heritage listed building. The exact date of these changes is unknown.



Figure 2.8
View of the heritage listed house at 22 Park Cresent, Pymble.
Source: www.realestate.com.au

Item 357 - Dwelling House
23 Redgum Avenue, Killara
Heritage Item ID: 1882450

The NSW Heritage Inventory contains no information about the heritage listed item. The heritage listed building appears to be substantially intact externally, featuring the key characteristics of the Old English architectural style. From the aerial photos of the site, it appears that the building has experienced extensive rear additions. The front garden has undergone changes over time.



Figure 2.9
View of the heritage listed house at 23 Redgum Avenue, Killara.
Source: www.realestate.com.au

Item 919 - "Somerset", dwelling house
47 Fox Valley Road, Wahroonga
Heritage Item ID: 1880088

The following Statement of Heritage Impact is sourced from the NSW Heritage Inventory for the heritage listed item.

> ***Statement of Significance***
> *Dating from 1936, the house and grounds of Somerset represent a fine example of the inter-war residential development of Sydney's north shore. Architect-designed for share broker, Claude Medway Cox, the building demonstrates the period of post-Depression recovery and development. The quality of construction and primary style of Inter-War Old English demonstrates the success of its owner in this period. It also references his profession, as this style is colloquially known as 'Stockbroker Tudor.'*



Figure 2.10
View of the heritage listed "Somerset" house at 47 Fox Valley Road, Wahroonga, showing half timbered gable and street presentation.
Source: NSW Heritage Inventory, 2021

Architecturally, the building demonstrates a fine example of the Inter-War Old English style with some other distinctive Inter-War stylistic elements, internally and externally. The asymmetrical massing, half-timbered gable with herringbone brickwork, elaborate tall brick chimneys and porte cochere are characteristic of the Old English style. The interiors and details are also characteristic of this style with high quality materials and finishes, heraldic devices in the stained glass windows, timber paneling and large fireplaces. An eclectic period, the stonework details particularly around the ground floor windows reference the grandeur of the Inter-War Gothic style. The bathroom inserts fine Art Deco elements, demonstrating the typical strong geometric forms with arched openings and colourful glazed tiles referencing the iconic Hollywood glamour of this era. The grounds with circular drive and tennis court contribute to its setting as a distinguished residence.

The building also demonstrates the work of local Sydney architect E C Pitt (1896-1938) in the final years before his early demise. Pitt was a local architecture graduate and foundational member of the Institute of Architects during this period when full time architecture courses were first established in Sydney. Described as one of Sydney's leading architects, Pitt was noted for his success in specialised flat and residential design. While his early demise limited his works, one example has since been recognised as significant in the Institute of Architects Register of Twentieth Century Architecture. Somerset is of local heritage significance in terms of its historical, associations, aesthetic technical and representative value. This satisfies four of the Heritage Council criteria of local heritage significance for local listing.

2.6.1 CONCLUSION

All identified Inter-war Old English style residential buildings are locally listed heritage items. They feature the key characteristics of the style externally.

While the streetscape presentation of the identified comparable houses has been substantially retained intact, some of them have experienced extensive rear additions and landscape changes.

Some of the identified heritage listed houses were originally constructed on a generous lot, while some are within a narrower lot. In some case, the original large lot was subdivided into two lots, an example of which is the heritage listed item at 22 Park Crescent.

From the identified comparable houses, it appears that tennis courts were not part of the original landscape design and they were added later, an example of which is the heritage listed item at 29 Lynwood Avenue.

2.7 GRADING OF SIGNIFICANCE

The subject site has been carefully assessed to determine a relative grading of significance into five levels. This process examines a number of factors, including:

- Relative age and original design quality
- Degree of intactness and general condition of fabric
- Extent of subsequent alterations
- Association with important people or events
- Intangible values
- Ability to demonstrate a rare quality, craft or construction process

Grading reflects the contribution the element makes to the overall significance of the item (or the degree to which the significance of the item would be diminished if the component were removed or altered).

EXCEPTIONAL SIGNIFICANCE
Rare or outstanding element directly contributing to a place or object's significance.

HIGH SIGNIFICANCE
High degree of original fabric.

Demonstrates a key element of the place or object's significance.

Alterations do not detract from its significance.

MODERATE SIGNIFICANCE
Altered or modified elements.

Elements with little heritage value, but which contribute to the overall significance of the place or object.

LITTLE SIGNIFICANCE
Alterations detract from its significance.

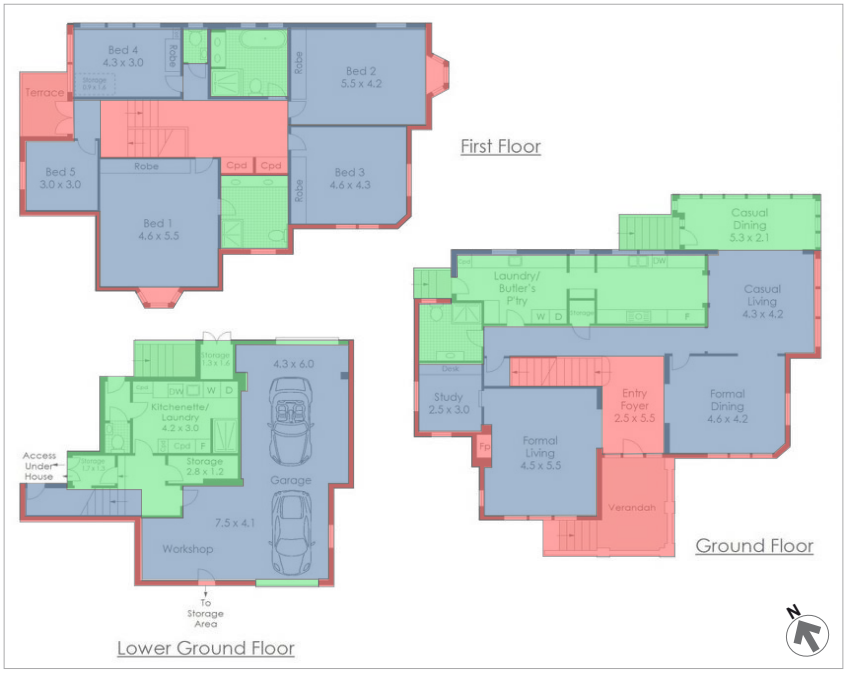
Difficult to interpret.

INTRUSIVE
Damaging to the place or object's significance.

Grading has been established as a valuable tool, to assist in developing appropriate conservation measures for the treatment of the building and its various elements. In general, good conservation practice encourages the focusing on change, or upgrading of, an historical building/site to those areas or components which make a lesser contribution to significance. The areas or components that make a greater or defining contribution to significance should generally be left intact or changed with the greatest care and respect.

The following table list the grading of significance for the building's components, which are also highlighted in the below floor plans (Figure 2.11).

GRADING OF SIGNIFICANCE	SITE ELEMENTS	REASONS
EXCEPTIONAL	There are no elements of the subject site to be of 'Exceptional' significance.	The subject property has no rare or substantial elements.
HIGH	All the original building's components and elements that contribute to its heritage significance, and to the interpretation and legibility of its original form and streetscape presentation, including: • Key characteristics of its Inter-war Old English Revival style. • Main (front) and side elevations of the building. • The main roof form. • Tall brick chimney with brick pot. • Original timber works and decorations internally and externally. • The entry verandah and stone stairs, • Original architraves, cornices, skirting and joinery. • Principal original room layout of the house.	These building elements have a high degree of original fabric and contribute to the heritage significance of the house.
MODERATE	• Original Internal walls and spaces. • The rear elevations of the building.	Internal walls of the building contribute to the overall heritage significance of the building but are of little heritage value, some of which have undergone alterations.
LITTLE	• The existing sunroom at the rear of the building. • The internal layout of the garage on the lower ground floor level. • Later additions to the building.	From the early footprint of the building (Figure 1.17), it appears that the rear sunroom was added later to the building and is of little significance. The lower ground floor garage has undergone extensive changes and is contemporary, and thus is of little significance.
INTRUSIVE	There are no building's components and elements of the subject site to be of 'Intrusive'.	There are no added building's elements/ components that are damaging to the building or its heritage significance.



LEGEND

EXCEPTIONAL

HIGH

MODERATE

LITTLE

INTRUSIVE

Figure 2.11
Floor plans Grading Diagram indicating the significance of individual components, as shown in the key on the left. The Grading Diagram is to be read in conjunction with the Grading Table provided above

2.8 SIGNIFICANCE OF THE PROPOSED WORK AREA

The proposed development (Figures 2.12 - 2.14) includes the construction of Senior Living buildings at the rear of the subject site, and incorporating the existing heritage house into the new development.

The subject building has undergone extensive alterations and additions over time, making some spaces less sensitive to any future changes. Based on the historical research, site inspection and the Statement of Significance, the subject house has been carefully assessed and a Grading of Significance has been provided for the subject building's elements and components (Section 2.7).

The proposed work areas are limited to the building's elements and components of 'Moderate' or 'Little' heritage significance, while no changes to the high significant elements and components, as identified in the Statement of Significance and the Grading of Significance, are proposed.

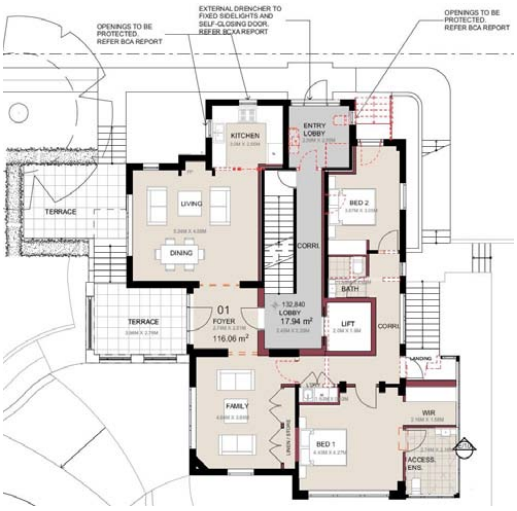


Figure 2.13
Ground floor level of the existing heritage house. Note the proposed changes to the building.
Source: Gelder Group Architects



Figure 2.14
First Floor level of the existing heritage house. Note the 'High' significant building's elements and spaces have been retained.
Source: Gelder Group Architects

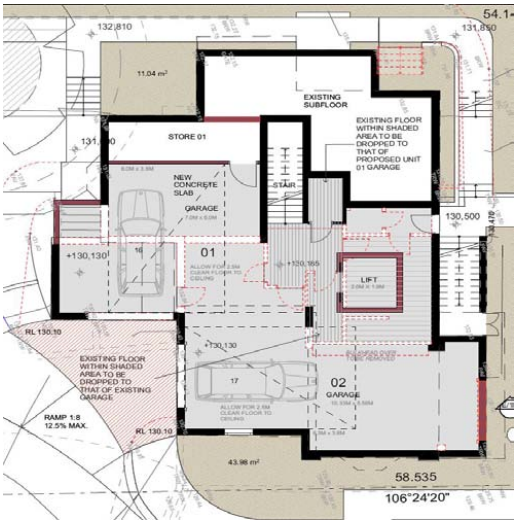
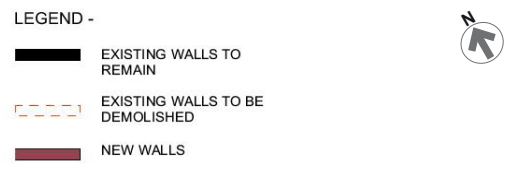


Figure 2.12
Lower ground floor of the existing heritage house. Note the proposed changes are mainly to the building's elements and spaces of 'Moderate' or 'Little' Significance.
Source: Gelder Group Architects



The landscape of the subject site has undergone changes over time, making it less sensitive to further changes. The proposed development includes demolition of the existing pool and tennis court, which are later additions and do contribute to the heritage significance of the subject site.

Regarding the proposed removal of trees and the proposed landscape changes, an 'Arborist Report' should be prepared by a specialist to assess the significance of the existing trees and vegetation on the subject site.

2.9 ARCHAEOLOGICAL POTENTIAL

Given that the subject building is the original structure on the subject site, it is unlikely that any significant remains of any earlier structure to be found below ground.

Although Archaeological Assessment is outside the scope of this Report, it should be noted that the Archaeological Management Provisions of the NSW Heritage Act apply to any relics which are essentially located below ground level. If, at any time, unexpected archaeological remains are uncovered or disturbed, work must stop immediately and the NSW Heritage Council must be notified.

3.0
PROPOSED WORKS

3.1 THE PROPOSAL

The proposed development, designed by Gelder Group Architects, is detailed in the plans and Statement of Environmental Effects that accompany this application. The plans are dated 12 February 2025, Issue C - DA Issue. It includes:

- Construction of two storey buildings including basement parking, at the rear (east side) of the subject site,
- Alterations to the existing heritage house and re-configuration of internal spaces,
- Landscape changes
- Partial Demolition of the internal walls, mainly in the lower ground floor, most of which are later additions,
- Construction of new walls and infilling some of the openings,
- Construction of a lift at the rear of the heritage house, providing access between levels.
- Construction of a terrace on the first floor level above the sunroom
- Demolition of the existing stairs and entry on the north side of the heritage house, which are later additions.

The aim of the proposal is to construct Senior Living buildings at the rear of the subject site, in which the existing heritage house will be integrated into the new development. The existing heritage house will be converted into two separate units. The proposed changes to the heritage house (shown in Section 2.8, Figures 2.11 - 2.13) includes:

The proposed development will provide contemporary senior living spaces within the heritage listed structure and at the rear of the subject site, while retaining the important architectural features and spaces of the historic dwelling.

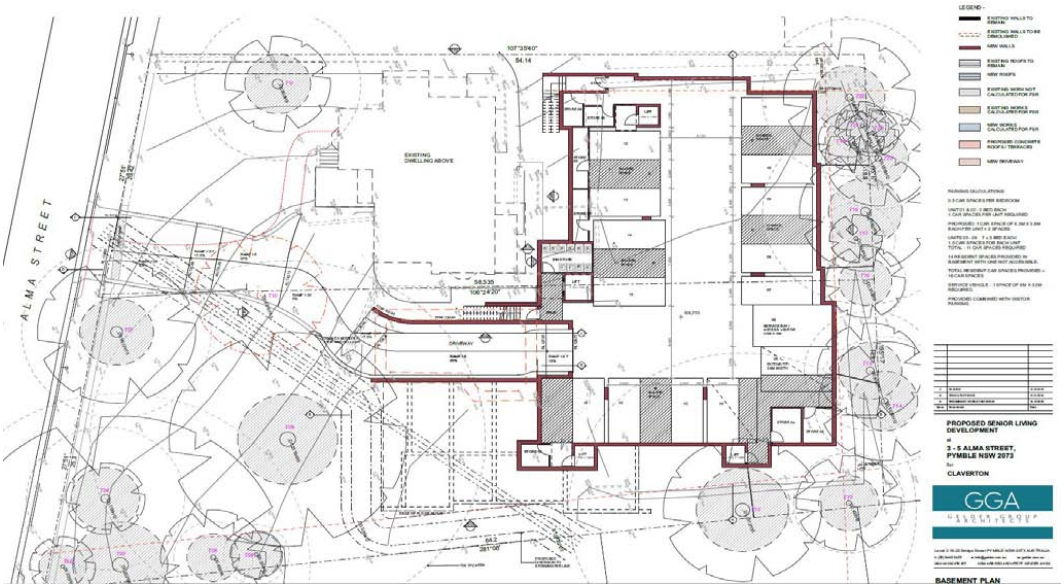


Figure 3.1
The proposed development - Basement
Source: Gelder Group Architects, 2025.

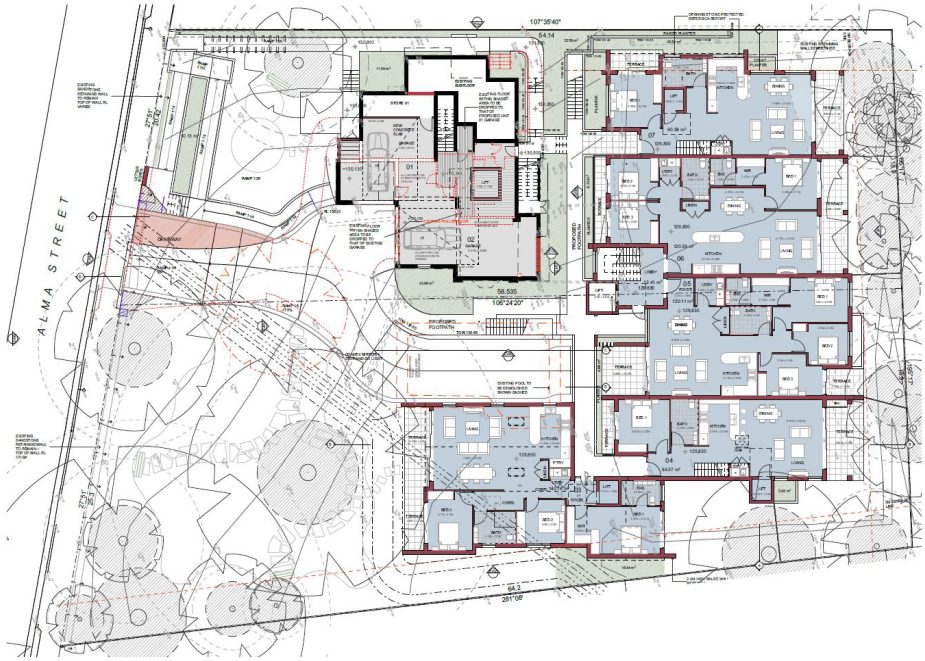


Figure 3.2
The proposed development - Lower ground floor.
Source: Gelder Group Architects, 2025.



Figure 3.3
The proposed development - Ground floor.
Source: Gelder Group Architects, 2025.



Figure 3.4
The proposed development - Ground floor.
Source: Gelder Group Architects, 2025.



Figure 3.5
The proposed development - North elevation.
Source: Gelder Group Architects, 2025.



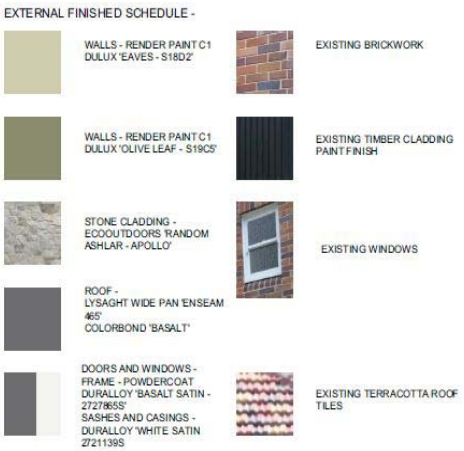
Figure 3.6
The proposed development - West (front) elevation facing Alma Street.
Source: Gelder Group Architects, 2025.



Figure 3.7
The proposed development - South elevation.
Source: Gelder Group Architects, 2025.



Figure 3.8
3D view of the proposed development. Note the heritage listed dwelling will be retained and respected. The proposed two-storey structures are sufficiently separated from the main heritage dwelling and are below the main ridge line of the heritage dwelling.
Source: Gelder Group Architects, 2024.



4.0
HERITAGE IMPACT ASSESSMENT

4.1 MATTERS FOR CONSIDERATION

4.1.1 FABRIC AND SPATIAL ARRANGEMENTS

The proposed development includes the construction of two storey senior living buildings at the rear (east side) and south side of the subject site. The existing heritage listed house on the subject site will be integrated into the new development, and will be converted into two separate units.

The subject heritage house has undergone extensive alterations and additions mainly after 2011, resulting in the loss of its original architectural integrity internally, and making it less sensitive to any future changes. The proposed development includes the partial demolition of internal walls, construction of new walls, construction of a lift at the rear of the house, demolition of the existing stair on the north side of the building, partial demolition of the wall underneath the front verandah to provide a new vehicular access, and construction of a terrace above the existing sunroom on the east side of the building. The proposed changes are mainly to the building's elements and spaces of 'Moderate' or 'Little' significance. No major changes to the 'High' significant fabric of the building and its significant architectural features are proposed. The main (front) and side elevations of the building will be largely retained. Accordingly, the proposed development will have an acceptable heritage impact on the building and its heritage significance as a fine example of Inter-war Old English Revival architectural style.

The proposed major change to the front facade of the heritage item includes partial demolition of the existing wall, underneath the front verandah (south side), to provide a new driveway opening/access. Although the proposed demolition work is to the main (front) elevation of the heritage listed dwelling, which is of high significance, given that this side of the building has minimal visibility from the public domain, and the existing decorative brickwork and balustrade will be retained, the proposed partial demolition work will have a minimal heritage impact on the heritage dwelling, its significance and its streetscape presentation.

The proposed development includes re-configuration of internal spaces to convert the existing house into the two separate units. The building has undergone extensive alterations over time, making it less sensitive to the proposed changes. The proposed internal changes to the building are reversible and will have acceptable heritage impact on the integrity of the building. The existing high significant architectural features and elements of the building will be retained and the existing internal layout of the building will partially remain legible, enabling its interpretation and appreciation.

4.1.2 SETTING, VIEWS AND VISTAS

The proposed development includes the construction of single and two-storey senior living buildings at the east (rear) and south sides of the subject site. The two-storey buildings will be located at the rear of the subject site, behind the heritage house. Being two-storey in height, the proposed development will be below the main roof of the heritage house, and thus will not visually dominate it. The proposed development will be partially visibility from the main street. However, it will be separated, set well back from and partially behind the existing building, being subservient in scale and sympathetic in design. Accordingly, the proposed development will not detract from the significant streetscape presentation of the heritage house or its contribution to the HCA.

The proposed single storey development on the south side of the subject site will be well separated from the heritage house. The front setback of the proposed development will be greater than that of the heritage house, retaining the existing ample front garden and existing mature trees. Accordingly, although the proposed development will be partially visible from the public domain, it will have an acceptable heritage impact on the house, its garden setting, and its streetscape presentation.

Being separated from the heritage house and being set well back from the front boundary, the proposed development will retain an appropriate garden setting around the heritage house, enabling the interpretation of its original setting on two generous lots, and thus will not detract from its streetscape presentation or its contribution to the HCA.

Although the proposed development will be partially visible from the main street, it will have an acceptable heritage impact on the significant setting, views and vistas of the heritage house.

4.1.3 LANDSCAPE

The proposed landscape works include demolition of the existing tennis court and retaining wall at the rear of the subject site, and the existing pool on the south side of the subject site. The exact date of the construction of the tennis court on the subject site is unknown. Given that the tennis court is not a feature of the Inter-war Old English architectural style, while there are some examples of tennis courts that were added later (e.g. 29 Lynwood Avenue), the proposed removal of the tennis court will have no adverse impact on the heritage significance of the subject site.

Given the topography of the subject site, it appears that the retaining wall was formed following the construction of a tennis court. The tennis court and the retaining wall have not been identified as contributory items to the heritage significance of the subject site. Being located at the rear of the property, and given the number of tennis courts in the locality, some of which are contemporary, the proposed removal of the tennis court and the retaining wall will have no adverse heritage impact on the subject site, its established heritage significance, or the heritage significance of the HCA.

It appears that the existing pool was constructed later, probably before the 1970s. It has no heritage significance and does not contribute to the heritage significance of the subject site or its contribution to the HCA. Accordingly, its proposed demolition will have no adverse impact on the subject house, its significant setting, its significant views, or its overall established heritage significance.

The proposed development includes the removal of a tree in the front garden for the proposed new driveway. The front garden has experienced changes over time. The proposed removal of a tree will have an acceptable heritage impact on the subject site and its established heritage significance. However, the significance of the existing trees should be assessed by an arborist.

In general, the proposed landscape works will have an acceptable heritage impact on the subject site, its established heritage significance, and its contribution to the HCA.

4.1.4 USE

The proposed development includes the conversion of the existing heritage house into two separate units, the use and function of which will be consistent with the existing use of the building. As a result of the proposed conversion, a lift will be installed at the rear of the existing heritage house to provide (disability) access between floors. The proposed lift will be installed at the rear of the main house, which has experienced several changes over time, and is less sensitive to further changes.

While the original layout of the building will remain legible, the proposed change of use will have an acceptable heritage impact on the building and its heritage significance.

4.1.5 DEMOLITION

The proposed development includes partial demolition of the internal walls and doors, some of which are later additions. It includes:

- demolition of the existing kitchenette/laundry in the lower ground floor,
- partial demolition of the sub-floor storage area,
- partial demolition of the internal walls on the ground and first floor levels, mainly at the rear of the building (see Figures 4.1 - 4.3).

The proposed demolition works are mainly to the internal walls of ‘moderate’ or ‘little’ heritage significance. Being limited to the internal spaces and being reversible in the future, the proposed demolition works will have an acceptable heritage impact on the main dwelling, while the original internal layout of the building will remain legible, enabling its interpretation and appreciation.

The existing stairs and opening on the north side of the building were added later and are not original. The proposed demolition of the stair and opening will have no adverse heritage impact on the building or its heritage significance.

The proposed development also includes removal of the roof over the sunroom at the rear (east side) of the building and construction of a terrace on the first floor level above the sunroom. From the early footprint of the building (Figure 1.17), it appears that the sunroom is a later addition and is a key characteristic of the architectural style of the main house. Being located at the rear of the main building, the proposed changes to the sunroom will have no adverse impact on the heritage significance of the building or its contribution to the HCA.

The high significant fabric of the dwelling will be largely retained. The proposed development includes the partial demolition of the existing wall of the storage underneath the front verandah (on its south side) to provide a new driveway access. Although the existing wall is of 'high' significance, given that this section of the building has minimal visibility from the public domain, and given that the existing decorative brick balustrade will be retained, the proposed demolition work will have an acceptable heritage impact on the main dwelling, its heritage significance, and its significant views.

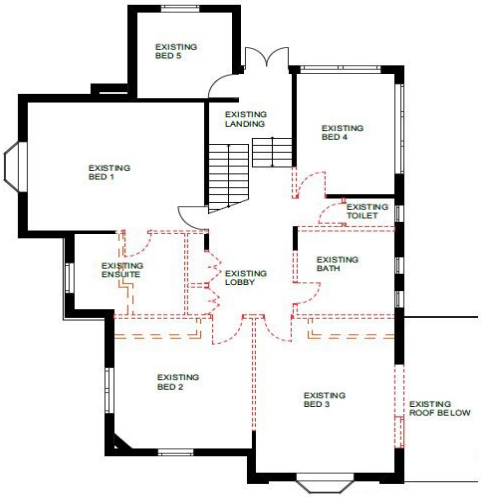


Figure 4.2
First floor, showing the proposed demolition works in the red dashed-lines.
Source: Gelder Group Architects, 2025

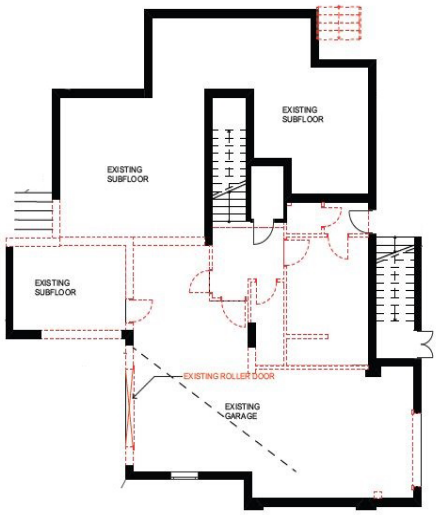


Figure 4.1
Lower ground floor, showing the proposed demolition works in the red dashed-lines.
Source: Gelder Group Architects, 2025

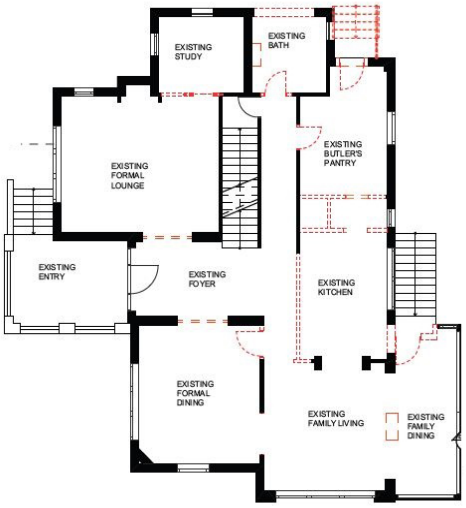


Figure 4.3
Ground floor, showing the proposed demolition works in the red dashed-lines.
Source: Gelder Group Architects, 2025

4.1.6 CURTILAGE

No changes to the existing lot boundaries and curtilage of the subject site are proposed. The proposed development includes the construction of new buildings at the rear and south side of the subject site, which will result in the reduced open space around the heritage house. However, being separated from the main heritage house, the proposed development will retain sufficient open space around the main house, enabling the interpretation of the original setting of the house on two generous lots.

The proposed single storey development at the south side of the historic dwelling will be well separated from it. The proposed development will be set well back from the front boundary, retaining the front garden and existing trees.

4.1.7 MOVEABLE HERITAGE

Not applicable.

4.1.8 ABORIGINAL CULTURAL HERITAGE

Not applicable. An assessment of Aboriginal Cultural Heritage is outside the scope of this report.

4.1.9 HISTORICAL ARCHAEOLOGY

An archaeological assessment has not been made as part of this report. However, the research carried out in the preparation of this report indicates that the current building was the first to be constructed on this site.

Although Archaeological Assessment is outside the scope of this Report, it should be noted that the Archaeological Management Provisions of the *NSW Heritage Act* apply to any relics which are essentially located below ground level. If, at any time, unexpected archaeological remains are uncovered or disturbed, work must stop immediately and the NSW Heritage Council must be notified.

4.1.10 NATURAL HERITAGE

Not applicable. An assessment of natural heritage is outside the scope of this report and has not been made as part of this report.

4.1.11 CONSERVATION AREAS

The subject property is located within the boundaries of *Athol Heritage Conservation Area (C46)*. As an Inter-war Stockbroker Tudor/Old English Revival style, the heritage dwelling makes a significant contribution to the heritage significance of the HCA. The proposed development will retain and respect the significant architectural features and elements of the building including its main and sides elevations and the front garden, respecting and retaining its streetscape presentation and its strong contribution to the HCA.

4.1.12 CUMULATIVE IMPACTS

The analyses in the previous sub-sections (4.1.1 - 4.1.11) show that the proposed development will have an acceptable heritage impact on the historic dwelling and its heritage significance.

The proposed development includes the construction of single and two-storey senior living buildings at the east (rear) and south sides of the subject site. The main heritage dwelling will be incorporated into the new development and converted into two separate units.

The proposed development at the rear of the historic dwelling will be below the main ridgeline, and thus will not visually dominate it. The proposed development on the south side of the subject site, will be separated from the historic house, with a greater front setback. The existing front garden and front fence will be largely retained. Accordingly, although the proposed development will be partially visible from the main street, it will not detract from the historic house or its streetscape presentation.

The proposed changes to the main historic dwelling are mainly to the building's elements and components of 'moderate' or 'little' significance. Although the proposed development includes partial demolition of the 'high' significant wall of the storage, underneath the front verandah, given that the existing decorative brickwork and balustrade will be retained, and given the corner location of the proposed changes that makes them less visible from the public domain, the proposal will have an acceptable heritage impact on the house, its established heritage significance, and its streetscape presentation.

The proposed development includes the removal of a tree on the front garden to provide driveway access. From the aerial photos (Figures 1.25 - 1.26), it appears that the tree is not original. As such, its proposed removal will have no heritage impact on the historic dwelling or its heritage significance. However, an

assessment of the significant trees on the subject site should be undertaken by an arborist.

The proposed development will result in a reduced open space around the main historic dwelling. However, the proposed buildings on the subject site will be separated from the main historic dwelling and they will set well back from the front boundary. The front garden, trees, and front fence, will be retained, enabling the appreciation and interpretation of the original setting of the historic house.

4.2 ADDITIONAL CONSIDERATIONS

The NSW Department of Planning and Environment has published the following considerations for specific types of work.[1]

Partial demolition of a heritage item (including internal elements)

- *Is the partial demolition essential for the heritage item to function?*
- *If partial demolition is proposed because of the condition of the fabric, can the fabric be repaired?*
- *Are important features and elements of the heritage item affected by the proposed partial demolition (e.g. fireplaces in buildings)?*
- *Will the proposed partial demolition have a detrimental effect or pose a risk to the heritage item and its significance? If yes, what measures are proposed to avoid/ mitigate the impact?*
- *Identify and include advice about how significant elements, if removed by the proposal, will be salvaged and reused.*

Comment

The proposed development includes the integration of the existing historic dwelling into the new development and its conversion into two separate units, which will result in minor partial demolition works to the historic building. Although, partial demolition works are not essential for the heritage item to function, they are required as part of the proposed development to facilitate its future use as a Senior Living accommodation.

The subject building has undergone extensive alterations and additions over time, making it less sensitive to further changes. While the remnant significant architectural features and elements of the dwelling will be retained, the proposed demolition works are mainly to the elements and spaces of 'moderate' or 'little' significance. The proposed demolition work will be reversible and the original layout of the building will remain legible. Accordingly, the proposed partial demolition works will have an acceptable heritage impact on the main dwelling and its established heritage significance.

The proposed development includes minor partial demolition of the 'high' significant wall of the storage, underneath the front verandah. The existing decorative brick balustrade will be retained. Accordingly, given that this corner of the building is not highly visible from the public domain, the proposed minor partial demolition works will have an acceptable heritage impact on the building, its streetscape presentation, and its contribution to the HCA.

The proposed development includes changes to the existing sunroom, in which its roof will be removed and replaced with a terrace for the first floor level. From the early footprint of the building, it appears that the sunroom is a later addition, and does not contribute to the heritage significance of the building. Being located at the rear of the historic building, the proposed changes to the sunroom will have no adverse heritage impact on the historic dwelling and its established heritage significance.

Alterations and additions

- *Do the proposed works comply with Article 22 of The Burra Charter, specifically Practice note article 22 — new work (Australia ICOMOS 2013b)?*
- *Are the proposed alterations/additions sympathetic to the heritage item? In what way (e.g. form, proportion, scale, design, materials)?*
- *Will the proposed works impact on the significant fabric, design or layout, significant garden setting, landscape and trees or on the heritage item's setting or any significant views?*
- *How have the impact of the alterations/ additions on the heritage item been minimised?*
- *Are the additions sited on any known or potentially significant archaeological relics? If yes, has specialist advice from archaeologists been sought? How will the impact be avoided or mitigated?*

Comment

The proposed alterations and additions are consistent with Article 22 of The Burra Charter.

The proposed development includes alterations and additions to the main historic dwelling. The internal alterations are mainly to the building's elements and spaces of 'moderate' or 'little' significance, which have

1 Heritage NSW, *Guidelines for Preparing a Statement of Heritage Impact*, Department of Planning and Environment, 2023

experienced changes over time. While the proposed internal alterations will be reversible, they will have an acceptable heritage impact on the main dwelling and its heritage significance.

The proposed development includes the construction of single and two storey 'Senior Living' buildings on the east (rear) and south sides of the subject site. The proposed new development will be separated from the main house. Being consistent with the roof form of the main historic house and being lower than the main ridgeline, the proposed development will respect and retain the visual dominance of the historic building on the site, and thus will not detract from its streetscape presentation or its contribution to the HCA.

It appears that the subject building is the first building constructed on the subject site, and thus there are not any known or physically significant archaeological relics on the site. However, archaeological assessment of the subject site is outside the scope of this report and should be carried out by an archaeology consultant.

Physical changes to fabric identified as significant

- *Has the fabric that will be impacted by the proposed works been assessed and graded according to its significance?*
- *Has specialist advice from a heritage professional, architect, archaeologist or engineer been sought?*

Comment

Based on the historical research, review of the previous changes to the building, and a detailed site inspection, a 'Grading of Significance' has been prepared for the historic dwelling (Section 2.6). The building has undergone extensive internal alterations and additions over time, making it less sensitive to future changes.

The proposed development includes physical changes mainly to the fabric of 'moderate' or 'little' significance. Given the changes to the building over time, the proposed physical changes will have an acceptable heritage impact on the building and its heritage significance.

The proposed physical changes to the 'high' significant fabric are limited to minor partial demolition of the existing wall of the storage, underneath the front verandah to make a new opening. However, given its corner location which make it less visible from the public domain, the proposed changes will have an acceptable heritage impact on the historic house and its heritage significance. The existing decorative brick balustrade will be retained, retaining the streetscape presentation of the building and its contribution to the HCA.

Change of Use

- *Does the existing use contribute to the significance of the heritage item? Why is the change of use proposed?*
- *Will the change of use have an impact on the significance of the heritage item?*
- *Will the change of use require changes to the fabric or significant elements? How does that impact significance of the heritage item?*

Comment

As part of the proposed development, the existing historic dwelling will be converted into two separate 'Senior Living' units. The proposed change of use will be compatible with the existing use of the dwelling and its physical characteristics.

The proposed change of use will retain the on-going use of the building and will have a neutral heritage impact on the building and its established heritage significance.

New services and service upgrades

- *Are any of the existing services of significance? In what way are they affected by the proposed works?*
- *How have the impacts of the installation of new services on heritage significance been minimised?*
- *Are any known or potential archaeological deposits affected by the proposed new services?*
- *Has specialist advice from a heritage consultant, architect, archaeologist or services engineer been sought?*

Comment

Given that the existing historic dwelling will be converted into two separate units, new services will be installed. However, the proposed services are carefully designed to minimise their impact on the historic dwelling by locating them in the areas that need minimum intervention in the significant fabric of the building.

The proposed location of new services at the rear of the main dwelling will have no adverse heritage impact on the heritage house or its heritage significance.

New landscape works and features

- *How has the impact on the heritage significance of the existing landscape been minimised?*
- *Are works to the landscape or pathways necessary to comply with the access requirements of the Disability Discrimination Act 1992?*

- *Has evidence (archival or physical) of previous landscape work been investigated? Is the original landscape work being reinstated?*
- *Will any known or potential archaeological relics be affected by the landscape works? How will this be mitigated? Has advice been sought from a suitably qualified archaeologist?*
- *Do the proposed works impact views to, from and within adjacent heritage items?*

Comment
The proposed development includes demolition of the existing tennis court and retaining wall at the rear of the subject site, and demolition of the existing pool on the south side of the subject site.

Given the topography of the subject site, it is likely that the retaining wall was formed following the construction of a tennis court at the rear of the subject site. The tennis court and retaining wall are not a feature of the Old English Architectural style, and are not considered as contributory to the established heritage significance of the subject site. Being located at the rear of the historic dwelling, the tennis court and its retaining wall are not visible from the public domain, thus do not contribute to the heritage significance of the HCA. Accordingly, the proposed demolition of the tennis court and the retaining wall will have no adverse heritage impact on the subject site, its established heritage significance, or its contribution to the HCA.

The existing pool on the south side of the subject site is not original and makes no contribution to the heritage significance of the main dwelling or the heritage significance of the HCA. As such, its proposed demolition will have no adverse heritage impact on the heritage significance of the building or the HCA.

The proposed development includes landscape changes to the front garden and front boundary. From aerial photos (Figures 1.25 - 1.27), it appears that the landscape around the main dwelling, especially the front garden, has undergone changes over time. While the front garden and the front fence will be largely retained, the proposed landscape changes will have no adverse impact on the heritage dwelling, its heritage significance, or its contribution to the HCA.

Tree removal or replacement
- *Does the tree proposed to be removed contribute to the heritage significance of the heritage item?*
- *Why is the tree being removed?*
- *Has the advice of a qualified arborist, tree surgeon or horticultural specialist been sought and implemented?*
- *Is the methodology for tree removal adequately understood? Will the proposed works impact on the significance of the heritage item?*
- *Is the tree being replaced? Where will it be replaced and with what species? Why?*

Comment
The proposed development includes the removal of a tree on the front garden for the proposed new driveway. From the aerial photos (Figures 1.17 - 1.18), it does not appear to be an original tree. However, the significance assessment of the existing trees and vegetation on the subject site needs to be undertaken by an arborist.

Works adjacent to a heritage item or within the heritage conservation area (listed on an LEP)
- *Will the proposed works affect the heritage significance of the adjacent heritage item or the heritage conservation area?*
- *Will the proposed works affect views to, and from, the heritage item? If yes, how will the impact be mitigated?*
- *Will the proposed works impact on the integrity or the streetscape of the heritage conservation area?*

Comment
The subject site is within the *Athol Heritage Conservation Area* and is also located within several heritage listed buildings.

Although the subject site is located in the vicinity of heritage listed items, it is separated from these items. The proposed new development on the subject site will be at the rear of the site, being set well back from the front boundary. The proposed development will have minimal visibility from the heritage items in the vicinity. The historic house and its front garden will be largely retained and the proposed development will have no adverse heritage impact on the heritage items in the vicinity or their significant views.

No major changes to the main elevations of the building, the front garden, and front fence are proposed, retaining its significant views, its streetscape presentation, and its contribution to the HCA.

4.3 HERITAGE OBJECTIVES OF THE KU-RING-GAI LEP 2015

The proposed development is considered to be acceptable, from a heritage perspective, for the following reasons:

- The proposed works are essentially reversible
- The proposed development retains all significant views to and from the historic house, the heritage items in the vicinity, and the HCA.
- The removal of some original fabric is considered acceptable given that the original architectural features and the key characteristics of the architectural style such as the form and fabric of the front facade and side elevations, the roof form, the main central stair, original timber works and decorations, original architraves, cornices, skirting and joinery are to be retained.
- In some spaces, the impact of the removal of internal walls is to be mitigated by the retention of wall nibs. The original internal layout of the building will remain legible, enabling its interpretation and appreciation.
- The proposed development will be separated from the front boundary, having minimal visibility from the main street. Accordingly, the proposed development will have no adverse impact on the heritage significance of the HCA or the heritage items in the vicinity.
- The established heritage significance of the main dwelling, and its ability to contribute to the streetscape and the conservation area, will be retained.

The proposal is, therefore, considered to be consistent with the relevant heritage objectives of the KLEP which are:

> ***5.10 Heritage conservation***
> *(1) Objectives*
> *The objectives of this clause are as follows:*
> *(a) to conserve the environmental heritage of Ku-ring-gai,*
> *(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views...*

4.4 HERITAGE GUIDELINES OF THE KU-RING-GAI DCP 2024

The proposed development is generally consistent with the guidelines of the KDCP that relate to the development of heritage items, development in conservation areas, and development in the vicinity of heritage items:

> ***19B Demolition***
>
> ***19B.1 DEMOLITION WITHIN HCAS***
>
> ***Objectives***
> *1 To ensure that sites, buildings and landscape features that contribute to the significance of an HCA are retained.*
>
> *2 To provide a photographic record before and during major works within an HCA, including demolition.*

Comment
The proposed development will respect and retain the main historic dwelling, its front garden, and its front boundary fence, retaining the streetscape presentation of the building and its contribution to the HCA, enabling its interpretation and appreciation. The proposed development will not detract from the heritage significance of the HCA or its streetscape character.

> ***19B.2 DEMOLITION RELATED TO A HERITAGE ITEM***
>
> ***Objectives***
> *1 To ensure that Heritage Items and all significant elements of Heritage Items are retained and conserved.*
>
> *2 To provide a photographic record of a Heritage Item before and during major works including demolition.*

Comment
The subject building has experienced extensive alterations and additions over time, making the building less sensitive to the future changes. Based on the review of historical documents related to the subject site and a detailed site inspection, a 'Grading of Significance' has been prepared for the existing historic dwelling (Section 2.6). The proposed demolition works are mainly to the building's elements and components of 'moderate' or 'little' heritage significance, which have experienced changes over time. The high significant building's elements and spaces are to be retained.

The proposed development includes minor partial demolition of the external wall of the storage, underneath the front verandah, which is of 'high' significance' to provide a new driveway opening. Given its corner location which make is less visible from the main street, while the existing decorative brickwork and balustrade will be retained, the proposed demolition work will have an acceptable heritage impact on the historic house and its established heritage significance.

The high significant building's elements and components including the front (main) and side elevations of the historic house will be retained, enabling its appreciation and interpretation from the public domain.

A photographic record of the subject building before and during the demolition works shall be carried out.

19C Development within HCAs - Alterations and Additions

19C.1 LOCAL CHARACTER AND STREETSCAPE

Objectives
1 To ensure that sites, buildings and landscape features that contribute to the significance of an HCA are retained.

2 To conserve and enhance the character and significant elements of the HCA.

3 To ensure that additions or changes to contributory properties within HCAs respect their original, built form, architectural style and character.

4 To ensure the visual impact of new work is minimised through appropriate design, detail, proportion, scale and massing.

5 To ensure that the impact of new work on the character of the HCA is considered from both street frontages.

6 To retain the significance and valuable contribution to the historic and landscape character Ku-ring-gai's rear lanes of an HCA.

7 To retain the significance and character of rear lanes which form an important factor and rare element of early subdivisions in Ku-ring-gai.

Comment
The existing Inter-war Stockbroker Tudor/Old English style dwelling in its current setting, its front garden, and its front fence contribute to the heritage significance of the HCA.

The proposed development includes construction of single and two-storey senior living buildings on the east and south sides of the subject site, all of which will be separated from the main historic dwelling and the front boundary of the subject site. Accordingly, the proposed development will respect and retain the visual dominance of the existing heritage house on the subject site, retaining its streetscape presentation and its contribution to the HCA.

The proposed two-storey rear development will be separated from the main historic house, and will be lower than the main ridgeline, and thus will not detract from its significant views, its streetscape presentation, or its contribution to the HCA.

Being consistent with the scale, height and roof form of the historic dwelling, although the proposed development will be partially visible from the public domain, it will not detract from the heritage significance of the HCA or its streetscape character.

19C.2 BUILDING SETBACKS

Objectives
1 To conserve and maintain the character and significance of individual properties and streetscapes in the HCA by maintaining the established pattern of front and side boundary setbacks.

2 To ensure the siting of new alterations and additions respect and contribute to the established streetscape patterns.

Comment
The proposed development includes the construction of two-storey senior living buildings at the eastern end of the subject site, separated from the heritage building and the front boundary, respecting and retaining the established streetscape pattern in the locality.

The proposed development includes construction of a single storey senior living building on the south side of the subject site. The proposed development will have a greater front setback than the existing heritage building, retaining the established front setback pattern, and thus will not detract from the HCA.

19C.3 GARDENS AND LANDSCAPING

Objectives

1 To retain the garden character of Ku-ring-gai's HCAs which is largely due to the deep frontages and large lots that support remnant trees, early surviving gardens with established introduced trees and built garden features such as fences, walls and paving. The street tree planting and pattern of soft and hard road verges also contribute to the landscape character.

2 To conserve, retain and enhance the significance of the garden and landscape character within individual properties, streetscapes and the HCA as a whole.

3 To ensure streetscapes within the HCAs are characterised by front gardens with substantial landscaped area and minimum hard surfaces.

Comment

The proposed landscape changes are mainly to the rear (east) side of the subject site, which is not visible from the main street. The front garden and trees will be largely retained, contributing to the heritage significance of the HCA.

19C.4 ACCESS AND PARKING

Objectives

1 To ensure that modifications to provide access do not adversely affect significant built fabric of either individual buildings or the HCA as a whole.

2 To allow for on-site car parking where possible while retaining the character of the property, the streetscape and significance of the HCA.

3 To ensure that driveways do not have any adverse visual impact on the immediate streetscape and historic patterns in the HCA.

4 To minimise the visual impact of new car parking by locating it at the side or rear of properties, where possible.
5 To ensure battle-axe driveways make a positive contribution to the streetscape and the HCA.

6 To allow for on-site car parking where possible while retaining the character of the property, the streetscape and significance of the HCA.

7 To ensure that new garages and carports do not have any adverse visual impact on the immediate streetscape and historic patterns in the HCA.

8 To minimise the visual impact of new car parking by locating garages and carports at the side or rear of properties, where possible.

9 To ensure that car parking structures do not challenge the mass or bulk or mimic the architectural detailing of original buildings and the wider streetscape.

10 To retain and conserve original and early coach houses, stables and motor garage as they contribute to the setting of the house.

Comment

The proposed development includes construction of a new driveway, parts of which will overlap with the existing driveway. Although the proposed new driveway will result in minor changes to the front landscape and boundary, given the minor nature of the proposed work, it will not detract from the streetscape character of the locality or the heritage significance of the HCA.

The proposed parking will be in the basement of the new development, and thus will not detract from the streetscape presentation of the historic house and its contribution to the HCA.

The proposed development includes construction of a new driveway opening in the existing wall underneath the front verandah. However, given the corner location of this opening, it will have no adverse visual impact on the heritage dwelling, its streetscape presentation, or its contribution to the HCA.

19C.5 BUILDING DESIGN

Objectives

1 To retain significant materials and details within HCAs.

2 To ensure that the materials and colours of new work enhances the identified character of the HCA

3 To ensure that the selection of materials and colours for new work is based on an understanding of the materials, finishes and colours predominant within the HCA.

4 To encourage the removal of paint from originally unpainted surfaces.

5 To encourage the recovery of the original character of contributory properties when undergoing additions and alterations.

6 To ensure the retention and encourage reinstatement of early verandah and balcony forms.

7 To protect the original fabric and details of doors and windows of contributory properties.

8 To discourage the use of window and door grilles and to encourage alternative security measures which do not detract from the appearance of individual buildings and the HCA as a whole.

Comment
The existing heritage dwelling will be respected and retained. No major changes to its main elevations are proposed, retaining its significant streetscape presentation and its contribution to the HCA.

The proposed development will be separated from the historic house and the front boundary. The proposed height and location of the new development will make it less visible from the street and public domain. Accordingly, it will have no adverse heritage impact on the heritage significance of the HCA.

The Athol HCA is occupied by residential buildings of various architectural styles and materials. The proposed materials and finishes will be sympathetic to the main heritage dwelling and the existing buildings in the locality, and thus will not detract from the HCA or the streetscape character of the locality.

Given that the front fence and front garden have experienced changes over time, the proposed minor changes to the front fence and front garden will not detract from the streetscape presentation of the subject site or the heritage significance of the HCA.

19C.6 ROOF FORMS AND STRUCTURES ATTACHED TO ROOFS

Objectives
1 To retain the character of the original roof forms within the HCA.

2 To protect the original fabric and details of roofs and chimneys.

3 To ensure that structures attached to roofs do not have an adverse impact on the character and significance of individual buildings, the immediate streetscape and the HCA.

Comment
No changes to the main roof form of the heritage house are proposed. No structure will be attached to the main roof. The proposed new development will be separated from the heritage house.

19C.7 OUTBUILDINGS AND GARDEN STRUCTURES (EXCLUDING GARAGES AND CARPORTS)

Objectives
1 To ensure that new garden structures and of outbuildings do not detract from the significance of individual properties or the HCA through inappropriate siting or excessive scale, bulk or visibility.

Comment
No outbuildings or garden structures are proposed to be constructed on the subject site.

19C.8 FENCING

Objectives
1 To retain early and original fences, gates and retaining walls where they survive, and where they reinforce the original landscape character of the garden and streetscape.

2 To retain those streetscapes where front and side fencing do not form part of the original streetscape.

3 To encourage the reinstatement of the original form of fencing and gates, where known.

4 To encourage new front fences and gates which contribute to the streetscape character of the HCA by being consistent with the established pattern of existing original fences.

Comment
The subject site is separated from the main street by a low height stone fence and medium height hedges which are located behind the front fence. The front boundary stone fence and hedges will largely remain intact, retaining the streetscape presentation of the site and its contribution to the HCA.

The proposed change to the front fence includes widening the driveway access to the subject site. Given that this section of the fence has experienced changes over time, the proposed changes will have an acceptable heritage impact on the subject site, its streetscape presentation, and its contribution to the HCA.

19D Development within HCAs: New Buildings

19D.1 LOCAL CHARACTER AND STREETSCAPE

Objectives
1 To promote high quality new design that complements the streetscape character and heritage significance of the HCA.

2 To ensure that new development retains the identified historic and aesthetic character of the HCA in which it is situated.

Comment
The proposed development includes the construction of single and two storey senior living buildings on the east and south sides of the subject site, separated from the main heritage house and front boundary. Given the topography of the subject site and the location of the proposed new development, it will have minimal visibility from the main street and the public domain. However, the proposed height, scale, design, roof form, and materials of the new development will be sympathetic to the existing heritage building and the existing buildings in the locality, and thus will not detract from the heritage significance of the HCA.

19D.2 BUILDING SETBACKS

Objectives
1 To ensure the location and siting of new development respects the established pattern of built elements in the streetscape and the HCA.

2 To ensure new development does not adversely impact on the immediate streetscape or significant views within the HCA.

Comment
The major parts of the proposed new development will be located at the eastern end of the subject site, behind the existing heritage house. A single storey building is proposed to be constructed on the south side of the subject site, separated from the historic house. The proposed development on the south side of the site will set well back from the front boundary with a greater front setback than the existing dwelling. Accordingly, the proposed development will have no adverse impact on the existing front setback of the subject site, and thus will not detract from its streetscape presentation.

Being separated from the main heritage house, the proposed development will retain the visual dominance of the existing historic house on the subject site. The existing significant views to and from the heritage house will be retained.

19D.3 GARDENS AND LANDSCAPING

Objectives
1 To preserve the garden and landscape character of the HCA.

2 To promote new front fences and gates that are consistent with the existing character of the streetscape.

3 To promote fences that do not detract from surrounding development.

4 To promote visual permeability between properties and the public domain.

5 To ensure that vehicular access gates are open and transparent, allowing sightlines to properties and driveways.

Comment
The front garden, front fence and gate will be largely retained, contributing to the garden and landscape character of the HCA.

19D.4 BUILDING DESIGN

Objectives
1 To ensure new development respects the character of, and minimises the visual impact upon, the HCA and its streetscapes.

Comment
The proposed new development will be consistent with the scale, design, roof form, massing, and materials of the existing heritage house and existing buildings in the locality. Accordingly, although the proposed new development will have minimal visibility from the street, it will not detract from the heritage house, its streetscape presentation or its contribution to the HCA.

The proposed new development will be separated from the main heritage house. The proposed development will be lower than the main ridgeline, retaining the visual dominance of the building on the site. As such, the proposed development will have no adverse visual impact on the main heritage house or the HCA.

19E Heritage Items

19E.1 BUILDING DESIGN

Objectives
1 To ensure the significant external features of a Heritage Item and its setting are retained and new development is sympathetic in terms of bulk, form, style, character, scale, and materials.

2 To encourage the reinstatement of missing elements, where known, and the removal of later unsympathetic changes.

3 To ensure that the materials, finishes, and colours of new work enhances the identified significance of the Heritage Item.

4 To ensure the significant internal spaces and features of a Heritage Items are identified, retained and conserved.

5 Encourage the reinstatement of missing elements, where known, and the removal of later unsympathetic changes.

Comment
The proposed development includes conversion of the historic house into two Senior Living units. The existing dwelling has undergone extensive internal alterations and additions, making it less sensitive to future changes. From the review of historical documents, Statement of Significance, and a detailed site inspection, a 'Grading of Significance' has been prepared for the historic building (Section 2.6).

The proposed changes are mainly to the building's elements and areas that have experienced change over time. While the 'high' significant architectural features, fabric, and spaces will be largely retained intact.

The proposed development includes the partial demolition of the existing high significant wall underneath the main verandah to make a new driveway opening to the garage. The high significant decorative brickwork and balustrade will be retained. Given the corner location of the proposed change, which is not highly visible from the public domain, it will have an acceptable heritage impact on the existing building and its streetscape presentation.

Given that the building's interior has undergone substantial changes and looks contemporary, the proposed internal changes will have an acceptable heritage impact on the historic house. The proposed internal changes will be essentially reversible, while the original layout of the building will remain legible, enabling its interpretation and appreciation.

From the early footprint of the building (Figure 1.17), it appears that the existing stair on the north side of the house is not original. As such the proposed demolition of the stair will have no adverse heritage impact on the established heritage significance of the house.

19E.2 ADAPTIVE REUSE

Objectives
1 To ensure that new uses for Heritage Items are compatible with the fabric and heritage significance of the Heritage Item.

Comment
The proposed development includes the conversion of the main heritage house into two separate Senior Living units. The proposed use of the heritage house is compatible with its residential viability and its physical characteristics. Accordingly, the proposed change of use will have an acceptable heritage impact on the historic building.

The proposed change of use will not generate any major changes to the main elevations of the heritage house, retaining its streetscape presentation and its contribution to the HCA.

19E.3 SETBACKS

Objectives
1 To ensure new work to heritage items respects and contributes to character of the heritage item.

2 To ensure new development provides an interface of scale and bulk to preserve the amenity to the significant elements within the heritage curtilage.

3 To ensure new medium density development does not visually dominate the Heritage Item, where this type of development is considered appropriate.

Comment
The proposed development includes the construction of single and two-storey Senior Living buildings mainly at the rear of the main heritage house. Being located at the eastern and southern ends of the subject site, the proposed new development will be sufficiently separated from the main heritage house.

The proposed new development will be lower than the main ridgeline of the heritage house, not visually dominating it or detracting from its significant views or its streetscape presentation.

The proposed scale, height, massing, roof form, setback, and materials will be consistent with the main heritage house and residential buildings in the locality. As such, although the proposed new development will be partially visible from the main street, it will not detract from the heritage house, its streetscape presentation, or its contribution to the HCA.

The front garden and trees will be largely retained. The proposed single storey Senior Living building on the south side of the site will be set well back from the front boundary, being largely obscured by the existing mature trees. Having minimal visibility from the public domain, the proposed development will not detract from the historic house or its streetscape presentation. The visual dominance of the historic house on the subject site will be retained, enable its appreciation and interpretation.

19E.4 GARAGES AND LANDSCAPING

Objectives
1 To retain and conserve the significance of a Heritage Item in its setting.

2 To retain and conserve the significant garden elements and structures of Heritage Items and to retain an appropriate garden setting.

Comment
The front garden has experienced changes over time and is less sensitive to future changes. The front garden, front boundary fence, and front trees will be largely retained. The proposed development includes the removal of one tree from the front garden to provide a driveway. From the aerial photos, it appears that the subject tree is not an early element of the site and is not considered significant. Accordingly, its proposed removal will have no adverse heritage impact on the subject site or its streetscape presentation. However, the significance of the existing trees on the subject site should be assessed by an arborist.

The proposed development includes the demolition of the existing tennis court and its retaining wall at the rear of the heritage house, none of which are key features of the Old English Architectural style, and thus are not considered contributory to the heritage significance of the subject site. Being located at the rear of the subject site, the existing tennis court and its retaining wall are not visible from the public domain, and thus do not make a contribution to the HCA. Given the number of tennis courts in the locality, some of which are contemporary, the proposed demolition of the tennis court and its retaining wall will have no adverse heritage impact on the established heritage significance of the subject site or its contribution to the HCA.

The existing pool on the south side of the subject site was constructed later. It does not contribute to the heritage significance of the house, and thus its proposed demolition will have no adverse impact on the heritage significance of the subject site.

19E.5 ACCESS AND PARKING

Objectives
1 To ensure that modifications to provide access do not adversely affect significant built fabric.

2 To allow for on-site car parking where possible while retaining the character of the property.

3 To ensure that driveways do not have any adverse visual impact on the curtilage or setting of the heritage item.

4 To minimise the visual impact of new car parking by locating it at the side or rear of properties.

5 To ensure battle-axe driveways do not detract from the curtilage or setting of the heritage item.

6 To ensure that new garages and carports do not have any adverse impact on the curtilage or setting of the heritage item.

7 To ensure that car parking structures do not challenge the mass or bulk or mimic the architectural detailing of the heritage item.

8 To retain and conserve original and early coach houses, stables and motor garage as they contribute to the setting of the heritage item.

Comment
The proposed development includes the construction of basement parking to be accessed from Alma Street. Accordingly, a new driveway will be constructed on the subject site and the front vehicular gate will be widened. The front vehicular gate has undergone alterations over time (Figures 1.28 - 1.31). While the front fence and front garden will be largely retained intact, the proposed minor changes will have an acceptable heritage impact on the subject site, its streetscape presentation, and its contribution to the HCA.

Being located on the basement level, the proposed car parking will have no adverse visual impact on the heritage house, its setting, or its significant views.

As the existing heritage dwelling will be converted into two separate units, additional car parking will be provided in the lower ground floor level of the heritage house. The proposed development includes the partial demolition of the high significant wall of the storage underneath the front verandah to provide vehicular access. Although the proposed development includes modifications to the high significant fabric, given the corner location of the new entry, which is not highly visible from the public domain, the proposed changes will have an acceptable heritage impact on the building and its significant views.

The proposed minor changes to the high significant fabric of the heritage house will not detract from its streetscape presentation or its contribution to the HCA.

19E.6 OUTBUILDINGS AND GARDEN STRUCTURES (EXCLUDING GARAGES AND CARPORTS)

Objectives
1 To ensure that new garden structures and of outbuildings do not detract from the significance of a heritage item through inappropriate siting or excessive scale, bulk or visibility.

Comment
No new garden structures or outbuildings are proposed as part of the proposed development.

19E.7 FENCING

Objectives
1 To retain early and original fences, gates and retaining walls where they survive, and where they reinforce the original landscape character of the garden and streetscape.

2 To retain those streetscapes where front and side fencing do not form part of the original streetscape.
3 To encourage the reinstatement of the original form of fencing and gates, where known.

4 To encourage new front fences and gates which contribute to the streetscape character of the HCA by being consistent with the established pattern of existing original fences.

Comment
The subject site is separated from the main street by low-height stone wall and piers. The hedges are located behind the stone wall fence. A section of the front fence in front of the garage has undergone changes over time, as shown in Figures 1.28 - 1.31. The proposed development includes minor partial demolition of the front fence to widen the vehicular access to the site. While the front fence will be largely retained intact including the existing pedestrian gate on the north-west corner of the subject site, the proposed minor changes to the front fence will have an acceptable heritage impact on the subject site and its significant views.

19F Development in the Vicinity of Heritage Items or Heritage Conservation Areas (HCAs)

19F.1 LOCAL CHARACTER AND STREETSCAPE

Objectives
1 To consider the impact on the historic curtilage and setting of the Heritage Item or HCA and related heritage features such as views, streetscape context, historical subdivisions, garden settings, alienated trees and other landscape features.

2 To retain the significance of Heritage Items or HCAs in their settings.

3 To ensure that the scale of new development does not dominate, detract from or compete with Heritage Items or HCAs in the vicinity.

4 To ensure that new development respects and conserves the significance of any nearby Heritage Items or HCA and their settings.

5 To ensure that new development does not visually dominate the adjoining or nearby Heritage Item or HCA.

6 To ensure that the scale of new development in the vicinity of the HCA is in harmony with the streetscape and does not dominate, detract from or compete with the Heritage Item or HCA.

7 To protect significant views and vistas to and from the Heritage Item or HCA.

Comment
The proposed development includes the construction of single and two-storey Senior Living buildings at the east and south sides of the subject site. The proposed new development will be lower than the main ridgeline of the historic house. Given the scale of the proposed new development, the topography of the subject site, and the tall mature trees in front garden, the proposed new development will have a low degree of visibility from the main street and public domain.

Although the subject site is located in the vicinity of several heritage listed items and the HCA, it is separated from these items. There are no views between the subject site and the heritage items in the vicinity that have been identified as contributing factors to the cultural heritage significance of any of these places. Being located mainly at the rear of the main heritage house, being lower than the main ridgeline of the heritage house, and being set well back from the front boundary, the proposed development will have minimal visibility, if any, from the heritage items in the vicinity and the HCA. The heritage house will remain visually dominant on the subject site. The proposed new development will not detract from the heritage items in the vicinity or their significant views.

The proposed scale, design, roof form and materiality of the new development will be sympathetic to the main heritage house and residential buildings in the locality. As such, although the proposed development will be partially visible from the public domain, it will have no adverse heritage impact on the heritage items in the vicinity or the HCA.

The front garden and front fence of the subject site will be largely retained intact, retaining the streetscape presentation of the subject site and its contribution to the HCA.

19F.2 BUILDING SETBACKS

Objectives
1 To ensure new work in the vicinity of a Heritage Item or HCA respects and contributes to the established streetscape patterns through careful siting of new buildings.

2 To ensure new development provides an interface of scale and bulk to preserve the amenity to the adjacent Heritage Item or building within a HCA.

3 To ensure new medium and high density development does not visually dominate the Heritage Item or building within the HCA.

Comment
Being located at the eastern and southern end of the subject site, the proposed new development will be set well back from the front boundary.

The proposed single storey development on the south side of the subject site will have a greater front setback than the existing heritage house, retaining its established pattern of front setback.

The proposed scale, height, bulk, massing, roof form, and materiality of the new development will be consistent with the existing heritage house and residential buildings in the locality. Being lower than the main ridgeline of the heritage house and being set well back from the front boundary, the proposed new development will not be highly visible from the main street and the public domain.

19F.3 GARDENS AND LANDSCAPING

Objectives
1 To ensure that new development does not impact on the landscape character and garden setting of any nearby Heritage Item or HCA.

Comment
Being sufficiently separated from the heritage items in the vicinity and the HCA, the proposed development will have no adverse heritage impact on these items or their significant gardens and landscaping.

19F.4 FENCING

Objectives
1 To retain early and original fences, gates and retaining walls where they survive, and where they reinforce the original landscape character of the garden and streetscape.

2 To retain those streetscapes where front and side fencing do not form part of the original streetscape.

3 To encourage the reinstatement of the original form of fencing and gates, where known.

4 To encourage new front fences and gates which contribute to the streetscape character of the HCA by being consistent with the established pattern of existing original fences.

Comment
The proposed development will respect and retain the existing front stone wall fence. The proposed minor changes to the front stone wall fence will not detract from the significant streetscape presentation of the subject site or its contribution to the HCA.

5.0

CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF PROPOSAL

- The subject site at 3-5 Alma Street is listed as an item of local heritage significance in Schedule 5 of the KLEP, being *Item 59 - "Claverton", dwelling house*.
- The subject site is located within the *Athol Heritage Conservation Area* (HCA).
- The subject site is also located in the vicinity of the several listed heritage items and the *Park Estate Heritage Conservation Area*.
- The proposed development includes the construction of new single and two-storey Senior Living buildings on the subject site, and alterations to the existing heritage house including its conversion into two separate Senior Living units.
- The subject heritage house has undergone extensive internal alterations and additions over time, which have resulted in the loss of its original architectural integrity internally, making it less sensitive to future changes.
- The proposed conversion of the heritage house into two separate units will include internal alterations to the heritage house in the form of minor partial demolition of internal walls, changes to the sunroom at the rear of the house, construction of new walls, installation of a lift, installation of new services, provision of an additional carpark on the lower ground floor, demolition of the existing stairs on the north side of the building.
- The proposed development includes the demolition of the existing tennis court and its retaining wall at the east side of the subject site and construction of two-storey Senior Living buildings on this side, behind the existing heritage house.
- The proposed development includes the demolition of the existing pool on the south side of the subject site and construction of a new single storey Senior Living building on this side of the building.
- The proposed development includes the construction of a basement carpark, which will be accessed from Alma Street, in which a small section of the front stone wall fence will be demolished to widening the existing vehicular access. A tree on the front garden is proposed to be removed for the construction of a new driveway.
- The front stone wall fence has undergone changes over time.
- The front garden, front fence, and main elevations of the heritage house will be largely retained intact.

5.2 SUMMARY OF IMPACT ASSESSMENT

- The proposed internal changes are mainly to the building's elements and components graded herein as having 'moderate' or 'little' significance. The proposed removal of some original fabric is considered acceptable, given that original and significant architectural features such as the original form and fabric of the building, the gable roof with its tiles and timber bargeboards, decorative brickworks, timber works, brick chimney, windows with leadlight glazing, and the internal stair are to be retained.
- Although the proposed development includes the removal of internal walls, the original layout of the house will remain legible, enabling its interpretation and appreciation.

- The building's high significant elements will be respected and retained. The proposed development includes minor partial demolition of the high significant wall underneath the front verandah to provide vehicular access. The existing decorative brickwork and balustrade will be retained. Given the corner location of the proposed demolition work, it will minimal visibility, if any, from the public domain, not detracting from the streetscape presentation of the historic house or its contribution to the HCA. Accordingly, the proposed minor demolition works to the high significant fabric will have an acceptable heritage impact on the existing building and its significant views.

- From the early footprint of the heritage house (Figure 1.17), it appears that the sunroom is a later addition and does not contribute to the heritage significance of the building. Being located at the rear of the heritage house, the proposed changes to the sunroom will have no adverse heritage impact on the building, its significant views or its significant streetscape presentation.

- Given that the front garden and front fence have undergone changes over time, the proposed minor changes to the front garden and front fence in the form of widening the existing vehicular access to the subject site and the removal of a tree will have an acceptable heritage impact on the building, its significant views, its significant streetscape presentation, and its contribution to the HCA.

- The proposed new development has been designed to reduce visual dominance, while being in keeping with the residential scale and character of the existing heritage house, residential buildings in the locality, and the heritage items in the vicinity.

- The proposed two-storey Senior Living buildings at the eastern end of the subject site will be separated from the existing heritage house. Although the proposed development will be two-storey in height, given the topography of the subject site, it will be lower than the main ridgeline of the heritage house, not visually dominating it. The proposed new development will have minimal visibility from the street, not detracting from the heritage house or its streetscape presentation.

- The proposed single storey Senior Living building on the south side of the subject site, will be separated from the main heritage house. The proposed new development will have a greater front setback than the main heritage house. Being largely obscured by the existing mature trees, the new development will have minimal visibility from the public domain, not detracting from the significant streetscape presentation of the heritage house or its contribution to the HCA.

- Although the proposed new development will be partially visible from the public domain, the proposed scale, bulk, massing, roof form, and materiality of the new development will be sympathetic to the main heritage house and the existing residential buildings in the locality. Accordingly, the proposed new development will not detract from the heritage house, heritage items in the vicinity, or the HCA.

- The proposed development includes demolition of the existing landscape features including the tennis court and its retaining wall at the east (rear) side of the subject site. Given the topography of the subject site, the retaining wall was formed following the construction of a pool at the rear of the subject site. The tennis court and its retaining wall are not key features of the Old English architectural style, and are not considered as contributory features to the established heritage significance of the subject site or the HCA. Being located at the rear of the subject site, the tennis court and its retaining wall are not visible from the public domain, not contributing to the HCA. Given the number of tennis courts in the locality, some of which are contemporary (e.g the tennis court at 7 Alma Street), the proposed demolition of the tennis court and its retaining wall will have no adverse heritage impact on the subject site or the HCA.

- The proposed development includes demolition of the existing pool on the south side of the subject site, which is a later addition and does not contribute to the heritage significance of the subject site or the HCA. As such the proposed demolition of the existing pool will have no adverse heritage impact on the subject site or the HCA.

- Although the proposed development will result in reduced open space around the heritage listed house, given that the front garden and trees will be largely retained and the new development will be well separated from the main heritage house, the original setting of the house will remain legible and contributory.

- The proposed development is consistent with the existing form of development in the locality and within the HCA.
- Although the subject site is located in the vicinity of heritage listed buildings and the HCA, it is separated from these items. There are no views between the subject site and the heritage items in the vicinity that have been identified as contributing factors to the cultural heritage significance of any of these places. Accordingly, although the proposed new development will have some visibility from the public domain, it will have no adverse visual impact on these items or their significant views.
- The proposed development is consistent with the heritage requirements and guidelines of the KLEP, KDCP, and the relevant guidelines of DPE.
- Overall, the proposal will have an acceptable impact on the existing historic building, the HCA, and the heritage items in the vicinity.

5.3 RECOMMENDATIONS

5.3.1 MITIGATION MEASURES

An archival photographic recording of the existing heritage house, "Claverton", undertaken in accordance with the NSW Heritage Council publication "*Photographic Recording of Heritage Items Using Film or Digital Capture*", should be made prior to any demolition works.

5.4 CONCLUSION

Subject to the recommended mitigation measures in Section 5.3 of this report, GBA Heritage recommends the application to Council for approval.

6.0
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Sydney Water Archives

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Ku-ring-gai Council, *Ku-ring-gai Local Environmental Plan 2015*

Environment Planning and Assessment Act 1979 (NSW)

Heritage Act 1977 (NSW)

WEBSITES

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NSW LRS Parish and Historical Maps, https://www.nswlrs.com.au/Parish-and-Historical-Maps

NSW LRS SIX Maps, www.six.nsw.gov.au

NSW Heritage Inventory, https://www.environment.nsw.gov.au/topics/heritage/search-heritage-databases

Spatial Collaboration Portal, Historical Imagery Viewer, https://portal.spatial.nsw.gov.au/portal/apps/sites/#/homepage/pages/map-viewers

State Library of NSW - Manuscripts, Oral History & Pictures Catalogue, www.acmssearch.sl.nsw.gov.au

Street Directory Australia, www.street-directory.com.au

Ku-ring-gai Council; Heritage Conservation Areas: https://www.krg.nsw.gov.au/Planning-and-development/Heritage/Heritage-conservation- areas

Ku-ring-gai Historical Society: https://www.khs.org.au/pymble-local-history/

DEVELOPMENT APPLICATION

SUMMARY SHEET

REPORT TITLE:	11 JEFFERSON AVENUE, ST IVES - DEMOLITION OF EXISTING STRUCTURES AND CONSTRUCTION OF INDEPENDENT LIVING UNITS
ITEM/AGENDA NO:	GB.4

APPLICATION NO:	eDA0184/25
ADDRESS:	11 Jefferson Avenue, St Ives
WARD:	St Ives
DESCRIPTION OF PROPOSAL:	Demolition of existing structures and construction of 10 independent seniors living units
APPLICANT:	Minto Planning Services
OWNER:	Mr O Stusenko, Mrs L Nikolsky
DATE LODGED:	23 April 2025
SUBMISSIONS:	27
ASSESSMENT OFFICER:	Brodee Gregory
RECOMMENDATION:	Refusal

KLPP REFERRAL CRITERION:	Sensitive development and to which the ADG apply and contentious development that has received 10 or more unique submissions

PURPOSE OF REPORT

To determine Development Application No eDA0184/25, for demolition of existing structures and construction of 10 independent seniors living units at 11 Jefferson Avenue, St Ives.

This application is reported to the Ku-ring-gai Local Planning Panel in accordance with the Minister's Section 9.1 Local Planning Panels Direction, as it:

a) is sensitive development to which Chapter 4 (Design of Residential Apartment Development) of SEPP (Housing) 2021 applies and

b) is contentious development that has received 10 or more unique submissions by way of objection.

RECOMMENDATION

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council as consent authority under Section 4.16 of the Environment Planning and Assessment Act 1979, refuse development consent to DA No. eDA0184/25 for demolition of existing structures and construction of 10 independent seniors living units at 11 Jefferson Avenue, St Ives, for the reasons provided in the Development Assessment Report **(Attachment A1)**.

Brodee Gregory
Executive Assessment Officer

Selwyn Segall
Team Leader - Development Assessment

Shaun Garland
Manager Development Assessment Services

Michael Miocic
Director Development & Regulation

Attachments:			
	A1⇩	Development Assessment Report	2025/221350
	A2⇩	Location Sketch	2025/244619
	A3⇩	Zoning Sketch	2025/244622
	A4⇩	Architectural Plans	2025/109398
	A5⇩	Landscape Plans	2025/109426
	A6⇩	Stormwater Plans	2025/109423

DEVELOPMENT APPLICATION

ASSESSMENT REPORT

REPORT TITLE	11 Jefferson Avenue, St Ives - Demolition of existing structures and construction of 10 independent seniors living units.

APPLICATION NO	eDA0184/25
PROPERTY DETAILS	11 Jefferson Avenue St Ives Lot 8 DP 231868 3,560m^2 R2 Low Density Residential
WARD	St Ives
PROPOSAL/PURPOSE	Demolition of existing structures and construction of 10 independent seniors living units
TYPE OF DEVELOPMENT	Local
APPLICANT	Minto Planning Services Pty Ltd
OWNER	Mr O Stusenko, Mrs L Nikolsky
DATE LODGED	23 April 2025
RECOMMENDATION	Refusal

PURPOSE OF REPORT

To determine Development Application No. eDA0184/25 for the demolition of existing structures and construction of 10 independent seniors living units pursuant to Part 5 of State Environmental Planning Policy (Housing) 2021.

This application is reported to the Ku-ring-gai Local Planning Panel in accordance with the Minister's Section 9.1 Local Planning Panels Direction, as it:

(a) is sensitive development to which Chapter 4 (Design of Residential Apartment Development) of SEPP (Housing) 2021 applies, and

(b) as it contentious development in respect of which 10 or more unique submissions, by way of objection, have been received.

INTEGRATED PLANNING AND REPORTING

Places, Spaces & Infrastructure

Community Strategic Plan Long Term Objective	Delivery Program Term Achievement	Operational Plan Task
P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai.	Applications are assessed in accordance with state and local plans.	Assessments are of a high quality, accurate and consider all relevant legislative requirements.

EXECUTIVE SUMMARY

Issues

Floor space ratio

Building height

Building typology, bulk and scale and local character

Location and access to facilities

Pedestrian access and crime prevention

Visual and acoustic privacy

Solar access and design for climate

Water management

Overflow assessment

Vehicular access and parking

Tree removal and impacts

Landscape design and amenity

BASIX

Construction Traffic Management Plan

Insufficient and inaccurate information

	Inadequate site analysis Design Verification Statement Inaccurate access report
Submissions	27
Land and Environment Court	Yes
Recommendation	Refusal

HISTORY

Site history

The site has a history of low-density residential use.

Previous applications history

A Pre-DA consultation was not undertaken with Council.

Council's records show previous applications relating to the site as follows:

Type	Application	Description	Decision	Date
CDC	52/06/CZ	Construction of a pergola & awning	Issued	25/08/2006
BA	93/01262	Proposed garage and tennis cabana	Approved	26/11/1993
DA	942/06	Torrens title subdivision	Rejected	23/10/2006
Rev	962/05A	Torrens title subdivision	Approved	11/07/2007
eDA	eDA0575/24	Demolition of existing structures and construction of part 2/part 3 building with 10 independent apartments, basement parking, landscaping and associated works (pursuant to Part 5 of SEPP Housing, 2021)	Withdrawn	21/12/2024

Current Development Application History

Date	Action
23/04/2025	Application lodged.
15/05/2025 – 15/06/2025	The application was notified to neighbouring property owners for a period of 30 days. In response, 27 unique submissions objecting to the development proposal were received.
24/06/2025	A deemed refusal appeal was filed with the Land & Environment Court.

Land and Environment Court appeal history

There is a current Class 1 appeal against the deemed refusal of the subject Development Application which was filed with the Land and Environment Court (Court) on 24 June 2025. The Statement of Facts and Contentions (SOFAC) was filed with the Court on 29 July 2025. A Section 34 conciliation conference is scheduled for 24 November 2025.

THE SITE



Figure 1: Aerial photograph of subject site and surrounding properties

Site description

The subject site is legally described as Lot 8 in DP 231868 and is known as No. 11 Jefferson Avenue, St Ives **(Figure 1)**. The site is irregular in shape and has dual street frontages of 22.555 metres to Jefferson Avenue and 18.835 metres to Maunder Avenue. The site area is 3,560m² (by survey).

The site has a fall generally from the northern (arc) boundary (RL157.00) to the Maunder Avenue (RL151.44) boundary of approximately 5.5 metres.

Development currently on the site comprises a single storey dwelling house of brick and weatherboard construction located within the northern portion of the lot. The dwelling surrounds an internal courtyard with covered walkways. Attached to the southern (rear) elevation of the dwelling is a timber deck which opens onto a level lawn. Adjoining the south-eastern edge of the dwelling is an in-ground swimming pool, with surrounding paved area. Located within the south-eastern portion of the site is a synthetic tennis court.

A detached outbuilding of stone construction and a double carport is located within the south-western corner of the site. Vehicular access to the carport is provided by an asphalt driveway from Maunder Avenue.

Existing vegetation within the site comprises an informal mix of groundcovers, shrubs and trees comprising a mix of native and non-native species. The western site boundary features dense shrub planting of bamboo.

Constraint:	Application:
Visual character study category	1945-1968.
Easements/rights of way	Easement for stormwater along western site boundary
Heritage Item - Local	No
Heritage Item - State	No
Heritage conservation area	No
Within 100m of a heritage item	No
Bush fire prone land	No
Natural Resources Biodiversity	No
Natural Resources Greenweb	No
Natural Resources Riparian	No
Within 25m of Urban Bushland	No
Contaminated land	No

Surrounding development

Development in the vicinity of the site comprises single dwellings on land zoned R2 Low Density Residential.

Due to the unusual configuration of the site, it is adjoined by a larger number of properties than is typical. These include:

i. No. 9 Jefferson Avenue, located to the north, supporting a single storey dwelling house
ii. No. 6 Hawley Close, located to the west, supporting a part single storey, part two storey dwelling house
iii. No. 8 Hawley Close, located to the west, supporting a two-storey dwelling with detached double garage
iv. No. 2A Maunder Avenue, located to the south-west, supporting a part single, part two storey dwelling house
v. No. 2 Maunder Avenue, located to the south, supporting a single storey dwelling house with detached double garage
vi. No. 4 Maunder Avenue, located to the south-east, supporting a part single, part two-storey dwelling house
vii. No. 10 Delaware Avenue, located to the east, supporting a two-storey dwelling house with swimming pool in the rear setback

The existing streetscape of Jefferson Avenue and Maunder Avenue is characterised by landscaped front setbacks with canopy tree plantings in the front and rear setbacks.

THE PROPOSAL

Development consent is sought for the following:

i. demolition of existing structures including dwelling house, driveway, tennis court and swimming pool
ii. removal of 109 trees
iii. construction of seniors housing – 10 independent living units as in-fill self-care housing each comprising 3 bedrooms in a part two and three storey building

a. ground floor comprises Units 1-5 with entrance lobby and lift
b. first floor comprises Units 6-10

iv. single level basement car park comprising 17 parking spaces (including 2 visitor spaces), storage cages, plant/service rooms and waste room
v. communal open space facilities including bbq area, water-closet and garden store
vi. new driveway from Maunder Avenue
vii. covered pedestrian entrance from Jefferson Avenue
viii. landscaping works, including pedestrian pathways
ix. stormwater works

Proposed works in the road reserve include construction of a new footpath between the subject site and bus stop ID 2075117, located adjacent to No. 17 Woodbury Road, via Maunder Avenue, Warrabina Avenue and Woodbury Road.

CONSULTATION

Community

In accordance with Appendix 1 of the Ku-ring-gai Community Participation Plan, owners of surrounding properties were given notice of the application. In response, submissions from the following were received.

1. *H. Mogharei – No. 2 Maunder Avenue, St Ives*
2. *M. Alamdari – No. 4 Maunder Avenue, St Ives*
3. *D. Arena – No. 23 Warrabina Avenue, St Ives*
4. *K. Anstis – No. 9 Maunder Avenue, St Ives (two unique submissions)*
5. *L. Hyde – No. 1 Jefferson Avenue, St Ives*
6. *C. Spearing – No. 17 Woodbury Road, St Ives*
7. *J. Zhang – No. 1 Maunder Avenue, St Ives*
8. *M. and A. Haslam – No. 21 Warrabina Close, St Ives*
9. *L. Lin – No. 6 Maunder Avenue, St Ives*
10. *P. and M. Garcia – No. 5 Ayres Road, St Ives*
11. *J. Weir – No. 18 Warrabina Avenue, St Ives*
12. *A. Kerr – No. 10 Warrabina Avenue, St Ives*
13. *G. van Rooyen – address not provided*
14. *T. and C. Cope – No. 8 Jefferson Avenue, St Ives*
15. *E. Khamesi – No. 2 Maunder Avenue, St Ives*
16. *L. Blix – No. 2a Maunder Avenue, St Ives*
17. *Z. Yue – No. 20 Warrabina Avenue, St Ives*
18. *P. and N. Schulz – No. 3 Maunder Avenue, St Ives*
19. *N. and J. Hogg – No. 10 Delaware Avenue, St Ives*
20. *B. and S. Acton – No. 2b Maunder Avenue, St Ives*
21. *D. and S. Shearman – No. 19 Maunder Avenue, St Ives*
22. *M. and K. Moffett – No. 5 Jefferson Avenue, St Ives*
23. *J. Stowe – No. 2 Nara Place, St Ives*
24. *J. and L. Borg – No. 6 Hawley Close, St Ives*
25. *R. Bruce – No. 20 Delaware Close, St Ives*
26. *T. Chen – address not provided*

The submissions raised the following issues:

- Driveway location and pedestrian safety; impacts to cul-de-sac in Maunder Avenue which is used for turning; swept path diagrams conflict with pedestrian routing plans

- Excessive tree removal and insufficient replenishment planting
- Traffic generation; impacts to local road network and pedestrian safety; existing congestion caused by school traffic will be exacerbated
- Bulk and scale impacts; bulk impacts are exacerbated by unrelieved walls and elevated terraces; typology of smaller scale buildings (duplexes, townhouses) would provide a better response
- Building height - inconsistent with neighbourhood; covenants require single storey development in Jefferson Avenue
- Impacts to unique streetscape character of Maunder Avenue which has underground utilities and is lined with palm trees
- Construction timeframe and noise impacts; request time curfews, limits on size of trucks, all damage to be made good and jib cranes not traverse (slew) over adjoining properties
- Inadequacies of traffic assessment - over-reliance on public transport; does not consider ongoing impacts to Jefferson Avenue; does not consider school events of Sydney Grammar Preparatory School (currently there is congestion caused by regular school program, weekend sport and after-hours events), inconsistencies with Access report
- Insufficient parking for residents and visitors – each unit will realistically have two cars
- Impacts to sewer system; existing problems on site and in the street will be exacerbated
- Waste collection – garbage trucks can only service one side of the street and struggle to manoeuvre currently (request that turning circles be checked, proposed circles are impacted by bins); safety concerns due to conflict with pedestrian crossing
- Impacts to fauna from tree removal - disruption to wildlife corridors and increased pollution
- Amenity impacts from communal BBQ area
- Overshadowing impacts to neighbouring properties including No. 2 Maunder Avenue
- Street address - suggest Maunder Avenue should be used as the address
- Units are oversized; concern number of units will be increased post approval
- Inconsistency with zone objectives
- Insufficient side and rear setbacks - setbacks of 9 metres should be provided
- Privacy impacts from terraces and full height glazed windows which are oriented towards neighbouring properties
- Deep soil landscaping – non-compliance with Seniors Housing Design Guide and ADG and expectations in Ku-ring-gai; deep soil zone has been incorrectly calculated by applicant
- Privacy impacts from windows and balconies to No. 2A Maunder Avenue (living room, dining room, kitchen and private open space)
- Bulk and scale impacts to No. 2A Maunder Avenue; natural ground level shown incorrectly on architectural sections
- Removal of Trees 8, 19 and 29 Jacaranda (on western site boundary) and Tree 48 Pinus radiata
- Impacts to retained trees - potential destabilisation of *Pinus radiata* which leans towards No. 6 Hawley Close
- Proposed canopy replacement trees are located too close to property boundaries
- Impacts to unidentified trees adjoining western boundary
- Accessibility – community was not advised of reasons for bus stop relocation; Bus service 194 provides access to the city and not local shops (a change in buses is required on Mona Vale Road to access local shops)
- Proposed new pedestrian path – path is of insufficient width and will impact trees adjacent to Nos. 1 and 3 Maunder Avenue; impacts to landscape character; safety concerns due to conflict with driveways
- Poisoning of trees on the site (four confirmed, plus Tree 46 possibly poisoned)
- Relocation of stormwater easement closer to western boundary
- Existing road is located partly on subject site; request retention of bay for turning

- Fire safety – concerns development cannot be accessed by a fire truck
- Communal areas should be included in FSR calculation
- Privacy screens are impermanent and should not be relied upon to manage privacy
- Possible noise impacts from air conditioning condensers on balconies; roof plant should be set back from boundaries and screened
- Noise pollution from air conditioning condensers
- Viability of proposed landscaping in vicinity of easement
- Insufficient screen planting within setbacks
- Amenity impacts to No. 10 Delaware Avenue due to proximity of entry path and lobby to site boundary
- Waste room clearance – request confirmation
- Discrepancy in site area – 3,650m^2 on plans and 3,519m^2 on site survey; query inclusion of right of way for No. 9 Jefferson Avenue
- Reduction in off-street parking resulting from proposed development
- Request any future modification applications be subject to community consultation
- Query why previous application was withdrawn
- Privacy impacts to No. 6 Hawley Close
- Inconsistency with Seniors Living Design Guide - proposed design does not respond appropriately to surrounding development
- Documentation indicates possible height non-compliance
- Lack of solar access to communal open space
- Lack of pre-DA engagement with community

The issues raised by the community, where they align with Council's concerns are reflected in the Statement of Facts and Contentions.

Internal referrals

Building

Council's Senior Building Surveyor has reviewed the proposed development and has not raised concerns. Conditions relating to access and fire safety provisions would be recommended if the application were recommended for approval.

Environmental Health

Council's Senior Environmental Health Officer has reviewed the proposed development and has not raised concerns. Conditions concerning noise and vibration management, acoustic impacts, location of air conditioning condensers, mechanical ventilation, waste and recycling storage facilities, control of construction noise, mechanical noise control, outdoor lighting and noise control would be recommended if the application were recommended for approval.

Urban design

Council's Urban Design consultant raised concerns with the site analysis, building typology, bulk and scale and local character, access to facilities, pedestrian access and crime prevention, visual and acoustic privacy, solar access and design for climate and Design Verification Statement. These issues are agreed with and form part of the recommended Reasons for Refusal 3-7 and 17-18.

Landscaping

Council's Senior Landscape and Tree Assessment Officer raised concerns with tree removal and impacts, landscape design and amenity, BASIX and insufficient/inaccurate information

on plans. These issues are agreed with and form recommended Reasons for Refusal 11-13 and 16.

Engineering

Council's Senior Development Engineer raised concerns with water management, overflow assessment, vehicle access and parking and construction traffic management. These issues are agreed with and form Reasons for Refusal 8-10 and 14-15.

Concerns were raised in the submissions in respect of traffic, safety and parking. These issues were considered in the assessment of the application, however, are not considered to be reasons to recommend refusal of the application.

Drainage Engineer

Council's Operations Drainage Engineer has reviewed the proposed development and has raised concerns in relation to stormwater management and flood planning. These issues are agreed with and form part of Reasons for Refusal 8-9 and 14.

Strategic Traffic Engineer

Council's Strategic Traffic Engineer has reviewed the proposed development and raises concerns in relation to vehicle access and parking. These issues are agreed with and form part of Reason 10 within the recommended Reasons for Refusal.

STATUTORY PROVISIONS

State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 Remediation of land

The provisions of Chapter 4 require Council to consider the potential for a site to be contaminated. The subject site has a history of low-density residential use and as such, it is unlikely to contain any contamination, consequently further investigation is not warranted in this case.

State Environmental Planning Policy (Sustainable Buildings) 2022 – Chapter 2 Standards for residential development – BASIX

A BASIX certificate has been submitted, however there are inconsistencies between the commitments made in the BASIX Certificate and the landscape plans. This issue forms a recommended Reason for Refusal 13.

State Environmental Planning Policy (Housing) 2021

SEPP Housing contains several principles including the promotion of the planning and delivery of housing in locations where it will make good use of existing and planned infrastructure and services.

The subject application seeks development consent for a residential flat building on land that is zoned R2 Low Density Residential.

The relevant sections of Chapter 4 of SEPP Housing are considered below -

Chapter 4 – Design of residential apartment development

Section 142(1) outlines the aims of Chapter 4 of SEPP Housing. In summary, those aims relate to ensuring residential development; contributes to sustainable development, achieves better form and aesthetics, maximises amenity, safety and security, satisfies the increasing demand for residential development, contributes to the variety of dwelling types, supports housing affordability, minimises the consumption of energy and facilitates the timely and efficient assessment of Development Applications.

The proposed development does not achieve the aims of this chapter because it will not achieve a better built form and aesthetics of buildings, nor does it maximise the amenity and safety of residents.

Section 147(1)(a) of SEPP Housing states that development consent must not be granted to residential apartment development unless the consent authority has considered the development against the design principles for residential apartment development set out in Schedule 9 of the SEPP.

