Metro Inner Development Assessment Panel Agenda

Meeting Date and Time: Wednesday, 6 May 2026; 9:30am
Meeting Number: MIDAP/131
Meeting Venue: 140 William Street, Perth

A live stream will be available at the time of the meeting, via the following link:
MIDAP/131 - 6 May 2026 - City of South Perth - City of Stirling

PART A – INTRODUCTION

1. Opening of Meeting, Welcome and Acknowledgement
2. Apologies
3. Noting of Minutes

PART B – CITY OF SOUTH PERTH

1. Declarations of Due Consideration
2. Disclosure of Interests
3. Form 1 DAP Applications
   - 3.1 Lots 37 & 36 (Nos. 29 & 31) Davilak Street, Como – Ten Grouped Dwellings – DAP/25/03029
4. Form 2 DAP Applications
5. Section 31 SAT Reconsiderations

PART C – CITY OF STIRLING

1. Declarations of Due Consideration
2. Disclosure of Interests
3. Form 1 DAP Applications
   - 3.1 Lot 101 (No.22) Muriel Avenue, Innaloo - Mixed Use Development - Two shops and six multiple dwellings – DAP/26/03046
4. Form 2 DAP Applications
5. Section 31 SAT Reconsiderations

PART D – OTHER BUSINESS

1. State Administrative Tribunal Applications and Supreme Court Appeals
2. Meeting Closure

Please note, presentations for each item will be invited prior to the items noted on the agenda and the presentation details will be contained within the related information documentation

DAP Members
Karen Hyde (Presiding Member)
Clayton Higham (Deputy Presiding Member)
Luigi D'Alessandro
Cr Kathy Lees (Part B – City of South Perth)
Cr Bronwyn Waugh (Part B – City of South Perth)
Cr Suzanne Migdale (Part C – City of Stirling)
Cr Rob Paparde (Part C – City of Stirling)

DAP Secretariat
Kristen Gray
Ashlee Kelly

PART A – INTRODUCTION

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PART B – CITY OF SOUTH PERTH

1. Declarations of Due Consideration

2. Disclosure of Interests

3. Form 1 DAP Applications

3.1 Lots 37 & 36 (Nos. 29 & 31) Davilak Street, Como – Ten Grouped Dwellings – DAP/25/03029

4. Form 2 DAP Applications

Nil.

5. Section 31 SAT Reconsiderations

Nil.

Part B – Item 3.1 – LOTS 37 & 36 (NO. 29 & 31) DAVILAK STREET, COMO – TEN GROUPED DWELLINGS

Form 1 – Responsible Authority Report
(Regulation 12)

DAP Name:	Metro Inner DAP
Local Government Area:	City of South Perth
Applicant:	Allerding & Associates
Owner:	Ngew Hoe Ching, Koon Foong Chong, Antadach Alpha Pty Ltd
Value of Development:	$6 million
Responsible Authority:	City of South Perth
Authorising Officer:	Fiona Mullen, Manager Development Services
LG Reference:	PDDA-2025/3243
DAP File No:	DAP/25/03029
Application Accepted Date:	16 December 2025
Report Due Date:	23 April 2026
Application Statutory Process Timeframe:	90 days with an additional 23 days agreed and 15 excluded holiday period days
Attachment(s):	1. Architectural plans 2. Landscape plans 3. Site aerial plan 4. Advertising submissions 5. Design Review Panel minutes 6. Tree survey report 7. Waste management plan 8. Applicant report and further information 9. Design statement 10. Sustainable design report 11. Swept path diagrams

Responsible Authority Recommendation

That the Metro Inner DAP resolves to:

1. **Approve** DAP Application reference DAP/25/03029 and accompanying plans in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, and the provisions of the City of South Perth Local Planning Scheme No. 7, subject to the following conditions:

Conditions

General Conditions

1. This decision constitutes development approval only and is valid for a period of four (4) years from the date of approval. If the subject development is not substantially commenced within the specified period, the approval shall lapse and be of no further effect.

2. The development shall be in accordance with the approved plans save that, in the event of any inconsistency between the approved plans and any requirements of the conditions set out below, the requirements of the conditions shall prevail.

3. All works to be carried out under this development approval, including footings, are required to be contained within the boundaries of the subject lot.

Amalgamation

4. Prior to applying for a Building Permit application, arrangements being made to the satisfaction of the City of South Perth for the amalgamation of all lots subject to this application. The amalgamation must be completed prior to occupation of the development.

Building Design

5. Prior to or in conjunction with the submission of a Building Permit application, amended plan(s) addressing the following matters shall be submitted to, and approved to the satisfaction of the City of South Perth:

   (a) Type E bedroom 3 achieving a minimum dimension of 2.9m and minimum area of 9.0m² excluding robes and built-in cabinetry.
   (b) The design of the solid 1.8m high street wall in the north-east corner of the site shall be revised to address adverse visual impacts to the streetscape associated with blank walls and visually prominent location of utilities.
   (c) The provision of a minimum of one bike bay per dwelling (in addition to the minimum recommended storage area under Table 4.6 of the Residential Design Codes Vol. 2), and one visitor bike bay located in a convenient and functional location.
   (d) Inclusion of clear and legible signage directing residents and visitors to the location of the communal bin store and visitor bike bay, in a location visible from the main entry point of the development.

6. External fixtures, including but not limited to air-conditioning units, clothes drying facilities, satellite dishes and non-standard television aerials, but excluding solar collectors, are to be integrated into the design of the building and shall be located so that they are not visible from the street, to the satisfaction of the City of South Perth.

Access and Parking

7. Prior to the submission of a Building Permit application, the applicant must be in receipt of an approved ‘Crossings Application’ that confirms the design is to the satisfaction of the City of South Perth.

8. Prior to occupation or use of the development, any redundant crossovers shall be removed and the verge and kerbing reinstated at the expense of the applicant, to the satisfaction of the City of South Perth.

9. Prior to occupation or use of the development, all vehicle crossings shall be constructed in accordance with an approved crossing application, to the satisfaction of the City of South Perth.

Materials and Finishes

10. Prior to or in conjunction with the submission of a Building Permit application, final details of the proposed materials, colours and finishes of the proposed development are to be submitted to the satisfaction of the City of South Perth. The finishes shall closely align with the finishes indicated in the approved plans, and be implemented and maintained thereafter, to the satisfaction of the City of South Perth.

11. Prior to occupation or use of the development, the boundary walls shall be constructed and finished in a clean material to the same standard as the rest of the development, to the satisfaction of the City of South Perth.

Public Art

12. Prior to or in conjunction with the submission of a Building Permit application, the applicant/owner is to comply with the City of South Perth Local Planning Policy 6.3 - Public Art through the contribution of a sum of 1% of the estimated cost of the development towards public art, being either:

    (a) Payment to the City of South Perth the value of 1.0% of the construction value (with the contribution capped at $500,000); or
    (b) The provision of public art on site to the minimum value of 1.0% of the construction value to the satisfaction of the City of South Perth.

    If public art is being provided on site, the applicant must seek approval in writing from the City of South Perth for the public art concept, including the artist proposed to undertake the works to the satisfaction of the City of South Perth. The approved public art concept shall be implemented prior to occupation of the development and maintained in compliance with the conditions of approval for the public art proposal to the satisfaction of the City of South Perth.

Landscaping

13. Prior to or in conjunction with the submission of a Building Permit application, a revised landscape plan demonstrating the long-term viability of planting is to be submitted and approved in writing by the City of South Perth to address the following:

    (a) Hard and soft landscaping areas;
    (b) The location and species of all trees and plants to be retained, transplanted, or removed;
    (c) The quantity, pot size, mature height and diameter of all new species to be planted;
    (d) The location of any lawn areas to be established;
    (e) Reticulation details clearly demonstrating waster sensitive design principles and automatic reticulation for all landscaped areas including on-structure planting;
    (f) Design of on structure landscaping including the arbour / trellis and balcony planters including detail on soil depths and access for maintenance; and
    (g) Details of any proposed verge treatments, landscaping, or planting of street trees.

    The detailed landscape plan shall be reflective of the landscape concept prepared by CaPA dated 26 March 2026 and recommendations included in the

Tree Survey Report prepared by Arborite dated 30 October 2025, updated as necessary to address requirements of development approval, to the satisfaction of the City of South Perth.

14. The *plumeria* (frangipani) tree shall be transplanted on site in the location of the medium tree indicated in the landscape concept prepared by CaPA dated 26 March 2026. Transplanting shall be undertaken in accordance with the procedure outlined in the Tree Survey Report prepared by Arborite dated 30 October 2025, to the satisfaction of the City of South Perth.

15. Prior to use or occupation of the development, landscaping areas shall be installed in accordance with the approved landscaping plan to the satisfaction of the City of South Perth. All landscaping areas shall be maintained for the lifetime of the development to the satisfaction of the City of South Perth.

16. All street trees in the verge adjacent to the lot will be required to be protected by a tree protection zone (TPZ) in accordance with Australian Standard 4970 during the works, to the satisfaction of the City of South Perth. Mulch is required to be provided around the base of each tree within the TPZ, and all trees must be watered regularly for the duration of the works, to the satisfaction of the City of South Perth.

Lighting

17. Prior to or in conjunction with the submission of a Building Permit application, an external lighting plan demonstrating compliance with Australian Standard 1158.3 and 4282 (as amended) must be submitted and approved in writing by the City of South Perth. The lighting is to be designed to provide a suitable level of light to communal areas and located to prevent any increase in light spill onto the adjoining properties.

    Prior to occupation and use of the development, the lighting shall be installed in accordance with the approved plan and maintained thereafter to the satisfaction of the City of South Perth.

Liveable housing design

18. Prior to or in conjunction with the submission of a Building Permit application, the applicant shall supply certification from a Liveable Housing Australia assessor confirming that the detailed design of Type B and F dwellings are compliant with the ‘Silver Level’ (or higher) of the ‘Liveable Housing Design Guidelines’ produced by Liveable Housing Australia or as otherwise agreed, to the satisfaction of the City of South Perth.

Acoustic

19. Prior to or in conjunction with the submission of a Building Permit application, (relevant to the construction of the affected components of the building), an Acoustic Report, completed by a suitably qualified acoustic engineer, and demonstrating that potential noise from the proposed development will comply with the *Environmental Protection (Noise) Regulations 1997*, must be submitted to, and approved in writing by, the City of South Perth. The report shall address:

(a) Noise impact prediction based on mechanical equipment selection / specification including but not limited to that from ventilation and exhaust systems.
(b) Mechanical plant/equipment/motors.
(c) Air conditioning.
(d) Mechanical gates/doors and intercoms alarms.

Noise control and noise management measures to address any impacts shall be included in the report. The approved acoustic report, including any specifications, requirements and recommendations cited in the report shall be implemented and maintained for the lifetime of the development to the satisfaction of the City of South Perth, including being incorporated into the building permit application documentation.

Sustainability

20. Prior to or in conjunction with the submission of a Building Permit application, the applicant is to submit a report demonstrating how the sustainability commitments indicated in the Report prepared by Emergen dated 11 November 2025 have been incorporated into the development, to the satisfaction of the City of South Perth.

All sustainability measures outlined in the Sustainable Design Assessment Report prepared by Emergen dated 11 November 2025 shall be implemented prior to use or occupation of the development, and maintained thereafter for the life of the development, to the satisfaction of the City of South Perth.

Stormwater management

21. Prior to or in conjunction with the submission of a Building Permit application, the applicant must be in receipt of an approved 'Stormwater Drainage Application' that confirms the design is to the satisfaction of the City of South Perth. All stormwater discharge from the development shall be contained and disposed of on-site unless otherwise approved by the City of South Perth.

Waste management

22. Prior to or in conjunction with the submission of a Building Permit application, an updated Waste Management Plan must be submitted and approved in writing by the City of South Perth to address the following:
    (a) Measures to be implemented for the purpose of minimizing the delivery of waste to landfill, including the onsite separation of materials for recycling;
    (b) The location and design of all bin storage areas and bin collection areas, including capacity, ventilation, drainage, roof coverage and space for washing and disinfecting of bins.
    (c) Updated waste generation rates and recalculation of the number, volume, type of bins, and type of waste to be placed in the bins. The number of bins presented for kerb collection at any one time shall be kept to a minimum.
    (d) Management of the bins and the bin storage areas, including cleaning, rotation and moving bins to and from the bin collection areas.
    (e) Details of how the Waste Management Plan will continue to be applied in perpetuity across the life of the development.

The approved Waste Management Plan shall be implemented and adhered to all times, to the satisfaction of the City of South Perth.

Construction Management

23. Prior to or in conjunction with the submission of a Building Permit application, or Demolition Permit application, whichever is earlier, a Construction Management Plan (CMP) must be submitted to, and approved in writing by, the City of South Perth. The CMP must address the following issues, where applicable:

    (a) Public safety and amenity;
    (b) Site plan and security;
    (c) Contact details of essential site personnel, construction period and operating hours;
    (d) management of deliveries and on-site storage of materials and equipment;
    (e) Community information, consultation and complaints management plan;
    (f) Noise and vibration management in accordance with the *Environmental Protection (Noise) Regulations 1997* and AS 2436 Guide to noise and vibration control on construction, demolition and maintenance sites;
    (g) Air and dust management;
    (h) Traffic, access and parking management;
    (i) Waste management and materials re-use;
    (j) Earthworks, excavation, land retention and associated matters;
    (k) Stormwater and sediment control, including protection of stormwater drains;
    (l) Street tree management and protection;
    (m) Removal of onsite effluent disposal system and stormwater management system;
    (n) Asbestos removal; and
    (o) Monitoring and reporting requirements.

    Where management of a particular issue is required to be addressed through a separate specialised management plan, the CMP is to reference the specialised management plan. The CMP must be implemented and adhered to all times, to the satisfaction of the City of South Perth.

Advice Notes

1. In the event of subdivision, the indicative lot boundaries shown on the approved plans will require modification to ensure that all vehicle manoeuvring is contained to the exclusive areas of the associated dwelling and common property. Vehicles may not encroach into the exclusive areas of other dwellings on site.

2. Australian Standard 4970 specifies the following measures are required to protect trees:

    (a) A minimum 2.0m radius tree protection zone (TPZ) shall be provided through 1.8m high fencing around the verge trees (chain mesh panels or other suitable material) during construction of the subject development.
    (b) The above fencing is not to be moved or removed at any period during construction, and this zone is not to be entered for any reason; signage notifying people of the TPZ and the associated requirements is to be placed on each side of the fencing.

(c) All activities and works related to construction of the subject development, including parking of vehicles, storage of materials, and washing of concreting tools and equipment is prohibited within the designated TPZ unless prior approval is sought from the City of South Perth.
(d) Any roots identified to be pruned shall be pruned with a final cut to undamaged wood outside of the TPZ. Pruning cuts shall be made with sharp tools such as secateurs, pruners, handsaws or chainsaws. Pruning wounds shall not be treated with dressings or paints. It is not acceptable for roots to be 'pruned' with machinery such as backhoes or excavators.

3. A bin store/enclosure shall be provided such that it is:

(a) Of sufficient size to contain all the required bins including adequate area around the bins to access and allow manoeuvring of the bins for collection;
(b) Provided with a mains water supply, with a sealed floor graded to a plumbed sewer drainage outlet/s to allow for the washing of all room surfaces and for the cleaning of bins as required;
(c) Designed with walls not less than 1.8m in height and access point with self-closing gate of not less than 1.0m in width;
(d) Access is to be provided to all bins (i.e. no stacking of rows of bins). Each bin must have a minimum 50mm spacing around all sides, including between walls, other bins and aisles;
(e) A smooth and impervious floor of not less than 100 millimetres in thickness;
(f) Where located within a building, the bin storage area is ventilated in accordance with Australian Standard 1668.2: The Use of Ventilation and Air Conditioning in Buildings (as amended); and
(g) Must be undercover and be designed to not permit storm water to enter the sewer drainage outlet.

4. In respect to Condition 5(b), measures such as reducing the wall length, incorporating articulation / fine grain detail to the wall, and/or introduction of landscaping are recommended.

Details:

Region Scheme	Metropolitan Region Scheme
Region Scheme - Zone/Reserve	Urban
Local Planning Scheme	City of South Perth Local Planning Scheme No. 7
Local Planning Scheme - Zone/Reserve	Centre zone
Structure Plan/Precinct Plan	Canning Bridge Activity Centre Plan
Structure Plan/Precinct Plan - Land Use Designation	Residential (H4), Davilak Quarter (Q4)
Use Class and permissibility:	Grouped Dwelling - Preferred
Lot Size:	1,606m² (803m² per parent lot)
Existing Land Use:	Two single houses
State Heritage Register	No
Local Heritage	☒ N/A ☐ Heritage List ☐ Heritage Area

Design Review	☐ N/A ☒ Local Design Review Panel ☐ State Design Review Panel ☐ Other
Bushfire Prone Area	No
Swan River Trust Area	No

Proposal:

The application seeks development approval for ten two-storey Grouped Dwellings. Vehicle access to all dwellings is via a common property driveway from Davilak Street.

Plans of the proposed development are provided in **Attachments 1 and 2**.

Proposed Land Use	Grouped Dwelling
Proposed Net Lettable Area	N/A
Proposed No. Storeys	Two
Proposed No. Dwellings	Ten

Background:

Site Context

The proposal is located over two lots featuring a minor slope from north (low) to south (high). The sites are located on the boundary of the Canning Bridge Activity Centre Plan area, with a Public Open Space Reserve (Neil McDougall Park) to the north. East of the site is a Residential (R20) zone and another Public Open Space reserve.

The immediate streetscape is characterised by single houses; 11 two-storey grouped dwellings are under construction adjacent to the rear of the site at the intersection of Ley Street and Philp Avenue. The site currently contains two single houses that will be demolished to accommodate the proposed development.

An aerial plan is provided in **Attachment 3**.

Legislation and Policy:

Legislation

Planning and Development Act 2005
Planning and Development (Local Planning Schemes) Regulations 2015
Planning and Development (Planning Codes) Regulations 2024
Planning and Development (State Planning Policies) Regulations 2024
Planning and Development (Development Assessment Panels) Regulations 2011
Metropolitan Region Scheme (MRS)
City of South Perth Local Planning Scheme No. 7 (LPS 7)
Residential Design Codes – Volume 2 (R-Codes)

State Government Policies

State Planning Policy 5.4 – Road and Rail Noise (SPP 5.4)
State Planning Policy 7.0 – Design of the built environment (SPP 7.0)

Structure Plans/Activity Centre Plans

Canning Bridge Activity Centre Plan (CBACP)

Local Policies

Local Planning Policy 3.1 – Waste Management (LPP 3.1)
Local Planning Policy 3.2 – Tree Retention (LPP 3.2)
Local Planning Policy 6.1 – Advertising of Planning Proposals (LPP 6.1)
Local Planning Policy 6.2 – Design Review Panel (LPP 6.2)
Local Planning Policy 6.3 – Public Art (LPP 6.3)

Consultation:

Public Consultation

Consultation has been undertaken to the extent and in the manner required by the Deemed Provisions and LPP 6.1 - Advertising of Planning Proposals. A total of 13 letters were sent to adjoining landowners and occupiers. At the close of the submission period, six objections were received.

Key matters raised in the submissions include:

- Streetscape character
- Land use
- Parking
- Visitor parking
- Sightlines
- Visual privacy
- Waste
- Trees

A copy of the submissions received is provided in **Attachment 4**.

Referrals/consultation with Government/Service Agencies

The application has not been referred to any external government agencies or services agencies.

Design Review Panel Advice

The proposal was referred to the Design Review Panel (DRP) in accordance with LPP 6.2, followed by a Chair Review of the amended plans submitted in response to the DRP advice.

The concluding remarks of the DRP Chair on the final review were as follows:

> *The Panel supports the proposal subject to confirmation that Unit Type E Bed 3 facing east does not depend on a high level window and/or invasive privacy screening that prevents access to view and vista for occupants.*
>
> *The proposed medium-density townhouse development presents a well-considered urban response that positively contributes to the streetscape and*

broader context. Key design strengths include strong orientation to the public realm, successful integration with Davilak Street, high levels of passive surveillance, and efficient internal layouts with good access to natural light and ventilation. The use of deep soil zones and a pedestrian-prioritised laneway further enhance the environmental quality and amenity of the development.

The City considers that the proposal satisfactorily addresses the ten design principles of SPP 7.0. The comment from the DRP relating to Unit Type E Bed 3 has been addressed in the revised plans with the inclusion of an additional window to the northern side of the room. The window is a major opening, and its placement is appropriate to minimise potential privacy impacts.

The minutes of the final review are contained in **Attachment 5**.

Planning Assessment:

The proposal has been assessed against all relevant legislative requirements of LPS 7, the CBACP, the R-Codes Volume 2, and State and Local Planning Policies.

The CBACP outlines the land use permissibility and built form requirements for the subject site. The CBACP requires all residential development (inclusive of grouped dwellings) to be considered against Volume 2 of the R-Codes.

The key elements for this proposal requiring the exercise of discretion are outlined below:

- Land use (dwelling diversity)
- Street setbacks
- Side and rear setbacks
- Visual privacy
- Open space and landscaping
- Parking
- Servicing and functionality
- Size and layout of dwellings
- Utilities

These matters are outlined and discussed in further detail below.

<u>Land Use (Dwelling Diversity)</u>

Discretion is sought in relation to dwelling diversity under Requirement 1.15 of the CBACP, summarised below.

Design Element	Requirement	Proposal
One bedroom or studio dwellings	Minimum 20% (2) Maximum 50% (5)	0% (0)

Discretion is to be considered against Desired Outcome 1.7 of the CBACP, relevant excepts are provided below.

- *Housing should be diverse and affordable, with a mix of options in all areas.*

The proposed dwelling diversity is supported for the following reasons:

- The proposal includes a mix of dwelling types, including two and three bedroom options, and variation in design of these dwellings to provide a mix of options.
- Whilst the development does not include any single bedroom dwellings, the offering of two and three bedroom options contributes towards dwelling diversity in the locality, as the predominant development type is currently larger single houses.

Street Setbacks

Discretion is sought in relation to street setbacks under Requirement 4.6 of the CBACP, summarised below.

Design Element	Requirement	Proposal
Upper floor street setback		
Type A	4.0 - 6.0m	3.5 - 4.0m (3.7m avg)
Type B	4.0 - 6.0m	3.5 - 4.0m (3.7m avg)
Type C	4.0 - 6.0m	3.5 - 4.0m (3.7m avg)

Discretion is to be considered against Desired Outcome 4 of the CBACP, relevant excepts are provided below.

- *To ensure that the setback to buildings contributes to a distinct street character and that the form of multi-level development is sensitive to pedestrian scale.*
- *Alternative means to reduce bulk and scale such as green walls and façade articulation are also encouraged.*
- *New buildings that are setback from the street boundary should not adversely affect the vibrancy and activity required to support the expected outcomes of the CBACP by creating unnecessary breaks in active frontages as per Figure 7.*

The proposed street setbacks are supported for the following reasons:

- The proposed upper floor street setbacks are less than that typically existing within the streetscape, however, closely align with the intended outcomes of the CBACP.
- The reduced setbacks are considered unlikely to have any adverse impact on the existing streetscape character as there is considerable variation in existing setbacks. Notably, newer development has been approved with street setbacks closer to the desired outcomes of the CBACP.
- The elements of the façade projecting forward of the 4.0m setback create articulation and interest in the design and proposed with a differing finish to highlight these areas as features of the design.
- The proposed building setback and street setback area has been designed to maximise activity and interaction with the streetscape and Neil McDougall Park.

Side and rear setbacks

Discretion is sought in relation to side and rear setbacks under Requirement 5.6 of the CBACP, summarised below.

Design Element	Requirement	Proposal
Ground floor side setback (west)		

Type A	4.0m minimum	Nil-3.4m (1.0m avg)
Type D	4.0m minimum	3.5m
Upper floor side setback (west)		
Type A	4.0m minimum	1.1 - 2.9m (1.5m avg)
Type D	4.0m minimum	3.5m
Ground floor side setback (east)		
Type C	4.0m minimum	0.8 - 2.9m (1.9m avg)
Type E	4.0m minimum	0.6 - 4.8m (2.3m avg)
Type F	4.0m minimum	1.0 - 3.5m (2.4m avg)
Upper floor side setback (east)		
Type C	4.0m minimum	0.8 - 2.5m (1.6m avg)
Type E	4.0m minimum	0.6 - 3.2m (2.1m avg)
Type F	4.0m minimum	0.9 - 3.2m (2.1m avg)
Ground floor rear setback (south)		
Type D	4.0m minimum	1.0m
Upper floor rear setback (south)		
Type D	4.0m minimum	1.0m

Discretion is to be considered against Desired Outcome 4 of the CBACP, relevant excepts are provided below.

- *To provide a continuity of frontage at ground and podium levels to encourage activity whilst providing interest.*
- *To allow opportunities for tower elements to access sunlight, ventilation and view corridors throughout the area from and between multi-level developments.*
- *To ensure that development opportunities throughout the precinct are maximised.*
- *Developers should consider the amenity of the precinct by minimising overlooking and overshadowing of adjacent and adjoining properties through appropriate design response, supported by the setback provisions of this Element.*

The proposed side and rear setbacks are supported for the following reasons:

Side setbacks (west)

- Setbacks of the Type A dwelling are appropriate to enable continuity of frontage and building separation between sites as viewed from the street consistent with existing development.
- The impact of the reduced setback of the Type A dwelling on amenity of the adjoining property is considered minimal as it primarily adjoins a garage structure.
- The adjoining garage structure at No. 27 Davilak Street included east facing solar panels setback approximately 0.4m from the lot boundary which will be significantly impacted by the Type A dwelling, however the location of the panels (ground level roof with minimal setback from the lot boundary) presents a situation where impact from any adjoining development exceeding single storey is effectively unavoidable.
- The consistent 3.5m setback of Type D is considered appropriate to mitigate impacts and notably greater setbacks have been provided than would typically be expected for a two-storey development.
- The impact of visual bulk is considered to be addressed through variation in wall finishes and minor structures which break up the visual mass.

- The setbacks provided across Type A and D are considered to maintain majority of sunlight access for 27 Davilak Street and will not have any notable impact on ventilation and outlook.

Side setbacks (east)

- The eastern setbacks are varied across the dwellings due to the lot boundary not being perpendicular to the street.
- This variation in setbacks, whilst resulting in some portions of wall close to the boundary, provides articulation and visual interest which offsets the impacts of building bulk.
- The proposed setbacks average to approximately 2m, which is half of the required setback, however noting that the development seeks only half of the potential building height (four storeys permitted) this is considered to be proportionally appropriate.

Rear setbacks (south)

- The proposed setbacks of Type D to the rear boundary are notably less than the CBACP requirements, although not unusual in the context of two-storey grouped dwelling development.
- The length of wall is 12.4m which represents approximately 45% of the total rear boundary length. The remainder of the boundary is either open or achieving the 4.0m setback requirement.
- The affected area (rear of 14 Philp Street) is vacant, with the associated dwelling located approximately 26.0m from the rear lot boundary, and therefore there will be no undue impacts on solar access, ventilation, privacy, or outlook.
- The impact of overshadowing equates to 13% of the affected site at 14 Philp Avenue, which is considered to be low for a site within the CBACP, and of minimal impact.
- The impact of visual bulk is considered to be addressed through variation in wall finishes which assist to break up the visual mass, and the transplanted tree and proposed landscaping which will be visible above the dividing fenceline will assist to soften the built form.

Visual privacy

Discretion is sought in relation to visual privacy under Requirement 5.8 of the CBACP, which refers to Element 3.5 of the R-Codes. A summary of the assessment against relevant Acceptable Outcomes is provided below.

Design Element	Requirement	Proposal
Upper floor street setback		
Type D bed 2 and 3 west facing windows	3.0m	1.3 - 1.4m (internal dwellings affected)
Type E study south facing window	3.0m	2.8m (No. 33 Ley Street affected)

Discretion is to be considered against Element Objective 3.5.1 of the R-Codes, provided below.

- *The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and*

of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms.

The proposed visual privacy is supported for the following reasons:

Type D bed 2 and 3

- The windows are oriented to the west, whilst the affected properties are north and south, enabling only oblique views rather than direct views.
- Internal cone of vision encroachments are considered acceptable and mutually beneficial to provide improved outlook, solar access, and ventilation to the bedrooms.
- Impacts to the adjacent outdoor living areas is mitigated by vertical separation and there will be partial screening provided through the shade structures at ground level.

Type E study

- The window is oriented to the south, whilst the affected property is located to the east, enabling only oblique views rather than direct views.
- The area overlooked is the rear corner of the site, which forms part of an extensive rear garden and is not considered to be an active space or forming part of the associated dwellings outdoor living area.

Open Space and Landscaping

Discretion is sought in relation to landscaping under Requirement 10.5 of the CBACP, which refers to Element 3.3 of the R-Codes. A summary of the assessment against relevant Acceptable Outcomes is provided below.

Design Element	**Requirement**	**Proposal**
Tree retention		
Jacaranda mimosifolia	Retention	Removal
Schinus sp. (pepper)	Retention	Removal
Plumeria sp. (frangipani)	Retention	Transplantation

Discretion is to be considered against Objectives of Element 3.3 of the R-Codes, provided below.

- *Site planning maximises retention of existing healthy and appropriate trees and protects the viability of adjoining trees.*
- *Adequate measures are taken to improve tree canopy (long term) or to offset reduction of tree canopy from pre-development condition.*
- *Development includes deep soil areas, or other infrastructure to support planting on structures, with sufficient area and volume to sustain healthy plant and tree growth.*

It is noted that tree retention also forms a requirement under LPP 3.2 – Tree Retention (LPP 3.2). The Jacaranda and Frangipani trees meet the definition of a Regulated Tree under LPP 3.2; accordingly, their proposed removal also requires assessment against LPP 3.2.

The proposed tree removal and relocation is supported as it is considered to meet the objectives of Element 3.3 of the R-Codes, and the objectives and removal criteria of LPP 3.2 as outlined below.

Local Planning Policy 3.2 – Tree retention	
Objective	**Assessment**
Prioritise the retention, protection, and the provisions of trees on private land and adjacent reserves in the planning process.	One of the three existing trees on site will be retained through transplantation as part of this proposal. On assessment of the remaining two trees, they were not considered suitable for retention.
Promote and facilitate tree preservation at the earliest possible stage in the planning and development process, balancing with the desired built form and land use outcomes.	The retention of the Jacaranda tree was discussed with the applicant, however on further assessment it was determined that retention of this tree was not reasonably practical.
Preserve and enhance neighbourhood amenity, character and sense of place.	The proposal retains (via transplantation) the only tree on site with a significant streetscape presence and focuses tree planting on the perimeter of the site where they will provide maximum benefit to the streetscape and adjoining properties, as well as the future residents of the site.
Mitigate the urban heat island effect, reduce air pollution, improve groundwater quality and contribute to biodiversity and other environmental benefits.	The proposal involves a sixfold increase in the number of trees on site, from three to 20, and is considered to provide a larger and more evenly spread canopy coverage across the site in the long term.
Tree damaging activity to a regulated tree may be considered if the following relevant information and/or technical reports are provided to demonstrate:	
(a) The regulated tree is unhealthy, based on the recommendations of an Arborist report; (b) The regulated tree causes safety risks to people, infrastructure or buildings based on recommendations on an Arborist report and/or Structural Engineering Report; (c) In the opinion of the City, the redesign of the development to accommodate the regulated tree is unfeasible.	All three trees are of reasonable health, however the Jacaranda tree has an 'average bordering poor' structure due to previous lopping and considerable epicormic growth. The Jacaranda and Pepper trees are located centrally on site, in the position where the common property access way is located. The pepper tree is widely recognised as a pest species and suitable for removal, whilst the applicant attempted to design around the jacaranda tree. The initial design retaining the Jacaranda tree resulted in onerous and

	difficult manoeuvring within the access way, and the calculated tree protection zone equated to 163m², which is larger than the site area of any proposed dwelling on site, creating considerable uncertainty around whether it was reasonably possible to retain the tree during construction. Ultimately it was determined that due to the considerable tree protection zone, average structural form, and implications on functionality of the development, it would be more suitable to replace the tree with a large quantity of smaller species trees around the site that could integrate better with the built form.

Additional details relating to the trees and arborist recommendations is provided in **Attachment 6**.

Parking

Discretion is sought in relation to parking and access under Requirements 18.1 and 18.3 of the CBACP, which also refers to Elements 3.8 and 3.9 of the R-Codes. A summary of the assessment against relevant Acceptable Outcomes is provided below.

Design Element	Requirement	Proposal
Sightlines		
Garages adjacent to the communal street	No obstructions above 0.75m high within 1.5m of where an access point adjoins the communal street	Garages located 1.0m from the communal street (garage walls obstruct views)
Bicycle parking		
Visitor bay location	Secure, undercover bicycle parking provided, with visitor parking clearly visible from the driveway	Visitor bicycle bay located adjacent the utility area in the north-west corner of the site

Whilst not a variation, it is noted that residential visitor bays are required at a rate or one bay per eight dwellings for development greater than 12 dwellings. As the proposal does not meet this dwelling threshold, visitor car parking is not required.

Discretion is to be considered against the Objectives of Element 3.8 and 3.9 of the R-Codes, relevant excerpts are provided below.

- *Vehicle access points are designed and located to provide safe access and egress for vehicles and to avoid conflict with pedestrians, cyclists and other vehicles. (O 3.8.1)*

- *Parking and facilities are provided for cyclists and other modes of transport. (O 3.9.1)*

The proposed sightlines are supported, however the proposed bicycle parking location is not supported, for the following reasons:

Sightlines

- Communal streets by nature are low speed environments conducive to increased driver caution and attention due to the increased presence of pedestrian activity and narrow pavement widths.
- The communal street has been designed as a shared space between pedestrians and vehicles and includes a number of traffic calming features such as use of varied materials and colours in the driveway finish and narrowing of the driveway at various points to incorporate landscaping.
- The differing finishes distinguish pedestrian and vehicle priority spaces within the communal street, reducing the likelihood of conflict between pedestrians and vehicles.
- The garages are offset 1.0m from the communal street which provides some space for sightlines, which in combination with the shared space design and low speed nature of the communal street is considered to adequately allow for safe access and egress.

Bicycle parking

- The location of the proposed visitor bicycle bay is disconnected both physically and visually from the main entrance to the development.
- The location is exposed to weather elements and has minimal passive surveillance to discourage antisocial behaviour.
- The visitor bay location is not considered to offer the convenience and protection reasonably expected of bicycle parking facilities to encourage alternate transport options.

The City has included a condition in its recommendation to address the visitor bicycle parking location.

Vehicle Swept Paths

Whilst not specifically considered as a variation, it is noted that several of the swept path diagrams provided encroach on the indicative site areas of other dwellings in the development. In the event of subdivision, the site areas will need to be updated with appropriate truncations to ensure manoeuvring encroachments do not occur.

As this application does not constitute subdivision approval, it is not considered necessary to address the encroachments as a condition of approval, however an advice note has been included to highlight this conflict with the indicative lot layout.

<u>Servicing and functionality</u>

Discretion is sought in relation to waste management arrangements under Requirement 19.3 of the CBACP, which refers to Element 3.1 of the R-Codes, which refers to any relevant local planning policies (LPP 3.1 – Waste Management). A summary of the assessment against relevant policy requirements is provided below.

Design Element	Requirement	Proposal
Off-site waste collection		
Bin size	Bin size utilised for collection is no larger than 240L	10 x 240L general waste 6 x 360L recycling
Bin numbers	No more than eight bins are presented for collection	Alternating between 10 and 16 bins each week
Bin collection area	Bin area takes up no more than one-third (13.12m) of the street frontage excluding crossover width.	Alternating between 26.7% (10.5m) and 44.9% (17.7m) each week

Discretion is to be considered against Objectives of Element 4.17 of the R-Codes, provided below.

- *Waste storage facilities minimise negative impacts on the streetscape, building entries and the amenity of residents.*
- *Waste to landfill is minimised by providing safe and convenient bins and information for the separation and recycling of waste.*

The proposed waste management arrangements are supported for the following reasons:

- The use of 360L bins (0.7m wide) rather than 240L bins (0.6m wide) on the streetscape is considered to impact on the amenity of the area, however, given that less than half of the bins are 360L, the impact is not considered so significant as to warrant refusal.
- The bin number limit in LPP 3.1 does not consider the length of the frontage of the site. In this instance the subject site will represent an amalgamation of two original frontages, each of which may have resulted in up to eight bins being presented. In this respect, the outcome proposed is considered to be in accordance with maximum number of bins permissible under LPP 3.1, although this is also subject to the compliance with maximum frontage requirements.
- The proposal will alternate between bin collection areas below and above one-third of the site frontage. On average the bins will occupy 35.8% of the frontage assuming that all bins are put out for collection each week, which is considered to be generally reflective of the intended limit under the policy.
- The number of bins on the verge is not dissimilar to existing grouped dwelling developments within the area, and the number of bins within the verge is consistent with the objectives of LPP 3.1 if managed appropriately by the future residents.
- The waste management plan overestimates waste generation as the result of an incorrect ratio of three bedroom units. Correctly calculated, the number of recycling bins can be reduced to five, which would reduce required frontage by 1.2m; this can be addressed as a condition of approval.

Additional details relating to waste management is provided in **Attachment 7**.

The City has included a condition in its recommendation for an updated waste management plan to be submitted to address the incorrect generation calculation and reduce bin numbers where possible.

Size and layout of dwellings

Discretion is sought in relation to the size and layout of dwellings under Elements 4.3 of the R-Codes. A summary of the assessment against relevant Acceptable Outcomes is provided below.

Design Element	Requirement	Proposal
Bedroom minimum dimension and area		
Type C bed 2	3.0m and 9m²	2.9m x 3.4m (10m²)
Type E bed 3	3.0m and 9m²	2.9m x 2.9m (8.4m²)
Type F bed 3	3.0m and 9m²	2.9m x 4.1m (11m²)

Discretion is to be considered against Objectives of Element 4.3 of the R-Codes is provided below.

- *The internal size and layout of dwellings is functional with the ability to flexibly accommodate furniture settings and personal goods, appropriate to the expected household size. (O 4.3.1)*
- *Ceiling heights and room dimensions provide for well-proportioned spaces that facilitate good natural ventilation and daylight access. (O 4.3.2)*

The proposed size and layout of dwellings Type C and F is supported, and Type E is not supported for the following reasons:

- The Type C and F bedrooms exceed the minimum recommended area and the reduced minimum dimension from 3.0m to 2.9m is not considered to have any significant impact on functionality of the room or furniture placement.
- The Type E bedroom is slightly under the recommended dimensions and area, resulting in a bedroom that may be somewhat constrained and result in a lower level of amenity than generally expected for a bedroom.
- Design of the Type E dwelling is considered capable of accommodating a wider bedroom without significant modification, and therefore it is considered reasonable that a condition be applied requiring the bedroom adjusted to achieve a minimum width of 3.1m which would result in the bedroom achieving 9m².This can be achieved by a minor reduction to the size of the adjoining ensuite bathroom.

Utilities

Discretion is sought in relation to the size and layout of dwellings under Elements 4.18 of the R-Codes. A summary of the assessment against relevant Acceptable Outcomes is provided below.

Design Element	Requirement	Proposal
Utilities located within the front setback	Integrated into the design of the development and not visually obtrusive	A 1.8m high and 3.0m wide solid wall is proposed fronting the Davilak Street (north-east corner of site) to accommodate utilities.

Discretion is to be considered against Objectives of Element 4.18 of the R-Codes, relevant excerpts are provided below.

- *Utilities, such as distribution boxes, power and water meters are integrated into design of buildings and landscape so that they are not visually obtrusive from the street or open space within the development. (O 4.18.3)*

The proposed solid wall fronting Davilak Street to accommodate utilities is not supported for the following reasons:

- The wall presents as an independent element of the design rather than being integrated with the development and is considered to be unnecessarily long.
- The City considers design should ensure utilities are not visually obtrusive. Any solid walls housing utilities should be no longer than 1.0m and aligned perpendicular to the street, neither of which are met in the current proposal.

To address the above concerns, a condition has been included in the City's recommendation for amended plans addressing the impact of the proposed solid wall.

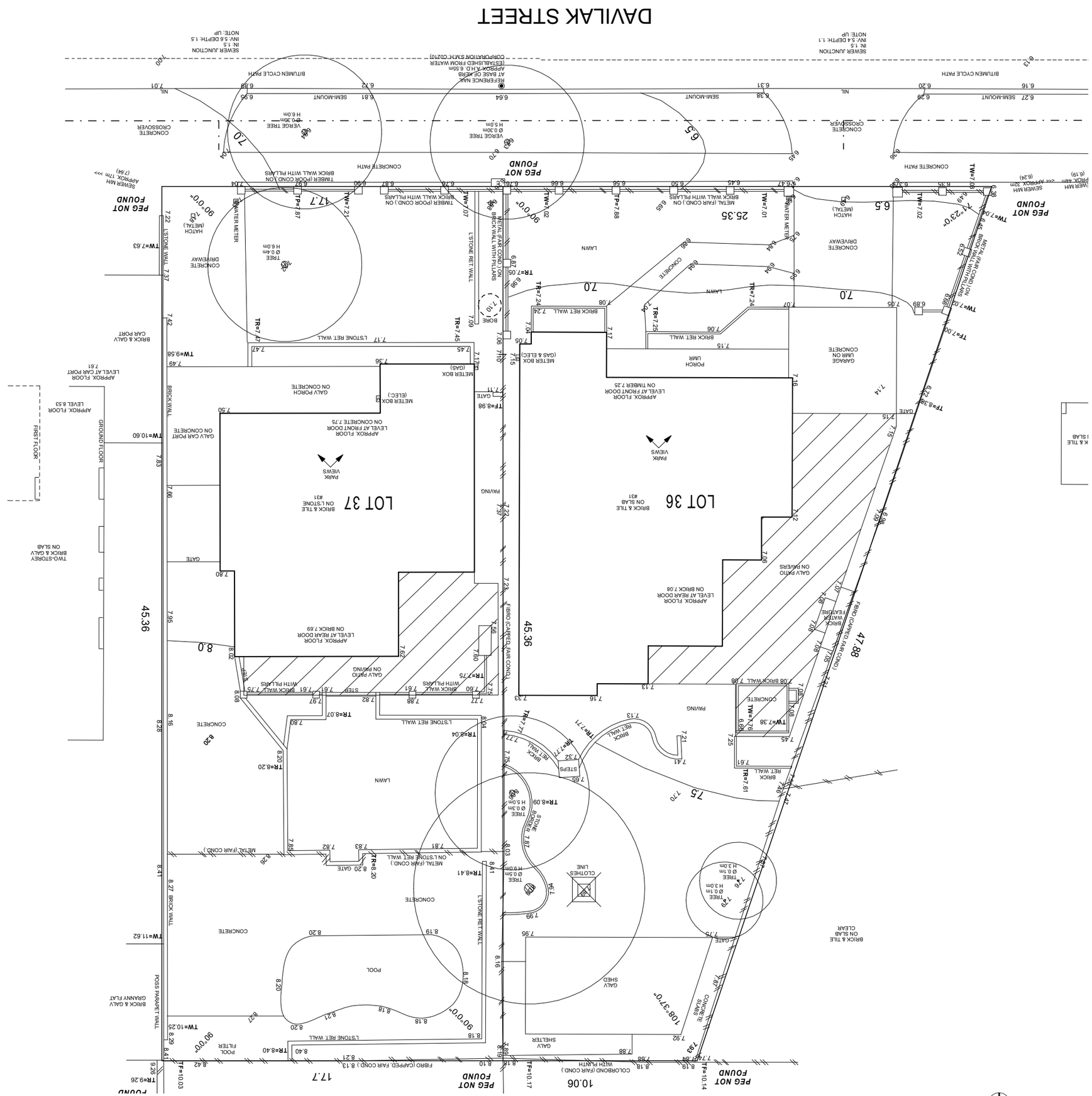
Conclusion:

The development is generally consistent with the local planning framework as discussed in the body of the report. The development is of a scale and design which is also broadly consistent with the existing and desired future development within the locality.

The development appropriately satisfies the objectives of the CBACP and where applicable the Element Objectives of the R-Codes Volume 2 subject to appropriate conditions being imposed.

Accordingly, subject to the inclusion of appropriate conditions, the application is recommended for approval.

SITE SURVEY


DAVILAK STREET
LOT 36
LOT 37
PEG NOT FOUND
BRICK WALL
CONCRETE
LAWN
PAVING
GALV SHED
GALV PATIO ON PAVERS
GALV SHELTER
GALV PORCH ON CONCRETE
GALV CAR PORT ON CONCRETE
BRICK & GALV CAR PORT
BRICK & GALV GRANNY FLAT
TWO-STOREY BRICK & GALV ON SLAB
BRICK & TILE ON SLAB
BRICK & TILE ON L'STONE
BRICK RET WALL
L'STONE RET WALL
FIBRO (CAPPED, FAIR COND.)
COLORBOND (FAIR COND.) WITH PLANTH
POSS PARAPET WALL
POOL
POOL FILTER
CLOTHES LINE
GARAGE UNR ON CONCRETE
PORCH UNR
METER BOX (GAS & ELEC)
METER BOX (ELEC.)
METER BOX (GAS)
WATER METER
HATCH (METAL)
CONCRETE DRIVEWAY
CONCRETE CROSSOVER
BITUMEN CYCLE PATH
CONCRETE PATH
SEMI-MOUNT
NIL
SEWER JUNCTION IN: 1.5 INV: 5.4 DEPTH: 1.1 NOTE: UP
SEWER JUNCTION IN: 1.5 INV: 5.6 DEPTH: 1.5 NOTE: UP
REFERENCE MARK AT BASE OF MEAS APPROX.7.41D 6.95m ESTABLISHED FROM WATER CORPORATION SMH: C0210
SEWER MH APPROX 7m >>> (7.64)
SEWER MH <<< APPROX 42m (6.19)
SEWER MH APPROX 32m (6.24)
TIMBER (POOR COND.) ON BRICK WALL WITH PILLARS
METAL (FAIR COND.) ON BRICK WALL WITH PILLARS
TIMBER (POOR COND.) ON BRICK WALL WITH PILLARS
METAL (FAIR COND.) ON BRICK WALL WITH PILLARS
TREE Ø 0.3m H 6.0m
TREE Ø 0.4m H 6.0m
TREE Ø 0.5m H 9.0m
TREE Ø 0.1m H 3.0m
TREE Ø 0.3m H 5.0m
TREE Ø 0.3m H 6.0m
VERGE TREE Ø 0.3m H 5.0m
VERGE TREE Ø 0.3m H 6.0m
BOREHOLE
25.35
45.36
47.88
17.7
10.06
6.5
7.0
7.5
8.0
8.20
90°0'0"
108°37'0"
TW=7.63
TW=9.58
TW=10.60
TW=11.62
TW=10.23
TW=7.38
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TF=7.00
TF=10.03
TF=10.17
TF=10.14
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TR=8.41
TR=8.20
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TR=7.75
TR=7.61
L'STONE WALL 7.37
L'STONE RET WALL
BRICK WALL
BRICK RET WALL 7.24
BRICK RET WALL
BRICK RET WALL 7.08
BRICK WALL WITH PILLARS
BRICK WALL 7.08
BRICK WALL 7.75
BRICK WALL
BRICK WALL 7.61
BRICK RET WALL
BRICK RET WALL
L'STONE RET WALL
L'STONE RET WALL
L'STONE RET WALL
L'STONE RET WALL
METAL (FAIR COND.)
METAL (FAIR COND.)
METAL (FAIR COND.) ON BRICK WALL WITH PILLARS
FIBRO (CAPPED, FAIR COND.)
FIBRO (CAPPED, FAIR COND.)
STEPS
STEPS
STEP
APPROX. FLOOR LEVEL AT FRONT DOOR ON CONCRETE 7.75
APPROX. FLOOR LEVEL AT FRONT DOOR ON TIMBER 7.25
APPROX. FLOOR LEVEL AT REAR DOOR ON BRICK 7.69
APPROX. FLOOR LEVEL AT REAR DOOR ON BRICK 7.08
APPROX. FLOOR LEVEL 8.53
APPROX. FLOOR LEVEL AT GARAGE 7.61
FIRST FLOOR
GROUND FLOOR

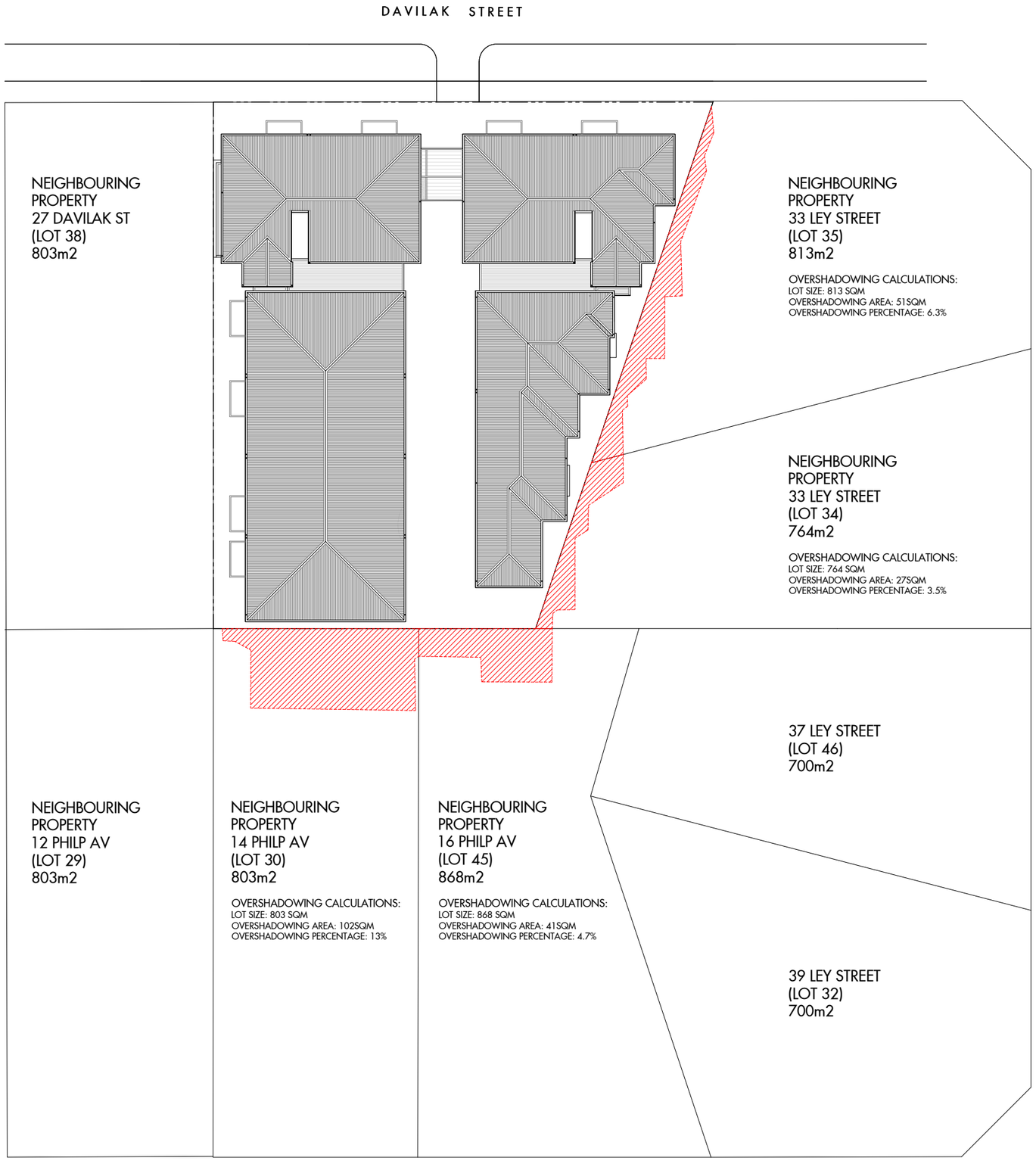
LOT DIAGRAM PLAN



OVERSHADOWING DIAGRAM PLAN

LPS7 R-code
All adjoining lots: R-AC0

No overshadowing requirements applicable



OVERALL GROUND FLOOR PLAN

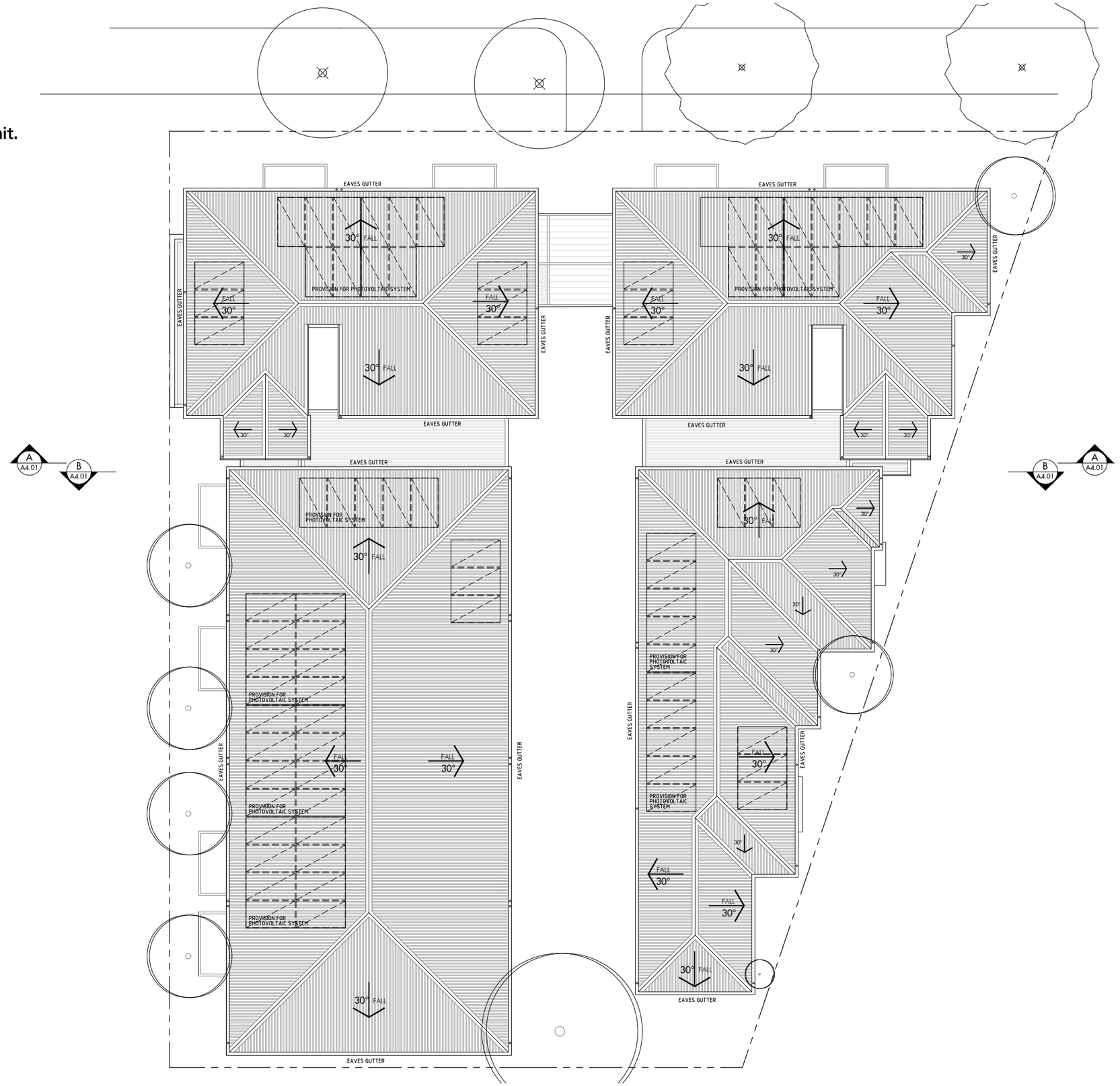


OVERALL FIRST FLOOR PLAN

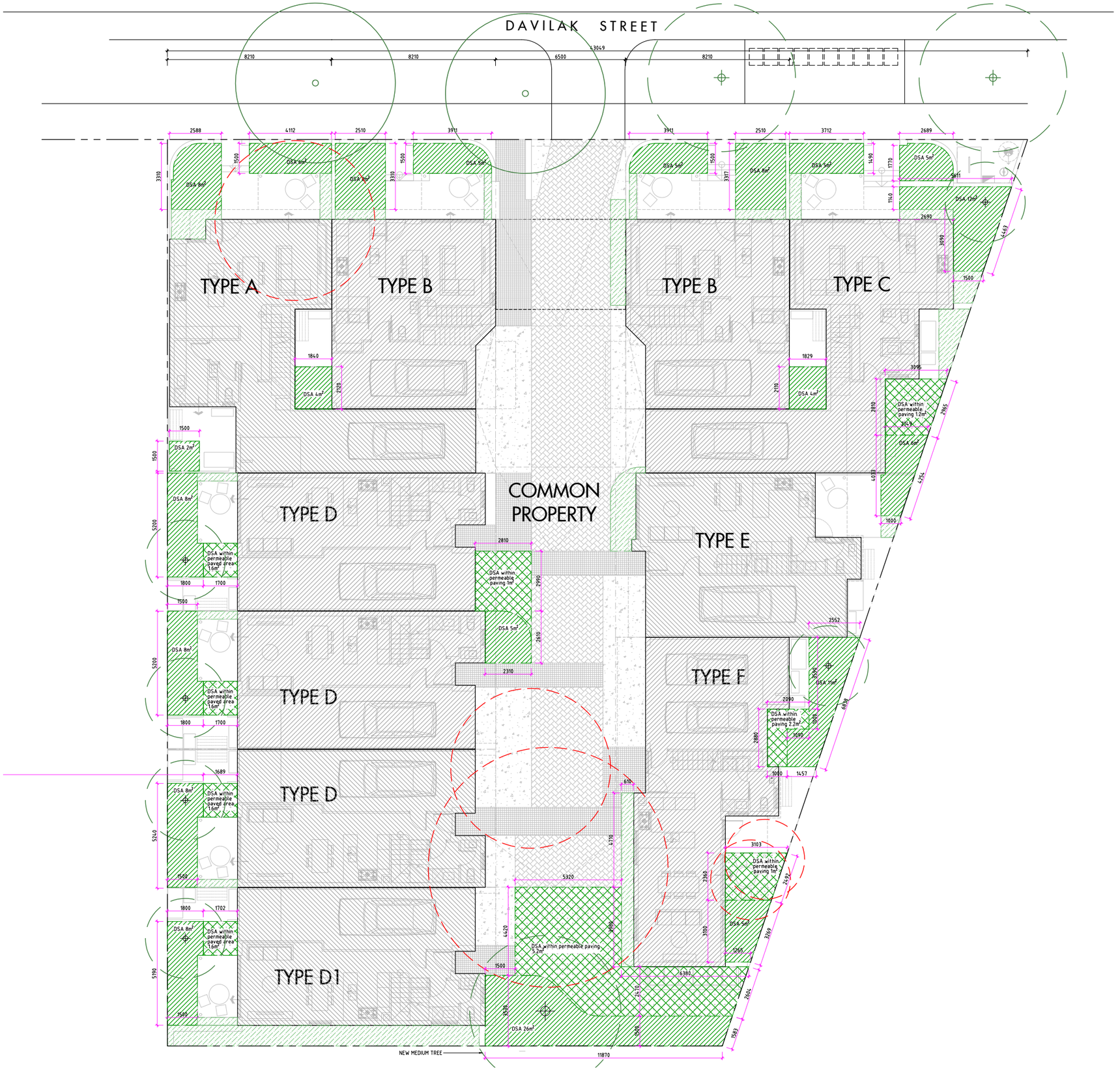


OVERALL ROOF PLAN

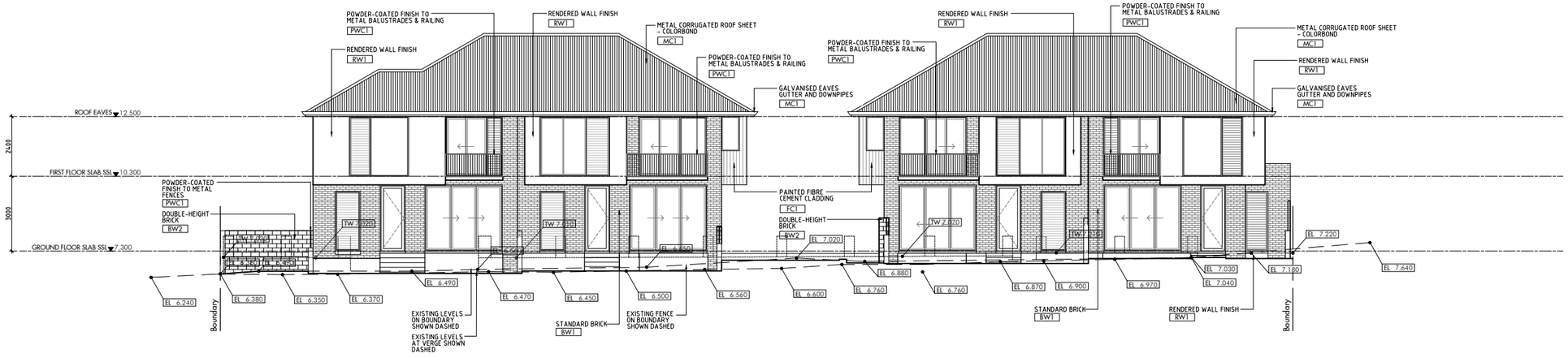
Provision for 5.5 KW solar panel system: 8 × 700 W panels per unit.



