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Ref: SSD-77829461

18 June 2025

Department of Planning Housing and Infrastructure
Locked Bag 5022
PARRAMATTA NSW 2124

Via: NSW Major Projects Portal

Attention: Charbel Touma

RE: OBJECTION TO SSD-77829461

Thank you for the opportunity to comment on State Significant Development Application (SSD-77829461) for demolition of existing buildings and construction of a residential apartment development with 111 apartments, including 29 affordable housing apartments, with communal open space, associated landscaping and parking for 150 cars in 3 basement levels and lot consolidation at No. 2 – 4 Larkin Street and 1 – 5 Pockley Avenue, Roseville.

This submission should be considered as an **objection** to the proposal. **Attachment 1** gives a detailed explanation of the reasons for Council's objection.

Council's key issues with the proposal include excessive height, bulk and scale; inadequate building setbacks; failure to maintain the landscape character of the locality; insufficient deep soil zones; and substandard residential amenity.

It is requested that the Applicant's Response to Submissions (RtS) is forwarded to Council for review prior to a determination being made. Council will be able to provide recommended conditions of consent following review of the RtS, unless there are substantial unresolved issues.

Subject to satisfactory resolution of the issues raised in this objection, Council may withdraw its objection to the proposal.

Should you have any further enquiries, please contact Sachit Sandhu on 9424 0000.

Yours sincerely,

Selwyn Segall
Team Leader Development Assessment

ATTACHMENT 1

Ku-ring-gai Council's objection to SSD-77829461 at No. 2 – 4 Larkin Street and 1 – 5 Pockley Avenue, Roseville.

The following objections are raised to the proposal:

A. URBAN DESIGN

Summary

The proposal relies on SEPP TOD to increase yield and bulk, but fails to adequately address key urban design issues, including the impact that a building of this scale will have in an area of biodiversity significance. Reduced setbacks to Larkin Street might enable the proposal to achieve the permissible GFA but are likely to result in extensive excavation, non-compliant height, and poor amenity for subterranean east-facing units. The justification advanced for the Clause 4.6 variation is broadly accepted as long as the outstanding amenity impacts of the lower east-facing apartments are resolved. SDRP recommendations, including converting lower units into 2-storey apartments and improving POS, have not been addressed.

Main issues:

1. Height non-compliance
2. Extensive excavation
3. Deep soil non-compliance
4. Sub-terranean apartments set below NGL
5. Volume over (SEPP Housing TOD and IAH SEPP Bonus) height control
6. Setback non-compliance

<u>Context and neighborhood character</u>

The proposal relies on the SEPP Housing TOD to increase the yield, mass, bulk and scale of the development, it is unfortunate that the singular significance of The Rifleway as a pedestrian through-connection to the Pacific Highway and Roseville Train Station, has not been given greater emphasis and/or value in the design. The COS to the north of the development will be over-looked by The Rifleway. Consideration should be given to an extension of the entry ramp along Larkin Street all the way east so that it more seamlessly connects with The Rifleway, thereby creating a wider and more direct pedestrian pathway into the building from this public pathway.

From an urban design perspective, the reduced 6m setback to Larkin Street might be acceptable. The increased setback along the western side will deliver a wider (and therefore better) degree of building separation with the neighbouring site and an arguably more generous and better shape for the COS. However, it does create some amenity problems along the eastern frontage of the building - bulk and mass into its steep location. If there is likely to be a demonstrable benefit to the nearby biodiversity zone - by increasing the western setback as proposed - then it is supported. The resulting design deficiencies of the subterranean east-facing units should be addressed however.

It is suggested that ways to integrate the design of COS on the north into this public concourse be explored with Council for opportunities to improve its material and landscape character.

Built Form and Scale

Appendix S: Design Verification Statement states that the setback on Larkin Street has been reduced to 6m as it is considered to be more consistent with the existing context. “The reduced front setback also allows for a larger buffer between the development to the southwest. Which improves the adjoining developments access to natural light. The additional height beyond the LEP height limit has no overt additional impact on the surrounding context. The upper two levels are set back to limit any impact to the adjoining sites.”

The larger buffer that is created with the development to the southwest is positive. It also does improve the adjoining developments access to natural light. The additional height is, however, likely to have a detrimental impact on the surrounding context in terms of overshadowing and view impact loss. The net impact should be assessed against the associated impacts of a fully complying scheme.

It is also arguable that the reduced setback to Larkin Street is proposed because it is the only viable way possible for the applicant to achieve the permissible GFA given the topography of the site. Notwithstanding it does not satisfy the permissible height. The reduced setback to Larkin Street combined with the non-compliant height results in the need for additional excavation, and the creation of east-facing ground floor apartments with reduced solar amenity (to both internal living spaces and POS). The excavation is such that a long, deep (5-6m) and narrow (4-5m) cavern is created along the street interface of the building. Access from the street is limited to one central location.

The Clause 4.6 Variation request (1.2 Overview) claims that the variation is “justified on environmental planning grounds … as the proposed development causes no unreasonable additional impact in terms of overshadowing or view loss as a result of the non-compliance.” This is questionable. It is likely that there will be additional overshadowing of the potential future development site at 7-11 Pockley Avenue and foreseeably the 2-16 Pockley Avenue (approval for which is being sought concurrently by the same applicant). It is just a question of how much. View loss will also certainly be affected but in terms of amenity impacts the additional overshadowing presents a bigger concern. The overshadowing and view loss impacts that result from a fully compliant scheme should be provided by the applicant to demonstrate whether or not the additional impacts of the height variation are in fact negligible (as they suggest). No additional overshadowing is justified.

The SDRP (Comment 15) suggested converting the subterranean units (“which have limited solar access, ventilation and outlook”) into 2-storey apartments. The applicant has responded by saying that conversion of “the Ground Floor apartments that are below entry level natural ground into 2-storey apartments was explored. However, due to the nature of the site, this led to deep and narrow apartments that proved to be very inefficient. The apartment sizes would also have to increase in order to be considered viable apartments, and this was in contradiction to market demand.”

The SDRP (Comment 15) still has architectural merit. It is unclear why apartment amenity would be negatively affected as a result and why the sizes would need to increase in order to be viable.

The SDRP also suggested that street access to the Larkin Street apartments be provided. The subterranean nature of apartments G04, G05, G06, G07, G08, G09 and to a lesser but still relevant extent, 106, 107,108, 109, 110 remain a concern. This relationship between ground level and NGL with respect to the Larkin Street frontage also has a potentially negative impact on POS. The POS of G06 - G07 and 107 -108 are additionally affected by their proximity to the pedestrian entry (acoustic and visual privacy).

Some reduction in overall building mass is recommended. The proposal is endeavouring to fit a significant amount of GFA on to the constraints of a steep and relatively small site area. The permissible GFA can only be met by breaking the combined SEPP TOD and IAH SEPP Bonus height control along with a significant amount of excavation that effectively makes the eastern-facing ground-floor apartments subterranean. A further reduction in area and bulk of the top most floor is recommended. Further design exploration of SDRP (Comment 15) is recommended to be submitted for consideration.

Density

The proposed development complies with the TOD FSR of 2.5:1. However, it is noted that this represents a substantial increase on the KDCP R2 zoning.

In light of the substantial increase in density that is facilitated by the SEPP Housing TOD, consideration should be given to ensuring that all other factors including building setback, height, landscape, apartment and COS amenity as well as the interface with surrounding streets all achieve full compliance with the controls. Furthermore, that the internal amenity of all apartments is not unduly compromised by the topographic constraints of the site (thereby minimising the need for subterranean apartments).

Sustainability

The proposal claims to have minimised excavation and cut and fill, but the decision to have a reduced street setback to Larkin Street, whilst at the same time maintaining the 2.5:1 permissible FSR, arguably negates this. This is a contributory factor in making the lower east-facing levels sub-terranean. If the permissible height and street setbacks were adhered to the amount of excavation necessary would be likely to diminish.

The amount of excavation and the impacts associated with the reduced street setback on lower-level apartment amenity could be substantially improved.