The principles set out in Schedule 9 of SEPP Housing relate to -

1. *Context and neighbourhood character*
2. *Built form and scale*
3. *Density*
4. *Sustainability*
5. *Landscape*
6. *Amenity*
7. *Safety*
8. *Housing diversity and social interaction*
9. *Aesthetics*

The proposed development does not meet the design principles as it; does not respond to its context, does not comprise a built form which responds to the existing character of the street and surrounding buildings, is not of an appropriate density, does not comprise good landscape design, does not provide good amenity for residents and neighbours, does not optimise safety and security and does not result in a built form which has good proportions and aesthetics.

Section 147(1)(b) of SEPP Housing states that development consent must not be granted to residential apartment development unless the consent authority has considered the Apartment Design Guide (ADG).

The proposed development does not satisfy the ADG for the reasons outlined in the Compliance Table below, which are also reflected in the recommended Reasons for Refusal.

ADG COMPLIANCE TABLE	
Guideline	**Compliance**
Objective 3A-1 Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.	**NO**

ADG COMPLIANCE TABLE	
Guideline	**Compliance**
Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development.	**NO**
Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid-winter.	**YES**
Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security.	**NO**
Objective 3C-2 Amenity of the public domain is retained and enhanced.	**YES**
Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	**YES**
Design criteria	
1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3). 2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter).	**YES** **YES**
Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.	**YES**
Objective 3D-3 Communal open space is designed to maximise safety	**NO**
Objective 3E-1 Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.	**YES**
Design criteria	
Deep soil zones are to meet the following minimum requirements: **Site area** / **Minimum dimensions** / **Deep soil zone (% of site area)** greater than 1,500m^2 with significant existing tree cover / 6 metres / 20.6%	**YES**

<table>
<tr><th colspan="2">ADG COMPLIANCE TABLE</th></tr>
<tr><th>Guideline</th><th>Compliance</th></tr>
<tr><td>Objective 3F-1
Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.</td><td>NO</td></tr>
<tr><td colspan="2">Design criteria</td></tr>
<tr><td>Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:

<table>
<tr><th>Building height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th><th>Proposal</th></tr>
<tr><td>up to 12m (4 storeys)</td><td>12 metres</td><td>6 metres</td><td>6.6 metres between Units 4 and 9 and No. 10 Delaware Avenue</td></tr>
</table>
</td><td>NO</td></tr>
<tr><td>Objective 3F-2
Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.</td><td>NO</td></tr>
<tr><td>Objective 3G-1
Building entries and pedestrian access connects to and addresses the public domain.</td><td>NO</td></tr>
<tr><td>Objective 3G-2
Access, entries and pathways are accessible and easy to identify.</td><td>NO</td></tr>
<tr><td>Objective 3H-1
Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.</td><td>NO</td></tr>
<tr><td colspan="2">Design guidance</td></tr>
<tr><td>Car park access should be integrated with the building’s overall facade. Design solutions may include:

• the materials and colour palette to minimise visibility from the street
• security doors or gates at entries that minimise voids in the facade
• where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed.</td><td>YES</td></tr>
</table>

ADG COMPLIANCE TABLE	
Guideline	**Compliance**
Objective 3J-1 1. Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas.	**YES**
Design criteria	
1. For development on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less. The car parking needs for a development must be provided off street.	**YES**
Objective 3J-2 Parking and facilities are provided for other modes of transport.	**NO**
Objective 3J-3 Car park design and access is safe and secure.	**YES**
Objective 3J-4 Visual and environmental impacts of underground car parking are minimised.	**NO**
Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.	**NO**
Design criteria	
1 Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas. 3 A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.	**NO** **YES**
Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months.	**NO**
Objective 4B-1 All habitable rooms are naturally ventilated.	**YES**
Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation.	**YES**

ADG COMPLIANCE TABLE	
Guideline	**Compliance**
Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents.	**YES**
Design criteria	
1 At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed. 2 Overall depth of a cross-over or cross-through apartment does not exceed 18 metres, measured glass line to glass line.	**YES** **YES**
Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access.	**YES**
Design criteria	
Measured from finished floor level to finished ceiling level, minimum ceiling heights are: **Minimum ceiling height for apartment and mixed use buildings** — **Proposal** Habitable rooms: 2.7 metres — 2.7 metres Non-habitable: 2.4 metres — 2.7 metres	**YES**
Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms.	**YES**
Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.	**YES**
Design criteria	
Apartments are required to have the following minimum internal areas: **Apartment type** — **Minimum internal area** — **Proposal** 3 bedrooms: 90m^2 — 152m^2 minimum The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m^2 each. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms.	**YES** **YES**

ADG COMPLIANCE TABLE	
Guideline	**Compliance**
Objective 4D-2 Environmental performance of the apartment is maximised.	**YES**
Design criteria	
1 Habitable room depths are limited to a maximum of 2.5 x the ceiling height. 2 In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.	**YES** **YES**
Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs.	**NO**
Design criteria	
1 Master bedrooms have a minimum area of $10m^2$ and other bedrooms $9m^2$ (excluding wardrobe space) 2 Bedrooms have a minimum dimension of 3 metres (excluding wardrobe space). 3 Living rooms or combined living/dining rooms have a minimum width of: • 3.6 metres for studio and 1 bedroom apartments • 4 metres for 2 and 3 bedroom apartments	**YES** **YES** **YES**
Objective 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential amenity.	**YES**
Design criteria	
All apartments are required to have primary balconies as follows: **Dwelling type** / **Minimum area** / **Minimum depth** 3+ bedroom apartments / $12m^2$ / 2.4 metres The minimum balcony depth to be counted as contributing to the balcony area is 1 metre / / Balconies width 2 metres For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of $15m^2$ and a minimum depth of 3 metres.	**YES**
Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents.	**YES**

ADG COMPLIANCE TABLE	
Guideline	**Compliance**
Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building.	**YES**
Objective 4E-4 Private open space and balcony design maximises safety.	**YES**
Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments.	**YES**
Design criteria	
1. The maximum number of apartments off a circulation core on a single level is eight	**YES**
Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents.	**NO**
Objective 4G-1 Adequate, well-designed storage is provided in each apartment	**YES**
Design criteria	
In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: **Dwelling type** — **Storage size volume** — **Proposal** 3+ bedroom apartments — 10m^3 — >10m^3 At least 50% of the required storage is to be located within the apartment.	**YES** **YES**
Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments.	**YES**
Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout.	**YES**
Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments.	**YES**
Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.	**YES**

ADG COMPLIANCE TABLE	
Guideline	**Compliance**
Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future.	**NO**
Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located.	**NO**
Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents.	**YES**
Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area.	**NO**
Objective 4M-2 Building functions are expressed by the façade.	**NO**
Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street.	**NO**
Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised.	**NO**
Objective 4N-3 Roof design incorporates sustainability features.	**NO**
Objective 4O-1 Landscape design is viable and sustainable.	**NO**
Objective 4O-2 Landscape design contributes to the streetscape and amenity.	**NO**
Objective 4P-1 Appropriate soil profiles are provided.	**YES**
Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance.	**NO**
Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members.	**YES**
Objective 4Q-2 A variety of apartments with adaptable designs are provided.	**NO**

ADG COMPLIANCE TABLE	
Guideline	**Compliance**
Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs.	**YES**
Objective 4U-1 Development incorporates passive environmental design and includes well located, screened outdoor areas for clothes drying.	**NO**
Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer Adequate natural ventilation minimises the need for mechanical ventilation.	**NO**
Objective 4U-3 Development incorporates passive environmental design and optimises cross ventilation.	**NO**
Objective 4V-1 Potable water use is minimised.	**YES**
Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters.	**NO**
Objective 4V-3 Flood management systems are integrated into site design.	**NO**
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.	**YES**
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling.	**YES**
Objective 4X-1 Building design detail provides protection from weathering.	**YES**
Objective 4X-2 Systems and access enable ease of maintenance.	**YES**
Objective 4X-3 Material selection reduces ongoing maintenance costs.	**YES**

The above departures are not acceptable because the development does not meet the underlying objectives of the controls that have been breached. Consequently,

The following is an assessment against SEPP Housing provisions:

SEPP (HOUSING) 2021 COMPLIANCE TABLE			
Section	**Provision**	**Proposed**	**Complies**
Division 2 Preliminary			
82 Definitions	(1) ***gross floor area*** (GFA) means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from another building, measured at a height of 1.4m above the floor— (a) excluding the following— (i) columns, fin walls, sun control devices and elements, projections or works outside the general lines of the internal face of an external wall, (ii) cooling towers, machinery and plant rooms, ancillary storage space and vertical air conditioning ducts, (iii) car parking and internal access to the car parking, (iv) space for the loading and unloading of goods, including access to the space, (v) areas for common vertical circulation, including lifts and stairs, (vi) storage, vehicular access, garbage and services within the basement, (vii) for a residential care facility—floor space used for service activities provided by the facility within the basement, (viii) terraces and balconies with outer walls less than 1.4m high, (ix) voids above a floor at the level of a storey or storey above, and (b) for in-fill self-care housing—including car parking provided at ground level, other than for visitors, in excess of 1 per dwelling. ***in-fill self-care housing*** means seniors housing consisting of at	Gross Floor Area has been calculated incorrectly by the applicant. The proposed waste room, bulky store room and some of the storage cages do not comprise basement and therefore comprise Gross Floor Area. Further, the communal water-closet and store room also comprise GFA.	**NO**

	least 2 independent living units and at which none of the following services are provided on the site— (a) meals, (b) cleaning services, (c) personal care, (d) nursing care. ***seniors*** means the following people— (a) people who are at least 60 years of age, (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, (c) people who have been assessed as being eligible to occupy housing for aged persons provided by a social housing provider. (2) The floor space ratio, and maximum permissible floor space ratio, of a building for this part must be calculated using gross floor area as defined for this part.		
Division 3 Development standards			
84 Development standards —general	(1) This section applies to development for the purposes of seniors housing involving the erection of a building.	Noted	
	(2) Development consent must not be granted for development to which this section applies unless—		
	(a) the site area of the development is at least 1,000m^2, and	3,560m^2	**YES**
	(b) the frontage of the site area of the development is at least 20 metres measured at the building line, and	37.4 metres	**YES**
	(c) for development on land in a residential zone where residential flat buildings are not permitted—		

	(i) the development will not result in a building with a height of more than 9.5 metres, excluding servicing equipment on the roof of the building, and	Part of building is located above the inground pool and exceeds 9.5 metres in height.	**NO**
	(ii) if the roof of the building contains servicing equipment resulting in the building having a height of more than 9.5m—the servicing equipment complies with subsection (3), and	Service elements are not on the roof. The proposed 3 storey building appears to be set within the building height plane though	**YES**
	(iii) if the development results in a building with more than 2 storeys—the additional storeys are set back within planes that project at an angle of 45 degrees inwards from all side and rear boundaries of the site.	clarification is required regarding ground levels at the boundaries.	**NO**
85 Development standards for hostels and independent living units	(1) Development consent must not be granted for development for the purposes of a hostel or an independent living unit unless the hostel or independent living unit complies with the relevant standards specified in Schedule 4.	Capable of compliance.	**YES**
88 Restrictions on occupation of seniors housing	(1) Development permitted under this Part may be carried out for the accommodation of only the following— (a) seniors or people who have a disability, (b) people who live in the same household with seniors or people who have a disability, (c) staff employed to assist in the administration and provision of services to housing provided under this Part.	A condition could be imposed if the application was recommended for approval.	**YES**
	(2) Development consent must not be granted under this Part unless the consent authority is satisfied that only the kinds of people referred to in subsection (1) will occupy	A condition could be imposed if the application was recommended for approval.	**YES**

	accommodation to which the development relates.		
Division 4 Site-related requirements			
93 Location and access to facilities and services—independent living units	(1) Development consent must not be granted for development for the purposes of an independent living unit unless the consent authority has considered whether residents will have adequate access to facilities and services— (a) by a transport service that complies with subsection (2), or (b) on-site.	Adequate access to services is not provided. The bus service provides access to Chatswood and the city rather than the local centre.	**NO**
	(2) The transport service must— (a) take the residents to a place that has adequate access to facilities and services, and (b) for development on land in the Eastern Harbour City, Central River City, Western Parkland City or Central Coast City— (i) not be an on-demand booking service for the transport of passengers for a fare, and (ii) be available both to and from the site at least once between 8am and 12pm each day and at least once between 12pm and 6pm each day, and (c) for development on other land—be available both to and from the site during daylight hours at least once each weekday.	Adequate access to services is not provided. The bus service provides access to Chatswood and the city rather than the local centre.	**NO**
	(3) For the purposes of subsections (1) and (2), access is adequate if— (a) the facilities and services are, or the transport service is, located at a distance of not more than 400m from the site, and (b) the distance is accessible by means of a suitable access pathway, and (c) the gradient along the pathway complies with subsection (4)(c).	The application contains inconsistencies in relation to relocation of the bus stop, which has already occurred. A suitable access pathway does not exist but is proposed pursuant to the subject application.	**NO** **NO**

		Further, it is unclear if the proposed pedestrian path to Jefferson Avenue meets the relevant requirements as this pathway is not addressed in the access report.	
	(4) In subsection (3)— (a) a ***suitable access pathway*** is a path of travel by means of a sealed footpath or other similar and safe means that is suitable for access by means of an electric wheelchair, motorised cart or the like, and (b) the distance is to be measured by reference to the length of the pathway, and (c) the overall average gradient must be not more than 1:14 and the gradients along the pathway must be not more than— (i) 1:12 for a maximum length of 15m at a time, or (ii) 1:10 for a maximum length of 5m at a time, or (iii) 1:8 for a maximum length of 1.5m at a time.	Noted.	
	(5) In this section— ***facilities and services*** means— (a) shops and other retail and commercial services that residents may reasonably require, and (b) community services and recreation facilities, and (c) the practice of a general medical practitioner. ***provide a booking service*** has the same meaning as in the *Point to Point Transport (Taxis and Hire Vehicles) Act 2016*, Section 7. **Note—** Provide a booking service is defined as carrying on a business taking bookings for taxis or hire vehicles to provide passenger services, whether immediately or	Bus service provides access to Chatswood and the city, not the local centre.	**NO**

	at a later time, and communicating the bookings to drivers for passenger services or providers of passenger services.		
95 Water and sewer	(1) A consent authority must not consent to development under this Part unless the consent authority is satisfied the seniors housing will— (a) be connected to a reticulated water system, and (b) have adequate facilities for the removal or disposal of sewage.	Capable of compliance.	**YES**
	(2) If the water and sewerage services will be provided by a person other than the consent authority, the consent authority— (a) must consider the suitability of the site in relation to the availability of reticulated water and sewerage infrastructure, or (b) if reticulated services are not available—must satisfy the responsible authority that the provision of water and sewerage infrastructure, including environmental and operational considerations, is satisfactory for the development.	Capable of compliance.	**YES**
	(3) In this section— ***responsible authority*** means the public authority responsible for water and sewerage services in the area in which the seniors housing is located.	Noted.	
96 Bush fire prone land	(1) A consent authority must not consent to development under this Part on relevant bush fire prone land unless the consent authority is satisfied the development complies with the requirements of Planning for Bushfire Protection.	The site is not located on bushfire prone land or within an exclusion zone.	**YES**
Division 5 Design requirements			
97 Design of in-fill self-care housing	(1) In determining a development application for development for the purposes of seniors housing, a consent authority must consider the *Seniors*	The proposed development is inconsistent with Schedule 8 as	**NO**

	Housing Design Guide, published by the Department in December 2023. (2) Development consent must not be granted to development for the purposes of seniors housing unless the consent authority is satisfied the design of the seniors housing demonstrates that adequate consideration has been given to the design principles for seniors housing set out in Schedule 8.	detailed in the below table.	
Division 7 Non-discretionary development standards			
106 Interrelationship of Division with design principles in Division 6	Nothing in this division affects the operation of Section 97(2).	Noted.	
108 Non-discretionary development standards for independent living units—the Act, s 4.15	(1) The object of this section is to identify development standards for particular matters relating to development for the purposes of independent living units that, if complied with, prevent the consent authority from requiring more onerous standards for the matters. **Note—** See the Act, section 4.15(3), which does not prevent development consent being granted if a non-discretionary development standard is not complied with. (2) The following are non-discretionary development standards in relation to development for the purposes of independent living units— (a) no building has a height of more than 9.5m, excluding servicing equipment on the roof of a building, (b) servicing equipment on the roof of a building, which results in the building having a height of more than 9.5m—	Part of building is located above the inground pool and exceeds 9.5 metres in height. Service material is not located on the roof.	**NO** **YES**

	(i) is fully integrated into the design of the roof or contained and suitably screened from view from public places, and (ii) is limited to an area of no more than 20% of the surface area of the roof, and (iii) does not result in the building having a height of more than 11.5m,		
	(c) the density and scale of the buildings when expressed as a floor space ratio is 0.5:1 or less,	Floor Space Ratio has not been correctly calculated. Floor Space Ratio has been estimated at 0.53:1 (Gross Floor Area 2,146m^2).	**NO**
	(d) a minimum landscaped area that is the lesser of— (i) 35m^2 per dwelling, or (ii) 30% of the site area, (e) (Repealed)	Landscaped area is calculated at 1,494.6m^2 which exceeds the minimum requirement of 350m^2.	**YES**
	(f) a deep soil zone on at least 15% of the site area, where each deep soil zone has minimum dimensions of 3m and, if practicable, at least 65% of the deep soil zone is located at the rear of the site,	Deep soil area is calculated at 834.3m^2 which exceeds the minimum requirement of 534m^2.	**YES**
	(g) at least 70% of the dwellings receive at least 2 hours of direct solar access between 9am and 3pm at mid-winter in living rooms and private open spaces,	Application documentation states that 70% of the dwellings receive a least 2 hours solar access, although the plans indicate that Unit	**NO**

	(h) for a dwelling in a single storey building or a dwelling located, wholly or in part, on the ground floor of a multi-storey building— (i) at least 15m^2 of private open space per dwelling, and (ii) at least 1 private open space with minimum dimensions of 3m accessible from a living area located on the ground floor, **Note—** The open space needs to be accessible only by a continuous accessible path of travel, within the meaning of AS 1428.1, if the dwelling itself is an accessible one—see Schedule 4, section 2. (i) for a dwelling in a multi-storey building not located on the ground floor—a balcony accessible from a living area with minimum dimensions of 2 metres and— (i) an area of at least 10m^2, or (ii) for each dwelling containing 1 bedroom—an area of at least 6m^2, (j) for a development application made by, or made by a person jointly with, a social housing provider or Landcom—at least 1 parking space for every 5 dwellings, (k) if paragraph (j) does not apply—at least 0.5 parking spaces for each bedroom.	10 receives 1.5 hours only. All ground floor units have more than 15m^2 of private open space per dwelling and at least 1 private open space with minimum dimensions of 3 metres accessible from a living area.	**YES**

SCHEDULE 4 STANDARDS CONCERNING ACCESSIBILITY AND USABILITY FOR HOSTELS AND INDEPENDENT LIVING UNITS - COMPLIANCE TABLE			
Section	**Provision**	**Proposed**	**Complies**
Part 1 Standards applying to hostels and independent living units			
1 Application of standards in this Part	The standards set out in this Part apply to any seniors housing that consists of hostels or independent living units.		
2 Siting standards	(1) **Wheelchair access** If the whole of the site has a gradient of less	It is unclear if the proposed	**NO**

	than 1:10, 100% of the dwellings must have wheelchair access by a continuous accessible path of travel to an adjoining public road. (2) If the whole of the site does not have a gradient of less than 1:10— (a) the percentage of dwellings that must have wheelchair access must equal the proportion of the site that has a gradient of less than 1:10, or 50%, whichever is the greater, and (b) the wheelchair access provided must be by a continuous accessible path of travel to an adjoining public road or an internal road or a driveway that is accessible to all residents. **Note.** For example, if 70% of the site has a gradient of less than 1:10, then 70% of the dwellings must have wheelchair access as required by this subsection. If more than 50% of the site has a gradient greater than 1:10, development for the purposes of seniors housing is likely to be unable to meet these requirements. (3) **Common areas** 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.	pedestrian path to Jefferson Avenue meets the relevant requirements as this pathway is not addressed in the access report.	
3 Letterboxes	(1) Letterboxes— (a) must be located on a hard standing area, and (b) must have wheelchair access by a continuous accessible path of travel from the letterbox to the relevant dwelling, and (c) must be lockable by a lock that faces a wheelchair accessible path. (2) If a structure contains multiple letterboxes, the structure must be in a prominent location. (3) At least 20% of the letterboxes on the site must be more than 600mm and less than 1,200	Satisfactory.	**YES**

	millimetres above ground level (finished).		
4 Car parking	(1) If parking spaces attached to or integrated with a class 1 building under the *Building Code of Australia* are provided for use by occupants who are seniors or people with a disability, at least 1 parking space must— (a) be at least 3.2 metres wide, and (b) be at least 2.5 metres high, and (c) have a level surface with a maximum gradient of 1:40 in any direction, and (d) be capable of being widened to 3.8 metres without requiring structural modifications to a building. (2) If parking spaces associated with a class 1, 2 or 3 building under the *Building Code of Australia* are provided in a common area for use by occupants who are seniors or people with a disability, the following applies— (a) for a parking space not in a group—the parking space must comply with AS/NZS 2890.6, (b) for a group of 2–7 parking spaces— (i) at least 1 of the parking spaces must comply with AS/NZS 2890.6, and (ii) 50% of the parking spaces must— (A) comply with AS/NZS 2890.6, or (B) be at least 3.2m wide and have a level surface with a maximum gradient of 1:40 in any direction, (C) for a group of 8 or more parking spaces— (i) at least 15% of the parking spaces must comply with AS/NZS 2890.6, and (ii) at least 50% of the parking spaces must—	Satisfactory.	**YES**

	(A) comply with AS/NZS 2890.6, or (B) be at least 3.2m wide and have a level surface with a maximum gradient of 1:40 in any direction. (3) To avoid doubt, a parking space that complies with AS/NZS 2890.6 is only counted toward 1 of the requirements in subsection (2)(b)(i) or (ii) or (c)(i) or (ii). (4) At least 5% of any visitor parking spaces must comply with AS/NZS 2890.6. (5) A parking space required by this section to comply with AS/NZS 2890.6, other than a visitor parking space, is not required to include the international symbol of access. (6) If multiple parking spaces are accessible by a common access point, the access point must be secured by a power-operated garage door, vehicle gate, vehicle barrier or similar device. (7) A parking space, other than a parking space under subsection (6), must be— (a) secured by a power-operated door, or (b) capable of accommodating the installation of a power-operated door, including by having— (i) access to a power point, and (ii) an area for motor or control rods for a power-operated door. (8) A requirement in this section for a parking space to comply with AS/NZS 2890.6 extends to the associated shared area within the meaning of AS/NZS 2890.6. (9) In this section, a parking space is in a ***common area*** if it is not attached to or integrated with a hostel or independent living unit.		
5 Accessible entry	(1) The main entrance to a dwelling must have— (a) a clear opening that complies with AS 1428.1, and	Capable of compliance.	**YES**

	(b) a circulation space in front of the door and behind the door that complies with AS 1428.1. (2) This section does not apply to an entry for employees.		
6 Interiors	(1) An internal doorway must have an unobstructed opening that complies with AS 1428.1. (2) An internal corridor must have an unobstructed width of at least 1,000mm. (3) The circulation spaces in front of and behind an internal doorway in the following areas must comply with AS 1428.1— (a) a kitchen, (b) a laundry, (c) a bathroom, (d) a toilet, (e) a bedroom, (f) a living area, (g) the main area of private open space. (4) To avoid doubt, subsection (3)(b) does not apply to laundry facilities in a cupboard.	Capable of compliance.	**YES**
7 Bedroom	At least one bedroom in a dwelling must have the following— (a) a clear area, not including a circulation space, sufficient to accommodate— (i) for a hostel—a wardrobe and a single-size bed, or (ii) for an independent living unit—a wardrobe and a queen-size bed, (b) a clear area around the area for the bed of at least— (i) 1,200 millimetres at the foot of the bed, and (ii) 1,000 millimetres on each side of the bed, (c) at least 2 double general power outlets on the wall where the head of the bed is likely to be, (d) at least one general power outlet on the wall opposite the wall where the head of the bed is likely to be.	Capable of compliance.	**YES**

8 Bathroom	(1) At least one bathroom in a dwelling must be located on— (a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The bathroom must have the following— (a) a slip resistant floor surface that achieves a minimum rating of P3 in accordance with AS 4586—2013, (b) a washbasin with tap ware capable of complying with AS 1428.1, including by future adaptation if the washbasin and tap ware continue to use existing hydraulic lines, (c) a shower that— (i) is accessible without a shower-hob or step, and (ii) complies with the requirements of AS 1428.1 for the entry, circulation space, floor gradient to the wastewater outlet and location of the mixer tap, and (iii) is in the corner of a room, and (iv) has a wall capable of accommodating the installation of a grab rail, portable shower head with supporting grab rail and shower seat, in accordance with AS 1428.1, (d) a wall cabinet with shelving illuminated by an illumination level of at least 300 lux, (e) a double general power outlet in an accessible location, in accordance with AS 1428.1. (3) Subsection (2)(c) does not prevent the installation of a shower screen that can easily be removed to enable compliance with that paragraph.	Capable of compliance.	**YES**

9 Toilet	(1) At least one toilet in a dwelling must be located on— (a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The toilet must have the following— (a) a water closet pan— (i) in the corner of the room, and (ii) with a centreline set-out in accordance with AS 1428.1, (b) a circulation space in front of the water closet pan that is— (i) at least 1,200 millimetres long and at least 900 millimetres wide, and (ii) clear of door swings and fixtures, other than a toilet paper dispenser or grab rails, (c) a circulation space around the water closet pan that complies with AS 1428.1, (d) a slip resistant floor surface that achieves a minimum rating of P3 in accordance with AS 4586—2013, (e) a wall capable of accommodating the installation of a back rest and grab rail that will comply with AS 1428.1. (3) A removable shower screen may be located in the circulation space specified in subsection (2)(c).	Capable of compliance.	**YES**
10 Surfaces of balconies and external paved areas	Balconies and external paved areas must have surfaces that are slip resistant and comply with— (a) the *Building Code of Australia,* or (b) the Standards Australia Handbook SA HB 198:2014*, Guide to the specification and testing of slip resistance of pedestrian surfaces*, published on 16 June 2014.	Capable of compliance.	**YES**

11 Door hardware	(1) Door handles and hardware for all doors, including entry doors and external doors, must comply with AS 1428.1. (2) To avoid doubt, subsection (1) does not apply to cabinetry.	Capable of compliance.	**YES**
12 Switches and power points	(1) Switches and power points must— (a) comply with AS 1428.1, or (b) be capable of complying with AS 1428.1 through future adaptation. (2) Subsection (1) does not apply to— (a) remote controls, or (b) power points likely to serve appliances that are not regularly moved or turned off.	Capable of compliance.	**YES**
13 Private passenger lifts	(1) This section applies to a private passenger lift that is required by this schedule to be accessible only from inside a particular dwelling. (2) The private passenger lift must— (a) be at least 1,100 millimetres wide and at least 1,400 millimetres long, measured from the lift car floor, and (b) have a clear indoor landing on all floors serviced by the lift, other than the floor on which the main area of private open space is located, at least 1,540 millimetres long and at least 2,070 millimetres wide, and (c) have controls that comply with— (i) AS 1735.12:2020*, Lifts, escalators and moving walks, Part 12: Facilities for persons with disabilities*, published on 26 June 2020, or (ii) AS 1735.15:2021*, Lifts, escalators and moving walks, Part 15: Safety rules for the construction and installation of lifts — Special lifts for the transport of persons and*	Capable of compliance.	**YES**

	goods — Vertical lifting platforms intended for use by persons with impaired mobility, published on 23 July 2021. (3) The width of the door opening of the private passenger lift must be at least 900 millimetres. (4) The private passenger lift must not be a stairway platform lift.		
Part 2 Additional standards for independent living units			
14 Application of standards in this Part	The standards set out in this Part apply in addition to the standards set out in Part 1 to any seniors housing consisting of independent living units.	Noted.	
15 Bedroom	At least one bedroom in an independent living unit that complies with this schedule, Section 7 must be located on— (a) the same floor as the entry to the unit, or (b) a floor serviced by a private passenger lift accessible only from inside the unit.	Compliance achieved.	**YES**
16 Living room	(1) A living room in an independent living unit must be located on— (a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The living room must have— (a) a circulation space that— (i) is clear of all fixtures, and (ii) has a diameter of at least 2,250mm, and (b) a telecommunications or data outlet adjacent to a general power outlet.	Capable of compliance.	**YES**
17 Main area of private open space	The main area of private open space for an independent living unit must be located on— (a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling.	The private open space adjoins the living area within each of the units.	**YES**
18 Kitchen	(1) A kitchen in an independent living unit must be located on—	Capable of compliance.	**YES**

	(a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The kitchen must have a circulation space with a diameter of at least 1,200 millmetres between each bench top, cupboard or large appliance and each other bench top, cupboard or large appliance. (3) Each circulation space specified in subsection (2) must be capable of being increased to a diameter of 1,550 millimetres without— (a) relocating the sink, or (b) moving a load-bearing wall, or (c) breaching another circulation requirement. (4) The kitchen must have the following fittings— (a) a bench that includes at least one work surface that is— (i) at least 800mm long, and (ii) clear of obstructions, and (iii) not in the corner of the room, (b) a lever tap set with the lever and water source that is within 300mm of the front of the bench, (c) a cooktop next to the work surface, (d) an isolating switch for the cooktop, (e) an oven that— (i) has operative elements between 450 millimetres and 1,250 millimetres above the finished floor level, and (ii) is next to the work surface, (f) at least one double general power outlet located within 300 millimetres of the front of a work surface. (5) The cupboards must— (a) not be entirely located in the corner of the bench or the corner of the room, and (b) face where the user of the fixture is likely to be. (6) An overhead cupboard in the kitchen must be capable of being		

	fitted with “D” pull cupboard handles towards the bottom of the cupboard. (7) A below-bench cupboard in the kitchen must be capable of being fitted with “D” pull cupboard handles towards the top of the cupboard. (8) The lever tap set, cooktop, isolating switch, oven and double general power outlet must— (a) not be in the corner of the bench or the corner of the room, and (b) face where the user of the fixture is likely to be. (9) Cabinetry below a work surface must be able to be easily removed to allow wheelchair access to the work surface.		
19 Laundry	(1) A laundry in an independent living unit must be located on— (a) the same floor as the entry to the dwelling, or (b) a floor serviced by a private passenger lift accessible only from inside the dwelling. (2) The laundry must have the following— (a) a circulation space that complies with AS 1428.1 at the approach to any external doors, (b) an appropriate space for an automatic washing machine and a clothes dryer, (c) a clear space in front of each appliance of at least 1,550 millimetres, (d) a slip resistant floor surface that achieves a minimum rating of P3 in accordance with AS 4586—2013, (e) a continuous accessible path of travel to the main area of private open space or any clothesline provided for the dwelling. (3) The space specified in subsection (2)(c) may overlap with a door swing or the circulation space for a door. (4) For laundry facilities in a cupboard, the cupboard must be	Capable of compliance.	**YES**

	capable of being fitted with "D" pull cupboard handles in the following locations— (a) for below-bench cupboards—towards the top, (b) for overhead cupboards—towards the bottom, (c) for floor-to-ceiling doors—between 900 millimetres and 1,100 millimetres above the finished floor level. (5) In this section— ***laundry*** includes laundry facilities in a cupboard.		
20 Linen storage	An independent living unit must have a floor-to-ceiling linen storage cupboard that— (a) is at least 600 millimetres wide, and (b) has adjustable shelving.	Compliance demonstrated.	**YES**
22 Garbage and recycling	A garbage storage area and a recycling storage area provided for an independent living unit must be accessible by a continuous accessible path of travel from the dwelling entrance.	Capable of compliance.	**YES**

SCHEDULE 8 Design Principles for Seniors Housing - COMPLIANCE TABLE			
Section	**Provision**	**Proposed**	**Complies**
1 Neighbourhood amenity and streetscape	Seniors housing should be designed as follows— (a) to recognise the operational, functional and economic requirements of residential care facilities, which typically require a different building shape from other residential accommodation, (b) to recognise the desirable elements of— (i) the location's current character, or (ii) for precincts undergoing a transition—the future character of the location so new buildings contribute to the quality and identity of the area, (c) to complement heritage conservation areas and heritage items in the area, (d) to maintain reasonable neighbourhood amenity and	The proposal does not have an adequate site layout, is inconsistent with the character of the area, and results in unacceptable privacy impacts to adjoining properties.	**NO**

	appropriate residential character by— (i) providing building setbacks to reduce bulk and overshadowing, and (ii) using building form and siting that relates to the site's land form, and (iii) adopting building heights at the street frontage that are compatible in scale with adjacent buildings, and (iv) considering, where buildings are located on the boundary, the impact of the boundary walls on neighbours, (e) to set back the front building on the site generally in line with the existing building line, (f) to include plants reasonably similar to other plants in the street, (g) to retain, wherever reasonable, significant trees, (h) to prevent the construction of a building in a riparian zone.		
2 Visual and acoustic privacy	Seniors housing should be designed to consider the visual and acoustic privacy of adjacent neighbours and all residents of the seniors housing by— (a) using appropriate site planning, including considering the location and design of windows and balconies, the use of screening devices and landscaping, and (b) ensuring acceptable noise levels in bedrooms of new dwellings by locating them away from driveways, parking areas and paths.	The proposal has not been designed to maintain amenity to adjoining properties.	**NO**
3 Solar access and design for climate	The design of seniors housing should— (a) for development involving the erection of a new building—provide residents of the building with adequate daylight in a way that does not adversely impact the amount of daylight in neighbouring buildings, and (b) involve site planning, dwelling design and landscaping that	Compliance is not adequately demonstrated. The architectural plans indicate that Unit 10 receives compliant 2 hours solar access however this dwelling would be overshadowed by the lobby walls.	**NO**

	reduces energy use and makes the best practicable use of natural ventilation, solar heating and lighting by locating the windows of living and dining areas in a northerly direction.	Further, the views from the sun diagrams are inconsistent with the plan diagrams.	
4 Stormwater	The design of seniors housing should aim to— (a) control and minimise the disturbance and impacts of stormwater runoff on adjoining properties and receiving waters by, for example, finishing driveway surfaces with semi-pervious material, minimising the width of paths and minimising paved areas, and (b) include, where practical, on-site stormwater detention or re-use for second quality water uses.	The proposed stormwater system is inadequate and fails to provide adequate detail. Further, the proposal does not consider flood events and the proposed new system drainage works are not of sufficient capacity.	**NO**
5 Crime prevention	Seniors housing should— (a) be designed in accordance with environmental design principles relating to crime prevention, and (b) provide personal property security for residents and visitors, and (c) encourage crime prevention by— (i) site planning that allows observation of the approaches to a dwelling entry from inside each dwelling and general observation of public areas, driveways and streets from a dwelling that adjoins the area, driveway or street, and (ii) providing shared entries, if required, that serve a small number of dwellings and that are able to be locked, and (iii) providing dwellings designed to allow residents to see who approaches their dwellings without the need to open the front door.	Inadequate regard has been given to the principles of crime prevention. Site planning does not facilitate passive surveillance with the entrance lobby and communal open space only visible from a small number of units. Further, the basement lobby provides opportunities for entrapment and pedestrian connectivity from the basement to the ground floor is poor.	**NO**
6 Accessibility	Seniors housing should— (a) have obvious and safe pedestrian links from the site that provide access to transport services or local facilities, and	The proposal does not include obvious and safe pedestrian links. The entrance lobby is located 90	**NO**

	(b) provide safe environments for pedestrians and motorists with convenient access and parking for residents and visitors.	metres from the street. Further, the accessible path of travel is circuitous and conflicts with vehicular access. Adequate access to facilities and services is not provided as the bus service services Chatswood and the city, not the local centre.	
7 Waste management	Seniors housing should include waste facilities that maximise recycling by the provision of appropriate facilities.	Appropriate waste facilities are proposed.	**YES**

Seniors Housing Design Guide

Independent living for low density - design principles			
14.1 Neighbourhood amenity and streetscape			
Objective	**Design Guide**	**Proposal**	**Compliance**
14.1.1 To provide single storey villa style accommodation with on grade carparking in a generous landscaped setting. 14.1.2 To integrate with the surrounding built form context and local character.	14.1.3 Introduce a high standard of design quality to the neighbourhood.	The proposal does not maintain the landscape setting with unnecessary tree removal, impacts to retained trees and insufficient replacement planting.	**NO**
14.2.1 To provide separation between communal open space and private open space.	14.2.2 Provide generous landscape buffers for screening and acoustic privacy.	Inadequate setbacks are proposed from the communal open space to the southern and eastern boundaries.	**NO**
14.3.1 To design dwellings that reduce the demand on energy.	14.3.2 The design and location of windows and shading should respond to the building orientation, site constraints or opportunities in order to maximise good solar access and meaningful cross ventilation. 14.3.3 Provide natural, passive ventilation, well insulated building	Window shading is not provided for east and west facing bedroom windows.	**NO**

	envelope, and avoid using dark roof colours to reduce heat absorbance. 14.3.4 Consider the use of overhangs, eaves, awnings, pergolas or verandahs to provide shading to reduce heat gain in summer.		
14.4.1 To safely manage stormwater run off and drainage systems without compromising pedestrian safety. 14.4.2 To minimise erosion and the potentially damaging effects from stormwater run-off on landscape and stability of pathways. 14.4.3 To provide effective filtration of stormwater to remove some sediment and pollutants. 14.4.4 To prevent flooding. 14.4.5 To slow the flow of fast moving water and debris.	14.4.6 Provide grates and drainage pits away from pedestrian pathways. 14.4.7 Manage stormwater with landscape design and gentle gradients of hard surfaces.	The proposed stormwater system is inadequate and does not include appropriately located drains and pits. Further, the proposal has not considered the 5% AEP flood event, and the size of new pipes is not sufficient.	**NO**
14.5.1 To observe and implement the design standards for accessibility in new building design. 14.5.2 To understand the specific needs of older people and people with a disability. 14.5.3 To de-stigmatise environments that cater for disabilities and that need considered design features to support mobility, wayfinding and safety.	14.5.4 Meet the required accessibility standards with compliant but non-institutional design solutions. 14.5.5 Integrate accessible design requirements with public access and pedestrian pathways for all, and not create the duality of 'us and them' access routes.	The proposed pedestrian pathway to Maunder Avenue is circuitous and does not include sufficient places to sit and gather. Further, it is unclear if the proposed pathway to Jefferson Avenue is compliant as the path includes awkward and acute angles.	**NO**
14.6.1 To provide waste management systems that manage health, safety and environmental issues. 14.6.2 To provide easy to access waste disposal points for independent residents to use. 14.6.3 To facilitate recycling of waste.	14.6.4 Provide appropriately sized disposal points that can accommodate bins for the various waste types including recyclables. 14.6.5 Ensure that waste collection points are safely located away from resident areas, should be screened, easy to access and preferably covered	An adequate waste storage area is provided.	**YES**

Ku-ring-gai Local Environmental Plan 2015

Clause 1.2 Aims of the Plan

The proposal has been assessed against the relevant Aims of the Plan. The proposal is inconsistent with the Aims for the reasons given within the assessment report.

Zoning and permissibility

The site is zoned R2 Low Density Residential under KLEP 2015. The proposed development is for the purposes of seniors housing, which is prohibited in an R2 Low Density Residential zone under KLEP 2015. However, seniors housing is permitted development in an R2 Low Density Residential zone under Section 81(a) of SEPP (Housing) 2021.

Zone objectives

The objectives of this zone are:

- *To provide for the housing needs of the community within a low density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide for housing that is compatible with the existing environmental and built character of Ku-ring-gai.*

The development does not provide for housing that is compatible with the existing environmental and built character of Ku-ring-gai and does not uphold the zone objectives.

Development standards

Ku-ring-gai Local Environmental Plan 2015

Development standard	Proposed	Complies
Cl 4.3 - Height of buildings: Maximum Building Height - 9.5 metres	Approximately 10 metres.	**NO**
Cl 4.4 - Floor space ratio (FSR): Maximum Floor Space Ratio - 0.3:1 Note: Subclause 2A Calculation 0.3:1 Gross Floor Area = 1068 m2	Approximately 2,146m^2/0.523:1	**NO**

Building height

The proposed development does not demonstrate compliance with Clause 4.3 of the KLEP and Section 108(2)(a) of SEPP Housing which both permit a maximum building height of 9.5 metres.

The architectural plans do not accurately show the highest point of the building. A height of RL163.40 is given for the roof, however, the parapet and the skylights exceed this height. Further, the proposed building is situated over an existing inground swimming pool, located in the south-eastern corner of the site. The building height must be measured from the existing ground level established by existing development on the site. A Clause 4.6 request

to vary the building height development standard is therefore required but has not been submitted.

Floor Space Ratio

The proposed development does not comply with Clause 4.4 of the KLEP.

Section 108(2)(c) of SEPP Housing overrides Clause 4.4 to the extent of any inconsistency and permits a maximum Floor Space Ratio of 0.5:1.

Under SEPP (Housing) 2021, Section 108(2)(c) is a non-discretionary development standard that, if met, the consent authority cannot require a more onerous standard. Section 108(2)(c) specifies a FSR of 0.5:1 or 1,780m² Gross Floor Area (GFA). The proposed GFA is stated as 1,780m² which is incorrect when evaluated against the definition of GFA in Section 82 of SEPP (Housing) 2021 for the following reasons:

- the waste room, bulky storeroom and storage cages and garbage room are not 'basement' as the floor level immediately above is more than 1 metre above ground level (existing);
- the proposal incorrectly excludes internal walls adjoining voids and lifts;
- the proposal incorrectly excludes communal facilities such as the storeroom and water-closet.

The proposed FSR is assessed as 0.523:1, or an exceedance of approximately 145m² or 4.6%.

Part 5 Miscellaneous provisions

Clause 5.10 – Heritage conservation

The subject site does not contain a heritage item, is not located within 100 metres of a heritage item and is not within a heritage conservation area. The proposed works do not affect any known archaeological or Aboriginal objects or Aboriginal places of heritage significance.

Part 6 Additional local provisions

Clause 6.1 – Acid sulphate soils

The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage. The land is mapped as Class 5 Acid sulfate soils. Development consent is required for works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the water-table is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land. The proposal is not subject to this clause as the works are more than 500 metres of adjacent Class 1, 2, 3 or 4 land.

Clause 6.2 - Earthworks

The proposed development, as it relates to earthworks will not restrict the existing or future use of the site, adversely impact on neighbouring amenity, the quality of the water table or disturb any known relics because of earthworks.

Clause 6.5 - Stormwater and water sensitive urban design

The stormwater design does not take all reasonable management actions to avoid, minimise or mitigate adverse impacts to adjoining properties.

Policy Provisions (DCPs, Council policies, strategies and management plans)

Ku-ring-gai Development Control Plan
Part 1A.5 General aims of the DCP

The proposed development has been assessed against the general aims of this DCP and is not found to be acceptable in all relevant respects for the reasons given throughout this report.

Part 2: Site analysis

The site analysis has not adequately identified existing site conditions and considerations within the KDCP or ADG.

Ku-ring-gai Development Control Plan

Section B

Part 20 – Development near Road or Rail noise

Not applicable. The development site is not in, or immediately adjacent to, the North Shore rail corridor, the Parramatta Rail Link or a busy road.

Ku-ring-gai Development Control Plan

Section C

Development Control	Proposed	Complies
Part 21 General Site Design		
21.1 – Earthworks and slope		
Development consider site topography, drainage, soli landscapes, flora, fauna and bushfire hazard by: • Stepping buildings down the site • Locate finished ground level as close to the natural ground level as practicable • Level changes to occur primarily within building footprint • Minimum 0.6 metres width between retaining walls • Maintain existing ground level within 2m from any boundary • Limit slope for embankments to 1:6 (grassed) and 1:3 (soil stabilising vegetation) • No fill and excavation within sensitive environments • Minimise altered groundwater flows	Existing ground levels are not maintained for a distance of 2 metres from the southern and eastern boundaries.	**NO**

21.2 – Landscape Design		
Appropriate and sensitive site planning and design Existing appropriate screen planting is retained	Appropriate site planning is not proposed. The proposed boundary setbacks are inadequate and provide insufficient area for planting.	**NO**
Planting between 100m – 300m from bushland • 50% of trees and shrubs local native species	More than 50% of proposed species are native.	**YES**
Part 22 - General access and parking		
22.1 – Equitable Access		
Compliance with DDA demonstrated Entry access ramps located within the site and does not dominate the front façade Access ways for pedestrians and for vehicles are separated	It is unclear if the proposed pedestrian pathway to Jefferson Avenue meets the requirements of AS14278.1.	**NO**
Residential only Multi Dwelling Housing, Residential Flat Buildings and Shop Top Housing within Mixed Use developments provide access to, and between, dwellings and parking in accordance with the Livable Housing Guidelines as stipulated in Part 6 Multi Dwelling Housing, Part 7 Residential Flat Buildings and Part 8 Mixed Use Development.	Accessible car spaces are proposed.	**YES**
22.2 – General vehicle access		
• Minimise width and number of vehicle access points • Access driveways set back at least 10m from street intersections and 3m from pedestrian entrances • Vehicle and pedestrian access to buildings clearly distinguished and separated • Vehicle crossing width is acceptable for intensity of use proposed • Vehicles must exit in a forward direction • Vehicle entries are integrated into the external façade and are finished in a high quality material	The vehicle access point does not include visual splays. Further, the width of the curved roadway between the property boundary and the basement carpark does not comply with AS2890.1.	**NO**

• Retaining walls associated with driveways maximum height of 1.2m • No driveways are longer than 30m unless a passing bay is provided		
22.3 – Basement car parking		
Logical and efficient basement design AS2890.1	Satisfactory.	**YES**
Appropriate ceiling floor to ceiling heights and ventilation provided: • 2.5 metres for parking area for people with a disability • 2.6 metres for residential waste collection and manoeuvring area • 4.5 metres for commercial waste collection and manoeuvring area	Satisfactory.	**YES**
Basement is fully tanked	Basement tanking is not proposed but is capable of being resolved via condition.	**YES**
Unimpeded access to visitor parking and waste recycling rooms	Unimpeded access to the waste room is proposed. An intercom system could be used to manage visitor access.	**YES**
Vehicles access ways are not in close proximity to doors and windows of habitable rooms	The driveway does not adjoin habitable rooms.	**YES**
Safe and accessible intercom access provided	Capable of compliance.	**YES**
22.4 – Visitor parking		
Visitor parking located behind a security grille with an intercom system to gain entry At least one visitor space is accessible and designed in accordance with AS2890.6	Capable of compliance. One accessible visitor parking space is proposed.	**YES**
22.5 – Parking for people with a disability		
Accessible spaces are signposted and have a continuous path of travel to the principal entrance or a lift	Capable of compliance.	**YES**

22.6 – Pedestrian Movement within Car Parks		
Pathways designed in accordance with AS1428.1	Satisfactory.	**YES**
Marked pedestrian pathways have clear sightlines, appropriate lighting, are visible, conveniently located and constructed of non-slip material	Satisfactory.	**YES**
22.7 – Bicycle Parking and facilities		
Bicycle parking and storage facilities satisfy AS2890.3	Bicycle parking is not required to be provided by SEPP Housing. Bicycles could be stored within the storage cages for each unit.	**YES**
Part 23 – Building Design and Sustainability		
23.3 – Sustainability of Building Materials and 23.4 – Materials and Finishes		
External walls constructed of high quality and durable materials	External finishes comprise painted render.	**YES**
Use of materials and colours creates well-proportioned facades and minimises visual bulk	Proposed materials do not compliment local character.	**NO**
23.6 – Building Services		
Services and related structures are appropriately located to minimise streetscape impact	Capable of being resolved via condition.	**YES**
Air-conditioning units are well screened and do not create adverse noise impacts	Air conditioning units are to be located in the plant room.	**YES**
23.7 – Acoustic Privacy		
Design minimises impact of internal and external noise sources	Satisfactory.	**YES**
Noise levels associated with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and plant either as an individual piece of equipment or in combination shall not be audible within any habitable room in any residential premises before 7am and after 10pm. Outside of these restricted hours noise	Capable of compliance.	**YES**

levels associated with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and plant either as an individual piece of equipment or in combination shall not emit a noise level greater than 5dB(A) above the background noise (LA90, 15 min) when measured at the boundary of the nearest potentially affected neighbouring properties. The background (LA90, 15 min) level is to be determined without the source noise present.		
23.8 – Visual Privacy		
Visual privacy maintained for occupants and for neighbouring dwellings	Inadequate building separation is proposed between Units 4 and 9 and No. 10 Delaware Avenue.	**NO**
23.9 – Construction, Demolition and Disposal		
Satisfactory Environmental Site Management Plan	An Environmental Site Management Plan is required to be submitted as part of a Construction Traffic Management Plan (CTMP). An indicative CTMP has not been submitted.	**NO**

The specific departures from the requirements of Section C of the KDCP are identified in the table above. The departures are not acceptable as the objectives of the controls have not been achieved.

Part 24 – Water management

The proposed development does not satisfy the requirements of Part 24 of KDCP.

Ku-ring-gai Contributions Plan 2010

The development, if approved, would attract a Section 7.11 contribution. If the application were recommended for approval, a condition requiring payment of the required contribution would be included in the recommendation.

REGULATION

Section 29(1) of the *Environmental Planning & Assessment Regulation 2021* requires a development application for residential flat building development to be accompanied by a statement by a qualified designer. Subclause (2) states that the statement must verify that the qualified designer designed or directed the design of the development and explain how the development addresses the design principles and the objectives of the ADG. The submitted Design Verification Statement is unsatisfactory as it supported by an unauthored compliance table and does not form a single document.

Section 61(1) of the *Environmental Planning & Assessment Regulation 2021* requires the consent authority to consider the provisions of *Australian Standard AS 2601-2001: The demolition of structures.* Conditions to manage demolition would be included in the event the application were to be approved.

LIKELY IMPACTS

The likely impacts of the development have been considered and are deemed to be unacceptable for the reasons outlined in this report.

SUITABILITY OF THE SITE

The site is not suitable for the proposed development for the reasons given throughout this report.

PUBLIC INTEREST

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by the Panel ensuring that any adverse effects on the surrounding area and the environment are minimised. The proposal has been assessed against the relevant environmental planning instruments and is deemed to be unacceptable.

CONCLUSION

Having regard to the provisions of Section 4.15 of the Environmental Planning and Assessment Act 1979, the proposed development is not satisfactory.

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, refuse development consent to eDA0184/25 for demolition of existing structures and construction of 10 independent living units on land at 11 Jefferson Avenue St Ives, for the following reasons:

1. Floor space ratio

The proposed development exceeds the maximum permitted Floor Space Ratio (FSR) specified in section 108(2)(c) of SEPP Housing. The applicant has not provided a Clause 4.6

request in respect of the variation. Consequently, there is no jurisdiction to grant development consent.

Particulars:

a) The proposed development does not demonstrate compliance with Section 108(2)(c) which, if complied with, permits a floor space ratio of 0.5:1.

b) The applicant has failed to calculate 'Gross Floor Area' (GFA) in accordance with the definition contained within Section 82 of SEPP Housing.

c) The proposal incorrectly excludes communal facilities such as the storeroom and water-closet from GFA.

d) The proposal incorrectly excludes areas of storage, vehicular access, garbage and services from GFA.

   i. Per the definition contained within Section 108 of the SEPP, 'vehicular access, garbage and services' is excluded from GFA, where located within the basement (as defined in the Standard Instrument – Principal Environmental Plan).

   ii. The proposed waste room, bulky storeroom and storage cages are not 'basement' therefore these spaces comprise GFA.

e) The proposal incorrectly excludes the internal walls adjoining voids and lifts.

f) Section 108(2)(c) comprises a non-discretionary development standard and the consent authority cannot grant consent to the development as proposed as a Clause 4.6 variation request has not been provided.

2. Building height

The proposed development is excessive in height and does not demonstrate compliance with Section 108(2)(a) of SEPP Housing.

Particulars:

a) The proposed development does not demonstrate compliance with Section 108(2)(a) of SEPP Housing, which permits a building height of 9.5 metres. The architectural plans do not accurately show the highest point of the building. A height of RL163.40 is given for the roof, however, the parapet and the skylights exceed this height.

b) The proposed building is situated over an existing inground swimming pool located in the south-eastern corner of the site. The building height must be measured from the existing ground level (below the pool) established by existing development on the site.

c) Section 108(2)(a) comprises a non-discretionary development standard and the consent authority cannot grant consent to the development as proposed as a Clause 4.6 variation request has not been provided.

d) The proposed development is partially three storeys in height and does not meet the requirements of Section 4.5 of Seniors Housing Design Code (SHDG) for three storey buildings in zones where residential flat buildings are not permitted.

   i. The proposal fails to satisfy Objective 4.5.1 as it results in adverse privacy impacts to adjoining properties and Objective 4.5.2 as it does not provide sufficient landscaping within the boundary setbacks.

   ii. Design Guidance 4.5.4 states that a third storey must be set back within a 45 degree plane from the ground line on the side and rear boundaries. Compliance with Design Guidance 4.5.4 has not been adequately demonstrated as inadequate detail regarding existing ground levels near property boundaries is shown on the architectural plans.

   iii. In the alternative, Design Guidance 4.5.5 states that all storeys can align with the setback of the third storey, if a generous landscape space is provided. Generous landscaped spaces with sufficient landscaping have not been provided as outlined in Reason 12.

3. Building typology, bulk and scale and local character

The typology of the proposed development is inconsistent with the character of the locality and results in adverse amenity impacts to adjoining properties contrary to the requirements of SEPP Housing, Part 3B of the ADG and SHDG.

Particulars:

a) Section 97(2) of SEPP Housing requires that the consent authority be satisfied the design of seniors housing demonstrates that adequate consideration has been given to the design principles for seniors housing set out in Schedule 8 of SEPP Housing. The proposal does not recognise the desirable elements of the location's current character. This does not meet the requirements of Schedule 8(1)(b)(i) of SEPP Housing.

b) The proposal does not meet the requirements of Schedule 8(1)(d)(i) of SEPP Housing as it does not maintain reasonable neighbourhood amenity and appropriate residential character. The proposal is unacceptable for the following reasons:

   i. Typology - The proposal does not meet Objective 15.1.1 of SHDG which aim to provide housing clusters where the scale and massing is articulated and separated to respect the character and pattern of the suburban surroundings. The proposed development is also inconsistent with ADG Objective 3B-2 which states that it is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimal setbacks are used and where buildings are higher than adjoining development.

   ii. Roof form – The proposed development features an extensive flat roof and is contrary to Objective 4.4.1 and Design Guidance 4.4.4 of SHDG which require articulated and varied roof forms to provide visual interest.

   iii. Building setbacks – The proposed development is inconsistent with ADG Design Guidance 3F-1 which states that apartment buildings should have an increased separation distance of 3 metres (9 metres in total) when adjacent to a different zone that permits lower density development. Whilst the adjoining properties are

zoned R2 Low Density Residential, the increased setbacks recommended by the ADG should be adopted given the building typology proposed.

iv. Building separation – The proposed development is inconsistent with ADG Part 2F which requires a building separation of 12 metres between habitable rooms and balconies for development to a height of 4 storeys. This separation should be equitably shared between properties. The proposal is inadequately set back from the eastern boundary, resulting in a building separation of only 8.5 metres between Unit 4 and No. 10 Delaware Avenue.

v. Materiality – The proposal does not meet Objective 4.11 of SHDG which is to take cues from the surrounding neighbourhood to introduce a materiality and built form which is complementary but provides a building with its own unique character and identity.

vi. Fenestration – The proposed fenestration does not meet Objective 4.11 of SHDG as it is repetitive and does not reflect the residential character of the surrounding neighbourhood.

4. Location and access to facilities

The proposal fails to comply with the requirements of Section 93 of SEPP Housing as adequate access to facilities and services is not provided.

Particulars:

a) Section 93(1) of SEPP Housing states that development consent must not be granted unless the consent authority is satisfied that residents will have *adequate* access to facilities and services. The bus stop is serviced by the 194 and 194X bus services which travel via Chatswood to the City. The services are not loop services and access is not provided to the local shops from the subject site, as would reasonably be expected. Adequate access to facilities and services is not provided therefore development consent may not be granted.

5. Pedestrian access and crime prevention

The proposed development does not provide satisfactory pedestrian access, does not have adequate regard to crime prevention, and is contrary to Schedule 8(5) and Schedule 8(6) of SEPP Housing and SHDG.

Particulars:

a) The proposed development does not include obvious and safe pedestrian links and does not satisfy Schedule 8(6) of SEPP Housing for the following reasons:

   i. The proposed entrance lobby is located up to 90 metres from the street and is not visible from either street frontage.
   ii. The accessible path of travel from the bus stop is circuitous and indirect, travelling via the communal open space and an external lift.
   iii. The proposed pedestrian pathway to the new bus stop conflicts with the proposed vehicular access.

b) The proposal does not meet Objective 15.1.5 of SHDG which is to provide clearly identifiable and accessible shared pedestrian entries, driveways and paths. The proposed pedestrian path network is also inconsistent with Design Guidance 6.3.5 of SHDG as the pathway to Maunder Avenue does not include sufficient places to sit and gather.

c) It is unclear whether the proposed pedestrian path to Jefferson Avenue meets the requirements of Australian Standard AS14278.1 as the pathway includes awkward and acute angles and the access report contains errors in relation to street names (e.g. the report states that driveway access is available from Jefferson Avenue, which is not the case).

d) The proposed development does not satisfy Schedule 8(5) SEPP Housing for the following reasons:

   i. The ground floor lift doors are not readily visible from outside the building.
   ii. The proposed entrance lobby is only partially visible from two dwellings.
   iii. The entry lobby is not visible from the communal open space.
   iv. Passive surveillance of the communal open space is provided from a small number of dwellings, none at the same level.
   v. There is no pedestrian connection between the lift lobby and the carpark (only fire stairs).
   vi. The lift lobby basement provides opportunities for entrapment.

e) For the reasons listed in (d), the proposal does not meet Objective 15.4.1 of SHDG which is to encourage crime awareness and passive community surveillance to deter crime. Further, the proposal is inconsistent with ADG Objective 3D-3 which states that communal open space should be readily visible from habitable rooms and private open space and ADG Objective 4F-2 which states that tight corners should be avoided for common/circulation spaces.

6. Visual and acoustic privacy

The proposed development would result in poor outcomes in relation to visual and acoustic privacy and is contrary to Schedule 8(2) of SEPP Housing and ADG Part 3F.

Particulars:

a) The proposed development does not utilise appropriate site planning for the location and design of windows and balconies and is inconsistent with Schedule 8(2) of SEPP Housing.

b) The proposed development is inadequately set back from the site boundaries and does not provide adequate building separation.

   i. The proposal includes terraces and elevated balconies within 6 metres of the eastern boundary and Unit 4 and Unit 9 will have a building separation of 6.57 metres to this boundary. This does not achieve the minimum separation distances for buildings of ADG Part 2F and will result in unreasonable visual and acoustic privacy impacts to No. 10 Delaware Avenue.

c) Bedroom 3 of Unit 1 is located above the driveway and car park entrance and will be impacted by the noise of vehicular traffic and garage door operations as well as

being impacted by car headlights at night which is inconsistent with Schedule 8(2)(b) of SEPP Housing.

7. Solar access and design for climate

The application provides inconsistent information in relation to solar access and has not been designed to manage solar access and maximise cross ventilation.

Particulars:

a) The proposal does not demonstrate compliance with Section 108(2)(g) of SEPP Housing and ADG Objective 4A-1 which require at least 70% of dwellings to receive at least 2 hours direct solar access between 9am and 3pm in midwinter. Whilst the architectural plans indicate that Unit 10 receives compliant solar access (DA 601 Rev A), this dwelling would be overshadowed by the lobby blade walls.

b) The 'views from the sun' diagrams (DA6.05 Rev A) are inconsistent with the plan shadow diagrams (DA601 Rev A) and show different overshadowing impacts.

c) The proposal is inconsistent with Design Guidance 15.2.6 of SHDG as window shading is not proposed for east and west facing bedroom windows.

8. Water management

The application does not take all reasonable management actions to avoid, minimise or mitigate adverse impacts to adjoining properties, contrary to Clause 6.5 of KLEP 2015. In the alternative, the application is not accompanied by sufficient particulars to enable an assessment against Clause 6.5 of KLEP 2015.

Particulars:

a) Clause 6.5 of KLEP 2015 provides that, before granting development consent to development on any land to which the LEP applies, the consent authority must be satisfied that, relevantly:

   i. the stormwater management system includes all reasonable management actions to avoid any adverse impacts on the land to which the development is to be carried out, adjoining properties, native bushland, waterways and groundwater systems; and

   ii. if a potential adverse environmental impact cannot be feasibly avoided, the development minimises and mitigates the adverse impacts of stormwater runoff on adjoining properties, native bushland, waterways and groundwater systems.

b) Council's OSD Calculation Sheet has not been submitted to confirm that the sizing of the detention system complies with Part 24C.5 of the KDCP and Part 4.1 of the Technical Guideline for Water Management.

c) The proposed development fails to provide a junction pit over the existing Council pipe as well as a surcharge pit located within the boundary of the subject site. Details of the junction pit including surface and invert levels have not been provided in accordance with Figure 11 of the Technical Guideline for Water Management.

d) The proposed development fails to provide suitable grated drains and inlet pits to capture stormwater runoff from the hard paved areas directed to the on-site detention (OSD) chamber prior to discharging to the public drainage system.

e) The proposal has not considered the 5% AEP flood event for the sizing of the pipeline. The proposed 525 millimetre pipe is under capacity.

f) The stormwater plans do not depict the easement width for the proposed pipe in accordance with the minimum width required by Part 24R.2(29) of the KDCP.

g) Portions of the proposed building are located close to Council Easement. A structural certificate was not prepared by a suitably qualified civil/structural engineer to confirm the building lies outside the 'Zone of Influence' of the Council's drainage infrastructure, as per the requirements of Figure 10 of the Technical Guideline for Water Management.

h) The BASIX Certificate water commitments are to be amended to show that only captured roof water is conveyed to the rainwater tank with the impervious areas and garden/lawn area conveyed to the OSD system.

i) No supporting hydraulic calculations have been submitted to demonstrate compliance with Part 24C.3-4 of the KDCP that requires rainwater retention and re-use to be provided to achieve a 50% reduction in runoff days. A water balance model has not been submitted.

j) No MUSIC Modelling has been submitted to confirm pollutant removal targets are met in accordance with Part 24C.6 of the KDCP. Water quality measures are to be shown on the stormwater plan.

9. Overflow assessment

The proposal fails to comply with 'Part 24D.2 - Flood Studies and the Design Flood Standard' and Part 24R.7 of the KDCP.

Particulars:

a) No DRAINS and HEC-RAS software files have been submitted for Council review. The submitted ILSAX model is an outdated flood software and is no longer supported by Council.

b) The design has not considered the PMF freeboard requirements as required by Control 4 of Part 24D.2 of KDCP which lists seniors housing as a sensitive and hazardous development type requiring greater consideration of flood risk.

c) No discussion within the Flood Report with regards to Flood Risk Management and compliance with the NSW Department of Planning and Environment - 'Flood risk management guideline' and in particular the flood hazard thresholds and discussion for the flooding up to the 1% AEP Storm Event and PMF Storm Event.

d) The Flood Report fails to address that the surface level along the boundary is lower than the proposed new drainage easement/flow path, which will result in overland flow towards the neighbouring properties.

10. Vehicular access and parking

The development fails to comply with AS2890.1:2004 Parking facilities Part 1: Off-street car parking.

Particulars:

a) No visual splays (sight line triangles of 2m x 2.5m) have been provided at the property boundary on either side of the driveway, as required by Figure 3.3 of AS2890.1:2004.

b) The width of the curved sections of roadway between the property boundary and the basement car park do not comply with the width requirements for curved roadways in AS2890.1. This departure from the Australian Standards should be justified or the curves redesigned to comply with the Standard.

c) EV readiness is to be provided for all car parking spaces within the development and depicted on the plans.

11. Tree removal and impacts

The proposed development results in excessive tree removal which is contrary to Part 5 of SEPP Housing, the SHDG and Parts 13 and 21 of the KDCP.

Particulars:

a) The removal of significant trees is contrary to (g) of Schedule 8 SEPP (Housing), Design Guidance 15.1.3 of SHDG and Part 13 and Control 8 of Part 21.1 of the KDCP. The following trees could be retained with design amendments:

   i. Tree 24 *Archontophoenix cunninghamiana* (Bangalow Palm) – tree located within a neighbouring property therefore not to be removed. Palm is not impacted by works.

   ii. Tree 28 *Jacaranda mimosifolia* (Jacaranda) – 10 metres high tree could be retained with adjustment of proposed communal open space set back a minimum 2.2 metres from the tree.

   iii. Tree 46 *Pinus radiata* – significant tree at 16 metres high with 1400 millimetres DBH. Could be retained with 9 metres setback of basement and building, as per line of basement adjacent to Tree 100. Although some trunk impact to tree, canopy appears healthy and no evidence or detailed assessment provided that the tree is in poor condition. Additional arboricultural evidence required if poor health of the tree is to justify its removal. Proposed 525 millimetres stormwater pipe to be thrust bored within TPZ and supported with design levels to ensure minimum 800 millimetres root ball clearance zone from top of pipe.

   iv. Tree 59 *Pittosporum undulataum* (Sweet Pittosporum), Tree 64 *Archontophoenix cunninghamiana* (Bangalow Palm) and Tree 65 *Ficus benjamina* can be retained, as there is only minor encroachments into the tree protection zone from the proposed works.

   v. Tree 99 *Syagrus romanzoffiana* (Cocoa Palm) is located on the public verge to Jefferson Avenue and as it is not impacted by the proposal. Consequently, it is to be retained to keep the existing streetscape tree planting.

vi. Review driveway and path options from Maunder Avenue to enable a greater setback from western boundary to retain Trees 8, 9 and 29 *Jacaranda mimosifolia* (Jacaranda) to western boundary.

b) Proposed transplanting of the Bangalow palms is not acceptable without a detailed transplanting management plan including storage location and maintenance programme to ensure palms remain viable. The palms to be transplanted would also need to be identified from those proposed to be removed.

c) Major encroachment into the tree protection zone for Trees 39 and 100 and other trees and shrubs along the boundary of No. 10 Delaware Avenue not, which is not indicated on plans and results in detrimental impacts to trees contrary to (g) of Schedule 8 SEPP (Housing), Design Guidance 15.1.3 of SHDG and Part 13 and Control 8 of Part 21.1 of the KDCP. The following trees are detrimentally impacted:

i. Tree 100 *Pinus radiata* – the proposed flood plan levels within the TPZ of Tree 100 are not acceptable with 400-500 millimetres of fill and 900 millimetres of cut at Section 11 and 10 indicated in the Figure 2 Post Development Flood Map. Existing levels are to be retained.

ii. Retaining walls to the eastern boundary impacts Tree 39 and other trees and shrubs along the boundary of 10 Delaware Avenue not indicated on plans. Walls are to be setback from the boundary to retain existing levels within the SRZ and NRZ of existing trees.

12. Landscape design and amenity

The proposed development fails to satisfy the relevant objectives and controls under Part 21.1 and Part 21.2 of the KDCP and Objectives 15.1.2 and 15.1.4 of SHDG.

Particulars:

a) An amended landscape plan must be submitted to resolve the following issues:

i. Symbol “EOM” points to a tree and “ULP” to the ground to western boundary instead of a tree symbol.

ii. “???” symbols are provided instead of plant symbols to the western boundary. Provide proposed planting and update plant schedule.

iii. “SNW” to southern boundary does not correspond with plant schedule and is likely to be “SNN”.

iv. Insufficient screen planting shrub species proposed to boundaries. Additional screen planting of shrubs capable of reaching 2-4 metres in height are to be provided to boundaries. In conjunction with proposed and existing trees, provide additional screening to neighbouring properties and increase landscape buffer, particularly to the western, northern and to boundaries of communal open space.

v. Existing ground level has not been maintained for 2 metres from the southern and eastern boundaries due to proposed paths and retaining walls. Paths and retaining walls, including entry seating areas, should be set back a minimum 2 metres from boundaries to retain existing levels to boundaries.

vi. There is insufficient setback of paths and seating area tothe eastern and southern setbacks to provide sufficient landscape buffer. There should be increased setbacks of proposed paths and seating areas from the boundaries. Consideration to be given for a reduction in path width or location, to achieve a greater landscape buffer between properties.

vii. Insufficient setback of driveway from the western boundary to allow for a landscape buffer to the neighbouring property. There needs to be an increase setback to allow for landscaping.

viii. Incorrect level of RL 154.4 provided at gate to Unit 4 which does not correspond with adjacent terrace level (RL 157.00) or post flood map levels (RL 156.75). Levels to be corrected.

ix. Top of wall levels to be provided to the proposed wall to the northern boundary for the overland flow flood path.

x. Proposed Pyrus trees to the eastern boundary of communal open space BBQ area are to be located outside of the existing easement to drain water.

xi. Proposed entry structure to Jefferson Avenue is set against the northern boundary. There needs to be a landscape buffer between entry and neighbouring property.

b) The applicant is to clarify if the pedestrian ramp from the front entry to Jefferson Avenue could exit to the verge (RL157.55 and RL 155.49) at the top of the path to the south of the flood path, rather than requiring an elevated ramp over the flood path extending to the northern corner. This would allow for a landscape buffer to the northern boundary.

13. BASIX

The BASIX certificate is inconsistent with the architectural, landscape and stormwater plans.

Particular:

a) The unit numbers with common garden areas is incorrect. Unit 3 garden area is 53.3m^2 and Unit 4 is 19.2m^2 not Unit 4 and 5, as stated in certificate. The BASIX Certificate is to be amended to reflect correct unit numbers and any amendments to the landscape plans.

b) The water commitments in the BASIX certificate are to be amended to show that only captured roof water is conveyed to the rainwater tank with the impervious areas and garden/lawn area conveyed to the OSD system.

B2 – CONTENTIONS WHICH MAY BE RESOLVED BY CONDITIONS OF CONSENT

Nil

B3 – CONTENTIONS WHICH MAY BE RESOLVED BY FURTHER INFORMATION

14. Water management

Amendments are required to resolve drainage matters and references to a superseded DCP.

Particulars:

a) According to Council records the drainage easement within the subject property is designated for “road water only.” Any connection to the Council’s drainage easement would require amendments to the terms of the easement to benefit the subject property.

b) A drainage easement shall be established over the proposed new pipeline to burden the subject property and benefit Council and any other existing beneficiaries to protect Council’s infrastructure as part of this development application.

c) Reference to Council’s DCP 47 within the flood report is to be deleted. DCP 47 has been replaced with Part 24 of the KDCP.

15. Construction traffic management plan

The Development Application does not include an indicative Construction Traffic Management Plan, as required under Council’s DA Guide.

Particulars:

a) No indicative construction traffic management plan (CTMP) has been submitted (required under Council’s DA Guide). The CTMP is to show the largest vehicle to be used entering and exiting the site for the demolition, excavation and construction stages along with details regarding stockpiles and all necessary tree protection fencing. Consultation with a consulting Arborist is recommended in preparation of any CTMP.

16. Insufficient or inaccurate information on plans

Insufficient information has been provided to enable an assessment of the application with regards to tree impacts and landscape design.

Particulars:

a) The following insufficient or inaccurate documentation is noted:

   i. Trees 48, 49, 50, 51, 52, 54, 55, 56, 57, 60, 61, 62, 63, 82, and 86 are not numbered on the landscape plan for removal. These tree numbers are to be added to the landscape plan.

   ii. Tree 135 is not indicated on the Arborist report plans, this must be added and impacts because of the proposed development assessed.

   iii. Tree 137 is indicated twice in different locations on the landscape plan. This is to be clarified.

   iv. Trees 8, 9 and 29 are to be located on the landscape plans in accordance with the survey locations.

   v. Trees 26, 82, 86, 134, 135, 140 and 141 are not indicated on the landscape plan for removal or retention and are to be added.

vi. Architectural Demolition Plan indicates an additional tree to the southern boundary is to be removed, which is incorrect. The Demolition Plan is to include trees to be retained to ensure they are protected and numbered in accordance with Arborist report.

vii. The 12 palms to be transplanted have not been identified on plans with only removal indicated. The palms to be transplanted are to be identified on plans and the methodology, including removal, storage location and maintenance programme are to be provided to assess if palms can remain viable.

viii. Proposed 525 millimetres stormwater pipe to be indicated as thrust bore within the NRZ of Trees 46, 69, 87 and 100 to reduce impact within the NRZ (inlet to pipe approximately 2m below).

17. Inadequate site analysis

A detailed site analysis has not been provided in support of the development proposal.

Particulars:

a) The submitted site survey does not meet the requirements outlined in Appendix 1 of the ADG, which requires the site analysis to address the following:

i. Site location
ii. Aerial photograph
iii. Local context plan
iv. Site context and survey plan
v. Streetscape elevations and sections
vi. Analysis

b) Per Objective 3A-1 of the ADG, the site analysis must demonstrate that design decisions have been based on opportunities and constraints of their relationship to the surrounding context. The subject application has not done this.

18. Design Verification Statement

The submitted Design Verification Statement does not meet the relevant statutory requirements.

Particulars:

a) Per Section 29 of the Regulation, the Design Verification Statement must explain how the development addresses the design principles for residential apartment development and the objectives of Parts 3 and 4 of the ADG. The proposed development includes a separate, unauthored compliance table which does not meet the requirements of the Regulation.

19. Inaccurate access report

The access report inaccurately refers to the relocation of a bus stop in Woodbury Road.

Particulars:

a) The access report states that the development does not comply with Section 93(3) of SEPP Housing as the existing bus stop in Woodbury Road is located more than 400 metres from the site.

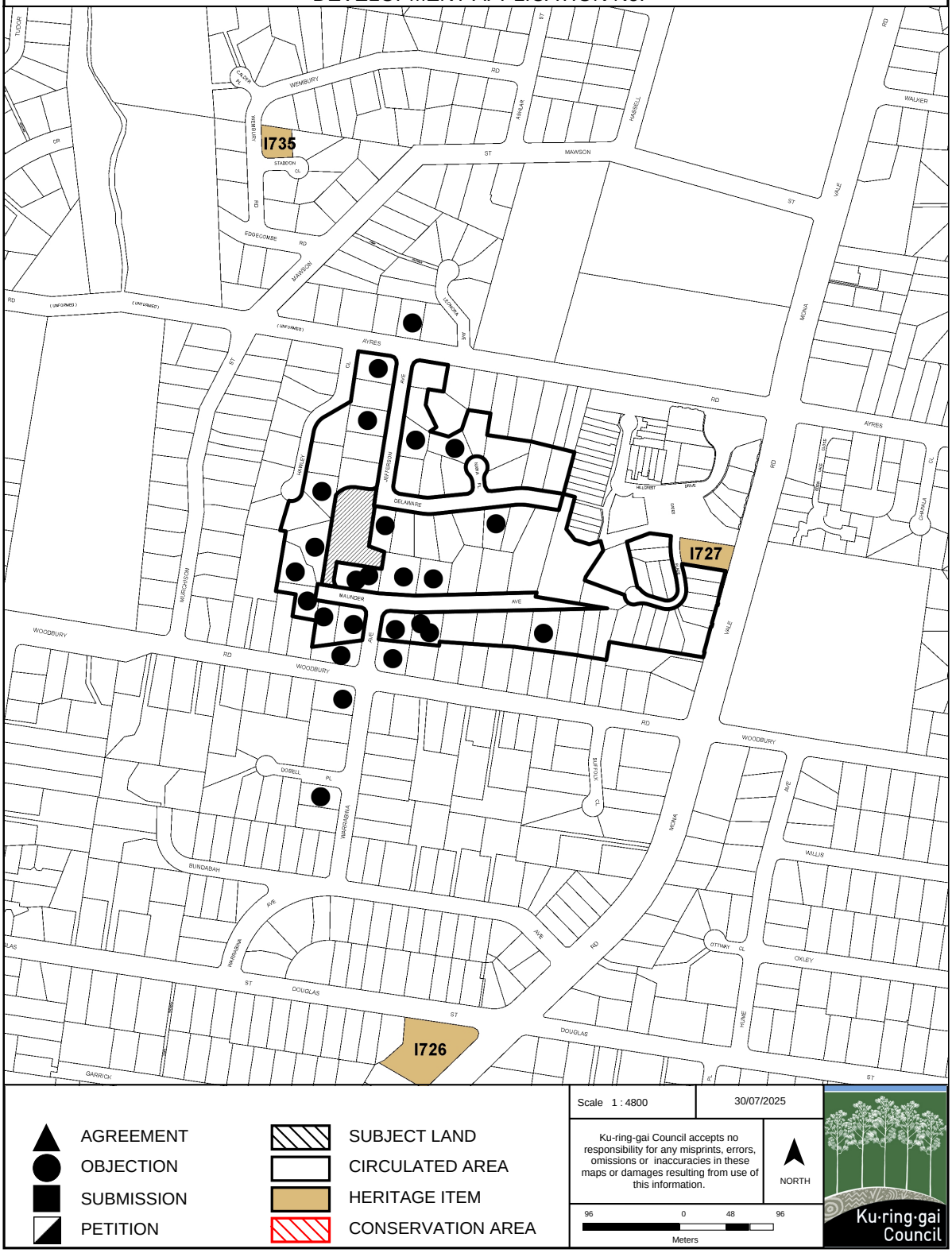
b) Part 3.4 of the access report states “As part of the application, it is requested to allow for the proposed relocation of the bus stops.”

c) The access report is inconsistent with the built reality as the bus stop has already been relocated. Therefore, the access report is to be updated to reflect existing access between the bus stop and the site in accordance with section 93(3) of SEPP Housing.

LOCATION SKETCH

11 Jefferson Avenue ST IVES NSW 2075

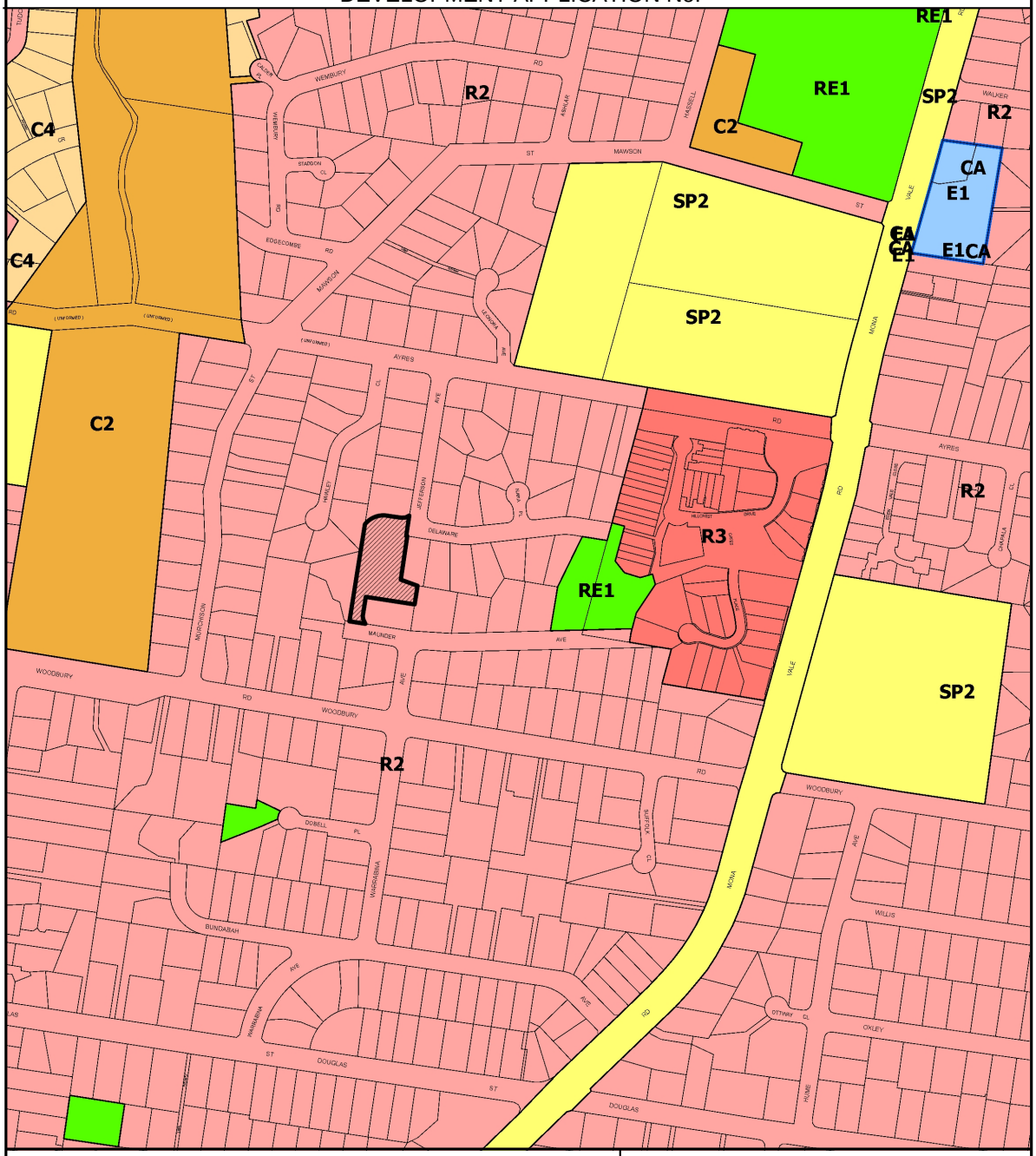
DEVELOPMENT APPLICATION No.



KU-RING-GAI LEP 2015 ZONING EXTRACT

11 Jefferson Avenue ST IVES NSW 2075

DEVELOPMENT APPLICATION No.



