AGENDA
DEVELOPMENT ADVISORY UNIT MEETING

NOTICE OF MEETING

I respectfully bring to the attention of Committee Members that a Development Advisory Unit Meeting will be held in the Melville Civic Centre, 10 Almondbury Road, Booragoon on Monday, 2 November 2026 commencing at 9:00 AM.

Kate Bainbridge
Manager Development Approvals

The City of Melville acknowledges the Bibbulmun people as the Traditional Custodians of the land on which the City stands today and pays its respects to the Whadjuk people, and Elders past, present and future.

Use this link to access the City of Melville Council Meetings YouTube channel to watch the live stream or access the recordings of public Council meetings.

Development Advisory Unit

1. **The DAU is not a decision making forum – it is an operational meeting to inform the recommendation to the Manager Statutory Planning on Development Applications and other planning proposals.**

2. **Should any Elected Member wish to discuss the content of any item included as part of the attached agenda, please contact Kate Bainbridge, Manager Statutory Planning and Building. Contact should be established as soon as possible after the publication of the agenda to the City of Melville website. Contact details are as follows: Tel 9364 0626 or via the Elected Members Portal.**

3. **Should an Elected Member propose that an item on this agenda be referred to Council for determination, a request to that effect must be made to the Chief Executive Officer (CEO). This request shall be made in accordance with the requirements set out by DAU Terms of Reference contained within Local Planning Policy LPP 1.1 'Planning Process and Decision Making'.**

4. **Should any applicant or adjoining property owner object to any proposal included as part of this DAU agenda, then an opportunity exists to request that the application be determined by Council. All such requests should be referred to an Elected Member of Council for the Ward within which the development application is located. An Elected Member may request that the application be determined by Council. Any call up request from an Elected Member shall be made in accordance with the requirements set out by DAU Terms of Reference contained within Local Planning Policy LPP 1.1 'Planning Process and Decision Making'.**

5. **In the absence of any referral request, a decision on any application included as part of this DAU agenda can take place under delegated authority to the Manager Statutory Planning and Building, after midday on the second Monday after the Friday publication of the minutes to the City's website. In the event that the DAU Agenda is not published to the City's website until the Monday after the DAU meeting, a decision on the application can still take place the following Monday.**

DISTRIBUTED: 6 NOVEMBER 2026

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1 ATTENDANCE AND APOLOGIES

In Attendance

Officer	Role
Kate Bainbridge	Manager Development Approvals
Troy Cappellucci	Principal Statutory Planner
Liam Johnson	Senior Statutory Planner
Nathan Mazzega	Acting Senior Statutory Planner
Kamal Khalil	Traffic and Road Safety Coordinator
Vanja Marjanovic	Service Lead - Resource Recovery & Waste
Paul Neal	Waste Collection Driver

Apologies

Nil

2 BUSINESS

	Matters for consideration	Notes from meeting
UP26/130	DA-2026-532 - 22 Multiple Dwellings at Nos. 109-141 (Lot 369) Somerville Boulevard, Winthrop	

3 OUTCOMES

The following items are to have recommendations created and included in the next agenda:

- Nil

The following items are to be deferred to the next DAU and represented with more information:

- Nil

4 ITEMS

UP26/130 22 Multiple Dwellings at Nos. 109-141 (Lot 369) Somerville Boulevard, Winthrop

Ward	Central Ward
Category	Operational
File Number:	
Responsible Officer:	Manager Development Approvals
Voting Requirements:	Simple Majority
Officer Disclosure of Interest:	Nil
Application Number:	DA-2026-532
Applicant:	TBB Planning
Owner:	Nostec Pty Ltd
Proposal:	22 Multiple Dwellings
Attachments:	1. Development Plans 2. Traffic Impact Statement 3. Waste Management Plan 4. Landscaping Concept Plan 5. Environmental Sustainbility Design Report 6. Local Development Plan - Lot 369 Somerville Boulevard, Winthrop

COUNCIL'S ROLE

Quasi-Judicial: When the Council determines an application/matter that directly affects a person's rights and interests. The judicial character arises from the obligation to abide by the principles of natural justice.

SUMMARY

- Development approval is sought for the construction of 22 Multiple Dwellings at Nos. 109-141 (Lot 369) Somerville Boulevard, Winthrop, on land forming part of the Winthrop Neighbourhood Centre.
- The subject site is zoned Centre C4 Neighbourhood Centre under the City of Melville's Local Planning Scheme No. 6 (LPS6) and is subject to an approved Local Development Plan (LDP) (See Attachment 6) which facilitates higher-density residential development within this portion of the centre.
- The application has been assessed against LPS6, the approved LDP, Residential Design Codes Volume 1 Part C (R-Codes) and relevant local planning policies.
- The proposed development requires a performance assessment in relation to plot ratio and street setbacks, private open space, trees and landscaping, communal open space, size and layout of dwellings and visitor parking.
- The application was advertised in accordance with the provisions of the R-Codes, *Planning and Development (Local Planning Scheme) Regulations 2015* and Local Planning Policy 1.1 – Planning Processes and Decision Making (LPP1.1) from 5 August 2026 until 2

September 2026. This included sending letters to all owners and residents within 200m of the subject site, publishing notice on our website, and placing signage on site. Forty-five (45) submissions were received during the advertising period, comprising 36 objections, six submissions in support and three neutral/conditional submissions.

- The primary matters raised through the consultation period related to traffic and congestion, resident and visitor parking, loss of shopping centre parking, building height and bulk, residential density, neighbourhood character, privacy, landscaping and pedestrian safety. Submissions in support generally identified the benefits of additional housing supply, housing diversity, downsizer opportunities and locating increased residential density close to shops, services and public transport. This is elaborated on in more detail in the Engagement section of this report.
- Following advertising and further technical review, a Further Information Request (FIR) was issued to the applicant. This included a request for reconsideration of the proposed visitor parking and amendments to the Waste Management Plan (WMP). The applicant has provided additional information to support a reciprocal arrangement with the shopping centre.
- This application was discussed in accordance with LPP 1.1 at the Development Advisory Unit (DAU) meeting held on 2 November 2026 where it was determined that the development is suitable for recommendation for approval subject to conditions.
- Parking has been a key consideration throughout the assessment. The development provides compliant resident and bicycle parking numbers against the relevant provisions, while five visitor bays are to be secured within the adjoining Winthrop Shopping Centre through a reciprocal rights arrangement, consistent with the approach contemplated by the LDP. At the DAU meeting, it was confirmed that a condition is recommended to ensure this arrangement with Winthrop Shopping Centre occurs and the parking for the development was acceptable. It was also noted that the verge is not suitable due to it's width and conflict with existing infrastructure and future waste collection.
- At the DAU meeting, discussion was also had on the amended Waste Management Plan (WMP) (Attachment 3), specifically regarding on-street waste collection. As a result of the discussion, a condition has been recommended requiring an amended WMP be provided to ensure on-street waste collection is provided for the development and from Jackson Avenue, Winthrop. On-site collection is not supported for safety reasons given the tight manoeuvring and potential shopping centre traffic conflicts.
- Several conditions are recommended to address other matters arising through the assessment, landscaping, sustainability and acoustic management. Given the development is for multiple dwellings (apartments) a condition requiring an acoustic report has been recommended to ensure the apartments are designed and mechanical equipment associated with the development complies with the *Environmental Protection (Noise) Regulations 1997*. The recommendations of the subsequently approved Acoustic Report will then need to be incorporated into the development and maintained during its operation.

OFFICER RECOMMENDATION

That the Development Advisory Unit recommends approval of the development subject to the following conditions:

1. **Development is to be in accordance with the attached approved plan(s) dated insert and subject to any modifications required as a consequence of any condition(s) of this approval. The endorsed plans are not to be modified or altered without the prior written approval of the City.**
2. **Prior to commencement of development, amended plans are to be submitted demonstrating minimum area of 3m^2 for all stores dedicated to one-bedroom apartments to the satisfaction of the City.**
3. **Prior to the commencement of development, a stormwater design plan is to be submitted for the approval of the City.**

   Prior to initial occupation of the development a Certificate of Compliance certifying that the development has been constructed in accordance with the approved plan is to be submitted to the City and thereafter all stormwater generated on site is to be retained on site in accordance with the approved plan.
4. **Prior to the commencement of construction, amended plans are to be submitted to and approved by the City, demonstrating secure, permanent and enclosed storage areas being provided for each multiple dwelling with minimum dimensions to satisfy the Residential Design Codes Volume 1 Part C, Cl 2.1.9 deemed to comply requirement, to the satisfaction of the City. Prior to the initial occupation of the development, the storage areas are to be provided in accordance with the approved detailed plans, to the satisfaction of the City.**
5. **Prior to the initial occupation of the development, all parking bays, bay dimensions, manoeuvring areas, driveway, ramp gradients, and points of ingress and egress and vehicle access sightlines shall be provided in accordance with the approved plans and Australian Standard AS2890.1:2004, to the satisfaction of the City. The access and parking for the development shall thereafter be maintained for the life of the development.**
6. **Any street walls and fences (including the height of any retaining walls) constructed within the street setback areas are to meet the requirements contained within Local Planning Policy 3.1 – Residential Development to the satisfaction of the City.**
7. **Prior to occupation of the development, the owner of the subject land shall provide evidence, that a legally enforceable reciprocal parking agreement has been entered into with the owner of Winthrop Shopping Centre site and the City, securing five (5) car parking bays within Winthrop Shopping Centre site for the exclusive use of visitors to the multiple dwelling development via a caveat on title.**

   The reciprocal parking agreement shall:

   - **secure the availability of the five (5) visitor parking bays for the life of the development;**
   - **identify the location of the five (5) parking bays;**
   - **require the five (5) parking bays to be appropriately marked and signposted for the use of visitors to the multiple dwelling development; and**
   - **be prepared and, where applicable, registered to the satisfaction of the City.**

   All costs associated with the preparation, execution and registration of the reciprocal parking agreement and associated caveat shall be borne by the owner of the subject land.

8. **Prior to demolition or construction commencing, a Demolition and Construction Management Plan (CMP) is to be submitted to and approved by the City. The CMP will require approval by the City prior to the issue of the associated Building Permit or Demolition Permit. Once approved in writing by the City, the development is to be carried out in accordance with the CMP to the satisfaction of the City. Any modifications to the CMP are to be approved by the City in writing.**
9. **Prior to the initial occupation of the development, an updated Waste Management Plan (WMP) is to be submitted and approved by the City. The WMP will require on street waste collection off Jackson Avenue for the development. Once approved, the development is to be constructed and operated in accordance with the WMP, to the satisfaction of the City.**
10. **Prior to construction commencing, a Public Art Plan is to be submitted to and approved in writing by the City in consultation with the City's Public Art Panel. In lieu of the provision of art on site, a cash in lieu contribution may be made for all or portion of the required contribution prior to construction commencing, to the satisfaction of the City.**
11. **Prior to the commencement of the development, details of the exterior colours, materials and finishes are to be submitted to and approved in writing, by the City. The development shall thereafter be constructed in accordance with those approved details, to the satisfaction of the City.**
12. **Prior to the occupation of the development, the subject site is to be served by an approved vehicle crossover constructed to the City's specifications and satisfaction.**
13. **Prior to commencement development, a detailed Acoustic Report is to be submitted to the City for approval to demonstrate how the development including mechanical plant will comply with the *Environmental Protection (Noise) Regulations 1997*. The development is required to be constructed with and operate in accordance with the recommendations set out in the approved Acoustic Report, to the satisfaction of the City.**

    Prior to the occupation of the development, evidence is to be submitted demonstrating compliance with recommendations set out in the required Acoustic Report, to the satisfaction of the City.
14. **Prior to the commencement of development, a Green Star Registration Certificate by a Green Star accredited professional must be submitted to the City to confirm the development can achieve a 4-Star Green Star - Design & As Built certified rating (demonstrating 'Australian Excellence') or equivalent. This should be supported by a project plan or similar confirmation document. Within 24 months of practical completion, an as Built certification must be achieved and evidence of this provided and approved in writing by the City.**
15. **Prior to the commencement of the development, updated plans and supporting documentation is to be submitted to and approved in writing by the City to demonstrate all the measures identified in the Energy Efficiency Certification (ESD Section J Report, dated 6 May 2026) have been incorporated into the design.**

    Prior to occupation, evidence is to be provided from a suitably qualified consultant, confirming that the development has been constructed in accordance with the approved plans.
16. **Prior to commencement of development, a detailed landscaping and reticulation plan for the subject site and/or the road verge(s) adjacent to the site is to be submitted to and approved in writing by the City which is consistent with the concept landscaping plan (dated 5 August 2026) which forms part of this approval. The landscaping plan is to include proposed details of (but is not limited to):**

a) **The location, number and type of proposed trees and shrubs including planter size and planting density;**
b) **Any lawns to be established;**
c) **Any existing vegetation and/or landscaped areas to be retained;**
d) **Any verge treatments;**
e) **The two on-street parking bays on Jackson Avenue being deleted; and**
f) **The trees within the Tree Preservation Area identified in the Local Development Plan titled 'Lot 369 Somerville Boulevard, Winthrop', being retained and maintained.**

The approved landscaping and reticulation plan shall be fully implemented within the first available planting season after the initial occupation of the development and maintained thereafter, to the satisfaction of the City.

17. **Temporary structures, such as prefabricated or demountable offices, portable toilets and skip bins necessary to facilitate storage, administration and construction activities are permitted to be installed within the property boundaries of the subject site(s) for the duration of the construction period. These structures are to be located so not to obstruct vehicle sight lines of the subject site, the adjacent road network or of adjoining properties to the satisfaction of the City and are to be removed prior to initial occupation of the development.**
18. **Any roof mounted or freestanding plant or equipment shall be located and/or screened so as not to be visible from the surrounding street(s) to the satisfaction of the City.**
19. **Lighting is to be provided to all car parking areas in accordance with Australian Standard AS 1158.3.1 (Cat. P). All external lighting to be hooded and oriented to minimise light spill.**
20. **The bin compound(s) are to be constructed to satisfy the following requirements:**
    a. **Provided with a tap and connected to an adequate supply of water. The tap is to be located in a position so that it will not be susceptible to being damaged by the bins being removed for collection.**
    b. **Having an access point of not less than 1 metre in width for resident/tenants to access the area and fitted with a self-closing gate.**
    c. **Access point for collection is to be of suitable size for the size of the bins used and the collection method proposed.**
    d. **Containing a smooth and impervious floor of not less than 75 millimetres in thickness; and provided with adequate and appropriate drainage to sewer. This pertains to commercial properties where approval is required from the Water Corporation for discharge of liquid waste.**
    e. **be ventilated in accordance with Australian Standard 1668.2: The Use of Ventilation and Air Conditioning in Buildings (as amended).**
    f. **Not readily accessible by the public.**
    g. **To have no steps or gradient from the bin store to the bin service area.**

PURPOSE

The purpose of this report is to provide an outline of the key matters of consideration for the proposed development, outline where discretion is required to be exercised and appropriateness of the discretion against the relevant performance criteria and outline the DAU reasoning for support.

STRATEGIC ALIGNMENT

Outcome	3	Sustainable, connected development and transport infrastructure across our City.
Objective	3	Sustainable and Connected Development
	3.1	Facilitate enhanced and sustainable urban development and amenity.
	3.3	Plan for urban growth and local commercial activity centres.

BACKGROUND

In May 2026, a development application was lodged for a 22 multiple dwellings development at No. 109-141 (Lot 369) Somerville Boulevard, Winthrop. The proposal comprises a four-storey apartment building containing a mix of one, two and three-bedroom dwellings together with lower-ground parking comprising 43 on-site car parking bays and associated landscaping and site works.

The subject site is located within the Winthrop Neighbourhood Centre and is zoned Centre C4 under Local Planning Scheme No. 6. The site forms part of the broader Winthrop Shopping Centre landholding and is subject to an approved LDP, which was adopted by Council in November 2017 (Attachment 6) and establishes site-specific development standards to facilitate future apartment development on the subject land.

In accordance with the *Planning and Development (Local Planning Schemes) Regulations 2015* and LPP1.1, the proposal was advertised via sending letters to all owners and residents within 200m of the subject site, publishing a notice on our website, and placing signage on site. This resulted in a total of 45 submissions being received comprising 36 objections, six in support and three neutral or conditional submissions.

The primary concerns raised through the advertising process related to visitor parking provision, traffic generation, the loss of shopping centre parking, building height and scale, privacy impacts, residential density and the retention of landscaping and mature trees. This is elaborated on in more detail in the Engagement section of this report.

Since advertising occurred, as part of the City's assessment of the application, it was identified that the initially submitted WMP was unable to be supported, specifically regarding waste needing to be collected on-street, not on-site as proposed. In addition, in terms of car parking supply provided by the development, all the on-street (verge) parking bays proposed to fulfill the visitor car parking required for the development were not considered acceptable due the reduced verge width and conflicts with existing street infrastructure and proposed waste collection.

Consequently, in response to the concerns raised during consultation and the above concerns from the City's assessment of the proposal, the City worked with the applicant to explore amendments that would reduce the potential impacts of the proposal on adjoining properties. This was achieved through:

- The removal of all proposed car parking bays within the verges of Jackson Avenue and Hatherely Parade.
- As per provision 5.1 within the LDP for the subject site, proposed to address the shortfall in visitor car parking bays on-site via a reciprocal rights arrangement with the shopping centre for to up 5 parking bays via a condition of development approval.
- The demonstration that the shopping centre has a surplus of car parking to support the visitor parking.

While in regard to the City's concerns with waste management, no changes to the proposed WMP were proposed by the applicant. However, after further discussions with the applicant, they have agreed for a recommended condition to be imposed to regarding the update of the WMP to require on-street waste collection arrangements, rather than waste being collected on-site.

Readvertising of the amended plans was not considered necessary, as the amendments addressed the majority of concerns raised by the submissions and from the City's assessment of the application or resulted in greater compliance with the deemed-to-comply provisions (hence limiting the amount of discretion sought) or were able to be addressed through recommended conditions.

Following receipt of the revised plans and supporting reports, a revised assessment was undertaken in relation to elements where discretion is still required to be exercised. The assessment has found that the amended proposal is considered to satisfy the relevant Design Principles as discussed in later sections of this report.

As there are outstanding objections to the development, the application was discussed at a Development Advisory Unit (DAU) and agenda published with officer recommendation as per procedures within LPP1.1.



Figure 1. Aerial Image of Subject Site (where development occurring marked in yellow)

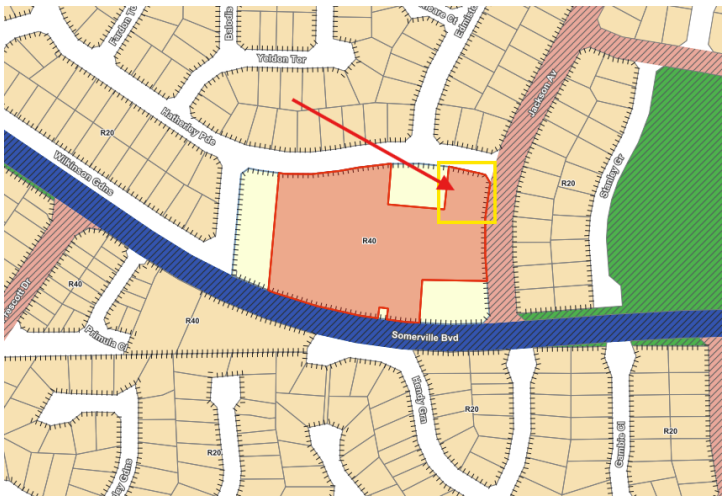


Figure 2. LPS6 Zoning Map Context (where development occurring marked in yellow)

Scheme Provisions

MRS Zoning		Urban
LPS Zoning		C4 – Neighbourhood Centre
R-Code		R40
Use Type		Multiple Dwellings
Use Class		LPS6 defers to the LDP for land use permissibility – The LDP stipulates that a multiple dwelling development is a permitted land use on this site

Site Details

Lot Area		21,274m^2 (Parent Lot)
Retention of Existing Vegetation		Trees are retained where possible
Street Tree(s)		Yes
Street Furniture (drainage pits etc.)		Yes
Site Details		Existing Winthrop Shopping Centre

CONSIDERATION

The application has been assessed against the provisions of LPS6, the applicable LDP, the R-Codes and relevant Local Planning Policies. The proposal complies with all the relevant development requirements except for those matters listed below, for which a performance assessment is required.

Local Planning Scheme and Local Policy Requirements

Local Development Plan – Lot 369 Somerville Boulevard, Winthrop

Development Requirement	Deemed to Comply	Proposed	Comments
Plot Ratio	Maximum plot ratio of 1.25	1.28	Requires a performance assessment. Refer to discussion below.
Street Setbacks	To Hatherley Parade, upper levels required to be setback 7m. To Jackson Avenue, upper most level required to be setback 4m from setback of proceeding floor	1.6m setbacks to Hatherley Parade at Levels 1 and 2. Upper most level facing Jackson Avenue is not setback 4m from setback of proceeding floor.	Requires a performance assessment. Refer to discussion below.

Residential Design Codes Volume 1 Part C

Development Requirement	Deemed to Comply	Proposed	Comments
Clause 1.1 – Private Open Space	Minimum dimensions – 3m	Minor shortfalls to minimum dimension of 3m for some of the dwellings	Through the assessment against the design principles, the City has deemed this element as being acceptable.
Clause 1.2 – Trees and Landscaping	15% soft landscaping and required tree provisions	12.6% soft landscaping and reduced medium tree provision	Requires assessment against the relevant Design Principles. Refer to discussion below.
Clause 1.3 - Communal Open Space	Maximum 100m² hard landscaping	106m² hard landscaping	Through the assessment against the design principles, the City has deemed this element as being acceptable.
Clause 2.1 - Size and Layout of Dwellings	Minimum storage area – 3m²	One storage area undersized at 2m²	Condition recommended to be imposed requiring all dwellings to achieve compliance.
Clause 2.3 - Visitor Parking	6 visitor parking bays on-site	No on-site visitor parking bays proposed. 5 bays proposed within adjoining shopping centre through reciprocal rights agreement (as per LDP) which still results in a shortfall of 1 visitor parking bay.	Requires assessment against the relevant Design Principles. Refer to discussion below.

Comment

Local Development Plan

The subject site is located within the Winthrop Neighbourhood Centre and is subject to an approved LDP, which provides the site-specific planning framework for the proposed development which is located within residential development site as per Figure 3 below.

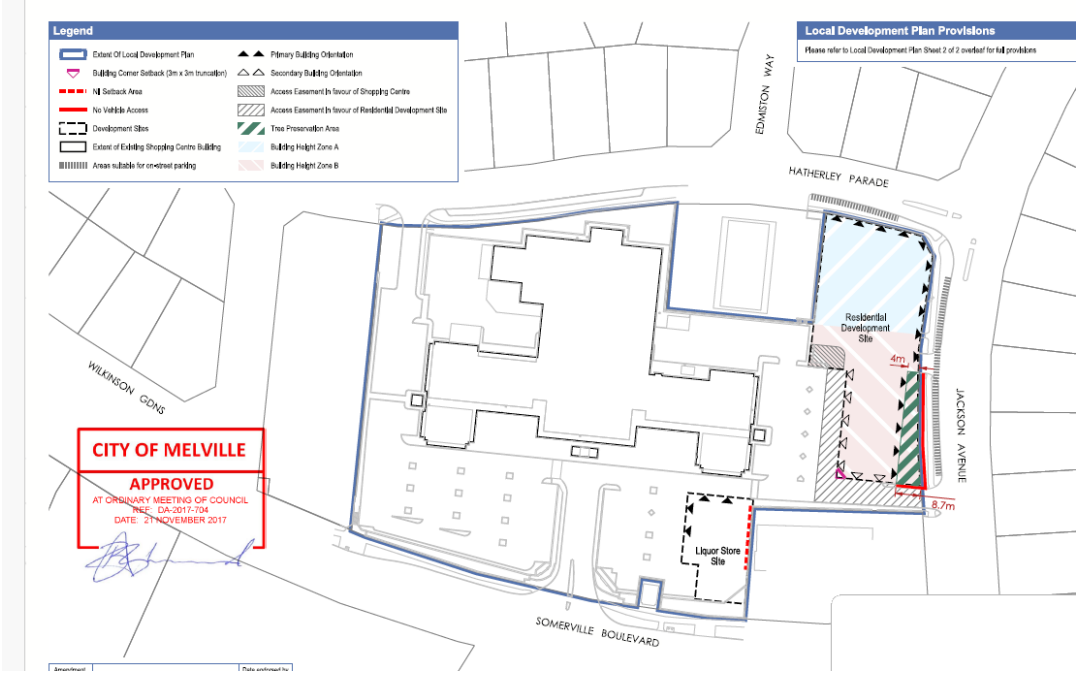


Figure 3 – Image of Area captured within the LDP for Lot 369 Somerville Boulevard, Winthrop, with the subject proposal being within the area marked as (Residential Development Site)

The LDP facilitates higher-density residential development on the site and establishes requirements relating to matters including plot ratio, building setbacks and reciprocal parking arrangements.

Plot Ratio

The proposal provides a plot ratio of 1.28 in lieu of the maximum 1.25 prescribed by the LDP. The exceedance is minor and is not considered to materially increase the overall bulk or intensity of the development beyond that contemplated for the site. Importantly, the additional floor area does not compromise the provision of landscaping, communal open space, parking or residential amenity. The development remains consistent with the broader intent of the LDP to facilitate higher-density residential development within the Winthrop Neighbourhood Centre and the minor plot ratio discretion is considered supportable. Furthermore a number of changes have been made to the R-Codes since the adoption of the LDP which has increased minimum internal area requirements which contributes to plot ratio.

Street Setbacks

Discretion is also sought in relation to portions of the building's street setbacks prescribed by the LDP. The reduced setbacks are considered appropriate having regard to the context and interfaces of the development site. The development does not directly interface with conventional low-density residential boundaries, with the relevant interfaces predominantly comprising streets, the adjoining shopping centre and other Centre-zoned land. The building incorporates substantial articulation, balconies, varied materials, landscaping and architectural elements which assist in reducing the perception of building bulk and provide a high-quality streetscape presentation. The reduced setbacks are therefore not considered to result in unacceptable visual, privacy or amenity impacts.

Overall, the proposal is considered to remain consistent with the development outcome contemplated by the LDP, notwithstanding the minor areas of discretion identified above.

<u>R-Codes Volume 1 Part C</u>

The proposal has been assessed against the applicable provisions of the Residential Design Codes Volume 1 Part C. While the development generally satisfies the Deemed-to-Comply requirements, several minor areas of discretion require assessment against the relevant Design Principles.

Trees and Landscaping

Concerns were raised by submitters regarding the removal of mature vegetation and the amount of landscaping proposed. The development provides 12.6% soft landscaping in lieu of 15% and does not provide the prescribed number of medium trees as noted above. Notwithstanding these numerical shortfalls, the landscaping plan provides a comprehensive landscape response and was reviewed by the City's Parks team, which considered the proposed outcome adequate and supportable. In addition, the proposed development is considered to meet the relevant design principles of the R-Codes as discussed below:

Design Principles	Assessment
P1.2.1 Site planning allows for site responsive and sustainable landscape design and the retention of existing trees on the site and adjoining properties.	The landscaping response has been designed around the proposed apartment development and its neighbourhood centre setting. Existing vegetation has been retained where practicable, while new planting is incorporated throughout the development to provide a sustainable landscape response that complements the built form.
P1.2.2 Provision of trees and high-quality landscaping enhances the built form, streetscape and pedestrian amenity, provides shade and amenity to communal areas and contributes to the visual appeal and outlook of the development.	Notwithstanding the numerical shortfall, the proposed landscaping is considered high quality and is distributed throughout the site to soften the built form, improve streetscape presentation and enhance communal areas. Planting also provides improved outlook and amenity from habitable rooms and private and communal open spaces.
P1.2.3 Development provides sufficient deep soil area to sustain healthy tree and plant growth, increase urban tree canopy and assist in managing stormwater.	The proposal incorporates deep soil and landscaped areas capable of supporting vegetation and contributing to longer-term landscape establishment. When considered holistically, the landscaping scheme provides an appropriate landscape and amenity outcome and satisfies the relevant Design Principles.

Visitor Parking

Parking was the most significant issue raised during public consultation. Submitters raised concerns regarding visitor parking, potential overflow into surrounding streets, the loss or use of shopping centre parking and the cumulative parking impacts associated with redevelopment of the centre. However, in regard to compliance with the associated planning framework, the only car parking non-compliance proposed is in terms of the number of on-site visitor parking bays proposed as outlined above whereby the R-Codes require six visitor bays on-site. However, the subject LDP as per provision 5.1 (see excerpt below) contemplates reciprocal parking between the residential development and adjoining shopping centre.

5. Parking

5.1 Residential visitor parking for multiple dwellings may be located on street where achievable and subject to the approval of the City of Melville. Up to 5 parking bays located within the shopping centre site are available for inclusion within the calculation of visitor parking provisions for multiple dwellings, subject to a reciprocal rights arrangement with the shopping centre and subject to approval by the City of Melville.

Figure 4 – Excerpt from LDP for Lot 369 Somerville Boulevard, Winthrop in relation to residential visitor car parking requirements

The proposal provides five visitor bays within the shopping centre, which will be secured through an appropriate reciprocal rights agreement, as recommended as a condition of development approval. This approach enables existing parking infrastructure within the broader centre to be efficiently utilised while ensuring visitor parking remains readily accessible to the residential development. The reciprocal parking arrangement is considered consistent with the intent of the LDP. The rationale behind the provision being included within the LDP was due to the identified surplus of car parking at the shopping centre applying a technical assessment using the ratios under the City's Local Planning Policy 1.6 – Parking and Access and natural reciprocity with the centre – noting that many visitors may also be patrons of the shopping centre as well.

In addition, the proposed non-compliance is considered to meet the relevant design principles of the R-Codes as discussed below:

Design Principles	Assessment
P2.3.1 Parking does not dominate the development or streetscape and responds appropriately to the local context.	Parking is integrated into the overall development and does not dominate the streetscape or detract from landscaping, communal areas or the presentation of the apartment building. The reciprocal visitor parking arrangement also makes efficient use of parking already available within the adjoining neighbourhood centre.
P2.3.2 Adequate parking is provided for various transport modes having regard to proximity to public transport, activity centres and amenities, dwelling numbers and the availability of on street and other off-street parking.	The proposed five visitor bays represent a minor one-bay shortfall. The bays will be conveniently located within the adjoining shopping centre and secured through a reciprocal rights arrangement. The site is located within the Winthrop Neighbourhood Centre, immediately adjacent to shops and services and with access to alternative transport options. Resident, bicycle and motorcycle/scooter parking otherwise complies. In this context, the five visitor bays are considered adequate to service the anticipated needs of the 22 dwellings.
P2.3.3 Parking spaces are designed for flexibility and adaptability having regard to occupant needs and alternative uses.	The parking configuration provides functional parking for residents and visitors and is integrated with the broader parking environment of the neighbourhood centre. The identified one-bay visitor parking shortfall does not compromise the functionality or adaptability of the overall parking arrangement.