Amenity

The site is constrained by the south-facing slope. 60% of apartments achieve cross-ventilation under ADG. This includes apartments at the centre of the building that rely on the deep east and west facing indentations in the building façade. To properly assess its validity further clarification on how this percentage is derived is sought.

The POS on the eastern side of the building facing Larkin Street falls short of being an optimal solution for the site. This was raised by the SDRP as a concern and the design has not been amended. The spaces are up to 5m below the street and approximately 4m in distance from boundary to building facade (once landscaping and retention walls are factored in). It is true that this POS will be afforded some sunlight from the north. However, the relative depth and narrowness of these spaces remains a concern and should be given further design consideration to improve.

Clarification is needed on how cross-ventilation is calculated. The design of the eastern POS facing Larkin Street remains suboptimal due to its depth and narrowness and should be further refined to improve amenity and usability.

Summary

The proposal relies on SEPP TOD to increase yield and bulk, but fails to adequately address key urban design issues, including the significance of The Rifleway as a public pedestrian link and the impact that a building of this scale will have in an area of biodiversity significance. Reduced setbacks to Larkin Street might enable the proposal to achieve the permissible GFA but are likely to result in extensive excavation, non-compliant height, and poor amenity for subterranean east-facing units. Overshadowing and view loss—particularly to nearby sites— is of moderate but lesser concern. The justification advanced for the Clause 4.6 variation is broadly accepted as long as the outstanding amenity impacts of the lower east-facing apartments are resolved. SDRP recommendations, including converting lower units into 2-storey apartments and improving POS, have not been addressed. SDRP recommendations, including converting lower units into 2-storey apartments and improving POS, have not been addressed.

B. PLANNING

Excessive Building Height

Section 155(2) in Chapter 5 of the SEPP (Housing) permits a maximum building height of 22 metres for a residential flat building within a TOD area. Under Section 16(1) & (2) in Chapter 2 of the SEPP (Housing), the maximum permitted building height equates to the sum of 22m (under Chapter 5 TOD provisions) and additional height that is the same percentage of the additional FSR permitted under Section 16(1) which is 27.52%. In this circumstance, the maximum permitted building height for the proposed development is 28.05m.

The proposal seeks a maximum building height of 30.22m, measured to top of the rooftop plant which exceeds the maximum building height control by 2.17m, equating to a variation of 7.7%.

Other building elements on the upper level of the proposed building, also exceed the maximum building height development standard as shown in Figures 1 and 2 below.

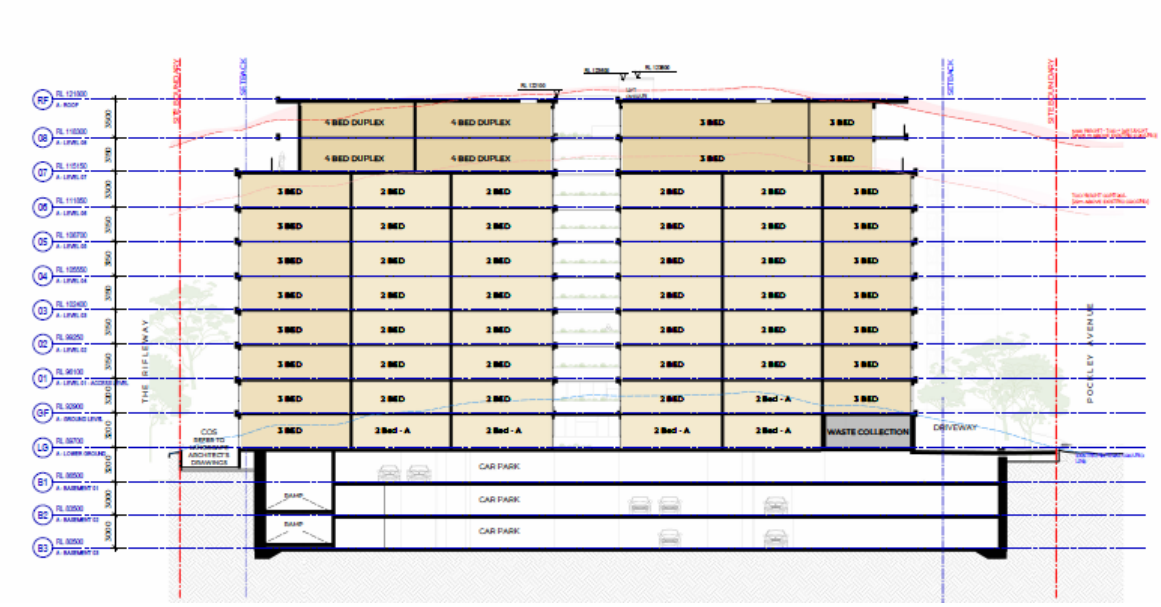


Figure 1: Building Sections – A, Sheet No. DA-AR-A-32-101, Revision A, prepared by Woods Bagot, dated 14/04/2025.

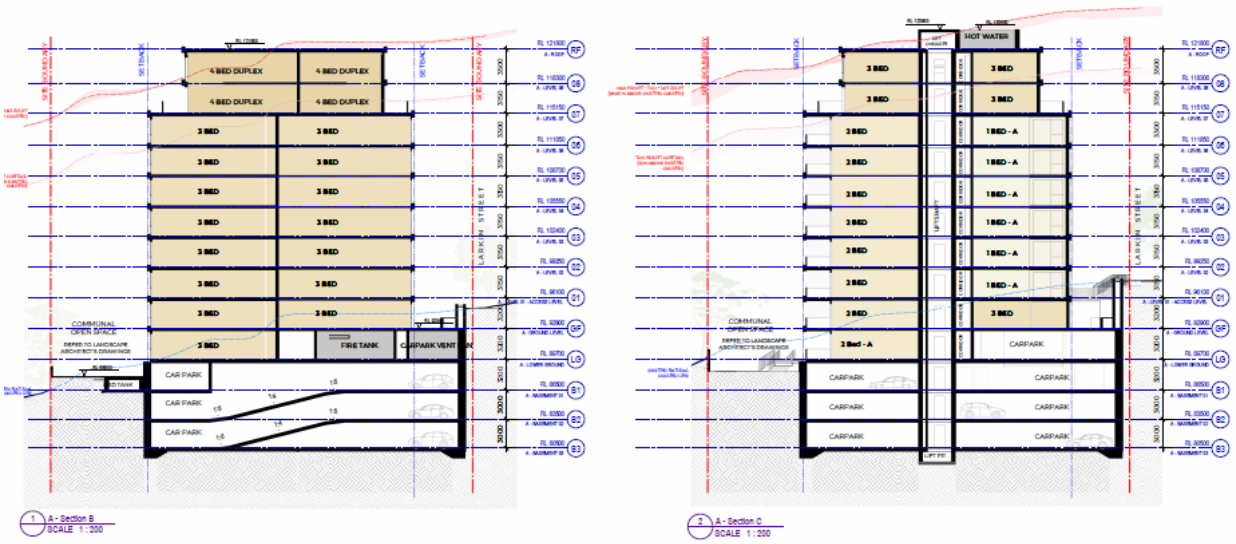


Figure 2: Building Sections – B & C, Sheet No. DA-AR-A-32-102, Revision A, prepared by Woods Bagot, dated 14/04/2025.