Legend

Subject Land

Zoning

E1	Local Centre	C4	Environmental Living	RE1	Public Recreation
E3	Productivity Support	R1	General Residential	RE2	Private Recreation
MU	Mixed Use	R2	Low Density Residential	SP1	Special Activities
C1	National Parks & Reserves	R3	Medium Density Residential	SP2	Infrastructure
C2	Environmental Conservation	R4	High Density Residential	W1	Natural Waterways
C3	Environmental Management	R5	Large Lot Residential		

Scale 1 : 4800

Date: 30/07/2025

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NORTH

0 96 192

Meters

Ku·ring·gai Council

11 JEFFERSON AVENUE, ST IVES

DEVELOPMENT APPLICATION FOR INDEPENDENT SENIOR'S LIVING

Council	Ku Ring Gai Council
Lot & DP	Lot 8 DP 231868
Zoning	R2
Site Area	3560 sq m

Drawing Schedule

Sheet Number	Sheet Name	Revision	Rev Date
DA1.00	Cover Sheet/ Data Schedules	A	03.12.2024
DA1.01	Site Analysis	A	03.12.2024
DA1.02	Location Plan	A	03.12.2024
DA2.01	Demolition Plan	A	03.12.2024
DA3.01	Site Plan	A	03.12.2024
DA3.09	Basement 01	A	03.12.2024
DA3.10	Ground Level	A	03.12.2024
DA3.11	Level 01	A	03.12.2024
DA3.20	Roof Plan	A	03.12.2024
DA3.50	Street Entry	A	03.12.2024
DA4.01	Section A & B	A	03.12.2024
DA5.01	Elevations East & North	A	03.12.2024
DA5.02	Elevations South & West	A	03.12.2024
DA6.00	Project Data Shedule	A	03.12.2024
DA6.01	Shadow Diagrams	A	03.12.2024
DA6.05	Sun's Eye View	A	03.12.2024
DA6.20	Cross Ventilation - Solar Access Diagrams	A	03.12.2024
DA6.30	GFA Diagrams	A	03.12.2024
DA6.40	Height Plane	A	03.12.2024
DA6.41	Envelope Setbacks 45 Degrees	A	03.12.2024
DA6.45	Deep Soil & COS Diagrams	A	03.12.2024
DA7.00	Schedule of Material and Finishes - East & North	A	03.12.2024
DA7.01	CGI - View 1	A	03.12.2024
DA7.02	CGI - View 2	A	03.12.2024

Grand total: 24



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REV	DESCRIPTION	BY	DATE
A	Issue for DA submission	MS	03.12.2024

ANTONIADES ARCHITECTS

www.antoniades.com.au
ACN 129 731 559

Nominated Architect: Andreas Antoniades
NSW Registration 7954

PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA1 General Information
DRAWING TITLE
Cover Sheet/ Data Schedules

DRAWING NO.
DA1.00
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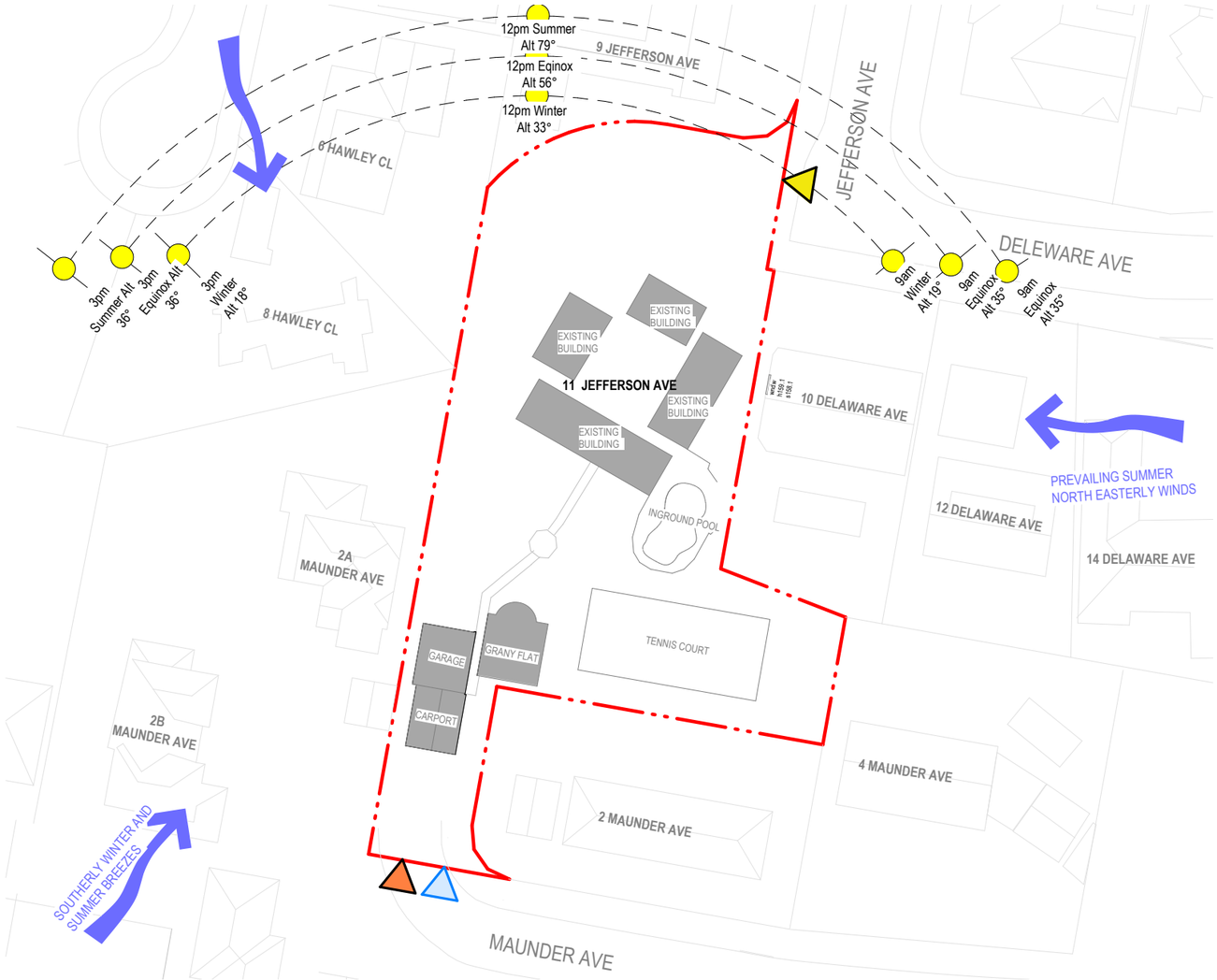



VIEW ONTO EXISTING DRIVEWAY AND #2 MAUNDER AVENUE



VIEW ONTO EXISTING DRIVEWAY AND #2A MAUNDER AVENUE



VIEW OF EXISTING POOL



EXISTING TENNIS COURT



VIEW OF EXISTING HOUSE



VIEW FROM JEFFERSON AVENUE

LEGEND:

- Vehicular entry / exit
- Pedestrian access path to bus stop
- Principle Pedestrian access
- Wind & Breeze
- Noise

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DEVELOPMENT APPLICATION

STATUS
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PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA1 General Information
DRAWING TITLE
Site Analysis

DRAWING NO.
DA1.01
SCALE
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REVISION
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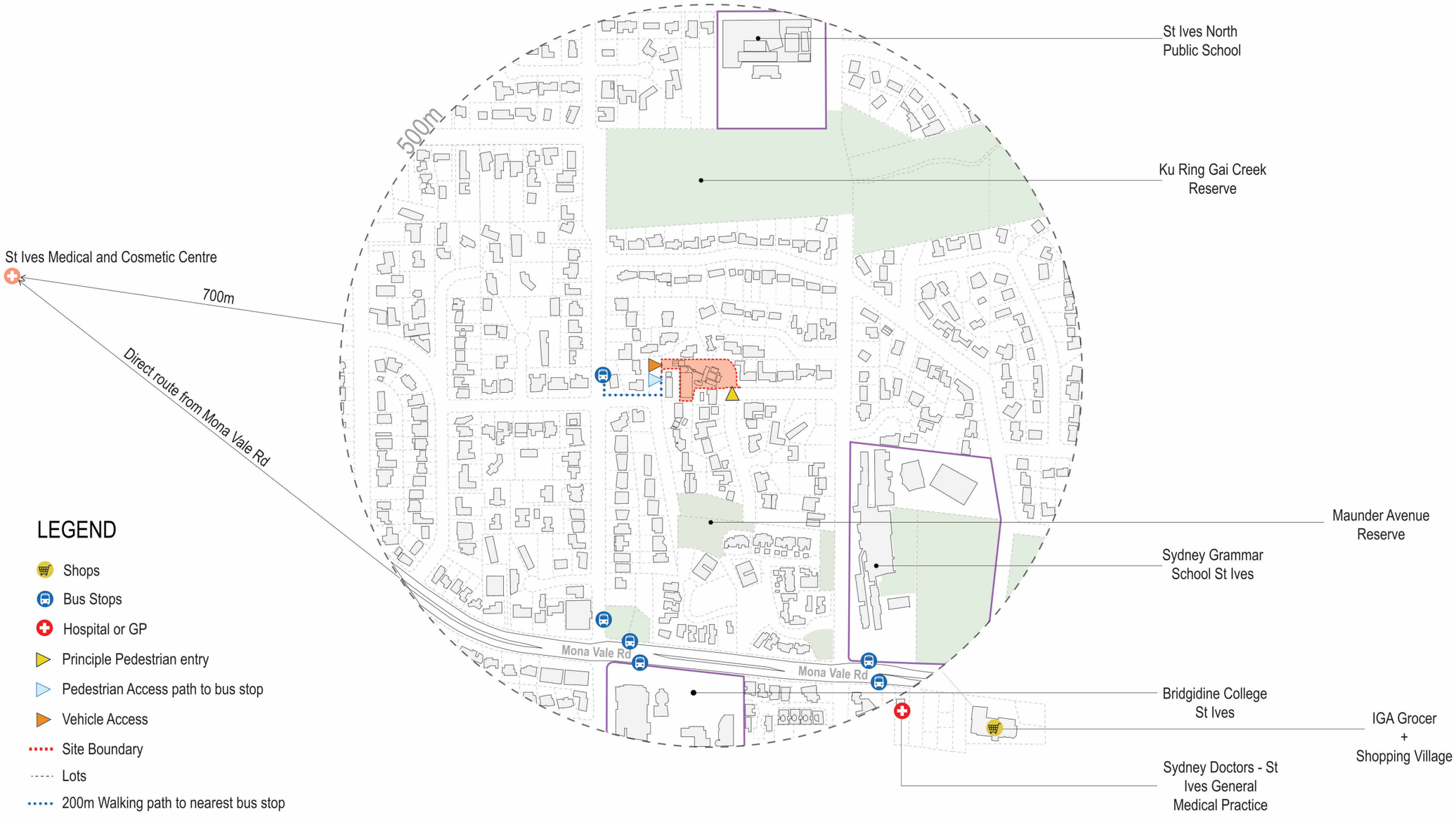

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PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
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PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA1 General Information
DRAWING TITLE
Location Plan

DRAWING NO.
DA1.02
REVISION
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MS
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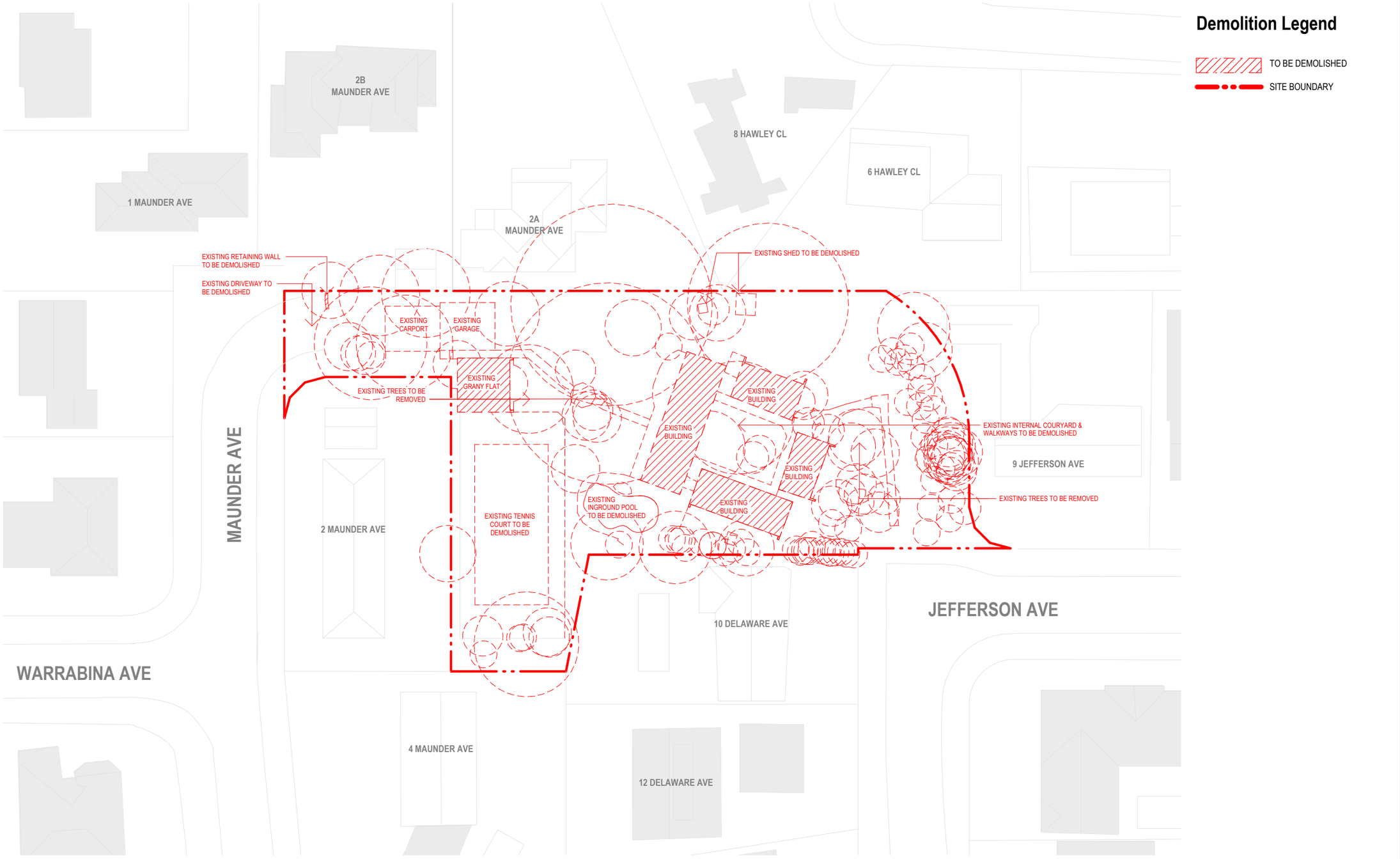

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PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA2 Existing Plans

DRAWING TITLE
Demolition Plan

DRAWING NO.
DA2.01

REVISION
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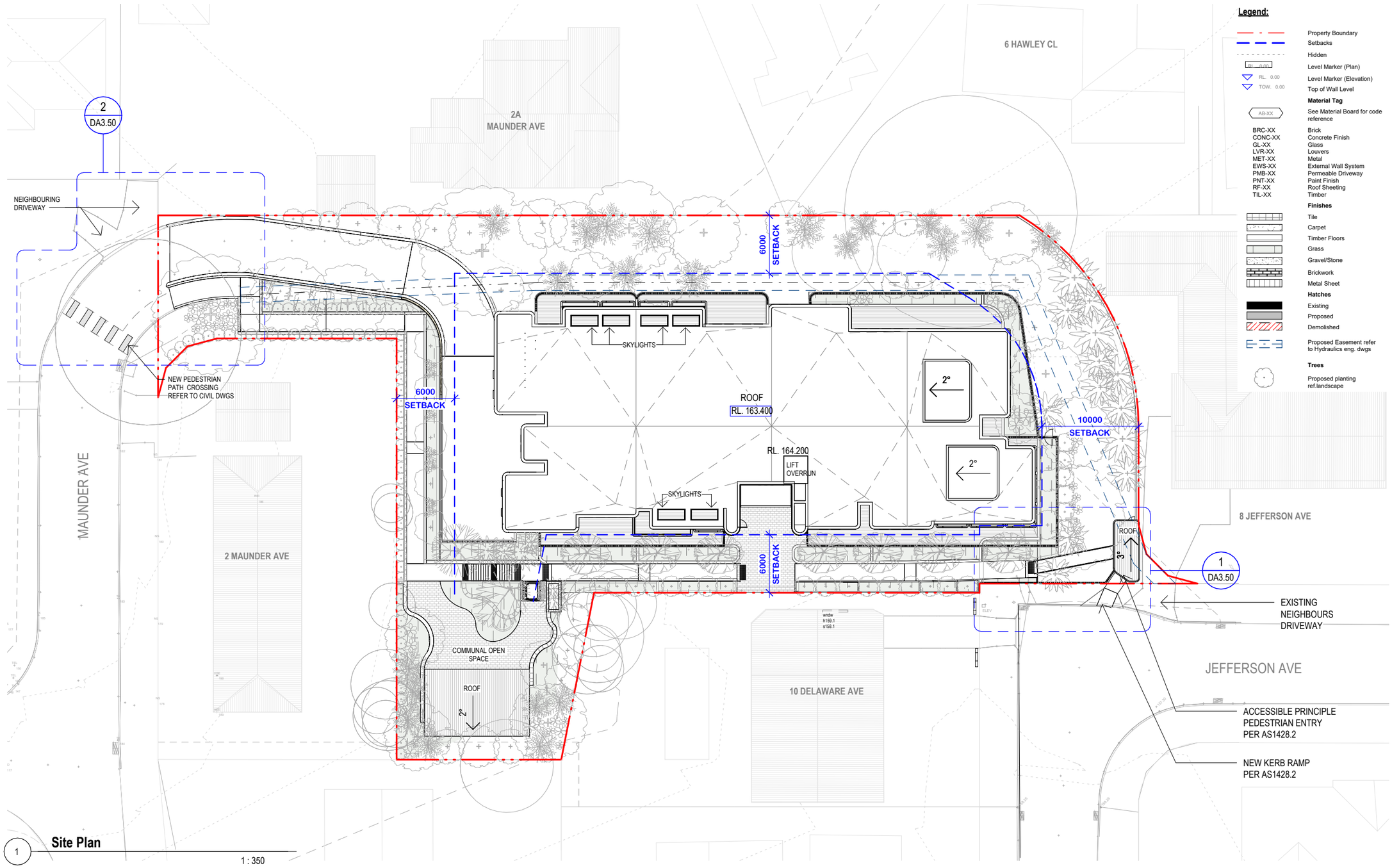
PV
CHECKED BY
MS

NORTH



1 **Site Plan** 1 : 350

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A	Issue for DA submission	MS	03.12.2024

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Nominated Architect: Andreas Antoniades
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PROJECT PHASE: DEVELOPMENT APPLICATION

STATUS: FOR SUBMISSION

PROJECT NO.: **24007**

PROJECT: **Seniors Living**

ADDRESS: 11 Jefferson Ave, St. Ives

CLIENT: Voskee Investments Pty Ltd

DRAWING SERIES: **DA3 Overall Plans**

DRAWING TITLE: **Site Plan**

DRAWING NO.: **DA3.01**

REVISION: **A**

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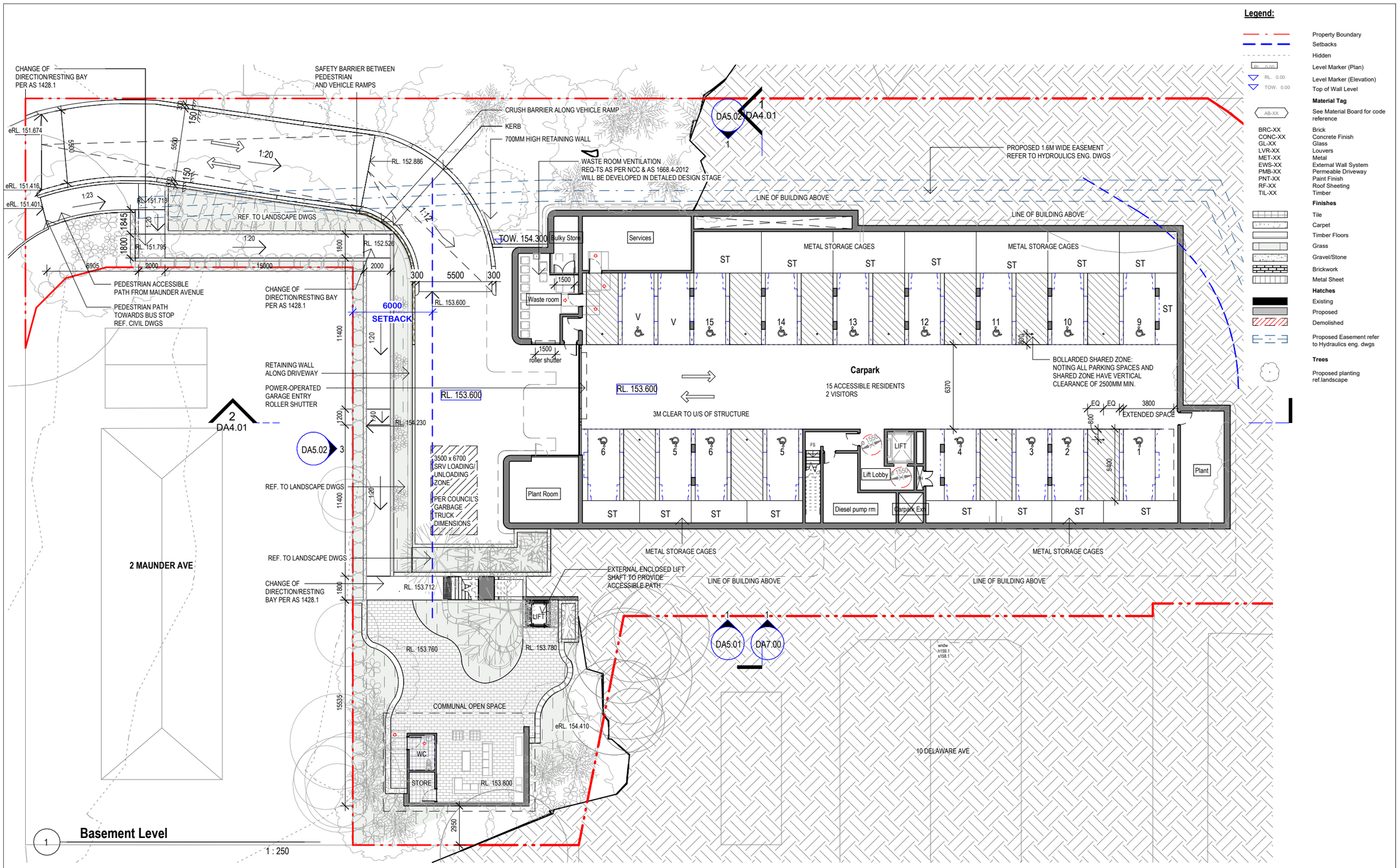
CHECKED BY: **AA**

NORTH



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REV	DESCRIPTION	BY	DATE
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Nominated Architect: Andreas Antoniades
NSW Registration 7954

PROJECT PHASE: DEVELOPMENT APPLICATION

STATUS: FOR SUBMISSION

PROJECT NO.: 24007

PROJECT: Seniors Living

ADDRESS: 11 Jefferson Ave, St. Ives

CLIENT: Voskee Investments Pty Ltd

DRAWING SERIES: DA3 Overall Plans

DRAWING TITLE: Basement 01

DRAWING NO.: DA3.09

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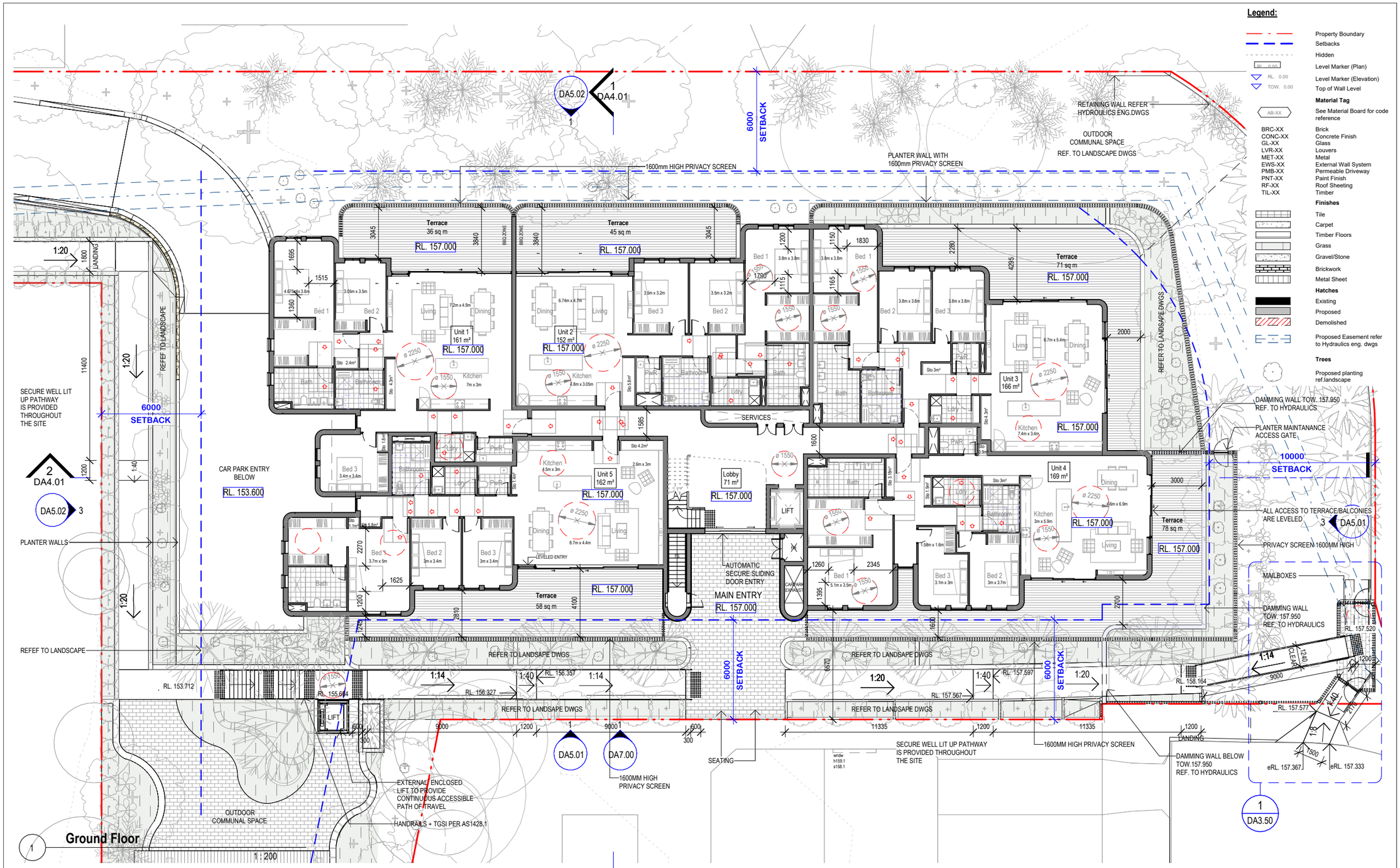

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REV	DESCRIPTION	BY	DATE
A	Issue for DA submission	MS	03.12.2024

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Nominated Architect: Andreas Antoniades NSW Registration 7954

PROJECT PHASE: DEVELOPMENT APPLICATION
STATUS: FOR SUBMISSION
PROJECT NO.: 24007
PROJECT: Seniors Living
ADDRESS: 11 Jefferson Ave, St. Ives
CLIENT: Voskee Investments Pty Ltd
DRAWING SERIES: DA3 Overall Plans
DRAWING TITLE: Ground Level
DRAWING NO.: DA3.10
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CHECKED BY: MS
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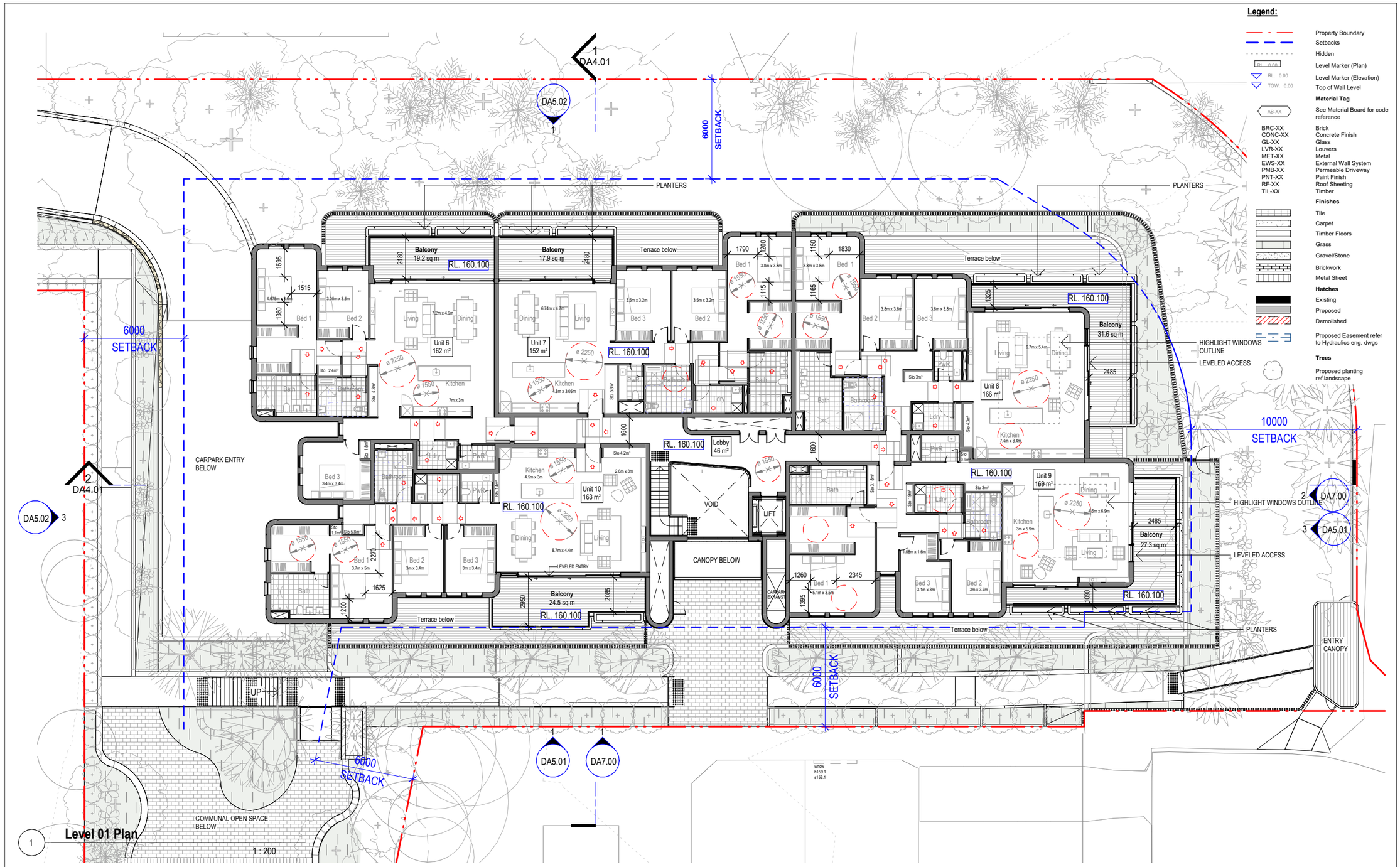

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REV	DESCRIPTION	BY	DATE
A	Issue for DA submission	MS	03.12.2024

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ACN 129 731 559

Nominated Architect: Andreas Antoniades
NSW Registration 7954

10 DELAWARE AVE

PROJECT PHASE: DEVELOPMENT APPLICATION

STATUS: FOR SUBMISSION

PROJECT NO. 24007

PROJECT: Seniors Living

ADDRESS: 11 Jefferson Ave, St. Ives

CLIENT: Voskee Investments Pty Ltd

DRAWING SERIES: DA3 Overall Plans

DRAWING TITLE: Level 01

DRAWING NO. DA3.11

REVISION A

SCALE: As indicated @A3

Scale 1:100

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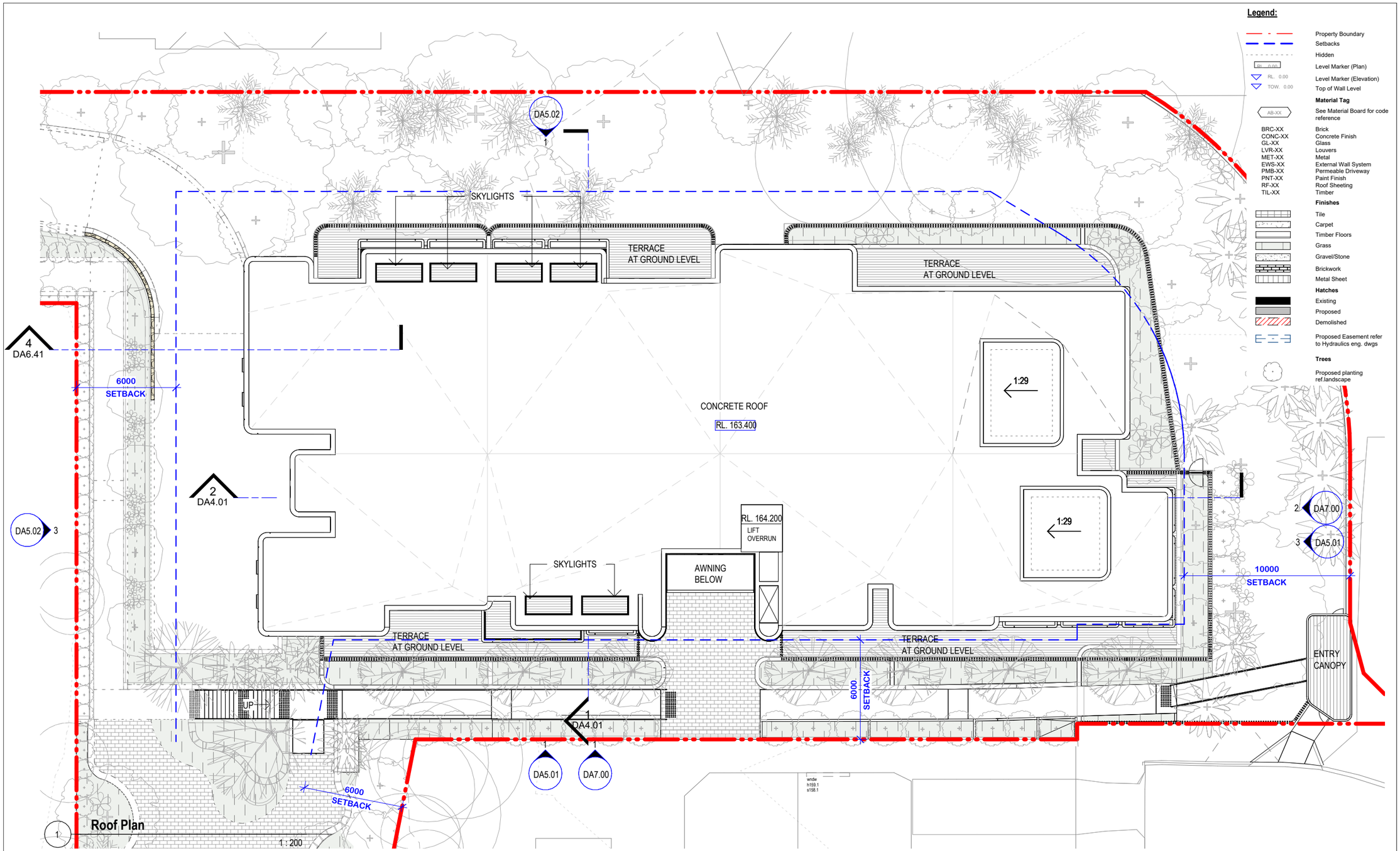

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REV	DESCRIPTION	BY	DATE
A	Issue for DA submission	MS	03.12.2024

ANTONIADES ARCHITECTS

www.antoniades.com.au
ACN 129 731 559

Nominated Architect: Andreas Antoniades
NSW Registration 7954

PROJECT PHASE: DEVELOPMENT APPLICATION

STATUS: FOR SUBMISSION

PROJECT NO.: 24007

PROJECT: Seniors Living

ADDRESS: 11 Jefferson Ave, St. Ives

CLIENT: Voskee Investments Pty Ltd

DRAWING SERIES: DA3 Overall Plans

DRAWING TITLE: Roof Plan

DRAWING NO.: DA3.20

REVISION: A

SCALE: As indicated @A3

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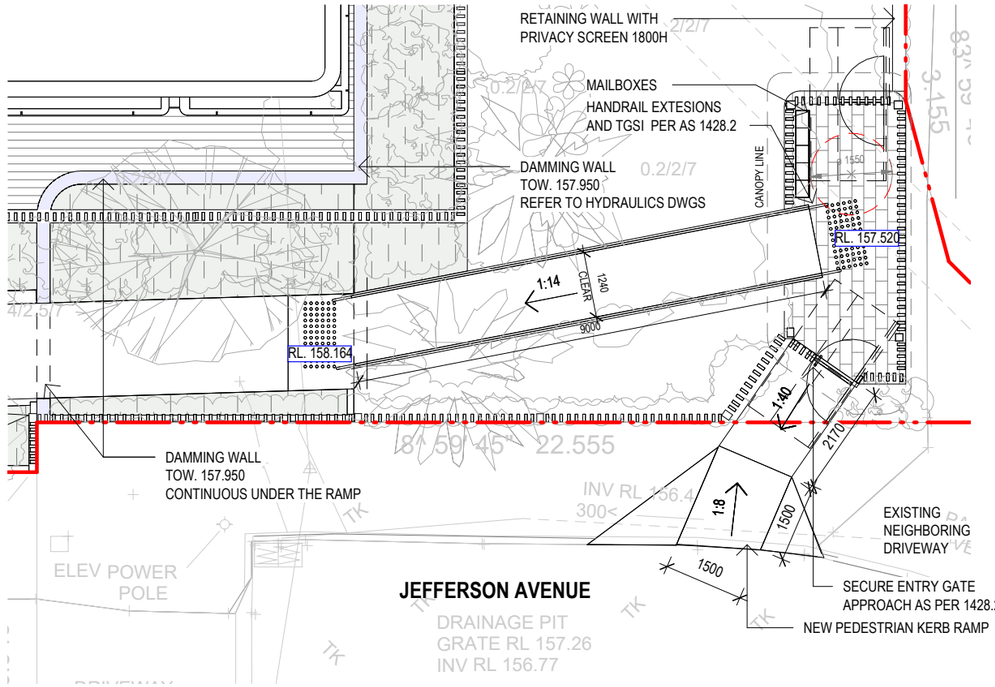
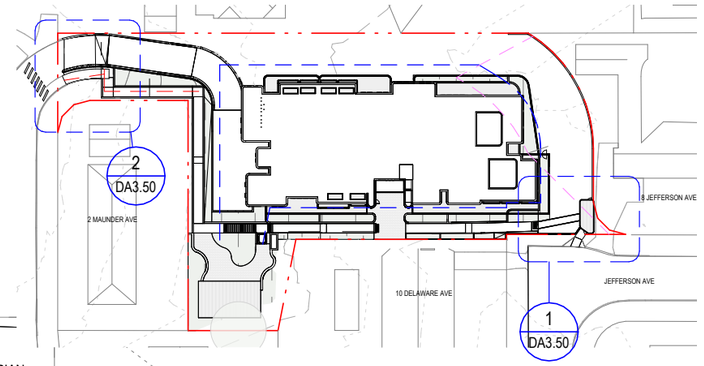


1 **Ramp Entry Jefferson Ave**

1 : 100



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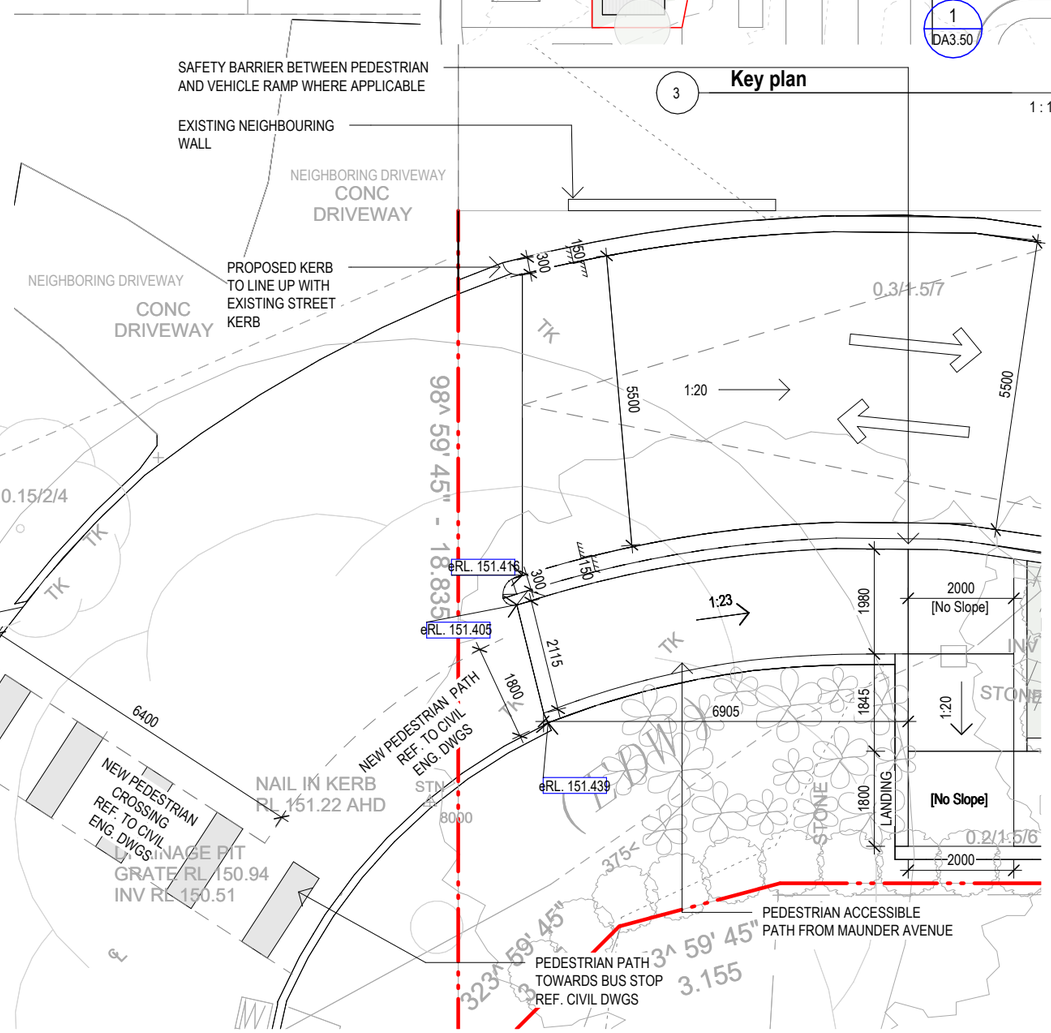

2 **Entry Maunder Avenue**

1 : 100

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REV	DESCRIPTION	BY	DATE
A	Issue for DA submission	MS	03.12.2024

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ARCHITECTS

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Nominated Architect: Andreas Antoniades
NSW Registration 7954

PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA3.5 Detail Plans

DRAWING TITLE
Street Entry

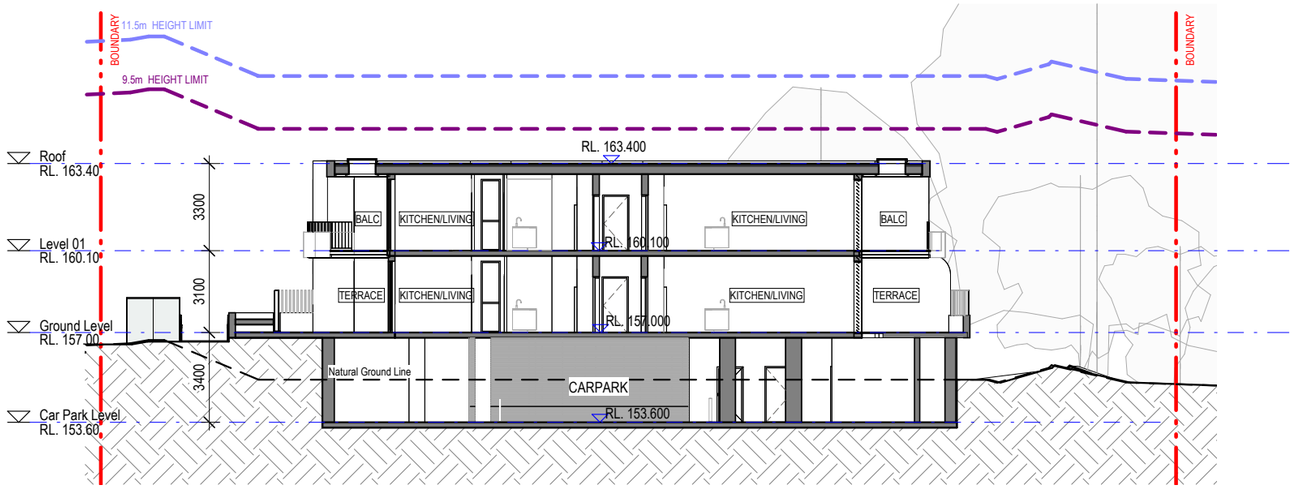
DRAWING NO.
DA3.50

REVISION
A

SCALE
As indicated @A3
Scale 1:100

DRAWN BY
MS
CHECKED BY
AA

NORTH



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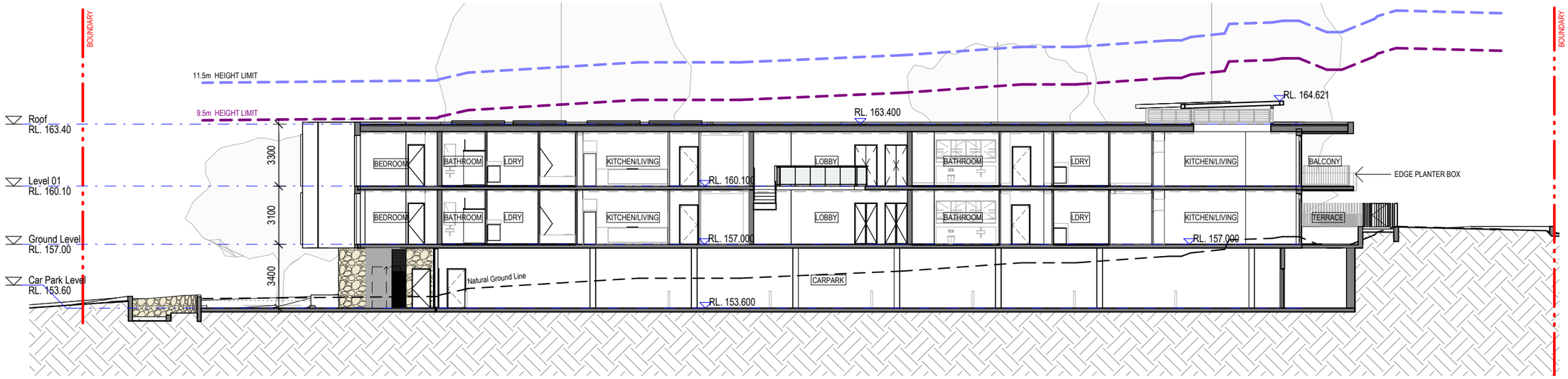

2 **Longitudinal Section**

1 : 200

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REV	DESCRIPTION	BY	DATE
A	Issue for DA submission	MS	03.12.2024

ANTONIADES ARCHITECTS

www.antoniades.com.au
ACN 129 731 559

Nominated Architect: Andreas Antoniades
NSW Registration 7954

PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA4 Sections

DRAWING TITLE
Section A & B

DRAWING NO.
DA4.01
REVISION
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DRAWN BY
PV
CHECKED BY
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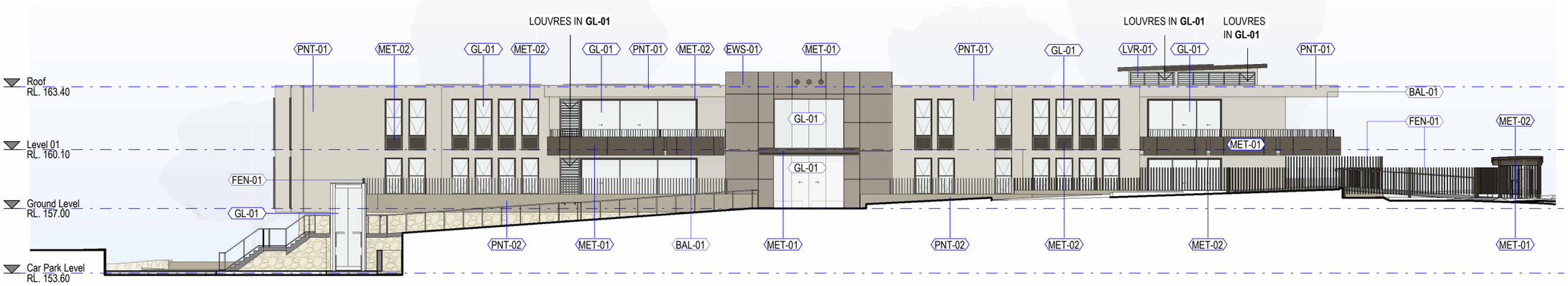

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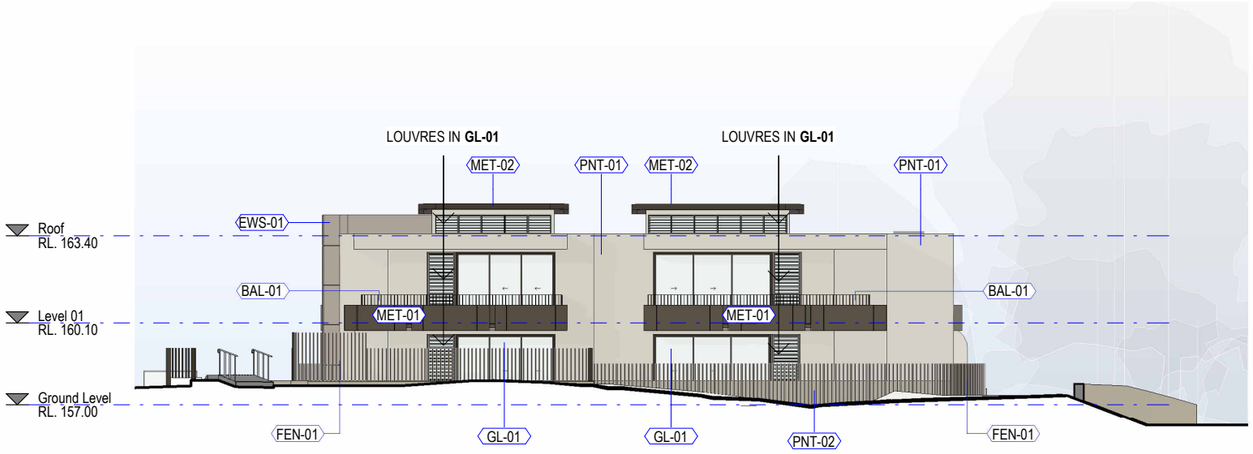

3 **North Elevation**

1 : 200

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STATUS
FOR SUBMISSION

PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA5 Elevations
DRAWING TITLE
Elevations East & North

DRAWING NO.
DA5.01
REVISION
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DRAWN BY
MS
CHECKED BY
AA
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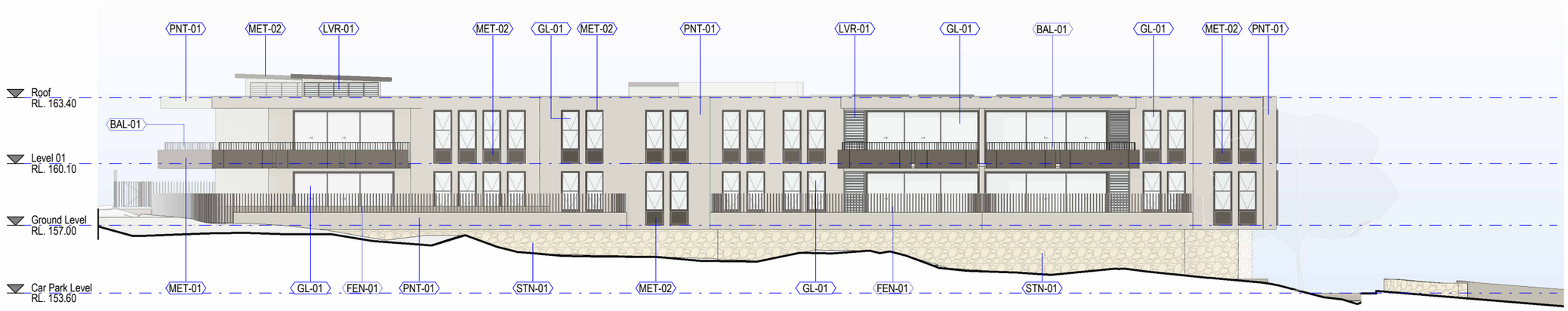

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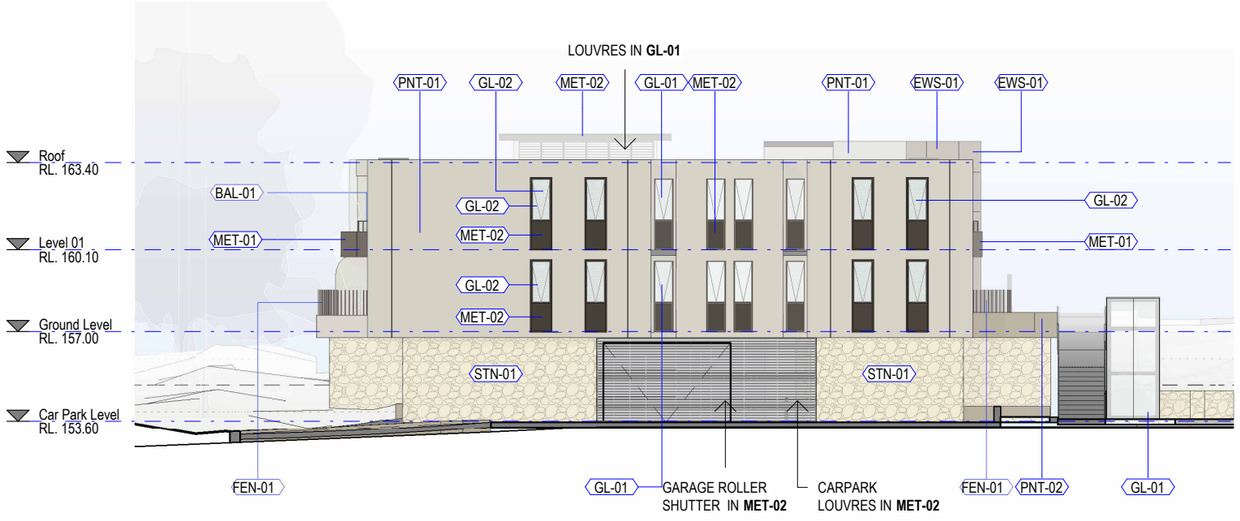
1 : 200



3 **South Elevation**

1 : 200

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DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

PROJECT NO.
24007

PROJECT
Seniors Living

ADDRESS
11 Jefferson Ave, St. Ives

CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA5 Elevations

DRAWING TITLE
Elevations South & West

DRAWING NO.
DA5.02

REVISION
A

SCALE
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Scale 1:100

DRAWN BY
MS
CHECKED BY
AA

NORTH

11 JEFFERSON AVENEU, ST IVES

Preliminary Design for Seniors Living Apartments

Anthony Bedrosian & Fadi Roumanos

November 2024

Council	Ku Ring Gai Council
Lot & DP	Lot 8 D.P. 231868
Zoning	R2
Site Area	3560 sq m

PLANNING

	FSR	GFA	Height of Building	Setbacks	Landscaping	Deep Soil (6m min.dimension)
Controls & Guidelines	0.5:1	1780m²	9.5m	Front 10m, Side 6m, Rear 6m	30% site area (1068m2)	15% site area (534m2)
Proposed	0.5:1	1780m²	9.5m	Front 10m, Side 6m, Rear 6m	34% site area (1217.4m2)	20.5% (731.2m2)

* Planning Instruments, Ku-Ring- Gai LEP 2022, Ku-Ring- Gai DCP 2022, SEPP 2021, NSW Apartment Design Guide June 2015

AMENITY

	Solar Access	Cross Ventilation	Accessible Apartments	Building depth	Private Open Space (m2)	Private Open Space depth (m)	Communal open space
Controls & Guidelines	70%	60%	100%	18m	3Bed 12m2 Ground floor 15m2	3Bed 2.4m Ground Floor 3m	25%
Proposed	70%	80%	100%	16.6m-23.2m	3Bed 17m2 Ground floor 26m2	3Bed 2.4m Ground Floor 3m	32.1% (1142.9m2)

* In accordance with NSW Apartment Design Guide June 2015

APARTMENT MIX

	3 Bed Apartment	Total	GFA
Ground Level	5	5	903m²
Level 01	5	5	877m²
Total	**10**	**10**	**1780m²**
%	100%	100%	

* GFA calculated Internal face of external wall excluding vertical circulation, plant rooms, garbage area, loading area, and car parking

PARKING

Cars	3 Bed (Ku Ring Gai DCP 2022) Visitors	**3 Bed SEPP Housing 2021**
Rate	1 per 10 Units	0.5 per Bed
Code Requirement		
Proposed	2	15
Total Requirement	17	
Total Proposed	**17**	

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PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA6 Design Analysis
DRAWING TITLE
Project Data Shedule

DRAWING NO.
DA6.00
REVISION
A
DRAWN BY
MS
CHECKED BY
AA
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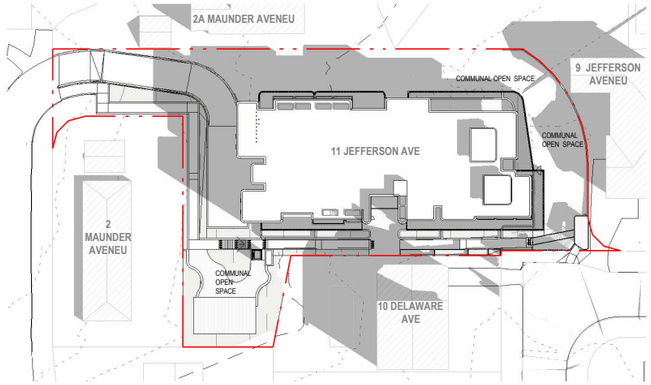
Scale 1:100



1 **Proposed - 9 am - 21 June**

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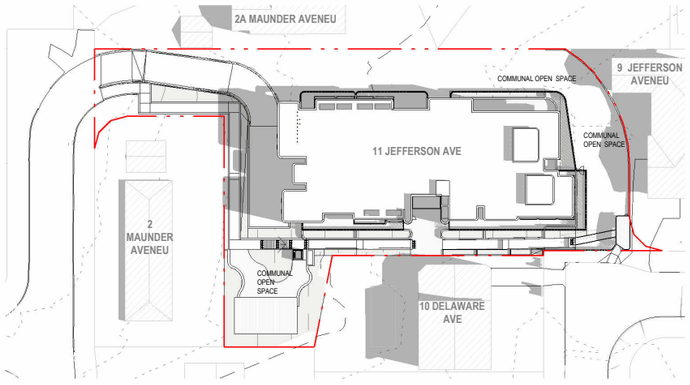

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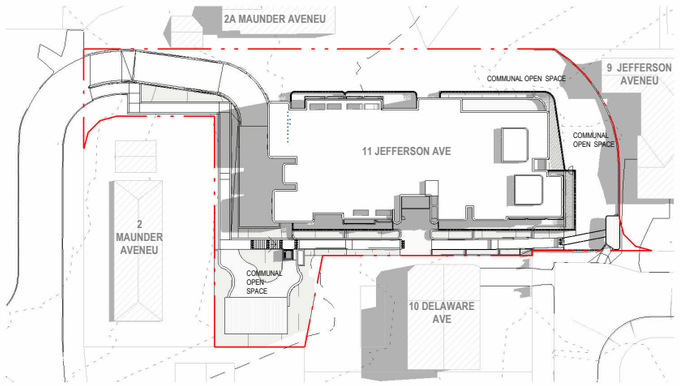

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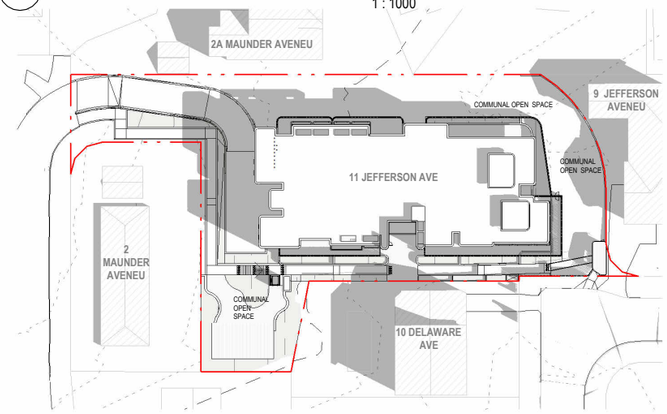

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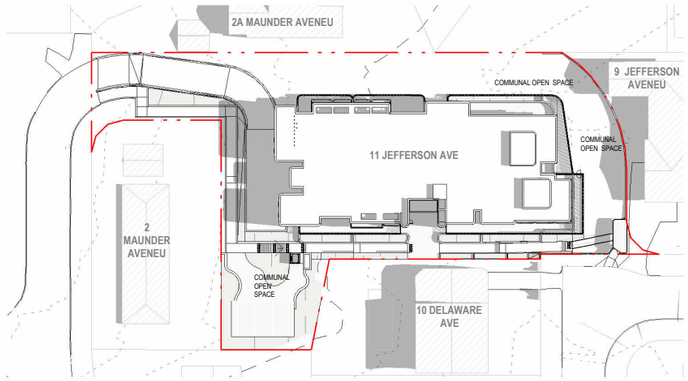

5 **Proposed - 1 pm - 21June**

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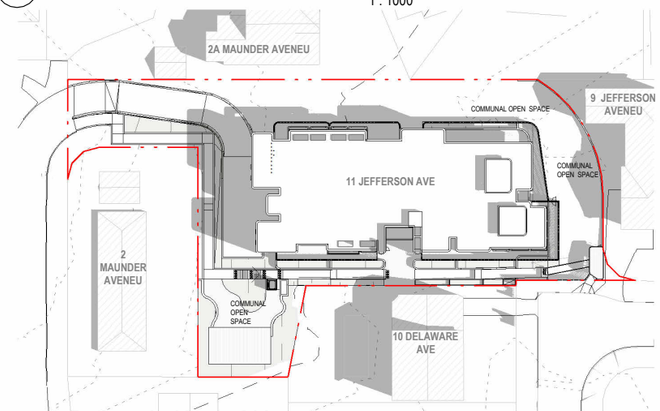

3 **Proposed - 11 am - 21June**

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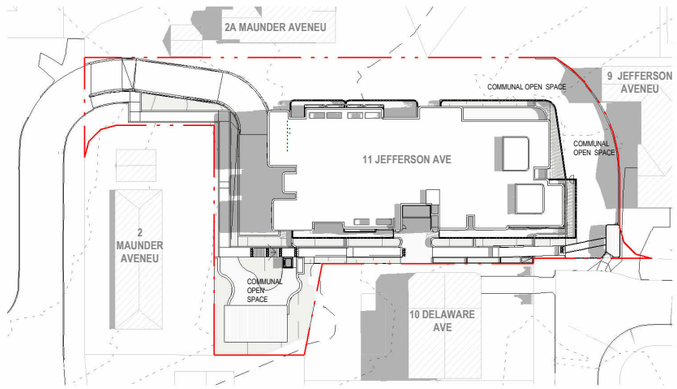
NOT FOR CONSTRUCTION



6 **Proposed - 2 pm - 21June**

1 : 1000

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NSW Registration 7954

PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA6 Design Analysis

DRAWING TITLE
Shadow Diagrams - 21st June

DRAWING NO.
DA6.01

REVISION
A

DRAWN BY
PV
CHECKED BY
MS

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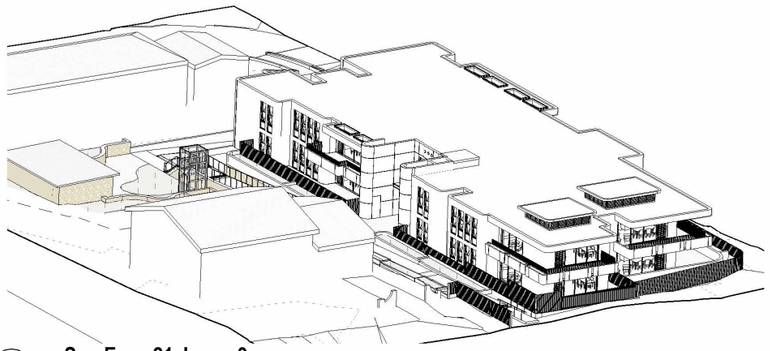

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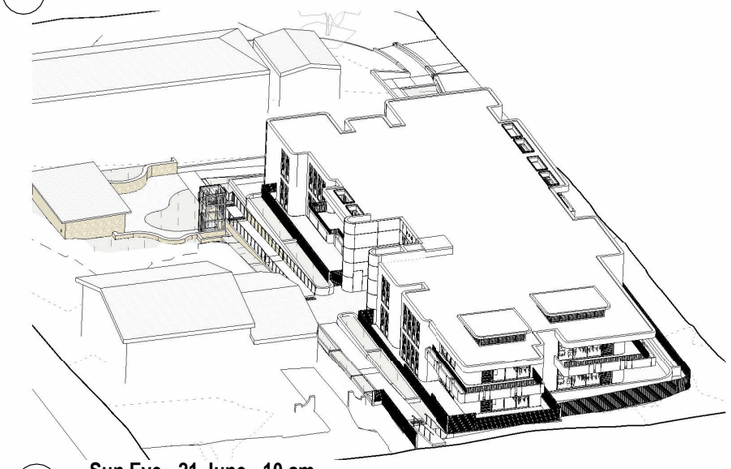
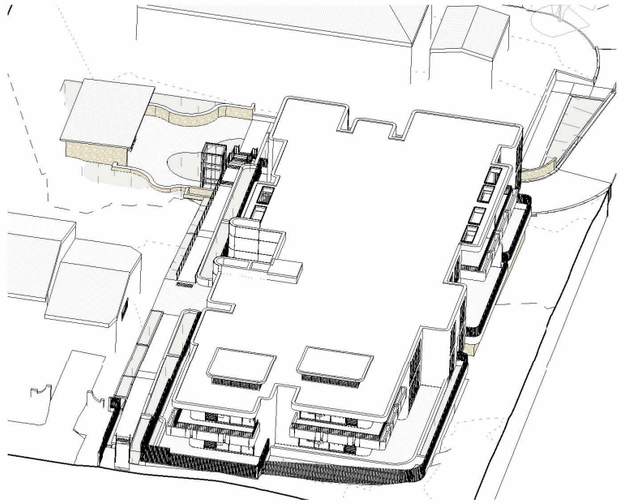


2 Sun Eye - 21 June - 10 am



3 Sun Eye - 21 June - 11 am



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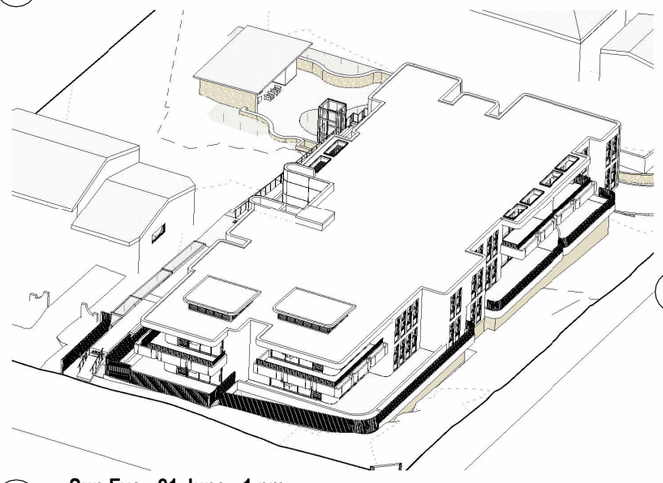
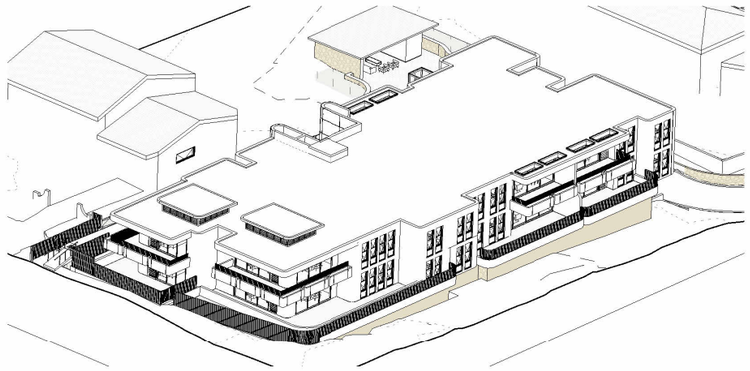


5 Sun Eye - 21 June - 1 pm



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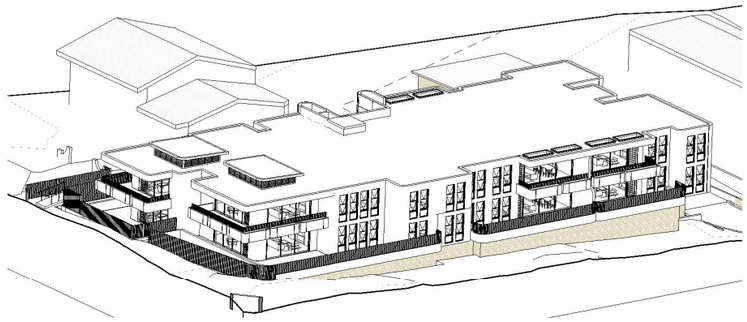

7 Sun Eye - 21 June - 3 pm

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DEVELOPMENT APPLICATION

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24007
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Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA6 Design Analysis

DRAWING TITLE
Sun's Eye View

DRAWING NO.
DA6.05

REVISION
A

DRAWN BY
PV
CHECKED BY
AA

SCALE
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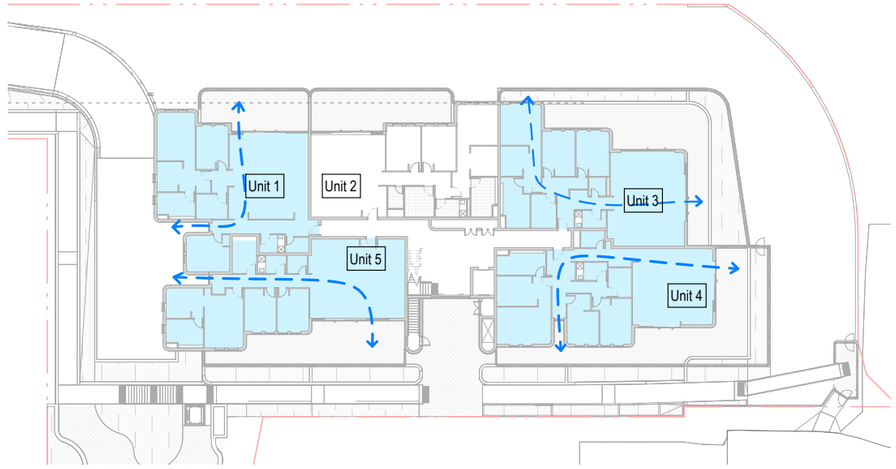


1 **Cross-Ventiation - Ground Lvl**

1 : 500



2 **Cross-Ventilation - Level 01**

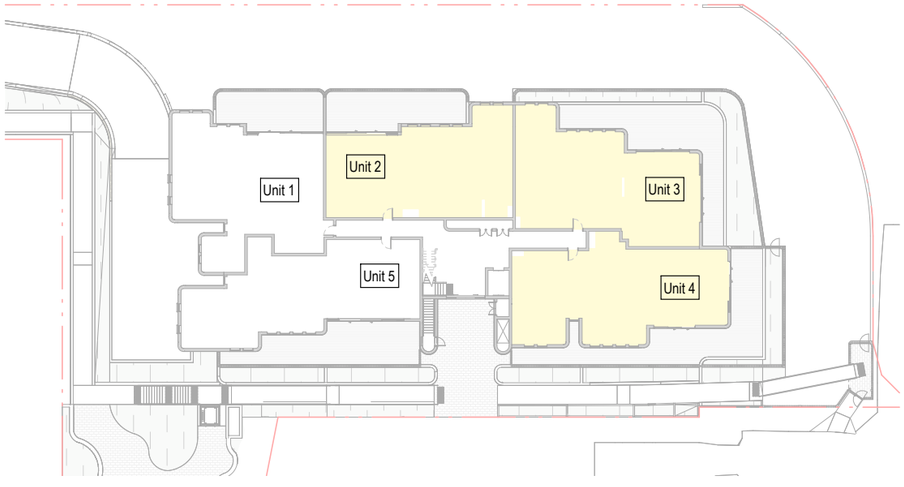
1 : 500

LEGEND:

Units with cross-ventilation aspects

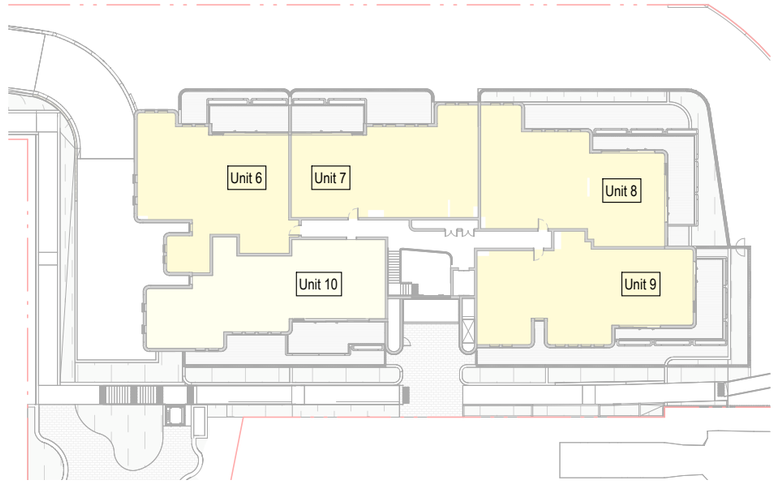
SUMMARY

OVERALL 8 UNITS OF 10 = **80%** OF UNITS ARE NATURALLY CROSS-VENTILATED.
COMPLIANCE WITH APARTMENT DESIGN GUIDE CROSS VENTILATION CRITERIA IS ACHIEVED.



3 **Solar Diagram - Ground Lvl**

1 : 500



4 **Solar Diagram - Level 01**

1 : 500

AT LEAST **70%** OF THE UNITS (7 OUT OF 10) RECEIVE MINIMUM OF 2 HOURS DIRECT SUNLIGHT IN THE PRIVATE OPEN SPACE AND LIVING AREAS BETWEEN 9 AM AND 3 PM AT WINTER SOLSTICE - 21 JUNE.

UNIT 10 IS PARTIALLY COMPLIANT - RECEIVES 2 HR OF DIRECT SUNLIGHT WITHIN P.O.S. AND 1.5HRS WITHIN LIVING AREA AND P.O.S. COMBINED

ZERO UNITS RECEIVE LESS THAN 15 OF DIRECT SUNLIGHT AT WINTER SOLSTICE BETWEEN 9AM AND 3PM.

SUMMARY

7 RECEIVE MINIMUM 2 HOURS DIRECT SUNLIGHT AT WINTER SOLSTICE BETWEEN 9AM-3PM.
COMPLIANCE WITH APARTMENT DESIGN GUIDE SOLAR ACCESS REQUIREMENT IS ACHIEVED.

Legend

Units receive min. 2hrs of direct sunlight at Winter Solstice on 21 June between 9am-3pm

Units receive less than 15 minuted of direct sunlight at Winter Solstice on 21 June between 9am-3pm

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Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA6 Design Analysis

DRAWING TITLE
Cross Ventilation - Solar Access Diagrams

DRAWING NO.
DA6.20

REVISION
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As indicated @A3
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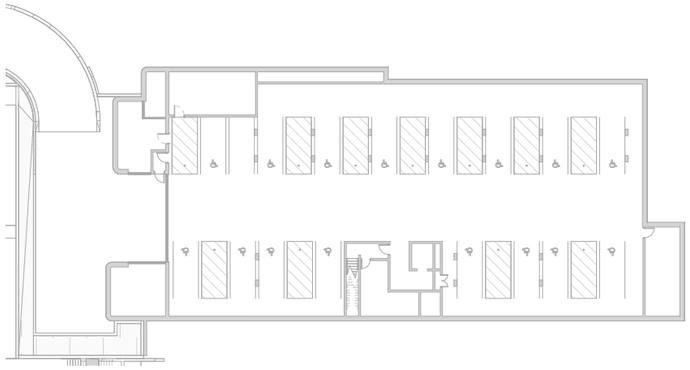
Scale 1:500

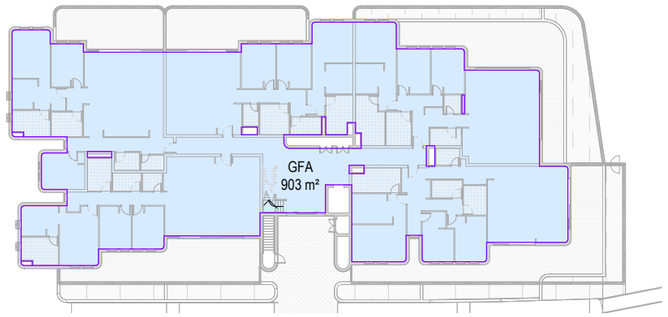
DRAWN BY
PY
CHECKED BY
AA

NORTH



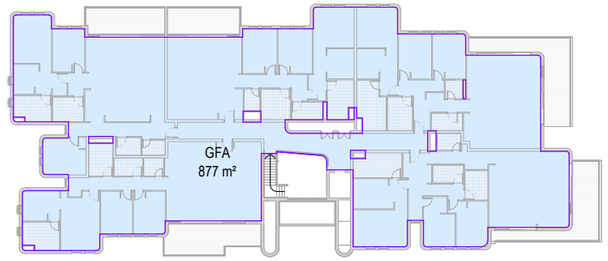
1 **Basement GFA**

1 : 500



2 **Ground Floor GFA**

1 : 500



3 **Level 01 GFA**

1 : 500

Area Schedule (GFA)	
Level	**Area**
Not Placed	0 m²
Ground Level	903 m²
Level 01	877 m²
Total: 13	1780 m²

Zoning	R2
Site Area	3560 sq m
FSR	0.5:1
Max GFA	1780 sq m

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REV	DESCRIPTION	BY	DATE
A	Issue for DA submission	MS	03.12.2024

ANTONIADES ARCHITECTS

www.antoniades.com.au
ACN 129 731 559

Nominated Architect: Andreas Antoniades
NSW Registration 7954

PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA6 Design Analysis
DRAWING TITLE
GFA Diagrams

DRAWING NO.
DA6.30
REVISION
A
DRAWN BY
LC
CHECKED BY
MS
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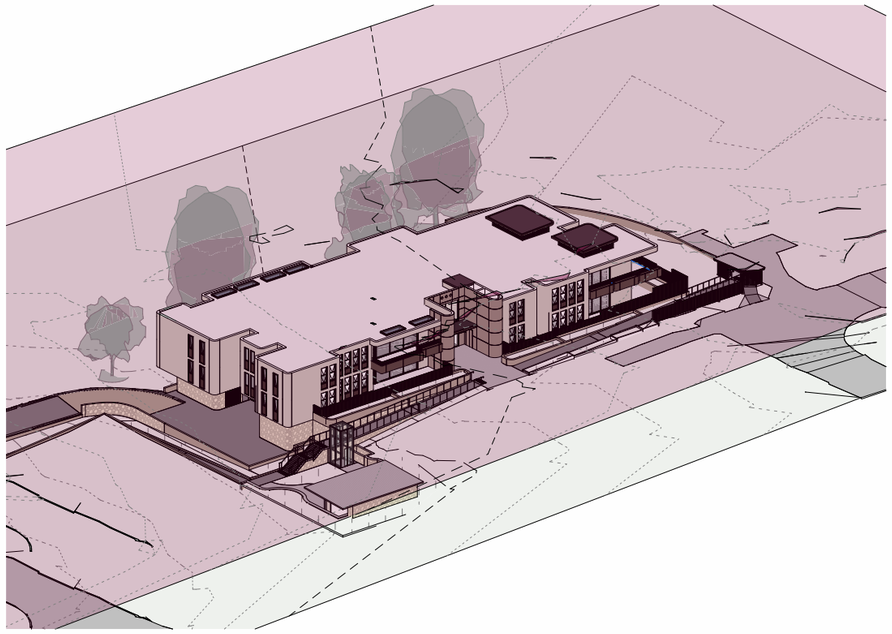
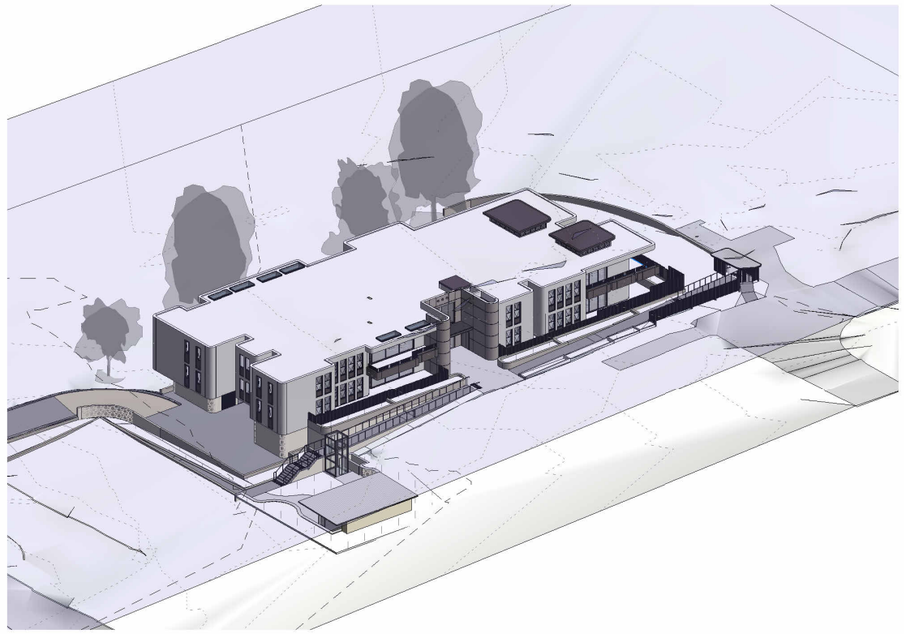
0m 0.8 1.6 2m
Scale 1:100



1 **Height Plane at 9.5m**



2 **Height Plane at 11.5m**

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DEVELOPMENT APPLICATION

STATUS
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PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA6 Design Analysis

DRAWING TITLE
Height Plane

DRAWING NO.
DA6.40

REVISION
A

DRAWN BY
PV
CHECKED BY
MS

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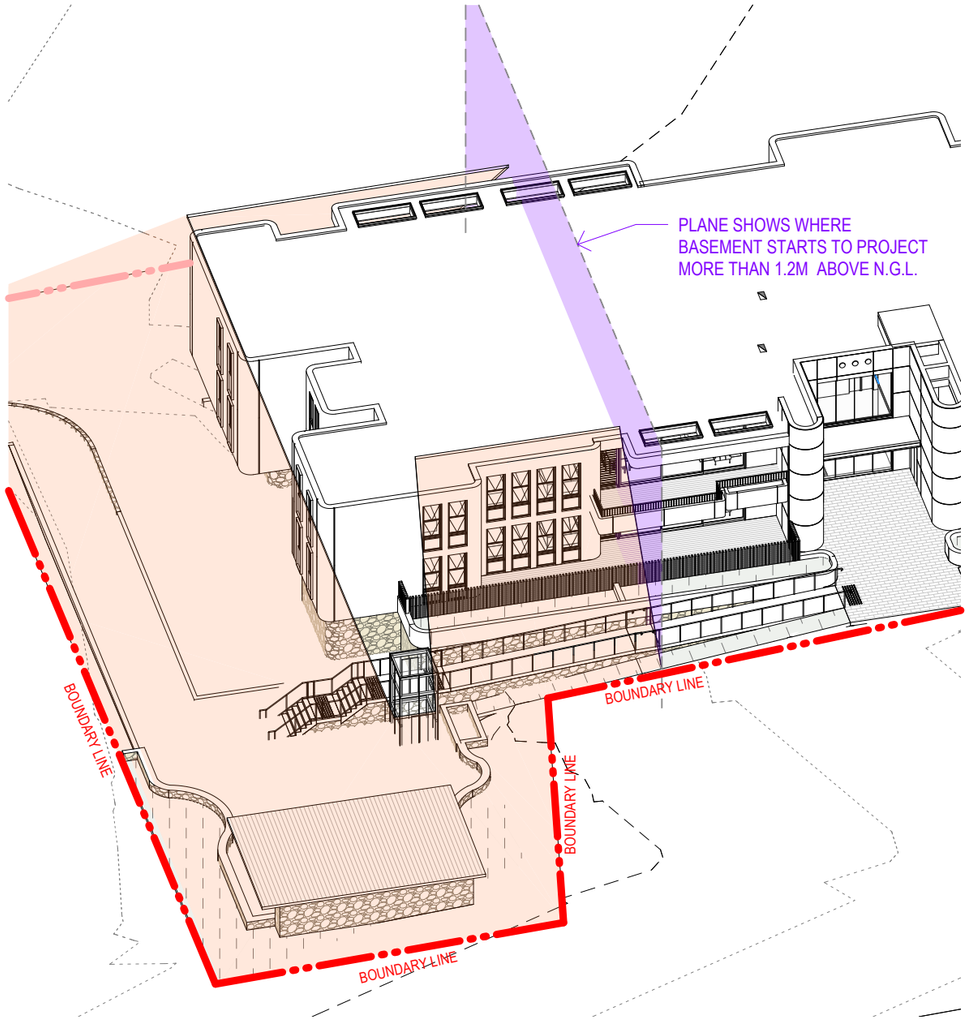
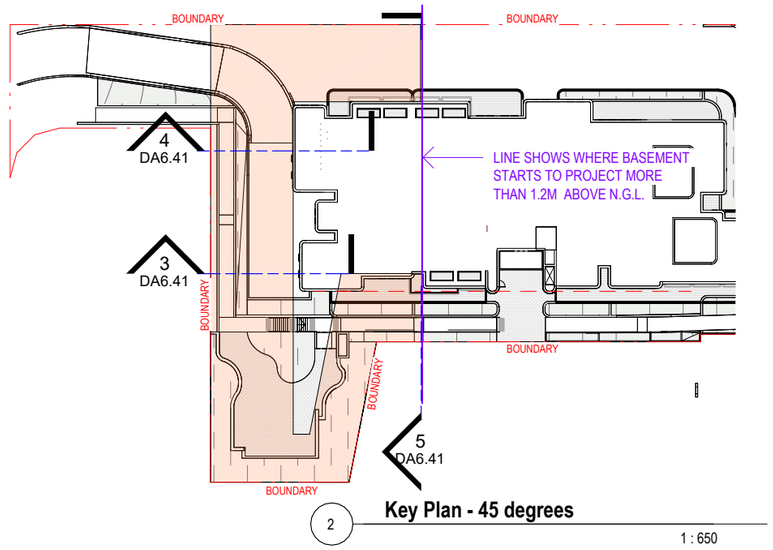
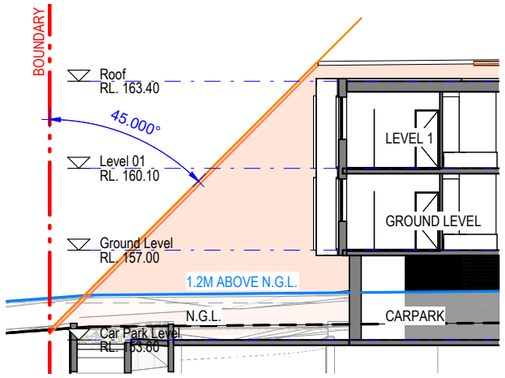


1 **3D - 45 Degree Envelope**



2 **Key Plan - 45 degrees**

1 : 650



3 **45 degree South Boundary**

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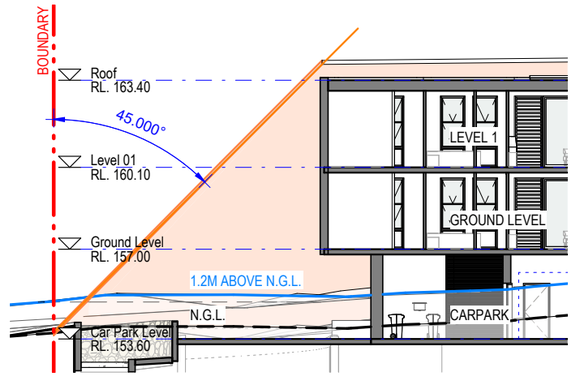
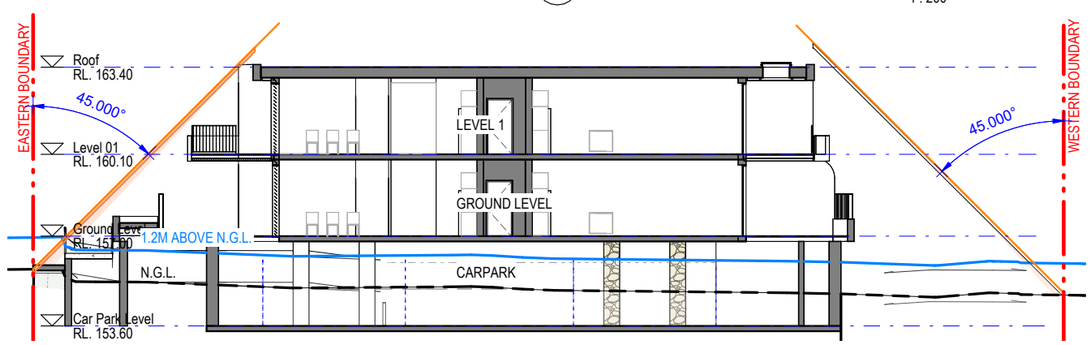


4 **45 degree South Boundary 2**

1 : 200



5 **45 degree East West**

1 : 200

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STATUS
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PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA6 Design Analysis
DRAWING TITLE
Envelope Setbacks 45 Degrees

DRAWING NO.
DA6.41
REVISION
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SCALE
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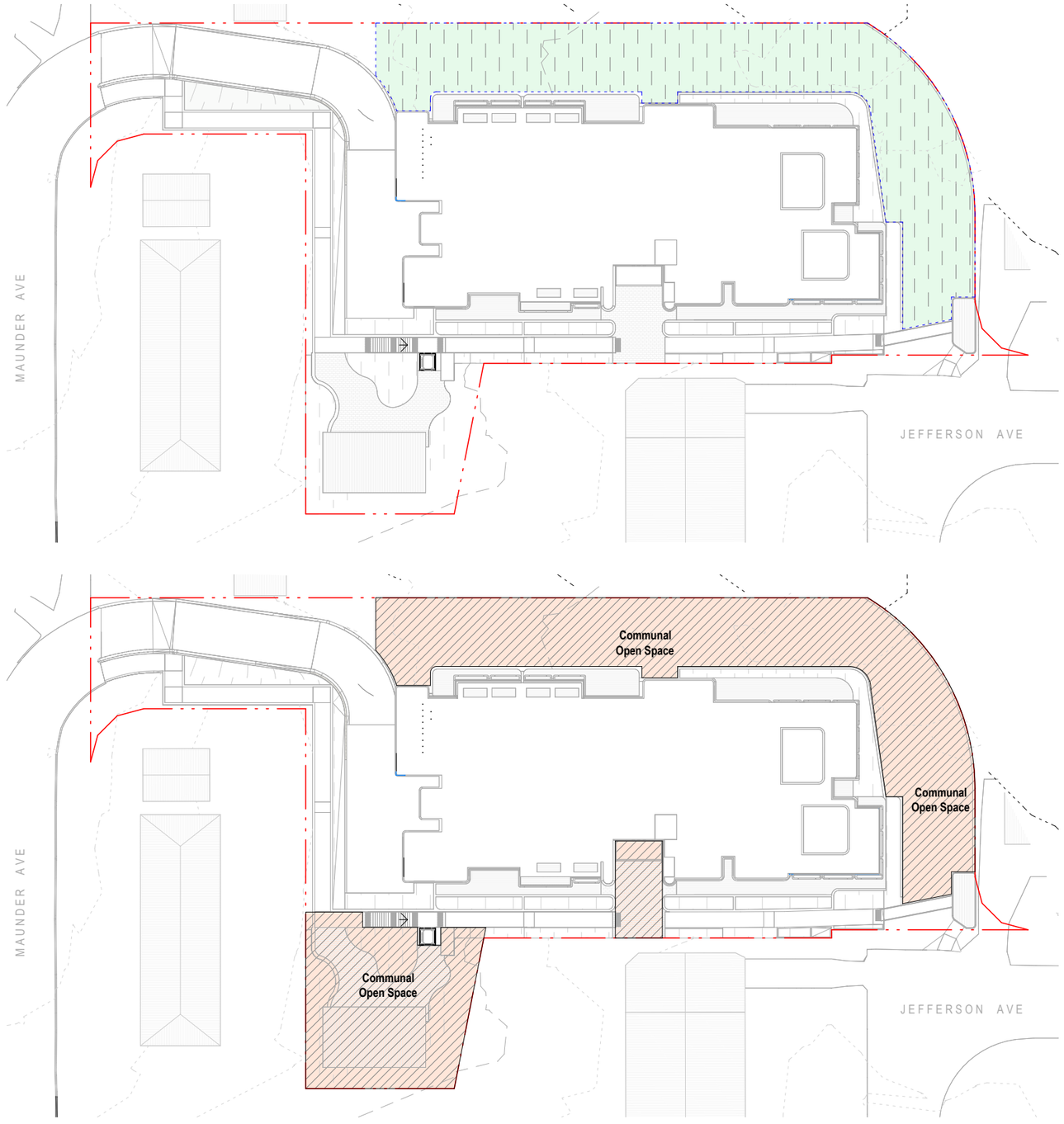
DRAWN BY
MS
CHECKED BY
AA



Legend

Deep Soil (6m. min)
Total Area = 731.2sqm = 20.5% of total site area

Communal Open Space
Total Area = 1142.9 sqm = 32.1% of total site area

Site Area = 3560sqm

DEEP SOIL AREA WITH 6M MIN. DIMENSION HAS BEEN PROVIDED

AREA OF COMMUNAL OPEN SPACE PROVIDED AT GROUND LEVEL WITH MIN. DIMENSION OF 6M. AND HAS BEEN CO-LOCATED WITH DEEP SOIL AREA

AREA OF COMMUNAL OPEN SPACE RECEIVES 2HR OF DIRECT SUNLIGHT ON 21 JUNE BETWEEN 9AM-3PM

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STATUS
FOR SUBMISSION

PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA6 Design Analysis

DRAWING TITLE
Deep Soil & COS Diagrams

DRAWING NO.
DA6.45

REVISION
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SCALE
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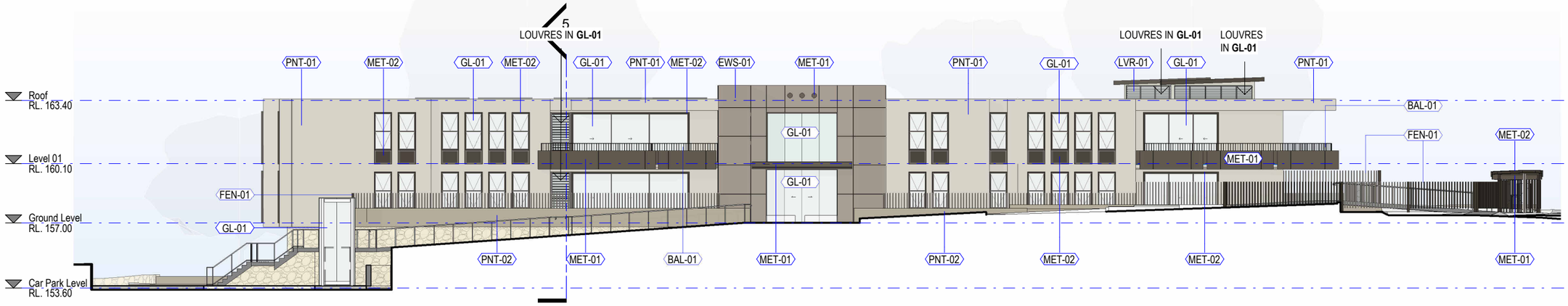
0m 0.8 1.6 2m
Scale 1:100

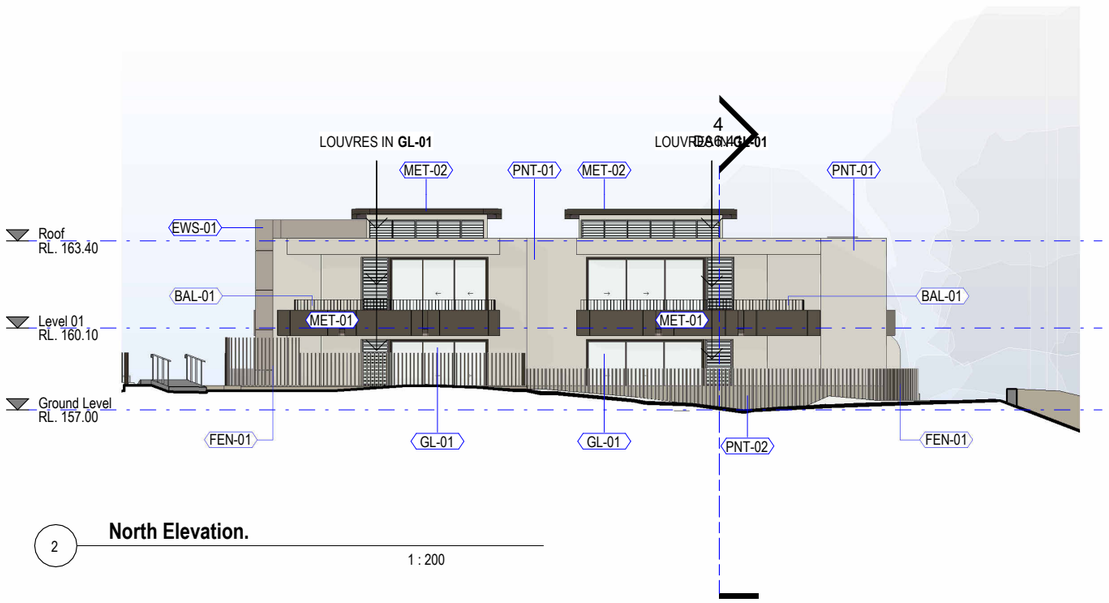
DRAWN BY
MS
CHECKED BY
AA

NORTH



1 **East Elevation.**

1 : 200



2 **North Elevation.**

1 : 200

MATERIAL REFERENCE:



EWS-01 - SANDSTONE HONED WHITE OR SIM.

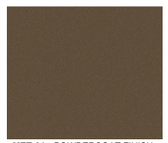


STN-01 - DRY STONE WALLING "ECO-OUTDOOR ALPINE" OR SIM.

PNT-01 - PAINT FINISH DULUX 'WHITE DUCK' OR SIM.



PNT-02 - PAINT FINISH DULUX 'LINSEED' OR SIM.



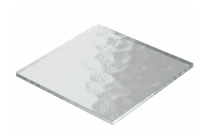
MET-01 - POWDERCOAT FINISH DULUX 'MEDIUM BRONZE' OR SIM.



MET-02 - POWDERCOAT FINISH DULUX "DARK BRONZE" OR SIM.



GL-01 - LOW IRON GLAZING CLEAR "VERIDIAN CLEAR" OR SIM.



GL-02 - LOW IRON GLAZING OBSCURE.



BAL-01 - BALCONY BALUSTRADE IN **MET-02** POWDERCOAT DULUX "DARK BRONZE" OR SIM.



FEN-01 - METAL FENCE IN **MET-02** POWERCOAT DULUX "DARK BRONZE" OR SIM.