ENGAGEMENT

Advertising Required	Yes
Neighbour's Comment Supplied	Yes
Reason	Required pursuant to LPP1.1 Planning Process and Decision-Making Clause 1.7.6
Support/Object	36 objections, six support and three neutral/conditional submissions

A summary of the content of the submissions received and a response is provided in the table below:

Summary of Submission	Support / Objection	Officer's Comment	Action (Condition / Uphold / Not Uphold)
Concerns with traffic generation, congestion and road/pedestrian safety	Objection	The Traffic Impact Assessment (TIA) was independently reviewed, with minor matters subsequently addressed through an amended TIA. The proposal is not considered to result in an unacceptable impact on the surrounding road network. There is concern in relation to the initially proposed on-street bays and conflicts with existing movement arrangements and	Partially Uphold

		hence these have been removed from the proposal.	
Concerns with resident and visitor parking, including impacts on shopping centre parking	Objection	Parking has been considered extensively through the assessment. Resident and bicycle parking requirements are satisfied. The proposed non-compliance with the number of visitor car parking bays provided on-site is considered to meet the design principles under Clause 2.3 'Visitor Parking' of the R-Codes as outlined in the above Comments section of this report when considering what is allowed in regards to a reciprocal arrangement with the adjoining shopping centre as per the LDP that is applicable to the development. There is a technical surplus of car parking on site to support the development and minimal key overlap times in peak demand.	Not Uphold
Concerns with building height, bulk, density and neighbourhood character	Objection	The site is zoned Centre C4 Neighbourhood Centre and is subject to an approved LDP facilitating higher-density residential development. The proposed built form and applicable identified areas of discretion being sort by the development in regard to plot ratio and street setbacks are considered appropriate having regard to the site context, architectural treatment and applicable planning framework as outlined above in the Comments section of this report.	Not Uphold
Concerns with privacy, overlooking and residential amenity	Objection	The proposal has been assessed against R-Codes Volume 1 Part C. The development does not directly interface with conventional residential side or rear boundaries and is compliant with the applicable privacy deemed-to-comply requirements of the R-Codes.	Not Uphold
Concerns with tree retention, landscaping and streetscape impacts	Objection	Existing trees are retained where practicable and a comprehensive landscaping scheme is proposed. The landscaping was reviewed internally and is considered to provide an appropriate streetscape and residential amenity outcome. As outlined above in the Comments section of this report, where discretion is being sort to the landscaping requirements of the R-Codes, it is considered to meet the relevant design principles.	Not Uphold
The development will provide additional housing supply,	Support	Noted. The development will provide 22 multiple dwellings within an established neighbourhood centre, increasing housing choice close to shops, services and public	Uphold

housing diversity and downsizer opportunities		transport.	

SUSTAINABILITY IMPLICATIONS

There are no sustainability implications presented as part of this report.

LEGISLATIVE AND POLICY ALIGNMENT

This proposal has been assessed in accordance with the *Planning and Development (Local Planning Schemes) Regulations 2015* (Regulations), LPS6, associated LDP for the subject site and relevant local planning policies. The requirements of the Regulations and LPP 1.1 necessitated the advertising of this application. Based on valid objections being received, the application is required to go through the DAU process prior to determination at either Council or by officers under delegation.

FINANCIAL IMPLICATIONS

There are no direct financial implications for the City relating to this proposal.

CONSEQUENCE

This application is proposed to be approved under delegation as per the officer recommendation through the DAU Process. However, should Elected Members have an alternative view, the DAU 'call-up' procedures provide opportunity to call this matter up for formal Council consideration at the next available Council meeting following call up.

BRIEFING FORUM – FURTHER INFORMATION

This section may be updated following the Agenda Briefing Forum to include any Elected Members questions and responses, or requests for further information.

5 OUTCOMES FOLLOWING CALL UP PERIOD

This section will be updated following the closure of the call up period – please refer to the DAU Terms of Reference for further information.

6 CLOSURE

9,.45am

CAMERON
CHISHOLM
NICOL



DEVELOPMENT APPLICATION

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT A000

P25037 01/10/2026 SK

CAMERON CHISHOLM NICOL



1 **NORTH ELEVATION**
1 : 200



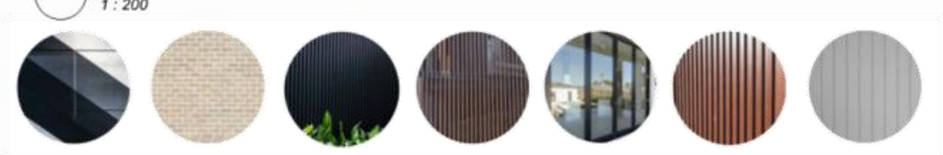
2 **EAST ELEVATION**
1 : 200



3 **SOUTH ELEVATION**
1 : 200



4 **WEST ELEVATION**
1 : 200



OBSCURE GLASS BALUSTRADING | FACE BRICKWORK | CHARCOAL ALUMINIUM SLATS | TIMBER LOOK ALUMINIUM SLATS | ALUMINIUM JOINERY | TERRAIN COLORBOND ROOF & WALL CLADDING | GROOVED LIGHT WEIGHT CLADDING

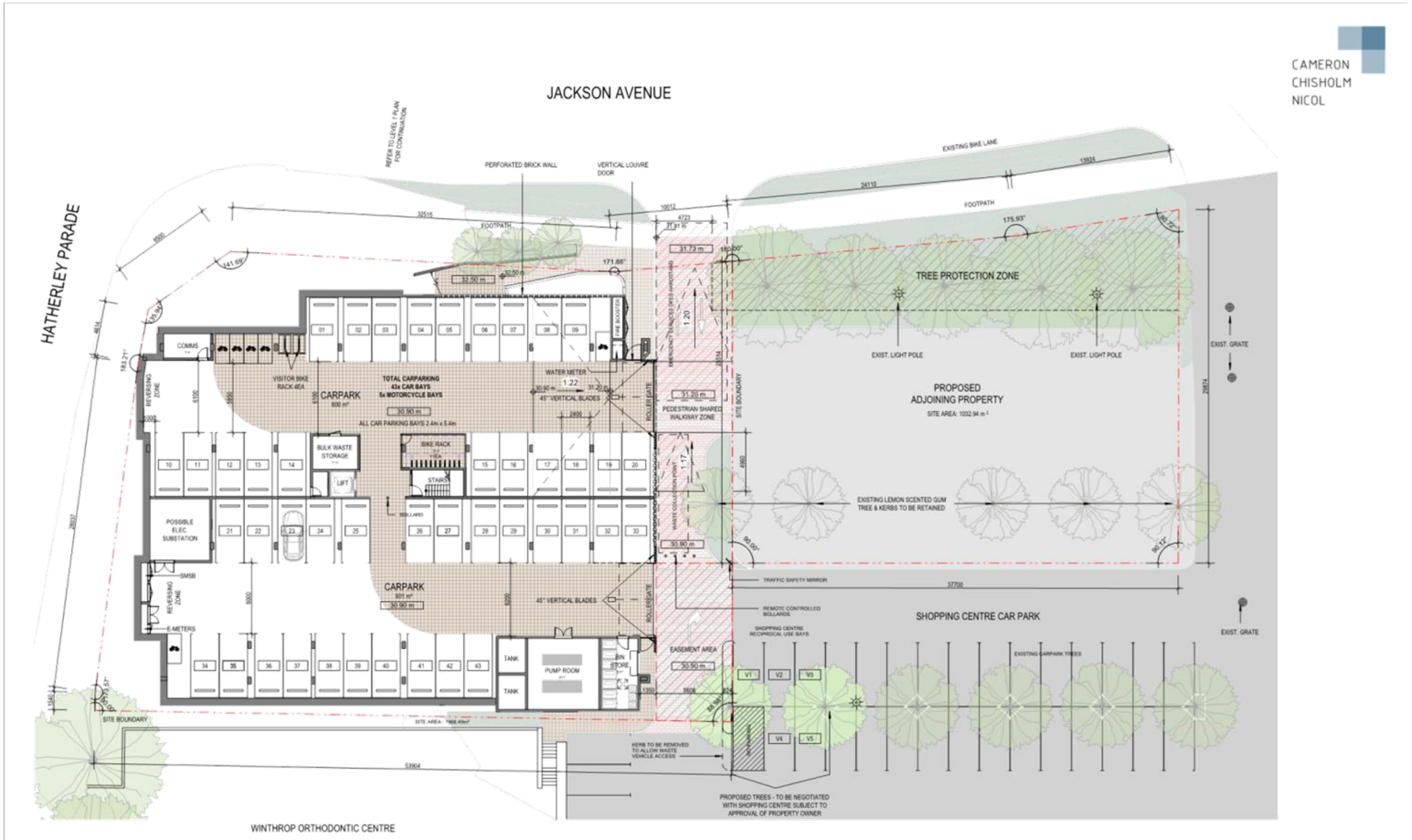
EXTERNAL ELEVATIONS

2 4 8 16 m SCALE 1 : 200 (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

P25037 21/07/2026

A002 SK



LOWER GROUND

2 4 8 16 m SCALE 1 : 200 (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

P25037 01/10/2026 A100 SK

CAMERON CHISHOLM NICOL



1 A002 DA - 00 GROUND LEVEL
1 : 200

2 A002 DA - 01 LEVEL
1 : 200

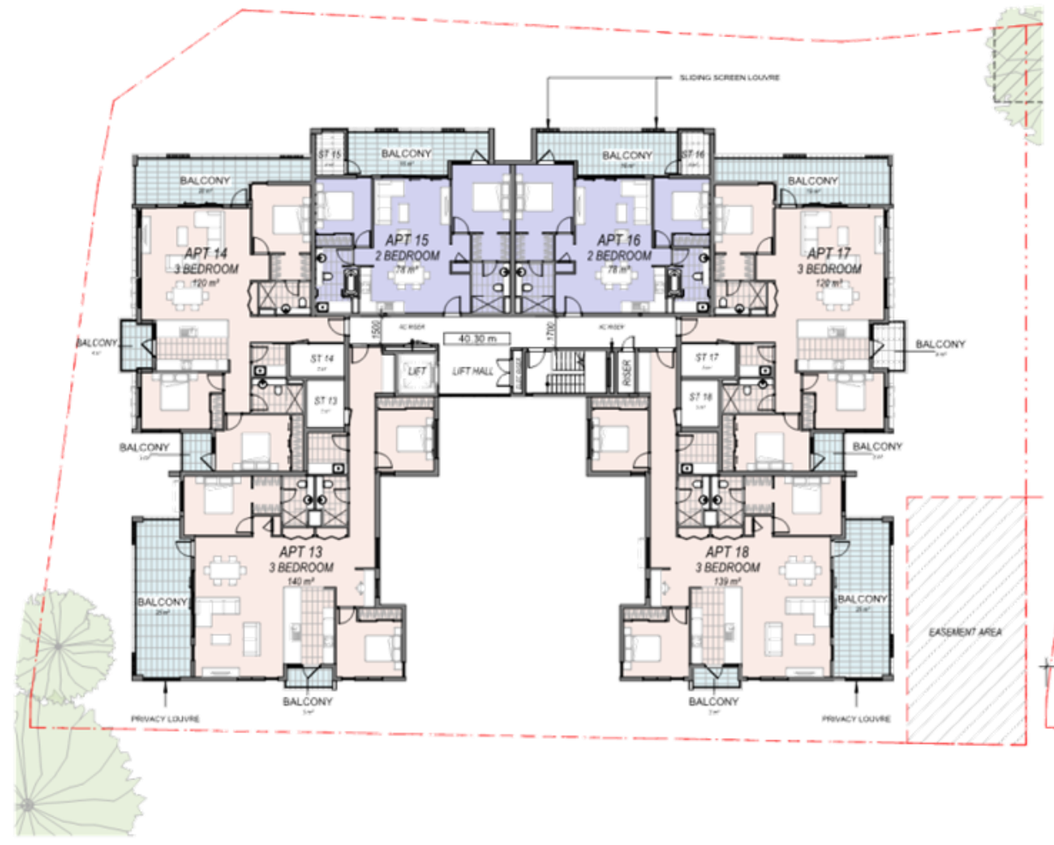
GROUND FLOOR & LEVEL 1

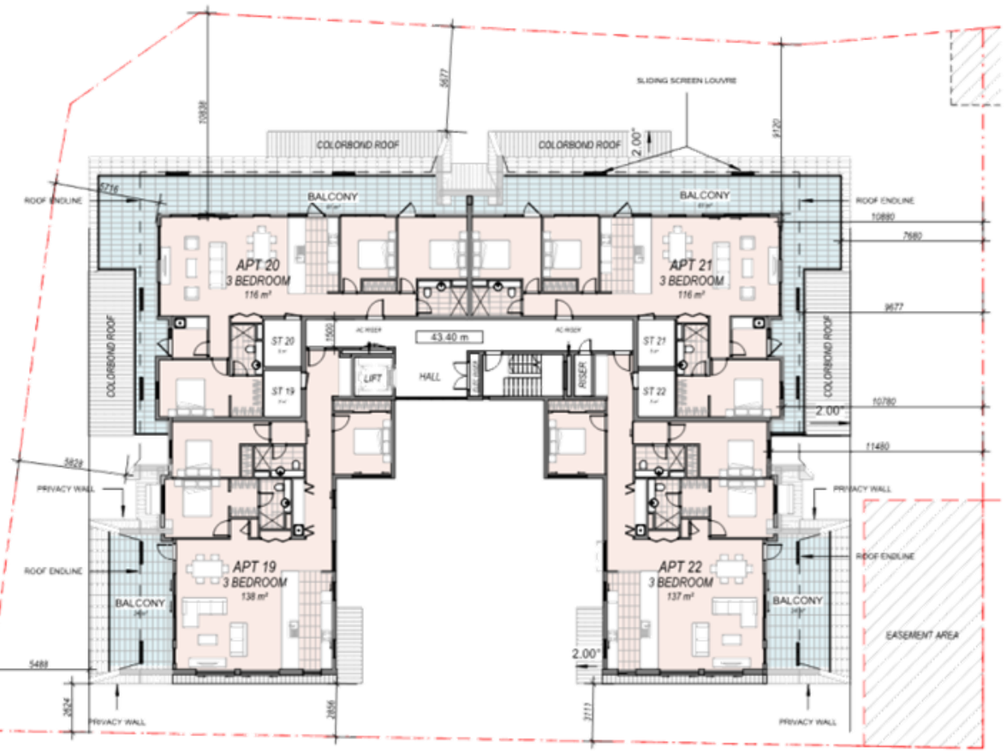
2 4 8 16 m SCALE 1 : 200 (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

P25037 01/10/2026 A101 SK

CAMERON CHISHOLM NICOL





2 BEDROOM
3 BEDROOM
BALCONY

1 A002 DA - 02 LEVEL
1 : 200

3 BEDROOM
BALCONY

2 A002 DA - 03 LEVEL
1 : 200

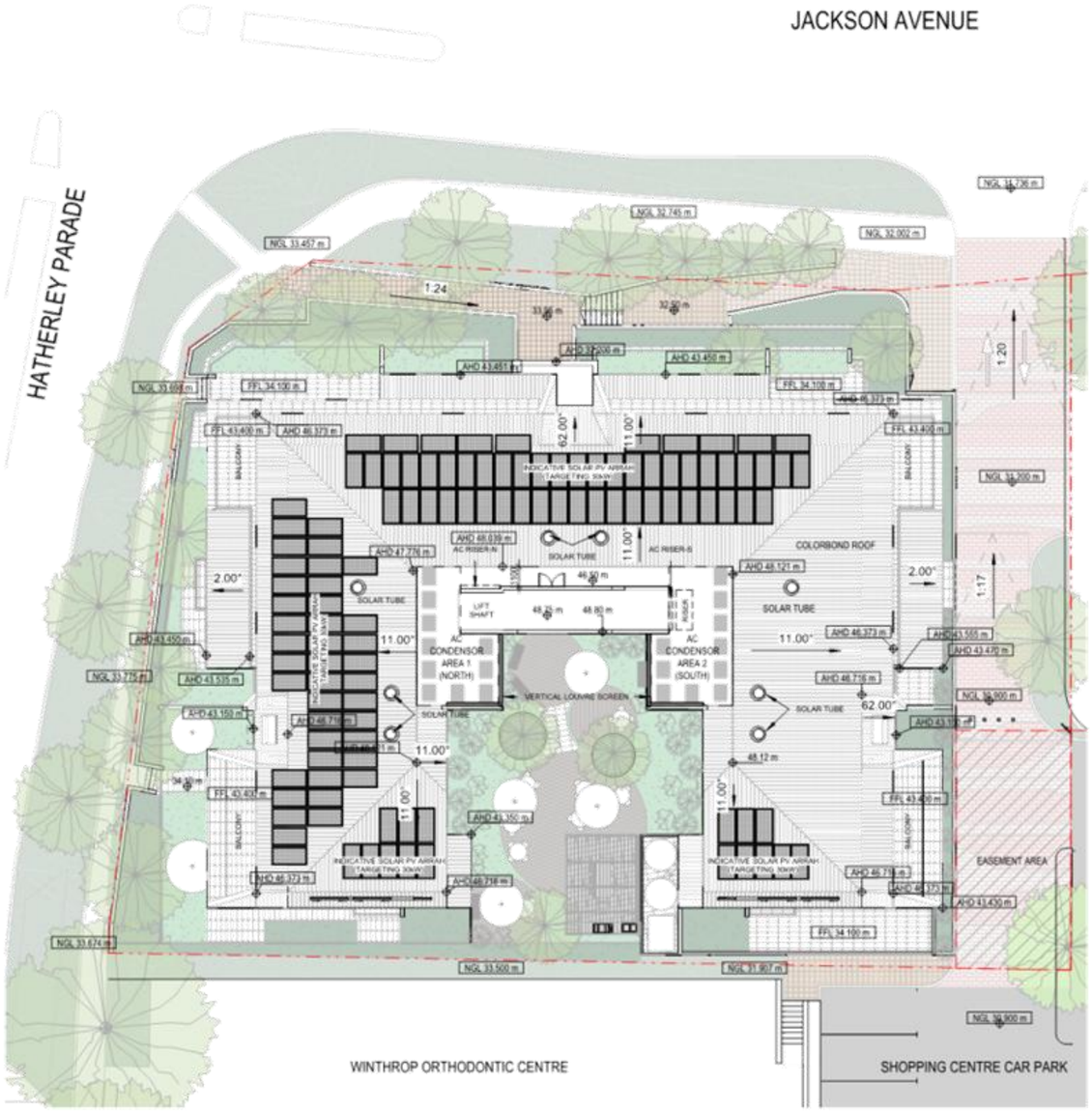
LEVEL 2 / LEVEL 3

2 4 8 16 m SCALE 1 : 200 (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

P25037 21/07/2026 A102 SK

CAMERON CHISHOLM NICOL



ROOF PLAN

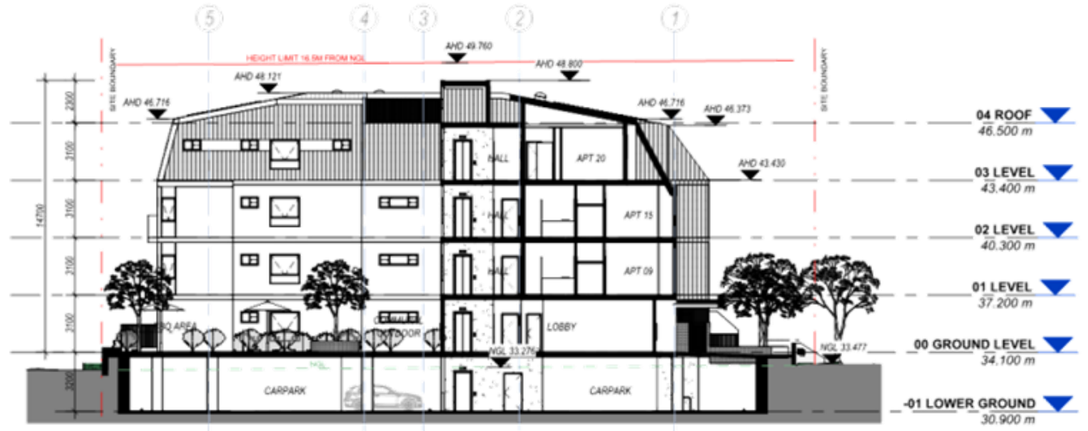
1 2 4 8 m SCALE 1 : 200 (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

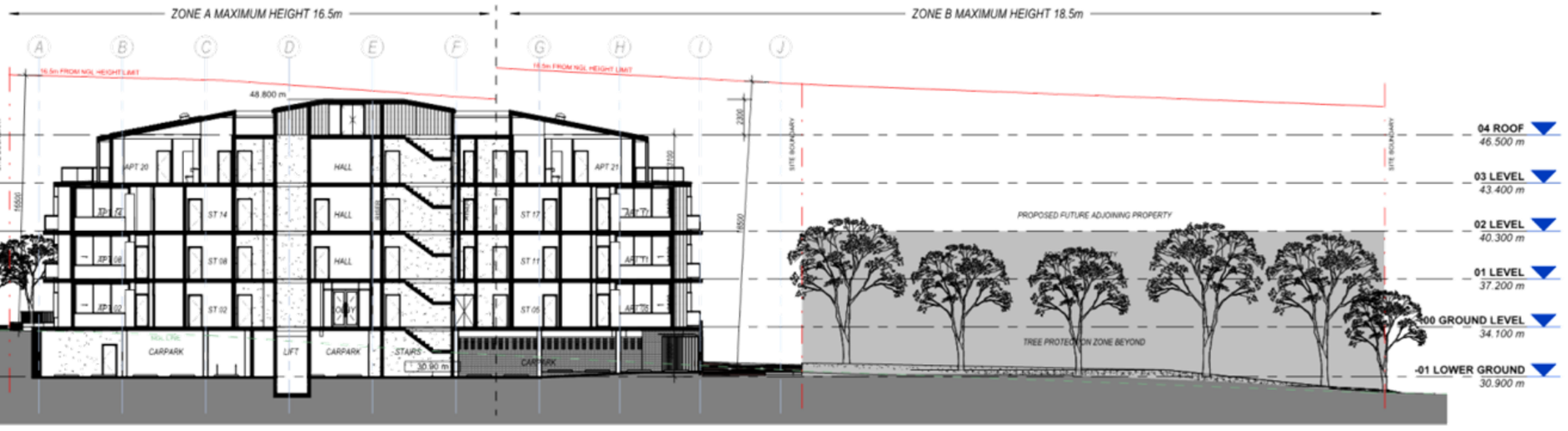
P25037 01/10/2026

A105 SK

CAMERON CHISHOLM NICOL



1 A08.01 **SHORT SECTION**
1 : 200



2 **LONG SECTION**
1 : 200

SECTIONS

2 4 8 16 m SCALE 1 : 200 (A2)

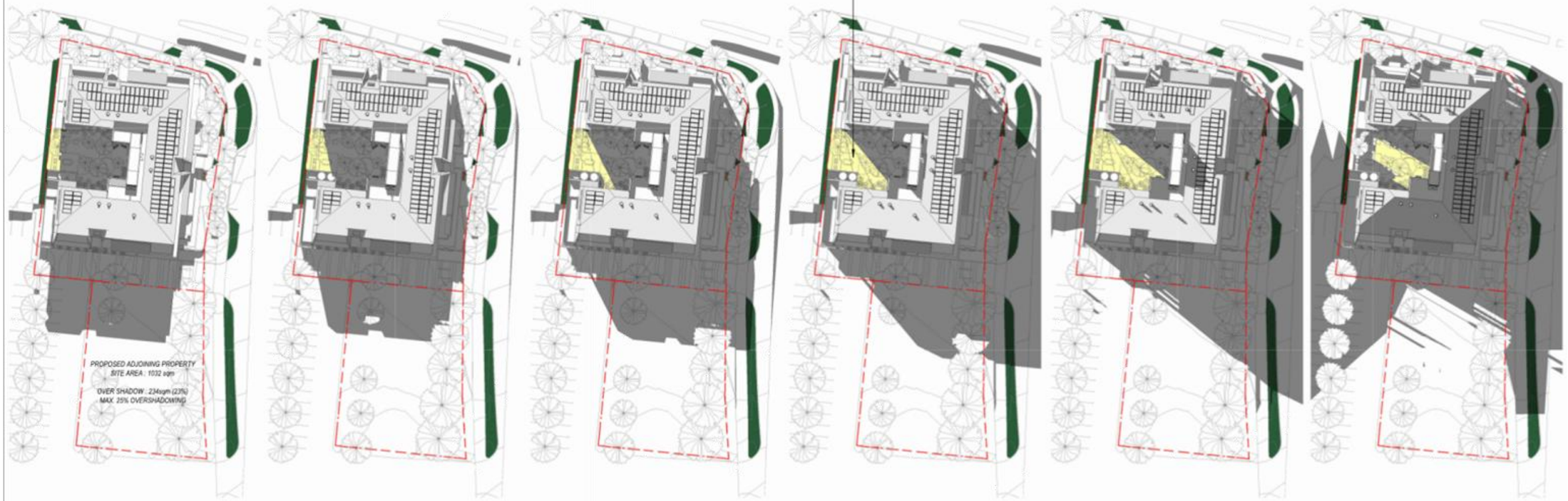
WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

P25037 21/07/2026

A110 SK

CAMERON
CHISHOLM
NICOL

2 HOURS DIRECT SUNLIGHT AREA = 98 m²
TOTAL COMMUNAL OPEN SPACE AREA = 200 m²
THE TOTAL QUALIFYING COMMUNAL OPEN SPACE AREA = 196 m²
MINIMUM REQUIREMENT COS = 6 m² X 22 UNITS = 132 m²



12PM / JUNE. 21 | 1PM / JUNE. 21 | 2PM / JUNE. 21 | 3PM / JUNE. 21 | 4PM / JUNE. 21 | 5PM / JUNE. 21

OVERSHADOWING

5 10 20 40 m SCALE 1 : 600 (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT A116

P25037 21/07/2026 SK

CAMERON CHISHOLM NICOL

YILED SCHEDULE — 22 Units

TYPE (EA)	3BED	2BED	1BED				TOTAL(EA)	NOTE
4F	4						4	
3F	4	2					6	
2F	4	2					6	
1F	4	1	1				6	
GF								
TOTAL NUMBER OF UNITS	16	5	1				22	
BED RATIO	73%	23%	5%				100%	

PLOT RATIO — 128%

FLOOR (sqm)	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	TOTAL (sqm)	NOTE
4F	138	116	116	137			514	
3F	140	120	78	78	120	139	675	
2F	140	120	78	78	120	139	675	
1F	140	120	52	78	120	139	648	
GF								
TOTAL GROSS AREA							2512	
SITE AREA							1966	
PLOT RATIO							127.77%	

COMMUNAL OPEN SPACE — Compliant

COMMUNAL OPEN SPACE	DETAILS / CALCULATION	AREA	NOTE
PROPOSED AREA	Planned C.O.S	196	Req : 132(22units x 6sqm)

PARKING SCHEDULE — Compliant

CATEGORY	MIN. REQUIREMENT	GROUND FLOOR	ROAD OR MALL PARKING	TOTAL (sqm)	NOTE
CAR BAYS - RISIDENT	22	43		43	CAR PARKING RATIO 1.95% 1BED 1 X 1BAY = 1BAY 2BED 5 X 2BAY = 10BAYS 3BED 16 X 2BAY = 32 BAYS TOTAL 43 BAYS, EXCLUDE VISITOR BAYS
CAR BAYS - VISITOR	5		5	5	
BICYCLE - RESIDENT	11	11		11	
BICYCLE - VISITOR	3	4		4	
TOTAL BICYCLE RACK	14	15		15	
MOTORCYCLE / SCOOTER	3	6		6	

YIELD, PLOT RATIO, DEEP SOIL AREA, COMMUNAL OPEN SPACE, PARKING SCHEDULE

2.5 5 10 20 m SCALE (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

P25037 01/10/2026

A200 SK

urbii
Sustainable Transport. Safe Solutions

Lot 369 Somerville Boulevard, Winthrop
Proposed Residential Development

TRANSPORT IMPACT STATEMENT



Prepared for:
Nostoc Pty Ltd

August 2026

Lot 369 Somerville Boulevard, Winthrop

Prepared for: Nostoc Pty Ltd
Prepared by: Paul Ghantous
Date: 5 August 2026
Project number: U26.035

Version control

Version No.	Date	Prepared by	Revision description	Issued to
U26.035.r01	14/05/26	Paul Ghantous	DRAFT	CCN
U26.035.r01a	21/05/26	Paul Ghantous	FINAL	CCN
U26.035.r01b	05/08/26	Paul Ghantous	REVISED FINAL	CCN

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1 Introduction

This Transport Impact Statement has been prepared by Urbii on behalf of Nostoc Pty Ltd in support of the proposed residential development, located on a portion of Lot 369 (No. 109–141) Somerville Boulevard, Winthrop.

The subject site is located within the north-eastern corner of the broader Winthrop Village landholding, with frontage to Jackson Avenue and Hatherley Parade (Figure 1). The broader parent lot accommodates the existing Winthrop Village Shopping Centre, associated car parking, landscaping and adjoining commercial and medical uses, while the development site itself is presently vacant and undeveloped (Figure 2).

It is proposed to develop the site into a four-storey residential apartment building comprising 22 dwellings, with associated communal open space, landscaping, bicycle parking, motorcycle parking and lower-ground resident car parking. The proposed dwelling mix comprises 1 one-bedroom apartment, 5 two-bedroom apartments and 16 three-bedroom apartments.

Vehicle access to the development is proposed via a single ramped entry from Jackson Avenue to the lower-ground parking level. The lower-ground level accommodates 43 resident car parking bays, together with motorcycle parking, bicycle parking, bin stores and associated service infrastructure. A further 2 visitor car parking bays are proposed on-street along the Jackson Avenue frontage, located conveniently adjacent to the development site. The proposal also includes four EV reciprocal use bays, located within the shopping centre car park adjacent to the site.

The surrounding area includes a mix of residential, commercial, retail, medical and community land uses. The site forms part of the established Winthrop Village neighbourhood centre and is located near a range of community facilities and services, including Murdoch University, Corpus Christi College, Winthrop Primary School, Somerville Park and Fiona Stanley Hospital. Existing footpath connections are provided along both street frontages, and Jackson Avenue is identified as having an existing bike lane.

Overall, the site is located within a well-serviced urban setting supported by residential, commercial, retail, education, health and recreation land uses.

This report considers the transport implications of the proposed development, including traffic generation, vehicle access arrangements, car parking provision, bicycle parking provision, servicing and waste collection arrangements, and accessibility to and from the site by other modes of travel.

Following the City's review of the development application, the proposed development has been subject to a number of refinements. This updated Transport Impact Statement reflects the revised development plans, including the amended visitor parking arrangement, and provides additional technical justification addressing matters raised during the assessment process, including the proposed on-street visitor parking and the operation of the on-site waste collection arrangements.



Figure 1: Subject site

Source: TBB Planning, annotated by Urbii



Figure 2: Existing site

Source: Google Streetview Image

2 Scope of work

The WAPC *Transport Assessment Guidelines (2016)* identify the proposed development as having a 'low' impact (refer Figure 3). Notwithstanding the relatively low forecast trip generation, a Transport Impact Statement has been prepared to support the Development Application and to document the access, parking and transport context of the proposal.