A Clause 4.6 variation request has been submitted in relation to building height. The Clause 4.6 variation request argues that the objectives of Chapter 2 and aims of Chapter 5 of the SEPP (Housing) is achieved notwithstanding non-compliance with the development standard and that compliance is unreasonable and unnecessary based on the following:

- *There are sufficient environmental planning grounds to justify the contravention of the height of building control, as the proposed development causes no unreasonable additional impact in terms of overshadowing or view loss as a result of the non-compliance, and is compatible with the future desired character of the area as established by the Housing SEPP.*
- *The minor non-compliance is specific to the circumstances of the proposed development, as the site slopes significantly and the height exceedance is only to a those parts of the upmost storey where the ground level (existing) falls away.*

Upon review of the proposal, Council does not consider the Clause 4.6 variation request to be well founded and objects to the variation of the building height development standard for reasons as follows:

- *The extent of the variation contributes to excessive building bulk and scale beyond the building envelopes envisaged for residential flat buildings, including compliant setbacks, articulation and built form. The proposal will detract from the desired future character of the streetscape, significance of heritage items and the amenity of surrounding residents.*
- *The extent of the variation at the upper level of the proposed building will be clearly visible from surrounding streets and the locality contributing to excessive building bulk and scale that is incompatible with the character of the locality.*
- *Insufficient overshadowing information has been submitted to clearly identify the full extent of additional overshadowing cast by building elements that exceeds the building height development standards. It is likely that there will be additional overshadowing of the potential future development site at 7-11 Pockley Avenue and foreseeably the 2-16 Pockley Avenue (approval for which is being sought concurrently by the same applicant). View loss will also certainly be affected but in terms of amenity impacts the additional overshadowing presents a bigger concern. The overshadowing and view loss impacts that result from a fully compliant scheme is not provided to demonstrate whether or not the additional impacts of the height variation are in fact negligible.*

Given the above, the Applicant's Clause 4.6 variation request is not considered to be well founded and does not provide sufficient environment planning grounds for the consent authority to support the variation.

Height and Foor Space Ratio and the KRG TOD Alternate Scenario

It is noted that seeking the maximum FSR is not an automatic right for any type of development, including affordable housing. The consent authority must consider other planning controls and impacts of the development in accordance with Section 4.15 of the Environmental Planning and Assessment Act 1979. It is not considered that the full permitted FSR can be achieved on the site whilst also complying with the ADG, providing a suitably scaled and articulated building, and providing sufficient deep soil and landscaping.

The proposed FSR is excessive and results in a significantly bulky building which is out of character with the desired future character of the area. The proposed FSR results in poor amenity for the future residents of the building, particularly in relation to solar access. Council is supportive of affordable housing; however, it should be housing which is of a high standard of residential amenity. While a reduction in FSR would reduce yield, it would enable compliance with key ADG amenity controls and a building which better responds to the desired future character of the area.

In response to the NSW TOD planning policy, Council has developed a preferred scenario for four railway precincts at Gordon, Killara, Roseville and Lindfield. The exhibited KRG TOD alternate scenario proposes a maximum height of 18.5 metres (No's 12-16) and 29 metres (No's 2-10). Council's proposed HOB amendments would provide for a development that is less bulky, provides an appropriate interface with the adjoining lower density land and allows for suitable landscaping that is consistent with the rest of Ku-ring-gai.

Detailed GFA diagrams indicating a clear breakdown of the floor space attributed to both the affordable and market rate dwellings contained within the development has not been provided. The consent authority must ensure that the proposed FSR attributable to the affordable housing complies with the requirements of the Housing SEPP.

C. LANDSCAPING

SEARS (Secretary's Environmental Assessment Requirements)

1. A full Planting Plan and Plant Schedule indicating location, quantity and pot size of proposed planting has not been provided which is contrary to the SEAR's, ADG and KDCP requirements. Refer to comments below under 'LANDSCAPE DESIGN and CHARACTER'**.**

2. The plans and Arborist report is to include all street trees. There are a number of trees not identified or numbered on plans or in the Arborist report to Larkin Street and the corner of Larkin and Pockely Avenue. The trees will require retention and tree protection. Trees include Gingko biloba, Acer sp, Ceratopetalum x 2, Elaeocarpus, 4 x Syzigium and Tristaniopsis.

BASIX COMMITMENTS

Certificate 1791579M_02 dated 16/4/25 is submitted as part of the application. The certificate is inconsistent with the development proposal due to:

1. The certificate fails to nominate the correct areas for lawn areas and common garden areas as the certificate states that there is 1400.7m2 of lawn and 139.94m2 of common garden area. The lawn area is considerably less and the garden area more.
2. The certificate fails to nominate any common taps. Common taps are required for the irrigation of common landscape areas and for common elements such as the bin/waste rooms (health) and car wash bay.

An amended certificate, consistent with the development, is required.

SEPP (Housing) 2021 - Design principle - Schedule 9: Design principles for residential apartment development

5 Landscape

The proposal is inconsistent with the landscape design principles due to:

- The lack of tall tree plantings and deep soil landscape zone within Larkin Street fails to contribute to the established and desired landscape character of the streetscape (2 and 3a).
- The removal of trees 3, 7, 23 and 29 fails to retain existing natural features that form part of the local context, contributes to the existing tree canopy within the streetscape and provides amenity to neighbouring sites (3a & e and 4).
- Insufficient detail regarding soil depth and volumes for on structure planters and location within Larkin Street setback fails to provide for practical establishment and long-term management of the proposed landscape design outcomes (5).

APARTMENT DESIGN GUIDE

Part 3E Deep soil zones

Insufficient deep soil results in impact to significant trees and a reduction in the landscape character and amenity.

The deep soil requirement of the ADG of minimum 7% (248.64m2) has been met, however as the site is considerably larger than 1500m2, the larger area of deep soil of minimum 15% (532.8m2) should be provided to provide for adequate landscaping to boundaries and street frontages and reduce encroachment on street and neighbouring trees. The proposal states 422.9m2 (11.9%) deep soil, however calculation includes areas an area less than 6m, therefore a shortfall of more than 110m2. Deep soil is particularly lacking along the northern boundary to Larkin Street where the basement is setback approximately 750mm from boundary and not consolidated under the building footprint. In addition, the proposal is a moderate encroachment on a significant Tree 25 (to footpath) and encroachment can be reduced with a greater basement setback.

The 50% deep soil requirement of the KDCP is not achieved.

Part 4O-1 Landscape Design

For a site area of 3552m2 with a minimum 15% deep soil (532.8m2) a minimum 6 large or 12 medium trees are required and at 7% deep soil a minimum of 4 large trees or 8 medium trees are required in accordance with the ADG. In accordance with KDCP a minimum of 10 large trees capable of reaching 18m in height are required. 11 tall trees capable of reaching over 13m in height are indicated on the proposed tree plan and in the plant schedule and therefore satisfies the ADG and Part 7A.6 of KDCP requirement, however full planting plans are to be provided to satisfy the requirement.

Objective 4O-2 Landscape design contributes to the streetscape and amenity

Landscape design does not contribute positively to the streetscape and amenity to the Larkin Street frontage with the insufficient setback of the basement and lack of deep soil. In addition, the planting area provided to Larkin Street is limited to up to 1.8m width of tiered planters, predominantly located 2-4m below the level of the street, with minimal planting area at street level. The proposed design is also a moderate encroachment on Tree 25 to Larkin Street footpath which may be detrimental to the long-term viability of the tree.

Part 4P -Planting on structures soil depths and soil volumes.

Landscape Plans are insufficient to fully assess if adequate soil depths are provided to planters for the proposed planting and in accordance with ADG and KDCP, as no detailed Planting plan and schedule is provided indicating location and number of proposed species.
In addition, the planters to Larkin Street frontage are of insufficient width to provide long term viability of planting and difficult to access without entering private courtyards and top of planter levels are not provided to planters within the sky bridge and the entry foyers.

TREE REMOVAL and IMPACTS

Part 13 Tree and Vegetation Preservation

The removal of Trees 3, 7, 23 and 29 is not supported.

Trees 7 and 23 to Pockley Avenue are not impacted by the works and are to be retained.

A greater basement setback from the northern boundary will enable retention of tree 3 and relocation of proposed deck to southern boundary will enable retention of tree 29. In addition, the moderate encroachment to Tree 25 can be reduced with greater setback of basement.