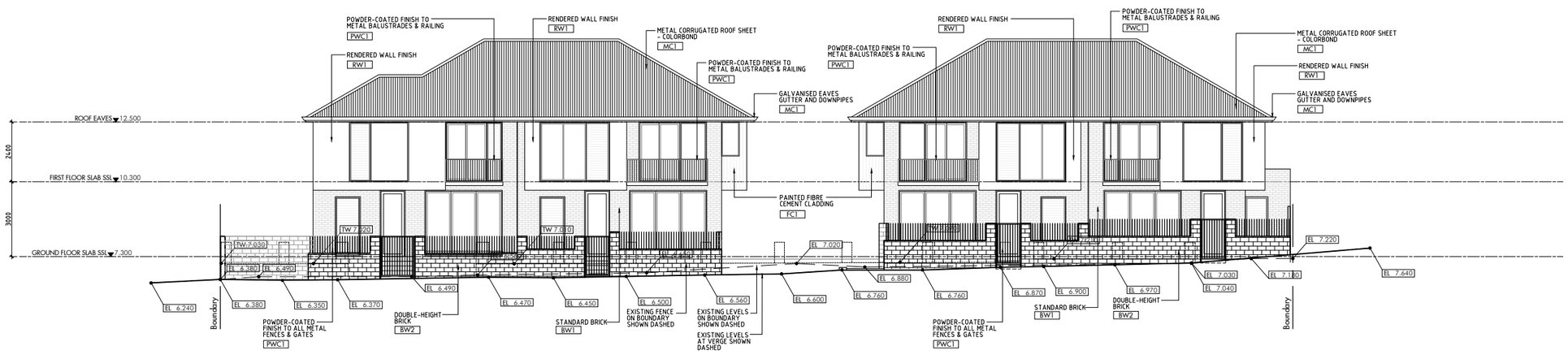
OVERALL LANDSCAPE PLAN



ELEVATIONS
NORTH



NORTH BUILDING ELEVATION - WITHOUT FENCE
SCALE 1:100 @ A1



NORTH STREET ELEVATION - WITH FENCE
SCALE 1:100 @ A1

MATERIAL KEY

BW1 FACE BRICK (230 x 110 x 76)
SUPPLIER: MIDLAND BRICK
PRODUCT: 'CREAM MEXI', CLASSIC RANGE

BW2 FACE BRICK (290 x 90 x 162)
SUPPLIER: MIDLAND BRICK
PRODUCT: 'BREMER BAY', MANOR RANGE

FC1 PAINTED FIBRE CEMENT CLADDING
SUPPLIER: JAMES HARDIE
PRODUCT: AXON CLADDING 133mm SMOOTH
COLOUR: WEATHERSHIELD PAINT IN 'BACKYARD', DULUX

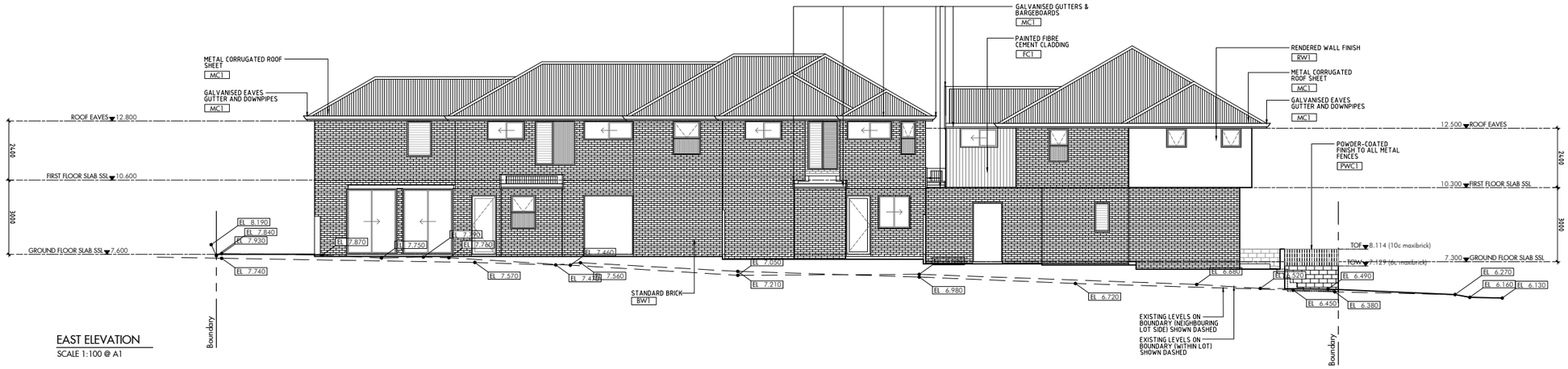
OFC1 OFF-FROM CONCRETE
SUPPLIER: BORAL
PRODUCT: LOW CARBON CONCRETE
COLOUR: GREY

RW1 RENDERED WALL FINISH
SUPPLIER: ROCKCOTE
PRODUCT: MODIFIED CEMENT RENDER

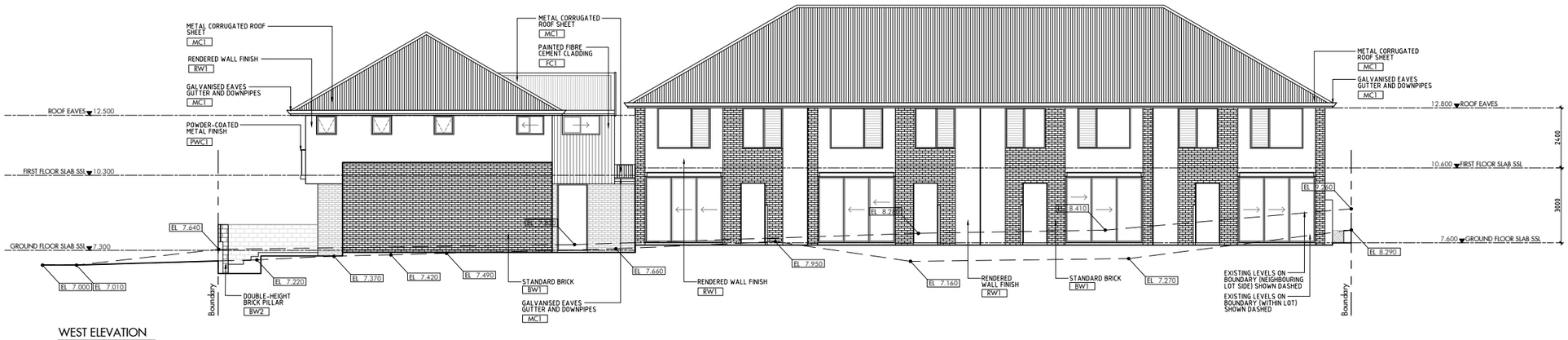
MC1 STEEL ROOFING
SUPPLIER: COLORBOND
PRODUCTS: CORRUGATED ROOF SHEETING, GUTTERS, FASCIAS & DOWNPIPES IN 'SOUTHERLY', CLASSIC FINISH

PWC1 POWDER-COATED METAL FINISH
SUPPLIER: DULUX
PRODUCT: 'WHITE MATT', DURALLOY RANGE

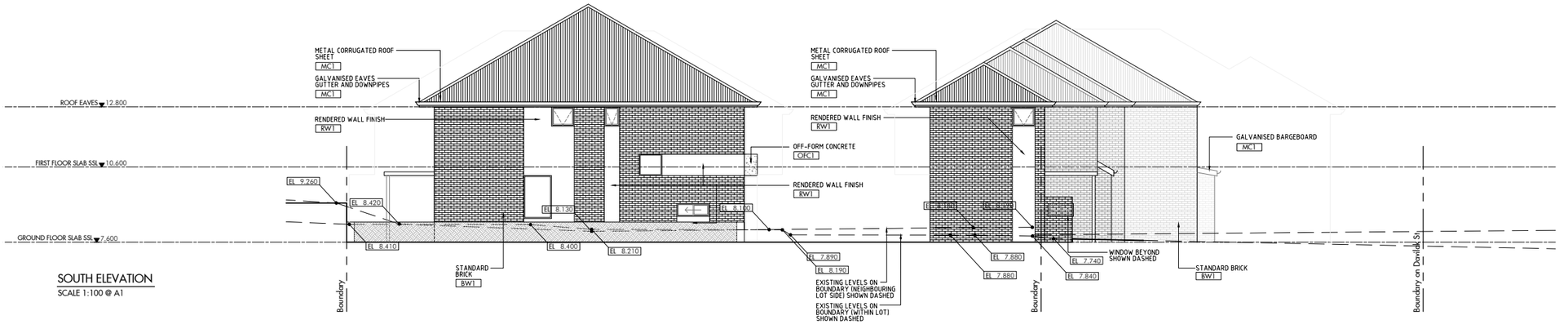
ELEVATIONS
EAST, WEST & SOUTH



EAST ELEVATION
SCALE 1:100 @ A1



WEST ELEVATION
SCALE 1:100 @ A1



SOUTH ELEVATION
SCALE 1:100 @ A1

MATERIAL KEY

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PRODUCT: 'BREMER BAY', MANOR RANGE

FC1 PAINTED FIBRE CEMENT CLADDING
SUPPLIER: JAMES HARDIE
PRODUCT: AXON CLADDING 133mm SMOOTH
COLOUR: WEATHERSHIELD PAINT IN 'BACKYARD', DULUX

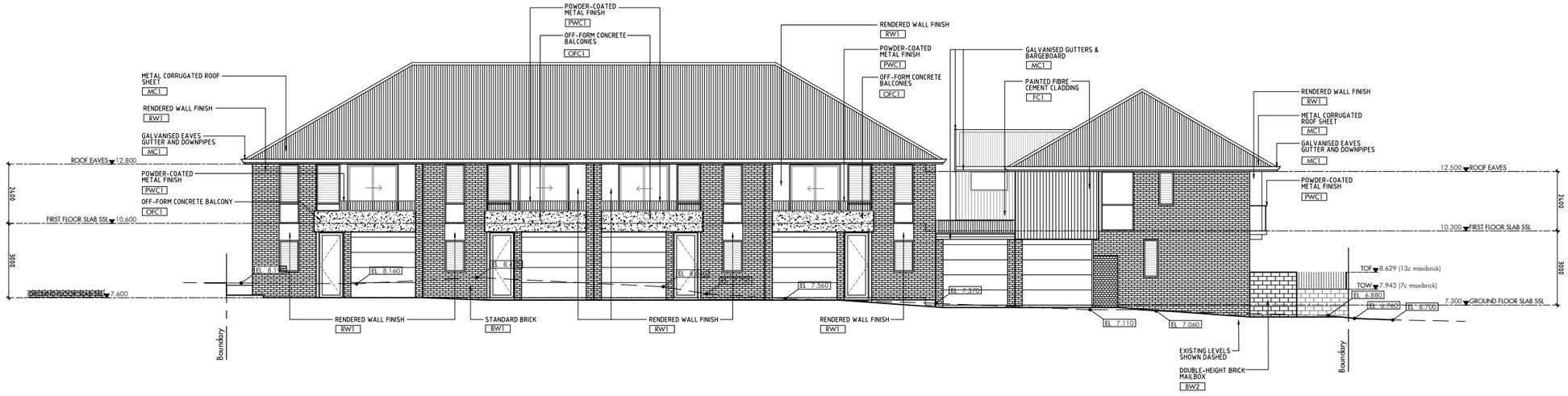
OFC1 OFF-FROM CONCRETE
SUPPLIER: BORAL
PRODUCT: LOW CARBON CONCRETE
COLOUR: GREY

RW1 RENDERED WALL FINISH
SUPPLIER: ROCKCOTE
PRODUCT: MODIFIED CEMENT RENDER

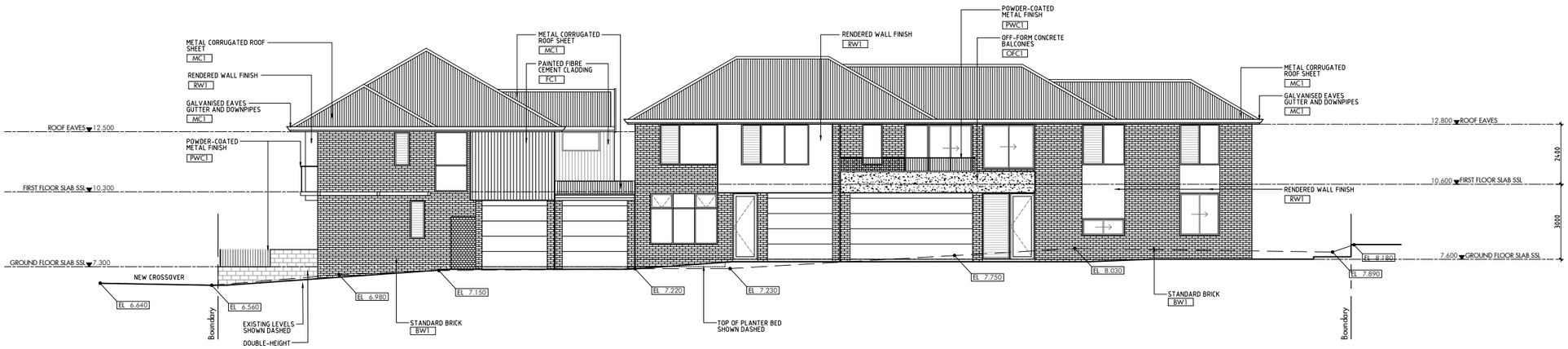
MC1 STEEL ROOFING
SUPPLIER: COLORBOND
PRODUCTS: CORRUGATED ROOF SHEETING, GUTTERS, FASCIAS & DOWNPIPES IN 'SOUTHERLY', CLASSIC FINISH

PWC1 POWDER-COATED METAL FINISH
SUPPLIER: DULUX
PRODUCT: 'WHITE MATT', DURALLOY RANGE

ELEVATIONS
INTERNAL LANEWAY



INTERNAL LANEWAY - EAST ELEVATION
SCALE 1:100 @ A1



INTERNAL LANEWAY - WEST ELEVATION
SCALE 1:100 @ A1

MATERIAL KEY

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SUPPLIER: MIDLAND BRICK
PRODUCT: 'CREAM MEXI', CLASSIC RANGE

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PRODUCT: 'BREMER BAY', MANOR RANGE

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SUPPLIER: JAMES HARDIE
PRODUCT: AXON CLADDING 133mm SMOOTH
COLOUR: WEATHERSHIELD PAINT IN 'BACKYARD', DULUX

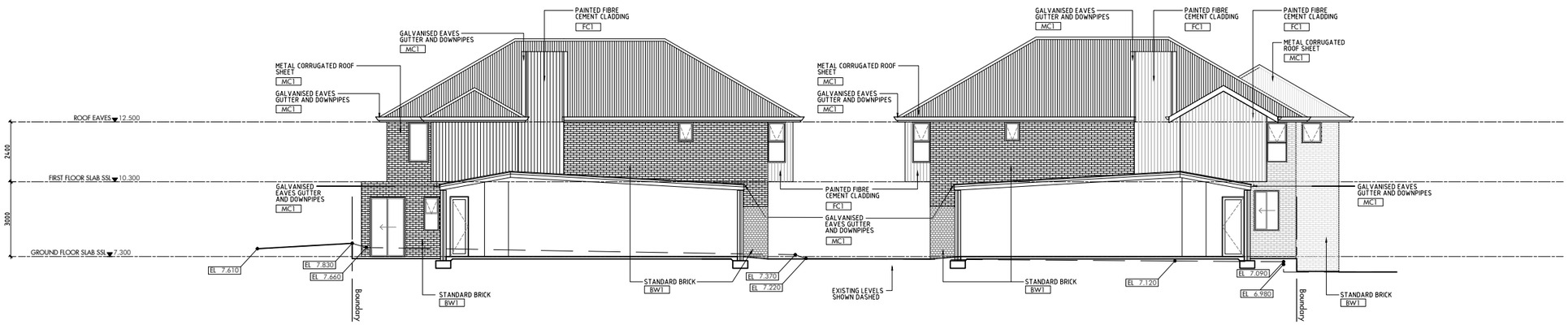
OFC1 OFF-FROM CONCRETE
SUPPLIER: BORAL
PRODUCT: LOW CARBON CONCRETE
COLOUR: GREY

RW1 RENDERED WALL FINISH
SUPPLIER: ROCKCOTE
PRODUCT: MODIFIED CEMENT RENDER

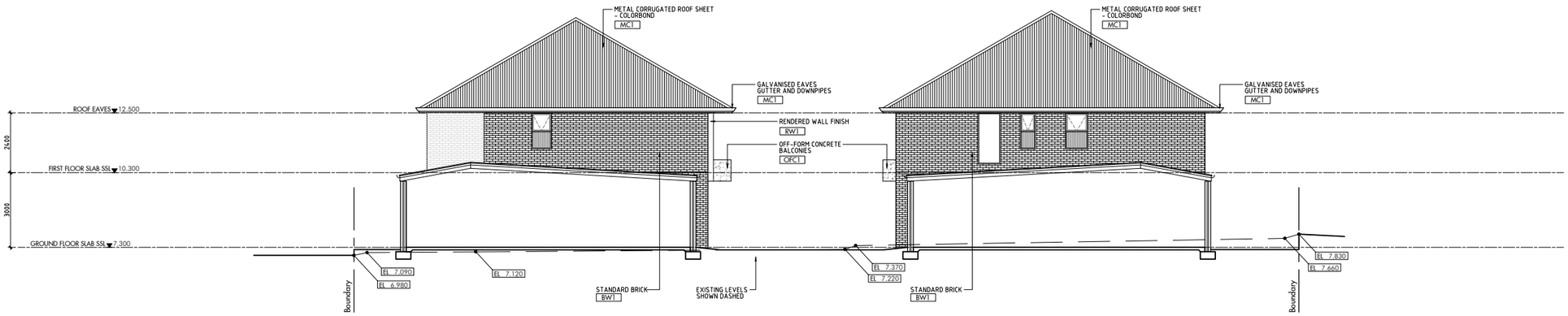
MC1 STEEL ROOFING
SUPPLIER: COLORBOND
PRODUCTS: CORRUGATED ROOF SHEETING, GUTTERS, FASCIAS & DOWNPIPES IN 'SOUTHERLY', CLASSIC FINISH

PWC1 POWDER-COATED METAL FINISH
SUPPLIER: DULUX
PRODUCT: 'WHITE MATT', DURALLOY RANGE

SECTIONAL ELEVATIONS
INTERNAL FACADES



SECTION A-A
SCALE 1:100 @ A1



SECTION B-B
SCALE 1:100 @ A1

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PRODUCT: AXON CLADDING 133mm SMOOTH
COLOUR: WEATHERSHIELD PAINT IN 'BACKYARD', DULUX

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SUPPLIER: BORAL
PRODUCT: LOW CARBON CONCRETE
COLOUR: GREY

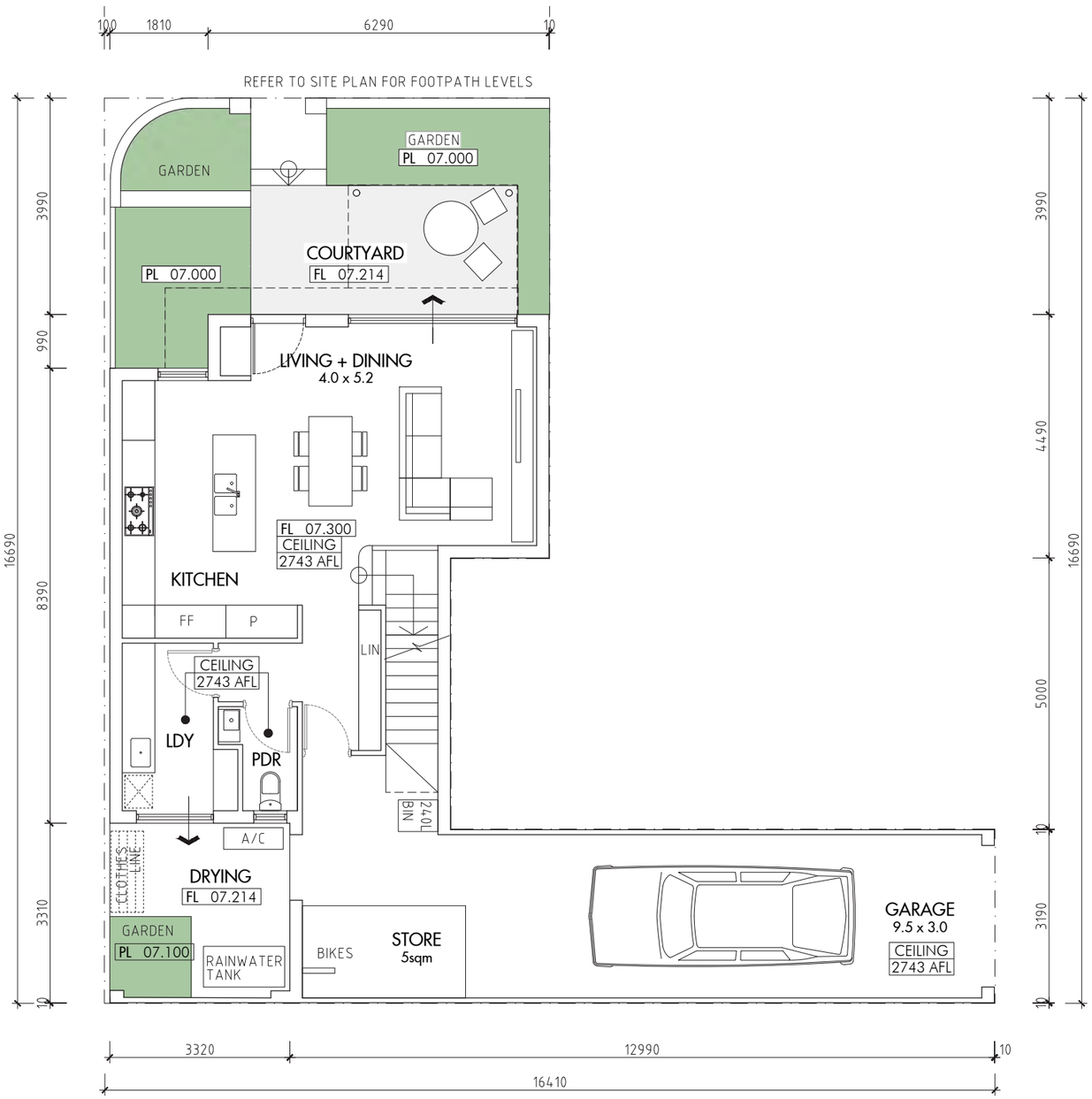
RW1 RENDERED WALL FINISH
SUPPLIER: ROCKCOTE
PRODUCT: MODIFIED CEMENT RENDER

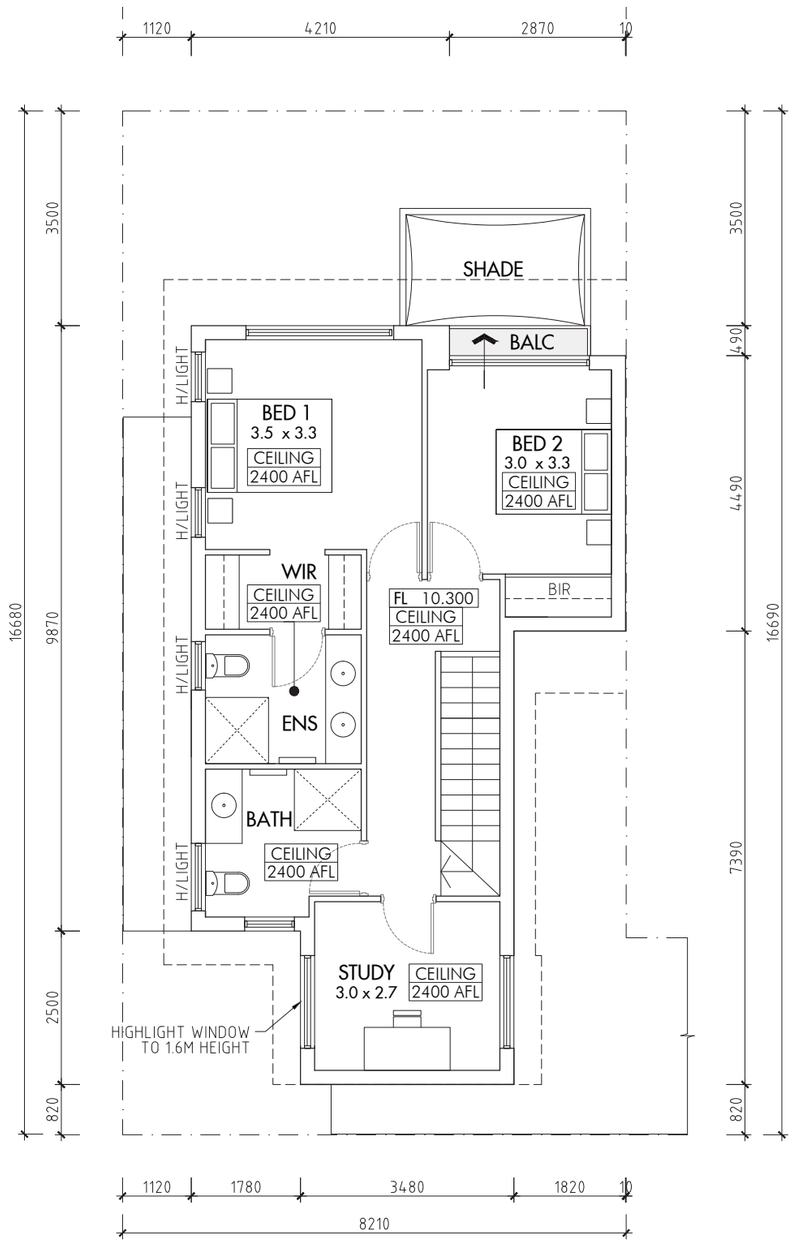
MC1 STEEL ROOFING
SUPPLIER: COLORBOND
PRODUCTS: CORRUGATED ROOF SHEETING, GUTTERS, FASCIAS & DOWNPIPES IN 'SOUTHERLY', CLASSIC FINISH

PWC1 POWDER-COATED METAL FINISH
SUPPLIER: DULUX
PRODUCT: 'WHITE MATT', DURALLOY RANGE

TYPE A PLANS

Types	Internal Lot	Mix
Type A	**154 sqm**	**2 Bed x 2.5 Bath x 1 Study**





FLOOR PLAN - GROUND

TYPE A

0m 5m

FLOOR PLAN - FIRST

TYPE A

0m 5m

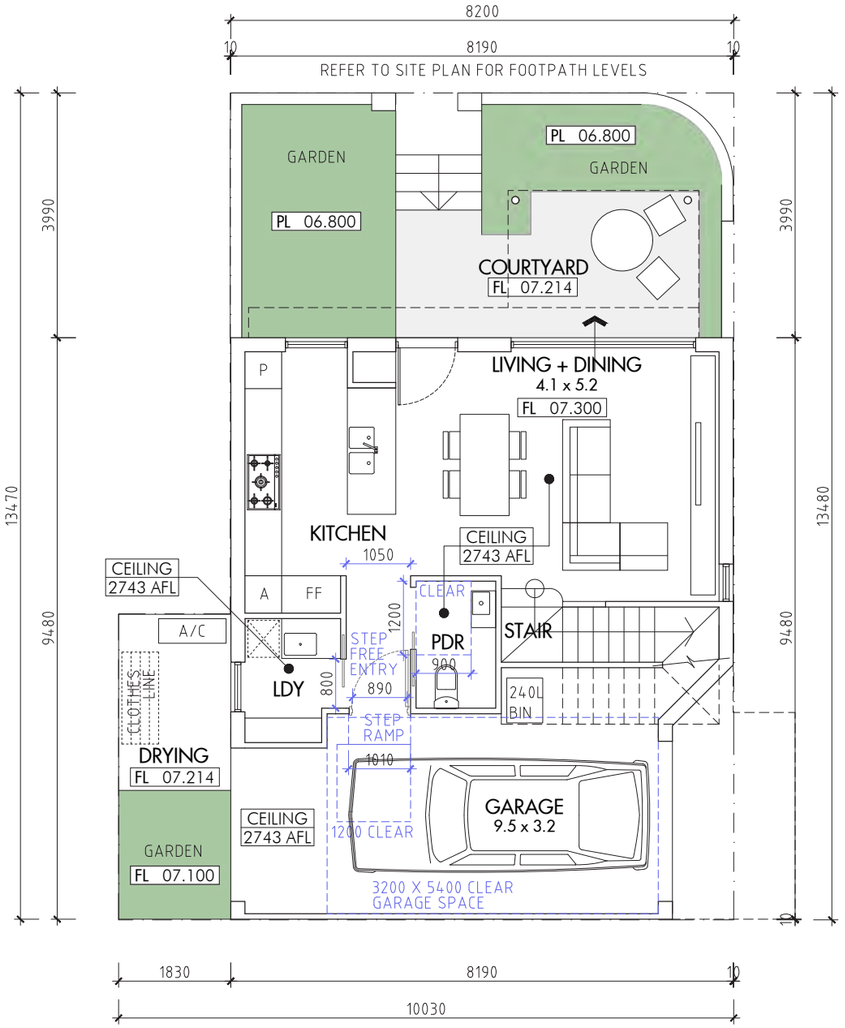
INTERNAL AREA CALCULATION

GROUND: 49 SQM
GARAGE: 41 SQM
UPPER: 59 SQM

TOTAL INTERNAL AREA: 149 SQM

TYPE B PLANS

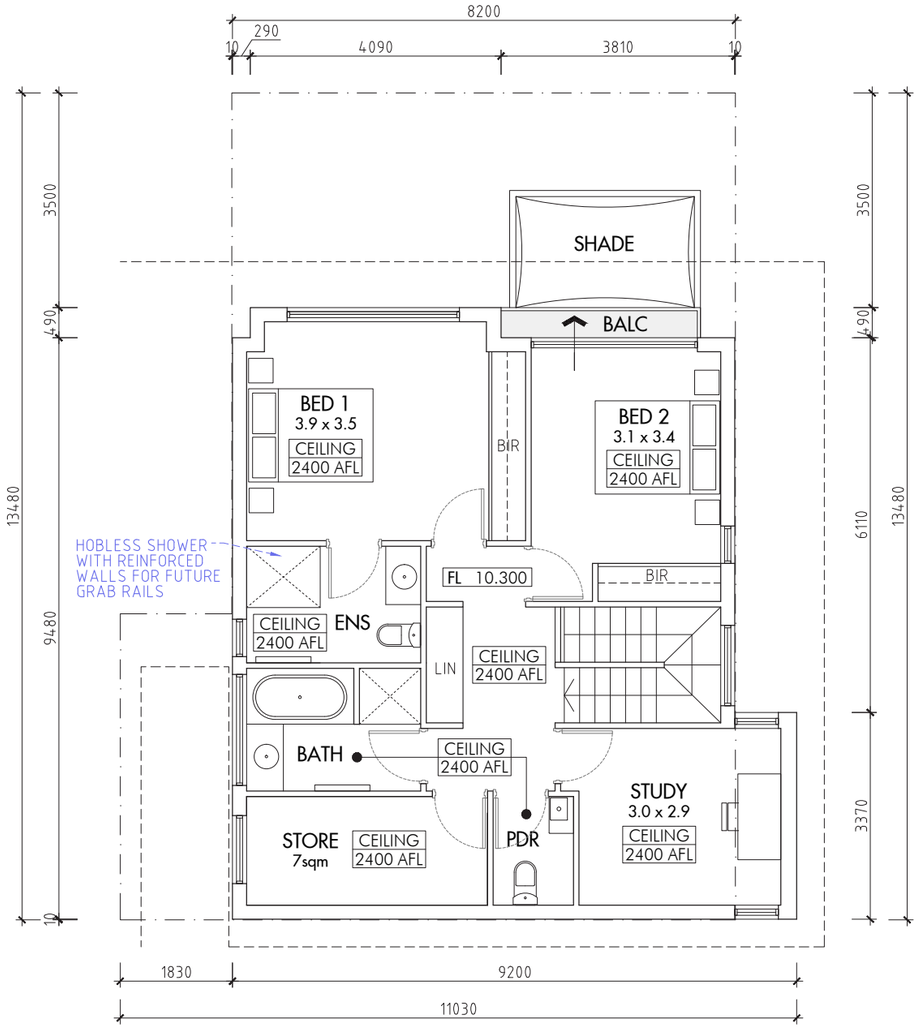
Types	Internal Lot	Mix
Type B	**120 sqm**	**2 Bed x 2 Bath x 2 Powder x 1 Study**



FLOOR PLAN - GROUND

TYPE B

0m 5m



FLOOR PLAN - FIRST

TYPE B

0m 5m

INTERNAL AREA CALCULATION

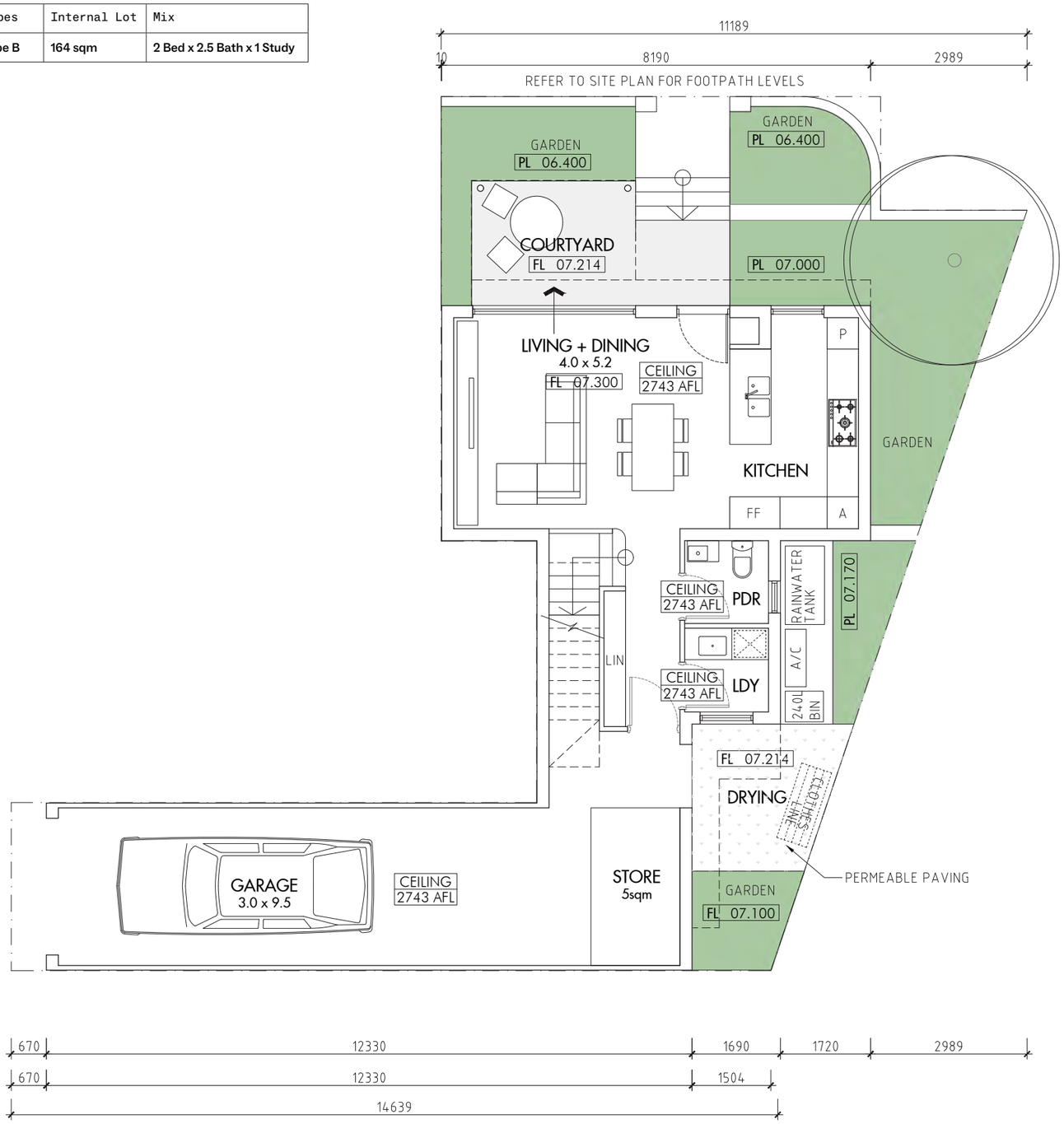
GROUND: 40 SQM
GARAGE: 24 SQM
UPPER: 74 SQM

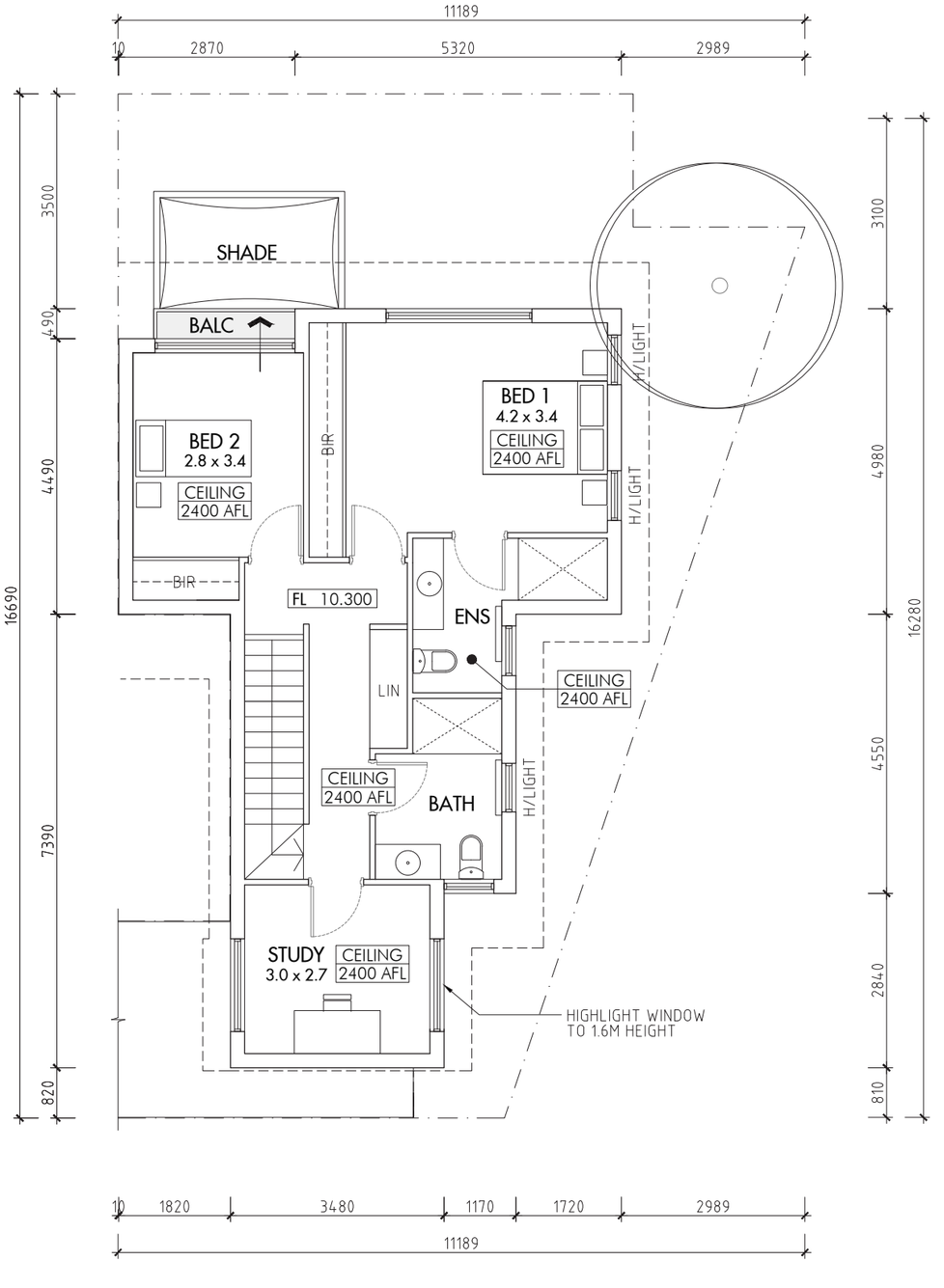
TOTAL INTERNAL AREA: 138 SQM

LHA SILVER LEVEL

TYPE C PLANS

Types	Internal Lot	Mix
Type B	**164 sqm**	**2 Bed x 2.5 Bath x 1 Study**





FLOOR PLAN - GROUND

TYPE C

0m 5m

FLOOR PLAN - FIRST

TYPE C

0m 5m

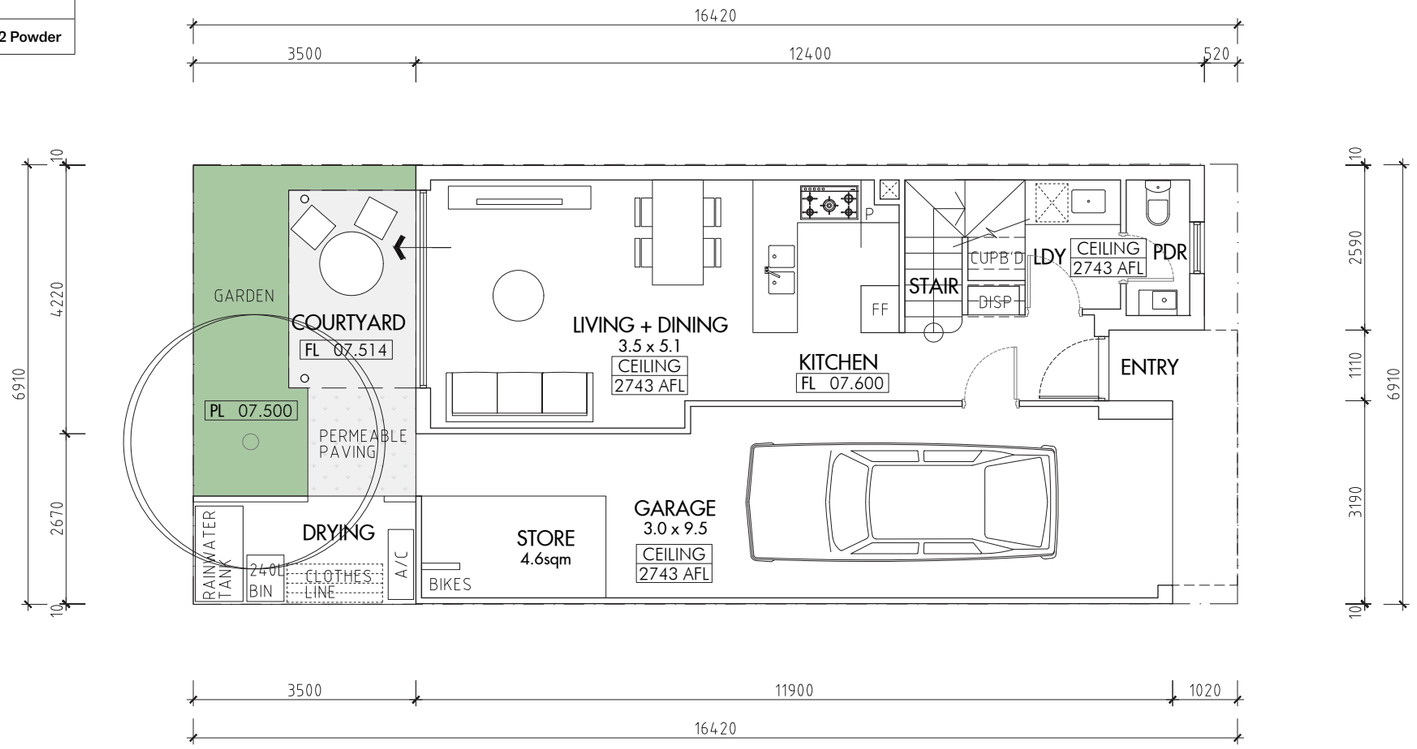
INTERNAL AREA CALCULATION

GROUND: 42 SQM
GARAGE: 41 SQM
UPPER: 57 SQM

TOTAL INTERNAL AREA: 140 SQM

TYPE D PLANS

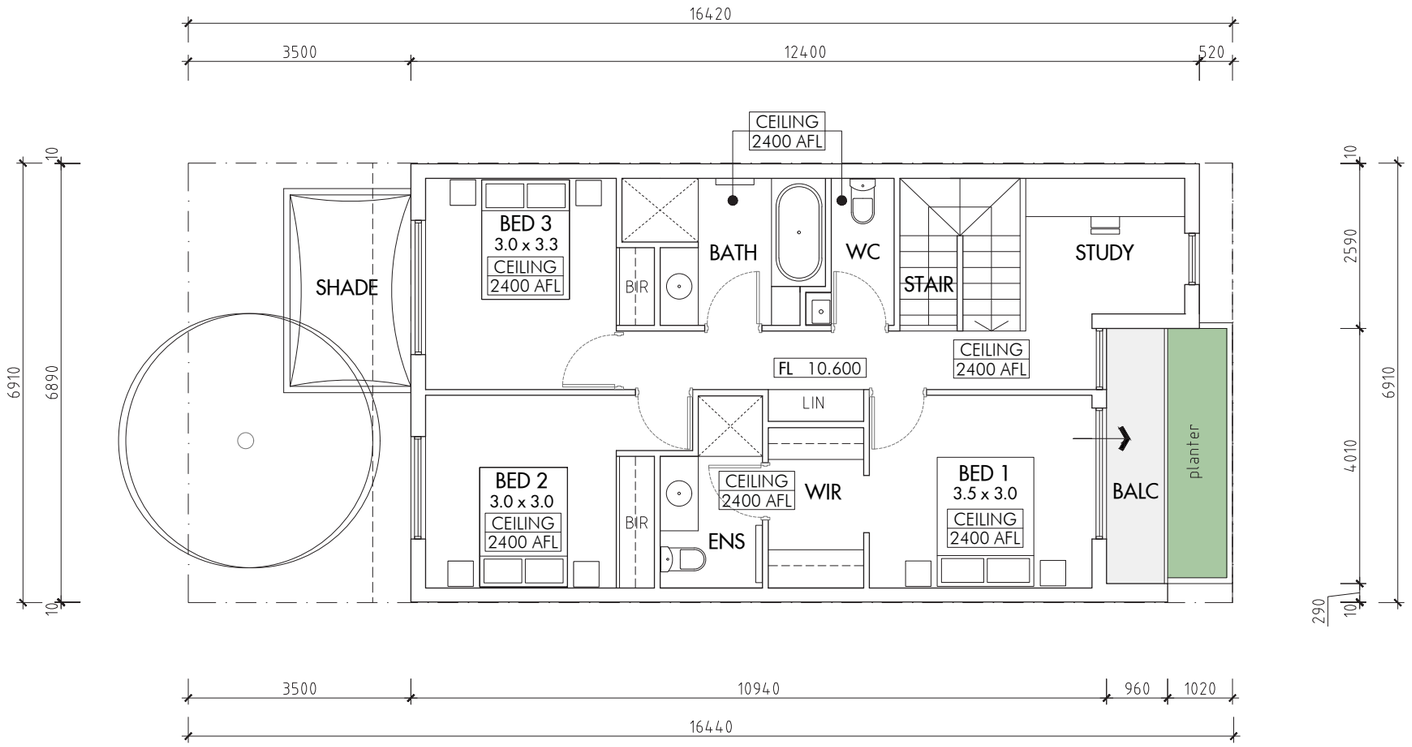
Types	Internal Lot	Mix
Type D, D1	113 sqm	3 Bed x 2 Bath x 2 Powder



FLOOR PLAN - GROUND

TYPE D

0m 5m



FLOOR PLAN - FIRST

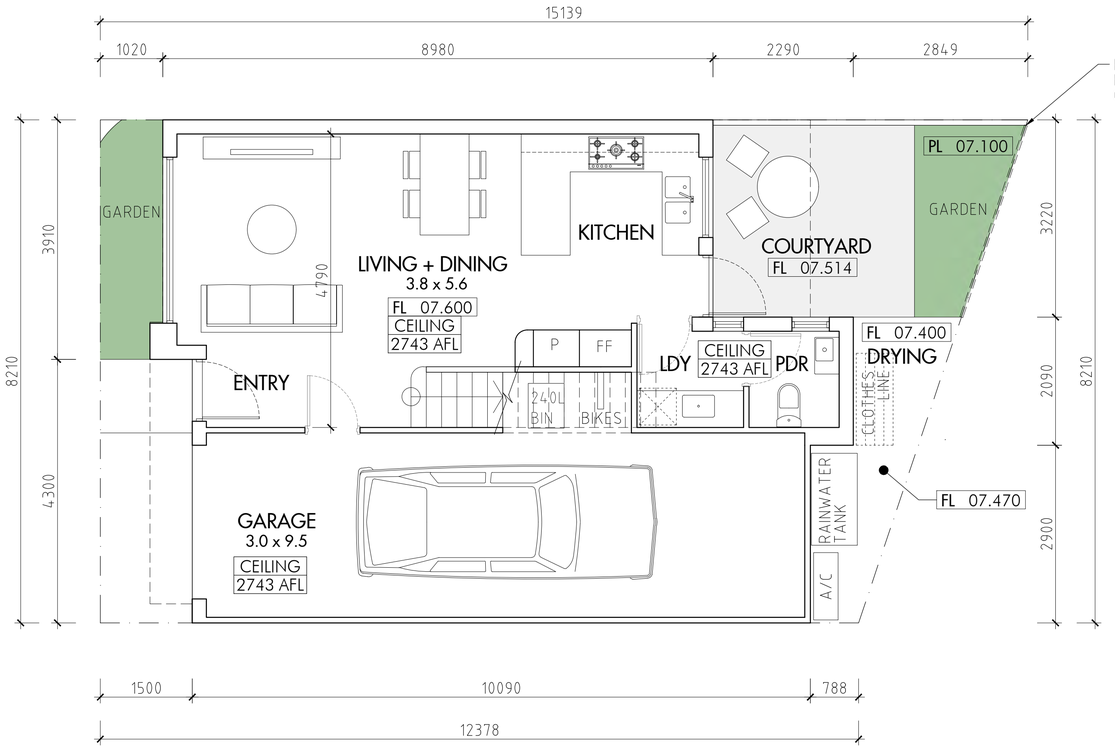
TYPE D

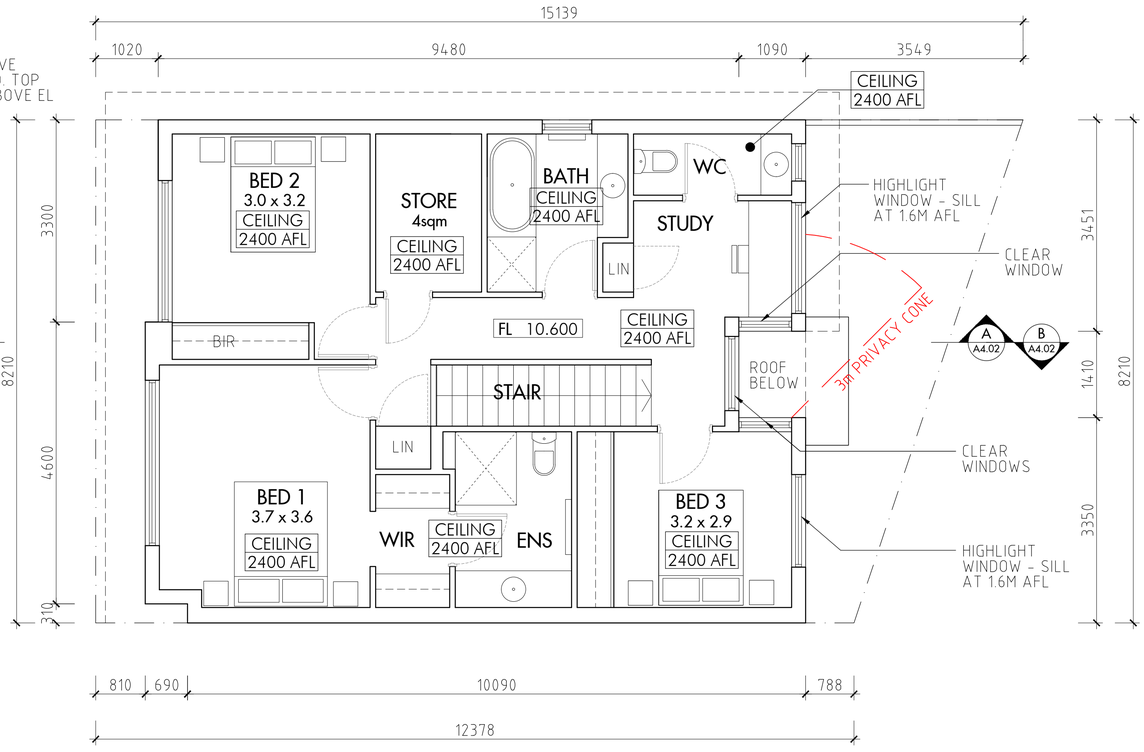
0m 5m

INTERNAL AREA CALCULATION

GROUND: 37 SQM
GARAGE: 33 SQM
UPPER: 70 SQM

TOTAL INTERNAL AREA: 140 SQM





FLOOR PLAN - GROUND

TYPE E

0m 5m

FLOOR PLAN - FIRST

TYPE E

0m 5m

CaPA
architecture

CARRIER AND POSTMUS ARCHITECTS
Architecture + Landscape
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p: (08) 9380 9020
e: admin@capa.studio

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birchgroup
architecture project management property development

DATE Y.M.D	REV	RECIPIENT / REASON FOR ISSUE	
26.04.15	B	LLGA RFI RESPONSE	SW
26.03.25	A	LLGA RFI RESPONSE	SW
25.11.26	-	DEVELOPMENT ASSESSMENT PANEL	SW
25.09.22	-	DESIGN REVIEW PANEL ISSUE	JC

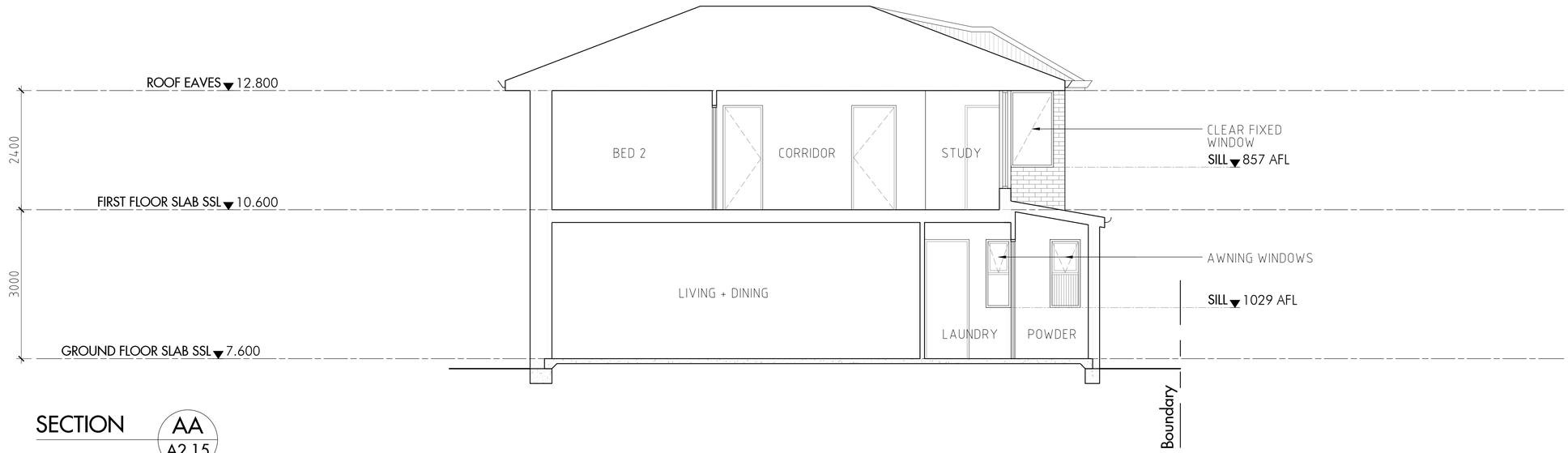
CONTRACTOR TO CHECK ALL DIMENSIONS AND LEVELS ON SITE BEFORE COMMENCING ANY WORK OR PREPARING ANY SHOP DRAWINGS
CAD FIGURE DIMENSIONS TAKE PRECEDENCE OVER MANUAL MEASUREMENTS SCALED OFF DRAWINGS
LARGE SCALE DWGS TAKE PRECEDENCE OVER SMALLER SCALE DWGS

TOWNHOUSE DEVELOPMENT
29 & 31 Davilak Street, COMO
Townhouse E Plan

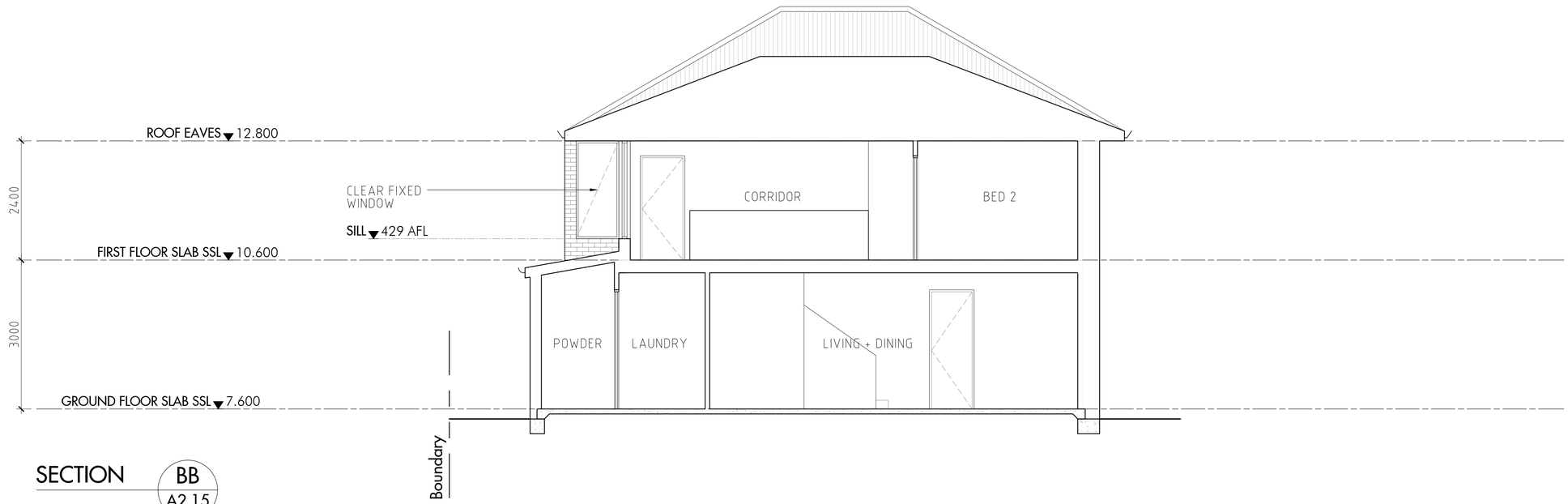
SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

DRAWN	JC	DESIGNED	JC	THIS IS A CAD DRAWING DO NOT AMEND MANUALLY	
CHECKED	JC	PRINCIPAL	-	REDUCTION	30mm@A1 15mm@A3
DATE	JULY 2025				
CLIENT PROJECT No.		CAPA PROJECT No.	2514	DRAWING No.	A2.15
SCALE	1:50@A1/1:100@A3			REV.	B

15-Apr-26 14:15



SECTION AA
A2.15



SECTION BB
A2.15

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DATE Y.M.D	REV	RECIPIENT / REASON FOR ISSUE	BY
26.04.15	-	LLGA RFI RESPONSE	SW

CONTRACTOR TO CHECK ALL DIMENSIONS AND LEVELS ON SITE BEFORE COMMENCING ANY WORK OR PREPARING ANY SHOP DRAWINGS

CAD FIGURE DIMENSIONS TAKE PRECEDENCE OVER MANUAL MEASUREMENTS SCALED OFF DRAWINGS

LARGE SCALE DWGS TAKE PRECEDENCE OVER SMALLER SCALE DWGS

TOWNHOUSE DEVELOPMENT
29 & 31 Davilak Street, COMO

Sections
Townhouse E

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

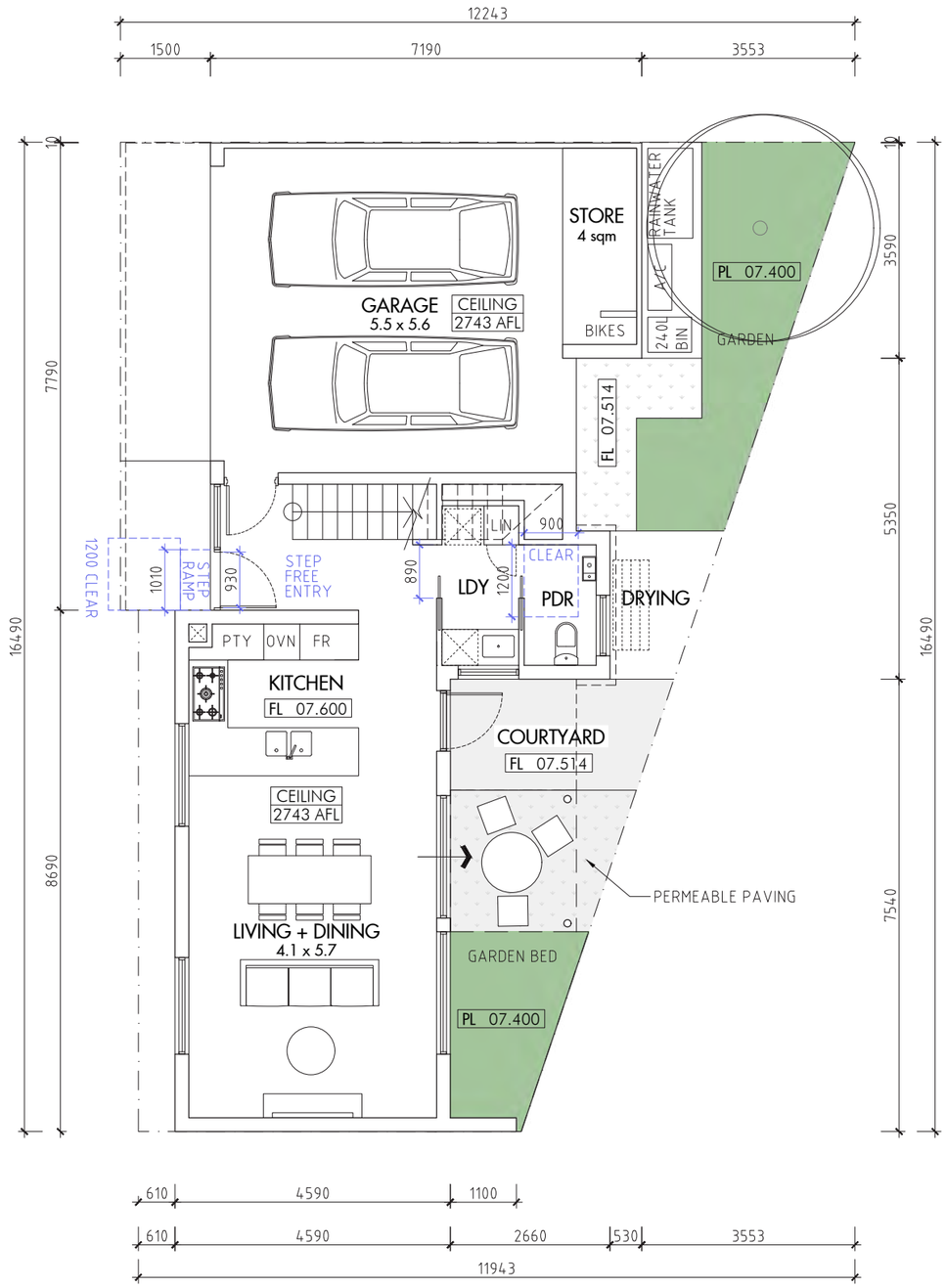
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CHECKED	JC	PRINCIPAL	-
DATE	JULY 2025		
CLIENT PROJECT No.		CAPA PROJECT No.	2514
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		REV.	-

THIS IS A CAD DRAWING DO NOT AMEND MANUALLY
REDUCTION
30mm@A1
15mm@A3

15-Apr-26 13:47

TYPE F PLANS

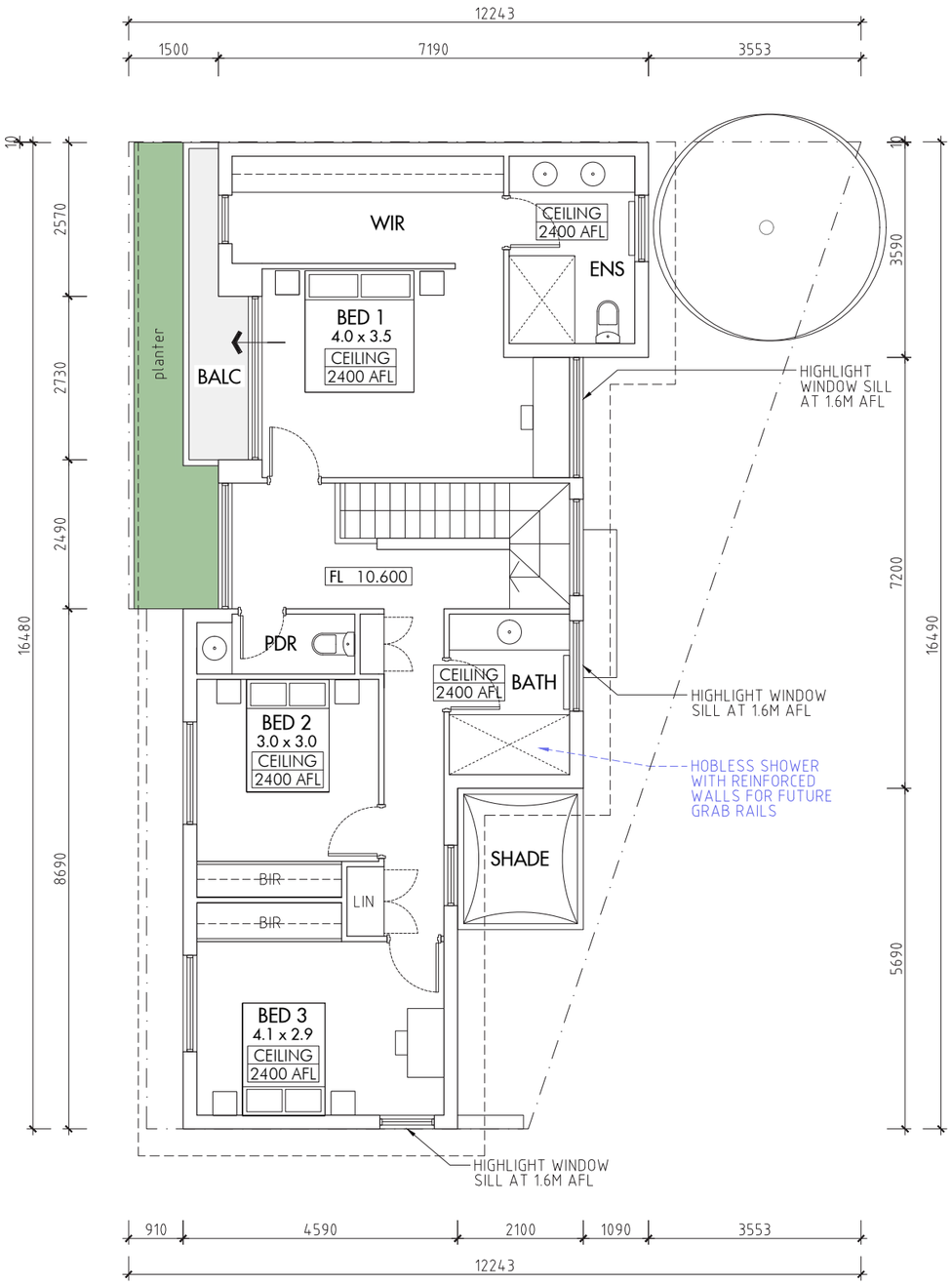
Types	Internal Lot	Mix
Type F	**153 sqm**	**3 Bed x 2 Bath x 2 Powder**



FLOOR PLAN - GROUND

TYPE F

0m 5m



FLOOR PLAN - FIRST

TYPE F

0m 5m

INTERNAL AREA CALCULATION

GROUND: 50 SQM
GARAGE: 36 SQM
UPPER: 84 SQM

TOTAL INTERNAL AREA: 170 SQM

LHA SILVER LEVEL

10 Townhouses
29-31 Davilak Street,
Como, WA 6152

27.03.2026 - Response to JDAP RFI (Revised Landscape Character)
10.12.2025 - Landscape Character

Principal Architect	Birchgroup
Architect in Association	CaPA
Landscape Architect	CaPA
Planning	Allerding & Associates
Traffic Impact Statement	Allerding & Associates
Waste Management Strategy	Allerding & Associates
Vehicle Swept Path Analysis	DVC
Sustainability Report	Emergen
Acoustic Report	Herring Storer
SPP 5.4 Noise Man't Plan	Herring Storer
Tree Survey Report	Arborite
Public Art	TBA



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architecture + landscape architecture

Allerding & Associates

The concluding remarks of the DRP Report note:

The Panel supports the proposal subject to a few minor considerations.