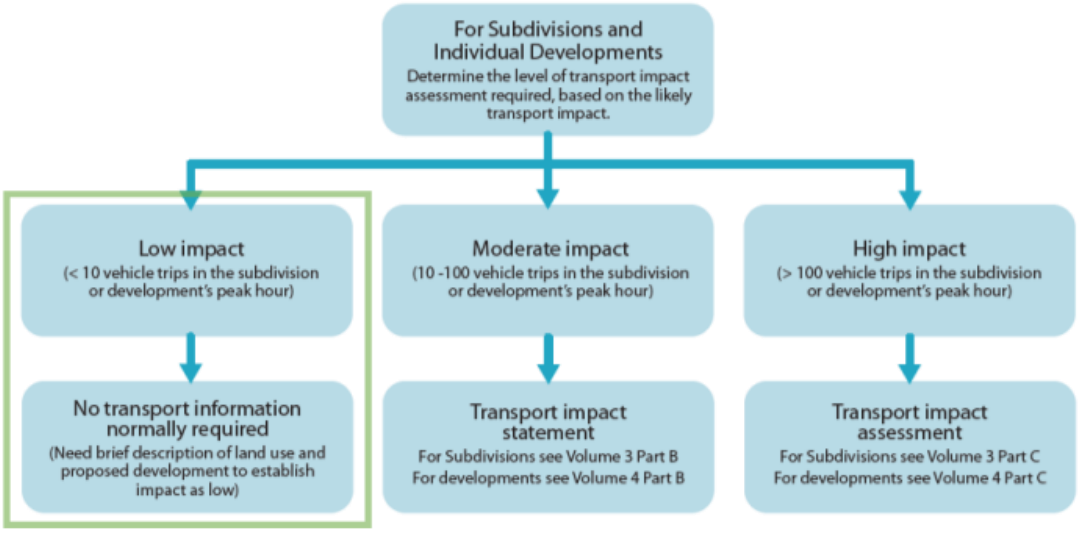


Figure 3: WAPC Transport Assessment Guidelines – reporting requirements

3 Proposed development

The proposal for the subject site is for a residential development comprising:

- 22 residential apartment dwellings, including:
  - 1 x 1-bedroom dwelling;
  - 5 x 2-bedroom dwellings; and
  - 16 x 3-bedroom dwellings;
- 43 resident car parking bays;
- 2 on-street visitor car parking bays;
- 5 motorcycle parking bays;
- 4 EV reciprocal-use parking bays within the adjoining shopping centre car park;
- 15 bicycle parking spaces, comprising:
  - 11 resident bicycle parking spaces; and
  - 4 visitor bicycle parking spaces; and
- bin stores and associated service infrastructure.

Vehicle access to the site is proposed via a single ramped crossover on Jackson Avenue, which provides access to the lower-ground parking level. The lower-ground car park is divided into two separate parking areas, each accessed via its own roller door. The two parking areas are connected internally by a shared pedestrian and bicycle access. However, there is no internal vehicular connection between them.

The access roadway connecting to Jackson Avenue will be constructed as a shared zone for walking, cycling and driving. This will provide a low-speed environment and reinforce pedestrian priority through the access area. Retractable remotely operated bollards will be provided within the shared zone to prevent through traffic associated with the adjoining shopping centre from using the residential access roadway as a shortcut. The bollards will allow access to be controlled for residents, authorised users and service vehicles as required.

The lower-ground parking level accommodates the resident car parking bays, motorcycle parking, bicycle parking, bin stores, pump room and associated service infrastructure.

Two visitor parking bays are proposed to be provided on-street along the Jackson Avenue frontage, immediately adjacent to the development. The bays provide convenient short-stay parking for visitors while maintaining direct pedestrian access to the development.

The development is well connected to the surrounding walking and cycling network. Existing footpaths are provided along both Jackson Avenue and Hatherley Parade, while Jackson Avenue includes an existing on-road bicycle lane that provides convenient cycling access to and from the site.

Waste collection is proposed to occur from within the internal shared zone, with access provided for local government waste collection vehicles via the controlled access system.

The proposed development plans are included for reference in Appendix A.

4 Vehicle access and parking

4.1 Existing vehicle access

The existing Winthrop Village Shopping Centre is served by multiple vehicle access points, including access from Jackson Avenue, Hatherley Parade and Somerville Boulevard, as shown in Figure 4.

There are two existing crossovers on Jackson Avenue which provide access to the eastern side of the shopping centre car park. Both crossovers currently operate as shopping centre access points and provide vehicle connectivity between Jackson Avenue and the internal shopping centre car park circulation network.

As part of the proposed development works, the function of the northern Jackson Avenue crossover will change. This crossover will be modified to provide private vehicle access to the proposed residential development and will no longer operate as a general shopping centre access point. The northern crossover will connect to the development access roadway and lower-ground residential car park.

The southern Jackson Avenue crossover will be retained to continue servicing the shopping centre car park. This arrangement maintains access to the shopping centre from Jackson Avenue, while separating general shopping centre traffic from the proposed residential access arrangement.



Figure 4: Existing vehicle access

Source: Metromap aerial, annotated by Urbii

4.2 Proposed vehicle access

As detailed in the proposed development plans and in Figure 5, vehicle access to the proposed residential development will be provided via the existing northern crossover on Jackson Avenue, which will be modified as part of the proposed development.

The northern Jackson Avenue crossover will be modified as part of the development works to provide private access to the residential development. This crossover will connect to a proposed access roadway extending west from Jackson Avenue towards the lower-ground car park. The access roadway will no longer operate as a general shopping centre access route.

The proposed access roadway will be constructed as a shared zone for walking, cycling and driving. This treatment will provide a low-speed environment and reinforce priority for people walking and cycling through the access area. The shared zone will also provide pedestrian and bicycle connectivity between Jackson Avenue, the proposed development and the adjoining shopping centre interface. The shared zone will also accommodate controlled access for authorised service vehicles, including local government waste collection vehicles.

Access to the lower-ground car park will be controlled by two garage roller doors, with each roller door providing access to a separate section of the car park. The two parking areas are connected internally by a shared pedestrian and bicycle access only, with no internal vehicular connection provided.

Visually permeable treatments will be provided on either side of the garage doors, including 45-degree vertical blades, to assist outbound drivers in observing people walking and cycling through the adjoining shared zone. These treatments will improve intervisibility at the garage interfaces while maintaining appropriate screening of the lower-ground parking areas.

Retractable remotely operated bollards will be installed within the shared zone to prevent general shopping centre traffic from using the residential access roadway as a through-route. This will assist in separating residential access movements from shopping centre circulation movements, while still allowing controlled access for residents, authorised users and service vehicles as required, including local government waste collection vehicles. A "*PRIVATE ROAD NO THROUGH TRAFFIC*" sign will be installed at the entry crossover, to ensure that shopping centre traffic does not enter the shared zone.

The western portion of the proposed access roadway will be subject to an easement to facilitate limited vehicle connectivity to one adjoining shopping centre parking aisle. This connection is required to maintain functional circulation for that parking aisle and avoid creating a blind aisle requiring a turnaround area. The easement connection will be limited in function and will not allow general shopping centre traffic to pass through the residential access roadway to Jackson Avenue, with the proposed retractable remotely operated bollards managing access through the shared zone.

A traffic safety mirror is proposed to be installed within the easement area to assist vehicles exiting from the western garage door. The mirror will improve visibility between outbound residential vehicles and shopping centre traffic accessing the easement connection, supporting safe and controlled vehicle movements at this interface.

The existing southern Jackson Avenue crossover will be retained to continue servicing the shopping centre car park. This arrangement maintains vehicle access to the shopping centre from Jackson Avenue while providing a separate and controlled access arrangement for the proposed residential development.

The proposed access arrangement also facilitates waste collection by allowing the local government rear-loader waste vehicle to enter the site via the existing southern Jackson Avenue crossover, circulate through the adjoining shopping centre car park in a clockwise direction and enter the shared zone in an eastbound direction. Following collection, the vehicle will continue eastbound through the shared zone and exit via the northern Jackson Avenue crossover, maintaining forward vehicle movements throughout the collection operation.

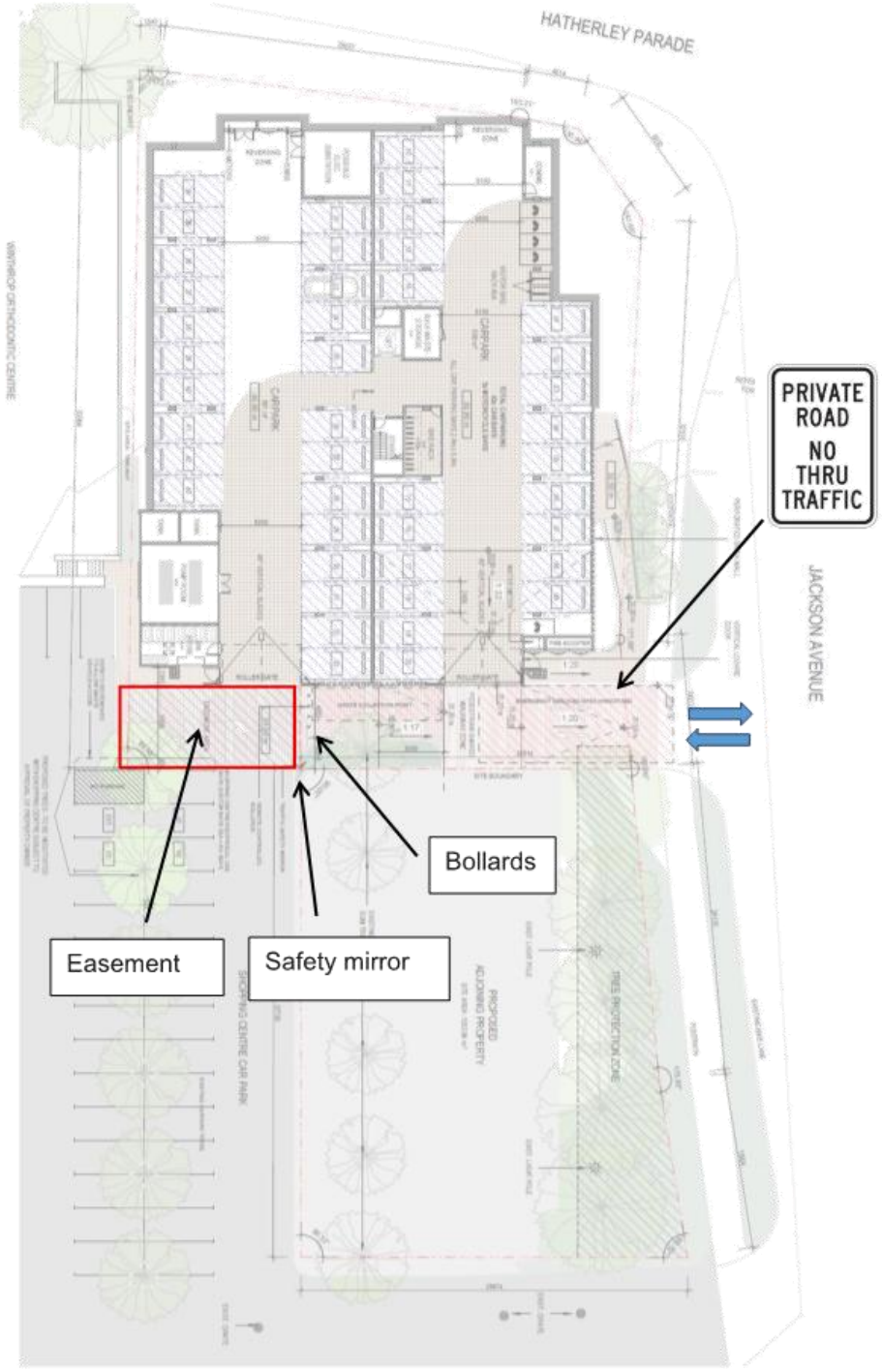


Figure 5: Proposed vehicle access

Source: CCN, annotated by Urbii

4.3 Movement and place analysis

The philosophy of movement and place recognises that streets perform multiple functions. Transport links not only move people from point A to B, but they can also function as key places. There is a natural tension between these two functions. As a movement corridor, every link aims to minimise travel time and keep people and goods moving. On the other hand, as a place, streets aim to increase visitor dwell time.

Not all streets can be popular destinations, just as not all streets can prioritise vehicle movement. It is important to recognise the roles of movement and place on our roads and streets. Finding an appropriate balance is key for integrated transport planning.

The movement and place framework categorises roads and streets as a function of their role in moving people and being a place (Figure 6).



Figure 6: Movement and place – road and street categories

Source: *Movement and Place in Victoria*, Department of Transport Victoria, 2019

Based on the movement and place categories, the proposed shared zone access roadway can be defined as a Local Street. Successful Local Streets should provide quiet, safe and desirable residential access for all ages and abilities that foster community spirit and local pride. They are part of the fabric of our neighbourhoods, where we live our lives and facilitate local community access.

The Main Roads WA *Speed Zoning - Policy and Application Guidelines - May 2021* recommends a speed limit of 10km/h in confined areas where movement of pedestrians and cyclists has priority over motor vehicles. Generally, the volume of traffic is very low. This definition is appropriate for the proposed development roadway.

It is therefore recommended that a 10km/h speed limit apply internally. This speed limit applies equally for all modes of transport and can be reinforced through installation of shared zone signs.

The Australian Standard AS 1742.4-2008: *Manual of uniform traffic control devices - Speed controls*, provides guidance on the use of shared zones. Signs shall be used at the start and end of shared zones as specified in Clause 3.2.6 and shown in Figure 7. A typical shared zone treatment is shown in Appendix B.

SHARED ZONE (R4-4)

END SHARED ZONE (R4-5)



R4-4 R4-5

Figure 7: Signs for shared zones

The Austroads *Guide to Traffic Management Part 8: Local Area Traffic Management*, provides the following guidance on the use of shared zones:

"A shared zone is an area utilised by both pedestrians and vehicular traffic in which drivers must give way to pedestrians at all times, and where the street environment has been adapted for very low-speed vehicles. Shared zones should aim to change the image and character of a street so that drivers are made aware that they are entering a street environment with driving conditions that are quite different to other more common situations. This can be achieved by the use of different coloured and/or textured pavement surfaces, by the use of full width flush paving between property lines and through landscaping. Shared zones must be designed in such a way that the low-speed environment is reinforced through the physical layout and treatment. A speed limit of 10 km/h is considered appropriate in shared zones to compliment these speed environment changes."

The proposed internal access roadway incorporates several design elements that support its function as a shared zone and local street environment, rather than a conventional vehicle access driveway.

The roadway will have a short internal length and will serve a limited access function, primarily providing access to the residential car park and controlled access to the adjoining shopping

centre parking aisle via the easement. Traffic volumes are therefore expected to be low, which is consistent with a local street / shared zone environment.

The roadway will be constructed with a flush paved surface, with no formal kerb separation between vehicle movement areas and paths for walking and cycling. This treatment will reinforce that the space is shared by all users and will encourage drivers to travel slowly and cautiously through the access area.

The proposed shared zone will also include walking and cycling connectivity between Jackson Avenue, the residential development and the adjoining shopping centre interface. This will make the access roadway part of the local access network for walking and cycling.

The internal roadway alignment is constrained and relatively narrow, with garage doors, bollards, landscaping, building edges and the adjoining easement interface all contributing to a low-speed environment. These elements will naturally discourage higher vehicle speeds and reinforce the intended 10km/h operating environment.

Retractable remotely operated bollards will be installed within the shared zone to prevent general shopping centre traffic from using the residential access as a through-route to Jackson Avenue. This will reduce through-movement demand and support the local access function of the roadway.

Overall, the internal roadway has been designed as a low-speed, low-volume access space with pedestrian-priority characteristics. The combination of flush paving, shared use, controlled vehicle access, short length, constrained geometry, intervisibility treatments and proposed shared zone signage supports its classification as a shared zone / local street environment.

4.4 Car parking layout

The dimensions of the parking aisles and bays are compliant with AS 2890.1. The on-site parking bays are 2.4 m wide and 5.4 m long, with a 6.0 m aisle width provided. A 1.1 m blind aisle extension is provided at the end of the parking aisle.

Swept path analysis for the car park access and internal circulation is provided in Appendix C.

4.5 Parking requirements

Reference has been made to the Residential Design Codes for applicable parking requirements. The site is located within 'Location A', with applicable parking rates set out in Table 1.

Table 1: R-Codes Volume 2 – Residential parking rates

Table 3.9 Parking ratio

Parking types		Location A	Location B
Car parking[1]	1 bedroom dwellings	0.75 bay per dwelling	1 bay per dwelling
	2+ bedroom dwellings	1 bay per dwelling	1.25 bays per dwelling
	Visitor	1 bay per four dwellings up to 12 dwellings 1 bay per eight dwellings for the 13th dwelling and above	
Bicycle parking[1]	Resident	0.5 space per dwelling	
	Visitor	1 space per 10 dwellings	
Motorcycle/ Scooter parking[2]	Developments exceeding 20 dwellings provide 1 motorcycle/scooter space for every 10 car bays		

[1] Calculations of parking ratios shall be rounded up to the next whole number.
[2] For each five motorcycle/scooter parking bays provided in accordance with Table 3.9, car parking bays may be reduced by one bay.

Definitions:
Location A: includes all land located within:
– 800m of a train station on a high-frequency rail route, measured in a straight line from the pedestrian entry to the train station platform to any part of a lot;
– 250m of a high-frequency transit route, or multiple transit routes that if combined have timed stops every 15 minutes during weekday peak periods (7 –9am and 5–7pm), measured in a straight line from along any part of the transit route to any part of the lot; and/or
– within the defined boundaries of an activity centre.
Location B: not within Location A.

The calculated parking requirements for the development are presented in Table 2.

Table 2: Development parking requirements

Parking	Min
Ancillary dwelling	0
Studio and 1 bedroom dwelling	1
2 bedroom dwelling	5
3+ bedroom dwelling	16
Total occupant car parking	**22**
Visitor car parking	5
Total car parking	**27**
Bicycle parking	
Occupant	11
Visitor	3
Total bicycle parking	**14**
Total motorcycle parking	**5**

4.6 Parking supply

The proposed development provides the following parking supply:

- 43 resident car parking bays within the lower-ground car park;
- 2 on-street visitor car parking bays along the Jackson Avenue frontage;
- 15 bicycle parking spaces, comprising:
  - 11 resident bicycle parking spaces; and
  - 4 visitor bicycle parking spaces; and
- 5 motorcycle parking bays.

The proposed car parking supply is summarised in Table 3.

Table 3: Proposed parking supply and requirement

Parking type	Requirement	Proposed supply	Difference
Resident car parking	22	43	Complies
Visitor car parking	5	2	-3
Total car parking	27	45	Complies
Resident bicycle parking	11	11	Complies
Visitor bicycle parking	3	4	+1
Total bicycle parking	14	15	+1
Motorcycle parking	5	5	Complies

The proposed development provides 43 resident car parking bays within the secure lower-ground car park and 2 on-street visitor parking bays along the Jackson Avenue frontage. The resident parking provision exceeds the minimum requirement of 22 bays by 21 bays.

The proposed visitor parking supply is 3 bays below the calculated requirement of 5 bays. This represents a minor shortfall in the allocation of visitor parking rather than a shortfall in the overall parking capacity available to the development. Although the dedicated visitor supply is below the calculated requirement, the overall development parking provision substantially exceeds the aggregate car parking requirement.

The proposed visitor parking demand is also expected to be moderated by the site location within the established Winthrop Village neighbourhood centre. The development is within convenient walking distance of retail, medical and community services and is connected to the surrounding walking, cycling and public transport networks. The adjoining shopping centre car park also provides publicly accessible short-stay parking in close proximity to the development, including 4 proposed reciprocal-use EV bays opposite the site.

The 2 proposed on-street visitor bays will provide convenient and readily identifiable short-stay parking immediately adjacent to the development entrance. The reduced number of on-street bays also enables the Jackson Avenue frontage to retain a high-quality landscaped interface and avoids excessive interaction with the existing walking and cycling path, street trees, development access and nearby intersection.

Having regard to the substantial surplus of resident parking, the availability of nearby reciprocal and public parking, the site accessibility by other modes of travel, and the limited scale of the shortfall, the provision of 2 dedicated visitor bays is considered appropriate for the proposed development.

The proposed bicycle parking supply comprises 15 spaces, exceeding the calculated requirement of 14 spaces. The development also provides 5 motorcycle parking bays, satisfying the applicable requirement.

Overall, the proposed parking supply is considered appropriate for the scale, nature and location of the development.

5 Provision for service vehicles

The proposed development is residential in nature and is not expected to generate significant delivery or service vehicle traffic. Deliveries can be accommodated from the proposed on-street visitor parking bays on Jackson Avenue or within the surrounding public road network.

Waste collection is proposed to be undertaken by the City of Melville waste collection service. The proposed servicing arrangement builds upon the waste collection strategy approved under the previous Development Approval for the site.

Under the previously approved development, waste collection occurred from within the Winthrop Village Shopping Centre car park. Waste collection vehicles entered via the existing southern Jackson Avenue crossover, circulated through the shopping centre parking aisles and stopped within the car park to service the development bins. As demonstrated in the previously approved Transport Report, this arrangement temporarily occupied part of the shopping centre circulation aisle and resulted in several parking bays being obstructed during the collection process.

The current proposal retains the approved principle of on-site waste collection while introducing a revised servicing arrangement that improves operational efficiency and minimises impacts on the surrounding shopping centre. Rather than stopping within the shopping centre parking aisles, the waste collection vehicle will continue through the shopping centre car park before entering the development private shared zone, where waste collection will occur adjacent to the bin store.

During collection, the rear of the waste vehicle will be positioned adjacent to the western garage door, allowing bins to be wheeled directly from the bin store to the rear loader and returned immediately following servicing. The waste vehicle will remain entirely within the private shared zone for only the time required to service the bins, which is expected to be approximately 5 minutes.

Importantly, the revised arrangement eliminates the need for the waste vehicle to stop within the shopping centre parking aisles. Unlike the previously approved development, waste collection will not obstruct shopping centre circulation or temporarily affect shopping centre parking bays during servicing. Similarly, the vehicle stopping position has been selected so that access to the development garage doors and lower-ground resident parking areas remains available throughout the collection process.

The waste collection vehicle will enter the site via the existing southern Jackson Avenue crossover serving the shopping centre, circulate through the shopping centre car park in a clockwise direction before entering the shared zone, and following collection continue eastbound through the shared zone before exiting via the northern Jackson Avenue crossover. This arrangement enables the vehicle to enter and leave the site in a forward gear and eliminates any reversing movements associated with waste collection.

Access for the City of Melville waste collection vehicle will be managed through the proposed access control system. Access remotes and/or PIN codes will be provided to enable operation of the retractable bollards and any access-controlled doors required for waste collection, allowing authorised service vehicle access while preventing general shopping centre traffic from using the residential shared zone as a through-route.

Waste collection will be scheduled during lower-activity periods for the shopping centre, where practicable, to minimise interaction with customer vehicles and people moving through the car park.

Overall, the proposed servicing arrangement represents an improvement over the previously approved development. It retains the benefits of on-site waste collection while relocating the waste collection activity entirely within the development private shared zone, thereby removing temporary impacts on shopping centre parking aisles and improving the overall safety and efficiency of waste collection operations.

Swept path analysis for a 10.6m rear loader waste truck was undertaken and is provided in Appendix C of this report. The analysis confirms that the waste collection vehicle can safely enter, service and exit the site in a forward gear.

6 Hours of operation

For residential developments, peak traffic periods typically coincide with the weekday commuter AM and PM peak periods on the surrounding road network.

In the Perth Metropolitan Area, the weekday AM peak period occurs between 7:00 am and 9:00 am, while the PM peak period typically occurs between 4:00 pm and 6:00 pm. Traffic associated with the proposed development is expected to align with these periods.

7 Daily traffic volumes and vehicle types

7.1 Traffic generation

The traffic volume that will be generated by the proposed development has been estimated using trip generation rates derived with reference to the following sources:

- Transport for New South Wales (TfNSW) *Guide to Transport Impact Assessment* (2024).
- WAPC *Transport Impact Assessment Guidelines* (2016).

The trip generation rates adopted are detailed in Table 4.

Table 4: Adopted trip rates for traffic generation

Land use	Trip rate source	Daily rate	AM rate	PM rate	AM-in	AM-out	PM-in	PM-out
Residential	TfNSW - Medium density residential (Metro)	2.72	0.39	0.37	25%	75%	65%	35%

The estimated traffic generation of the proposed development is summarised in Table 5. The development is expected to generate approximately 60 vehicle trips per day (vpd), including approximately 9 and 8 vehicle trips during the weekday AM and PM peak hours, respectively.

The estimated trips include both inbound and outbound vehicle movements. It is anticipated that the majority of vehicles will comprise passenger cars.

Table 5: Traffic generation – Weekday AM and PM peak hours

Land use	Quantity	Daily Trips	AM Trips	PM Trips	AM Peak Trips		PM Peak Trips	
					IN	OUT	IN	OUT
Residential	22	60	9	8	2	7	5	3

7.2 Impact on surrounding roads

The WAPC Transport Impact Assessment Guidelines for Developments (2016) provides the following guidance on the assessment of traffic impacts:

> "As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis."

The proposed development will not increase traffic flows on any roads adjacent to the site by the quoted WAPC threshold of +100vph to warrant further analysis. Therefore, the impact on the surrounding road network is acceptable.

8 Traffic management on the frontage roads

Information from online mapping services, Main Roads WA, Local Government, and/or site visits was collected to assess the existing traffic management on frontage roads.

8.1 Jackson Avenue

Jackson Avenue near the subject site is an approximately 10.0m wide, two-lane divided road, with a 1.8m wide painted median. A path for walking and cycling is provided along the western side of the road, in addition to marked on-street cycling lanes on both sides of the road.

Jackson Avenue is classified as a *Local Distributor* road in the Main Roads WA road hierarchy (Figure 8) and operates under a speed limit of 50km/h (Figure 9). Local Distributor roads are the responsibility of Local Government and are for the movement of traffic within local areas and connect access roads to higher order Distributors (Figure 10).

Based on traffic data obtained from the City of Melville, Jackson Avenue is estimated to carry around 4,000 vehicles per day adjacent to the site. 85th percentile speeds are estimated to be around 48 km/h.

8.2 Hatherley Parade

Hatherley Parade near the subject site is an approximately 7.5m wide, two-lane undivided road. A path for walking and cycling is provided along the southern side of the road, in addition to on-street parking embayments.

Hatherley Parade is classified as an *Access* road in the Main Roads WA road hierarchy (Figure 8) and operates under a speed limit of 50km/h (Figure 9). Access roads are the responsibility of Local Government and are for the provision of vehicle access to abutting properties (Figure 10).

Based on analysis of TomTom vehicle traffic statistics, Hatherley Parade is estimated to carry under 1,500 vehicles per day adjacent to the site. 85th percentile speeds are estimated to be around 35 km/h.



Figure 8: Main Roads WA road hierarchy plan

Source: Main Roads WA Road Information Mapping System (RIM)



Figure 9: Main Roads WA road speed zoning plan

Source: Main Roads WA Road Information Mapping System (RIM)

ROAD HIERARCHY FOR WESTERN AUSTRALIA
ROAD TYPES AND CRITERIA (see Note 1)

CRITERIA	PRIMARY DISTRIBUTOR (PD) (see Note 2)	DISTRICT DISTRIBUTOR A (DA)	DISTRICT DISTRIBUTOR B (DB)	REGIONAL DISTRIBUTOR (RD)	LOCAL DISTRIBUTOR (LD)	ACCESS ROAD (A)
Primary Criteria						
1. Location (see Note 3)	All of WA incl. BUA	Only Built Up Area.	Only Built Up Area.	Only Non Built Up Area. (see Note 4)	All of WA incl. BUA	All of WA incl. BUA
2. Responsibility	Main Roads Western Australia.	Local Government.	Local Government.	Local Government.	Local Government.	Local Government.
3. Degree of Connectivity	High. Connects to other Primary and Distributor roads.	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	Medium. Minor Network Role Connects to Distributors and Access Roads.	Low. Provides mainly for property access.
4. Predominant Purpose	Movement of inter regional and/or cross town/city traffic, e.g. freeways, highways and main roads.	High capacity traffic movements between industrial, commercial and residential areas.	Reduced capacity but high traffic volumes travelling between industrial, commercial and residential areas.	Roads linking significant destinations and designed for efficient movement of people and goods between and within regions.	Movement of traffic within local areas and connect access roads to higher order Distributors.	Provision of vehicle access to abutting properties
Secondary Criteria						
5. Indicative Traffic Volume (AADT)	In accordance with Classification Assessment Guidelines.	Above 8 000 vpd	Above 6 000 vpd.	Greater than 100 vpd	Built Up Area - Maximum desirable volume 6 000 vpd. Non Built Up Area – up to 100 vpd.	Built Up Area - Maximum desirable volume 3 000 vpd. Non Built Up Area – up to 75 vpd.
6. Recommended Operating Speed	60 – 110 km/h (depending on design characteristics).	60 – 80 km/h.	60 – 70 km/h.	50 – 110 km/h (depending on design characteristics).	Built Up Area 50 - 60 km/h (desired speed) Non Built Up Area 60 – 110 km/h (depending on design characteristics).	Built Up Area 50 km/h (desired speed). Non Built Up Area 50 – 110 km/h (depending on design characteristics).
7. Heavy Vehicles permitted	Yes.	Yes.	Yes.	Yes.	Yes, but preferably only to service properties.	Only to service properties.
8. Intersection treatments	Controlled with appropriate measures e.g. high speed traffic management, signing, line marking, grade separation.	Controlled with appropriate measures e.g. traffic signals.	Controlled with appropriate Local Area Traffic Management.	Controlled with measures such as signing and line marking of intersections.	Controlled with minor Local Area Traffic Management or measures such as signing.	Self controlling with minor measures.
9. Frontage Access	None on Controlled Access Roads. On other routes, preferably none, but limited access is acceptable to service individual properties.	Prefer not to have residential access. Limited commercial access, generally via service roads.	Residential and commercial access due to its historic status. Prefer to limit when and where possible.	Prefer not to have property access. Limited commercial access, generally via lesser roads.	Yes, for property and commercial access due to its historic status. Prefer to limit whenever possible. Side entry is preferred.	Yes.
10. Pedestrians	Preferably none. Crossing should be controlled where possible.	With positive measures for control and safety e.g. pedestrian signals.	With appropriate measures for control and safety e.g. median/islands refuges.	Measures for control and safety such as careful siteing of school bus stops and rest areas.	Yes, with minor safety measures where necessary.	Yes.
11. Buses	Yes.	Yes.	Yes.	Yes.	Yes.	If necessary (see Note 5)
12. On-Road Parking	No (emergency parking on shoulders only).	Generally no. Clearways where necessary.	Not preferred. Clearways where necessary.	No – emergency parking on shoulders – encourage parking in off road rest areas where possible.	Built Up Area – yes, where sufficient width and sight distance allow safe passing. Non Built Up Area – no. Emergency parking on shoulders.	Yes, where sufficient width and sight distance allow safe passing.
13. Signs & Linemarking	Centrelines, speed signs, guide and service signs to highway standard.	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs and guide signs.	Speed and guide signs.	Urban areas – generally not applicable. Rural areas - Guide signs.
14. Rest Areas/Parking Bays	In accordance with Main Roads' *Roadside Stopping Places Policy*.	Not Applicable.	Not Applicable.	Parking Bays/Rest Areas. Desired at 60km spacing.	Not Applicable.	Not Applicable.