LANDSCAPE DESIGN and CHARACTER

1. A full Planting Plan and Plant Schedule indicating location, quantity and pot size of proposed planting has not been provided which is contrary to the SEAR's, ADG and KDCP requirements. Without a full planting plan and complete plant schedule, assessment of the proposal is unable to fully assess the following:
   i. adequate screen planting to boundaries and between ground floor units and private open space.
   ii. Trees are to be planted in all setback areas.
   iii. suitable planting densities and species
   iv. adequate soil depths provided in planters for the proposed planting and in accordance with ADG and KDCP.
   v. Provide a mix of native and exotic planting

2. The existing ground levels have not been maintained to within 2m of boundaries with the following:

   i. The extension of the basement to the northern boundary rather than within the footprint of the proposed building is contrary to the ADG and KDCP. This results in planters to boundaries rather than deep soil which restricts the height of proposed planting to boundaries and reduces the long-term viability of the planting due to the restricted soil area and reliance on irrigation. Maintenance of planters will also be difficult without access to private courtyards.

ii. The walling to the Boori Boori Pit is set 700-1.7m above existing levels to western boundary requiring retaining walls within 2m of boundary and excavated up to 500mm for the western outdoor dining area
iii. Proposed elevated deck to rear boundary is within 700mm of the boundary which impacts on neighbouring property with insufficient setback for screening and privacy to neighbouring property.

3. Landscape planting to both sides of pedestrian entry paths to be provided with minimum dimension of 1.2m on either side.

4. Communal Open space is not adequate for the development:

   i. equitable access not provided with the proposed deck 200-500mm above proposed path and stepping stone access only to the western boundary seating areas.
   ii. Communal open space is predominantly shaded for most of the day as located to the south of the 10-storey development. Proposed lawn is also unlikely to thrive under proposed conditions. Use of a roof terrace to be considered to provide a more useable space with solar access and provide a variety and additional facilities.

Construction and Traffic Management Plan

(CTMP)/ Environmental Site Management Plan is to include tree protection fencing to trees on site and to street footpath.

D. ENVIRONMENTAL HEALTH

Acoustic report

A Noise and Vibration Impact Assessment (NVIA) prepared by Stantec, dated 16 April 2025, has been provided as part of the SSD application.

The report addresses the requirements of Clause 13 of the Planning Secretary's Environmental Assessment Requirements – Housing, in accordance with the *SEPP (Resilience and Hazards) 2021*, and assesses operational noise impacts from the proposed mechanical plant in accordance with the NSW EPA Noise Policy for Industry (2017) and Ku-ring-gai DCP 2024.

The mechanical plant (i.e. air conditioning condenser units) is proposed to be located on the rooftop within two dedicated areas identified as 'condenser plant'—consistent with the Architectural Plans prepared by Woods Bagot, dated 14 April 2025 (Version A). As shown in Figure 3 of the NVIA (page 16), these areas will be enclosed by a 2-metre-high solid acoustic barrier to minimise potential impacts, noting that final plant selection is yet to be confirmed.

The report assesses a conservative worst-case 24-hour operational scenario, adopting a night-time trigger level of 35 dB(A) at the nearest residential receivers. Based on the preliminary layout and mitigation measures, noise emissions are predicted to comply with the relevant EPA and DCP criteria, including being inaudible within habitable rooms during restricted hours.

Given that the final mechanical plant equipment is still to be selected, a detailed acoustic assessment is recommended to be undertaken.

Contamination report

A Preliminary Site Investigation (PSI) Report prepared by EI Australia Pty Ltd (EI), dated 27 March 2025, has been provided as part of the SSD application. Consideration of the recommendations provided in the report should be undertaken.

E. ENGINEERING

Water Management

A stormwater management plan has been submitted and prepared by Stantec Australia Pty Ltd.

Part 24A. Site Design for Water Management

It is proposed that Stormwater is discharged to the existing stormwater network in The Rifleway via a 375mm RCP. Existing invert levels and exact location to be confirmed by further survey. A junction pit is to be provided for the connection into Council's truck drainage system. A Roads Act condition will be imposed for works within the road reserve.

Part 24C. 5 Controls for On-site Detention

The stormwater plans show all roof areas to be collected and conveyed to a rainwater tank (volume unknown) with the overflow conveyed to a compliant detention tank comprising a total storage of $90m^3$ located on the side setback of the proposed development. The overflow from the detention system is directed to the Rifleway via a 375mm diameter pipe.

Clarification of the proposed headwall and OSD basin is required for its intended purpose. Design details of the system is to be provided. A basin within the landscaped area is not desirable to capture stormwater runoff that bypasses the OSD.

The location of the access pits to the detention system and rainwater tank are shown to be readily accessible external to the building and outside of the communal area (not within private courtyard) which is acceptable.

Stormwater plans to clearly show location of the OSR and its volume as well as cross section details of the tank depicting surface and invert levels.

Part 24C.4 On-site Stormwater Management

A BASIX Certificate has been submitted which shows a 5,000L rainwater tank to collect 1103.13sqm of roof area and reuse for irrigation of 1400.7 square metres of common landscaped area on the site and 1 car wash bay.

Whilst the report states that a rainwater tank is required, the stormwater plans however do not show the location nor the volume of the proposed rainwater tank.

No supporting hydraulic calculation submitted to demonstrate compliance with Part 24C.3-4 of the Ku-ring-gai DCP 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.

Part 24B.5 Pump-out tank

A pump-out tank within the basement is to be provided and designed for the 100-year 2 hour storm.

Part 24C.6 Stormwater Quality Control

The captured stormwater will be treated using 4 x Full Height AtlanFilters cartridges located within the OSD tank and 2 x StormSack Pit Baskets. The pollutant load standards have been satisfied. MUSIC model results has been provided.

Part 24D.2 and Part 24E.1 Flood Studies and Design Procedures

A Flood Risk Management Report has been prepared by Kozarovski and Partners for the proposed development.

The site is not affected by mainstream 1% AEP flooding, with only minor affectation observed under the Probable Maximum Flood (PMF) event. A detailed hydraulic model using a 2D HEC-RAS system was developed for the catchment area to assess flood behaviour under both 1% AEP and PMF conditions.

Flood mitigation strategy measures include the following:

- A minimum 200 mm freeboard above PMF levels is to be provided at the northern corner of the site, which is marginally affected.
- The driveway ramp is to incorporate a hump constructed to RL 88.8m AHD to prevent basement car park inundation.

The Flood Mitigation Strategy is to be adopted as a condition of consent.

The flood report concluded that the development is located outside the 1% AEP flood extent and will not cause adverse impacts on local flood behaviour. The site is marginally affected by the PMF, with associated flood risk classified as Low Hazard (H1 category), and no evacuation is required as the development remains safe during all possible flood events.

Parking Provision and Traffic Generation (Strategic Traffic Engineers comments)

The following documentation was used for the assessment:

- Transport and Accessibility Impact Assessment report (by Varga Traffic Planning)
- Architectural Plans (by Woods Bagot)
- Statement of Environmental Effects (by Planning & Co)
- Landscape Plan (by Ground Ink)
- Green Travel Plan (by Varga Traffic Planning)

In addition to any comments made in the Engineering Referral, the following comments are made:

Traffic generation and associated impacts

The Transport and Accessibility Impact Assessment (TAIA) has calculated the traffic generation of the site using the industry accepted traffic generation rate for high density residential developments close to transport (0.19 vehicle trips in AM peak hour and 0.15 vehicle trips in PM peak hour, 2-way) set out by Transport for NSW in the Guide to Transport Impact Assessments.

Applying these rates would result in the following additional peak hour vehicle movements:

- AM peak hour: 18 vehicle trips (2-way) per hour.
- PM peak hour: 13 vehicle trips (2-way) per hour.

No operational assessment of this intersection was carried out in the TPAR, presumably because it noted that vehicle movements of this magnitude (an average of 1 additional vehicle trip every 3-4 minutes) would have not have any noticeable or unacceptable effect on the road network serving the site in terms of road network capacity or traffic-related environmental effect. However, there are other State Significant development applications, and TOD development applications lodged with Council in the area, and there will be cumulative effects of these developments on the intersection of Pacific Highway and Maclaurin Parade.