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Nominated Architect: Andreas Antoniades
NSW Registration 7954

PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA7 Materials & Finishes
DRAWING TITLE
Schedule of Material and Finishes - East & North

DRAWING NO.
DA7.00
REVISION
A
SCALE
As indicated @A3
0m 0.8 1.6 2m
Scale 1:100

DRAWN BY
PV
CHECKED BY
MS



VIEW FROM MAUNDER AVENUE

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A	Issue for DA submission	MS	03.12.2024

ANTONIADES ARCHITECTS

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ACN 129 731 559

Nominated Architect: Andreas Antoniades
NSW Registration 7954

PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

PROJECT NO.
24007

PROJECT
Seniors Living

ADDRESS
11 Jefferson Ave, St. Ives

CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA7 Photomontage

DRAWING TITLE
CGI - View 1

DRAWING NO.
DA7.01

SCALE
@A3
0m 0.8 1.6 2m
Scale 1:100

REVISION
A

DRAWN BY
MS

CHECKED BY
AA



VIEW FROM JEFFERSON AVENUE

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ACN 129 731 559

Nominated Architect: Andreas Antoniades
NSW Registration 7954

PROJECT PHASE
DEVELOPMENT APPLICATION

STATUS
FOR SUBMISSION

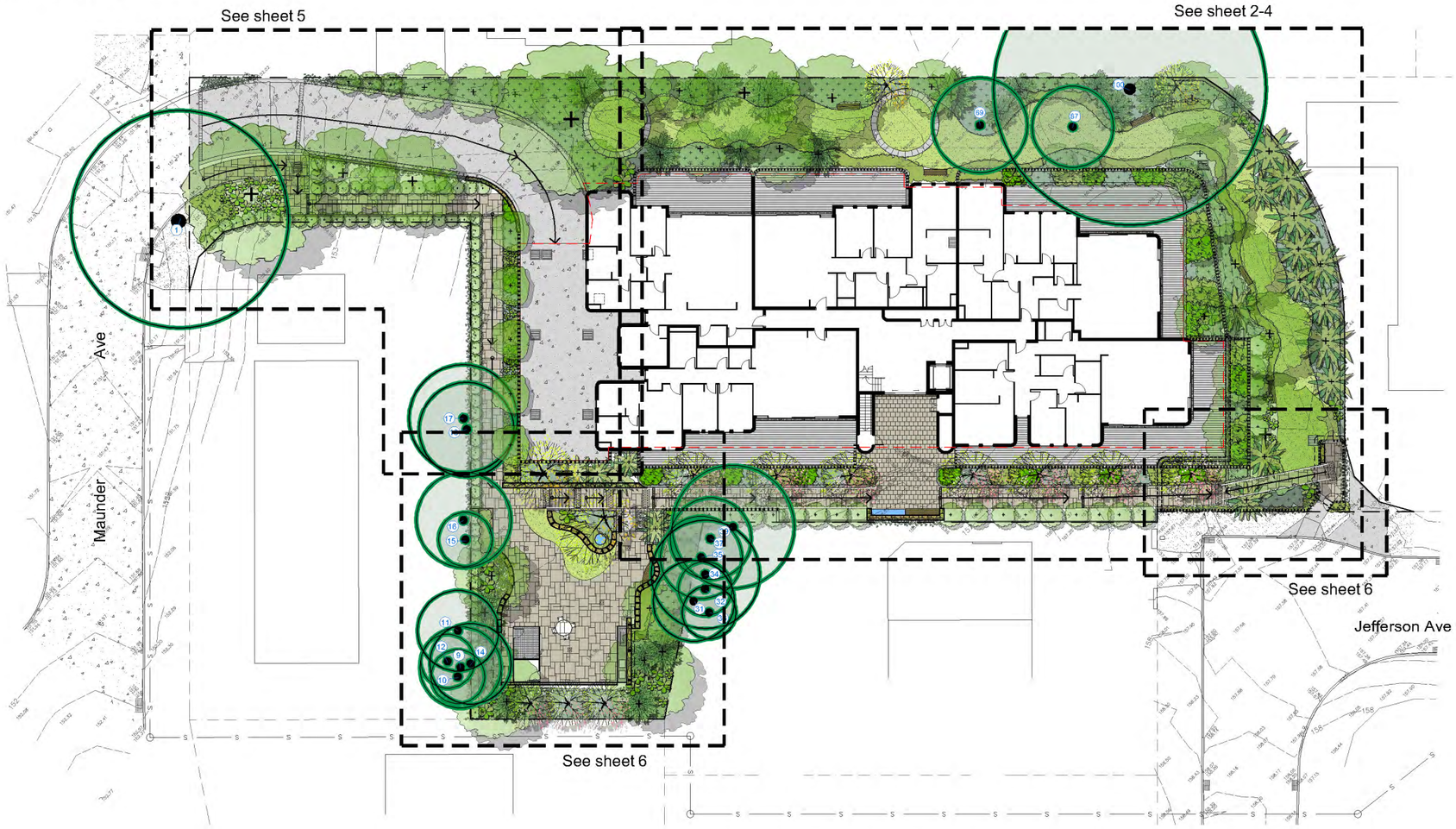
PROJECT NO.
24007
PROJECT
Seniors Living
ADDRESS
11 Jefferson Ave, St. Ives
CLIENT
Voskee Investments Pty Ltd

DRAWING SERIES
DA7 Photomontage
DRAWING TITLE
CGI - View 2

DRAWING NO.
DA7.02
REVISION
A
DRAWN BY
MS
CHECKED BY
AA
SCALE @A3
0m 0.8 1.6 2m
Scale 1:100

Landscape site plan 1:200 @ A1

0 1 2 3 4 5 10



Drawing schedule:
Sheet 1: Landscape site plan
Sheet 2: Landscape Detail plan
Sheet 3: Details plan
Sheet 4: Planting plan
Sheet 5: Southern driveway entry
Sheet 6: Eastern C.O.S & NE entry
Sheet 7: Calculation plan
Sheet 8: Tree retention/ removal plan

Arborist :
Tree Survey.
Phil Witten

Stormwater :
John Romanous & Associates.

Architect :
Antoniades & Associates .

Note: See sheet 3 for trees to be removed / retained.
See sheet 2 for all levels, wall heights & ramps.
See sheet 5 for Southern driveway entry / path.
See sheet 6 for eastern C.O.S & NE entry details

Amendments

D	3.12.24	
C	2.12.24	Final review
B	29.11.24	Coordination
A	26.11.24	Initial review

PAUL SCRIVENER
LANDSCAPE

PO Box 4050. ACT 2602
ABN: 16 949 100 279
Phone: 02 9907 8011
www.scrivener-design.com
Email: paul@scrivener-design.com

Project: Seniors Living
11 Jefferson Ave, St. Ives

Dwg: Site plan layout

Date: 2.12.24 Scale: 1:200 @A1

Job Ref: 24/2804

Builder must verify all dimensions of the site before work commences.
Figured dimensions should be used in preference to those scaled off.

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North

1 of 8

DA

ISSUE-D

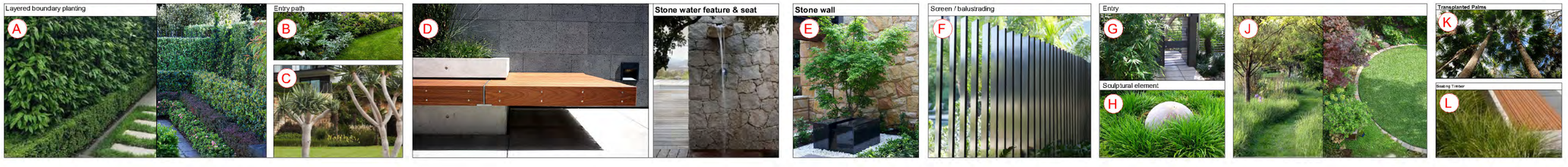
Landscape site plan 1:150 @ A1

0 1 2 3 4 5 10



Typical design images

Note: See sheet 3 for all levels, ramps & wall heights.



Ex. trees (Refer to Arborist's report)

Privacy screen / balustrading to Architect's details

Screen planting

Palms

Proposed evergreen trees (See sheet 4)

Proposed Deciduous tree

P.O.S paving

Turf

Note: See sheet 3 for all levels, ramps & wall heights.

Amendments

D	3.12.24	
C	2.12.24	Final review
B	29.11.24	Coordination
A	26.11.24	Initial review

PAUL SCRIVENER LANDSCAPE

PO Box 4050. ACT 2602
ABN: 16 949 100 279
Phone: 02 9907 8011
www.scrivener-design.com
Email: paul@scrivener-design.com

Project: Seniors Living
11 Jefferson Ave, St. Ives

Dwg: Landscape plan

Date: 2.12.24 Scale: 1:150 @A1

Job Ref: 24/2804

Builder must verify all dimensions of the site before work commences
Figured dimensions should be used in preference to those scaled off
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North

2 of 8

DA

ISSUE-D

Detail plan 1:150 @ A1

0 1 2 3 4 5 10

Refer to Stormwater plans for minor level adjustments 80–150mm

Seat

New 1800mm timber L&C fence

1600mm high privacy open screen. 300mm clearance at base for overland flow

Note: Refer to stormwater plans for overland flow path coordinated with Arborist report for retention of existing trees

Drainage pit. R.L 156.05

Post transplant

New low wall on boundary (Refer to Stormwater plans). Timber L&C fence over to 1800mm total height

New drainage easement & pipe. Approx. 1000mm below ground level

Gate

Landing R.L 152.52

Grated drain

Retaining wall

Low retaining wall

OSD tank under driveway & pits. (Refer to Stormwater Engineer's plans)

New 1800mm L & C fence on boundary

1:40 landing

T.O.W 153.55

Unit 1 F.F.L.157.00

Unit 2 F.F.L.157.00

Unit 3 F.F.L.157.00

Lobby F.F.L.157.00

Unit 5 F.F.L.157.00

Unit 4 F.F.L.157.00

Privacy screen

T.O.W 157.95

T.O.W 157.20

T.O.W 156.40

T.O.W 153.70

T.O.W 154.60

T.O.W 157.77

T.O.W 158.10

Seat

T.O.W 157.95 as damming wall. (Refer to stormwater Engineer's details

R.L 157.20

ramp 1:20

ramp 1:14

ramp 1:16

Ex.156.30

Ex.158.60

Ex.157.70

Ex.157.95

T.O.W 157.20

Grated drain

Retaining wall returns to ex. ground level here. R.L 156.30

Pond/Water feature

T.O.W 158.10 Stone clad wall

Retaining wall

Landing R.L 157.58 Landscape at ex. ground level.

Damming wall continues / under path. R.L 157.95. Return to boundary

T.O.W 158.16 Ex. telecom hatch cover

Ex. KIP 10

Flood void under ramp

T.O.W 155.60

T.O.W 155.68

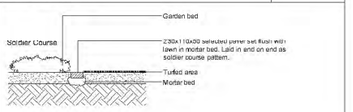
B.W 155.22

Landing R.L 1056.34

Detail 08 Stacked demolition sandstone around trees

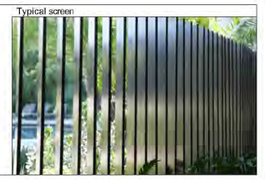


Detail 09 Brick edge detail n.t.s. — PSLA 11



Detail 10

Typical screen



Detail 11

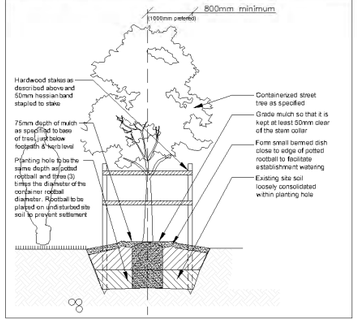
Typical entry garden



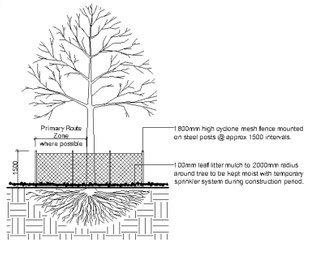
Detail 12



Detail 01 Tree planting details — PSLA 68

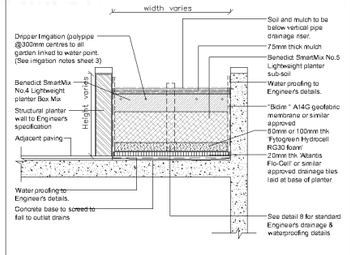


Detail 02 Tree protection measure Type 2 n.t.s. — PSLA 2

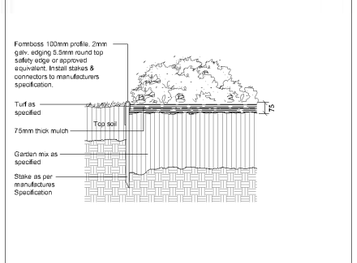


Detail 03 On structure planter typical soil installation detail n.t.s — PSLA 17

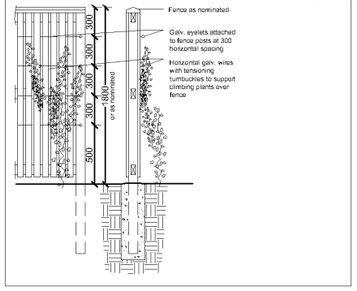
For soil & irrigation methodology only Structural & drainage to relevant Engineers details



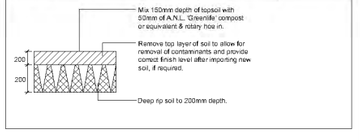
Detail 04 Metal edging typical detail n.t.s — PSLA 18



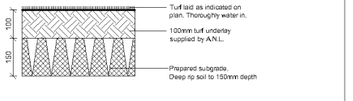
Detail 05 Wire supports for climbers on fence n.t.s — PSLA 50



Detail 06 Soil preparation detail n.t.s. — PSLA 8



Detail 07 Turf over soil n.t.s — PSLA 12



Ex. trees (Refer to Arborist's report)	Raised planter over slab (Detail 3)
Detail # Sheet 3	Natural soil (Detail)
Basement wall below	Balustrading screen (Detail 10)
Turfed area (Detail)	Ex. levels / Proposed levels

Amendments

D	3.12.24	
C	2.12.24	Final review
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Dwg: Detail plan

Date: 2.12.24 Scale: 1:150 @A1

Job Ref: 24/2804

North

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DA

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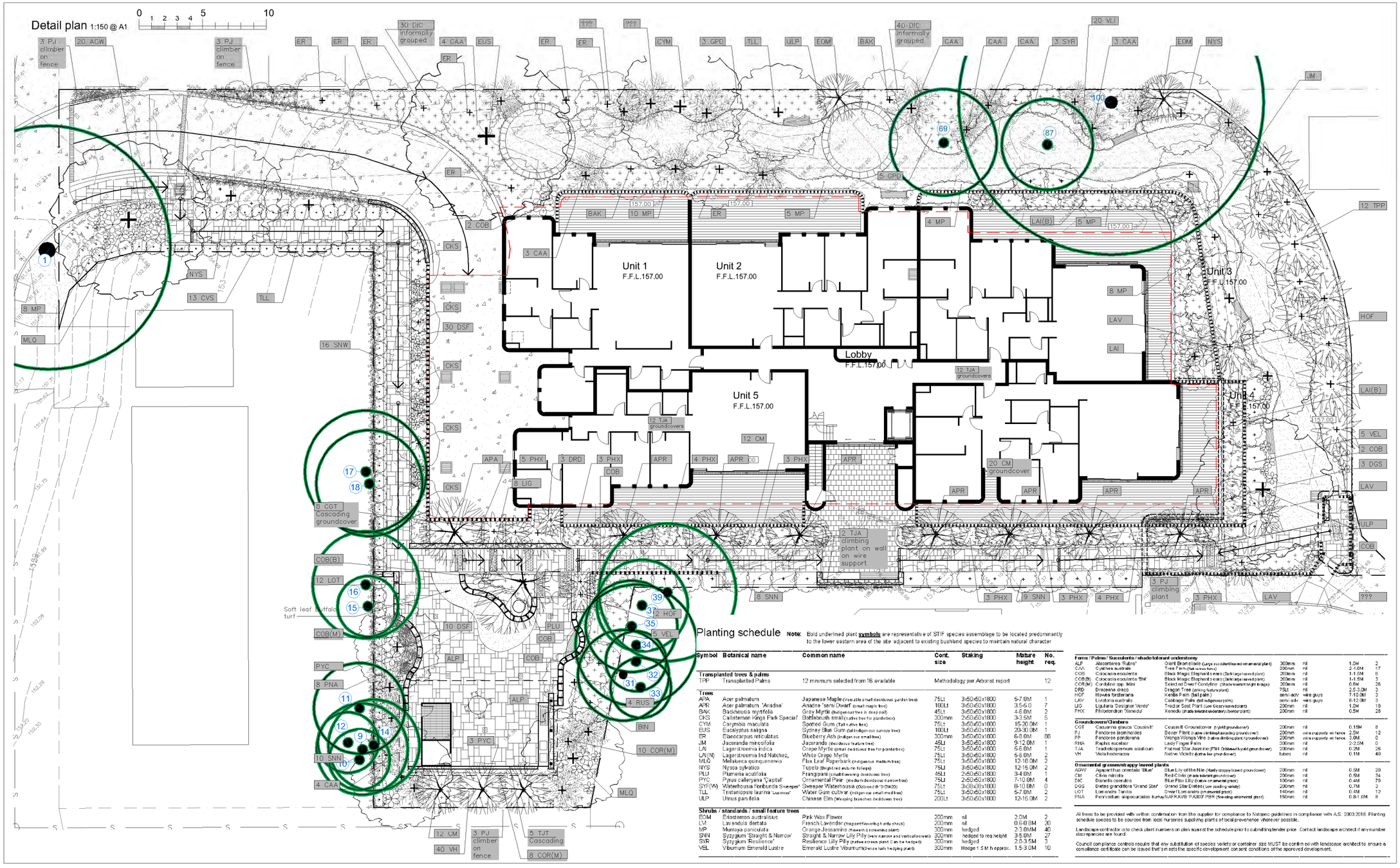

Planting schedule

Note: Bold underlined plant **symbols** are representative of STIF species assemblage to be located predominantly to the lower eastern area of the site adjacent to existing bushland species to maintain natural character

Symbol	Botanical name	Common name	Cont. size	Staking	Mature height	No. req.
Transplanted trees & palms						
TPP	Transplanted Palms	12 minimum selected from 16 available		Methodology per Arborist report		12
Trees						
APA	Acer palmatum	Japanese Maple (View stock small deciduous garden tree)	75Lt	3x50x50x1800	5-7.0M	1
APR	Acer palmatum 'Ariadne'	Ariadne 'Semi Dwarf' (small maple tree)	100Lt	3x50x50x1800	3.5-5.0	7
BAK	Backhousia myrtifolia	Grey Myrtle (hedgeroot tree in deep soil)	45Lt	3x50x50x1800	4-6.0M	2
CKS	Callistemon 'Kings Park Special'	Bottlebrush small (native tree for planterbox)	300mm	2x50x50x1800	3-3.5M	5
CYM	Corymbia maculata	Spotted Gum (Tall native tree)	75Lt	3x50x50x1800	15-20.0M	1
EUS	Eucalyptus saligna	Sydney Blue Gum (tall/indigenous canopy tree)	100Lt	3x50x50x1800	20-30.0M	1
ER	Elaeocarpus reticulatus	Blueberry Ash (Indigen our small tree)	300mm	3x50x50x1800	6-8.0M	88
JM	Jacaranda mimosifolia	Jacaranda (deciduous feature tree)	45Lt	3x50x50x1800	9-12.0M	1
LAI	Lagerstroemia indica	Crepe Myrtle (small deciduous tree for planterbox)	75Lt	3x50x50x1800	5-6.0M	1
LAI(N)	Lagerstroemia Ind Natchez,	White Crepe Myrtle	75Lt	3x50x50x1800	5-6.0M	2
MLQ	Melaleuca quinquenervia	Flax Leaf Paperbark (indigenous medium tree)	75Lt	3x50x50x1800	12-18.0M	2
NYS	Nyssa sylvatica	Tupelo (Bright red autumn foliage)	75Lt	3x50x50x1800	12-15.0M	2
PLU	Plumeria acutifolia	Frangipani (small flowering deciduous tree)	45Lt	2x50x50x1800	3-4.0M	1
PYC	Pyrus calleryana 'Capital'	Ornamental Pear (medium deciduous narrow tree)	75Lt	2x50x50x1800	7-10.0M	4
SYF(W)	Waterhousia floribunda 'Sweeper'	Sweeper Waterhousia (Dobreed ® 'D Dlk20)	75Lt	3x28x28x1800	8-10.0M	0
TLL	Tristaniopsis laurina 'Luscious'	Water Gum cultivar (indigenous small med tree)	75Lt	3x50x50x1800	5-7.0M	2
ULP	Ulmus parvifolia	Chinese Elm (Weeping branches deciduous tree)	200Lt	3x50x50x1800	12-15.0M	2
Shrubs / standards / small feature trees						
EOM	Eriostemon australasius	Pink Wax Flower	200mm	nil	2.0M	2
LVI	Lavandula dentata	French Lavender (fragrant flowering hardy shrub)	200mm	nil	0.6-0.8M	20
MP	Murraya paniculata	Orange Jessamine (Prevents a screening plant)	300mm	hedged	2-3.0MM	40
SNN	Syzygium 'Straight & Narrow'	Straight & Narrow Lilly Pilly (Very narrow and vertical screen)	300mm	hedged to req height	3-5.0M	27
SYR	Syzygium 'Resilience'	Resilience Lilly Pilly (native screen plant Can be hedged)	300mm	hedged	2.8-3.5M	3
VEL	Viburnum Emerald Lustre	Emerald Lustre Viburnum (Dense lush hedging plant)	300mm	Hedge 1.5 M h approx.	1.5-3.0M	10

Ferns / Palms / Succulents / shade tolerant understorey						
ALP	Alocasonova 'Rubra'	Giant Bromeliads (Large succulent leaved ornamental plant)	300mm h	nil	1.0M	2
CAA	Cyathea australis	Tree Fern (Tall screen fern)	200mm	nil	2.4-6M	17
COB	Colocasia esculenta	Black Magic Elephant's ears (Dark large leaved plant)	200mm	nil	1-1.5M	6
COB(B)	Colocasia esculenta 'BM'	Black Magic Elephant's ears (Dark large leaved plant)	300mm	nil	1-1.5M	3
COR(M)	Cordyline spp. Mini	Selected Dwarf Cordyline (shade tolerant bright foliage)	200mm	nil	0.6M	26
DRD	Dracaena draco	Dragon Tree (striking feature plant)	75Lt	nil	2.5-3.0M	3
HOF	Howea forsteriana	Kentia Palm (tall palm)	semi-adv	wire guys	7-10.0M	3
LAV	Livistona australis	Cabbage Palm (tall indigenous palm)	semi-adv	wire guys	8-12.0M	3
LIG	Ligularia 'Designer Verde'	Tractor Seat Plant (Low Glossy leaved plant)	200mm	nil	1.0M	10
PHX	Phiilodendron 'Xanadu'	Xanadu (shade tolerant understorey/border plant)	200mm	nil	0.6M	28
Groundcovers/Climbers						
CGT	Casuarina glauca 'Cousin It'	Cousin It Groundcover (hybrid groundcover)	200mm	nil	0.15M	8
PJ	Pandorea jasminoides	Bower Plant (native climber/cascading groundcover)	200mm	wire supports on fence	2.5M	12
PR	Pandorea pandorana	Wonga Wonga Vine (native climbing plant /groundcover)	200mm	wire supports on fence	3.0M	0
RHA	Rhapis excelsa	Lady Finger Palm	300mm	nil	2-2.5M	0
TJA	Trachelospermum asiaticum	Flat mat Star Jasmine (PBR Dobreed hybrid groundcover)	200mm	nil	0.2M	26
VH	Viola hederacea	Native Violets (native low groundcover)	tubers	nil	0.1M	40
Ornamental grasses/sedges/ strap leaved plants						
AGAV	Agapanthus orientalis 'Blue'	Blue Lily of the Nile (Hardy strappy leaved groundcover)	200mm	nil	0.5M	20
CM	Clivia miniata	Red Clivia (shade tolerant groundcover)	200mm	nil	0.5M	34
DIC	Dianella caerulata	Blue Flax Lilly (native ornamental grass)	190mm	nil	0.4M	79
DXG	Dietes grandiflora 'Grand Star'	Grand Star Dietes (Low seeding variety)	200mm	nil	0.7M	3
LGT	Lomandra Tanika	Dwarf Lomandra (ornamental grass)	140mm	nil	0.4M	12
PNA	Pennisetum alopecuroides 'Nafray'	NAFRAVB 'PADOFPBR' (Low-wing ornamental grass)	150mm	nil	0.8-1.0M	8

All trees to be provided with written confirmation from the supplier for compliance to Natspec guidelines in compliance with A.S. 2303:2018. Planting schedule species to be sourced from local nurseries supplying plants of local provenance wherever possible.

Landscape contractor is to check plant numbers on plan against the schedule prior to submitting tender price. Contact landscape architect if any number discrepancies are found.

Council compliance controls require that any substitution of species variety or container size MUST be confirmed with landscape architect to ensure a compliance certificate can be issued that simsets the specific development consent conditions of the aporoved development.

Ex. trees (Refer to Arborist's report)

Proposed trees

Planting symbols

Amendments

D	3.12.24	
C	2.12.24	Final review
B	29.11.24	Coordination
A	26.11.24	Initial review

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11 Jefferson Ave, St. Ives

Dwg: Planting plan

Date: 2.12.24 Scale: 1:150 @A1

Job Ref: 24/2804

4 of 8

DA

ISSUE-D

North

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Driveway entry area 1:100 @ A1

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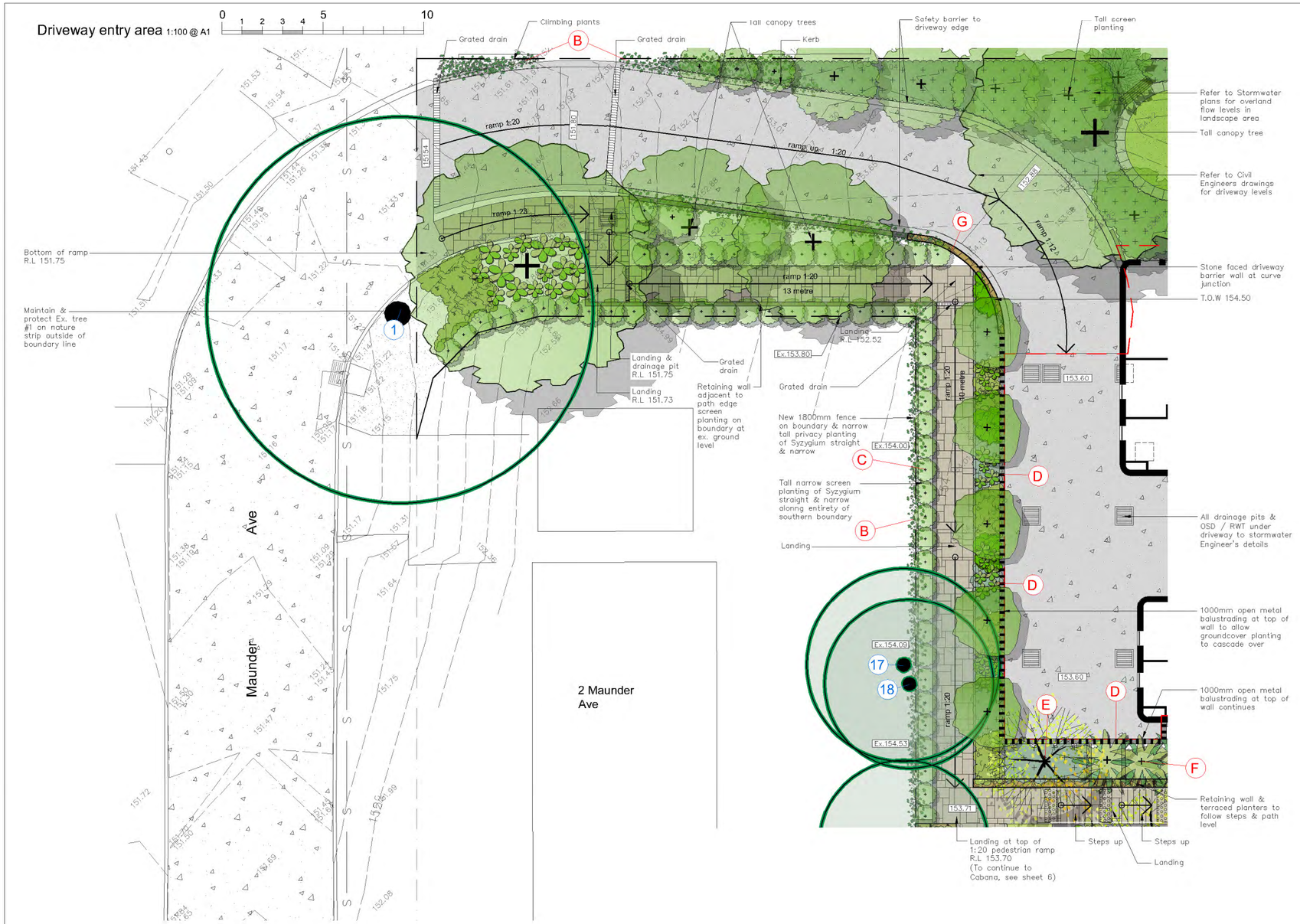

Typical design palette













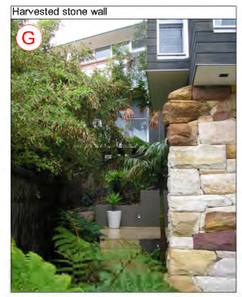

Ex. trees (Refer to Arborist's report)

Proposed evergreen trees (See sheet 4)

Privacy screen / balustrading to Architect's details

Proposed Deciduous tree

Screen planting

P.O.S paving

Palms

Turf

Note: See sheet 3 for all levels, ramps & wall heights.

Amendments

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C	2.12.24	Final review
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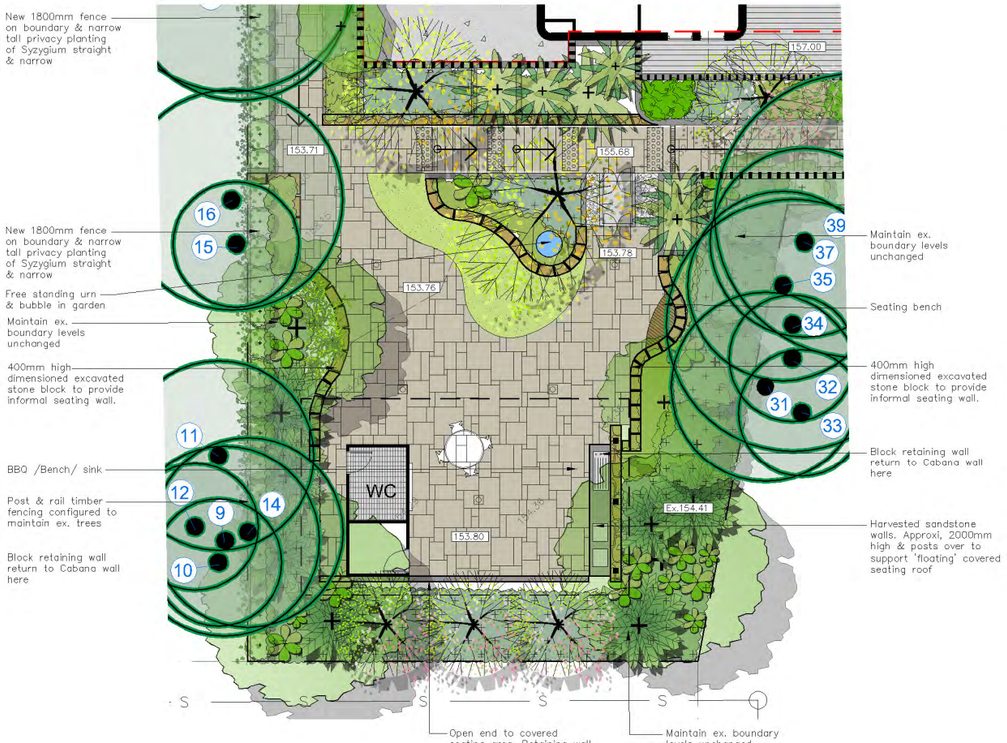
ISSUE-D

Eastern C.O.S 1:100 @ A1



Eastern C.O.S 1:100 @ A1



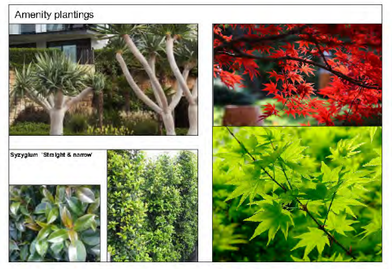
Typical design images.



Entry landing water feature wall

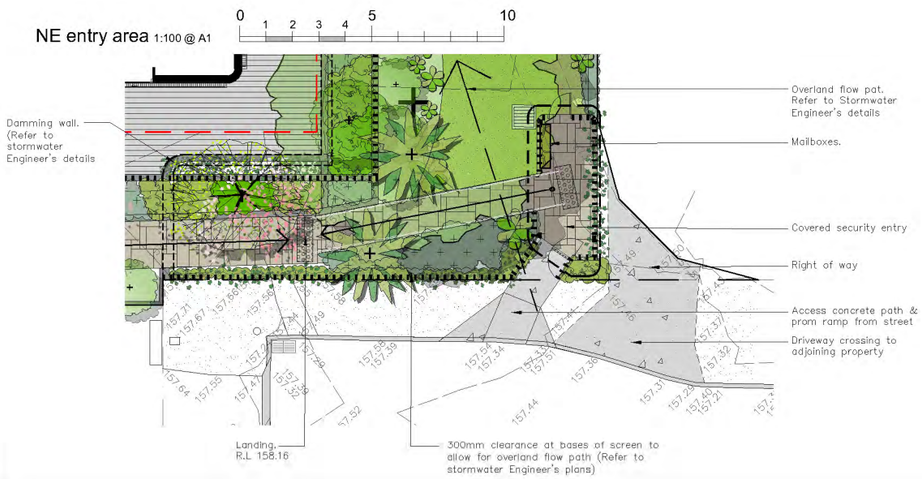


Amenity plantings

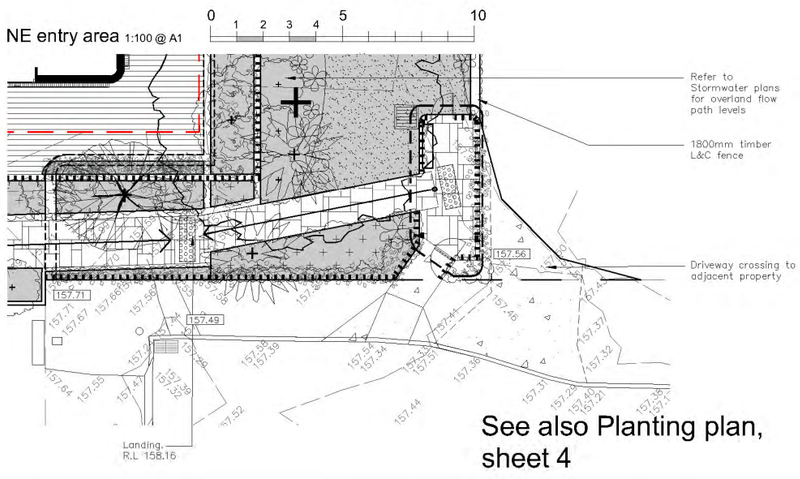




NE entry area 1:100 @ A1



NE entry area 1:100 @ A1



See also Planting plan, sheet 4

Ex. trees (Refer to Arborist's report)	Raised planter over slab (Detail 3)
Ex. trees to be removed	Natural soil (Detail)
	Turfed area (Detail)
	Detail # Sheet 3
	Stone clad wall
	Harvested stone blocks as low wall
	Privacy open screen/ balustrading
	C.O.S paving

Amendments

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Dwg: Detail area plan

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DA

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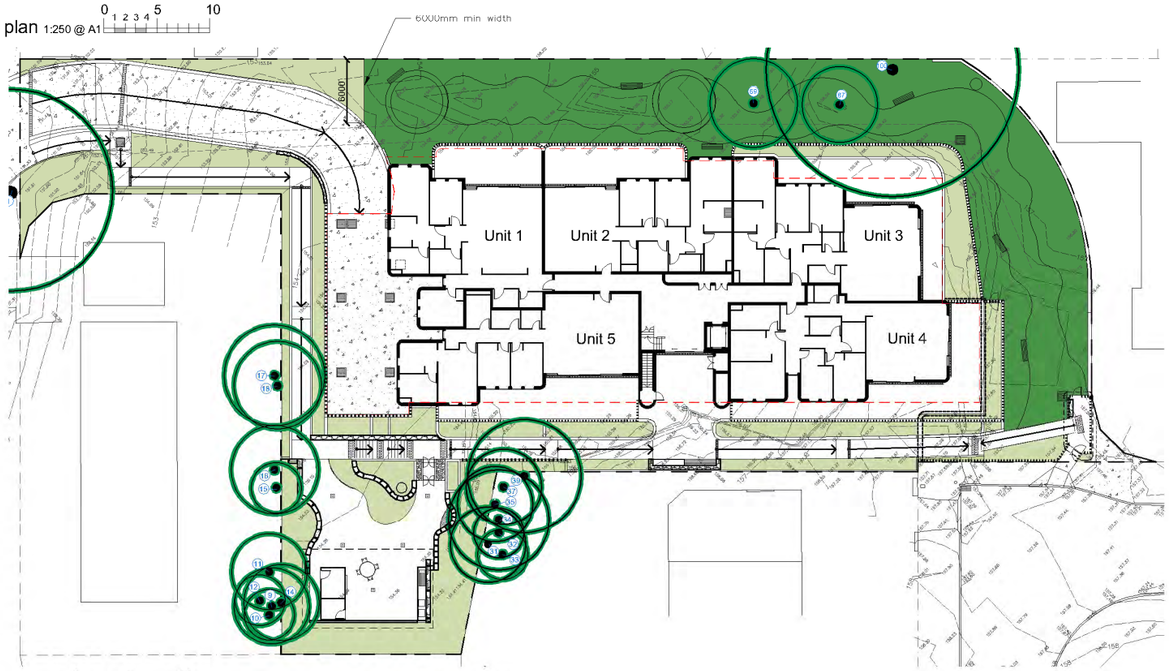
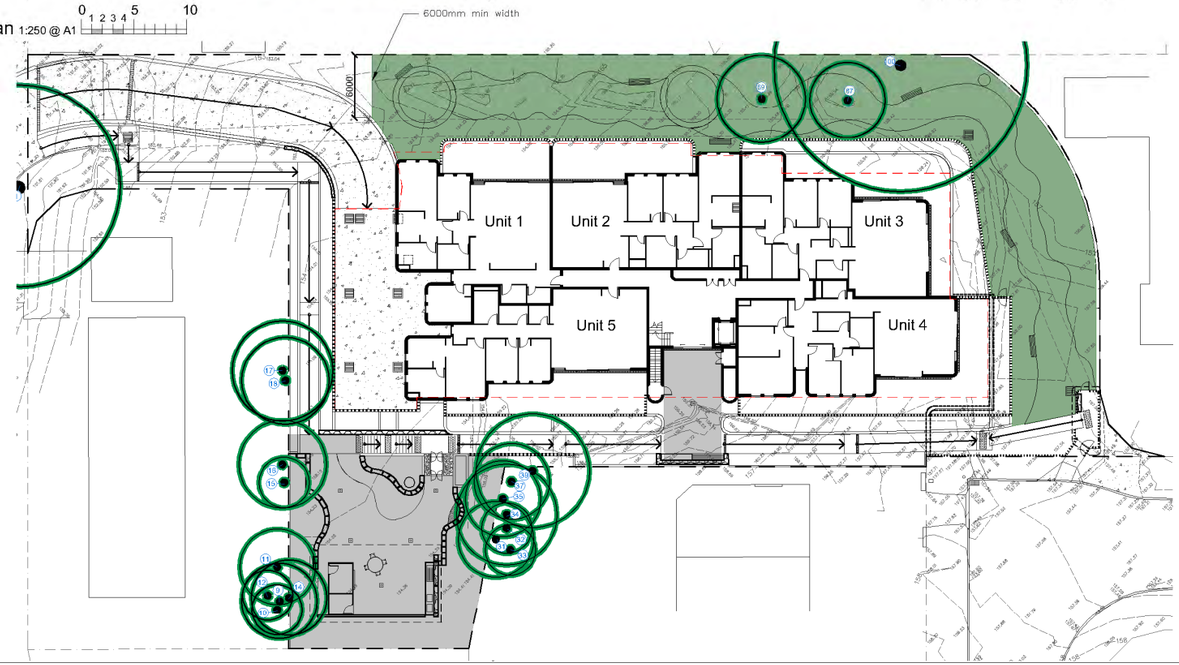
Deep soil plan 1:250 @ A1



Detail plan 1:250 @ A1



Deep soil (Minimum 6000mm width)	731.2 m²	Communal open space mini. width 6000mm co-located with deep soil	1142.9 m²
Additional landscape (less than 6000mm width)	513.1 m²		

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DA

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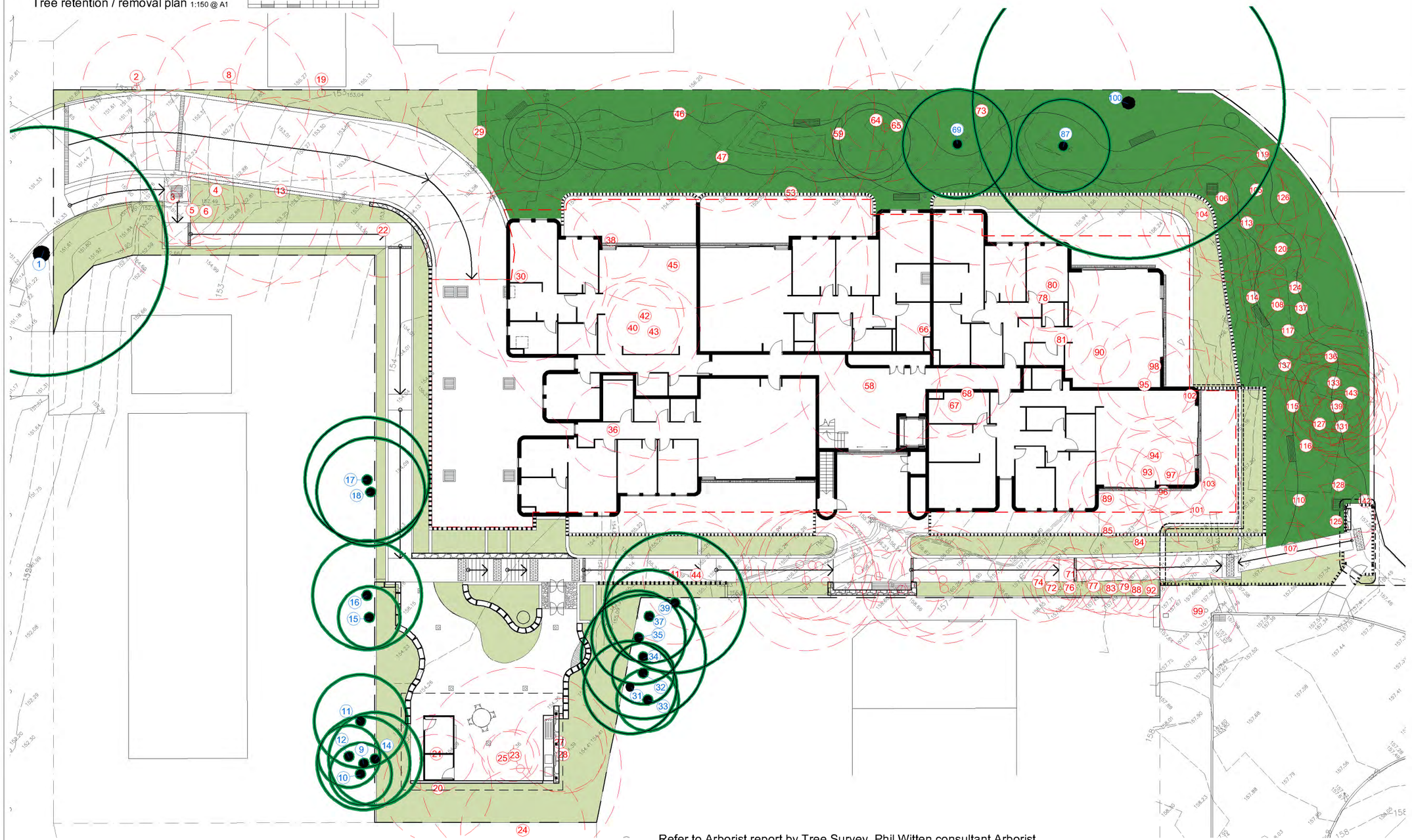
Tree retention / removal plan 1:150 @ A1

0 1 2 3 4 5 10



Refer to Arborist report by Tree Survey. Phil Witten consultant Arborist

65 Ex. trees (Refer to Arborist's report)

45 Ex. trees to be removed

Soft landscape area 1,217.4 m²

See sheet 7 for BASIX areas

Amendments		
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Dwg: Tree retention / removal & soft landscape area

Date: 3.12.24 Scale: 1:150 @A1

Job Ref: 24/2804

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DA

ISSUE-D

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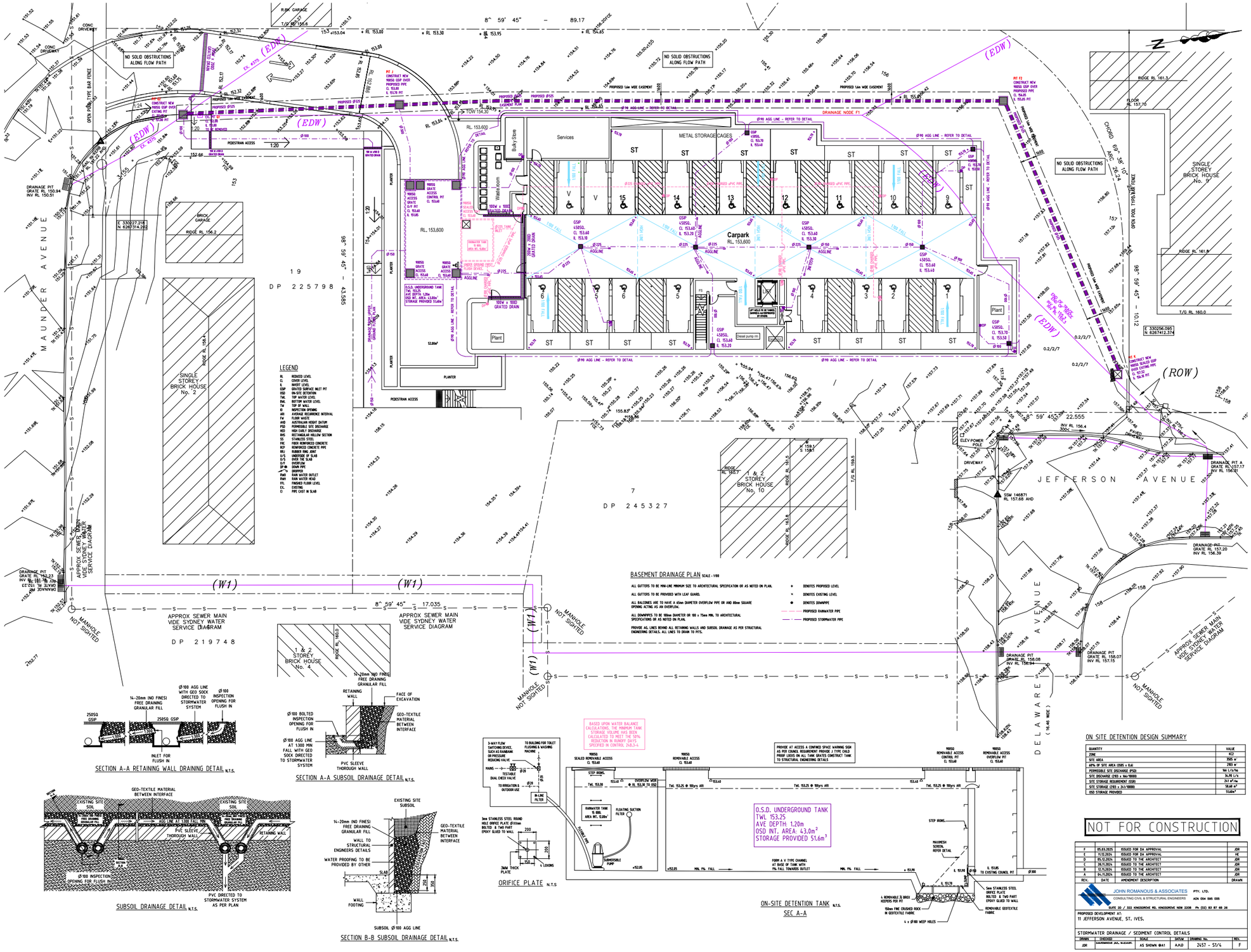
NO SOLID OBSTRUCTIONS ALONG FLOW PATH
(EDW)
(W1)
(ROW)
Carpark
RL. 153,600
METAL STORAGE CAGES
Services
Bulky Store
Waste Room
Plant
Diesel pump rm
Lift
Switch
Pit
DRAINAGE NODE F1
MAUNDER AVENUE
JEFFERSON AVENUE
DELAWARE AVENUE
(16.40 WIDE)
SINGLE STOREY BRICK HOUSE No. 2
SINGLE STOREY BRICK HOUSE No. 4
SINGLE STOREY BRICK HOUSE No. 9
2 STOREY BRICK HOUSE No. 10
BRICK GARAGE
RIDGE RL 156.2
RIDGE RL 161.3
RIDGE RL 161.9
RIDGE RL 160.7
RIDGE RL 165.8
FLOOR RL 157.70
T/G RL 160.0
T/G RL 159.5
T/G RL 165.8
DRIVEWAY
PLANTER
PEDESTRIAN ACCESS
OPEN POOL TYPE BAR FENCE
CONC DRIVEWAY
CONC DRIVEWAY
WIRE GUIDED GATE
DRAINAGE PIT GRATE RL 150.94 INV RL 150.51
DRAINAGE PIT GRATE RL 152.23 INV RL 151.93
DRAINAGE PIT GRATE RL 157.20 INV RL 156.39
DRAINAGE PIT GRATE RL 157.17 INV RL 156.81
DRAINAGE PIT GRATE RL 156.08 INV RL 155.94
DRAINAGE PIT GRATE RL 157.07 INV RL 157.15
INV RL 156.4
ELEV POWER POLE 10.4
SSM 146871 RL 157.68 AHD
E 330227.214 N 6267314.292
E 330256.095 N 6267412.374
1 9 DP 225798
98° 59' 45" 43.585
8° 59' 45" 89.17
8° 59' 45" 17.035
8° 59' 45" 22.555
CHORD 69° 36' 10" 26.14
98° 59' 45" 10.12
7 DP 245327
DP 219748
APPROX SEWER MAIN VIDE SYDNEY WATER SERVICE DIAGRAM
MANHOLE NOT SIGHTED
PROPOSED 150 DIA EASEMENT
PROPOSED 1.5m WIDE EASEMENT
PROPOSED 1.5m WIDE EASEMENT
PROPOSED 3.0m WIDE EASEMENT
PIT J1 CONSTRUCT NEW 900SQ GSP OVER PROPOSED PIPE CL 153.18 IL 152.78 PIT
PIT F2 CONSTRUCT NEW 900SQ GSP OVER PROPOSED PIPE CL 156.45 IL 155.85 PIT
PIT F1 CONSTRUCT NEW 900SQ GSP OVER EXISTING PIT CL 153.85 IL 153.25 PIT
PIT F3 CONSTRUCT NEW 900SQ SEALED GSP OVER EXISTING PIPE CL 157.63 IL 156.91 PIT
900SQ GRATE ACCESS CONTROL PIT CL 153.40
900SQ REMOVABLE ACCESS CONTROL PIT CL 153.40
900SQ REMOVABLE ACCESS OVERFLOW PIT CL 153.40
GSP 450SQ. CL 153.40 IL 153.10
GSP 450SQ. CL 153.40 IL 153.20
GSP 450SQ. CL 153.70 IL 153.10
1200W x 1000 GRATED DRAIN
200W x 200D GRATED DRAIN
Ø225 AGGLINE
Ø150 AGGLINE
Ø90 AGG LINE - REFER TO DETAIL
100W FALL
300W FALL
RL 153.600
RL 153.95
RL 154.65
RL 153.30
RL 153.00
RL 154.22
RL 154.50
RL 154.76
RL 154.64
RL 154.51
RL 154.76
RL 154.432
RL 154.689
RL 155.00
RL 155.155
RL 155.72
RL 155.20
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RL 155.204
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RL 152.70
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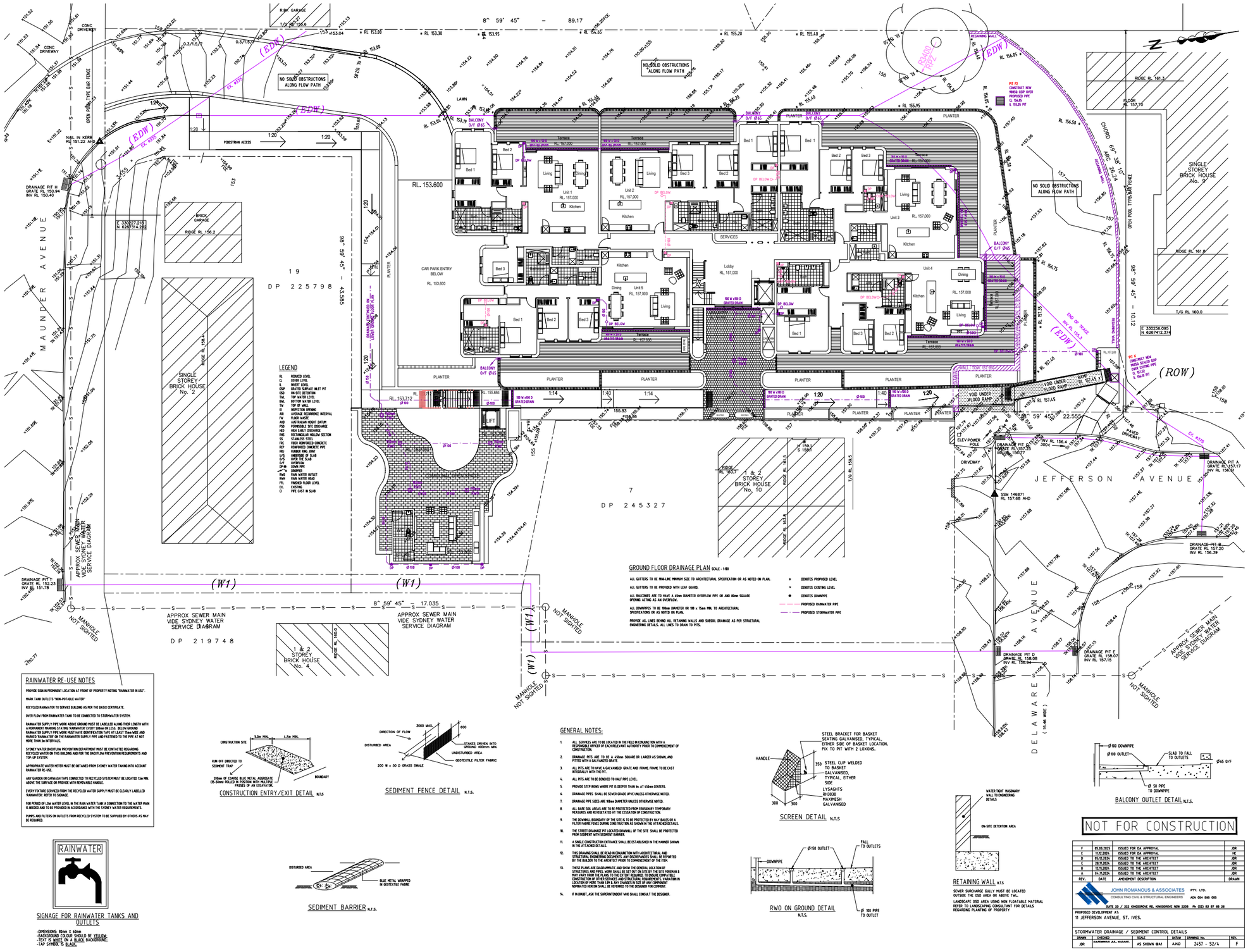
RL


MAUNDER AVENUE
JEFFERSON AVENUE
DELAWARE AVENUE
LOT 19 DP 225798 43.585
LOT 7 DP 245327
LOT 1 & 2 DP 219748
SINGLE STOREY BRICK HOUSE No. 2
1 & 2 STOREY BRICK HOUSE No. 4
1 & 2 STOREY BRICK HOUSE No. 10
SINGLE STOREY BRICK HOUSE No. 9
BRICK GARAGE
R/W GARAGE
RL. 153.600
CAR PARK ENTRY BELOW RL. 153.600
LIFT
PLANTER
BALCONY O/F Ø45
PEDESTRIAN ACCESS
OPEN POOL TYPE BARRIER FENCE
CONC DRIVEWAY
NAIL IN KERB RL 151.22 AHD
DRAINAGE PIT H GRATE RL 150.94 INV RL 150.40
E 330227.218 N 6267314.252
E 330256.095 N 6267412.374
SSM 146871 RL 157.68 AHD
DRAINAGE PIT A GRATE RL 157.17 INV RL 156.91
DRAINAGE PIT B GRATE RL 157.20 INV RL 156.39
DRAINAGE PIT C GRATE RL 152.23 INV RL 151.78
DRAINAGE PIT D GRATE RL 156.08 INV RL 150.94
DRAINAGE PIT E GRATE RL 157.07 INV RL 157.15
PIT F2 CONSTRUCT NEW 900SQ GSP OVER PROPOSED PIPE CL 156.25 IL 155.85 PIT
PIT K CONSTRUCT NEW 900SQ GRATED GSP OVER EXISTING PIPE CL 157.32 IL 156.96 PIT
APPROX SEWER MAIN VIDE SYDNEY WATER SERVICE DIAGRAM
MANHOLE NOT SIGHTED
NO SOLID OBSTRUCTIONS ALONG FLOW PATH
(EDW)
(W1)
(ROW)
Ex. K375
8° 59' 45" – 89.17
98° 59' 45" – 43.585
8° 59' 45" – 17.035
98° 59' 45" – 10.12
CHORD 69° 35' 10" ARC 26.14
8° 59' 45" – 22.555
RIDGE RL 161.3
FLOOR RL 157.70
RIDGE RL 161.9
T/G RL 160.0
RIDGE RL 156.2
RIDGE RL 158.7
RIDGE RL 160.7
RIDGE RL 161.0
T/G RL 156.9
RIDGE RL 156.4
RIDGE RL 160.0
RIDGE RL 160.1
RIDGE RL 160.5
RIDGE RL 160.6
RIDGE RL 160.8
RIDGE RL 161.1
RIDGE RL 161.2
RIDGE RL 161.3
RIDGE RL 161.4
RIDGE RL 161.5
RIDGE RL 161.6
RIDGE RL 161.7
RIDGE RL 161.8
RIDGE RL 161.9
RIDGE RL 162.0
RIDGE RL 162.1
RIDGE RL 162.2
RIDGE RL 162.3
RIDGE RL

LEGEND

RL	REDUCED LEVEL
CL	COVER LEVEL
IL	INVERT LEVEL
GSP	GRATED SURFACE INLET PIT
OSD	ON-SITE DETENTION
TWL	TOP WATER LEVEL
BWL	BOTTOM WATER LEVEL
TW	TOP OF WALL
IO	INSPECTION OPENING
ARI	AVERAGE RECURRENCE INTERVAL
FW	FLOOR WASTE
AHD	AUSTRALIAN HEIGHT DATUM
PSD	PERMISSIBLE SITE DISCHARGE
HED	HIGH EARLY DISCHARGE
RHS	RECTANGULAR HOLLOW SECTION
SS	STAINLESS STEEL
FRC	FIBER REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
RRJ	RUBBER RING JOINT
U/S	UNDERSIDE OF SLAB
O/S	OVER THE SLAB
O/F	OVERFLOW
DP ●	DOWN PIPE
	DROPPER
RWO	RAIN WATER OUTLET
RWH	RAIN WATER HEAD
FFL	FINISHED FLOOR LEVEL
EX.	EXISTING
CI	PIPE CAST IN SLAB

GENERAL NOTES:

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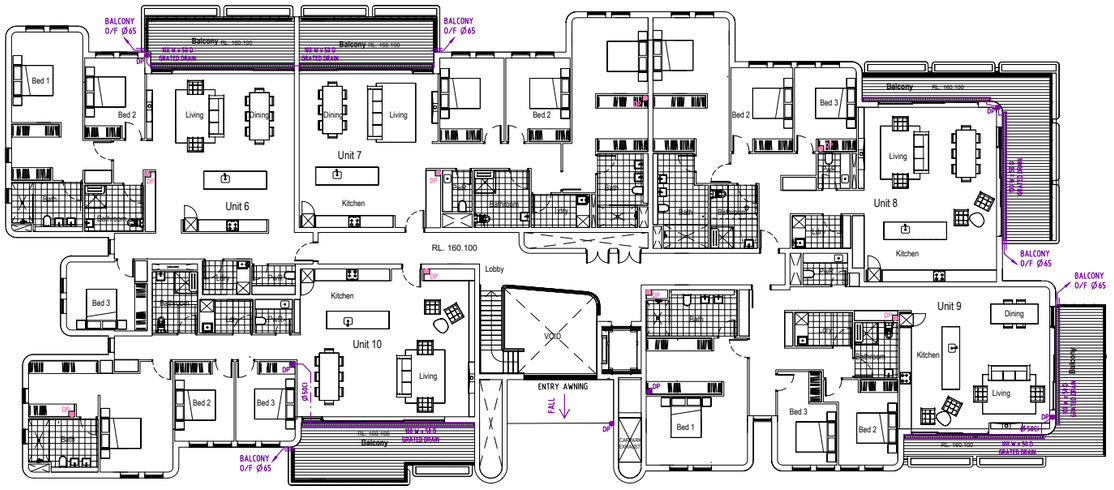
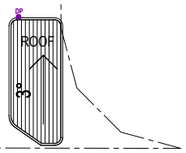
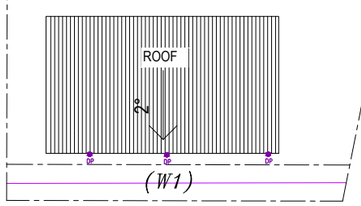






FIRST FLOOR DRAINAGE PLAN SCALE - 1:100

ALL GUTTERS TO BE MIN-LINE MINIMUM SIZE TO ARCHITECTURAL SPECIFICATION OR AS NOTED ON PLAN.

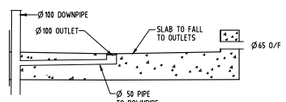
ALL GUTTERS TO BE PROVIDED WITH LEAF GUARD.

ALL BALCONIES ARE TO HAVE A 65mm DIAMETER OVERFLOW PIPE OR AND 80mm SQUARE OPENING ACTING AS AN OVERFLOW.

ALL DOWNPIPES TO BE 100mm DIAMETER OR 100 x 75mm MIN. TO ARCHITECTURAL SPECIFICATIONS OR AS NOTED ON PLAN.

PROVIDE AG. LINES BEHIND ALL RETAINING WALLS AND SUBSOIL DRAINAGE AS PER STRUCTURAL ENGINEERING DETAILS. ALL LINES TO DRAIN TO PITS.

*	DENOTES PROPOSED LEVEL
×	DENOTES EXISTING LEVEL
●	DENOTES DOWNPIPE
	PROPOSED RAINWATER PIPE
	PROPOSED STORMWATER PIPE



BALCONY OUTLET DETAIL N.T.S.

NOT FOR CONSTRUCTION

REV.	DATE	AMENDMENT DESCRIPTION	DRAWN
F	05.03.2025	ISSUED FOR DA APPROVAL	JDR
E	11.12.2024	ISSUED FOR DA APPROVAL	HE
D	05.12.2024	ISSUED TO THE ARCHITECT	JDR
C	28.11.2024	ISSUED TO THE ARCHITECT	JDR
B	12.11.2024	ISSUED TO THE ARCHITECT	JDR
A	04.11.2024	ISSUED TO THE ARCHITECT	JDR

JOHN ROMANOUS & ASSOCIATES PTY. LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS ACN 054 595 005
SUITE 2D / 322 KINGSGROVE RD. KINGSGROVE NSW 2208 Ph (02) 83 87 68 26

PROPOSED DEVELOPMENT AT:
11 JEFFERSON AVENUE, ST. IVES.

STORMWATER DRAINAGE / SEDIMENT CONTROL DETAILS

DRAWN	CHECKED	SCALE	DATUM	DRAWING No.	REV.
JDR	D.ROMANOUS B.E. M.I.E.AUST.	AS SHOWN @A1	A.H.D	2457 - S3/4	F

LEGEND

RL	REDUCED LEVEL
CL	COVER LEVEL
IL	INVERT LEVEL
GSIP	GRATED SURFACE INLET PIT
OSD	ON-SITE DETENTION
TWL	TOP WATER LEVEL
BWL	BOTTOM WATER LEVEL
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RCP	REINFORCED CONCRETE PIPE
RRJ	RUBBER RING JOINT
U/S	UNDERSIDE OF SLAB
O/S	OVER THE SLAB
O/F	OVERFLOW
DP ●	DOWN PIPE
	DROPPER
RWO	RAIN WATER OUTLET
RWH	RAIN WATER HEAD
FFL	FINISHED FLOOR LEVEL
EX.	EXISTING
CI	PIPE CAST IN SLAB

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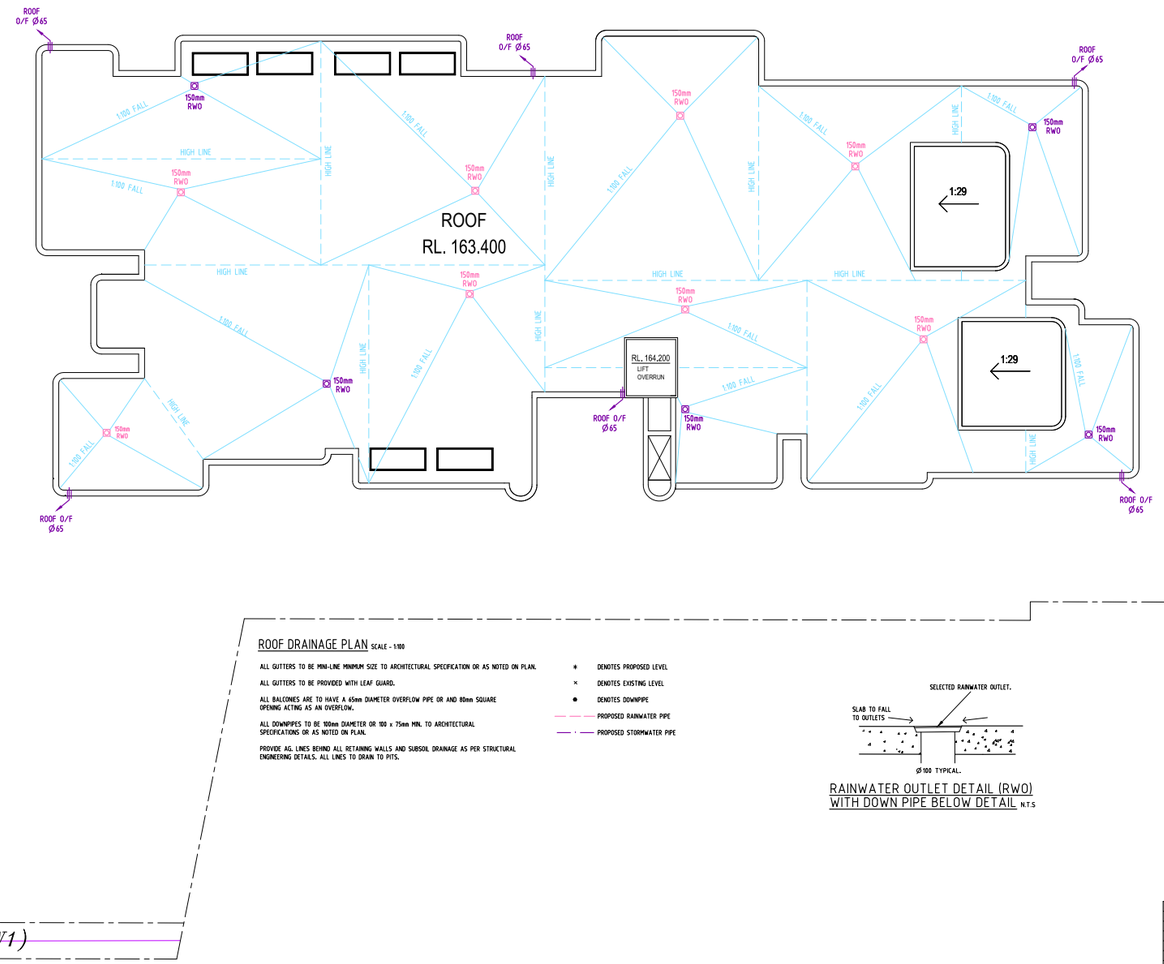

ROOF DRAINAGE PLAN SCALE - 1:100

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×	DENOTES EXISTING LEVEL
●	DENOTES DOWNPIPE
	PROPOSED RAINWATER PIPE
	PROPOSED STORMWATER PIPE

RAINWATER OUTLET DETAIL (RWO) WITH DOWN PIPE BELOW DETAIL N.T.S

NOT FOR CONSTRUCTION

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DRAWN	CHECKED	SCALE	DATUM	DRAWING No.	REV.
JDR	ROMANOUS A.E. M.I.E.AUST.	AS SHOWN @A1	A.H.D	2457 - S4/4	F

DEVELOPMENT APPLICATION

SUMMARY SHEET

REPORT TITLE:	130 KILLEATON STREET, ST IVES - DEMOLITION OF EXISTING STRUCTURES AND CONSTRUCTION OF A RESIDENTIAL FLAT BUILDING CONSISTING OF 37 APARTMENTS OVER SEVEN STOREYS WITH BASEMENT PARKING
ITEM/AGENDA NO:	GB.5

APPLICATION NO:	eDA0170/25
ADDRESS:	130 Killeaton Street, St Ives
WARD:	St Ives
DESCRIPTION OF PROPOSAL:	Demolition of existing structures and construction of a residential flat building consisting of 37 apartments over seven storeys, with basement parking
APPLICANT:	AHG Homebush Pty Ltd
OWNER:	AHG Homebush Pty Ltd
DATE LODGED:	14 April 2025
SUBMISSIONS:	34 submissions
ASSESSMENT OFFICER:	Peggy Wong
RECOMMENDATION:	Refusal

KLPP REFERRAL CRITERION:	Sensitive development and to which the ADG applies and contentious development that received 10 or more unique submissions

PURPOSE OF REPORT

To determine Development Application No. eDA0170/25 for demolition of existing structures and construction of a residential flat building consisting of 37 apartments over seven storeys, with basement parking at 130 Killeaton Street, St Ives.

This application is reported to the Ku-ring-gai Local Planning Panel in accordance with the Minister's Section 9.1 Local Planning Panels Direction, as it:

(a) is sensitive development to which Chapter 4 (Design of Residential Apartment Development) of SEPP (Housing) 2021 applies and

(b) is contentious development that received 10 or more unique submissions by way of objection in accordance with the Minister's S 9.1 Local Planning Panels Direction.

RECOMMENDATION

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council as consent authority under Section 4.16 of the Environment Planning and Assessment Act 1979, refuse development consent to No eDA0170/25 for demolition of existing structures and construction of a residential flat building consisting of 37 apartments over seven storeys with basement parking at 130 Killeaton Street, St Ives, for the reasons provided in the Development Assessment Report **(Attachment A1)**.

Peggy Wong
Executive Assessment Officer

Selwyn Segall
Team Leader - Development Assessment

Shaun Garland
Manager Development Assessment Services

Michael Miocic
Director Development & Regulation

Attachments:

A1⇩	Development Assessment Report	2025/187515
A2⇩	Location Sketch	2025/273072
A3⇩	Zoning Sketch	2025/273074
A4⇩	Architectural Plans	2025/287501
A5⇩	Landscape Plans	2025/104731
A6⇩	Stormwater Plans	2025/104736
A7⇩	Clause 4.6 Variation Request	2025/104727

DEVELOPMENT APPLICATION

ASSESSMENT REPORT

REPORT TITLE	130 Killeaton Street, St Ives - Demolition of existing structures and construction of a residential flat building consisting of 37 apartments over seven storeys, with basement parking

APPLICATION NO	eDA0170/25
PROPERTY DETAILS	130 Killeaton Street St Ives Lot 1 DP 748682 2,803m² R4 High Density Residential
WARD	St Ives
PROPOSAL/PURPOSE	Demolition of existing structures and construction of a residential flat building consisting of 37 apartments over seven storeys, with basement parking
TYPE OF DEVELOPMENT	Integrated
APPLICANT	AHG Homebush Pty Ltd
OWNER	AHG Homebush Pty Ltd
DATE LODGED	14 April 2025
RECOMMENDATION	Refusal

PURPOSE OF REPORT

To determine Development Application No. eDA0170/25 for demolition of existing structures and construction of a residential flat building consisting of 37 apartments over seven storeys, with basement parking (Affordable Housing).

This application is reported to the Ku-ring-gai Local Planning Panel in accordance with the Minister's Section 9.1 Local Planning Panels Direction, as it:

(a) is sensitive development to which Chapter 4 (Design of Residential Apartment Development) of SEPP (Housing) 2021 applies, and

(b) is contentious development in respect of which 10 or more unique submissions, by way of objection, have been received.

INTEGRATED PLANNING AND REPORTING

Places, Spaces & Infrastructure

Community Strategic Plan Long Term Objective	Delivery Program Term Achievement	Operational Plan Task
P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai.	Applications are assessed in accordance with state and local plans.	Assessments are of a high quality, accurate and consider all relevant legislative requirements.

EXECUTIVE SUMMARY

Issues	Building height Building separation Building bulk and scale Streetscape impacts Incorrect calculation of gross floor area and floor space ratio Ecological and biodiversity Deep soil area Excessive car parking spaces requiring additional excavation location of vehicular access and pedestrian pathways Amenity impacts Accessibility Insufficient information
Submissions	34 unique submissions received
Land and Environment Court	Yes

Recommendation Refusal

HISTORY

Site history

The site has a history of low density residential use.

Previous applications history

A Pre-DA consultation was not undertaken with Council prior to the lodgement of this Development Application.

Council's records show previous applications relating to the site as follows:

Type	Application	Description	Decision	Date
ConvBA	87/01972	Dwelling	Approved	11/01/1988

Planning proposal history

A formal Pre-planning proposal application (Reference No. 2021/381101) was lodged on 11 November 2021 seeking advice for a Planning Proposal to change the zoning of the site from SP2 – Infrastructure to R4 – High Density Residential Zone, amend the floor space ratio (FSR) development standard to 1.3:1 and amend the maximum building height development standard to 17.5 metres.

A Pre-planning proposal meeting, attended by Council Strategic Planning staff and the applicant, was held on 15 December 2021. The following issues were identified and were required to be addressed in any future planning proposal:

- consistency with Council's Local Housing Strategy and Local Planning Priorities relating to revitalisation of local centres, mixed use developments to meet the needs of the community and activate transport,
- identification of threatened vegetation, remnant canopy and biodiversity on the site, and
- urban design study to identify and address site specific controls.

A Planning Proposal was lodged with Council on 31 March 2022. Following consideration by the Ku-ring-gai Local Planning Panel (KLPP) on 19 September 2022 and at the Ordinary Meeting of Council on 18 October 2022, the application was deferred, subject to a site inspection. Consequently, at its meeting on 13 December 2022, Council resolved that amendments to supporting documentation were required to be prepared and submitted for further assessment.

On 16 May 2023, Council resolved to not to support the Planning Proposal and that the NSW Department of Planning and Environment be advised that the application should not proceed to a Gateway Determination.

On 21 August 2023, the Sydney North Planning Panel (SNPP) considered a Rezoning Review application for the site and resolved to submit the Planning Proposal for a Gateway determination. Following public exhibition of the Planning Proposal between 16 February and 15 March 2024, the SNPP approved the application on 30 July 2024 and the KLEP was

amended accordingly on 6 August 2024.

Current Development Application history

Date	Action
14 April 2025	Application lodged.
29 April to 29 May 2025	The application was notified to neighbouring property owners for a period of 30 days. 34 unique submissions, raising objection to the application, were received.
26 June 2025	Council sent an issues letter to the applicant seeking additional information to address the following: • GFA calculations must include the internal communal area and garbage bin storage in the lobby of each floor level. • A Clause 4.6 request seeking variation to the FSR development standard is to be provided if the revised GFA and FSR exceeds the development control. • The clearing of vegetation requires a Biodiversity Development Assessment Report (BDAR) to be submitted for consideration under Section 7.3 of the Biodiversity Conservation Act 2016 as the site contains Sydney Turpentine Ironbark Forest and is listed as a Critically Endangered Ecological Community. • Levels 4 and 5 do not achieve the minimum 9 metres building separation to the side boundaries required under Part 3F of the ADG and habitable windows and balconies have direct sightlines to habitable rooms and balconies of adjoining properties. • Building separation between habitable windows and balconies of apartments within the development are insufficient to provide visual and acoustic privacy of future occupants. • Discrepancies between the architectural plans and the Traffic Impact Assessment Report are to be corrected, particularly the number and mix of apartments and calculation of car parking rates. The architectural plans are to clearly label the accessible car parking spaces for visitors and platinum level apartments. • The proposal provides 28 car parking spaces beyond the requirement and results in additional excavation for basement Level 3 which is excessive. • Calculation of deep soil areas to be revised in accordance with the definition of the KDCP and exclude paved areas, pathways wider than 1.2 metres, built structures, planters and landscaped areas less than 2 metres wide. • The setback of the driveway from the eastern side boundary is inadequate and will impact on deep soil landscaping. • The pedestrian pathway and pergola structure within eastern side setback is unnecessary as the building has a primary pedestrian entry point and a secondary pathway adjacent to the western side boundary. The pathway and

	pergola structure should be deleted and replaced with landscape planting. • Lift lobbies have insufficient circulation space and are required to provide a minimum width of 1.8 metres adjacent to the lift. • Additional details on the architectural plans are required to correct discrepancies and be consistent with the proposed works identified in supplementary documentation. • The architectural and landscape plans contain discrepancies, particularly in relation to the alignment and width of pathways and are required to be amended to be consistent. • Insufficient shadow diagrams have been submitted, they do not clearly identify existing solar access and the extent of proposed overshadowing to habitable windows or private open space of adjoining properties compared to a compliant building envelope. • The BASIX Certificate is inconsistent with the landscape plan regarding the calculation of common lawn areas and private landscaping. A BASIX compliance plan, clearly identifying the different areas counted as common lawn and private landscaping including gardens, lawn and planters, is required to be submitted. • A swept path analysis and longitudinal section are required to demonstrate that Council's waste collection vehicle can enter and exit the waste storage area in a forward direction and has sufficient clearance along the path of travel. • An indicative Construction Traffic Management Plan (CTMP) and an indicative construction methodology identifying the largest vehicle that will enter and exit the site during demolition, excavation and construction stages has not been submitted. • Insufficient details have been provided within the Geotechnical Investigation Report as site specific subsurface profile, geotechnical parameters, recording of groundwater and recommendations for excavation methods and vibration monitoring have not been included. • Discrepancies contained within the Acoustic Report relating to air conditioning condenser units and number of apartments needs to be clarified.
17 July 2025	The applicant lodged a Class 1 deemed refusal appeal with the NSW Land and Environment Court.

Land and Environment Court appeal history

There is a current Class 1 appeal against the deemed refusal of the subject Development

Application, which was filed with the Land and Environment Court (Court) on 17 July 2025. The Statement of Facts and Contentions were filed with the Court on 21 August 2025.

A Section 34 Conciliation Conference is scheduled for 15 December 2025.

THE SITE



Figure 1: Aerial photograph of the site, which is coloured red and surrounding developments

Site description

The subject site is described as Lot 1 in DP 748682 and is known as No. 130 Killeaton Street, St Ives **(Figure 1)**.

The site is located on the southern side of Killeaton Street, to the east of the intersection with Mona Vale Road. The site is regular in shape with a frontage to Killeaton Street, measuring 34.6 metres, a depth of 81.3 metres and has an area of 2,803m² by survey. The site is generally flat, with a slight fall of 0.69 metres from the north-eastern corner to the rear and 0.19 metres from the north-western corner to the rear.

The site is currently occupied by a two-storey dwelling house, with an attached three car garage accessed from Killeaton Street.

The site contains numerous tall trees within the front, side and rear setbacks that screen the existing dwelling from the street and adjoining properties. The existing trees contribute to the landscaped character of the streetscape and locality.

Photographs of the site are contained in **Figures 2 to 6** below.



Figure 2: View of site from Killeaton Street



Figure 3: View of existing dwelling house looking north from rear open space



Figure 4: View of existing trees at the south-western corner of the site and the adjoining school grounds (Corpus Christi Catholic Primary School)



Figure 5: Looking south from the rear yard towards the southern boundary



Figure 6: Existing trees and building setback from the western side boundary, looking north from the rear yard

Constraint:	Application:
Visual character study category	1945-1968
Easements/rights of way	N/A
Heritage Item - Local	No
Heritage Item - State	No
Heritage conservation area	No
Within 100m of a heritage item	No
Bush fire prone land	No
Natural Resources Biodiversity	No
Natural Resources Greenweb	No
Natural Resources Riparian	No
Within 25m of Urban Bushland	No
Contaminated land	No

Surrounding development

The site is adjoined by five storey residential flat buildings immediately to the east (No. 132-138 Killeaton Street) and west (No. 126 Killeaton Street). The adjoining residential flat buildings have vehicular access from Killeaton Street to basement car parking. There are street trees adjacent to the street frontages of Nos. 126 and 132-138 Killeaton Street and landscaping within the front setbacks. There are currently no street trees within the grass verge on Killeaton Street adjacent to the subject site.

Directly opposite the site, on the northern side of Killeaton Street, is a two storey residential care facility for 125 occupants, with one level of basement car parking accessed from Killeaton Street (No. 97 Killeaton Street).

Development to the east of the site and on the southern side of Killeaton Street consists of 10 townhouses with a shared basement carpark at No. 142 Killeaton Street and a retirement village at the intersection of Killeaton Street and Yarrabung Road. Existing developments

further to the north-east of the site consist of two storey detached dwellings with integrated garages accessed from Killeaton Street.

The south and south-west boundaries of the site, are the playing fields and open spaces of Masada College and Corpus Christi Catholic Primary School, respectively.

The St Ives Shopping Village is located to the south-west and within 800 metres of the site.

The closest bus stop is located 150 metres from the site on Mona Vale Road, in front of the Corpus Christi Catholic Church. Three bus routes (Nos. 197, 194 and 582) utilise the bus stop providing access to Macquarie University, the city (Town Hall) and St Ives Shopping Centre.

There are no heritage items or conservation areas located adjacent to or within 100 metres of the site.

Photographs of surrounding developments are contained in **Figures 7 to 9** below.



Figure 7: Adjoining development to the west of the site at No. 126 Killeaton Street



Figure 8: Adjoining development to the east of the site at No. 132-138 Killeaton Street



Figure 9: Residential care facility opposite the site at No. 97 Killeaton Street

THE PROPOSAL

The application proposes the demolition of existing structures, removal of 65 trees, excavation and construction of a seven storeys residential flat building. The residential flat building consists of 37 apartments (8 affordable housing apartments), 3 levels of basement car parking for 79 car spaces and 41 bicycle parking spaces, and associated landscape works. The proposed works are detailed as follows:

Basement 1

- 11 residential car spaces, including 8 accessible spaces
- 10 visitor car spaces, including carwash bay
- 3 waiting bays
- 4 visitor bicycle parking spaces
- 2 lifts and 2 fire stairs to access basement floors below and residential floors above
- 2 x waste rooms
- bulky waste room
- pump room
- plant room
- 17 storage areas for apartments

Basement 2

- 35 residential car spaces
- 3 waiting bays
- bicycle storage room for 19 bicycles
- 18 storage areas for apartments
- 2 electrical cupboards
- 2 lifts and 2 fire stairs to access basement floors below and residential floors above

Basement 3

- 23 residential car spaces
- bicycle storage room for 18 bicycles
- 2 lifts and 2 fire stairs to access basement floor and residential floors above
- 1 electrical cupboard
- 6 storage areas for apartments

Ground floor

- 5 x 2 bedrooms apartments with private terraces
- 1 x 3 bedrooms apartment with private terraces
- 2 x lobbies with lift and fire stairs, mechanical and plant cupboards, garbage chute and bin storage
- indoor communal area with an outdoor terrace and an accessible water-closet
- centrally located primary building entry with pathway from Killeaton Street
- secondary pedestrian pathways within the east and west side setback
- new driveway and ramp to basement car park
- 1.5 metres high aluminium palisade fence within the front building line with 3 pedestrian gates
- open steel pergola set back 1.3 metres from the eastern boundary
- fire hydrant booster adjacent to the western boundary within the front setback
- landscape works including new plantings, pavers and pathways for pedestrian access

Levels 1 and 2

- 5 x 2 bedrooms apartments
- 2 x 3 bedrooms apartments
- 2 x lobbies with lift and fire stairs, mechanical and plant cupboards, garbage chute and bin storage

- landscape planter boxes adjacent to hallways, linking centrally located apartments to lobbies and planters on the northern elevation

Levels 3 and 4

- 4 x 3 bedrooms apartments
- 2 x 2 bedrooms apartments
- 2 x lobbies with lift and fire stairs, mechanical and plant cupboards, garbage chute and bin storage
- landscape planter boxes adjacent to hallways, linking centrally located apartments to lobbies and planters on the northern elevation

Level 5

- 4 x 4 bedrooms apartments
- 2 x lobbies with lift and fire stairs, mechanical and plant cupboards, garbage chute and bin storage
- landscape planter boxes adjacent to hallways, linking centrally located apartments to lobbies and planters on the northern elevation

Level 6

- 2 x 4 bedrooms apartments
- communal open space with BBQ and seating, landscaping with open pergola

Roof

- access hatch to roof for maintenance purposes
- 2 x lift overruns
- 1.5 metres high screening around the perimeter of mechanical plant areas

CONSULTATION

Community

In accordance with Appendix 1 of the Ku-ring-gai Community Participation Plan, owners of surrounding properties were given notice of the application. In response, 56 submissions were received, from the following, of which 34 were considered unique submissions and 22 submissions were identical and not considered unique.

1. S and N Cook - Unit 38, 132-138 Killeaton Street, St Ives
2. M Pratt - Unit 70, 132-138 Killeaton Street, St Ives
3. J Kim - Unit 57, 132-1338 Killeaton Street, St Ives
4. A Xu - Unit 123, 132-138 Killeaton Street, St Ives
5. N Zheng - Unit 217, 132-138 Killeaton Street, St Ives
6. T Browsky - Unit 267, 132-138 Killeaton Street, St Ives
7. G Clarke - Unit 278, 132-138 Killeaton Street, St Ives
8. A and R Vernon - Unit 348, 132-138 Killeaton Street, St Ives
9. F So - Unit 360, 132-138 Killeaton Street, St Ives
10. C and E Colyn - Unit 375, 132-138 Killeaton Street, St Ives
11. A Baker - Unit 447, 132-138 Killeaton Street, St Ives
12. J and S Wolfraad -Unit 448, 132-138 Killeaton Street, St Ives
13. H Shen - No unit number, 132-138 Killeaton Street, St Ives
14. A Woodley - No unit number, 132-138 Killeaton Street, St Ives

15. L Cunningham - Unit 410, 126 Killeaton Street, St Ives
16. P Mathers - Unit 307, 126A Killeaton Street, St Ives
17. M Hugo - Unit 102, 126 Killeaton Street, St Ives
18. A Yuan - Unit 314, 126B Killeaton Street, St Ives
19. X Zhong and P Cao - Unit 409, 126B Killeaton Street, St Ives
20. F Pahlevani - Unit 313, 126B Killeaton Street, St Ives
21. N Gorjizadeh - No unit number, 126B Killeaton Street, St Ives
22. L Zaubzer - Strata committee for SP87639 (132-138 Killeaton Street, St Ives) – 2 submissions
23. S Ldewig and D Cramer - 2 Mariana Close, St Ives
24. V Holland - Unit 31, 165-167 Rosedale Road, St Ives
25. S Lawson - 24 King Edward Street, Pymble
26. K Curran - 9 Yarralulma Aveue, St Ives Chase
27. R Harper - 23 Gould Avenue, St Ives
28. K Haywood - Voices of Ku-ring-gai Action Group
29. J Green - STEP Inc Environment group
30. H Shen - Unit 11, 5 Morton Street, Wollstonecraft
31. J Inshaw - 33 Arcadia Road, Galston
32. K Emmett - No address – resident from Galston
33. A Cooper - 49 Aranda Drive, Davidson
34. G Vissel - Unit 5, 5 Narabang Way, Belrose

The submissions raised the following issues:

Construction will take an extended period of time and is bad for the environment. New buildings should be constructed on vacant lots elsewhere.

The proposal for demolition of existing structures and construction of a residential flat building is permissible with consent within the R4 High Density Residential zone. Construction timeframes are not a matter for consideration under the EP&A Act.

The bulk and scale is unsympathetic to the streetscape, is an overdevelopment and will cause over population of the area.

The proposed built form, particularly building separation and landscape impacts, is incompatible with the site and will detract from the amenity of adjoining properties and character of the streetscape.

The proposed 15% affordable housing component is consistent with the objective of the SEPP (Housing) to provide new infill affordable housing and is this component is not considered an overdevelopment of the site nor will it result in over population of the area.

There are limited public transport options in the vicinity of the site. The site is not in close proximity to a train station or transport hub.

The proposed development is permissible and is not required to be in close proximity to a train station or transport hub under the provisions of SEPP (Housing) and the KLEP. Notwithstanding this, the site is within the vicinity of a bus stop and bus routes that provide access to the surrounding locality and to the city.

The traffic report does not contain adequate data reflecting the traffic congestion beyond the one hour AM and PM peak times. The street is experiencing traffic congestion from major developments and there is insufficient street car parking spaces for residents and visitors.

Council's Traffic Engineer has reviewed the traffic report and has not raised an issue with the data provided as it is in accordance with TfNSW Guide to Transport Impact Assessments. The generation of 7 vehicle trips in the morning peak hour and 6 vehicle trips in the evening peak hour can be satisfactorily accommodated within the local and arterial road networks.

Traffic safety for pedestrians

The proposal will result in additional vehicle movements from the site that are within the TfNSW guidelines and are not considered to result in significant adverse impacts on pedestrian safety.

Overshadowing adjoining properties and view loss of the sky

Insufficient information has been submitted to clarify the overshadowing impacts on adjoining properties. As such, the proposed built form is not acceptable in its current form as the extent of amenity impacts on adjoining properties cannot be determined.

The building should be shifted to the west to minimise overshadowing impacts to the east.

The proposed building footprint and envelope do not achieve adequate building separation and are not acceptable, having adverse impacts on the amenity of adjoining properties.

The middle section of the building is unnecessary and should be redesigned.

The proposed building comprises three components, linked by common corridors on each floor level. The middle section of the building is wholly contained within a permissible building footprint and is compliant with building separation controls in the ADG. The middle portion of the building is not considered to have unreasonable visual or acoustic privacy impacts, overshadowing or excessive bulk and scale impacts on adjoining properties or the streetscape and is acceptable. .

There are insufficient side setbacks, resulting in balconies being too close to the adjoining properties.

Agreed. The proposal results in insufficient building separation and does not provide adequate setbacks between proposed balconies and habitable windows and adjoining properties.

The roof top communal open space will give rise to visual and acoustic impacts on neighbouring properties.

The communal open space on Level 6 is not directly aligned with habitable floors of adjoining properties and will not result in direct overlooking as the useable area of the communal space is set back more than 11 metres from the eastern and western side boundaries and will be screened by privacy screens and landscaping. The use of the communal open space on Level 6 is consistent with the design guidance in Part 3D of the ADG for passive recreation and will not result in any unreasonable acoustic impacts on adjoining properties.

Tree removal and insufficient replacement planting will detract from the streetscape and landscape character of the site.

Insufficient information has been provided to identify the ecological and biodiversity impacts

of the proposed tree removal. Council's Senior Landscape Assessment Officer has reviewed the landscape plan and is satisfied that a minimum of 10 trees can be attained on the site, which is acceptable in terms of replacement planting.

Tree protection measures during construction works must be required to protect trees identified for retention.

Conditions requiring tree protection measures during construction works could be imposed if the application were approved.

Additional population will increase pressure on local services and infrastructure.

The proposed residential flat building is consistent with the desired future character for a R4 High Density Residential zone. Should the proposal be approved, appropriate contribution fees would be imposed to ensure the development contributes to the provision of infrastructure to meet the demands of the community.