Figure 10: Road types and criteria for Western Australia

Source: Main Roads Western Australia D10#10992

9 Public transport access

Information was collected from Transperth, PTA and site visits to assess the existing public transport access to and from the site.

The subject site has access to multiple bus services within walking distance, as detailed in Table 6.

Table 6: Bus routes servicing the subject site

Route Number	Route Description
115	Perth - Hamilton Hill via Booragoon Bus Stn (Figure 12)
504	Bull Creek Stn - Murdoch Stn via Jackson Av (Figure 13)
511	Murdoch Stn - Fremantle Stn via Somerville Bvd & McCombe Av (Figure 14)

Public transport services provide a viable alternative mode of transport for residents and visitors to the proposed development.

The closest bus stops are located on Somerville Boulevard, within 250 m walking distance of the site (Figure 11). A pedestrian crossing facility including kerb ramps and a median refuge is provided at the roundabout intersection of Somerville Boulevard / Jackson Avenue, near the bus stops.

Bus services provide excellent coverage and connectivity to the rail network and connecting bus services via Murdoch, Bull Creek and Fremantle Train Stations.

The existing public transport network plans are shown in Figures 12 to 14.



Figure 11: Closest bus stops serving the proposed development

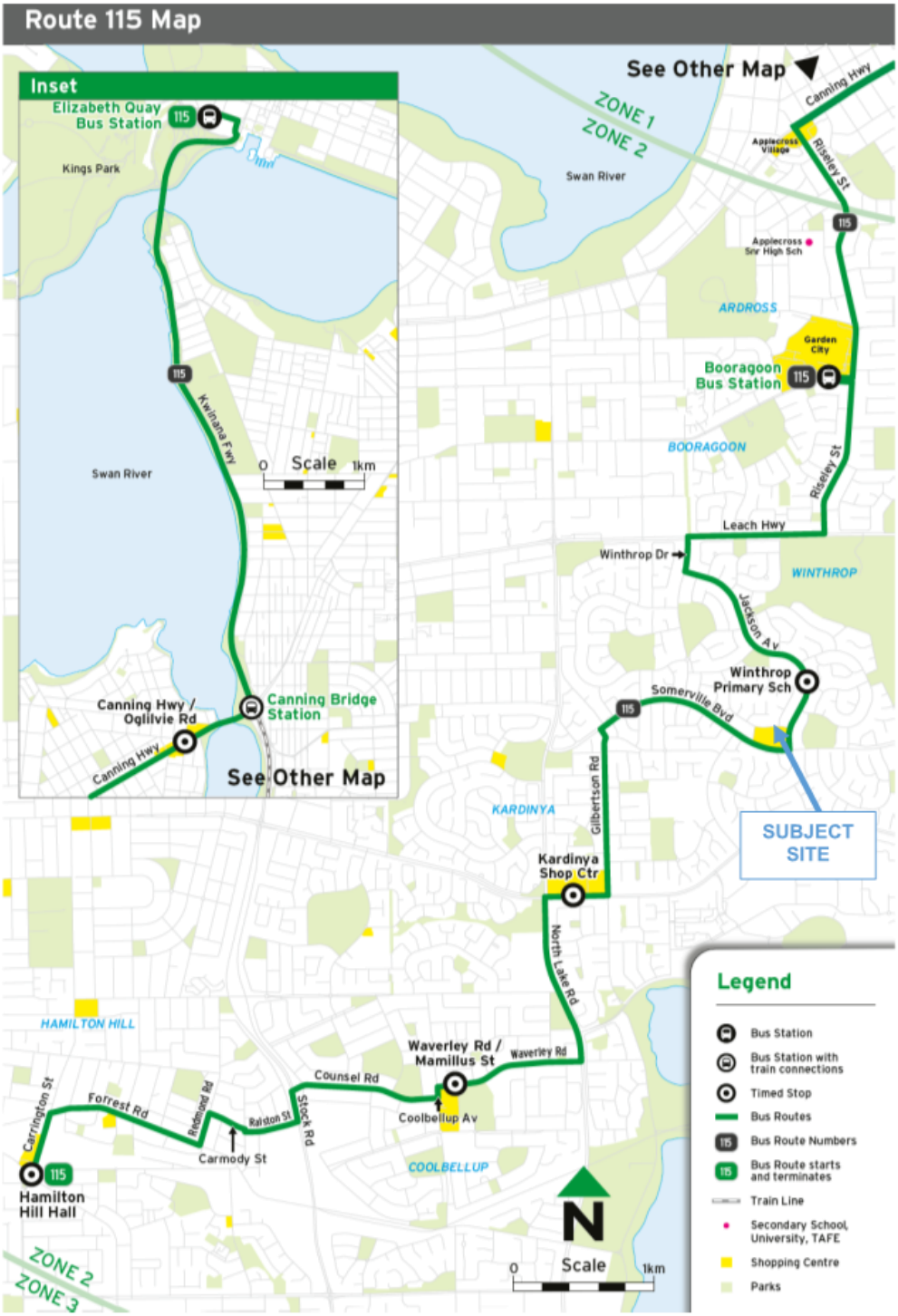


Figure 12: Transperth public transport plan (route 115)

Source: Transperth

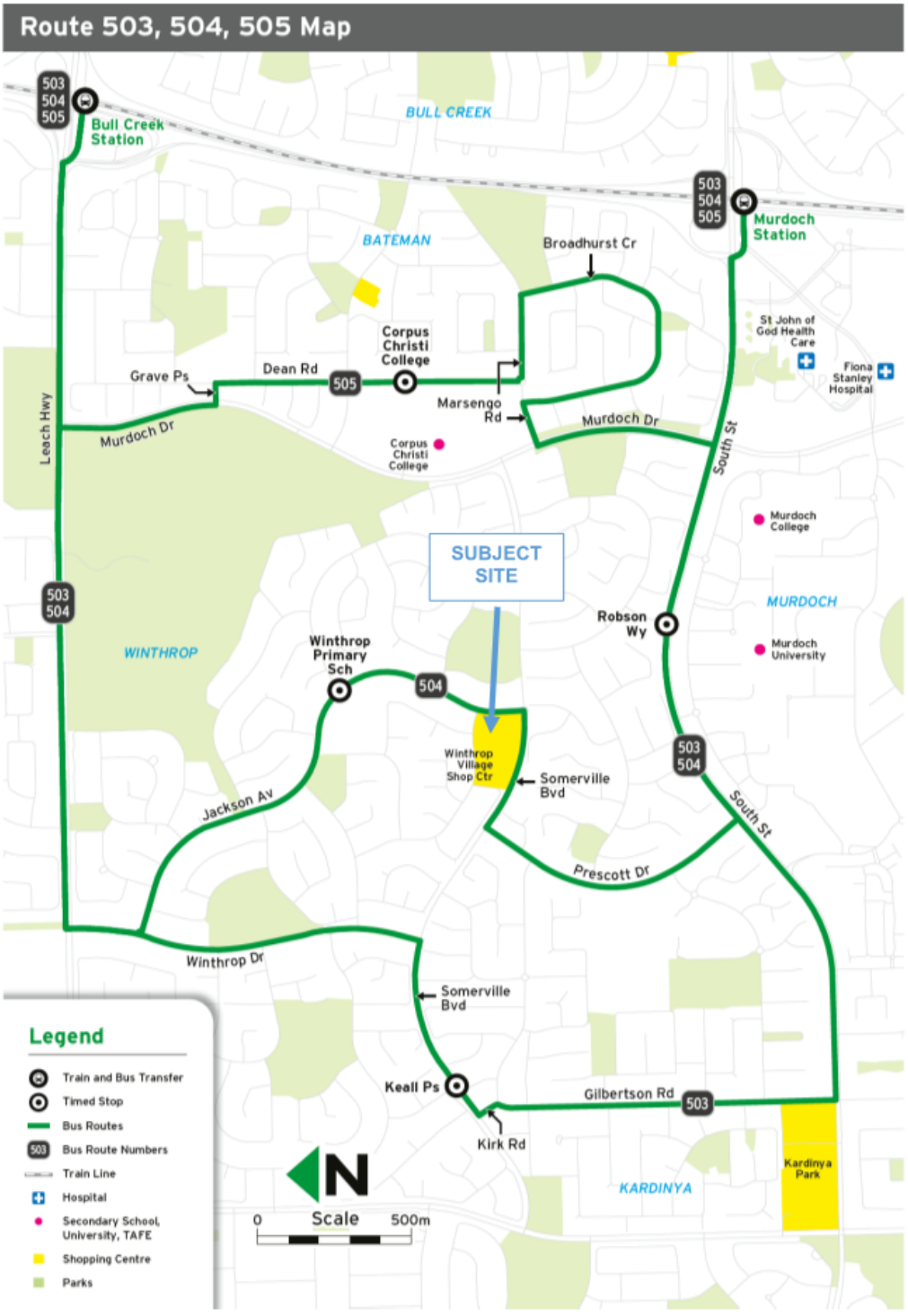


Figure 13: Transperth public transport plan (route 504)

Source: Transperth

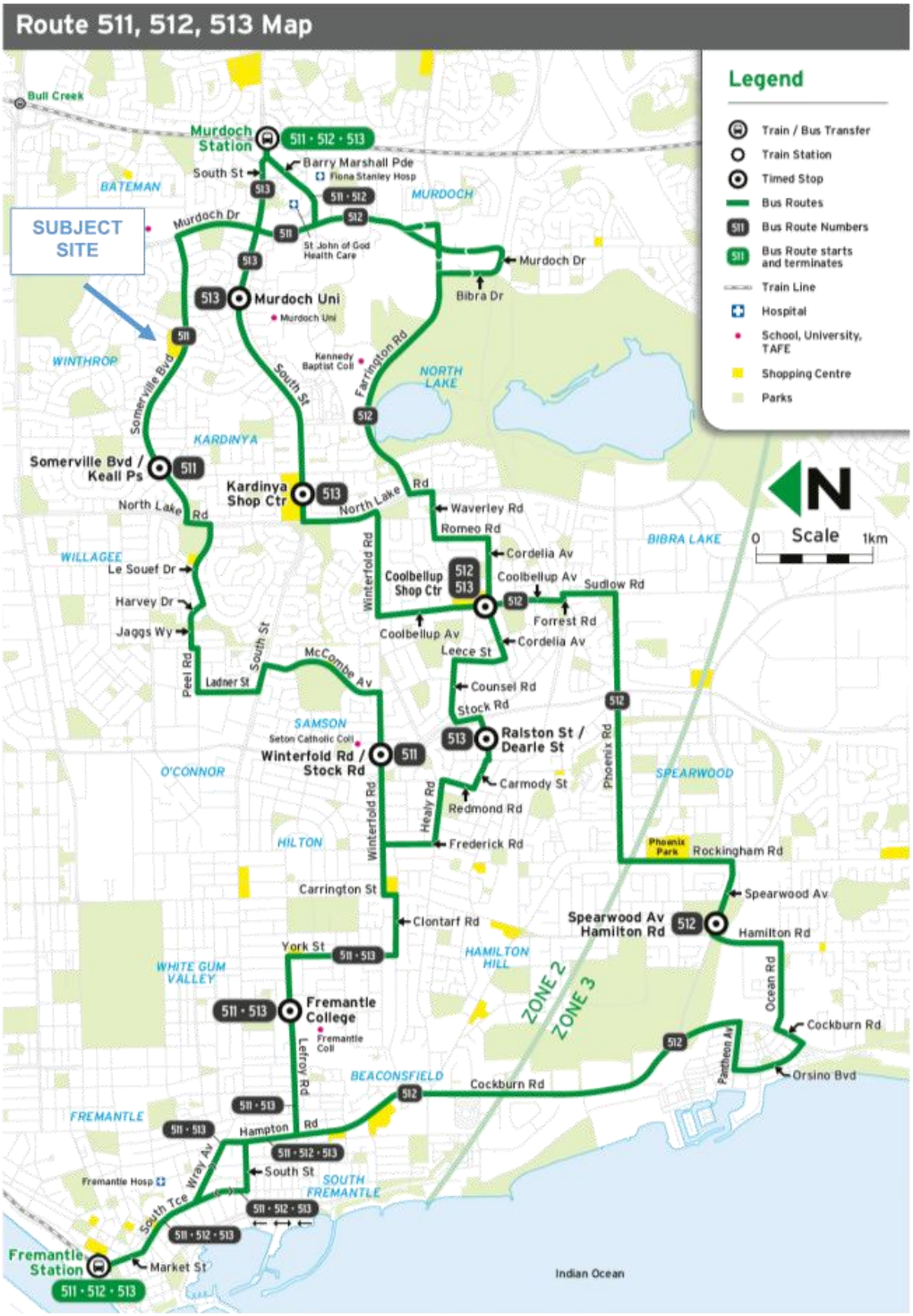


Figure 14: Transperth public transport plan (route 511)

Source: Transperth

10 Walking access

Information from online mapping services, Main Roads WA, Local Government, and site visits was collected to assess the walking access for the proposed development.

10.1 Walking facilities

The subject site is located within the established Winthrop Village neighbourhood centre, with existing walking infrastructure provided throughout the surrounding area.

Existing footpaths are provided along both site frontages, including Jackson Avenue and Hatherley Parade. These footpaths provide direct connectivity between the subject site, the adjoining Winthrop Village Shopping Centre, nearby residential areas and surrounding local streets.

The proposed development includes a clear and legible walking connection from Jackson Avenue to the main residential lobby. The access roadway between Jackson Avenue and the lower-ground parking area is proposed to operate as a shared zone for walking, cycling and driving, providing a low-speed environment and maintaining walking connectivity through the eastern side of the site.

Walking access will also be available between the development and the adjoining shopping centre car park / internal pedestrian network. This will support convenient access to the retail, commercial and medical uses within Winthrop Village without requiring residents or visitors to rely on private vehicle trips for short local journeys.

The broader walking network provides access to nearby community facilities and local destinations, including Winthrop Village Shopping Centre, Winthrop Primary School, Somerville Park and nearby residential streets. The local street environment is conducive to walking, with low-speed residential streets, established verges and existing paths supporting access through the surrounding neighbourhood.

Overall, the site is considered to have a good level of walking accessibility. The proposed development will maintain and enhance walking connections along Jackson Avenue and Hatherley Parade, while providing direct internal access between the residential entry, shared zone, visitor parking areas and adjoining neighbourhood centre.

11 Bicycle access

Information from online mapping services, Department of Transport, Local Government, and/or site visits was collected to assess bicycle access for the proposed development.

11.1 Bicycle network

The subject site is located within an established bicycle network, with cycling facilities and low-speed local streets providing connectivity to the surrounding residential catchment, neighbourhood centre uses and nearby activity destinations.

Jackson Avenue, which forms the eastern frontage of the site, includes existing cycling lanes on both sides of the road. This provides direct bicycle access past the subject site and connects to the broader local street network. Hatherley Parade also provides a local street connection along the northern frontage of the site and forms part of the surrounding low-speed residential street environment.

Somerville Boulevard, located to the south of the site, forms a key east-west cycling route through the locality. This corridor provides connectivity towards Winthrop Drive to the west and Murdoch Drive to the east, including access towards Murdoch University, Fiona Stanley Hospital and other regional activity destinations. South Street, further south of the site, also forms part of the broader cycling network, providing higher-order east-west connectivity through the area.

The Strava cycling heatmap shown in Figure 15 indicates that cycling activity is concentrated along the higher-order road corridors, including Somerville Boulevard, Murdoch Drive and South Street. Moderate activity is also evident on several local connector streets within the surrounding residential area. This indicates that the site is located within an area where cycling is already occurring, particularly for movements along the surrounding distributor road network and connections to nearby activity centres.

Cycling access to the proposed development will be available via Jackson Avenue, Hatherley Parade and the surrounding local street network. The proposed internal shared zone will support bicycle access between Jackson Avenue, the residential development and the adjoining Winthrop Village interface. Bicycle parking is proposed within the development.

Overall, the site is considered to have a good level of cycling accessibility. The existing on-road bicycle lanes on Jackson Avenue, nearby cycling facilities on Somerville Boulevard and the surrounding local street network provide practical bicycle connections to local shops, schools, open space, public transport and nearby employment / education destinations.

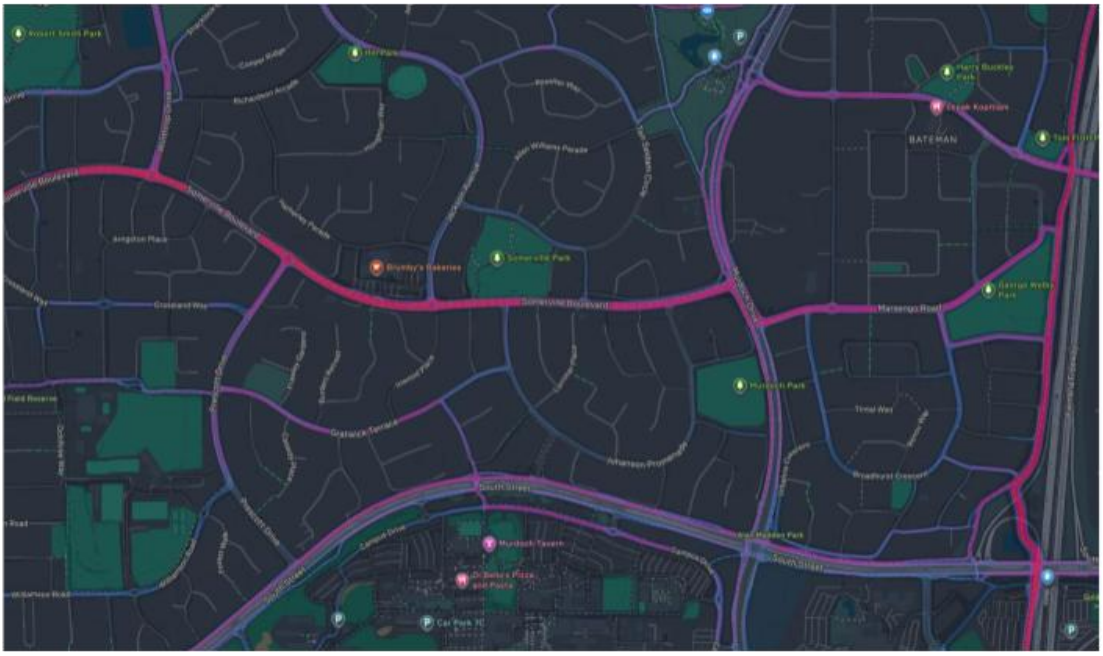


Figure 15: Strava cycling heatmap

11.2 Bicycle parking and end of trip facilities

Bicycle parking is proposed to be provided on-site in accordance with the requirements of the Residential Design Codes (R-Codes). A total of 15 bicycle parking spaces are proposed, comprising 11 spaces for residents and 4 spaces for visitors.

Resident bicycle parking will be provided within the lower-ground parking level, in a secure and convenient location close to the lift and stair core. This will support longer-term bicycle storage for residents and provide direct access between the bicycle parking area, resident car park and apartment levels.

Visitor bicycle parking will be provided in an accessible location within the development car park for short-term use by visitors. The visitor bicycle parking will be located to provide convenient access from the surrounding path network and the development entry. Visitors can gain access to bicycle parking through intercom access.

Given the residential nature of the development, dedicated end-of-trip facilities such as showers and change rooms are not typically required.

Overall, the proposed bicycle parking provision exceeds the calculated R-Codes requirement of 14 spaces and is considered appropriate for the scale and nature of the development.

12 Site specific issues

During the City's assessment of the amended development application, two matters were raised regarding the proposed on-street visitor parking bays on Jackson Avenue:

- the interface between parked vehicles and the adjoining shared path; and
- the suitability of providing on-street parking on Jackson Avenue.

These matters have been reviewed as part of this updated Transport Impact Statement and are addressed below.

12.1 Pedestrian interface

The landscape plan has been revised to improve the interface between the proposed visitor parking bays and the adjoining pedestrian environment.

The footpath adjacent to the proposed parking bays has been increased to a minimum width of approximately 2.1 m. This provides additional clearance adjacent to parked vehicles, allowing for door opening while maintaining a generous continuous path of travel for people walking, using mobility devices and pushing prams. The resulting footpath width remains suitable for two-way pedestrian movements and comfortably exceeds the space required for a continuous accessible path of travel.

Providing paved footpaths immediately adjacent to kerbside parking is also a common and well-established streetscape treatment throughout metropolitan activity centres. Figure 16 illustrates a comparable example on Angelo Street, South Perth, where parallel on-street parking is provided directly adjacent to the footpath without landscaped verge separation. Similar arrangements exist throughout many established town centres across Perth.

Accordingly, the proposed interface is considered appropriate for the urban context of Jackson Avenue and provides a safe and practical arrangement for all road users.



Figure 16: Example path abutting street parking – Angelo Street, South Perth

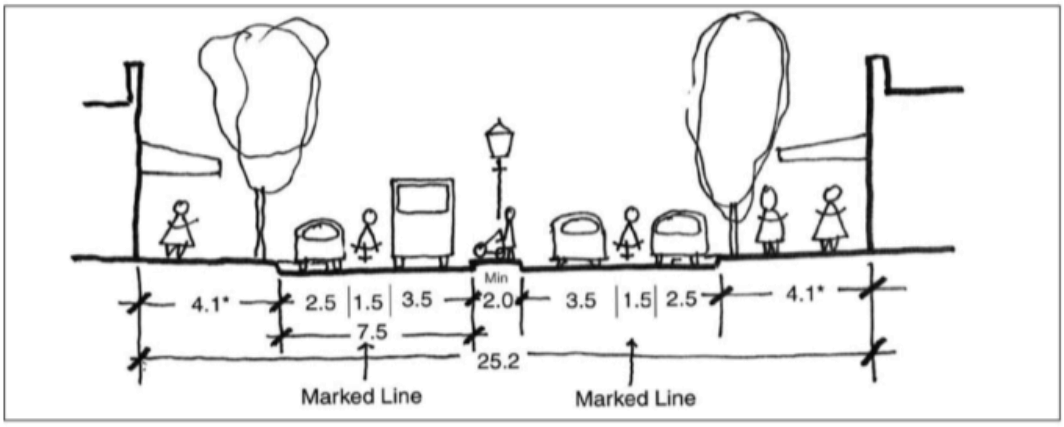
12.2 Consistency with Liveable Neighbourhoods

The proposed on-street visitor parking arrangement is also consistent with the design intent of *Liveable Neighbourhoods*.

The *Liveable Neighbourhoods* road hierarchy identifies Integrator B roads within town centres as accommodating parallel on-street parking, footpaths immediately adjacent to the kerb, and on-road cycling facilities within the same cross-section (Figure 17). These streets are intended to support mixed-use activity and typically accommodate traffic volumes of up to approximately 15,000 vehicles per day.

Jackson Avenue exhibits the characteristics of an Integrator B town centre street. It provides frontage to the Winthrop Village neighbourhood centre, includes an existing bicycle lane and pedestrian facilities, operates within a 50 km/h speed environment, and carries approximately 4,000 vehicles per day. This traffic volume is substantially below the upper operating range contemplated by *Liveable Neighbourhoods* for this road type.

Accordingly, the provision of parallel on-street visitor parking is entirely consistent with contemporary Western Australian street design guidance and is not expected to adversely affect traffic operations or road safety.



Integrator B – town centre main street – 40-50 km/hr (up to 15 000 vehicles per day).

Figure 17: Liveable Neighbourhoods – Integrator B road section

12.3 Previous approval and sight distance

The subject site benefits from an existing development approval that incorporated on-street visitor parking as part of the approved traffic engineering assessment.

The previous Transport Impact Statement identified approximately 69 m of sight distance in each direction from the development crossover and confirmed that street parking complied with the relevant intersection setback and driveway sightline requirements, as shown in Figure 18. The revised street parking arrangement does not reduce the previously demonstrated sight distance.

The current proposal also provides a wider pedestrian path adjacent to the parking bays, representing an improvement over the previously assessed arrangement.



Figure 18: Development crossover sight distance

Source: Winthrop Village Residential Development Technical Note, Flyt 2020

12.4 Overall assessment

The proposed visitor parking bays represent a minor variation to the applicable R-Codes visitor parking requirement, with two visitor bays proposed in lieu of five.

From a transport engineering perspective, the proposed arrangement is appropriate having regard to:

- the site location within an established neighbourhood activity centre;
- the availability of substantial adjoining shopping centre parking;
- the revised 2.1 m footpath providing improved pedestrian clearance;
- consistency with *Liveable Neighbourhoods* guidance for Integrator B town centre streets;
- the relatively low traffic volumes on Jackson Avenue (approximately 4,000 vehicles per day);
- the demonstrated compliance with sight distance requirements for both the nearby intersection and the proposed development crossover.

Overall, the proposed on-street visitor parking is considered to provide a safe, functional and appropriate outcome and is not expected to adversely affect traffic operations, road safety or pedestrian accessibility. It therefore remains suitable to support the proposed development.

13 Safety issues

A review of reported crash data in the vicinity of the site was undertaken using Main Roads Western Australia crash records for the five-year period 2021 to 2025. The recorded crash locations are shown in Figure 19, with a summary of the crash history provided in Table 7.

A total of 4 crashes were recorded within the assessed locality during the five-year review period. Of these crashes, 3 resulted in medical treatment and 1 was recorded as property damage only. No fatal or hospital crashes were recorded.

The majority of crashes were right-angle crashes, with 3 right-angle crashes recorded, representing 75% of the total crash history.

All recorded crashes occurred during daylight conditions. Three crashes occurred in dry conditions, with the remaining crash recorded as other / unknown conditions. The crashes were distributed across the review period, with 1 crash recorded in 2022, 2 crashes recorded in 2023 and 1 crash recorded in 2025.

The crash map in Figure 19 indicates that the recorded crashes were generally associated with the surrounding road network and intersection environments, rather than being concentrated at the proposed development access location. Based on the low number of crashes recorded over the five-year period, and the absence of any fatal or hospital crashes, the crash history does not indicate an existing road safety issue that would be materially affected by the proposed residential development.

The proposed development access arrangements include several design measures to support safe operation, including the use of a low-speed shared zone, controlled access via retractable bollards, visually permeable treatments adjacent to the garage doors, and a traffic safety mirror to assist intervisibility between vehicles exiting the western garage and shopping centre traffic using the easement connection.

Overall, based on the crash history summarised in Table 7 and the proposed access design measures, the development is not expected to create or exacerbate any road safety issues on the surrounding road network.



Figure 19: 5-year crash map in the locality (2021-2025)

Source: MRWA crash mapping tool

Table 7: 5-year crash history in the locality (2021-2025)

Severity	No.	%
Fatal	0	0
Hospital	0	0
Medical	3	75.00
PDO Major	0	0
PDO Minor	1	25.00

Year	No.	%
2022	1	25.00
2023	2	50.00
2025	1	25.00

Nature	No.	%
Head On	0	0
Hit Animal	0	0
Hit Object	1	25.00
Hit Pedestrian	0	0
Non Collision	0	0
Not Known	0	0
Rear End	0	0
Right Angle	3	75.00
Right Turn Thru	0	0
Sideswipe Opposite Dirn	0	0
Sideswipe Same Dirn	0	0

Light	No.	%
Dark - Street Lights Not Provided	0	0
Dark - Street Lights Off	0	0
Dark - Street Lights On	0	0
Dawn Or Dusk	0	0
Daylight	4	100.00
Not Known	0	0

Conditions	No.	%
Dry	3	75.00
Not Known	0	0
Other / Unknown	1	25.00
Wet	0	0

Alignment	No.	%
Curve	0	0
Not Known	0	0
Other / Unknown	3	75.00
Straight	1	25.00

Total		4

14 Conclusion

This Transport Impact Statement has been prepared by Urbii on behalf of Nostoc Pty Ltd in support of the proposed residential development located on a portion of Lot 369 (No. 109–141) Somerville Boulevard, Winthrop.

The proposed development comprises 22 residential apartments, consisting of one one-bedroom dwelling, five two-bedroom dwellings and sixteen three-bedroom dwellings. The development provides 43 resident car parking bays within the lower-ground car park, two on-street visitor parking bays, five motorcycle parking bays and 15 bicycle parking spaces.

Vehicle access to the development is proposed via the modified northern Jackson Avenue crossover. The access roadway will operate as a low-speed shared zone for walking, cycling and driving, with access controlled by retractable remotely operated bollards. The existing southern Jackson Avenue crossover will continue to service the adjoining shopping centre, maintaining separation between shopping centre traffic and residential access movements.

The proposed visitor parking arrangement represents a minor variation to the applicable planning policy requirements. However, the reduced provision is considered appropriate having regard to the site location within the Winthrop Village neighbourhood centre, the availability of adjoining public parking, the revised 2.1 m wide footpath adjacent to street parking bays, compliance with sight distance requirements, and consistency with the principles of Liveable Neighbourhoods for town centre streets.

Waste collection is proposed to occur on-site within the private shared zone using the City of Melville waste collection service. Compared with the previously approved development, the revised arrangement provides an improved operational outcome by enabling waste collection to occur within the development site rather than within the shopping centre parking aisles. This eliminates obstruction of shopping centre parking bays during collection while maintaining forward entry and exit for the waste vehicle.

The proposed development is forecast to generate approximately 60 vehicle trips per day, including approximately 9 trips during the weekday AM peak hour and 8 trips during the weekday PM peak hour. This level of traffic generation is low and will not materially affect the operation of the surrounding road network.

A review of reported crash data did not identify any existing road safety issues that would be materially affected by the proposal. The access arrangements, sight distances, shared zone treatment and low traffic generation are expected to support safe and efficient operation of the development.

Overall, the proposed development is considered acceptable from a transport planning and traffic engineering perspective. The proposed access arrangements, parking provision and servicing strategy are appropriate for the site and represent a practical improvement over the previously approved development while remaining consistent with the surrounding activity centre context and applicable planning and engineering guidance.