In terms of the wider transport context, Strategic Planning has commissioned transport consultants to assess the cumulative impacts in Roseville of the NSW Government's TOD and Council's alternative scenario. Progress so far indicates that the existing Level of Service of the intersection of Pacific Highway and Maclaurin Parade is C in the AM peak (satisfactory operation) and A in the PM peak (good operation).

This development (in isolation) is unlikely to significantly impact on the operation of the intersection, but with the full roll-out of the NSW Government's TOD in Roseville and no additional mitigation measures, intersection will continue to operate at Level of Service B (satisfactory operation) in the AM peak, and reduce to Level of Service D (operating near capacity) in the PM peak.

While improvements to the intersection and nearby roads are possible and are being planned, these can be costly and have not been considered or approved by Transport for NSW or Council. Key transport-related works already identified in the Development Contributions Plan 2010 that are being re-assessed include road widening on Pacific Highway to accommodate 3 northbound lanes and fully controlled right turns into Maclaurin Parade. A Transport Response is being developed, to mitigate the impacts of new development and to create a centre with improved walkability/bicycle access to the shops and station. Any new transport infrastructure identified in the TIA will inform the review of the Contributions Plan, including:

- Improved local access on the western side of Roseville with a new street between Pockley Avenue and Shirley Road.
- New and upgraded walking and cycling infrastructure and reduced speed limits to encourage active transport to the station and shops.
- Dedicated car share vehicles within and near development sites to reduce car ownership and dependence, and bicycle parking at key locations.

This new infrastructure will also be tested as part of the assessment of Council's preferred alternative housing scenario. Other improvement opportunities being considered in the assessment of the TOD SEPP and Council's preferred alternative scenario (if adopted by Council) include upgrades identified in the Roseville Public Domain Plan. With the improvements under the NSW Government's TOD Scenario, the intersection of Pacific Highway and Maclaurin Parade could operate at Level of Service D (operating near capacity) in the AM peak, and improve slightly to Level of Service C (satisfactory operation) in the PM peak.

Parking provision and design

Car Parking

The following apartment breakdown was provided as part of the TAIA and the Architectural Plans:

Use	Market Housing	Affordable Housing
Studio	-	-
1 bedroom	-	24
2 bedroom	41	5
3+ bedroom	41	-
Total	**82**	**29**

Car parking provision has been assessed against the requirements of the TOD SEPP and the Ku-ring-gai DCP:

Parking type	TOD SEPP requirement	Ku-ring-gai DCP requirement	Proposed
Residential - Market	39	118-163	140 (breakdown not provided)
Residential - Affordable	103	-	
Visitor	-	19	19*
Car Share Bay	-	2	1
Car Wash Bay	-	can be shared with visitor parking bay	1
Loading Bay	-	1	1
Total	**142**	**140-185**	**162**

*the number of visitor car parking spaces has been documented as 9 in the TAIA, however the architectural plans shown 19 visitor car parking spaces. Therefore 19 visitor car parking spaces are being relied on in this assessment.

The proposed residential parking provision meets the requirements of the TOD SEPP and the Ku-ring-gai DCP. However, the number of on-site car share spaces does not comply with Ku-ring-gai DCP requirements and should be increased (see discussion in Car share spaces, below)

When considering the household vehicle ownership data in the 2021 Census, the following information was obtained for statistical areas in the Roseville TOD precinct with a high proportion of high-density residential apartments:

Vehicle ownership per household - 2021 Census

Statistical Areas with high concentrations of apartments

			Number of vehicles per household		
SA1 Location	**TOD Centre**	**approx address**	**0**	**1**	**2+**
12103140803	Roseville	Pacific Hwy, Shirley Rd, The Rifleway	18%	57%	26%
12103140863	Roseville	Pacific Hwy, Hill St, Victoria St, Bancroft Ave	16%	51%	33%
12103140861	Roseville	Victoria St	7%	70%	23%
12103140832	Roseville	Pacific Hwy, Maclaurin Pde, Alexander Pde, Corona Ave	7%	57%	36%
12103140864	Roseville	Boundary St Roseville	14%	70%	17%
12103140843	Roseville	Hill St, Lord St, Roseville Ave	14%	51%	36%
	Roseville	**Average**	**13%**	**59%**	**28%**

This indicates that approximately 3/4 of households in the above statistical areas own no cars or one car only. Given that the site is located in close proximity to Roseville station, local and regional bus routes, shops and amenities, the parking provision should be reduced to better align with current vehicle ownership patterns in the area, and supplemented with on-site car share vehicle/s, so that residents that need access to a vehicle (or a 2nd vehicle) do not need to own an additional vehicle and the car space associated with it.

While a breakdown of parking allocation has not been provided, for this assessment a notional breakdown has been prepared:

	Total		**Allocation of proposed parking provision**				
Qty	Unit type		Units with **0** spaces	Units with **1** space	Units with **2** spaces	Qty check	
0	Studio					0	
24	1br		10	14		24	
46	2br		2	44		46	
41	3+br				41	41	
	visitor						
111	**Total**			58	82	140	Total spaces
			12	58	41	111	Total units
			11%	**52%**	**37%**		

The notional breakdown would have a higher number of households with 2 vehicles compared to current household vehicle ownership patterns in the area. If the minimum car parking required by the Ku-ring-gai DCP was provided, the following allocation would be consistent with current household vehicle ownership patterns:

Total		**Allocation of lower end of DCP parking provision**				
Unit type		Units with **0** spaces	Units with **1** space	Units with **2** spaces	Qty check	
Studio					0	
1br		10	14		24	
2br		6	40		46	
3+br			10	31	41	
visitor						
Total			64	62	126	Total spaces
		16	64	31	111	units
		14%	**58%**	**28%**	**Parking space allocation**	

Reducing the proposed parking provision will also improve affordability, as complying with the Ku-ring-gai DCP could result in reduced basement excavation, and would give future residents the opportunity of owning apartments with reduced car parking spaces (or even no car parking spaces) because of the availability of on-site car share vehicles.

The Ku-ring-gai DCP requires that at least 1 visitor car parking spaces be designed as accessible in accordance with AS 2890.6, but there is no evidence of this in the architectural plans. An accessible visitor car parking space could be provided by reallocating an adjacent residential car parking space to the shared zone required by AS 2890.6.

Car share spaces

The Ku-ring-gai DCP requires car share spaces for residential developments of more than 90 dwellings. The provision of 2 spaces complies with this requirement. However, recent guidance from one car share provider suggests the following car share provision:

- Provide 1 on-site car share vehicle for every 10-15 units without parking.
- Provide 3 on-site car share vehicles for every 100 2-bed+ units with one parking space

As part of this assessment, given the site's proximity to transport, shops and amenities, the proposed parking should be reduced and supplemented with car share vehicle/s to provide access to additional travel options and reduce reliance on on-street parking.

Based on the notional allocation of resident car parking spaces, it is recommended that at least 3 car share spaces be provided, and the 2 additional car share parking spaces could be provided by way of re-allocation of 2 residential car parking spaces. Even without the recommended reduction in resident car parking spaces, provision of at least one additional car share parking space is justified based on the guidance above.

Conditions similar to the following could be imposed:

1. At least 2 spaces on Lower Ground level are to be reserved for car share operation, with no charge to the car share operator to use the space/s.
2. The spaces must be available/accessible to verified members of the car share scheme (including members who are not residents of the development) and should be well-lit with safe pedestrian access.
3. These spaces must be contracted to an operator (a Car Share Provider that has been approved by the Responsible Authority) with evidence of agreement submitted to Council prior to issuing of the Occupation Certificate.
4. Car share vehicles must be operational within 4 weeks of issue of the Occupation Certificate
5. The agreement must ensure appropriate insurance and vehicle maintenance is in place, including public liability.
6. Since car share spaces are located in the basement, sufficient cellular communications connectivity must available at the location of the carshare spaces to ensure proper car share management/operation.