The proposed medium-density townhouse development presents a well-considered urban response that positively contributes to the streetscape and broader context. Key design strengths include strong orientation to the public realm, successful integration with Davilak Street, high levels of passive surveillance, and efficient internal layouts with good access to natural light and ventilation. The use of deep soil zones and a pedestrian-prioritised laneway further enhance the environmental quality and amenity of the development.

The matters raised within the Report have been addressed as follows:

PRINCIPAL 1
CONTEXT & CHARACTER

1. Consider terracing or stepping the front retaining wall for Types B and C to create a softer relationship with the public realm.

   Response: *This has been adopted into the design.*

2. Explore the opportunity to implement a compliant front setback to remove this issue from the assessment.

   Response: *This has been adopted into the design with very minor variances.*

PRINCIPAL 5
SUSTAINABILITY

The DRP acknowledged that "The proposal has strong passive design principles, however, the absence of a report clearly identifying what is a commitment verses what is a target makes this Principle difficult to assess at this stage."

Response: *A sustainability report was not available at the time of the presentation but is now provided as part of the Development Application, clearly outlining the project commitments.*

PRINCIPAL 6
AMENITY

1. Consider a more robust privacy strategy between the Unit Type B private outdoor space and the entry pathway to provide more privacy between the main entry and the unit occupants when on their outdoor terrace.

   Response: *This has been fully adopted into the design.*

2. Reconsider the requirement for two side by side car bays in Type F to facilitate a better outcome for the living dining area.

   Response: *This was thoroughly explored with the outcome still leading to side-by-side parking providing the best outcome. The interior has been changed to reflect the comments from the DRP in regard to a better interior outcome.*

3. Enhance Type C laundry access.

   Response: *This has been adopted into the design.*

4. Ensure no bedrooms rely on solely high-level windows.

   Response: *This has been fully adopted into the design.*

5. Confirm with the City traffic officers and with detailed traffic assessment.

   Response: *A detailed review of vehicle swept paths has been conducted by a traffic consultant and is included in the Development Application. The swept path assessment has informed the final design of the internal driveway and adjacent spaces to improve vehicle manoeuvrability and access throughout the site.*

The proposed grouped dwelling development at 29 and 31 Davilak Street comprises ten townhouses that are build-to-rent. Ownership is being retained by the proponent, providing dwellings that are located close to a broad range of transport, shopping, entertainment and leisure venues, and are located directly opposite the wonderful parkland and amenity provided by McDougall Park.

All dwellings are intentionally modest sized. This is a reflection of one of the architects' recent projects, demonstrating that smaller dwellings can fully accommodate a variety of tenants without continuing previous excesses seen in more recent housing trends. This is a more sustainable approach to housing, improving maintenance and occupant flexibility.

Focusing on creating a more affordable design with familiar construction forms and context, the design addresses the park and pedestrian interfaces; encourages a communal feeling; maximising solar exposure and natural ventilation; utilises low maintenance materials and finishes; reduces vehicle crossovers and greatly improves landscape on the verge through the retention and addition of new verge trees and verge landscaping.

Early engagement with the planners at the City greatly helped inform the project, informing the design in alignment with the City's aspirations regarding crossovers, tree retention policy, waste management, setbacks, street activation, pedestrian engagement and landscaping.

This engagement also informed the design in relation to the Canning Bridge Activity Centre Plan. Further items discussed included; dwelling diversity and liveable housing requirements, natural ground level response, solar access, private open space, energy efficiency and water management, universal access, quality of fencing, and public art.

This along with the design teams' considered integrated landscape and architectural approach at inception and coupled with the delivery of numerous projects in the precinct, provides a considered and appropriate outcome. Importantly, it adds to the range of dwelling types becoming available in the area, inviting a range of occupiers that perhaps do not want for apartment living and cannot buy existing housing, though wish to benefit from living in the area. We look forward to receiving the input of the Design Review Panel, who's commentary will only add to the quality of the proposal.

- The proposal has been designed with an integrated architectural & landscape approach to give the opportunity for more people to live opposite the much loved McDougall Park. This is a much sought after location for this great park.
- The proposal is for 10 secure, modest townhouses with gardens spaces for families, down-sizers or students.
- The design will bring to the area affordable but well considered build-to-rent accommodation, which responds to current housing demands, and is in keeping with the surrounding context.
- Early in the process, key design considerations were worked through with the City of South Perth planning department through meetings and with our planner, Allerding & Associates.
- These included new tree retention requirements, crossover minimisation, bulk & scale & setbacks, street activation, solar access and ventilation, and waste management.



DESIGN PRINCIPLE GOAL

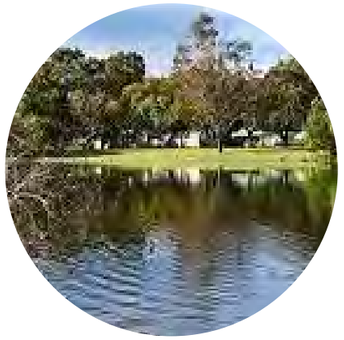
Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.

SITE DESCRIPTION

Neil McDougall Park Lake was formally part of a natural chain of wetlands and swamps which were seasonal.
Over the years it has been heavily modified to maintain water levels year round and is also a local water catchment lake.

- The site is surrounded by excellent outdoor amenities and public open space, transport and food and retail choices for all walks of life & demographics

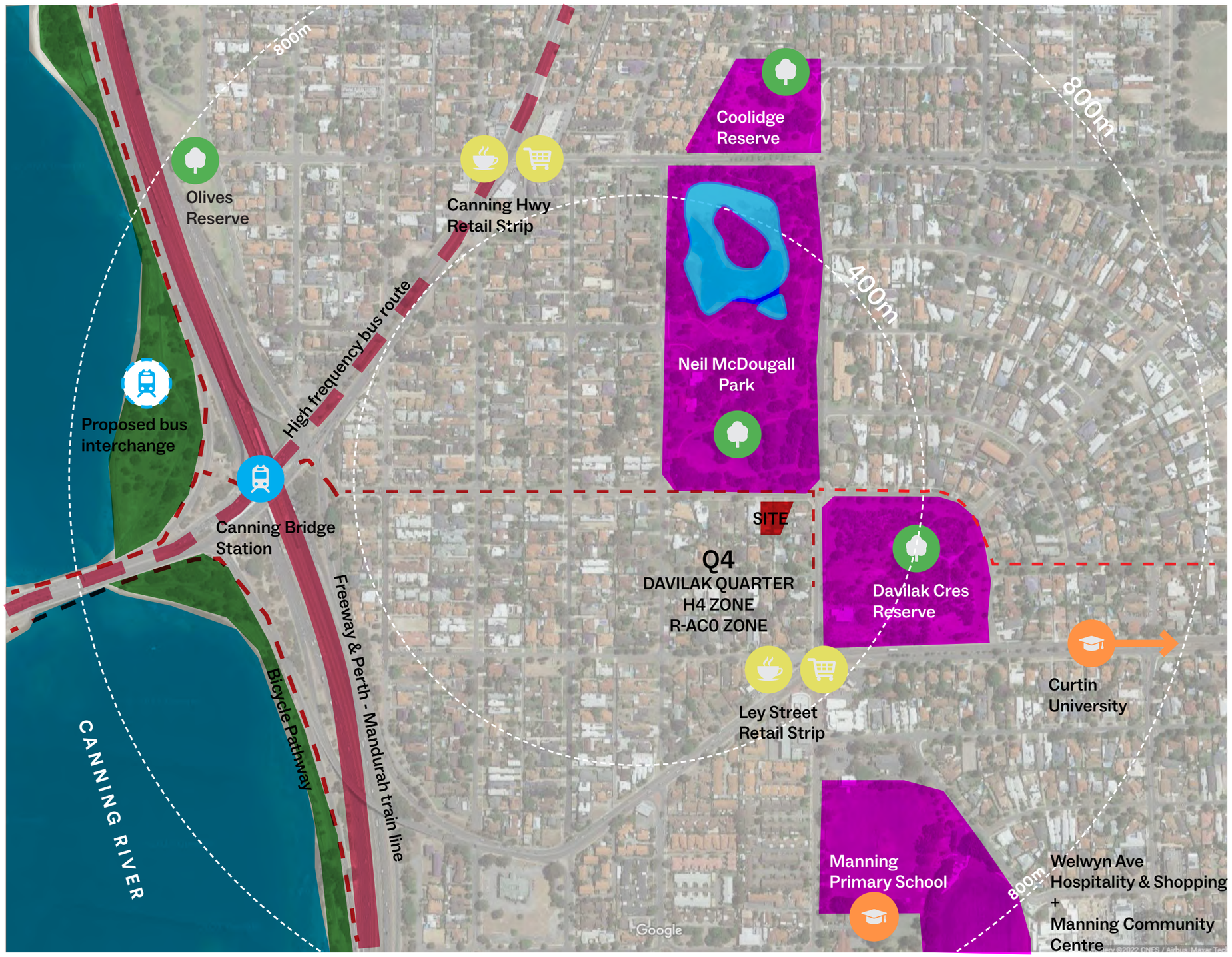
NEIGHBOURING AMENITIES



LAKE & RIVER



PARKS + BBQ + PLAY + HISTORIC SPACES



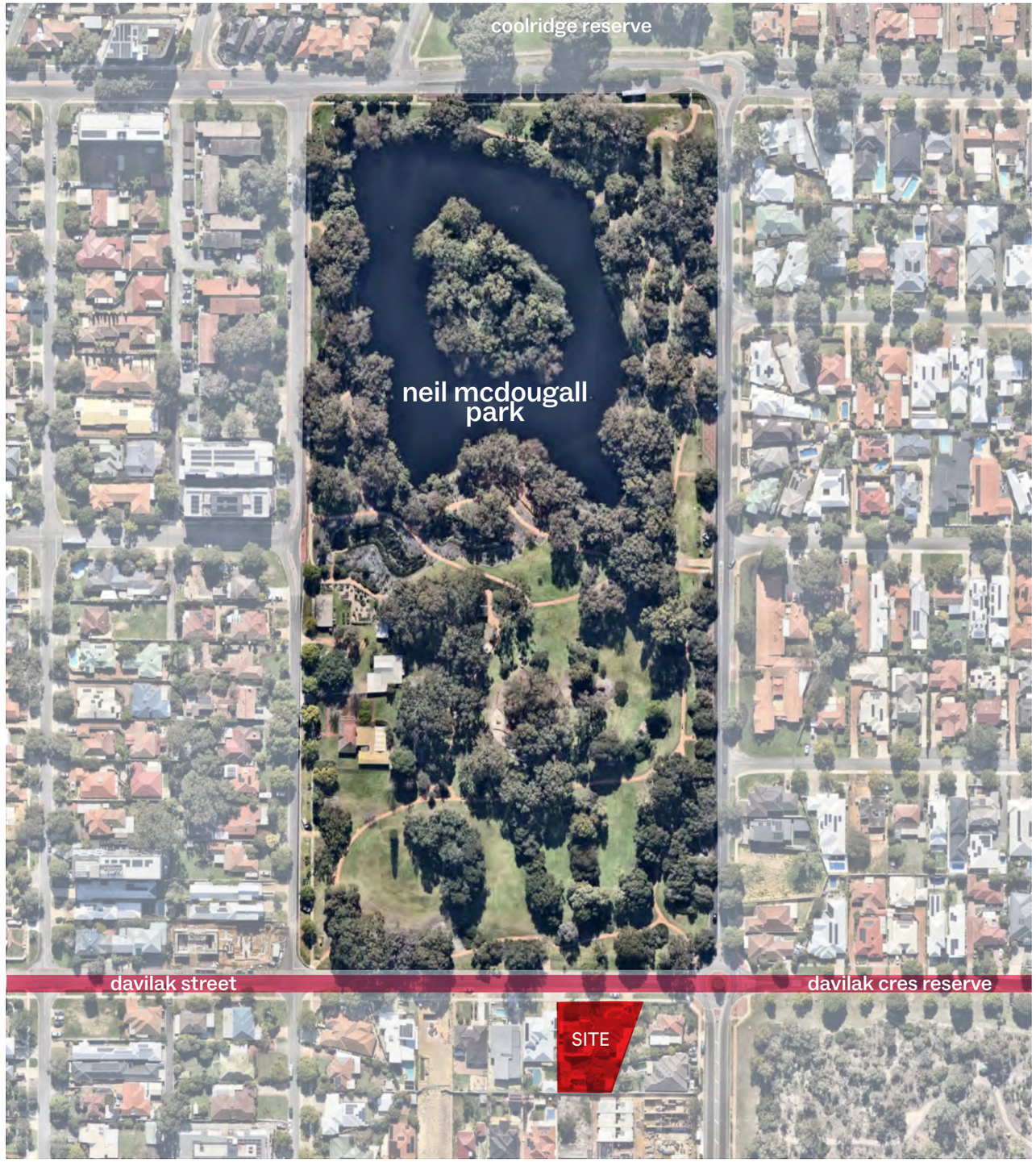
DESIGN PRINCIPLE GOAL

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context

The site is nestled amongst reserves and parklands featuring endemic and exotic planting. These spaces also support a diversity of local flora and fauna and provide important landscape vistas.

- The Landscape design extends and builds upon the endemic nature of the parkland flora and fauna.
- Verges are envisaged to be ‘bushland’ like with native under plantings underpinning groves of small - medium sized native trees.
- 2 existing verge trees are retained, and 2 more are proposed.
- Key softscape palette references endemic wetland planting from the nearby parkland.

Neil McDougall Park is well recognised for its importance in local flora and fauna and is undergoing continuing improvements to address key issues surrounding the long term health of the Lake.













CONCEPT IDEAS



COURTYARD LANDSCAPE

- Boutique townhouses are paired with courtyard amenity spaces and landscape, 4 with direct views to street trees and 6 with one small tree, ensuring a physical and visual connection internally to nature.
- Additional borrowed landscape and enjoy parkland vistas.



ENDEMIC LANDSCAPE CHARACTER

- With significant connection with Neil Mcdougall Park, the landscape aspires to weave in the native wetland palette.
- The addition of significant verge trees to build additional canopy for the community.



LANDSCAPE ENTRY ARBOR + SHARED SPACES

- A landscaped entry arbor and gatehouse with trellis planting provides a soft transition into the shared landscape space of the private domain.
- The internal driveway is envisaged as a shared landscaped space which incorporates an existing significant tree on site.

COURTYARD LANDSCAPE

- **Key landscape points.**

EXISTING VERGE TREES RETAINED

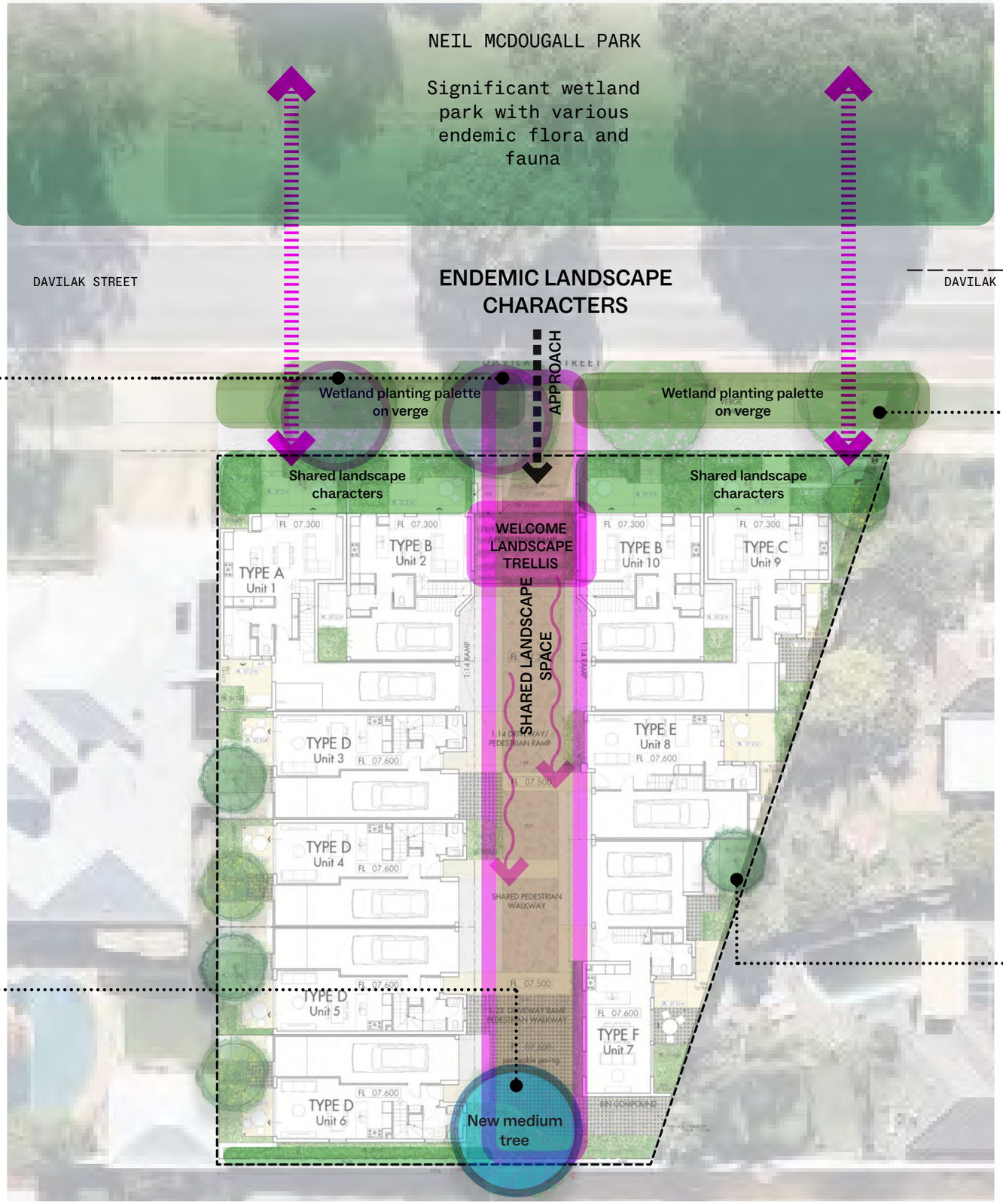


- THE TWO EXISTING VERGE TREES (EUCALYPTUS MARGINATA) HAVE BEEN RETAINED

NEW NATIVE TREE - EUCALYPTUS CAESIA MAGNA



- ARBORIST RECOMMENDS THE EXISTING LARGE TREE ON SITE (JACARANDA MIMOSIFOLIA) BE REPLACED



REDUCTION OF CROSSOVERS



DAVILAK CRESCENT

- REMOVAL OF ONE CROSSOVER CREATING MORE SOFTSCAPE ON THE VERGE

NEW VERGE TREES PROPOSED



- THE PROPONENT OFFERS TO PROVIDE TWO ADDITIONAL VERGE TREES BEING OF THE CITY'S CHOICE

ADDITIONAL TREES & DEEP SOIL



LANDSCAPE OVERALL

VERGE PLANTING

Verge planting species as per local council's species list

VERGE TREES

Two significant verge trees retained

LANDSCAPED ENTRY

A landscaped entry trellis unifying two buildings and providing a green threshold between the public and private domain



GROUND PLANTING

A mix of Australian native shrubs to public and private gardens

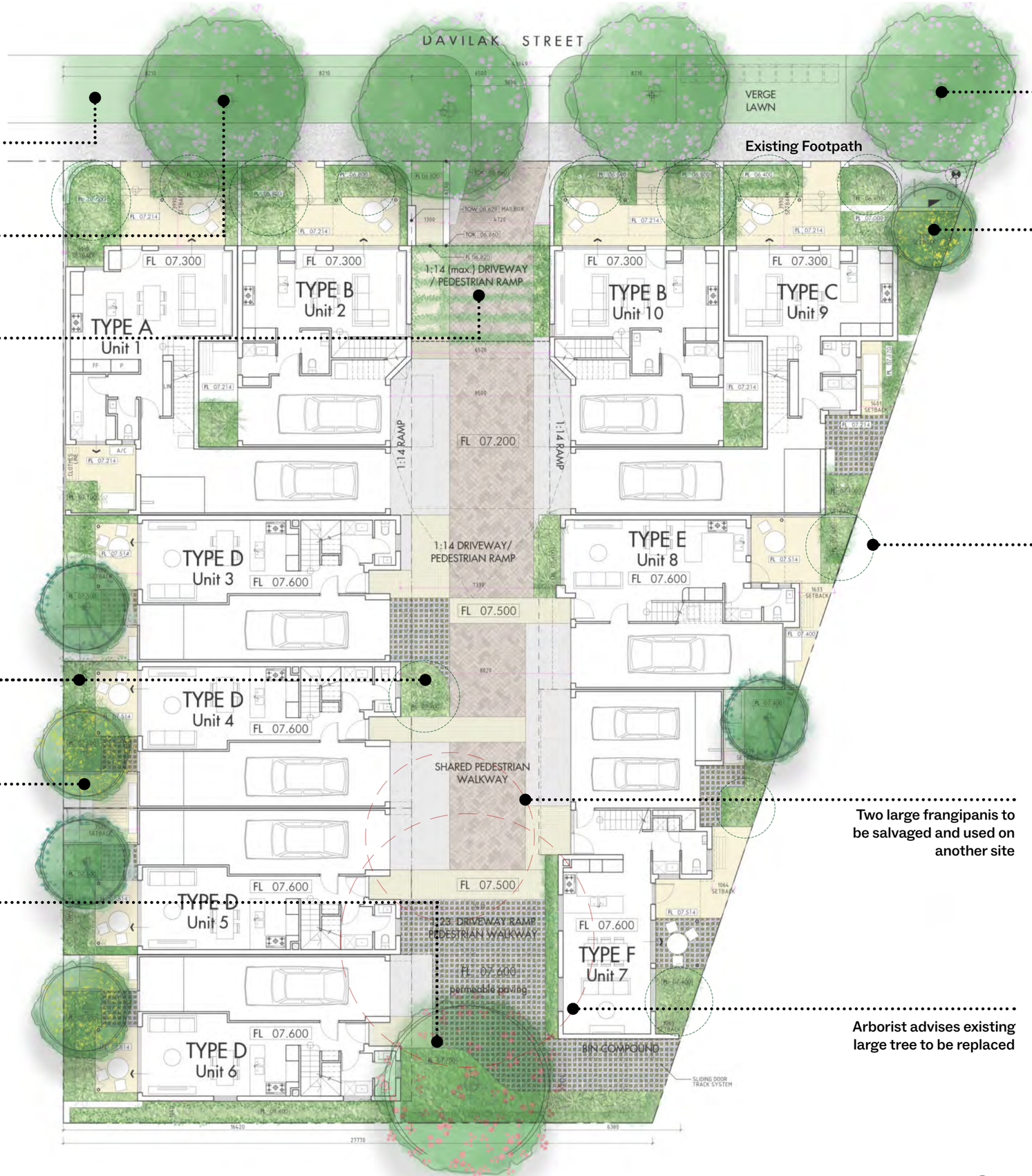
PRIVATE COURTYARD TREES

Australian native columnar trees to private courtyards

LANDSCAPED INTERNAL LANEWAY

Feature native tree with silvery foliage and wetland planting under_Eucalyptus caesia





Two new verge trees to be planted of the City's choice

Feature native tree to the street entry courtyard _Hymenosporum flavum

Additional smaller native trees to entry and private courtyards

Two large frangipanis to be salvaged and used on another site

Arborist advises existing large tree to be replaced

LANDSCAPE PLAN

VERGE UPGRADE



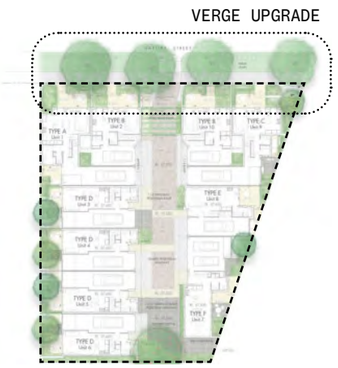
VERGE TREE
Jacaranda mimosifolia
15m h x 10m w

Compulsary Street Tree Selection as part of Davilak Cresent Precinct Plan 14

DAVILAK CRESCENT

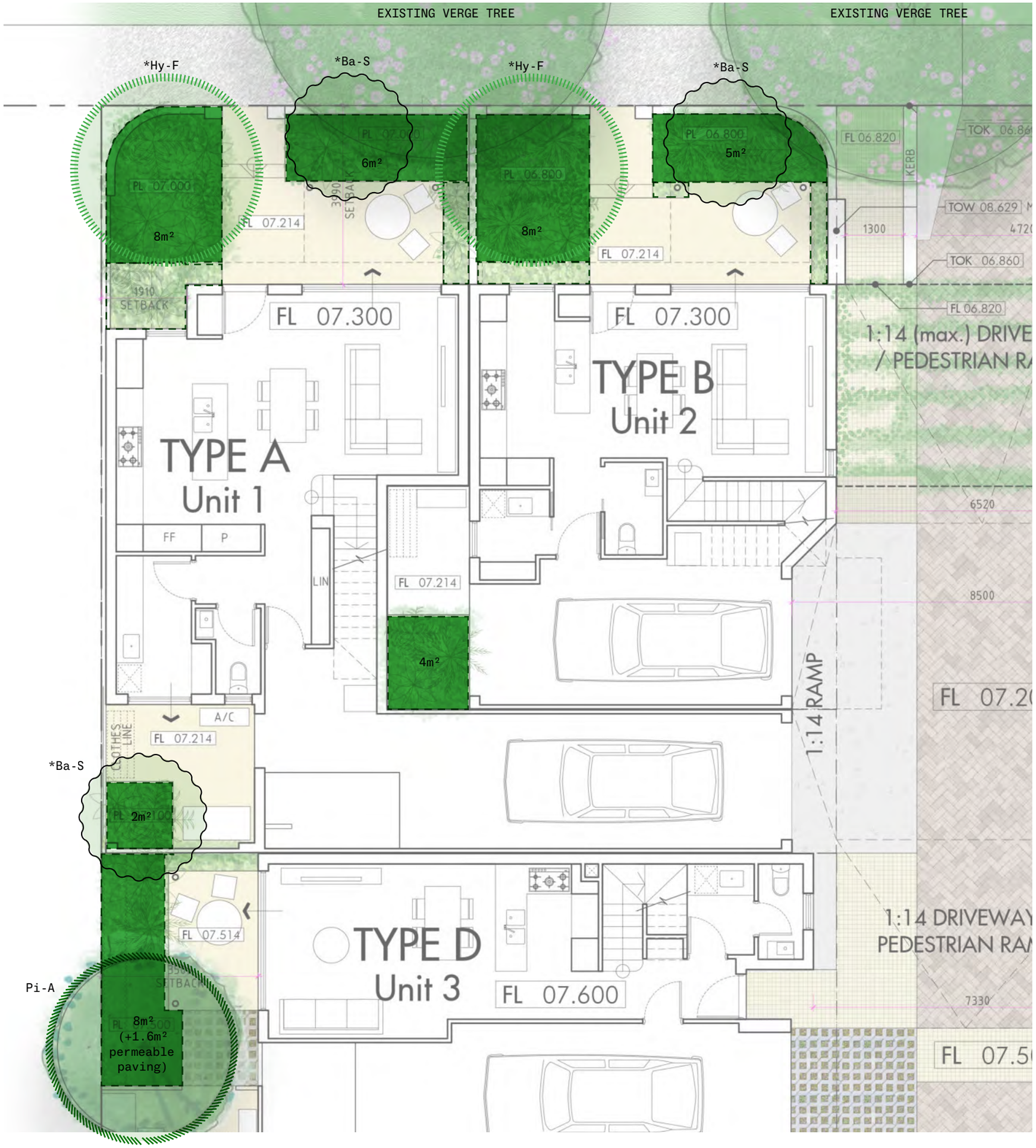


VERGE UPGRADE



LANDSCAPE PLAN

PART A





ENTRY COURTYARDS **Ba-S**
Banksia sentinel
(Coastal Banksia)
3m h x 1m w

AUS Native



COURTYARDS **Hy-F**
Hymenosporum flavum
(Native Frangipani)
8m h x 4m w

AUS Native



COURTYARDS **Pi-A**
Pittosporum angustifolium
(Weeping Pittosporum)
8m h x 5m w

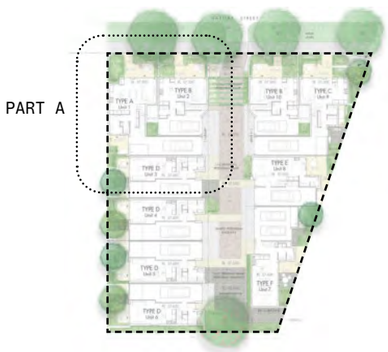
AUS Native

LEGEND

DEEP SOIL AREAS

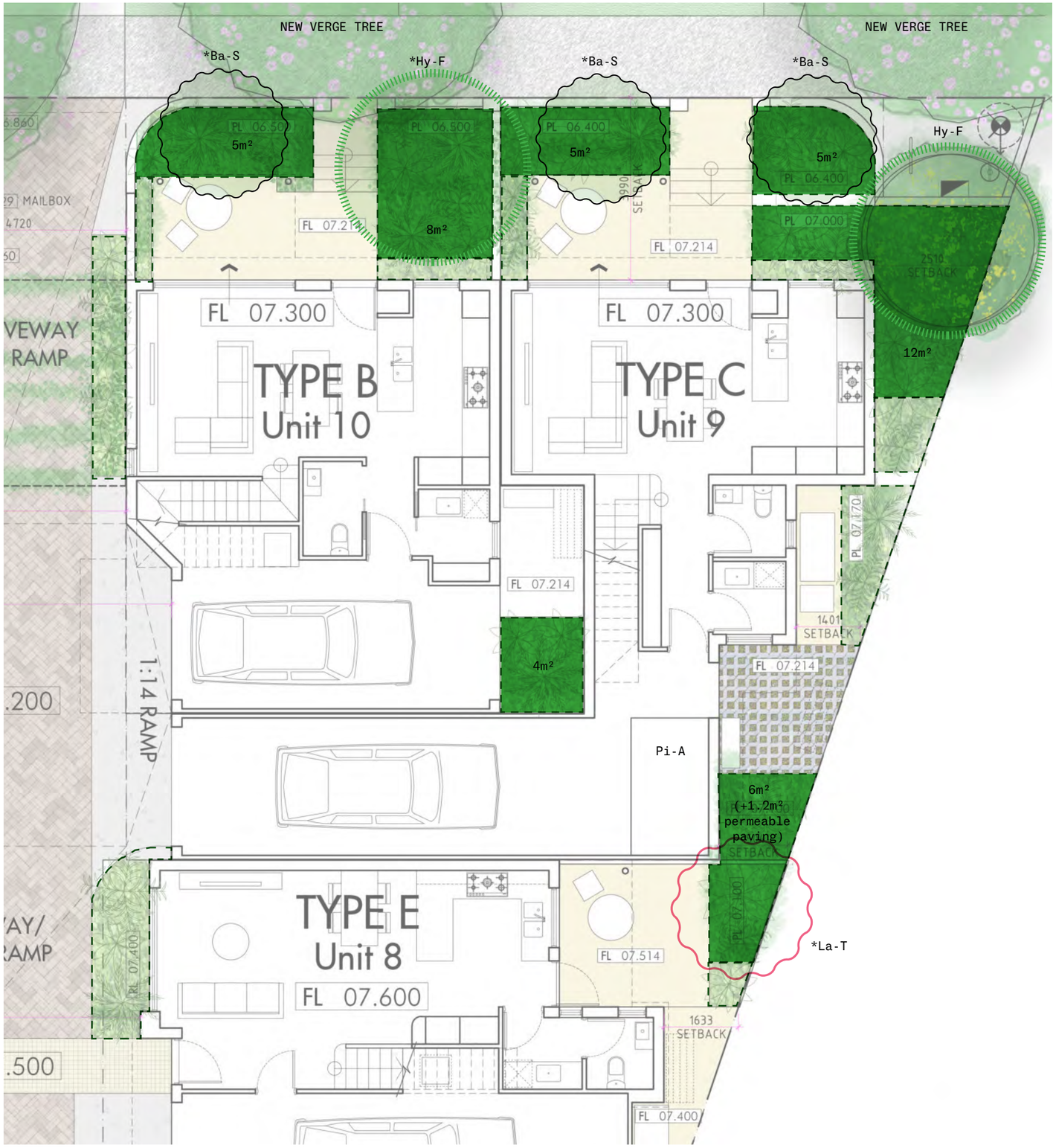
SOFT LANDSCAPING

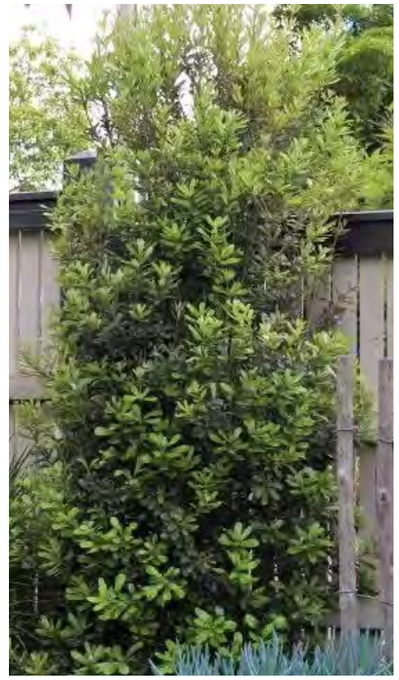
*tag TREES
(not included in DTC calculations)



LANDSCAPE PLAN

PART B





ENTRY COURTYARDS **Ba-S**
Banksia sentinel
(Coastal Banksia)
3m h x 1m w

AUS Native



COURTYARDS **Hy-F**
Hymenosporum flavum
(Native Frangipani)
8m h x 4m w

AUS Native



COURTYARDS **La-T**
Lagerstroemia
'Tuscarora' Crepe Myrtle
5m h x 3m w

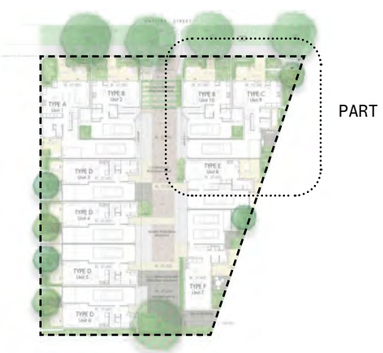
***slow growing**

LEGEND

DEEP SOIL AREAS

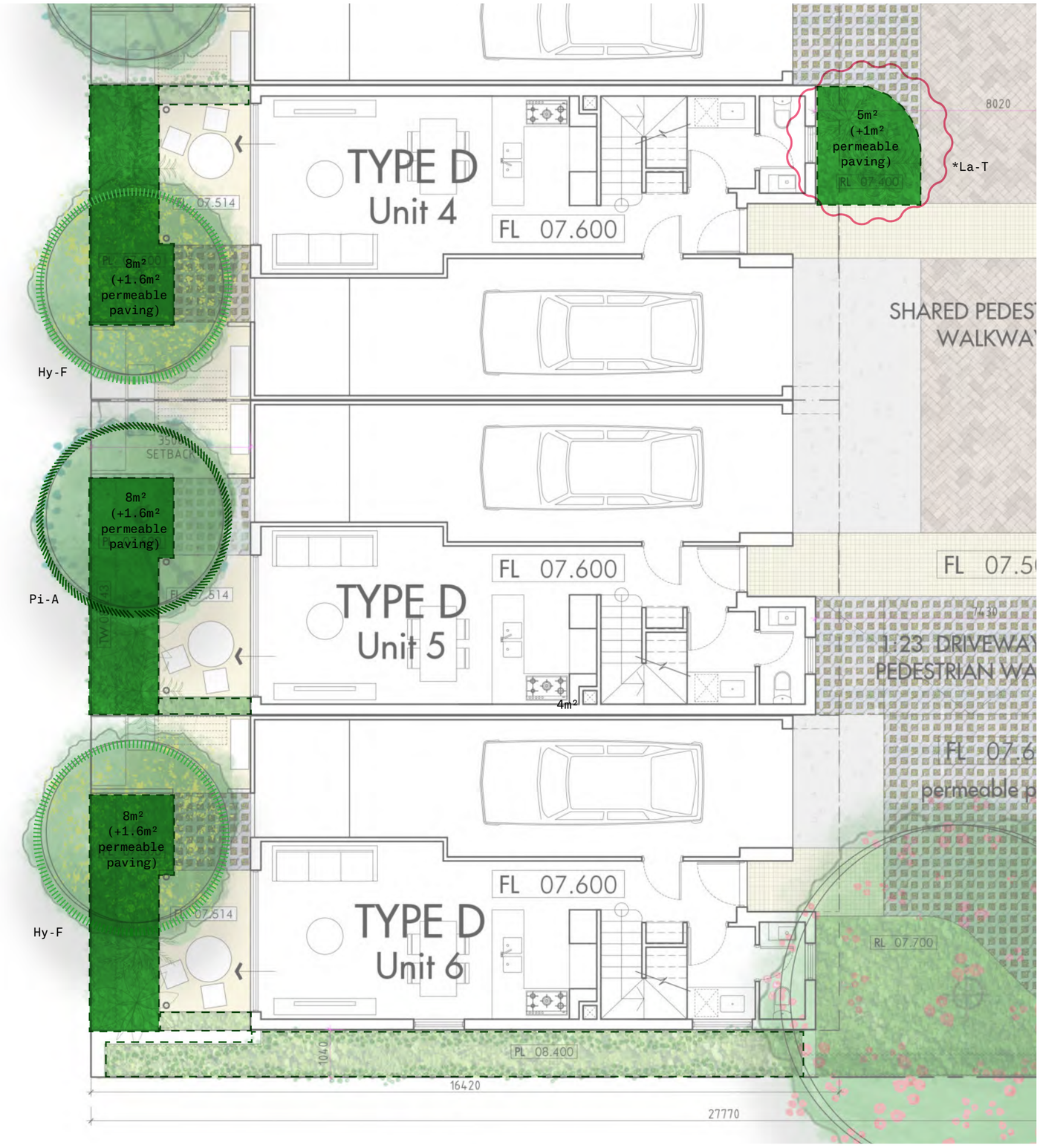
SOFT LANDSCAPING

***tag** **TREES**
(not included in DTC calculations)



LANDSCAPE PLAN

PART C





COURTYARDS **Pi-A**
Pittosporum angustifolium
(Weeping Pittosporum)
8m h x 4m w

AUS Native



COURTYARDS **Hy-F**
Hymenosporum flavum
(Native Frangipani)
8m h x 4m w

AUS Native



LANEWAY **La-T**
Lagerstroemia
'Tuscarora' Crepe Myrtle
5m h x 3m w

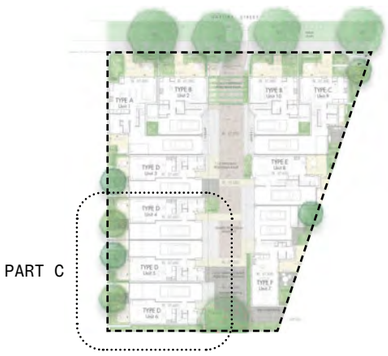
*slow growing

LEGEND

DEEP SOIL AREAS

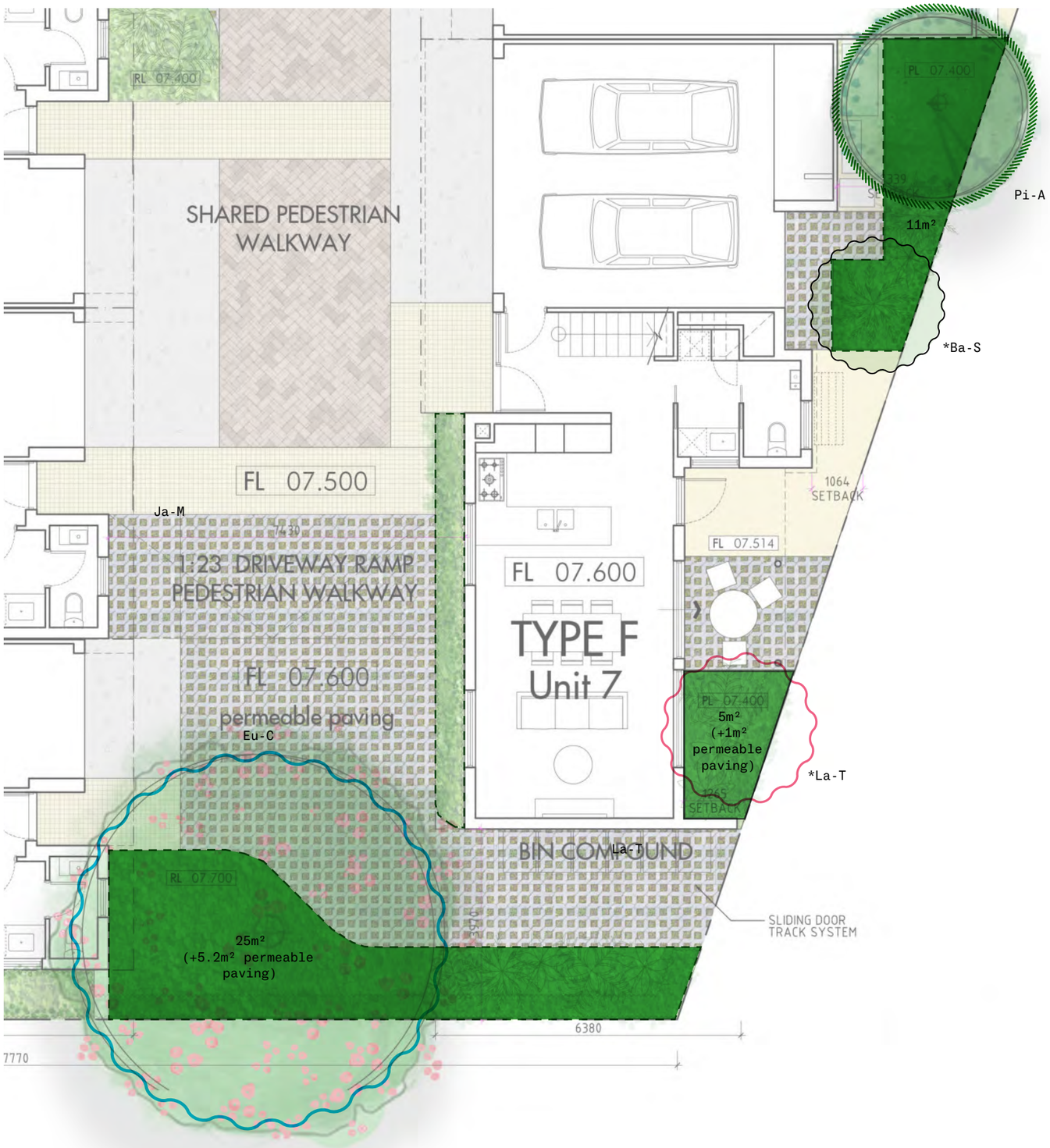
SOFT LANDSCAPING

*tag **TREES**
(not included in DTC calculations)



LANDSCAPE PLAN

PART D





LANEWAY **Eu-C**
Eucalyptus caesia 'Gungurru'
8m h x 5m w

WA Native



COURTYARDS **Hy-F**
Hymenosporum flavum
(Native Frangipani)
8m h x 4m w

AUS Native



COURTYARDS **Pi-A**
Pittosporum angustifolium
(Weeping Pittosporum)
8m h x 4m w

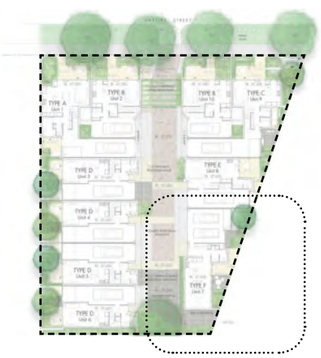
AUS Native

LEGEND

DEEP SOIL AREAS

SOFT LANDSCAPING

*tag TREES
(not included in DTC calculations)





OVERALL STREETFRONT LANDSCAPE CHARACTER



LANDSCAPED ENTRY ARBOR THRESHOLD & STREET VIEW TO FEATURE MEDIUM TREE



VERGE AND COURTYARD LANDSCAPING CREATES VISUAL INTEREST



BALCONY PLANTERS AND ENTRY CANOPIES

PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE INDICATIVE TREE CHARACTER



VERGE
Jacaranda mimosifolia
15m h x 10m w

Compulsary Street Tree Selection as part of Davilak Cresent Precinct Plan 14



LANDSCAPED INTERNAL LANEWAY
Eucalyptus caesia 'Gungurru'
8m h x 5m w

WA Native



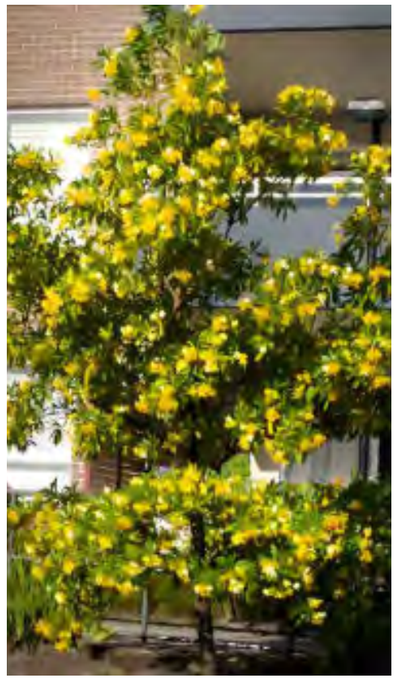
ENTRY COURTYARDS
Banksia sentinel
(Coastal Banksia)
2m h x 1m w

AUS Native



PRIVATE COURTYARDS
Pittosporum angustifolium
(Weeping Pittosporum)
8m h x 4m w

AUS Native



PRIVATE COURTYARDS
Hymenosporum flavum
(Native Frangipani)
8m h x 4m w

AUS Native



SCREENING
Hakea salicifolia
(Willow-leaved Hakea)
4m h x 3m w

AUS Native

PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE INDICATIVE SOFTSCAPE CHARACTER

VERGE PLANTING



Verge Planting
Eremophila ‘Kalbarri Carpet’
0.2m h x 2m w
WA native
*Local council’s suggested plant



Verge Planting
Westringia Grey Box
0.5m x 0.5m wide & high
Aus native



Verge Planting
Dianella revoluta ‘Little Rev’
0.5m h x 0.4m w
AUS native
*Local council’s suggested plant



Verge Planting
Adenanthos cuneatus
0.3m h x 2m w
WA endemic
*Local council’s suggested plant



Verge Planting
Myaporum insulare prostrate
0.5m h x 2m w
AUS native



Verge Planting
Hemiandra pungens
0.2m h x 0.75m w
WA native
*Local council’s suggested plant

PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE INDICATIVE SOFTSCAPE CHARACTER
GROUND PLANTING



Ground Planting - Flowering shrub
Conostylis candicans
0.3m h x 0.5m w
WA native



Ground Planting
Banksia nivea
0.5m h x 0.5m w
WA endemic
*Local council's suggested plant



Ground Planting - Silver shrub
Leucophyta brownii
1m x 1m wide & high
AUS native
*Local council's suggested plant



Ground Planting
Correa alba
1.5m h x 1.5m w
AUS native



Ground Planting - Wetland shrub
Ficinia nodosa
1.5m h x 1.5m w
WA native
*Local council's suggested plant



Ground Planting - Wetland shrub
Lepidosperma gladiatum 'Coastal Sedge'
1m h x 1m w
WA native



Ground Planting - Ground cover
Lomandra Lime Tuff
0.6m h x 0.6m w
AUS native

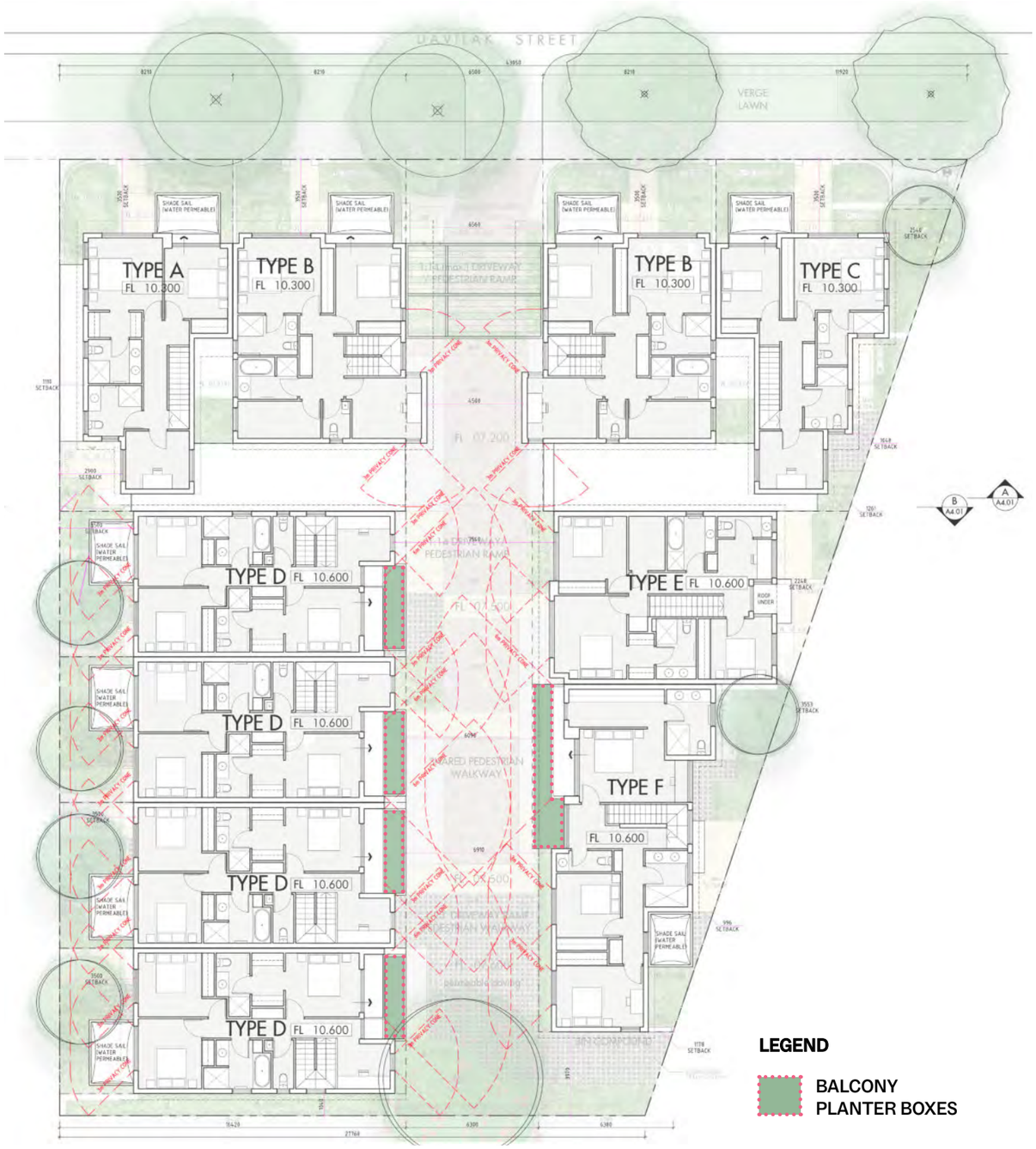


Ground Planting - Ground cover
Myaporum insulare prostrate
0.5m h x 2m w
AUS native

PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE INDICATIVE SOFTSCAPE CHARACTER

BALCONY PLANTING



LEGEND

BALCONY
PLANTER BOXES



Planter Box
Westringia Grey Box
0.5m h x 0.5m w
AUS native



Planter Box
Lomandra Lime Tuff
0.6m h x 0.6m w
AUS native

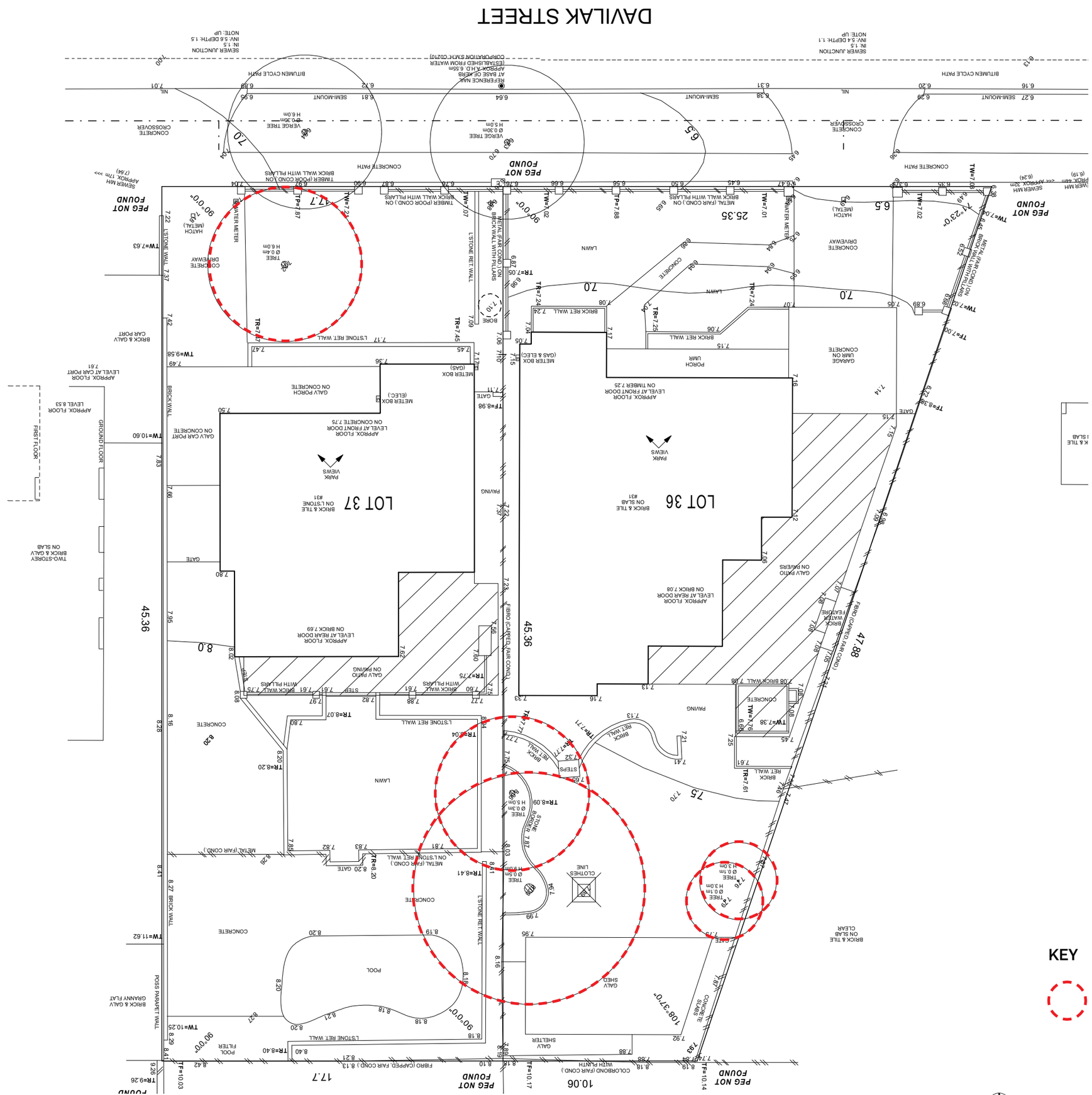


Planter Box
Adenanthos cuneatus
0.3m h x 2.0m w
WA endemic



Planter box
Banksia petiolaris
0.5m h x 1.5m w
WA native
*Local council's suggested plant

TREE DEMOLITION PLAN


DAVILAK STREET
LOT 37
LOT 36
PEG NOT FOUND
BRICK WALL
CONCRETE
LAWN
PAVING
GALV PORCH ON CONCRETE
GALV PATIO ON PAVERS
GALV SHELTER
GALV SHED
BRICK & GALV GARAGE
BRICK & TILE ON SLAB
CONCRETE DRIVEWAY
GARAGE UNIR ON CONCRETE
PORCH UNIR
BRICK RET WALL
L'STONE RET WALL
BRICK RET WALL
METAL (FAIR COND.) ON BRICK WALL WITH PILLARS
TIMBER (POOR COND.) ON BRICK WALL WITH PILLARS
METAL (FAIR COND.) ON BRICK WALL WITH PILLARS
FIBRO (CAPPED, FAIR COND.)
COLORBOND (FAIR COND.) WITH PLANTH
POSS PARAPET WALL
BRICK & GALV GRANNY FLAT
TWO-STOREY BRICK & GALV ON SLAB
BRICK & TILE ON SLAB
FIBRO (CAPPED, FAIR COND.) WATER FEATURE
BRICK & TILE ON SLAB
BRICK & TILE ON L'STONE
BRICK & TILE ON SLAB
BITUMEN CYCLE PATH
CONCRETE CROSSOVER
CONCRETE PATH
SEWER MH
SEWER JUNCTION
HATCH (METAL)
WATER METER
GATE
METER BOX (GAS)
METER BOX (ELEC.)
METER BOX (GAS & ELEC)
TREE Ø 0.4m H 6.0m
TREE Ø 0.3m H 6.0m
TREE Ø 0.3m H 5.0m
TREE Ø 0.5m H 9.0m
TREE Ø 0.1m H 3.0m
TREE Ø 0.1m H 3.0m
REFERENCE MARK AT BASE OF MERB APPROX.74.1D, 6.58m CORRECTION STATE: C0210 (ESTABLISHED FROM WATER
APPROX. FLOOR LEVEL AT FRONT DOOR ON BRICK 7.08
APPROX. FLOOR LEVEL AT FRONT DOOR ON TIMBER 7.25
APPROX. FLOOR LEVEL AT FRONT DOOR ON CONCRETE 7.75
APPROX. FLOOR LEVEL AT REAR DOOR ON BRICK 7.08
APPROX. FLOOR LEVEL AT REAR DOOR ON BRICK 7.69
APPROX. FLOOR LEVEL 8.53
APPROX. FLOOR LEVEL AT GAR PORT 7.61
BRICK & GALV GAR PORT
BRICK & GALV PORCH ON CONCRETE
GALV CAR PORT ON CONCRETE
BRICK WALL
GROUND FLOOR
FIRST FLOOR
L'STONE WALL
CONCRETE DRIVEWAY
POOL
POOL FILTER
STEPS
BRICK RET. WALL
BRICK RET WALL
L'STONE RET WALL
L'STONE RET.WALL
METAL (FAIR COND.) ON L'STONE RET WALL
FIBRO (CAPPED, FAIR COND.)
CLOTHES LINE
SEMI-MOUNT
NIL
VERGE TREE Ø 0.3m H 6.0m
VERGE TREE Ø 0.3m H 5.0m
SEWER MH APPROX 7m >>> (7.64)
SEWER MH APPROX 42m <<< (6.19)
SEWER MH APPROX 32m (6.24)
SEWER JUNCTION IN: 1.5 INV: 5.6 DEPTH: 1.5 NOTE: UP
SEWER JUNCTION IN: 1.5 INV: 5.4 DEPTH: 1.1 NOTE: UP
PARK VIEWS
45.36
25.35
47.88
17.7
10.06
8.0
7.0
6.5
7.5
90°0'0"
108°37'0"
TW=7.63
TW=10.60
TW=9.58
TW=11.62
TW=10.23
TW=7.87
TW=7.23
TW=7.07
TW=7.01
TW=7.02
TW=7.38
TW=7.76
TW=7.05
TW=7.00
TF=8.98
TF=8.38
TF=10.03
TF=10.17
TF=10.14
TR=7.47
TR=7.87
TR=7.24
TR=7.25
TR=7.05
TR=7.75
TR=8.07
TR=8.04
TR=8.20
TR=8.20
TR=8.09
TR=8.41
TR=8.40
TR=9.26
TR=7.71
TR=7.61
7.7 230°
6.5
7.0
7.5
8.0
8.20
8.41
8.28
8.16
8.27 BRICK WALL
8.29
8.42
8.10
8.18
8.19
8.20
8.21
8.27
8.18
8.16
8.18
8.19
8.20
8.21
8.18
8.19
8.20
8.21
8.18
8.19
8.20
8.21

- 1 new medium tree and 6 new small trees to be placed within the site.
- Additional smaller trees and softscape planting is proposed to enhance landscaped areas.



- **varied hardscape treatments to break up spaces, traffic calming and for wayfinding.**

Step-free pedestrian entry

Segmental pavers to driveway paving



Cobblestone paving to demarcate townhouse entry paths





Permeable paving within new medium tree zone

PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE CALCULATIONS

DEEP SOIL ZONES	
Overall Site Area	1605m²
Required Deep Soil Area (DSA) in accordance to R-Codes Volume 2	161 m2 (10% of site area)
Deep Soil Area Proposed	181m² being 11% of the Site 19m² within permeable paving
DSA Summary	The proposed landscape design meets the minimum Deep Soil Area requirement as per SPP 7.3 Volume 2, and provides more than 10% of landscaped area within the lot boundary.

KEY ITEMS

- Site Boundary
- Deep Soil Zones
- Verge Garden
- Soft Landscaping Area (not included in DSA calculation as less than 1.5m wide)
- Planting on Structure (Trellis)

A total of 181m² deep soil is made available for trees and softscape planting. Adjacent rootable soil zones are provided within permeable paving areas to support trees.



PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE CALCULATIONS

TREE CANOPY METRIC	
Site Area	1605m²
Minimum requirement for trees	2 large trees and small trees to suit area (Option 2 in table 3.3 under SPP 7.3 Volume 2)
New Trees Provision	1 medium tree + 6 small trees (+13 small trees in free draining garden beds lees than 9m²) 2 large trees (verge)
Tree Canopy Summary:	Following an arboriculture report to remove the existing large tree on site, the proposed landscape incorporates a new medium tree and numerous small trees to achieve tree canopy element objectives.

KEY ITEMS

New Medium Tree on site

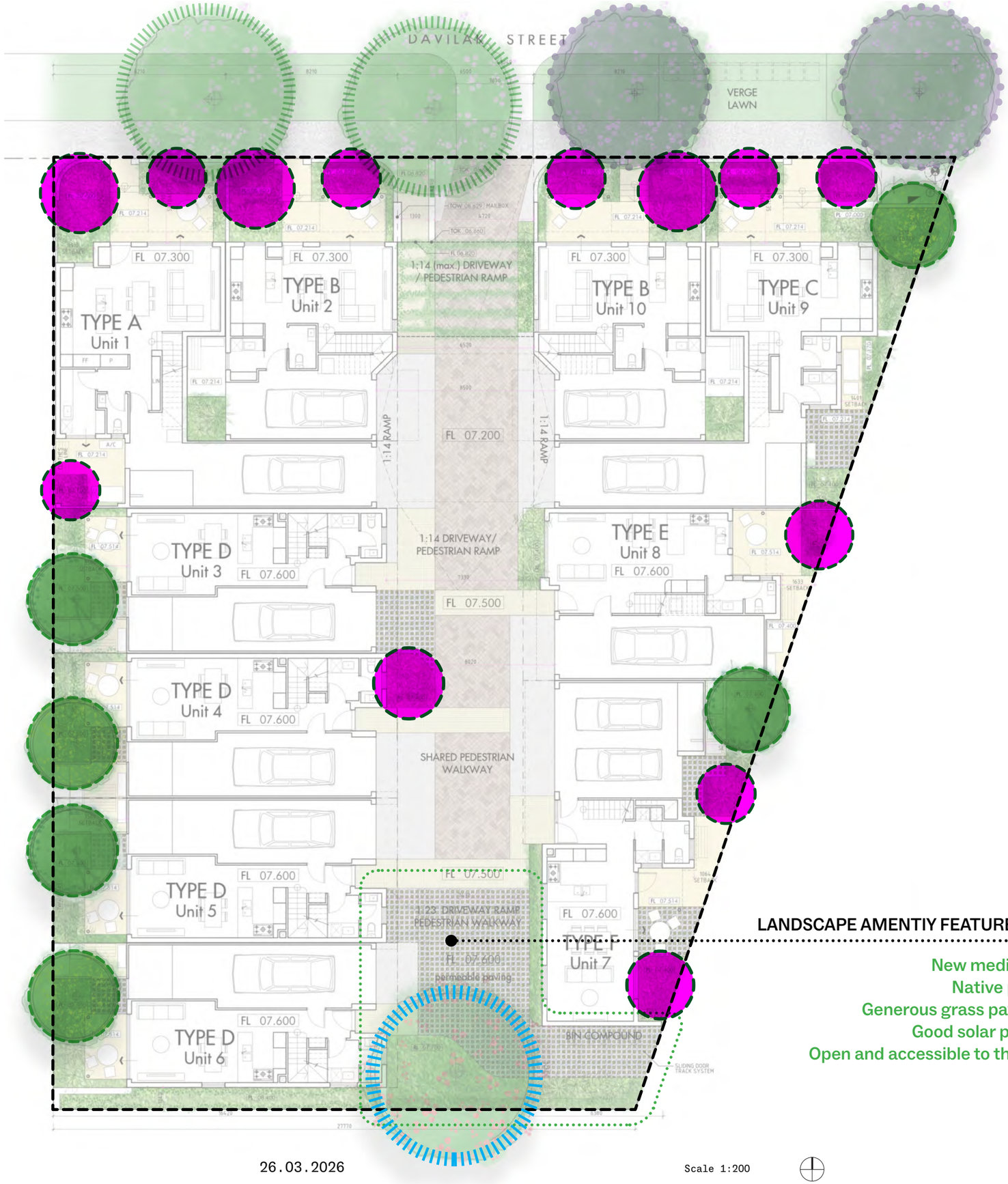
Existing Verge Trees

New Verge Trees

New Small Trees
(in free draining garden beds less than 9m²)

New Small Trees

Towards achieving the R-Codes element objectives, provided is an additional 2 large verge trees & 19 small native trees. In addition, a new medium native tree will be integrated into the site in place of the existing large tree, which contributes greatly to the amenity of the internal shared space & connects the site terminus to the public domain.