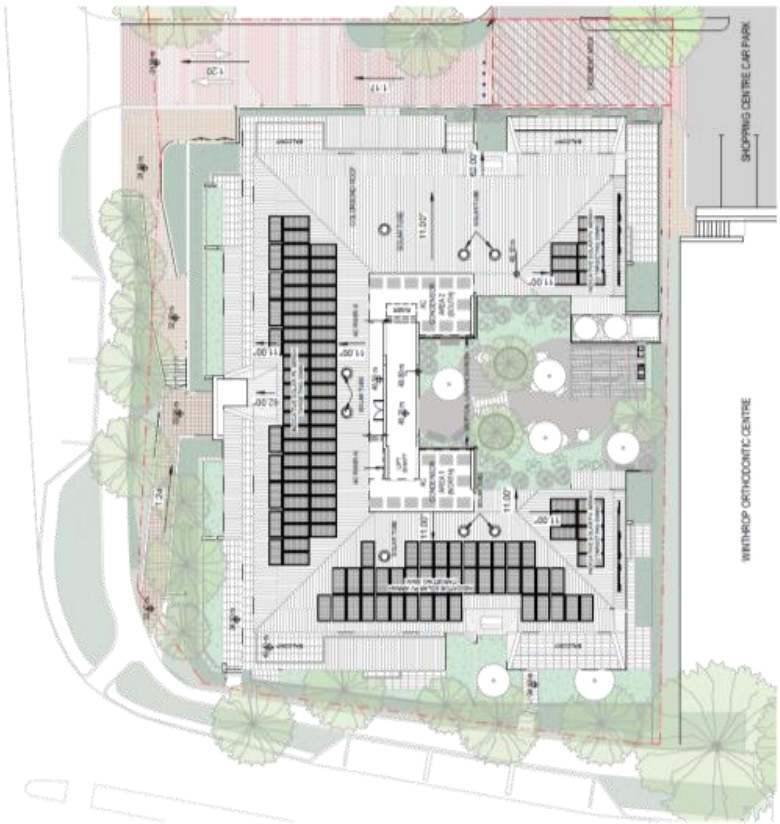
15 Appendices

Appendix A: Proposed development plans


CAMERON CHISHOLM NICOL
WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT
A100
P25037
LOWER GROUND
SCALE 1:200 (A2)
JACKSON AVENUE
HATHERLEY PARADE
TREE PROTECTION ZONE
PROPOSED ADJOINING PROPERTY
SHOPPING CENTRE CAR PARK
CARPARK
WINTHROP ORTHODONTIC CENTRE


CAMERON CHISHOLM NICOL
WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT
A101
P25037
21/07/2026
GROUND FLOOR / LEVEL 1
SCALE 1:200 (A2)
JACKSON AVENUE
HATHERLEY PARADE
SHOPPING CENTRE CAR PARK
COMMUNAL OUTDOOR
1 DA - 00 GROUND LEVEL 1:200
2 DA - 01 LEVEL 1:200
1 BEDROOM
2 BEDROOM
3 BEDROOM
BALCONY
TERRACE


CAMERON CHISHOLM NICOL
WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT
A102
08/05/2026
P25037
LEVEL 2 / LEVEL 3
SCALE 1 : 200 (A2)
DA - 02 LEVEL
DA - 03 LEVEL
2 BEDROOM
3 BEDROOM
47



CAMERON CHISHOLM NICOL

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT A105

P25037 08/05/2026

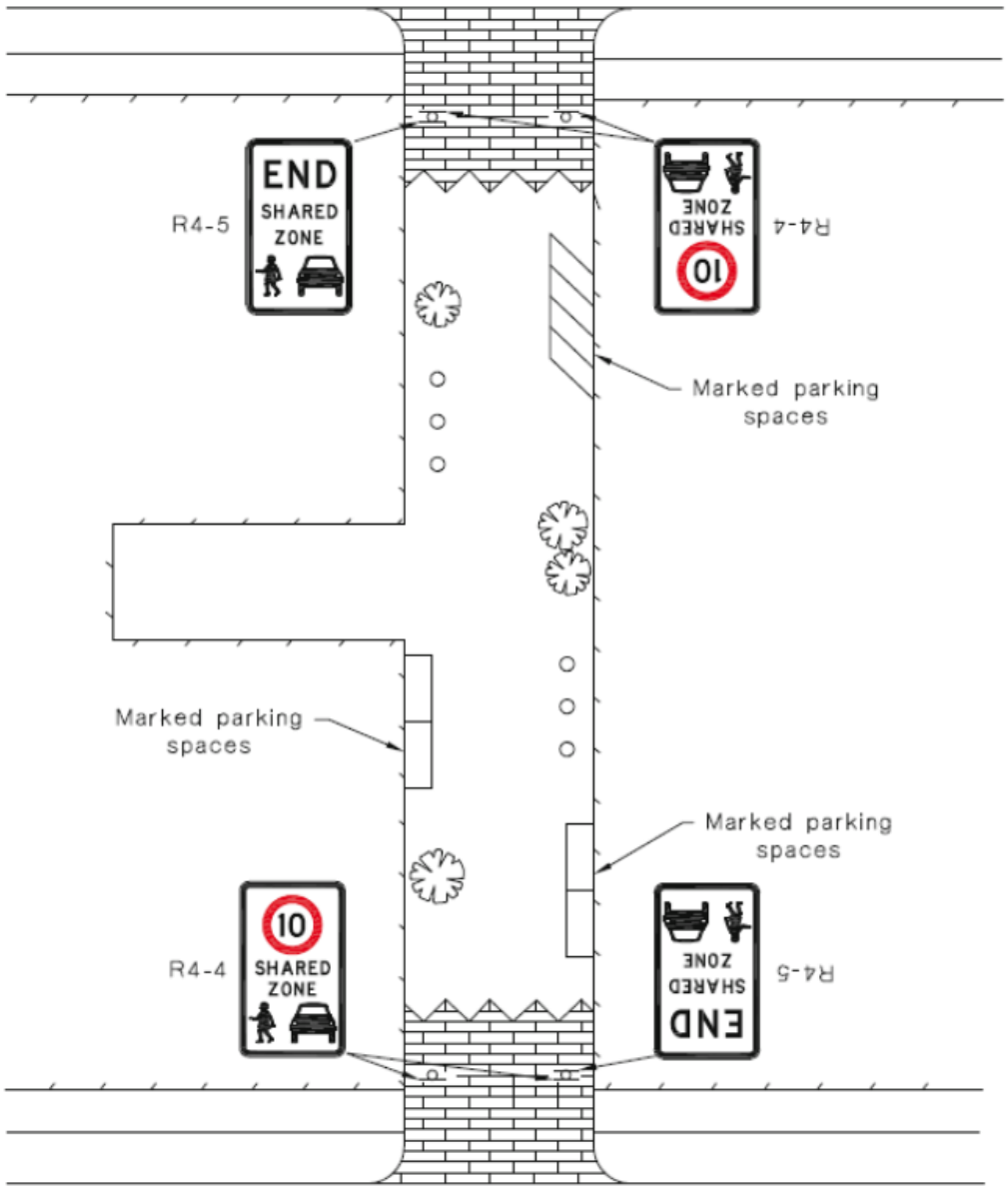
ROOF PLAN

SCALE 1 : 200 (A2)

1 2 4 8 m

Appendix B: Typical shared zone treatment

Source: AS 1742.4 – 2008



Appendix C: Swept path diagrams

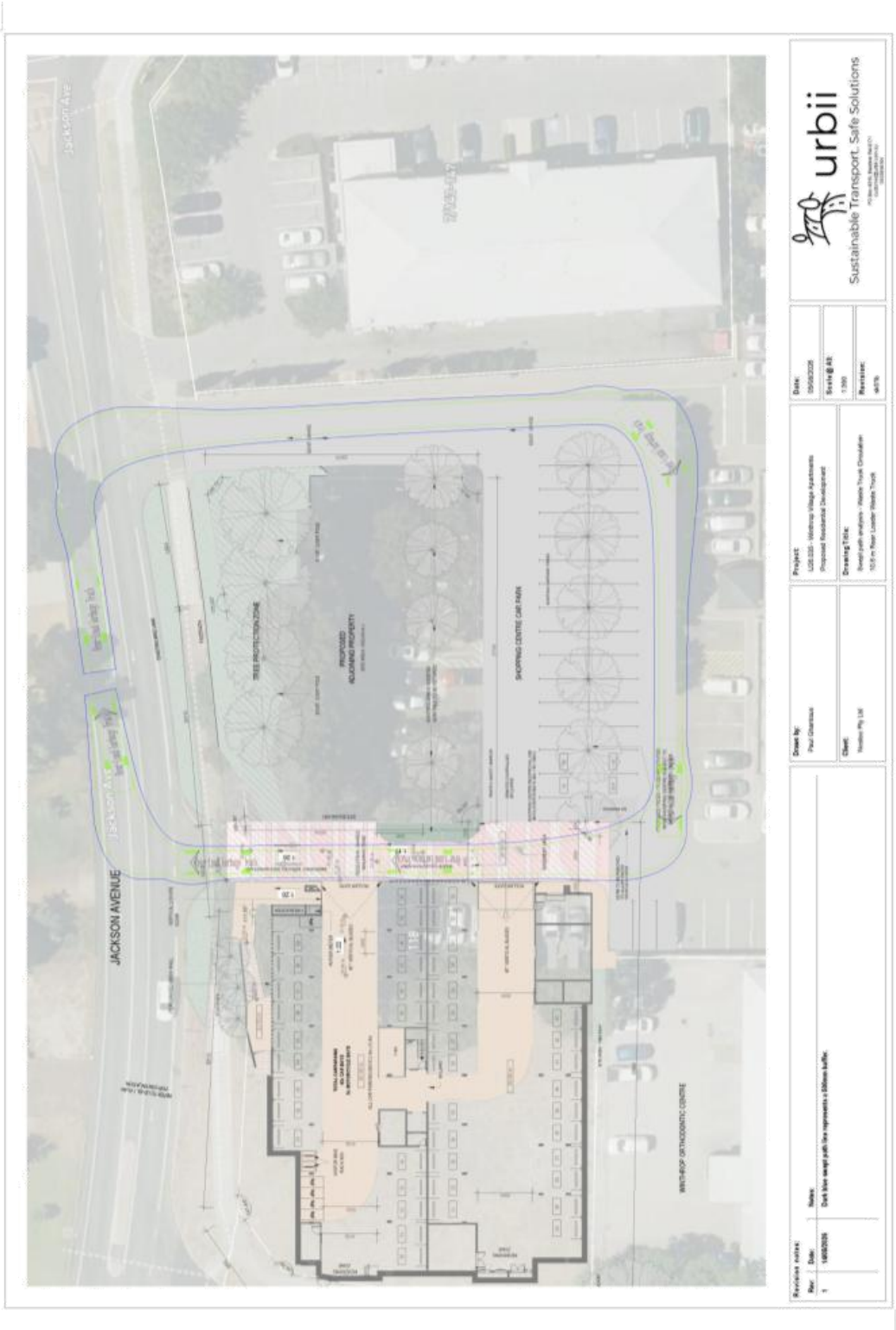
Swept path diagrams are included in this section of the report. Different coloured lines are employed to represent the various envelopes of the vehicle swept path, as described below:

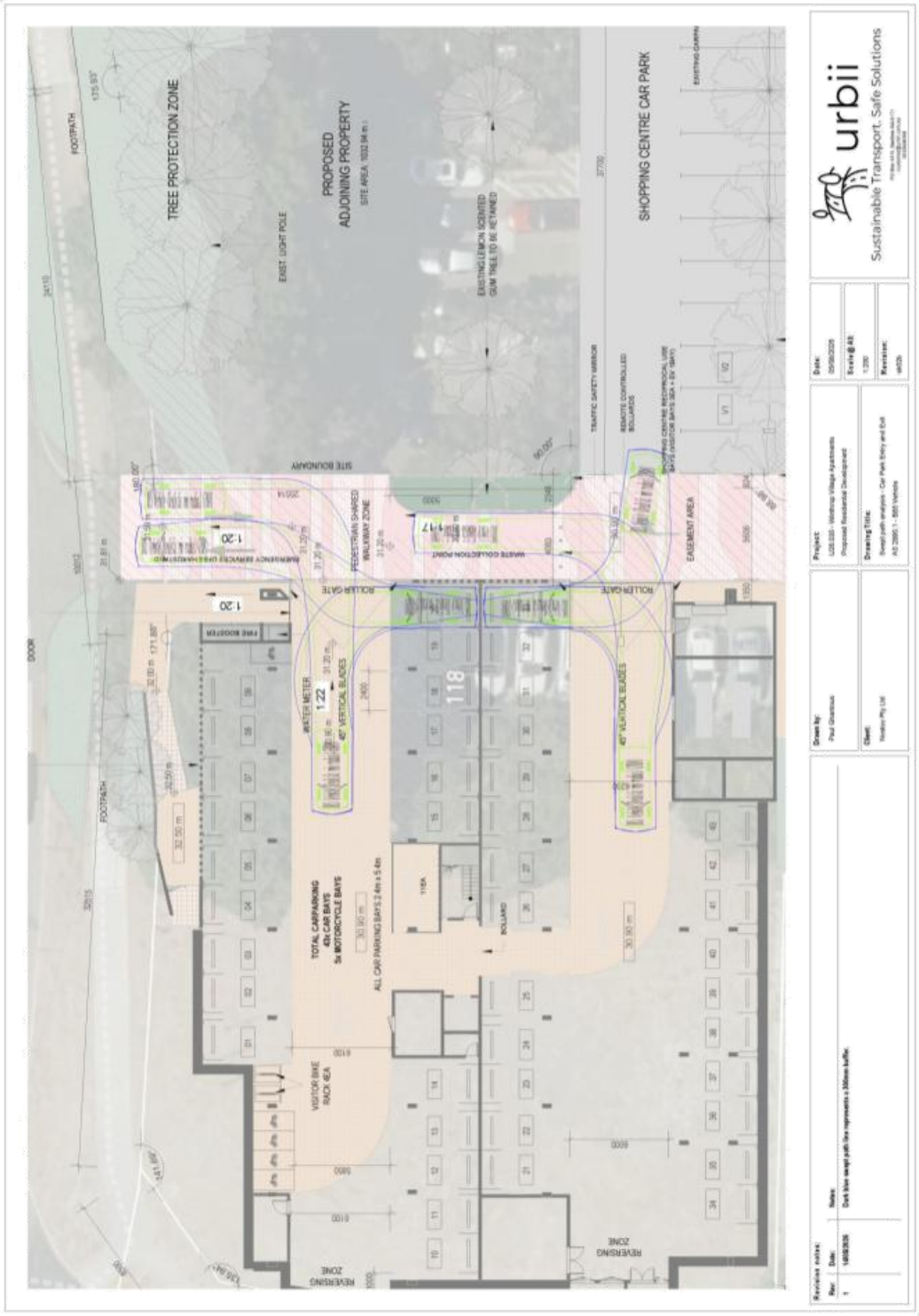
Cyan represents the wheel path of the vehicle

Green represents the vehicle body envelope

Blue represents a 300mm / 500mm buffer line, offset from the vehicle swept path

The swept path diagrams are also provided separately in high-quality, A3 PDF format.


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Lot 369 Somerville Boulevard, Winthrop
Proposed Residential Development

Waste Management Plan



Prepared for:
Nostoc Pty Ltd

August 2026

Lot 369 Somerville Boulevard, Winthrop

Prepared for: Nostoc Pty Ltd
Prepared by: Paul Ghantous
Date: 5 August 2026
Project number: U26.035

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1 Introduction

This Waste Management Plan has been prepared by Urbii on behalf of Nostoc Pty Ltd in support of the proposed residential development, located at Lot 369 Somerville Boulevard, Winthrop.

The subject site is located within the north-eastern corner of the broader Winthrop Village landholding, with frontage to Jackson Avenue and Hatherley Parade, as shown in Figure 1.

It is proposed to develop the site into a four-storey residential apartment building comprising 22 dwellings, with associated communal open space, landscaping, bicycle parking, motorcycle parking and lower-ground resident car parking. The proposed dwelling mix comprises 1 one-bedroom apartment, 5 two-bedroom apartments and 16 three-bedroom apartments.

The key issues addressed in this WMP include calculation of waste generation for the development, assessment of waste storage provisions, and documentation of the waste collection arrangements.

This WMP has been updated following consultation with the City of Melville during the development assessment process. The revised plan adopts the City's waste generation rates prescribed by Local Planning Policy 1.3 and provides further detail regarding the waste storage, bulk waste provision, collection and vehicle access arrangements.



Figure 1: Subject site

2 Objectives

The objectives of this WMP are adapted from WALGA:

- Ensure that the long-term waste management needs for the development are met in an efficient and sustainable manner.
- Minimise the impact of waste services and facilities on the streetscape and surrounds, in relation to both the footpath/public realm and the frontage of the development.
- Reduce the impact of waste collection services and facilities on the amenity of the locality particularly in terms of noise and odour.
- Maximise safety for both waste collection staff and the public.
- Minimise traffic and footpath obstruction.

3 Referenced documents

The documents referenced in preparing this WMP may include, but are not limited to:

- City of Melville Local Planning Policy 1.3 – *Waste and Recyclables Collection for Multiple Dwellings, Mixed Use Developments and Non-Residential Developments;*
- WALGA *Multiple Dwelling Waste Management Plan Guidelines*;
- WALGA *Subdivision Waste Management Plan Guidelines*; and,
- Waste Authority WA *Waste Avoidance and Resource Recovery Strategy for 2030*.

4 Guiding concepts

Urbii adopts the guiding concepts of the State's Waste Strategy and encourages these concepts to be considered in all developments to the furthest extent feasible.

4.1 Waste hierarchy

The *Waste Avoidance and Resource Recovery Strategy 2030* applies the waste hierarchy (Figure 2), which is a widely accepted decision-making tool. The waste hierarchy ranks waste management options in order of their general environmental desirability. Waste avoidance is the most preferred option in the hierarchy.

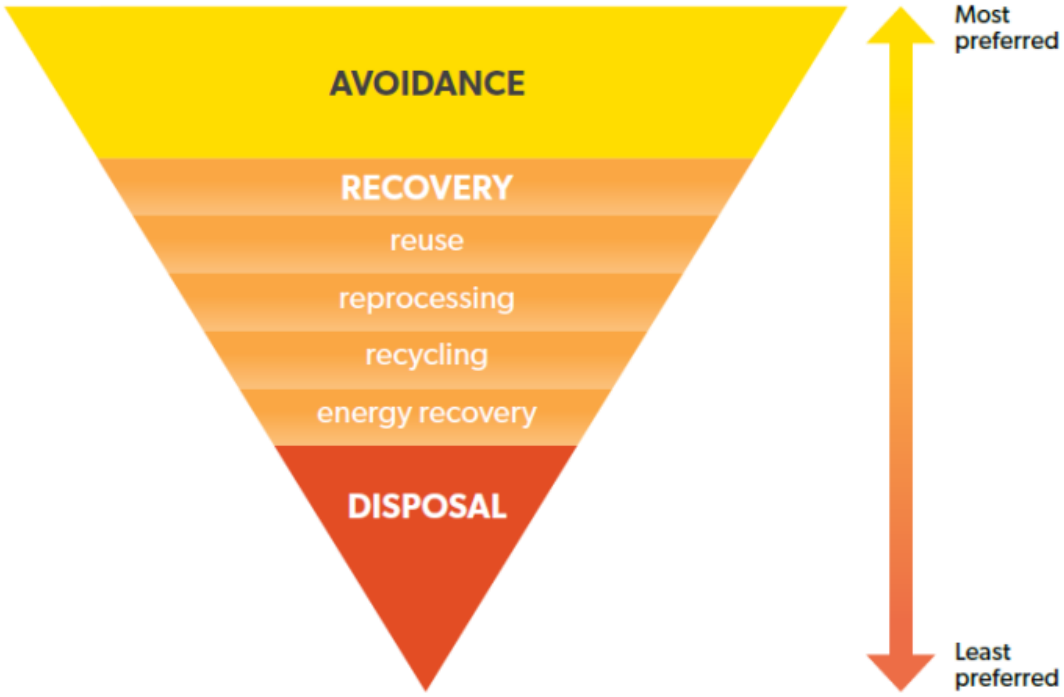


Figure 2: Waste hierarchy

Source: Waste Authority WA *Waste Avoidance and Resource Recovery Strategy for 2030.*

Resource recovery options recover value from materials, thereby offsetting the environmental impacts of extracting and processing raw materials. Energy recovery is the least preferred recovery option. Disposal is the least preferred option. Disposal generally recovers the least value from materials and delivers the least environmental benefit.

4.2 Circular economy

A circular economy (Figure 3) makes use of established sustainability concepts, including life cycle thinking and resource efficiency. A circular economy should consider the flow of both materials and energy. It moves away from the linear 'take, make, use and dispose' model, to one which keeps materials and energy circulating in the economy for as long as possible.

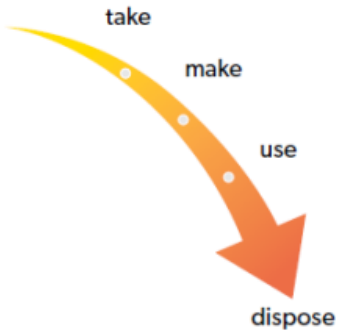
Current approach	Circular economy
	
Linear flow of materials – 'take, make, use and dispose' model.	Circular flow of materials – materials sorted and retained in the economy for as long as possible.
Limited use of renewable materials and energy.	Preference for renewable materials and energy.
Significant volumes of materials disposed of and lost to the economy. Loss of embodied materials, energy and water.	Materials recovered as high up the waste hierarchy as possible. Embodied materials, energy and water retained in the economy. Organic materials re-enter and regenerate the environment safely (for example, as compost).
Materials managed locally and globally.	Preference to manage materials locally to reduce the costs and impacts of transport, and to provide local employment and investment opportunities.
Economic value of materials, employment and investment not fully accounted for.	Economic value of materials, employment and investment accounted for.
Limited focus on life cycle thinking.	Products designed and manufactured to minimise environmental impact through whole of life.

Figure 3: Transitioning to a circular economy

5 Proposed development

The proposal for the subject site is for a residential development comprising:

- 22 residential apartment dwellings, including:
  - 1 x 1-bedroom dwelling;
  - 5 x 2-bedroom dwellings; and
  - 16 x 3-bedroom dwellings;
- 43 resident car parking bays;
- 2 on-street visitor car parking bays;
- 5 motorcycle parking bays;
- 15 bicycle parking spaces, comprising:
  - 11 resident bicycle parking spaces; and
  - 4 visitor bicycle parking spaces; and
- a communal bin store, bulk waste storage room and associated service infrastructure.

Vehicle access to the site is proposed via a single ramped crossover on Jackson Avenue, providing access to the lower-ground parking level.

The access roadway connecting to Jackson Avenue will be constructed as a shared zone for walking, cycling and driving. This will provide a low-speed environment and reinforce pedestrian priority through the access area. Retractable remotely operated bollards will be provided within the shared zone to prevent through traffic associated with the adjoining shopping centre from using the residential access roadway as a shortcut. The bollards will allow controlled access for residents, authorised users and service vehicles, including the City's waste collection vehicle.

A single communal bin store is provided within the lower-ground parking level, located adjacent to the western garage door and the proposed waste collection point within the shared zone. This arrangement allows bins to be moved directly from the bin store to the rear of the waste collection vehicle for servicing and returned immediately after collection.

A separate 11 m² bulk waste storage room is also provided within the lower-ground level. This room will be used for the temporary storage of bulky household items pending collection or disposal and will be managed by the building or strata manager.

The proposed development plans are included for reference in Appendix A.

6 Waste stream composition and generation

6.1 Waste composition

Residential developments typically generate several distinct waste streams that require separate collection and management systems. Understanding the expected composition of these waste streams is essential for determining appropriate storage volumes, collection frequencies, and servicing arrangements.

Table 1 summarises the common waste streams associated with medium- and high-density residential developments and provides indicative commentary on their characteristics and management considerations.

Table 1: Types of waste generated by multiple dwelling developments

Waste Stream	Comment
General Waste	General waste usually includes non-recyclable materials, such as non-recyclable plastic packaging, paper packaging contaminated with food waste and organic materials, such as garden trimmings and food waste. Batteries, hazardous waste (chemicals, paints, cleaning products, medicines or flammable liquids) should not be included in the general waste stream.
Comingled recyclables	Comingled recyclables consist of the assortment of recyclable materials generated in households. Materials collected for recycling may vary between Local Governments, but generally include plastic and glass containers, paper, cardboard and steel and aluminium cans.
Organic waste	Organic waste, includes garden waste, food scraps, compostable paper (tissues, serviettes, soiled paper, paper plates, etc.) and can make up a significant percentage of the general waste stream.
Household Hazardous Waste	Household hazardous waste (HHW) is broadly defined as leftover household products that are corrosive, toxic, flammable or reactive. If improperly used or disposed of, HHW can be harmful to human health and the environment. HHW includes chemical waste and other hazardous materials, such as batteries, fluorescent lamps, and gas cylinders.
Bulky Waste	Bulky waste can include old and broken furniture and electronic items/white goods and materials generated. Bulky waste can be a significant issue within developments with a high residential turnover, such as rental unit complexes, where tenants are required to dispose of various unwanted household items.

6.2 Waste generation rates

The waste generation rates for general waste, recycling and FOGO have been adopted from the City of Melville Local Planning Policy 1.3 – *Waste and Recyclables Collection for Multiple Dwellings, Mixed Use Developments and Non-Residential Developments*.

The applicable residential waste generation rates are based on dwelling size and are summarised in Table 2.

Table 2: Residential waste generation rates

Dwelling size	General waste	Recycling	FOGO	Metric
1-bedroom dwelling	40	60	10	L/week/dwelling
2-bedroom dwelling	60	80	20	L/week/dwelling
3-bedroom dwelling or greater	70	120	30	L/week/dwelling

6.3 Waste generation calculations

The estimated waste generation for the development is:

- General Waste: 1,460 L per week.
- Commingled recyclables: 2,380 L per week.
- FOGO: 590 L per week.

Detailed waste generation calculations are provided in Appendix D.

7 Design considerations

7.1 Noise

The relevant better practice principles which have been adopted for this development to reduce noise include:

☒	Locating bin bays and collection points far enough away from residents to reduce the impact of the noise of bin use and waste collection
☒	Eliminating the need for collection vehicles to reverse
☐	Chutes, if installed, should be well insulated to avoid noise disturbing neighbouring units
☒	Select appropriate surfacing materials that will assist in minimising noise for pathways and driveways that bins will need to be wheeled over
☒	Consider how material will be transferred into bins or static compactors at storage points

7.2 Odour

Odour problems can be minimised by having well-ventilated waste storage areas. For enclosed storage and service areas, the air flowing from any storage areas should not exit close to residences. Ventilation openings should be protected against flies and vermin and located as near the ceiling and floor as possible, but away from the windows of dwellings.

The proposed odour control for the waste storage area includes:

☐	The waste storage area is uncovered
☒	The waste storage area is covered. The design of the bin store will provide for adequate natural ventilation through ventilated doors or an alternative method which will be permanent, unobstructed natural ventilation openings direct to the external air, **not less than one-twentieth i.e. 5% of the floor area.**
☐	The waste storage area is completely enclosed with no natural ventilation. A mechanical ventilation system is required, with the following features: • It should be in accordance with the ventilation requirements of the Building Code of Australia and Australian Standard *AS 1668.2 The use of Ventilation and Air Conditioning in Buildings.* • It should not be connected to the same ventilation system supplying air to the units.

7.3 Hygiene and vermin

Waste not sealed in containers attracts vermin and is potentially unhygienic. To minimise the potential for this, keep waste collection and storage areas free of clutter and dumped waste, do not allow bins to sit open for extended periods of time and **as far as possible, prevent vermin getting into waste collection and storage areas**.

Communal bin storage areas need to be easy to clean, with access to water (a tap and a hose) and **correct drainage to the sewer**. The disposal of water from washing bins and/or waste storage areas to stormwater drains **should be avoided**, wash-down areas having **drainage connected to the sewer**.

Drains to sewer should be located under cover to prevent rainwater inflows. Ideally, having covered floor junctions at walls helps with cleaning and avoids the build-up of dirt/spills. To maintain hygiene wash bins, floors and walls of waste bays and rooms regularly.

The development bin store includes the following features:

☒	Self-closing doors to control vermin
☒	Bin store doors can be locked open while moving bins
☒	Impermeable walls and floor with a tap and hose to facilitate washing of bins and the bin store
☒	Suitably graded floor with a waste drain that is connected to sewer
☒	Designed to prevent storm water from entering the drain

7.4 Security

As far as practicable, the design of waste storage areas should:

- Maximise everyday surveillance by other residents
- Allow and encourage easy access for residents and building management whilst barring access by the public.

Some examples of how this could be done include:

- Locate the bin storage area away from public thoroughfares
- Design bin storage areas that can be locked
- For communal bin areas, ensure they are sufficiently open and well-lit to allow their use after dark.

The bin store will be located within the secured on-site parking area and will benefit from lighting and passive surveillance.



8 Waste storage

8.1 Bin storage area design summary

The proposed development incorporates the following design elements which are applicable:

☒	The bin store is large enough for the bins to sit next to each other, not behind each other, as residents may not take responsibility for rotating bins
☒	The height of the bin store is sufficient for the residual waste bin lids to be opened
☒	Bins are located on-site (not on the verge), and they are screened from any street frontage
☒	Adequate lighting will be provided to allow the usage of the bin store after dark
☒	Internal waste rooms are well ventilated and have a smooth, easily cleanable floor
☒	Suitable drainage, with water discharging into a sewer drain, will be installed to allow the washing of bins
☒	A tap with hose will be available for use by residents/cleaners to wash out domestic bins and transport containers
☐	CCTV will be fitted inside the bin room.

8.2 Bin storage within residences

Designers should aim to incorporate sufficient space within the kitchen, laundry room, or other convenient location within the dwelling for the temporary storage of waste. Space should be sufficient to allow for the separate storage of recyclables and general waste, as well as organic waste where applicable. Ways to encourage recycling and minimise contamination include:

- Provision of adequate internal storage space within dwellings (kitchen or laundry) to accommodate the temporary storage of at least 2 days' worth of general waste, organics (where applicable), and recycling. This should comprise:
  - A minimum 30L general waste bin
  - A minimum 30L commingled recyclables bin
  - A 10L organic waste bin
- Provision of reusable, robust containers to assist residents in transporting recyclable materials from their dwelling to recycling bins without resorting to plastic garbage bags e.g. reusable, washable tote bags
- Posting signage in public areas of the building to educate residents/tenants about the location and use of the waste management system, including what materials are suitable for recycling and composting.

8.3 External bin storage areas

Bin storage areas for this development must be adequate to contain all waste streams generated on the premises for the proposed waste collection frequency.

8.3.1 Bin size, quantity and colour

It is proposed to provide the following bins within a single communal bin store located near the waste collection point:

- 3 x 660L General waste (red lid bin).
- 4 x 660L Commingled recycling (yellow lid bin).
- 3 x 240L FOGO (lime green lid bins).

The proposed bin quantities provide sufficient capacity for the calculated weekly waste generation, based on weekly collection of each waste stream. The use of 660 L bins is subject to confirmation by the City of Melville waste services team.

The number of bins required for the development is detailed in Appendix D.

8.3.2 Bin storage area size

As detailed in Table 3, each 240L and 660L bin has a footprint area of 0.43m^2 and 1.16m^2, respectively. A 50mm gap is allowed between the bins to allow easy pull movement, and suitable clearance allowed between opposite bins and in walkways to maintain convenient walking access. The proposed bin store is sufficiently sized to accommodate the required bins, associated clearances and access paths, as indicated in Appendix B.

Table 3: Mobile Garbage Bin (MGB) dimensions

Bin capacity	80L	120L	140L	240L	360L
Height (mm)	870	940	1065	1080	1100
Depth (mm)	530	560	540	735	885
Width (mm)	450	485	500	580	600
Approximate footprint (m²)	0.24	0.27	0.27	0.43	0.53

Bin capacity	660L	770L	1,100L	1,300L	1,700L
Height (mm)	1250	1425	1470	1408	1470
Depth (mm)	850	1100	1245	1250	1250
Width(mm)	1370	1370	1370	1770	1770
Approximate footprint (m²)	1.16	1.5	1.7	1.21	1.27

8.3.3 Bin storage area use

Waste and recycling storage facilities are located in positions that:

☒	Permit easy, direct and convenient access for the users of the facility
☒	Permit easy transfer of bins to the presentation point
☒	Permit easy, direct and convenient access for collection service providers
☒	Are well screened and do not reduce amenity
☒	Are secure and provide protection against potential vandalism
☒	Reduce potential noise pollution and disturbance of residents
☒	Are close to building exits.