Motorcycle Parking

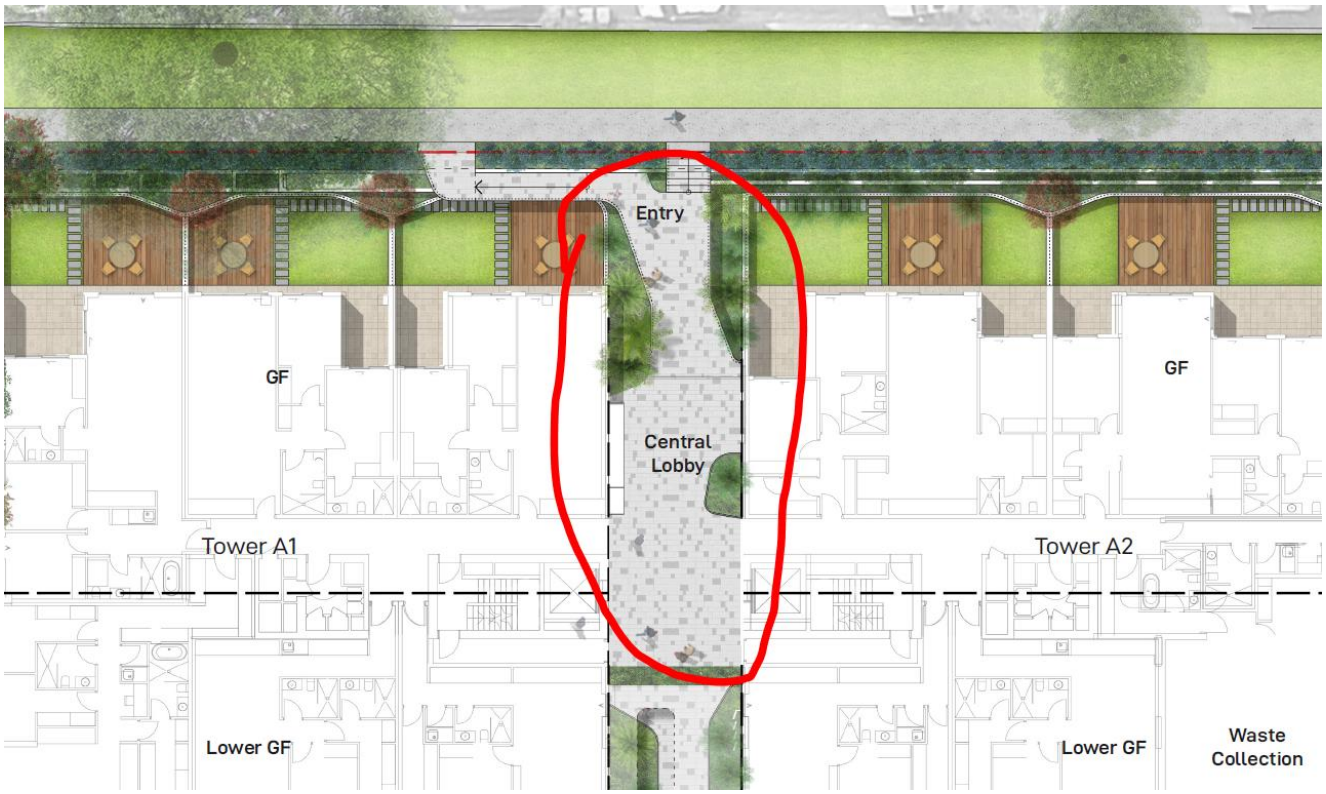
Although not required by the Ku-ring-gai DCP, 25 motorcycle spaces have been provided across the basement parking levels.

Bicycle Parking

The number of bicycle parking facilities for residents and visitors is provided in accordance with the Ku-ring-gai DCP.

Resident bicycle parking is proposed to be located in allocated storage areas for each apartment, located across the Lower Ground level and Basement 01-03 levels. This is acceptable, however the ramps connecting Basement levels 01-03 have gradients of up to 1:4 (25%), which generally will exceed the capability of many bicycle users to remain mounted with stability (1:12, or 8% is practical). Therefore, the lifts and lobbies on Basement levels 01-03 should be of a suitable size such that residents can transport their bicycles between their storage area and ground/street level without using the internal car park ramps.

Visitor bicycle parking is proposed to be located on the Lower Ground level. The entry ramp has manageable grades, but given the practicality of visitors entering the secure parking area to access the bicycle parking from the main entry ramp, it is recommended that the visitor bicycle parking be relocated on-site near the main pedestrian entry off Larkin Street or in the Central Lobby area, in accordance with AS2890.3 (circled in red):



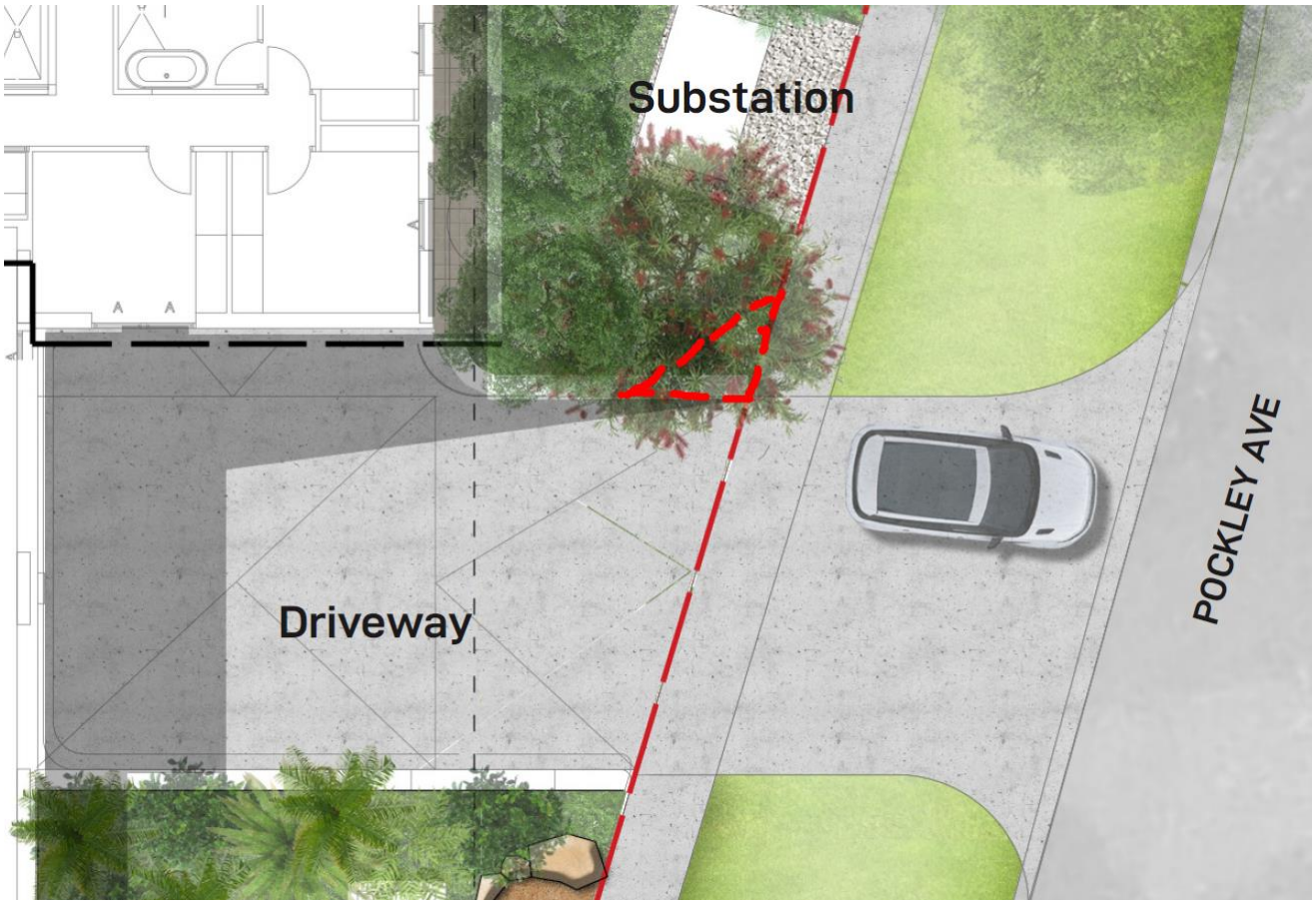
Electric Vehicles (EVs)

In accordance with the Ku-ring-gai DCP, EV readiness is to be provided for all car parking spaces within the development, with design and construction (provision for conduits, switchboards, electrical capacity etc) to enable installation of electric vehicle charging points that are linked to each individual dwelling electricity meter. Section 7.18.3 of the Environmental Impact Statement notes that, as a social impact mitigation measure, all car parking spaces are to be designed to be EV ready, to enable installation of electric vehicle charging points for each individual dwelling electricity meter. This could be conditioned.

