818 Pacific Highway, Gordon NSW 2072
Locked Bag 1006 Gordon NSW 2072
T 02 9424 0000 F 02 9424 0001
DX 8703 Gordon TTY 133 677
E krg@krg.nsw.gov.au
W www.krg.nsw.gov.au
ABN 86 408 856 411

Contact: B. Pearce

Ref: SSD-77825469

17 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-77825469

Thank you for the opportunity to comment on State Significant Development Application (SSD-77825469) for demolition of existing buildings and construction of a residential apartment development with 178 apartments, including 39 affordable housing apartments, above basement car parking, tree removal and lot consolidation. At No. 2 – 16 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 Brent Pearce on 9424 0768.

Yours sincerely,

Selwyn Segall
Team Leader Development Assessment

ATTACHMENT 1

Ku-ring-gai Council's objection to SSD-77825469 at No. 2 – 16 Pockley Avenue, Roseville.

BACKGROUND

An early consultation meeting was held on the 21/11/2024, followed by a meeting of the State Design Review Panel on the 19/02/2025, a Council Officer attended both meetings.

The following objections are raised to the proposal:

A. URBAN DESIGN

Summary

The proposal also attempts to fit excessive building mass onto a steep, constrained site, resulting in non-compliant setbacks, extensive excavation, and breach of height limits. In this regard amendments should be made to the design. While a 10m Larkin Street setback better integrates with the topography, a 14m western setback may benefit biodiversity. However, the current design leads to sunken, poorly separated communal spaces and reduced apartment amenity. Reducing height by one storey and better aligning bulk and scale with surrounding streets are recommended. Material authenticity is urged to enhance aesthetics and durability. Overall, further consideration is needed to balance density with compliance on setbacks, height, landscape, and apartment amenity.

Main issues:

- Unacceptable height non-compliance
- Site coverage
- Extensive excavation
- Deep soil non-compliance
- Sub-terranean apartments set below NGL requiring deep external garden terracing. Grade separation and depth especially notable along Maclaurin Parade frontage. Due to the steepness of the fall and the way it is dealt by the creation of 3 key ground level tiers (corresponding to ground plane of each building – referred to as A, B and C) this modified ground to street condition occurs at 3 separate locations along two parallel street frontages – Pockley Avenue and Maclaurin Parade.
- the corresponding changes in level across the site create 2 storey-high blank walls (fronting carparks) extending from the Pockley Avenue boundary on the north to the Maclaurin Parade boundary on the south

Context and neighborhood character

The street setback from Larkin Street (to the east) is reduced by 4m down to 6m. Consequently, the setback from Pockley Avenue (to the west) is increased by 4m to 14m. The main rationale for this reconfiguration in setbacks would appear to be determined by the reduced 6m Larkin Street setback that is being proposed for the neighbouring development (also by the same applicant) at 2&4 Larkin Street and 1,3.5 Pockley Avenue. Whilst the reduced 6m setback to the Larkin Street site might be an appropriate reference alignment for the subject proposal, it is not considered necessary and this entry way to Larkin Street would benefit from a wider compliant 10m setback.

This is due to the steep topography of the surrounding area and the narrowness of the street in this location. As the applicant correctly notes, the lower "levels 1-4 may be impacted by (the) increasing terrain (if) the mass (is) moved towards the Larkin St side of the site." This is primarily because it requires arguably greater excavation and the relationship between the COS/ POS to the east of each building needs to be positioned at a significantly lower level than the streets they interface with. This refers to the COS between Buildings A and B and between Buildings B and C that spans between Pockley Avenue to the north and Maclaurin Parade to the south. It also refers to the POS between Building A and Larkin Street. Moving the 3 buildings (A, B and C) further towards Larkin Street compounds the subterranean nature of this COS and POS as well as the amenity of apartments along the subterranean eastern frontages of these buildings.

From an urban design perspective, the wider (compliant) 10m setback to Larkin Street would be likely to deliver a better fit of the building bulk and mass into its steep location. However, if there is likely to be a demonstrable benefit to the biodiversity zone by increasing the western setback as proposed to 14m then this change (in purely urban design terms) is supported. The subterranean condition of many lower-level apartments and COS/POS is however exacerbated by the non-compliant setbacks. Not-with-standing the above, if the applicant were made to comply with the Larkin Street setback it would be even harder for them at achieve a building with the same yield. Compliance with the Larkin Street setback would mean that a higher percentage of the building area would be outside of the compliant 22m permissible height limit. The pros and cons of these different solutions would benefit from further consideration.

Built Form and Scale

The design is attempting 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 combining the SEPP TOD and SEPP IAH bonus heights along with a significant amount of excavation that effectively buries the ground floor of the buildings up to 9m below natural ground where the corresponding COS/POS interfaces with the surrounding streets including Larkin Street, Maclaurin Parade and Pockley Avenue.

The buildings are described misleadingly as "pavilions". Pavilions are small (often ephemeral) buildings for example park shelters. These are, in stark contrast, 9-storey buildings with a significant footprint.

It is true that "the division of the site into three blocks creates the opportunity for an open, connected ground plane" and enhances opportunities for dual-aspect apartments. But the COS spaces that result are constrained by their narrowness (with respect to ADG minimum building separation non-compliance), height and depth below street level, meaning they cannot be directly accessed form the street and nor can they form a continuous interface with these streets. They can only be looked over and into from Pockley Avenue and Maclaurin Parade.

It would help if the levels of these in-between ground level COS were shown as a dashed line on the north and south street elevations, to properly illustrate the visual, physical, and landscape character of the interface between the perimeter curtilage of each building and the footpath/street. As it is shown the exact interface cannot be determined.

Development appears to require substantial excavation. This creates 3 different ground level datums at RLs: Building A Ground RL 78.0, Building B Ground RL 84.4, Building C Ground RL 90.8. The height difference created between these levels and surrounding streets (at the points of intersection) are between 7-9m below street level. It requires cuttings into natural ground at 3 areas along the site with retaining walls that are approximately 7-9m high. This degree of excavation appears necessary to achieve the GFA. Even then the height of the development exceeds the height standard and such an exceedance is not justifiable.