Where bins of up to, and including, **360L** in capacity need to be wheeled to the collection point **by residents** (such as within unit complexes and townhouses):

☐	The distance should not exceed 75m in all circumstances
☐	For aged persons or persons with a disability, the distance should be limited to 50m
☐	The bin transfer grade should not exceed 1:14
☐	Bins should not need to be wheeled over steps (neither up nor down).

For bins **greater than 360L capacity**, if relocation of bins is required:

☐	Bins should not be wheeled over steps (neither up nor down)
☐	If less than or equal to 1.0m3 in capacity, bins should not need to be wheeled more than 5m from the interim storage point to the collection point
☐	If greater than 1.5m3 in capacity, manual manoeuvring of bins should be avoided wherever possible. Where it cannot be avoided (for example if bins are stored in a room or enclosure), the bins should not need to be wheeled more than 3m from the interim storage point to the collection point
☐	The bin-transfer grade should not exceed 1:30.

☒	Note: The above requirements are not applicable as residents will not be wheeling bins to the collection point. Bins will be transferred by building caretakers or waste contractor staff.

9 Waste collection

9.1 Waste vehicle types

Waste collection will be serviced by:

☒	Local government collection service: City of Melville A rear loader waste truck will be used to collect waste from the communal bin store.
☐	Private contractor collection service:

9.2 Waste collection frequency

The following waste collection frequency is proposed:

☒	General waste	Once per week
☒	Commingled recyclables	Once per week
☒	FOGO	Once per week

9.3 Waste collection method and presentation points

The proposed waste collection method and presentation point is:

☐	Standard kerbside service by placing bins on the verge (maximum 360L bin size)
☐	Street collection directly from the bin store
☒	On-site waste collection

Waste collection will occur from the designated collection point within the development private shared zone. The collection point is located near the communal bin store, allowing bins to be wheeled directly from the store to the rear of the waste collection vehicle for emptying.

All general waste, recycling and FOGO bins will be stored within the single communal bin store. No transfer of bins between separate storage areas will be required.

On collection day, the City of Melville waste collection service, or its appointed contractor, will service the bins from the shared zone collection point. Bins will be wheeled from the communal bin store to the rear of the waste collection vehicle, emptied and returned to the bin store immediately after servicing.

This arrangement minimises the distance over which bins must be moved, avoids the need for bins to be presented on the external road verge and keeps waste collection activities within a controlled on-site location.

A separate 11 m² bulk waste storage room is provided within the lower-ground level. This room will be used for the temporary storage of bulky household items pending collection or disposal and will be managed by the building or strata manager.

Overall, the proposed collection method is considered appropriate for the development and provides a safe, efficient and well contained waste servicing arrangement.

9.4 Vehicle access and maneuvering

Waste collection is proposed to be undertaken by the City of Melville waste collection service using a rear-loader waste collection vehicle.

The waste vehicle will enter via the existing southern Jackson Avenue crossover serving the Winthrop Village Shopping Centre. It will then circulate clockwise through the shopping centre car park before entering the development private shared zone in an eastbound direction.

During collection, the rear of the waste vehicle will be positioned near the communal bin store and western garage door. This allows bins to be wheeled directly from the store to the rear of the vehicle for emptying and returned immediately after servicing.

The waste vehicle will stop entirely within the private shared zone and only for the time required to service the bins. The stopping position will not obstruct the adjoining shopping centre parking aisles or parking bays. Access to both development garage doors and the lower-ground resident parking areas will also remain available during collection.

Following collection, the waste vehicle will continue eastbound through the shared zone and exit via the northern Jackson Avenue crossover. This arrangement enables the vehicle to enter, service and exit the site in a forward gear and avoids reversing movements within the shared zone.

Access for the waste collection vehicle will be managed through the proposed access-control system. Access remotes and/or PIN codes will be provided to the City or its appointed contractor to operate the retractable bollards and any relevant access-controlled gates or doors. This will allow authorised service vehicle access while preventing general shopping centre traffic from using the residential shared zone as a through-route.

Where practicable, waste collection will be scheduled during lower-activity periods for the shopping centre to minimise interaction with customer vehicles and people moving through the car park.

The proposed arrangement represents an improvement over the waste collection strategy approved under the previous development approval. Under the earlier arrangement, the waste vehicle circulated through and stopped within the shopping centre car park, temporarily obstructing access to several parking bays. Under the current proposal, the waste vehicle will stop within the development private shared zone, avoiding obstruction of the shopping centre aisles and parking bays.

Overall, the proposed servicing arrangement is considered safe and appropriate for the development. Waste collection will occur entirely on-site, bins will be stored and managed within the communal bin store, and no bins will be presented on the external road verge.

Swept path analysis for a 10.6m rear loader waste truck was undertaken and is provided in Appendix C of this report.

The analysis confirms that the vehicle can safely enter, service and exit the site in a forward gear.

10 Additional waste requirements

10.1 Bulk waste

A dedicated 11m² bulk waste storage room is provided within the lower-ground level of the development. The room will be used for the temporary storage of bulky household items pending collection or disposal.

Access to the bulk waste storage room will be managed by the building or strata manager. Residents will be required to arrange the placement of items within the room in accordance with the building's waste management procedures.

Bulk waste will be removed by a private waste contractor or through an available on-demand collection service provided by the City of Melville. The building or strata manager will coordinate collections to ensure items are not stored within common accessways, parking areas or the external road verge.

10.2 E-Waste

E-waste will be temporarily stored within individual dwellings or designated storage areas prior to disposal. E-waste will be disposed of via appropriate off-site facilities, local recycling centres, public battery recycling points, or other approved collection services where available.

10.3 Garden organics

Garden organic waste associated with landscape maintenance will be managed by the site caretaker or strata management.

Where feasible, garden waste will be placed within FOGO bins, subject to available capacity. Alternatively, garden waste will be removed from the site via trailer and disposed of at an appropriate off-site facility.

11 Response to City of Melville feedback

Following consultation with the City of Melville during the development assessment process, the WMP has been revised to address the matters raised in relation to waste generation, bin storage, bulk waste provision and the proposed on-site collection arrangement. The following sections summarise the key amendments and demonstrate how the revised proposal responds to the City's feedback and the relevant requirements of LPP 1.3.

11.1 Waste generation, bin provision and storage

The WMP has been updated to adopt the City of Melville LPP 1.3 waste generation rates for general waste, recycling and FOGO. Based on these rates, the development is estimated to generate 1,460 L of general waste, 2,380 L of recycling and 590 L of FOGO per week.

The proposed bin schedule comprises:

- 3 × 660 L general waste bins;
- 4 × 660 L recycling bins; and
- 3 × 240 L FOGO bins.

The proposed weekly storage capacity exceeds the calculated generation for each waste stream.

The previous two-store arrangement has also been revised. All bins will now be accommodated within a single communal bin store located near the waste collection point, removing the need to transfer bins between separate storage areas.

The former satellite bin store has been converted into a dedicated 11 m² bulk waste storage room for the temporary storage of bulky household items pending collection or disposal.

11.2 On-site collection and compliance with LPP 1.3

The proposed on-site collection arrangement has been reviewed against the requirements of Section 8.2 of the City of Melville Local Planning Policy 1.3. Compliance is summarised in Table 4.

The assessment confirms that the proposed on-site collection arrangement satisfies the requirements of Section 8.2 of LPP 1.3, subject to the waste vehicle pavement route being certified by the project civil or structural engineer as suitable for a 25-tonne vehicle.

Table 4: Compliance with LPP 1.3 Section 8.2

LPP 1.3 requirement	Proposed response	Compliance
Suitable location for collection	The waste vehicle will stop within the development private shared zone, near the communal bin store. The vehicle will not obstruct the adjoining shopping centre aisles, shopping centre parking bays or access to either development garage door.	Complies
Minimum 4.0 m vertical clearance, where applicable	The waste collection point and vehicle route through the shared zone are located in an open-air area with no overhead building elements. The minimum vertical clearance requirement is therefore not restrictive at the collection point. Any overhead services along the vehicle route will be maintained clear of the required operating envelope.	Complies
Minimum access-way width of 4.0 m	The shopping centre circulation aisles and private shared zone provide a minimum clear width exceeding 4.0 m along the waste vehicle route.	Complies
Structural capacity for a 25-tonne waste collection vehicle	The waste vehicle route and collection point will be designed and constructed to support a 25-tonne waste collection vehicle. Structural pavement capacity is to be confirmed by the project civil or structural engineer before construction.	Complies, subject to engineering certification
Entry and egress in a forward direction for a truck at least 10.5 m long	Swept path analysis has been undertaken using a 10.6 m rear-loader waste vehicle. The vehicle enters via the southern Jackson Avenue crossover, services the bins within the shared zone and exits via the northern crossover in a forward direction.	Complies
Maximum three-point turn permitted	The proposed waste vehicle movement does not require a three-point turn or reversing manoeuvre. Forward circulation is maintained throughout. Swept paths are included in Appendix C.	Complies
Ramps and driveway gradients suitable for a vehicle at least 10.5 m long	The waste vehicle remains on the shopping centre circulation aisles and private shared zone and does not enter the lower-ground car park ramp. The proposed route has been assessed through swept path analysis for a 10.6 m vehicle.	Complies
Suitable access arrangements for the City or its contractor	The City or its appointed contractor will be provided with remotes and/or PIN codes to operate the retractable bollards and any relevant access-controlled gates or doors.	Complies
Bin collection point within 20 m of the truck laydown area	The communal bin store is located near the waste vehicle stopping position. The bin movement distance will be substantially less than 20m.	Complies

11.3 Waste vehicle access and movements

The waste collection vehicle will enter the Winthrop Village Shopping Centre car park via the existing southern Jackson Avenue crossover. It will circulate clockwise through the shopping centre aisles before entering the development private shared zone in an eastbound direction.

The vehicle will stop within the shared zone adjacent to the communal bin store. Bins will be wheeled directly to the rear of the vehicle, emptied and returned to the store immediately following servicing.

The stopping position has been selected to ensure that:

- the waste vehicle remains clear of the shopping centre circulation aisles and parking bays;
- access to both development garage doors is maintained;
- resident access to and from the lower-ground car park remains available; and
- bin movement distances are minimised.

Following collection, the vehicle will continue eastbound through the shared zone and exit via the northern Jackson Avenue crossover. No reversing movement or three-point turn is required.

11.4 Improvement over the previous approval

The subject site has an existing development approval that included on-site waste collection. Under the previously approved arrangement, the waste vehicle entered and exited through the shopping centre car park and stopped within a shopping centre circulation aisle to service the development. The approved swept path assessment identified that one parking bay would need to be removed and access to four additional bays would be temporarily restricted during collection.

The current proposal retains the established principle of on-site collection but provides an improved operational outcome. The waste vehicle will now stop entirely within the development private shared zone rather than within the shopping centre aisle.

Accordingly, the revised arrangement:

- avoids obstruction of shopping centre circulation aisles;
- avoids temporary impacts on shopping centre parking bays;
- maintains access to both development garage doors;
- provides a collection point near the communal bin store; and
- allows the waste vehicle to enter and exit in a forward direction.

The revised proposal therefore reduces the operational impacts of waste collection compared with the previously approved arrangement.

11.5 Access control and collection management

Access for the City's waste collection vehicle will be managed through the development's access control system. Remotes and/or PIN codes will be provided to the City or its appointed contractor to operate the retractable bollards and any relevant controlled gates or doors.

Waste collection will be scheduled during lower-activity periods for the shopping centre, where practicable, to minimise interaction with customer vehicles and people moving through the car park.

The building or strata manager will be responsible for:

- maintaining clear access to the communal bin store and collection point;
- ensuring that bins are available for servicing on collection day;
- preventing vehicles or stored items from obstructing the waste vehicle route;
- coordinating bulk waste and specialised waste collections; and
- liaising with the City or its contractor regarding access arrangements and collection requirements.

11.6 Compliance summary

The revised waste management strategy directly addresses the matters raised by the City during its assessment of the development application.

The WMP now:

- adopts the waste generation rates prescribed by LPP 1.3;
- provides sufficient bin capacity for all three waste streams;
- consolidates all mobile bins within one communal bin store near the collection point;
- provides a dedicated 11 m² bulk waste storage room;
- demonstrates compliance with the on-site collection requirements of Section 8.2 of LPP 1.3;
- provides forward entry and exit for a 10.6 m waste vehicle; and
- relocates the collection activity away from the shopping centre parking aisles and into the development private shared zone.

Subject to final engineering certification of the pavement for a 25-tonne waste vehicle, the proposed waste management and collection arrangements are considered suitable for the development and consistent with the applicable requirements of City of Melville LPP 1.3.

12 Waste management

The building caretaker (or strata management) will be responsible for:

- Cleaning and maintaining bin storage areas and associated facilities; and
- Ensuring bins are regularly cleaned and kept in a hygienic condition.

Residents will dispose of waste within the designated bin store and are required to comply with waste separation requirements. Only permitted materials are to be placed in each respective bin stream. Waste that cannot be accommodated within the provided bins is to be disposed of via an appropriate alternative method.

A copy of this Waste Management Plan will be retained on site and within strata records for reference.

13 Signage and education

Ongoing education, to support the waste management service, is one of the most important factors in encouraging residents to continue to utilise services and systems as originally intended. The following recommendations have been adapted from the WALGA Guidelines.

- *Install signage to clearly identify what items are and are not accepted in the general waste and recycling systems. **If signage within the bin store is not possible due to space or other restrictions, bin stickers may be appropriate**.*
- *Outline appropriate waste management behaviour i.e. placing refuse/recyclables inside as opposed to adjacent to bins, placing mixed recyclables into the bin loose (not in a plastic bag), closing bin lids etc.*
- *Where the strata body/building management holds tenants' induction schemes, these should include the use of waste and recycling facilities. The strata body/building management, in conjunction with the Local Government, should issue a leaflet on the correct use of the waste and recycling facilities and the materials recycled. Tenants' handbooks should include a section on the correct use of general waste and recycling facilities.*
- *Ensuring education is 'ongoing' is beneficial because it tackles the transient nature of residents and differences between different Local Government services. All waste and recycling bins or receptacles should be clearly and correctly labelled and signage should be erected in bin storage areas to instruct residents as to the correct separation of recyclables from general waste.*
- *Any hazards or potential dangers associated with the waste facilities, including those from the use of any waste handling equipment, should also be clearly identified. It is recommended that building managers post information in communal areas which clearly identifies the relevant points of contact regarding recycling and/or other services within the development. As part of the ongoing education program, welcome packs should be produced and provided to all new residents. These packs should contain information outlining the developments waste management system, required actions and appropriate waste management behaviours.*
- *Signage should be provided to demonstrate to users how to use the waste system and to identify any hazards or potential dangers within Bin Storage Areas, including those from the use of waste handling equipment. Signage should conform to the relevant Australian Standard (AS4123) bins, (AS4123.7) bin colours and (AS1319) safety signs.*
- *Consistent and clear signage is a key element of effective source separation and minimising incorrect disposal and it is important that signage is consistent throughout the whole of the development.*
- *In addition, there is benefit in using visual aids and colour consistency to re-enforce messaging. Below gives examples of bin stores where bins for various waste streams are stored against colour coded walls. This enables easy identification of what materials should be placed in each bin and to ensure bins are always returned to the same position to maintain consistency.*



Figure 4: Example bin store signage

14 Conclusion

As demonstrated in this Waste Management Plan, the proposed development provides sufficient storage capacity for the calculated general waste, recycling and FOGO generation, based on the waste generation rates prescribed by City of Melville LPP 1.3.

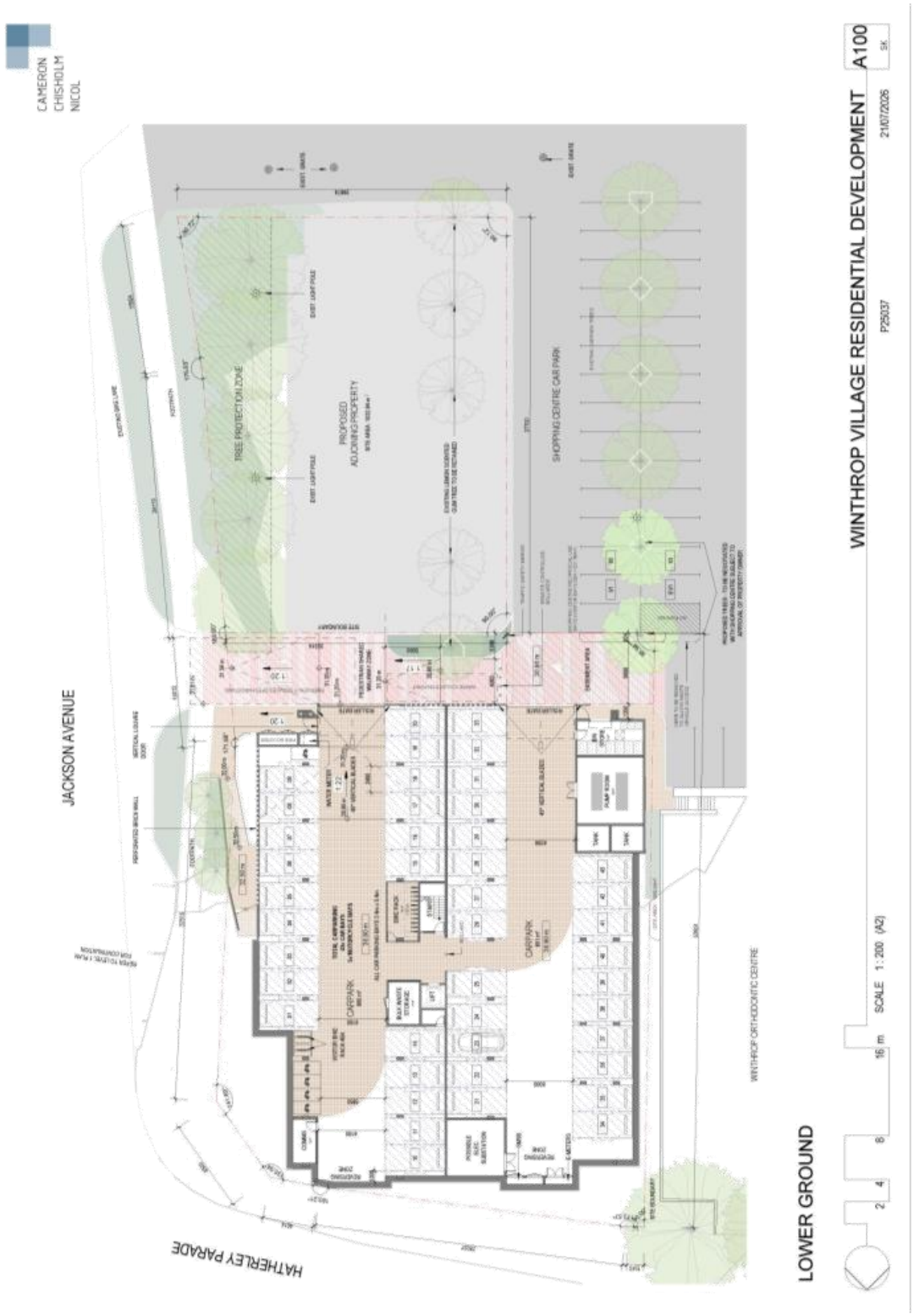
All mobile bins will be accommodated within a single communal bin store located near the on-site collection point. A separate 11 m² room will provide temporary storage for bulk waste.

The proposed collection arrangement satisfies the relevant on-site collection requirements of Section 8.2 of LPP 1.3, subject to final engineering confirmation that the waste vehicle route can support a 25-tonne collection vehicle. The arrangement provides forward entry and exit for the nominated 10.6 m rear-loader vehicle and avoids obstruction of the shopping centre parking aisles, parking bays and development garage doors.

Overall, the proposed waste storage, management and collection arrangements are considered appropriate for the development.

Appendices

Appendix A: Proposed development plan


CAMERON CHISHOLM NICOL
WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT
A100
P25037
21/07/2026
LOWER GROUND
SCALE 1:200 (A2)
JACKSON AVENUE
HATHERLEY PARADE
TREE PROTECTION ZONE
PROPOSED ADJOINING PROPERTY
SHOPPING CENTRE CAR PARK
WINTHROP ORTHODONTIC CENTRE


CAMERON CHISHOLM NICOL
WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT
A101
P25037
21/07/2026
GROUND FLOOR / LEVEL 1
SCALE 1 : 200 (A2)
JACKSON AVENUE
HATHERLEY PARADE
SHOPPING CENTRE CAR PARK
COMMUNAL OUTDOOR
DA - 00 GROUND LEVEL
1 : 200
DA - 01 LEVEL
1 : 200
1 BEDROOM
2 BEDROOM
3 BEDROOM
BALCONY
TERRACE

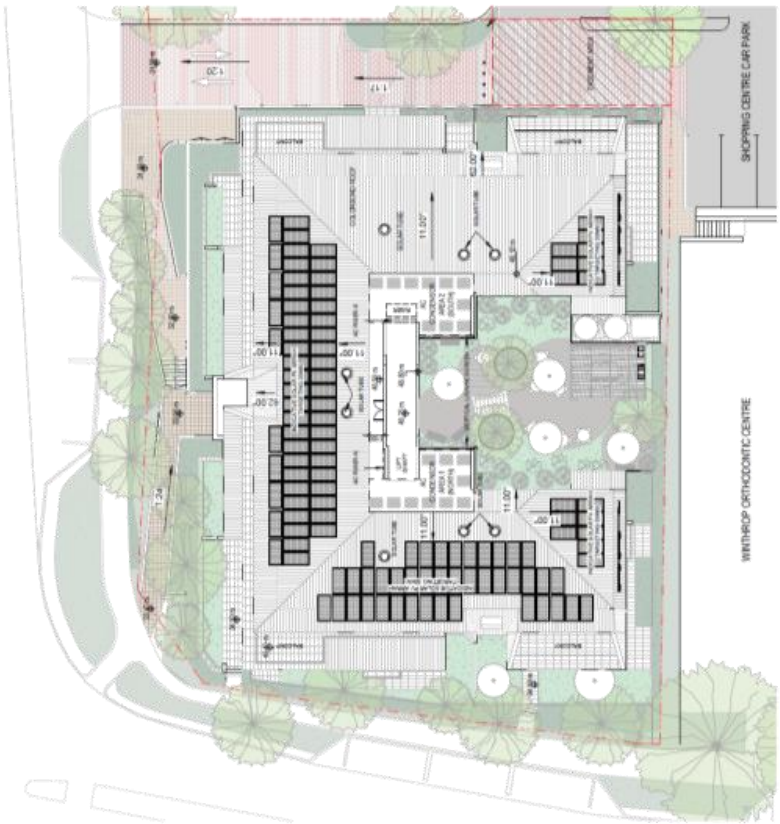

CAMERON CHISHOLM NICOL
WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT
A102
08/05/2026
P25037
LEVEL 2 / LEVEL 3
SCALE 1 : 200 (A2)
1 DA - 02 LEVEL 1 : 200
2 DA - 03 LEVEL 1 : 200
2 BEDROOM
3 BEDROOM

CAMERON CHISHOLM NICOL

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT A105

08/05/2026

P25037

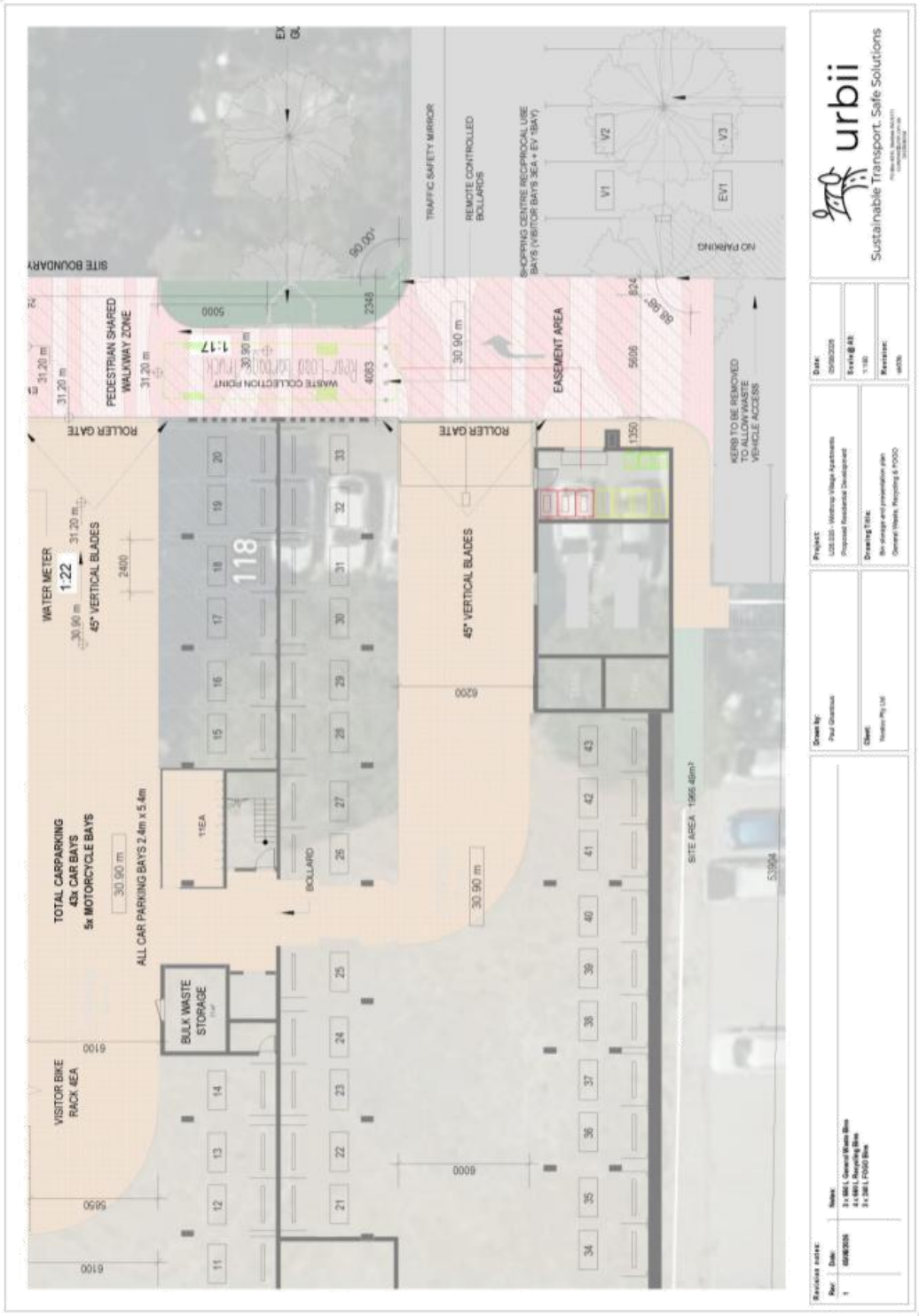


ROOF PLAN

SCALE 1 : 200 (A2)

1 2 4 8 m

Appendix B: Bin storage and presentation plans


urbii
Sustainable Transport. Safe Solutions
SITE BOUNDARY
PEDESTRIAN SHARED WALKWAY ZONE
WASTE COLLECTION POINT
TRAFFIC SAFETY MIRROR
REMOTE CONTROLLED BOLLARDS
SHOPPING CENTRE RECIPROCAL USE BAYS (VISITOR BAYS 3EA + EV 1BAY)
NO PARKING
EASEMENT AREA
KERB TO BE REMOVED TO ALLOW WASTE VEHICLE ACCESS
ROLLER GATE
ROLLER GATE
WATER METER
45° VERTICAL BLADES
45° VERTICAL BLADES
TOTAL CARPARKING
43x CAR BAYS
5x MOTORCYCLE BAYS
ALL CAR PARKING BAYS 2.4m x 5.4m
BULK WASTE STORAGE
VISITOR BIKE RACK 4EA
BOLLARD
SITE AREA 1966.48m²
118
1:22

Appendix C: Swept path diagrams

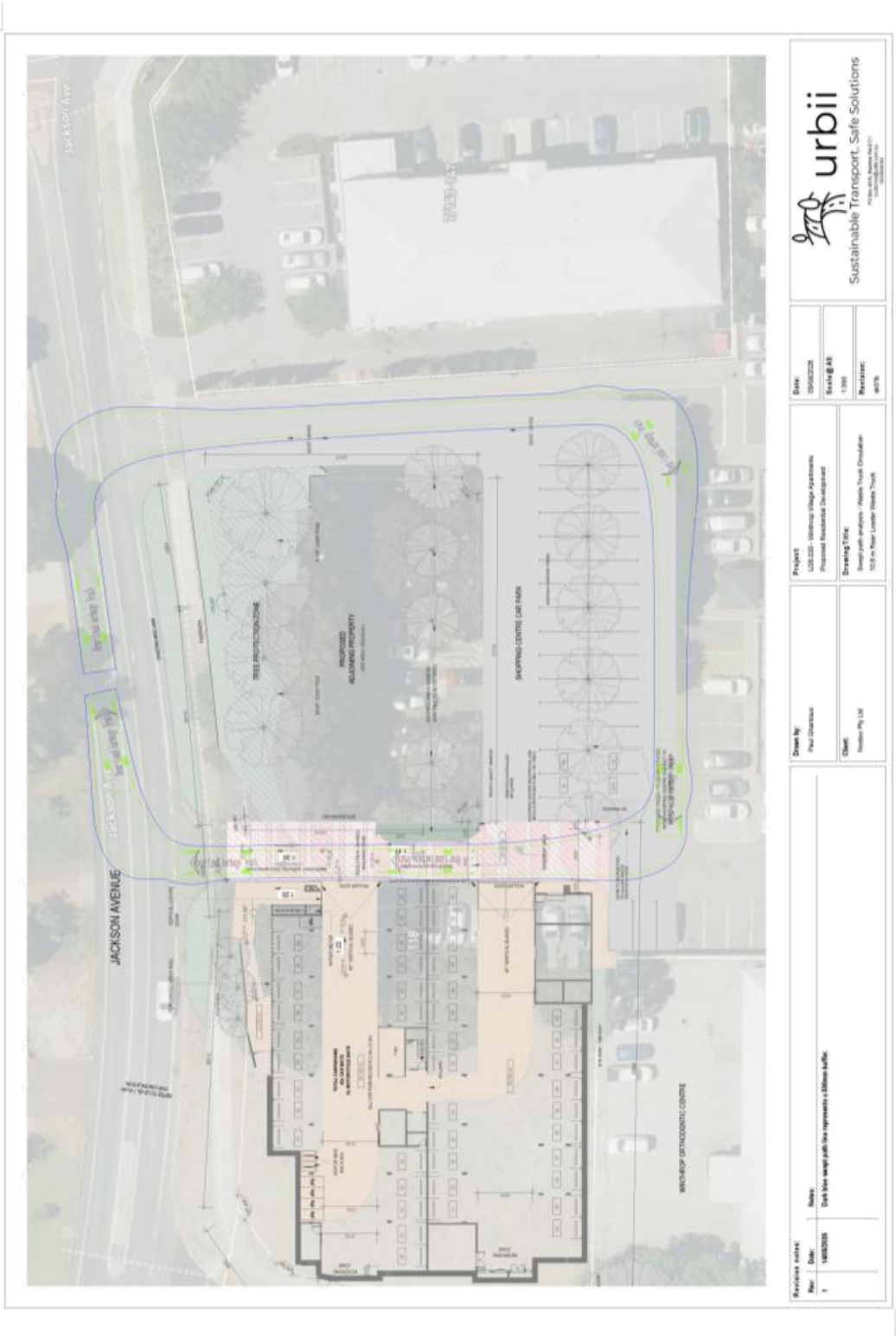
Swept path diagrams are included in this section of the report. Different coloured lines are employed to represent the various envelopes of the vehicle swept path, as described below:

Cyan represents the wheel path of the vehicle

Green represents the vehicle body envelope

Blue represents a 500mm buffer line, offset from the vehicle swept path

The swept path diagrams are also provided separately in high-quality, A3 PDF format.