Internal referrals

Urban design

Council's Urban Design consultant commented on the proposal as follows (summarily):

- *GFA does not appear to be calculated correctly as the ground floor communal area and associated communal circulation space have been excluded. Inclusion of these spaces would result in a marginal non-compliance of the FSR development standard requiring a Clause 4.6 written request to demonstrate that compliance with the development standard is unreasonable or unnecessary in the circumstances, and that there are sufficient environmental planning grounds by which to justify the contravention.*

- *The proposed built form, landscaping and amenity impacts on adjoining properties is not compatible with the desired future character of the area and has impacts including:*

    i. The proposal appears to overshadow adjoining properties resulting in less than 2 hours of direct sunlight to properties to the east and west of the site. Insufficient information has been provided to demonstrate that existing and proposed solar access for adjoining properties achieves solar access requirements of the ADG.
    ii. Building separation of habitable room windows and balconies on the fifth storey to the east and west side boundaries and between balconies of separate units within the development do not achieve the minimum separation requirements of the ADG.
    iii. The 2.5 metres setback of the proposed driveway from the eastern side boundary is contrary to the minimum 6 metres side setback control in the KDCP and will not enable sufficient deep soil planting.
    iv. The footprint and design of Level 6 is inconsistent with the setback requirements in Part 7C.8 of the KDCP and the ADG.

- *Three affordable housing units will receive a minimum of 2 hours direct sunlight between 9am and 3pm on 21 June which equates to 38% of the affordable housing provided within the development. The percentage of affordable units that will receive at least 2 hours of direct sunlight is significantly less than the market apartments, which is inequitable for occupants of the affordable housing units*

and does not contribute to good residential amenity. The proposal does not satisfy the amenity design principle for residential apartment developments in Schedule 9 of the SEPP (Housing) 2021.

- *Site coverage and deep soil areas appear to have been incorrectly calculated as specified exclusions and inclusions in accordance with the definition in the KDCP have not been clearly identified.*

- *Proposed unit mix does not include one-bedroom apartments particularly on ground level and is inconsistent with unit mix requirements in Part 7C.4 of the KDCP.*

- *Basement storage areas are not shown to be separated from tanked walls by an accessible maintenance passage as required by Part 7C.3 of the KDCP.*

- *Circulation width outside of lifts on each floor level is less than 1.8 metres and is non-compliant with requirements under Part 7C.15 of the KDCP.*

Council's Urban Design Consultant's assessment is concurred with and the proposal is not considered to be acceptable on urban design grounds.

Landscaping

Council's Senior Landscape and Tree Assessment Officer raised concerns with tree removal and impacts, insufficient deep soil and landscape areas, BASIX and insufficient/inaccurate information on the plans.

The conclusions of Council's Senior Landscape and Tree Assessment Officer's assessment are concurred with and the proposal is considered to be unacceptable on landscaping grounds.

Ecology

Council's Ecological Assessment Officer raised concerns that the proposal results in significant impacts on identified Sydney Turpentine Ironbark Forest (STIF) and the proposal triggers entry into the Biodiversity Offsets Scheme which requires the preparation of a Biodiversity Development Assessment Report (BDAR). As no BDAR has been submitted with the application, the proposal is not acceptable.

Council's Ecological Assessment Officer's assessment is concurred with and the proposal is considered to be unacceptable on ecological grounds.

Engineering

Council's Team Leader Development Engineers raised concerns with car parking, vehicular access, and insufficient information submitted to address construction traffic management and geotechnical investigation.

Council's Team Leader Development Engineer's assessment is concurred with, and the proposal is considered to be unacceptable on engineering grounds.

Environmental Health

Council's Environmental Health Officer commented on the proposal and raised no concerns.

Conditions relating to noise control, mechanical ventilation, waste and recycling storage facilities, construction noise, outdoor lighting and management of contaminated materials would ordinarily be recommended if the application were recommended for approval. These comments are concurred with.

Building

Council's Senior Building Surveyor commented on the proposal and raised no concerns. Conditions concerning access and fire safety provisions would ordinarily be recommended if the application were recommended for approval. These comments are concurred with.

External referrals

The applicant has not identified the proposal as Integrated Development.

Council's Team Leader Development Engineers identified that the submitted Geotechnical Investigation contains insufficient information and does not adequately determine groundwater levels or if permanent dewatering will be required as part of this proposal. As permanent dewatering has not been identified as a requirement, no external referral was sent to the NSW Office of Water. If permanent dewatering is required, the proposal is Integrated Development and development consent cannot be granted by the consent authority prior to concurrence from the NSW Office of Water.

STATUTORY PROVISIONS

State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 Remediation of land

The provisions of Chapter 4 require Council to consider the potential for a site to be contaminated. The subject site has a history of residential use and, as such, it is unlikely to contain any contamination, and further investigation is not warranted in this case.

Draft State Environmental Planning Policy (Remediation of Land)

The draft SEPP is a relevant matter for consideration as it is an Environmental Planning Instrument that has been placed on exhibition. New provisions will be added in the SEPP to:

- *require all remediation work that is to be carried out without development consent, to be reviewed and certified by a certified contaminated land consultant*
- *categorise remediation work based on the scale, risk and complexity of the work*
- *require environmental management plans relating to post-remediation management of sites or ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) to be provided to Council*

The site is unlikely to contain any contamination, and further investigation is not warranted in this case.

State Environmental Planning Policy (Biodiversity & Conservation) 2021 - Chapter 2 Vegetation in non-rural areas

Chapter 2 of the SEPP applies to the issuing of permits for clearing of vegetation and is relevant to the assessment of development applications which include removal of native vegetation.

The merits of the proposed tree removal have been considered in the assessment of the application by Council's Landscape and Tree Assessment Officer and Ecological Assessment Officer who do not support the proposal in its current form. This is because the removal of trees will have a significant impact on the Critically Endangered Ecological Community under the Biodiversity Act 2016, which triggers the Biodiversity Offsets Scheme and requires the preparation of a Biodiversity Development Assessment Report (see commentary under the heading 'Internal Referrals') which has not been submitted.

State Environmental Planning Policy (Sustainable Buildings) 2022 – Chapter 2 Standards for residential development – BASIX

A valid BASIX certificate has been submitted and the proposal is consistent with commitments identified in the certificate. As per the requirements of Clause 2.1(5) the consent authority is not satisfied that the application includes information in which the embodied emissions attributable to the development have been quantified. In particular, the nominated landscape outcomes are inconsistent with the landscape plans and does not enable an accurate calculation of areas for low water use or indigenous species.

State Environmental Planning Policy (Housing) 2021 (SEPP Housing)

SEPP Housing contains several principles including the promotion of the planning and delivery of housing in locations where it will make good use of existing and planned infrastructure and services.

The subject application seeks development consent for a residential building on land that is zoned R4 High Density Residential. The site is not located within the Transport Oriented Development Area of Ku-ring-gai. The subject application also seeks to provide in-fill affordable housing more than the minimum affordable housing requirements under Chapter 5 of SEPP Housing.

The relevant sections of Chapters 2 and 4 of SEPP Housing are considered below -

Chapter 2 – Affordable housing

The subject application involves residential flat development that is subject to Chapter 4. The proposal contains 16.38% affordable housing, which is consistent with the bonus provisions under Chapter 2 for additional floor space ratio (FSR) and building height for the development.

The proposal therefore satisfies Section 15C of SEPP Housing.

The bonus FSR and building height along with the non-discretionary development standards are discussed in the table below –

Development standard	Proposed	Complies
S 16 (1) - Affordable housing requirements for additional floor space ratio Minimum affordable housing component – 10% $\text{affordable housing component} = \frac{\text{additional floor space ratio (as a percentage)}}{2}$	16.38% of GFA for affordable housing (744m²). The applicant has nominated a total GFA of 4,542.8m² and FSR of 1.62:1.	**Unclear**

Maximum permissible floor space – 1.3:1 plus additional 30% (based on minimum affordable housing component) – 1.69:1 (4,737.07m²)	Errors have been identified in the applicant's calculation of GFA such as the internal communal area, circulation space and bin storage in the lobby of each floor level are required to be included as GFA. Based on the submitted plans, an approximate GFA of 4,588.9m² and a possible FSR of 1:64:1 has been calculated which needs to be verified by revised GFA calculation plans. At the time of preparing this report, the applicant had not submitted revised GFA calculations to clarify the total proposed GFA and FSR in accordance with the definitions of the KLEP and proper consideration of FSR compliance cannot be determined and forms recommended reason 13 for refusal.	
S 16 (3) – Maximum permissible building height Maximum permissible building height (RFB – 17.5m plus same % as the additional floor space permitted under (1) – 22.75m	The proposal has a maximum building height of 24.05m, presenting a variation of 5.7%.	**NO**
S 19 - Non-discretionary development standards—the Act, s 4.15		
Site area – 450m²	The site has an area of 2,830m².	**YES**
Minimum landscape area, the lesser of – (i) 35m² per dwelling, or (ii) 30% of the site area,	A minimum landscaped area of 840.9m² (30% of the site area) is required. The applicant has stated the proposal provides 1,402.5m² of landscaping equating to 50% of the site area. The site coverage and deep soil diagram does not distinguish between landscape and deep soil area which are separately defined in the	**NO**

	SEPP Housing and KLEP. The landscape area calculations are inaccurate as hard paving and built structures have been included. It is unclear if landscaped area calculated in accordance with the definition is compliant.	
Deep soil zone on at least 15% of site area – (i) each deep soil zone has minimum dimension of 3m, and (ii) if practicable, at least 65% of the deep soil zone is located at the rear of the site	Deep soil zones within the front, side and rear setbacks are greater than 3 metres in width, except for the portion of the eastern side setback adjacent to the driveway which is set back 1.5 metres from the boundary and is to be excluded from deep soil area calculations. The proposed deep soil area as calculated by Council's Senior Landscape Assessment Officer equates to 37% of the site area (1050m²) and is compliant. The area of deep soil at the rear of the site is approximately 23.3% of the proposed deep soil area (245.1m²) .	**NO**
Solar access to living rooms and private open spaces – At least 70% of dwellings receive at least 3 hours of direct solar access between 9am and 3pm at mid-winter	35% of apartments receive 3 or more hours of direct sunlight to living rooms between 9am and 3pm at mid-winter. 51% of apartments receive 3 or more hours of direct sunlight to private open spaces between 9am and 3pm at mid-winter. Notwithstanding this, the proposal provides at least 2 hours of direct sunlight	**NO**

	to living rooms and private open space to 73% of apartments and complies with Design Criteria 1 of Objective 4A-1 in Part 4 of the ADG.	
Car parking		
Number of parking spaces for dwellings <u>used for affordable housing</u>— (i) for each dwelling containing 1 bedroom—at least 0.4 parking spaces, (ii) for each dwelling containing 2 bedrooms—at least 0.5 parking spaces, (iii) for each dwelling containing at least 3 bedrooms— at least 1 parking space,	A minimum of 4 car spaces are required for 8 x 2 bedrooms affordable housing apartments. The proposal provides a total of 69 residential car spaces of which 4 car spaces can be allocated to affordable housing apartments.	**YES**
Number of parking spaces for dwellings <u>not used for affordable housing</u> – (i) for each dwelling containing 1 bedroom—at least 0.5 parking spaces, (ii) for each dwelling containing 2 bedrooms—at least 1 parking space, (iii) for each dwelling containing at least 3 bedrooms—at least 1.5 parking spaces,	A minimum 36 car spaces are required for the 28 'market' apartments (non-affordable housing apartments). The proposal provides a total of 69 residential car spaces of which 36 car spaces can be allocated to 'market' apartments.	**YES**
Minimum internal area – as per ADG	See ADG table	**YES**
S 20 – Design requirements The design of the residential development is compatible with – (a) the desirable elements of the character of the local area, or (b) for precincts undergoing transition—the desired future character of the precinct.	The siting of the built form, vehicular access and landscaping does not contribute positively to existing and desired future character of the streetscape.	**NO**
S 21 - Must be used for affordable housing for at least 15 years If providing affordable housing component under Section 16, 17 or 18 and the affordable housing component will be managed by a registered community housing provider	8 affordable housing apartments will be managed by a registered community housing provider for a minimum of 15 years.	**YES**

<u>Deep soil zone</u>

The proposed deep soil area of the site equates to approximately 23.3% of the total deep soil area for the site and presents a variation of 41.7% to the development standard in Section 19(2)(c)(ii) in Part 2 of Chapter 2 of the SEPP Housing. No Clause 4.6 variation request has been submitted to seek a variation to the deep soil development standard within the rear of the site. Therefore, development consent cannot be granted by the consent

authority as the applicant has not demonstrated that compliance with the development is unreasonable or unnecessary and that there are sufficient environmental planning grounds to justify contravention of the development standard under Clause 4.6(3) of the KLEP.

Chapter 4 – Design of residential apartment development

The design in its current form does not complement the built form, scale or landscape character of surrounding developments and the streetscape. The proposal has not adequately demonstrated that the amenity of future occupants and adjoining properties, particularly visual and acoustic privacy and solar access, will be maintained in accordance with the design requirements of the ADG. The proposal will result in poor internal amenity for future occupants and adjoining residents and is unacceptable.

Consideration is given below to the quality of the design of the residential apartment development when evaluated in accordance with the design principles set out in Schedule 9 of SEPP Housing.

1 Context and neighbourhood character

The building footprint and envelope does not demonstrate good design in response to the existing landscape character and built form and scale within the streetscape. In particular, the proposal provides insufficient building separation to side boundaries which contributes to building bulk and scale and landscaping impacts that detracts from the low to medium density character of the street.

2 Built form and scale

The proposed building separation of Levels 4 and 5 do not achieve the minimum setback of 9 metres from the eastern and western side boundaries and contribute to excessive building bulk and scale at the upper levels, which is incompatible with the scale of development immediately adjoining properties and built form within the streetscape.

3 Density

The proposal does not demonstrate good design as building separation between habitable windows and balconies both within the development and to adjoining properties is insufficient and will impact the amenity for future residents and adjoining occupants.

The proposed GFA and FSR have not been accurately calculated therefore compliance with the maximum permitted FSR, subject to provision of affordable housing components, has not been demonstrated. In addition to the proposed density, insufficient information has been submitted to identify and address the built form impacts on the critically endangered ecological community within the site to demonstrate suitability of the proposal for the site and environmental impacts on the locality.

4 Sustainability

The proposal achieves natural cross ventilation to 33 of the 37 (89.2%) apartments and at least 2 hours of direct sunlight to living rooms and private open spaces to 27 apartments (73%) and complies with the minimum natural ventilation target of 60% and direct sunlight to 70% of apartments in the ADG. However, the distribution of affordable housing apartments that receive a minimum of 2 hours of direct sunlight to living rooms and private open space has been calculated at 38% which is disproportionate to the number of market apartments that will receive a minimum of 2 hours of direct sunlight. The design and distribution of

affordable housing apartments should ensure good amenity for future residents and be equitable within the development.

The proposed external materials and finishes consists of sustainable materials that complement the character of the streetscape and are acceptable.

5 Landscape

The proposed landscape design in conjunction with the bulk and scale of the building will result in the removal of trees and impact significant ecological and biodiversity communities within the site. The proposed landscape works have not adequately demonstrated sufficient deep soil areas and plantings particularly within the side and front setbacks that will contribute to the landscaped character of the streetscape and amenity for residents and adjoining properties.

6 Amenity

Insufficient building separation between the building and adjoining properties and between apartments within the development does not contribute to good internal amenity, particularly solar access and privacy for occupants or neighbouring residents. The design does not achieve good solar access for affordable housing apartments compared to market apartments and will result in direct overlooking of habitable windows and balconies. In addition, common circulation spaces do not achieve minimum dimensions to enhance accessibility. It is also noted that no outdoor clothes drying areas have been shown on the architectural plans to enhance functionality and amenity for future occupants.

7 Safety

The proposal provides clearly defined private spaces and communal spaces within the development by fencing, screening and landscaping. The proposed principal building entry from Killeaton Street and secondary pedestrian pathway along the western side setback are clearly defined and provides secure access from the public domain to the building. The apartments incorporate windows and private open spaces that have an outlook over communal and public spaces enabling passive surveillance to enhance safety.

8 Housing diversity and social interaction

The proposal to incorporate affordable housing apartments within the development contributes to the supply of housing to meet the demands of different households within the community and is acceptable. However, the proposal does not provide a sufficient apartment mix as it does not include studio or 1 bedroom apartments.

9 Aesthetics

The proposed external materials and finishes complement the materiality and colour scheme of immediately adjoining developments to the east and west.

The built form, particularly the upper levels, results in a building bulk and layout of habitable rooms and balconies that will have privacy and amenity impacts on future occupants and adjoining properties.

Consideration is also given in the table below to the Apartment Design Guide -

ADG COMPLIANCE TABLE	
Guideline	**Compliance**
Objective 3A-1 Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	**YES**
Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development	**NO**
Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid-winter	**NO**
Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security	**YES**
Objective 3C-2 Amenity of the public domain is retained and enhanced	**NO**
Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	**NO**
Design criteria	
1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3) 2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter)	**NO** **YES**
Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	**YES**
Objective 3D-3 Communal open space is designed to maximise safety	**YES**
Objective 3E-1 Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality	**YES**
Design criteria	
Deep soil zones are to meet the following minimum requirements: **Site area** **Minimum dimensions** **Deep soil zone (% of site area)**	**YES**

less than 650m² - 650m² - 1,500m² 3 metres greater than 1,500m² 6 metres 7% greater than 1,500m² 6 metres with significant existing tree cover	
Objective 3F-1 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy	**NO**
Design criteria	
Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: **Building height** / **Habitable rooms and balconies** / **Non-habitable rooms** / **Proposal** up to 12m (4 storeys) / 6 metres / 3 metres / 6 metres – 9 metres up to 25m (5-8 storeys) / 9 metres / 4.5 metres / 6 metres – 9 metres **Note:** Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties	**YES** – up to fourth storey **NO** – fifth and sixth storeys
Objective 3F-2 Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space	**NO**
Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain	**YES**
Objective 3G-2 Access, entries and pathways are accessible and easy to identify	**YES**
Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	**NO**
Objective 3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	**YES**

Objective 3J-2 Parking and facilities are provided for other modes of transport	**NO**
Objective 3J-3 Car park design and access is safe and secure	**YES**
Objective 3J-4 Visual and environmental impacts of underground car parking are minimised	**NO**
Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	**YES**
Design criteria	
1 Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas 3 A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter	**YES** **YES**
Objective 4A-2 Daylight access is maximised where sunlight is limited	**YES**
Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months	**YES**
Objective 4B-1 All habitable rooms are naturally ventilated	**YES**
Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation	**YES**
Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	**YES**
Design criteria	
1 At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed 2 Overall depth of a cross-over or cross-through apartment does not exceed 18 metres, measured glass line to glass line	**YES** **YES**

Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access	**YES**
DESIGN CRITERIA	
Measured from finished floor level to finished ceiling level, minimum ceiling heights are: **Minimum ceiling height for apartment and mixed use buildings** — **Proposal** Habitable rooms: 2.7 metres — 2.9 metres Non-habitable: 2.4 metres — 2.9 metres	**YES**
Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms	**YES**
Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building	**YES**
Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	**YES**
DESIGN CRITERIA	
Apartments are required to have the following minimum internal areas: **Apartment type** — **Minimum internal area** — **Proposal** Studio — 35m² — N/A 1 bedroom — 50m² — N/A 2 bedroom — 70m² — 79m² - 144m² 3 bedroom — 90m² — 124m² - 144m² 4 bedroom — 102m² — 123m² - 183m² The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	**YES**
Objective 4D-2 Environmental performance of the apartment is maximised	**YES**
DESIGN CRITERIA	
1 Habitable room depths are limited to a maximum of 2.5 x the ceiling height	**YES** **YES**

2 In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8 metres from a window	
Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs	**YES**
DESIGN CRITERIA	
1 Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space) 2 Bedrooms have a minimum dimension of 3 metres (excluding wardrobe space) 3 Living rooms or combined living/dining rooms have a minimum width of: • 3.6 metres for studio and 1 bedroom apartments • 4 metres for 2 and 3 bedroom apartments 4 The width of cross-over or cross-through apartments are at least 4 metres internally to avoid deep narrow apartment layouts	**YES** **YES** **YES** **YES**
Objective 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential amenity	**NO**
DESIGN CRITERIA	
All apartments are required to have primary balconies as follows: **Dwelling type** / **Minimum area** / **Minimum depth** Studio apartments / 4m² / - 1 bedroom apartments / 8m² / 2 metres 2 bedroom apartments / 10m² / 2 metres 3+ bedroom apartments / 12m² / 2.4 metres **The minimum balcony depth to be counted as contributing to the balcony area is 1m** / Balconies width 2 metres For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m	**NO**
Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents	**YES**
Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	**NO**
Objective 4E-4 Private open space and balcony design maximises safety	**YES**

Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments	**NO**
DESIGN CRITERIA	
1. The maximum number of apartments off a circulation core on a single level is eight	**YES**
Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents	**YES**
Objective 4G-1 Adequate, well-designed storage is provided in each apartment	**YES**
DESIGN CRITERIA	
In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: **Dwelling type** / **Storage size volume** / **Proposal** Studio apartments / 4m³ / N/A 1 bedroom apartments / 6m³ / N/A 2 bedroom apartments / 8m³ / 8m³ 3+ bedroom apartments / 10m³ / 10-13.6m³ At least 50% of the required storage is to be located within the apartment	**YES**
Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments	**YES**
Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout	**NO**
Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments	**NO**
Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future	**NO**
Objective 4K-2 The apartment mix is distributed to suitable locations within the building	**YES**
Objective 4L-1	**YES**

Street frontage activity is maximised where ground floor apartments are located	
Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents	**YES**
Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area	**YES**
Objective 4M-2 Building functions are expressed by the façade	**YES**
Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street	**YES**
Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised	**YES**
Objective 4N-3 Roof design incorporates sustainability features	**YES**
Objective 4O-1 Landscape design is viable and sustainable	**NO**
Objective 4O-2 Landscape design contributes to the streetscape and amenity	**NO**
Objective 4P-1 Appropriate soil profiles are provided	**NO**
Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance	**YES**
Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces	**YES**
Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members	**YES**
Objective 4Q-2 A variety of apartments with adaptable designs are provided	**YES**
Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs	**YES**

Objective 4T-2 Signage responds to the context and desired streetscape character	**NO**
Objective 4U-1 Development incorporates passive environmental design	**YES**
Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer Adequate natural ventilation minimises the need for mechanical ventilation	**YES**
Objective 4U-3 *Adequate natural ventilation minimises the need for mechanical ventilation*	**YES**
Objective 4V-1 Potable water use is minimised	**YES**
Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters	**YES**
Objective 4V-3 Flood management systems are integrated into site design	**YES**
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	**YES**
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	**YES**
Objective 4X-1 Building design detail provides protection from weathering	**YES**
Objective 4X-2 Systems and access enable ease of maintenance	**YES**
Objective 4X-3 Material selection reduces ongoing maintenance costs	**YES**

The above departures are not acceptable because the development does not meet their underlying objectives.

Any inconsistencies with other Environmental Planning Instruments

The development standards referred to in the above table prevail to the extent of any inconsistency with another Environmental Planning Instrument including KLEP 2015.

The following controls under KLEP 2015 are not inconsistent with the above-mentioned SEPP Housing provisions and as such they continue to apply to the assessment of the

subject application.

Ku-ring-gai Local Environmental Plan 2015

Clause 1.2 Aims of the Plan

The proposal has been assessed against the relevant Aims of the Plan. The proposal is inconsistent with the aims for the reasons given within the assessment report and specifically as follows:

(a) to guide the future development of land and the management of environmental, social, economic, heritage and cultural resources within Ku-ring-gai,
(b) to protect, enhance and sustainably manage the biodiversity, natural ecosystems, scenic values, water resources and ecological processes within the catchments of Ku-ring-gai for the benefit of current and future generations,
(l) to facilitate development that complements and enhances amenity for residential uses and public spaces,

Zoning and permissibility

The site is zoned R4 High Density Residential. The proposed development is defined as a residential flat building, which is permissible development with consent.

Zone objectives

The objectives of the zone are:

- *To provide for the housing needs of the community within a high density residential environment.*
- *To provide a variety of housing types within a high density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide for high density residential housing close to public transport, services and employment opportunities.*

The proposal is consistent with the objectives of the zone, except for the apartment mix which does not include one bedroom apartments, particularly for the affordable housing component and does not provide housing mix to meeting the needs of the community.

Development standards:

Ku-ring-gai Local Environmental Plan 2015

Development standard	Proposed	Complies
Cl 4.3 - Height of buildings: Maximum Building Height - 17.5 metres	The maximum permitted building height for the proposal is 22.75 metres in accordance with the additional height provisions in Section 18 of SEPP (Housing). The proposal has a building height of 24.05 metres,	**NO**

Development standard	Proposed	Complies
	measured to the top of the lift overrun, exceeding the maximum building height by 5.7%. A portion of the roof at the south-western corner of the building and the screens around the mechanical plants on the roof exceed the maximum building height between 218mm and 1.3m, respectively.	
Cl 4.4 - Floor space ratio (FSR): Maximum FSR - 1.3:1 Gross Floor Area = 3529.5m²	The maximum permitted FSR for the proposal is 1.69:1 (4,737.07m²) in accordance with the additional FSR provisions in Section 16 of SEPP (Housing). The proposal has nominated a FSR of 1.62:1. However, the submitted gross floor area (GFA) calculations are incorrect as some areas that are defined as GFA have been excluded from the calculation. At the time of preparing this report, revised GFA and FSR calculations demonstrating compliance with the development standard had not been submitted.	**NO**
Cl 6.6 - Requirements for multi dwelling housing and residential flat buildings: Minimum lot size 1200m² Minimum lot width and depth 30m for site greater than 1800m²	The site has a site area of 2803m², a width of 34.6 metres and depth of between 80.72 metres and 81.295 metres.	**YES**

Clause 4.6 Exceptions to development standards

The proposed development breaches the maximum height of buildings development standard contained within Clause 4.3 of the KLEP of 17.5 metres. Section 16(3) of SEPP (Housing)overrides Clause 4.3 and permits a maximum building height of 22.75 metres. The applicant has made a submission pursuant to Clause 4.6 seeking to vary the building height development standard under Section 16(3) of the SEPP (Housing). Clause 4.6 provides flexibility in applying certain development standards and an assessment of the request to vary the development standard is provided below:

(1) The objectives of this clause are as follows—

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,

(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.

(3) Development consent must not be granted to development that contravenes a development standard unless the consent authority is satisfied the applicant has demonstrated that—

(a) compliance with the development standard is unreasonable or unnecessary in the circumstances, and

(b) there are sufficient environmental planning grounds to justify the contravention of the development standard.

Whether compliance with the development standard is unreasonable or unnecessary in the circumstances of the case

The applicant submits that in *Wehbe v Pittwater Council* [2007] NSWLEC 827, the Court established five ways to demonstrate that compliance with a development standard is unreasonable or unnecessary. The applicant states that the first and third ways have been adopted in this case to establish that compliance with the height of buildings development standard is unreasonable and unnecessary for the following reasons:

First way – Consistency with objectives of the standard

Section 15A of SEPP Housing states that the objective of this division is to facilitate the delivery of new in-fill affordable housing to meet the needs of very low, low and moderate income households.

To the extent that the building height breaching elements are appropriately described both quantitatively and qualitatively as minor, I am satisfied that the building height breaching elements do not contribute to building height or massing to the extent that the overall building will be incompatible with the desired future character of the precinct as anticipated through strict compliance with the applicable infill affordable housing incentive provisions which anticipate buildings having a height and floor space 30% more than the maximum prescribed by the applicable Local Environmental Planning instrument.

Accordingly, I am satisfied that notwithstanding the building height breaching elements the proposal satisfies the clause 20(3)(b) design requirements of SEPP Housing. Further, notwithstanding the non-compliant building height breaching elements, the proposal facilitates the delivery of new infill affordable housing that will meet the needs of very low, low and moderate income households and to that extent achieves the objective of the standard.

I also consider it appropriate to assess the proposed building height against the objectives of the height of building standard contained at Clause 4.3 of the KLEP to the extent that they do not derogate from the infill affordable housing objective at Section 15A of SEPP Housing.

An assessment as to the consistency of the proposal when assessed against the objectives of Clause 4.3 of KLEP are as follows:

(a) to ensure that the height of buildings is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai centres,

Comment: I note that the subject site is zoned R4 High Density Residential and is not located within a nominated town centre. The overall building height is consistent with that anticipated by the infill affordable housing incentive provisions at Chapter 2 of SEPP Housing.

The building height breaching elements do not contribute to the overall building height to the extent that the development is inconsistent with such provisions or perceived as inappropriate or jarring having regard to the high-density residential context in which it is located.

Notwithstanding the building height breaching elements, the proposal satisfies this objective.

(b) to establish a transition in scale between the centres and the adjoining lower density residential and open space zones to protect local amenity,

Comment: I note that the subject site is zoned R4 High Density Residential and is not located within a nominated town centre. The overall building height is consistent with that anticipated by the infill affordable housing incentive provisions at Chapter 2 of SEPP Housing. The subject site does not adjoin low density residential or open space zones with the building height breaching elements not giving rise to any adverse local amenity impacts in terms of visual bulk, views, privacy or solar access. Notwithstanding the building height breaching elements the proposal satisfies this objective.

(c) to enable development with a built form that is compatible with the size of the land to be developed.

Comment: the subject property satisfies the minimum site area and dimension standards at Clause 6.6 KLEP applicable to residential flat development within the R4 Higher Density Residential zone. The building height breaching elements do not contribute to overall building height to the extent that the development will be perceived as inappropriate or jarring having regard to the high-density residential context in which it is located.

Consistent with the conclusions reached by Senior Commissioner Roseth in the matter of Project Venture Developments v Pittwater Council (2005) NSW LEC 191 I have formed the considered opinion that most observers would not find the overall height of the development, in particular the contribution made by the building height breaching elements, offensive, jarring or unsympathetic in a streetscape and urban context. In this regard, it can be reasonably be concluded that, notwithstanding the building height breaching element, the development is capable of existing together in harmony with surrounding and nearby development.

Notwithstanding the building height breaching element, the resultant development is compatible with the height and scale of existing nearby development and provides for a building form is compatible with the size of the land to be developed.

Notwithstanding the building height breaching elements the proposal satisfies this objective.

Having regard to the above, the non-compliant component of the building will achieve the objectives of the standard to at least an equal degree as would be the case with a development that complied with the building height standard. Given the developments consistency with the objectives of the height of buildings standard strict compliance has been found to be both unreasonable and unnecessary under the circumstances.

It is agreed that the proposal is consistent with the objectives of the R4 High Density Residential zone.

Further, it is agreed that objectives (a) and (b) in Clause 4.3 of the KLEP are not specifically relevant as the site is not located within a village centre, does not adjoin low density residential developments or open space.

The proposed building envelope and variation to the maximum building height development standard do not satisfy objective (c) and the proposal is not compatible with the size of the site as the proposal will result in additional overshadowing impacts to habitable windows and balconies of adjoining properties.

Inadequate justification has been provided to demonstrate that exceedance of the building height development standard is necessary to achieve the objective of the SEPP (Housing) to provide affordable housing.

Third way - The underlying objective or purpose would be defeated or thwarted if compliance was required

The third way, which has also been adopted, is that the underlying objective or purpose would be defeated or thwarted if compliance was required with the consequence that compliance is unreasonable. That is, strict compliance could be achieved through a reduction in building height and associated floor space to the extent that it would not be possible to take advantage of the 30% FSR incentive provision in circumstances where the building height breaching elements are inconsequential in relation to unacceptable streetscape or residential amenity impacts. The building height variation facilitates the delivery of new in-fill affordable housing to meet the needs of very low, low and moderate income households with strict compliance defeating or thwarting this objective.

The non-compliant component of the development, as it relates to building height, demonstrates consistency with objectives of the zone and the height of building standard objectives. Adopting the first and third ways in Wehbe strict compliance with the height of buildings standard has been demonstrated to be is unreasonable and/or unnecessary.

The justification provided by the applicant has not demonstrated that the permitted floor space cannot be accommodated within a compliant building footprint and envelope associated with the provision of infill affordable housing in Chapter 2 of SEPP (Housing). In particular, additional floor space on each proposed floor could be accommodated by infilling

the voids and setbacks between the three building components that are connected by common corridors. Therefore, the underlying objective to provide a built form that is appropriate for the site and complementary to surrounding developments will not be thwarted or defeated by a development that is compliant with the maximum height of buildings development standard.

Whether there are sufficient environmental planning grounds to justify contravening the development standard

The applicant states that the following environmental planning grounds justify contravening the development standard:

> ***Ground 1 - Topography***
>
> *The topographical characteristics of the site contribute towards the extent of height breach which falls away towards its south-western corner and can be directly attributed to the roof edge height breaches.*

The justification that existing topography is an environmental planning ground for the variation is not acceptable as the site is not steeply sloping towards the south-west corner. Furthermore, the proposal does not seek to retain the existing ground levels immediately below the roof elements and plant areas that exceed the development standard therefore, existing topography is not considered a constraint of the site.

> ***Ground 2 - Minor nature of breach & lack of impact***
>
> *The building height breaching elements are appropriately described both quantitatively and qualitatively as minor. I am satisfied that the building height breaching elements do not contribute to building height or massing to the extent that the overall building will be incompatible with the desired future character of the precinct as anticipated through strict compliance with the applicable in-fill affordable housing incentive provisions which anticipate buildings having a height and floor space 30% more than the maximum prescribed by the applicable Local Environmental Planning instrument.*
>
> *I am also satisfied that the building height breaching elements will not give rise to adverse streetscape or residential amenity impacts. Consistent with the findings of Commissioner Walsh in Eather v Randwick City Council [2021] NSWLEC 1075 and Commissioner Grey in Petrovic v Randwick City Council [2021] NSW LEC 1242, the particularly small departure from the actual numerical standard and absence of impacts consequential of the departure constitute environmental planning grounds, as it promotes the good design and amenity of the development in accordance with the objects of the EP&A Act.*

The additional building height provision in Section 16 of SEPP (Housing) is a maximum height of buildings development standard and includes roof elements, lift overruns and mechanical plant and screens. As such, the desired future character for sites that provide infill affordable housing and utilise additional building height in Section 16 should not exceed the development standard as the built form and scale of the development will be excessive in comparison to surrounding developments.

Further, the extent of the height variation will result in additional overshadowing impacts on habitable windows and balconies of adjoining properties to the east. Therefore, the applicant's argument that the proposal does not result in adverse amenity or streetscape impacts is not be accepted as it has not been demonstrated that compliance with the

development standard is unnecessary or unreasonable and there are environmental planning grounds to justify the variation.

Ground 3 – Objectives of SEPP Housing

Approval of the minor building height breaching elements will achieve the objective of the Division 1 in-fill affordable housing provisions within SEPP Housing being to facilitate the delivery of new in-fill affordable housing to meet the needs of very low, low and moderate income households (clause 15A).

The extent of the variation to the maximum height of buildings development standard does not directly contribute to the affordable housing component of the proposal and it has not been adequately demonstrated that affordable housing apartments cannot be reasonably achieved within a compliant building envelope.

Ground 4 - Objectives of the Environmental Planning and Assessment Act 1979

Approval of the minor building height breaching elements will promote the delivery of affordable housing consistent with objective 1.3(d) of the Act.

There are sufficient environmental planning grounds to justify contravening the development standard.

The proposal has not adequately demonstrated that there are sufficient environmental planning grounds to justify contravening the maximum height of buildings development standard in this circumstance as there are no site constraints that have been identified that would prevent compliance with the development standard. As noted, the height standard is a maximum not a minimum.

The proposal has not clearly demonstrated the extent of overshadowing impacts of a compliant building envelope or the proposed building envelope on the amenity impacts on adjoining properties. The application demonstrates that the non-compliant built form will result in additional overshadowing to habitable rooms and balconies of the adjoining developments and suggests that insufficient solar access will be achieved. Therefore, the proposal does not demonstrate that there are sufficient environmental planning grounds for the variation to the height standard.

The variation to the height of buildings development standard is not considered a critical component associated with the delivery of affordable housing apartments on the site, noting that the floor space of affordable housing and market apartments are contained within the development standard.

Authority to determine variation

Any variation to a numerical standard that exceeds 10% or relates to a non-numerical standard must be considered by the Ku-ring-gai Local Planning Panel (KLPP) or the Sydney North Planning Panel. As the variation to the numerical standard is less than 10% the application is not required to be referred to the Ku-ring-gai Local Planning Panel. Notwithstanding, the proposal is required to be determined by KLPP for the reasons given at the beginning of the report..

Development standards that cannot be varied

The variation to the development standard is not contrary to the requirements in subclauses (6) or (8) of Clause 4.6.

Part 5 Miscellaneous provisions

Clause 5.10 – Heritage conservation

The subject site does not contain a heritage item, is not located within 100 metres of an item, and is not within a heritage conservation area. The proposed works do not affect any known archaeological or Aboriginal objects or Aboriginal places of heritage significance.

Part 6 Additional local provisions

Clause 6.1 – Acid sulphate soils

The objective of this clause is to ensure that development does not disturb, expose, or drain acid sulfate soils and cause environmental damage. The land is mapped as Class 5 Acid sulfate soils. Development consent is required for works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the water-table is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land. The proposal is not subject to this clause as the works are more than 500 metres of adjacent Class 1, 2, 3 or 4 land.

Clause 6.2 - Earthworks

The objective of this clause is to ensure that earthworks will not likely disturb or have detrimental environmental impacts on the site and surrounding properties and to mitigate impacts of the development.

The proposal involves excavation works up to 11 metres below existing ground level for the construction of three levels of basement. A geotechnical report has been submitted, however the report is insufficient and further investigations are required including bore hole investigations to determine site specific sub-surface profiles, geotechnical parameters, groundwater levels and recommendations for excavation works and monitoring.

Clause 6.3 - Biodiversity protection

The site is not mapped as land comprising biodiversity significance and this clause is not applicable.

Council's Ecological Assessment Officer has considered the proposed development and, although the site is not mapped as biodiversity significance, there is clearing of native vegetation impacting Sydney Turpentine Ironbark Forest located at the site which is listed as a Critically Endangered Ecological Community (CEEC) under the Biodiversity Conservation Act 2016. The proposed works have a significant impact on the ecological community.

The proposal is required to prepare and submit a Biodiversity Development Assessment Report (BDAR) under the Biodiversity Conservation Act 2016 to assess the significant impacts and the Biodiversity Offsets Scheme (BOS) which is triggered by the clearing of native vegetation.

As no BDAR has been submitted, the proposal does not satisfy the provisions of Clause 6.3 and is not acceptable.

Clause 6.5- Stormwater and water sensitive urban design

Council's Team Leader Development Engineers has considered the objective of this clause, which seeks to minimise the adverse impacts of urban water on the site and within the catchment. The stormwater design adequately manages water quality and control discharge volumes and frequency, consistent with the objectives of this control.

Policy Provisions (DCPs, Council policies, strategies and management plans)

Ku-ring-gai Development Control Plan

Part 1A.5 General aims of the DCP

The proposed development has been assessed against the general aims of this DCP and is not found to be acceptable in all relevant respects for the reasons given throughout this report.

Part 2: Site analysis

A site analysis which identifies the existing characteristics of the site and the surrounding area has been provided as part of the development application. The site analysis satisfies the objectives of this Part of the DCP.

Part 7: Residential Flat Buildings

COMPLIANCE TABLE		
Development Control	**Proposed**	**Complies**
Part 7 Residential Flat Buildings		
7A.1 – Local character and streetscape		
All Residential Flat Buildings are to be designed by an architect registered with the NSW Architects Registration Board.	The design is prepared by a registered architect.	**YES**
All residential flat buildings are to demonstrate how they provide a garden setting with buildings surrounded by landscaped gardens, including tall trees, on all sides.	Landscaped front, side and rear setbacks are provided. However, the driveway and pedestrian path project within the eastern side setback and do not optimise deep soil areas and substantial landscaping within the front and side setbacks.	**NO**
Design components of new development are to be based on the existing predominant and high quality characteristics of the local neighbourhood.	The proposed bulk and scale do not achieve adequate building separation from adjoining properties and is not consistent with the built form and scale of surrounding developments.	**NO**

The appearance of the development is to maintain the local visual character by considering the following elements: i) visibility of on-site development when viewed from the street, public reserves and adjacent properties; and ii) relationship to the scale, layout and character of the tree dominated streetscape of Ku-ring-gai.	The proposal is set back adequately from the boundary and is consistent adjoining properties. The proposed removal of existing trees within the front setback and the location of the driveway and pedestrian pathway adjacent to the eastern boundary will adversely impact planting of tall trees and screen planting. The proposed built form will be visually prominent when viewed from the street and will not complement the landscape character of the streetscape.	**NO**
The predominant and high quality characteristics of the local neighbourhood are to be identified and considered as part of the site analysis.	Developments within close proximity of the site comprise a mix of low density dwellings, residential apartments, aged care and schools. The proposed built form and scale will result in visual, acoustic and solar access impacts on adjoining properties.. The existing streetscape and locality are characterised by tall tree canopies and landscaping within the front, side and rear setbacks. The proposal does not contribute positively to the landscaped character of the site or streetscape.	**NO**

Development is to integrate with surrounding sites by: i. being of an appropriate scale retaining consistency with the surrounds when viewed from the street, public domain or adjoining development; ii. minimising overshadowing; and iii. integrating built form and soft landscaping (gardens and trees) within the tree canopy that links the public and private domain throughout Ku-ring-gai.	The built form is not consistent with the scale of adjoining properties as it does not provide satisfactory building separation, exceeds the maximum height of buildings development standard, results in additional overshadowing of adjoining properties, and does not optimise deep soil areas and tree planting, particularly along the eastern side boundary.	**NO**
7A.2 – Site layout		
The site layout is to demonstrate a clear and appropriate design strategy and arrangement of building mass in response to the Site Analysis in Part 2 Site Analysis of this DCP. Demonstration of design strategies to address opportunities and constraints based on Site Analysis are to include: i. building location and orientation on the site optimising northern aspect; relationship with neighbouring developments; building setbacks; geographical aspect; views; access etc; ii. response of building development in maintaining site characteristics within the subject site, such as topography, vegetation, significant trees, any special features, etc. iii. building separation and internal layouts of buildings that respond to (i) above and be consistent with the requirements of the DCP. iv. limited apartments with no direct sunlight.	Insufficient information has been provided to demonstrate the extent of tree removal will not have detrimental ecological and biodiversity impacts on the site and locality. The building footprint responds appropriately to the north-south orientation of the site. However, the proposal does not achieve adequate building separation to adjoining properties and will adversely impact the amenity of adjoining habitable rooms and private open spaces.	**NO** **NO**
A drawing and supporting written information is to demonstrate how the building and its layout has applied and responded to the site analysis required by Part 2 of the DCP.	A site analysis and site plan has been submitted.	**YES**
Any building with a frontage to the street is to address that street.	The primary building entry and apartments on the northern elevation address the street.	**YES**
Soft landscaping, including tall trees, is to be provided between onsite buildings, fences and courtyard walls.	Soft landscaping is proposed.	**YES**

Hard landscaping is to be minimised and to maximise opportunities for landscape planting	Hard landscaping has not been minimised along the side boundaries to optimise areas for deep soil and landscape planting.	**NO**
Long straight driveways are not permitted, except where necessary for battle-axe sites. Driveways are to be designed to be of minimal visual impact.	The width and location of the driveway does not comply with the controls in the KDCP and will have visual impacts when viewed from the streetscape and adjoining properties.	**NO**
Provide a single pedestrian entry point into the development from the street. Other entries may be permitted where several buildings address the street along an extended street or where there are dual frontage sites.	Three pedestrian pathways are provided from the street frontage including a centrally located pathway to the primary building entry and two alternative pedestrian pathways within the east and west side setbacks. The number of pedestrian pathways is unnecessary and constrain available deep soil provision.	**NO**
Developments are to allow the retention of a minimum of 4 hours direct sunlight between 9am to 3pm on 21st June to all existing solar collectors and solar hot water services on neighbouring buildings.	Insufficient information has been provided to clarify overshadowing impacts on adjoining properties.	**NO**
7A.3 – Building setbacks		
Residential flat buildings are to meet the following street setback requirements: i. 10 metres from the street boundary; ii. on corner sites and sites with multiple street frontages a 10 metres setback is to be provided on all street frontages.	The proposal is set back more than 10 metres from the front boundary.	**YES**
Residential flat buildings are to provide a 2 metres articulation zone behind the street setback, and no more than 40% of this zone (in plan) is to be occupied by the building.	A portion of the planter boxes on the north elevation occupy 35% of the articulation zone.	**YES**

The building line to any street is to be parallel to the prevailing building line in the streetscape. For angled sites, a stepped façade may be appropriate.	The proposed front building line is consistent with the building line of adjoining properties.	**YES**
Residential flat buildings are to meet the following side and rear setback requirements to ensure deep soil, landscaping and tall trees are accommodated to all sides of the building: i. a minimum of 6 metres from the side boundary for all levels up to the fourth storey. ii) a minimum of 9 metres to the fifth storey and above.	The driveway, pedestrian pathway and pergola structure are located within the eastern side setback and does not achieve satisfactory areas for deep soil and landscaping. The side setbacks on Levels 4, 5 and 6 project are less than the minimum 9 metres setback and do not provide adequate building separation.	**NO**
Side setback areas behind the building line are not to be used for driveways or for vehicular access into the building.	The driveway to the basement car park is within the side setback area along the eastern boundary.	**NO**
Driveways are to be set back a minimum of 6 metres from the side boundary within the street setback to allow for deep soil planting.	The driveway is not set back a minimum of 6 metres from the side boundary and does not facilitate adequate deep soil area along the side boundary within the front setback.	**NO**
Encroachments i. Basements do not encroach into any setback areas ii. Ground floor terrace/courtyard walls minimum 8 metres to street boundary / 4 metres to rear & side boundaries / 7 metres adjacent to lower density residential zone iii. No encroachments where site area is < 1800m^2 iv. No encroachments are permitted where minimum side setbacks have not been achieved. v. A maximum of 15% of the street setback area occupied by private terraces/courtyards	The basement does not encroach upon the setback areas. Ground floor terraces are set back between 4 metres and 6 metres from side boundaries and 7.2 metres from the rear boundary. Private terraces are not contained within the front building line.	**YES**

Eaves, open pergolas, blades, fins and columns may encroach into the setback areas where they do not increase the apparent bulk of the building or create visual clutter:	The eaves, columns or blades that form part of the articulation of facades do not encroach further than the building setbacks.	**YES**
7A.4 – Building Separation		
Residential buildings on the same development site are to include areas of deep soil in between the buildings that are capable of housing substantial vegetation and tall trees.	The proposal comprises three building components linked by common corridors. Deep soil areas are not provided between the three building components. Landscaping between the buildings is limited to planter-boxes adjacent to pedestrian pathways. In this circumstance, the lack of deep soil areas between the building components is acceptable on merit.	**YES**
The minimum separation between residential buildings on the development site is to comply with the following controls: Up to 4th storey: • 12 metres between habitable rooms/balconies • 9 metres between habitable rooms/balconies and non-habitable rooms • 6 metres between non-habitable rooms 5th storey & above: • 18 metres between habitable rooms/balconies • 13.5 metres between habitable rooms/balconies and non-habitable rooms • 9 metres between non-habitable rooms	The separation between habitable rooms and balconies of apartments within the development are less than 5 metres on Levels 1, 2, 3, 4 and 5. The design of apartments, windows and balconies do not adequately mitigate privacy between apartments and is not acceptable.	**NO**
Buildings are to be located so that apartments benefit from views into and through onsite landscaped gardens.	Windows and balconies of apartments have an outlook over front, side and rear landscaped setbacks.	**YES**
7A.5 – Site coverage		
The site coverage may be up to a maximum of 30% of the site area, provided that the deep soil landscaping requirements in Section A Part 7A.6 Deep Soil Landscaping are met.	The proposed site coverage occupies 29.8% of the site area.	**YES**

Note: Site coverage is not the inverse of deep soil landscaping. Refer to Part 1B Dictionary for clarification of site coverage. Note: Certain sites in B2 and B4 zones have reduced maximum site coverage. Refer to Section B Part 14 Urban Precincts and Sites.		
7A.6 – Deep soil landscaping		
A minimum deep soil landscaping area of 40% for a site area less than 1800m^2 and 50% for a site area of 1800m^2 or more. Note: For the purpose of the deep soil calculation the site area excludes any access handle. Note: Certain sites in the B2 and B4 zones have a reduced maximum deep soil landscaping area. Refer to Section B Part 14 Urban Precinct and Sites.	Chapter 2 of the SEPP (Housing) provides non-discretionary development standards for deep soil areas that overrides the DCP controls. The submitted deep soil calculations are inaccurate, consequently an assessment regarding compliance could not be completed. Based on the definition of deep soil area under the KLEP, the proposal is unlikely to provide compliant deep soil areas.	**NO**
Deep soil zones are to be configured to retain healthy and significant trees on the site and adjoining sites, where possible.	Deep soil areas are provided to support the retention of some existing trees on the site. However, the proposed removal of native trees will have a significant impact the ecological and biodiversity significance of the site and is not acceptable.	**NO**
Deep soil zones are to be configured to allow for required tree planting including tall tree planting and garden and screen planting at front, side and rear boundaries.	Insufficient deep soil zones have been provided along the eastern side boundary for satisfactory landscaping and planting of tall trees or screen planting.	**NO**

Deep soil landscaping is to be provided in the common areas as a buffer between buildings that softens the bulk and scale of the buildings.	The landscaped area adjacent to the eastern side boundary will not accommodate tall trees or substantial screen planting to mitigate the scale of the development when viewed from adjoining properties or the streetscape.	**NO**
Driveways are not to dominate the street setback area. Deep soil landscaping areas in the street setback are to be maximised.	The driveway does not dominate the front building line however, the driveway design and secondary pedestrian pathway along the eastern side boundary, within the front setback, reduces deep soil area for landscaping and does not contribute positively to the streetscape.	**NO**
Lots with the following sizes are to support a minimum number of tall trees capable of attaining a mature height of at least 18 metres on shale, transitional soils and 15 metres on sandstone derived soils. i. 1200m^2 or less – 1 tall tree per 400m^2 or part thereof ii. 1201m^2 – 1800m^2 – 1 tall tree per 350m^2 or part thereof iii. 1801m^2 + - 1 tall tree per 300m^2 or part thereof	The proposed number of existing trees to be retained on the site satisfies the requirement for tall trees on the site.	**YES**
In addition to the tall trees, a range of medium trees, small trees and shrubs are to be selected to ensure that vegetation softens the building form and creates a garden setting. At least 50% of all tree plantings are to be locally occurring trees and spread around the site.	Sufficient numbers of medium to small trees and shrubs are proposed for the site.	**YES**
Trees are to be planted within all setback areas. At least 30% of the required number of tall trees are to be planted within the front setback.	The location of proposed tree plantings is acceptable.	**YES**
7B – Access and parking		
7B.1 – Car parking provision		
All residential flat developments are to provide on-site car parking within basements**.**	Car parking within basement levels is provided.	**YES**

Basement car park areas are to be consolidated under building footprints.	The basement car park levels are located beneath the building footprint.	**YES**
The use of single lane tunnels and single lane spiral ramps is not permitted. Double lane spiral ramps may be allowed where there are no other options, but can only link a maximum of 2 floor levels.	Spiral ramps within the basement car parking levels are not proposed.	**YES**
The basement car park is not to project more than 1 metre above existing ground level. Note: Basements greater than 1 metre above the natural existing ground level are counted as a storey for the purposes of the DCP and will be included in the floor space ratio calculation as well as any control based on the number of storeys.	The basement carpark does not project above the existing ground level.	**YES**
Single lane aisles, straight ramps and tunnels max 12 metres in length.	Two way aisles are proposed on each basement level.	**YES**
Direct and continuous internal pedestrian access from basement car park is provided to each level of the building	Two lifts from each basement level will provide access to residential levels above.	**YES**
Car park entry is to be integrated within the building and located behind the building line.	The car park entry is located behind the front building line and is not visually prominent from the street.	**YES**
Car parking design is to be in accordance with requirements for Silver and Platinum Level dwellings as required in this DCP and by the *Livable Housing Guidelines*. Circulation areas, roadways and ramps are to comply with AS2890.1. Where a conflict occurs, the *Livable Housing Guidelines 2012* is to take precedence.	Insufficient information has been provided to clearly identify car parking spaces to be allocated to platinum apartments in accordance with the KDCP.	**NO**

Car parking rates in accordance with Section C in Part 22R.1: Studio: 0.5 spaces One bedroom: 1 space Two bedrooms: 1.25 spaces Three or more bedrooms: 2 spaces Visitors: 1 per 4 units The above are minimum requirements unless Council is satisfied on the merit basis there are particular circumstances that warrant reduction of the above rates. Note: Studies or the like will be considered as bedrooms for the purpose of the DCP.	Refer to the car parking rates for affordable housing and non-affordable housing apartments in Section 19 of the SEPP (Housing) assessment. As visitor car parking requirements are not provided under the SEPP (Housing) the KDCP visitor car parking rates are applicable. The proposal provides 10 visitor car parking spaces and is compliant with the KDCP.	**YES**
At least one visitor car space is to be accessible and be provided within the site for every 6 apartments or part thereof and is to comply with the dimensional and locational requirements of AS2890.6.	The proposal provides 10 accessible car spaces and 10 visitor car parking spaces. No visitor car parking spaces have been clearly identified as an accessible car space.	**NO**
A clearly signposted parking bay for temporary parking of service and removalist vehicles is to be provided. The space is to have the following standards: i) a minimum dimension of 3.5 metres x 6 metres; ii) a minimum manoeuvring area 7 metres wide. Note: Where a separate space can not be provided, one of the visitor spaces may be used as the service/removalist parking spaces provided it meets the dimensions stated in 13(i) and 13(ii) above.	A loading bay is provided in Basement 1.	**YES**
One visitor parking bay is to be provided with a tap, to make provision for on-site car washing.	A visitor parking space is provided as a car wash bay in Basement 1.	**YES**
Parking areas are to be designed and constructed so that electric vehicle charging points can be installed.	Electric vehicle charging points are capable of being installed.	**YES**
7B.2 – Bicycle parking and support facilities provision		
Provide on-site, secure bicycle parking spaces and storage at the following rates: i) 1 bicycle parking space per 5 units or part thereof for residents within the residential car park area; and	41 bicycle parking spaces including 4 visitor bicycle parking spaces are provided within the basement levels.	**YES**

ii) 1 bicycle parking space (in the form of a bicycle rail) per 10 units for visitors in the visitor car park area.		
All on-site bicycle parking spaces and storage are to be designed to AS2890.3.	Bicycle parking spaces are designed in accordance with AS2890.3.	**YES**
7C – Building design and sustainability		
Part 7C.1 - SEPP 65 and Apartment Design Guide requirements		
All residential flat buildings are to comply with the objectives, Design Criteria and Design Guidance of the following *Apartment Design Guide* sections: 3F Visual Privacy 4A Solar and Daylight Access 4B Natural Ventilation 4C Ceiling Heights 4D Apartment Size and Layout 4E Private Open Space and Balconies 4F Common Circulation and Spaces 4G Storage	Refer to the ADG compliance table.	**NO**
7C.2 – Communal open space		
At least 10% of the site area must be provided as communal open space. Each parcel of communal open space is to have a minimum dimension of 5m.	The proposal provides communal open spaces at ground level adjacent to the eastern side boundary and on Level 6. The combined area of communal open space as calculated by the applicant is 341.8m² (12.2% of the site area) with minimum dimensions of 5 metres. The calculation of communal open space areas is accepted.	**YES**
At least one single parcel of Primary communal open space with a minimum area of 80m^2 and a minimum dimension of 8 metres is to be provided.	The ground floor communal open space adjacent to indoor communal area measures 156m² and has a depth of between 6 metres to 10 metres.	**YES**
The Primary communal open space is to be directly accessible from the internal common circulation areas.	Compliance is demonstrated.	**YES**

The Primary communal open space is to be located at or above finished ground level behind the building line. Roof top Primary communal open space may be provided where the ground level cannot meet performance requirements or is undesirable.	The communal open space at ground level is located behind the front building line and at the finished floor level.	**YES**
Secondary communal open spaces are to have a minimum dimension of 5 metres and may be provided on roof tops.	The communal open space on Level 6 has a maximum width of 10.5 metres and provides an alternative passive recreational space for future residents.	**YES**
Access to and within the Primary communal open space is to be provided for people with a disability Part 2 Section 7 of AS1428.	Communal open space areas are accessible via lifts and pathways.	**YES**
The location and design of the Primary communal open space is to optimise opportunities for active and passive social and recreation activities, solar access and orientation, summer shade, outlook, and maintain the privacy of residents on adjoining sites zoned differently for lower density residential development sites.	Communal open space areas provide opportunities for passive recreational activities and is screened by landscaping. The ground floor communal open space has limited direct sunlight however the space on Level 6 will receive direct sunlight between 9am and 3pm on 21 June.	**YES**
At least 50% of the area of the Primary communal open space and any Secondary communal open space are to receive direct sunlight for at least two hours between 9am and 3pm on 21st June.	Communal open spaces will receive adequate direct sunlight as discussed above.	**YES**
Communal open space is to be integrated with any significant natural feature(s) of the site and soft landscaping areas.	The communal open space at ground level is adjacent to deep soil areas and existing trees to be retained.	**YES**

The communal open space is to have surveillance from at least two onsite apartments for safety reasons.	Passive surveillance of the communal open space at ground level will be achieved from windows and balconies of apartments on Levels 1 to 5 inclusive. The communal open space on Level 6 is not directly overlooked by the two adjacent apartments on the same level. However, the northern end of the balcony of Unit 6.02 and Lobby 1 and 2 will have sightlines to the open space and achieves adequate passive surveillance.	**YES**
Communal open space design is to avoid creation of concealment or entrapment areas. Note: Communal open space is to be well lit with an energy efficient lighting system to be used in conjunction with timers or daylight controls. All light spill is prohibited.	The communal open spaces do not contain areas of concealment.	**YES**
Shared facilities such as barbecue facilities, shade structures, play equipment and seating, are to be provided within the Primary communal open space. Note: Selected items within communal open spaces are to be appropriate to the space and demonstrate consideration of the amenity of nearby apartments.	BBQ facilities are proposed for the communal open space on Level 6. The ground floor communal open space will be serviced by facilities within the internal communal area. Seating and shade structures are proposed within both communal open spaces.	**YES**
Garden maintenance storage areas, drainage and connections to water taps are to be provided with the Primary communal open space. Secondary communal open spaces are to have adequate connections to water for maintenance purposes. Note: Proposals are to demonstrate entry and access to communal open spaces and common areas for maintenance purposes. Note: Refer to Section A Part 1B Dictionary for definitions of Communal Open Space and Common Area.	Facilities to enable maintenance of communal open spaces can be accommodated.	**YES**
7C.3 – Ground floor apartments		
Ground floor apartments are to be separated	The orientation of	**YES**

from noise sources such as common areas, communal open space and the public domain.	ground floor apartments minimises potential noise impacts from communal open spaces, the building entry and the public domain.	
Ground and podium level apartments are to have private outdoor areas differentiated from communal areas by at least one of the following: i) a change in level; ii) walls to deflect noise; iii) planting, such as hedges and low shrubs; iv) a fence/wall to a maximum height of 1.8m. Any solid wall component is to be a maximum height of 1.2m with at least 30% transparent component above.	Ground floor apartments have appropriately screened private open spaces and landscaping to separate private spaces from communal areas.	**YES**
A gate is to be provided from each ground floor apartment private open space into common areas where practical.	The ground floor apartments at the south-western corner of the site have gates providing direct access from private courtyards to the communal pedestrian pathway and landscaped setback along the western boundary. Direct access from other ground floor apartments has not been provided due the design of pedestrian pathways, building entries and landscaping.	**YES**
No subterranean rooms to any part of any apartment	No subterranean rooms are proposed.	**YES**
No ground floor apartments created as a result of excessive excavation.	Excavation is only for the construction of basement car parking.	**YES**
No part of any wall used to accommodate any residential apartment uses, including storage areas outside the apartment, is to be in direct contact with soil or rely on any form of tanking including spaces that act as tanking. Note: Tanking is only acceptable to basement parking levels.	No tanking for residential apartments is proposed.	**YES**
Tanking may only be provided to basement parking levels. Where basement storage is located adjacent to external walls, they are to	The wall to basement storage is not shown to be separated from the	**NO**

be separated from the tanked wall by an accessible maintenance passage. Note: See Figure 7C.3-2 of the DCP	tanked wall by an accessible maintenance passage.	
The internal finished floor level of any part of a ground floor apartment and/or private open space is not to be more than 0.9 metres below existing ground level at the building line.	The internal floor level of ground floor apartments, internal communal area, communal and private open spaces are not more than 0.9 metres below existing ground level.	**YES**
Where the internal finished floor level of a ground floor apartment and/or private open space is not more than 0.9m below the existing ground level at the building line, the ground level adjacent to the building is to be levelled to the finished floor level for a distance of 3.0m from the building line. Note: See Figure 7C.3-2 of the DCP	The finished floor level at the building line aligns with the internal floor level of ground floor apartments.	**YES**
All obstructions, such as retaining walls or fences, are to be located below a 45˚ control plane, drawn from the finished ground level at the building line. Landscaping plants may project beyond the 45˚control plane. Note: See Figure 7C.3-2 of the DCP	No obstructions at the ground floor building line project beyond the 45^0 control plane.	**YES**
7C.4 – Apartment mix and accessibility		
Range of apartment sizes (one, two, three bedroom) included within the development	No studios or one bedroom apartments are proposed.	**NO**
Mix of 1, 2 & 3 - bedrooms apartments located on the ground level.	The ground floor comprises 1 x 3 bedrooms apartment and 5 x 2 bedrooms apartments. No one bedroom apartments are proposed.	**NO**
All apartments are to be designed to Silver Level under the Liveable Housing Design Guidelines	All apartments are designed to achieve Platinum Level standards.	**YES**
At least 15% of the dwellings (or part thereof) are to be designed to Platinum Level under the Liveable Housing Design Guidelines.	All apartments are designed to achieve Platinum Level standards.	**YES**
At least 70% of all dwellings are visitable.	Access to all apartments meet the	**YES**

	requirements of the national construction code and Liveable Housing Design Guidelines.	
7C.5 – Building entries		
The residential flat building entry is to be clearly expressed using appropriate architectural elements.	The primary building entry is centrally located and clearly defined from the street.	**YES**
Buildings are to address the street by providing visible entry points with the following: i) main building entrances that are level and directly accessible from the street; or, ii) where site configuration is conducive to having a side entry, the path to the building entrance is readily visible from the street, and the building entrance is signalled with appropriate architectural elements.	Level pedestrian pathways are provided from the street frontage to the building entry. The primary building entry is clearly defined and visible from the street.	**YES**
Entry foyers are to be no more than 1 metre above ground level. Any ramped access required is to be integrated into the design of the building or landscape. Mechanical chairlifts and the like will not be accepted.	Compliance is demonstrated.	**YES**
Buildings are to have a clearly visible building entry for each vertical circulation core with clear way-finding signs integrated into the external circulation pathway system.	The primary building entry provides direct access to both Lobby 1 and Lobby 2. The secondary pathways lead pedestrians clearly to both lobbies.	**YES**
The building entry is to be legible and integrated with horizontal and vertical building facade architectural elements. At street level, the entry is to be articulated with awnings, porticos, recesses or projecting bays for clear identification.	The building entry is clearly defined at street level as it is centrally located on the facade and articulated by curved building elements on either side.	**YES**
All entry areas are to be well lit and designed to avoid any concealment or entrapment areas and avoid dog leg entry foyers. All light spill is prohibited.	Appropriate lighting at the building entries, pedestrian pathways and communal open spaces can be accommodated.	**YES**
Lifts are to be directly visible from the building entry doorway.	The lift in Lobby 1 is visible from the building entry and the internal pedestrian pathways. The lift in Lobby 2 is visible from the internal	**YES**

	pedestrian pathways.	
Lockable mail boxes are to be: provided close to the street; and be at 90 degrees to the street and to Australia Post standards; and integrated with front fences or building entries.	Compliance is demonstrated	**YES**
On large development sites comprising multiple separate buildings, each building is to have its own clear entry with good sightlines. Way-finding signs are to be provided.	The proposal comprises of one building.	**YES**
All entries are to be integrated into the external circulation pattern of the development.	Compliance is demonstrated.	**YES**
Buildings on corner sites are to address both street frontages and provide entry points and direct level access from both street frontages.	The site is not on a corner lot and does not have a secondary frontage.	**YES**
Building entry paths are to be minimum 1.2 metres wide and located within the common area with a minimum dimension of 1.2 metres on either side for landscape planting. Paths are to provide extra width at building entries to allow easy passing between pedestrians and to allow effective turning. **Note:** This may result in increased side setbacks.	Compliance is demonstrated	**YES**
All common circulation corridors are to be at least 1.5 metres wide, and the area outside lifts is to be at least 1.8 metres wide.	The circulation space immediately outside lifts are 1.6 metres wide and do not provide sufficient accessible circulation space.	**NO**
7C.6 – Building Form and Facades		
All building facades at ground level are to be designed to avoid the creation of entrapment areas.	Compliance is demonstrated	**YES**
No single wall plane is to exceed 81m^2 in area.	Compliance is demonstrated.	**YES**
The following are to be avoided on all building elevations: i. large flat walls; ii. undifferentiated window openings; iii. applied treatments; iv. one single predominant finish or material.	Compliance is demonstrated.	**YES**
All facades are to place entries, habitable room windows, and balconies so that they maximise outlook and passive surveillance of	Compliance is demonstrated.	**YES**

the street and to common areas surrounding the building.		
All building elements including shading devices, signage, drainage pipes awnings/colonnades and communication devices are to be coordinated and integrated into the overall facade design. Note: Refer to Section A Part 12 Signage and Advertising for other signage controls.	Compliance is demonstrated.	**YES**
Air conditioning condensers are to be located within the basement or within the roof structure of the upper most roof. Air conditioning condensers are not to be located on: i) the building façade: ii) the top of a flat roof: iii) terraces; iv) private or communal open spaces; or v) balconies.	Air-conditioning condenser units are to be located on the roof behind screening.	**YES**
Screening between adjacent apartments is to be integrated into the overall building design.	Insufficient screening between apartments within the site have been identified on Levels 2, 3 and 5. Insufficient screening has been provided to balconies and habitable windows to adjoining properties.	**NO**
Notches, slots or indentations in the perimeter of the building are to be at least as wide as they are deep.	Compliance is demonstrated.	**YES**
Facade elements that result in poor architectural design outcomes for internal spaces, such as snorkel windows, are not permitted. Note: Refer to Section A Part 1B Dictionary for definition of snorkel window.	Compliance is demonstrated.	**YES**
All facades are to be designed to minimise on-going maintenance and weathering through measures such as: i. selecting appropriate robust materials/finishes; and ii. including appropriate building edge, balcony edge, sill, head and parapet detailing that demonstrates protection from prevailing weather and harsh solar aspects.	Compliance is demonstrated.	**YES**

Facade Articulation		
All building facades are to be articulated with wall planes varying in depth by not less than 0.6 metres, and supplemented with architectural elements.	Compliance is demonstrated.	**YES**
Facade articulation is to be well composed with attractive proportions and coherent rhythms and integrated into the building form and structure. Methods of achieving articulated facades include: i. defining a base, middle and top relating to the overall proportion of the building; ii. expressing the internal building layout or structure, such as vertical bays or party walls; iii. using a variety of window types to create rhythm or express the building uses; iv. using recessed balconies and deep windows to add visual depth; v. use of eaves, louvres and sun shading devices to openings. vi. using elements that cast shadow and accentuate the appearance of depth; vii. using changes of material, texture and colour integrated with the building articulation to break down large or repetitive facades and reduce the bulk and scale of the building.	Compliance is demonstrated.	**YES**
Blade walls are not to be the sole element used to provide articulation.	Compliance is demonstrated.	**YES**
All developments are to utilise shading/glare control devices to articulate the facade and contribute to the streetscape. Design solutions can include: i. providing external horizontal shading to north-facing windows, such as eaves, overhangs, pergolas, awnings, colonnades, ii. upper floor balconies, and/or deciduous vegetation; iii. providing vertical shading to east and west windows, such as sliding screens, adjustable louvres, blinds and/or shutters; iv. providing shading to glazed and transparent roofs; v. integration of shading devices with solar energy collection technology.	Compliance is demonstrated.	**YES**

Building Length		
The continuous length of a single building on any elevation is not to exceed 36m.	Compliance is demonstrated.	**YES**
The length of a single building elevation facing the side or rear boundary may exceed 36m provided that: i. the façade is recessed in depth and width to appear as distinctive and separate building bays or wings; and ii. the recess is retained as common area with landscaping which includes at least one medium tree (at least 8m canopy diameter at maturity).	No length of building along the side or rear boundaries is greater than 36 metres.	**YES**
Balconies		
Balcony or terrace design may incorporate building elements such as pergolas, sun screens, shutters, operable walls and the like to respond to the street context, building orientation and residential amenity. The use of such building elements are not to enable the balcony or terrace to be used as a habitable room.	Compliance is demonstrated.	**YES**
Balconies that run the full length of the building facade are not permitted.	Levels 3 to 6 comprise of balconies that extend the length of the building façade on the east, south and west elevations. The length of these balconies are acceptable on merit as the overall building façades particularly to the east and west consist of three components.	**YES**
Continuous transparent or translucent balustrades are not permitted to balconies or terraces.	All balcony balustrades comprise of solid materials.	**YES**
Balconies are not to project more than 1.5 metres from the outermost wall of the building facade.	The maximum projection of the balconies on the north elevation measures 2.4 metres from the external wall. The depth of the balconies contributes to building articulation and useability of the	**YES**

<table>
<tr><td></td><td>balconies and are acceptable on merit.</td><td></td></tr>
<tr><td colspan="3">7C.7 – Building storeys</td></tr>
<tr><td>Sites with the following maximum building heights under the KLEP are to have a maximum number of storeys above the basement as in the table below:

<table><tr><th>Maximum building height</th><th>Maximum number of storeys</th></tr><tr><td>23.5 metres</td><td>7</td></tr></table>
Note: The 1st storey is measured from a maximum 1m above the existing ground level. Also see figure 7C.7-1 in the DCP.</td><td>The proposal is subject to a maximum building height of 22.75 metres permitted in Chapter 2 of SEPP (Housing).

The proposal for a 7-storeys building with a maximum building height of 24.05 metres exceeds the number of storeys envisaged in the KDCP and is excessive in bulk and scale.</td><td>NO</td></tr>
<tr><td colspan="3">7C.8 – Top storey design and roof forms</td></tr>
<tr><td>The top storey of a building is to be designed so that:
i) the GFA of the top storey of a residential flat building does not exceed 60% of the GFA of the storey immediately below it; and

ii) for the purposes of this section, the top storey applies to the building as a whole and does not apply to the top level of each part of a stepped building.</td><td>The architectural plans contain inaccurate GFA calculations. However, the plans indicate that the GFA of Level 6 (358.4m²) equates to approximately 65.2% of the GFA of Level 5 (549.7m²) below and is excessive.</td><td>NO</td></tr>
<tr><td>The top storey of a building is to be set back a minimum of 2.4 metres from the outer face of the floors below on all sides (roof projection is allowed beyond the outer face of the top storey).</td><td>The top storey is setback between 0.4 metres to 1.2 metres from the eastern external wall and has nil setback from the western external wall of the floor below.</td><td>NO</td></tr>
<tr><td>The upper storeys of residential buildings are to be articulated with differentiated roof forms, maisonettes or mezzanine penthouses and the like.</td><td>The upper floor levels do not contain different roof form or style to the floor levels below and will contribute to visual bulk and is not acceptable.</td><td>NO</td></tr>
<tr><td>Service elements are to be integrated into the overall design of the roof and not be visible from the public domain or any surrounding development. These elements include lift overruns, plant equipment, air conditioning units, chimneys, vent stacks, water storage, communication devices and signage.</td><td>The lift overrun and mechanical plant areas are located on the roof and setback from the external walls of the floors below.</td><td>YES</td></tr>
</table>

Roof design is to respond to solar access and prevailing weather with the use of eaves, skillion roofs, awnings and the like with a minimum overhang of 0.6 metres	No eaves are proposed over the windows on the western elevation for sun-shading. Overhangs of balconies on floor levels above provide shading to openings to balconies on the west elevation.	**NO** **YES**
Lightweight pergolas, sun screens, privacy screens and planters are permitted on the roof or podium, provided they are integrated with the building and facade design and do not increase the bulk of the building, create visual clutter or impact on significant views from adjoining properties.	Compliance is demonstrated.	**YES**
Roof top gardens for private or communal use are encouraged.	A roof top communal open space with landscaping along the east and west perimeter is proposed.	**YES**
7C.9 – Laundry and air clothes drying facilities		
Each apartment is required to have access to an external air clothes drying area, such as a screened balcony, a terrace or clothes lines within the common area.	No clothes lines are provided in common areas. Balconies have solid balustrades and can facilitate clothes drying.	**YES**
All external air clothes drying areas are to be screened and not be visible from any public domain area.	Compliance is demonstrated.	**YES**
Storage volume calculation within laundries is to exclude the space required to accommodate a washing tub, washing machine and dryer.	Storage calculation plans include the washing tub and space for the washing machine and dryer. Notwithstanding this, sufficient storage is provided for each apartment in accordance with the ADG.	**YES**
Where clothes drying is provided within private open space within a communal open space, its area is to be additional to that required for the private open space or communal open space.	Compliance is demonstrated.	**YES**

7C.10 – Fencing		
Front boundary fences and walls (to a public street) and side boundary fences within the street setback are not to be higher than: i) 0.9 metres if of closed construction (such as masonry, lapped and capped timber or brushwood fences); or ii) 1.2 metres if of open construction (such as open paling and picket fences).	The front fence and gate measures 1.5 metres in height and is set back between 7.5 metres and 10 metres from the front boundary. The fence and gate comprise vertical open balustrades.	**YES**
Hedges and shrub planting are preferred to the street frontage, but no higher than 1.2 metres along the entire front boundary, or 1.8 metres on a site fronting a busy road.	A mix of shrubs and small feature trees are proposed within the front setback. The front boundary will not comprise of continuous hedge or shrub plantings.	**YES**
All fencing is to be designed to highlight entrances and be compatible with buildings and letterbox areas.	Compliance is demonstrated.	**YES**
External finishes for fencing are to be robust and graffiti resistant.	Compliance is demonstrated.	**YES**
Ground floor private open space, courtyard and terrace wall and fence heights are not to exceed i. 1.2 metres to any street frontage ii. 1.8 metres to any side or rear boundary with a maximum 1.2 metres high solid component and a minimum 30% transparent component above.	Fences to ground floor private open space comprise solid base with open balustrades. Fences to private open spaces are set back behind landscaping and sufficiently set back from front, side and rear boundaries.	**YES**
7C.11 – Acoustic Privacy		
Noise levels associated with air conditioning, kitchen, bathroom, laundry ventilation, other mechanical ventilation systems and other plant are to comply with the requirements in Part 23.8 of the DCP.	An acoustic report has been submitted demonstrating compliance.	**YES**

Ku-ring-gai Development Control Plan

Section B

Part 18 – Biodiversity

The site is not mapped as land comprising biodiversity significance however the site contains landscape remnants. Council's Ecological Assessment Officer and Landscape Assessment Officer have addressed biodiversity and tree impacts earlier in this report.

Ku-ring-gai Development Control Plan

Section C

Development Control	Proposed	Complies
Part 21 General Site Design		
21.1 – Earthworks and slope		
Development considers site topography, drainage, soli landscapes, flora, fauna and bushfire hazard by: • Stepping buildings down the site • Locate finished ground level as close to the natural ground level as practicable • Level changes to occur primarily within building footprint • Minimum 0.6 metres width between retaining walls • Maintain existing ground level within 2 metres from any boundary • Limit slope for embankments to 1:6 (grassed) and 1:3 (soil stabilising vegetation) • No fill and excavation within sensitive environments • Minimise altered groundwater flows	The topography of the site is generally maintained.	**YES**
21.2 – Landscape Design		
Appropriate and sensitive site planning and design Existing appropriate screen planting is retained	Insufficient eastern side setbacks within the front building setback does not provide adequate deep soil areas for appropriate tree and screen plantings.	**NO**
Part 22 - General access and parking		
22.1 – Equitable Access		
Compliance with DDA demonstrated Entry access ramps located within the site and does not dominate the front façade	Compliance is demonstrated.	**YES**

Access ways for pedestrians and for vehicles are separated		
Residential only Multi Dwelling Housing, Residential Flat Buildings and Shop Top Housing within Mixed Use developments provide access to, and between, dwellings and parking in accordance with the Livable Housing Guidelines as stipulated in Part 6 Multi Dwelling Housing, Part 7 Residential Flat Buildings and Part 8 Mixed Use Development.	Compliance is demonstrated.	**YES**
22.2 – General vehicle access		
• Minimise width and number of vehicle access points • Access driveways set back at least 10 metres from street intersections and 3 metres from pedestrian entrances • Vehicle and pedestrian access to buildings clearly distinguished and separated. Vehicle access to be a minimum 3 metres from pedestrian entrances • Vehicle crossing width is acceptable for intensity of use proposed • Vehicles must exit in a forward direction • Vehicle entries are integrated into the external façade and are finished in a high quality material • Retaining walls associated with driveways maximum height of 1.2 metres • No driveways are longer than 30 metres unless a passing bay is provided	The vehicle crossing has a width of 8.2 metres, exceeding the maximum 6 metres width. The vehicle crossing width is capable of being reduced to 6 metres. Although given the application is not supported the issue forms recommended reason 8 of refusal. The location of the driveway and adjacent pedestrian pathway is not appropriate as it will restrict deep soil and planting along the eastern side boundary.	**NO**
22.3 – Basement car parking		
Logical and efficient basement design AS2890.1	Compliance is demonstrated.	**YES**
Appropriate ceiling floor to ceiling heights and ventilation provided: • 2.5 metres for parking area for people with a disability; • 2.6 metres for residential waste collection and manoeuvring area • 4.5 metres for commercial waste collection and manoeuvring area	Compliance is demonstrated.	**YES**
Basement is fully tanked	Compliance is demonstrated.	**YES**
Unimpeded access to visitor parking and waste recycling rooms	Compliance is demonstrated.	**YES**

Ventilation grilles and screening devices are integrated into the landscape design	The basement carpark does not extend above existing ground level.	**YES**
Vehicles access ways are not in close proximity to doors and windows of habitable rooms	The driveway ramp to the basement car park entry is immediately below habitable windows of the ground floor apartment. The difference in level will not result in unreasonable amenity impacts for future residents.	**YES**
Safe and accessible intercom access provided	Compliance is demonstrated.	**YES**
22.4 – Visitor parking		
Visitor parking located behind a security grille with an intercom system to gain entry At least one visitor space is accessible and designed in accordance with AS2890.6	Compliance is demonstrated.	**YES**
22.5 – Parking for people with a disability		
Accessible spaces are signposted and have a continuous path of travel to the principal entrance or a lift	Compliance is demonstrated.	**YES**
22.6 – Pedestrian Movement within Car Parks		
Pathways designed in accordance with AS1428.1	Compliance is demonstrated.	**YES**
Marked pedestrian pathways have clear sightlines, appropriate lighting, are visible, conveniently located and constructed of non-slip material	There is adequate circulation space particularly around lifts and stairs for safe pedestrian movements.	**YES**
22.7 – Bicycle Parking and facilities		
Bicycle parking and storage facilities satisfy AS2890.3	Compliance is demonstrated.	**YES**
Bicycle access paths have a minimum width of 1.5 metres	Adequate access for bicycles to the basement storage areas are provided.	**YES**
Part 23 – Building Design and Sustainability		
23.3 – Sustainability of Building Materials and 23.4 – Materials and Finishes		
External walls constructed of high quality and durable materials	External walls comprise of face brick, precast	**YES**

	concrete, concrete and painted render.	
Use of materials and colours creates well-proportioned facades and minimises visual bulk	The horizontal and vertical proportions of façades are distinguished with different materials and colours.	**YES**
23.5 – Roof Terraces and Podiums		
Podiums and roof terraces are trafficable and support landscaping	No podiums are proposed. Landscape planting is proposed to the east and west sides of the roof top communal open space.	**YES**
Roof & terrace common areas design encourage usage	BBQ facilities and seating are provided within the roof top communal open space to accommodate passive recreation.	**YES**
23.6 – Building Services		
Services and related structures are appropriately located to minimise streetscape impact	Compliance is demonstrated.	**YES**
Air-conditioning units are well screened and do not create adverse noise impacts	Air conditioning condenser units are proposed on the roof top and are screened with louvres.	**YES**
23.7 – Acoustic Privacy		
Design minimises impact of internal and external noise sources	Insufficient building separation and location of the balconies and habitable windows conflicts with adjacent habitable windows and balconies.	**NO**
Noise levels associated with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and plant either as an individual piece of equipment or in combination shall not be audible within any habitable room in any residential premises before 7am and after 10pm. Outside of these restricted hours noise levels associated with air conditioning, kitchen, bathroom, laundry ventilation, or other mechanical ventilation systems and plant either as an individual piece of	Acoustic privacy can be satisfactorily achieved.	**YES**

equipment or in combination shall not emit a noise level greater than 5dB(A) above the background noise (LA90, 15 min) when measured at the boundary of the nearest potentially affected neighbouring properties. The background (LA90, 15 min) level is to be determined without the source noise present. Note: Council requires an acoustic assessment be undertaken for multi-dwelling housing, residential flat buildings, mixed-use development, non-residential buildings, and child care centres. Council may require an acoustic assessment be undertaken for dwelling houses and secondary dwellings. Assessment must be undertaken by a suitably qualified acoustic consultant to assess compliance with the above criteria. Recommended noise attenuation measures must be included in this report where applicable.		
23.8 – Visual Privacy		
Visual privacy maintained for occupants and for neighbouring dwellings	The location of balconies and habitable windows on the east and west elevations of Levels 4 and 5 will have unacceptable visual privacy impacts on adjoining properties.	**NO**
23.9 – Construction, Demolition and Disposal		
Satisfactory Environmental Site Management Plan	Compliance is demonstrated.	**YES**

Part 24 – Water management

Council's Team Leader Development Engineers is satisfied that the proposed development has been designed to manage urban stormwater as per the requirements of the KDCP. The comments provided by the Team Leader Development Engineers are concurred with.

Ku-ring-gai Contributions Plan 2010

The development, if approved, would attract a Section 7.11 contribution. lf the Panel is of a mind to approve the application, it is recommended al, a condition requiring payment of the required contribution to be included in the determination.

REGULATION

Section 61(1) of the Environmental Planning & Assessment Regulation 2021 requires the consent authority to consider the provisions of *Australian Standard AS 2601-2001: The demolition of structures.* If the application was recommended for approval, conditions to manage demolition would be included in the recommendation.

LIKELY IMPACTS

The likely impacts of the development have been considered and are deemed to be unacceptable for the reasons outlined in this report.

SUITABILITY OF THE SITE

The site is suitable for the proposed development.

PUBLIC INTEREST

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by the Panel ensuring that any adverse effects on the surrounding area and the environment are minimised. The proposal has been assessed against the relevant environmental planning instruments and is deemed to be unacceptable as detailed throughout the report and recommended reasons for refusal.

CONCLUSION

Having regard to the provisions of Section 4.15 of the Environmental Planning and Assessment Act 1979, the proposed development is unsatisfactory for the reasons advanced in the recommendations of this report.

RECOMMENDATION

PURSUANT TO SECTION 4.16(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

THAT the Ku-ring-gai Local Planning Panel, exercising the functions of Ku-ring-gai Council, as the consent authority, pursuant to Section 4.16 of the Environment Planning and Assessment Act 1979, refuse development consent to eDA0170/25 for the demolition of existing structures and construction of a seven storey residential flat building consisting of 37 apartments including infill affordable housing and three levels of basement parking on land at 130 Killeaton Street, St Ives, for the following reasons:

1. Excessive building height

The proposed building height is excessive and results in unacceptable amenity impacts on adjoining properties which is contrary to the objective in Clause 4.3(1)(c) of the Ku-ring-gai Local Environmental Plan 2015 (**KLEP**).

Particulars:

a) The Clause 4.6 variation request provided in support of the breach of the maximum additional building height development standard permitted in Section 16(3) in Chapter 2, Part 2, Division 1 of the State Environmental Planning Policy (Housing) 2021 (SEPP Housing) does not demonstrate that compliance with the height standard is unreasonable or unnecessary in the circumstances or that there are sufficient environment planning grounds to justify the contravention.

b) The cumulative impact of variation to the maximum additional FSR development standard permitted under Section 16(1) in Chapter 2, Part 2, Division 1 of SEPP Housing and the exceedance to the building height development standard results in an excessive built form that is not compatible with size of the site and is inconsistent with the height of buildings development standard objective in Clause 4.3(1)(c) of the KLEP.

c) The location of the lift overruns and screening to the mechanical plant areas on the roof exceed the maximum additional height of buildings development standard permitted in Clause 16(3) in Chapter 2, Part 2, Division 1 of SEPP Housing. The extent of the variation to the height of buildings development standard will result in additional overshadowing impacts on adjoining habitable windows and balconies and likely resulting in less than 2 hours of direct sunlight received between 9am and 3pm at midwinter to affected adjoining properties. Insufficient information, such as existing and proposed solar access analysis and floor plans of affected adjoining properties are required to enable proper assessment of overshadowing impacts.

d) The Clause 4.6 variation request has not demonstrated that the extent of the variation achieves a better outcome for the site, adjoining properties or the locality in comparison to a compliant building envelope and that there are sufficient environmental planning grounds to justify contravening the development standard. The built form will result in unreasonable overshadowing impacts on adjoining properties and is inconsistent with Clause 4.6(1)(b) of the KLEP.

e) The variation to the height of buildings development standard is not considered a critical component associated with the delivery of affordable housing apartments on the site, noting that the floor space of affordable housing and market apartments are contained within the development standard.

f) The Clause 4.6 request seeking variation to the building height development standard in Clause 16(3) in Chapter 2, Part 2, Division 1 of the SEPP Housing is not considered to be well founded.

2. Built form

The proposed building footprint and envelope projects beyond the minimum building separation to the side boundaries and results in excessive building bulk and would have unreasonable amenity impacts on the future residents and adjoining properties, contrary to the Design Principle 2 in Schedule 9 of the SEPP (Housing) and Objective 3F-1(1) in the Apartment Design Guide (**ADG**) and Controls 1, 2, 3, 5 in Part 7C.8 of the Ku-ring-gai Development Control Plan (**KDCP**.

Particulars:

a) The external walls, window openings and balconies on Levels 4 and 5 project beyond the minimum 9 metres building separation from the side boundaries and are inconsistent with Design Principle 2 in Schedule 9 of the SEPP Housing and Objective 3F-1 in the ADG as the building contributes to visual bulk and scale when viewed from adjoining properties to the east at 132-138 Killeaton Street and 126 Killeaton Street to the west and the public domain. The proposed built form does not complement the scale of the 5-storey residential flat buildings immediately to the east and west or the two-storey aged care development to the north at 97 Killeaton Street. Further to the north-east and east of the site, are two storey dwellings at Nos 105 to 117 Killeaton Street, 4 storey residential flat building at 142 Killeaton Street and a two-storey aged care facility at 144 Killeaton Street.

b) The proposed habitable windows and balconies on the eastern and western elevations of Levels 4 and 5 are inconsistent with Objective 3F-1 of the ADG and Principle 6 in Schedule 9 of SEPP Housing as it will result in unreasonable direct overlooking and loss of visual privacy between future occupants and residents of adjoining properties.

c) The top storey of the building has a Gross Floor Area (GFA) measuring 65.2% of the GFA of the level immediately below and exceeds the GFA control in Control 1 in Part 7C.8 of the Ku-ring-gai Development Control Plan (KDCP) and results in a built form that is not appropriately stepped to reduce building bulk and scale. The proposed building does not demonstrate compliance the Objectives and Controls 2, 3 and 5 of Part 7C.8 as the upper levels do not minimise visual bulk and overshadowing of adjoining properties, nor do they include appropriate solar and weather control for apartments.

3. Desired future character impacts

The proposed built form and landscaping of the site are not compatible with the existing or desired future character of the locality and do not achieve the design requirements in Section 20 of SEPP Housing, the Design Principles in Schedule 9 of SEPP Housing, or Parts 3 and 4 of the ADG.

Particulars:

a) The proposed building footprint and envelope is non-compliant with building separation requirements under Part 3F of the ADG, particularly to the side boundaries. The proposal exceeds the maximum building height and FSR development standards of SEPP Housing, resulting in a built form that is excessive in scale that will be visually prominent when viewed from surrounding properties and the streetscape.

b) The proposed building envelope does not achieve compliance with Objective 4A-1 and Objective 3F-1 of the ADG as it does not demonstrate compatibility with existing surrounding developments and the built form will result in unreasonable amenity impacts such as additional overshadowing and loss of privacy impacts on adjoining properties.

c) The proposed built form and location of the vehicular access and pedestrian pathways, particularly adjacent to the eastern side boundary, constrains the provision of deep soil area for planting of tall trees or screen planting and does not complement the landscaped character of the streetscape or locality required under Objective 4O-2 of the ADG.

4. **Failure to provide a biodiversity development assessment report**

A Biodiversity Development Assessment Report (BDAR) has not been submitted with the development application.

a) The proposed development involves the clearing of native vegetation comprising Sydney Turpentine Ironbark Forest (STIF), identified as Plant Community Type (PCT) 3262, which is listed as a Critically Endangered Ecological Community (CEEC) under Schedule 2 of the Biodiversity Conservation Act 2016.

b) The removal of STIF vegetation results in a significant impact on this CEEC, triggering entry into the Biodiversity Offsets Scheme (BOS) under Section 7.3(1) of the Biodiversity Conservation Act 2016 and Clause 7.1 of the Biodiversity Conservation Regulation 2017.

c) As the BOS is triggered, a BDAR is required to be submitted in accordance with Section 6.12 of the Biodiversity Conservation Act 2016.

d) No BDAR has been provided with the application. As such, the proposal fails to comply with the relevant provisions of the Biodiversity Conservation Act 2016 and Biodiversity Conservation Regulation 2017.

5. Impact on vegetation identified as landscape remnant

The proposed development is inconsistent with Part 18.4 'Landscape Remnant' of the DCP.

Particulars:

a) The subject site contains land identified as Landscape Remnant on the Greenweb map, comprising patches of Key Vegetation Communities (KVC) (Sydney Turpentine Ironbark Forest), which act as important habitat "stepping stones" for flora and fauna and support ecological connectivity.

b) The proposal involves the removal of a significant portion of vegetation within the Landscape Remnant, contrary to Control 1 of Part 18.4 of the KDCP, which requires avoiding locating development on land identified as Landscape Remnant.

c) The proposal fails to comply with Control 2 of Part 18.4 of the KDCP, as vegetation retention and rehabilitation measures are not designed to improve connectivity with existing vegetation and habitat.

d) The proposal does not meet the objectives of Part 18.4, which include:
   i. Maintaining smaller Key Vegetation Community remnants to support habitat, seedbanks, and pollination (Objective 1);
   ii. Maintaining and restoring smaller remnants across diverse topographies (Objective 2);
   iii. Protecting significant trees that provide habitat or have exceptional aesthetic value (Objective 3).

6. Tree removal and impact

The proposed development fails to protect and enhance the aesthetic value of trees, local character and amenity due to tree removal and impact to retained trees and is contrary to Objectives 1, 2, 4, 5, 6 and 7 in Part 13.1 in the KDCP and Control 6 in Part 21.2 of the KDCP.