Access Point

A 7.2m wide access point at the property boundary is proposed (which is acceptable). At the edge of bitumen alignment, the gutter crossing width splays out to approximately 11.3m, presumably to facilitate the swept paths of the service vehicle entering and leaving the site.

It is unclear whether the 2m x 2.5m sight triangle as per AS2890.1 (shown in red below) has been provided, but this could be conditioned:



In accordance with section P of Council's Traffic and Transport Policy, 'No Parking' restrictions for 6 metres on either side of the driveway are to be implemented prior to occupation. Council's fees and charges for referral to the Ku-ring-gai Traffic Committee and installation of signs apply.

To facilitate home deliveries (e.g. groceries, parcels etc), bulky goods waste collection and other service vehicles that cannot access the basement due to the 2.6m height clearance, the development should also provide an on-site loading area (a separate hardstand area is not permitted). The position of the loading area must not prevent access to and from the basement level car park, with at least one travel lane to be maintained at all times while loading/unloading takes place on the driveway. At least one on-site loading space is to be provided to cater for a minimum 6.7 m long service vehicle. The loading space/s should be line marked and/or signposted as a designated loading area. The on-street parking around the site is subject to competition from commuters and other users due to its proximity to the shops and station in Roseville, and requests for an on-street Loading Zone will not be considered.

Green Travel Plan

3.2 Car Share

This section notes that there are existing car share vehicles by one car share provider in the area, with the closest being in Hill Street, near Victoria Street (approx. 10 minutes walk from the site) and Westbourne Road Lindfield (approx. 10 minutes walk), but these are unlikely to be convenient locations for residents of this development. Also, these are not a car share vehicles in a fixed/allocated space, but free-floating vehicles, and their longevity at these locations cannot be confirmed. The proposal is making provision for on-site car share anyway, therefore references to these car share vehicles should be removed from this section and the Transport Access Guide in

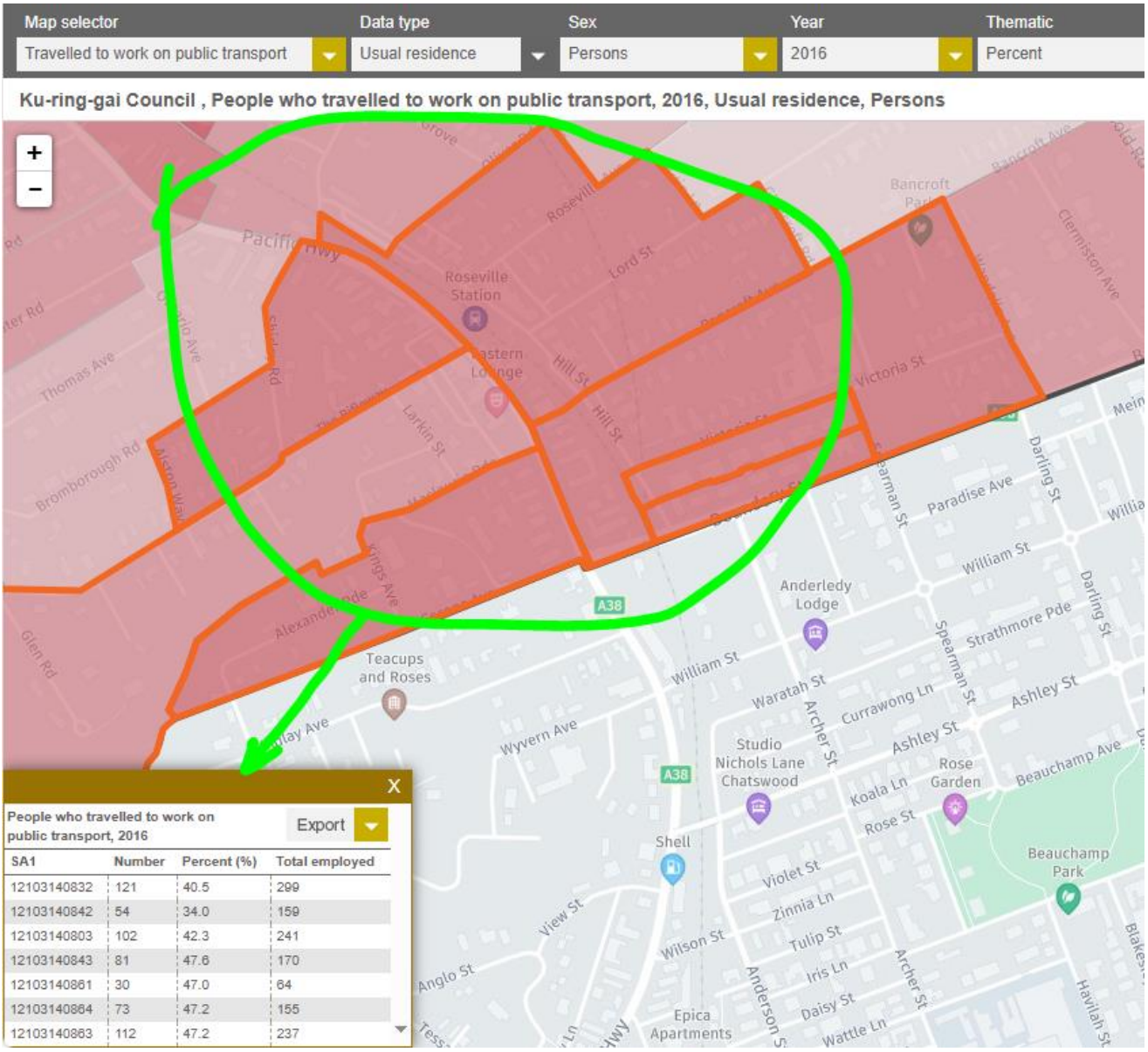
Appendix A.

3.5 Bicycle Routes

This section contains an extract of the Ku-ring-gai Cycling Map, which shows dedicated cycleways as well as useful unmarked routes, and the commentary in this section implies that the useful unmarked routes are separated cycleways. This should be clarified in the commentary.

3.6 Existing Transport Mode Split

2021 Census data was used to obtain mode of travel to work for residents in the Lindfield – Roseville SA2 area, and notes that Covid travel restrictions heavily affected this data. Also, the Lindfield – Roseville SA2 area is quite extensive and would not accurately the reflect travel modes of residents living within 400m of Roseville station. It is recommended that this whole section and Section 4.2 (Mode Share Targets) be revised to use 2016 Census data and using a finer-grained SA1 analysis (available from atlas.id on Council's website (Social atlas | Ku-ring-gai Council area | atlas.id) to obtain the base travel mode data from which to set the mode share targets:



Construction Traffic Management

It is understood that all demolition, excavation spoil, and construction materials will be loaded and unloaded wholly within the site, where possible, using a variety of truck types and sizes, including small and medium rigid trucks, and occasionally trucks up to 11 metres in length. Trucks will access the site via a temporary driveway off Pockley Avenue and will enter and exit in a forward direction where feasible. All truck movements are to be supervised by accredited traffic controllers.