JACKSON AVENUE
urbii
Sustainable Transport. Safe Solutions

Appendix D: Waste calculations

Table 5: Weekly waste generation and collection – Residential 3-bin system

Land use	Description	Units	General waste rate	Recyclables rate	FOGO rate	Weekly General Waste (L)	Weekly Recyclables (L)	Weekly FOGO (L)
Residential	Residential 1-bed apartments	1	40L/week/unit	60L/week/unit	10L/week/unit	40	60	10
Residential	Residential 2-bed apartments	5	60L/week/unit	80L/week/unit	20L/week/unit	300	400	100
Residential	Residential 3-bed apartments	16	70L/week/unit	120L/week/unit	30L/week/unit	1120	1920	480
Total		22				1460	2380	590

General Waste

Weekly generation (L)	Bin size (L)	Number of bins	Weekly collection frequency	Weekly capacity (L)
1460	660	3	1	1980

Recycling

Weekly generation (L)	Bin size (L)	Number of bins	Weekly collection frequency	Weekly capacity (L)
2380	660	4	1	2640

FOGO

Weekly generation (L)	Bin size (L)	Number of bins	Weekly collection frequency	Weekly capacity (L)
590	240	3	1	720


WINTHROP | WA
SEASONAL MEANS
WINTER SUN 9 - 16°C
SUMMER SUN 17 - 31°C
SOLAR DIAGRAM
SEASONAL SUNLIGHT
WIND DIRECTION
SEASONAL STRENGTH
LANDSCAPE DESIGN RATIONALE
Initial site investigations reveal a cleared residential lot with a combined area of 1966m² at the corner of Hatherley Parade and Jackson Avenue in Winthrop, WA . The site has an north-east facing frontage. Streetscapes are typically paved with natural grey concrete paths on this side of the street and predominated by mature Spotted Gums (Corymbia maculata) further down the street that are earmarked for retention. There are no overhead powerlines on this side of George Street with a generous verge that could accommodate verge plantin, some embayed parking and new street trees.
The design of the driveway has been maintained to as an entry into the shopping centre carpark and to provide access throughout the complex with carpark trees retained on site to maximise, shade and habitat canopy.
Street tree species shown are a suggestion only and subject to local council selections - Angophora costata and Eucalyptus victrix nana are proposed in 100L pot size to tie in with the smooth trunks of the spotted gums already established around the site.
No turf will be incorporated but rather planted and irrigated by the development to soften the presentation to their street. The landscape design for this project will consist of plants and materials sourced locally using the toughest native species adapted to this location. The soft works designs are inspired by local vegetation complexes punctuated with small and medium-sized ornamental trees to create a flowering and scented, textured native garden setting to the complex and enhance local streetscapes.
7.9%
DEEP SOIL AREA
156 SQM
1966 SQM LOT
9.3%
NON DSA LANDSCAPE
183SQM
1966 SQM LOT
12.6%
COMBINED AREA
156 SQM
1966 SQM LOT
HATHERLEY PARADE
JACKSON AVENUE
BBQ AREA
DECORATIVE ENTRANCE WALL
WIDEN FOOTPATH TO 2.1m
LEGEND
Material supply, material costs and design coordination with Architectural consultant is ongoing and may be subject to change of final material selections.
TREES TO BE RETAINED
to be protected to AS 4970 - 2025
TREE TO BE REMOVED
stumps + roots to be removed
PROPOSED TREE
refer schedule for selections & sizes
FEATURE PLANTING
accent species | succulent or vertical accent
MASS PLANTING
75mm organic mulch | 3 plants/sqm | 130mm pots
INTERNAL DRIVEWAY
red asphalt | flush kerbs or line marking
TIMBER DECKING
Hardwood decking | to AS 1684 timber framing code
colour: MERBAU (potential timber look tiles on podium)
PEDESTRIAN PAVEMENT
200 x 200 x 50mm unit paving | haunch to edges
stretcher bond | colour: LIMESTONE
PREMIUM CONCRETE PAVING
no float framing | sawn joints | honed finish
GRANULAR | Permeable | Bluestone Steppers
75 thick | 3-5mm crushed pea gravel | compacted
(Ischandra ripens seeding (7g/sqm)
IRRIGATION RATIONALE
Irrigation will be a series of smart, automatic irrigation systems that will provide subsurface watering to verge planting for establishment from each individual lot.
DRIP IRRIGATION THROUGHOUT
in-line drip system | subsurface
BUBBLERS TO TREES
1 - 3 bubblers per tree dependent on size
NO OVERHEAD SPRAY SPRINKLERS
minimise water use, overspray & evaporation
HYDROZONING
designed with water demand cosilocated stations
SOIL MOISTURE SENSORS
smart system to respond to soil moisture levels
RAIN SENSORS
smart system to respond to prevailing weather
PASSIVE IRRIGATION
direct storm water to gardens before drains
PEDESTRIAN-PRIORITY LANEWAY
PAINTED PATTERN TO DRIVEWAY
RESURFACE AS RED ASPHALT
TREE SYMBOL DIMENSIONS
note: symbols on plan are drawn to scale to demonstrate the following areas and dimensions:
Minimum deep soil area (9 m²)
Location of tree (refer species code + pot size)
Minimum dimension (1.5m x 1.5m)
LARGE TREE
MEDIUM TREE
SMALL TREE
TREE RETENTION SCHEDULE
TYPICAL UNDERSTOREY PLANTING PALETTE
M1 FULL SUN
Carpobrotus virescens Pig Face
Evolvulus glaber Kelbert Carpet
Pimelea ferruginea Rice Flower
M2 FULL SUN
Anigozanthos manglesii Kangaroo Paw
Chrysocephalum apiculatum Yellow Buttons
Conostylis candicans Grey Cotton Heads
Myoporum parvifolium Creeping Boobialla
M3 SEMI - SHADE
Casuarina 'Cousin It' Cousin It
Hibbertia scandens Snake Vine
Scaevola aemula Aussie Fanfare
Trachelospermum jasminoides Star Jasmine
Westringia prostrata Coastal Rosemary
M4 FULL SHADE
Wahlenbergia hederacea WA Blue Bell
Dianella revoluta Flax Lily
Ficus pumila Climbing Fig
Lepidosperma gladiatum Coastal Sword Sedge
Liriope muscari Evergreen Giant
Dianella revoluta Flax Lily
M5 FULL SHADE
Viola hederacea Native Violet
Sansevieria trifasciata Mother-in-law Tongues
Ajuga reptans Bugle Plant
Clivia miniata Natal Lily
Crinum pedunculatum Spider Lily
Asplenium nidus Bird's-nest fern
Ci Citrus limon 45L Lemon Tree
Ac Angophora costata 45L Apple Gum
Dracena marginata 45L Dragon Tree
Ca Cordyline australis 45L Cabbage Palm
Ev Eucalyptus victrix nana 100L Dwarf Ghost Gum
TYPICAL TREE PLANTING PALETTE
propagule
PROPOSED APARTMENTS DEVELOPMENT
LANDSCAPE DEVELOPMENT APPLICATION

SUMMATION

Winthrop Village Apartments

ESD Section J Report

Prepared for: Cameron Chisholm Nicol

Prepared by: Jomaire Duhig / Lachlan Hill

Date: 06/05/2026

Revision: 001

Project Ref: SUPER25084



Document Set ID: 7390417
Version: 1, Version Date: 12/06/2026

1 Executive Summary

This document has been prepared for Cameron Chisolm Nicol for the Winthrop Village Apartments project to assess the proposed Class 2 building and outline requirements to ensure compliance with Section J of the National Construction Code (NCC) 2022 Volume One.

It has been determined that proposed building may demonstrate compliance with the Section J energy efficiency requirements via:

- The 'J1V3 Verification using a reference building' verification method for the Class 2 common areas, and
- The NatHERS DTS pathway for the Class 2 sole-occupancy units (SOUs).

The Architect shall be required to incorporate the details and requirements set out in this report into project documentation to ensure compliance with NCC 2022 Volume One Section J.

A performance-based design brief has been developed to serve as the basis for the proposed performance solution covering the respective parts of the building. Refer to the Performance Based Design Brief (PBDB) for details of the applicable Performance Requirements and acceptance criteria.

1.1 Basis of Compliance

Compliance with Section J has been determined on the following basis:

- The required thermal performance of the building fabric forming the envelope as outlined in Section 4. Refer to Appendix E for locations of required insulation.
- The building must comply with the prescriptive requirements as detailed in Appendix A, Appendix B and Appendix C. These requirements are to be incorporated by the Architect into the project documentation.
- It is noted that Parts J6 to J9 will be covered by the respective services consultants for the project.

1.2 Key Actions

A summary of key actions is outlined as follows:

- Architect to review and incorporate performance requirements into project documentation;
- Architect to notify Summation of any changes to the assumed construction build-ups; and
- Architect / Summation to verify whole-of-home equipment assumptions.

REF: HTTPS://SUMMATIONPTYLTD.SHAREPOINT.COM/SITES/HUB/ACTIVE PROJECTS/SUSTAINABILITY/PERTH/SUPER25084_WINTHROP VILLAGE APARTMENTS/SECTION J/REPORTS/SUPER25084_WINTHROP VILLAGE APARTMENT_NCC2022 RESI NATHERS + J1V3.DOCX

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Version: 1, Version Date: 02/06/2026

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Abbreviations/Glossary

Abbreviation	Description
DTS	Deemed-to-Satisfy
ESD	Environmentally Sustainable Design
GHG	Greenhouse Gas
J1V3	J1V3 Verification using a reference building
NatHERS	Nationwide House Energy Rating Scheme
NCC	National Construction Code
PBDB	Performance Based Design Brief
PMV	Predicted Mean Vote
SOU	Sole-occupancy Unit

Revision History

Revision	Date	Notes	Prepared By	Approved By
001	06/05/2026	Development Application	JD / LPH	PDS

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2 Introduction

2.1 Project Background

The proposed Winthrop Village Apartments project is located on the corner of Jackson Avenue and Hatherley Parade, Winthrop WA 6150. The site location is shown in Figure 1 below.



Figure 1 – Site Location and Context

The project consists of 4 levels of residential apartments. A summary of the expected project yield is as follows:

- 22 residential apartments – Class 2 SOU NCC Classification
- Lobbies and lift halls – Class 2 Common Area NCC Classification

2.2 Disclaimer

Building energy models provide an estimate of a building's energy performance and are based on a simplified representation of the building. The thermal performance of elements described in this report are to meet the minimum energy efficiency requirements under the NCC only. Summation does not guarantee or warrant the building's performance in actual operation. It is expected that this report constitutes acceptable evidence of design compliance with the NCC energy efficiency requirements. If required, non-accredited NatHERS certificates can be made available for an additional fee. Additional requirements concerning matters including, but not limited to, moisture, condensation, structural, acoustics, fire, thermal comfort, etc., are not within Summation's scope of work and are to be confirmed by the appropriate consultant or engineer.

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3 Assessment Methodology

3.1 Class 2 Common Areas – J1V3 Solution

3.1.1 Acceptance Criteria

The Class 2 common areas of the proposed building has been assessed using the NCC 2022 Volume One J1V3 verification method.

As per the accompanying PBDB and in accordance with the 'J1V3 Verification using a reference building' verification method, compliance with J1P1 is verified when:

- the annual greenhouse gas emissions of the proposed building are not more than the annual greenhouse gas emissions of a reference building when modelled with the same services as the reference building; and
- The proposed building achieves a thermal comfort level between -1 to +1 (Predicted Mean Vote) across not less than 95% of the floor area of all occupied zones for not less than 98% of the annual hours of operation of the building.

Additionally, building elements are required to meet prescriptive thermal performance requirements for the building fabric and building sealing.

It is noted that Parts J6 to J9 will be covered by the respective services consultants for the project.

3.1.2 Modelling Inputs

The following table provides a summary of the key modelling inputs.

Table 1 – Summary of J1V3 Modelling Inputs

Parameter	Description
Modelling Software	Speckel (EnergyPlus) – ANSI/ASHRAE Standard 140 compliant
Weather File	AUS_WA_Perth.Metro.946080_TMYx.2007-2021
NCC Climate Zone	Climate Zone 5 (Warm Temperate)
Occupancy and Operation Profile	Class 2 Common Area profiles
Occupant Heat Gains	As per NCC 2022 Volume One Table D2D18 and Table S35C2n
Artificial Lighting Gains	As per NCC 2022 Volume One Table J7D3a
Equipment Gains	As per NCC 2022 Volume One Table S35C2l
Infiltration	HVAC Active: 0.35 ACH HVAC Inactive: 0.7 ACH
Thermostat Setpoints	Cooling: 24.0°C Heating: 21.0°C

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HVAC Performance	Cooling: EER 3.1 Heating: COP 3.1
Thermal Comfort Conditions	Activity: 130 W/person Air Velocity: 0.1 m/s Clothing: Dynamic Clothing Model (ASHRAE 55)

3.2 Class 2 SOU – NatHERS DTS Solution

Under the DTS provisions, compliance for Class 2 SOUs is verified when building elements are determined to meet the prescriptive thermal performance requirements for the building fabric and building sealing.

The Class 2 SOUs must be modelled using an accredited house energy rating software to demonstrate they:

- Collectively achieve an average energy rating of not less than 7 stars;
- Individually achieve an energy rating of not less than 6 stars; and
- Individually achieve a whole-of-home rating of not less than 50.

It is noted that Parts J6 to J9 will be covered by the respective services consultants for the project.

The following table provides a summary of the key modelling inputs.

Table 2 – Summary of NatHERS Modelling Inputs

Parameter	Description
Modelling Software	HERO – NatHERS accredited house energy rating software
NatHERS Climate Zone	NatHERS Zone 13 – Perth Airport
Typical Floor to Ceiling Height	2850mm
Roof Solar Absorptance	Colorbond Terrain (SA 0.69)
Wall Solar Absorptance	Varies – as per architectural drawings
Construction R-values	Refer to Section 4
Loss of ceiling insulation (e.g. clearance from downlights, etc)	Automatically compensated for in energy rating software Downlights assumed as IC-4 rated with no clearance to insulation
Floor Coverings	Default – tiles to kitchens and wet areas; carpet to other areas.
Ceilings Fans	None
Glazing Openability	Restricted to 10% openability where not opening to ground or balconies

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Table 3 – Summary of NatHERS WoH Regulated Load Inputs

Parameter	Description
Heating Type & Efficiency	Ducted Air-Conditioner – ZERL 1.5 star / 3.0 HSPF
Cooling Type & Efficiency	Ducted Air-Conditioner – ZERL 2.0 star / 3.5 TCSPF
Hot Water	Electric Instantaneous
Lighting	Default – 5 W/m^2
Pool	N/A
Solar and Batteries	Refer to Section 5

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4 Thermal Performance Requirements

The required thermal performance of building fabric elements forming the envelope is summarised in Table 4 and Table 5 below. Performance requirements have been standardised where possible for simplification of documentation and construction. Refer to Appendix D for example R-value calculations and Appendix E for locations of required insulation.

The thermal performance provided below is preliminary and pending detailed coordination with the Architect. Performance requirements are therefore subject to change pending final energy modelling results.

Table 4 – Building fabric thermal performance requirements

Element	Description	Minimum Total System R-value [m^2.K/W]	Minimum Typical Insulation [m^2.K/W]	Example Typical Insulation
Roof[1]	Metal Deck – GF & L2	R4.03	R3.6	145mm R3.6 reflective (E≤0.05) glasswool blanket with 120mm spacer (i.e., non-compressed)
	Metal Deck – L3	R4.97	R1.3 + R4.0	60mm R1.3 reflective (E≤0.05) glasswool blanket + 195mm R4.0 glasswool batts
	Concrete Slab – GF & L2	R4.08	R3.65	80mm R3.65 reflective (E≤0.05) rigid board
	Concrete Slab – L3	R5.13	R1.3 + R4.0	30mm R1.30 reflective (E≤0.05) rigid board + 195mm R4.0 glasswool batts (continuous over IC-4 rated downlights)
	Concrete Slab – Comms Room	R4.96	R4.60	100mm R4.60 rigid board
Walls[2]	Brick Veneer with Int. Steel LW Wall – GF to L2	R1.39	R2.5 + R0.2	90mm R2.5 glasswool batts + R0.2 thermal break or unvent. cavity – refer Appendix D
	Steel Lightweight – L3	R1.35	R2.5 + R0.2	90mm R2.5 glasswool batts + R0.2 thermal break or unvent. cavity – refer Appendix D
	Int. Concrete w/ Internal Lining – Lifts, Stairs, Risers	R0.92	R1.5	50mm R1.5 glasswool batts
	Int. Steel Lightweight – Lobbies, Corridors, Risers	R0.62	R1.5	75mm R1.5 glasswool batts
Floor	Suspended Slab	R2.0	R1.75	40mm R1.75 soffit board
	Slab-on-Ground	N/A	-	No additional insulation required

[1] Refer Table 1 for roofs' solar absorptance requirements.
[2] Refer Table 1 for walls' solar absorptance requirements.

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Table 5 – Glazing thermal performance requirements

Location	Total System U-value [W/m^2.K]	Solar Heat Gain Coefficient	Example Typical Glazing
Apartment Glazing	3.0	0.30	Double Glazing Low-E in Standard Aluminium Frame
Common Areas	3.0	0.30	Double Glazing Low-E in Standard Aluminium Frame

The above glazing performance values apply to all external glazing and are stated as whole-of-system requirements, inclusive of framing and glass, in accordance with Australian Fenestration Rating Council (AFRC) requirements.

It is noted the above whole-of-system window performance requirements are the area-weighted average performance of all vision glazing elements within the building. It is recognised some glazing elements will be above and some will be below the stated figures.

The Window Supplier / Contractor must provide aggregated area-weighted glazing performance data and calculations to Summation for review to verify compliance with the above requirements.

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5 Onsite Renewable Energy Requirements

NCC 2022 Whole-of-Home compliance has been achieved in accordance with J3D15 'Net equivalent energy usage for a sole-occupancy unit of a Class 2 building or Class 4 part of building – home energy rating software'.

The project is required to install solar PV systems in accordance with Table 6. This also outlines system parameters under which the modelled performance is achieved, and any deviation from these conditions shall be updated and approved by Summation, if required.

Table 6 – Solar PV Modelled System Parameters & Performance

Parameter	Description
Annual Yield	**≥33,000 kWh**
Indicative Min. System Capacity[1]	~22.5 kWdc
Assumptions	Shading – None
	Tilt – 11 degrees
	Azimuth – 90 degrees

[1] Note, system capacities are indicative only. Electrical contractor is to determine specific system capacities based on the required annual energy yields outlined. Individual PV systems are also required, unless an embedded network is provided by which annual yields may be aggregated.

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6 J1V3 Modelling Results

Energy modelling results for the Class 2 Common Areas of the proposed building are presented in Table 7 to Table 9 below.

Table 7 – Proposed Building GHG Emissions Overview

Model	Overall Energy Consumption [kWh/annum]	GHG Emissions [kg.CO_2-e]	Section J Compliant
Reference Project	135,431.86	93,122.95	-
Proposed Project (excluding on-site solar)	135,423.72	93,117.35	Yes

Table 8 – Proposed Building Energy Breakdown

Meter	Reference Energy [kWh/annum]	Proposed Energy [kWh/annum]	Improvement
Cooling Energy	77.71	60.13	22.6%
Heating Energy	152.40	162.85	-6.9%
Fan Energy	16.29	15.27	6.3%
Lighting Energy	134,599.40	134,599.40	-
Equipment Energy	586.07	586.07	-

Table 9 – Proposed Building Thermal Comfort Overview

Building	PMV Range	% of Total Area in PMV Range for at least 98% of Occupied Hours	Section J Compliant
Proposed Project	-1 to 1	N/A[1]	Yes

[1] Not applicable to Class 2 Common Areas given 0% occupancy as per NCC 2022 modelling profile/requirements.

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7 NatHERS Modelling Results

A summary of energy modelling results for the proposed Class 2 SOUs are presented in Table 10 below.

Note additional requirements for NatHERs ratings may apply for Green Star credits. Refer to the project's Green Star documentation for further information.

Refer to Appendix F for a full breakdown of ratings per individual SOU.

Table 10 – NatHERS Thermal Fabric Results

Class 2 SOUs	Star Rating Achieved	Required Star Rating	Section J Compliant
Average NatHERS rating	8.4	≥7.0	Yes
Minimum NatHERS rating	6.3	≥6.0	Yes

Table 11 – NatHERS Whole-of-Home Results

Class 2 SOUs	Rating Achieved	Required Rating	Section J Compliant
Minimum WoH rating	50	≥50	Yes

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8 Conclusion

The results of this assessment confirms that the proposed building has the capability to meet the requirements of NCC 2022 Volume One Section J via the J1V3 verification method, NatHERS DTS pathway and prescriptive DTS requirements set out in Appendix A to Appendix C.



Lachlan Hill

Summation Pty Ltd

Date: 06/05/2026

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Appendices



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Appendix A Part J3 – Provisions for Class 2 SOUs

To ensure compliance with Part J3, the following general prescriptive notes are to be incorporated into the architectural specification and/or drawings.

A.1 J3D5 Roof Thermal Breaks

A thermal break, consisting of a material with an R-Value greater than or equal to R0.2, must be installed between the metal sheet roofing and its supporting metal purlins, metal rafters, or metal battens where a roof:

- Has metal sheet roofing fixed to metal purlins, metal rafters or metal battens; and
- Does not have a ceiling lining or has a ceiling lining fixed directly to those metal purlins, metal rafters or metal battens.

A.2 J3D6 Wall Thermal Breaks

A thermal break, consisting of a material with an R-Value greater than or equal to R0.2, must be installed at all points of contact between the external cladding and the metal frame where a wall:

- Does not have a wall lining or has a wall lining that is fixed directly to the same metal frame; and
- Is clad with weatherboards, fibre-cement or the like, or metal sheeting fixed to a metal frame.

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Appendix B Part J4 – Building Fabric

To ensure compliance with Part J4, the following general prescriptive notes are to be incorporated into the architectural specification and/or drawings.

B.1 J4D3 Thermal Construction – General

Where required, insulation must comply with AS/NZS 4859.1 and be installed so that it:

- Abuts or overlaps adjoining insulation other than at supporting members such as studs, noggings, joists, furring channels and the like where the insulation must be against the member; and
- Forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barrier; and
- Does not affect the safe or effective operation of a service or fitting.

Where required, reflective insulation must be installed with:

- The necessary airspace to achieve the required R-Value between a reflective side of the reflective insulation and a building lining or cladding; and
- The reflective insulation closely fitted against any penetration, door or window opening; and
- The reflective insulation adequately supported by framing members; and
- Each adjoining sheet of roll membrane being:
  - Overlapped not less than 50 mm; or
  - Taped together.

Where required, bulk insulation must be installed so that:

- It maintains its position and thickness, other than where it is compressed between cladding and supporting members, water pipes, electrical cabling or the like; and
- In a ceiling, where there is no bulk insulation or reflective insulation in the wall beneath, it overlaps the wall by not less than 50 mm.

B.2 J3D10 Floors

Where required, insulation to the vertical edge of the perimeter of a concrete slab-on-ground must:

- Be water resistant; and
- Be continuous from the adjacent finished ground level:
  - To a depth not less than 300 mm; or
  - For the full depth of the vertical edge of the concrete slab-on-ground.

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Appendix C Part J5 – Building Sealing

To ensure compliance with Part J5, the following general prescriptive notes are to be incorporated into the architectural specification and/or drawings.

C.1 J5D3 Chimneys and Flues

The chimney or flue of an open solid-fuel burning appliance must be provided with a damper or flap that can be closed to seal the chimney or flue.

C.2 J5D4 Roof Lights

Roof lights must be sealed, or capable of being sealed, and must be constructed with:

- An imperforate ceiling diffuser or the like installed at the ceiling or internal lining level; or
- A weatherproof seal; or
- A shutter system readily operated either manually, mechanically or electronically by the occupant.

C.3 J5D5 Windows and Doors

A door, openable window or the like must be sealed to restrict air infiltration whereby:

- Seals for the bottom edge of a door, must be a draft protection device; and
- Seals for the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compression strip, fibrous seal or the like.

The requirements for a door, openable window or the like to be sealed do not apply to:

- A window complying with AS 2047; or
- A fire door or smoke door; or
- A roller shutter door, roller shutter grille or other security door or device installed only for out-of-hours security.

An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, rapid roller door, revolving door or the like, other than:

- Where the conditioned space has a floor area of not more than 50 m2; or
- Where a café, restaurant, open front shop or the like has—
  - A 3 m deep un-conditioned zone between the main entrance, including an open front, and the conditioned space; and
  - At all other entrances to the café, restaurant, open front shop or the like, self-closing doors.

A loading dock entrance, if leading to a conditioned space, must be fitted with a rapid roller door or the like.

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C.4 J5D6 Exhaust Fans

Exhaust fans must be fitted with a sealing device such as a self-closing damper or the like.

C.5 J5D7 Construction of Ceilings, Walls and Floors

Ceilings, walls, floors and any opening such as a window frame, door frame, roof light frame or the like must be constructed to minimise air leakage in accordance with the below.

Construction required to minimise air leakage must be:

- Enclosed by internal lining systems that are close fitting at ceiling, wall and floor junctions; or
- Sealed at junctions and penetrations with:
  - Close fitting architrave, skirting or cornice; or
  - Expanding foam, rubber compressible strip, caulking or the like.

These requirements do not apply to openings, grilles or the like required for smoke hazard management.

C.6 J5D8 Evaporative Coolers

Evaporative coolers must be fitted with a self-closing damper or the like.

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Appendix D Example R-value Calculations

Roof/Ceiling – Metal Deck with Dropped Ceiling (i.e., Level 3)				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m².K/W]
1	Outdoor Air Film (7m/s)	N/A		0.03
2	Steel	0.5		0.00
3	**R1.3 Reflective (≤E0.05) Glasswool Blanket**	60		1.14
4	Airspace (reflective, unventilated)	≥300		1.09
5	**R4.0 Glasswool Ceiling Batts**	195	Steel – 11.1%	2.47
6	Plasterboard Gypsum	13		0.08
7	Indoor Air Film (Still Air) - Horizontal	N/A		0.16
			Calculated Total System R-value	4.97

Roof/Ceiling - Metal Deck w/o Ceiling (i.e., Ground & Level 2)				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m².K/W]
1	Outdoor Air Film (7m/s)	N/A		0.03
2	Steel	0.5		0.00
3	**R3.6 Refl. (E≤0.05) Glasswool Blanket** (w. 120mm spacer / non-compressed)	145		3.60
4	Refl. Indoor Air Film (Still Air) - Horizontal	N/A		0.23
			Calculated Total System R-value	4.03

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Roof/Ceiling – Concrete Suspended Slab with Dropped Ceiling (i.e., Level 3)				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]
1	Outdoor Air Film (7m/s)	N/A		0.03
2	Solid Concrete	250		0.17
3	**R1.3 Reflective (≤E0.05) Rigid Board**	30		1.30
4	Airspace (reflective, unventilated)	≥300		1.09
5	**R4.0 Glasswool Ceiling Batts**	195	Steel – 11.1%	2.47
6	Plasterboard Gypsum	13		0.08
7	Indoor Air Film (Still Air) - Horizontal	N/A		0.16
			Calculated Total System R-value	5.13

Roof/Ceiling – Concrete Suspended Slab (i.e., Ground & Level 2)				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]
1	Outdoor Air Film (7m/s)	N/A		0.03
2	Solid Concrete	250		0.17
3	**R3.65 Refl. (E≤0.05) Rigid Board**	80		3.65
4	Refl. Indoor Air Film (Still Air) - Horizontal	N/A		0.23
			Calculated Total System R-value	4.08

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Roof/Ceiling – Concrete Suspended Slab (i.e., Comms)				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]
1	Outdoor Air Film (7m/s)	N/A		0.03
2	Solid Concrete	250		0.17
3	**R4.60 Rigid Board**	100		4.60
4	Indoor Air Film (Still Air) - Horizontal	N/A		0.16
			Calculated Total System R-value	4.96

External Wall – Concrete w. Insulated Plasterboard (i.e., Comms)				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]
1	Indoor Air Film (Still Air)	N/A		0.12
2	Solid Concrete	≥ 150		0.10
3	**R1.8 Phenolic Insulated Plasterboard**	50		1.80
4	Indoor Air Film (Still Air)	N/A		0.12
			Calculated Total System R-value	2.14

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External Wall – Option 1: Brick Veneer – ventilated*					
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]	NatHERS R-value [m^2.K/W]
1	Outdoor Air Film	N/A		0.03	0.05
2	Clay Brick	110		0.00	0.18
3	Airspace (non-reflective, ventilated)	≥40		0.00	0.13
4	**R2.5 Glasswool Batts & R0.2 Thermal Break**	90	Steel – 13%	1.16	2.08
5	Plasterboard Gypsum	13		0.08	0.08
6	Indoor Air Film (Still Air)	N/A		0.12	0.11
			Calculated Total System R-value	1.39	2.63

*Recommended

External Wall – Option 2: Brick Veneer – unventilated					
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]	NatHERS R-value [m^2.K/W]
1	Outdoor Air Film	N/A		0.03	0.05
2	Clay Brick	110		0.14	0.18
3	Airspace (non-reflective, unventilated)	≥40		0.16	0.16
4	**R2.5 Glasswool Batts**	90	Steel – 13%	0.96	2.08
5	Plasterboard Gypsum	13		0.08	0.08
6	Indoor Air Film (Still Air)	N/A		0.12	0.11
			Calculated Total System R-value	1.49	2.66

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External Wall – Option 1: Steel Lightweight – ventilated*					
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]	NatHERS R-value [m^2.K/W]
1	Outdoor Air Film	N/A		0.03	0.05
2	Steel Cladding	0.5		0.00	0.00
3	Airspace (non-reflective, ventilated – vertical + cross battens)	≥40		0.00	0.13
4	**R2.5 Glasswool Batts & R0.2 Thermal Break**	90	Steel – 13%	1.16	2.08
5	Plasterboard Gypsum	13		0.08	0.08
6	Indoor Air Film (Still Air)	N/A		0.12	0.11
			Calculated Total System R-value	1.39	2.45