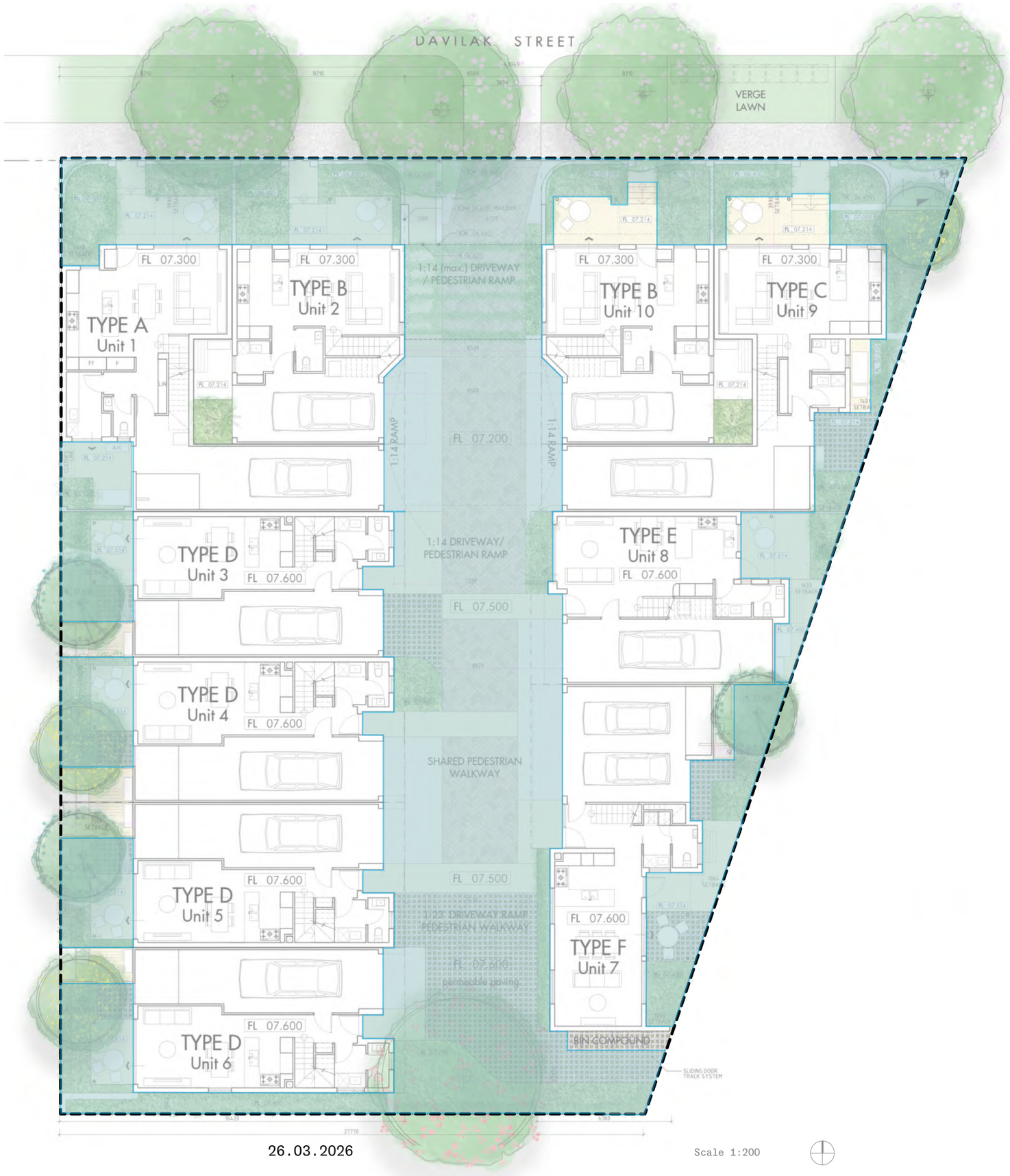
PRINCIPLE 2: LANDSCAPE CHARACTER

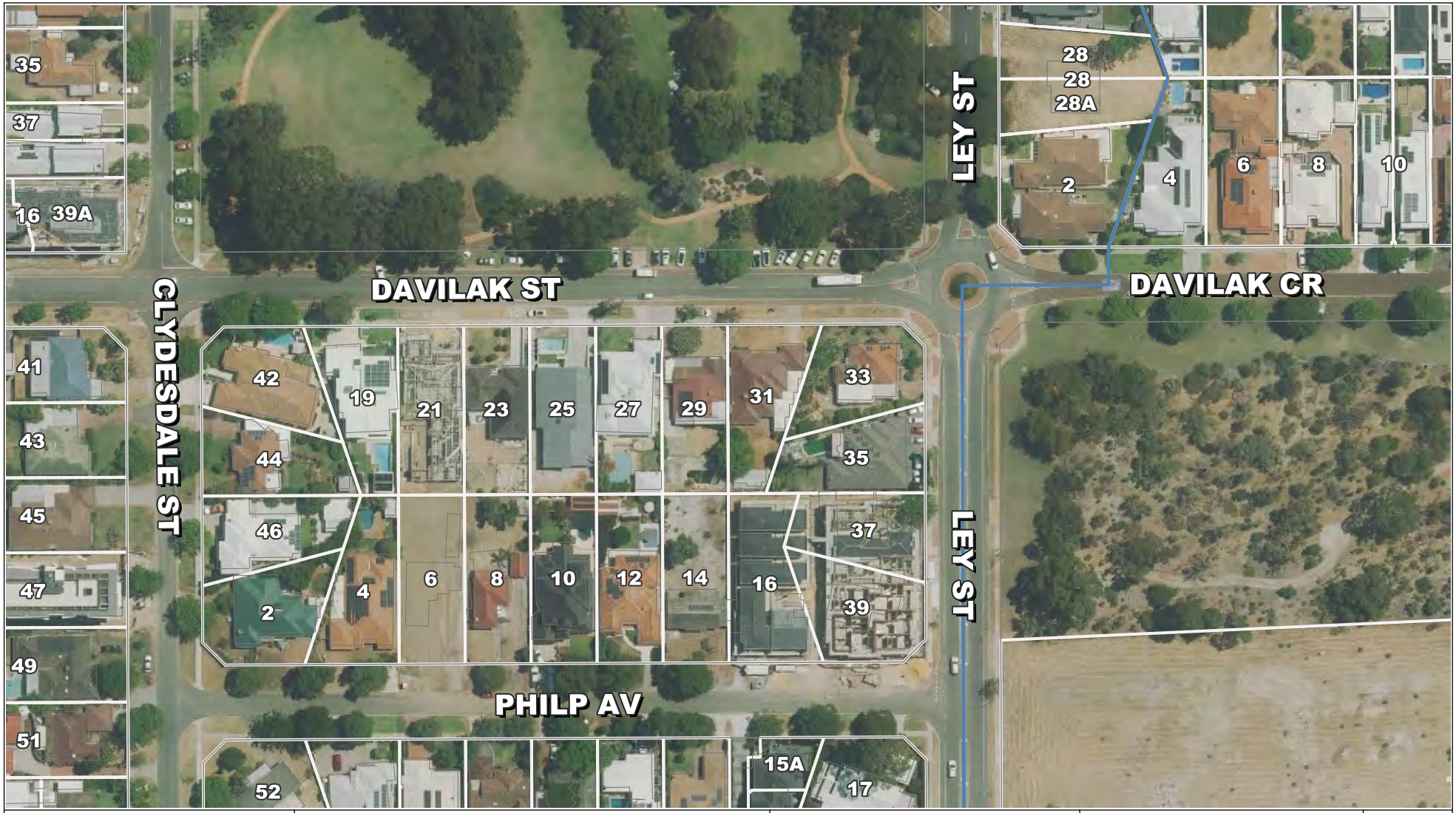
OPEN SPACE CALCULATIONS

OPEN SPACE ZONES	
Overall Site Area	1605 m²
Open Space Requirements in Accordance to Canning Beach Activity Centre Plan	642 m2 (40% of site area)
Open Space Provision	672m² OR 42% of the Site
Open Space Summary	Element objective is achieved.

1. Refer to Unit Layout Plans for Private Open Space Calculations in accordance to R codes Volume 2

The proposed design meets the Canning Beach Activity Centre Plan in Open Space calculation.





City of South Perth

The City of South Perth accepts no responsibility whatsoever for the accuracy or otherwise of any information within this application. The IntraMaps pages are amended regularly to provide the latest and most accurate information available. Some information may, however, not be current. Viewers must take account of these facts when reading the data.

31/03/2026

1:1500

N

Submitter:

Colin Houghton

Reference:

SUB-00000590

Submission Date:

28-Jan-2026

Submission Text:

We are opposed to the proposed development. The key objections are based on: - The Proposed development is inconsistent with recent nearby DA's in Daviilak St - The DA understates the proposed Dwelling mix - The proposed development lacks visitor parking - The proposed development does not provide for sufficient bin capacity for the calculated waste generation per LPP 3.1. - The proposed development Waste Management Plan is non-compliant with LPP 3.1 for bin capacity, Off-site Waste Collection requirements, or a designated loading bay. - Vehicle sightlines are impacted - Western boundary fence retention - Protection of parapet wall integrity - Incorrect location used by Simulation Software for the Sustainable Design Assessment Report

Sentiment Metric:

Oppose

26 January 2026

Planning Office
City of South Perth

Re: Proposed 10 Grouped Dwellings (DAP/25/03029)
29 & 31 Davilak Street, COMO WA 6152

We are opposed to the proposed development.
Our objections are as follows.

- The proposed use, namely that of moderate quality rental accommodation and potentially high occupancy, is not consistent with recent development approvals in Davilak St between Ley St and Clydesdale St.
Numbers 25, 21 and 19 Davilak St are all owner occupied single residential houses that have recently been completed or are in construction.

- The DA inconsistently summarises the Dwelling mix of the proposed development.
The Joint Development Assessment Panel Report identifies 6 3BR unit and 4 2br units.
The Waste Management Plan identifies 9 x3BR and 1x 2BR unit for the calculation of waste generation.
Closer scrutiny of the plans with out regard for room labelling (ie bedroom labelled as study) identifies 4 x 4BR units plus 4 x 3BR units plus potentially 2 x 5BR units if Stores with external windows were to be used for single accommodation.
This calculation is relevant is satisfying the requirements of LPP 3.1.

- Using a shared rental arrangement, this development has the potential for 40 rental bedrooms on this site. This level of occupancy distorts planning guidelines and requirements using normal residential unit usage.

- The proposed development lacks visitor parking and as such poses street side parking issues on a busy bus route and cycle way on Davilak St.

- The proposed development does not provide for sufficient bin capacity for the calculated waste generation per LPP 3.1.
According to the proposed Waste Management Plan, the projected Recycling Generation is already above the proposed On-site MGB capacity. Correctly identifying the development as 10 x 3+BR dwelling mix places the projected Garbage Generation at the maximum capacity of the proposed MGB and Recycling Generation further exceeds proposed capacity by 240L/fortnight.

- The proposed development exceeds Off-site Waste Collection requirements of LPP 3.1 and does not have provision for On-site waste collection.
The stated proposed bin collection area of 18.2m already exceeds the allowable maximum of stated of 14.5m. The actual frontage length less the vehicle crossover is 37m making the allowable 1/3 of the eligible street frontage only 12.3m.

Document Set ID: 1710962
Version: 1, Version Date: 29/01/2026

LPP 3.1 would be further exceeded if garbage and recycling storage capacity is increased to meet the LPP 3.1 Waste Generation Calculation using an accurate proposed Dwelling Mix.

- The proposed development does not include a designated loading bay.
Local Planning Policy 3.1 Waste Management 5.5.4 provides that "Where on-site waste collection will result in adverse impacts to traffic management, developments shall provide a designated loading bay."
The stated bin collection area of 18.2m length by itself provides a dangerous visual sightline to cyclists and vehicles travelling along the Davilak St cycleway. This is exacerbated by the visual hazard created by the bin collection area located between 2 new verge side trees.

- Vehicle sightlines of pedestrians from the adjoining driveway on 27 Davilak St is restricted by a) the height of the west boundary fence at the front of Unit Type A and b) the choice of feature trees to the street entry courtyard of Unit Type A.

- Vehicle sightlines of pedestrians from the shared laneway is restricted by the choice of feature trees for the entry courtyard of Unit Types B.

- The close location of internal driveway crossover to existing and proposed new verge trees poses a visibility restriction to bicycle traffic on the Davilak St cycleway

- The proposal is silent on plans for retention of the existing well maintained western boundary fence jointly owned by 27 Davilak St. Said fence was built and paid for solely by owners of 27 Davilak St in agreement with the then owners of 29 Davilak St. It also provides soil retention for 27 Davilak St.

- The proposal is silent on plans to ensure the integrity of a parapet wall on 27 Davilak St supporting a dual carport adjoining Unit Type A. It is highly likely the construction of a parapet wall for Unit Type A will undermine the footing of the wall on 27 Davilak St.

- It is noted that the Simulation Software used for the Sustainable Design Assessment Report used a Climate File location of Esperance WA. Presumably correction of this will alter the findings and compliance of the Sustainable Design Assessment.

- The 1st floor western windows have no shading from direct sun light and number 8 bedrooms overlooking the neighbouring backyard/ pool area of 27 Davilak St.

Your sincerely
Colin & Jennifer Houghton

Document Set ID: 1710962
Version: 1, Version Date: 29/01/2026

Submitter:

Yvonne Lim

Reference:

SUB-00000589

Submission Date:

27-Jan-2026

Submission Text:

You are probably aware of the above proposed development consisting of 10 "build to rent" units. Using a shared rental arrangement, this development has the potential for 38 rental bedrooms on this site. Whilst not opposed to increased housing density in general (eg the units on Philp St), we believe that this proposed development is not consistent with recent development approvals in Davilak St between Ley St and Clydesdale St. . Namely 25, 21 and 19 Davilak St which are all owner occupied single residential houses. We have lodged a submission to this development objecting on several issues including the following: - The proposed use is inconsistent with recent DA's for this section of Davilak St - The proposed development lacks visitor parking and as such poses street side parking issues on a busy bus route and cycle way on Davilak St. - The proposed Waste Management Strategy is unacceptable ie potentially 26 kerbside 5ins each fertnight. Should you also disagree with this proposal as it stands, we ask that you also lodge an objection. The closing date for submissions is Wednesday 28/ January 2026. Submissions can be lodged online by going to the South Perth Council website on its View advertised DA's page. https://cosp.t1cloud.com/apps/Applications/Details/mySouthPerth/Application_Details_-_DA_Advertising/228768 : ' We appreciate the very short notice but would appreciate your consideration.

Sentiment Metric:

Oppose

EDWARD & YVONNE LIM.

26 January 2026

Dear Neighbour

Re: Proposed development 29 & 31 Davilak St, Como.

You are probably aware of the above proposed development consisting of 10 "build to rent" units.

Using a shared rental arrangement, this development has the potential for 38 rental bedrooms on this site.

Whilst not opposed to increased housing density in general (eg the units on Philp St), we believe that this proposed development is not consistent with recent development approvals in Davilak St between Ley St and Clydesdale St.

Namely 25, 21 and 19 Davilak St which are all owner occupied single residential houses.

We have lodged a submission to this development objecting on several issues including the following:

- The proposed use is inconsistent with recent DA's for this section of Davilak St
- The proposed development lacks visitor parking and as such poses street side parking issues on a busy bus route and cycle way on Davilak St.
- The proposed Waste Management Strategy is unacceptable ie potentially 26 kerbside bins each fortnight.

Should you also disagree with this proposal as it stands, we ask that you also lodge an objection. The closing date for submissions is Wednesday 28/ January 2026.

Submissions can be lodged online by going to the South Perth Council website on its View advertised DA's page.

https://cosp.t1cloud.com/apps/Applications/Details/mySouthPerth/Application_Details_-_DA_Advertising/228768

We appreciate the very short notice but would appreciate your consideration.

Regards

Document Set ID: 1710706
Version: 1, Version Date: 29/01/2026

Submitter:

Gavin Walton

Reference:

SUB-00000588

Submission Date:

27-Jan-2026

Submission Text:

Several concerns that I have as a resident of this street 1) there are a large number of high density developments in the immediate area with a large one at the end of Davilak street - Lago coming on stream soon which will increase traffic on an already busy road. This development will add significant traffic with 10 units and with 20+ rooms which could equate to 30 additional cars 2) only 10 off street parking spaces which will mean an increase in street parking and verge parking and no off street visitor parking 3) all of the houses on the street opposite the park are currently single residential and this development is out of street character 4) whilst the DRP report talks about good mix of units for down sizers, families, students it is our understanding none of the units will be sold and all will be for student rental only - our view may be different if they were being sold tourney occupier down sizers 5) bins on street could be 20 on bin day - visually ugly

Sentiment Metric:

Oppose

Submitter:

Cristy Secombe

Reference:

SUB-00000587

Submission Date:

26-Jan-2026

Submission Text:

To whom it may concern Please see the attachment outlining our objections to this development Yours Sincerely Cristy and Mark Secombe

Sentiment Metric:

Oppose

26th January 2026

To South Perth Council Planning Department

We object to the proposed development of 29 and 31 Davilak St, Como for the following reasons

- It is not clear if the proposed development is compliant with section 5.10 of the Canning Bridge Activity Precinct plan (within H4 Zones (in Q1 and Q2) any structure located at roof level shall be setback a distance of 2.5 metres from the building edge at the side and rear boundaries). The plans suggest this is not the case on the southern and western boundaries. This results in a large amount of shadowing into 14 Philp Ave.
- It is unclear as to why the large jacaranda tree on lot 36 Davilak does not fit the criteria of a regulated tree as per the policy Local Planning Policy 3.2 – Tree Retention. Given that the assessment as stated within the arborists report was limited to a single ground based VTA that did not extend to aerial inspections, nor below ground evaluations, it is unclear as to why further investigations was not undertaken to ensure that this tree's health status was as documented. This tree does have high amenity value to surrounding properties and we argue that it makes significant environmental contributions. Finally, it is proposed to be replaced by another jacaranda tree that fits with the new plans. It is unclear as to why every effort has not been made to preserve this tree.
- We are of the opinion that the waste management plan does not comply with the Local Planning Policy 3.1 Waste Management policy, which the report undertaken by Allerding and Associates in November 2025 confirms in regards to the 16 bins being placed on the kerb on recycling day exceeding 1/3 of the frontage. Allerding and Associates has made the argument that as the development is actually two properties they are able to have 16 bins. The policy states it does not apply to single dwelling properties, which the 2 lots originally were. The lots are now being combined into one multiple dwelling residential property with one crossover. The policy implies that for properties with a single cross over there can be a maximum of 8 bins for off-site collection. Sixteen bins on the verge every second week will significantly impact the amenity of the area, obstruct footpaths and vehicle sightlines. It is our opinion that the developers need to either consider onsite waste collection or reduce the number of dwellings to comply with policy.

Yours sincerely

Cristy and Mark Secombe

Document Set ID: 1706967
Version: 1, Version Date: 27/01/2026

Submitter:

Ali Birjandi

Reference:

SUB-00000586

Submission Date:

26-Jan-2026

Submission Text:

Unrealistic visitor parking affecting neighbours if Davilak Street gets Congested. Unrealistic waste management due to the front width to park the bins. Our privacy of the pool area would be affected.

Sentiment Metric:

Oppose

Submitter:

Lisa Resch

Reference:

SUB-00000585

Submission Date:

26-Jan-2026

Submission Text:

The proposed use Of these blocks is not consistent with recent DA's for this section of Davilak st; and The proposed development lacks visitor parking thus posing street parking issues on a busy bus route and cycle way on davilak st; and The proposed waste management strategy is unacceptable due to the potentially large number of bins on the kerbside each week/ fortnight.

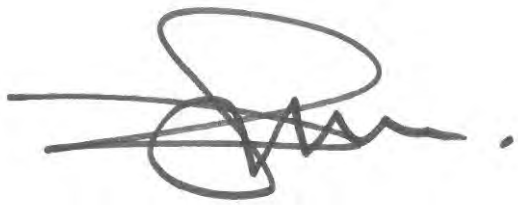
Sentiment Metric:

Oppose

Design Review Report

29-31 Davilak Street Como
Chair Design Review 02

2026-02-09

Design Review Report		
Subject	29-31 Davilak Street Como-Chair Design Review 02	
Date	09 February 2026	
Time	-	
Location	-	
Design Reviewers	Dominic Snellgrove	Chair
Proponent	Birch group, Capa, Allerding Associates	
Project Team		
Planning Authority	City of South Perth	Steven DePiazzi
Stakeholders	Nil.	
Declarations	None	
Briefings		
Relevant Authorities Project Team		
Design Review Report endorsement		
Reviewer's signature	 Dominic Snellgrove	

Introductory Comments		
Design quality evaluation		
		Supported
		Pending further attention
		Not yet supported
		Yet to be addressed
Strengths of the Proposal		**Chair Design Review 02** The Proponent is commended for their response to commentary from DRP 01. • A comprehensive and legible submission clearly detailing the issue raised and the design solution in response. • A front wall that successfully navigates the slope of the site and steps accordingly to maintain a strong streetscape engagement strategy. • Further design work in support of achieving setback compliance • The appointment of an ESD professional and the inclusion of a comprehensive ESD report outlining passive and active sustainable design commitments • Privacy screen added to main laneway entry in favour of adjacent unit. • Swept path traffic movements The proposed development demonstrates a high level of design resolution and urban response appropriate for its location and typology. Key design merits include: **1. Urban Integration and Streetscape Response** • The proposal delivers much-needed medium-density townhouse accommodation in close proximity to public transport and high levels of local amenity. • **The 4 front facing units** successfully orientate themselves to address Davilak Street, reinforcing the public domain and positively contributing to the existing and future streetscape character. • The direct front door address of **the street facing 4 units** to the street enhances legibility and creates a clearly defined interface with the public realm. • **Level 1 balconies** to the 4 front facing units engage with Davilak Street, offering further activation and passive surveillance. • The ground floor **living** and dining areas of the 4 street facing units directly overlook Davilak Street, further supporting passive surveillance and public realm engagement. • All garaging is sleeved and accessed via the single central laneway, reducing visual and functional impact on the public streetscape. • Front fence successfully balances permeability with privacy **2. Laneway and Site Planning** • The **vehicular crossover** is limited to a single-car width, minimising disruption to the footpath and public realm. • The **mews laneway** design prioritises soft landscaping over hard paving, enhancing permeability and visual amenity. • Paving within the laneway successfully signals a **pedestrian-priority shared zone**, supporting safety and walkability.

		• **Individual unit entries** in the laneway incorporate porch canopies by virtue of balcony overhangs, improving wayfinding and visual legibility. **3. Landscape and Environmental Performance** • The proposal incorporates **generous deep soil planting**, with 10% of the site allocated to deep soil zones to support canopy growth and improved site ecology. Exceeding minimum requirements by 3% • Tree retention and frangipani tree relocation strategy are evident. • Compliant 40% open space provided • Permeable paving • **Natural ventilation and daylighting** have been prioritised across all units: o Most bathrooms benefit from access to natural light and ventilation. o Many bedrooms are dual-aspect, supporting cross ventilation. o Living and dining areas to the front facing units are oriented to capture **northern light** and connect to **north-facing private outdoor spaces**. o There are no living dinning spaces that are solely facing south. • ESD professional appointed **4. Internal Planning and Amenity** • The townhouse layouts are compact, **functional and efficient**, with well-proportioned rooms and clear circulation. • In excess of 20% Liveable Standard units provided. • Functional floor to floor heights proposed • Services, AC condensers and drying areas identified. **5. Architectural Expression** • The architectural language is **contextually appropriate**, employing a material palette and roof forms—**pitched Colorbond roofs**—that reference the surrounding suburban context. • High quality and durable materials are proposed including face brick.
Principle 1 **Context and character**		*Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.*
		a) The front facing units present well to the street. b) The inclusion of a front door and pathway from the public domain that addresses the street successfully contributes to the streetscape character of the area. c) Upper levels of the front facing units provide adequate passive surveillance and streetscape activation. d) The second floor balcony on the front facing units provides for an open and engaged relationship with the street. e) Car parking has been successfully sleeved from the public realm f) Front setback modified to be very close to compliant
Recommendations		**1. Supported.**

Principle 2 **Landscape quality**		*Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.*
		a) The Proponent is commended for the delivery of more than the minimum requirements for deep soil planting. b) The minimisation of paving areas in the mews laneway in favour of landscape will deliver a more attractive and distinctive mews entry experience for residents.
Recommendations		**1. Supported.**
Principle 3 **Built form and scale**		*Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.*
		a) The built form and scale are considered appropriate.
Recommendations		**1. Supported.**
Principle 4 **Functionality and build quality**		*Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.*
		a) The project is functional, and the spaces have been well arranged and managed.
Recommendations		**1. Supported.**
Principle 5 **Sustainability**		*Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.*
		a) The proposal has strong passive design principles. b) An ESD professional has been appointed and a comprehensive ESD report has been prepared outlining passive and active sustainable design commitments.
Recommendations		**1. Supported.**
Principle 6 **Amenity**		*Good design optimises internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.*
		a) The proposal will offer high levels of resident amenity by way of functional, generous and well-arranged planning that offers high levels of solar access and cross ventilation. b) Type E Bed 3 appears to rely on a high level east facing widow. This remains unsupportable. c) Windows on the boundary between unit lots may provide issues relating to fire separation.
Recommendations		**1. Confirm that no bedrooms rely on solely high level windows. Including Type E east facing unit.**
Principle 7 **Legibility**		*Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.*
		a) Front facing units are successfully oriented to address the Davilak Street public domain foot path assisting greatly to respond to the streetscape character of the area. b) Front facing entries directly addresses the public domain creating a legible address that contributes to the streetscape. c) Individual unit entries within the laneway incorporate porch canopies above the front doors to assist with legibility and way finding. d) The mews laneway is illustrated as being paved which will successfully signal a pedestrian priority shared zone.
Recommendations		**1. Supported**

Principle 8 **Safety**		*Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.*
		a) The proposal provides for high levels of passive surveillance on ground and above ground to the streetscape and to the mews laneway.
Recommendations		**1. Supported.**
Principle 9 **Community**		*Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.*
		a) In a project of this scale the most important contribution to the community is an active and engaged ground plane where the ground floor connects with and passively surveilles the adjoining public domain b) The front facing units present well to the street. c) The inclusion of a front door and pathway from the public domain that addresses the street successfully contributes to the streetscape character of the area. d) Upper levels of the front facing units provide adequate passive surveillance and streetscape activation. e) The second floor balcony on the front facing units provides for an open and engaged relationship with the street.
Recommendations		**1. Supported.**
Principle 10 **Aesthetics**		*Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.*
		a) The aesthetic approach is compatible with the immediate and broader context with pitched and colorbond roofing and the use of high quality and durable materials like face brick. b) The front facing units present well to the street. c) The inclusion of a front door and pathway from the public domain that addresses the street successfully contributes to the streetscape character of the area. d) Upper levels of the front facing unit provide adequate passive surveillance and streetscape activation. e) The second floor balcony on the front facing unit provides for an open and engaged relationship with the street.
Recommendations		**1. Supported.**

Concluding Remarks

The Panel supports the proposal subject to confirmation that Unit Type E Bed 3 facing east does not depend on a high level window and/or invasive privacy screening that prevents access to view and vista for occupants.

The proposed medium-density townhouse development presents a well-considered urban response that positively contributes to the streetscape and broader context. Key design strengths include strong orientation to the public realm, successful integration with Davilak Street, high levels of passive surveillance, and efficient internal layouts with good access to natural light and ventilation. The use of deep soil zones and a pedestrian-prioritised laneway further enhance the environmental quality and amenity of the development.

Design Review progress

	Supported
	Pending further attention
	Not yet supported
	Yet to be addressed

	DR1	*DR2*	*DR3/01*
Principle 1 - **Context and character**			
Principle 2 - **Landscape quality**			
Principle 3 - **Built form and scale**			
Principle 4 - **Functionality and build quality**			
Principle 5 - **Sustainability**			
Principle 6 - **Amenity**			
Principle 7 - **Legibility**			
Principle 8 - **Safety**			
Principle 9 - **Community**			
Principle 10 - **Aesthetics**			

Prepared for: Birchgroup

Prepared by: ARBORITE TREE MANAGEMENT SOLUTIONS

30 October 2025

Tree Survey Report



29-31 Davilak St,
Como WA 6152

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"In nature, nothing is perfect and everything is perfect. Trees can be contorted, bent in weird ways, and they're still beautiful."

- Alice Walker

1. Client

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2. Introduction

The purpose of this report is to provide an independent Arboricultural assessment of a tree set located at 29-31 Davilak St, Como WA 6152 (Fig. 1). Arborite Tree Management Solutions has been employed to establish; tree details, health & condition and useful life expectancy (ULE) to assist with tree retention priorities. A risk assessment will be conducted on the subject trees and recommendations to mitigate associated risks will be provided where necessary.

3. Key objectives

- Retain the subject trees through appropriate management
- Perform visual tree inspection (VTA) on the subject trees to determine health and structure
- Identify scientific and common names
- Determine the subject trees height, width, trunk diameter, tree protection zone (TPZ) and structural root zone (SRZ)
- Establish tree retention values

4. Methodology

- The site was assessed from observations made from ground level on the 22nd October 2025
- Field notes were taken and the information documented was an accurate account of the subject trees on the above specified date
- Australian Standards 4970-2009 – Protection of trees on development sites has been used as a reference for this TPP
- A tape measure was used to determine relevant trees diameter at breast height (DBH)
- Trees with a DBH of less than 100mm have not been surveyed
- The height and spread of the trees were estimated
- A walk by assessment (ISA Level 2 risk assessment) was performed on all trees on site and QTRA risk assessment model was applied to determine levels of risk.
- A Samsung tablet and Geographic Information System (GIS) have been used to capture the tree and its location imposed on Google satellite imagery

5. Limitations

Information contained in this report pertains only to the trees examined on the above specified date of inspection. The tree assessment was performed by a suitably qualified arborist (AQF 5) using a recognised model (VTA) that aligns with the International Society of Arboriculture (ISA). The assessment was limited to a ground based VTA that did not extend to aerial inspections, nor below ground evaluations. The documented, observations, results, recommendations and conclusions given may vary after the site visit due to environmental conditions or variances in site conditions. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject tree may not arise in the future.

6. Site details

6.1 Site Map

The trees' locations (Fig. 11) have been plotted using GIS software and are only accurate to that of standard GPS (4-8m). The points have been manually adjusted using aerial imagery to improve accuracy however, there is a margin of error and some points may not be in their correct (accurate) location.



Fig. 1 - Indicating subject trees at 29-31 Davilak St, Como (Google satellite)

6.2 Feature survey

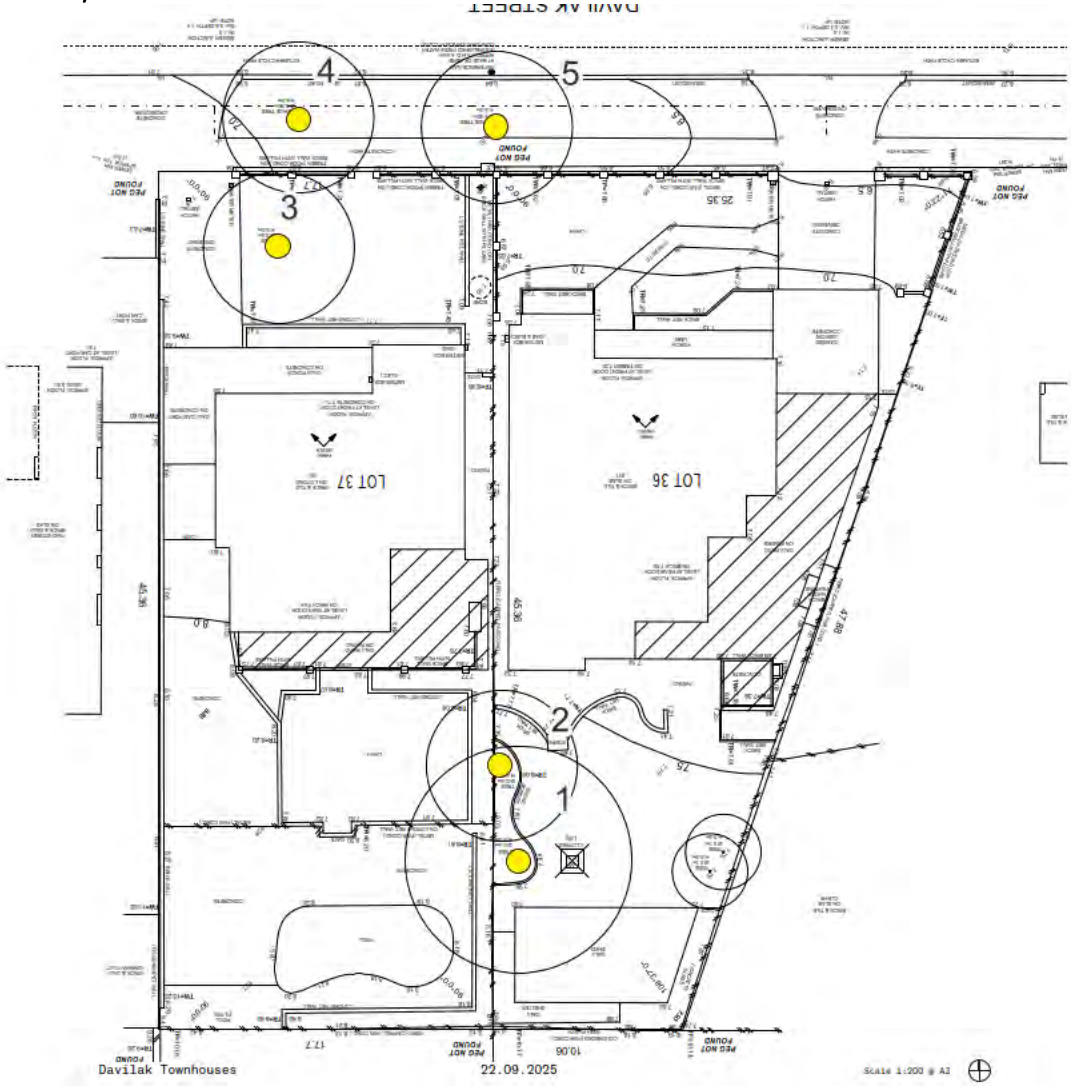


Fig. 2 - Indicating subject trees on feature survey

7. Tree details

7.1 Tree survey

Tag no.	Species	Height (m)	Width (m)	DBH (m)	Health	Structure	Age class	ULE	Retention Priority
1	*Jacaranda mimosifolia*	10-15	10-15	0.6	7	5	semi-mature	15-40	Medium
2	*Schinus sp.*	1-5	1-5	0.2	8	8	juvenile	15-40	Low
3	*Plumeria sp.*	1-5	5-10	0.3	8	8	semi-mature	15-40	Medium
4	*Eucalyptus marginata*	5-10	1-5	0.2	8	8	juvenile	15-40	Medium
5	*Eucalyptus marginata*	5-10	1-5	0.25	8	8	semi-mature	15-40	Medium

Table 1: Tree survey

7.2 Site observations

7.2.1 Tree 1

Tree 1 was previously lopped to head height and has since produced considerable epicormic growth, some of which appear to be poorly attached.

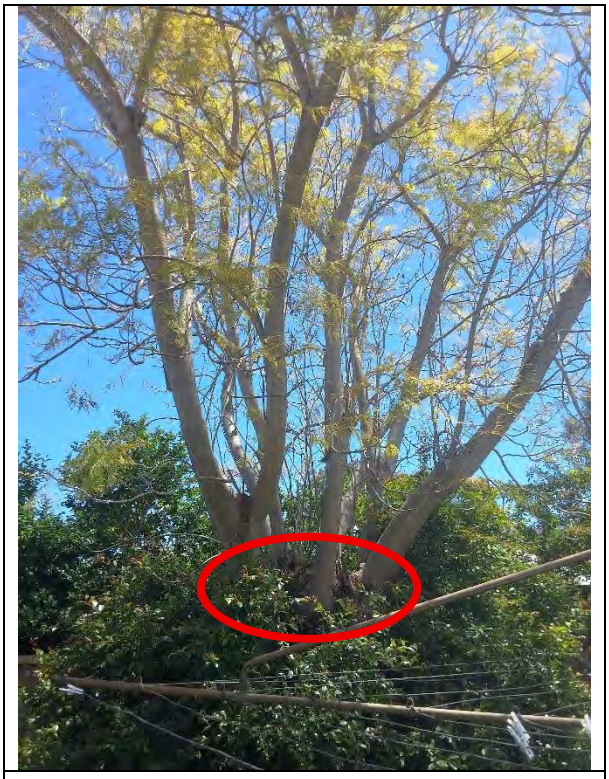


Fig. 3 – Previous lopped points and epicormic growth

7.2.2 Tree 3

Tree 3 is a Frangipani and has been proposed to be transplanted. Follow guidelines in appendix: 15.4 Basic transplant procedure

7.2.3 Trees 4 & 5

Trees 4 & 5 have been awarded a Medium retention value despite their young age and size, due to their status as council-managed trees.

7.3 Trees not surveyed

Trees not surveyed are those that are or may include trees;

1. Not within the scope of this report
2. With a DBH of less than 100mm
3. That have a low retention value/not significant

8. Retention values

8.1 Tree retention

There is always a compromise between retaining trees on a development site and the economic imperatives of land development. Retaining trees on development sites is a fine balance between sustaining that amenity and the economic development of the land. Establishing priorities for the retention of trees is an important part of the planning process if amenity is to be sustained in the long term. If the trees are found to have high significance plans may be altered or construction methods changed to accommodate tree retention. Excavation within the TPZ can be conducted in a non-intrusive manner that can dramatically reduce disturbance to the trees' roots.

8.2 Medium retention value trees

4 trees were categorized as having a medium retention value (Fig. 43). Typically trees in this category are of average quality with an estimated remaining life expectancy of 15–25 years. They have moderate amenity value and make low/moderate environmental contributions. Trees with this retention value warrant minor design consideration in an attempt to allow for their retention or a suitable replanting scheme.

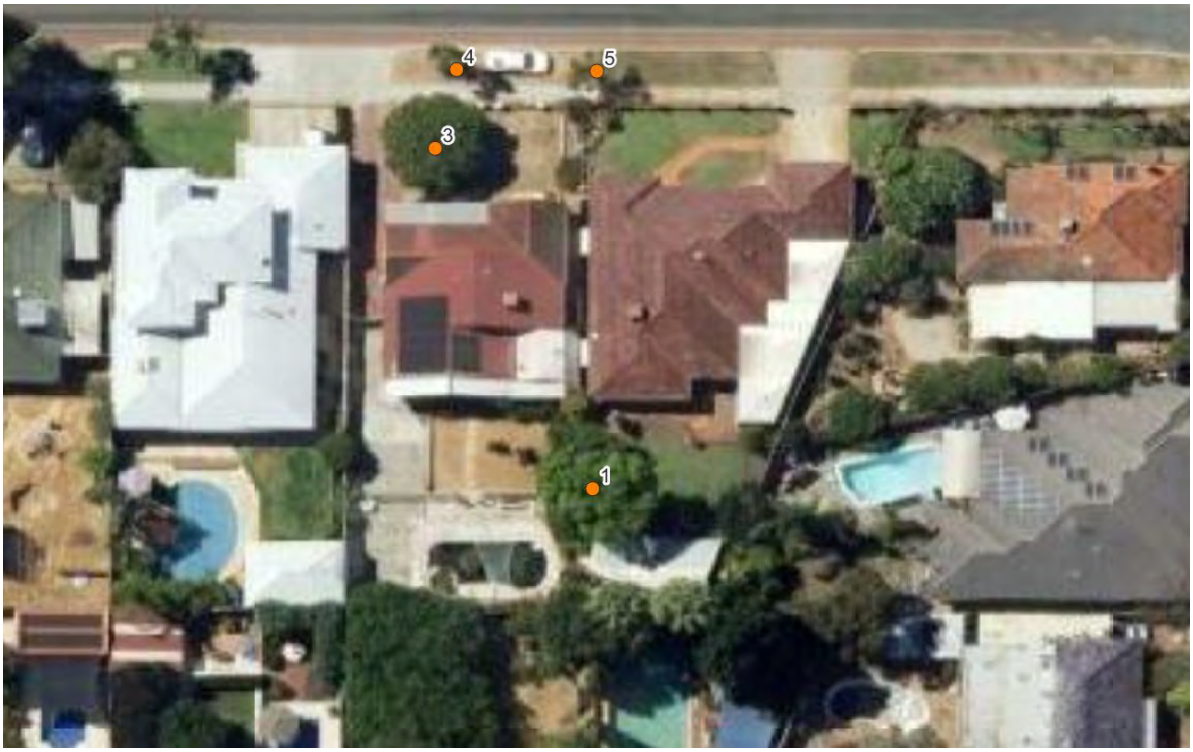


Fig. 4 - Indicating medium priority trees at 29-31 Davilak St, Como (Count 4)

8.3 Low retention value trees

1 tree was categorized as having a low retention value (Fig. 54). Trees in this category are typically of low health and condition with an estimated remaining life expectancy of 5–15 years or; young trees that are easily replaceable, trees of poor health and structure or undesirable species. Low retention value trees do not warrant design consideration.



Fig. 5 - Indicating low priority tree at site 29-31 Davilak St, Como (Count 1)

8.4 Small trees

With present day abilities to easily move small trees or replace them with virtually identical semi-matures, it is inappropriate that they should dictate the long-term layout of a new construction site. For the purpose of this report, trees/shrubs with a DBH of <100mm have not been regarded.

9. Risk Assessment (QTRA)

9.1 QTRA overview

The QTRA system applies established and accepted risk management principles to tree safety management. The system moves the management of tree safety away from labelling trees as either 'safe' or 'unsafe' and thereby away from requiring definitive judgements from either tree assessors or tree managers. Instead, QTRA quantifies the risk of significant harm from tree failure in a way that enables tree managers to balance safety with tree values and operate to pre-determined limits of tolerable or acceptable risk.

Tree safety management should not seek to minimise the risk of falling trees, but should balance the benefits of risk reduction with the associated costs in terms of both lost tree value and financial expenditure and maintain risks and benefits at a reasonable level.

The QTRA method provides a framework for the assessment of the three primary components of tree failure risk. The input values for these components are set out in broad ranges of Target, Size, and Probability of Failure. The QTRA User estimates values for the three components and inputs them to either the QTRA manual calculator or software application to calculate the Risk of Harm.

9.2 Tree risk management

The risks from tree failure are generally very low and high risks will usually be encountered only in areas with either high levels of human occupation or where valuable property can be affected by the

structural failure of trees. Where human occupation and the value of property are sufficiently low, we may be able to identify that the risk is 'broadly acceptable'.

9.3 Tree risk management vs. cost

Risk minimisation is often cited as an objective when managing risks from trees. This is not a reasonable aim because it does not take account of the cost of risk reduction. If reasonable management decisions are to be made, the benefits of controlling a risk must be balanced with its costs, and those costs are not just financial. The tree-related benefits that are lost to risk control are often a substantial cost of managing risks from falling trees.

When considering risks from falling trees, the cost of risk control will usually be too high when it is clearly 'disproportionate' to the reduction in risk. The issue of 'gross disproportion'[5], where decisions are heavily biased in favour of safety, is likely to be considered only where there are annualised risks greater than 1/10, 000.

9.4 Weather affected targets

Often the nature of a structural weakness in a tree is such that the probability of failure is greatest during windy weather, while the probability of the site being occupied by people during those weather conditions is often low. As wind speeds increase to 60-70 knots the failure of branches will increase both in size and number and the population is put on notice that catastrophic tree failure is increasingly likely. In most recreational areas, including the streets of our towns and cities, pedestrian access reduces with inclement weather.

9.5 Land use

The risk assessment has been conducted based on the anticipation of property development. This may include site works, further inspections, contractors entering site etc. It is recommended to conduct a further risk assessment once development has been complete and before opening to the general public.

9.6 QTRA result & recommendations

Tag no.	Species	Tree defect 1	Tree defect 2	Risk rating	Pruning Rec.	Management recommendations	Residual risk
1	*Jacaranda mimosifolia*	Previously lopped	Epicormic growth	low	Yes	1. Consider removal as poor structure and replant	low
2	*Schinus sp.*	Weed species	Multi-stemmed with inclusion	low	Yes	1. Remove and replant as weed species	low
3	*Plumeria sp.*	Multi-stemmed		low	Yes		low
4	*Eucalyptus marginata*			low	No		low
5	*Eucalyptus marginata*	Included unions		low	No		low

Table 2: QTRA result and risk mitigation recommendations

NOTE: Pruning recommendations and comments made are irrespective of the decision to remove or retain the tree.

10. Tree Protection Zone (TPZ)

10.1 TPZ

Tree protection zones (TPZ) are the principal means of protecting trees on development sites and are defined by AS 4970-2009 Protection of Trees on Development Sites (Standards Australia 2009). The TPZ is a combination of the root area and crown area requiring protection. It is an area that is required to be isolated from construction disturbance to ensure continued viability of the tree.

The TPZ for an individual tree is determined as follows (Standards Australia 2009):

TPZ = DBH × 12

That is, the radius of the TPZ = 12 X the DBH measured at 1.4 metres (m).

A TPZ should not be less than 2 m nor greater than 15 m except where crown protection is required.

The TPZ incorporates the structural root zone (SRZ).

10.2 SRZ

The structural root zone (SRZ) is the minimum volume of roots required by the tree to remain stable in the ground (Standards Australia 2009). If the SRZ is breached the chances of windthrow are significantly increased, especially if roots are cut on the same side as prevailing winds. Windthrow is an event where the entire tree fails/falls over. Often, the tree is completely uprooted with devastating results.

It is important to note that the SRZ is not related to tree health. It refers to the physical volume of roots required for the tree to remain stable in the ground. It is in no way related to the physiological requirements of the tree but is the minimum volume of roots required for the tree to remain standing.

11. Impact assessment

11.1 TPZ summary

The table below is a summary of the trees TPZ.

Tag no.	Species	DBH (m)	TPZ (m radius)	SRZ (m radius)	TPZ area (m^2)
1	*Jacaranda mimosifolia*	0.6	7.20	2.16	162.86
2	*Schinus sp.*	0.2	2.40	1.50	18.10
3	*Plumeria sp.*	0.3	3.60	1.50	40.72
4	*Eucalyptus marginata*	0.2	2.40	1.50	18.10
5	*Eucalyptus marginata*	0.25	3.00	1.50	28.27

Table 3: TPZ summary

11.2 Calculating incursions

Using the above table (0), the relative TPZ values can be added to the feature survey and overlaid with concept/development plans to gain a more accurate TPZ incursion figure (Fig. 6). As a general rule;

1. Trees with a TPZ incursion of <10% can be retained and will not require additional arboricultural input
2. Trees with a TPZ incursion of 10-25% can typically be retained with minimal intervention
3. Trees with a TPZ incursion of 25-50% may have retention viability with additional arboricultural input (i.e., design review & root mapping)
4. Trees with a TPZ incursion of >50% or with an SRZ breach will typically require removal. For trees in this category that have HIGH retention values, an additional viability assessment is recommended.

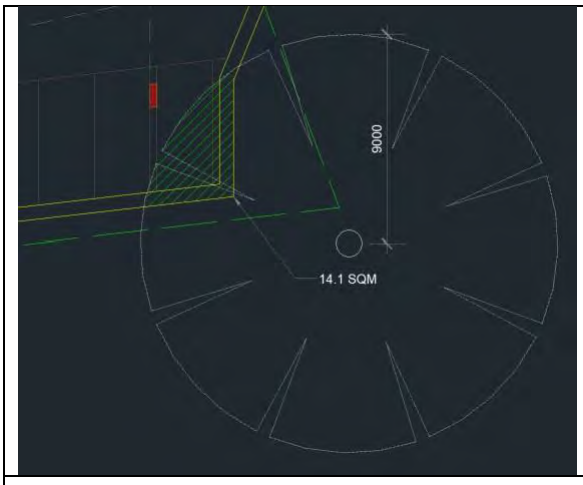


Fig. 6 - An example of TPZ incursion using CAD

12. Discussion

12.1 Tree protection Zone (TPZ)

Tree protection zones (TPZ) are the principal means of protecting trees on development sites and are defined by AS 4970-2009 Protection of Trees on Development Sites (Standards Australia 2009). The tree protection zone (TPZ) is a guideline established to help protect trees, especially during construction. The TPZ is calculated based on the trunk diameter and makes some assumptions as to the likely spread of the tree's roots. Theoretically, the standard allows 100% impact on the TPZ, **provided that the project arborist can adequately demonstrate that the tree will remain viable.**

12.2 Structural root zone (SRZ)

The SRZ is the area of the root system (as defined by AS 4970-2009) used for stability, mechanical support and anchorage of the tree. It is critical for the support and stability of the tree, and provides the bulk of mechanical support and anchorage. Severance of roots (>50 mmØ) within the SRZ is generally not recommended as it may lead to the destabilisation and/or decline of the tree.

12.3 TPZ Incursion:

It may be possible to encroach into or make variations to the standard TPZ. Encroachment includes excavation, compacted fill and machine trenching. Encroachment can be classified as minor or major encroachment.

Minor: If the proposed encroachment is less than 10% of the area of the TPZ and is outside the SRZ.

Major: If the proposed encroachment is greater than 10% of the TPZ or inside the SRZ.

12.4 Root damage

Root damage is the most common cause of damage to trees on construction sites. Mechanical damage reduces the root:shoot ratio and subsequently inhibits the trees' ability to uptake water resulting in symptoms synonymous to drought and can be fatal.

12.5 Root mapping

Root mapping is the process of investigating the presence of subsurface tree roots in a specific location. This can be achieved by vacuum excavation, Ground Penetrating Radar or more commonly hand excavation. Roots are mapped down to a specified depth, usually the depth of the proposed development. Root mapping is used prior to development to locate structural woody roots so that the extent of root loss can be determined and minimised.

12.6 Clean cutting roots

Damaged roots are very susceptible to pathogen infection so it is important to sterilize equipment before cutting each root, using sharp loppers or hand saws to encourage faster healing and good wound compartmentalisation. Aim to cut at root junctions where possible and after each cut has been made, remove the cutting and fill in soil around the remaining root. When the clean cutting has been completed, water the tree well.

12.7 Excavation

Traditional excavation (levelling) can be very impactful to a tree's root system and typically results in shredding or tearing of the tree's roots. A torn or shredded root is much harder for the tree to compartmentalise and exposes the root to harmful pathogens for a longer period of time. Shredded roots should be 'clean cut' to minimise the risk of infection and facilitate healing. **Excavation close to or**

within the trees SRZ can be hazardous. Anchorage roots destroyed in the process can render the tree unstable resulting in an elevated risk of whole tree failure. Backfilling will mask the trees hazardous state and whole tree failure may occur years after the root severance has occurred.

12.8 Manual excavation

Where excavation, demolition or the removal of material is necessary in the TPZ; this should be done manually without the use of heavy machinery to prevent damage to the tree and should be supervised by a suitably qualified arborist (AQF 5 or equiv.)

12.9 Sandy soils

In urban settings, the trees roots are not often where they are expected and can also be influenced by soil type and tree species. A majority of Perth's suburbs are situated on sandy soils that typically have low compaction rates and high filtration that can result on tree roots growing downwards as opposed to the more conventional lateral growth. As a result, it may be possible in certain circumstances to make significant encroachments into the TPZ and often the structural root zone.

12.10 Root pruning

Most trees will tolerate root pruning up to 25% total mass and some species endure considerably more. Given they have space to do so, roots will regenerate in time to compensate for the loss and re-align the root:shoot ratio.

12.11 Tree health amendment prior to construction

Construction works often compromises the growing environment of nearby trees and may place them in a state of stress which may lead to decline or tree mortality. How a tree responds to various stresses will depend largely on their current health. To greatly increase tree viability on construction sites it is recommended to develop a Tree Health Amendment Strategy. This may be a simple as supplying supplementary irrigation and can extend to mulching, soil amendments and nutrient injections etc. This particularly important where the tree is currently showing signs of stress or reduced vitality, or if the tree is predisposed to decline following changes in its environment.

12.12 Tree transplanting/relocation

Transplanting trees is not often economically viable, requires long preparation times and can have marginal success depending on variables such as size and species. HIGH valued trees are typically old, and large in stature making them difficult candidates for transplantation. Conversely, smaller, low valued trees have a greater transplantation success rate but is often harder to justify the expense to do so.

Where a tree has a high retention PRIORITY (e.g. cultural, heritage significance) then transplantation may become a viable alternative to removal. However, careful planning (6-12months) and execution by a suitably qualified/experienced team will be required.

Alternatively, a simpler method can be employed (appendices – Basic transplant procedure) and may achieve a satisfactory outcome (success rate vs. capital expenditure) for small to medium size trees.

13. Recommendations

13.1 Recommendations

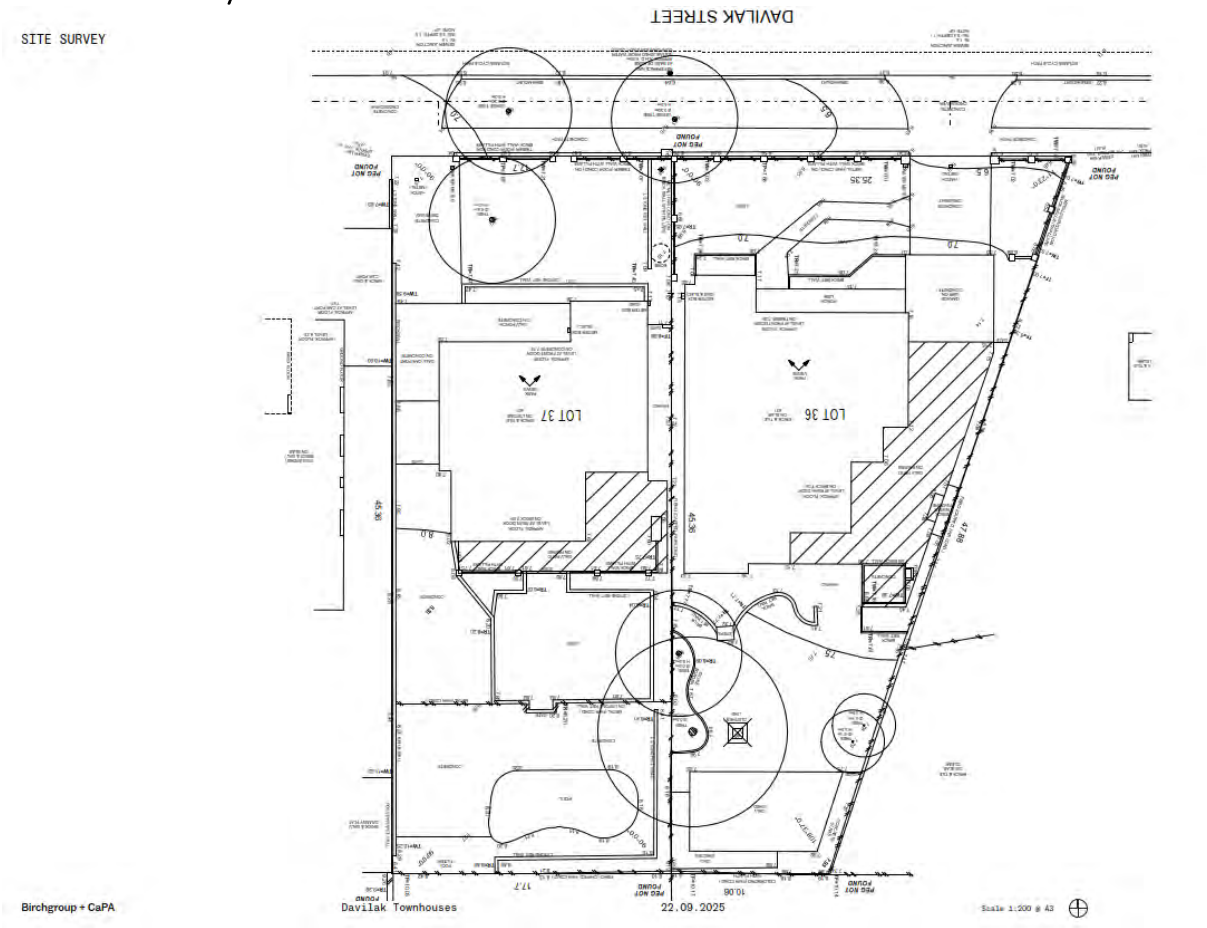
- Overlay TPZ to determine which trees will require removal
- Used the TPZ to determine approximate incursion levels to identify trees that will require further arboricultural input where retention is a priority
- Once plans have been finalised, conduct an impact assessment and draft a tree protection plan detailing measures to protect trees marked for retention throughout the entire construction process.
- Prune tree prior to the commencement of work
- Prior to construction, perform tree health amendments on trees with reduced vitality and ULE marked for retention
- Conduct a further risk assessment prior to handover and/or opening to the general public for access

14. Disclaimer

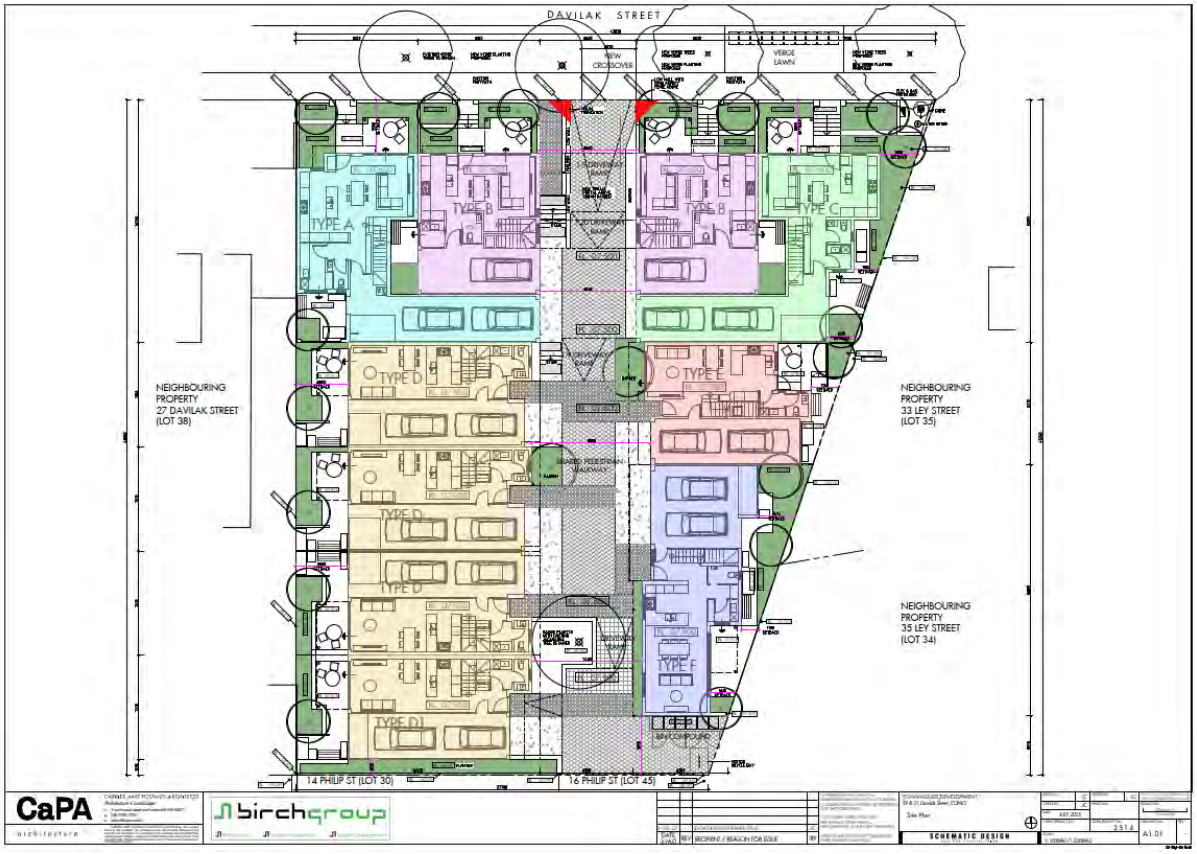
The conclusions and recommendations contained in this report refer to the trees' condition on the day of inspection only. The report should be read and considered in its entirety. All care has been taken using the most up to date arboricultural information in the preparation of this report. The report is based on visual inspection only. No guarantee can be given nor can it be predicted that branch failure or uprooting (windthrow) would not occur as a result of high winds and /or excessive rainfall and other unpredictable events. Tree health and environmental conditions can change at any time due to unforeseen circumstances.

15. Appendices

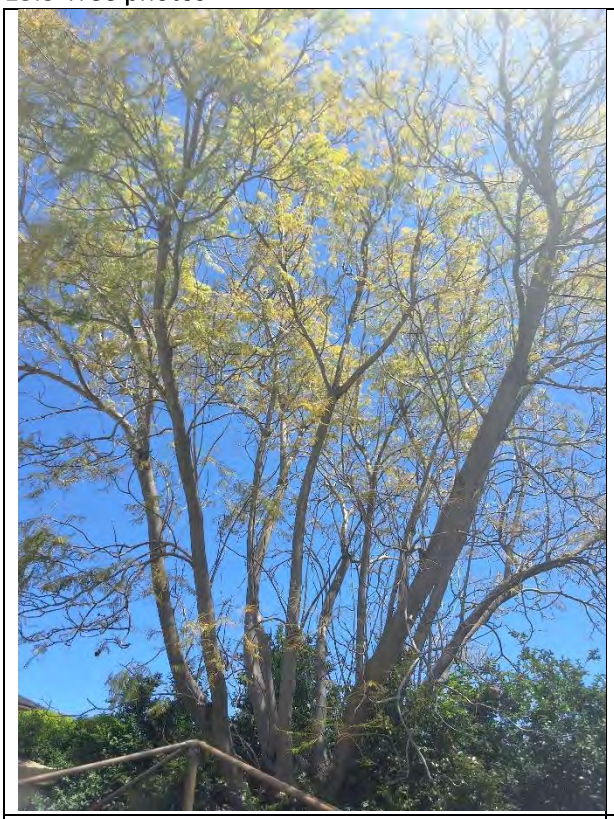
15.1 Feature survey



15.2 Ground floor plan



15.3 Tree photos



Tree 1



Tree 2



Tree 3



Tree 4



Tree 5

15.4 Basic transplant procedure

1. Mark the north side of the tree
2. Determine the root ball size. A larger root ball is preferable but will be dependent on the machinery available. Aim to capture at least the size of the SRZ.
3. Soak the transplantable root ball at least 1 day before transplantation
4. Dig a hole, twice the size of the root ball to be transplanted. Taking particular care to get the depth correct. Digging a little deeper is preferable because it will be relatively easy to suspend the tree a short time and back fill under the ball to achieve the correct height.
5. Mix 25% well composted organic material in with the soil to be used as back fill. Or available top soil that has been previously stored on site.
6. Dig around the tree roots to create the desired root ball width, clean cutting the roots (>40mm) at the perimeter of the desired root ball
7. Apply trunk protectors at the points where slings (or equivalent lifting equipment) are required to prevent unnecessary damage to the trunk.
8. Prune limbs that will likely be damage prior to lifting the tree.
9. Aim to lift the tree directly upwards, stopping and clean cutting additional roots preventing/restricting the lift
10. Use spotters or tag lines to prevent too much swinging of the tree during transport.
11. Lower the tree into the previously dug hole, orientating the tree to face north (as previously marked) and check for correct height before back filling.
12. Back fill with top soil, or soil containing at least 20-25% organics material.
13. Backfill in stages and water in well to remove air spaces and secure the backfill snuggly around the roots. Continue back filling in this manner until the desired soil level height has been achieved.
14. The following day, water in again with a solution designed to stimulate root growth (i.e. fish hydrolysate, kelp) .
15. Mulch around the tree to a depth of 75-100mm
16. Irrigate regularly (in between rain days), supplying at least 100L weekly for the first 6 months, with intermittent fertilising with the same solution as described above.