The external spaces that are created in these COS areas are approximately 8m wide from building face to building face and do not comply with the min ADG separation of 12m. It is noted that at they may benefit from a northern orientation and are therefore likely to get reasonable solar amenity.

The Clause 4.6 Variation request claims that the increase in height is due to the topography. “Due to the complex nature of the site topography, the proposed pavilions step with the site slope in an effort minimise any significant height complications” * Appendix D Design Report - 07 Building Height.

The impact of the non-compliance is most notable along the western profile of each building and equates to 3.57m increase Building C, 4.05m increase Building B and 4.36 increase on Building A. In Ku-ring-gai and in throughout Sydney more broadly, topographic steepness is a key factor contributing to many sites. It is therefore a key characteristic to be responded to positively rather than a constraint to be overcome or varied.

Further design consideration must be given to reducing the bulk and scale by minimising height differences between ground levels and surrounding streets. The proposal attempts to fit excessive GFA onto a steep, constrained site, requiring extensive excavation—up to 9m below natural ground—and contravening the height limits under SEPP TOD and IAH bonuses. Misleadingly termed “pavilions,” the bulky 9-storey buildings disrupts street interfaces and creates narrow, sunken communal spaces that fail ADG separation standards.

Density

Considering 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.

Amenity

- 59% of units receive 2 hours sunlight on 21 June between 9am-3pm
- 69% of units can receive 2 hours of sun on 21 June between 9am-4.30pm
- Dual aspect apartments have been maximised – 60% are dual aspect (106 of 178)

It is noted that ground floor courtyard apartments to the east of building (Pavilion) A have been converted to 2-storey apartments on the advice of the SDRP which include double height spaces, two storey windows and living spaces across both ground and first storeys to improve amenity and daylighting. This is a good outcome. Further responding to comments of the SDRP, the Illustration of how each façade responds to sun, wind, views, privacy, outlook, streetscape character, etc. is also a good outcome.

Aesthetics

Indicative concept information is provided on how the facades are to be detailed, for example how the joints and fixings of stone look-alike cladding are to be expressed. The thoughtful attention given to consideration of these details is a good outcome. The interplay between dark and light-coloured materials looks to be working successfully and likely to deliver a durable architecture. All buildings will naturally weather and dis-colour over-time and this reality needs to

be accommodated within the design palette of materials and colours. This appears to be the case. Details like the angled flat bar balustrading suggest a level of design refinement that is to be commended. It is hoped that these details will not be forfeited for lesser alternatives during the documentation and construction process.

Summary

The proposal provides a skill-full architectural design response to the difficult problem of inserting a much higher density residential building into what was otherwise an R2 residential zone. Conversely the proposal also attempts to fit excessive building mass onto a steep, constrained site, resulting in non-compliant setbacks, extensive excavation, and breach of height limits. In this regard amendments should be made to the design. While a 10m Larkin Street setback better integrates with the topography, a 14m western setback may benefit biodiversity. However, the current design leads to sunken, poorly separated communal spaces and reduced apartment amenity. Reducing height by one storey and better aligning bulk and scale with surrounding streets are recommended. Material authenticity is urged to enhance aesthetics and durability. Overall, further consideration is needed to balance density with compliance on setbacks, height, landscape, and apartment amenity.

B. HEIGHT AND FLOOR 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. CLAUSE 4.6 – HEIGHT OF BUILDING

The Clause 4.6 seeks to vary the maximum building height (27.9 metres) by 4.41 metres (15.45%), resulting in a maximum building height of 32.31 metres.

The Clause 4.6 has failed to give any consideration to the objectives in Clause 4.3 in KLEP. The objectives in Clause 4.3 in KLEP deal directly with building height and should be considered in order to demonstrate whether strict compliance is "unreasonable and unnecessary" The variation request argues that compliance with the development standard is unreasonable and unnecessary for various reasons. Relevant extracts of the variation request are provided below:

Contrary to the argument advanced in the Clause 4.6 request, the proposal:

- is not of an appropriate height, bulk and scale;
- does provide an appropriate height transition to the surrounding lower density land and therefore is not compatible with the desired streetscape character;
- provides insufficient landscaping which is not in keeping with the landscaped character of the area.

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.

D. LANDSCAPING

Trees and Landscaping

The proposal fails to provide evidence that opportunities to retain significant trees have been explored and/or inform the plan. Tree 3 *Cedrus deodar* (Himalayan Cedar) in excellent health and condition, of high significance (20m high) with an AA1 Rating (highest); Tree 7 *Phoenix canariensis* (Canary Island Date Palm) in excellent health and condition, 14m high with an A1 rating, contributing positively to the established landscape character and context, and streetscape. Trees 3 and Tree 7 can be viably retained by:

- relocating the location of the proposed substation so as not to conflict with trees 6 & 7
- maintaining existing levels and grades to the existing building line (tree 3).
- Reducing excavation extent within the TPZ for large areas of POS.

NOTE: Palms (tree 7) have a fibrous root system and are tolerant of disturbance within their TPZ.

As per the project arborists reporting AA1 trees are 'important trees suitable for retention for more than 10 years and worthy of being a material constraint. AA trees are at the top of the categorisation hierarchy and should be given the most weight in any selection process. The removal of trees 3 and 7 fails to maintain significant trees that contribute positively to the streetscape and established landscape character.

Additional trees including trees: 4, 6, 26 and 28 with locations adjacent to site boundaries are worthy of retention, particularly with A1 category ratings. The Z12 ratings accorded to trees 6 and 12 is disagreed with. While the trees maybe co-dominant (which is quite typical of the species), they do not have any structural floors they contribute positively to the established landscape character and context of Roseville.

With a large site area of over 7000sqm, there is design opportunity and flexibility to retain highly significant trees (tree 3) and locate areas of deep soil to enable the viable retention of other trees with high and moderate landscape significance (trees: 6, 7, 28, 35 and 36) to maintain the established landscape character. The nominated tree removal (clearing all trees and vegetation on site) is inconsistent with Issue 8 of SEARS.

The submitted landscape plan fails to satisfy Issue 8 of SEARS as the plans and plant schedule does not adequately detail the proposed site planting location or number. Only tree location and numbers have been provided. A detailed planting plan should be provided to provide certainty and clarity of proposed landscape outcomes.