*Recommended

External Wall – Option 2: Steel Lightweight – unventilated					
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]	NatHERS R-value [m^2.K/W]
1	Outdoor Air Film	N/A		0.03	0.05
2	Steel Cladding	0.5		0.00	0.00
3	Airspace (non-reflective, unventilated – cross-battened)	≥20		0.16	0.16
4	**R2.5 Glasswool Batts**	90	Steel – 13%	0.96	2.08
5	Plasterboard Gypsum	13		0.08	0.08
6	Indoor Air Film (Still Air)	N/A		0.12	0.11
			Calculated Total System R-value	1.35	2.48

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Internal Wall – Concrete w. Internal Lining (i.e., shafts, risers)				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]
1	Indoor Air Film (Still Air)	N/A		0.12
2	Solid Concrete	≥ 200		0.14
3	**R1.5 Glasswool Batts**	50	Steel – 17%	0.46
4	Plasterboard	13		0.08
5	Indoor Air Film (Still Air)	N/A		0.12
			Calculated Total System R-value	0.92

Internal Wall – Steel Lightweight (i.e., shafts, risers)				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]
1	Indoor Air Film (Still Air)	N/A		0.12
2	Gypsum Shaftliner	25		0.15
3	**R1.5 Glasswool Batts**	75	Steel – 13%	0.22
4	Plasterboard Gypsum	13		0.08
5	Indoor Air Film (Still Air)	N/A		0.12
			Calculated Total System R-value	0.69

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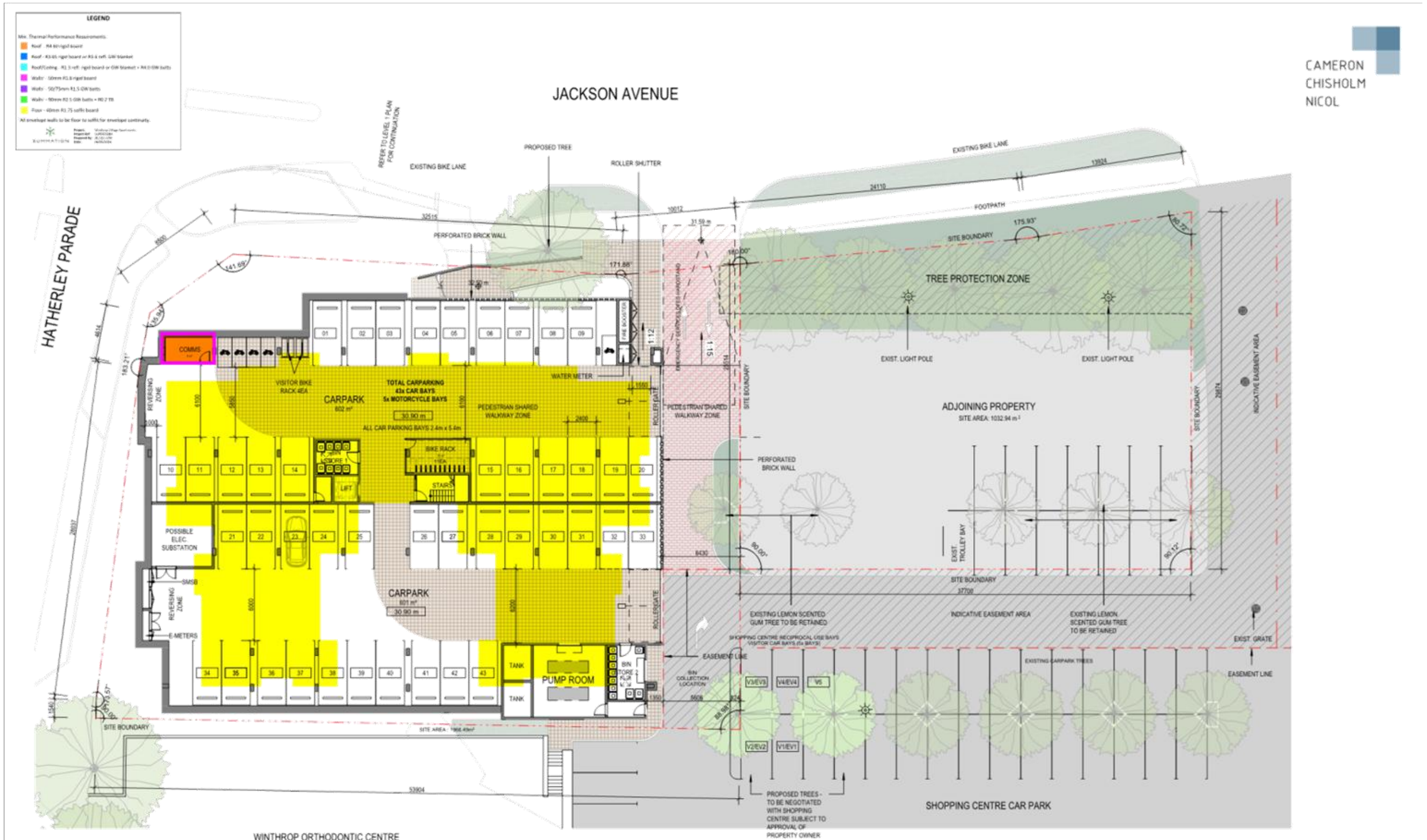
Internal Wall – Steel Lightweight (i.e., lobbies, halls/corridors)				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]
1	Indoor Air Film (Still Air)	N/A		0.12
2	Plasterboard Gypsum	13		0.08
3	**R1.5 Glasswool Batts**	75	Steel – 13%	0.22
5	Plasterboard Gypsum	13		0.08
6	Indoor Air Film (Still Air)	N/A		0.12
			Calculated Total System R-value	0.62

Floor – Suspended Slab				
Item	Component	Thickness (mm)	Framing Material & Percentage	Effective R-value [m^2.K/W]
1	Indoor Air Film (Still Air)	N/A		0.11
2	Solid Concrete	250		0.17
3	**R1.75 Soffit Board**	40		1.75
4	Outdoor Air Film (7m/s)	N/A		0.03
			Calculated Total System R-value	2.06

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Appendix E Insulation Markups

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CAMERON CHISHOLM NICOL

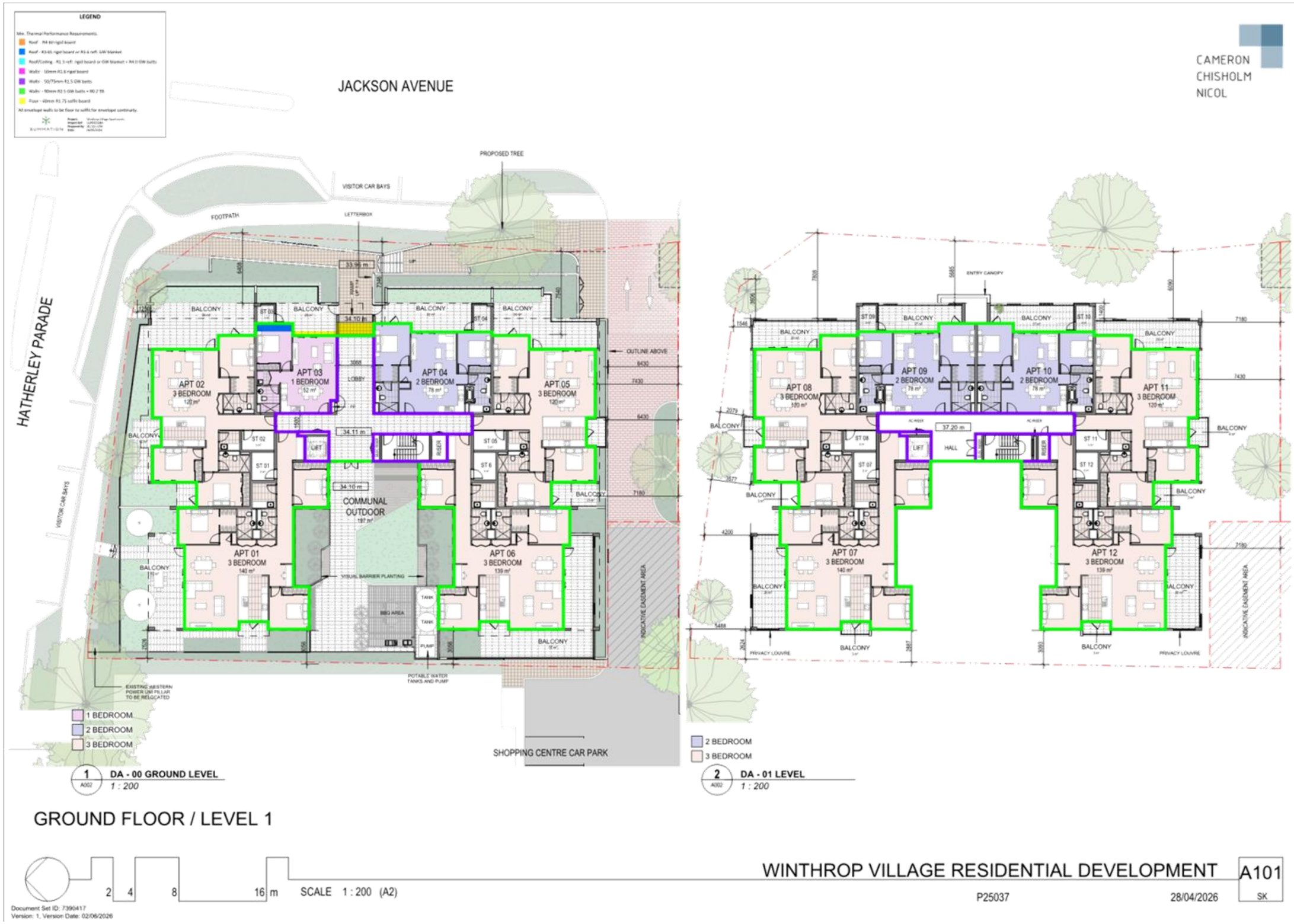
LOWER GROUND

2 4 8 16 m SCALE 1 : 200 (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

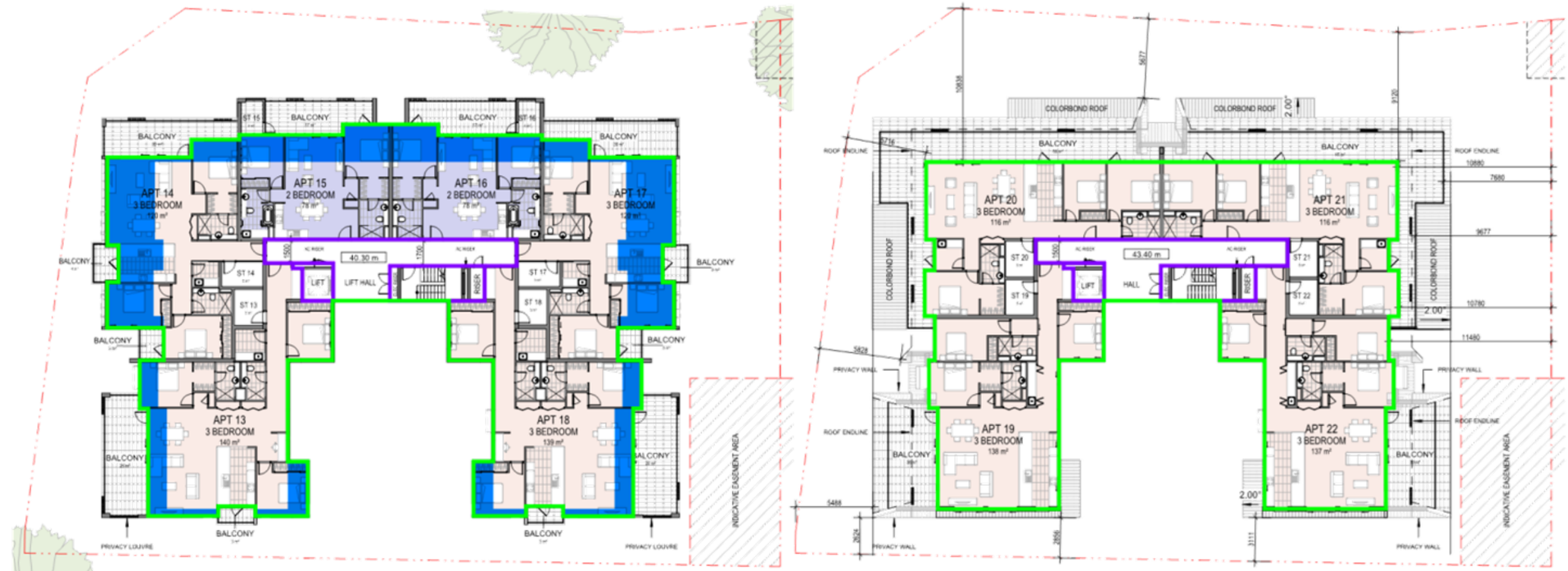
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Version: 1, Version Date: 02/06/2026


LEGEND
JACKSON AVENUE
HATHERLEY PARADE
CAMERON CHISHOLM NICOL
PROPOSED TREE
VISITOR CAR BAYS
FOOTPATH
LETTERBOX
APT 01 3 BEDROOM 140 m²
APT 02 3 BEDROOM 120 m²
APT 03 1 BEDROOM 52 m²
APT 04 2 BEDROOM 78 m²
APT 05 3 BEDROOM 120 m²
APT 06 3 BEDROOM 139 m²
COMMUNAL OUTDOOR 197 m²
VISUAL BARRIER PLANTING
BBQ AREA
TANK
TANK
PUMP
POTABLE WATER TANKS AND PUMP
INDICATIVE EASEMENT AREA
EXISTING WESTERN POWER LIGHT PILLAR TO BE RELOCATED
SHOPPING CENTRE CAR PARK
1 BEDROOM
2 BEDROOM
3 BEDROOM
1 A002 DA - 00 GROUND LEVEL 1 : 200
ENTRY CANOPY
APT 07 3 BEDROOM 140 m²
APT 08 3 BEDROOM 120 m²
APT 09 2 BEDROOM 78 m²
APT 10 2 BEDROOM 78 m²
APT 11 3 BEDROOM 120 m²
APT 12 3 BEDROOM 139 m²
HALL
LIFT
PRIVACY LOUVRE
2 BEDROOM
3 BEDROOM
2 A002 DA - 01 LEVEL 1 : 200
GROUND FLOOR / LEVEL 1
2 4 8 16 m SCALE 1 : 200 (A2)
WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT
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A101
SK
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CAMERON CHISHOLM NICOL



2 BEDROOM
3 BEDROOM

1 A002 **DA - 02 LEVEL**
1 : 200

3 BEDROOM

2 A002 **DA - 03 LEVEL**
1 : 200

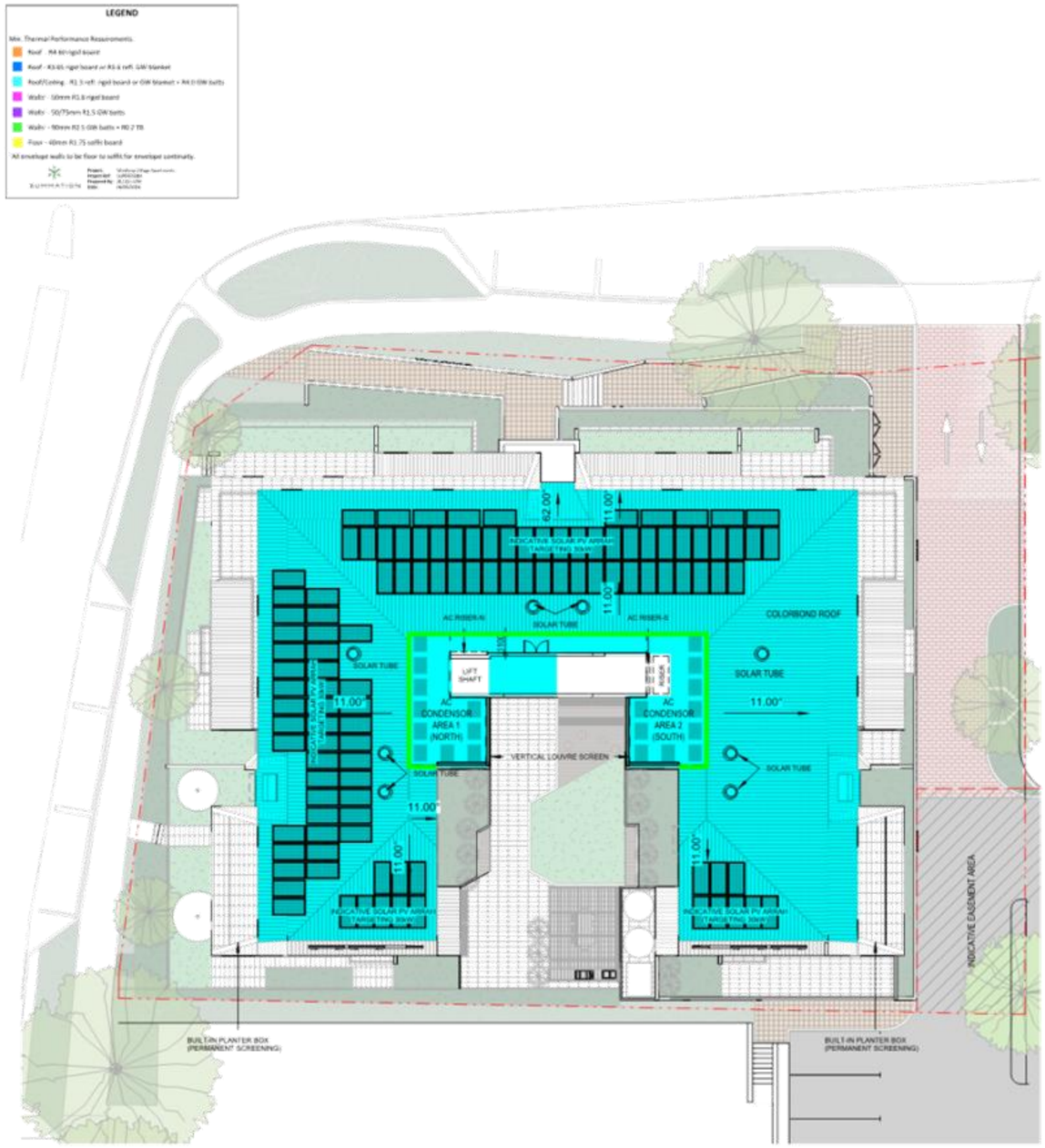
LEVEL 2 / LEVEL 3

2 4 8 16 m SCALE 1 : 200 (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

P25037 28/04/2026 A102 SK

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CAMERON CHISHOLM NICOL

WINTHROP ORTHODONTIC CENTRE

SHOPPING CENTRE CAR PARK

ROOF PLAN

1 2 4 8 m SCALE 1 : 200 (A2)

WINTHROP VILLAGE RESIDENTIAL DEVELOPMENT

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Appendix F NatHERS Thermal & WoH Results

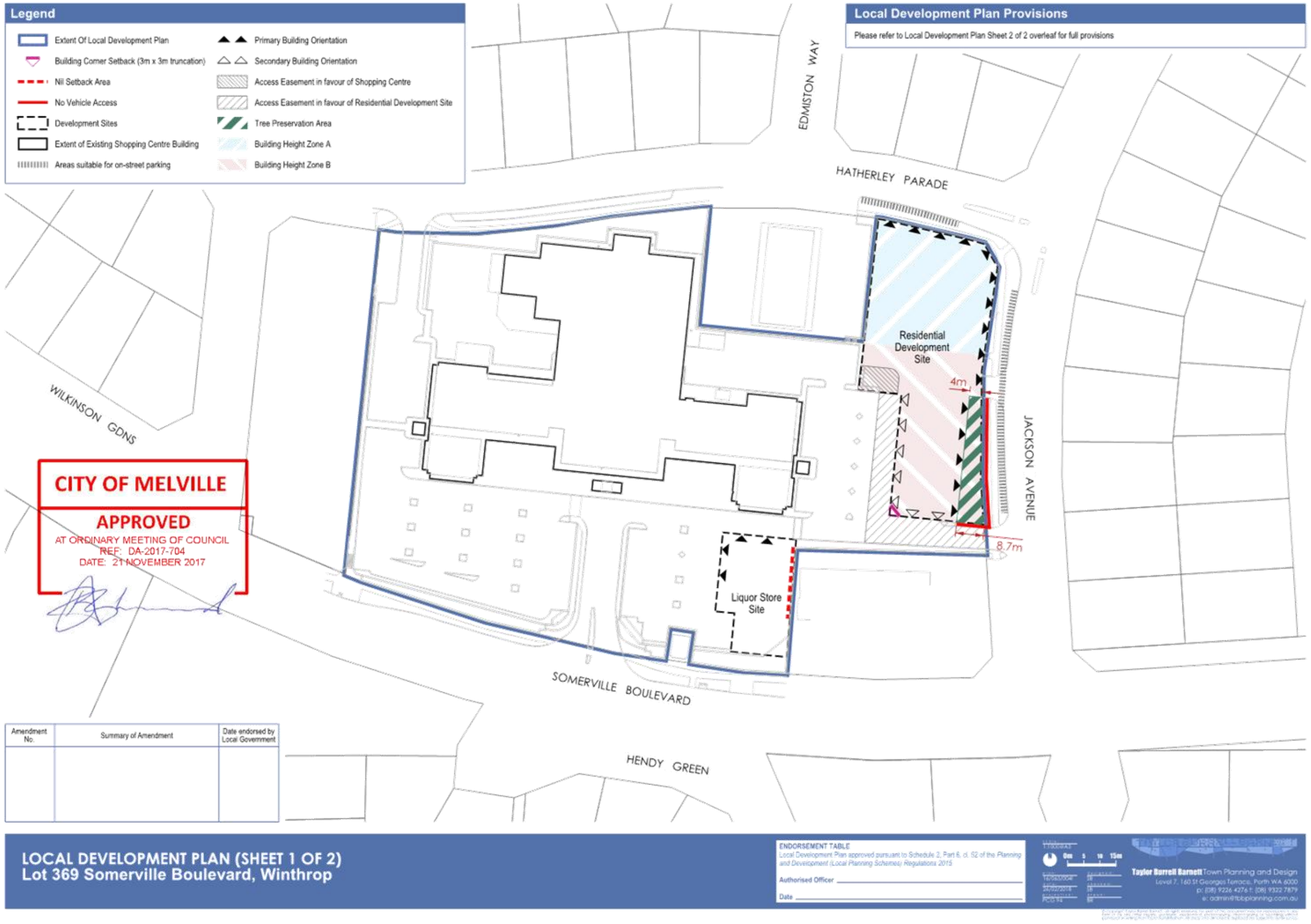
Classification	Average Thermal Star Rating	Minimum Thermal Star Rating	Minimum Whole-of-Home Rating	Section J Compliant
Class 2 SOUs	8.4	6.3	50	Yes

Level	Thermally Unique Units	No. Units	Thermal Star Rating	Whole-of-Home Rating
Ground	APT 01	1	8.4	52
	APT 02	1	9.6	57
	APT 03	1	7.8	63
	APT 04	1	8.4	60
	APT 05	1	8.4	54
	APT 06	1	8.6	53
Level 1	APT 07	1	8.9	54
	APT 08	1	9.9	58
	APT 09	1	8.2	60
	APT 10	1	8.9	60
	APT 11	1	9.1	56
	APT 12	1	9.0	54
Level 2	APT 13	1	8.6	53
	APT 14	1	9.5	57
	APT 15	1	8.6	60
	APT 16	1	8.7	60
	APT 17	1	8.5	54
	APT 18	1	8.7	53
Level 3	APT 19	1	7.4	50
	APT 20	1	6.9	50
	APT 21	1	6.3	55
	APT 22	1	7.2	55

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Legend
Extent Of Local Development Plan
Building Corner Setback (3m x 3m truncation)
Nil Setback Area
No Vehicle Access
Development Sites
Extent of Existing Shopping Centre Building
Areas suitable for on-street parking
Primary Building Orientation
Secondary Building Orientation
Access Easement in favour of Shopping Centre
Access Easement in favour of Residential Development Site
Tree Preservation Area
Building Height Zone A
Building Height Zone B
Local Development Plan Provisions
Please refer to Local Development Plan Sheet 2 of 2 overleaf for full provisions
EDMISTON WAY
HATHERLEY PARADE
WILKINSON GDNS
JACKSON AVENUE
SOMERVILLE BOULEVARD
HENDY GREEN
Residential Development Site
Liquor Store Site
4m
8.7m
CITY OF MELVILLE
APPROVED
AT ORDINARY MEETING OF COUNCIL
REF: DA-2017-704
DATE: 21 NOVEMBER 2017
Amendment No.
Summary of Amendment
Date endorsed by Local Government
LOCAL DEVELOPMENT PLAN (SHEET 1 OF 2)
Lot 369 Somerville Boulevard, Winthrop
ENDORSEMENT TABLE
Local Development Plan approved pursuant to Schedule 2, Part 6, cl. 52 of the Planning and Development (Local Planning Schemes) Regulations 2015
Authorised Officer
Date
Taylor Burrell Barnett Town Planning and Design
Level 7, 160 St Georges Terrace, Perth WA 6000
p: (08) 9226 4276 f: (08) 9322 7879
e: admin@tbbplanning.com.au

Local Development Plan Provisions

LOCAL DEVELOPMENT PLAN PROVISIONS

- The requirements of the City of Melville Local Planning Scheme No. 6 (LPS6) and the Residential Design Codes (R-Codes) apply unless otherwise provided for below.
- Where development meets the provisions contained under the Local Development Plan, further neighbour consultation is not required.
- Compliance with this Local Development Plan (LDP) does not remove the need for Planning Approval.

Zoning	Density
LPS6 Zone: Centre - C4	R-Coding: R40

RESIDENTIAL DEVELOPMENT SITE REQUIREMENTS

1. Land Use

1.1 Only multiple dwelling or grouped dwelling development shall be permitted on this site.

2. Setbacks

Applicable Location		Minimum Setback [1]	
Boundary / Street Frontage	Building Level	Setback to Tree Preservation Area[2]	Setback to Street (All Other Areas)
Jackson Ave	Basement	3.0m	Nil
	Street level (first level)	3.0m [3]	As LPS6
	Second level and above (excluding upper level) [4]	3.0m	As LPS6
	Upper Level [4]	7.0m	4.0m from setback of proceeding floor
Hatherley Pde and Street Corner Truncation	Basement	N/A	Nil
	Street level and above (excluding upper level) [4]	N/A	3.0m
	Upper Level [4]	N/A	7.0m
Common Boundary to Lot 370	Basement	N/A	Nil
	Street level (first level) to third level	N/A	As LPS6
	Fourth level	N/A	2.0m [5]

[1] *No averaging permitted to minimum setback.*
[2] *Subject to arborist advice. Minimum setback measured from edge of the Tree Preservation Area, as defined on the plan.*
[3] *Outdoor Living Area may be located within setback area, subject to arborist advice.*
[4] *Additional setback to upper level only applicable where building height is four storeys or greater.*
[5] *Applies to walls with no major openings. Boundary setbacks to walls with major openings are as per LPS6.*

2.1 Trees within the Tree Preservation Area depicted on the plan are to be retained, unless otherwise approved by Council.
2.2 Building corner setback (3m x 3m truncation) within car park to maintain visibility for car park users. Any fencing or wall located within this truncation area is to be visually permeable above 0.75 meters of natural ground level.

3. Building Heights

3.1 The standard building height requirements are as per the LPS6, unless otherwise provided for below or in provision 6.3 - Special Provisions for Development Achieving Best Practice in Sustainability.
3.2 A minimum building height of two storeys (excluding basement) applies to all development fronting Jackson Avenue and Hatherley Parade.

4. Built Form Orientation and Street Edge Integration

4.1 Every residential street elevation shall be considered as a primary building orientation and designed as such. For dwellings on primary orientations, at least one living space per dwelling shall be located overlooking the street[s] in the form of a habitable room or balcony.
4.2 Corner street frontages for residential development must present well to the street and contain openings and/or glazing and detailing, design and materials appropriate to the point(s) from which they are visible.
4.3 Blank walls are not permitted to building frontages facing the shopping centre. Frontages shall contain appropriate articulation, openings and/or glazing and present well to the shopping centre and/or car park.
4.4 Ground floor residences must have a pedestrian entry from the street or pedestrian pathway.

5. Parking

5.1 Residential visitor parking for multiple dwellings may be located on street where achievable and subject to the approval of the City of Melville. Up to 5 parking bays located within the shopping centre site are available for inclusion within the calculation of visitor parking provisions for multiple dwellings, subject to a reciprocal rights arrangement with the shopping centre and subject to approval by the City of Melville.
5.2 For residential development which demonstrates 'Australian Best Practice' in sustainability, as outlined in Provision 6.3 below, the minimum number of on-site car parking spaces required under the R-Codes may be reduced by up to 15%.

6. Special Provision for Development Achieving Best Practice in Sustainability (Plot Ratio and Building Heights)

6.1 The standard plot ratio and building height requirements are as per LPS6, unless otherwise provided for below.
6.2 Plot ratio over the Residential Development Site shall be calculated independently of the shopping centre site, even if it has not been subdivided.
6.3 Additional building height and plot ratio bonuses apply to development which demonstrates 'Australian Best Practice' in sustainability. Meeting the best practice requirement shall be demonstrated by the development meeting the criteria of a Green Star 4 Star rated development, as assessed by a Green Star Accredited Professional. The development is not required to be formally accredited by the Green Star Building Council of Australia to meet this requirement*. The following special provisions will apply to development which meets the above criteria:

Planning Requirement	Additional 'Best Practice' Development Requirement	
Plot Ratio	1.25	
Building Height	Building Height Zone A	Building Height Zone B
Maximum Height (Storeys)	4	5
Maximum Height (Metres) [1]		
To eaves	14.0	16.0
External wall	15.0	17.0
Maximum	16.5	18.5

[1] *Building height is measured to the highest point of a wall or roof of a building vertically above natural ground level. No averaging of 'equal cut and fill' across the site may be used when calculating the maximum height. Maximum building heights exclude 'minor projections'.*

CITY OF MELVILLE
APPROVED
AT ORDINARY MEETING OF COUNCIL
REF: DA-2017-704
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LIQUOR STORE SITE DESIGN REQUIREMENTS

7. Setbacks

Applicable Location	Minimum Setback
Nil Setback Area (indicated on plan)	Nil [1]

[1] *Applies to walls with no major openings only.*

8. Built Form Orientation and Street Edge Integration

8.1 Liquor Store development frontages noted as Primary Building orientations shall address the existing shopping centre and car park, as per clause 3 of City of Melville Local Planning Policy 2.1 *Non-Residential Development Policy*.

*The development shall be assessed by a Green Star Accredited Professional using the Green Star rating system to ensure that it has achieved the equivalent of a 4 Star rating. The project will not be submitted to the Green Building Council of Australia (GBCA) for a formal rating, however, this assessment will demonstrate that it has incorporated the sustainability features of an "Australian Best Practice" development.

The process that will be followed includes:

- Prepare a list of Green Star initiatives included in project to the equivalent of 4 Stars using the Green Star Design and As Built v1.1 tool;
- Incorporate these initiatives into the design documentation;
- Provide a report for the Building Licence submission stating how the development achieves the equivalent of 4 Star rating;
- Provide the builder with the list of Green Star equivalent initiatives to incorporate into the development;
- The builder will provide a sign off report demonstrating that they have achieved all of the initiatives included in the Green Star equivalent plan.

LOCAL DEVELOPMENT PLAN (SHEET 2 OF 2)
Lot 369 Somerville Boulevard, Winthrop

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