15.5 Health rating

Assessed trees are given a numerical value to signify their overall health. Several factors and/or symptoms are taken into consideration when assessing the health of a tree. It's vigour and seasonal extension growth, symptoms of decline like deadwood and/or dieback, foliage density, colour, size and intactness as well as signs of pests and/or disease are all appraised.

Rating	Health
10	Exceptional
9	
8	Good
7	
6	Average
5	
4	
3	Poor
2	
1	Dead

Classification	Description
Exceptional	Canopy is full with dense foliage coverage throughout, leaves are entire and are of an excellent size and colour for the species with no visible pathogen damage. Excellent growth indicators, e.g. seasonal extension growth.
Good	Canopy is full with minor variations in foliage density throughout, leaves are entire and are of good size and colour for the species with minimal or no visible pathogen damage. Some minor dead wood and epicormic growth. Good growth indicators.
Average	Canopy has moderate variations in foliage density throughout, leaves not entire with reduced size and/or atypical in colour, moderate pathogen damage. Reduced growth indicators, visible amounts of minor and major deadwood/dieback, and epicormic growth.
Poor	Canopy density significantly reduced throughout, leaves are not entire, are significantly reduced in size and/or are discoloured, significant pathogen damage. Significant amounts of deadwood and/or epicormic growth, noticeable dieback of branch tips, possibly extensive.
Dead	Dead No live plant material observed throughout the canopy, bark may be visibly delaminating

15.6 Structure rating

Assessed trees are given a numerical rating to signify their overall structure. Several factors and/or conditions are taken into consideration when assessing a tree's structure. It's form, branching habit, trunk and lower stem are all appraised.

Rating	Structure
10	Exceptional
9	
8	Good
7	
6	
5	Average
4	
3	Unacceptable
2	
1	

Classification	Description
Exceptional	Good form and branching habit typical of the species. Structural defects are insignificant or undetected. All major unions appear well attached and devoid of anything that could be considered a weakness. All aspects of the tree exhibit no evidence of pathogens. No obvious damage to the trunk and roots.
Good	Canopy devoid of major defects but may exhibit minor damage, disease or decay in the crown, trunk and roots. Branching habit is well formed, spaced and tapered. May contain small amounts of deadwood or have evidence of previous limb failure.
Average	Moderate structural defects, damage, disease or decay that impact longevity. Defects may not reflect an imminent threat
Unacceptable	Serious structural defects that could cause failure within 12 months i.e., active splits, unstable/loose in ground, excessive branch end-weight. Immediate arboricultural intervention recommended to minimise risk.

16. Glossary of terms

ULE – Useful Life expectancy

DBH – Diameter at breast height

TPZ – Tree protection Zone

SRZ – Structural root zone

VTA - Visual tree assessment

QTRA – Quantified tree risk assessment

DTW – Distance to works

TPP – Tree Protection Plan

Waste Management Plan for Townhouse Grouped Dwelling Development

Lot 36 & 37 (No. 31 & 29) Davilak Street, Como

City of South Perth



Prepared For: Birchgroup

Prepared By: Allerding and Associates

NOVEMBER 2025

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TABLE 2 –WASTE GENERATION CALCULATION

TABLE 3 – RESPONSE TO CLAUSE 5.4.1 OF LPP3.1

TABLE 4 – RESPONSE TO CLAUSE 5.8.2 OF LPP3.1

FIGURE 1 – WASTE COLLECTION PROCESS

Document ID: BIR DVL GE / WMP Report

Issue	Date	Status	Prepared by;		Approved by:	
			Name	Initials	Name	Initials
1	21.11.25	DRAFT	John Williamson	JW	Tom Hockley	TH
2						
3						
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1.0 INTRODUCTION

This Waste Management Plan (**WMP**) has been prepared in accordance with the City of South Perth's *Local Planning Policy 3.1 – Waste Management* (**LPP 3.1**) as well as the *WALGA Multiple Dwelling Waste Management Plan Guidelines* (**WALGA Guidelines**). Using these resources, as well as liaising with the waste officers of the City of South Perth (**the City**), the anticipated quantities of general waste and recycling have been calculated and a strategy has been formulated on how to manage on-site general and recycled waste.

This WMP will apply to the proposed grouped dwelling development comprising of a total of 10 dwellings at Lots 36 and 37 (Nos. 31 and 29) Davilak Street, Como (**Subject Site**).

The subject site comprises two conventional lots fronting Davilak Street with a total combined frontage of 43m. The site is zoned Centre and is surrounded by a mixture of residential dwelling types.

This WMP is prepared in accordance with the relevant standards and requirements set out in LPP 3.1, requiring a WMP to be prepared and submitted with a development application for five (5) or more grouped dwellings according to Appendix 1 of the policy.

The objective of this WMP is to outline the details of the waste strategy and the procedures that will be adopted to manage all waste on the subject site.

In line with the objectives of LPP 3.1, the proposed waste management strategy and procedures reflect best practice outcomes, minimising environmental and amenity impacts, and providing both occupants and service providers with convenient, legible and safe access to facilities.

Once approved by the City, waste collection and disposal is to be undertaken in accordance with this WMP, subject to any additional conditions of planning approval.

2.0 BACKGROUND TO WASTE MANAGEMENT PLAN

Pre-lodgement engagement with the City's planning and waste officers occurred in September 2025 with a number of waste management strategies considered, including:

- On-site waste collection via the City's waste collection vehicle;
- Multiple general waste collections per week to limit the number of bins presented on the verge for collection at any one time; and
- Provision of a consolidated recycling bin store to reduce the overall number of recycling bins required to service the development.

Given the design of the proposed grouped dwelling development involving one consolidated vehicle access from Davilak Street, a centralised driveway servicing the 10 dwellings, and allowing for retention of existing trees on the verge, there is insufficient available of space within the subject site for the manoeuvrability of a waste collection vehicle. For these reasons, on-site collection is not viable for this proposal.

The City's waste officers have also confirmed that multiple weekly collection under an extended schedule is not available for the proposed development.

A communal bin store for recycling has therefore been identified with the objective of reducing the total number of bins through the use of 360L bins. Under this arrangement, residents will store general waste bins within their own private garage, but utilise the communal store for the disposal of recycling. The provision of recycling within a communal store also allows for an averaging of recycling disposal across the development, accounting for the fact that some residents are unlikely to require the full recycling allocation. This waste management strategy is detailed below.

3.0 SUMMARY OF DEVELOPMENT

This application seeks approval to create a grouped dwelling development on Davilak Street comprising:

- A total of 10 two-storey townhouse grouped dwellings, comprising, nine (9) three-bedroom townhouses, and one (1) two-bedroom townhouse is proposed; and
- An internal common driveway from Davilak Street servicing the development.

In accordance with the City's waste generation rates, **Table 1** provides for the waste generation and collection frequency for the development.

4.0 WASTE SERVICE PROVIDER

Clause 5.1.1 of LPP 3.1 requires stipulates that the City shall provide waste collection services to all residential development.

The application proposes collection of waste by the City per Clause 5.1.1.

5.0 WASTE GENERATION

5.1 Waste and Recyclables Capacity

Appendix 2 of LPP 3.1 provides the following applicable waste generation rates for residential development:

Table 1: Waste Generation Rates

Type of Premises	Garbage Generation	Recycling Generation
Residential		
2-bedroom dwelling	160L per week	80L per fortnight
3+ bedroom dwelling	240L per week	240L per fortnight

Table 2 below details the calculated waste generation rates for the proposed residential development based on Appendix 2.

Table 2: Waste Generation Calculation

Residential Dwelling Type	Garbage Generation	Recycling Generation
2-bedroom dwelling (x1)	160L per week	80L per fortnight
3+ bedroom dwelling (x9)	2,160L per week	2,160L per fortnight
Total	**2,320L per week**	**2,240L per fortnight**

Based on the above rates in **Table 2**, the following bins are proposed to be used:

- Garbage - Refuse Mobile Garbage Bin (**MGB**) (collected weekly) – 10 x 240L bins (total 2,400L capacity).
- Recycling – Recycling MGB (collected fortnightly) – 6 x 360L bins (total 2,160L capacity).

While the total recycling capacity is 80L less than the calculated fortnightly generation, the provision of recycling MGBs within a common storage facility allows for an averaging of recycling disposal across the development and accounts for the likelihood that some residents will not require the full recycling generation allocation.

5.2 Other Waste Requirements

The proposal does not involve the generation of liquid waste, hazardous waste or medical waste products controlled by the *Environmental Protection (Controlled Waste) Regulations 2004.* No processing, retail and/or wholesale of animal products will occur on-site.

6.0 WASTE COLLECTION ARRANGEMENT

The proposed development will require off-site servicing due to design constraints that prevent practical on-site waste collection.

The site layout of the development has accounted for the retention of existing verge trees and consolidation of vehicle access to a single driveway servicing all 10 dwellings.

As the form of development reflects a conventional grouped dwelling arrangement where dwellings are provided with independent garages and access, there is insufficient space at ground level to accommodate turning movements of the City's standard rear loader waste collection vehicle.

Off-site waste collection has been considered against the provisions of for Off-Site Servicing under Clause 5.4.1 of LPP 3.1 and justified in **Table 3** as follows:

Table 3: Response to Clause 5.4.1 of LPP3.1

Clause 5.4.1 Provision	Response
(a) The bin size utilised for collection is no larger than 240L; and	It is proposed that 240L bins are used for garbage and 360L bins are used for recycling. The use of 360L bins for recycling was recommended by the City's Waste and Fleet Coordinator in order to reduce the number of recycling bins presented on the verge on collection day. Having regard to the demonstrated site constraints, this arrangement is considered best practice having regard to the objectives of LPP 3.1.
(b) No more than eight (8) bins (including both general waste and recycling) are required for collection as part of a regular collection schedule; and	The subject site comprises two residential lots with a total frontage of 43m. Therefore, if divided across the two existing frontages, the waste collection arrangement will involve the presentation of five (5) bins per frontage on general waste collection days and eight (8) bins per frontage on general waste and recycling collection days. This arrangement satisfies the policy measure.
(c) The bin collection area takes up no more than 1/3 of the street frontage, excluding the width of the crossover (refer to Figure 2);	With 0.5m minimum spacing between placed for kerbside collection, the bin collection area will occupy a total length of 18.2m which is marginally greater than 14.5m (or 1/3 of the street frontage). Having regard to the demonstrated site constraints, this arrangement is considered best practice having regard to the objectives of LPP 3.1.
(d) Bins can be presented for collection without obstructing on-street or embayed parking, footpaths, vehicle sightlines, street trees (including tree canopy) and street furniture;	The proposed bin collection area will not affect any street parking, footpaths, vehicle sightlines, street trees and street furniture. This arrangement satisfies the policy measure.
(e) A minimum 0.5m spacing is required between bins placed for kerbside collection;	A minimum 0.5m spacing can be achieved between bins placed for kerbside collection across the frontage of the subject site. This arrangement satisfies the policy measure.
(f) Bin pads (e.g. paving or hardstand) are not proposed in the verge unless required due to site constraints (e.g. a significant change in verge gradient);	No bin pads are proposed within the street verge. This arrangement satisfies the policy measure.
(g) Surfaces of all bin travel paths are designed to allow easy transportation of the bins. Travel paths are level and with smooth non-slip surfaces free of obstacles and steps; and	Bins can be easily transported from dwellings and the communal recycling bin store via the internal communal driveway to the street verge with uninterrupted paving to the verge collection area. This arrangement satisfies the policy measure.

Clause 5.4.1 Provision	Response
(h) Gradients of bin travel paths must not exceed 1:14.	The bin path gradient does not exceed 1:14. This arrangement satisfies the policy measure.

Given the above, off-site servicing is appropriate for the development and can adequately be accommodated without adversely impacting the streetscape.

A copy of the waste collection process is included at **Figure 1**.

7.0 WASTE STORAGE

7.1 Private Dwellings (Garbage)

Bin storage for one (1) 240L Garbage MGB per dwelling will be provided:

- Within the locked garage of each dwelling, integrated into the design as a separate designated storage unit that is separate to the garage parking area so as not to encroach into that space;
- To a sufficient dimension to comfortably accommodate the storage of one (1) 240L MGB's with manoeuvrability to transfer bins for collection; and
- Screened from view from both public and private spaces.

7.2 Communal Bin Store (Recycling)

The recycling bins will be stored within the designated enclosed communal bin store located in the south-east corner of the subject site. Residents will be able to access the bin store areas via the internal communal driveway.

Signage will be placed on the bin store doors outlining the frequency of collection, management arrangements and the responsibilities and contact details of the nominated individual responsible for managing the recycling collection process.

The communal recycling bin store has been designed with due regard to the provisions of Clause 5.8.2 of LPP 3.1 as outlined in **Table 4** below:

Table 4: Response to Clause 5.8.2 of LPP3.1

Clause 5.4.1 Provision	Response
(a) Provided with a mains water supply, with a sealed floor graded to a plumbed sewer drainage outlet to allow for the washing of all room surfaces and for the cleaning of bins as required;	A tap will be provided in the vicinity of the bin store for cleaning purposes. The floor will be sealed and graded to a plumbed sewer drainage outlet to allow for the washing of all room surfaces and for the cleaning of bins.
(b) Designed with walls not less than 1.8m in height and access point with self-closing doors of not less than 1.0m in width;	The recycling bins will be provided within a cabinet of 1.3m in height and will be fitted with self closing doors of not less than 1.0m in width. Given the intention to store only recycling in the communal bin store, the cabinet design is considered acceptable as bins will not require the same level of ventilation and cleaning as general waste bins.
(c) Access is provided to all bins, allowing for a minimum 50mm spacing around all sides, including between walls, other bins;	Provided for as part of the bin enclosure.
(d) Provided with a smooth and impervious floor of not less than 100 millimetres in thickness;	Provided for as part of the bin enclosure.
(e) Located for convenient disposal of recyclables by residents/tenants;	The location of the bin store is in the south-eastern corner of the subject site which is conveniently accessible via the internal pedestrian pathways connecting each dwelling.
(f) Not readily accessible by the public; and	Being located in the south-eastern corner of the subject site, the bin store is located to avoid access by the public.
(g) Designed to be undercover to prevent storm water to enter into the sewer drainage outlet.	Provided for as part of the bin enclosure.

8.0 RESPONSIBILITIES FOR BIN COLLECTION

General waste will be collected on a weekly schedule and recycling will be collected on a fortnightly schedule.

It is the responsibility of the residents for ensuring that garbage collection is maintained according to the off-site servicing provisions contained within this document.

A caretaker/maintenance representative or nominated resident will be responsible for managing the communal recycling collection process.

The following outlines the collection process: (refer **Figure 1**):

- On collection day, residents will wheel garbage bins out from the garages and position them on the verge for collection.
- On recycling days, the nominated individual will wheel recycling bins out from the bin store and position them on the verge for collection.
- The pathway between the bin store area and the bin presentation area is a flat sealed surface and will be kept free of obstacles.

- Once garbage and recycling collection is completed, residents will be responsible for returning garbage bins to their garages and the nominated individual will be responsible for returning recycling bins to the bin store.

9.0 FREQUENCY OF COLLECTION

Weekly general waste collection and fortnightly recycling collection will occur on a Wednesday by the City's refuse collection services in accordance with the City's *2025 Bin Collection Calendar.*

10.0 ESTABLISHMENT OF WASTE MANAGEMENT PLAN AND ONGOING MANAGEMENT

Upon occupation of the development, the Waste Management Plan will be provided to the Strata Body who will assign and implement the waste management systems as set out in this document. The Strata Body will be responsible for providing a copy of the Waste Management Plan to all occupants of the building and the caretaker/maintenance representative or nominated resident.

The responsibilities of the caretaker/maintenance representative or nominated resident will be:

- Monitoring and maintenance of the communal bin storage area;
- Cleaning of the recycling bins and the bin storage areas as required;
- Transporting the recycling bins to and from the bin collection area for collection days;
- Installing signage as required in the recycling bin storage area; and
- Ensuring that the residents are aware of the waste management plan and their responsibilities.

11.0 CONCLUSION

The proposed waste management arrangement set out in this WMP provides sufficient storage and display areas for the proposed general waste and recycling bins based on the estimated waste generation volumes. This demonstrates that adequate storage areas have been provided and off-site collection of general waste and recycling can be achieved in line with the City's planning framework.

OVERALL GROUND FLOOR PLAN

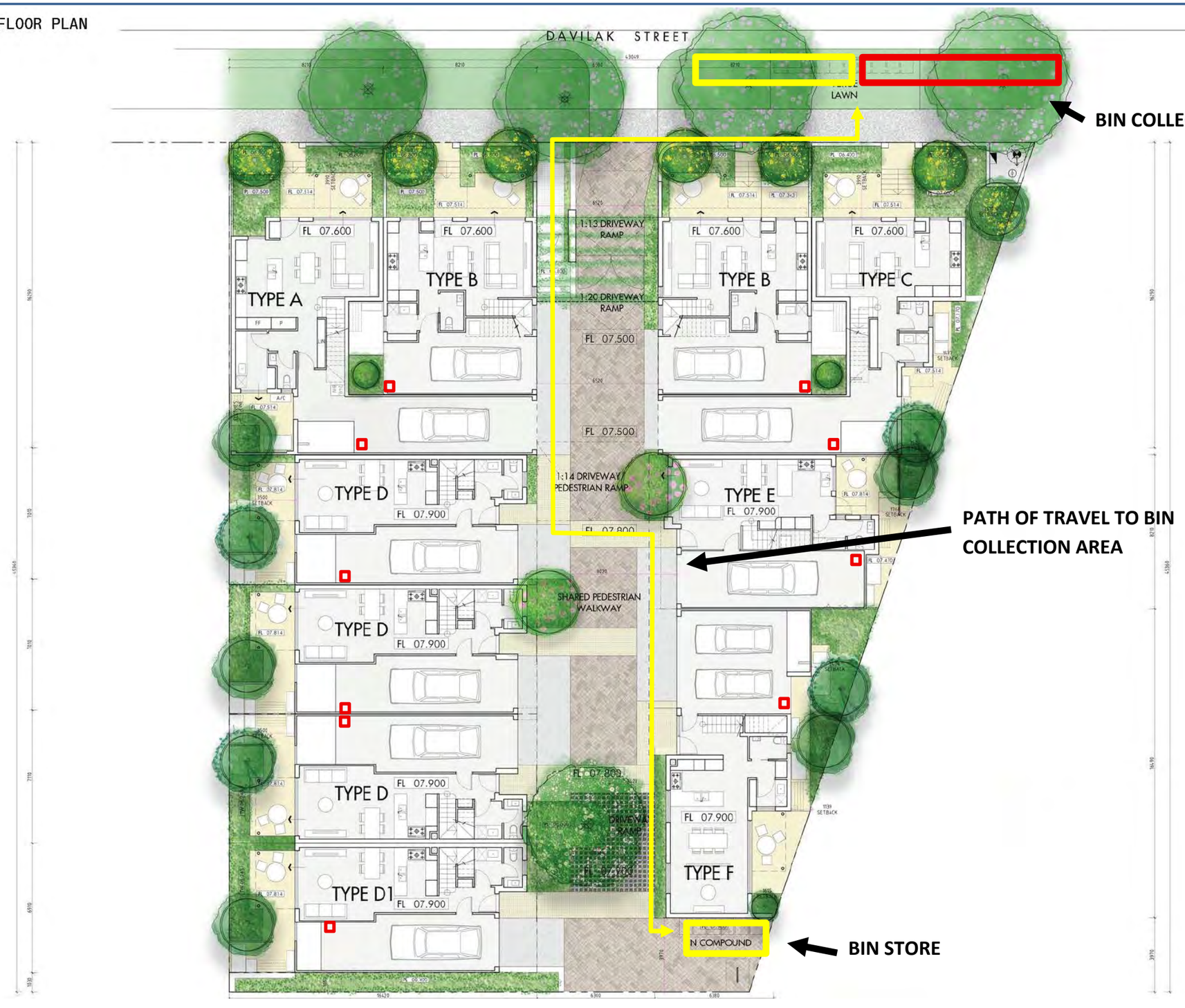


Figure 1 – Waste Collection Process

Development Application for Townhouse Grouped Dwelling Development

Lot 36 & 37 (No. 31 & 29) Davilak Street, Como

City of South Perth



Prepared For: Birchgroup

Prepared By: Allerding and Associates

NOVEMBER 2025

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Document ID: BIR DVL GE / 251120

Issue	Date	Status	Prepared by;		Approved by:	
			Name	Initials	Name	Initials
1	13/11/2025	DRAFT	John Williamson	JW		
2	21/11/2025	FINAL	John Williamson	JW	Tom Hockley	TH

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1.0 EXECUTIVE SUMMARY

Allerding & Associates represent Birchgroup Pty Ltd (**Birchgroup**) in respect of this application for development approval to construct ten (10) new townhouse dwellings over Lot 36 and Lot 37 (No. 31 and No. 29) Davilak Street, Como (**subject site**).

The subject site is located within the 'Davilak' Quarter pursuant to the Canning Bridge Activity Centre Plan (**CBACP**), which was developed over the recognised activity centre area that straddles the Local Government boundaries of The City of South Perth, and the City of Melville. The area is less than 8km from the Perth CBD, and noted for its proximity to major transit networks, commercial centres, and its picturesque location on the Swan and Canning Rivers.

The Davilak Quarter identified as south of Canning Highway and north of Manning Road, is characterised as an almost exclusively residential area with a prevalence of established single and grouped dwellings. Higher density residential development is also emerging within the Quarter in accordance with the CBACP. The prevalence of parkland is a feature of the Davilak Quarter and of particular relevance to the proposal as the subject site is located directly adjacent Neil McDougall Park.

This application responds to the characteristics of the Davilak Quarter and the immediate site context through the provision of ten (10) high-quality townhouse grouped dwellings. The proposal will contribute to the City's intent to increase housing density in order to improve land efficiency and support the facilities within the CBACP area, whilst also committing to a feature landscaping outcome that will enhance the streetscape through its interaction with the significant parkland directly to the north.

Respecting the nature of the established built form along Davilak Street in proximity to the subject site, the proposal has opted for the delivery of two-storey development notwithstanding the opportunity for greater height under the CBACP.

The development responds to the specifics of the subject site, the characteristics of the locality, and will deliver a residential offering consistent with the local planning framework, designed to enhance the local character. The support of the proposal by the City of South and Development Assessment Panel is therefore respectfully requested.



Figure 1: Highly Landscaped Common Area and Dwellings

2.0 INTRODUCTION

The Development Application proposes the construction of ten (10) new townhouse grouped dwellings over the subject site. The dwellings will each be two storey townhouses, containing two or three bedrooms, kitchen and living spaces. Whilst consistent in offering, the dwelling types vary in layout to suit the specific configuration of the subject site and enable diversity in housing options for future occupant preference. The subject site will be held in single ownership and will provide for additional supply for long-term rental accommodation within the locality to address housing demand.

A communal vehicle access is the primary service point for the development from Davilak Street to the north, which will enable vehicle access to the respective townhouse dwellings.

The design responds to the local planning framework, providing for an increase in residential density in accordance with the vision of the CBACP. Whilst contributing to desired density, the two-storey development represents a considered development approach within the locality, respecting the established residential development form.

Interacting with the adjacent parkland, a site-specific landscaping response enhances the greenery within the streetscape. The provision of landscaping will deliver functional, high amenity spaces for future residents and beautify the public realm.

We submit the townhouse development over the subject site as proposed is appropriate for approval, and has been thoroughly discussed with the City's planning department, and received strong Design Review Panel (**DRP**) support. Matters raised by the DRP have been fully addressed.



Figure 2: Aerial Photo

3.0 SITE DETAILS

3.1 Subject Site

The particulars of the subject site are described in **Table 1**.

Table 1: Site Details

Lot Number	House Number	Plan	Volume	Folio	Site Area
36	31	6392	1711	212	803m^2
37	29	6392	1167	220	803m^2

A copy of the Certificates of Title is included as **Annexure 2**.

Lot 37 is a rectangular block characterised by a flat topography. Lot 36 is a non-conventional shape tapering to the southern end, and also has a flat topography. Refer to the Aerial Photo at **Figure 2**.

3.2 Location and Context

The subject site, situated within the suburb of Como, is located 6km south of the Perth CBD. The site has a single frontage to Davilak Street to the north. The site is surrounded by existing residential dwellings on the rear and sides. Refer to the Aerial Photograph and Location Plan included in **Figure 2** and **Figure 3** respectively.

The site is situated within walking distance of high frequency transport from Canning Bridge Train Station (680m), the commercial centre on Ley Street (220m), and two large public parks.

3.3 Servicing

The subject site is fully serviced with reticulated water, power, sewerage/drainage, and telecommunications infrastructure.



Figure 3: Location Plan

4.0 PROPOSED DEVELOPMENT

Birchgroup is proposing the construction of ten (10), two-storey townhouses over the subject site. The proposal will comprise the following house types:

Townhouse Type 'A'

- Two bedrooms and a study, kitchen, dining and living areas;
- A ground floor courtyard garden and first floor balcony; and
- A garage with a single parking bay.

Townhouse Type 'B'

- Two bedrooms and a study, kitchen, dining and living areas;
- A ground floor courtyard garden and first floor balcony; and
- A garage with a single parking bay.

Townhouse Type 'C'

- Two bedrooms and a study, kitchen, dining and living areas;
- A ground floor courtyard garden and first floor balcony; and
- A garage with two tandem parking bays.

Townhouse Type 'D'

- Three bedrooms, kitchen, dining and living areas, along with a study;
- A ground floor courtyard garden and first floor balcony; and
- A garage with a single parking bay.

Townhouse Type 'E'

- Three bedrooms, kitchen, dining and living areas;
- A ground floor courtyard garden; and
- A garage with a single parking bay.

Townhouse Type 'F'

- Three bedrooms, kitchen, dining and living areas;
- A ground floor courtyard garden and first floor balcony; and
- A garage with two side-by-side parking bays.

All townhouses will be serviced by a communal, central driveway that is also from Davilak Street to the north.

A full set of plans is included in the Architectural Package at **Annexure 3**.

4.1 Development Form

The development will comprise a face brick and render finish that will be light brick with feature white render elements. This will be complemented by metal infill that will be in the form of balcony balustrading, pergola covering, and front fence panels.

Light green coloured infill will be incorporated into the front fencing, with a complementary coloured cladding under the dwelling eaves, light green garage doors and downpipes.

The colours and materials are carefully selected to complement the landscaping selections over the site which will form a connection to Neil McDougall Park.

4.2 Landscaping

There is presently limited street tree planting toward to the eastern end of Davilak Street adjacent Neil McDougall Park, noting generally lawned gardens with low level shrubs contained within street setback areas. By contrast, this development will introduce two (2) new mature street trees to the site frontage, along with several new small and medium size trees complemented by low level shrubs and plantings within the street setback to beautify the frontage. The two (2) existing trees within the verge will be protected and retained. The landscaping response will significantly enhance the streetscape and connect the site with the significant parkland adjacent.

Within the site, the landscaped design intent revolves around generous private gardens on the ground floor of each townhouse dwelling, new trees around the internal communal driveway, and perimeter planting to the lot boundaries. Planting on-structure is a core component of the design and is particularly prominent addressing the internal communal areas.

We note a total of 160m^2 of deep soil is provided over the site, along with several new small trees (and two large verge trees), exceeding the required planting as per the R-Codes Volume 2.

An existing Jacaranda tree, initially intended to be retained, will be replaced with a White Crepe Myrtle ('Lagerstroemia Natchez') as a result of the aboricultural advice received (refer Arborist Report at **Annexure 4**).

The landscaping outcome is included in the Architectural Package at **Annexure 3.**



Figure 4: Gated Pedestrian Entry and Façade

Environmentally Sustainable Design (ESD)

Emergen were engaged to prepare a Sustainable Design Assessment Report (**SDAR**) for the development. The purpose of the SDAR was to outline the suitable industry benchmark for demonstrating best practice approach to ESD.

The SDAR notes:

> *The development is designed to enhance the local streetscape by delivering high-quality, sustainable housing that respects and complements the suburb's existing low- to medium-density residential character.*

With respect to sustainability targets, the SDAR identifies the following goals:

- Integrate passive solar design principles into optimising solar access in winter and shading in summer.
- Enhance energy performance by reducing consumption through efficient design and the use of renewable and low-energy systems.
- Efficient water fixtures.
- Reduce impacts of heat island effect.
- Low carbon options.
- Enhance indoor air quality.

Those sustainable development goals inform substantial sustainabilty commitments throughout the development.

A copy of the SDAR is contained at **Annexure 5** to this report.

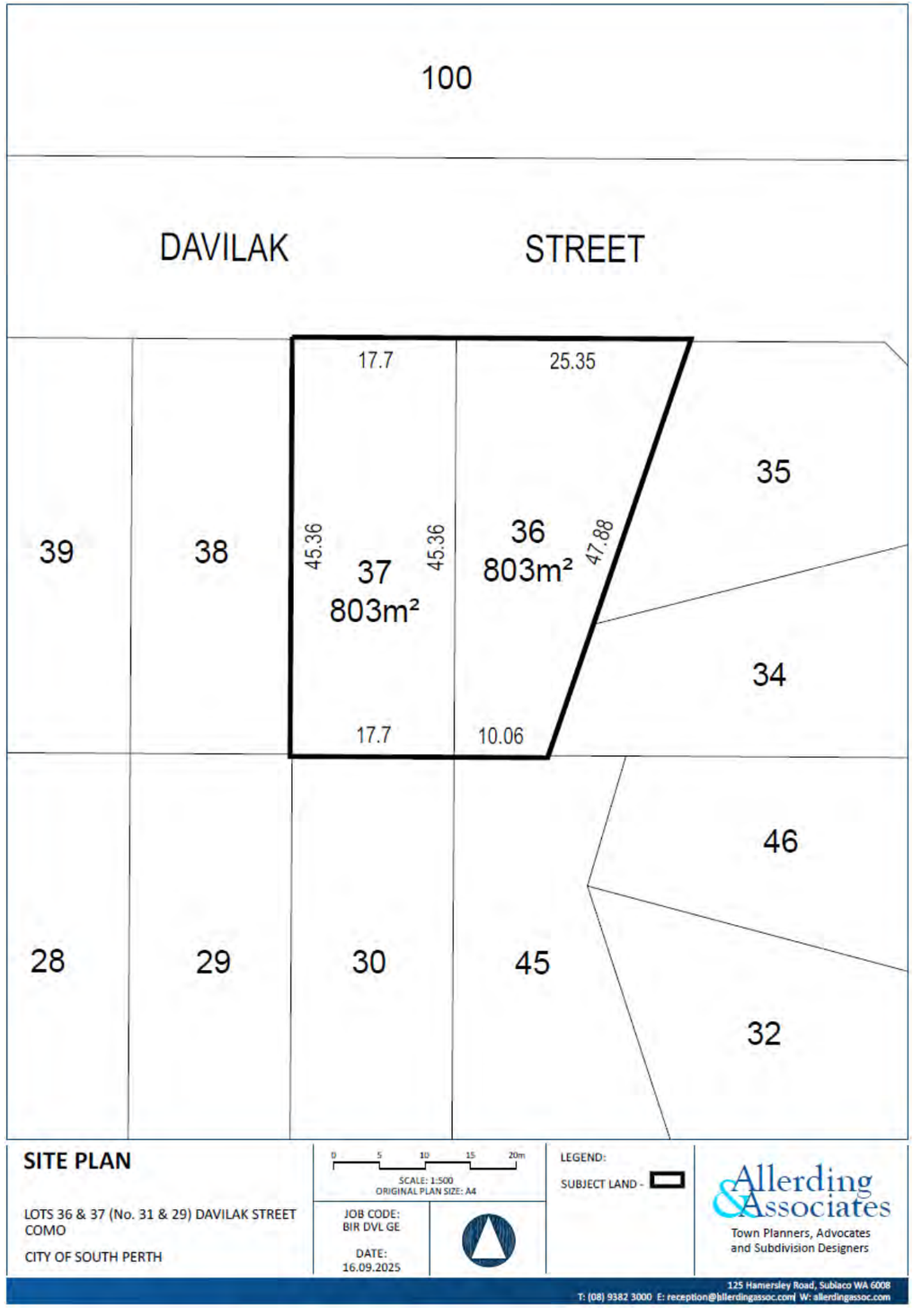


Figure 5: Site Plan

5.0 ASSESSMENT UNDER THE STATE PLANNING FRAMEWORK

The planning framework relevant to this proposal supports the proposal in line with the Government's statutory and strategic documents. These documents recognise the importance of appropriately planned and situated residential infill as a sustainable measure to accommodate the planned growth projected for Perth to 2050. The rate and scale of development in the Perth Metropolitan Region has grown significantly, and this is expected to continue in accordance with the projections set out in State Government policy which is planning for population growth of the Perth and Peel regions to 3.5 million in 2050. The role of the subject site in providing a new supply of residential dwellings has therefore become significantly more important as is reaffirmed in the Regional and Local Planning Framework.

5.1 Metropolitan Region Scheme

The subject site is zoned "Urban" under the Metropolitan Region Scheme (**MRS**).

5.2 Perth and Peel @ 3.5 Million

The *Perth and Peel @3.5 Million* strategic suite of documents has been developed to realise the visions encapsulated in *Directions 2031 and Beyond* and the *State Planning Strategy 2050* and respond to deepening and emerging challenges, such as how local and state government can achieve infill development to deliver a more compact and connected city. It focuses on infill and consolidation, and also seeks to promote the connectivity and development of activity centres, noting a population growth of 3.5 million by 2050.

Significantly, it notes that increases in population growth translate into the demand for 800,000 new dwellings within the Perth and Peel Region by 2050. To accommodate the new dwellings needed, the core and frame areas of activity centres are a key focus for increasing residential densities, together with a mix of uses. In particular, the documents seek to provide opportunities for higher-density residential development, particularly around activity centres, station precincts and along high-frequency public transport routes. *Perth and Peel @ 3.5 Million* outlines 10 consolidation principles for guiding infill. The consolidation principles for guiding infill that the proposal contributes to are housing and urban corridors.

In increasing residential densities in and around activity centres, the *Central Sub-Regional Planning Framework* (**CSPF**) aims to minimise the impact of urban consolidation and infill development on existing suburbs and retain the existing built-up residential character and amenity. *SPP 4.2: Activity Centres for Perth and Peel* identifies the nearest activity centre as Canning Bridge, which is a District Centre in the Central Sub-Region. Consequently, the subject site is contained within the CBACP area, which was developed to guide land use and development within the precinct surrounding the station. The development is consistent with the land use type, and built form desired by the CBACP.

The proposal is consistent with principles of *Perth and Peel @ 3.5 million*.

5.3 State Planning Policy 3 – Urban Growth and Settlement

The policy sets out the principles and considerations which apply to planning for urban growth and settlement in Western Australia. A key objective of the policy is to:

> *"... promote the development of sustainable and liveable neighbourhood form which reduces energy, water and travel demand whilst ensuring safe and convenient access to employment services by all modes, provides choice and affordable housing and creates an identifiable sense of place for each community".*

Clause 5.1 of SPP3 outlines the policy measures for creating sustainable communities. The policy recommends the following measures:

- *variety and choice in the size, type and affordability of housing to support a range of household sizes, ages and incomes and which is responsive to housing demand and preferences.*

- *supporting higher residential densities in the most accessible locations, such as, in and around town and neighbourhood centres, high frequency public transport nodes and interchanges, major tertiary institutions and hospitals, and adjacent to high amenity areas such as foreshores and parks.*

- *good urban design which creates and enhances community identity, sense of place, liveability and social interaction in new and existing neighbourhoods.*

The development over the subject site is consistent with the measures listed above, and the objectives of SPP3.

5.4 State Planning Policy No. 4.2: Activity Centres for Perth and Peel

The purpose of SPP4.2 is to ensure decisions relating to planning and development consider "the distribution, function, broad land use, access and urban form considerations for activity centres". A key outcome sought by the policy is reducing the overall need to travel and supporting the use of existing public transport, cycling and walking for access to services, employment and facilities. The policy also seeks to "encourage and consolidate residential and commercial development in activity centres so they contribute to a balanced network".

The Canning Bridge Activity Centre is identified as a "District Centre" under Table 2: Activity Centres Hierarchy of the policy, with the purpose of:

> *District centres have a greater focus on servicing the daily and weekly needs of residents. Their relatively smaller scale catchment enables them to have a greater local community focus and provide services, facilities and job opportunities that reflect the particular needs of their catchments.*

Clause 5.2.2 of the policy outlines provisions for residential density and states:

> *(1) Commercial and residential growth should be optimised through appropriately-scaled buildings and higher-density development in walkable catchments of centres.*
>
> *(2) Higher density housing should be incorporated within and immediately adjacent to activity centres to establish a sense of community and increase activity outside normal business hours...*

The development is generally consistent with the objectives and intent of the policy.

5.5 State Planning Policy 5.4 – Road and Rail Noise (SPP 5.4)

State Planning Policy 5.4 (**SPP 5.4**) applies to the preparation of development proposals where a noise sensitive land use is within the policy's trigger distance of a transport corridor as specified in the Policy.

The subject site is approximately 180m from Manning Road. Despite the setback to these major transport corridors, the subject site is within the specified trigger distance.

Therefore, Herring Storer Acoustics were engaged to prepare an Acoustic Report and Noise Management Plan (**NMP**) for the development.

The NMP concludes:

> *Noise measurements and modelling were undertaken to determine the noise received within the development. Noise received within the development complies with the requirements of State Planning Policy 5.4. No acoustic construction requirements are recommended.*

A copy of the Acoustic Report and NMP is contained at **Annexure 6**.

5.6 State Planning Policy No. 7.0: Design of the Built Environment

State Planning Policy No. 7.0: Design of the Built Environment (SPP 7.0) seeks to deliver the broad, economic, environmental, social and cultural benefits derived from good design outcomes that support consistent and robust design review and assessment processes across the State.

To achieve this SPP 7.0 sets out the objectives, measures, principles and processes which apply to the design and assessment of built environment proposals through the planning system. The policy provides the overarching framework for a range of supporting State Planning Policies that provide design quality guidance for specific types of planning and development proposals.

Design quality mechanisms (measures) within SPP 7.0 Include:

1. Design Principles - which assist in establishing a defining of 'good design' that can inform the design, review and decision-making processes for built environment proposals across the State.

2. Design Review - an independent and impartial evaluation process through which a panel of experts on the built environment assesses the design of a proposal.

3. Design Skills - involves the use of competent and skilled architects for the design and planning process to achieve good design outcomes.

This proposal has been designed by experienced architects who have specifically addressed the Policy's design principles in designing the proposal. Moreover, the CBACP's Design Review Panel (**DRP**) has reviewed the proposal, which has now been modified to respond to the DRP's recommendations. A copy of the DRP's comments from the meeting of 7 October 2025 are included at **Annexure 7** which includes an Applicant's response to the items raised by the panel.

5.7 State Planning Policy No. 7.3: Residential Design Codes Volume 2

State Planning Policy 7.3 provides strategic guidance on the design of residential development in WA. The R-Codes Volume 2 - Apartments provides planning and design standards for residential apartments (multiple dwellings) in high density coded areas (R80 and above and R-AC).

The subject site is zoned 'Centre' pursuant to the City of South Perth Local Planning Scheme No. 7 (LPS7) with an R-Coding of R-AC0. Table 2.1 (Primary controls table) of the R-Codes Volume 2 refers to the development controls of a local planning scheme, local development plan and/or precinct controls, as applicable, for R-AC0 coded areas.

Schedule C (Additional Centre Requirements) of LPS7 notes that where a site is coded R-AC0 and located within the CBACP, all site development requirements shall be in accordance with the CBACP. The CBACP notes that the R-Codes do not apply in part or in whole to the CBACP area except where reference is specifically made to a R-Codes provision.

6.0 ASSESSMENT UNDER THE LOCAL PLANNING FRAMEWORK

6.1 City of South Perth Local Planning Scheme No. 7 (LPS7)

The subject site is zoned 'Centre' and coded R-AC0 pursuant to the City of South Perth Local Planning Scheme No. 7 (LPS7).

The following objectives are applicable to the Centre zone:

- *To designate land for future development as a town centre or activity centre.*
- *To provide a basis for future detailed planning in accordance with any relevant state planning policy.*

In accordance with the above objectives, the CBACP was developed to guide development over land including the subject site.

Clause 33 of LPS7 contains the additional site and development requirements for areas covered by structure plan or local development plan and requires development to comply with any site or development requirement set out in Schedule C of the Scheme. Schedule C (Additional Centre Requirements) of LPS7 includes ACR4 – Land subject to the Canning Bridge Activity Centre Plan, which contains the following provisions:

> *(1) Where a site is coded RAC-0 and located within the Canning Bridge Activity Centre Plan area all site and development requirements shall be in accordance with the Canning Bridge Activity Centre Plan.*

The proposal is consistent with the requirements of the CBACP as addressed in the following section.

6.2 Canning Bridge Activity Centre Plan (CBACP)

The Canning Bridge Activity Centre Plan (**CBACP**) comprises land from both the City of South Perth and the City of Melville, located less than 8km from the Perth CBD. The CBACP area is connected to the CBD with direct road, public transport, walking and cycling access and is set against the backdrop of the Swan and Canning rivers and the adjacent foreshore open space.

The area is a walkable distance from the Canning Bridge bus and rail interchange, which is located at the junction of the Canning Highway and Kwinana Freeway. Development within the CBAC is proposed to comprise a mix of residential, civic, office, retail and entertainment uses.

The CBACP has been prepared in cooperation by the WAPC, Department of Planning Lands and Heritage (**DPLH**), City of Melville, City of South Perth, Department of Transport, Public Transport Authority and Main Roads WA (**MRWA**). The Plan has been prepared to provide a guide to development within the Centre to progress long term planning within its boundaries.

The CBACP is divided into separate quarters. The subject site is located within the Davilak Quarter Q4 (refer **Figure 6**).



Figure 6: ACP Quarters

The objectives for the Davilak Quarter are to provide a vibrant and rejuvenated area, with access to a main street of local shops and employment along Robert and Davilak Streets. Housing is envisaged to cater to multiple users, with student housing and apartments dominating the area closest to the train station. The area fringing the park, which contains the subject site, will feature three and four storey townhouses and apartments.

The CBACP Design Guidelines contained within Section 7 of the CBACP apply to all the land which is identified within the CBACP boundary. The CBACP has been divided into 5 zones for the purpose of the Guidelines (see **Figure 7**). The appliable zone to this application is:

Land Use, Built Form and zones Plan Legend	***Height applied in metres***	***Guidelines Naming Reference***
Residential up to 4 storeys	Residential up to 16m in height	H4

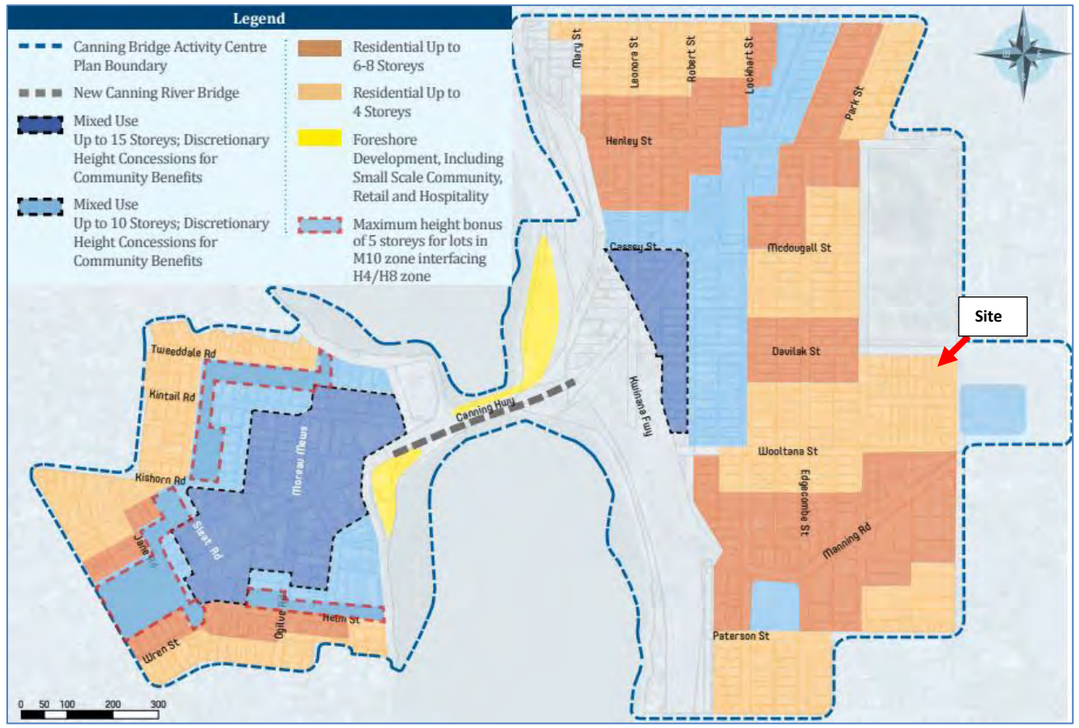


Figure 7: Canning Bridge ACP Land Use, Heights and Zones

Each Requirement within the Guidelines represents the quantitative criteria against which a development will be designed and assessed. Each Requirement is complemented by a Desired Outcome (DO) which represents the qualitative principles against which the proposal will be determined. Importantly, and as enabled by the R-Codes, the CBACP Design Guidelines have been established as an alternative to the R-Codes within the CBACP area.

Within Q4, the provisions of Parts 3 and 4 (only) and Elements 2.6 and 2.7 of the R-Codes Volume 2 shall apply to residential development. However, where the CBACP provides a more specific design outcome/requirement than the R-Codes Volume 2, the provisions of the CBACP shall prevail.

An assessment against the provisions of the CABACP has been undertaken at **Table 2.**

The following elements are not augmented by the Elements of the CBACP and therefore are to apply in full:

- 3.1 Site Analysis and Design Response;
- 4.2 Natural Ventilation, 4.3 Size and Layout of Dwellings, 4.11 Roof Design; and
- 4.13 Adaptive Reuse, and 4.18 Utilities.

An assessment against the elements of the R-Codes Volume 2 not augmented by the Elements of the CBACP has been undertaken at **Table 3.**

6.3 CBACP Design Guidelines & R-Codes Vol. 2 Assessment (as applicable)

Table 2: CBACP Assessment

Element	*Desired Outcome*	*Requirements*	*Response*
1. Land Use	**DO 1.4** Uses within the Residential zone will remain as residential only to establish an appropriate buffer between the centre and the surrounding suburb, although some appropriate scale non-residential uses may be considered along the residential edges of Davilak Street.	**Preferred Land Uses** **1.10.3** H4 and H8 zone - Multiple Dwelling, Grouped Dwelling, Single House, Aged or Dependant Person's Dwelling, Single Bedroom dwelling, Corner Store, Recreation - Private, Recreation - Public, Residential Building, Home Occupation, Home Office.	The application proposes the development of ten (10) new townhouse grouped dwellings over the subject site. The proposed land use is therefore consistent with the preferred land use, and desired outcome for the site.
	DO 1.7 All Quarters will comprise a mix and variety of development. Housing should be diverse and affordable, with a mix of options in all areas. Innovative land uses which support the Desired Outcome of each Quarter will be encouraged.	**1.15 Dwelling Diversity** Development that contains ten (10) or more dwellings shall provide a minimum of 20% and a maximum of 50% of the dwellings as one (1) bedroom or studio dwellings, and shall provide a minimum of 40% of the dwellings as two (2) bedroom dwellings. In Q3, Q4 and Q5, development be designed in accordance with Residential Design Codes Vol. 2 Element 4.8 and 4.9 in respect to dwelling mix and universal design.	The proposal involves two and three-bedroom townhouses in different configurations to provide a specific offering particularly aimed at families. The townhouses provide generous internal living spaces that are suitable for comfortable family living. The proposal provides for an underrepresented form of housing in the CBACP area which is dominated by large existing single and grouped dwellings and new one-, two- and three-bedroom multiple dwellings. The proposal will provide a contemporary form of housing which contributes to the diversity of supply in the locality. The provision of two storey townhouses responds to the vision for greater density within the CBACP area, whilst also managing the immediate transition from existing single residential properties. The proposal is compliant with this element requirement. Pursuant to R-Codes Vol. 2 Element 4.9 (universal design), three dwellings (or 30% of the dwellings) have been designed to meet the Silver level for Livable Housing Design Guidelines and achieves the Acceptable Outcomes which require 20% of dwellings to achieve this standard. Note that the Acceptable Outcomes of R-Codes Vol. 2 Element 4.8 (dwelling mix) apply to developments with greater than 10 dwellings and is therefore not applicable to the proposal.
2. Form and Mass	**DO 2** Site planning should encourage the development of adequate sites for certain building types and heights to ensure street frontages are appealing and not overly interrupted.	**2.6.** Building depth in Q3, Q4 and Q5 designed in accordance with Residential Design Codes Vo. 2 Element 2.6.	Refer **Table 3**.
3. Heights	**DO 3** To ensure that building heights are consistent with the desired scale and built form of the centre and to ensure that the interface between Zones is appropriately managed and the amenity of property both within and adjacent to the CBACP is adequately considered. Applicants are encouraged to provide	**3.5.** For buildings in the H4 Zone, notwithstanding the 4 storey height limit, no building shall exceed 16 metres above NGL.	The development will be to a maximum of two (2) storeys and a total of no more than 6.5m in height (top of wall), and no more than 9.5m (roofline). The proposal is compliant with this element requirement.

Element	*Desired Outcome*	*Requirements*	*Response*
	variation in scale, bulk and form along the streetscape.		
4. Street Setbacks	**DO 4** To ensure that the setback to buildings contributes to a distinct street character and that the form of multi level development is sensitive to pedestrian scale. Alternative means to reduce bulk and scale such as green walls and façade articulation are also encouraged.	**4.6** All development within H4 Zones in Q3, Q4 and Q5 shall have a minimum 4 metre and maximum 6 metre setback.	The street setback to the external wall of each townhouse dwelling is 3.99m from the front lot boundary at ground floor level, and 3.5m from first floor level. Positioning of the first floor marginally forward of the ground floor serves to create a level of façade articulation that is accentuated by the use of varying colours and materials to soften the built form to the street. From a review of aerial mapping, it is evident that contemporary development along Davilak Street has introduced street setbacks of between 3.8m-4.6m, which is consistent with the street setback provided. Therefore, the street setback of 3.5m-3.99m appropriately references the existing contemporary and future intended streetscape character. The proposal is compatible with this element requirement.
		4.9 Where a street setback is required, the setback area shall be activated and/or landscaped.	To complement the articulated façade, highly landscaped courtyard spaces are provided for within the street setback, on the ground floor of the four street fronting townhouse dwellings. The courtyard spaces consider the transition between the public and private realm, comprising a selection of Australian native trees and waterwise ground planting that are site and orientation appropriate, providing a connection to the public open space adjacent. The combination of on-site planting within the front setback, in conjunction with both the proposed and retained mature vegetation within the verge will deliver a high-quality landscaping outcome to complement the built form. The proposal is compliant with this element requirement.
5. Side and Rear Setbacks	**DO 5** To ensure that development opportunities throughout the precinct are maximised. Developers should minimise overlooking and overshadowing of adjacent and adjoining properties through appropriate design response, supported by the setback provisions of this Element.	**5.6** Side and rear setbacks for all development within the H8 and H4 Zones shall be 3 metres for any lot which is less than or equal to 14 metres in width or shall be 3.5 metres for any lot which is greater than 14 metres in width but less than 16 metres in width or 4 metres for any lot which is equal to or greater than 16 metres in width. Setbacks do not apply to any eaves and sun shading devices.	The townhouse dwellings will be set back 3.5m from the western lot boundary for the majority of the boundary length. Townhouse type 'A' abuts the western lot boundary at ground floor level, and has a lot boundary setback to the west of 1.1m to 2.9m at the first-floor level. The portion of Townhouse type 'A' with a reduced setback to the western boundary will align with the neighbour's carport. Therefore, the proposal will not adversely impact the neighbouring property with respect to building bulk or access to sunlight. Due to the irregular shape of the subject site, varied lot boundary setbacks are provided to the eastern boundary. The minimum setback to the east is 0.65m on the ground and first floors, however the setback increases to 3.5m on the ground floor, and 3.9m on the first floor. The development to the east aligns with vegetation and rear yard space to the adjoining properties and articulation along this elevation is achieved as the irregular lot shape breaks up the built form presenting to the west. The proposal will therefore have minimal impact on the adjoining properties to the east with respect to building bulk. It is noted that all major openings facing adjoining properties are either set back sufficiently from the respective lot boundaries to ensure the cone of vision does not encroach on habitable space, or alternatively, are proposed as a highlight window. To the south, a minimum setback of 1.04m is provided from the Townhouse Type D1. This townhouse abuts an unmanaged rear yard space which contains a large area of sand and is not currently considered to be a habitable portion of yard. Therefore, the southern elevation of this townhouse will not adversely impact the amenity of the southern neighbour with respect to building bulk or access to sunlight. This is also valid should that property be developed. Therefore, the setbacks to the nearest adjoining residential property boundary are compliant with the requirements of this element.
		5.7 For buildings up to 4 storeys (16m) in height buildings shall be separated from adjoining boundaries in accordance with Clause 5. 6 of this plan and Residential Design Codes Vol.2 Element 3.5 - Visual Privacy.	Residential Design Codes Vol.2 Element 3.5 - Visual Privacy. Element Objective O 3.5.1 – *The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms.* The R-Codes Vol. 2 require a minimum setback for visual privacy purposes of 3m for major openings to bedrooms, studies and open walkways. For other habitable rooms the setback required is 4.5m, and 6m for private outdoor spaces.

Element	Desired Outcome	Requirements	Response
			<u>Type F – First Floor Bedroom East</u> The first floor bedroom to the east creates a cone of vision that encroaches minimally (20cm) into the rear yard of the property to the east. The cone of vision falls over the corner of the eastern neighbour's yard which is not habitable and contains mature vegetation along the lot boundary. Therefore, the minor encroachment will not adversely impact the neighbour's amenity. <u>Type D – First Floor Balcony South</u> The first floor balcony to the south creates a cone of vision that encroaches approximately 4m into the rear yard of the neighbour's property. This portion of the neighbour's yard is unmanaged and contains a large area of sand; thus, it is not considered to be a habitable portion of yard. Therefore, the encroachment will not adversely impact the neighbour's amenity. <u>Within the Site</u> In relation to major openings, the proposal meets this standard, with the exception of the westernmost first-floor bedroom openings (Townhouse types 'A', 'D' and D1'). However, the cone of vision encroachment to the adjoining townhouse lot is minor and oblique, falling over a small area of the adjoining ground floor yard. The orientation of these major openings is such that the primary outlook is directly west rather than toward the adjoining townhouse to ensure privacy is protected. Overall, a high proportion of glazing is provided to each of the townhouse dwellings to enable good solar access The glazing is appropriately located to protect the privacy of adjoining townhouses subject of the proposal, as well as adjacent properties. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 3.5 - Visual Privacy.
		5.8 Provisions of privacy and solar access and overshadowing do not apply within Q1 and Q2. In Q3, Q4 and Q5, development designed in accordance with Residential Design Codes Vol.2 Element 3.2 and 4.1 in respect to solar access, and 3.5 in respect to visual privacy.	<u>Residential Design Codes Vol.2 Element 3.2 – Orientation</u> Element Objective O 3.2.1 – *Building layouts respond to the streetscape, topography and site attributes while optimising solar and daylight access within the development.* The four street fronting townhouse dwellings present a two-storey built form that respects the existing streetscape character. Each of these townhouse dwellings have large major openings oriented north to the street, optimising solar and daylight access. The remaining townhouses, within the subject site, will be constructed with an east-west orientation. The townhouses will be dual aspect, with large major openings on each side providing good access to natural light. Every habitable room has at least one window in an external wall, visible from all parts of the room with a glazed area not less than 10% of the floor area comprising a minimum 50% clear glazing. Shading will generally occur through the provision of upper floor eave overhang, along with upper floor elements including balcony cover of ground floor openings. The proposal is consistent with the element objectives of the R-Codes Vol. 2. Element Objective O 3.2.2 – *Building form and orientation minimises overshadowing of the habitable rooms, open space and solar collectors of neighbouring properties during mid-winter.* Given the adjoining property is part of the CBACP and has a residential density coding of higher than R80, Clause A3.2.3 of the R-Codes Vol. 2 stipulates there are no requirements relating to overshadowing of adjoining properties. The planning framework provides capacity for development of up to four (4) storeys on the property to the south in the future, noting that this proposal includes only two-storey development. Notwithstanding, the proposal will not adversely impact habitable rooms, open space and solar collectors of neighbouring properties during mid-winter. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 3.2 – Orientation. <u>Residential Design Codes Vol.2 Element 3.5 – Visual Privacy</u> Element Objective O 3.5.1 – *The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms.*

Element	Desired Outcome	Requirements	Response
			Refer to comments in relation to Element **5.7**. The proposal minimises direct overlooking of habitable rooms and private outdoor living areas of neighbouring properties. Direct overlooking within the site between dwellings within the subject site has been minimised through appropriate location and orientation of major openings. The design will also ensure a high level of daylight and solar access, ventilation external outlook of habitable rooms. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 3.5 – Visual Privacy. <u>Residential Design Codes Vol.2 Element 4.1 – Solar and Daylight Access</u> Element Objective O 4.1.1 – *In climate zones 4, 5 and 6: the development is sited and designed to optimise the number of dwellings receiving winter sunlight to private open space and via windows to habitable rooms.* All townhouse dwellings have living rooms and private open space that will obtain at least 2 hours of direct sunlight between 9am-3pm on 21 June. Element Objective O 4.1.2 – *Windows are designed and positioned to optimise daylight access for habitable rooms.* Every habitable room has at least one window in an external wall, visible from all parts of the room with a glazed area greater than 10% of the floor area comprising a minimum 50% clear glazing. A high proportion of the front (northern) façade of the street facing townhouse dwellings will be glazed to optimise solar access. Element Objective O 4.1.3 – *The development incorporates shading and glare control to minimise heat gain and glare from mid-spring to autumn in climate zones 4, 5 and 6.* Shading will generally occur through the provision of upper floor eave overhang, along with upper floor elements including balcony cover of ground floor openings. Typical internal shading devices such as vertical blinds and shutters can be installed as a further shading measure. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 4.1 – Solar and Daylight Access.
9. Facades	**DO 9** Development of the centre should respond sensitively to the site and support a sense of place. Development should be pleasing to the eye, be interactive and provide definition between public and private spaces. Maintaining a strong urban edge with the built form and providing a variety of high quality architectural forms and features will attract people to the centre and establish a sense of Place.	**9.1** In Q3, Q4 and Q5, development designed in accordance with Residential Design Codes Vol.2 Element 4.10.	<u>Residential Design Codes Vol.2 Element 4.10 – Façade Design</u> Element Objective O 4.10.1 – *Building façades incorporate proportions, materials and design elements that respect and reference the character of the local area.* The development will comprise a face brick with render highlight elements finish that will be light brick with feature pastel render elements. The brick and render finishes are consistent with both older and contemporary developments within the streetscape. Light green coloured infill will be incorporated into the fronting fencing, matching a light green cladding under the dwelling eaves, light green garage doors and downpipes. The colours and materials are carefully selected to complement the landscaping selections over the site which will form a connection to Neil McDougall Park. Element Objective O 4.10.2 - *Building façades express internal functions and provide visual interest when viewed from the public realm.* The use of contrasting brick and render form and materiality creates an attractive interface to the public realm. The primary materials are complemented by metal infill, along with the use of light green cladding and roofing as a connection to the parkland. A high degree of façade articulation is also provided in conjunction with the variation in colour and material to break up the built form to the streetscape. The articulation is achieved by recessed components, in addition to balconies and pergola coverings that project forward of the ground floor building line. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 4.10 – Façade Design.