The proposal fails to maximise opportunities for green infrastructure components, consistent with Greener Places. For example, no rooftop gardens/green roof is proposed. A green roof is an appropriate design outcome as the site sits below the ridgeline and with future tall residential development proposed upslope, future residents will overlook the rooftop.

Landscape

The proposal is inconsistent with the landscape design principle for the following reasons:

- The proposed removal of trees: 3, 6, 7, 28, and 35 fails to retain an existing positive natural feature that forms part of the local context and character and provides habitat (3a, d, e & f).
- The proposed removal of tree: 3, 6 and 7 fails to respect neighbour's amenity (4d).
- The planting of tall canopy tree species within restricted landscape areas with reduced soil volumes fails to provide for practical establishment and long-term tree management and viability (5).
- The proposed landscape aesthetic that excludes the use of exotic deciduous and evergreen tree species fails to adequately respond to the landscape character of the streetscape and neighbourhood (2).

BASIX inconsistency

The submitted BASIX certificate (1792023M dated 15/04/2025) and development proposal is inconsistent for the following reasons:

- The common area of lawn is inconsistent – 1943.8m2 nominated / 0.0m2 proposed
- The common area of garden is inconsistent – 194m2 nominated / >1900m2 proposed
- The certificate fails to nominate private areas of garden and lawn that are proposed as part of the development. The following dwellings have areas of private planters (areas of garden and lawn) proposed: A.GR.02, A.GR.03, A.GR.04

NOTE: Gardens and lawn have differing water use requirements.

BASIX definitions include:

> ***Common area:*** means spaces within the development site that can be used by the occupants of more than one dwelling or services more than one dwelling, and includes shared open space, shared lobbies, corridors, gyms, pools, car parks and common service areas such as plant rooms and garbage areas.
>
> ***Private landscaping:*** for a dwelling, means landscaping that is for the private use of occupants of the dwelling (and is not a common area).

Therefore, the areas that are fenced as private courtyards and planter boxes directly associated with and only accessible from private terraces are assessed as private areas of garden and lawn. An amended certificate consistent with the development proposal is required.

Deep soil zones

The location of proposed deep soil zones has not adequately considered the retention of trees with high significance including trees: 3 and 7 and fails to satisfy the design guidance to retain existing significant trees.

The lack of deep soil landscape areas within the Maclaurin and Larkin St site frontages fails to provide viable soil volumes and areas for the planting of tall canopy trees to contribute to the streetscape and public domain, and in turn fails to recognise the established landscape character.

It is important to note that deep soil zones and canopy tree planting (existing and proposed) are considered fundamental to the desired future character of residential apartment development in Ku ring gai. This is further reinforced in the Local Strategic Planning Statement which describes the established tree canopy in Ku ring gai is a defining characteristic and essential to the 'look and feel' of Ku ring gai.

Due to the sites context and established character, it is assessed that as the site area of 6539m2 is significantly larger than 1500m2 the ADG 15% deep soil should apply as a minimum.

The applicants deep soil compliance plan incorrectly includes areas that are inconsistent with the definition.

For example:

- The nominated areas located adjacent to the Maclaurin Pde frontage are traversed by retaining structures and do not meet the minimum 6.0m dimension.
- The area to the west of the on-site detention tank within the Pockley Ave site frontage fails to meet the minimum 6.0m dimension.

For clarity and certainty of design outcomes an amended compliance plan and area calculation/s, consistent with the definition is requested. The proposal fails to meet the 15% deep soil zone design criteria objective. The lack of deep soil zones within site frontages is inconsistent with 'Greener Places' design opportunities for supplementary tall tree plantings consistent with the established landscape character and streetscape.

The planting of tall endemic species within restricted planting areas with limited soil volumes is considered unviable and does not provide certainty of long term planting outcomes.

Landscape design contributes to the streetscape and amenity

The removal and loss of mature and significant trees that contribute positively to the established streetscape and landscape character and the desired future landscape character of high retention values in good health and condition does not contribute to the streetscape and amenity and is inconsistent with ADG Objective Part 4O-2 and design guidance.

There is design opportunity to enable the viable retention of trees: 3 and 7 (high significance) and other trees that contribute to the established landscape and streetscape character (trees: 6, 28 and 35). If the retention of trees 6, and 28 (Jacaranda) is not favourably considered, replenishment species should be consistent to reflect and maintain the established landscape

context.

Stormwater

The location of the proposed OSD tank outside of the basement footprint within development setback areas within the Pockley Ave site frontage fails to adequately consider the impacts for the ability of the proposal to provide deep soil landscape zone for the planting of trees to contribute positively to the streetscape and landscape character. The OSD tank location should be reconsidered and relocated within the building footprint and outside of boundary setbacks and street frontages.

Tree and Vegetation Preservation

The removal of trees of high significance including trees: 3 and 7 fails to protect, maintain and preserve the tree canopy and established landscape character.

Landscape character

The landscape plans fail to provide sufficient detail of the proposed site planting, including location, number and species of plantings as required by Issue 8 of SEARS. For certainty and clarity of landscape outcomes and consistency with SEARS, a detailed planting plan and fully detailed plant schedule shall be submitted.

The planting of tall Eucalypts (>20m) with broad canopy dimensions (>20m) e.g. *Eucalyptus saligna* (Sydney Blue Gum) near the building and built infrastructure is ill-advised and will lead to future and ongoing conflict resulting in the planting being unviable. While the planting of tall Eucalypts that strongly define Ku ring gai's landscape character is encouraged, they should be appropriately located with suitable setbacks to enable their future canopy growth and development.

The proposed native planting aesthetic fails to respond to the existing established or desired urban landscape character and broader context, where exotic trees and understorey canopy and plantings provide seasonal change and variation, and solar amenity beneath a taller endemic tree canopy.

Bluestone is uncharacteristic of Ku ring gai. The use of Sydney sandstone is more appropriate to maintain and enhance the established landscape character and context.

The lack of deep soil landscape areas to two site frontages fails to maintain established landscape character with the planting of tall trees.

The removal of trees with broader landscape significance in good health and condition (trees 3 and 7) fails to maintain existing landscape character.