Particulars:

a) The Arborist Report fails to accurately identify or assess the extent of development encroachment on existing trees and is inconsistent with Control 6 in Part 21.2 of the KDCP for the reasons as follows:

   i. Tree 50: Eucalyptus saligna (Sydney Blue Gum) is located towards the northwestern site corner within the site frontage and is identified as a mature specimen of high landscape value. The proposed development including the basement and additional development work encroaches the Tree Protection Zone (TPZ) by approximately 30% (106m²) and is within the structural root zone (SRZ) which has the potential to impact the tree beyond an acceptable threshold. The proposed excavation within the SRZ has the potential to sever structural roots impacting stability, while excavation within the TPZ has the potential to sever feeder roots, impacting vigour and health.

ii. Tree 96: Eucalyptus saligna (Sydney Blue Gum) is centrally located adjacent to the eastern site boundary. The tree is in good health and condition, of high significance and prominent within the landscape providing valuable amenity. The arborist has failed to accurately identify or assess the extent of development encroachment within the tree's TPZ and has based their assessment on the proposed basement footprint without assessing additional development works located within the TPZ. The TPZ area is approximately 409m² and the proposed encroachment of 25% is considered major in accordance with AS4970-2009 and has the potential to impact upon the tree's health and ongoing viability through root loss and changes to the trees growing environment.

iii. The project arborist has not assessed or considered whether canopy reduction or pruning is required to accommodate the numerous storeys proposed.

b) The proposed tree removal will potentially have adverse impacts on the preservation of significant native vegetation and detract from the character of Ku-ring-gai and is therefore inconsistent with Objectives 1, 2, 4, 5, 6 and 7 in Part 13.1 in the KDCP.

7. Deep soil and landscape works

Insufficient deep soil areas, particularly at the rear of the site and along the eastern side boundary, are proposed to accommodate tree plantings that will contribute to the landscaped character of the site, streetscape and locality.

Particulars:

a) Insufficient deep soil area is provided at the rear of the site and is inconsistent with the deep soil area development standard in Section 19(2)(c)(ii) in Part 2 of Chapter 2 of the SEPP (Housing). A variation request pursuant to Clause 4.6 of the KLEP, seeking to vary the deep soil area required at the rear of the site prescribed by Clause 19(2)(c)(ii) in Part 2 of Chapter 2 of the Housing SEPP, has not been provided with the Development Application. In the absence of this jurisdictional requirement, development consent may not be granted.

b) Deep soil areas have been incorrectly calculated as areas excluded from the definition, such as pathways greater than 1.2 metres wide, gardens and planters less than 2 metres wide, built structures, and pipes greater than 300 millimetres in diameter have been included as deep soil, contrary to the definition in the KDCP.

c) The proposed deep soil area is less than 50% of the site area and is inconsistent with Objectives 1, 2, 3, 4, 5 and 7 and Control 1 in Part 7A.6 of the KDCP as it does not provide adequate landscape areas for retention of existing native trees or tall tree plantings that will contribute and complement the character of the streetscape and locality.

d) The proposed landscape plan contains insufficient information and is inconsistent with Objectives 1 to 3 (inclusive) and Controls 1(i) and (ii) in Part 21.2 in the KDCP as it does not demonstrate appropriate plantings that are suitable for the development and contextually appropriate for the locality.

8. Vehicular access

The design of the vehicular access, particularly the width of the crossing at the property boundary and location of the driveway ramp to the basement is visually prominent and will have undesirable streetscape impacts.

Particulars:

a) The vehicular crossing measures 8.2 metres wide at the property boundary and is greater than the maximum permitted width of 6 metres and is inconsistent with Objectives 1 to 3 (inclusive) and Control 6 in Part 22.2 of the KDCP.

b) The driveway ramp to the basement encroaches upon the minimum 6 metres side setback to the eastern boundary and does not provide sufficient deep soil areas along the side boundary for tall trees within the front building line or screen planting along the side boundary. The vehicular access will have adverse impacts on provision of deep soil within the front building setback, landscape character and the streetscape as it is inconsistent with Objectives 1, 2, 3, 5 and 7 and Controls 3 and 5 in Part 7A.6 and Objectives 1, 2, 7 in Part 21.2 in the KDCP.

c) The proposed traffic signal system, including a traffic light within the driveway ramp, will be visually prominent from the public domain and will contribute to detracting elements of the development as viewed from the street.

9. Amenity impacts

The building footprint, envelope and orientation of habitable windows and balconies particularly along the eastern and western side boundaries, are insufficiently set back from existing adjoining properties and will result in unacceptable amenity impacts, contrary to Objectives 3F-1, 4H-1, 4H-2 and Objective 4E-3 in the ADG and Design Principle 6 in Schedule 9 of the SEPP Housing.

Particulars:

a) The proposed balconies and habitable windows on Levels 4 and 5 on the eastern and western elevations are positioned directly opposite existing habitable windows and balconies of adjoining properties. The proposed development is inconsistent with Objectives 3F-1, 4H-1, 4H-2 in the ADG and Design Principle 6 in Schedule 9 of SEPP Housing as the design of the building does not provide reasonable levels of external and internal visual or acoustic privacy for future occupants or adjoining residents.

b) Balconies and terraces are jointly accessed from bedrooms and living rooms with no physical separation to provide privacy for bedrooms of units G.01, G.02, G.04, 1.01, 1.02, 1.05, 2.01, 2.02, 2.05, 3.01, 3.02, 4.02, 5.01, 5.02 and 6.01. This does not achieve good amenity for future occupants and is inconsistent with Objective 3F-2 of the ADG and objectives in Design Principle 6 in Schedule 9 of SEPP Housing.

c) No details are provided to demonstrate any operable screens, shutters, hoods or pergolas are proposed to enable control of sunlight or wind to enhance the amenity for future occupants as required in Objective 4E-3 of the ADG.

d) The number of affordable housing apartments that receive at least 2 hours of direct sunlight between 9am and 3pm on 21 June equates to 38% of affordable housing apartments contrary to the solar access requirements for apartments in Part 4A-1 of

the ADG and residential amenity considerations in the Department of Planning, Housing and Infrastructure In-fill Affordable Housing Practice Note (December 2023). Adequate solar access to affordable housing apartments should be provided to achieve equity across the proposed development.

e) No outdoor clothes drying areas within communal open spaces have been identified on the architectural plans and is inconsistent with passive environmental design and building design requirements in Parts 4E-3(8) and 4U-1 of the ADG and Objectives 1 and 2 and Control 1 in Part 7C.9 of the KDCP.

10. Excessive excavation and car parking

The three levels of basement carparking provides car parking spaces in excess of the requirement for residents and visitors, and will result in excessive excavation that is likely to have environmental impacts, contrary to Clause 19(2)(e) and (f) in Chapter 2 of the SEPP (Housing) 2021, Controls 8 and 11 in Part 7B.1 of the KDCP and visitor car parking requirements in Part 22 of the KDCP.

Particulars:

a) Insufficient and inconsistent details have been provided on the architectural plans and the traffic report to clarify that the allocation of car parking spaces is compliant with the requirements for car parking in Section 19(2)(e) and (f) in Chapter 2 of SEPP Housing, Controls 8 and 11 in Part 7B.1 of the KDCP and visitor car parking requirements in Part 22 of the KDCP.

b) Calculations of required car parking for the development in accordance with the car parking rates in Section 19(2)(e) and (f) of SEPP Housing and Parts 7B.1 and 22 of the KDCP indicate the proposal provides 28 car parking spaces more than the requirements. The excess car parking spaces are in Basements 2 and 3. The excess car parking spaces requires additional level of excavation to a depth of 11 metres which has not been adequately supported by a detailed geotechnical investigation. As such, the proposed earthworks are considered excessive and likely to result in environmental impacts that are inconsistent with the matters for consideration in Clause 6.2 of the KLEP.

11. Apartment mix

The proposed development does not incorporate a range of apartment types and sizes to meet the needs of different households, contrary to Part 4K in the ADG and the Objectives and Controls 1 and 2 in Part 7C.4 of the KDCP

Particulars:

a) The proposed development does not include one bedroom apartments to contribute to a wider range of apartment types and sizes, and to meet the demands for affordable housing for different household types under Part 4K in the ADG and the Objectives and Controls 1 and 2 in Part 7C.4 of the KDCP.

12. Circulation areas and accessibility

The circulation areas adjacent to lifts in common areas of the building do not achieve the minimum circulation widths to ensure equitable access and internal amenity for residents and visitors, contrary to Objective 4 and Control 13 in art 7C.5 of the KDCP.

Particulars:

a) The circulation areas immediately outside lifts in Lobbies 1 and 2 are less than 1.8 metres in width and are inconsistent with Objective 4 and Control 13 in Part 7C.5 of the KDCP. The insufficient circulation width outside of lifts do not provide adequate space for access and egress of residents and/or visitors and the transportation of large items such as furniture.

13. Floor space ratio (Insufficient information)

The proposed GFA and FSR calculations contains errors and it cannot be determined if the proposed development achieves compliance with the maximum FSR development standard.

Particular:

a) The submitted FSR calculation suggests compliance with the maximum FSR development standard in Clause 16 of the SEPP (Housing) however, the calculations are incorrect as all areas of the building defined as GFA under the KLEP have not been included in the calculations. It is unclear if the proposal, calculated in accordance with the definition of GFA in the KLEP achieves compliance.

14. Geotechnical investigation (insufficient information)

Insufficient information has been provided to enable a proper assessment of the geotechnical investigation of the site and impacts of the proposed excavation on the stability of the site and environmental impacts on the surrounding locality.

Particulars:

a) The submitted Geotechnical Investigation Report contains insufficient information and does not adequately address the matters for consideration for the proposed earthworks and environmental impacts such as groundwater in accordance with Clause 6.2 of the KLEP and Objectives 2, 3, 5, 6, 10 and Controls 10 in Part 21.1 of the KDCP.

b) The submitted geotechnical report does not identify and determine the site-specific subsurface profile and geotechnical parameters for the site. The geotechnical investigation does not include sufficient boreholes into bedrock, records of groundwater levels to determine if permanent dewatering will be required or recommendations to address excavation methods and support, vibration monitoring and requirements for a dilapidation survey.

c) In the event that permanent dewatering will be required, development consent may not be granted by the consent authority prior to a referral to the NSW Office of Water for licensing conditions (Integrated Development).

15. Solar access (insufficient information)

There is insufficient information to clarify the extent of additional overshadowing cast by the proposed building envelope and any adverse overshadowing impacts on the amenity of adjoining properties to the east and west at 132-138 Killeaton Street and 126 Killeaton Street, respectively, to enable a proper assessment of the proposed development.

Particulars:

a) The submitted shadow diagrams and view from the sun diagrams do not identify if impacted windows of adjoining properties are to habitable or non-habitable rooms and a comparison of the additional overshadowing cast by a compliant building envelope and the non-compliant building separation has not been submitted for consideration.

b) True north, as identified on the survey plan should be shown on the solar access diagrams to enable a proper assessment of overshadowing impacts.

16. Waste management (insufficient information)

The proposed development contains insufficient information to enable a proper assessment of the proposal.

Particulars:

a) The development application has not provided sufficient information to enable assessment of the head height clearance throughout the basement carpark along the path of travel for a waste collection vehicle in accordance with Objective 1 and Control 3 in Part 25 of the KDCP.

b) A swept path analysis to demonstrate adequate manoeuvring for a 6.7 metres long waste collection vehicle has not been provided to clarify that a waste collection vehicle can enter and exit the garbage collection point in a forward direction.

17. BASIX certificate

The proposed development is inconsistent with the landscape outcomes nominated within the submitted BASIX certificate. The submitted BASIX certificate does not contain accurate information and is not acceptable.

Particulars:

a) Certificate 1788973M dated 26/03/2025 is submitted with the application and includes:

   i. 612.8m² of common lawn area
   ii. 919.3m² of common garden area
   iii. 300 m² of low water use/indigenous species
   iv. No individual units have areas of private garden and lawn nominated
   v. Common taps are provided.

b) Private areas of garden and lawn are proposed for units G.02, G.03, G.04, G.05, G.06, 1.01, 2.01, 3.01, 4.01 and 5.01, whereas the certificate does not nominate any areas of private garden and lawn.

c) The calculation of common area lawns is incorrect and inconsistent between landscape plans and the BASIX Certificate as 612.8m² is nominated on the BASIX certificate however 244m² is proposed on the landscape plan.

d) The calculation of common gardens is inconsistent. The BASIX certificate nominates 919m² however the landscape plans show common garden areas of greater than 1100m².

e) The BASIX certificate includes a commitment for 300m² of low water use/indigenous species. Insufficient information has been submitted to clearly identify the mix of proposed lower and higher water use species and enable accurate calculation of the area of proposed low water use/indigenous species.

18. Construction management

A Construction Traffic Management Plan (CTMP) has not been provided.

Particular:

a) No indicative CTMP has been submitted (required under Council's DA Guide). The CTMP is to show the largest vehicle to be used entering and exiting the site for the demolition, excavation and construction stages, stockpiles and all necessary tree protection fencing. Consultation with a consulting arborist is recommended in preparation of any CTMP.

19. Insufficient details on architectural plans

Insufficient information has been provided on the architectural plans to enable a proper assessment of the basement design to determine compliance or otherwise with Control 7 in Part 7C.3 of the KDCP.

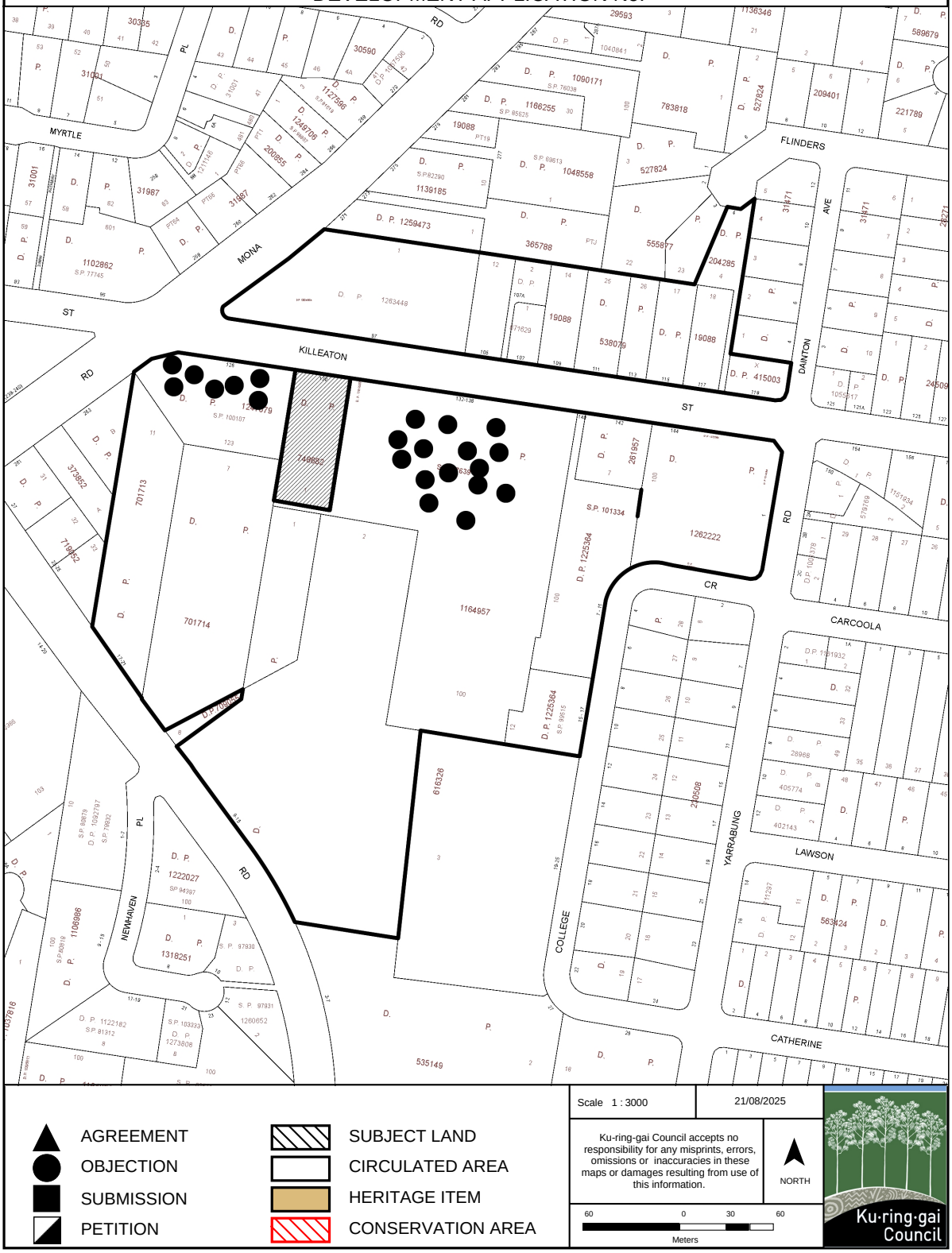
Particulars:

(a) The architectural plans do not demonstrate separation of the walls of the basement storage areas to the tanked walls by an accessible maintenance passage and is inconsistent with Objective 5 and Control 7 in Part 7C.3 of the KDCP.

LOCATION SKETCH

130 Killeaton Street ST IVES NSW 2075

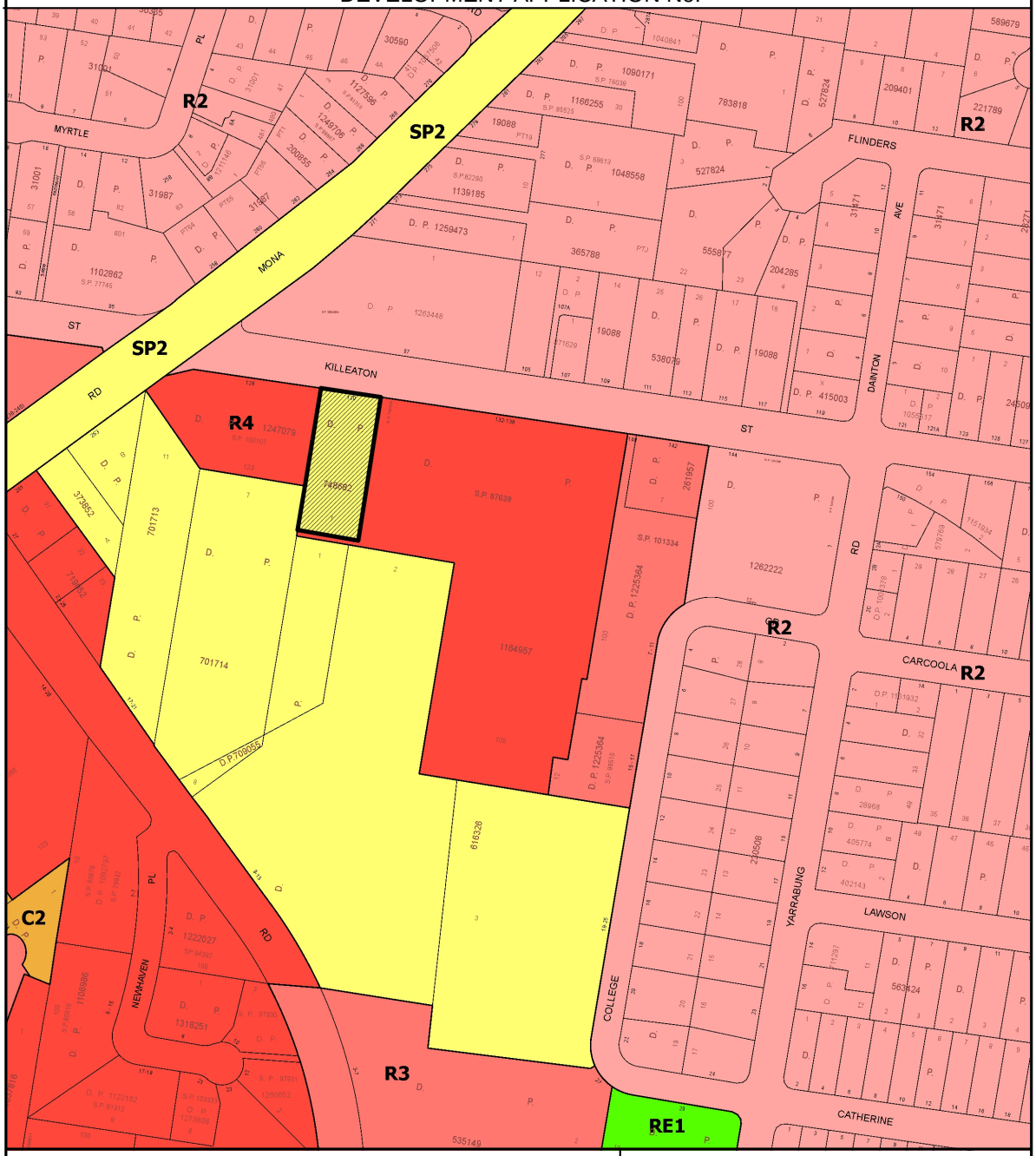
DEVELOPMENT APPLICATION No.



KU-RING-GAI LEP 2015 ZONING EXTRACT

130 Killeaton Street ST IVES NSW 2075

DEVELOPMENT APPLICATION No.



Legend

Subject Land

Zoning

E1	Local Centre	C4	Environmental Living	RE1	Public Recreation
E3	Productivity Support	R1	General Residential	RE2	Private Recreation
MU	Mixed Use	R2	Low Density Residential	SP1	Special Activities
C1	National Parks & Reserves	R3	Medium Density Residential	SP2	Infrastructure
C2	Environmental Conservation	R4	High Density Residential	W1	Natural Waterways
C3	Environmental Management	R5	Large Lot Residential		

Scale 1 : 3000

Date: 21/08/2025

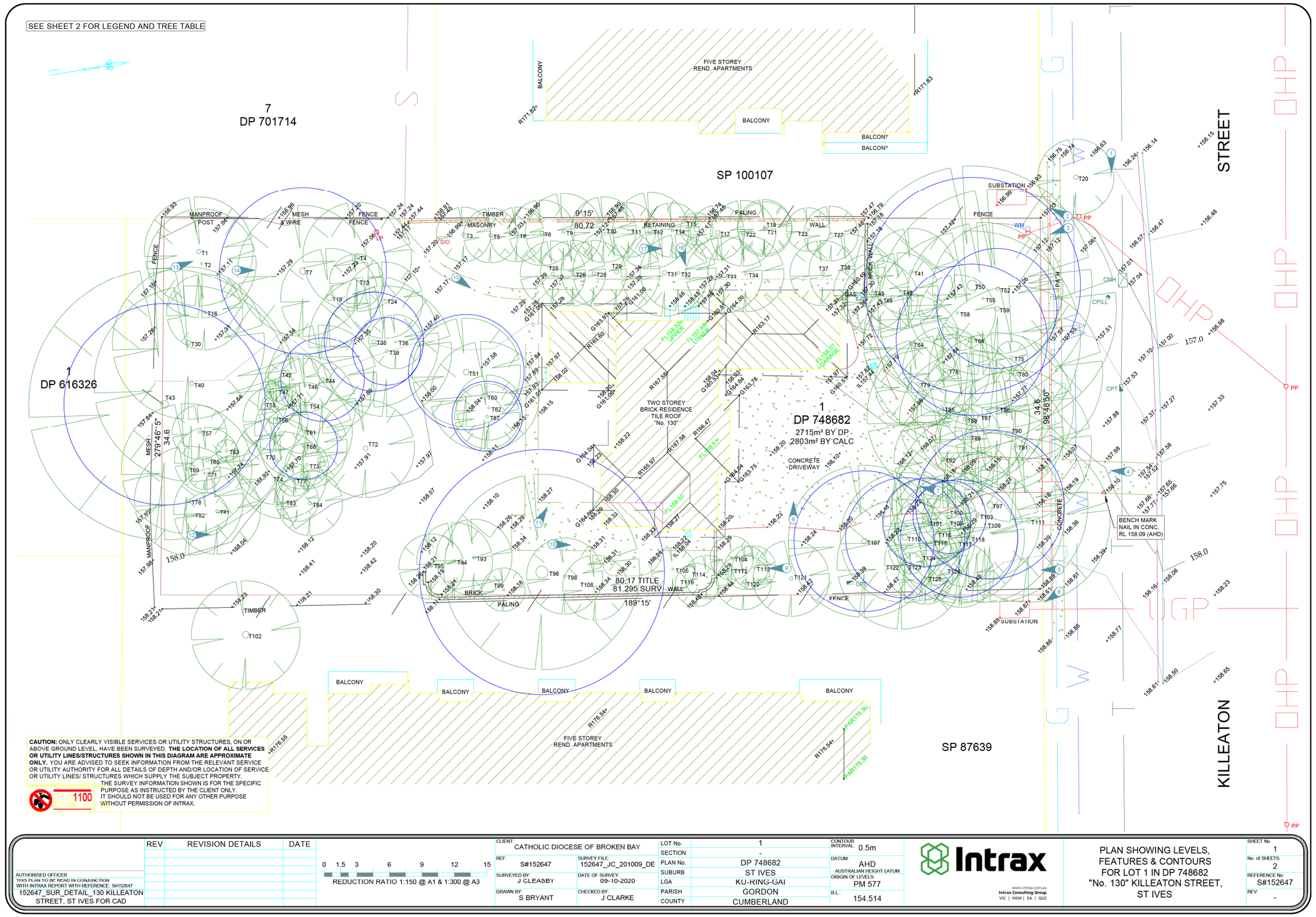
Ku-ring-gai Council accepts no responsibility for any misprints, errors, omissions or inaccuracies in these maps or damages resulting from use of this information.

NORTH

0 60 120

Meters

Ku·ring·gai Council



CAUTION: ONLY CLEARLY VISIBLE SERVICES OR UTILITY STRUCTURES, ON OR ABOVE GROUND LEVEL, HAVE BEEN SURVEYED. **THE LOCATION OF ALL SERVICES OR UTILITY LINES/STRUCTURES SHOWN IN THIS DIAGRAM ARE APPROXIMATE ONLY.** YOU ARE ADVISED TO SEEK INFORMATION FROM THE RELEVANT SERVICE OR UTILITY AUTHORITY FOR ALL DETAILS OF DEPTH AND/OR LOCATION OF SERVICE OR UTILITY LINES/ STRUCTURES WHICH SUPPLY THE SUBJECT PROPERTY.

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THE SURVEY INFORMATION SHOWN IS FOR THE SPECIFIC PURPOSE AS INSTRUCTED BY THE CLIENT ONLY. IT SHOULD NOT BE USED FOR ANY OTHER PURPOSE WITHOUT PERMISSION OF INTRAX.

REV	REVISION DETAILS	DATE

AUTHORISED OFFICER:
THIS PLAN TO BE READ IN CONJUNCTION WITH INTRAX REPORT WITH REFERENCE: S#152647
152647_SUR_DETAIL_130 KILLEATON STREET, ST IVES FOR CAD

0 1.5 3 6 9 12 15
REDUCTION RATIO 1:150 @ A1 & 1:300 @ A3

CLIENT:	CATHOLIC DIOCESE OF BROKEN BAY		
REF:	S#152647	SURVEY FILE:	152647_JC_201009_DE
SURVEYED BY:	J CLEASBY	DATE OF SURVEY:	09-10-2020
DRAWN BY:	S BRYANT	CHECKED BY:	J CLARKE

LOT No.	1
SECTION	-
PLAN No.	DP 748682
SUBURB	ST IVES
LGA	KU-RING-GAI
PARISH	GORDON
COUNTY	CUMBERLAND

CONTOUR INTERVAL:	0.5m
DATUM:	AHD
	AUSTRALIAN HEIGHT DATUM
ORIGIN OF LEVELS:	PM 577
R.L.:	154.514

Intrax
www.intrax.com.au
Intrax Consulting Group
VIC | NSW | SA | QLD

PLAN SHOWING LEVELS, FEATURES & CONTOURS FOR LOT 1 IN DP 748682 "No. 130" KILLEATON STREET, ST IVES

SHEET No.	1
No. of SHEETS:	2
REFERENCE No:	S#152647
REV:	-

Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075



Drawing List

DA000	Cover Page	DA201	South Elevation	DA601	Sun-Eye Diagram
DA001	Project Information	DA202	East Elevation	DA700	Shadow Diagram (Winter - 21st June)
DA002	Demolition Plan	DA203	West Elevation	DA800	Platinum Units
DA003	Site Analysis	DA300	Section A		
DA004	Site Plan	DA301	Section B		
DA100	Basement 3 Plan	DA302	Ramp Section		
DA101	Basement 2 Plan	DA400	Finishes Schedule		
DA102	Basement 1 Plan	DA410	Photomontage		
DA103	Ground Floor Plan	DA500	GFA Diagram		
DA104	Level 1 Plan	DA510	Site Coverage & Deep Soil Diagram		
DA105	Level 2 Plan	DA520	Height Plane Diagram		
DA106	Level 3 Plan	DA530	Cross Ventilation Diagram		
DA107	Level 4 Plan	DA540	Communal Open Space Diagram		
DA108	Level 5 Plan	DA550	Unit Mix Diagram		
DA109	Level 6 Plan	DA560	Solar Access Diagram		
DA110	Roof Plan	DA570	Storage Calculation Diagram		
DA200	North Elevation	DA600	Sun-Eye Diagram		

GENERAL NOTES:

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Issue	Date	Description
A	21/03/2025	DA Submission

pbd architects

P - 02 9698 8140
E - info@pbdarchitects.com.au
W - pbdarchitects.com.au

Level 2, 52 Albion Street, Surry Hills NSW 2010

ABN 36 147 035 550
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Cover Page

DRAWING BY: AI	CHECKED BY: KS	DATE: 24/03/2025
SCALE: @ A1 NTS PROJECT NO: 2434	DRAWING NO.: **DA000**	ISSUE: **A**

PROJECT INFORMATION	
130 Killeaton Street , St Ives	
Site Area (m2)	2803
Zone	R4 - High Density Residential
Permissible FSR	1.3:1
Permissible GFA (m2)	3643.9
Permissible height	17.5 m
Housing SEPP Bonus	30.00%
Bonus GFA (m2)	1093.17
max. GFA m2 (incl. bonus)	4737.07
max. FSR (incl. bonus)	1.69:1
max. HOB (incl. bonus)	22.75 m
Proposed FSR	1.62:1
Proposed GFA (m2)	4542.8

Unit Mix				
Level	2 Bed	3 Bed	4 Bed	Total
Ground	5	1	0	6
Level 1	5	2	0	7
Level 2	5	2	0	7
Level 3	2	4	0	6
Level 4	2	4	0	6
Level 5			3	3
Level 6			2	2
Total	19	13	5	37
	51%	35%	14%	100%

GFA Schedule	
Level	GFA (m2)
Ground Floor	636.5
Level 1	745.3
Level 2	745.3
Level 3	745.3
Level 4	745.3
Level 5	547
Level 6	378.1
Proposed GFA	4542.8
Proposed FSR	1.62:1

Car Parking Requirements (DCP)				
		No. of units	Required (min.)	Proposed
2 bed	1 space per dwelling	11	11	
3 bed	2 space per dwelling	13	26	
4 bed	2 space per dwelling	5	10	
1 bed (Housing SEPP)	0.4 space per dwelling	0	0	
2 bed (Housing SEPP)	0.5 space per dwelling	8	4	
3 bed (Housing SEPP)	1 space per dwelling	0	0	
Total Residential			51	69
Accessible			Inclusive of above	
Visitor	0.25 space per dwelling	37	9.3	10
Car Wash Bay			1	1

Affordable GFA Schedule	
Level	GFA(m2)
Ground	370.4
Level 1	373.6
Proposed Affordable GFA	744

Target Affordable GFA - 15% *710.6*

Proposed Affordable housing	
8	2 Bed
8	Units

Bicycle Requirements			
		Required (max.)	Proposed
Bicycle	1 /dwelling	37	37
Bicycle (visitor)	10 /dwelling	3.7	4

Other requirements			
		Required	Proposed
Solar access (2+ HR)	70%	25.9	27
Silar access (nil)	max. 15%	5.55	4
Cross ventilation	60%	22.2	33
Site Coverage	30%	840.9	834.7
Deep soil	50%	1401.5	1402.5
Communal Open Space	10%	280.3	341.8
Platinum Units	15%	5.55	6

Area Schedule

Level	Unit.No	Type		Affordable	Platinum Livable	Internal Area (m2)	Terrace/ Balcony (m2)	Storage (m3)	Min. Carpark Storage (m3)	Total Storage (m3)
Ground Floor	G.01	2	BED		✓	93	26.1	4.4	3.6	8.0
	G.02	3	BED			129	48	5.0	5.0	10.0
	G.03	2	BED	✓		83	55.8	4.1	3.9	8.0
	G.04	2	BED	✓		80	56	4.2	3.8	8.0
	G.05	2	BED	✓		85	69	4.3	3.7	8.0
	G.06	2	BED	✓		86	62.5	4.1	3.9	8.0
LEVEL 1	1.01	3	BED		✓	124	17.4	5.6	8.0	13.6
	1.02	3	BED		✓	129	21	5.2	4.8	10.0
	1.03	2	BED			79	15.8	4.9	3.1	8.0
	1.04	2	BED	✓		79	15.8	4.9	3.1	8.0
	1.05	2	BED	✓		80	28.8	4.0	4.0	8.0
	1.06	2	BED	✓		85	10	4.3	3.7	8.0
	1.07	2	BED	✓		86	13.7	3.4	4.6	8.0
LEVEL 2	2.01	3	BED		✓	123	17.4	5.6	4.4	10.0
	2.02	3	BED		✓	129	21	5.2	4.8	10.0
	2.03	2	BED			79	15.8	4.9	3.1	8.0
	2.04	2	BED			79	15.8	4.9	3.1	8.0
	2.05	2	BED			80	28.8	4.0	4.0	8.0
	2.06	2	BED			85	10	4.3	3.7	8.0
	2.07	2	BED			86	13.7	3.4	4.6	8.0
LEVEL 3	3.01	3	BED		✓	123	17.4	5.6	4.4	10.0
	3.02	3	BED			129	21	5.2	4.8	10.0
	3.03	2	BED			79	15.8	4.9	3.1	8.0
	3.04	2	BED			79	15.8	4.9	3.1	8.0
	3.05	2	BED			144	29	8.0	0.0	8.0
	3.06	2	BED			110	13.7	7.7	0.3	8.0
LEVEL 4	4.01	3	BED			123	29	5.6	4.4	10.0
	4.02	3	BED			129	21	5.2	4.8	10.0
	4.03	2	BED			79	15.8	4.9	3.1	8.0
	4.04	2	BED			79	15.8	4.9	3.1	8.0
	4.05	2	3 BED			144	29	8.0	0.0	8.0
	4.06	2	3 BED			110	13.7	7.7	0.3	8.0
LEVEL 5	5.01	4	BED			153	27	7.0	5.0	12.0
	5.02	4	BED			152	42	9.1	2.9	12.0
	5.03	4	BED			183	60	6.8	5.2	12.0
LEVEL 6	6.01	4	BED			153	27	7.0	5.0	12.0
	6.02	4	BED			183	25.5	6.8	5.2	12.0

4.05 doesnt exist on plan. 4.06 is a 3 bed, 4.07 is a 3 bed

GENERAL NOTES:

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Issue	Date	Description
A	21/03/2025	DA Submission

pbd architects

P - 02 9698 8140
E - info@pbdarchitects.com.au
W - pbdarchitects.com.au

Level 2, 52 Albion Street,
Surry Hills NSW 2010

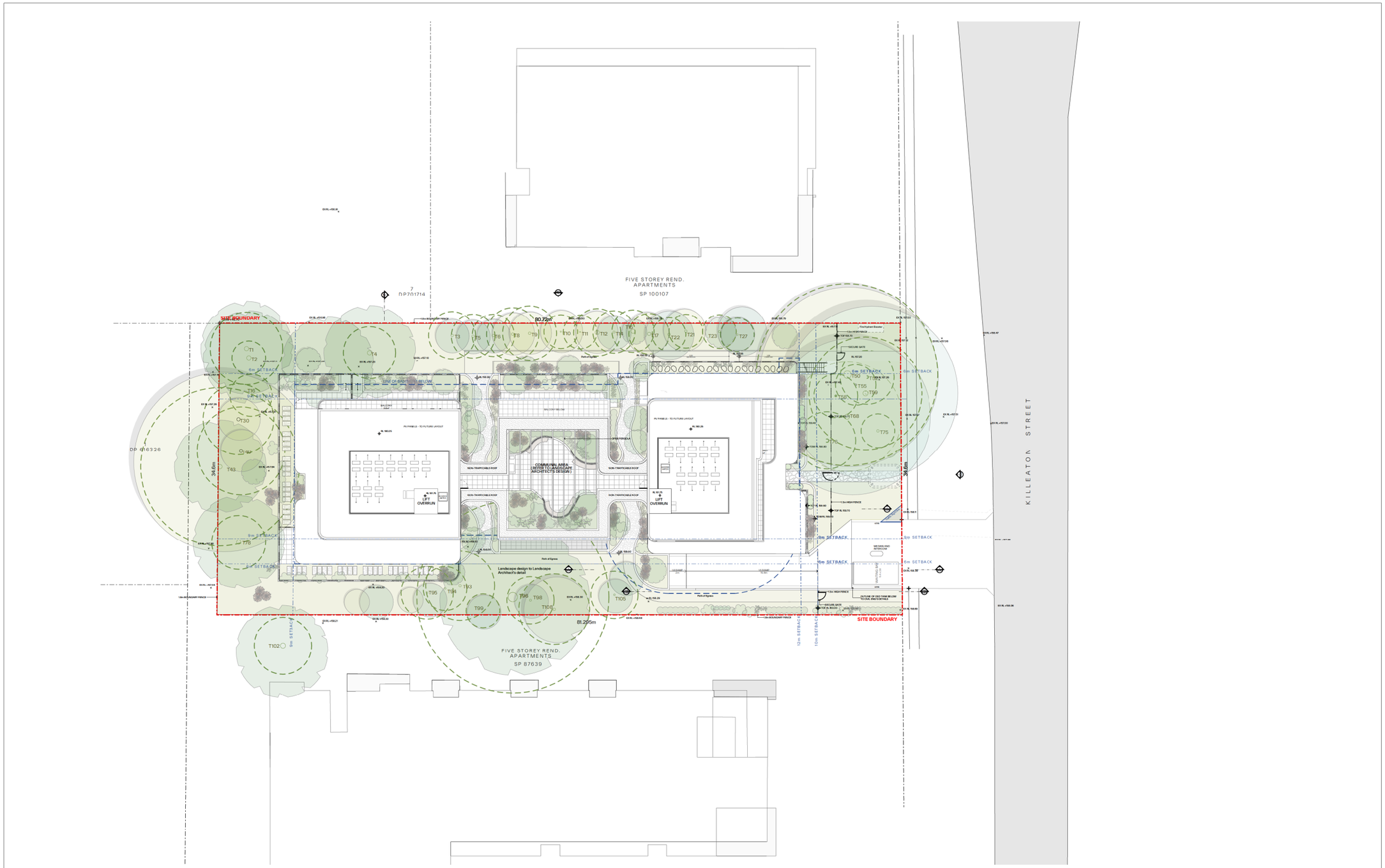
ABN 36 147 035 550
Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Project Information

DRAWING BY:	CHECKED BY:	DATE:
AL	KS	25/03/2025
SCALE: - - - NTS	DRAWING NO.:	ISSUE:
PROJECT NO: 2434	**DA001**	**A**



1 Site Plan 1:200

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Nominated Architect: Paul Buljevic NSW 7768

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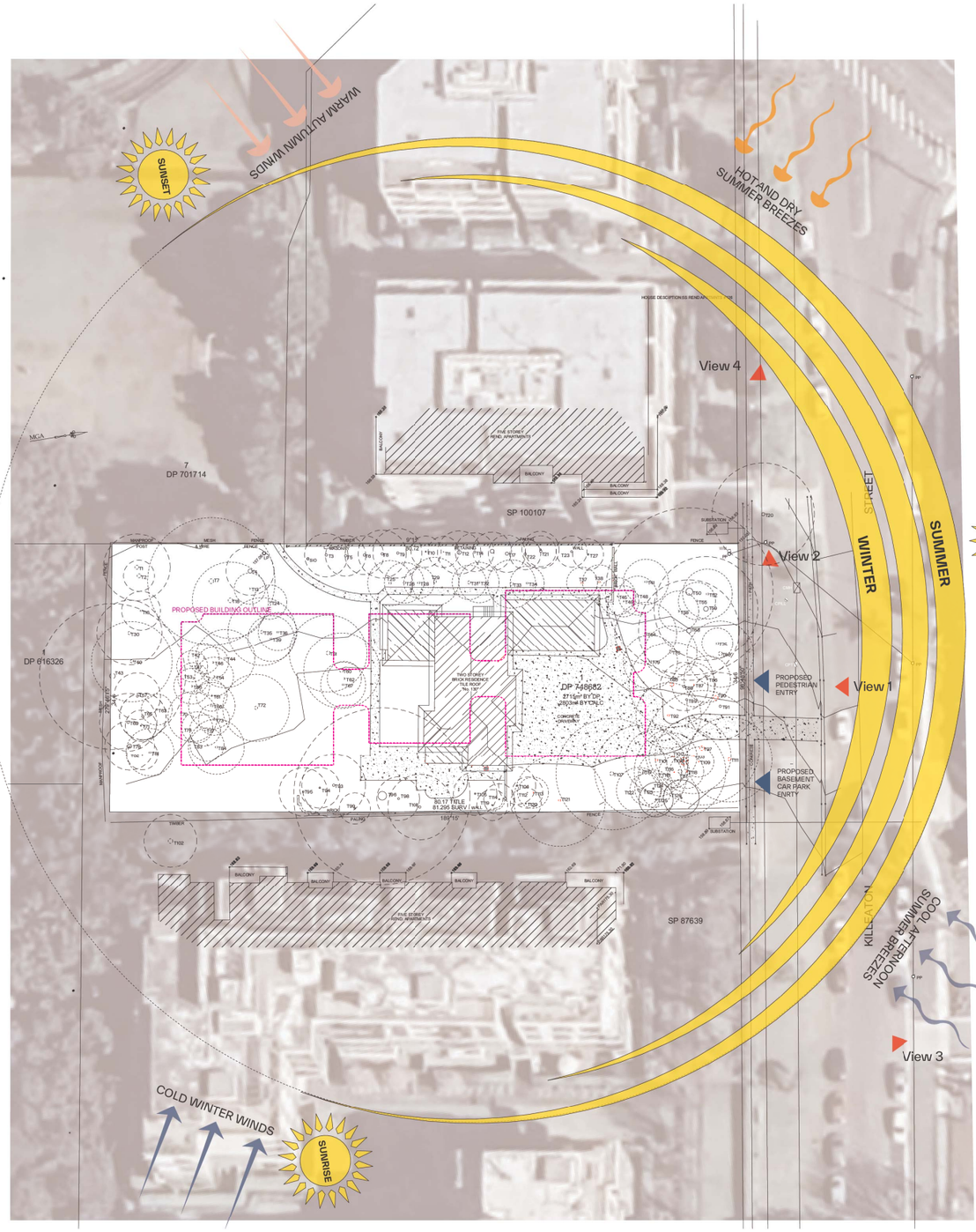
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Site Plan

DRAWING BY: A1	CHECKED BY: KB	DATE: 24/03/2025
SCALE: 1:200, 1:100@A1	DRAWING NO: **DA004**	ISSUE: **A**
PROJECT NO: 2434		





View 1



View 2



View 3



View 4

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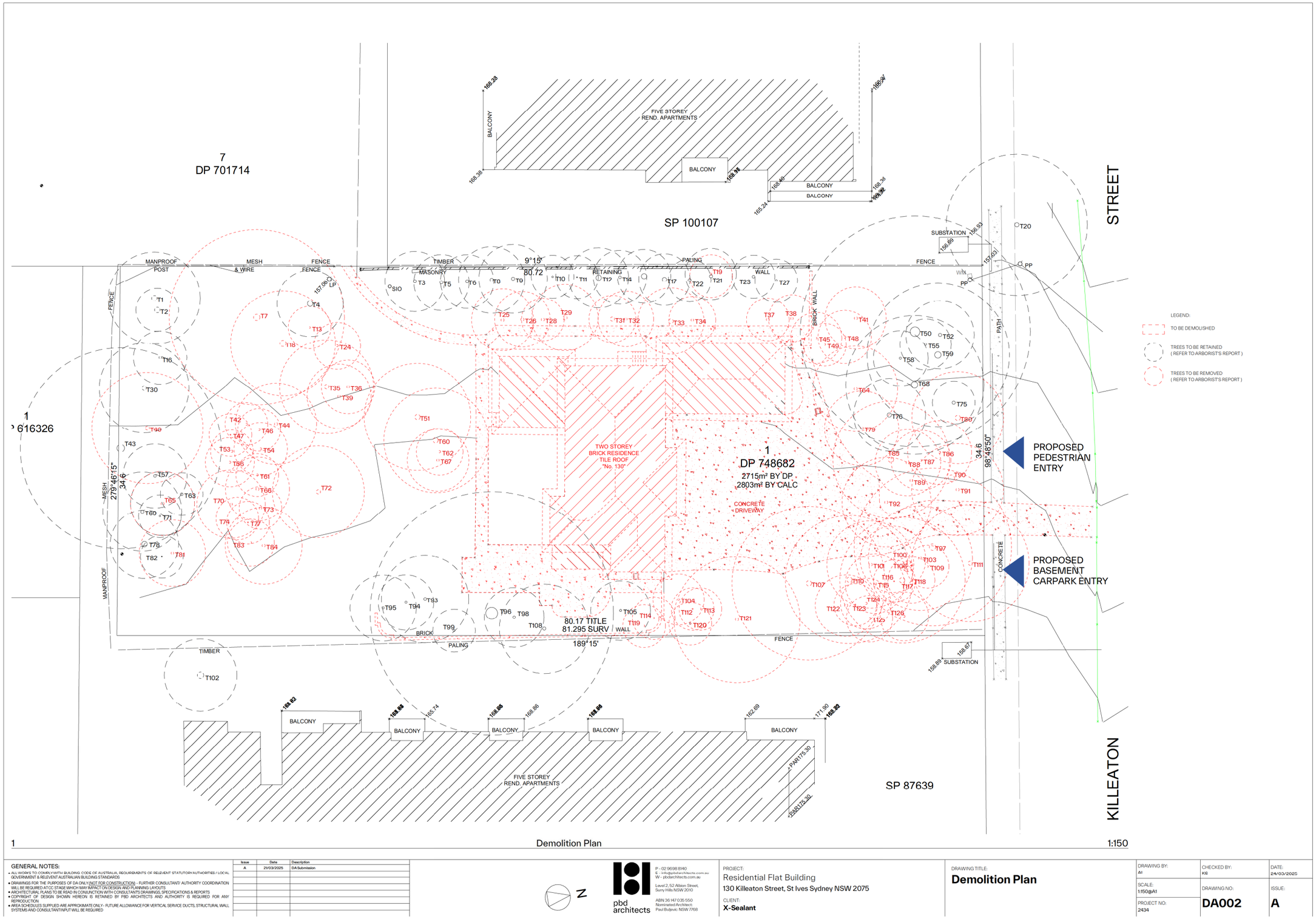
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Site Analysis

DRAWING BY:	CHECKED BY:	DATE:
AL	KS	24/03/2025
SCALE: @A1	DRAWING NO: **DA003**	ISSUE: **A**
PROJECT NO: 2434		



1 Demolition Plan 1:150

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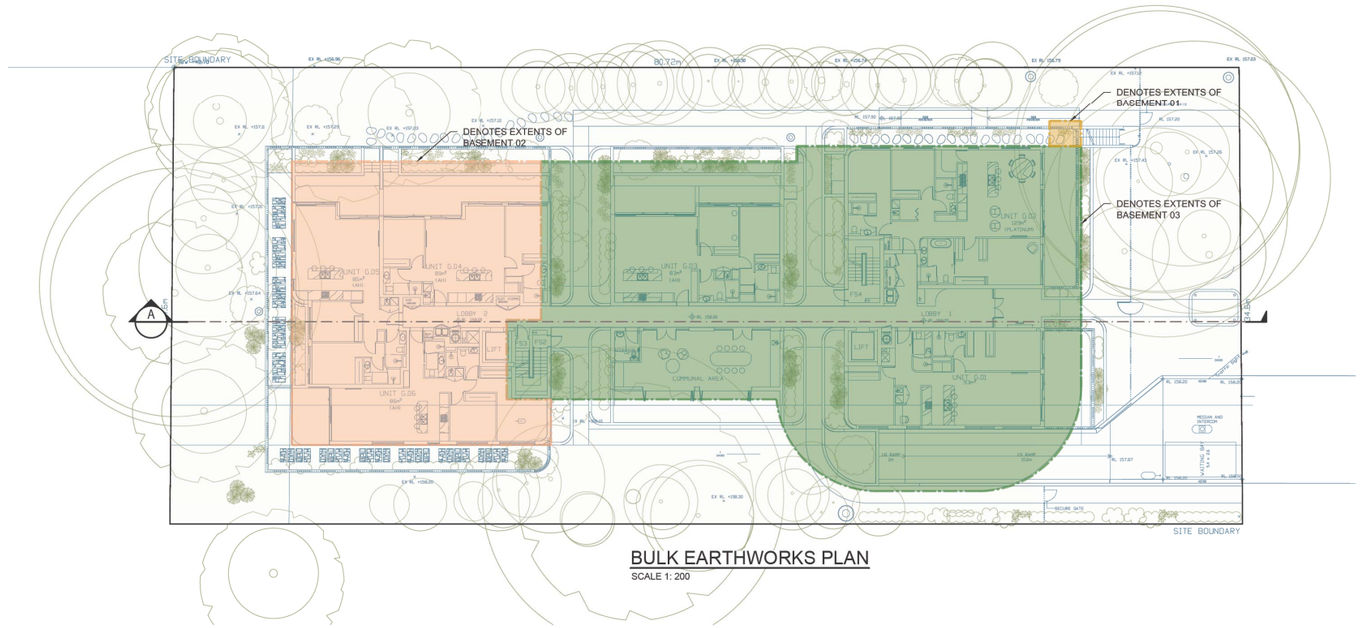
Level 2, 52 Albion Street, Surry Hills NSW 2010
ABN 36 147 035 550
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Demolition Plan

DRAWING BY:	CHECKED BY:	DATE:
AI	KB	24/03/2025
SCALE: 1:150@A1	DRAWING NO: **DA002**	ISSUE: **A**
PROJECT NO: 2434		



BULK EARTHWORKS PLAN

SCALE 1: 200

VOLUME TABLE

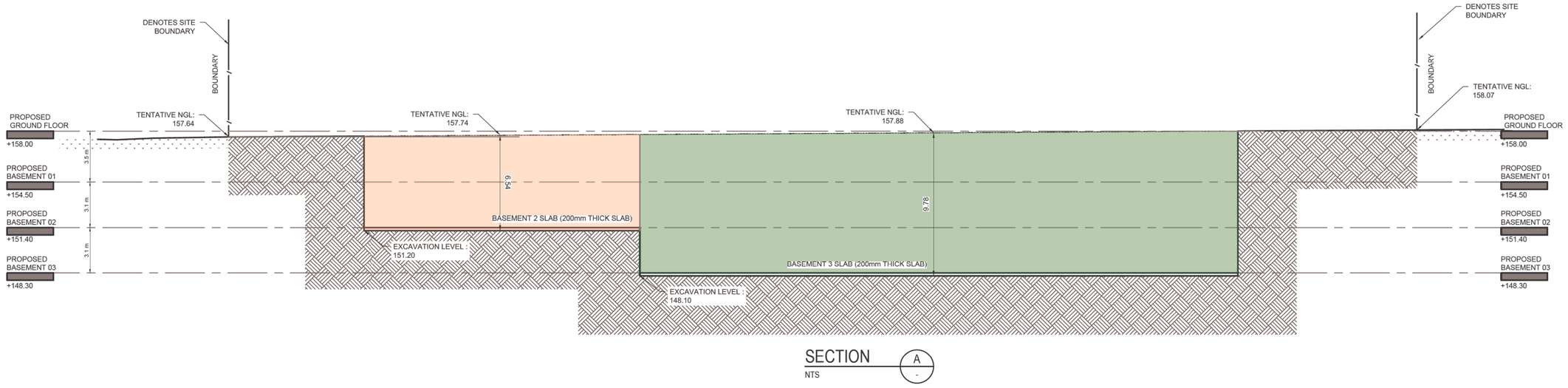
NO.	FROM LEVEL	EXCAVATION LEVEL	DEPTH	COLOUR	LEVEL	AREA	TENTATIVE VOLUME
01	157.88	154.30	3.58		BASEMENT 01	4.55 m²	16.28 m³
02	157.74	151.20	6.54		BASEMENT 02	392.31 m²	2,565.71 m³
03	157.88	148.10	9.78		BASEMENT 03	912.66 m²	8,925.81 m³
					TOTAL CUT VOLUME		11,507.80 m³

BULK EARTHWORKS NOTES:

CONTRACTOR TO CONFIRM BULK EARTHWORKS VOLUMES AND LEVELS BASED ON THEIR OWN ASSUMPTIONS AND CALCULATIONS.

BULK EARTHWORKS CALCULATIONS ARE BASED ON STANDARD CUT AND FILL BETWEEN EXISTING SURFACE AND FINISHED DESIGN SURFACE WITHOUT ALLOWANCE FOR TOPSOIL REMOVAL, ROAD BOXOUT, OR TRENCHING.

VOLUME CALCULATIONS ARE TENTATIVE ONLY AND HAS BEEN COUNTED CONSIDERING 200mm NOMINATED SLAB THICKNESS.



SECTION A

NTS

A	ISSUED FOR APPROVAL	ES	20.03.25	02	
P01	PRELIMINARY ISSUE	ES	19.03.25	01	
Issue	Last revision title	By	Date	Status	

Issuer internal sequence and revision history

1-preliminary 2-development application 3-construction certificate
4-tender 5-construction 6-other

Reference Coordination Drawing

Discipline	Drawing Title and Number	Date	Rev.
ARCH			
STRUCT			
MECH			
ELEC			
HYD			
FIRE			
LANDS			
CIVIL			
SURVEY			

Quality Control

DRAWN	DATE 20.03.25
CHECKED	DATE 20.03.25
DESIGNED	DATE 20.03.25
VERIFIED	DATE 20.03.25
APPROVED	DATE 20.03.25

ENGINEERS AUSTRALIA
Chartered Professional Engineer
MEMBER

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Scales

0m 2 4 6 8 10

SCALE 1:200 ON ORIGINAL SIZE

Client

AHG HOMEBUSH PTY LTD

SAINT PROJECT MANAGEMENT PTY LTD

Architect

PAUL BULJEVIC

S&G CONSULTANTS PTY LTD
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480 PACIFIC HIGHWAY
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A.B.N. 21 118 222 530

PROJECT

130 KILLEATON STREET,
ST. IVES.

EXCAVATION PLAN

Grid	Datum	Sheet
-	A.H.D.	04

Status: ISSUED FOR DA
NOT FOR CONSTRUCTION

Drawing Title: BULK EARTHWORKS PLAN & CALCULATIONS

Project No.	Set No. - Drg No.	Revision No.
20240240	S01-SW251	A

A1 Plotted Thursday, 20 March 2025 4:59:47 PM By CMM-RSGCE File Name:Z:\Production\20240240\240240 -100 Killeaton Street, St Ives\CAD\C4D\01 - SW - DA\S01#240240_S01-SW251.dwg

FIVE STOREY REND.
APARTMENTS
SP 100107

SITE BOUNDARY

6m SETBACK

4.1m SETBACK

6m SETBACK

FS1a

FS1

MSB ROOM
3.6m x 4.6m

PUMP ROOM
5.3m x 7m

5,600

5,300

7,000

A/I

LOADING BAY
3.5 x 6m
MIN. 2600mm
CLEAR CEILING

VISITOR

VISITOR

VISITOR / CAR WASH BAY

TRAFFIC MIRROR

WAITING BAY
5.4 x 2.6

WAITING BAY
5.4 x 2.6

WAITING BAY
5.4 x 2.6

6,850

FHR

TRAFFIC MIRROR

BASEMENT 1
11 x RESIDENTIAL
(INCL 8 ACCESSIBLE BAY)
10 x VISITOR PARKING (INCL CAR WASH BAY)
1x LOADING BAY
TOTAL 22

+154.50

1,000

LIFT 2

FS2

WASTE ROOM 2

15 x STR

VISITOR

VISITOR

VISITOR

VISITOR

VISITOR

LIFT 1

WASTE ROOM 1

VISITOR

VISITOR

RL 154.50

1:8 RAMP 3m

RL 154.25

3,000

4 x VISITOR BICYCLE PARKING

BULKY WASTE ROOM

OSD TANK TO CIVIL ENG'S DETAILS

TRAFFIC MIRROR

RL 154.50

1:8 RAMP 2m

RL 154.75

1:5 RAMP 15.6m

3,300

2.5m SETBACK

SITE BOUNDARY

9m SETBACK

12m SETBACK

9m SETBACK

FIVE STOREY REND.
APARTMENTS
SP 87639

GENERAL NOTES:

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Issue	Date	Description
A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

N

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Level 2, 52 Albion Street,
Surry Hills NSW 2010

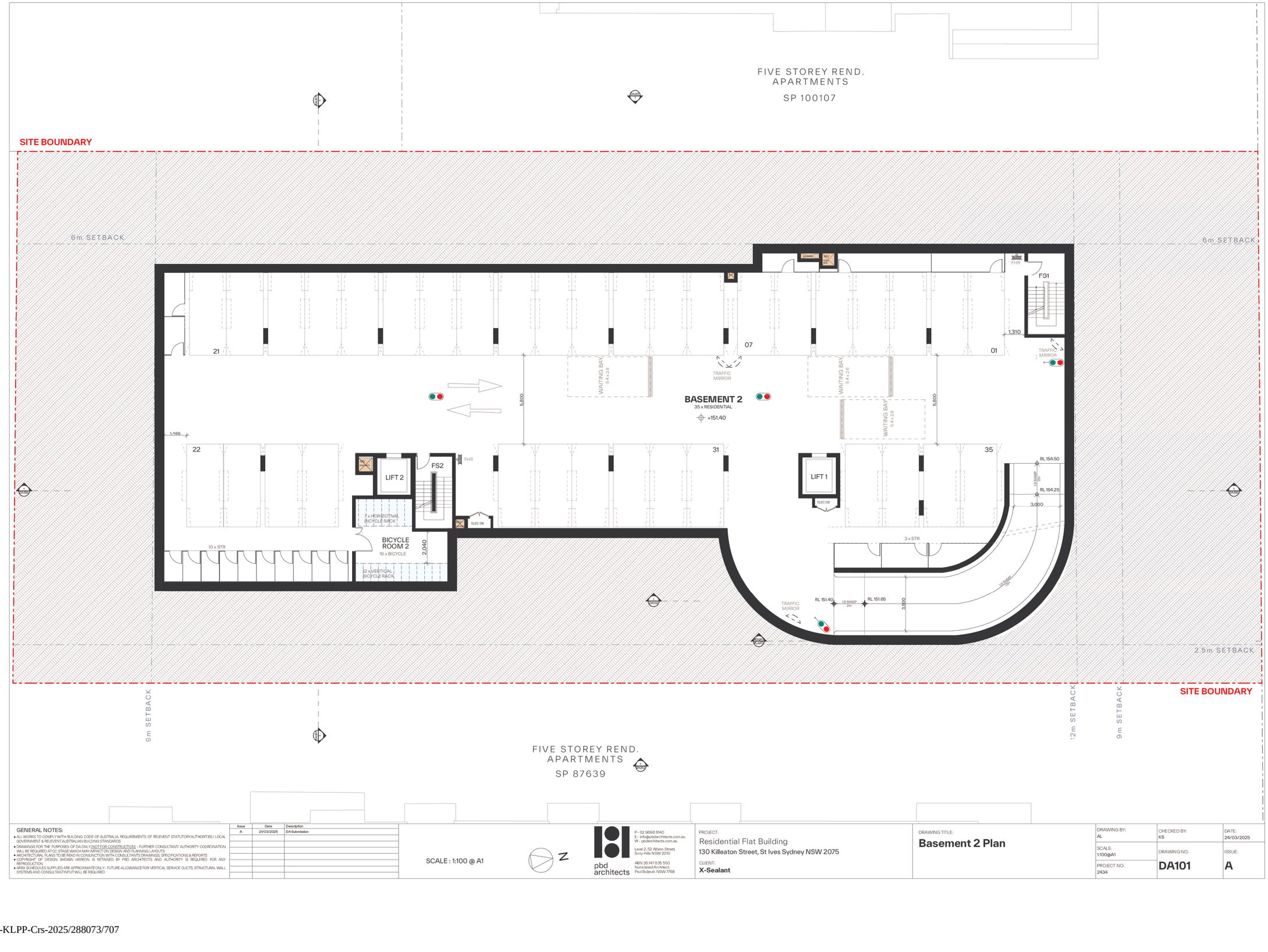
ABN 36 147 035 550
Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Basement 1 Plan

DRAWING BY:	CHECKED BY:	DATE:
AL	KS	24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA102**	ISSUE: **A**
PROJECT NO: 2434		



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Issue	Date	Description
A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

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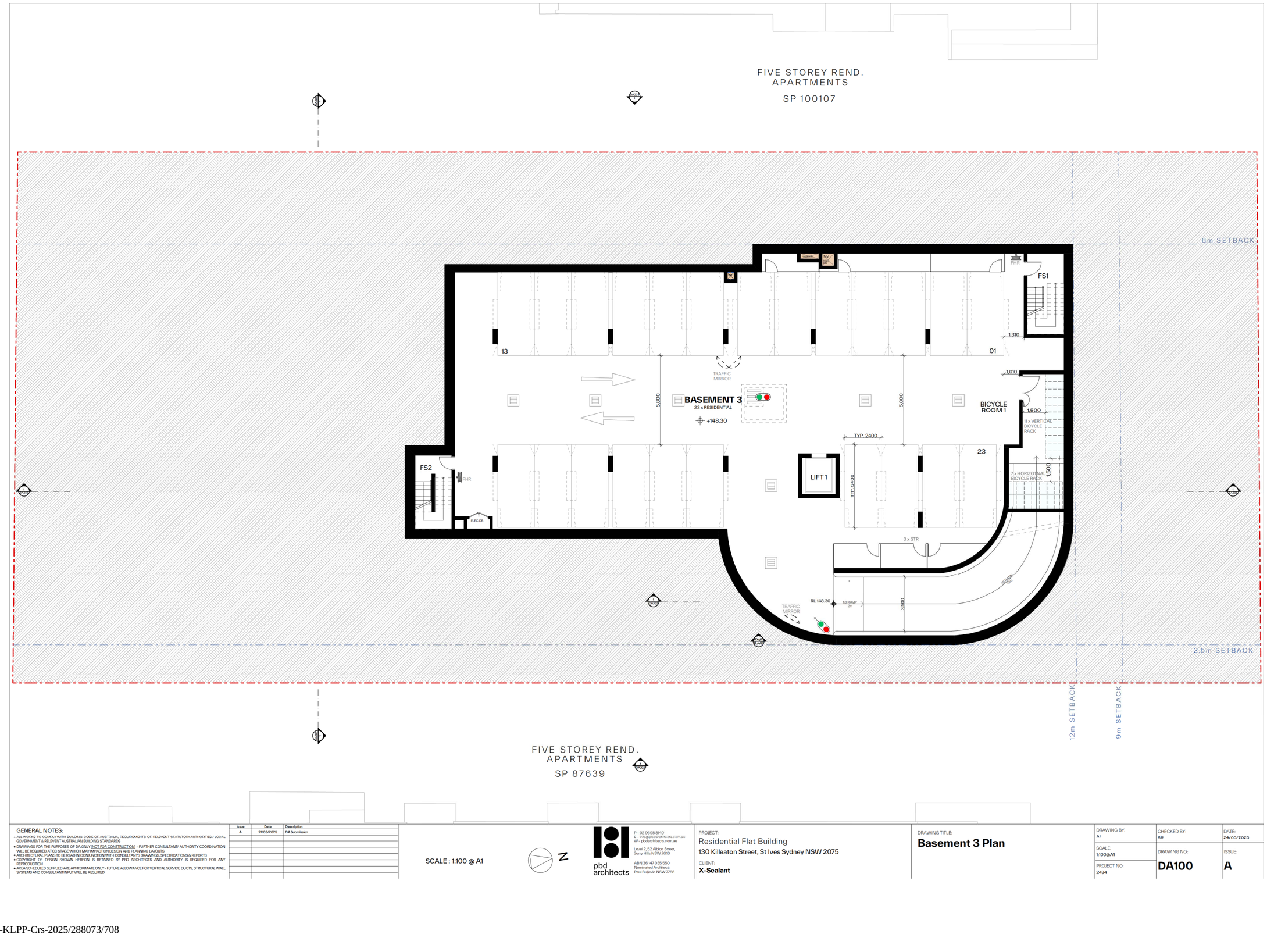
PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Basement 2 Plan

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA101**	ISSUE: **A**
PROJECT NO: 2434		



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Issue	Date	Description
A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

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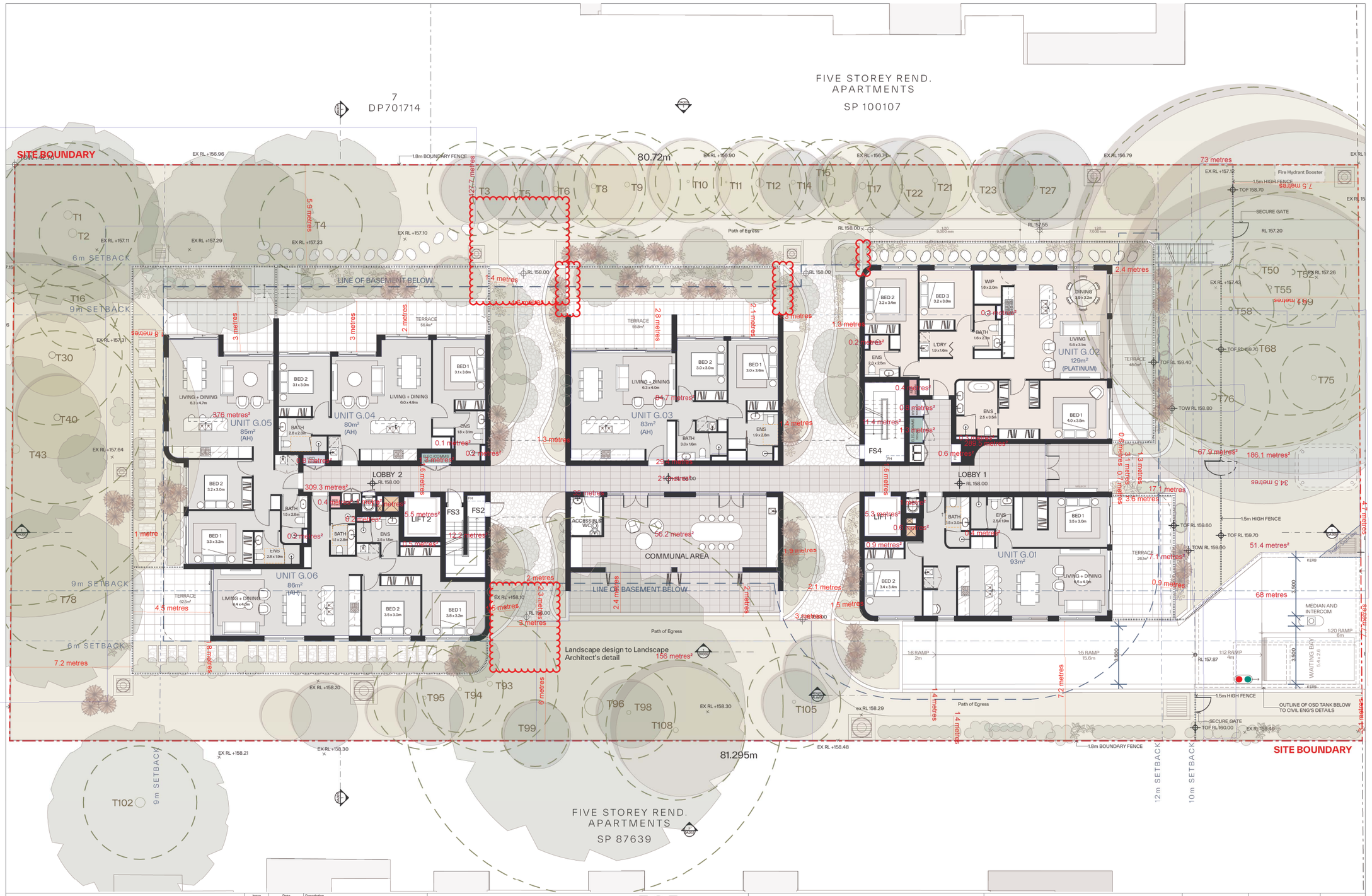
PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Basement 3 Plan

DRAWING BY:	CHECKED BY:	DATE:
AI	KS	24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA100**	ISSUE: **A**
PROJECT NO: 2434		



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A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

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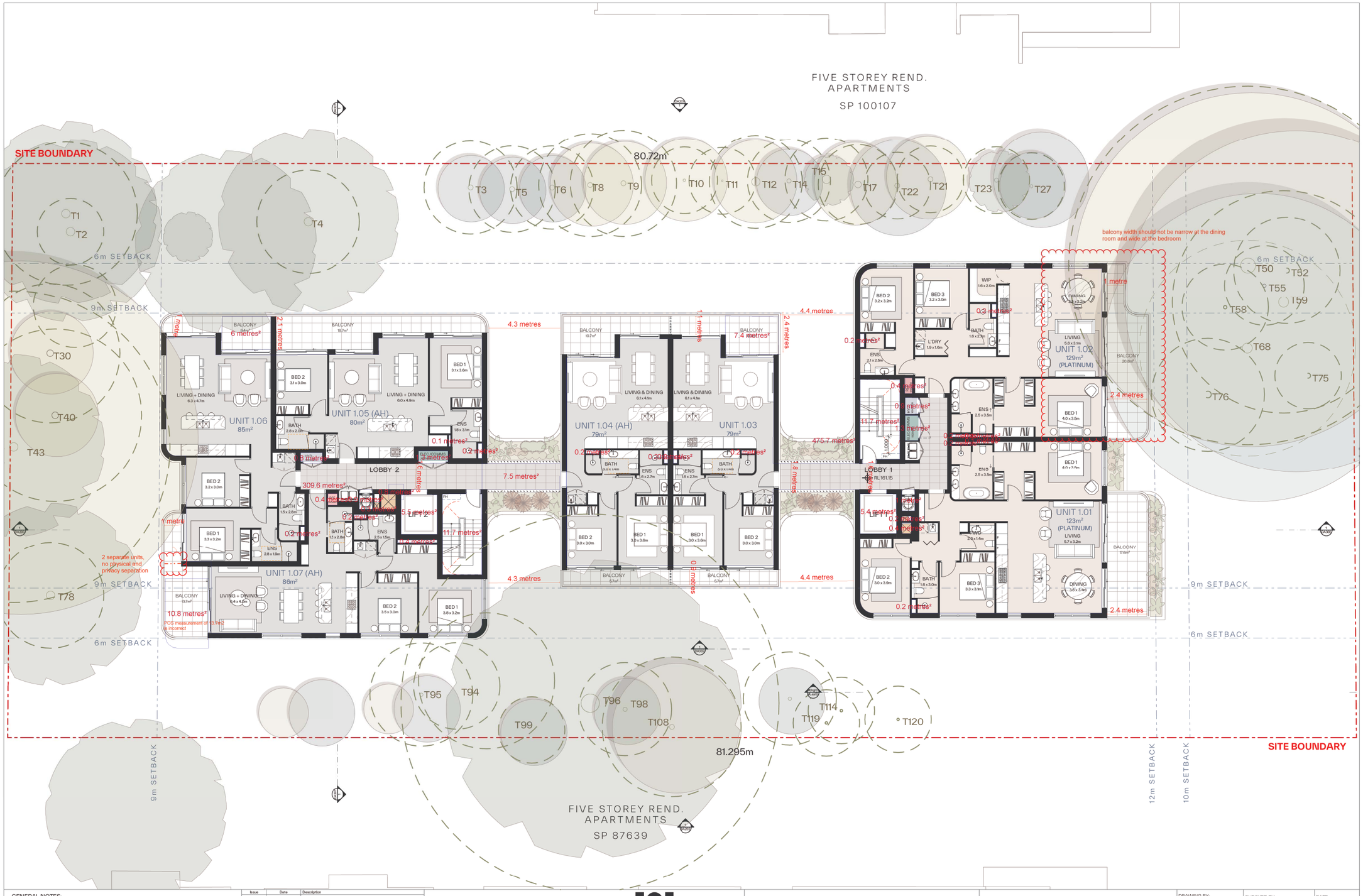
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Ground Floor Plan

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025	
SCALE: 1:100@A1	DRAWING NO: **DA103**	ISSUE: **A**	
PROJECT NO: 2434			



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SCALE : 1:100 @ A1

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PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Level 1 Plan

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025	
SCALE: 1:100@A1	DRAWING NO: **DA104**	ISSUE: **A**	
PROJECT NO: 2434			



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Issue	Date	Description
A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

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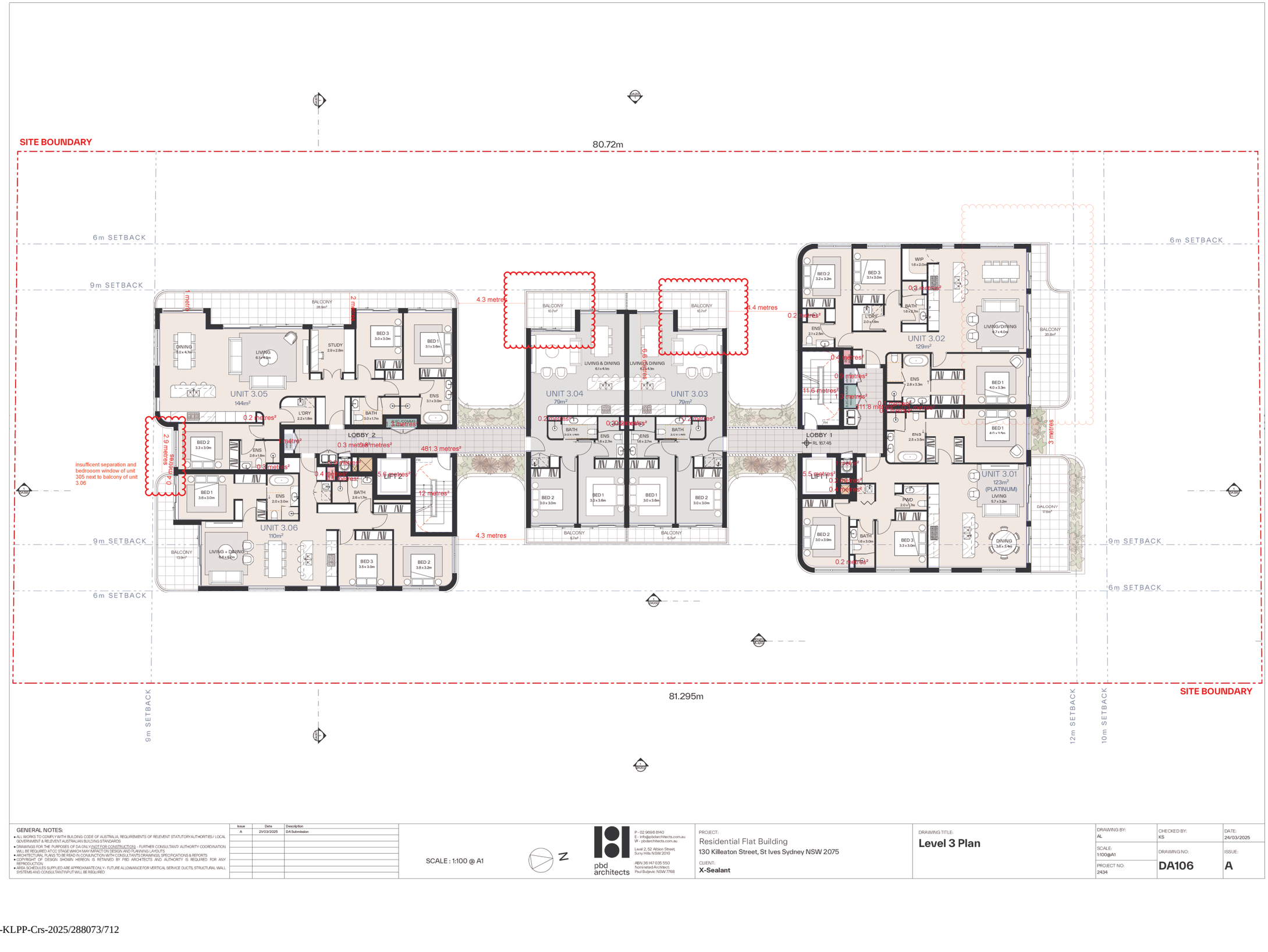
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Level 2 Plan

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA105**	ISSUE: **A**
PROJECT NO: 2434		



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A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

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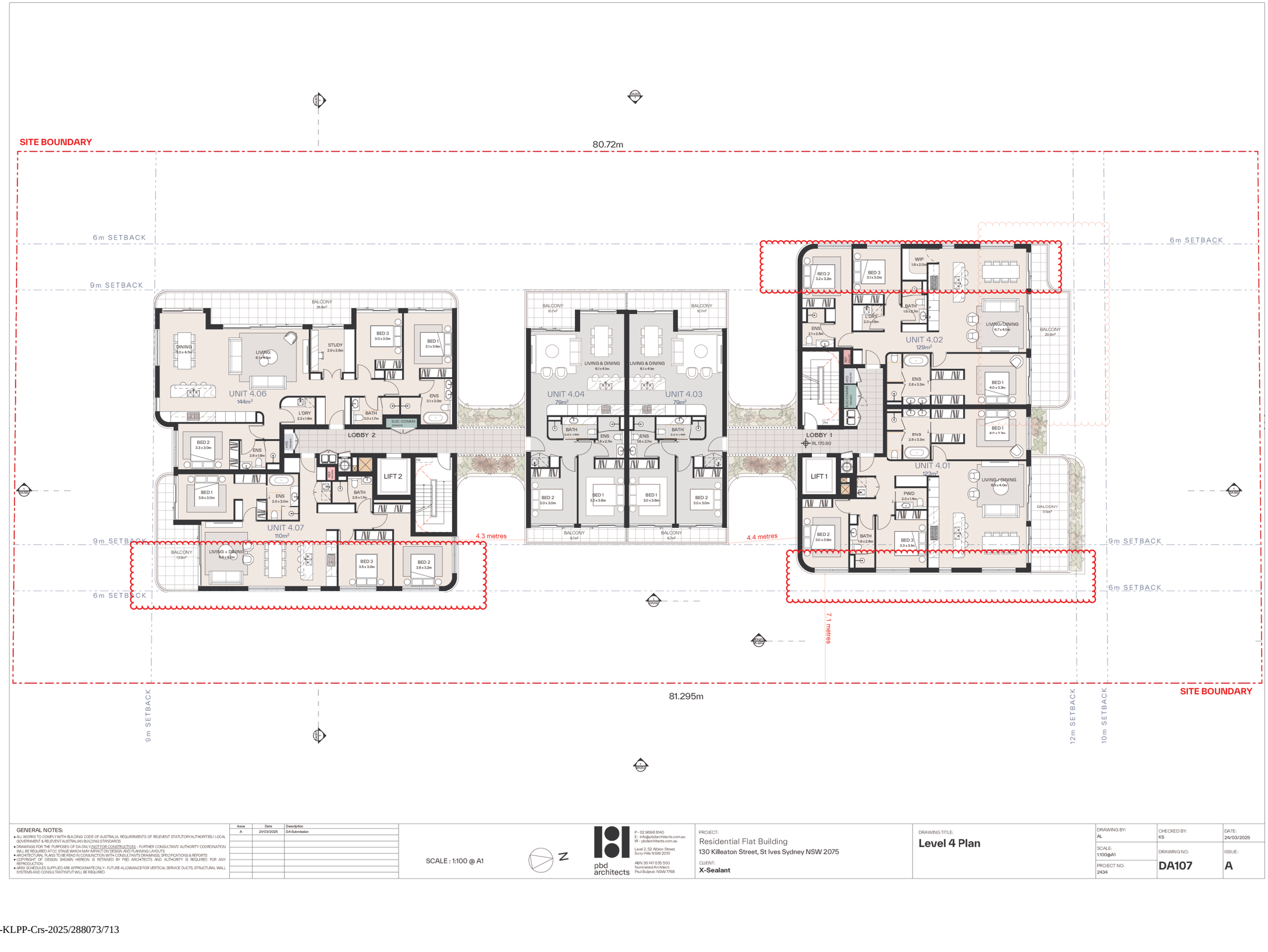
PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Level 3 Plan

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA106**	ISSUE: **A**
PROJECT NO: 2434		



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A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

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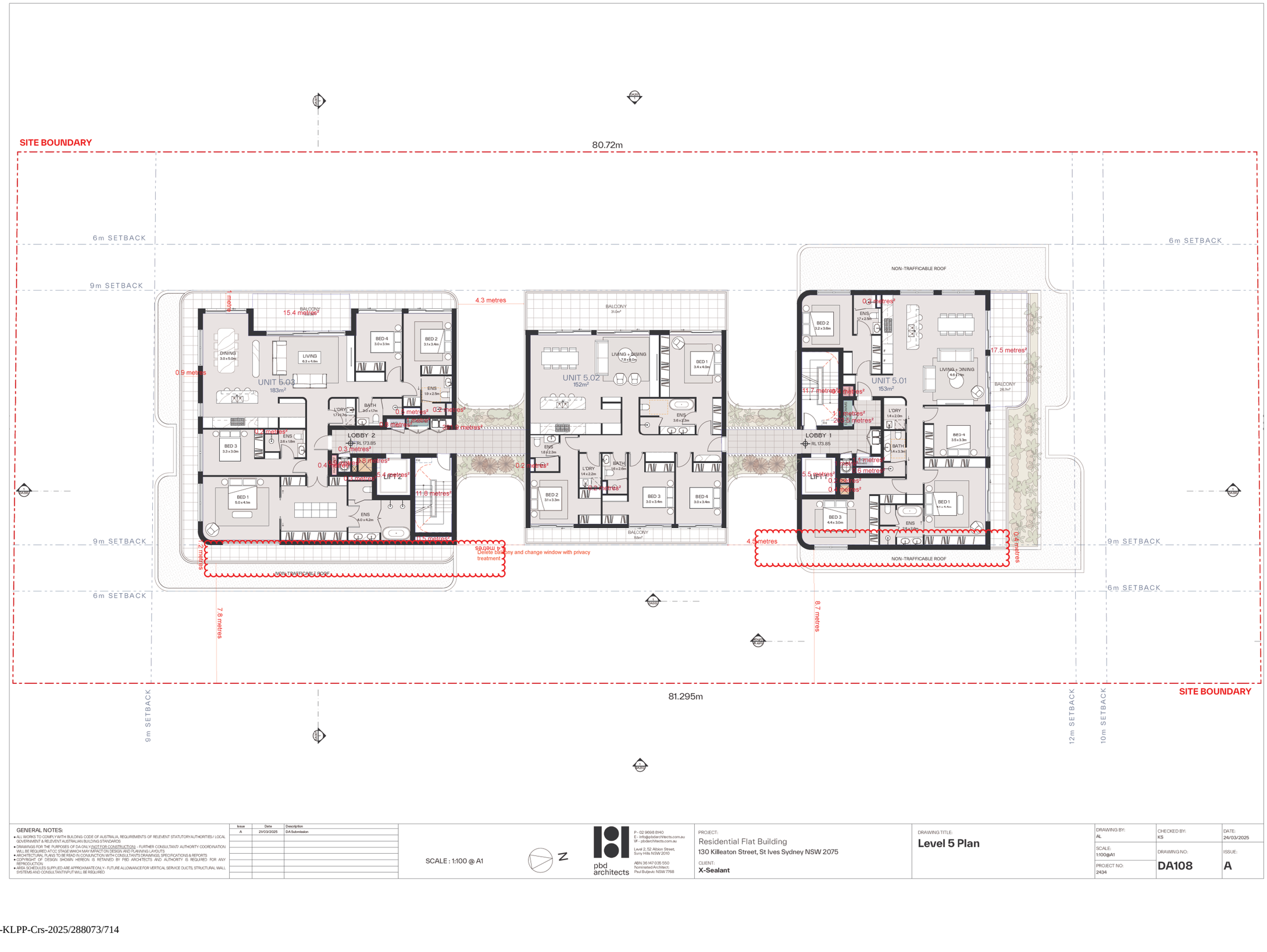
PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Level 4 Plan

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA107**	ISSUE: **A**
PROJECT NO: 2434		



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Issue	Date	Description
A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

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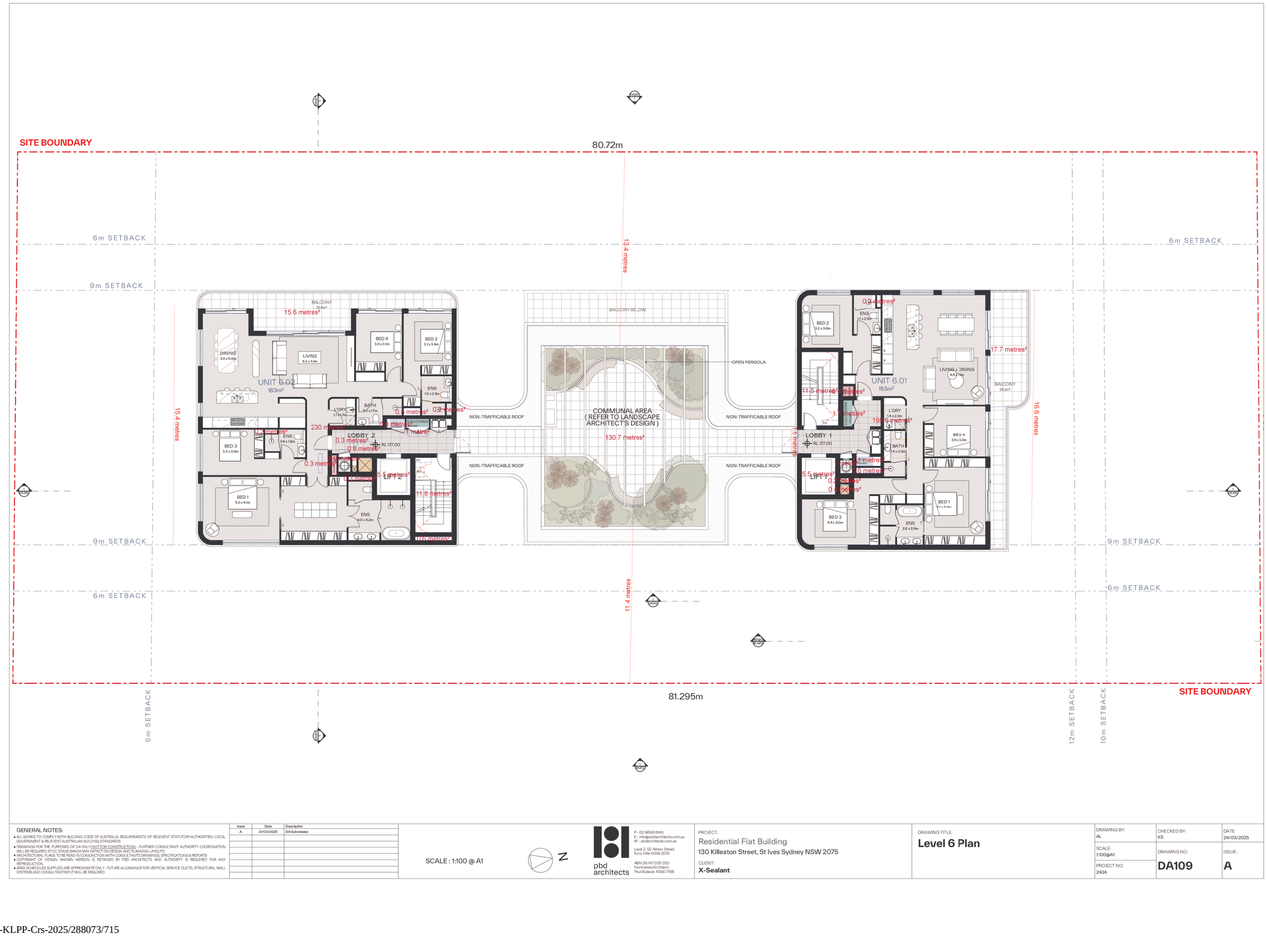
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Level 5 Plan

DRAWING BY:	CHECKED BY:	DATE:
AL	KS	24/03/2025
SCALE: 1:100@A1	DRAWING NO:	ISSUE:
PROJECT NO: 2434	**DA108**	**A**



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A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

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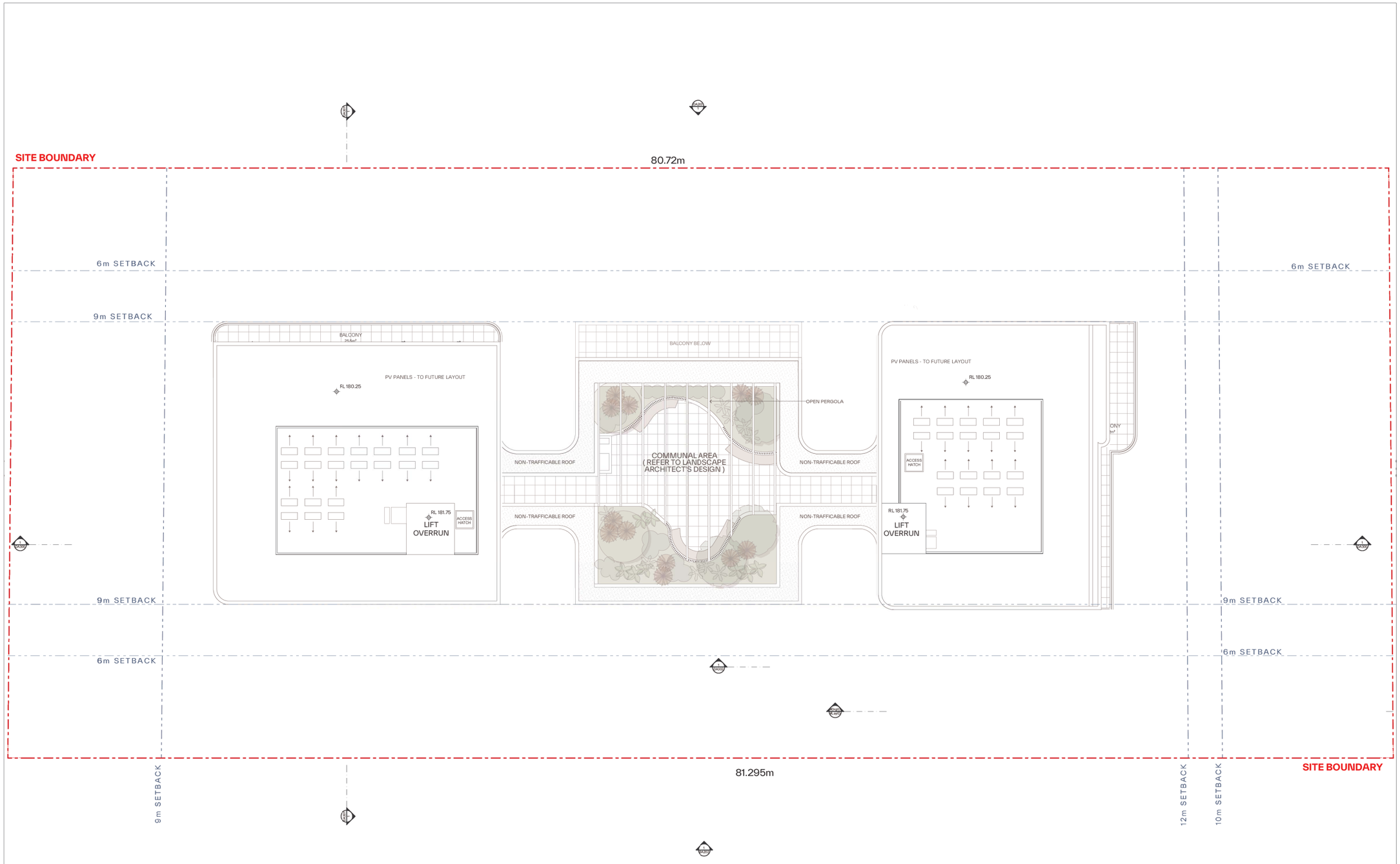
Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Level 6 Plan

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA109**	ISSUE: **A**
PROJECT NO: 2434		



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Issue	Date	Description
A	21/03/2025	DA Submission