Element	*Desired Outcome*	*Requirements*	*Response*
		9.2 Proposed development shall incorporate substantial areas of glazing on street frontages. Glazing shall comprise no less that 50% of any façade at pedestrian/ground level and where opaque signage is proposed on glazing, unimpeded clear glazing shall still comprise greater than 50% of the frontage.	At ground floor level, approximately 50% of each façade addressing Davilak Street with comprise glazing. The proposal is compliant with this element requirement.
		9.3 Semi-active frontages are required on all residential Zones with a minimum of 35% of the frontage incorporating windows or doorways with passive visual surveillance of the adjacent street at ground level.	More than 35% of each townhouse frontage will be glazed providing passive visual surveillance of Davilak Street. Passive surveillance is provided from the ground living areas, and first floor bedrooms and balconies. The proposal is compliant with this element requirement.
		9.4 Windows and balconies shall be incorporated into the design of developments above ground level. In Q3, Q4 and Q5, private open space and balconies designed in accordance with Residential Design Codes Vol.2 Element 4.4.	<u>Residential Design Codes Vol.2 Element 4.4 – Private Open Space and Balconies</u> Element Objective O 4.4.1 – *Dwellings have good access to appropriately sized private open space that enhances residential amenity.* Each dwelling has a minimum of 15m^2 (up to 36m^2) private open space area that is directly accessible from a habitable room. The private open space component comprises a ground level landscaped courtyard. Element Objective O 4.4.2 – *Private open space is sited, oriented and designed to enhance liveability for residents.* Each of the private open space areas associated with the townhouse dwellings is sited and oriented to receive access to northern light year-round. The private open space courtyards are each directly accessible from the primary kitchen/living areas for practical usage in conjunction with internal spaces. Element Objective O 4.4.3 – *Private open space and balconies are integrated into the overall architectural form and detail of the building*. All dwellings have a first-floor balcony. The balconies provide opportunities for additional planting, enhancing the amenity of the development. The ground level courtyards will be highly landscaped to beautify the spaces. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 4.4 – Private Open Space and Balconies.
		9.5 Developments shall be designed so as to discourage vandalism by use of materials such as sacrificial paint or architectural features to discourage inappropriate activity.	The development is fenced preventing public access to the building edge. Therefore, the design of the development discourages vandalism.
		9.7 In Q3, Q4 and Q5, development designed in accordance with Residential Design Codes Vol.2 Element 3.6.	<u>Residential Design Codes Vol.2 Element 3.6 – Public Domain Interface</u> Element Objective O 3.6.1 – *The transition between the private and public domain enhances the privacy and safety of residents.* A private landscaped garden and courtyard is provided at the ground floor level to each townhouse dwelling fronting Davilak Street. Visually permeable front fencing along the site frontage ensures passive visual surveillance is achieved from ground floor internal and external habitable spaces, whilst providing security to the residents. Element Objective O 3.6.2 – *Street facing development and landscape design retains and enhances the amenity and safety of the adjoining public domain, including the provision of shade.* The development delivers a substantial landscaping commitment within the front setback areas that complements the permeable front fencing design and dwelling facades. The landscaping will be in the form of two (2) existing and two (2) new mature street trees, along with several new small and medium size

Element	Desired Outcome	Requirements	Response
			trees complemented by low level shrubs and plantings within the street setback to beautify the frontage. The landscaping response will significantly enhance the streetscape and connect the site with the parkland adjacent. The permeable front fencing and orientation of major openings to address the street will ensure that good casual surveillance is achieved. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 3.6 – Public Domain Interface.
10. Open Space and Landscaping	**DO 10** To encourage intensity of development whilst also catering for the enjoyment, comfort and sense of security of centre users.	**10.5** Development in the H4 Zone shall be provided with a minimum provision of 40% open space which shall be provided in shared common space at ground levels and/or shared common space on areas such as the roof. For development in the H4 zone in Q3, Q4 and Q5, the open space provision includes deep soil zones as per State Residential Design Codes Vol.2 Element 3.3 and the required open space area in addition to the deep soil zone be landscaped in accordance with Residential Design Codes Vol.2 Element 4.12.	The proposal includes 43% of the site as open space, in addition to the balconies. A Landscape Plan has been prepared by CaPA, Landscape Architects, in support of this application. <u>Residential Design Codes Vol.2 Element 3.3 – Tree Canopy and Deep Soil Areas</u> Element Objective O 3.3.1 – *Site planning maximises retention of existing healthy and appropriate trees and protects the viability of adjoining trees.* The proposal seeks to substantially increase the provision of landscaping over the site compared with existing site conditions. As noted, the development will introduce two (2) new mature street trees to the site verge, along with several new small and medium size trees complemented by low level shrubs and plantings within the street setback to beautify the frontage. The landscaping response will significantly enhance the streetscape and connect the site with the significant parkland adjacent. Within the site, the landscape design intent revolves around generous private gardens on the ground floor of each townhouse dwelling, new trees around the internal communal driveway, and perimeter planting to the lot boundaries. Planting on-structure is provided as a core component of the design and is particularly prominent addressing the internal communal areas. Element Objective O 3.3.2 – *Adequate measures are taken to improve tree canopy (long term) or to offset reduction of tree canopy from pre-development condition.* The design substantially increases the provision of landscaping over the site compared with existing site conditions. The development will introduce two (2) new mature street trees to the site verge, along with several new small and medium size trees complemented by low level shrubs and plantings. Within the site, several new trees are provided in addition to lawn, shrubs and on-structure planting. Element Objective O 3.3.3 – *Development includes deep soil areas, or other infrastructure to support planting on structures, with sufficient area and volume to sustain healthy plant and tree growth.* A total deep soil provision of 214m^2 across the site greatly exceeds the 160m^2 requirement under Element 3.3 of the R-Codes Vol. 2. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 3.3 – Tree Canopy and Deep Soil Areas.
		10.6 Where development is not proposed to all boundaries of a site, landscaping design shall be incorporated providing that such landscaping maintains openness and visibility into the development site. Landscaping in the form of hard and soft landscaping can be utilised. Water sensitive design shall be implemented for all landscaped areas. In Q3, Q4 and Q5, development designed in accordance with Residential Design Codes Vol.2 Element 4.12.	Private landscaped gardens and courtyards are provided at the ground floor level to each dwelling fronting Davilak Street. Visually permeable front fencing along the site frontage ensures passive visual surveillance is achieved from ground floor internal and external habitable spaces, also providing security to the residents. <u>Residential Design Codes Vol.2 Element 4.12 – Landscape Design</u> Element Objective O 4.12.1 – *Landscape design enhances streetscape and pedestrian amenity; improves the visual appeal and comfort of open space areas; and provides an attractive outlook for habitable rooms.* The landscaping response will significantly enhance the streetscape and connect the site with the significant parkland adjacent, providing an attractive outlook for the habitable rooms oriented to Davilak Street. Element Objective O 4.12.2 – *Plant selection is appropriate to the orientation, exposure and site conditions and is suitable for the adjoining uses.* Landscaped courtyards and communal areas at ground level comprise a selection of Australian native trees and plantings, including waterwise ground planting that is site and orientation appropriate. Element Objective O 4.12.3 – *Landscape design includes water efficient irrigation systems and, where appropriate, incorporates water harvesting or water re-use technologies.*

Element	Desired Outcome	Requirements	Response
			Planting selections across the site are native, water-wise species. Planting selections build upon the endemic nature of the adjacent parkland flora and fauna. The planting selections contribute to water efficiency. Element Objective O 4.12.4 – *Landscape design is integrated with the design intent of the architecture including its built form, materiality, key functional areas and sustainability strategies.* The landscaped courtyards and common gardens at ground level are visible to the public realm by virtue of the permeable front fencing. The landscaped spaces provide high amenity to the ground floor offices to each townhouse, which achieve casual surveillance through major openings on both the ground and first floors. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 4.12 – Landscape Design.
		10.7 In Q3, Q4 and Q5, development designed in accordance with Residential Design Codes Vol.2 Element 3.6.	<u>Residential Design Codes Vol.2 Element 3.6 – Public Domain Interface</u> Element Objective O 3.6.1 – *The transition between the private and public domain enhances the privacy and safety of residents.* A private landscaped garden and courtyard is provided at the ground floor level of each townhouse dwelling fronting Davilak Street. Visually permeable front fencing will be introduced along the site frontage to ensure passive visual surveillance is achieved from ground floor internal and external habitable spaces, whilst providing security to the residents. Element Objective O 3.6.2 – *Street facing development and landscape design retains and enhances the amenity and safety of the adjoining public domain, including the provision of shade.* The four townhouses addressing Davilak Street each have major openings on the ground and first floors oriented to the street to ensure good casual surveillance is achieved. Open style pergola structures are provided to the front courtyard areas along with new verge trees and planting within the lot to provide amenity and shading. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 3.6 – Public Domain Interface.
11. Sustainability	**DO 11** All developments should follow ecologically sustainable design principles to develop a world class showcase of environmentally sound development techniques. Principles which should be applied include: • Minimise operational and maintenance costs of the development; • Innovative and integrated water resource management; • Reduction in the use of fossil fuel energy by using renewable energy supply sources and employing demand-efficient	**11.5** In Q3, Q4 and Q5, new development excludes development which would otherwise be exempted from assessment under the City of South Perth environmentally sustainable buildings policy. Therefore, no specific requirement exists with respect to achieving a Green Star design rating. Notwithstanding, a qualified consultant has prepared an ESD report to support this application, outlining the sustainability initiatives proposed.	Emergen were engaged to prepare a Sustainable Design Assessment Report (**SDAR**) for the development. The SDAR outlines the suitable industry benchmark for demonstrating best practice approach to ESD. The SDAR notes: *The development is designed to enhance the local streetscape by delivering high-quality, sustainable housing that respects and complements the suburb's existing low- to medium-density residential character.* With respect to sustainability targets, the SDAR identifies the following goals: • Integrate passive solar design principles into optimising solar access in winter and shading in summer. • Enhance energy performance by reducing consumption through efficient design and the use of renewable and low-energy systems. • Efficient water fixtures. • Reduce impacts of heat island effect. • Low carbon options. • Enhance indoor air quality. Those sustainable development goals inform substantial sustainabilty commitments throghout the development. A copy of the SDAR is contained at **Annexure 5** to this report.

Element	Desired Outcome	Requirements	Response
	building techniques and technologies; and • Biodiversity and habitat enhancement through appropriate and native landscaping.	**11.7** In Q3, Q4 and Q5, development designed in accordance with Residential Design Codes Vol.2 Element 4.15 and 4.16 in respect to energy efficiency and water management.	<u>Residential Design Codes Vol. 2 Element 4.15 – Energy Efficiency</u> Element Objective O 4.15.1 – *Reduce energy consumption and greenhouse gas emissions from the development.* The project will reduce energy consummation and greenhouse gas emissions by: • Aligning orientation, window sizing, shading and material to maximise solar availability and reduce reliance on artificial lighting. • Applying cross ventilation principles to minimise usage of mechanical appliances. • Minimising the requirement for heating and cooling mechanisms by implementing a well-designed, insulated façade. • Promoting heat resilience by installing substantial landscaping, appropriate roof materials, and a balance of shaded and unshaded hardscaping. • Provision for future solar panels, batteries & car chargers, heat pump hws, solar powered lighting to common spaces. The project meets the Element Objective of the Residential Design Codes Vol.2 Element 4.15 – Energy Efficiency. <u>Residential Design Codes Vol. 2 Element 4.16 – Water Management and Conservation</u> Element Objective O 4.16.1 – *Minimise potable water consumption throughout the development.* Planting selections across the site are native, water-wise species. Plating selections build upon the endemic nature of the adjacent parkland flora and fauna. The planting selections contribute to water efficiency with reticulation being dripline. Element Objective O 4.16.2 – *Stormwater runoff from small rainfall events is managed on-site, wherever practical.* Stormwater run-off is managed on-site, collected into landscaped areas. This maximises permeable surfaces at ground level, which prevents overland flow into habitable spaces at ground level. Element Objective O 4.16.3 – *Reduce the risk of flooding so that the likely impacts of major rainfall events will be minimal.* As above, stormwater run-off will be managed on-site, collected into landscaped areas. The proposal meets the Element Objective of the Residential Design Codes Vol.2 Element 4.16 – Water Management and Conservation.
12. Acoustics	**DO 12** Development, along with meeting the basic requirements of noise attenuation set out under the relevant Legislation, should consider additional measures to both inform and protect the future occupants of the CBACP area.	**12.1** All new development adjoining Canning Highway or Manning Road or adjacent to the Kwinana Freeway shall be designed to achieve appropriate acoustic protection from noise generated by traffic including utilising double glazing or acoustically protected window frames, walls and ceilings.	Herring Storer Acoustics were engaged to prepare an Acoustic Report and Noise Management Plan (**NMP**) for the development. The NMP concludes: > *Noise measurements and modelling were undertaken to determine the noise received within the development. Noise received within the development complies with the requirements of State Planning Policy 5.4. No acoustic construction requirements are recommended.* The Acoustic Report and NMP is contained at **Annexure 6**.
		12.2 All residential development in buildings adjoining Canning Highway or Manning Road or adjacent to the Kwinana Freeway shall have a notification applied to the title and any created strata title pursuant to section 70A of the Transfer of Land Act 1893, together with section 165 of the Planning and Development Act 2005 to inform prospective land owners and residents of the likelihood of higher noise levels associated within the inner city environment.	Noted.

Element	Desired Outcome	Requirements	Response
		12.3 In addition to 12.1 and 12.2, in Q3, Q4 and Q5, development designed in accordance with Residential Design Codes Vol.2 Element 4.7.	Residential Design Codes Vol. 2 Element 4.7 – Managing the Impact of Noise Element Objective O 4.7.1 – *The siting and layout of development minimises the impact of external noise sources and provides appropriate acoustic privacy to dwellings and on-site open space.* Davilak Street is an access road, therefore minimal external noise is received from the road, and surrounding residential properties. External private open space at the ground level is set back from the street and provided with a buffer of landscaping and fencing. At the upper levels, the balconies are unlikely to be adversely impacted by external noise sources. Element Objective O 4.7.2 – *Acoustic treatments are used to reduce sound transfer within and between dwellings and to reduce noise transmission from external noise sources.* The dwellings will be constructed to ensure all internal spaces between dwellings are provided adequate noise attenuation. Adequate screen walls and internal fencing will be installed to provide further noise attention. The design meets the Element Objective of the Residential Design Codes Vol.2 Element 4.7 – Managing the Impact of Noise.
14. Street Edges	**DO 14** Uses that promote activity can sometimes also create issues with fluid movement for users. Development within the centre should always consider the restrained use of signage and advertising, particularly portable signage which is placed along pedestrian footpaths. Alfresco areas require approval by Council and should not be approved without consideration of appropriate through movement.	**14.1** In Q3, Q4 and Q5, development designed in accordance with Residential Design Codes Vol.2 Element 3.7.	Residential Design Codes Vol. 2 Element 3.7 – Pedestrian Access and Entries Element Objective O 3.7.1 *Entries and pathways are universally accessible, easy to identify and safe for residents and visitors.* Four individual entry paths are provided to each of the respective street fronting townhouse dwellings. Those entry points are clearly defined by a permeable entry gate which provides unobstructed pedestrian access to each of the dwellings. For the remainder of the dwellings, a separate pedestrian entry point is provided from Davilak Street. Again, the entry point is clearly defined by a permeable entry gate that leads to a designated internal pedestrian path that is defined by varied materiality to the internal driveway, providing pedestrian access to each townhouse entry. Element Objective O 3.7.2 *Entries to the development connect to and address the public domain with an attractive street presence.* Defined entry gates are provided for each of the pedestrian entry points. The entry gates will comprise a contemporary infill design that complements the façade of the townhouse dwellings. The entry points will be accessible from the existing public footpath that abuts the front lot boundary of the subject site. The proposal meets the Element Objective of the Residential Design Codes Vol.2 Element 3.7 – Pedestrian Access and Entries.
15. Level Changes	**DO 15** The centre shall be an inviting and user friendly place for all members of the community and universal access / accessibility shall be provided for all developments in a variety of ways. Blank facades may affect the vibrancy and activity in an area, or encourage graffiti, and as such design should limit this outcome by considering façade treatments such as wall art, landscaping or furniture.	**15.2** All development shall provide universal access in accordance with relevant codes and standards. Innovative design features for ramps are encouraged to make universal access an integral part of design.	All townhouse dwellings are provided with universal access. In addition, three dwellings (or 30% of the dwellings) have been designed to meet the Silver level for Livable Housing Design Guidelines. The proposal is compliant with this requirement.
16. Fencing	**DO 16** Fencing should be designed to be aesthetically pleasing to all users who can see it and should be treated in the same	**16.1** All proposed fencing which is visible from a public place shall be treated in the same way as required in Clause 15.1. Fencing shall be of a high quality on both sides.	Visually permeable fencing is provided along the street frontage, allowing for the landscaped courtyards to present as the key feature within the streetscape. The fencing will comprise of an open metal style with consistently spaced infill panels. The fencing will be of a high quality and complement the landscaping and built form.

Element	Desired Outcome	Requirements	Response
	way as blank facades (see Element 14).		
17. Public Art	**DO 17** To provide for an exciting and enticing public realm which supports the extensive growth of the CBACP area. To promote cultural vitality within the CBACP area.	**17.2** All development which is greater than $1 million in total capital cost of development shall contribute 1.0% of the total capital cost of development to a CBACP wide public art fund. Alternatively the developer may propose to provide on-site public works which are integral to the design of the development. Any public art proposed shall form part of the development application to be considered by the Design Advisory Group.	The Applicant notes the public art requirement under the CBACP.
		17.3 Notwithstanding Clause 17.2, the total cost liability for contribution to the public art fund shall be capped at $500,000.	Noted.
18. Parking	**DO 18** Parking should be provided to ensure that the CBACP area can provide for its residents and guests, but should balance this need with a need to discourage private vehicle travel generally. Alternative transport is encouraged by way of providing for bicycle parking and storage, and motorcycle and scooter parking.	**18.1** In Q3, Q4 and Q5, vehicle access designed in accordance with Residential Design Codes Vol.2 Element 3.8.	<u>Residential Design Codes Vol.2 Element 3.8 – Vehicle Access</u> Element Objective O 3.8.1 – *Vehicle access points are designed and located to provide safe access and egress for vehicles and to avoid conflict with pedestrians, cyclists and other vehicles.* A single, central vehicle access is provided to service the dwellings. The vehicle access width is 3.7m. The following is also noted: • 1.5m sight lines are provided on either side of the driveway by ensuring that either no wall is above 750mm from NGL, or a maximum pier width of 400mm. • The vehicle access/driveway is separated from the internal pedestrian access at the entrance to the site. • Within the subject site, a shared pedestrian and vehicle zone will be managed by differentiated materiality to identify the independent function and priority of usage. • Donald Veal Consultants has undertaken a swept path analysis to demonstrate the internal functionality of the access which achieves adequate turning circles for access and egress. A copy of the swept path analysis is included at **Annexure 8.** Element Objective O 3.8.2 – *Vehicle access points are designed and located to reduce visual impact on the streetscape.* A single, central vehicle access is provided to service the dwellings which will also minimise the proportion of hardstand to the streetscape, allowing a greater landscaping commitment. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 3.8 – Vehicle Access.
		18.3 Car parking for residential development in Q3, Q4 and Q5 shall be provided at a minimum ratio of 0.75 bays for each studio or single bedroom dwelling and a minimum ratio of 1.0 bay for each two or three bedroom dwelling and a minimum ratio of 1.25 bays for dwellings with four bedrooms or greater.	Each of the townhouse dwellings is provided with a minimum of one (1) car parking bay. This is fully compliant with the minimum parking bays required under the CBACP.

Element	Desired Outcome	Requirements	Response
		In Q3, Q4 and Q5, vehicle parking areas designed in accordance with Residential Design Codes Vol.2 Element 3.9.	Element Objective O 3.9.1 – *Parking and facilities are provided for cyclists and other modes of transport.* Space for visitor bicycle parking is provided adjacent to the recycling waste bin store to the south of the site. Within dwellings, garages provide sufficient space for bicycle storage for residents. Element Objective O 3.9.2 – *Car parking provision is appropriate to the location, with reduced provision possible in areas that are highly walkable and/or have good public transport or cycle networks and/or are close to employment centres.* Each of the townhouse dwellings is provided with a minimum of one (1) car parking bay. Element Objective O 3.9.3 – *Car parking is designed to be safe and accessible.* Donald Veal Consultants has undertaken a swept path analysis to demonstrate the internal functionality of the access which achieves adequate turning circles for access and egress. A copy of the swept path analysis is included at **Annexure 8.** Further, all parking bay dimensions are in accordance with AS2890.1. Element Objective O 3.9.4 – *The design and location of car parking minimises negative visual and environmental impacts on amenity and the streetscape.* Garages are accessible via a central common driveway which is connected to Davilak Street by a single crossover. Garages will therefore not be visible from the public road network and are designed to avoid negative visual impact on the amenity and streetscape. The proposal meets the Element Objectives of the Residential Design Codes Vol.2 Element 3.9 – Car and Bicycle Parking.
		18.8 Bicycle storage/parking shall be provided for all residential development at a ratio of one bay for every dwelling within a development site, and can be comprised within storage areas required as per Clause 19.5 or in shared parking areas or both.	Bicycle storage is provided for each of the townhouse dwellings.
19. Servicing and Functionality	**DO 19** Individual residential developments should be provided with adequate storage facilities for the storage of bikes and other household items.	**19.5** In Q3, Q4 and Q5, development designed in accordance with Residential Design Codes Vol.2 Element 4.6.	<u>Residential Design Codes Vol.2 Element 4.6 – Storage</u> Element Objective O 4.6.1 – *Well-designed, functional and conveniently located storage is provided for each dwelling.* Each dwelling has a minimum 4m^2 internal storage area. The proposal meets the Element Objective of the Residential Design Codes Vol.2 Element 4.6 – Storage.
20. Safety	**DO 20** Crime Prevention Through Environmental Design or CPTED uses the built environment to reduce the opportunity for crime, increase the perception of safety perceived by authorised users of a space, while increasing the perception of risk by unauthorised users of a space. Development should promote the safety and security of the public environment. Buildings should overlook streets and other public spaces to promote natural supervision. Blank walls onto streets, or large	**20.1** Access to and through a development shall be safe and efficient. Entrances shall be positioned so that all pedestrian movement is adequately lit and directly visible from a public space. Access to and from car parking areas and building entrances shall be adequately sign-posted with provision of good lighting to enable safe out of hours use.	Defined entry gates are provided for each of the pedestrian entry points. The entry gates will comprise a contemporary infill design that complements the façade of the townhouse dwellings. The entry points will be accessible from the existing public footpath that abuts the front lot boundary of the subject site. The entry points will all be well lit and casual surveillance of the each of the entry points is achieved from north facing major openings to the townhouse dwellings fronting Davilak Street. The proposal is compliant with this requirement.
		20.6 In Q3, Q4 and Q5, development shall be designed in accordance with Residential Design Codes Vol.2 Element 4.5.	<u>Residential Design Codes Vol.2 Element 4.5 – Circulation and Common Spaces</u> Element Objective O 4.5.1 *Circulation spaces have adequate size and capacity to provide safe and convenient access for all residents and visitors* The internal access to the each of the townhouse dwellings is adequate to accommodate a safe shared vehicle and pedestrian environment. Element Objective O 4.5.2 *Circulation and common spaces are attractive, have good amenity and support opportunities for social interaction between residents.*

Element	*Desired Outcome*	*Requirements*	*Response*
	distances between the footpath and openings are discouraged In addition, access to daylight should be maximised and a high level of lighting should be provided in all public areas.		Whilst well landscaped and attractive, the internal space is generally for access only noting that each of the townhouse dwellings are provided with generous areas of ground floor level private open space and provision of a balcony on the first floor. The proposal meets the Element Objective of the Residential Design Codes Vol.2 Element 4.5 – Circulation and Common Spaces.

Table 3: R- Codes Volume 2 Assessment

Objectives	Response
PART 2 – PRIMARY CONTROLS	
2.6 Building depth	
O 2.6.1 Building depth supports **apartment** layouts that optimise **daylight** and **solar access** and **natural ventilation**.	The application does not propose apartment development. Notwithstanding, four townhouses are oriented north with a high proportion of glazing to the street which will enable good solar access. Each of the townhouses are dual aspect and will receive a high amount of sunlight, whilst achieving cross ventilation.
O 2.6.2 Articulation of **building** form to allow adequate access to **daylight** and **natural ventilation** where greater **building depths** are proposed.	The development is designed to optimise sunlight to internal habitable spaces and to private open space. All dwellings have living areas and private open space that will receive northern sunlight.
O 2.6.3 Room depths and/or ceiling heights optimise **daylight** and **solar access** and **natural ventilation**.	Every habitable room has at least one window in an external wall, visible from all parts of the room, with a glazed area not less than 10% of the floor area and comprising a minimum of 50% of clear glazing. The development provides for well-proportioned ceiling heights and room dimensions which meet the acceptable outcomes of this element.
2.7 Building separation	
O 2.7.1 New **development** supports the desired future **streetscape** character with spaces between **buildings**.	Pursuant to Clause 5.7 (building separation) of the CBACP, the development is to be assessed in accordance with Clause 5.6 (side and rear setbacks) of the CBACP and Residential Design Codes Vol.2 Element 3.5 - Visual Privacy. Refer to **Table 2** above for an assessment against the side and rear setback requirements of Clause 5.6 of the CBACP and below for an assessment against Element 3.5. Within the site, primary private open spaces to each townhouse are provided at the ground floor level with direct connection to the internal kitchen/living spaces for functional indoor/outdoor usage.
O 2.7.2 Building separation is in proportion to building height.	
O 2.7.3 Buildings are separated sufficiently to provide for residential **amenity** including visual **and acoustic privacy**, **natural ventilation**, **sunlight** and **daylight** access and outlook.	
O 2.7.4 Suitable areas are provided for **communal** and **private open space**, **deep soil areas** and **landscaping** between **buildings**.	
PART 3 – SITING THE DEVELOPMENT	
3.1 Site analysis and design response	
DG 3.1.1 A written and illustrated **site** analysis should be provided that demonstrates how the design response is informed by the site analysis and responds to surrounding context.	A site analysis is included with the development plan set contained within the Architectural Package at **Annexure 3**.
PART 4 – DESIGNING THE BUILDING	
4.2 Natural ventilation	

Objectives	Response
O 4.2.1 Development maximises the number of **apartments** with **natural ventilation**.	As demonstrated in the Architectural Package at **Annexure 3**, each townhouse will be provided at least two facades with direct access to light. Additionally, all townhouses have at least a dual aspect for excellent cross ventilation. The dual aspect of all townhouses optimises natural ventilation through the provision of large habitable room windows on both the ground and first floor.
O 4.2.2 Individual **dwellings** are designed to optimise **natural ventilation** of **habitable rooms**.	
O 4.2.3 Single aspect apartments are designed to maximise and benefit from **natural ventilation**.	
4.3 Size and layout of dwellings	
O 4.3.1 The internal size and layout of **dwellings** is functional with the ability to flexibly accommodate furniture settings and personal goods, appropriate to the expected household size.	The development is for two-storey grouped dwelling townhouses, comprising both two- and three-bedroom designs. As noted, a total of 10 dwellings will be constructed. Therefore, the development is a specific offering generally for family living, with the two-bedroom design available for younger couples and downsizers. Each dwelling has a generous internal floor area, complemented by functional landscape private open space. Internal room sizes are generous with an open plan living design that sees areas open out onto outdoor living areas that have northern exposure. Each dwelling has excellent access to natural ventilation and light. In summary the internal size and layout of dwellings is functional and meets the floor area requirements for 2- and 3-bedroom dwellings under Table 4.3a of Element 4.3. The development provides for well-proportioned ceiling heights and room dimensions which meet the Acceptable Outcomes of this element and meet the minimum internal floor area and internal dimensions for dwellings under Table 4.3b. Refer to the Architectural Package at **Annexure 3** for further details.
O 4.3.2 Ceiling heights and room dimensions provide for well-proportioned spaces that facilitate good **natural ventilation** and **daylight** access.	
4.11 Roof design	
O 4.11.1 Roof forms are well integrated into the **building** design and respond positively to the **street**.	The proposal incorporates a modest pitched roof form that reflects the predominant roof form of existing residential dwellings within the streetscape. The lighter roof colour complements the brick and render designed façade of each dwelling, presenting an attractive contemporary built form to enhance the streetscape.
O 4.11.2 Where possible, roof spaces are utilised to add **open space**, **amenity**, solar energy generation or other benefits to the **development**.	
4.13 Adaptive reuse	
O4.13.1 New additions to existing **buildings** are contemporary and complementary and do not detract from the character and scale of the existing building.	Not applicable to this proposal.
O4.13.2 Residential **dwellings** within an adapted **building** provide good **amenity** for residents, generally in accordance with the requirements of this policy.	
4.18 Utilities	
O 4.18.1 The **site** is serviced with power, water, gas (where available), wastewater, fire services and telecommunications/broadband services that are fit for purpose and meet current performance and access requirements of service providers.	The subject site is appropriately serviced for the scale of development proposed. The Applicant therefore notes the requirements for the appropriate siting and design of utilities as outlined under these provisions and it is expected that standard conditions of planning approval will be required to address these matters. This is likely to include the following conditions as a minimum which the Applicant has no objection to: • External fixtures, such as air-conditioning infrastructure, shall be integrated into the design of the building so as to not be visually obtrusive when viewed from the street and to protect the visual amenity of residents in neighbouring properties, to the satisfaction of the City of South Perth. • External clothes drying facilities shall be screened from view from the street or any other public place.
O 4.18.2 All **utilities** are located such that they are accessible for maintenance and do not restrict safe movement of vehicles or pedestrians.	
O 4.18.3 Utilities, such as distribution boxes, power and water meters are integrated into design of **buildings** and **landscape** so that they are not visually obtrusive from the **street** or **open space** within the **development**.	
O 4.18.4 Utilities within individual **dwellings** are of a functional size and layout and located to minimise noise or air quality impacts on **habitable rooms** and **balconies**.	

6.4 Local Planning Policy 3.1 Waste Management

Pursuant to Clause 3 of Local Planning Policy 3.1 Waste Management (**LPP3.1**) the policy applies to all development on land throughout the City where LPS7 applies, excluding single houses, and where the R-Codes Volume 2 applies, the policy augments the Acceptable Outcomes under Part 4.17.

Pursuant to Clause 5.2.1(a), unless otherwise determined by the City, a Waste Management Plan (**WMP**) prepared in accordance with Appendix 1 of the policy shall be submitted with a development application for five or more grouped dwellings.

Accordingly, a WMP has been prepared and is included at **Annexure 9** of this report.

6.5 Local Planning Policy 3.2 Tree Retention

The City's Local Planning Policy 3.2 Tree Retention (**LPP3.2**) has been prepared with the purpose of encouraging and facilitating the protection of trees and to maintain and enhance tree canopy.

Pursuant to Clause 3, LPP3.2 applies to zoned land under LPS7 in the following circumstances:

> *(a) Development applications; …*
>
> *…(d) Any tree damaging activity to a regulated tree.*

Clause 7 of LPP3.2 outlines the requirements for development applications and notes as follows under Clause 7.1:

> *There is a general presumption against tree damaging activity (other than maintenance pruning) to any regulated tree and the siting and design of the development should, where possible, avoid impacting any regulated tree.*

The terms 'Regulated tree' and 'Tree damaging activity' are defined under Clause 10 as follows:

> *Regulated tree: means a living tree that:*
>
> *(a) Is 8.0m or more high; and/or*
>
> *(b) has an average canopy diameter of at least 6.0m; and/or*
>
> *(c) has a trunk circumference of at least 1.5m, measured 1.4m above the ground; and*
>
> *(d) is of a species that is not included on State or local area weed register.*
>
> *Tree damaging activity: means:*
>
> *(a) the killing or destruction of a tree; and/or*
>
> *(b) the removal of a tree; and/or*
>
> *(c) the severing of branches, limbs, stems or trunk of a tree; and/or*
>
> *(d) the ringbarking, topping or lopping of a tree; and/or*
>
> *(e) any other substantial damage to a tree.*

Only one existing tree within the subject site which meets the definition of 'Regulated tree' under LPP3.2 will be removed. That tree is identified as a Jacaranda and has been recommended for removal by the consulting arborist due to the tree have a poor structure (refer to the Arborist Report at **Annexure 4**). The Arborist Report recommends that a tree is replanted in place of the Jacaranda and as such, a White Crepe Myrtle ('Lagerstroemia Natchez') will be planted in this location.

6.6 Local Planning Policy 6.2 Design Review Panel

Local Planning Policy 6.2 Design Review Panel (**LPP6.2**) applies to planning proposals on land within the City and encourages the use of the Design Review Panel (**DRP**) early in the design concept stage.

Under Clause 5.2 of LPP6.2, proposals with four or more residential grouped dwellings will be referred to the DRP for review. The decision maker shall have due regard to the recommendations of the DRP when considering planning proposals.

The DRP considers the proposal against the ten (10) design principles under State Planning Policy 7.0 – Design of the Built Environment.

The application was presented to the DRP on 7 October 2025, with the panel supporting the proposal in relation to seven of the ten principles, with three evaluated as pending further attention. It is noted that none of the principles were evaluated as 'not supported'.

Therefore, the comments of the DRP have been addressed with particular focus on the elements evaluated as pending further attention through amended plans submitted with this application.

The DRP Report and Applicant's response is included at **Annexure 7** of this report.

6.7 Local Planning Policy 6.3 Public Art

The development is subject to the provisions of Local Planning Policy 6.3 Public Art (**LPP6.3**), pursuant to Clause 3(b) as follows:

> *Within the Canning Bridge Activity Centre Plan where the estimated cost of the development is $1 million or greater, with contributions capped at $500,000.*

Public art contributions are to be of a value equating to at least one percent (1%) of the total construction value estimated at the Development Application stage.

The Applicant notes the public art requirement under the CBACP.

6.8 Planning and Development (Local Planning Schemes) Regulations 2015

The Planning and Development (Local Planning Schemes) Regulations 2015 (the Regulations) came into effect on 19 October 2015. The Regulations have introduced a set of deemed provisions that now form part of LPS7. Clause 67(2) deals with matters to be considered by local government and include key provisions relevant to the assessment of applications for development approval. **Table 4** includes responses to the key provisions applicable to the development.

Table 4: Response to Clause 67 Requirements

Matters to be considered	Comment
(a) the aims and provisions of this Scheme (including any planning codes that are read, with or without modifications, into this Scheme) and any other local planning scheme operating within the Scheme area;	The townhouse development on the subject site achieves the aims of Local Planning Scheme No. 7 (LPS7) and is consistent with the land use and built form expectations under the CBACP. The development provides a diversity in housing choice, supports a growing population whilst respecting both the existing and desired character of the locality.
(b) the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving;	There are no proposed planning schemes or amendments to LPS7 at the time of preparing this report.
(c) any approved State Planning policy;	The proposal is consistent with the requirements of State Planning Policy 3, State Planning Policy 4.2, State Planning Policy 5.4, State Planning Policy 7.0 and State Planning Policy 7.3, as outlined in section 5 of this report.
(d) any environmental protection policy approved under the Environmental Protection Act 1986 section 31(d);	No environmental protection policies are applicable to this proposal.
(e) any policy of the Commission;	Not applicable to this proposal.
(f) Any policy of the State;	Not applicable to this proposal.
(fa) any local planning strategy for this Scheme endorsed by the Commission;	The City's Local Planning Strategy identifies activity centres as being appropriate for higher density residential development to cater for future population growth. The CBACP which applies to the subject site sets the land use and built form framework over the subject site. Therefore, the proposal for two- and three-bedroom townhouse dwellings on the subject site responds to the vision set out on the Local Planning Strategy.
(g) any local planning policy for the Scheme area;	With respect to Local Planning Policy 6.4, the obligations for contribution to public art are acknowledged.
(h) any structure plan or local development plan that relates to this development;	The proposal is consistent with the provisions of the CBACP for the reasons outlined in this report, and in particular the responses provided in **Table 2**.
(i) any report of the review of the local planning scheme that has been published under the Planning and Development (Local planning Schemes) Regulations 2015;	Not applicable to this proposal at the time of preparing this report.
(j) in the case of land reserved under this Scheme, the objectives for the reserve and the additional and permitted uses identified in this Scheme for the reserve;	The application does not apply to reserved land.
(k) the built heritage conservation of any place that is of cultural significance;	There are no built heritage considerations for this proposal.
(l) the effect of the proposal on the cultural heritage significance of the area in which the development is located;	There are no cultural heritage considerations for this proposal.
(m) the compatibility of the development with its setting, including - *(i) the compatibility of the development with the desired future character of its setting; and* *(ii) the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;*	The CBACP was prepared to provide the framework for future development within the activity centre. The subject site is contained within the 'Davilak' Quarter, with a permitted building height of 'residential up to 4 storeys'. The same development parameters apply to the adjoining lots and immediate locality. The proposal for residential townhouses to a maximum height of two storeys is therefore compatible with the desired future character of its setting, whilst respecting the transition to the existing residential properties in vicinity of the site. Seeking to complement the character of the surrounding established built form, the design incorporates elements of brick and render, along with a modest pitched roof that reflects the predominant built form within the streetscape. In addition, the use of varied materiality in conjunction with projecting and recessed façade elements creates a high level of articulation and visual interest to the street. The development is therefore consistent with the envisaged built form over the site (height, bulk and scale), whilst respecting the existing development on adjoining land and within the locality.
(n) the amenity of the locality including the following — *(i) environmental impacts of the development;* *(ii) the character of the locality;* *(iii) social impacts of the development;*	Provision has been made for future solar panels, batteries & car chargers, heat pump hws, solar powered lighting to common spaces. As outlined, the subject site is contained within the 'Davilak' Quarter, with a permitted building height of 'residential up to 4 storeys'. The same development parameters apply to the adjoining lots and immediate locality. The proposal for residential townhouses to a height of two storeys is therefore compatible with the desired future character of its setting, whilst as noted, respecting the transition to the existing residential properties in vicinity of the site. The proposal to develop new townhouse dwellings on the subject site assists in achieving the City's density target, noting future residents will support the growth of local businesses.
(o) the likely effect of the development on the natural environment or water resources and any means that are proposed to protect or to mitigate impacts on the natural environment or the water resource;	The proposal will not adversely affect the natural environment or water resources.

Matters to be considered	Comment
(p) whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved;	CAPA have prepared a landscaping plan to support the development proposal. A total of 160m^2 of deep soil is provided over the site, exceeding the required planting as per the R-Codes Volume 2. In addition, a total of 19 small trees (and two large verge trees) on the site as part of the development, exceeding the compliant requirement under the R-Codes Vol. 2. All existing mature street trees adjacent to the site will be retained and protected as part of this proposal.
(q) the suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk;	The land does not present any risk to the development in respect of these matters.
(r) the suitability of the land for the development taking into account to possible risk to human health or safety;	The proposal is suitable for the land on which it is situated and there is no risk to human health or safety.
(s) The adequacy of - *(i) the proposed means of access and egress from the site; and* *(ii) arrangements for the loading, unloading, manoeuvring and parking of vehicles;*	Access and egress from the site is from a single access and communal driveway from Davilak Street. The access arrangement is capable and appropriate for vehicle access and egress. A swept path analysis has been undertaken to demonstrate the internal functionality of the access which achieves adequate turning circles for access and egress. A copy of the swept path analysis is included at **Annexure 8**. Further, all parking bay dimensions are in accordance with AS2890.1.
(t) the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effects on traffic flow and safety;	A total of ten (10) new dwellings will be constructed over the subject site. The proposal will not adversely affect the local road system, traffic flow or safety.
(u) The availability and adequacy for the development of the following - *(i) public transport services;* *(ii) public utility services;* *(iii) storage, management and collection of waste;* *(iv) access for pedestrians and cyclists (including end of trip storage, toilet and shower facilities);* *(v) access by older people and people with disability;*	The site is situated within walking distance of high frequency transport from Canning Bridge Train Station (680m). This public transport linkage provides direct connectivity to the wider network. Two, 240L bins will be stored within a designated area within each of the townhouse garages. Bins will be collected from the Davilak Street verge, as identified on the ground floor plan. Given the proposal is only for residential development, end of trip facilities are not applicable. Notwithstanding, bike storage will be provided within each townhouse garage. Each townhouse will be accessible for older people and people with disability.

Matters to be considered	Comment
(v) the potential loss of any community service or benefit resulting from the development other than potential loss that may result from economic competition between new and existing businesses;	The proposal to provide appropriate density over the subject site in accordance with the applicable planning framework will increase activity in the locality to support local businesses.
(w) the history of the site where the development is to be located;	The site has historically been designated for residential purposes, as is proposed with this application.
(x) the impact of the development on the community as a whole notwithstanding the impact of the development in particular individuals;	The proposal to provide appropriate density over the subject site in accordance with the applicable planning framework will increase activity in the locality to support local businesses. In addition, development of a presently vacant site promotes streetscape activation and safety through increased surveillance.
(y) any submissions received on the application;	There are no submissions on the application at the time of preparing this report.
(za) the comments or submissions received from any authority consulted under clause 66;	There are no submissions on the application at the time of preparing this report.
(zb) any other planning consideration the local government considers appropriate.	Not applicable at the time of preparing this report.

7.0 CONCLUSION

The CBACP has been prepared to provide the framework for future development and land use within the activity centre area. The development of ten (10) townhouse dwellings over the subject site directly responds to the envisaged development within this part of the 'Davilak Quarter' under the CBACP, and has been supported by the DRP and in meetings with the City's planning department.

The townhouse offering vary in layout to suit the specific configuration of the subject site and enable diversity in housing options for future occupant preference. The subject site will be held in single ownership and will provide for additional supply for long term rental accommodation within the locality to address housing demand.

The development responds to the local planning framework, providing for an increase in residential density, whilst respecting the established residential development form by presenting a two-storey development forms.

The site-specific landscaping response enhances the greenery within the streetscape with a combination of contextually appropriate native plantings that build upon the endemic nature of the adjacent parkland flora and fauna. The provision of landscaping will deliver functional, high amenity spaces for future residents and beautify the public realm.

The townhouse development over the subject site is both compatible with the applicable planning framework, and appropriate for approval.

Allerding & Associates
Town Planners, Advocates and Subdivision Designers
ABN 24 044 036 646

30 March 2026

Our Ref: BIR DVL GE
Your Ref: PDDA-2025/3243

Chief Executive Officer
City of South Perth
Cnr Sandgate Street and South Terrace
SOUTH PERTH WA 6151

Attn: Steven DePiazzi (Senior Urban Planner)

Dear Steven,

RE: 10 GROUPED DWELLINGS – LOTS 36 & 37 (#31 & 29) DAVILAK STREET, COMO RESPONSE TO REQUEST FOR FURTHER INFORMATION

We refer to your correspondence dated 25 February 2026 seeking further information with respect to the 10 grouped dwelling development at Lots 36 and 37 (Nos. 31 and 29) Davilak Street, Como (**subject site**) which is currently under assessment by the City of South Perth (**the City**). This submission has also been prepared in response to the public consultation comments provided by officers.

An updated set of plans and information has been prepared in response to these matters and is included as part of this submission.

Should you have any queries or require any further information in the meantime, please do not hesitate to contact our office on 9382 3000.

Yours sincerely
ALLERDING AND ASSOCIATES

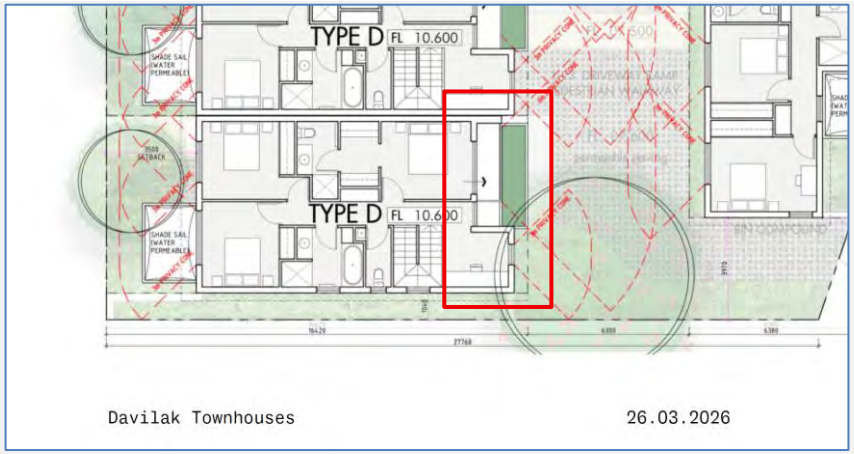


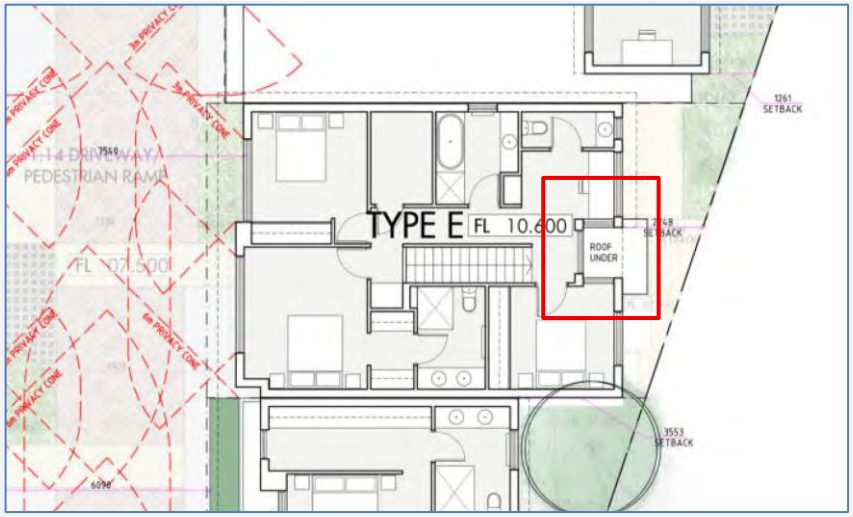
TOM HOCKLEY
ASSOCIATE DIRECTOR

cc. Client (via email)

Encl. Attachment 1 – Amended Plan Set
Attachment 2 – Amended Swept Paths
Attachment 3 – Amended Landscape Report
Attachment 4 – Amended Sustainable Design Report

Officer Comment	Applicant Comment
1. Lot Layout	
(a) Lots do not include truncations to facilitate vehicle sightlines at the intersection of the driveway and Davilak Street; 1.5m x 1.5m required.	Noted. Truncations now provided. Refer Amended Plan Set at **Attachment 1.**
(b) Truncations have not been provided between the shared access way and garage walls to ensure vehicles are not manoeuvring over adjoining lots when entering/exiting their garages.	Noted. Truncations now provided between the shared access way and garages. Refer Amended Plan Set at **Attachment 1.** Revised swept paths demonstrating manoeuvrability into garages have also been provided at **Attachment 2**.
2. Side and rear setbacks (CBACP E5)	
(a) The development seeks various discretions to lot boundary setbacks which are generally considered acceptable given the nature and scale of development proposed, however there are some concerns in respect of the cumulative impact of the western walls of Type D/D1 and the southern wall of Type D1 given the large expanse of wall with no change to setback across its length or height. It is requested that some measures be implemented to break the wall mass into smaller elements and assist with mitigating visual bulk impacts.	Noted. Rendered panels have been added to the western and southern façades to provide visual differentiation for those elevations. Refer Amended Plan Set at **Attachment 1.**
(b) The plans only provide visual cues to the nature of shade structures for the outdoor living areas (appear to be shade sails). If the plans could be updated with annotations to confirm the nature of the structures and if they are shade sails whether the material is water permeable. Operable louvres are encouraged as a more durable alternate to shade sails and allow future residents to manage sunlight access, privacy, and weather protection to suit their needs.	Noted. The upper floor plans have been updated to annotate "Shade Sail (Water Permeable)" to clarify the nature of the shade structures. Refer Amended Plan Set at **Attachment 1.**
(c) Type D1 balcony visual privacy setback of 1.9m in lieu of 6.0m to the south adjoining lot boundary. The balcony will have direct views to an outdoor living area and kitchen window, consideration is to be given to incorporating screening or locating the balcony on the northern side of the façade.	Noted. The Type D1 unit design has been updated by flipping the internal layout. The result of the updates achieves compliant visual privacy requirements. Refer Amended Plan Set at **Attachment 1.**

Officer Comment	Applicant Comment
	
(d) The nature of the Type F master bed east facing window is unclear on the plans, if this could be clarified. If the window meets the definition of a major opening there will be concerns in respect of direct views to a swimming pool to the east.	Noted. The plans have been updated to introduce a highlight window for the Type F master bed east facing window. Refer Amended Plan Set at **Attachment 1.**
(e) Type E bed 3 relies only on a highlight window, consideration to be given to how a larger window with some outlook can be achieved without unduly impacting visual privacy of the adjoining properties.	Noted. The plans have been updated to introduce a north facing window created by a recessed opening providing improved daylight access for adjacent rooms and passageways. Windows will be treated with obscure glazing for visual privacy outcomes. Refer Amended Plan Set at **Attachment 1.**

Officer Comment	Applicant Comment
	
(f) Several elevations include a dashed line annotated as 'existing levels at verge' despite the associated elevation relating to a lot boundary, and the line protruding well beyond the verge. Clarification to be provided on what this line represents.	Noted. The annotations have been reworded for clarity. Refer Amended Plan Set at **Attachment 1.**
3. Facades (CBACP E9)	
(a) The private open spaces of Type E and Type F are below the minimum recommended 12m² area and 2.4m minimum dimension for a three bedroom dwelling. In particular, the Type E private open space is considered to offer poor functionality and amenity for residents, with majority of the area being unviable to accommodate any furniture due to access routes through the space. The outdoor living area is to be reviewed to provide an area suitable to accommodate outdoor living for a three bedroom dwelling, consideration to be given to adjusting levels of the dwelling and/or private open space to	Noted. The plans have been updated to achieve minimum area and dimension requirements. This includes revisions to the Type E unit to combine the privacy screen with the fence rather than the screening provided within the courtyard. The Type F unit has been revised to reconfigure the laundry and powder room to increase courtyard more space. Refer Amended Plan Set at **Attachment 1.**

Officer Comment	Applicant Comment
enable the space to be more effectively used and avoid the need for a separate privacy screen in addition to the privacy provided by a standard dividing fence.	
4. Open space and landscaping (CBACP E10	
(a) There is inconsistency across the plans regarding retention of the Jacaranda tree, landscape plans indicate replacement, whilst architectural plans indicate retention. In the event that the tree is proposed to be replaced, consideration should be given to locating the tree at the end of the shared access way and locating the garage of D1 further north to avoid the existing awkward access point. On this point I note that I am still yet to receive comments from our Parks section in relation to whether removal is supported, however acknowledge the recommendations in the arborist report provided.	Noted. The City's Parks Department has confirmed agreement with the Applicant's intention to remove the Jacaranda. The plans have been updated to locate the replacement tree at the southern end of the shared access way to provide for an improved vehicle access arrangement. Refer Amended Plan Set at **Attachment 1.**
(b) The landscape plan does not include details of the balcony landscaping and reticulation; this will be required as part of detailed landscape plan through condition in the event of approval.	Noted. Details of balcony landscaping has been added to the landscape report (refer Amended Landscape Report at **Attachment 3**). Detail of reticulation would be accepted as a condition of development approval.
5. Acoustics (CBACP E12)	
(a) The location of the air conditioning unit for Type D will negatively impact on acoustics for the associated courtyard area, it is recommended that the air conditioning unit be relocated or screening be provided to eliminate direct line of sight and reduce noise impacts. (also relevant to R-Codes 4.18).	Noted. Screening within courtyard areas has been shifted to screen air conditioning units. Refer Amended Plan Set at **Attachment 1.**
6. Level changes (CBACP E15)	
(a) The shared access way does not appear to be designed to provide a continuous accessible path of travel in accordance with AS1428.1. Steps within the shared access way conflict with providing an accessible path of travel and also conflict with some vehicle movements shown in the swept paths diagrams. It is suggested that the design of this space be reviewed to avoid the use of stairs.	Noted. The shared access way has been revised to achieve a maximum 1:14 gradient. The steps within the shared access way have been removed and replaced with a ramp to avoid conflict with vehicle movements. Refer Amended Plan Set at **Attachment 1** and revised swept paths at **Attachment 2**.

Officer Comment	Applicant Comment
7. Parking (CBACP E18)	
(a) Swept path diagrams do not appear to demonstrate functional or convenient manoeuvring through the site. Further review is required to ensure that vehicle manoeuvring is functional and not excessively onerous for future residents.	Noted. Refer revised swept paths at **Attachment 2** which demonstrate functional vehicle manoeuvring throughout the site.
(b) The swept paths show no clearance to some garage doors and extend over stairs and gardens, it is not entirely clear which areas are trafficable. Provision of longitudinal section(s) along the driveway may also assist to demonstrate accessibility and functionality where grade changes are involved.	Noted. Refer revised swept paths at **Attachment 2** which demonstrate accessibility and functionality throughout the site.
(c) Some manoeuvres have extremely small clearances on tight turns (even for a B85 vehicle) and in some instances there are conflicts with obstructions (for example SK08A, SK10A, SK11A, SK13A).	Noted. Refer revised swept paths at **Attachment 2** which address conflicts and obstructions throughout the site. All landscaped areas are low level without retaining walls to allow clear passage of vehicles adjacent to planted areas.
(d) In some instances, manoeuvring is over the site area of other dwellings (for example SK09A).	Noted. As the driveway and pedestrian accessway are common spaces, the access arrangement is considered to provide for a functional movement arrangement without unreasonably compromising adjoining dwellings.
(e) It is unclear how vehicles exiting garages will have line of sight to avoid conflict with cars and pedestrians moving along the shared access way	Noted. The central common driveway will also function as a pedestrian accessway and will be a low speed internal driveway accessible only to residences within the development. As such, residents will be aware of the traffic movement environment which will assist to address pedestrian and vehicle conflict along the shared accessway.
(f) Access to the rear garage has poor legibility and requires excessive vehicle movements to access. If the Jacaranda is not proposed to be retained, flipping the design of the unit may assist with improving access to this unit.	Noted. The replacement tree has been shifted to the southern boundary of the subject site and the Unit D floor layout has been flipped to improve vehicle access to the unit. Refer Amended Plan Set at **Attachment 1** and revised swept paths at **Attachment 2**.

Officer Comment	Applicant Comment
(g) Whilst not a variation, it is noted that garages which do not achieve at least 10.8m depth (excluding store areas) are only considered to accommodate one car bay; each dwelling only requires only one car bay under the CBACP.	Noted. Revised plans have been provided to show only one car bay per garage. Refer Amended Plan Set at **Attachment 1**.
(h) The location of the visitor bike bay is considered to conflict with bin store access and is also not located in a convenient or legible location for visitors. Further consideration to be given to an appropriate location for the visitor bicycle bay.	Noted. Revised plans have been provided to relocate bike bays to the front of the development adjacent to the footpath. Refer Amended Plan Set at **Attachment 1**.
8. Safety (CBACP E20)	
(a) The street fence in the north-east corner of the site includes a 4m² area concealed on three sides, with no passive surveillance. It is requested that the street fence be reviewed to enable passive surveillance to this space and avoid creation of an area of concealment. (also relevant to R-Codes 4.18)	Noted. Revised plans have been provided to introduce permeable fencing on one side to provide passive surveillance. Refer Amended Plan Set at **Attachment 1**.
9. Size and layout of dwellings (R-Codes 4.3)	
(a) Type E living area provides a minimum dimension of 3.4m in lieu of 4.0m. The level of internal amenity achieved is considered less than desirable for a three bedroom dwelling, accordingly it is requested that consideration be given to increasing the minimum dimension to enable an appropriately sized living room for the future residents. It is acknowledged that the dwelling is constrained by the proposed lot width, and whether there may be opportunity to shift Type F further south to create some additional space.	The plans have been reviewed to confirm that a minimum dimension of 3.8m has been achieved, which increases to 4.8m when the entry is included.
(b) Ceiling heights do not appear to be indicated on the proposed plans. A minimum ceiling height of 2.7m is recommended for habitable rooms to provide suitable internal amenity for future residents, plans to be updated to indicate ceiling heights for dwellings.	Noted. Revised plans have been provided to reference ceiling heights (refer 1:50 plan set) demonstrating ceiling heights of 2743mm (ground floor) and 2400mm (upper floor). Refer Amended Plan Set at **Attachment 1**.

Officer Comment	Applicant Comment
DRP Comments	
The chair review has been completed and is attached for your information; no major concerns have been raised. One recommendation is made: 1. Ensure no bedrooms rely solely on high level windows. (Type E east facing bedroom)	Noted. Plans have been reviewed and revised to ensure no bedrooms rely solely on high level windows. Refer Amended Plan Set at **Attachment 1**.

Submission Summary	Applicant Response
Public Consultation	
1. The proposal is inconsistent with nearby recently approved development on Davilak Street, such as 19, 21, and 25 Davilak Street all redeveloped as single houses. All properties on the street opposite the park are single houses, this proposal is out of character.	The development is consistent with the density and form of development permitted in the Canning Bridge Activity Centre Plan (CBACP) area. The development involves two storey townhouses which are of lower scale and intensity to what is permitted on this site and therefore provides a form of development which is respectful to the surrounding residential context in this transitional area near the boundary of the CBACP.
2. It is our understanding that all dwellings will be retained by the owner and rented out to students.	While the development is intended for build to rent, the ultimate occupation of the development will be market dependent.
3. If used for shared rental arrangements this has potential to accommodate 38-40 rental bedrooms.	The density of the development aligns with the expectations for the CBACP area.
4. 10 dwellings with 20+ rooms could equate to 30 additional cars, resulting in significant additional traffic on an already busy road.	The development provides for a compliant outcome with respect to resident parking and access as demonstrated in the application plans and documentation. Development within the CABCP area has been modelled through the activity centre plan preparation process with public access and infrastructure upgraded as required by the City.
5. Lack of visitor parking and poses risk for excessive impact on street parking to a busy bus route and cycle way on Davilak Street.	Refer response to submission comment No. 4 above.
6. The western boundary fence obstructs sightlines for the adjoining driveway at 27 Davilak Street.	Noted. A truncation has been introduced to the north-western corner of the subject site adjacent to the adjoining driveway of 27 Davilak Street to allow sightlines.
7. The first-floor western windows have no shading and overlook the rear yard of 27 Davilak Street.	The first-floor western windows achieve compliant cone of vision privacy setbacks to adjoining properties.

Submission Summary	Applicant Response
8. Visual privacy of pool area at 35 Ley Street will be compromised.	Noted. The Type D1 unit design has been updated by flipping the internal layout. The result of the updates achieves compliant visual privacy requirements. Refer Amended Plan Set at **Attachment 1.**
9. The proposal does not comply with the City's Waste Management Local Planning Policy. A maximum of 8 bins should be presented for kerb collection, the proposed 16 bins every second week will significantly impact the amenity of the area, occupying more than one third of the frontage and obstructing footpaths and vehicle sightlines.	A Waste Management Plan has been developed in consultation with City officers and accepted based on waste collection method and frequency.
10. The waste generation rates have also been incorrectly calculated and underestimate what the development will generate. The proposal does not provide for sufficient bin capacity for the calculated waste generation if correctly calculated at 10 three bedroom dwellings.	A Waste Management Plan has been developed in consultation with City officers and accepted based on waste collection method and frequency. One single 240L general waste bin is provided per dwelling, while the recycling has been averaged across the development consistent with the requirements of the City's Local Planning Policy 3.1 Waste Management.
11. The existing Jacaranda tree on site is considered to have high amenity value for the surrounding properties and is considered to make a significant environmental contribution; it is unclear why every effort has not been made to retain it.	The City's Parks Department has confirmed agreement with the Applicant's intention to remove the Jacaranda. The plans have been updated to locate the replacement tree at the southern end of the shared access way to provide for an improved vehicle access arrangement consistent with the recommendations of City officers.
12. The simulation software used of the sustainable design Assessment Report used the climate file location of Esperance WA, the report should be reviewed using correct location data.	Noted. The reference to Esperance WA has been corrected with confirmation received by the sustainability consultants that the report has been correctly modelled on the Perth WA file location. A revised Sustainable Design Report is included at **Attachment 4**.

10 Townhouses
29-31 Davilak Street,
Como, WA 6152

26.03.2026 - Revised Joint Development Assessment Panel Report
05.12.2025 - Joint Development Assessment Panel Report

Principal Architect	Birchgroup
Architect in Association	CaPA
Landscape Architect	CaPA
Planning	Allerding & Associates
Traffic Impact Statement	Allerding & Associates
Waste Management Strategy	Allerding & Associates
Vehicle Swept Path Analysis	DVC
Sustainability Report	Emergen
Acoustic Report	Herring Storer
SPP 5.4 Noise Man't Plan	Herring Storer
Tree Survey Report	Arborite
Public Art	TBA



birchgroup

architecture project management property development

CaPA
architecture + landscape architecture

Allerding & Associates

The concluding remarks of the DRP Report note:

The Panel supports the proposal subject to a few minor considerations.

The proposed medium-density townhouse development presents a well-considered urban response that positively contributes to the streetscape and broader context. Key design strengths include strong orientation to the public realm, successful integration with Davilak Street, high levels of passive surveillance, and efficient internal layouts with good access to natural light and ventilation. The use of deep soil zones and a pedestrian-prioritised laneway further enhance the environmental quality and amenity of the development.

The matters raised within the Report have been addressed as follows:

PRINCIPAL 1
CONTEXT & CHARACTER

1. Consider terracing or stepping the front retaining wall for Types B and C to create a softer relationship with the public realm.

   This has been adopted into the design.

2. Explore the opportunity to implement a compliant front setback to remove this issue from the assessment.

   This has been adopted into the design with only very minor variances.

PRINCIPAL 5
SUSTAINABILITY

The DRP acknowledged that "The proposal has strong passive design principles, however, the absence of a report clearly identifying what is a commitment verses what is a target makes this Principle difficult to assess at this stage."

A sustainability report was not available at the time of the presentation but is now provided within the Development Application and clearly outlines the project commitments.

PRINCIPAL 6
AMENITY

1. Consider a more robust privacy strategy between the Unit Type B private outdoor space and the entry pathway to provide more privacy between the main entry and the unit occupants when on their outdoor terrace.

   This has been fully adopted into the design.

2. Reconsider the requirement for two side by side car bays in Type F to facilitate a better outcome for the living dining area.

   This was thoroughly explored with the outcome still leading to side-by-side parking providing the best outcome. Although the interior has been changed to reflect the comments from the DRP in regard to a better interior outcome.

3. Enhance Type C laundry access.

   This has been adopted into the design.

4. Ensure no bedrooms rely on solely high-level windows.

   This has been fully adopted into the design.

5. Confirm with the City traffic officers and with detailed traffic assessment.

   A detailed review of vehicle swept paths has been conducted by a traffic consultant and is included in the Development Application. The swept path assessment has informed the final design of the internal driveway and adjacent spaces to improve vehicle manoeuvrability and access throughout the site.

The proposed grouped dwelling development at 29 and 31 Davilak Street comprises ten townhouses that are build-to-rent. Ownership is being retained by the proponent, providing dwellings that are located close to a broad range of transport, shopping, entertainment and leisure venues, and are located directly opposite the wonderful parkland and amenity provided by McDougall Park.

All dwellings are intentionally modest sized. This is a reflection of one of the architects' recent projects, demonstrating that smaller dwellings can fully accommodate a variety of tenants without continuing previous excesses seen in more recent housing trends. This is a more sustainable approach to housing, improving maintenance and occupant flexibility.

Focusing on creating a more affordable design with familiar construction forms and context, the design addresses the park and pedestrian interfaces; encourages a communal feeling; maximising solar exposure and natural ventilation; utilises low maintenance materials and finishes; reduces vehicle crossovers and greatly improves landscape on the verge through the retention and addition of new verge trees and verge landscaping.

Early engagement with the planners at the City greatly helped inform the project, informing the design in alignment with the City's aspirations regarding crossovers, tree retention policy, waste management, setbacks, street activation, pedestrian engagement and landscaping.

This engagement also informed the design in relation to the Canning Bridge Activity Centre Plan. Further items discussed included; dwelling diversity and liveable housing requirements, natural ground level response, solar access, private open space, energy efficiency and water management, universal access, quality of fencing, and public art.

This along with the design teams' considered integrated landscape and architectural approach at inception and coupled with the delivery of numerous projects in the precinct, provides a considered and appropriate outcome. Importantly, it adds to the range of dwelling types becoming available in the area, inviting a range of occupiers that perhaps do not want for apartment living and cannot buy existing housing, though wish to benefit from living in the area. We look forward to receiving the input of the Design Review Panel, who's commentary will only add to the quality of the proposal.

- The proposal has been designed with an integrated architectural & landscape approach to give the opportunity for more people to live opposite the much loved McDougall Park. This is a much sought after location for this great park.
- The proposal is for 10 secure, modest townhouses with gardens spaces for families, down-sizers or students.
- The design will bring to the area affordable but well considered build-to-rent accommodation, which responds to current housing demands, and is in keeping with the surrounding context.
- Early in the process, key design considerations were worked through with the City of South Perth planning department through meetings and with our planner, Allerding & Associates.
- These included new tree retention requirements, crossover minimisation, bulk & scale & setbacks, street activation, solar access and ventilation, and waste management.



PRINCIPLE 1: CONTEXT & CHARACTER

CONTEXT

DESIGN PRINCIPLE GOAL

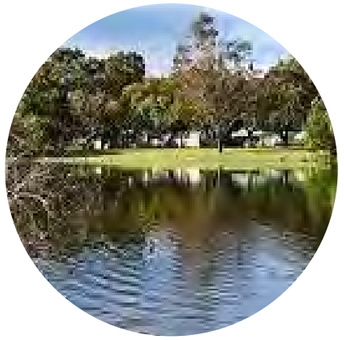
Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.

SITE DESCRIPTION

Neil McDougall Park Lake was formally part of a natural chain of wetlands and swamps which were seasonal.
Over the years it has been heavily modified to maintain water levels year round and is also a local water catchment lake.