E. ENGINEERING

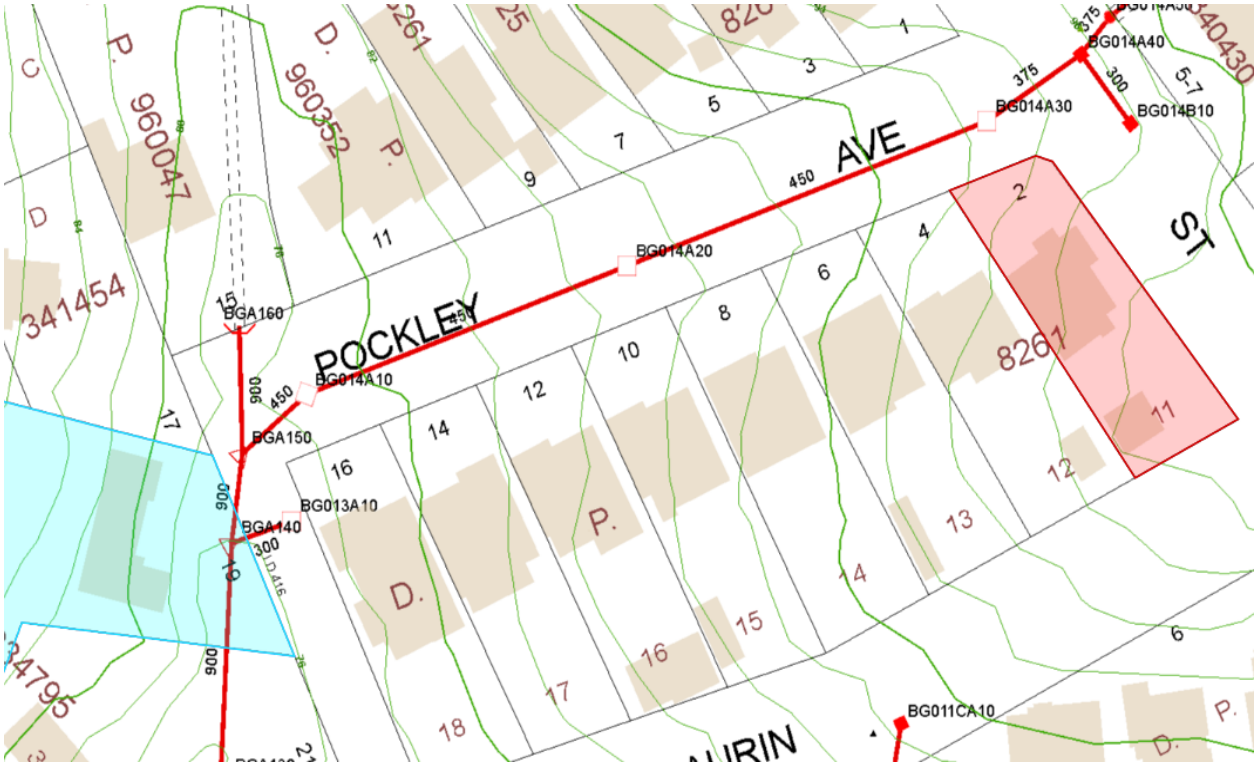
A stormwater management plan has been submitted and prepared by Stantec.

Site Design for Water Management

The 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.

A CCTV video and report of the existing pit and pipe fronting to Council's trunk drainage system shall form part of this required certification. The condition of the existing pipe is to be inspected by a licensed plumber to verify if the existing pipe is in good working condition. The findings of the plumber report are to be submitted.

The design engineer is to check the size of the pipe to which connection is proposed and confirm its hydraulic capacity to ensure the pipe can accepted the post developed flows.



On-site Detention

The stormwater plans show an on-site detention tank of total storage of 126m^3 located at the north- western corner of the site. No design details of the OSD have been submitted together with Council's OSD Calculation Sheet to confirm the site storage requirements.

The location of the access pits to the detention system and rainwater tank are to be readily accessible external to the building and outside of the communal area (not within private courtyard). This will need to be verified.

On-site Stormwater Management

A BASIX Certificate has been submitted, requiring a 5,000L rainwater tank to capture 2245.58sqm of roof area and provide irrigation of 1943.8sqm of common landscaped area and 1 car wash. The stormwater plans do not show any rainwater tank(s) or depicts its storage volume with re-use to be provided. A water balance model is to be submitted to reduce the site runoff days by 50.0% which would satisfy Council's streamflow objectives under Part 24C.3 of the Ku-ring-gai DCP.

Pump-out tank

No pump-out pit within the basement has been shown with the rising main discharge to the

stormwater pit. The pump-out tank is to be designed based on the 100-year 2 hour storm as required under Part 24B.5 of the KDCP.

Stormwater Quality Control

The captured stormwater will be treated using OCEAN PROTECT 'StormFilter'. No details of the location of the Stormfilters and Oceanguards have been depicted on the stormwater plan to satisfy the pollution load standards of the KDCP. MUSIC Link result summary has been provided.

Flood Studies and Design Procedures

A flood study report prepared by a suitably qualified hydraulic engineer is to be submitted for the 1% AEP design storm to determine the extent of the flow path & freeboard requirements.

The development site is slightly affected by the 1% AEP flood at the North-Western corner; however, the footprint of the development is not affected. It would be necessary to physically protect the North-Western corner of the site from the PMF plus say 200 mm freeboard to eliminate any risk of flooding during the maximum possible flood.

Confirmation from the Design Engineer that the minimum floor levels for the proposed development as depicted on the architectural plans has met the design requirements levels as stated within the Flood Risk Management Report.

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: 29 vehicle trips (2-way) per hour.
- PM peak hour: 21 vehicle trips (2-way) per hour.