Construction vehicles will access the site via Pacific Highway, Maclaurin Parade, Larkin Street, and Pockley Avenue, avoiding local roads with load or height restrictions. No queuing of construction vehicles is to occur on Pacific Highway. Deliveries are to be radio-controlled and coordinated to avoid congestion.

The submitted CTMP does not propose a formal works zone, as all loading/unloading is to occur within the site frontage setback along Pockley Avenue. However, it is noted that if future circumstances change, a works zone application will need to be submitted and approved by the Ku-ring-gai Local Traffic Committee.

It will be conditioned that a detailed CTMP will need to be submitted prior to the issue of the construction certificate showing the construction vehicle routes for the southbound and northbound directions, largest vehicle to be used entering and exiting the site for the demolition, excavation and construction stages, stockpiles and all necessary tree protection fencing.

Part 25 Waste Management

Part 25A.1 General Requirements

A proposed garbage and recycling storage area is located in the basement adjacent to the loading bay area. The waste / recycling storage area is accessible from the basement level.

Swept paths are to be submitted demonstrating that Council's Waste Collection Vehicle of 6.7m Mitsubishi Canter can enter and depart the garbage/room recycle storage area in a forward direction. The 6.4m SRV as shown is no longer adopted by Council.

Part 25A.3 Access to Collection Point Loading/Servicing Provisions

A clear head height of 2.6m has not been provided. A longitudinal section through the driveway and into the basement carpark to clearly demonstrate that there will be 2.6 metres clear headroom along the whole of the travel path required for the small waste collection vehicle is to be submitted. The section must include realistic slab/beam depths, stormwater pipelines and other overhead services.

Part 25A.5 Residential Buildings

In order to meet Council's servicing requirements, all waste material will be stored in 21 x 660-litre red lidded mobile waste bins. All recycling material will be stored in 11 x 660-litre yellow lidded mobile bins and all paper and cardboard recycling material will be stored in 11 x 660-litre blue lidded mobile bins. 5 x 240L bins for FOGO has been provided

Geotechnical Investigation

Geotechnical investigation report has been prepared by EI Australia Pty Ltd. The investigation included the drilling of five boreholes, installation of three groundwater monitoring wells and laboratory testing of selected samples. Boreholes were drilled to depths ranging between 7.57 m and 25.15 m.

Groundwater seepage was observed during auger drilling of BH3 at a depth of 1.45 m. No permanent groundwater was observed from the ground monitoring wells.

A conditioned should be imposed that the basement excavations are to be fully tanked unless it can be demonstrated to the discretion of the certifier that ongoing dewatering will be less than 3ML/year AND the proposal is approved by NSW DPI Office of Water.

Prior to excavation commencing, dilapidation reports should be completed on adjoining structures and infrastructure, in particularly 9 Burgoyne Street to the common eastern site boundary and 1 Pearson Avenue stormwater detention basin located near the south-western corner of the property.

Recommendations

The proposed development cannot be fully assessed until the following information has been submitted.

Car Parking / Vehicular Access & Traffic Assessment

1. References to existing car share vehicles should be removed from Section 3.2 (Car Share) of the Green Travel Plan, as well as from the Transport Access Guide in Appendix A.

2. The commentary in Section 3.5 of the Green Travel Plan (Bicycle Routes) should be clarified with respect to the existing cycleways and useful unmarked bicycle routes referred to in Figure 3.3.

3. Section 3.6 (Existing Transport Mode Split) and Section 4.2 (Mode Share Targets) from the Green Travel Plan are to be revised using 2016 Census data and using a finer-grained SA1 analysis to obtain the base travel mode data from which to set the mode share targets.

4. The parking provision should be reduced to the lower end of the range in the DCP, and supplemented with at least 3 car share vehicles.

5. The lifts and lobbies on Basement levels 01-03 should be of a suitable size such that residents can transport their bicycles between their storage area and the Central Lobby area.

6. The visitor bicycle parking be relocated on-site near the main pedestrian entry off Larkin Street or in the Central Lobby area.

7. A complying 2m x 2.5m sight triangle at the access point as required by AS2890.1 needs to be provided.

8. No driveway longitudinal section starting from the centreline of the public road to the ground floor carpark entry has been submitted. The driveway gradient of 5% for the first 6m as per AS2890.1:2004 is to be demonstrated.

Water Management

1. Proposal seeks to discharge into Council's existing drainage system via a 375mm pipe. Council's pipe system will need to be investigated. The existing invert levels and exact location of the stormwater pit within the road reserve will need to be confirmed by a registered surveyor.

2. Clarification of the proposed headwall and OSD basin is required for its intended purpose. Design details of the system is to be provided. A basin within the landscaped area is not desirable to capture stormwater runoff that bypasses the OSD.

3. Provide invert levels and surface levels of all stormwater pits within the site.

4. Supporting hydraulic calculations are to be submitted to confirm that the pipeline to which connection is proposed has sufficient hydraulic capacity to accept the post developed flows.

5. No supporting hydraulic calculation submitted to demonstrate compliance with Part 24C.3-4 of the Ku-ring-gai DCP 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.

6. No clarification has been provided as to the purpose of the proposed rainwater tank given that a retention component would also be required.

7. Full design details including cross section details of the OSD and OSR are to be submitted.

8. Council's OSD Calculation Sheet is to be submitted to confirm the OSD site storage requirements have been met.

9. No stormwater disposal system has been submitted for the basement level.

10. No supporting calculation for the pump-out pit based on the 100 year 2 hour storm has been submitted.

11. Stormwater design does not show the rising main from the pump-out tank directed to the on-site detention tank.

12. No details of the location of the Allan Stormstack pit baskets have been depicted on the stormwater plan and to confirm that the pollutant load standards of the Part 24C.6 of the KDCP has been met.

13. A MUSIC Model diagram is to be submitted with the MUSIC link file.

Waste Management

1. Swept paths are to be submitted demonstrating that Council's Waste Collection Vehicle of 6.7m Mitsubishi Canter can enter and depart the garbage/room recycle storage area in a forward direction. The 6.4m SRV as shown is no longer adopted by Council.

2. Provide a longitudinal section through the driveway and into the basement carpark to clearly demonstrate that there will be 2.6 metres clear headroom along the whole of the travel path required for the small waste collection vehicle. The section must include realistic slab/beam depths, stormwater pipelines and other overhead services.

F. AFFORDABLE HOUSING NEEDS

Council acknowledges that housing in Roseville is not affordable and population displacement and community retention is a challenge in the LGA. The provision of apartment housing stock in the area, particularly affordable housing, will contribute to addressing this issue. Affordable housing should support lower income-earning key workers that are needed in their local community, such as home support workers, rather than only moderate income earners. It was specifically noted that home support workers that undertake home visits are highly sought after in the local area by aged care providers funded to support ageing individuals who wish to age in place.

Council recommends that all affordable housing units within the development should be operated by a Community Housing Provider in perpetuity (beyond the 15-year minimum requirements) as the loss of affordable housing after 15 years will result in the displacement of that resident population raising the key issues of social isolation with people having to reestablish their social and support networks elsewhere. Loss of the resident population returns the issue of loss of local workforce and thus impacts on the local community reliant on those workers.

G. SOCIAL INFRASTRUCTURE AND SERVICES

Council notes that there is a need for the provision of additional social infrastructure services to meet the demands of an increasing population resulting from high density residential developments such as the subject proposal. In particular, Council has identified the need to provide additional services and facilities including additional library spaces, cultural facilities, hireable community spaces, aquatic centres, indoor recreational spaces and open spaces to meet the demands of residents.

It is also important for the applicant and consent authority to identify the capacity of existing services such as pre-school and childcare places and address future demands as such services will be required to support young families that move into the development.

Council notes that over subscription of schools and hospitals and other social services have not been considered by the State Government for the expected cumulative development that will result from the increased housing reforms.

H. LOCAL INFRASTRUCTURE CONTRIBUTIONS

The applicable s7.11 contributions plan is Ku-ring-gai Contributions Plan 2010 and the current inflated contributions rates can be found on council’s website and on the planning portal. These are updated quarterly.