- **The site is surrounded by excellent outdoor amenities and public open space, transport and food and retail choices for all walks of life & demographics**

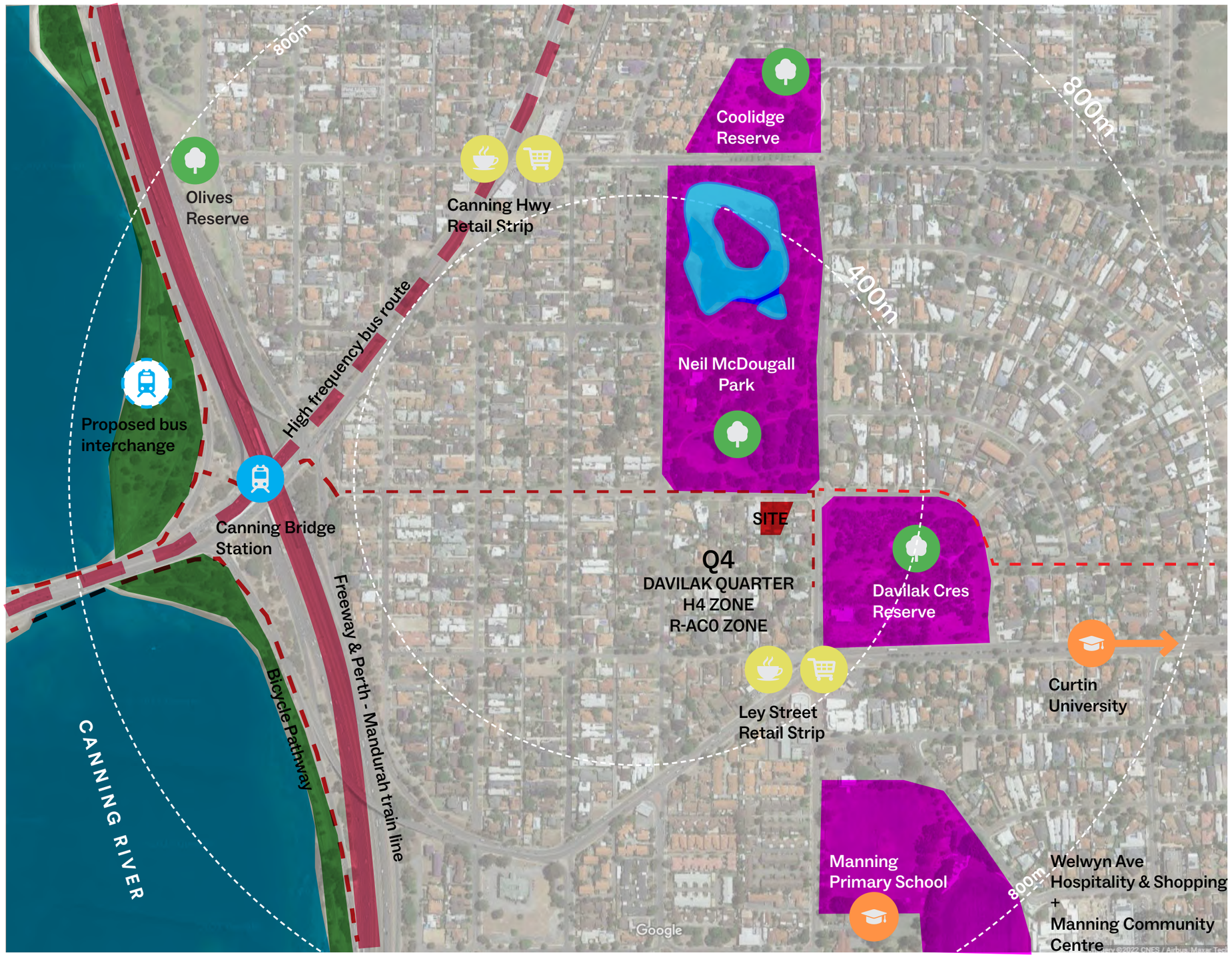
NEIGHBOURING AMENITIES



LAKE & RIVER



PARKS + BBQ + PLAY + HISTORIC SPACES



SITE ANALYSIS

SITE SUMMARY

Local Area Policy:	**City of South Perth's TPS No 7**
Land Area:	**1606sqm**
Permitted building height:	**20 m (being less than 1,200sqm)**
Plot Ratio:	**N/A**
Privacy:	**RDC Vol. 2 Apart. 3.5**
Solar access/ overshadowing:	**N/A**
Setbacks:	**CBACP Design Guidelines + SPP7.3**

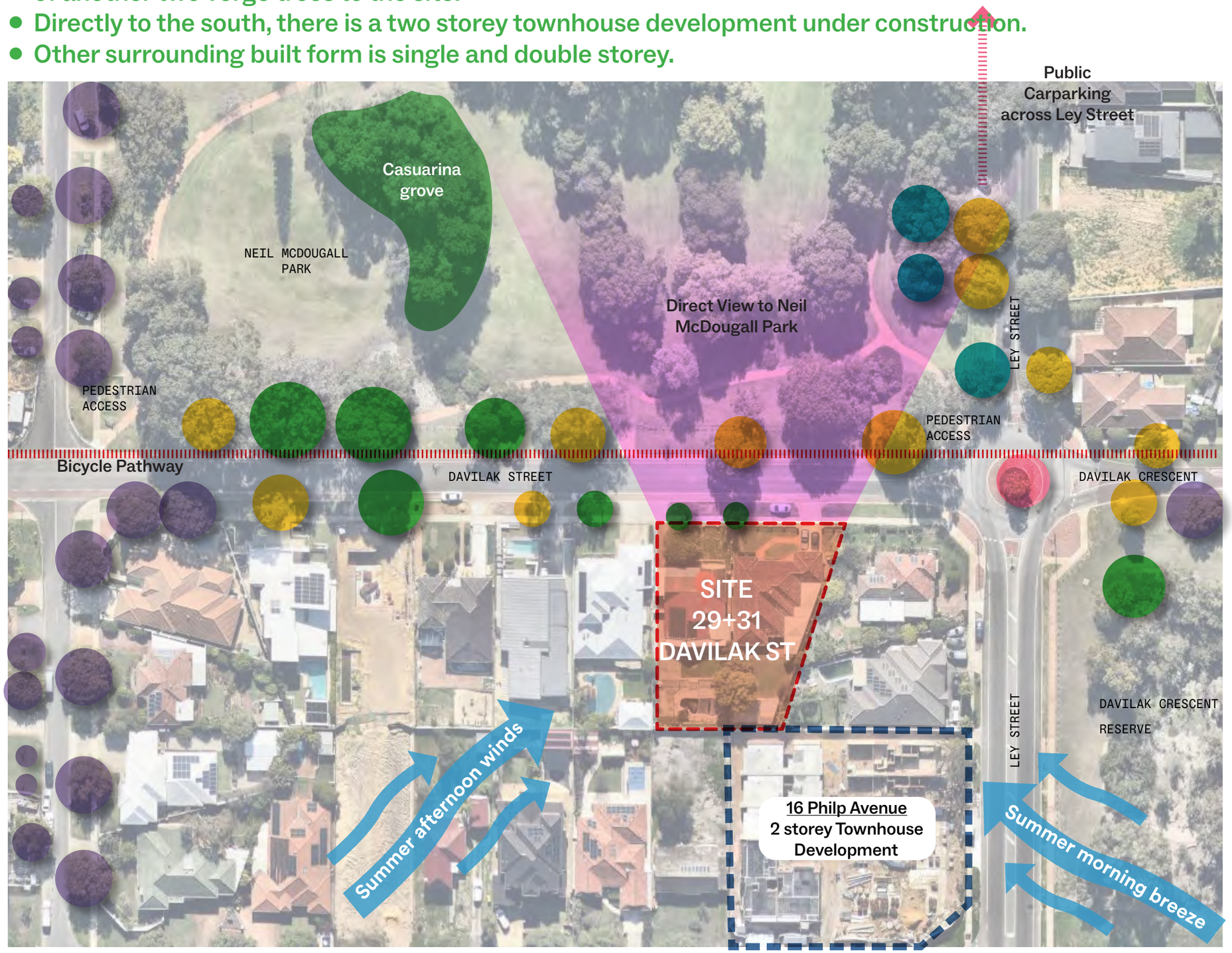
SITE DESCRIPTION

The existing streetscape on Davilak Street comprises an eclectic mix of exotic and native tree species.

There are two existing verge trees to Davilak Street. The existing Eucalyptus marginata trees are relatively young specimens and will provide more canopy cover as they mature.

The proponent proposes to plant two additional verge trees.

- The site has a great northern aspect into McDougall Park.
- There are two existing verge trees which are being retained and we also propose the addition of another two verge trees to the site.
- Directly to the south, there is a two storey townhouse development under construction.
- Other surrounding built form is single and double storey.



KEY ITEMS

- LOPHOSTEMON CONFERTA 'Queensland Box Tree'
- EUCALYPTUS MARGINATA 'Jarrah'
- AGONIS FLEXUOSA 'Weeping Peppermint'
- JACARANDA MIMOSIFOLIA 'Jacaranda'
- MICHELIA ALBA

EXISTING STREETSCAPE

- The site sits at the edge of the H4 zone.
- The existing and emerging streetscape is of a residential scale





- The aspect to McDougall Park is extensive and sought after.

PRINCIPLE 1: CONTEXT & CHARACTER

TOWNHOUSE PRECEDENTS



NO. 1 WOOLTANA STREET

3 STOREY TOWNHOUSE

IN CONSTRUCTION



117-119 LOCKHART STREET

4 STOREY TOWNHOUSE

IN CONSTRUCTION



16 PHILP AVENUE

2 STOREY TOWNHOUSE

IN CONSTRUCTION



73 LOCKHART ST COMO

2 STOREY TOWNHOUSE

DESIGNED BY CAPA

BUILT



61 EDGECUMBE STREET, COMO

4 STOREY TOWNHOUSE WITH ROOF AMENITY

DESIGNED BY CAPA

DA APPROVED



17 CLYDESDALE STREET, COMO

2 STOREY TOWNHOUSE

DESIGNED BY CAPA

BUILT

Within the Davilak Quarter, a number of two to four storey group townhouse projects have been awarded development approval, in construction or constructed.

Notably, 16 Philp Avenue is a townhouse development currently in construction, to the south-east of the proposed site.

Birchgroup and CaPA have also been involved in successfully delivering a number of projects in the precinct.

Projects we designed recently constructed in the H4 zone incorporated 2 storey townhouses at the street interface as transitions. Of particular note is 17 Clydesdale which relates well to the surrounding buildings and park in terms of its scale.

PRINCIPLE 2: LANDSCAPE CHARACTER

CONTEXT

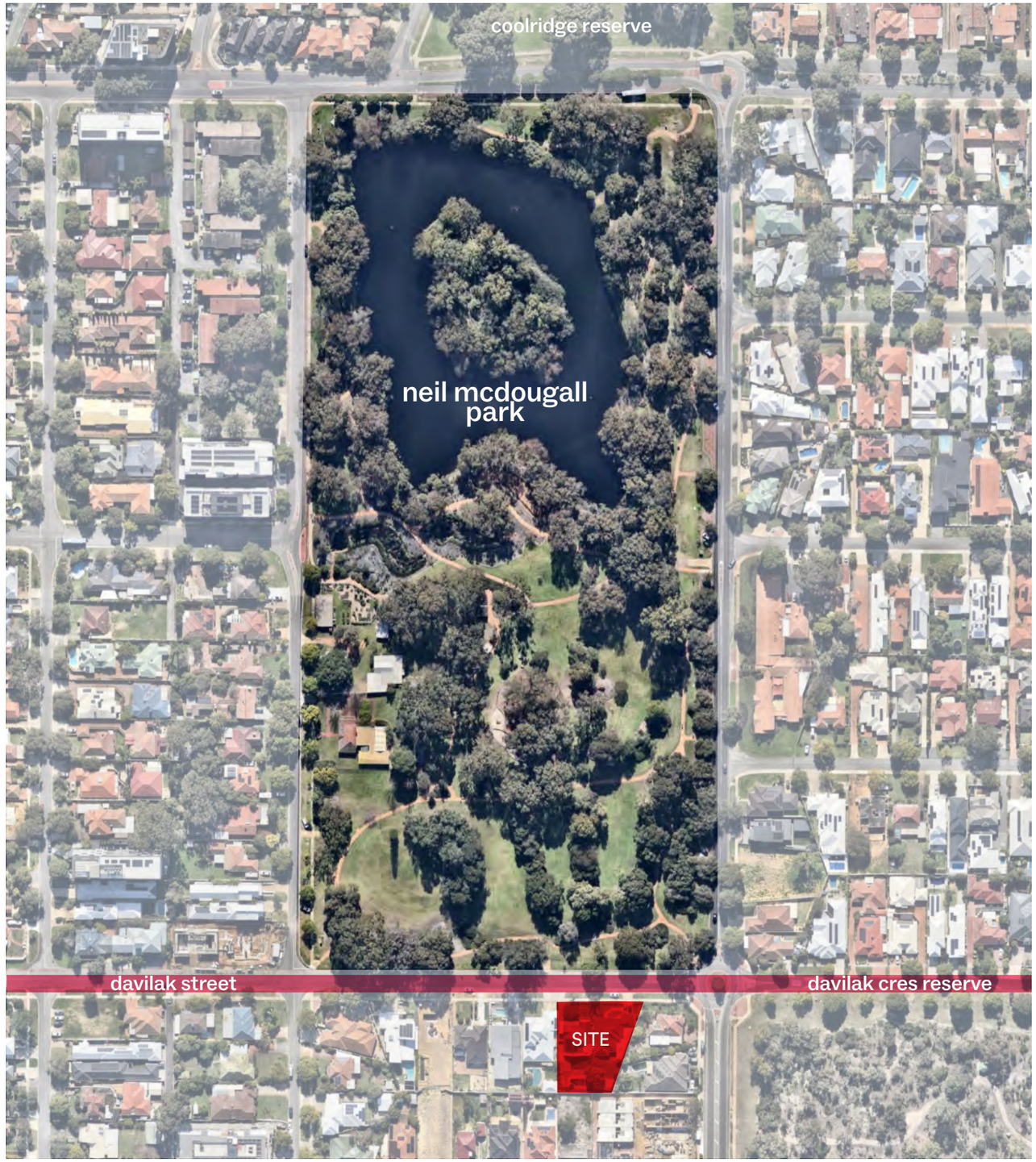
DESIGN PRINCIPLE GOAL

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context

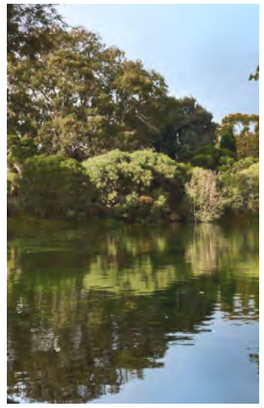
The site is nestled amongst reserves and parklands featuring endemic and exotic planting. These spaces also support a diversity of local flora and fauna and provide important landscape vistas.

- The Landscape design extends and builds upon the endemic nature of the parkland flora and fauna.
- Verges are envisaged to be ‘bushland’ like with native under plantings underpinning groves of small - medium sized native trees.
- 2 existing verge trees are retained, and 2 more are proposed.
- Key softscape palette references endemic wetland planting from the nearby parkland.

Neil McDougall Park is well recognised for its importance in local flora and fauna and is undergoing continuing improvements to address key issues surrounding the long term health of the Lake.













PRINCIPLE 2: LANDSCAPE CHARACTER

CONCEPT



COURTYARD LANDSCAPE

- Boutique townhouses paired with landscaped courtyard spaces each, 4 with direct views to verge trees and 6 with one small tree, ensuring a physical and visual connection internally to nature.
- Borrowed landscape and enjoy parkland vistas.



ENDEMIC LANDSCAPE CHARACTER

- With a significant connection with Neil Mcdougall Park,
- The landscape aspires to weave in the native wetland palette.
- The addition of significant verge trees to build additional canopy for the community.



LANDSCAPE ENTRY ARBOR + SHARED SPACES

- A landscaped entry arbor and gatehouse with trellis planting provides a soft transition into the shared landscape space of the private domain.
- The internal driveway is envisaged as a shared landscaped space which incorporates an existing significant tree on site.

COURTYARD LANDSCAPE

- Key landscape points.

EXISTING VERGE TREES RETAINED

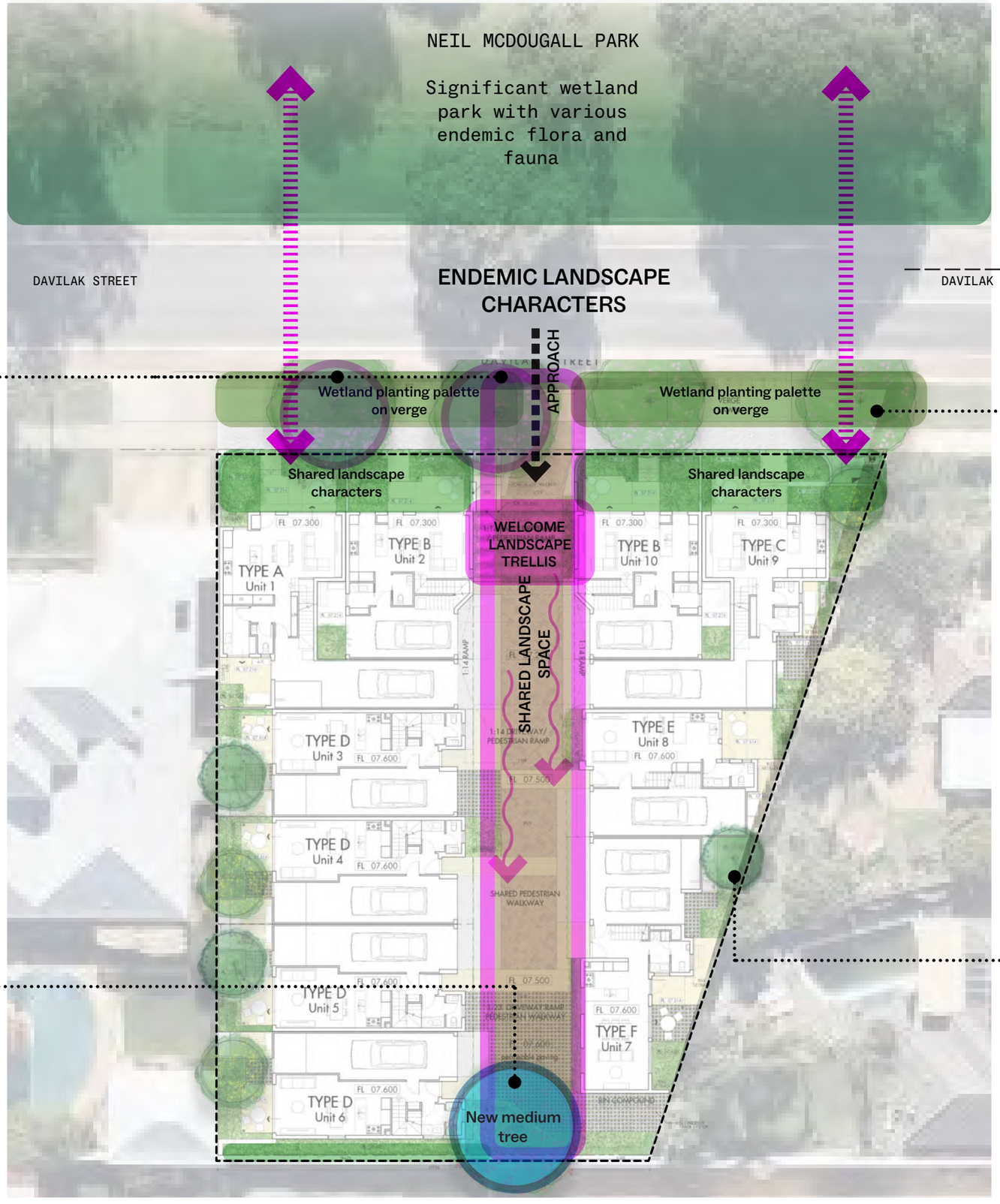


- THE TWO EXISTING VERGE TREES (EUCALYPTUS MARGINATA) HAVE BEEN RETAINED

NEW - EUCALYPTUS CAESIA MAGNA



- ARBORIST RECOMMENDS THE EXISTING LARGE TREE ON SITE (JACARANDA MIMOSIFOLIA) BE REPLACED



REDUCTION OF CROSSOVERS



DAVILAK CRESCENT

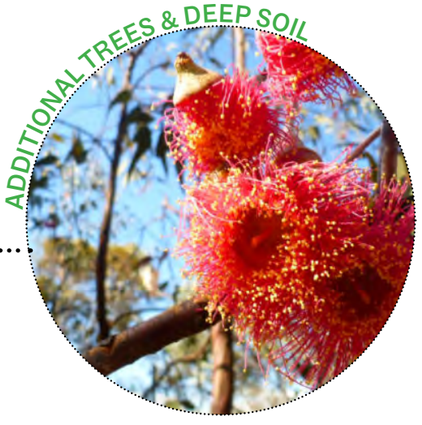
- REMOVAL OF ONE CROSSOVER CREATING MORE SOFTSCAPE ON THE VERGE

NEW VERGE TREES PROPOSED

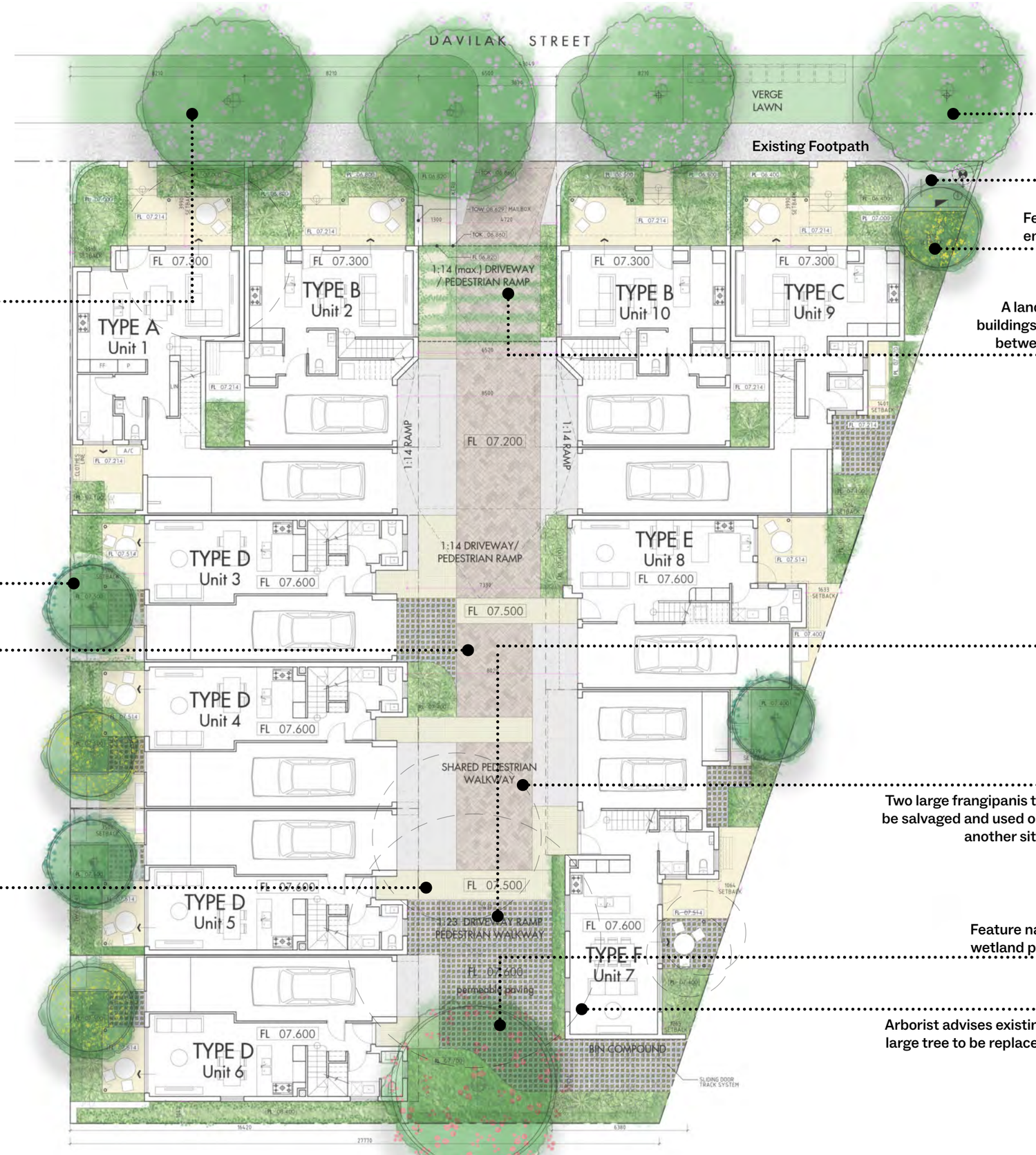


- THE PROPONENT OFFERS TO PROVIDE TWO ADDITIONAL VERGE TREES BEING OF THE CITY'S CHOICE

ADDITIONAL TREES & DEEP SOIL



- **varied hardscape treatments to break up spaces, traffic calming and for wayfinding.**



Verge planting species as per local council's species list

Australian native columnar trees to courtyards_ Native frangipani & Pittosporum angustifolium mix

Segmental pavers to driveway paving



Cobbletop paving to demarcate townhouse entry paths



Two new verge trees to be planted of the City's choice

Visitor's bicycle parking

Feature native tree to the street entry courtyards _ Banksia sentinel

A landscaped entry trellis unifying two buildings and providing a green threshold between the public and private domain



Permeable paving within new medium tree zone



Two large frangipanis to be salvaged and used on another site

Feature native tree with silvery foliage and wetland planting under_Eucalyptus caesia

Arborist advises existing large tree to be replaced





OVERALL STREETFRONT LANDSCAPE CHARACTER



LANDSCAPED ENTRY ARBOR THRESHOLD & STREET VIEW TO FEATURE MEDIUM TREE



VERGE AND COURTYARD LANDSCAPING CREATES VISUAL INTEREST



BALCONY PLANTERS AND ENTRY CANOPIES

PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE INDICATIVE TREE CHARACTER



VERGE & INTERNAL LANEWAY
Jacaranda mimosifolia
15m h x 10m w

**Compulsary Street Tree Selection as part of Davilak Cresent Precinct Plan 14*



SHARED LANDSCAPE SPACE
Eucalyptus caesia 'Gungurru'
8m h x 5m w

WA Native



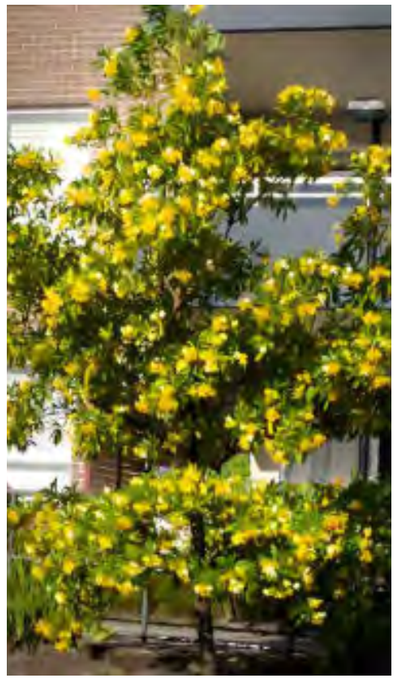
ENTRY COURTYARDS
Banksia sentinel
(Coastal Banksia)
2m h x 1m w

AUS Native



COURTYARDS
Pittosporum angustifolium
(Weeping Pittosporum)
8m h x 5m w

AUS Native



COURTYARDS
Hymenosporum flavum
(Native Frangipani)
8m h x 4m w

AUS Native



SCREENING
Hakea salicifolia
(Willow-leaved Hakea)
4m h x 3m w

AUS Native

LANDSCAPE INDICATIVE TREE CHARACTER



Verge Planting
Eremophila ‘Kalbarri Carpet’
0.2m h x 2m w
WA native
*Local council’s suggested plant



Verge Planting
Westringia Grey Box
0.5m x 0.5m wide & high
Aus native



Verge Planting
Dianella revoluta ‘Little Rev’
0.5m h x 0.4m w
AUS native
*Local council’s suggested plant



Verge Planting
Adenanthos cuneatus
0.3m h x 2m w
WA endemic
*Local council’s suggested plant



Verge Planting
Myaporum insulare prostrate
0.5m h x 2m w
AUS native



Verge Planting
Hemiandra pungens
0.2m h x 0.75m w
WA native
*Local council’s suggested plant

PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE INDICATIVE SOFTSCAPE CHARACTER



Flowering shrub
Conostylis candicans
0.3m h x 0.5m w
WA native



Ground Planting
Banksia nivea
0.5m h x 0.5m w
WA endemic
*Local council's suggested plant



Silver Planting
Leucophyta brownii
1m x 1m wide & high
AUS native
*Local council's suggested plant



Ground Planting
Correa alba
1.5m h x 1.5m w
AUS native



Wetland Planting
Ficinia nodosa
1.5m h x 1.5m w
WA native
*Local council's suggested plant



Wetland Planting
Lepidosperma gladiatum 'Coastal Sedge'
1m h x 1m w
WA native



Groundcover
Lomandra Lime Tuff
0.6m h x 0.6m w
AUS native



Ground Cover
Myaporum insulare prostrate
0.5m h x 2m w
AUS native

PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE CALCULATIONS

DEEP SOIL ZONES	
Overall Site Area	1605m²
Required Deep Soil Area (DSA) in accordance to R-Codes Volume 2	161 m2 (10% of site area)
Deep Soil Area Proposed	181m² being 11% of the Site 19m² within permeable paving
DSA Summary	The proposed landscape design meets the minimum Deep Soil Area requirement as per SPP 7.3 Volume 2, and provides more than 10% of landscaped area within the lot boundary.

KEY ITEMS

- Site Boundary
- Deep Soil Zones
- Verge Garden
- Soft Landscaping Area (not included in DSA calculation as less than 1.5m wide)
- Planting on Structure (Trellis)

A total of 181m² deep soil is made available for trees and softscape planting. Adjacent rootable soil zones are provided within permeable paving areas to support trees.



PRINCIPLE 2: LANDSCAPE CHARACTER

LANDSCAPE CALCULATIONS

TREE CANOPY METRIC	
Site Area	1605m²
Minimum requirement for trees	2 large trees and small trees to suit area (Option 2 in table 3.3 under SPP 7.3 Volume 2)
New Trees Provision	1 medium tree + 6 small trees (+13 small trees in free draining garden beds lees than 9m²) 2 large trees (verge)
Tree Canopy Summary:	Following an arboriculture report to remove the existing large tree on site, the proposed landscape incorporates a new medium tree and numerous small trees to achieve tree canopy element objectives.

KEY ITEMS

New Medium Tree on site

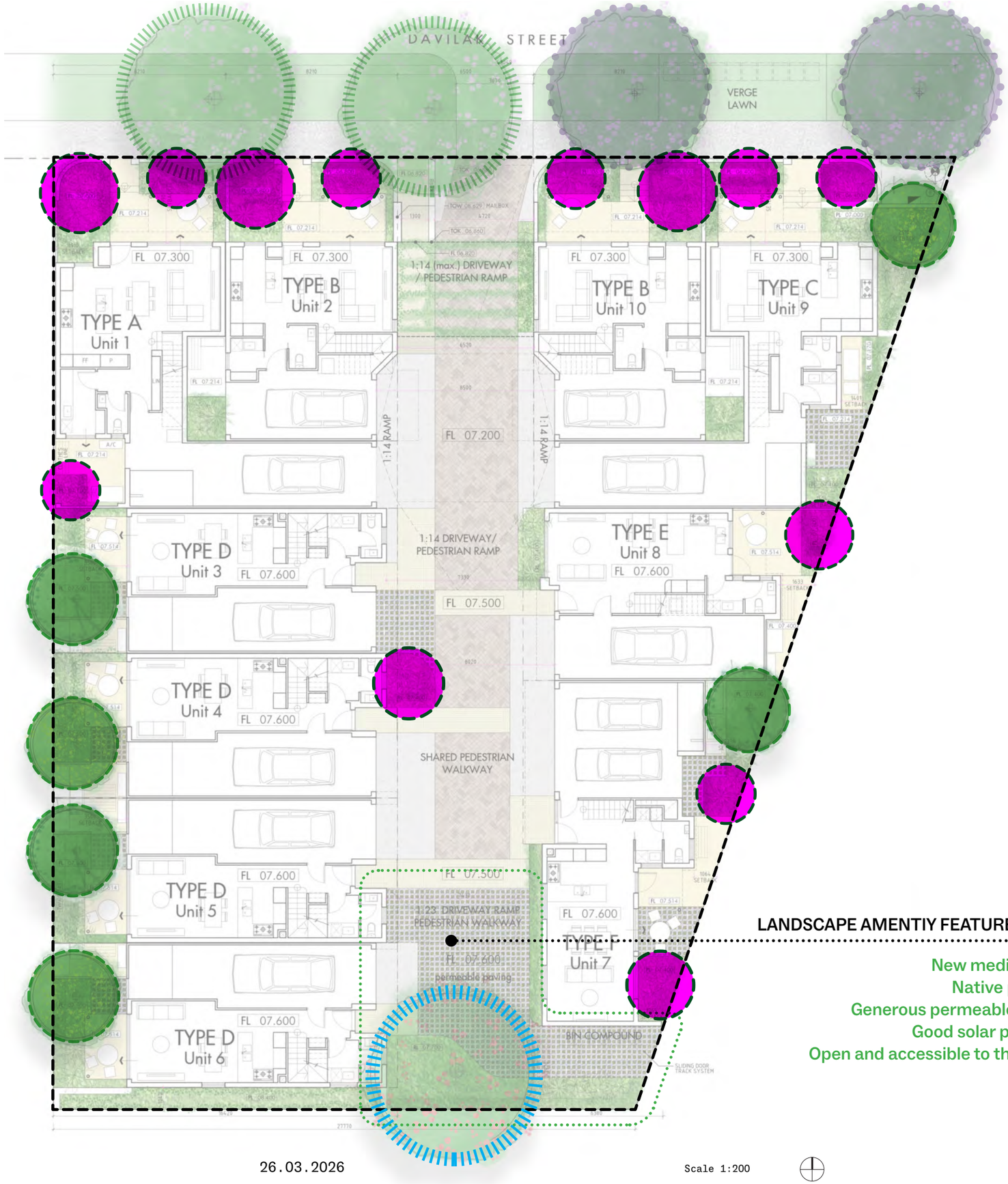
Existing Verge Trees

New Verge Trees

New Small Trees
(in free draining garden beds
less than 9m²)

New Small Trees

Towards achieving the R-Codes element objectives, provided is an additional 2 large verge trees & 19 small native trees. In addition, a new medium native tree will be integrated into the site in place of the existing large tree, which contributes greatly to the amenity of the internal shared space & connects the site terminus to the public domain.



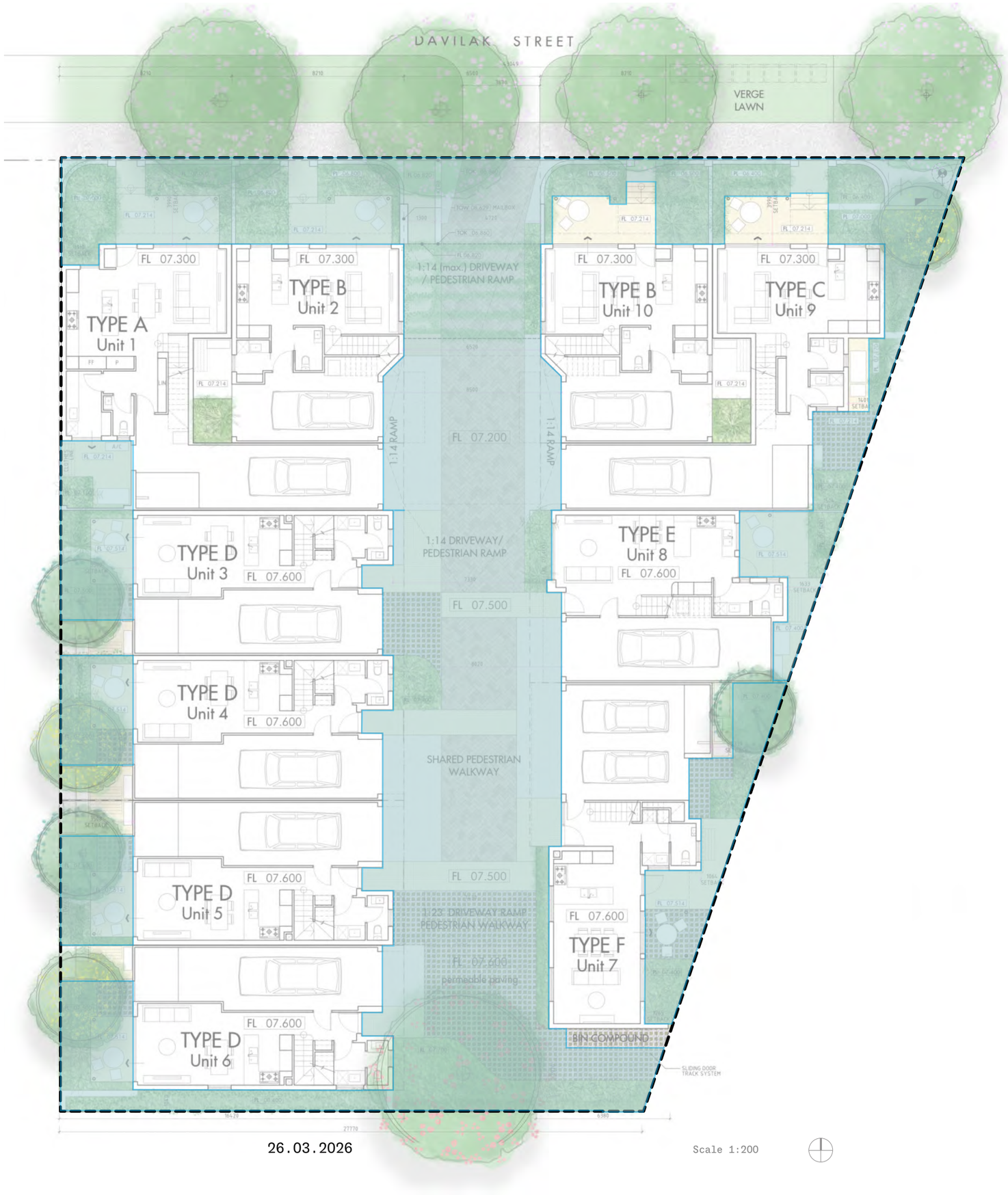
PRINCIPLE 2: LANDSCAPE CHARACTER

OPEN SPACE CALCULATIONS

OPEN SPACE ZONES	
Overall Site Area	1605 m²
Open Space Requirements in Accordance to Canning Beach Activity Centre Plan	642 m2 (40% of site area)
Open Space Provision	672m² OR 42% of the Site
Open Space Summary	Element objective is achieved.

1. Refer to Unit Layout Plans for Private Open Space Calculations in accordance to R codes Volume 2

The proposed design meets the Canning Beach Activity Centre Plan in Open Space calculation.



PRINCIPLE 3: BUILT FORM & SCALE

DESIGN PRINCIPLE GOAL

Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area

BULK & MASSING

- Keeping car garage and access through the centre of the site, the townhouses maximise northern exposure and street connection.
- Two main forms face the street and are kept simple with face brickwork elements and intentionally clean roof forms. We then layered steel pergolas, an abor and gatehouses for detailing

STREETSCAPE & VIEWS

Individual courtyards with landscaping at the street level activate the streetscape. There are views north across Neil McDougall Park.

HEIGHT

CBACP guidelines for the site allow for four storeys up to a height of 16m.

- The proposal is two storeys, with traditional hipped roofs, fitting in well with the existing streetscape and built context.

PRIVACY

Visual privacy is compliant by way of privacy setbacks, translucent windows and privacy screens. Refer privacy diagrams.

SETBACKS

- Setbacks have been discussed with the City planners, who expressed their support for the balance between the overall design and the few minor discretionary elements.



DAVILAK STREET FACADE

PRINCIPLE 4: FUNCTIONALITY & BUILD QUALITY

DESIGN PRINCIPLE GOAL

Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle

DWELLING TYPE, SIZES AND MIX

A range of dwelling types, sizes and configurations is provided that caters for differing household types and changing community demographics.

The dwellings range in size from 140sqm to 175sqm. Internal room sizes are generous and the open plan living areas open out onto outdoor living areas which generally face north, east or west. Each dwelling has excellent access to natural ventilation and light.

Refer to the Dwelling Mix and Circulation Diagram.

CIRCULATION

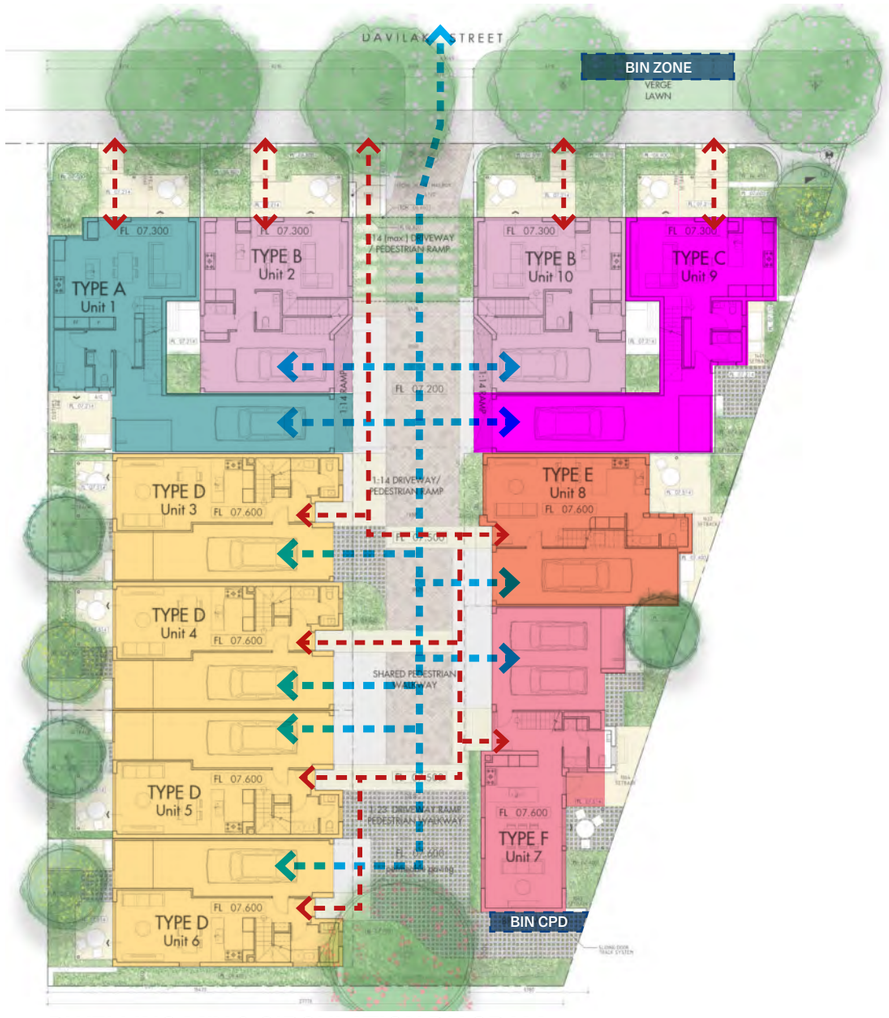
- The four streetfront townhouses have direct pedestrian addresses to the street and can be accessed off the footpath.

Circulation into the remaining townhouses is via a Gate house and arbor. All vehicle circulation is via the central shared space which the driveway passes through.

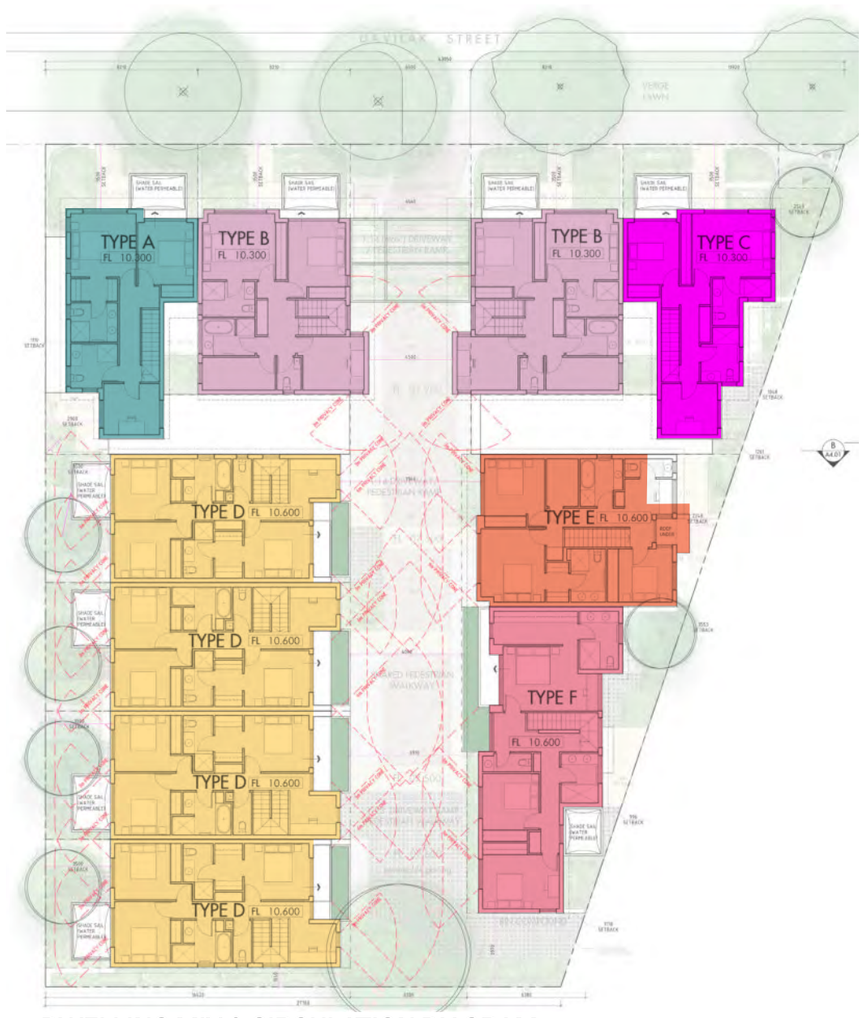
WASTE

A Waste Management Strategy has been discussed with the Council being that:

- Each townhouse contains its general waste bin which the occupier takes out for weekly collection.
- A common recycled bin compound for 6 × 360L bins is provided on site and managed by the strata for council collection.



DWELLING MIX & CIRCULATION DIAGRAM - GROUND FLOOR



DWELLING MIX & CIRCULATION DIAGRAM - GROUND FLOOR

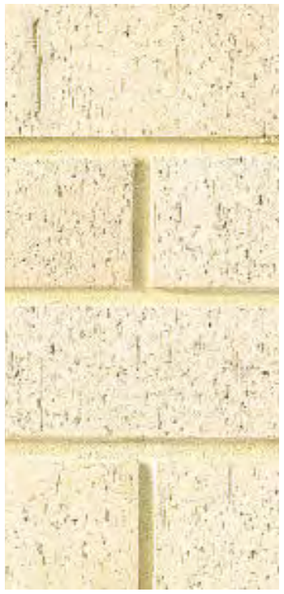
Key	Types	Internal Area (Sqm)	Mix (Bed x Bath x Powder)
	Type A	149 sqm (108 sqm living + 41 sqm garage)	2B x 2.5B x Study
	Type B	138 sqm (114 sqm living + 24 sqm garage)	2B x 2B x 2P x Study
	Type C	140 sqm (99 sqm living + 41 sqm garage)	2B x 2.5B x Study
	Type D	140 sqm (107 sqm living + 33 sqm garage)	3B x 2B x 2P
	Type E	148 sqm (117 sqm living + 31 sqm garage)	3B x 2B x 2P
	Type F	170 sqm (134 sqm living + 36 sqm garage)	3B x 2B x 2P

PEDESTRIAN CIRCULATION

VEHICLE CIRCULATION

PRINCIPLE 4: FUNCTIONALITY & BUILD QUALITY

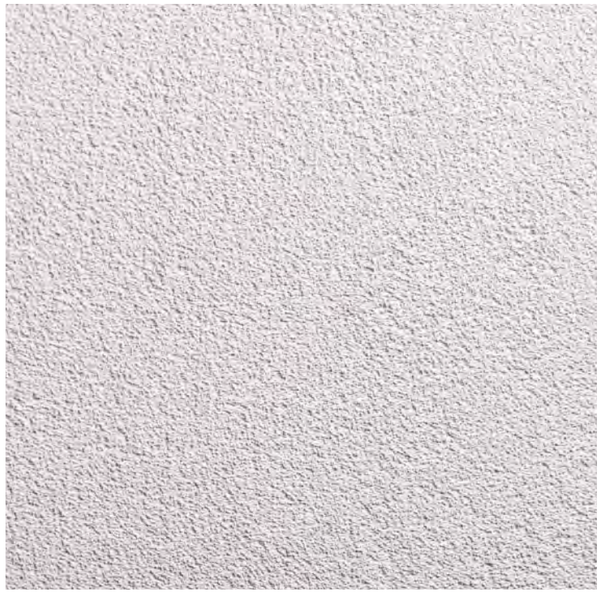
MATERIALITY





Face Brick and Face Blocks

A combination of facebrick and faceblock is proposed to create context within a typical development of this style throughout the precinct. The use of facebrick and faceblock also reduces long-term maintenance.



Render



Lightweight Painted Fibre Cement Cladding

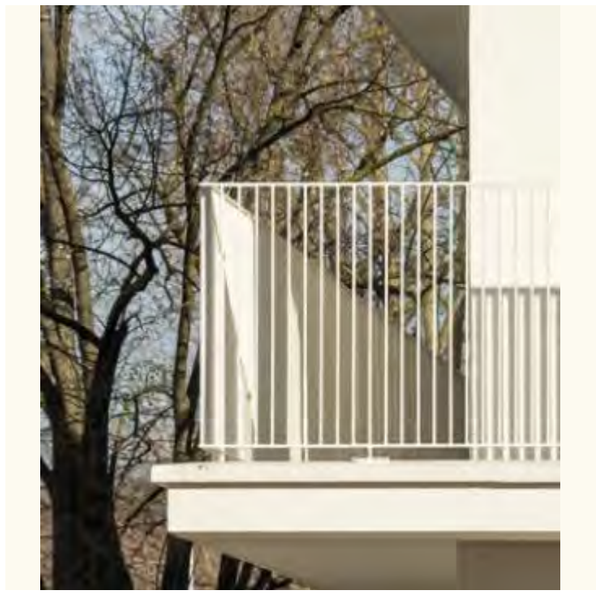


Off-Form Concrete & Cloth Shade Structure





Colorbond Metal Roof Sheeting, Galvanised Gutters & Downpipes



Metal Balustrade





Segmental Pavers

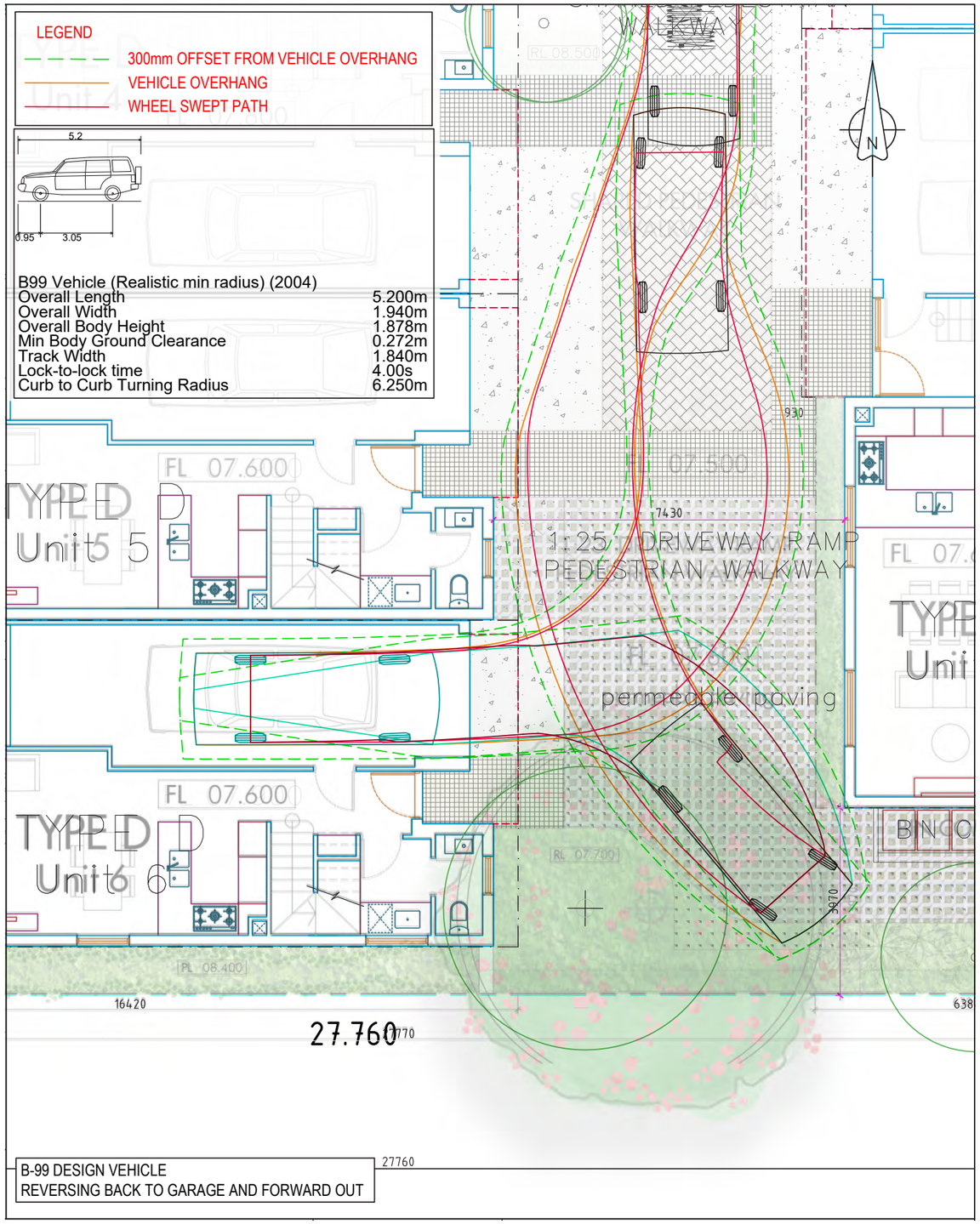


Permeable Paving

CAR SWEPT PATHS

The design team and the traffic consultant have assessed the car swept paths for all units.

- The diagram adjacent demonstrates that a B99 design vehicle can safely enter and exit Townhouse Type D on the southern end of the site and safely clear the large tree within the shared laneway.



DESIGN PRINCIPLE GOAL

Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle

OVERALL SUSTAINABILITY REQUIREMENT

An ESD consultant has been engaged, with a preliminary report pending. This is addressing requirements set by the City, along with recently enacted requirements brought about through the NCC 2022 adoption.

VENTILATION

All townhouses achieve cross ventilation as shown on the Ventilation Diagrams.

ENERGY EFFICIENCY

Element 4.15 of SPP7.3 has been addressed through the inclusion of: Provision for future solar panels, batteries & car chargers, heat pump hws, solar powered lighting to common spaces.

SOLAR POWER

All townhouses will have provision for solar panels and electric vehicle car chargers and battery storage capability.

WATER

Rainwater tanks (2000L) are provided for all but Type B townhouses, as indicated on the plans. Plumbing fixtures will be WELS rated. In addition, selected landscape plantings will be waterwise species with reticulation being dripline.

- All but two of the proposed dwellings are dual aspect or better, for natural ventilation, solar access and views.
- Each unit also has provision for solar panels and electric car chargers and a rain water tank.
- Hot water units are to have heat pumps, common lighting is to be solar powered.



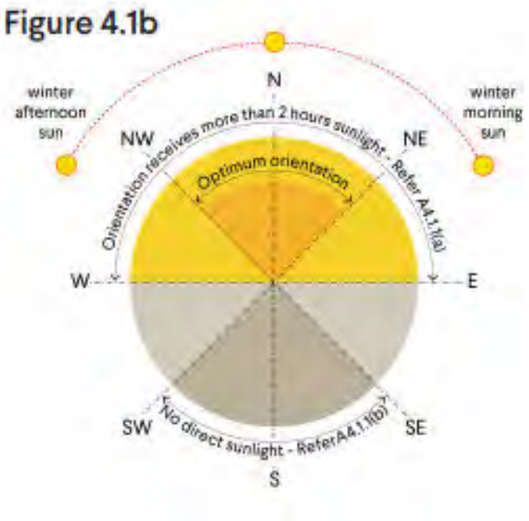
VENTILATION DIAGRAMS - GROUND FLOOR



VENTILATION DIAGRAMS - FIRST FLOOR

SOLAR & DAYLIGHT ACCESS

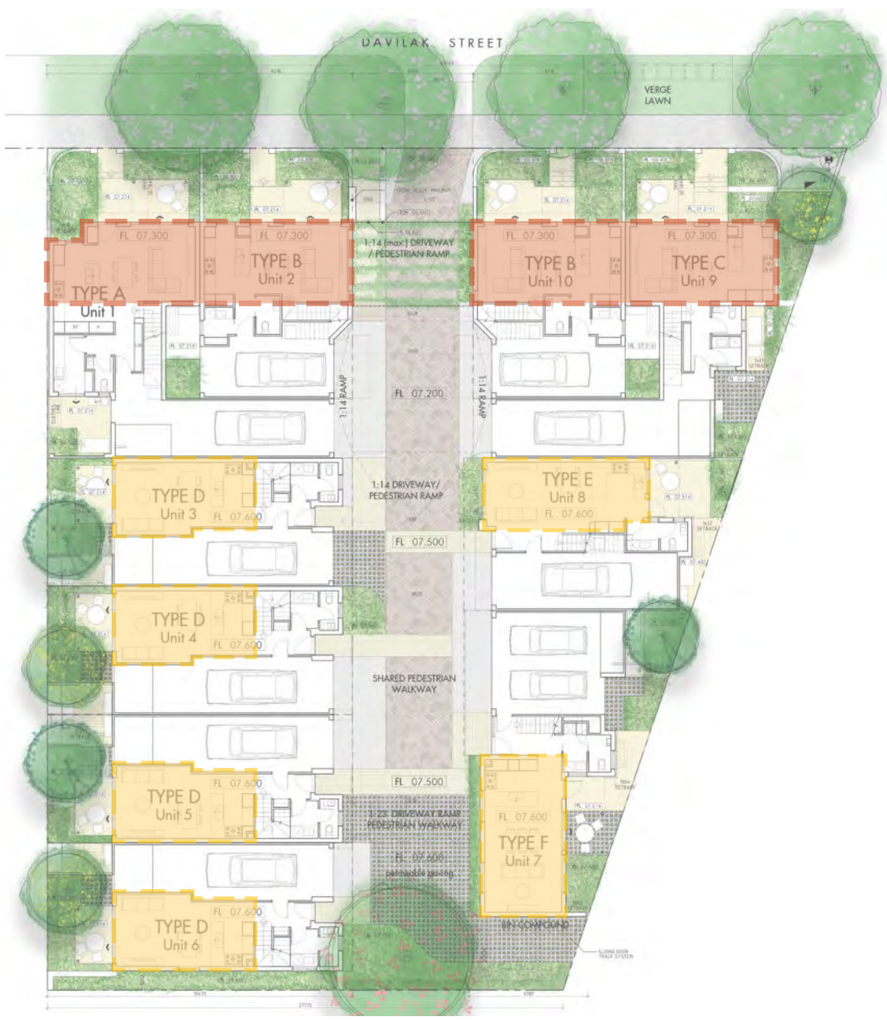
- **All main living spaces and habitable rooms receive or exceed the deemed to comply requirements for solar access. Refer to the Solar Access Diagrams.**



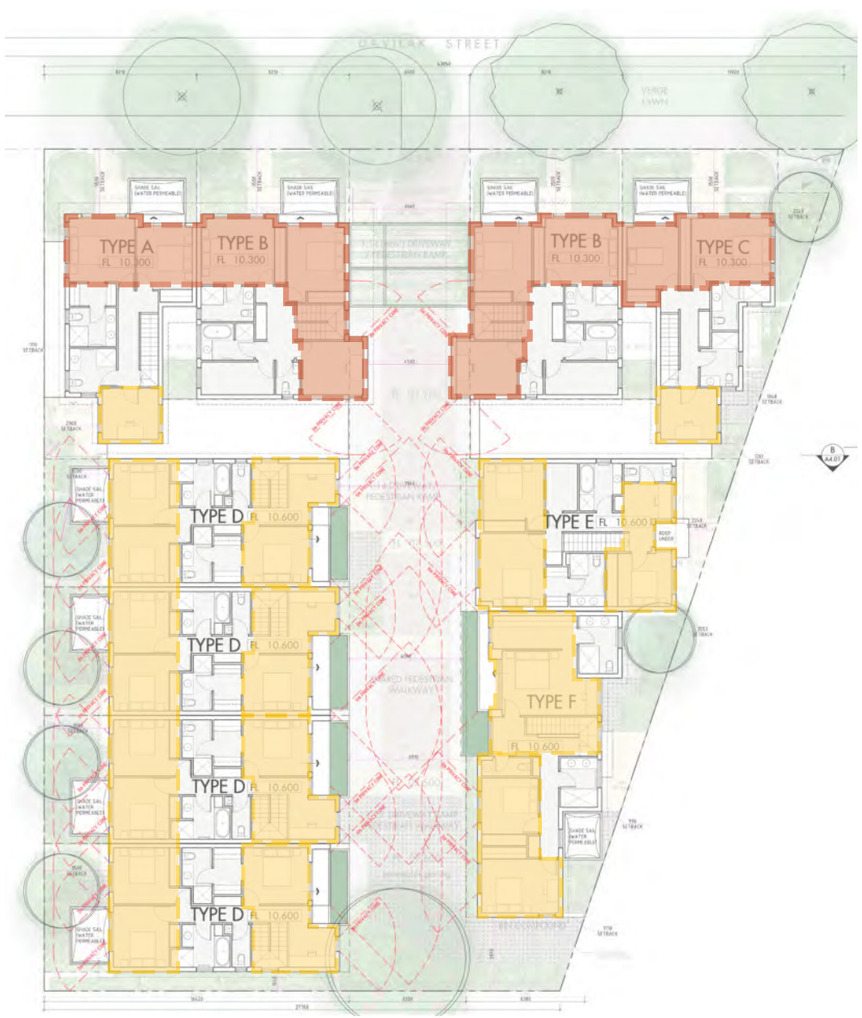
KEY

Habitable rooms receiving more than 2 hours of sunlight

Habitable rooms receiving more than 2 hours of sunlight and in the optimum orientation



SOLAR ACCESS DIAGRAMS - GROUND FLOOR



SOLAR ACCESS DIAGRAMS - FIRST FLOOR

DESIGN PRINCIPLE GOAL

Good design provides successful places that offer a variety of uses and activities while optimising internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.

Each dwelling has their own private courtyard accessed directly from the main living areas. Some courtyards face onto the parkland to the north. Each courtyard has a small tree and planting which provides a connection to landscape and nature providing a softer view from the internal spaces.

All but two of the proposed dwellings are dual aspect for natural ventilation, solar access and views. Each unit also has provision for solar panels and electric car chargers and a rain water tank.

The provision of large garages that can accommodate one car with the remaining space being flexible for bikes, a workshop or additional storage.

The proposal also maximises the number of townhouses (four) with a direct connection to the parkland to the north and the associated full northern solar aspect.

At the same time, the proposal has only one crossover for all parking on site. Providing parking for the four townhouses to the front of the scheme from the central driveway required careful planning.

Three townhouses are designed to meet the Silver level for Liveable Housing Design Guidelines, which is greater than the requirement for the City.

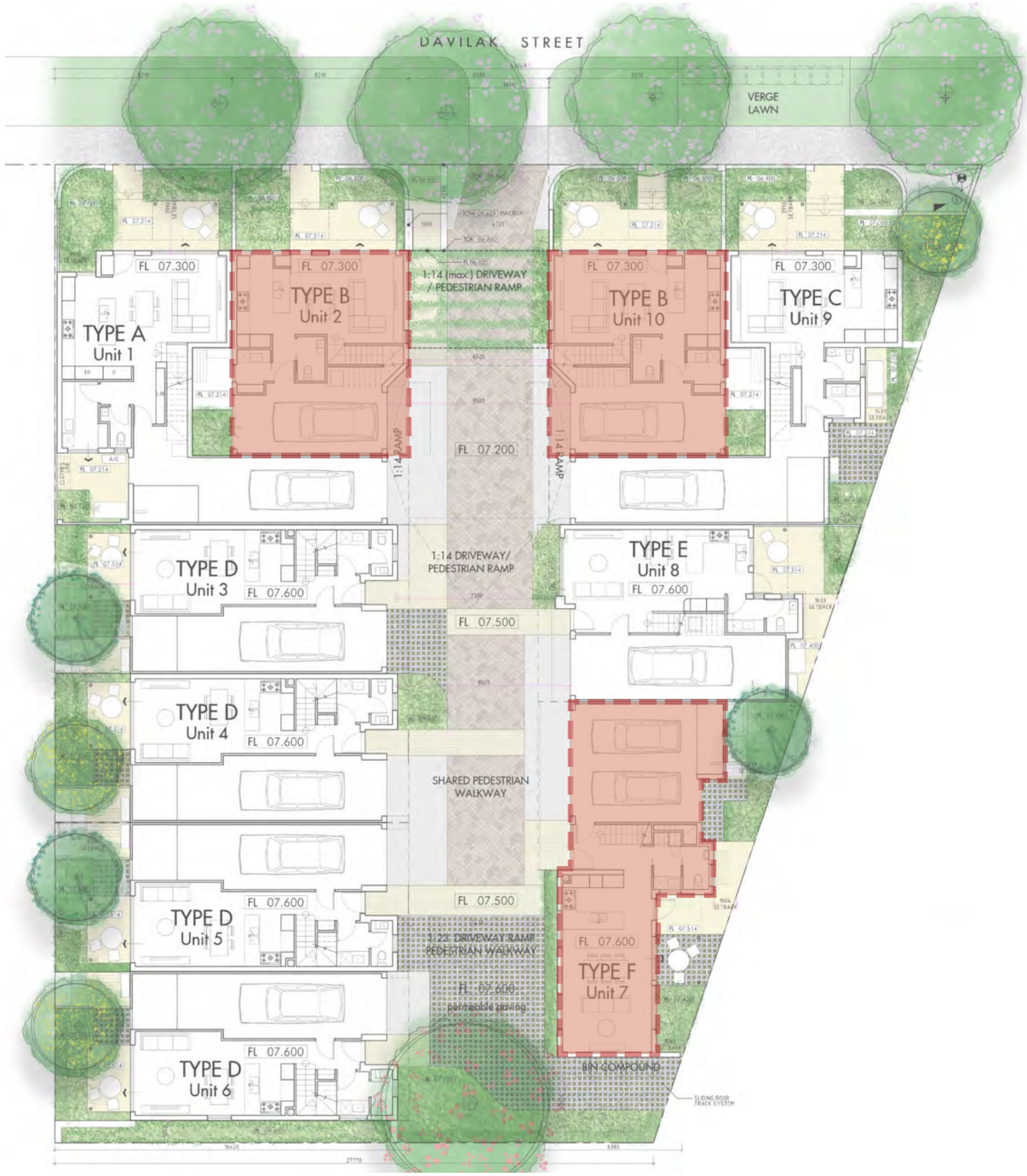


PRINCIPLE 6: AMENITY

LIVABLE HOUSING DESIGN GUIDELINES

LIVABLE HOUSING DESIGN REQUIREMENTS	
20% of Dwellings to meet Silver Level as defined in Livable Housing Design Guidelines to City of South Perth's satisfaction	2 Units out of 10 Units
Provision	3 Units out of 10 Units

- The proposed design provides an excess of 1 additional dwelling, to a total of 3, that will meet the Silver Level of the Livable Housing Design Guidelines.
- The design creates a village feel with mixture of spaces to interact with neighbours both within the development and facing to the street and McDougall Park.
- Good landscape provisions and planning ensure every living space opens onto a landscaped space whether in be a courtyard or onto parkland.
- Great access to light and ventilation.