SCALE : 1:100 @ A1

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ABN 36 147 035 550
Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Roof Plan

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA110**	ISSUE: **A**
PROJECT NO: 2434		



1 Elevation - North 1:100

GENERAL NOTES:

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A	21/03/2025	DA Submission

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Nominated Architect:
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PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
North Elevation

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: @A1	DRAWING NO: **DA200**	ISSUE: **A**
PROJECT NO: 2434		



1 Elevation - South 1:100

GENERAL NOTES:

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PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
South Elevation

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025	
SCALE: @A1	DRAWING NO: **DA201**	ISSUE: **A**	
PROJECT NO: 2434			



1 Elevation - East 1:100

GENERAL NOTES:

- ALL WORKS TO COMPLY WITH BUILDING CODE OF AUSTRALIA, REQUIREMENTS OF RELEVENT STATUTORY AUTHORITIES / LOCAL GOVERNMENT & RELEVENT AUSTRALIAN BUILDING STANDARDS
- DRAWINGS FOR THE PURPOSES OF DA ONLY (NOT FOR CONSTRUCTION) - FURTHER CONSULTANT/ AUTHORITY COORDINATION WILL BE REQUIRED AT CC STAGE WHICH MAY IMPACT ON DESIGN AND PLANNING LAYOUTS
- ARCHITECTURAL PLANS TO BE READ IN CONJUNCTION WITH CONSULTANTS DRAWINGS, SPECIFICATIONS & REPORTS
- COPYRIGHT OF DESIGN SHOWN HEREON IS RETAINED BY PBD ARCHITECTS AND AUTHORITY IS REQUIRED FOR ANY REPRODUCTION
- AREA SCHEDULES SUPPLIED ARE APPROXIMATE ONLY - FUTURE ALLOWANCE FOR VERTICAL SERVICE DUCTS, STRUCTURAL WALL SYSTEMS AND CONSULTANT INPUT WILL BE REQUIRED

Issue	Date	Description
A	21/03/2025	DA Submission

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Level 2, 52 Albion Street,
Surry Hills NSW 2010

ABN 36 147 035 550
Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
East Elevation

DRAWING BY:	CHECKED BY:	DATE:
AL	KS	24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA202**	ISSUE: **A**
PROJECT NO: 2434		



1 Elevation - West 1:100

GENERAL NOTES:

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A	21/03/2025	DA Submission

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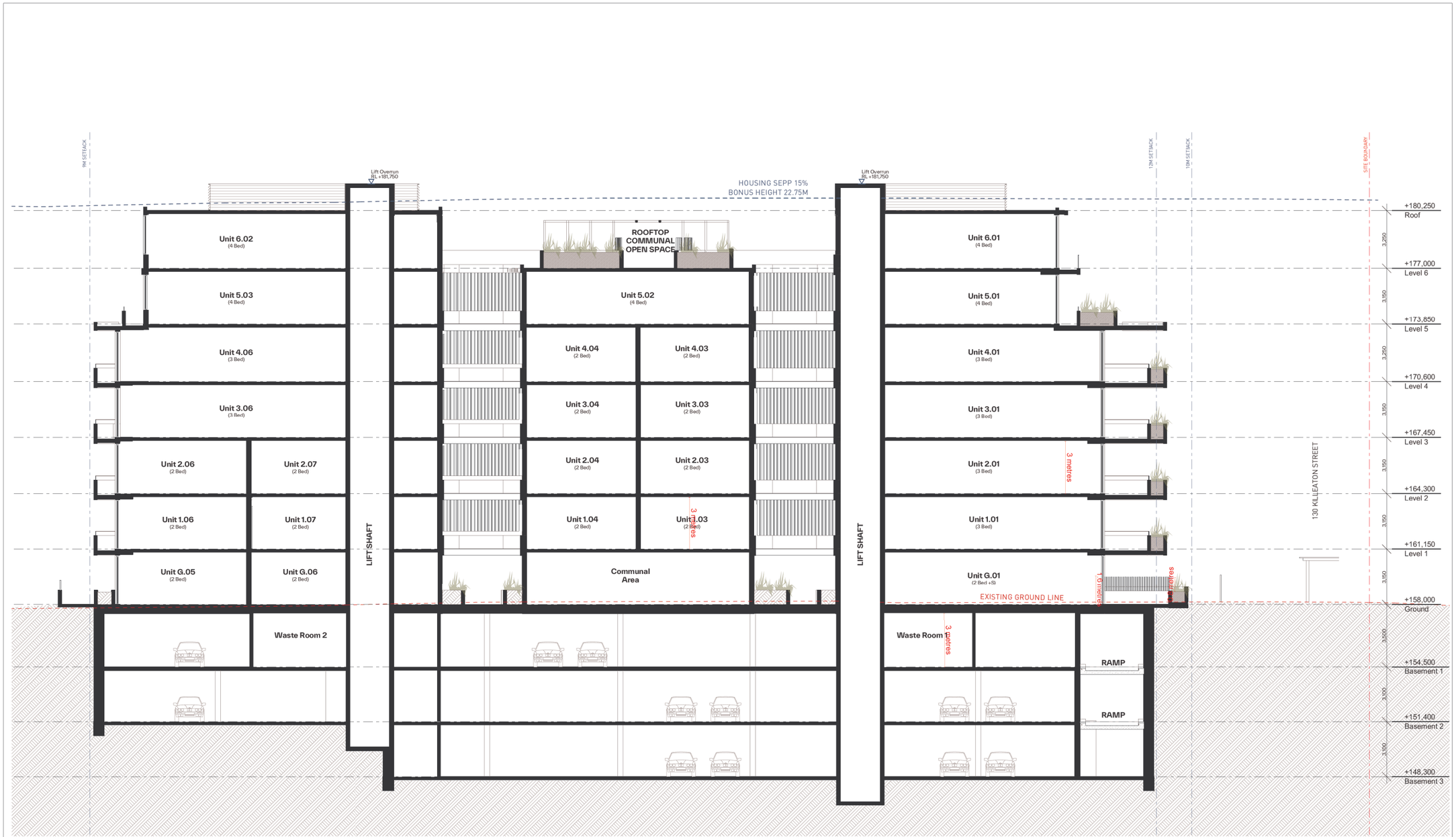
ABN 36 147 035 550
Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
West Elevation

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:100@A1	DRAWING NO: **DA203**	ISSUE: **A**
PROJECT NO: 2434		



1 Section AA 1:100

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A	21/03/2025	DA Submission

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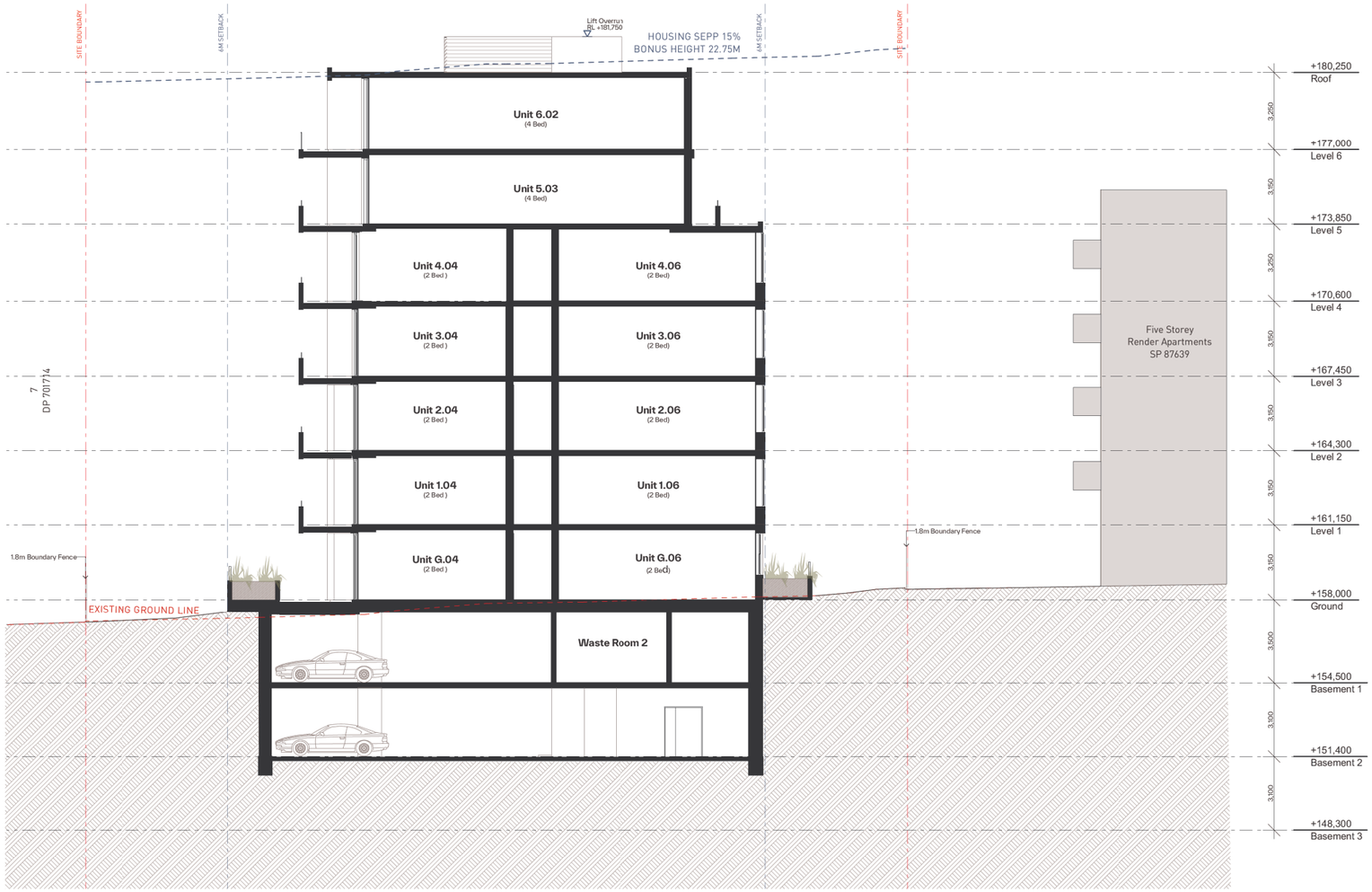
Level 2, 52 Albion Street, Surry Hills NSW 2010
ABN 36 147 035 550
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Section A

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: @A1	DRAWING NO: **DA300**	ISSUE: **A**
PROJECT NO: 2434		



1 Section BB 1:100

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Issue	Date	Description
A	21/03/2025	DA Submission

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Level 2, 52 Albion Street,
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Nominated Architect:
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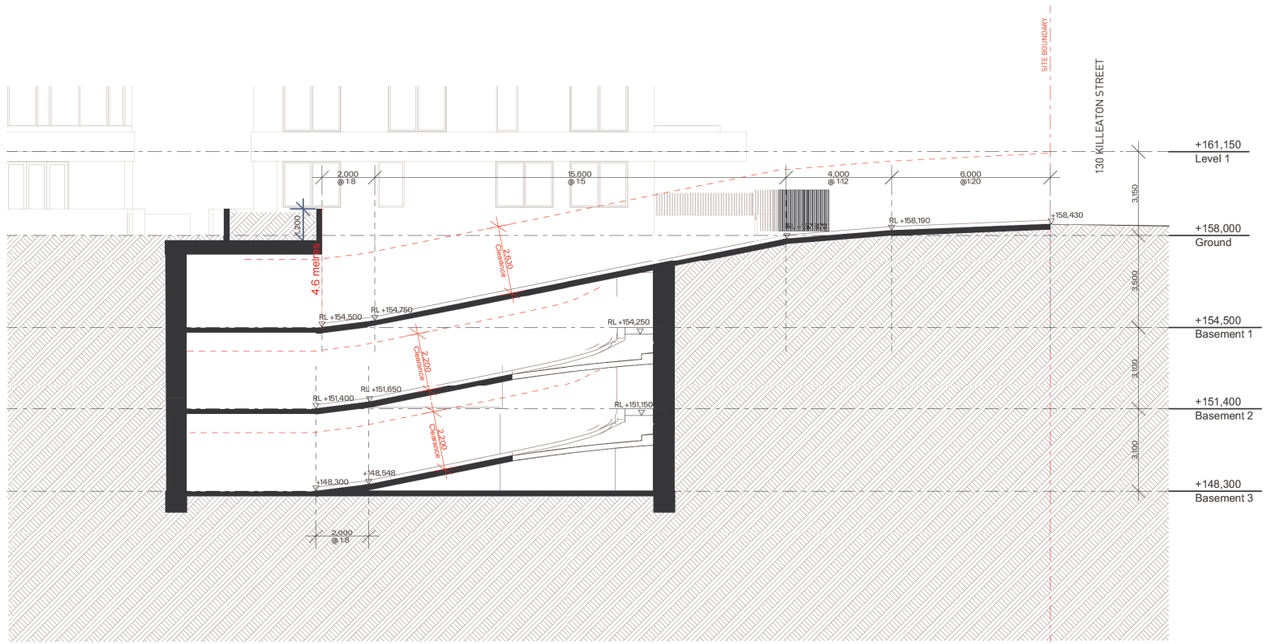
PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Section B

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: @A1	DRAWING NO: **DA301**	ISSUE: **A**
PROJECT NO: 2434		



1 RAMP SECTION 1:100

GENERAL NOTES:

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Issue	Date	Description
A	21/03/2025	DA Submission

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Level 2, 52 Albion Street,
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Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

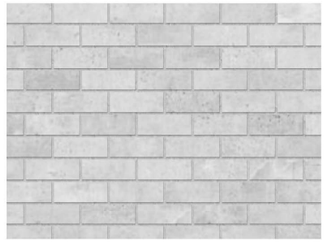
CLIENT:
X-Sealant

DRAWING TITLE:
Ramp Section

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: @A1	DRAWING NO: **DA302**	ISSUE: **A**
PROJECT NO: 2434		



AFG
ALUMINUM FRAME GLAZING - DARK CHARCOAL FINISH OR SIMILAR



BR 1
BRICK - GREY COLOUR OR SIMILAR



CO1
CONCRETE - EARTH COLOUR OR SIMILAR



CO2
CONCRETE - DUNE COLOUR OR SIMILAR



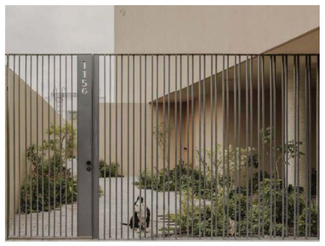
RW1
RENDER WALL - DULUX BEIGE ROYALE OR SIMILAR



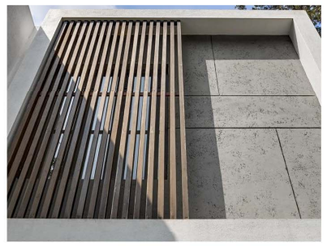
FC
FLUTED PRECASTE CONCRETE - HYCOLOUR-GRAPHITE OR SIMILAR



SW 1
SANDSTONE - NATURAL OR SIMILAR



MF 1
ALUMINIUM - DULUX DURALLOY CHARCOAL OR SIMILAR



LV
LOUVRE SCREEN - TIMBER LOOK OR SIMILAR (NON-COMBUSTIBLE)



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Issue	Date	Description
A	21/03/2025	DA Submission

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Level 2, 52 Albion Street, Surry Hills NSW 2010
ABN 36 147 035 550
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Finishes Schedule

DRAWING BY:	CHECKED BY:	DATE:
AI	KB	24/03/2025
SCALE: 1:1.67 2.1e-01 NTS	DRAWING NO:	ISSUE:
PROJECT NO: 2434	**DA400**	**A**



GENERAL NOTES:

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LEGEND:

AW	AWNING
AH	ACCESS HATCH
AC	A/C CONDENSER UNITS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FS	FIRE STAIRS
GC	GARBAGE CHUTE
HW	HIGHLIGHT WINDOW
MV	MECHANICAL RISER TO FUTURE DETAIL
MB	MAILBOX TO FUTURE DETAIL
R	240L RECYCLING BIN
SK	SKYLIGHT
ST	STORAGE
HWU	HOT WATER UNITS

MATERIALS LEGEND:

AHG	ALUMINIUM HAMELD GLAZING
LV	ALUMINIUM ELLIPTICAL FIXED LOUVERS
AW	AWNING (TO FUTURE DETAIL)
CONC	CONCRETE
FB	FACE BRICK
GB	FRAMELESS TOUCHENED GLASS BALUSTRADE (TO BCA/AUS STANDARDS)
MB	METAL BALUSTRADE
MC	METAL CLADDING
FCE	METAL FENCING (TO FUTURE SELECTION)
PC	COMPOSITE PANEL CLADDING
PSx	PRIVACY SCREEN (TO FUTURE SELECTION)
PTx	PAINT FINISH TYPEx
RD	ROLLER DOOR
RP	RIVER PEBBLES
RW	RENDERED FINISH/SELECTED PAINT FINISH
TC	TIMBER CLADDING
VB	EXTERNAL VENETIAN BLINDS

Issue	Date	Description
P1	12/03/2025	Final Coordination

CLIENT:
X-Sealant

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Level 2, 52 Albion Street,
Surry Hills NSW 2010

ABN 36 147 035 550
Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

DRAWING TITLE:
Photomontage

DRAWN BY:	CHECKED BY:	DATE:
AL	Checked by KS	12/03/2025
SCALE: NTS	DRAWING NO: DA410	ISSUE: P1
PROJECT NO: 2434		



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LEGEND:

AW	AWNING
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AC	A/C CONDENSER UNITS
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FS	FIRE STAIRS
GC	GARBAGE CHUTE
HW	HIGHLIGHT WINDOW
MV	MECHANICAL RISER TO FUTURE DETAIL
MB	MAILBOX TO FUTURE DETAIL
R	240L RECYCLING BIN
SK	SKYLIGHT
ST	STORAGE
HWU	HOT WATER UNITS

MATERIALS LEGEND:

AHG	ALUMINIUM HAMELD GLAZING
LV	ALUMINIUM ELLIPTICAL FIXED LOUVERS
AW	AWNING (TO FUTURE DETAIL)
CONC	CONCRETE
FB	FACE BRICK
GB	FRAMELESS TOUCHENED GLASS BALUSTRADE (TO BCA/AUS STANDARDS)
MB	METAL BALUSTRADE
MC	METAL CLADDING
FCE	METAL FENCING (TO FUTURE SELECTION)
PC	COMPOSITE PANEL CLADDING
PSx	PRIVACY SCREEN (TO FUTURE SELECTION)
PTx	PAINT FINISH TYPEx
RD	ROLLER DOOR
RP	RIVER PEBBLES
RW	RENDERED FINISH/SELECTED PAINT FINISH
TC	TIMBER CLADDING
VB	EXTERNAL VENETIAN BLINDS

Issue	Date	Description
PI	12/03/2025	Final Coordination
A	21/03/2025	DA Submission

CLIENT:
X-Sealant

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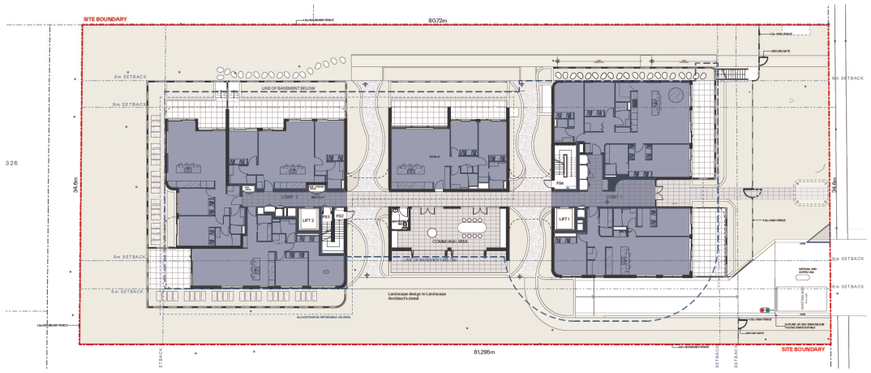
Nominated Architect:
Paul Buljevic NSW 7768

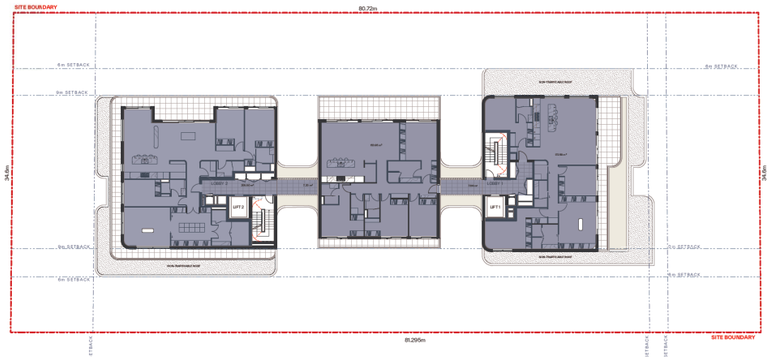
PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

DRAWING TITLE:
Photomontage

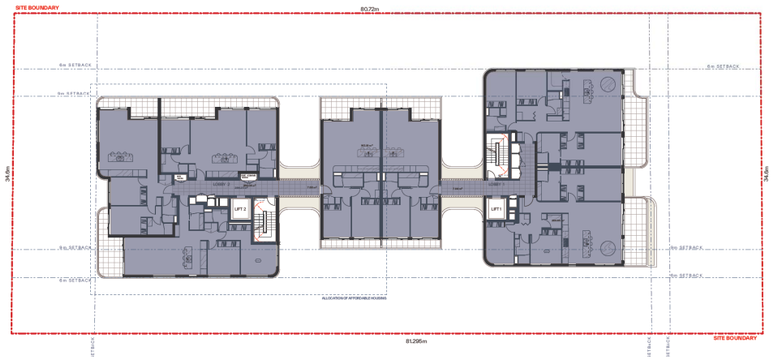
DRAWN BY:	CHECKED BY:	DATE:
AL	Checked by KS	24/03/2025
SCALE: NTS	DRAWING NO: DA410	ISSUE: A
PROJECT NO: 2434		



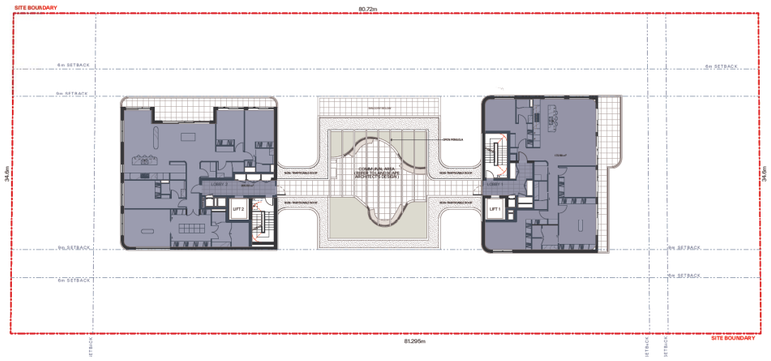
1 Ground



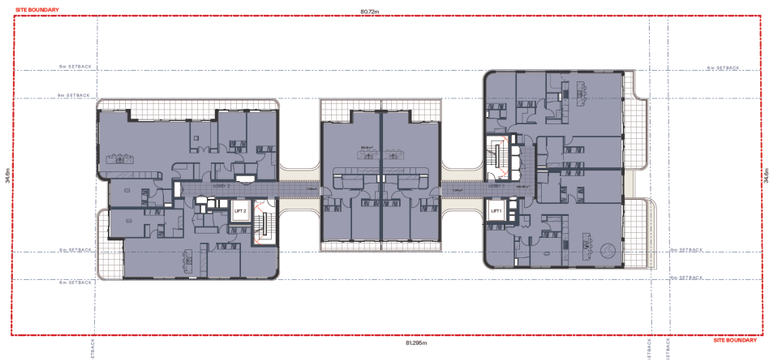
4 Level 5



2 Typical Level 1 - 2



5 Level 6



3 Typical Level 3 - 4

LEGEND:

GROSS FLOOR AREA

PROPERTY DETAILS:
AREA: 2803m^2
ZONE: R4

PERMISSIBLE GFA (INCL.BONUS) : 4,737.07 m
PERMISSIBLE FSR: 1.69:1

GROSS FLOOR AREA

Ground	636.5	Gr Fl - 693m2 including communal area
Level 1	745.3	Level 1 - 746.7m2
Level 2	745.3	Level 2 - 746.7m2
Level 3	745.4	Level 3 - 747.2m2
Level 4	745.4	Level 4 - 747.2m2
Level 5	547.0	Level 5 - 549.7m2
Level 6	378.1	Level 6 - 358.4m2
TOTAL	4,542.8 m^2	Total - 4,588.9m2
PROPOSED FSR	1.62:1	Proposed FSR - 1.64:1

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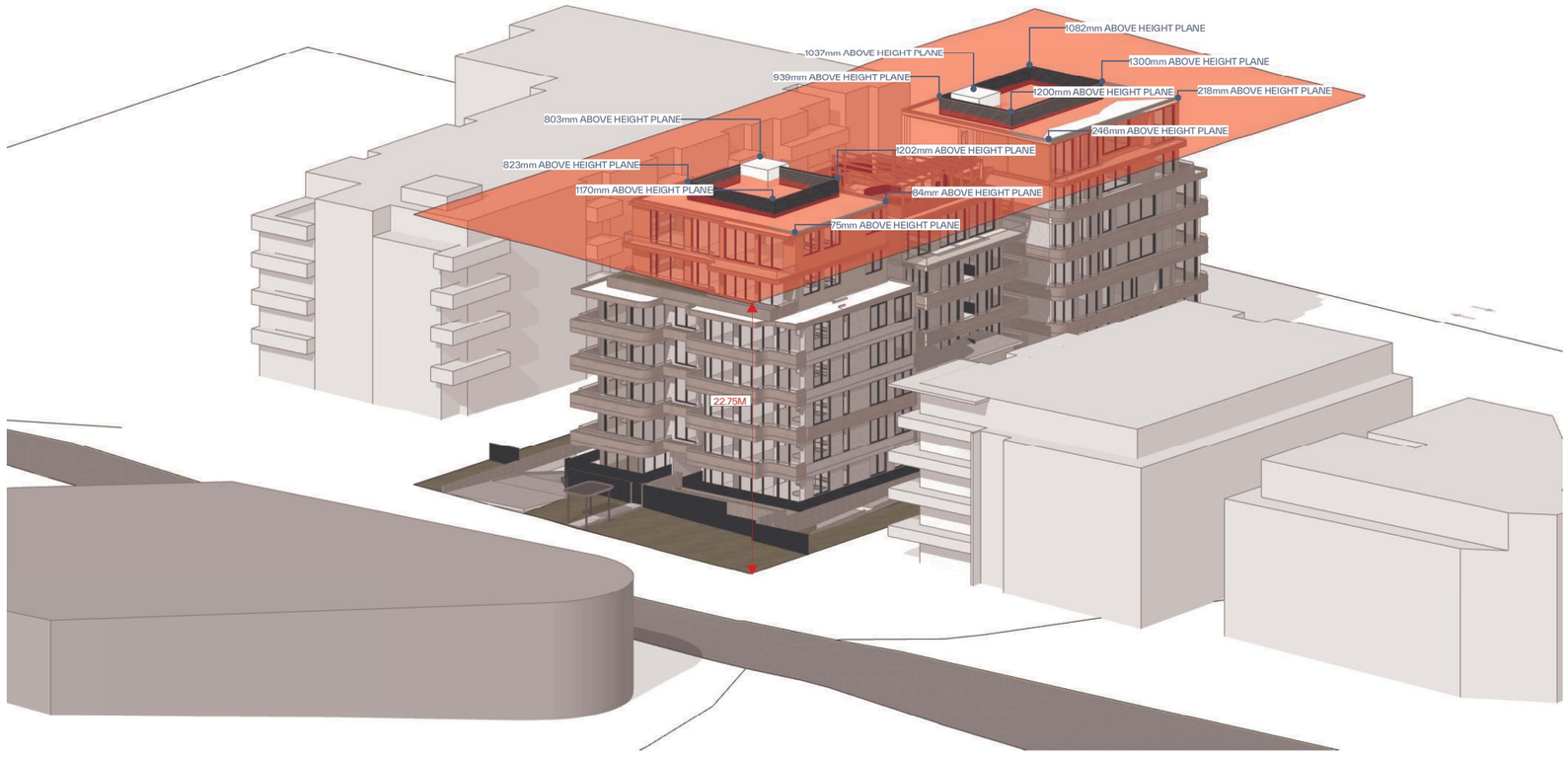
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
GFA Diagram

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025	
SCALE: 1:285.71@A1	DRAWING NO: **DA500**	ISSUE: **A**	
PROJECT NO: 2434			



LEGEND:

HOUSING SEPP 30% BONUS HEIGHT PLANE

GENERAL NOTES:

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A	25/03/2025	DA Submission

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Nominated Architect:
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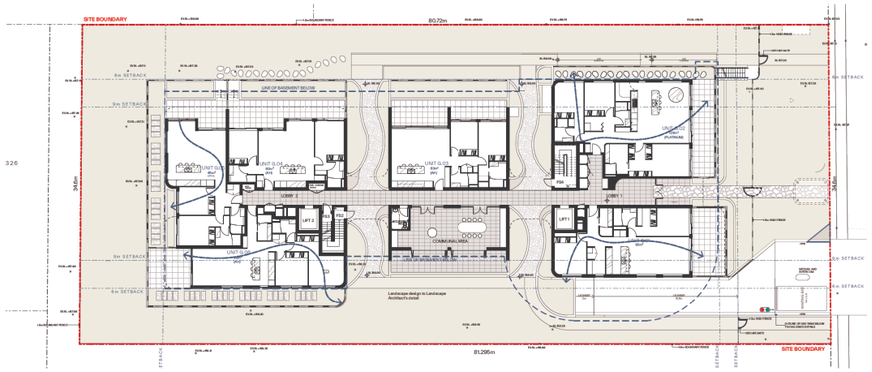
PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

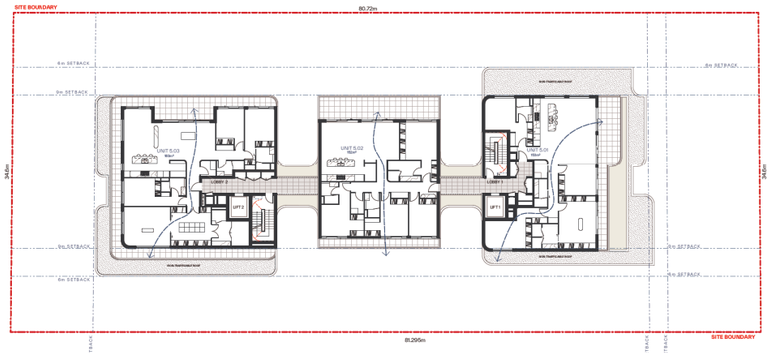
CLIENT:
X-Sealant

DRAWING TITLE:
Height Plane Diagram

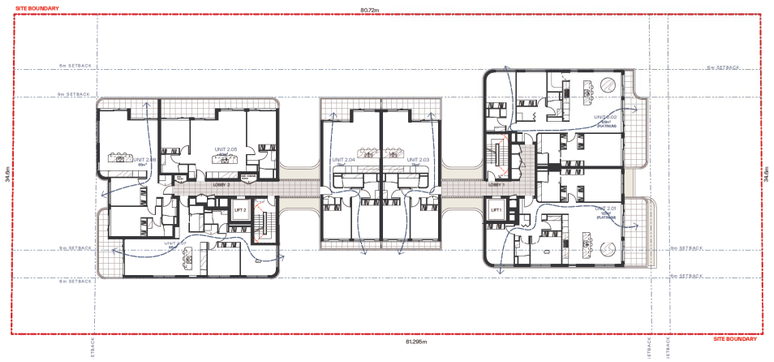
DRAWING BY: AL	CHECKED BY: KS	DATE: 25/03/2025
SCALE: 1:125@A1	DRAWING NO: **DA520**	ISSUE: **A**
PROJECT NO: 2434		



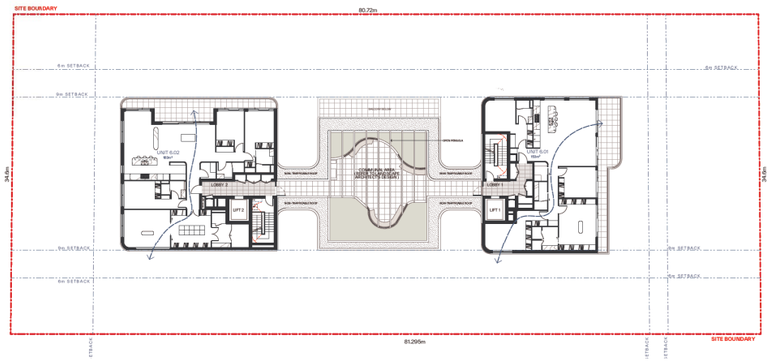
1 Ground



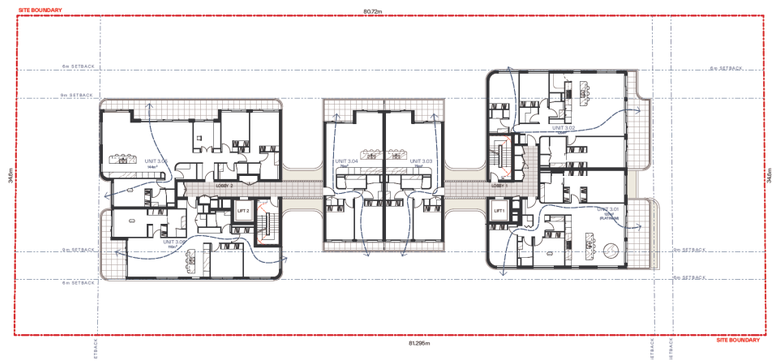
4 Level 5



2 Typical Level 1 - 2



5 Level 6



3 Typical Level 3 - 4

LEGEND:

NATURALLY CROSS VENTILATED APARTMENTS

TARGET CROSS VENTILATION:
MINUMUM 60% - 23 UNITS

PROPOSED CROSS VENTILATION:
89.2% - 33 UNITS

GENERAL NOTES:

- ALL WORKS TO COMPLY WITH BUILDING CODE OF AUSTRALIA, REQUIREMENTS OF RELEVENT STATUTORY AUTHORITIES / LOCAL GOVERNMENT & RELEVENT AUSTRALIAN BUILDING STANDARDS
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Issue	Date	Description
A	21/03/2025	DA Submission

N

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Level 2, 52 Albion Street,
Surry Hills NSW 2010

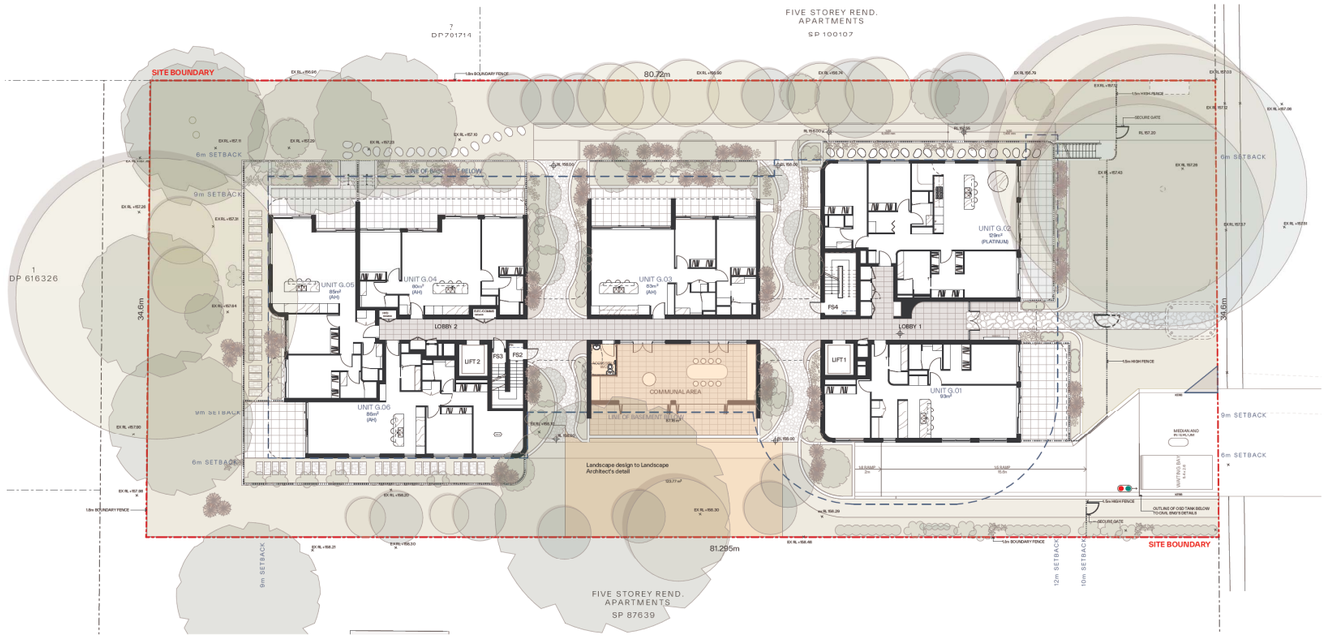
ABN 36 147 035 550
Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Cross Ventilation Diagram

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:285.71@A1	DRAWING NO: **DA530**	ISSUE: **A**
PROJECT NO: 2434		



LEGEND:

COMMUNAL OPEN SPACE

PROPERTY DETAILS:
AREA: 2803m²
ZONE: R4

Minimum Required: 10% of the Site Area = 280.3m²

COMMUNAL OPEN SPACE

Ground	211.0
Level 6	130.8
	341.8 m²

GENERAL NOTES:
- ALL WORKS TO COMPLY WITH BUILDING CODE OF AUSTRALIA, REQUIREMENTS OF RELEVENT STATUTORY AUTHORITIES / LOCAL GOVERNMENT & RELEVENT AUSTRALIAN BUILDING STANDARDS
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Issue	Date	Description
A	21/03/2025	DA Submission

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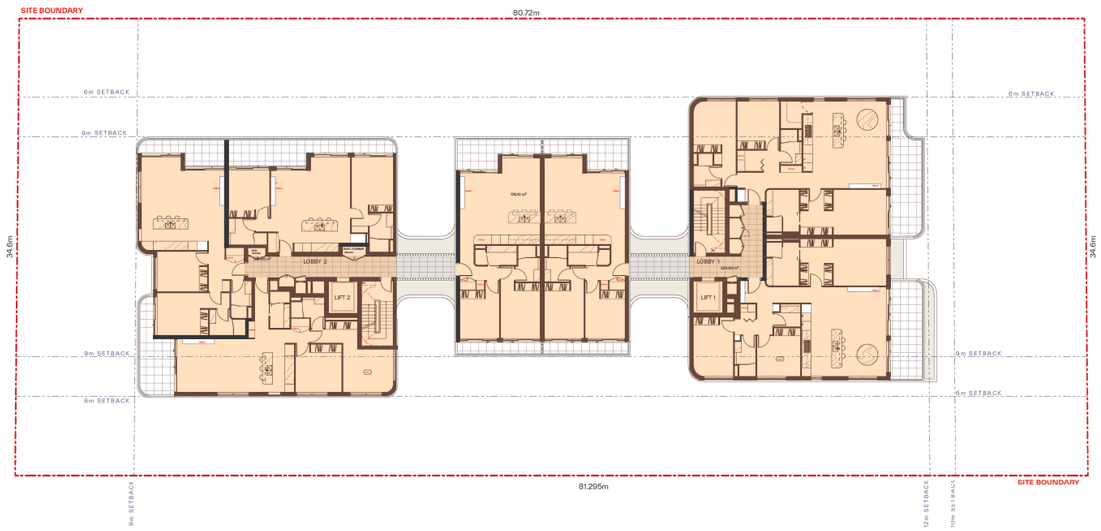
Level 2, 52 Albion Street, Surry Hills NSW 2010
ABN 36 147 035 550
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Communal Open Space Diagram

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025	
SCALE: @A1	DRAWING NO: **DA540**	ISSUE: **A**	
PROJECT NO: 2434			



1 Site Coverage Diagram

LEGEND:

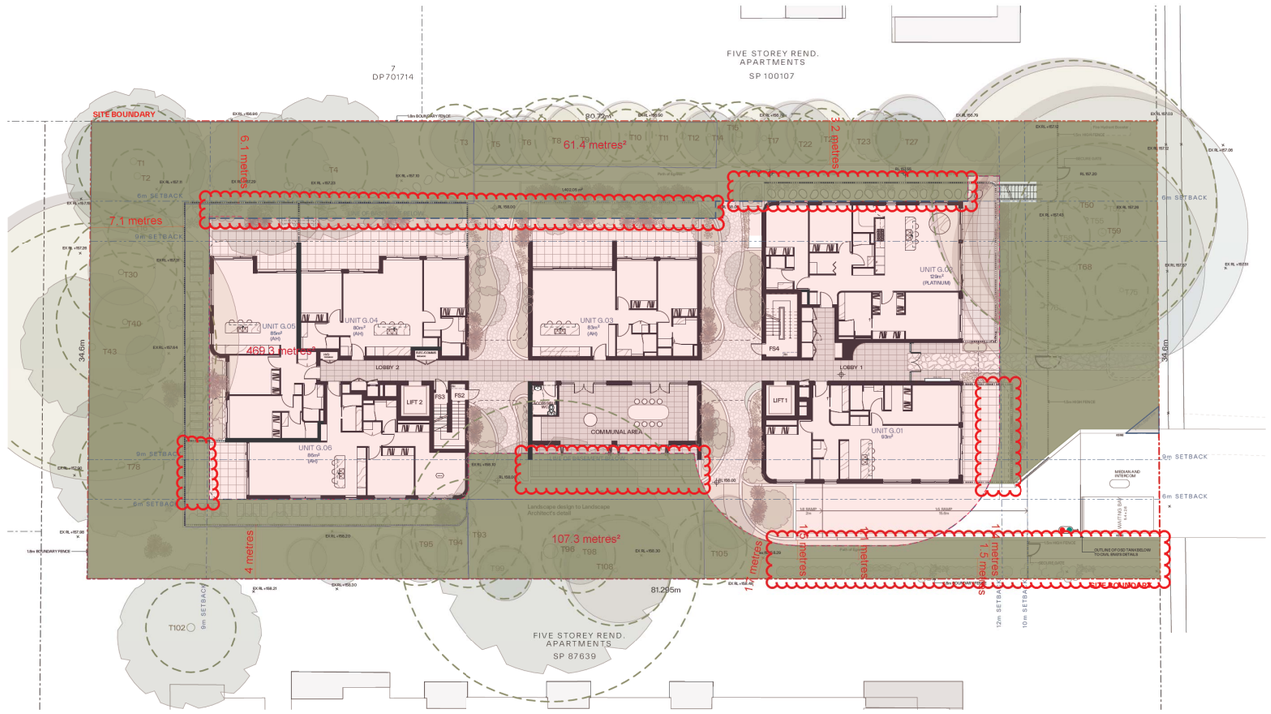
SITE COVERAGE

PROPERTY DETAILS:
AREA: 2803m²
ZONE: R4

Maximum Site Coverage : 30% of Site Area
840.9m²

SITE COVERAGE SUMMARY

Typical Level - 834.72 m² (30%)



2 Deep Soil Diagram

LEGEND:

DEEP SOIL AREA
EXTENT OF BASEMNET AREA

PROPERTY DETAILS:
AREA: 2803m²
ZONE: R4

Minimum Deep Soil Area : 50% of Site Area
1401.5m²

PROPOSED DEEP SOIL AREA- 1402.5m² (50%)

GENERAL NOTES:

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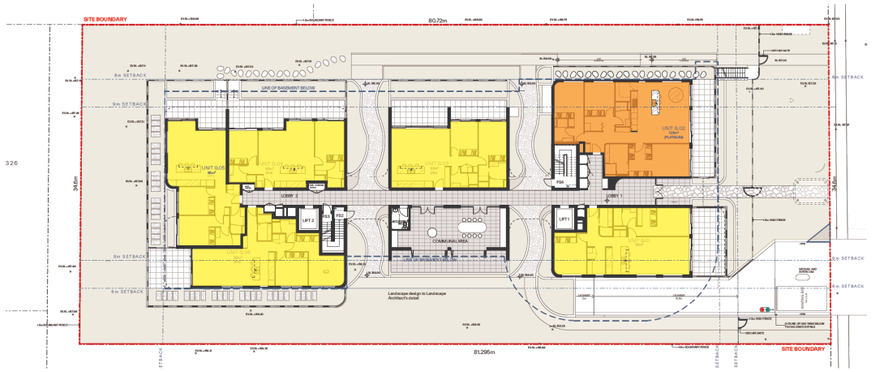
Level 2, 52 Albion Street, Surry Hills NSW 2010
ABN 36 147 035 550
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

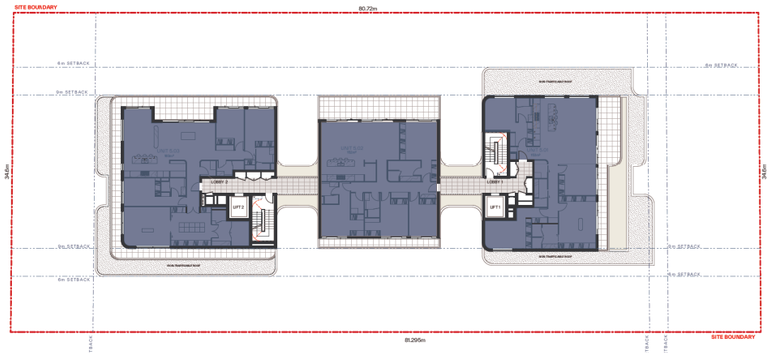
CLIENT:
X-Sealant

DRAWING TITLE:
Site Coverage & Deep Soil Diagram

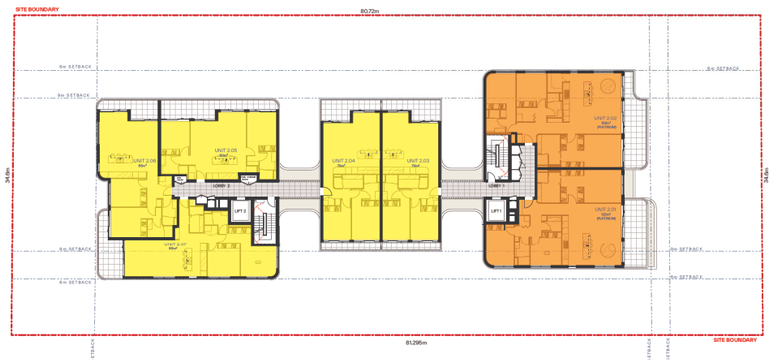
DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:200@A1	DRAWING NO: **DA510**	ISSUE: **A**
PROJECT NO: 2434		



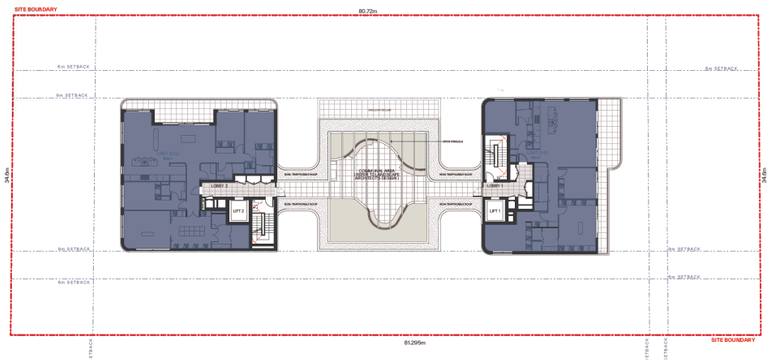
1 Ground



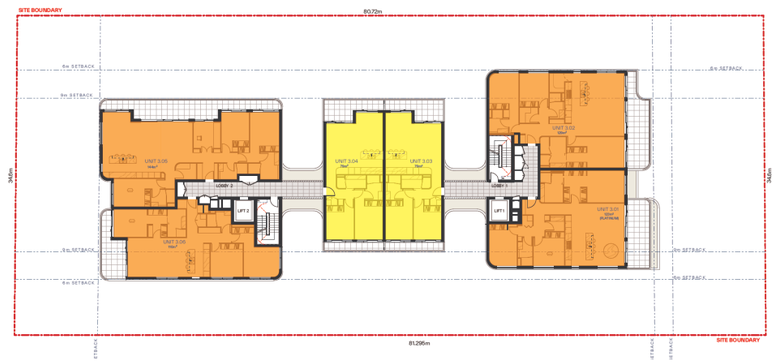
4 Level 5



2 Typical Level 1 - 2



5 Level 6



3 Typical Level 3 - 4

LEGEND:

2 BED x19

3 BED x13

4 BED x5

REFER TO TO DA001

GENERAL NOTES:

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Issue	Date	Description
A	21/03/2025	DA Submission

N

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Level 2, 52 Albion Street, Surry Hills NSW 2010

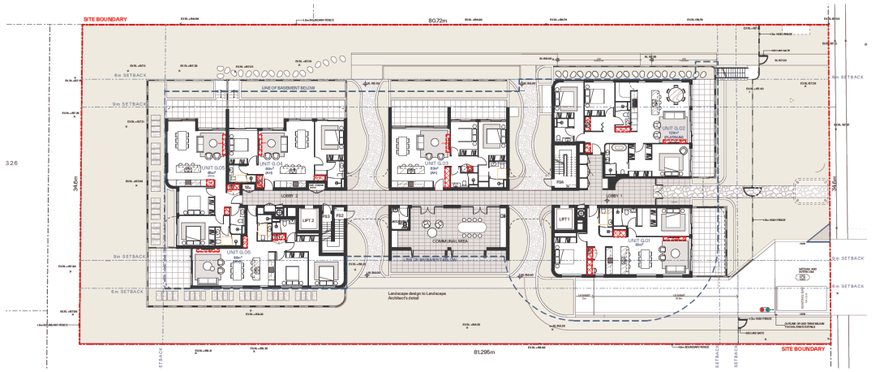
ABN 36 147 035 550
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

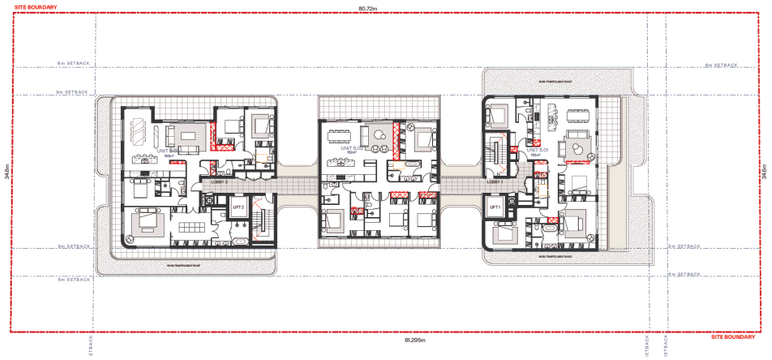
CLIENT:
X-Sealant

DRAWING TITLE:
Unit Mix Diagram

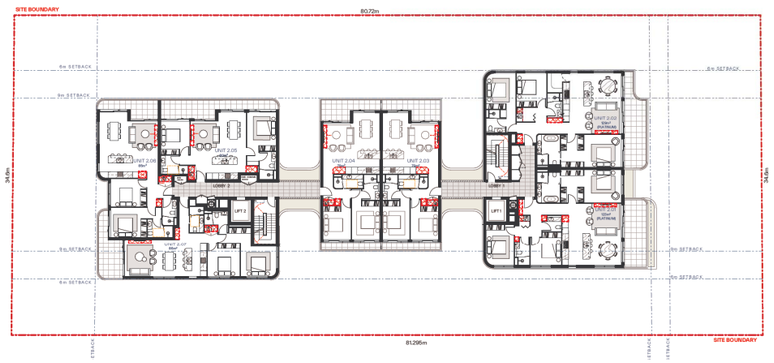
DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:285.71@A1	DRAWING NO: **DA550**	ISSUE: **A**
PROJECT NO: 2434		



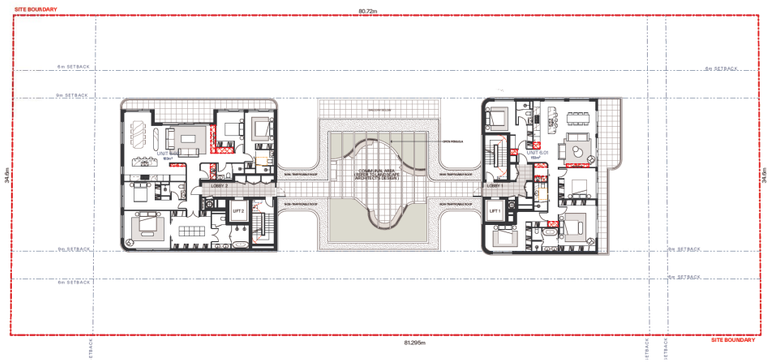
1 Ground



4 Level 5



2 Typical Level 1 - 2



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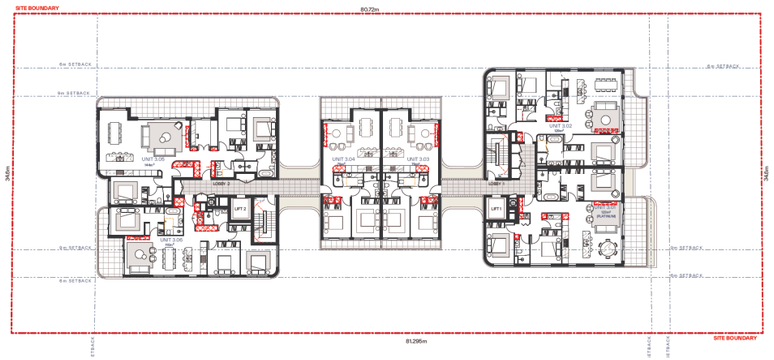

3 Typical Level 3 - 4

LEGEND:

STORAGE AREA

REFER TO DA001 FOR DETAILS

GENERAL NOTES:

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A	21/03/2025	DA Submission

N

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Level 2, 52 Albion Street,
Surry Hills NSW 2010

ABN 36 147 035 550
Nominated Architect:
Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Storage Calculation Diagram

DRAWING BY: AL	CHECKED BY: KS	DATE: 24/03/2025
SCALE: 1:285.71@A1	DRAWING NO: **DA570**	ISSUE: **A**
PROJECT NO: 2434		

TOILET CIRCULATION SPACE CLEARANCE OF 1200x1200

SHOWER CIRCULATION SPACE CLEARANCE OF 1400x1600

REINFORCED WALL

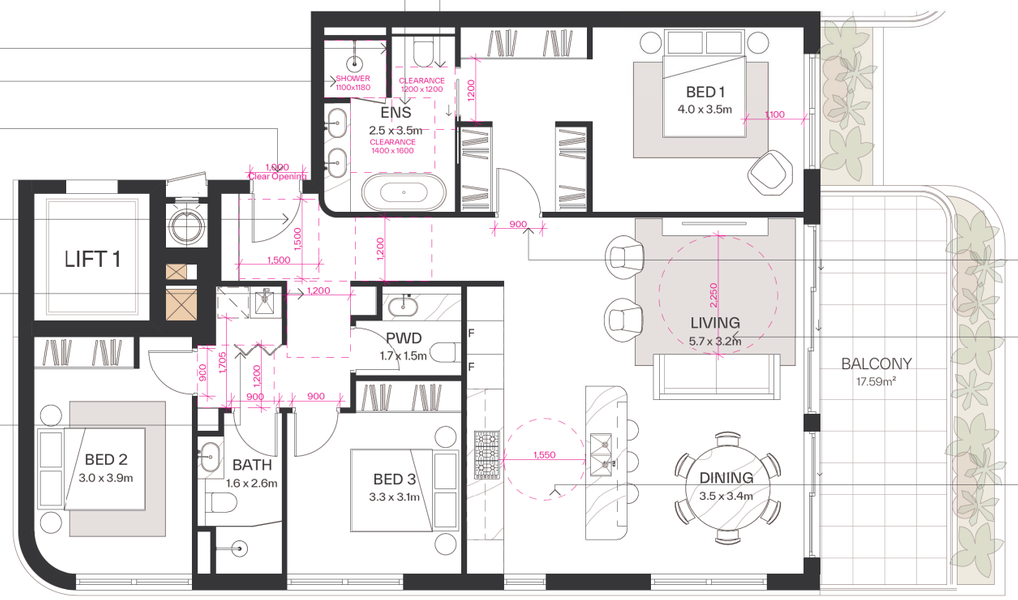
SHOWER MINIMUM DIMENSION OF 1100x1180

ENTRANCE DOOR CLEARANCE OF MINIMUM 900mm

ALL FLOOR COVERING MUST BE FIRM, FLOOR EVEN AND SLIP RESISTANT. (INCLUDE LAUNDRY , KITCHEN AND BATHROOM)

CORRIDOR MINIMUM CLERANCE OF 1200mm

DOOR BI-FOLD ALLOW AT LEAST 1550mm CLEARANCE INFRONT OF BENCHES AND APPLIANCES



ALL INTERNAL DOOR CLEARANCE OF MINIMUM 900mm

FAMILY AND LIVING ROOM MINIMUM CLEARANCE OF 2250mm

AT LEAST 1550mm CLERANCE INFRONT OF FIXED BENCHES AND APPLIANCES

1 TYPE A - Unit 1.01 , 2.01 , 3.01
Total Number - 3

CORRIDOR MINIMUM CLERANCE OF 1200mm

DOOR BI-FOLD ALLOW AT LEAST 1550mm CLEARANCE INFRONT OF BENCHES AND APPLIANCES

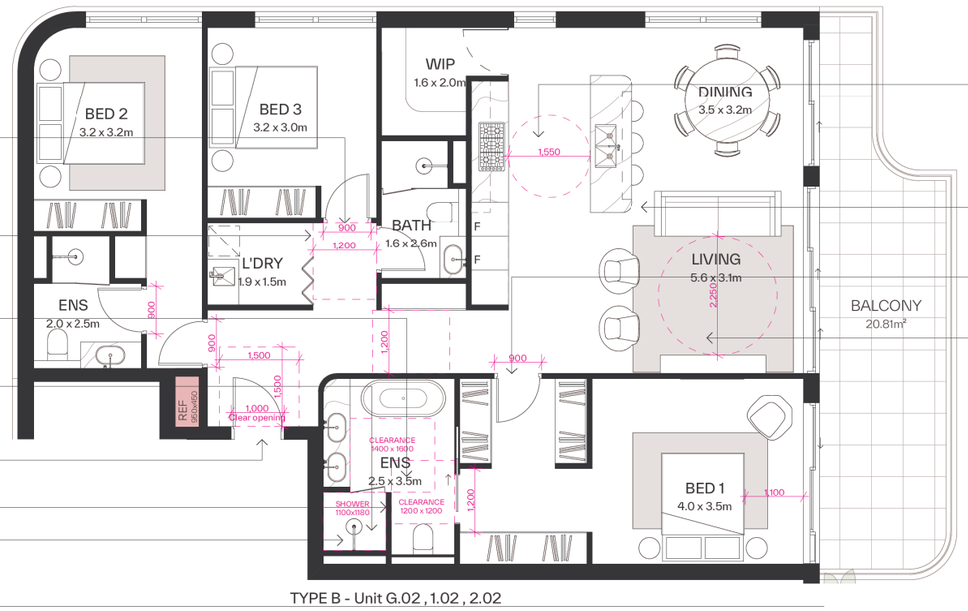
TOILET CIRCULATION SPACE CLEARANCE OF 1200x1200

SHOWER CIRCULATION SPACE CLEARANCE OF 1400x1600

ENTRANCE DOOR CLEARANCE OF MINIMUM 900mm

REINFORCED WALL

SHOWER MINIMUM DIMENSION OF 1100x1180



AT LEAST 1550mm CLERANCE INFRONT OF FIXED BENCHES AND APPLIANCES

ALL FLOOR COVERING MUST BE FIRM, FLOOR EVEN AND SLIP RESISTANT. (INCLUDE LAUNDRY , KITCHEN AND BATHROOM)

ALL INTERNAL DOOR CLEARANCE OF MINIMUM 900mm

FAMILY AND LIVING ROOM MINIMUM CLEARANCE OF 2250mm

2 TYPE B - Unit G.02 , 1.02 , 2.02
Total Number - 3

GENERAL NOTES:
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A	21/03/2025	DA Submission

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P - 02 9698 8140
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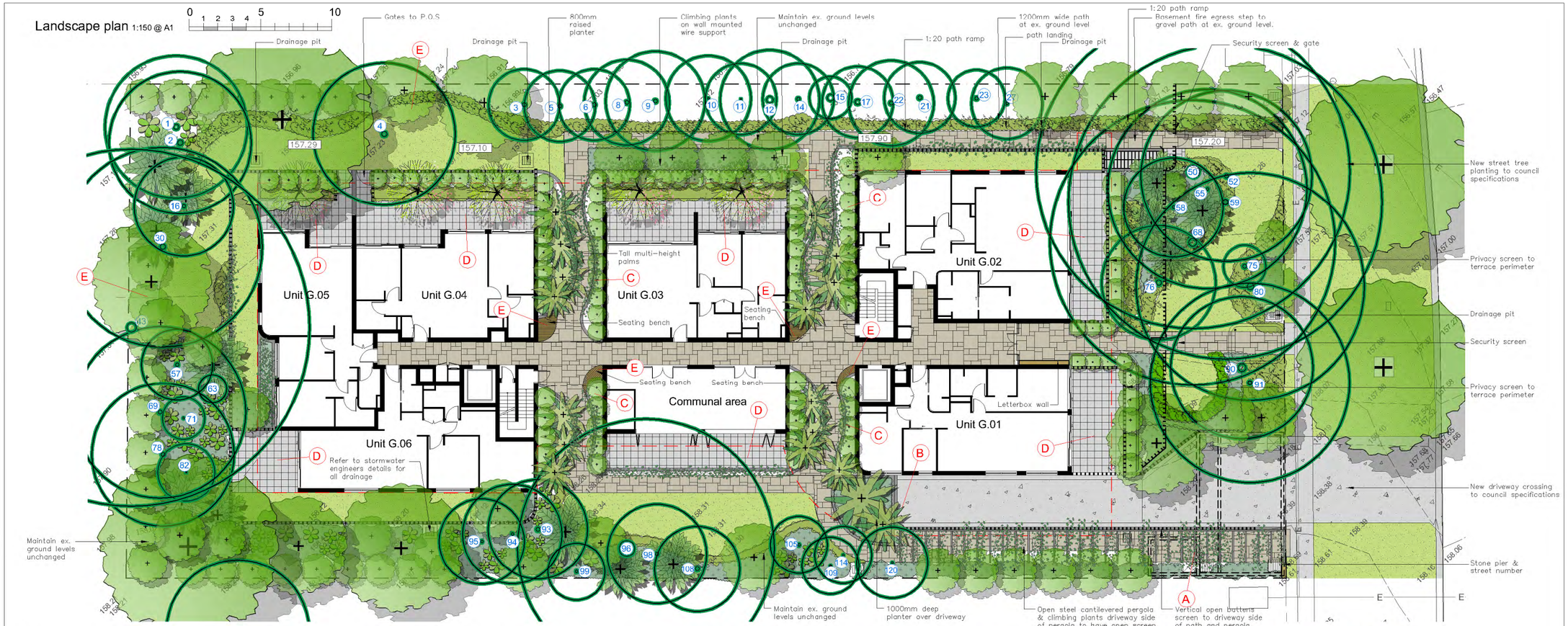
Level 2, 52 Albion Street, Surry Hills NSW 2010
ABN 36 147 035 550
Nominated Architect: Paul Buljevic NSW 7768

PROJECT:
Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW 2075

CLIENT:
X-Sealant

DRAWING TITLE:
Platinum Units

DRAWING BY:	CHECKED BY:	DATE:
AL	KS	24/03/2025
SCALE: @A1	DRAWING NO: **DA800**	ISSUE: **A**
PROJECT NO: 2434		



Drawing schedule:

Sheet 1: Landscape site plan
Sheet 2: Detail plan 7 Levels
Sheet 3: Planting plan
Sheet 4: Tree retention plan
Sheet 5: Level 6 plan
Sheet 6: Level 1 - 5 plan

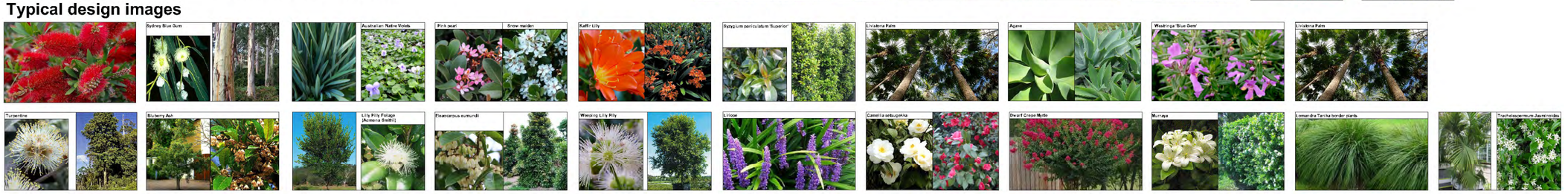
Arborist report by:
AQF5 Arboriculturist & AQF8 Aorticulturist
Reference # : 22-042a-02_3 (2023) 130 Killeaton Street, ST IVES NSW 2075.
Date: 28.09.2023

Stormwater :
S&G Consultants Pty Ltd
Reference # : 20240240-SW SPATIAL

Biodiversity Impact Assessment:
Keystone Ecological Pty Ltd
Reference # : KMC 21-1154
Date: 28.09.2023



Typical design images



Ex. trees to be retained
Ex. trees to be retained
P.O.S path
C.O.S path
Privacy screens
Retaining wall
Basement wall between

Amendments

D	12.3.25	DA Issue
C	25.2.25	DA review
B	12.2.25	DA review
A	4.2.25	Preliminary review

PAUL SCRIVENER
LANDSCAPE

PO Box 4050. ACT 2602
ABN: 16 949 100 279
Phone: 02 9907 8011
www.scrivener-design.com
Email: paul@scrivener-design.com

Project: Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW

Dwg: Landscape Plan

Date: 12.3.25
Scale: 1:150 @A1
Job Ref: 24/2823

Builder must verify all dimensions of the site before work commences.
Figured dimensions should be used in preference to those scaled off.

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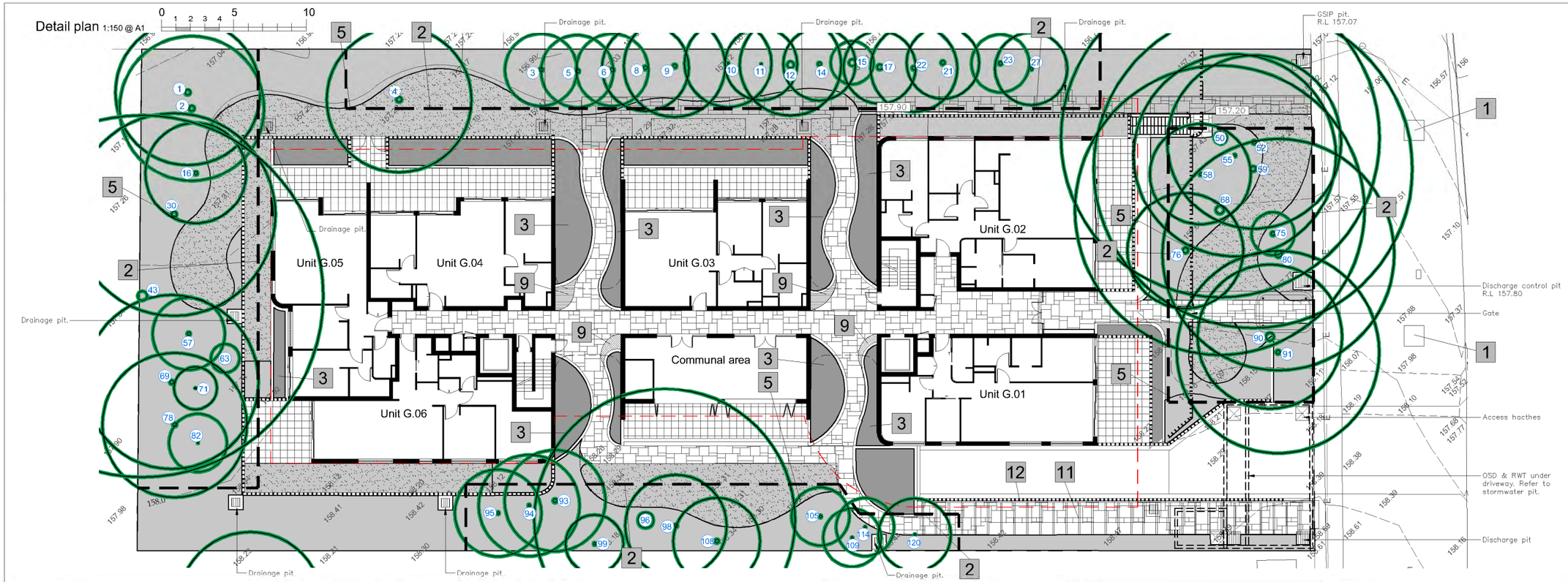
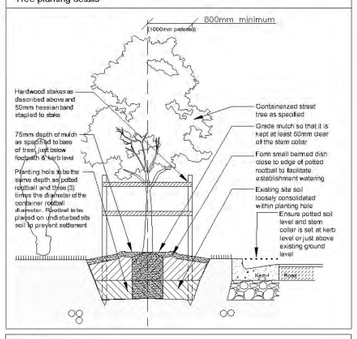
North

1 of 5
DA
ISSUE-D

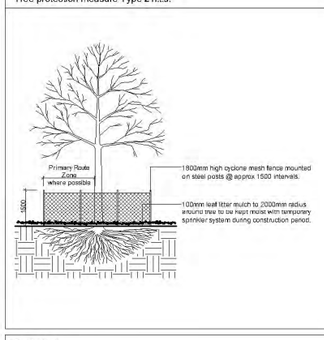
Detail plan 1:150 @ A1



Detail 1
Tree planting details

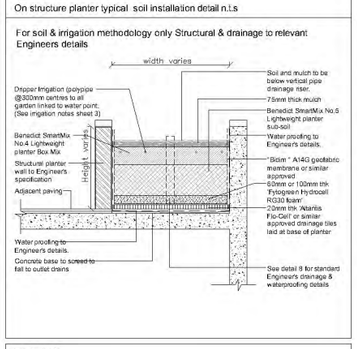


Detail 2
Tree protection measure Type 2 n.t.s.

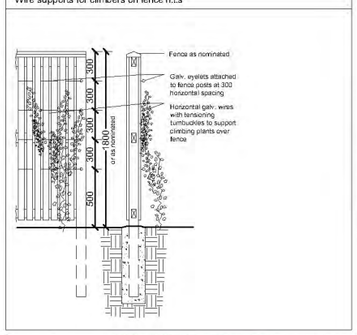


Detail 3
On structure planter typical soil installation detail n.t.s

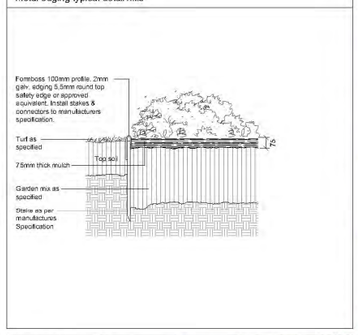
For soil & irrigation methodology only Structural & drainage to relevant Engineers details



Detail 4
Wire supports for climbers on fence n.t.s



Detail 5
Metal edging typical detail n.t.s



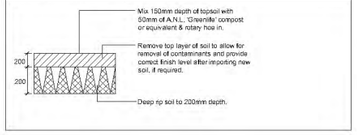
Detail 11
Open steel pergola & Climbing plants



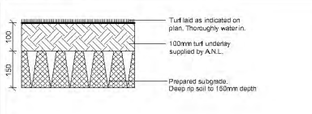
Detail 12
Open steel pergola



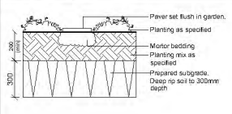
Detail 6
Soil preparation detail n.t.s.



Detail 7
Turf over soil n.t.s



Detail 8
Stepping stones in garden n.t.s



Detail 9



Detail 10



4 Detail #

Ex. trees to be retained (9)

Nature soil garden areas (See Detail 6)

Turfed areas (See Detail 7)

Raised planter. (See Detail 3)

Privacy screen (Detail 10)

Basement wall below

1200mm max. width path in deep soil zone.

Tree protection fencing (Detail 2)

Amendments

D	12.3.25	DA Issue
C	25.2.25	DA review
B	12.2.25	DA review
A	4.2.25	Preliminary review

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Email: paul@scrivener-design.com

Project: Residential Flat Building
130 Killeaton Street, St Ives Sydney NSW

Dwg: Detail Plan

Date: 12.3.25 Scale: 1:150 @A1

Job Ref: 24/2823

Builder must verify all dimensions of this site before work commences.
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North

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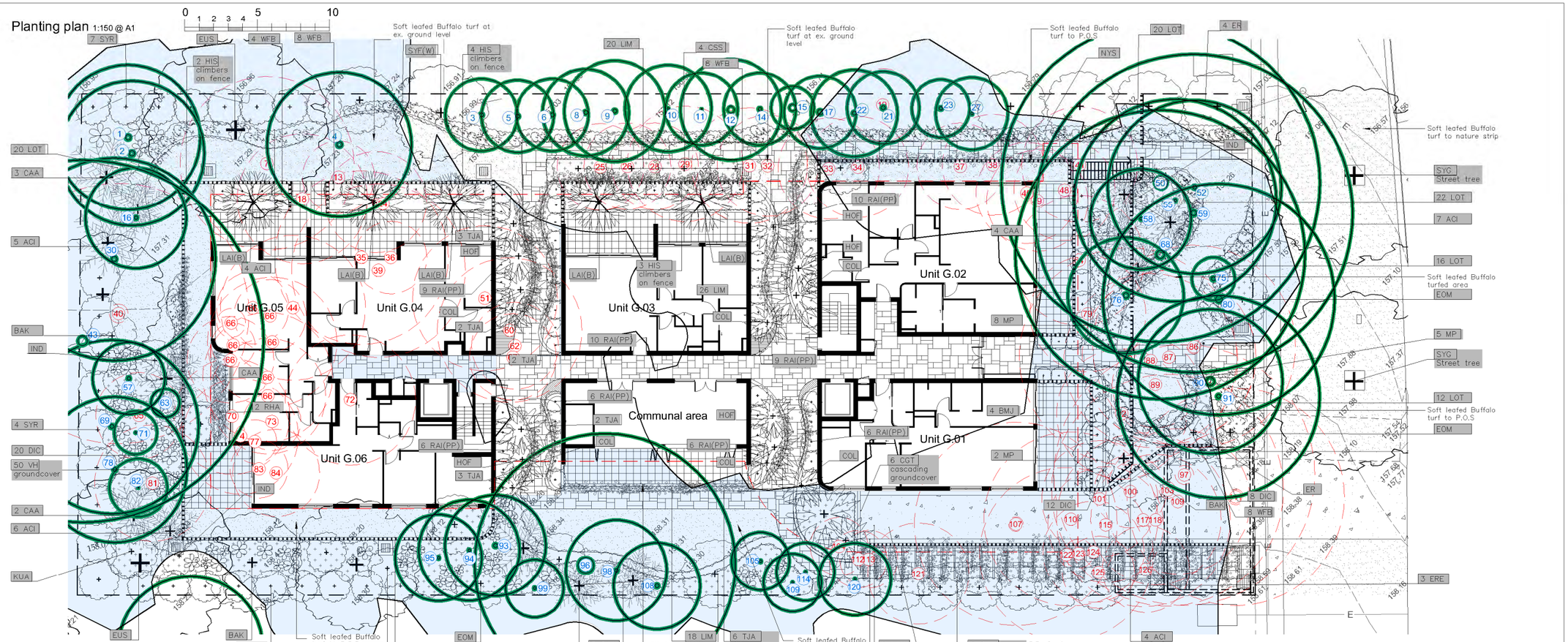
DA
ISSUE-D



Planting schedule

Symbol	Botanical name	Common name	Cont. sl.	Staking	Mature height	No. req.
Trees						
BAK	Backhousia myrtifolia	Grey Myrtle (indigenous tree in deep soil)	45Lt	3x50x50x1800	4-6.0M	3
EUS	Eucalyptus saligna	Sydney Blue Gum (tall indigenous canopy tree	100Lt	3x50x50x1800	20-30.0M	2
ER	Elaeocarpus reticulatus	Blueberry Ash (indigenous small tree)	300mm	3x50x50x1800	6-8.0M	5
ERE	Elaeocarpus eumundii	QLD Quondong (native vertical narrow screen t.	45Lt	2x50x50x1800	7-10.0M	3
LAI(B)	Lagerstroemia Ind xL. Biloxi'	Biloxi Dwarf Crepe Myrtle	45Lt	3x50x50x1800	3.0-4.0M	5
NYS	Nyssa sylvatica	Tupelo (bright red autumn foliage)	75Lt	3x50x50x1800	8-10.0M	1
PLU	Pluvenis acuminata	Frangipani (small flowering deciduous tree)	45Lt	2x50x50x1800	3-4.0M	1
SYG	Syncarpia glommulifera	Turpentine (indigenous canopy tree)	100Lt	3x50x50x1800	18-25.0M	2
SYF(W)	Waterm osia floribunda 'Sweeper'	Sweeper Watermousia (Espaliered ® 'DOWN2)	75Lt	3x38x38x1800	8-10.0M	2
Shrubs / standards / small feature trees						
ACI	Arthropodium cirratum	Renga Renga Lilly	150mm	nil	0.8M	26
AGW	Agapanthus orientalis 'Blue'	Blue Lily of the Nile (Hardy strappy leaved groundcover)	200mm	nil	0.5M	14
BMJ	Buxus microphylla 'Japonica'	Japanese Box Hedge (form all low hedging plant)	200mm	nil	0.4-1.0M	4
COA	Correa alba	White Correa (hardy salt wind tolerant coastal shrub)	200mm	nil	1.5-2.0M	3
CVE	Callistemon citrinus 'Endeavor'	Endeavor Crimson Bottlebrush (flowering native small tree)	300mm	nil	2-3.0M	6
EOM	Pilotheca (Eriostemon) australis	Pink Wax Flower (flowering native shrub)	200mm	nil	1.50M	3
IND	Indigofera australis	Australian Indigo (small flowering native shrub)	200mm	nil	1.5-2.0M	3
KUA	Kunzea ambigua	Tick Bush (flowering native shrub)	250mm	nil	2-3.0M	2
MP	Murraya paniculata	Orange Jessamine (flowering screening plant)	300mm	hedged	2-3.0MM	13
RAI (PP)	Raphiolepis indica PP	Pink Pearl (hedging dense flowering plant)	300mm	nil	1.0M	62
RAI (SM)	Raphiolepis indica SM	Snow Maiden (hedging dense flowering plant)	300mm	nil	1.0M	14
SYR	Syzygium 'Resilience'	Resilience Lilly Pilly (native screen plant. Can be hedged)	300mm	hedged	2.5-3.5M	21
WFB	Westringia fruticosa 'Blue Gem'	Dwarf Blue Westringia (hardy low growing plant)	150mm	hedged	1.2-1.5M	40
Ferns / Palms / Succulents / shade tolerant understorey						
AGV	Agave attenuata	Century plant (striking spiky leaved succulent)	200mm	nil	0.5M	8
CAA	Cyathea australe	Tree Fern (Native tree ferns)	300mm	nil	2-4.0M	13
CHM	Chamaerops humilis	European Fan Palm (Hardy Small – med palm)	300mm	nil	3-5.0M	2
COL	Colocasia esculenta	Elephants ears (Dark large leaved plant)	200mm	nil	1-1.5M	6
HOF	Howea forsteriana	Kentia Palm (tall palm)	semi adv	wire guys	7-10.0M	5
LAV	Livistona australis	Cabbage Palm (tall indigenous palm)	semi adv	wire guys	8-12.0M	2

Symbol	Botanical name	Common name	Cont. size	Staking	Mature height	No. req.
Groundcovers/Climbers						
CGT	Casuarina glauca 'Cousin It'	Cousin It Groundcover (hybrid groundcover)	200mm	nil	0.15M	6
DSF	Dichondra 'Silver Falls	Silver Falls (cascading groundcover in roof garden)	200mm	nil	0.15M	52
HIS	Hibbertia scandens	Guinea Flower (flowering climber / groundcover)	200mm	nil	0.3M	13
PJ	Pandorea jasminoides	Bower Plant (native climbing/cascading groundcover)	200mm	wire supports on fence	2.5M	13
RHA	Raphis excelsor	Lady Finger Palm	300mm	nil	2-2.5M	2
SOJ	Solanum jasminoides	Potato Vine (deciduous climber over pergola)	300mm	over pergola	3.5M	4
TJA	Trachelospermum asiaticum	Flatmat Star Jasmine (FT01 Grafted hybrid groundcover	200mm	nil	0.2M	35
VH	Viola hederacea	Native Violets (native low groundcover)	tubes	nil	0.1M	50
Ornamental grasses/strappy leaved plants						
CM	Clivia miniata	Red Clivia (shade tolerant groundcover)	200mm	nil	0.5M	6
DIC	Dianella caerulea	Blue Flax Lilly (native ornamental grass)	100mm	nil	0.4M	52
LIM	Liriope Evergreen Giant	Turf Lily (shade tolerant groundcover)	150mm	nil	0.4M	118
LOT	Lomandra Tanika	Dwarf Lomandra (ornamental grass)	150mm	nil	0.4M	148

All trees to be provided with written confirmation from the supplier for compliance to Natspec guidelines in compliance with A.S. 2303:2018. Planting schedule species to be sourced from local nurseries supplying plants of local provenance wherever possible.

Landscape contractor is to check plant numbers on plan against the schedule prior to submitting tender price. Contact landscape architect if any number discrepancies are found.

Council compliance controls require that any substitution of species variety or container size MUST be confirmed with landscape architect to ensure a compliance certificate can be issued that's meets the specific development consent conditions of the approved development.

Maintenance schedule

The Landscape Contractor shall maintain the contract areas by accepted horticultural practices as well as rectifying any defects that become apparent in the works under normal use. The Landscape Contractor shall maintain the works and make good all defects for a period of twenty six (26) weeks after the date of practical completion. Practical completion of the landscape works shall include but not be limited to the replacement of plants which have failed or been damaged or stolen during work under the contract. Landscape maintenance shall include but not be limited to the following: watering, rubbish removal, spraying and wiping leaf surfaces, replacing failed plants, maintaining mulch, pruning, insect and disease control, cleaning of surrounding areas. Mow the turf when it is established at regular intervals to maintain an average height of 50mm.

The owners of the residence are responsible for the ongoing maintenance and viability of the gardens and ongoing maintenance shall include the following:

- Regular hand watering of gardens if installed drip line irrigation system is turned off. Irrigation to be installed and maintained as per manufacturers specifications including regular checks for function of system, to check for leaks and to ensure general good working operation.
- Mulch is to be regularly topped up every 6 months to ensure an even 75mm coverage in all garden beds
- Regular pruning of plants is to be undertaken to ensure continued uniform growth of canopy and foliage of trees and shrubs.
- Regular assessment of plants for evidence of insect attack or disease. Appropriate pest oil, white oil of Yates pest spray or equivalent is to be employed if required
- Garden/lawn edging to be inspected regularly after practical completion to ensure it is maintained in good order. Replace where required if defective sections are discovered
- All garden refuse, rubbish and associated items that arise from the regular garden maintenance procedures are to be collected and stored in appropriate general waste or green waste containers as is appropriate. Excess waste unable to be stored in Council waste containers is to be removed from the site is a timely manner.

Arborist report by:
AQF5 Arboriculturist & AQF8 Aorticulturist
Reference # : 22-042a-02_3 (2023) 130
Killeaton Street, ST IVES NSW 2075.
Date: 28.09.2023

Biodiversity Impact Assessment:
Keystone Ecological Pty Ltd
Reference # : KMC 21-1154
Date: 28.09.2023

Stormwater :
S&G Consultants Pty Ltd
Reference # : 20240240-SW SPATIAL

Ex. trees to be removed

Ex. trees to be retained . Refer to Arborists report

Plant symbols (See schedule this sheet)

Garden bed groundcovers & mulch

Urban Native / Exotic vegetation

Amendments

D	12.3.25	DA Issue
C	25.2.25	DA review
B	12.2.25	DA review
A	4.2.25	Preliminary review

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130 Killeaton Street. St Ives Sydney NSW

Dwg: Planting Plan

Date: 12.3.25
Scale: 1:150 @A1
Job Ref: 24/2823

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North

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DA
ISSUE-D

Level 6 plan 1:100 @ A1

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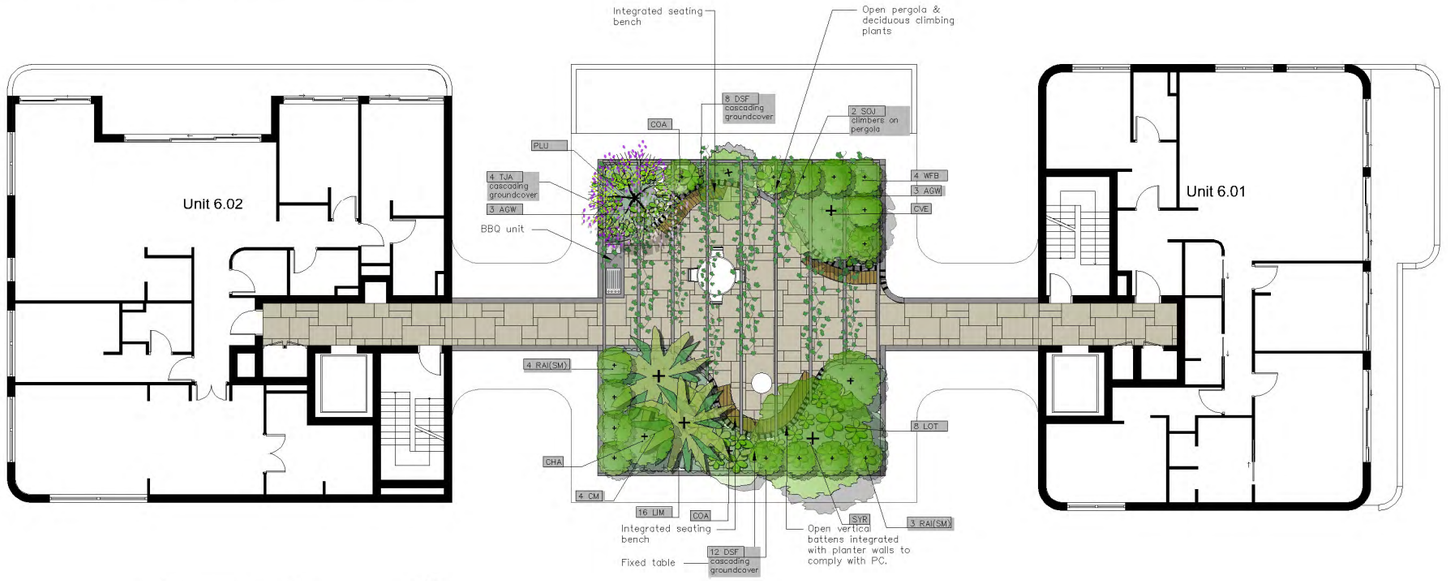

Level 6 plan 1:100 @ A1

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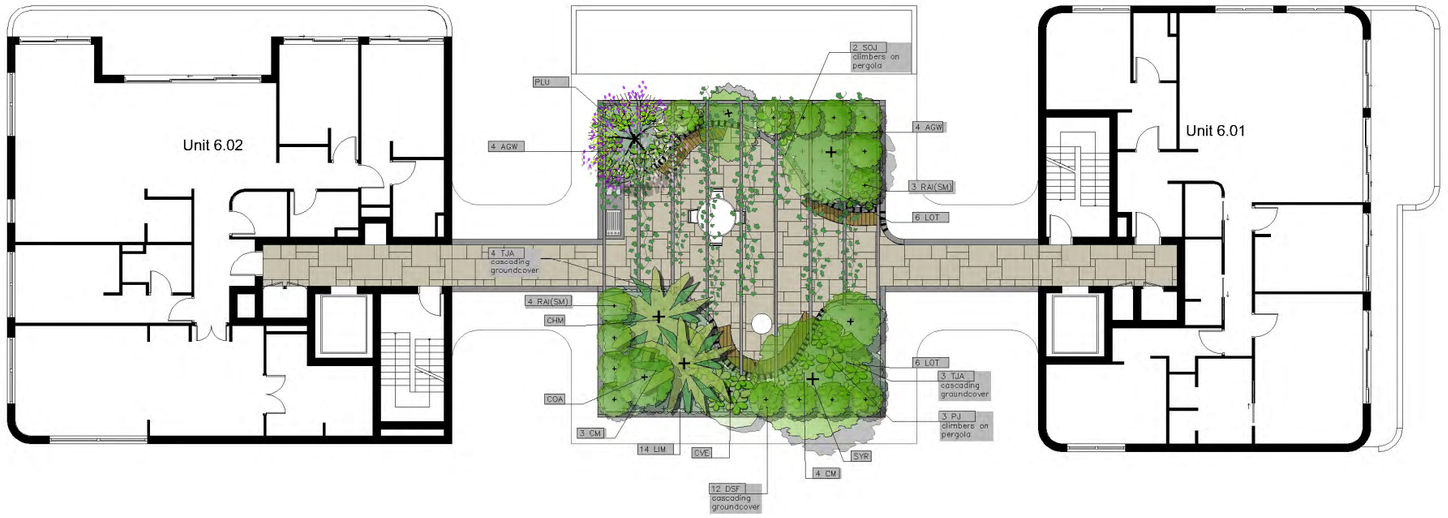
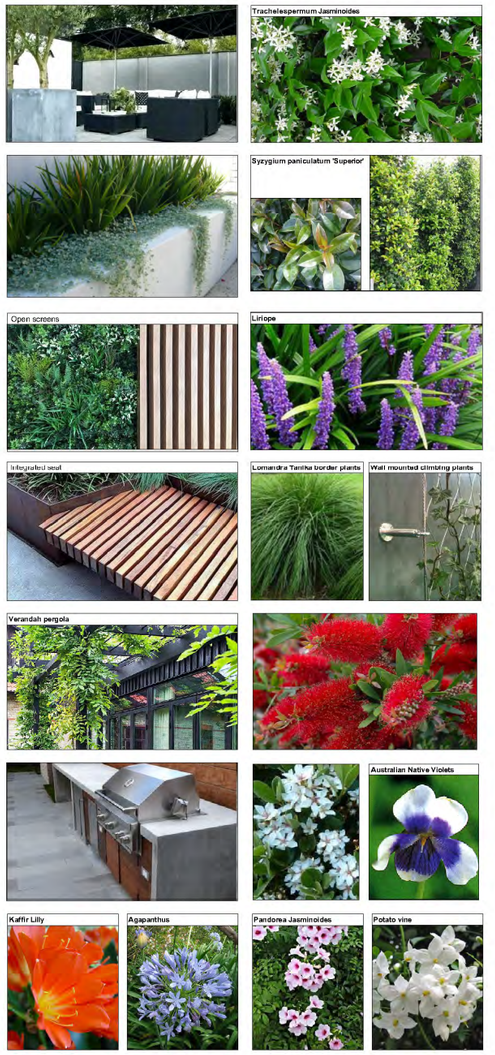


Typical images



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Date: 28.09.2023

Stormwater :
S&G Consultants Pty Ltd
Reference # : 20240240-SW SPATIAL

ER — Planting symbol (See schedule, sheet 3)

4 — Detail ref. (See Sheet 2)

Amendments

D	12.3.25	DA Issue
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130 Killeaton Street. St Ives Sydney NSW

Dwg: Level 6 Plan

Date: 12.3.25 Scale: 1:100 @A1

Job Ref: 24/2823

North

4 of 5
DA
ISSUE-D

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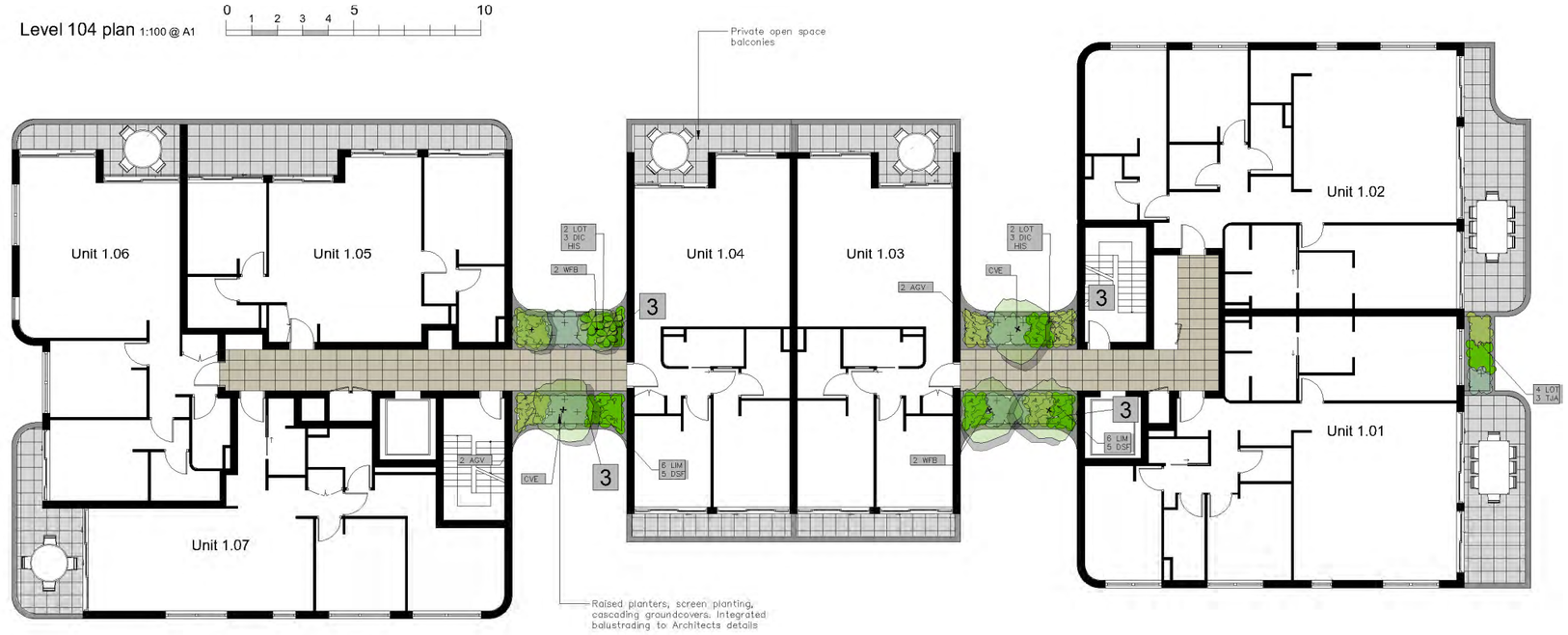
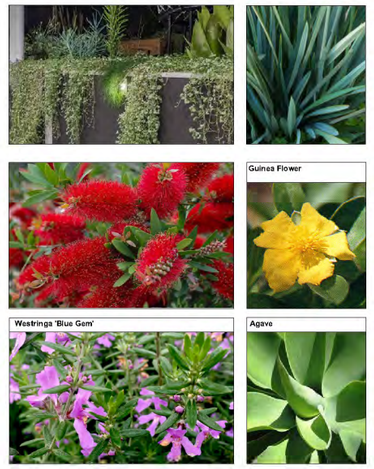
Level 104 plan 1:100 @ A1



Level 5 plan 1:100 @ A1



Typical design images



Irrigation notes

Automatic drip line watering system to be selected. To extend to ALL garden areas nominated on the deep soil and planter box areas and is to include all raised planter boxes over slab. (all lawn areas to be excluded) Water supply tap hosecocks as indicated on CC stage drawings.(To be coordinated with Hydraulic and Structural Engineer's details). Dripline supply system only to be incorporated.