No operational assessment of this intersection was carried out in the TPAR, presumably because it is considered that additional vehicle movements of this magnitude (an average of 1 additional vehicle trip every 2 minutes in the AM peak and an additional vehicle trip every 3 minutes in the PM peak) would have not significant 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:

Use	**Market Housing**	**Affordable Housing**
Studio	-	-
1 bedroom	0	20
2 bedroom	54	19
3+ bedroom	85	-
Total	**139**	**39**

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	182	204-282	252 (breakdown not provided)
Residential - Affordable	23	-	
Visitor	-	30	31
Car Share Bay		2	2
Car Wash Bay	-	Can be shared with visitor parking bay	1
Loading Bay	-	1	1
Total	**205**	**235-311**	**287**

The total proposed residential parking provision meets the requirements of both the TOD SEPP and the Ku-ring-gai DCP.

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 bus routes, shops and amenities, the parking provision should be reduced to the lower end of the Ku-ring-gai DCP range to better align with current vehicle ownership patterns in the area, and supplemented with additional 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. A possible allocation of parking spaces could be as follows:

Total		Allocation of SEPP parking provision				
Unit type		Units with **0** spaces	Units with **1** space	Units with **2** spaces		
Studio						
1br		10	10			
2br		10	63			
3+br			25	60		
visitor						
Total			98	120	218	Total spaces
		20	98	60	178	units
		11%	**55%**	**34%**	**Parking space allocation**	

Reducing the proposed resident car parking provision to 218 spaces will also improve affordability, as providing car parking at the lower end of Ku-ring-gai DCP range 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.

Control 11 in Part 7B.1 of the Ku-ring-gai DCP requires that at least 1 visitor parking space be accessible, but there are none shown on the architectural plans. This could be included as a condition of consent.

Car share spaces

For high density residential developments, the Ku-ring-gai DCP requires 1 car share space per 90 dwellings (or part thereof). This would result in the provision of 2 car share spaces, which the proposal complies with.

However, recent guidance from one car share provider suggests the following rate of 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

Based on the reduced car parking provision and allocation, and the relatively high numbers of 2-bed+ units with one parking space, it is recommended that at least 5 on-site car share spaces be provided. This could be by way of re-allocation of an excess visitor car parking space and residential car parking spaces.

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. Conditions similar to the following could be imposed:

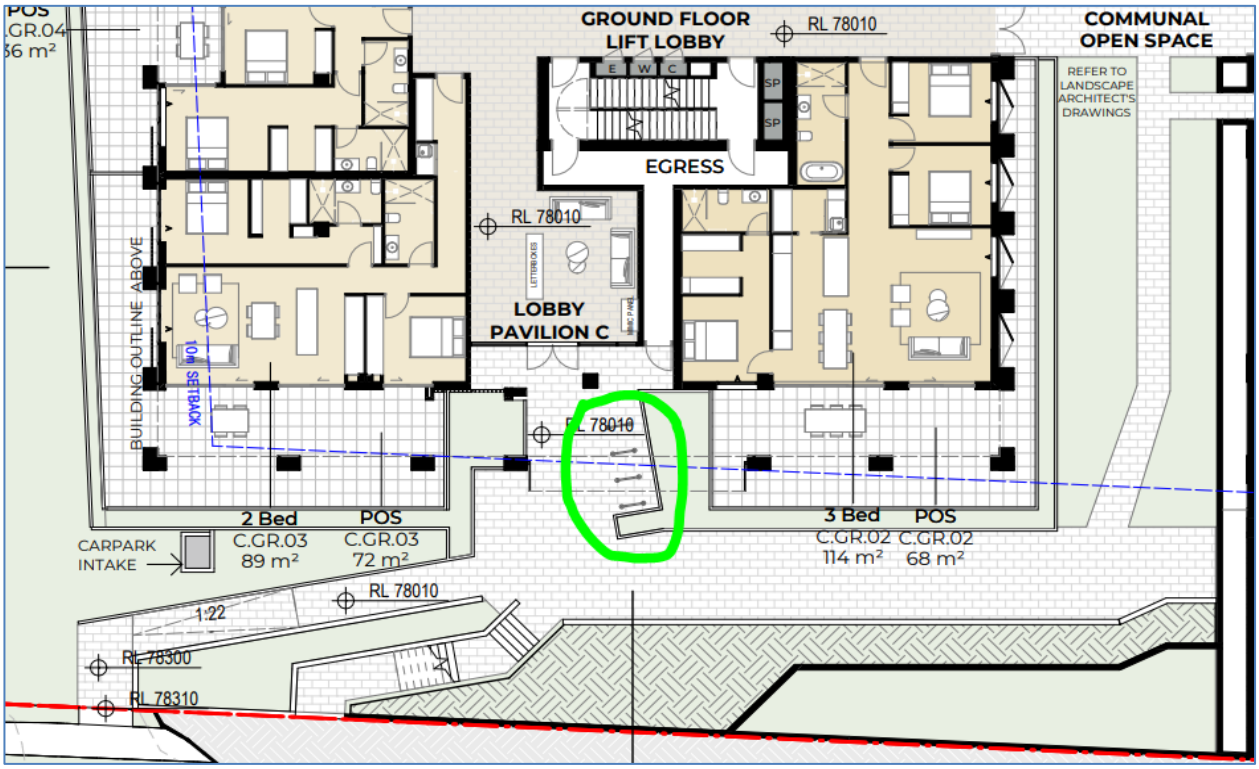
- At least 5 car parking spaces on Basement 03 level are to be reserved for car share operation, with no charge to the car share operator to use the space/s.
- The spaces must be available/accessible to verified members of the car share scheme (including members who are not residents of the development) and should be well-lit with safe pedestrian access.
- 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.
- Car share vehicles must be operational within 4 weeks of issue of the Occupation Certificate
- The agreement must ensure appropriate insurance and vehicle maintenance is in place, including public liability.
- 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.