Prior to approval by the project manager and prior to installation the Contractor responsible for the irrigation installation is to provide an irrigation design to meet the following requirements.

Generally: Supply an automatic drip line irrigation system. To include all piping to solenoids either PVC lines and/or class 12 pressure pipe or low density, rubber modified polypropeyline reticulation as required to provide water supply to the nominated areas. To be coordinated with Hydraulic engineers plans. To include all bends, junctions, ends, ball valves, solenoids and all other ancillary equipment. Backwash valve: An approved backwash prevention valve is to be located at the primary water source for top up valves to rainwater tanks (where applicable).

Ensure rain sesnsor is installed for common area garden zones connected to timers

Root inhibiting system. Driplines to be 'Netafim Techline AS XR' drip tubing or approved equivalent
.
Automatic Controller: Provide automatic 2 week timer with hourly multi-cycle operation for each zone as noted on the irrigation areas plan on sheet .... . Battery timers to isolated planter boxes is acceptable and to maintained by the owners corporation as part of the ongoing property maintenanace.

Performance: It shall be the Landscape Contractor's responsibility to ensure and guarantee satisfactory operation of the irrigation system. The system is to be fit for the purpose and should utilize sufficient solenoids to provide for the varying watering requirements of landscape areas to allow all plants and lawn areas to thrive and attain long term viability.

Testing: After the system has been installed to the satisfaction of the project manager, the installation shall be tested under working conditions. Acceptance of the installed plant and equipment shall be subject to these being satisfactory.

Warranty: A twelve month warranty is to be provided in writing by the Landscape Contractor, which shall commit the Landscape Contractor to rectify the system (the items they have installed) to the satisfaction of the project manager or nominated representative. This will apply should any fault develop, or the capacity or efficiency fall below that guaranteed, or should the discharge or pressure be inadequate, or should defects develop in the filter unit or control heads, or any blockages that may develop in the system.

Approvals: The Landscape Contractor is to liaise as necessary, to ensure that the irrigation system conforms with all Water Board, Council and Australian standards (AS)

Planter walls / balustrading

Private terrace

ER — Planting symbol (See schedule, sheet 3)

Low level planting

Common access paths

4 — Detail # (See Sheet 2)

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North

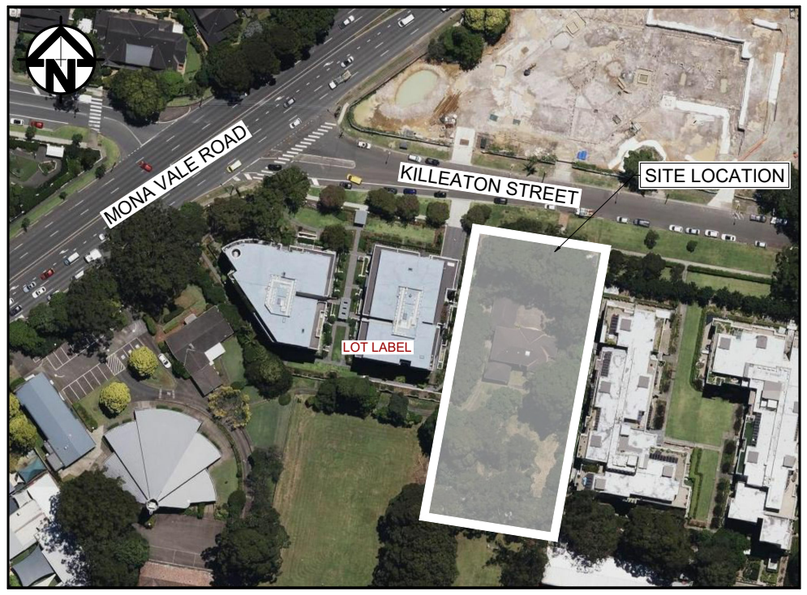
5 of 5

DA

ISSUE-D

COUNCIL REF:_____

130 KILLEATON STREET,
ST. IVES.
STORMWATER CONCEPT DESIGN



LOCALITY PLAN
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DRAWING INDEX			
SHEET No.	DWG. No.	DRAWING TITLE	REV.
01	S01-SW100	COVER SHEET & DRAWING INDEX	A
02	S01-SW101	NOTES & LEGEND	A
03	S01-SW201	EROSION & SEDIMENT CONTROL PLAN & DETAILS	A
04	S01-SW301	STORMWATER CONCEPT DESIGN BASEMENT 03	A
05	S01-SW302	STORMWATER CONCEPT DESIGN GROUND FLOOR PLAN SHEET 01 OF 02	A
06	S01-SW303	STORMWATER CONCEPT DESIGN GROUND FLOOR PLAN SHEET 02 OF 02	A
07	S01-SW401	STORMWATER CONCEPT DESIGN DETAILS SHEET	A
08	S01-SW402	STORMWATER CONCEPT DESIGN DETAILS SHEET	A
09	S01-SW501	STORMWATER GRADING DESIGN MUSIC CATCHMENT PLAN & DETAILS	A

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PAUL BULJEVIC

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MANAGEMENT PTY LTD

LGA

Ku·ring·gai Council

Project No. 20240240 Drawing No. S01-SW100 Revision No. A

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SITEWORKS LEGEND

SWD	STORMWATER LINE
RW RW	STORMWATER LINE TO RAINWATER TANK
SS SS SS	SUBSOIL LINE
SWRM SWRM	STORMWATER RISING MAIN
S S	AUTHORITY SEWER LINE
W W	AUTHORITY WATER LINE
G G	AUTHORITY GAS LINE
OH OH	AUTHORITY OVER HEAD ELECTRICITY LINE
E E	AUTHORITY UNDERGROUND ELECTRICITY LINE
T T	AUTHORITY COMMS LINE
	GRATED SURFACE INLET PIT
	GRATED SURFACE INLET PIT WITH ENVIROPOD INSERT
	JUNCTION PIT
	GRATED TRENCH DRAIN
RWO	RAINWATER OUTLET
CO	CLEAR OUT POINT
DDO	DISH DRAIN OUTLET
PD	PLANTER DRAIN
	DOWNPIPE DROP
DP	DOWNPIPE
	WARNING LIGHT
00.00	FINISH SURFACE LEVEL

ABBREVIATIONS:

Ø or DIA	DIAMETER
CO	CLEAR OUT
DDO	DISH DRAIN OUTLET
DP	DOWNPIPE
e	EXISTING
FFL	FINISHED FLOOR LEVEL
GTD	GRATED TRENCH DRAIN
GSIP	GRATED SURFACE INLET PIT
IL	INVERT LEVEL
KIP	KERB INLET PIT
NGL	NATURAL GROUND LEVEL
OFP	OVERLAND FLOWPATH
OSD	ON-SITE DETENTION
RCP	REINFORCED CONCRETE PIPE
RL	REDUCED LEVEL
RWT	RAINWATER TANK
SW	STORMWATER
SWP	STORMWATER PIT
SWRM	STORMWATER RISING MAIN
SWS	STORMWATER SUMP
TOK	TOP OF KERB
TOW	TOP OF WALL
UPVC	

BEFORE YOU DIG www.byda.com.au

GENERAL

G1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS, BUILDING CODE OF AUSTRALIA, NSW CODE OF PRACTICE AND THE TO THE RELEVANT SERVICE CODES.

G2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.

G3. ALL DIMENSIONS SHOWN ON THE DRAWINGS ARE IN MILLIMETERS (U.N.O.). DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OF THESE DRAWINGS. USE FIGURED DIMENSIONS ONLY.

G4. BENCHMARKS HAVE BEEN ESTABLISHED WHERE INDICATED ON THE DRAWINGS. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.). THE CONTRACTOR SHALL UNDERTAKE ALL NECESSARY SURVEY WORK TO ENSURE THAT THE WORKS ARE CONSTRUCTED TO DESIGN LINE AND LEVEL.

G5. SETTING OUT DIMENSIONS AND LEVELS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR.

G6. ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE RELEVANT SZZ CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.

G7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL SAFETY FENCES, WARNING SIGNS, TRAFFIC DIVERSIONS AND THE LIKE DURING CONSTRUCTION. ALL WORKS TO COMPLY WITH WORK HEALTH AND SAFETY REQUIREMENTS AND OTHER RELEVANT AUTHORITY SAFETY REQUIREMENTS.

G8. NO TREES SHALL BE REMOVED, CUTBACK OR RELOCATED WITHOUT THE WRITTEN INSTRUCTION FROM THE SUPERINTENDENT.

G9. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.

G10. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS AND THESE SPECIFICATIONS.

G11. DESIGN LEVELS GIVEN ARE TO FINISHED SURFACE LEVEL AND INCLUSIVE OF TOPSOIL. (TOPSOIL DEPTH VARIES).

G12. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A N.A.T.A. REGISTERED SURVEYOR.

G13. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER TELECOMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.

G14. THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ON THE DRAWING HAVE BEEN PLOTTED FROM DIAGRAMS PROVIDED BY SERVICE AUTHORITIES. THIS INFORMATION HAS BEEN PREPARED SOLELY FOR THE AUTHORITIES OWN USE AND MAY NOT NECESSARILY BE UPDATED OR ACCURATE.

G15. THE POSITION OF SERVICES AS RECORDED BY THE AUTHORITY AT THE TIME OF INSTALLATION MAY NOT REFLECT CHANGES IN THE PHYSICAL ENVIRONMENT SUBSEQUENT TO INSTALLATION.

G16. S&G CONSULTANTS DOES NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THE DRAWING SHOWS MORE THAN THE PRESENCE OR ABSENCE OF SERVICES, AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.

G17. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN FROM THE UTILITY SERVICES AUTHORITIES A CURRENT COPY OF UNDERGROUND SERVICES SEARCH FOR THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORK AND NOTIFY ANY CONFLICT WITH THE DRAWINGS IMMEDIATELY. CLEARANCE SHALL BE OBTAINED FROM THE RELEVANT REGULATORY AUTHORITY. CONTRACTOR TO KEEP COPY OF UNDERGROUND SERVICES SEARCH ON SITE AT ALL TIMES. ANY DAMAGES TO SERVICES OR SERVICES ADJUSTMENTS SHALL BE CARRIED OUT BY THE CONTRACTOR OR RELEVANT AUTHORITY AT THE CONTRACTOR'S EXPENSE.

G18. VISIT THE SITE BEFORE SUBMITTING THE FINAL TENDER PRICE TO ASSESS 'ON SITE' CONDITIONS. FAILURE TO DO SO WILL FORFEIT ANY CLAIM FOR NOT BEING AWARE OF CONDITIONS AFFECTING THE TENDER.

G19. THE CONTRACTOR SHALL PREPARE ACCURATE WORK-AS-EXECUTED DRAWINGS FOLLOWING THE COMPLETION OF ALL WORKS.

G20. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE IN PLACE & MAINTAIN TRAFFIC FACILITIES AT ALL TIMES DURING CONSTRUCTION.

G21. CONTRACTOR TO PROVIDE WORKSHOP COORDINATED DRAWINGS PRIOR TO COMMENCING WORKS ON SITE. WORKSHOP DRAWINGS TO BE REVIEWED AND APPROVED BY DESIGN ENGINEER.

STORMWATER

S1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE AS3500.3-2003: 'STORMWATER DRAINAGE'.

S2. FOR STORMWATER DRAINAGE PIPES THAT EXCEED 1:5 GRADE, REINFORCED CONCRETE ANCHOR BLOCKS SHALL BE INSTALLED. ANCHOR BLOCKS TO BE CONSTRUCTED TO SPECIFICATIONS SET OUT IN AS3500.3-2018 SECTION 8.10.

S3. EXISTING SERVICES SHOWN IN APPROXIMATE LOCATIONS ONLY. CONFIRM EXACT LOCATIONS ON SITE PRIOR TO COMMENCING WORK.

S4. COORDINATE THE INSTALLATION OF NEW SERVICES WITH ALL NEW & EXISTING SERVICES & STRUCTURAL PROVISIONS AS DETERMINED ON SITE.

S5. ALL PIPEWORK TO BE SUPPORTED IN ACCORDANCE WITH AS3500.3-2018.

S6. ALL PIPEWORK IS TO BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS AS SET DOWN IN AS3500.3-2003. ALL IN-GROUND PIPEWORK TO BE INSPECTED BY THE SUPERINTENDENT UNDER TEST CONDITIONS PRIOR TO BACKFILLING. BACKFILLING AND BEDDING TO AS3500.3-2018.

S7. PIPES SHALL BE TRUE TO GRADES SHOWN AND ALIGNED SO THAT THE CENTRE OF THE INLET PIPE INTERSECTS WITH THE CENTRE OF THE OUTLET PIPE AT THE DOWNSTREAM FACE OF THE PIT.

S8. BED ALL PIPES FIRMLY AND EVENLY WITH IMPORTED FILL ONLY. THICKNESS OF BEDDING LAYER SHALL BE 75mm IN SOIL AND 200mm IN ROCK.

S9. LAY AND JOINT ALL PIPES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS3725-2007:'DESIGN FOR INSTALLATION OF BURIED CONCRETE PIPES.

S10. ALLOW TO TEST ALL PIPES AND PITS TO LOCAL AUTHORITY'S REQUIREMENTS.

S11. EXCAVATE TRENCHES AND STOCKPILE ALL MATERIAL FOR INSPECTION WITH REGARD TO REUSE FOR TRENCH BACKFILL. REMAINING MATERIAL TO BE REMOVED FROM SITE.

S12. BACKFILL PIPES WITH IMPORTED FILL. PROVIDE 200mm SIDE SUPPORT AND 150mm OVERLAY ABOVE PIPE CROWN. TRENCH FILL ABOVE THE EMBEDMENT ZONE TO THE UNDERSIDE OF THE ROAD PAVEMENT OR THE FOOTWAY SHALL BE AS FOLLOW:

UNDER ROADWAY
TRENCH FILL MATERIAL SHALL CONSIST OF IMPORTED FILL AS SPECIFIED HEREIN OF EITHER HIGH GRADE COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RMS QA SPECIFICATION 3051 OR SIMILAR.

OTHER THAN ROADWAY
TRENCH MATERIAL EXCAVATED SHALL CONSIST OF SELECT FILL AS SPECIFIED HEREIN AND SHALL NOT CONTAIN MORE THAN 20% OF STONES OF SIZE BETWEEN 25mm AND 75mm AND NONE LARGER THAN 75mm. PRIOR TO USE OF THE EXCAVATED MATERIAL IT SHALL BE INSPECTED AND APPROVED BY THE ENGINEER.

S13. COMPACT BEDDING. EMBEDMENT AND TRENCH FILL MATERIALS AS FOLLOW:
EMBEDMENT:
FOR GRANULAR FILL MATERIAL (NON-COHESIVE SOIL) e.g. COARSE AGGREGATE FILL, THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%.

TRENCH FILL:
FOR GRANULAR MATERIAL (NON COHESIVE SOILS). THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%. FOR NON-GRANULAR FILL MATERIAL (COHESIVE SOILS), THE DRY DENSITY RATIO (RD) SHALL BE NOT LESS THAN 95%.

S14. EXISTING SERVICES
UTILITY INFORMATION SHOWN ON THE PLANS IS NOT INTENDED TO DEPICT MORE THAN THE PRESENCE OF ANY SERVICES. ACTUAL LOCATIONS SHOULD BE VERIFIED BY HAND EXCAVATION PRIOR TO CONSTRUCTION.

S15. THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF ALL EXISTING SERVICES IN AREAS AFFECTED BY THE WORKS.

S16. THE CONTRACTOR SHALL ENSURE THAT SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED AT ALL TIMES. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING WHERE REQUIRED. ONCE THE WORKS ARE COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD ALL DISTURBED AREAS.

S17. DRAINAGE PIPES
EXISTING PIPES WHICH FORM NO PART OF THE DRAINAGE SYSTEM SHALL BE REMOVED OR SEALED AS INDICATED ON THE PLANS. PIPES UP TO 300mm DIAMETER SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS (U.N.O.). ALL PIPE JUNCTIONS AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS.

S18. WHERE DOWNPIPES PASS UNDER FLOOR SLABS, SEWER GRADE uPVC WITH RUBBER RING JOINTS ARE TO BE USED.

S19. MINIMUM GRADE TO DRAINAGE PIPES TO BE 1% (U.N.O.), MIN. SIZE 100mm DIAMETER (U.N.O.).

STORMWATER (CONTINUED)

S20. PIPES EQUAL TO AND LARGER THAN 375mm DIAMETER TO BE REINFORCED CONCRETE RUBBER RING JOINTED TYPE (CLASS 2) MANUFACTURED TO AS4058 (U.N.O.).

S21. PIPE INSTALLATION UNDER TRAFFICABLE AREAS SHALL BE IN ACCORDANCE WITH CONCRETE PIPE ASSOCIATION OF AUSTRALIA PUBLICATION "CONCRETE PIPE SELECTION & INSTALLATION" TYPE HS3 SUPPORT.

S22. EQUIVALENT STRENGTH FRC PIPES MAY BE USED SUBJECT TO AUTHORITY APPROVAL.

S23. MINIMUM PIPE COVER TO BE 600mm UNDER TRAFFICABLE AREAS AND 300mm ELSEWHERE (U.N.O.).

S24. CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.

S25. PROVIDE CLEANING EYES TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS.

S26. STORMWATER DRAINAGE CONNECTIONS TO COUNCIL'S SYSTEM SHALL BE TO THE REQUIREMENTS AND THE SATISFACTION OF LOCAL COUNCIL.

S27. DRAINAGE PITS
PITS DEEPER THAN 1200mm TO BE FITTED WITH STEP IRONS AT 300 CENTRES TO AS1657-2013:'FIXED PLATFORMS, WALKWAYS, STAIRWAYS AND LADDERS - DESIGN, CONSTRUCTION AND INSTALLATION'.

S28. ALL EXPOSED EDGES TO BE ROUNDED WITH 20mm RADIUS, OR CHAMFERED 20mm x 20mm.

S29. PIT REINFORCEMENT - MESH SL82 LAP TO BE 400mm MIN. CLEAR COVER 40 MIN. CAST AGAINST BLINDING OR FORMWORK. CORNER RETURNS MAY BE FABRIC OR EQUIVALENT BARS.

S30. BENCHING TO BE HALF OUTGOING PIPE DEPTH. CONCRETE FOR BENCHING TO BE 20MPa MASS CONCRETE.

S31. APPROVED PRECAST PITS MAY BE USED.

S32. 100mm DIAMETER HOLE FOR SUBSOIL DRAINAGE OUTLET TO BE LOCATED 100mm ABOVE INVERT OF ALL INLET PIPES. SUBSOIL DRAINAGE TO EXTEND FOR A DISTANCE OF 3m UPSTREAM OF PIT (AT EACH INLET TRENCH) WITH THE UPSTREAM END SEALED.

S33. ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.

S34. PIT GRATE, FRAMES AND SOLID COVERS SHALL BE CLASS B IN NON TRAFFIC AREAS AND CLASS D IN TRAFFICABLE AREAS IN ACCORDANCE WITH AS3996.

S35. ALL GRATES SHALL BE PROVIDED WITH A LOCKING CLIP.

S36. MAXIMUM FRONT ENTRY PIPE:-
STRAIGHT ENTRY - Ø750
SKEW ENTRY 45° - Ø525

S37. PIT GRATING TO BE GALVANISED STEEL TYPE 'WELDLOK' OR APPROVED EQUIVALENT.

S38. SUBSOIL DRAINAGE
SUBSOIL PIPES SHALL BE LAID AT A MIN GRADE OF 0.5% (U.N.O.).

S39. ADDITIONAL SUBSOIL DRAINAGE SHALL BE LAID TO SUIT SITE CONDITIONS AND GROUNDWATER PRESENCE AS DIRECTED.

S40. SUBSOIL PIPES SHALL BE LAID BEHIND KERBS IN CUT AREAS OF THE SITE.

S41. SUBSOIL DRAINAGE SHALL CONSIST OF A SLOTTED 100mm DIAMETER PLASTIC PIPE WRAPPED IN GEOTEXTILE AND PLACED A MINIMUM OF 600mm BELOW THE SUBGRADE LEVEL AND COVERED WITH 500mm OF 20mm GRAVEL. PROVIDE A MINIMUM OF 150mm GRAVEL AROUND SUBSOIL PIPE. TRENCH TO BE LINED WITH GEOTEXTILE FABRIC TYPE BIDIM A24.

S42. GRATES TO PITS IN FOOTPATH AREAS SHALL BE HEEL SAFE COMPLYING WITH THE DISABLED ACCESS CODE.

S43. CONTRACTOR TO PROVIDE WORKSHOP COORDINATED DRAWINGS PRIOR TO COMMENCING WORKS ON SITE. WORKSHOP DRAWINGS TO BE REVIEWED AND APPROVED BY DESIGN ENGINEER.

S44. ALL EXTERNAL AREA TO HAVE A MINIMUM 1% FALL TO OUTLETS PROVIDED.

S45. PROVIDE OVERFLOWS TO ALL AREAS TO ARCHITECT'S SPECIFICATIONS.

S46. ALL RAINWATER OUTLETS TO OPEN AREAS SHALL BE SPS TRUFLO TYPE TIA100F UNLESS NOTED OTHERWISE. DO NOT INSTALL BALCONY OUTLETS OR SIMILAR IN AREAS SUBJECT TO DIRECT RAINFALL.

S47. ALL PVC PIPES TO HAVE EXPANSION JOINTS IN ACCORDANCE WITH AS/NZS2032.

S48. CONNECT ALL TUNDISHES FROM MECHANICAL A/C UNITS INTO STORMWATER ONLY IF ACCEPTABLE BY THE LOCAL COUNCIL BUILDER TO VERIFY AND OBTAIN CONSENT.

S49. ALL GRATED TRENCH DRAINS IN FRONT OF FIRE EXIT DOORS TO BE SET 100mm AWAY FROM DOOR (TYPICAL).

EROSION CONTROL

EC1. BEFORE EARTHWORKS CAN COMMENCE THE EROSION & SEDIMENT CONTROL MEASURES MUST BE IN PLACE.

EC2. DURING THE CONSTRUCTION PERIOD, THESE CONTROL MEASURES WILL NEED TO BE INSPECTED & MAINTAINED REGULARLY, ESPECIALLY AFTER STORM EVENTS, BY THE CONTRACTOR.

EC3. ALL WORK IS TO BE CARRIED OUT TO PREVENT EROSION, CONTAMINATION & SEDIMENTATION OF THE STORAGE SITE, SURROUNDING AREAS & DRAINAGE SYSTEMS.

EC4. MINIMIZE DISTURBED AREA COVERED WITH NATURAL VEGETATION. ONLY THOSE AREAS DIRECTLY REQUIRED FOR CONSTRUCTION ARE TO BE DISTURBED.

EC5. INSTALL EROSION/SEDIMENT CONTROL MEASURES PRIOR TO COMMENCEMENT OF CONSTRUCTION OR EXCAVATION OPERATIONS.

EC6. PROVIDE SILT FENCE/STRAW BAIL BARRIERS TO THE LOW SIDE OF ALL EXPOSED EARTH EXCAVATIONS. TIE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.

EC7. ISOLATE EXISTING STORMWATER PITS WITH STRAW BALES OR SILT TRAPS TO FILTER ALL INCOMING FLOWS.

EC8. DO NOT STOCKPILE EXCAVATED MATERIAL ON THE ROAD WAY.

EC9. DIVERT CLEAN WATER FROM UNDISTURBED AREAS AROUND THE WORKING AREAS.

EC10. CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING AND LEAVING THE SITE DO SO IN A FORWARD DIRECTION.

EC11. TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL

EC12. ADOPT TEMPORARY MEASURES AS MAY BE NECCESSARY FOR EROSION & SEDIMENT CONTROL, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

DRAINS:	TEMPORARY DRAINS AND CATCH DRAINS. SPREADER BANKS OR OTHER
STRUCTURES:	TO DISPERSE CONCENTRATED RUNOFF.
SILT TRAPS:	CONSTRUCTION AND MAINTENANCE OF SILT TRAPS TO PREVENT DISCHARGE OF SCOURED MATERIAL TO DOWNSTREAM AREAS.

EC13. AFTER RAIN, INSPECT, CLEAN, AND REPAIR IF REQUIRED, TEMPORARY EROSION & SEDIMENT CONTROL MEASURES.

EC14. REMOVE TEMPORARY EROSION &SEDIMENT CONTROL MEASURES WHEN THEY ARE NO LONGER REQUIRED.

EC15. COMPLY WITH THE REQUIREMENTS OF LANDCOM'S MANAGING URBAN STORMWATER SOIL AND CONSTRUCTION "THE BLUE BOOK' LATEST EDITION.

EC16. THE EROSION & SEDIMENT CONTROL PLAN PROVIDED IS ONLY INDICATIVE. THE CONTRACTOR SHOULD PREPARE A DETAILED ESCP SUITABLE FOR THE SPECIFIC SITE CONDITIONS.

Issue	Last revision title	By	Date	Status
A	ISSUED FOR APPROVAL	ES	14.03.25	02
P01	PRELIMINARY ISSUE	ES	04.03.25	01

Issuer internal sequence and revision history
1-preliminary 2-development application 3-construction certificate 4-tender 5-construction 6-other

Reference Coordination Drawing

Discipline	Drawing Title and Number	Date	Rev.
ARCH			
STRUCT			
MECH			
ELEC			
HYD			
FIRE			
LANDS			
CIVIL			
SURVEY			

Quality Control

DRAWN	DATE 14.03.25
CHECKED	DATE 14.03.25
DESIGNED	DATE 14.03.25
VERIFIED	DATE 14.03.25
APPROVED	DATE 14.03.25

ENGINEERS AUSTRALIA
Chartered Professional Engineer
MEMBER

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Scales

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PROJECT
130 KILLEATON STREET,
ST. IVES.
STORMWATER CONCEPT DESIGN

Grid	Datum	Sheet
-	A.H.D.	02

Status: ISSUED FOR DA
NOT FOR CONSTRUCTION

Drawing Title: NOTES & LEGEND

Project No.	Set No. - Drg No.	Revision No.
20240240	S01-SW101	A

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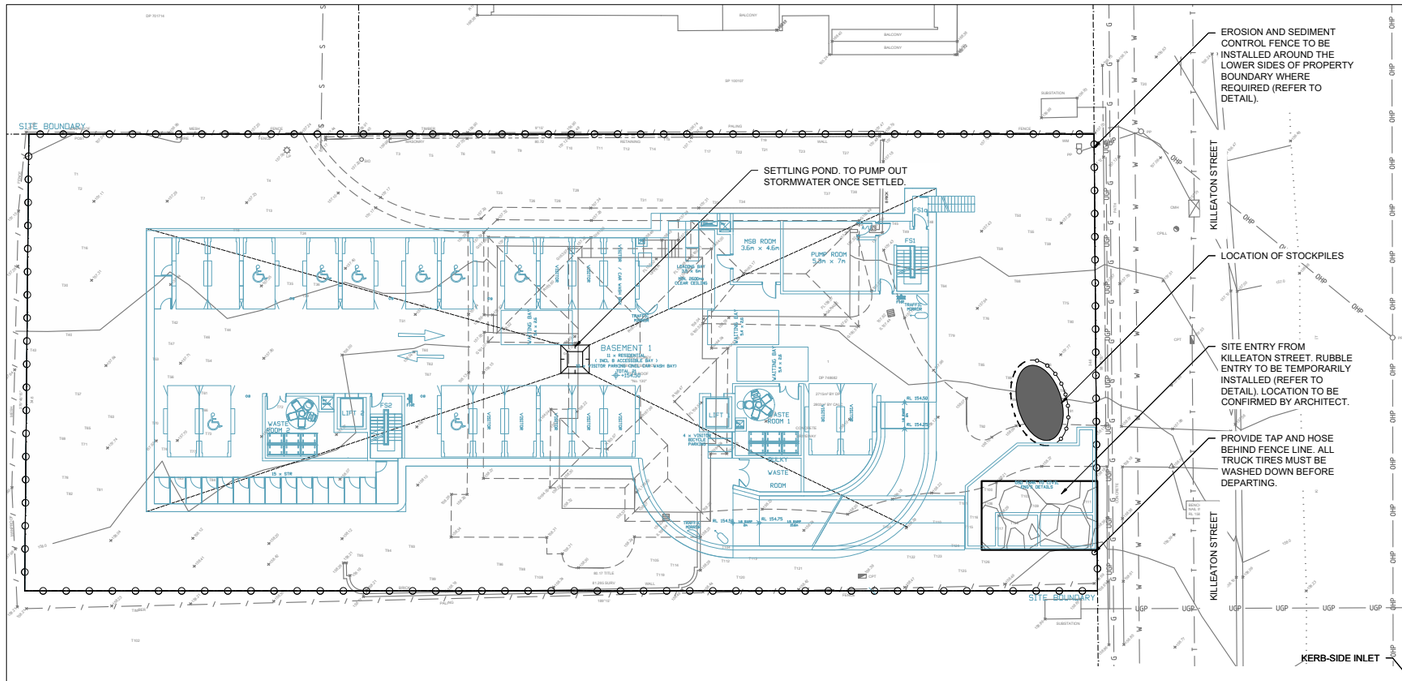
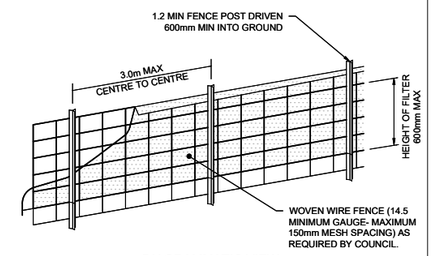
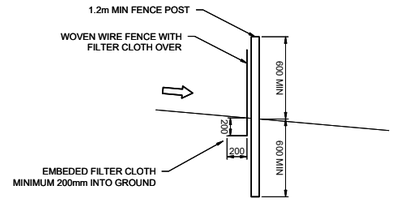




DIAGRAMMATIC VIEW



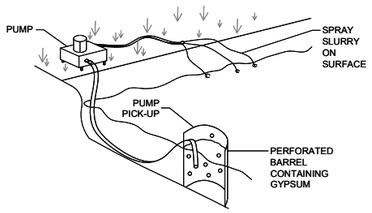
TYPICAL SECTION

SEDIMENT FENCE

NOT TO SCALE

NOTE:

1. FLOCCULATION TO BE USED IF WATER IS NOT CLEAR (ie. SEDIMENT GREATER THAN 50 mg/L) PRIOR TO DISCHARGING FROM TEMPORARY PUMP OUT
2. FOR RATES & AGENTS SEE APPENDIX E OF NEW SOUTH WALES DEPARTMENT OF HOUSING "MANAGING URBAN STORMWATER SOILS & CONSTRUCTION".



FLOCCULATION DETAIL

NOT TO SCALE

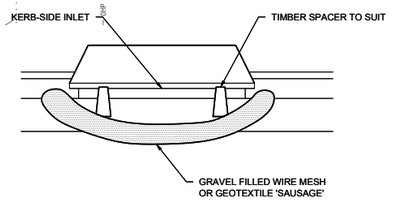
GENERAL NOTES

1. THIS PLAN IS A CONCEPT PLAN ONLY FOR STORMWATER DISPOSAL & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDER DURING DEMOLITION, EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.
2. ALL DRAINAGE LAYOUT & DETAILS ARE DIAGRAMMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADES MAY ALTER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.

CLAY SOILS

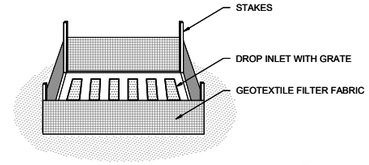
A SYSTEM SHALL BE INSTALLED TO EITHER:

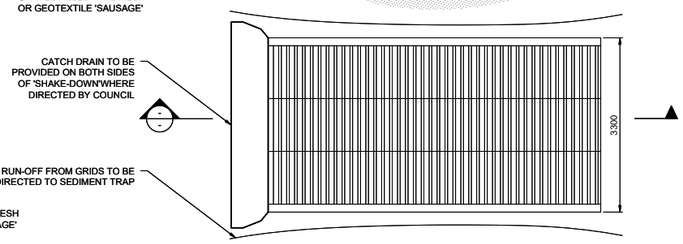
1. TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA PUMP TRUCKS.
2. TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL.



GEOTEXTILE INLET FILTER

GEOTEXTILE INLET FILTER IS PLACED IN EVERY PIT WITHIN THE SITE TO ENSURE THE RUNOFF WATER DURING CONSTUCTION NOT ENTER THE PITS.





PLAN VIEW

CONSTRUCTION NOTES

FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAT THE LENGTH OF THE INLET PIT

FILL THE SLEEVE WITH 25mm TO 50mm GRAVEL

FORM AN ELLIPTICAL CROSS-SECTION OF THE KERB INLET LEAVING A 100mm GAP AT THE TOP TO ACT AS AN EMERGENCY SPILLWAY

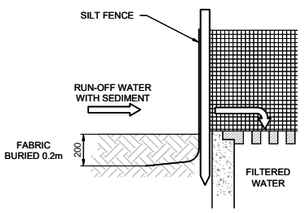
MAINTAIN THE OPENING WITH SPACER BLOCKS

FORM A SEAL WITH THE KERBING AND PREVENT SEDIMENT BYPASSING THE FILTER

FIT TO ALL KERB INLETS AT SAG POINTS

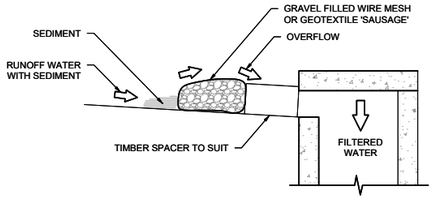
EROSION & SEDIMENTATION CONTROL NOTES

1. CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. TIE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
2. EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
3. NO PARKING OR STOCKPILING OF MATERIALS IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
4. GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
5. CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.



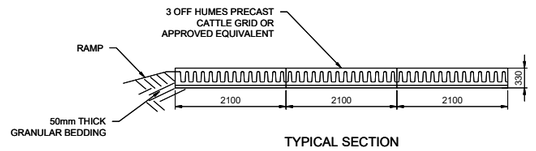
GEOTEXTILE INLET FILTER

NOT TO SCALE



GRAVEL INLET FILTER (SAUSAGE)

NOT TO SCALE



TYPICAL SECTION

'CATTLE GRID' ALTERNATIVE

TEMPORARY CONSTRUCTION EXIT - NOT TO SCALE

A	ISSUED FOR APPROVAL	ES	14.03.25	02	
P01	PRELIMINARY ISSUE	ES	04.03.25	01	
Issue	Last revision title	By	Date	Status	

Issuer internal sequence and revision history

1-preliminary 2-development application 3-construction certificate 4-tender 5-construction 6-other

Reference Coordination Drawing

Discipline	Drawing Title and Number	Date	Rev.
ARCH			
STRUCT			
MECH			
ELEC			
HYD			
FIRE			
LANDS			
CIVIL			
SURVEY			

Quality Control

DRAWN	DATE 14.03.25
CHECKED	DATE 14.03.25
DESIGNED	DATE 14.03.25
VERIFIED	DATE 14.03.25
APPROVED	DATE 14.03.25

ENGINEERS AUSTRALIA Chartered Professional Engineer MEMBER

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Scales

0m 2 4 6 8 10

SCALE 1:200 ON ORIGINAL SIZE

Client

AHG HOMEBUSH PTY LTD

SAINT PROJECT MANAGEMENT PTY LTD

Architect

PAUL BULJEVIC

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Web: www.sgce.com.au
A.B.N. 21 118 222 530

PROJECT
130 KILLEATON STREET,
ST. IVES.
STORMWATER CONCEPT DESIGN

Grid	Datum	Sheet
-	A.H.D.	03

Status: ISSUED FOR DA NOT FOR CONSTRUCTION

Drawing Title: EROSION & SEDIMENT CONTROL PLAN & DETAILS

Project No.	Set No. - Drg No.	Revision No.
20240240	S01-SW201	A

All Printed Prints - 14 March 2025 10:23:19 AM By CHRISB [BLANKBSC] File Name: Z:\Productive\20240240\240130 Killeaton St\arc_SW_DA\20240240_S01-SW201.dwg

PUMP OUT PIT:-
RL:148.20
TWL:147.90
IL:145.90
HEIGHT:2.0m
AREA:5.25m^2
VOLUME PROVIDED:10.50m^3
SUBSOIL PUMPOUT PIT TO CONTAIN 2x SUBMERSIBLE FLAMESAFE PUMPS WITH DUTY OF 10 L/s FOR 15m HEAD.
USE MAN 550/2/80 A1FT/50 OR APPROVED EQUIVALENT.

SUBSOIL DESIGN CALCS:

100yr 2hr ARI STORM = 50.90mm/hr
ARIx2 = 101.80mm
UNCOVERED DRIVEWAY RAMP AREA = 100m^2

V = Axd
= 100x(101.80/1000)
= 100x0.1018
= 10.18m^3

PUMP-OUT PIT NOTE:

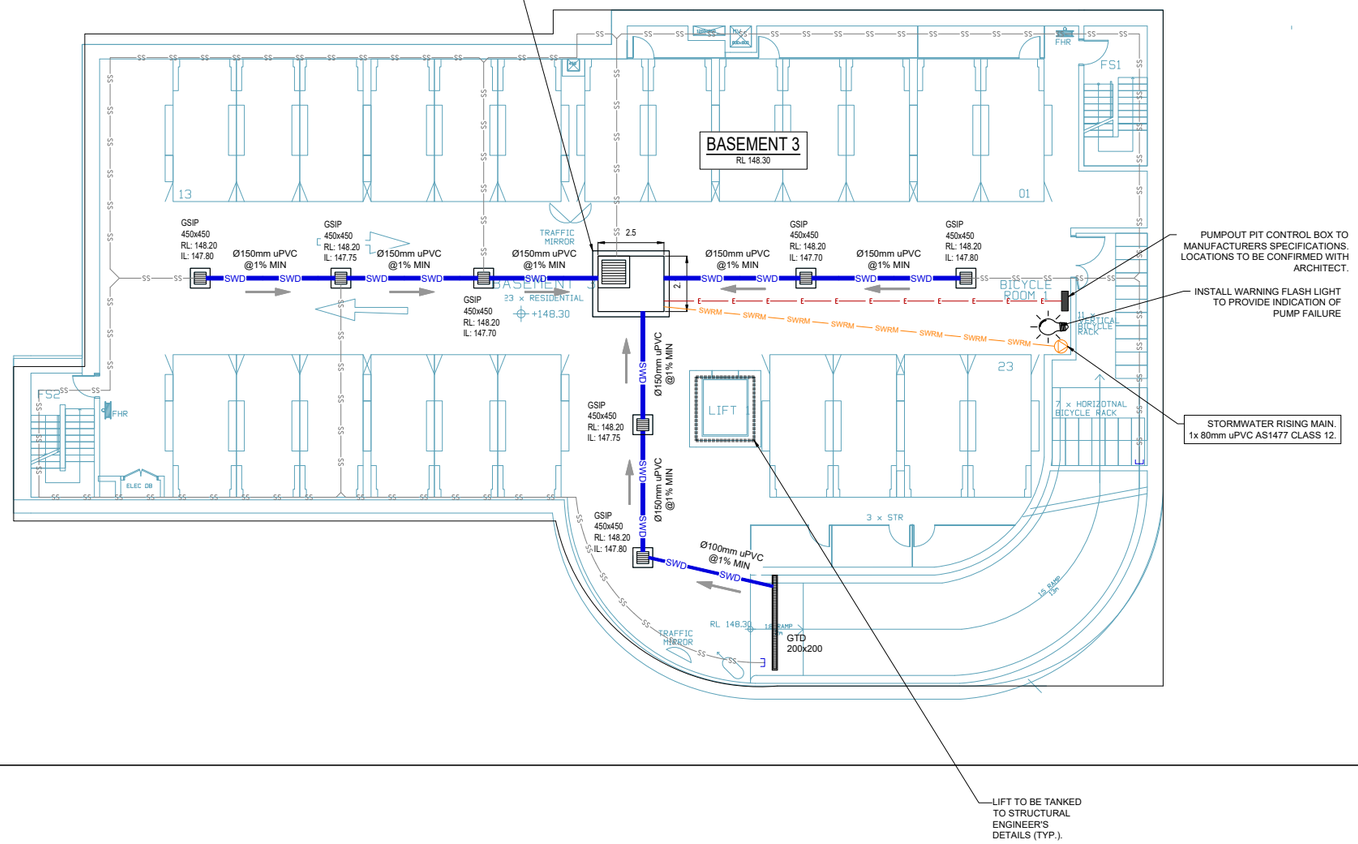
EACH PUMP NEED TO BE INSTALLED FOLLOWING ITEMS:
900SQ HEAVY DUTY CLASS "C" STEEL GRATED LID FOR ACCESS AND MAINTENANCE PURPOSES.
-CONFINED SPACE SIGN ABOVE PUMP OUT PIT FOR PUBLIC AWARENESS AND WARNING.
-FLOAT SWITCH AND CONTROL PANEL TO MANUFACTURER'S SPECIFICATIONS.

NOTES:

FINAL SUBSOIL DESIGN TO BE CARRIED OUT ONCE GEOTECHNICAL REPORT AND WATER TABLE LEVEL IS CONFIRMED.

SUBSOIL DRAINAGE NOTES:

ALL SUBSOIL LINES ARE Ø100 AG LINES U.N.O.



A	ISSUED FOR APPROVAL	ES	14.03.25	02	
P01	PRELIMINARY ISSUE	ES	04.03.25	01	
Issue	Last revision title	By	Date	Status	

Issuer internal sequence and revision history
1-preliminary 2-development application 3-construction certificate
4-tender 5-construction 6-other

Reference Coordination Drawing			
Discipline	Drawing Title and Number	Date	Rev.
ARCH			
STRUCT			
MECH			
ELEC			
HYD			
FIRE			
LANDS			
CIVIL			
SURVEY			

Quality Control	
DRAWN	DATE 14.03.25
CHECKED	DATE 14.03.25
DESIGNED	DATE 14.03.25
VERIFIED	DATE 14.03.25
APPROVED	DATE 14.03.25

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Scales
0m 1 2 3 4 5
SCALE 1:100 ON ORIGINAL SIZE

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Architect
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PROJECT
130 KILLEATON STREET,
ST. IVES.
STORMWATER CONCEPT DESIGN

Grid	Datum	Sheet
-	A.H.D.	04

Status
ISSUED FOR DA
NOT FOR CONSTRUCTION

Drawing Title
STORMWATER CONCEPT DESIGN
BASEMENT 03

Project No.	Set No. - Drg No.	Revision No.
20240240	S01-SW301	A

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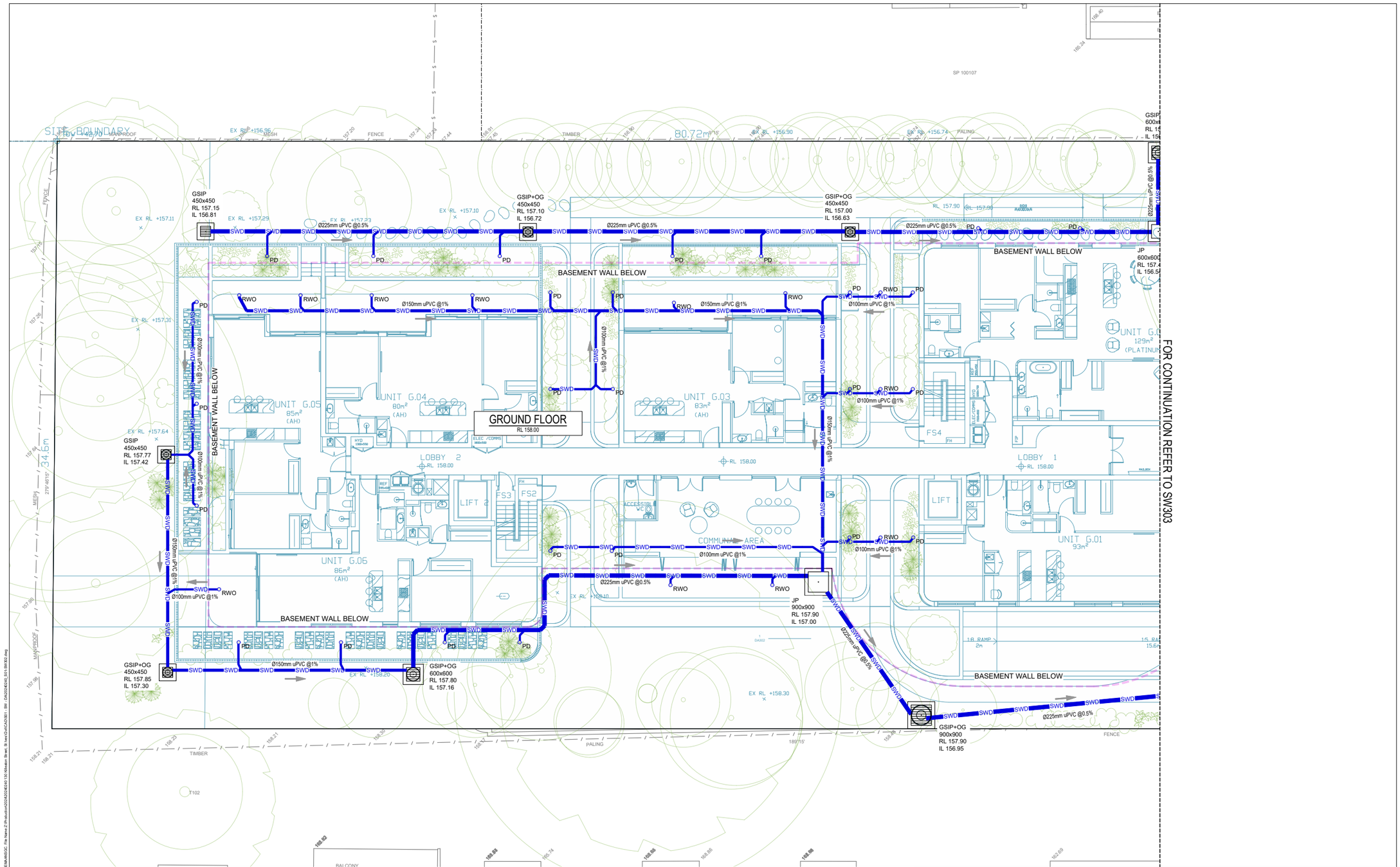

A	ISSUED FOR APPROVAL	ES	14.03.25	02	
P01	PRELIMINARY ISSUE	ES	04.03.25	01	
Issue	Last revision title	By	Date	Status	

Issuer internal sequence and revision history

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Discipline	Drawing Title and Number	Date	Rev.
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STRUCT			
MECH			
ELEC			
HYD			
FIRE			
LANDS			
CIVIL			
SURVEY			

Quality Control		
DRAWN	DATE	14.03.25
CHECKED	DATE	14.03.25
DESIGNED	DATE	14.03.25
VERIFIED	DATE	14.03.25
APPROVED	DATE	14.03.25

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0m 1 2 3 4 5

SCALE 1:100 ON ORIGINAL SIZE

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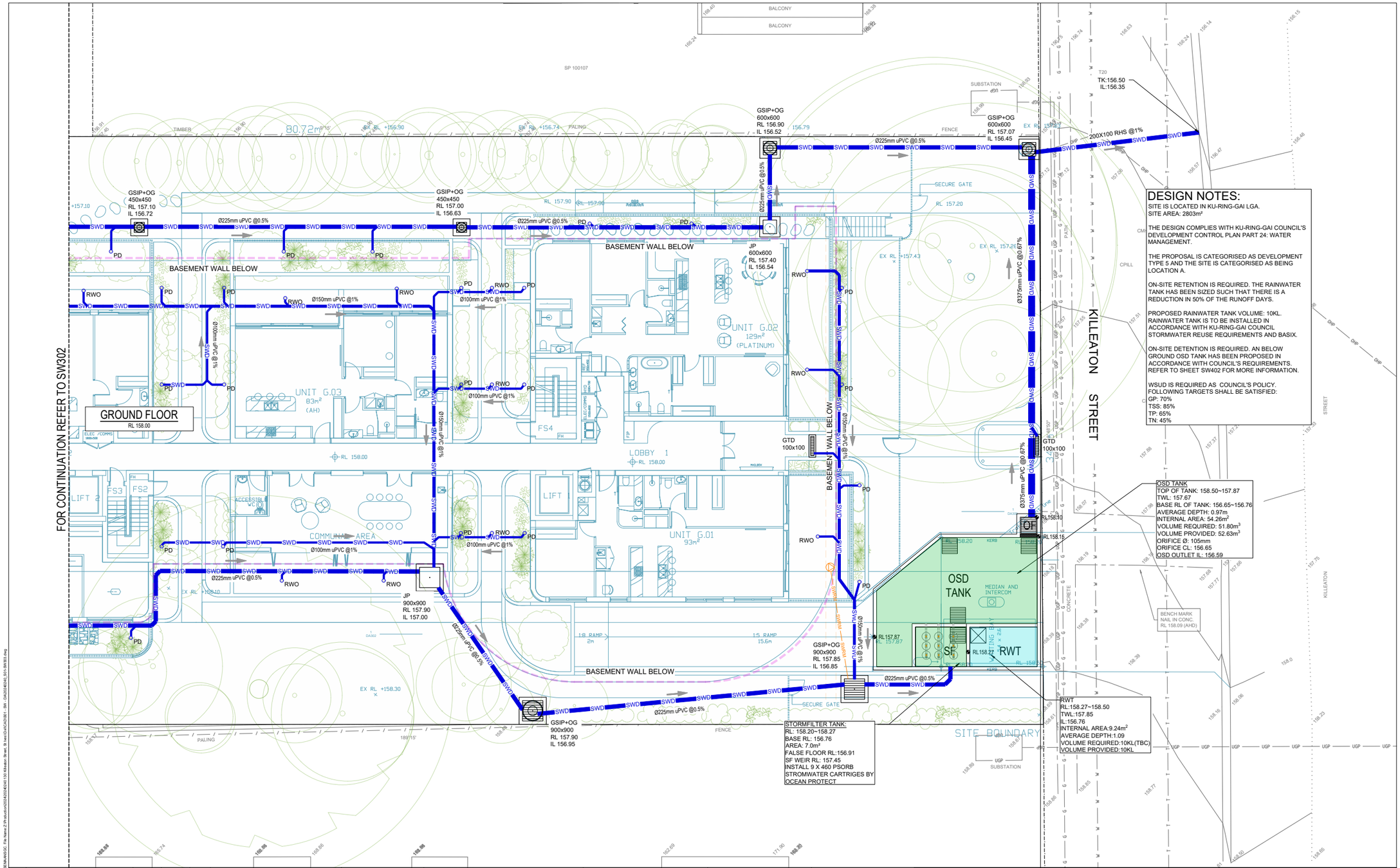
PROJECT
130 KILLEATON STREET,
ST. IVES.
STORMWATER CONCEPT DESIGN

Grid	Datum	Sheet
-	A.H.D.	05

Status: ISSUED FOR DA
NOT FOR CONSTRUCTION

Drawing Title
STORMWATER CONCEPT DESIGN
GROUND FLOOR PLAN
SHEET 01 OF 02

Project No.	Set No. - Drg No.	Revision No.
20240240	S01-SW302	A



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Quality Control

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PROJECT
130 KILLEATON STREET,
ST. IVES.
STORMWATER CONCEPT DESIGN

Grid	Datum	Sheet
-	A.H.D.	06

Status: ISSUED FOR DA
NOT FOR CONSTRUCTION

Drawing Title
STORMWATER CONCEPT DESIGN
GROUND FLOOR PLAN
SHEET 02 OF 02

Project No.	Set No. - Drg No.	Revision No.
20240240	S01-SW303	A

ON-SITE DETENTION CALCULATIONS
KU-RING-GAI COUNCIL

Project: Proposed New Residence
Our Job No 2024.024
Location: 130 Killeaton Street St Ives

CATCHMENT CODE	KC1		
CATCHMENT DISCHARGE RATE	139.0	l/s/ha	[A]
CATCHMENT STORAGE RATE	308.0	m^3 / ha	[B]

SITE DETAILS

SITE AREA	2803	m^2	
60% OF SITE AREA	1681.8	m^2	[C]
AREAS NOT DRAINING TO OSD	420	m^2	
TOTAL IMPERVIOUS AREA	1545	m^2	[D]
IMPERVIOUS AREA BYPASSING OSD	0	m^2	[E]

PERMITTED SITE DISCHARGE

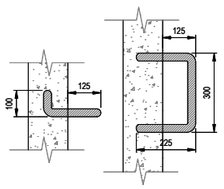
C x A	23.38	l/s	[FLOW 1]
ADJUSTMENT FOR ANY UNCONTROLLED IMPERVIOUS FLOW			
E / D (<0.25)	0.00		[F]
FLOW 1 x F	0.00	l/s	[FLOW 2]
FLOW 1 - FLOW 2	23.38	l/s	PSD

SITE STORAGE REQUIREMENT

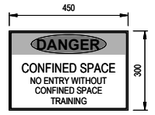
C x B	51.80	m^3	[SSR 1]
IF THE STORAGE IS IN A LANDSCAPED BASIN			
SSR 1 x 1.2	N/A	m^3	[SSR 2]

ORIFICE CALCULATIONS

HEIGHT DIFFERENCE BETWEEN TOP WATER SURFACE LEVEL AND THE CENTRE OF ORIFICE		1.02	m	[G]
ORIFICE DIAMETER	21.85 x SQRT(PSD/(SQRT(	= 105.1	mm	



STEP IRONS
N.T.S.



CONFINED SPACE SIGN
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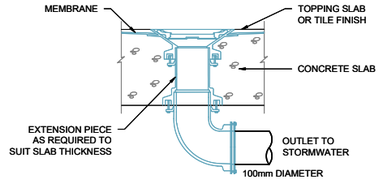
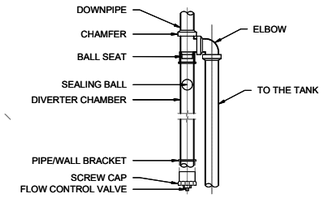


RAINWATER OUTLET
N.T.S.

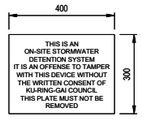


RAINWATER SIGN
N.T.S.

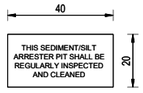
LEGEND:
BACKGROUND IS YELLOW
TEXT IS WHITE ON BLACK BACKGROUND



FIRST FLUSH DIVERTER
N.T.S.



OSD SIGN
N.T.S.



SILT ARRESTER SIGN
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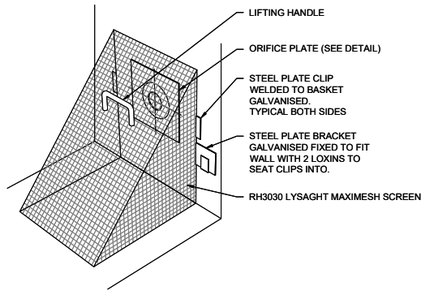

DEBRIS SCREEN
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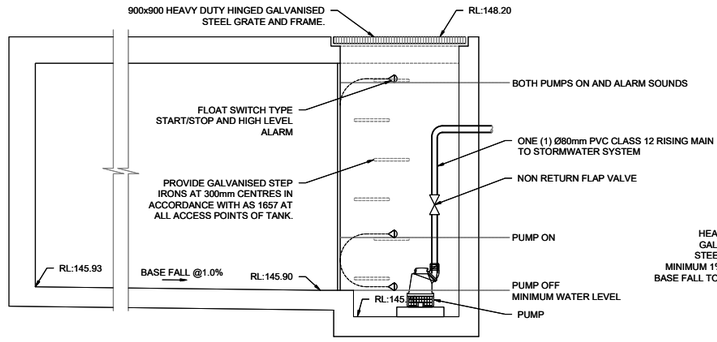
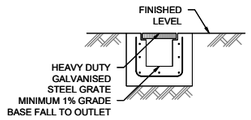


SUBSOIL PUMP OUT PIT
N.T.S.



GRATED TRENCH DRAIN
N.T.S.

Assumptions				Water Usage - Landscape Watering			Water Usage - AAA Toilets		
* Wet day = greater than 0mm of daily rain	Rainfall loss	1	mm	Area to be watered	1135	m2	No. of Toilets	0	
* Total water usage is calculated in m3/day and subtracted on each day	Roof area	801	m2	Watering rate	0.4	m3/yr/m2 *[a]*	AAA Toilet flush rate	5	L/flush *[c]*
* Target is 50% reduction in runoff days	Rainwater tank size	10	m3	Total water used	1.243	m3/day	Flushes	2	flush/pers/day *[c]*
* Assume that if rainwater tank does not overflow on a wet day,	%Full at start	80	%	Water Usage - Car Wash Bay			Total water used	0	m3/day
this is no longer a 'runoff day'. OF = Overflow Day	Total# days	9611	days	Number units	0		Water Usage - 4A Washing Machines		
* %Reduction in wet days = (wet days - OF days) / wet days	Total# wet days	1935	days	% of units using car wash	25	%	No. of units w. machines	0	
	Total# OF days	779	days	Average washes	4	washes/yr/unit	Water use	45	L/wash
References	%reduction in wet days	59.7	%	Usage Rate	100	L/wash *[b]*	Washes per week	2	
[a] Blacktown Council WSUD guidelines				Total water used	0.000	m3/day	Total water used	0.00	m3/day
[b] AW / Sydney Water	%of time tank is empty	58	%						
[c] Melbourne Household Water Use calculator	%of time tank is full	8	%	**Total Water usage**	1.243	m3/day			

Issue				
A	ISSUED FOR APPROVAL	ES	14.03.25	02
P01	PRELIMINARY ISSUE	ES	04.03.25	01
Issue	Last revision title	By	Date	Status

Issuer internal sequence and revision history
1-preliminary 2-development application 3-construction certificate
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Reference Coordination Drawing			
Discipline	Drawing Title and Number	Date	Rev.
ARCH			
STRUCT			
MECH			
ELEC			
HYD			
FIRE			
LANDS			
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SURVEY			

Quality Control

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Scales

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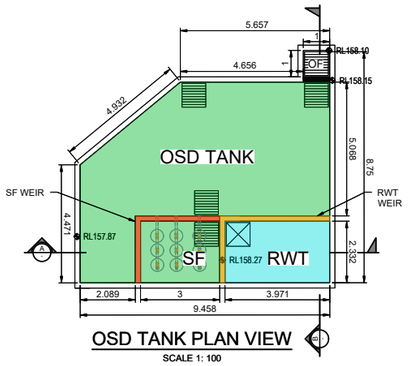
Grid	Datum	Sheet
-	A.H.D.	07

Status: ISSUED FOR DA
NOT FOR CONSTRUCTION

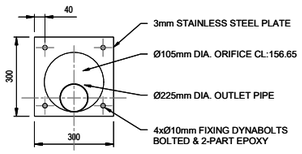
Drawing Title
STORMWATER CONCEPT DESIGN DETAILS SHEET
SHEET 01 OF 02

Project No.	Set No. - Drg No.	Revision No.
20240240	S01-SW401	A

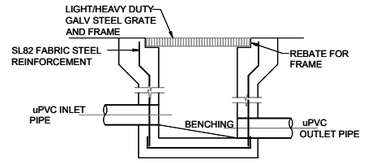
A1 Printed Friday, 14 March 2025 10:55:20 AM By CHRISSEAN ANGC File Name:Z:\Projects\2024\20240240 130 Killeaton Street, St Ives\CAD\S01 - SW - DA\20240240_S01-SW401.dwg



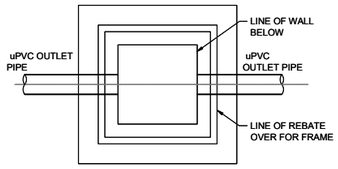
OSD TANK PLAN VIEW
SCALE 1: 100



ORIFICE PLATE
SCALE 1: 10

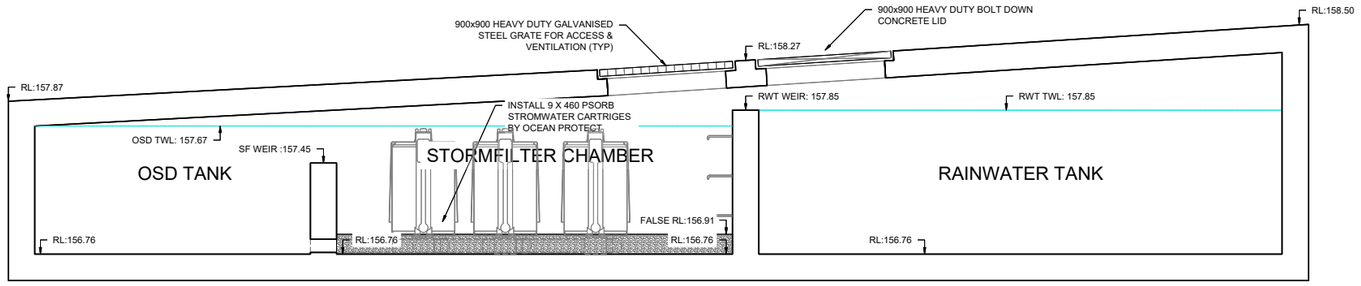


SECTION

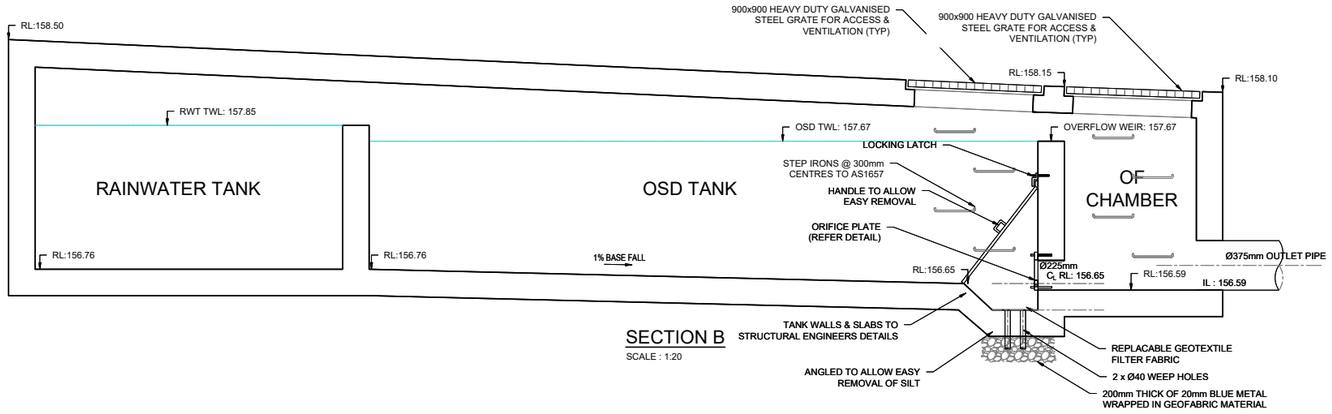


PLAN WITHOUT GRATE

STORMWATER PIT
N.T.S.



SECTION A
SCALE : 1:20



SECTION B
SCALE : 1:20

A	ISSUED FOR APPROVAL	ES	14.03.25	02
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Scales
0m 0.1 0.2 0.3 0.4 0.5
SCALE 1:10 ON ORIGINAL SIZE
0m 0.2 0.4 0.6 0.8 1.0
SCALE 1:20 ON ORIGINAL SIZE
0m 1 2 3 4 5
SCALE 1:100 ON ORIGINAL SIZE

Client
AHG HOMEBUSH PTY LTD
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PROJECT
130 KILLEATON STREET,
ST. IVES.
STORMWATER CONCEPT DESIGN

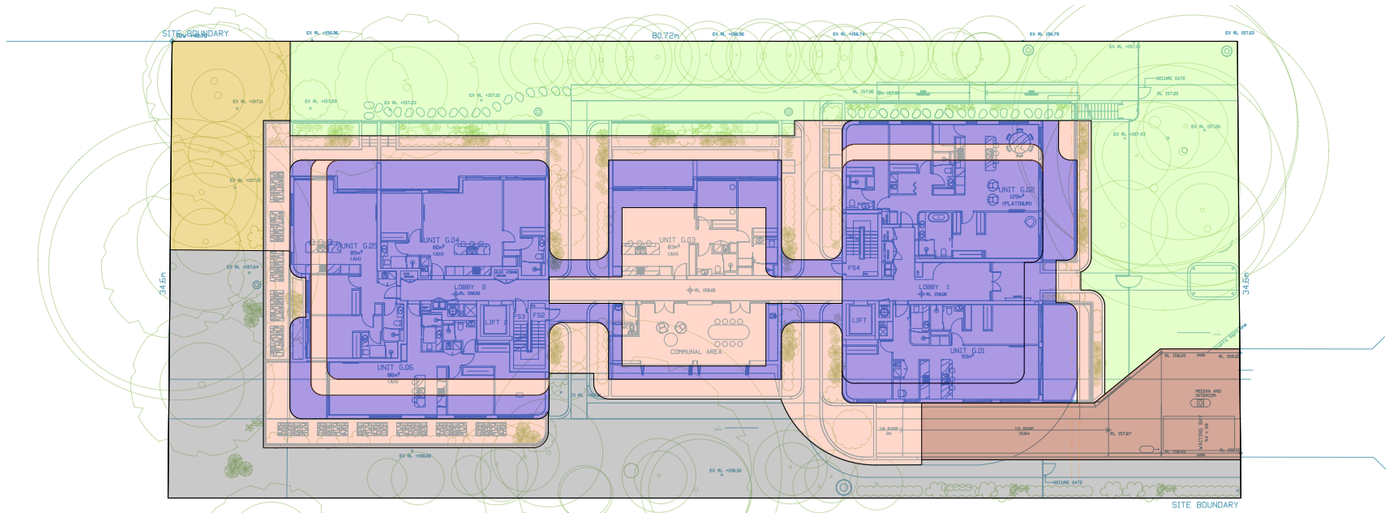
Grid	Datum	Sheet
-	A.H.D.	08

Status
ISSUED FOR DA
NOT FOR CONSTRUCTION

Drawing Title
STORMWATER CONCEPT DESIGN DETAILS SHEET
SHEET 02 OF 02

Project No.	Set No. - Drg No.	Revision No.
20240240	S01-SW402	A

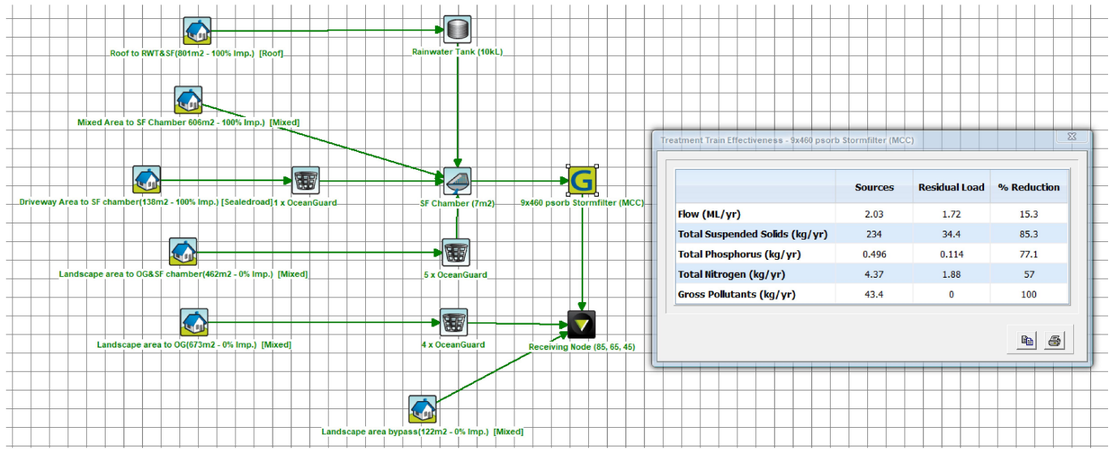
A1 Printed Friday, 14 March 2025 10:56:04 AM By CHRISTIE MA ANSOC File Name: Z:\Productive\2024\20240240\100 Kitelton Street, St Ives\CAD\20240240-S01-SW402.dwg



MUSIC CATCHMENT PLAN
NOT TO SCALE

LEGEND

- ROOF AREA TO RWT&SF (801m2 100%IMP)
- MIXED AREA TO SF(606m2 100%IMP)
- LANDSCAPE AREA TO OG(673m2 0%IMP)
- DRIVEWAY TO OG&SF(139m2 100%IMP)
- LANDSCAPE AREA TO OG&SF(462m2 0%IMP)
- LANDSCAPE AREA BYPASS(122m2 100%IMP)



Treatment Train Effectiveness - 9x460 psorb Stormfilter (MCC)

	Sources	Residual Load	% Reduction
Flow (ML/yr)	2.03	1.72	15.3
Total Suspended Solids (kg/yr)	234	34.4	85.3
Total Phosphorus (kg/yr)	0.496	0.114	77.1
Total Nitrogen (kg/yr)	4.37	1.88	57
Gross Pollutants (kg/yr)	43.4	0	100

Issue	Last revision title	By	Date	Status
A	ISSUED FOR APPROVAL	ES	14.03.25	02
P01	PRELIMINARY ISSUE	ES	04.03.25	01

Issuer internal sequence and revision history
1-preliminary 2-development application 3-construction certificate
4-tender 5-construction 6-other

Reference Coordination Drawing

Discipline	Drawing Title and Number	Date	Rev.
ARCH			
STRUCT			
MECH			
ELEC			
HYD			
FIRE			
LANDS			
CIVIL			
SURVEY			

Quality Control

DRAWN	DATE 14.03.25
CHECKED	DATE 14.03.25
DESIGNED	DATE 14.03.25
VERIFIED	DATE 14.03.25
APPROVED	DATE 14.03.25

ENGINEERS AUSTRALIA
Chartered Professional Engineer
MEMBER

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Scales

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STORMWATER CONCEPT DESIGN

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-	A.H.D.	09

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Drawing Title
STORMWATER GRADING DESIGN
MUSIC CATCHMENT PLAN
& DETAILS

Project No.	Set No. - Drg No.	Revision No.
20240240	S01-SW501	A

A1 Plotted Friday, 14 March 2025 12:04:41 AM By CHRISTIE MA AKASIC File Name: Z:\Productivity\2024\240240-130 Killeaton Street, St Ives\CIVIL\CAD\01 - SW - DA\240240_S01-SW501.dwg

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Attachment 1

Clause 4.6 variation request – Height of buildings
Residential flat building development
130 Killeaton Street, St Ives

1.0 Introduction

This clause 4.6 variation has been prepared having regard to the Land and Environment Court judgements in the matters of *Wehbe v Pittwater Council* [2007] NSWLEC 827 (*Wehbe)* at [42] – [48], *Four2Five Pty Ltd v Ashfield Council* [2015] NSWCA 248, *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118, *Baron Corporation Pty Limited v Council of the City of Sydney [2019]* NSWLEC 61, and *RebelMH Neutral Bay Pty Limited v North Sydney Council* [2019] NSWCA 130.

2.0 State Environmental Plan Policy (Housing) 2021 (SEPP Housing)

2.1 Chapter 2, Part 2, Division 1, clause 16(3) - Affordable housing requirements for additional floor space ratio

Pursuant to clause 16(3) of SEPP Housing, if the development includes residential flat buildings or shop top housing, the maximum building height for a building used for residential flat buildings or shop top housing is the maximum permissible building height for the land plus an additional building height that is the same percentage as the additional floor space ratio permitted under subsection (1).

I confirm that the application proposes the provision of 8 affordable housing apartments, representing a total GFA of 744m² or 16.3% of total GFA, in accordance with the affordable housing FSR incentive provisions contained within Chapter 2, Part 2, Division 1 Infill affordable housing of SEPP Housing. As 15% of total GFA is proposed as affordable housing an additional floor space ratio of 30% applies to the maximum prescribed floor space ratio. Accordingly, the applicable building height standard is the maximum permissible building height for the land plus an additional 30%.

The stated objective of the Division is to facilitate the delivery of new in-fill affordable housing to meet the needs of very low, low and moderate income households. It is also considered appropriate to assess the proposed building height against the objectives of the height of building standard at clause 4.3 of Ku-ring-gai Local Environmental Plan 2015 (KLEP 2015) namely:

(a) to ensure that the height of buildings is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai centres,
(b) to establish a transition in scale between the centres and the adjoining lower density residential and open space zones to protect local amenity,
(c) to enable development with a built form that is compatible with the size of the land to be developed.

Building height is defined as follows:

> ***building height*** *(or* ***height of building****) means the vertical distance between ground level (existing) and the highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.*

Ground level (existing) is defined as follows:

> **ground level (existing)** means the existing level of a site at any point.

In this regard, I note that clause 4.3 KLEP prescribes a maximum building height for development on the land of 17.5m. Applying the 30% building height incentive results in a maximum building height for development on the land of 22.75m.

It has been determined that portions of the western roof edge breach the building height standard by between 75mm (0.03%) and 246mm or 1.08%, the northern lift overrun breaches the standard by a maximum of 803mm (3.5%) and the southern lift overrun by a maximum of 1.037m (4.5%) and the rooftop mechanical plant and associated screening by between 803mm (3.5%) and 1.3m (5.7%) as depicted on the building height blanket compliance diagram extract over page.

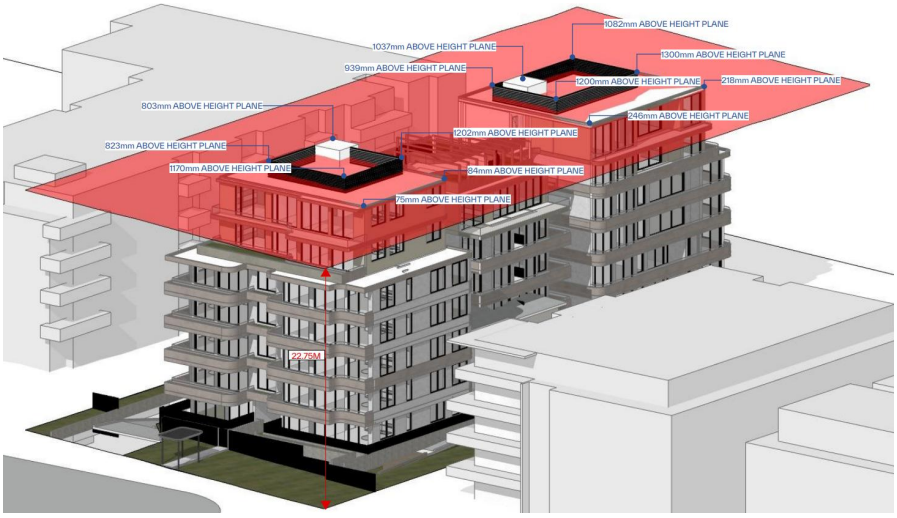

Figure 1 - Plan extract showing minor breaches of the building height standard

2.2 Clause 4.6 – Exceptions to Development Standards

Clause 4.6(1) of KLEP provides:

(1) The objectives of this clause are:

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development, and

(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

The decision of Chief Justice Preston in Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118 ("Initial Action") provides guidance in respect of the operation of clause 4.6 subject to the clarification by the NSW Court of Appeal *in RebelMH Neutral Bay Pty Limited v North Sydney Council* [2019] NSWCA 130 at [1], [4] & [51] where the Court confirmed that properly construed, a consent authority has to be satisfied that an applicant's written request has in fact demonstrated the matters required to be demonstrated by cl 4.6(3).

Initial Action involved an appeal pursuant to s56A of the Land & Environment Court Act 1979 against the decision of a Commissioner. At [90] of *Initial Action* the Court held that:

> *"In any event, cl 4.6 does not give substantive effect to the objectives of the clause in cl 4.6(1)(a) or (b). There is no provision that requires compliance with the objectives of the clause. In particular, neither cl 4.6(3) nor (4) expressly or impliedly requires that development that contravenes a development standard "achieve better outcomes for and from development". If objective (b) was the source of the Commissioner's test that non-compliant development should achieve a better environmental planning outcome for the site relative to a compliant development, the Commissioner was mistaken. Clause 4.6 does not impose that test."*

The legal consequence of the decision in *Initial Action* is that clause 4.6(1) is not an operational provision and that the remaining clauses of clause 4.6 constitute the operational provisions.

Clause 4.6(2) of KLEP provides:

> *Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.*

This clause applies to the clause 4.3 KLEP Height of Buildings Development Standard.

Clause 4.6(3) of KLEP provides:

> *Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating that:*
>
> *(a) compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
>
> *(b) there are sufficient environmental planning grounds to justify contravening the development standard.*

The proposed development does not comply with the height of buildings provision at clause 16(3) of SEPP Housing which specifies a maximum building height across the land however strict compliance is considered to be unreasonable and unnecessary in the circumstances of this case and there are considered to be sufficient environmental planning grounds to justify contravening the development standard.

3.0 Relevant Case Law

In *Initial Action* the Court summarised the legal requirements of clause 4.6 and confirmed the continuing relevance of previous case law at [13] to [29]. In particular the Court confirmed that the five common ways of establishing that compliance with a development standard might be unreasonable and unnecessary as identified in *Wehbe v Pittwater Council (2007) 156 LGERA 446; [2007] NSWLEC 827* continue to apply as follows:

17. The first and most commonly invoked way is to establish that compliance with the development standard is unreasonable or unnecessary because the objectives of the development standard are achieved notwithstanding non-compliance with the standard: Wehbe v Pittwater Council at [42] and [43].

18. A second way is to establish that the underlying objective or purpose is not relevant to the development with the consequence that compliance is unnecessary: Wehbe v Pittwater Council at [45].

19. A third way is to establish that the underlying objective or purpose would be defeated or thwarted if compliance was required with the consequence that compliance is unreasonable: Wehbe v Pittwater Council at [46].

20. A fourth way is to establish that the development standard has been virtually abandoned or destroyed by the Council's own decisions in granting development consents that depart from the standard and hence compliance with the standard is unnecessary and unreasonable: Wehbe v Pittwater Council at [47].

21. A fifth way is to establish that the zoning of the particular land on which the development is proposed to be carried out was unreasonable or inappropriate so that the development standard, which was appropriate for that zoning, was also unreasonable or unnecessary as it applied to that land and that compliance with the standard in the circumstances of the case would also be unreasonable or unnecessary: Wehbe v Pittwater Council at [48]. However, this fifth way of establishing that compliance with the development standard is unreasonable or unnecessary is limited, as explained in Wehbe v Pittwater Council at [49]-[51].

The power under cl 4.6 to dispense with compliance with the development standard is not a general planning power to determine the appropriateness of the development standard for the zoning or to effect general planning changes as an alternative to the strategic planning powers in Part 3 of the EPA Act.

22. These five ways are not exhaustive of the ways in which an applicant might demonstrate that compliance with a development standard is unreasonable or unnecessary; they are merely the most commonly invoked ways. An applicant does not need to establish all of the ways. It may be sufficient to establish only one way, although if more ways are applicable, an applicant can demonstrate that compliance is unreasonable or unnecessary in more than one way.

The relevant steps identified in *Initial Action* (and the case law referred to in *Initial Action*) can be summarised as follows:

1. Is clause 16(3) of SEPP Housing a development standard?

2. Is the consent authority satisfied that this written request adequately addresses the matters required by clause 4.6(3) by demonstrating that:

   (a) compliance is unreasonable or unnecessary; and

   (b) there are sufficient environmental planning grounds to justify contravening the development standard

4.0 Request for variation

4.1 Is clause 16(3) of SEPP Housing a development standard?

The definition of "development standard" at clause 1.4 of the EP&A Act includes a provision of an environmental planning instrument or the regulations in relation to the carrying out of development, being provisions by or under which requirements are specified or standards are fixed in respect of any aspect of that development, including, but without limiting the generality of the foregoing, requirements or standards in respect of:

(c) the character, location, siting, bulk, scale, shape, size, height, density, design or external appearance of a building or work,

Clause 16(3) of SEPP Housing prescribes a height provision that seeks to control the height of certain development. Accordingly, clause 16(3) of SEPP Housing is a development standard.

4.2 Clause 4.6(3)(a) – Whether compliance with the development standard is unreasonable or unnecessary

The common approach for an applicant to demonstrate that compliance with a development standard is unreasonable or unnecessary are set out in Wehbe v Pittwater Council [2007] NSWLEC 827.

The first way, which has been adopted in this case, is to establish that compliance with the development standard is unreasonable and unnecessary because the objectives of the development standard are achieved notwithstanding non-compliance with the standard.

The third way, which has also been adopted, is that the underlying objective or purpose would be defeated or thwarted if compliance was required with the consequence that compliance is unreasonable.

First way - Consistency with objectives of the standard

Clause 15A of SEPP Housing states that the objective of this division is to facilitate the delivery of new in-fill affordable housing to meet the needs of very low, low and moderate income households.

To the extent that the building height breaching elements are appropriately described both quantitatively and qualitatively as minor, I am satisfied that the building height breaching elements do not contribute to building height or massing to the extent that the overall building will be incompatible with the desired future character of the precinct as anticipated through strict compliance with the applicable infill affordable housing incentive provisions which anticipate buildings having a height and floor space 30% more than the maximum prescribed by the applicable Local Environmental Planning instrument.

Accordingly, I am satisfied that notwithstanding the building height breaching elements the proposal satisfies the clause 20(3)(b) design requirements of SEPP Housing. Further, notwithstanding the non-compliant building height breaching elements the proposal facilitates the delivery of new infill affordable housing that will meet the needs of very low, low and moderate income households and to that extent achieves the objective of the standard.

I also consider it appropriate to assess the proposed building height against the objectives of the height of building standard contained at clause 4.3 KLEP to the extent that they do not derogate from the infill affordable housing objective at clause 15A of SEPP Housing.

An assessment as to the consistency of the proposal when assessed against the objectives of clause 4.3 KLEP are as follows:

> *(a) to ensure that the height of buildings is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai centres,*

Comment: I note that the subject site is zoned R4 High Density Residential and is not located within a nominated town centre. The overall building height is consistent with that anticipated by the infill affordable housing incentive provisions at Chapter 2 of SEPP Housing.

The building height breaching elements do not contribute to overall building height to the extent that the development is inconsistent with such provisions or perceived as inappropriate or jarring having regard to the high-density residential context in which it is located.

Notwithstanding the building height breaching elements the proposal satisfies this objective.

> *(b) to establish a transition in scale between the centres and the adjoining lower density residential and open space zones to protect local amenity,*

Comment: I note that the subject site is zoned R4 High Density Residential and is not located within a nominated town centre. The overall building height is consistent with that anticipated by the infill affordable housing incentive provisions at Chapter 2 of SEPP Housing. The subject site does not adjoin low density residential or open space zones with the building height breaching elements not giving rise to any adverse local amenity impacts in terms of visual bulk, views, privacy or solar access.

Notwithstanding the building height breaching elements the proposal satisfies this objective.

> *(c) to enable development with a built form that is compatible with the size of the land to be developed.*

Comment: the subject property satisfies the minimum site area and dimension standards at clause 6.6 KLEP applicable to residential flat development within the R4 Higher Density Residential zone. The building height breaching elements do not contribute to overall building height to the extent that the development will be perceived as inappropriate or jarring having regard to the high-density residential context in which it is located.

Consistent with the conclusions reached by Senior Commissioner Roseth in the matter of *Project Venture Developments v Pittwater Council (2005) NSW LEC 191* I have formed the considered opinion that most observers would not find the overall height of the development, in particular the contribution made by the building height breaching elements, offensive, jarring or unsympathetic in a streetscape and urban context. In this regard, it can be reasonably be concluded that, notwithstanding the building height breaching element, the development is capable of existing together in harmony with surrounding and nearby development.

Notwithstanding the building height breaching element, the resultant development is compatible with the height and scale of existing nearby development and provides for a building form is compatible with the size of the land to be developed.

Notwithstanding the building height breaching elements the proposal satisfies this objective.

Having regard to the above, the non-compliant component of the building will achieve the objectives of the standard to at least an equal degree as would be the case with a development that complied with the building height standard. Given the developments consistency with the objectives of the height of buildings standard strict compliance has been found to be both unreasonable and unnecessary under the circumstances.

Third way - The underlying objective or purpose would be defeated or thwarted if compliance was required

The third way, which has also been adopted, is that the underlying objective or purpose would be defeated or thwarted if compliance was required with the consequence that compliance is unreasonable. That is, strict compliance could be achieved through a reduction in building height and associated floor space to the extent that it would not be possible to take advantage of the 30% FSR incentive provision in circumstances where the building height breaching elements are inconsequential in relation to unacceptable streetscape or residential amenity impacts. The building height variation facilitates the delivery of new in-fill affordable housing to meet the needs of very low, low and moderate income households with strict compliance defeating or thwarting this objective.

The non-compliant component of the development, as it relates to building height, demonstrates consistency with objectives of the zone and the height of building standard objectives. Adopting the first and third ways in *Wehbe* strict compliance with the height of buildings standard has been demonstrated to be is unreasonable and/or unnecessary.

4.3 Clause 4.6(4)(b) – Are there sufficient environmental planning grounds to justify contravening the development standard?

In Initial Action the Court found at [23]-[24] that:

> *As to the second matter required by cl 4.6(3)(b), the grounds relied on by the applicant in the written request under cl 4.6 must be "environmental planning grounds" by their nature: see Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 90 at [26]. The adjectival phrase "environmental planning" is not defined, but would refer to grounds that relate to the subject matter, scope and purpose of the EPA Act, including the objects in s 1.3 of the EPA Act.*

The environmental planning grounds relied on in the written request under cl 4.6 must be "sufficient". There are two respects in which the written request needs to be "sufficient". First, the environmental planning grounds advanced in the written request must be sufficient "to justify contravening the development standard". The focus of cl 4.6(3)(b) is on the aspect or element of the development that contravenes the development standard, not on the development as a whole, and why that contravention is justified on environmental planning grounds.

The environmental planning grounds advanced in the written request must justify the contravention of the development standard, not simply promote the benefits of carrying out the development as a whole: see Four2Five Pty Ltd v Ashfield Council [2015] NSWCA 248 at [15]. Second, the written request must demonstrate that there are sufficient environmental planning grounds to justify contravening the development standard so as to enable the consent authority to be satisfied under cl 4.6(4)(a)(i) that the written request has adequately addressed this matter: see Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 90 at [31].

Sufficient environmental planning grounds

Ground 1 - Topography

The topographical characteristics of the site contribute towards the extent of height breach which falls away towards its south-western corner and can be directly attributed to the roof edge height breaches.

Ground 2 - Minor nature of breach & lack of impact

The building height breaching elements are appropriately described both quantitatively and qualitatively as minor. I am satisfied that the building height breaching elements do not contribute to building height or massing to the extent that the overall building will be incompatible with the desired future character of the precinct as anticipated through strict compliance with the applicable in-fill affordable housing incentive provisions which anticipate buildings having a height and floor space 30% more than the maximum prescribed by the applicable Local Environmental Planning instrument.

I am also satisfied that the building height breaching elements will not give rise to adverse streetscape or residential amenity impacts. Consistent with the findings of Commissioner Walsh in *Eather v Randwick City Council* [2021] NSWLEC 1075 and Commissioner Grey in *Petrovic v Randwick City Council* [2021] NSW LEC 1242, the particularly small departure from the actual numerical standard and absence of impacts consequential of the departure constitute environmental planning grounds, as it promotes the good design and amenity of the development in accordance with the objects of the EP&A Act.

Ground 3 – Objectives of SEPP Housing

Approval of the minor building height breaching elements will achieve the objective of the Division 1 in-fill affordable housing provisions within SEPP Housing being to facilitate the delivery of new in-fill affordable housing to meet the needs of very low, low and moderate income households (clause 15A).

Ground 4 - Objectives of the Environmental Planning and Assessment Act 1979

Approval of the minor building height breaching elements will promote the delivery of affordable housing consistent with objective 1.3(d) of the Act.

There are sufficient environmental planning grounds to justify contravening the development standard.

5.0 Conclusion

Pursuant to clause 4.6(4)(a), the consent authority is satisfied that the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3) being:

(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and

(b) that there are sufficient environmental planning grounds to justify contravening the development standard.

As such, I have formed the considered opinion that there is no statutory or environmental planning impediment to the granting of a height of buildings variation in this instance.

Boston Blyth Fleming Pty Limited



Greg Boston
B Urb & Reg Plan (UNE) MPIA
Director

24.3.25