Bicycle Parking

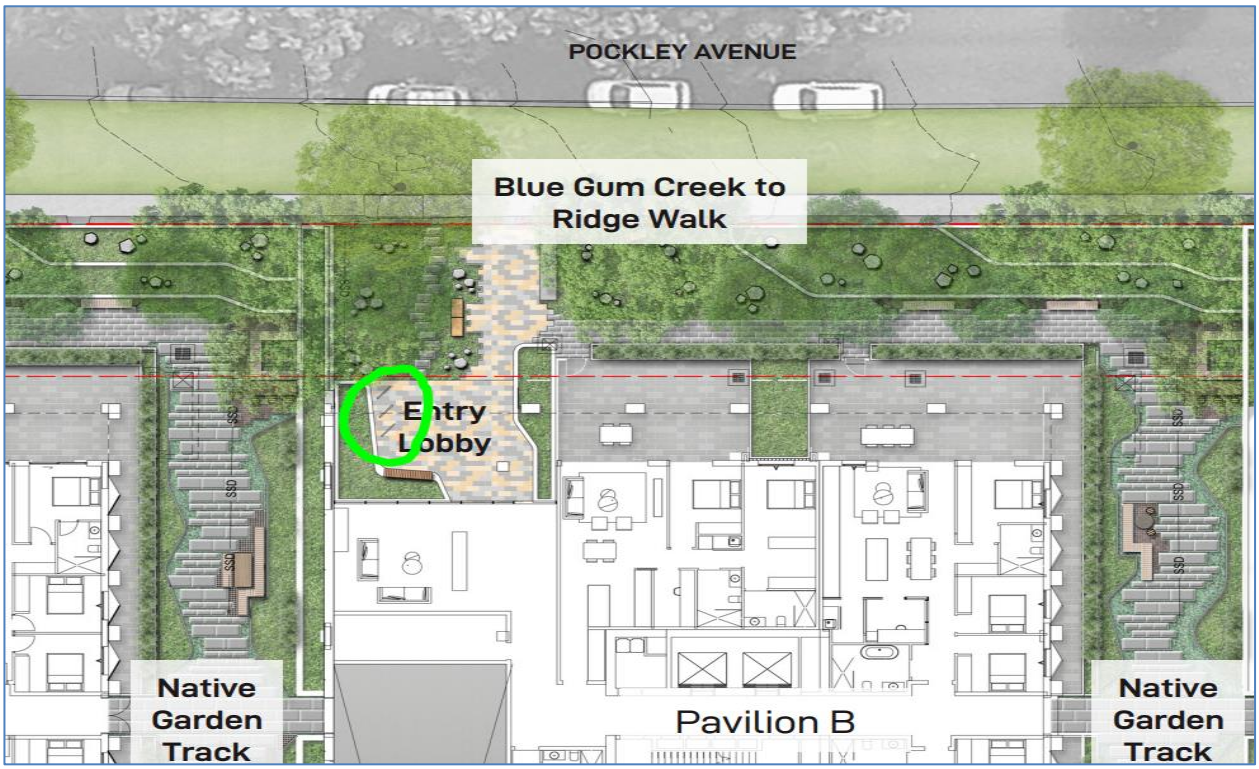
The number of bicycle parking facilities for residents and visitors is provided in accordance with the Ku-ring-gai DCP.

Resident bicycle parking is proposed to be located in allocated resident storage areas on the various basement levels. The entry ramps and the ramps connecting the basement levels 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 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.

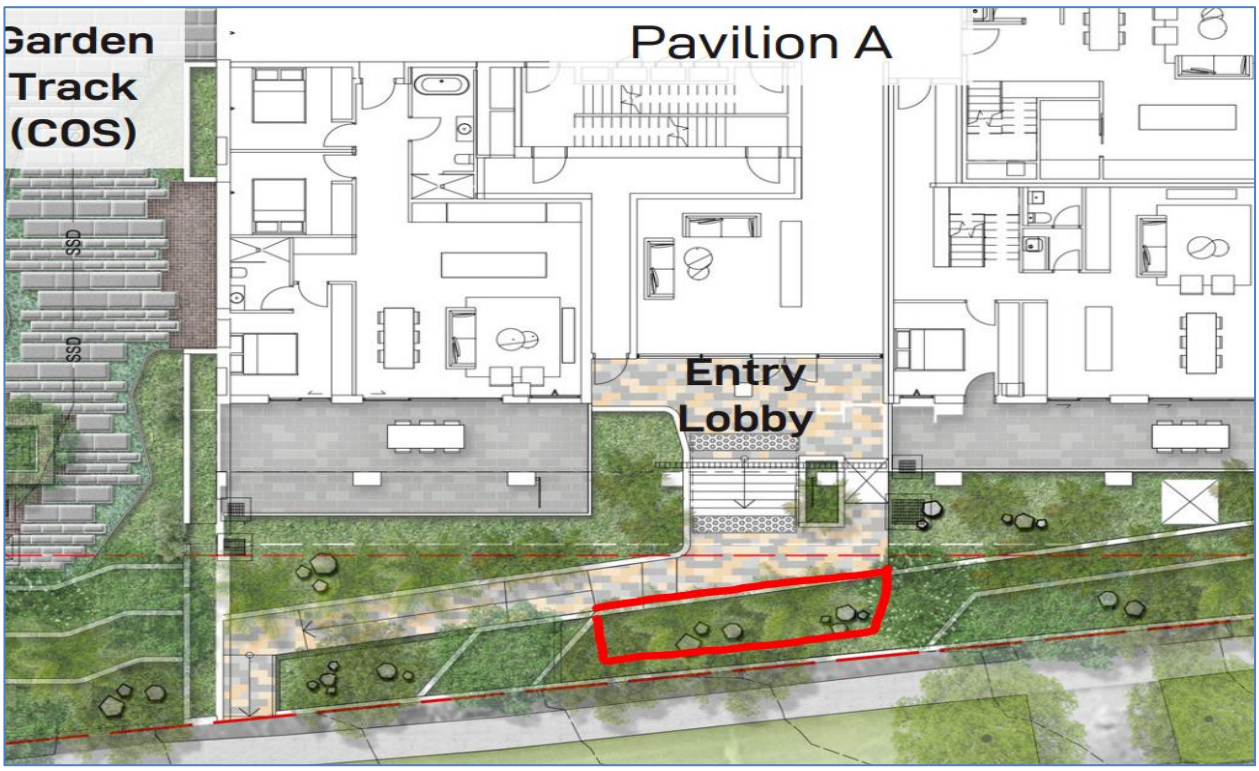
From the Architectural Plan, 4 visitor bicycle parking racks were found to be located outside the Pavilion C Lobby, which are supported:



The Landscape Plan shows 3 visitor bicycle racks outside the Pavilion B Lobby, which are acceptable:



However, none could be found near the Pavilion A Lobby. It is recommended that some of the visitor bicycle racks from Pavilion B and C be re-distributed to the Pavilion A Lobby as shown in red in the Landscape Plan below: This should be included as a condition of consent.

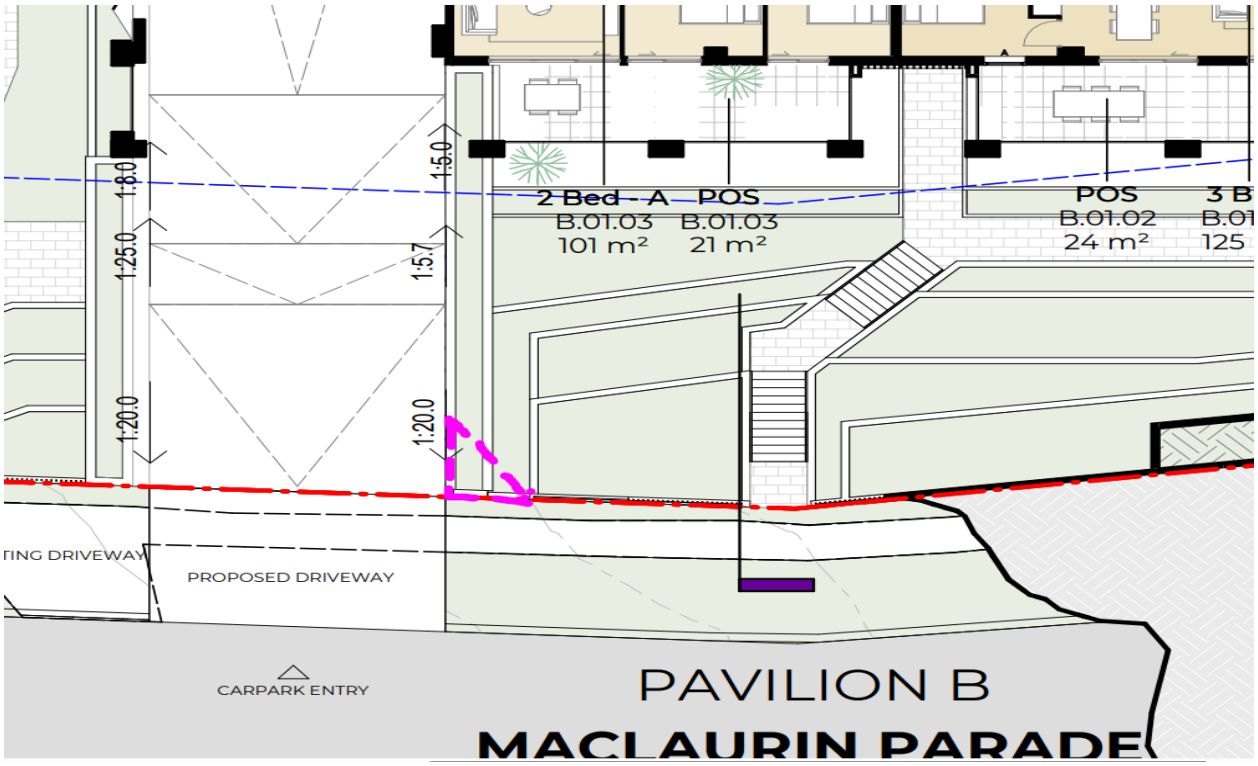


Electric Vehicles (EVs)

In accordance with the Ku-ring-gai DCP, the Environmental Impact statement notes that 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 can be included as a condition of consent.

Access Point

A 7.2m wide access point at the property boundary and kerb line is proposed, which is acceptable. It is unclear what the treatment is in the area of the 2m x 2.5m sight triangle as required by AS2890.1 (shown in pink below), and this needs to be clarified:



Currently, No Parking restrictions are currently in place on the Maclaurin Parade frontage of the site, from Pockley Avenue to (approximately) the western side of the proposed access point. 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 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

Car Share

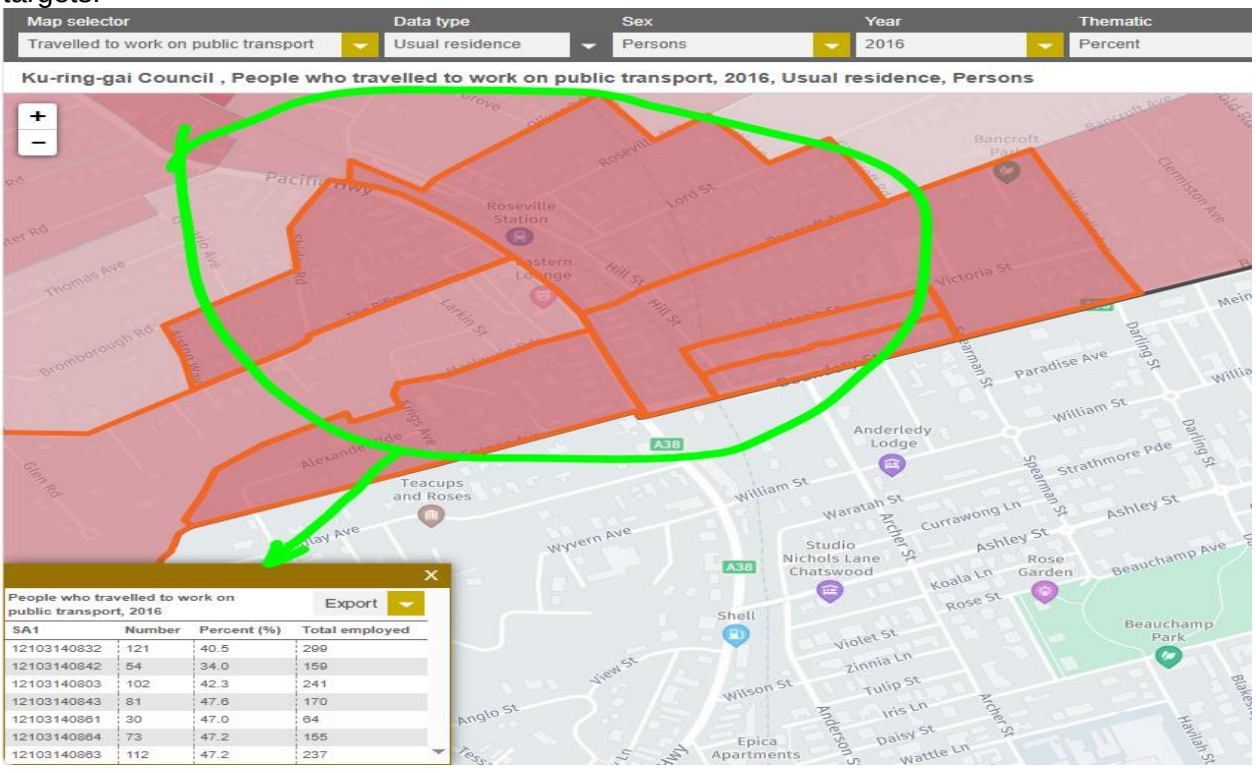
This section notes that there are existing car share vehicles by one car share provider in the area, with the closest being in Hill Street, near Victoria Street (approx. 10 minutes walk from the site) and Westbourne Road Lindfield (approx. 10 minutes walk), but these are unlikely to be convenient locations 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.

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.

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

An indicative construction traffic management plan (CTMP) has been provided.

All heavy vehicles involved in the demolition, excavation and construction of the proposed development are to approach and depart the site via the Pacific Highway, Maclaurin Parade, Larkin Street and Pockley Avenue.

All demolition and excavated spoil will be loaded wholly within the site, using a variety of truck types and sizes, ranging from small and medium bogey trucks up to and including 11m in length. Trucks will enter and exit the site in a forward direction via the existing/future driveway located midway off the Maclaurin Parade site frontage.

Loading/unloading activities will occur entirely within the front setback area of the site, fronting the Pockley Avenue site frontage and therefore a Works Zone is not considered necessary.

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

General

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.

Provision has been made for a small refuse collection vehicle of 6.4m to access the basement. A 6.7m refuse truck is not shown and will need to be provided to Council's current waste vehicle.

Access to Collection Point Loading/Servicing Provisions

A longitudinal section is to be submitted demonstrating that a clear head height of 2.6m and throughout the basement carpark along the path of travel can be provided. The driveway grade of 20% for the small waste collection vehicle is also to be demonstrated.

Residential Buildings

In order to meet Council's servicing requirements, all general waste will be serviced by 34 x 660L bins, Paper/Cardboard Recycling will be serviced by 18 x 660L bins, Comingled Recycling will be serviced by 18 x 660L bins, FOGO will be serviced by 9 x 240L band there will be Service Bins of 3 x 660L bins.

Impacts on Council Infrastructure

Detailed design drawings to include new 1.2m wide footpath, upgrades to the nature strip, stormwater pit upgrade and new 375mm diameter pipe in Pockley Avenue is required. These works will be assessed by Council's Operations Department for approval under the Roads Act. No final certificate would be issued until the works are completed to the satisfaction of Council.

Geotechnical Investigation

A geotechnical report based on boreholes drilled to below basement level is to be submitted with

the DA. The report is to contain recommendations for excavation methods and support, vibration monitoring, dilapidation survey etc. Groundwater levels are to be recorded to determine if permanent dewatering will be required, in which case the DA may require referral to NSW Office of Water for licensing conditions (Integrated).

Ei Australia has conducted a preliminary geotechnical site investigation at the subject site. Drilling of eleven boreholes in total and four Dynamic Cone Penetrometer (DCP) tests. The subsurface conditions comprised of fill/topsoil and overlying shale and sandstone.

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.

For a drained basement, drainage should be provided behind all basement retaining/shoring walls, around the perimeter of the basement and below the basement slab. The completed excavation should be inspected by the hydraulic engineer to confirm that adequate drainage has been allowed for. Drainage should be connected to the sump-and-pump system and discharging into the stormwater system.

In the event that groundwater will be encountered, it will be conditioned 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.

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.

Engineering Recommendations

The proposal is not supported by sufficient information.

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. A CCTV video and report of the existing pit and pipe fronting to Council's trunk drainage system shall form part of this required certification. The condition of the existing pipe is to be inspected by a licenced plumber to verify if the existing pipe is in good working condition. The findings of the plumber report are to be submitted.

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. The location of the access pits to the detention system and rainwater tank are to be readily accessible external to the building and outside of the communal area (not within private courtyard). This will need to be verified.

13. No details of the location of the Stormfilters and Oceanguards 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.

Flood Assessment

1. Confirmation from the Design Engineer that the minimum floor levels for the proposed development as depicted on the architectural plans has met the 500mm above the 1% AEP levels as stated within Flood Risk Management Report.

Car Parking / Vehicular Access & Traffic Assessment

1. Demonstrate compliance with the 2m x 2.5m sight triangle at the access point as required by AS2890.1:2004.

2. 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.

3. 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.

4. 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.

5. The residential car parking provision should be reduced to the lower end of the range in the Ku-ring-gai DCP, and supplemented with at least 5 car share vehicles.

6. At least 1 visitor car parking space is to be designed as accessible in accordance with AS2890.6.

7. At least 5 car parking spaces on Basement 03 level are to be reserved for car share operation, with no charge to the car share operator to use the space/s.

8. The lifts and lobbies 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.

9. Some of the visitor bicycle parking devices from Pavilion B and C are to be re-distributed to the Pavilion A Lobby.

10. An on-site loading area should be provided. The position of which 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 which is at least 3.5m wide 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.

Civil Plans

1. Stormwater discharge connection to the existing stormwater pit in Pockley Avenue will need to be upgraded. Consultation with Council's Design Engineer is recommended.

2. A footpath design is to be provided along the site's frontage and is to be designed in accordance with Council drawing 2003-004 Rev. 'B'. A footpath longitudinal section will also need to show the extent of cut/fill, existing services and existing street tree locations. The project arborist will need to endorse the civil plans. All redundant driveway crossing are to be shown to be removed.

Waste Management

1. Swept paths analysis is to be amended 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.

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 as required under Part 25A.3 of the KDCP. 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.