Ground Floor Plan

- We've mentioned before that the proposal is for a modest development in its scale and architectural expression. The design is simple and embelished in a few key areas, such as the gate house, arbor elements and then with good landscape provisions.
- These embelishments add to the legibility of the design and also in wayfinding.

DESIGN PRINCIPLE GOAL

Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around

The townhouses are presented to the street frontage as two main buildings with abundant fenestration to the north taking advantage of the solar aspect and also of views to the park. The built form of the main massing and roofs is intentionally simple and clean.

Care was also taken to articulate each vertical townhouse as a single dwelling with its own street presence. Individual pergola structures to the front courtyard help to identify each townhouse layering detail to the development.

The existing footpath in the front verge connects each street facing dwelling to the existing footpath network, integrating the new development with the neighbourhood.

A gatehouse and arbor structure then unify the main buildings and provide a marker for pedestrian and vehicle entry for parking and rear townhouse access.

Internally, the legibility of vehicle and front door access to the townhouses is managed through varying paving patterns and landscape planters and garden beds.

The internal elevations of the townhouses accessed via the central shared zone have repeated vertical articulations spaced by a balcony planter which also serves as an entry canopy.



PRINCIPLE 8: SAFETY

DESIGN PRINCIPLE GOAL

Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use

Creating usable front gardens whereby people can engage with their neighbours is also good for community and safety.

- Passive surveillance over the street and into the adjacent park is achieved through open views from each of the floors of the northern facing dwellings.
- Front private courtyards have permeable fencing, providing direct visual connection to the parkland and streetscape.

Changes in paving type, paving widths, garden beds and plantings with trees, are traffic calming devices which create a safer space for vehicular and pedestrian movement.

Access for cars, bicycles and pedestrians is via the shared space which is not just a driveway.

Common area lighting on sensors will assist with safety at night. Passive surveillance into the shared space is encouraged through the provision of habitable rooms and balconies facing into this space.



PRINCIPLE 9: COMMUNITY

DESIGN PRINCIPLE GOAL

Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction

Offering a townhouse typology on this site being at the edge of the four-storey height zone and adjacent to the residential zone bridges the scales of the traditional single detached house and the increasing number of multi-storey apartments.

- The proposal is of a scale that relates well to surrounding neighbours, minimising the impact of overshadowing and bulk and scale.
- The scale also affords neighbours ample solar access.
- Street facing townhouses encourage occupiers to engage with each other and with other locals through courtyards fronting onto the public domain.

Personal outdoor areas are an offering not typical for higher density dwellings, an attractive feature for young families. The townhouse typology provides this. Above and on-ground planting opportunities allow ways for tenants to express individual personality.

The design retains a significant tree on the site, and two on the verge to retain canopy cover and also improves on what is currently on site by adding a significant number of smaller trees.

The townhouses also encourage a diverse range of occupiers from young couples and students to small families to down-sizers.



PRINCIPLE 10: AESTHETICS

DESIGN PRINCIPLE GOAL

Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses

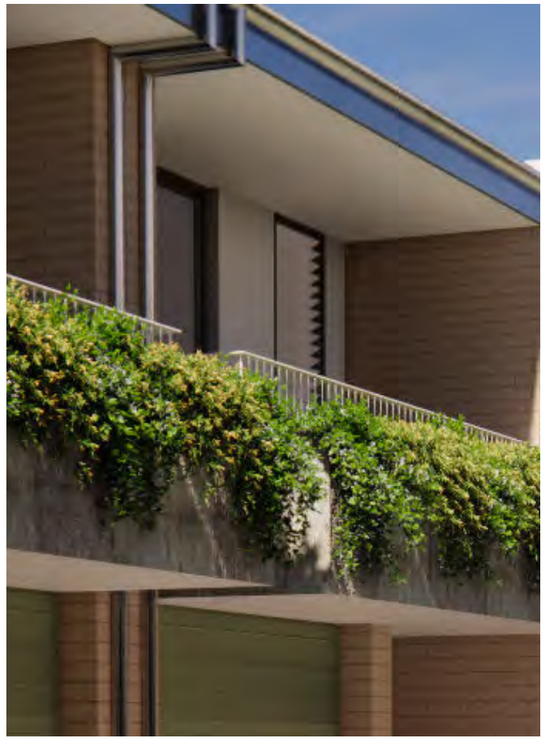
The two main building forms fronting Davilak Street can be described as traditional in their form with pitched roofs, boxed eaves and face brickwork . Finer steel elements by way of pergolas, balustrades and an entry arbor and gatehouse, have been used to provide articulation and detail.

A variation in the format sizes of face brickwork provide a nuanced patterning and hierarchy to the masonry elements of the design. Coloured grooved eaves and wall linings draw upon the green/grey tones of the adjacent parkland.

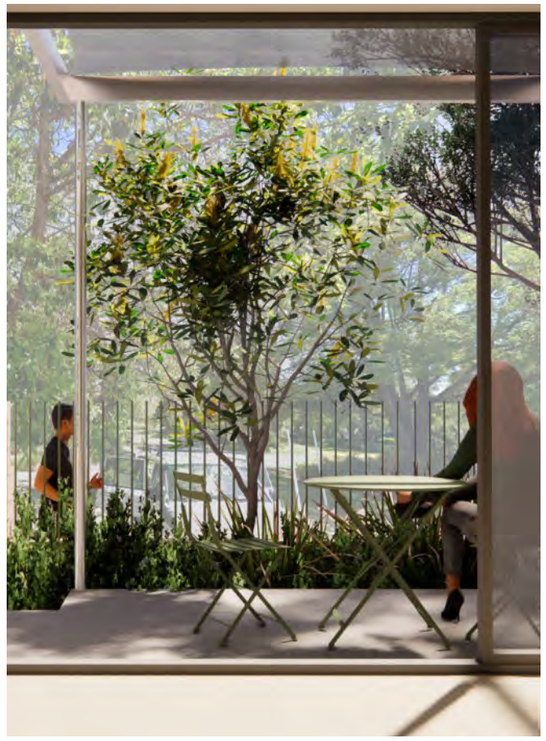
The design is intended to be modest in scale and form, and be of a human scale both to blend into the existing built context, but also to free itself from some of the ubiquitously accepted design trends seen in housing. The traditional roof functions well for solar performance, drainage and cost effectiveness. The design aspires to provide good planning and good relationships between internal and external living spaces, with those relationships extending to the parkland.

The integrated landscaped elements have an important role in softening the built form and providing joy and interest to the public realm and private spaces of the design. An engaging palette of local flora will provide seasonal flowers and colours and draw in birds and animals. The trellised entry arbor importantly provides a visual threshold and privacy from the street to announce the entrance to the development, whilst also mitigating a 'gun barrel' vista from the public domain. Differing paving elements, garden beds and trees to the central shared space create interest and variety to what could be a harsh driveway dominated space or cars.

- The architectural aesthetic is deliberately of a traditional look, utilising materials from a well understood public palette of face brickwork, some rendered elements, pitched roofs, within a verdant landscape.









EMERGEN

SUSTAINABLE DESIGN ASSESSMENT REPORT

TOWNHOUSE DEVELOPMENT

29 & 31 Davilak Street, Como, WA 6152

PREPARED BY

NYONIKA OBERAI

Project: 132752

Published Date: 11/11/2025

EMERGEN

DOCUMENT REVISION

DATE	DOCUMENT	COMPLETED BY	REVIEWED BY	APPROVED BY	REV NO.
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A1.01 - A3.03	Architectural Drawings	1

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The contents of this report are based on the documentation and plans provided by the Client to EMERGEN/CADDS Group. The outcomes presented are representative of schematic systems, schedules, and project design. These results should not be considered as actual energy usage.

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1 OVERVIEW

EMERGEN has developed a sustainable design report on the proposed Townhouse Development at 29 & 31 Davilak Street, Como, WA, in consultation with Birch Group.

The purpose of this report is to support the development application by identifying the principles incorporated in the design that meet sustainable objectives and targets for the site. The initial assessment is based on preliminary documentation with the outcomes subject to change during design development.

1.1 STATE PLANNING POLICY SUMMARY

EMERGEN (a division of CADDS GROUP), in collaboration with the design team (Birch I have aGroup) has developed a sustainable design strategy aligning with State Planning Policy 7.0 – Design of the Built Environment, which focuses on the Design of the Built Environment - specifically, Principle 5: Sustainability, and also Element 4.15 (Energy efficiency) of the Residential Design Codes Volume 2 as referenced by the Canning Bridge Activity Centre Plan. Pre-lodgement engagement with City of South Perth officers has confirmed that a sustainable design strategy focussing on Element 4.15 (Energy efficiency) of the Residential Design Codes Volume 2 is an accepted pathway to sustainability as an alternative to the green star design pathway under the Canning Bridge Activity Centre Plan.

This report serves the vital purpose of bolstering the development application by articulating the sustainability principles and commitments for the project site. We acknowledge the significance of State Planning Policy 7.0 in promoting sustainability within the built environment. Good design, as outlined in the policy, is not only about aesthetics but also optimises the sustainability of our built surroundings, yielding positive outcomes on environmental, social, and economic fronts.

Our approach to sustainable landscape and urban design adheres closely to the established water-sensitive urban design principles, ensuring minimal adverse impacts on existing natural features and ecological processes while promoting green infrastructure at all scales of the project. Furthermore, our strategy for sustainable built environments embraces passive environmental design measures tailored to local climate and site conditions. This includes careful consideration of optimal orientation, shading, building envelope, and natural ventilation, ultimately reducing reliance on energy-intensive heating and cooling technologies. This, in turn, results in reduced energy consumption, decreased resource usage, and lowered operating costs throughout the project's lifecycle.

EMERGEN

2 TARGETS

The design team will utilise a structured approach to a sustainable outcome for the design and construction of the development including the following Sustainable Targets.

Table 1: Sustainability Targets

DESCRIPTION	GOAL	SUSTAINABILITY COMMITMENTS
STRUCTURE DESIGN EFFICIENCY	Integrate passive solar design principles into optimising solar access in winter and shading in summer.	• Enhance solar passive performance by incorporating shading devices on north and west-facing windows to reduce summer heat gain and improve visual interest. • Above **60%** of the combined living and bedroom area of each unit have high level of daylight (above 160 Lux). • Building orientation and design to maximise natural ventilation and promote cooling opportunities • External shading devices to minimise heat gains • Building form and orientation to maximise natural daylighting • External clothesline for all dwellings • Rainwater wanks for 2000 litre capacity for each dwelling except Type B
ENERGY EFFICIENCY	Enhance energy performance by reducing consumption through efficient design and the use of renewable and low-energy systems.	• Efficient LED Lighting. • Provision for future solar photovoltaic (PV) system to supply renewable energy. • All units meet the minimum NatHERS energy efficiency requirement of **7 stars for sole occupancy**, based on the NCC 2022.
WATER EFFICIENCY	Efficient water fixtures.	• High WELS Ratings
HEAT RESILIENCE	Reduce impacts of heat island effect	• Light roof colour (SRI ≥ 0.64). • Incorporate vegetation and green spaces around the building to provide shading and reduce surrounding air temperatures. • Landscaping plant selections are water-wise species
SUSTAIBLE TRANPORT	Low carbon options	• Provision for future EV charging bays. • Provision for secure bicycle storage area.
INDOOR ENVIRONMENT QUALITY	Enhance indoor air quality	• Natural ventilation to all apartment units. • Low VOC and Low Formaldehyde products to be used. • Minimum 95% of internally applied paints, adhesives, sealants (by volume), and carpets (by area) must meet TVOC limits.

3 PROJECT INFORMATION

The proposed development is located at 29 & 31 Davilak Street, Como, and seeks to revitalize the site through a contemporary residential project. The proposal includes 10 townhouse units over a two floor. The development is designed to enhance the local streetscape by delivering high-quality, sustainable housing that respects and complements the suburb's existing low- to medium-density residential character.



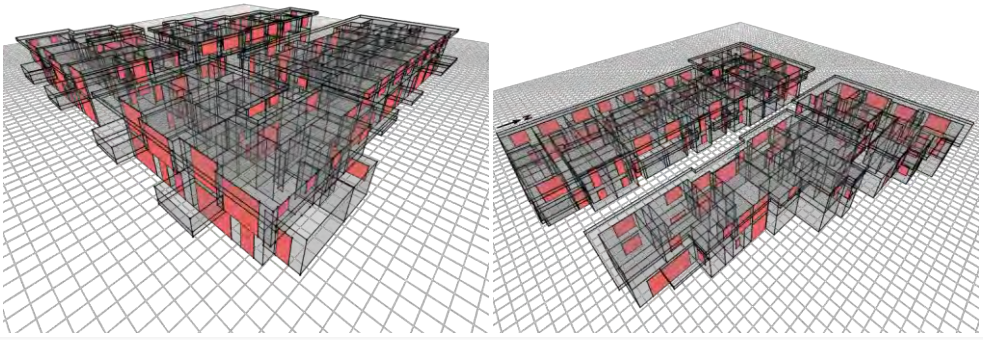


Figure 1: Existing Site Image/Proposed Development

4 STRUCTURE DESIGN EFFICIENCY

4.1 SOLAR PASSIVE DESIGN

The heatmap shows the average direct solar radiation (W/m^2) by hour and month. As expected, no solar occurs overnight, with exposure starting around 7–8 AM, peaking at midday, and tapering off by evening. Peak values are highest in summer (up to ~880 W/m^2) with longer daylight hours, while winter months show lower peaks (~350–550 W/m^2) and shorter exposure periods. This data highlights seasonal variation in solar availability.



Direct Solar (mean) W/m²

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12 AM	0	0	0	0	0	0	0	0	0	0	0	0
11 PM	0	0	0	0	0	0	0	0	0	0	0	0
10 PM	0	0	0	0	0	0	0	0	0	0	0	0
9 PM	0	0	0	0	0	0	0	0	0	0	0	0
8 PM	0	0	0	0	0	0	0	0	0	0	0	0
7 PM	541	310	0	0	0	0	0	0	0	0	39	498
6 PM	701	646	585	144	0	0	0	0	320	500	592	660
5 PM	793	744	718	589	415	369	120	441	552	633	692	750
4 PM	834	790	784	672	506	467	276	524	599	700	748	800
3 PM	857	827	821	681	582	534	342	549	612	726	788	846
2 PM	866	843	847	655	628	593	418	551	623	737	796	880
1 PM	848	846	839	623	627	636	493	552	644	732	796	880
12 PM	826	844	810	591	616	650	521	553	672	713	775	863
11 AM	799	804	773	581	578	598	507	540	671	690	733	835
10 AM	746	722	703	537	490	503	467	477	617	651	684	791
9 AM	662	585	578	411	365	257	398	364	510	571	624	714
8 AM	530	403	299	157	0	0	200	49	285	443	534	589
7 AM	223	35	0	0	0	0	0	0	0	157	341	384
6 AM	0	0	0	0	0	0	0	0	0	0	0	0
5 AM	0	0	0	0	0	0	0	0	0	0	0	0
4 AM	0	0	0	0	0	0	0	0	0	0	0	0
3 AM	0	0	0	0	0	0	0	0	0	0	0	0
2 AM	0	0	0	0	0	0	0	0	0	0	0	0
1 AM	0	0	0	0	0	0	0	0	0	0	0	0

Location
Perth.Metro, WA, AUS

Coordinates
31.92° S / 115.87° E

Weather File
AUS_WA_Perth.Metro.946080_TMYx.2007-2021

Figure 2: Average Direct Solar (W/m^2)

By aligning orientation, window sizing, shading, and material selection with the solar availability shown, the building can achieve improved comfort, reduced energy demand, and stronger alignment with passive design principles.

4.2 DAYLIGHTING

The proposed development has been designed to optimise natural daylight, improving occupant comfort and reducing reliance on artificial lighting.

To evaluate the effectiveness of these strategies, a detailed daylight assessment was undertaken using Green Star Buildings Credit 11 – Light Quality as the performance benchmark. Under this framework, high daylight levels are defined as at least 160 lux from daylight for 80% of occupied hours, with compliance achieved when 60% of the combined assessed areas meet this target. This methodology provides a recognised standard for assessing internal daylight performance.

The results confirm that the majority of apartment units and key common areas achieve adequate daylight, exceeding the 60% compliance threshold and demonstrating the success of the proposed daylighting strategies. Figure 5 to Figure 8 illustrate the distribution of daylight across the building, while Table 3 and 4 summarises compliance by floor.

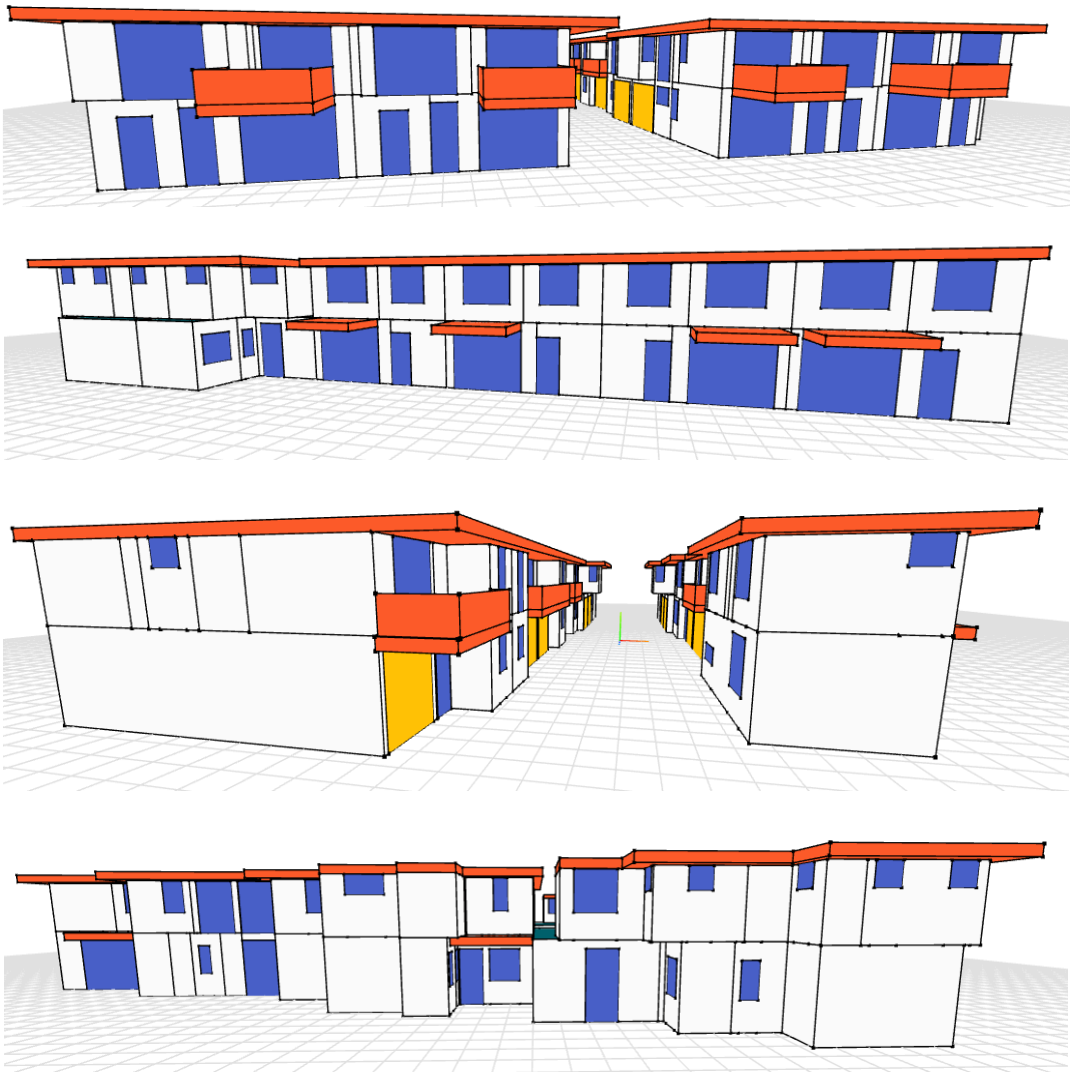


Figure 3: Daylighting Model in Better Buildings

Table 2: Calculation Conditions - Daylight

CALCULATION CONDITIONS	
TEST FACTOR	Spatial Daylight Autonomy
SKY MODEL	Perez Sky, adapted according to hourly weather conditions
DATE	Annual (on all days between 8am until 6pm)

Table 3: Daylighting Results for Apartments

LEVEL	PROPOSE USAGE	NOMINATED AREA (m^2)	COMPLIANT AREA (m^2)	COMPLIANCE (%)
1	Living	195.17	195.17	100.00
2	Bedrooms	333.66	324.22	97.17



Figure 4: Daylighting for Ground Floor



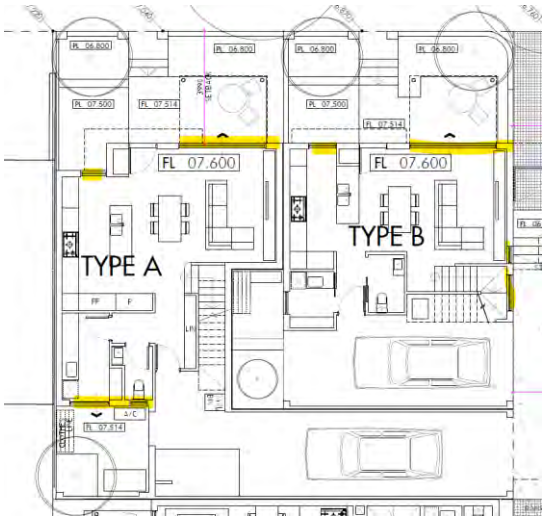
Figure 5: Daylighting for First Floor

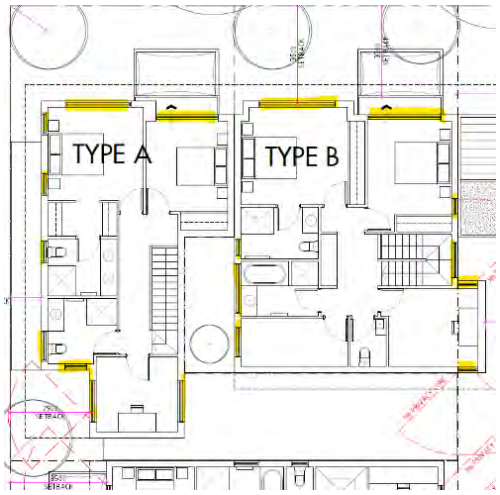
5 PASSIVE DESIGN

5.1 NATURAL VENTILATION

The natural ventilation strategy has been informed by the Built Environment Sustainability Scorecard (BESS), a recognised best-practice guidance tool commonly used to demonstrate effective ventilation outcomes at the planning stage.

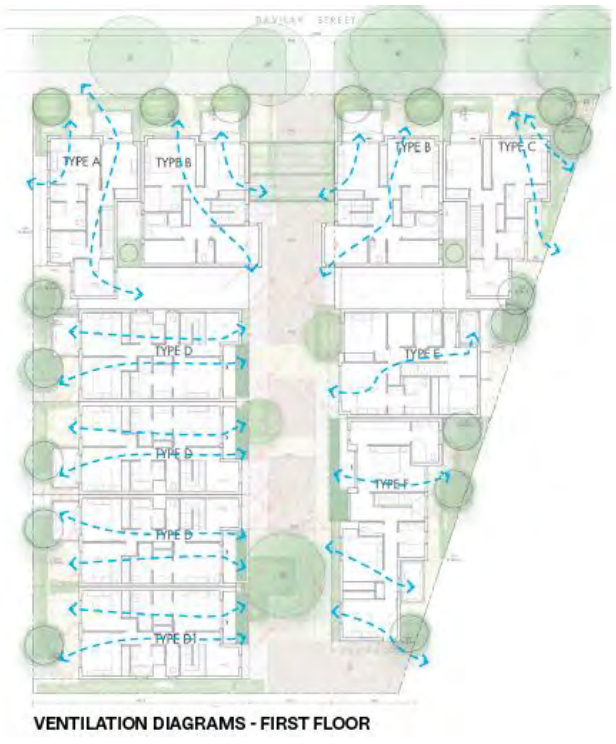
- In townhouses, Cross ventilation can be designed for rooms or for an entire unit. Accordingly, cross ventilation principles are applied. BESS guidance for cross ventilation recommends that: The length of the breeze path should be a maximum of 15 metres; Ventilation openings should be at least 1m^2 or 2% of the floor area in size; Ventilation openings on adjacent walls should be at least 3 metres apart; There should not be more than 1 doorway or opening between ventilation openings.







VENTILATION DIAGRAMS - GROUND FLOOR



VENTILATION DIAGRAMS - FIRST FLOOR

Figure 6: Type A and B on the GF and FF - Cross ventilation strategy

5.2 PROVISION OF EXTERNAL CLOTHESLINE

Each townhouse has external clothesline to every dwelling located in an area of direct view on an external wall or in a breezeway



Figure 7: Clothesline in all units

5.3 RAINWATER TANK

Rainwater tanks (2000ltr) provided for each dwelling except Type B



6 ENERGY EFFICIENCY

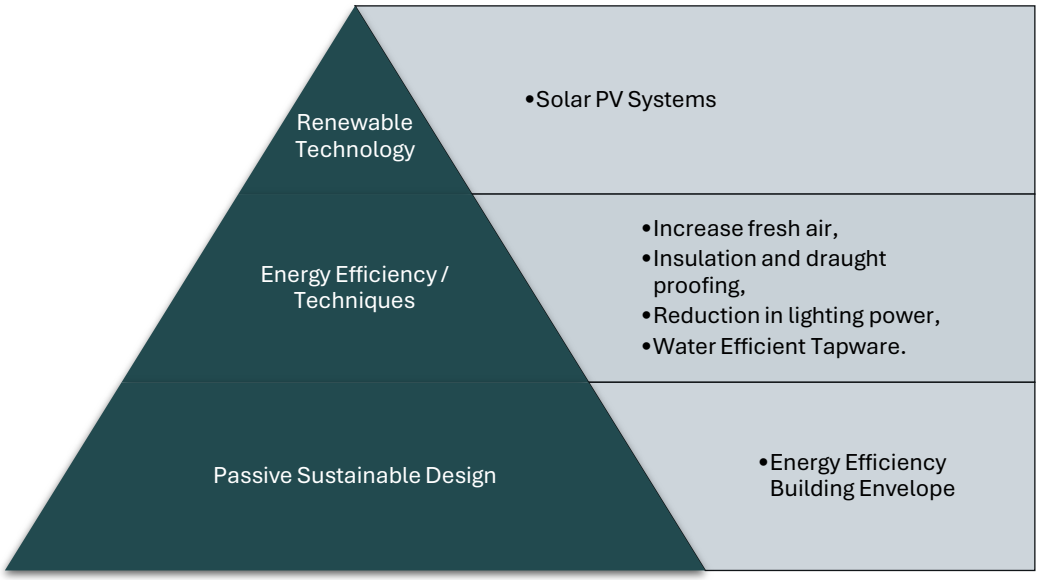


Figure 8: Energy Reduction Strategy

6.1 LIGHTING COMFORT

Lighting within the building must meet the following criteria:

- All lighting must be flicker-free.
- Light sources must have a minimum Colour Rendering Index (CRI) average R1 to R8 of 85 or higher and have a CRI R9 of 50 or higher.
- Light sources must meet best practice illuminance levels for each task within each space type with a maintained illuminance that meets the levels recommended in AS/NZS 1680.1:2006 series applicable to the project type and including maintenance.
- The maintained Illuminance values must achieve a uniformity of no less than that specified in Table 3.2 of AS/NZS 1680.1:2006, with a maintenance factor method as defined in AS/NZS 1680.4.; and
- All light sources must have a minimum of 3 MacAdam Ellipses.
- The walls within the field of view of occupants in regularly occupied spaces must have an average surface reflectance value of 0.70 and an average surface illuminance of at least 50% of the horizontal illuminance levels required for task.
- Vertical illuminance in workspaces: ensure that 50% of the horizontal task illuminance reaches the average eye height for 90% of primary spaces using vertical illuminance calculation grid.
- The illuminance values must be calculated in accordance with AS/NZS 1680 series for the relevant task.

6.2 ARTIFICIAL LIGHTING & CONTROLS

Internal lighting is a significant contributor to overall building energy use. To reduce demand, all functional (non-decorative) lighting will utilise high-efficiency Light-Emitting Diodes (LEDs) and be fitted with appropriate controls, such as occupancy sensors and time switches, to limit operation when spaces are unoccupied, particularly in transient areas such as amenities.

Where compliance with the relevant Australian Standards for illumination levels can be maintained, the development will also target at least a 5% improvement on the 2022 NCC Section J Part J7 lighting power density limits. This is summarised in Table 4.

As illustrated in Figure 9, the lighting strategy combines high-efficiency fittings with smart controls and integrates principles of human-centric lighting, aligning energy performance, user wellbeing, and sustainable design outcomes (Image source: XtraLight, 2025).

Table 4: Proposed lighting power density improvement

ARTIFICIAL LIGHTING	PROPOSED DEVELOPMENT OUTCOME
NCC 2022, Section J Part J7: Maximum lighting power density	At least 5% reduction in lighting power density

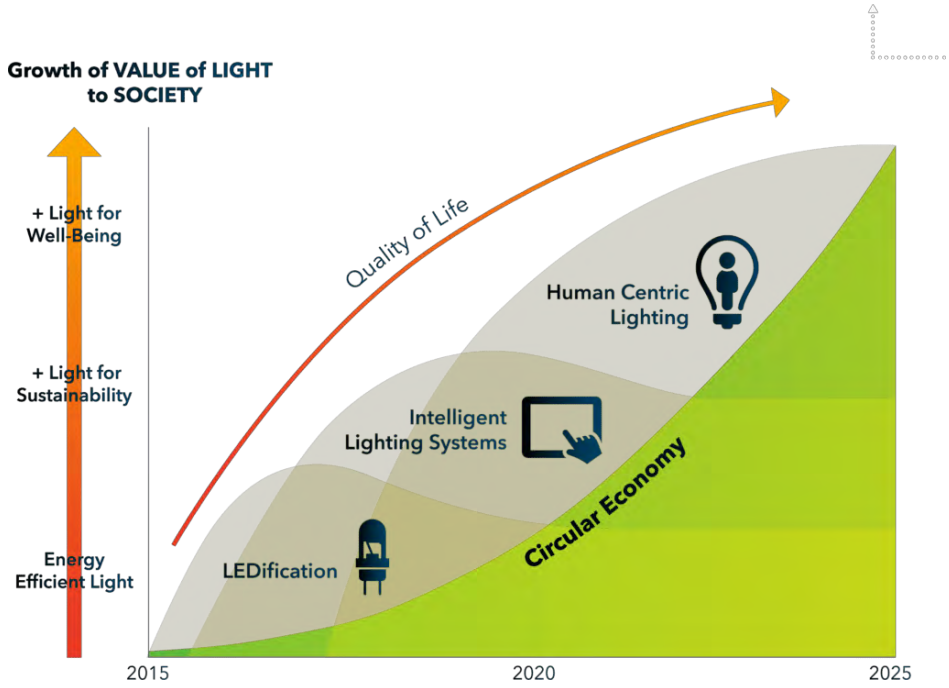


Figure 9: Proposed lighting strategy of LED lighting with integrated controls. (Source: XtraLight, "LED Lighting Controls," https://www.xtralight.com/led-lighting-controls/)

6.3 RENEWABLE TECHNOLOGY

Integrating solar panels into the residential development offers multiple benefits, including cost savings, improved energy independence, and reduced environmental impact. As the site will operate as an all-electric development, a future solar photovoltaic (PV) system will play a key role in reducing greenhouse

gas emissions and offsetting grid electricity consumption, thereby enhancing the project's overall sustainability performance.

The building design, including the roof layout, electrical distribution system, and metering infrastructure, will incorporate provisions to allow for the future installation of systems such as solar photovoltaic arrays and battery storage. This ensures the development remains adaptable and ready to accommodate emerging renewable energy technologies.

6.4 ENERGY USE

Energy savings in a building can be realised by minimising the need for heating and cooling through a well-designed and insulated façade. The design team will focus on enhancing energy efficiency by exceeding the minimum requirements of BCA Section J. This will involve optimising the building envelope, air conditioning and ventilation systems, and lighting to ensure lower energy consumption.

The review has been undertaken in accordance with the Energy Efficiency provisions of the NCC 2022 for the building class referred in the table below:

Table 5: Energy Compliance Overview

BUILDING	CLASS	VERIFICATION
10 X Sole Occupancy	1	NatHERS

These results are produced from models based on the documentation provided by the Architects. Any updates to the plans may affect the results and may require a change to specification (Section 5.1.1).

6.4.1 BUILDING SPECIFICATIONS

The construction for the proposed building envelope is as per plans provided and outlined below.

Table 6: Proposed Building Specifications for ALL townhouses

CONSTRUCTION		DESCRIPTION	REQUIREMENT (ALL TYPES)	**REQUIREMENT (TYPE F)**
ENVELOPE WALLS	External Cavity Brick Wall	2x90mm Brick separated by 50mm air gap with 10mm plasterboard lining internally.	**50mm R1.3 Insulation Batts**	**50mm R1.3 Insulation Batts**
	Party Wall	2x90mm Brick separated by 50mm air gap with 10mm plasterboard lining internally.	**No Insulation Required.**	**No Insulation Required**
INTERNAL WALLS	Single brick wall	90mm/110mm brick with 10mm plasterboard	**No Insulation Required.**	**No Insulation Required.**
FLOORS	Slab on Ground	Concrete slab with ground contact. Floor coverings as per plans.	**No Insulation Required.**	**No Insulation Required.**
	Suspended Concrete Slab	250mm suspended concrete slab.	**R 1.3 insulation to Exposed /elevated floor**	**R 1.3 insulation to Exposed /elevated floor**

	Suspended Concrete Slab	Suspended Concrete Slab	**No Insulation Required.**	**No Insulation Required.**
ROOFS/ CEILING	Roof Type 1	257mm concrete slab.	**R4.1 Insulation Batts** to dropped plasterboard ceilings.	**R5.0Insulation Batts** to dropped plasterboard ceilings.
	Roof Type 2	Metal deck roof sheet. Medium/light roof colour **(SA ≤ 0.45).**	**60mm Anticon (R1.3)** with **R4.0 Insulation Batts** to dropped plasterboard ceilings.	**60mm Anticon (R1.3)** with **R5.0 Insulation Batts** to dropped plasterboard ceilings.

Table 7: Proposed Glazing Specifications for Apartment Units

WINDOW SPECIFICATION		U-VALUE	SHGC
EXTERNAL GLAZING: TYPE 1	Single Clear glazing in Aluminium frame. (Sliding Door, fixed, louvre)	**5.40**	**0.58**
	Single Clear glazing in Aluminium frame. (Awning)	**5.40**	**0.49**
EXTERNAL GLAZING: TYPE 2	Double Clear glazed low E in Aluminium frame. (Sliding Door)	**3.04**	**0.59**
	Double Clear glazed in Aluminium frame. (Awning)	**3.53**	**0.55**
	Double Clear glazed in Aluminium frame. (Casement, Fixed)	**3.12**	**0.69**
	Single Clear glazing in Aluminium frame. (Louvres)	**5.40**	**0.58**

Note: Glazing values provided are for Whole System (Frame + Glass)

6.4.2 NATHERS RESULT

The results below are based on NatHERS rating. The minimum requirement under the NCC 2022 is 7 stars for sole occupancy for townhouses (class1).

Table 8: Options and Upgrades Required

TOWNHOUSE	TYPE 1 GLAZING	TYPE 2 GLAZING	CEILING FANS IN LOUNGE	R5.0+ ANTICON	TILES IN KITCHEN/LIVING/DINING/FF LOBBY AND STAIRS
A	X				
B	X				X
C	X				
D	X				
E	X				
F		X	X	X	X

Table 9: NatHERS Results

TOWNHOUSE	HEATING	COOLING	TOTAL	STAR RATING
A	18.2	26.5	44.7	7.9
B	42.0	17.4	59.4	7.1
C	15.3	20.2	35.5	8.4
D	27.5	16.3	43.8	7.9
E	15.3	19.5	34.8	8.4
F	30.4	28.2	58.6	7.1

7 WATER EFFICIENCY

7.1 SANITARY FIXTURE AND APPLIANCE EFFICIENCY

All new water fixtures are to ensure that high WELS rating fixtures and fitting are to be specified in line with minimum benchmarks below.

Table 10: WELS Ratings

FIXTURE / EQUIPMENT TYPE	WELS RATING
TAPS	4 Star
TOILETS	4 Star
SHOWERS	4 Star

8 HEAT RESILIENCE

Urban heat island effect occurs when built-up areas are warmer than their surroundings due to hard surfaces, dark finishes, and limited vegetation. The proposed development will mitigate this effect by ensuring that at least 75% of the total site area consists of one or a combination of the following strategies in Table 11.

Table 11: Proposed heat resilience strategies

CATEGORY	PROPOSED DEVELOPMENT STRATEGIES
Vegetation and landscaping	Provide shaded and planted areas to reduce surface heat gain
Roofing materials	3-year SRI ≥64, or initial SRI ≥82
Unshaded hardscaping	3-year SRI ≥34, or initial SRI ≥39
Shaded hardscaping	Hard surfaces shaded by vegetation, roof structures, or photovoltaic panels

9 SUSTAINABLE TRANSPORT

9.1 WALKABILITY TO THE SITE

The building's design and location encourage walking to and from several amenities within the vicinity. This means designing roads within the building boundary to prioritise pedestrians, and either providing within, or being located close to, several amenities.

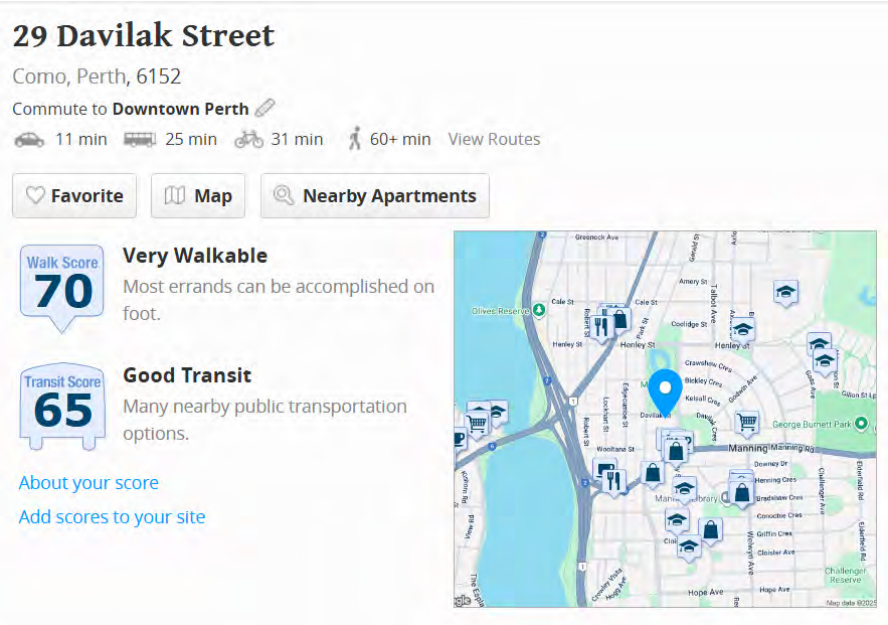


Figure 10: Walkability Score of the Proposed Development

Provision of conduits and capacity in the electrical distribution system and metering for future provision of electric car charging within each garage.

10 INDOOR ENVIRONMENT QUALITY

10.1 PROVISIONS FOR INCREASED OUTDOOR AIR

Pollutants entering the building are minimised, and a high level of fresh air is provided to ensure levels of indoor pollutants are maintained at acceptable levels. It is proposed that outdoor air provided to primary areas will be at a rate at least 50% greater than minimum in AS 1668.2:2012, this will need to be confirmed by the mechanical engineer.

10.2 INTERNAL FINISHES

Internal Finishes (paints, adhesives, sealants, carpets) with low VOC and formaldehyde content will be prioritised.

Using low VOC (volatile organic compounds) products offers numerous benefits, primarily by enhancing indoor air quality and promoting better health. These products release fewer harmful chemicals, reducing the risk of respiratory issues, headaches, dizziness, and long-term health problems. Environmentally, low VOC products contribute less to air pollution and smog formation, supporting a healthier ecosystem.

10.3 PAINTS, ADHESIVES, AND SEALANTS

To meet the requirements, at least 95% of internally applied paints, adhesives, sealants (by volume), and carpets (by area) must meet TVOC (Total Volatile Organic Compounds) limits. Compliance with these limits can be achieved through one of the following methods:

1. **Product Certification Scheme:** The contractor can use products that are certified under a recognized and current Product Certification Scheme at the time of purchase. These schemes assess and verify the TVOC content of the materials, ensuring they meet the specified limits.
2. **Laboratory Product Testing**: If there are no certified products available, the contractor can conduct laboratory testing on the paints, adhesives, and sealants, to determine their TVOC content. The testing should be carried out using the whole paint, including water and tinters, to obtain accurate results.
3. **Absence of Non-compliant Materials**: Alternatively, if none of the materials mentioned (paints, adhesives, sealants, and carpets) are present at the time of practical completion (PC), and thus no TVOC emissions are expected, compliance can be achieved.

All paints used for internal application on the job are to have a low TVOC content as outlined below. TVOC content must be based on whole paint (water and tinters included):

Table 12: Paint VOC limits

PRODUCT TYPE / SUBCATEGORY	MAX TVOC CONTENT (G/L OF READY TO USE PRODUCT)
Walls and ceilings – Any gloss level	16
Trim, varnishes and wood stains	75
Primers, sealers and prep coats	65

Maximum TVOC Content Limits for Paints, Varnishes and Protective Coatings
*EU Directive
The TVOC content of the 'ready-to-use' paint shall be theoretically calculated as the sum total of the VOCs of each of the raw material component comprising the paint.

Where the TVOC content of individual components is not known, it must be determined experimentally by one of the following testing methods as appropriate:

- ISO Method 17895 (2005), for a material with a presumed VOC content <1%;
- ISO Method 11890-2 (2006), for a material with a presumed VOC <15%;
- ISO Method 11890-1 (2007), for a material with a presumed VOC content >15%;
- ASTM D3960, which is comprised of four individual testing procedures that measures TVOC (D2369) as well as density (D1475) and water content (D4017). Exempt compounds (D4457) must not be subtracted in the calculation of VOC content.

The contractor must obtain written approval from the design team before using any sealant, adhesive, paint, flooring or fit out items. This approval will be contingent on the provision of proof that the product has a VOC content below that noted above.

At the end of construction, the contractor is required to undertake a final audit to ensure that the correct products have been used.

All sealants used in an internal application on the job are to have a low TVOC content as outlined below.

Table 13: Adhesives/Sealants VOC limits

PRODUCT	MAXIMUM TVOC CONTENT (G/LITRE)
General purpose adhesives and sealants	50
Acoustic sealants, architectural sealant, waterproofing membranes and sealant, fire retardant sealants and adhesives	250
Structural glazing adhesive, wood flooring and laminate adhesives and sealants	100
Primers, sealers and prep coats	65
One and two pack performance coatings for floors	140

Maximum TVOC limits for Adhesives & Sealants
*Sealants used to enhance the fire- and water-proofing properties are included.

The testing method applicable to adhesive and sealants is only ASTM D3960 as detailed above for paints. For more information on ASTM D3960 refer to South Coast Air Quality Management District Rule 1168.

The contractor must obtain written approval from the design team before using any sealant, adhesive, paint, flooring or fit out items. This approval will be contingent on the provision of proof that the product has a VOC content below that noted above.

At the end of construction, the contractor is required to undertake a final audit to ensure that the correct products have been used.

All carpets and/or other flooring used on the project are to have low TVOC emission rates as outlined below.

Table 14: Carpet VOC limits

ALL CARPET/FLOORING PRODUCTS MUST COMPLY WITH TVOC EMISSION LEVELS	
Total VOC limit	0.5 mg/m^2 per hour
4-pc (4-Phenolcycohexene) limit	0.05 mg/m^2 per hour

Compliance Testing: Refer to Carpet and Rug Institute Green Label (US) OR American Society for Testing and Materials (ASTM) D5116 Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Material/Products OR

For carpets and laminate floor coverings, an option for demonstrating compliance with TVOC levels is as follows: ISO 10580 (also known as ISO/TC 219) – Document N238 – Resilient,

Textile and Laminate Floor Coverings Evaluation of Volatile Organic Compounds Emissions, with a limit of 500µg/m^2/hr at 24 hours. OR

For floor coverings (other than carpet), an option for demonstrating compliance with TVOC levels is as follows:

ISO16000 parts 9, 10 and 11 (also known as the EN 13419), with a TVOC limit at three days of 5mg/m^2/h and 0.5mg/m^2/h at 28 days.

Carpet or other flooring installed as part of the base building works prior to fit out works, can be deemed re-used for the purpose of this credit.

The contractor must obtain written approval from the design team before using any sealant, adhesive, paint, flooring or fit out items. This approval will be contingent on the provision of proof that the product has a VOC content below that noted above.

At the end of construction, the contractor is required to undertake a final audit to ensure that the correct products have been used.

There are two options for demonstrating compliance for carpets, as follows:

Option A - Product Certification:

Carpets certified under a relevant Product Certification Scheme standard recognised by the GBCA under the GBCA assessment Framework for Product Certification Schemes are deemed to satisfy the requirements of this criterion. Relevant GBCA recognized standards are listed on the GBCA web site. The certificate must be current at the time of project registration or submission and list the relevant product name and model.

A UL GREENGUARD Children & Schools® certification current at the time of project registration or submission is another acceptable evidence for demonstrating compliant TVOC levels for carpets.

Option B - Experimental Testing

All carpets comply with the Total VOC (TVOC) limits within Table below. The emission levels detailed in this table must be established by a NATA or another ISO/IEC17025 accreditation laboratory.

Table 15: Flooring VOC limits

ALL CARPET/FLOORING PRODUCTS MUST COMPLY WITH TVOC EMISSION LEVELS – TO ASTM D5116 TEST PROTOCOL	
Carpets using ASTM D5116 Test Protocol:	
Total VOC limit	0.5 mg/m^2 per hour
4-pc (4-Phenolcycohexene) limit	0.05 mg/m^2 per hour
Carpet using ISO 16000 test protocol (also known as EN 13419)	
TVOC at three days-	0.5 mg/sqm per hour
Flooring using ISO 10580 (also known as ISO/TC 219) – Document	
TVOC at 24 hours - 0	0.5mg/sqm per hour

10.4 FORMALDEHYDE MINIMISATION

All engineered wood products used internally, including exposed and concealed applications, must have low formaldehyde emissions as defined in the table below, or contain no formaldehyde. Engineered wood products are defined as particleboard, plywood, veneer, MDF, Laminated Veneer Lumber (LVL), High-Pressure Laminate (HPL), Compact Laminate and decorative overlaid wood panels and include both finished and unfinished products.

These requirements are not applicable to exterior applications, formwork, internal car park applications, reused engineered wood products or raw timber.

The contractor must obtain approval from the design team before substituting any product.

The limits listed here are defined according to the test method. The levels listed are equivalent results for different test procedures.

Table 16: Formaldehyde emission limits

TEST PROTOCOL	EMISSION LIMIT/ UNIT OF MEASUREMENTS
AS/NZS 2269:2004, testing procedure AS/NZS 2098.11:2005 method 10 for Plywood	< 1.0 mg/L
AS/NZS 1859.1:2004 - Particle Board, with use of testing procedure AS/NZS 4266.16:2004 method 16	< 1.5 mg/L
AS/NZS 1859.2:2004 - MDF, with use of testing procedure AS/NZS 4266.16:2004 method 16	< 1.0 mg/L
JIS A 5908:2003- Particle Board and Plywood, with use of testing procedure JIS A 1460	< 1.0 mg/L
JIS A 5905:2003 - MDF, with use of testing procedure JIS A 1460	< 1.0 mg/L
JIS A1901 (not applicable to Plywood)	< 1.0 mg/L
ASTM D5116	<0.1 (+/- 0.0005) mg/m^{2}hr (may also be represented as mg/m^2/hr)

ISO 16000 part 9, 10 and 11 (also known as EN 13419)	<0.1 (+/- 0.0005) mg/m^{2}hr (may also be represented as mg/m^2/hr)
ASTM D6007	0.12mg/m^3*
ASTM E1333	0.12mg/m^3**
EN 717-1 (also known as DIN EN 717-1)	0.12 mg/m^3
EN 717-2 (also known as DIN EN 717-2)	3.5 mg/m^{2}hr (may also be represented as mg/m^2/hr).
*The test report must confirm that the conditions of Table 1 comply for the particular wood product type, the final results must be presented in EN 717-1 equivalent (as presented in the table) using the correlation ratio of 0.98.	

11 CONCLUSION

In conclusion, the report outlines sustainability commitments that align with core principles, focusing on energy, water, and waste management. It highlights efforts to promote environmental responsibility and resource efficiency, underscoring a commitment to a greener, more sustainable future.

Table 17: Sustainability Commitments

DESCRIPTION	GOAL	SUSTAINABILITY COMMITMENTS
STRUCTURE DESIGN EFFICIENCY	Integrate passive solar design principles into optimising solar access in winter and shading in summer.	• Enhance solar passive performance by incorporating shading devices on north and west-facing windows to reduce summer heat gain and improve visual interest. • Above **60%** of the combined living and bedroom area of each unit have high level of daylight (above 160 Lux). • Building orientation and design to maximise natural ventilation and promote cooling opportunities • External shading devices to minimise heat gains • Building form and orientation to maximise natural daylighting • External clothesline for all dwellings • Rainwater wanks for 2000 litre capacity for each dwelling except Type B
ENERGY EFFICIENCY	Enhance energy performance by reducing consumption through efficient design and the use of renewable and low-energy systems.	• Efficient LED Lighting. • Provision for future solar photovoltaic (PV) system to supply renewable energy. • All units meet the minimum NatHERS energy efficiency requirement of **7 stars for sole occupancy**, based on the NCC 2022.
WATER EFFICIENCY	Efficient water fixtures.	• High WELS Ratings

HEAT RESILIENCE	Reduce impacts of heat island effect	• Light roof colour (SRI ≥ 0.64). • Incorporate vegetation and green spaces around the building to provide shading and reduce surrounding air temperatures. • Landscaping plant selections are water-wise species
SUSTAIBLE TRANPORT	Low carbon options	• Provision for future EV charging bays. • Provision for secure bicycle storage area.
INDOOR ENVIRONMENT QUALITY	Enhance indoor air quality	• Natural ventilation to all apartment units. • Low VOC and Low Formaldehyde products to be used. • Minimum 95% of internally applied paints, adhesives, sealants (by volume), and carpets (by area) must meet TVOC limits.

11.1 SIMULATION SOFTWARE

Daylight modelling was conducted using Better Building software, which employs the Radiance simulation engine. The software is one of the listed software's in the simulation software standards in the *Green Star Buildings Submission Guidelines*. Details of the software and simulator are shown in Table 18.

Table 18: Daylight modelling analysis software requirements

PARAMETER	Input
Software Name and Version	Better Building
Software Developer	Better Building
Software simulation engine	Radiance

11.2 GLAZING VISUAL LIGHT TRANSMITTANCE

The Visual Light Transmittance (VLT) inputted into the software for all glazing materials is as per Table 19.

Table 19: Visual light transmittance

GLAZING SYSTEM	VISUAL LIGHT TRANSMITTANCE
All levels external glazing	0.60

11.3 MATERIAL REFLECTANCE VALUES

Daylight modelling reflectance values were based on conservative industry defaults as shown in Table 20.

Table 20: Material reflectance values

SURFACE	REFLECTANCE VALUE	DESCRIPTION
Ceilings	0.70	Typical light-painted ceiling
Walls	0.70	Standard painted plasterboard
Floors	0.30	Standard carpet/tile finish

11.4 WEATHER

The weather file was assigned based on the project location, as per Table 21.

Table 21: Weather file input

PARAMETER	INPUT
Climate file	AUS_WA_Perth.Metro.946080_TMYx.2007-2021
Climate file location	Perth, WA, AUS

11.5 DAYLIGHT LEVELS

The simulation inputs for the daylight levels assessment were assigned as per Table 22.

Table 22: Radiance simulation inputs

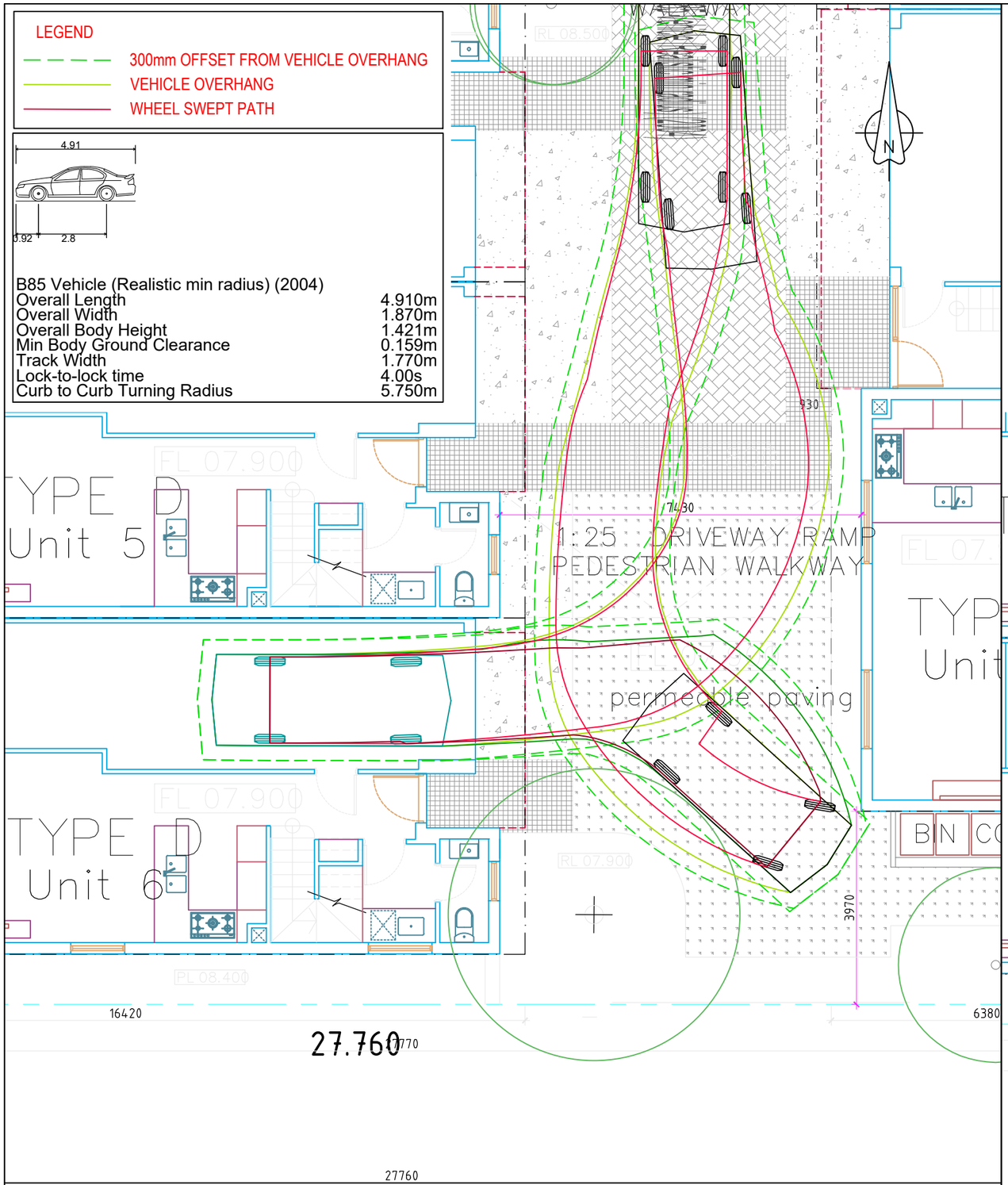
PARAMETER	INPUT
Dynamic daylight simulation	Spatial Daylight Autonomy (sDA)
Sky model	Standard CIE overcast sky
Grid size	0.5 m
Grid height	0.75 m

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG
VEHICLE OVERHANG
WHEEL SWEPT PATH

B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



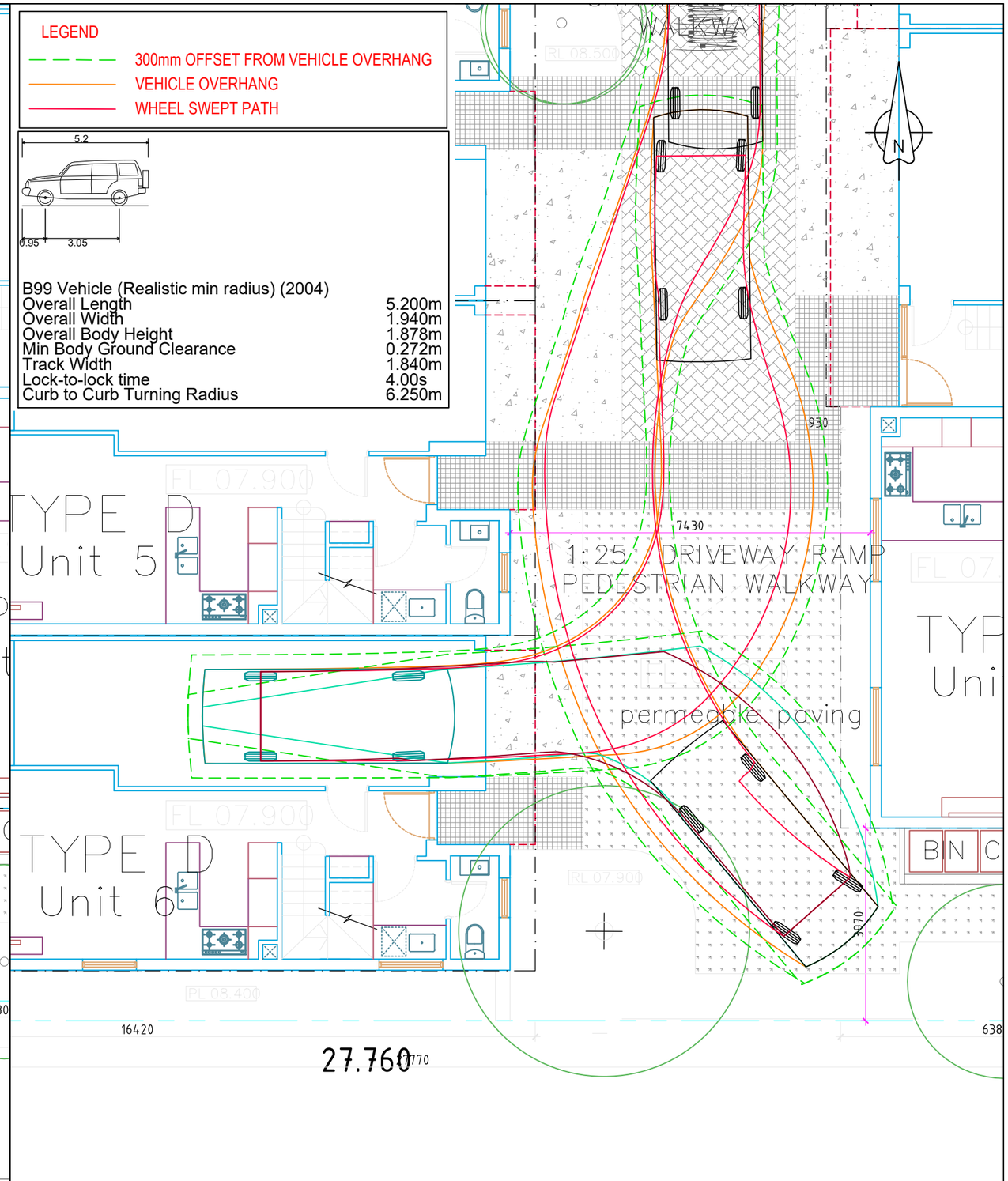
B-85 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG
VEHICLE OVERHANG
WHEEL SWEPT PATH

B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m



B-99 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

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Project
29 & 31 DAVILAK STREET, COMO

Title
SWEPT PATH ANALYSIS: UNIT 6

Client
BIRCHGROUP

Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

Donald Veal Consultants
6 Burgess Street
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Telephone +61 8 9274 7076
Facsimile +61 8 9274 4854

DVC DONALD VEAL CONSULTANTS

Project Number	Drawing File Name	Drawing Number	Revision
Z1081	DVC-Z1081-I	SK15	B

LEGEND

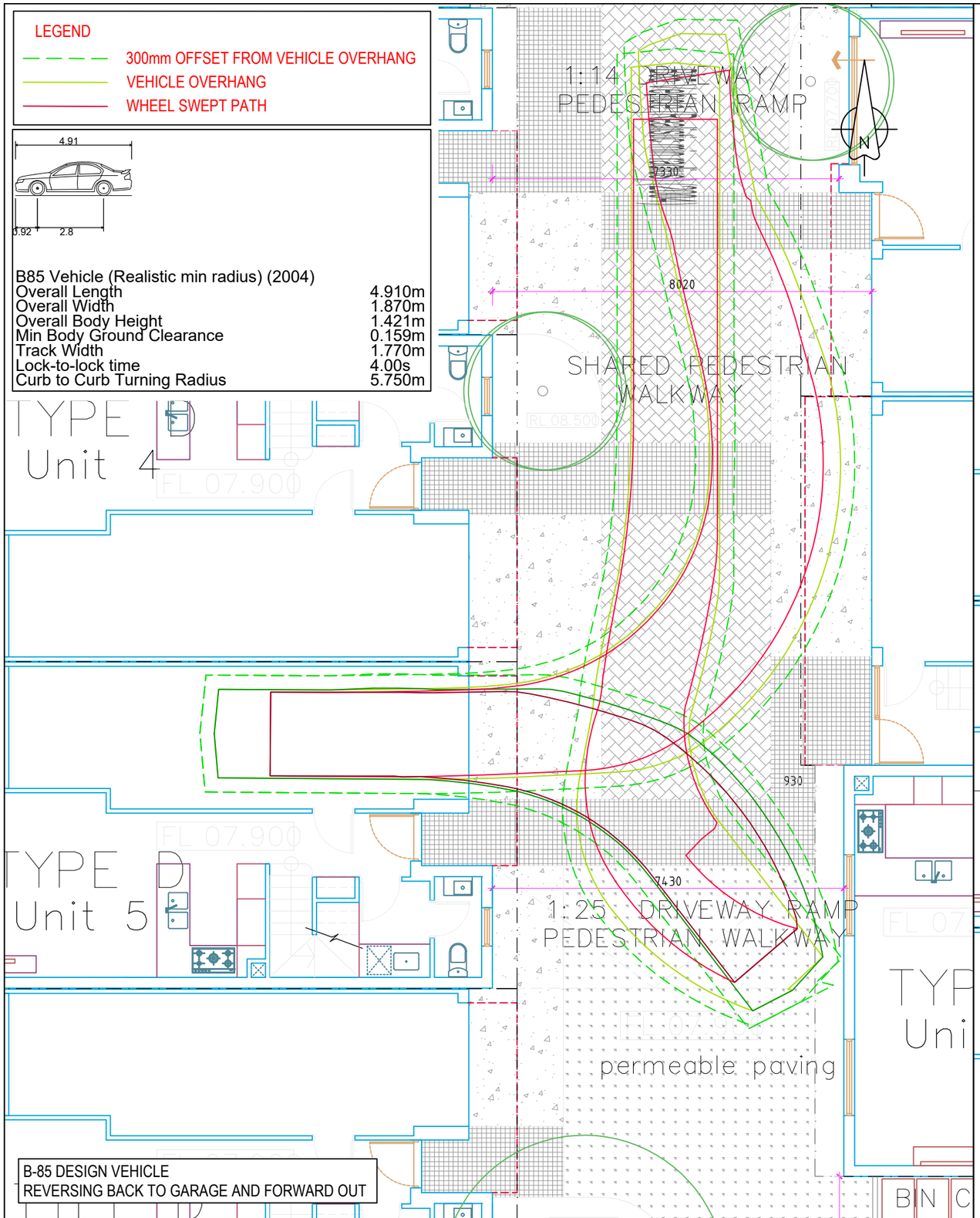
300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH

B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B-85 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

LEGEND

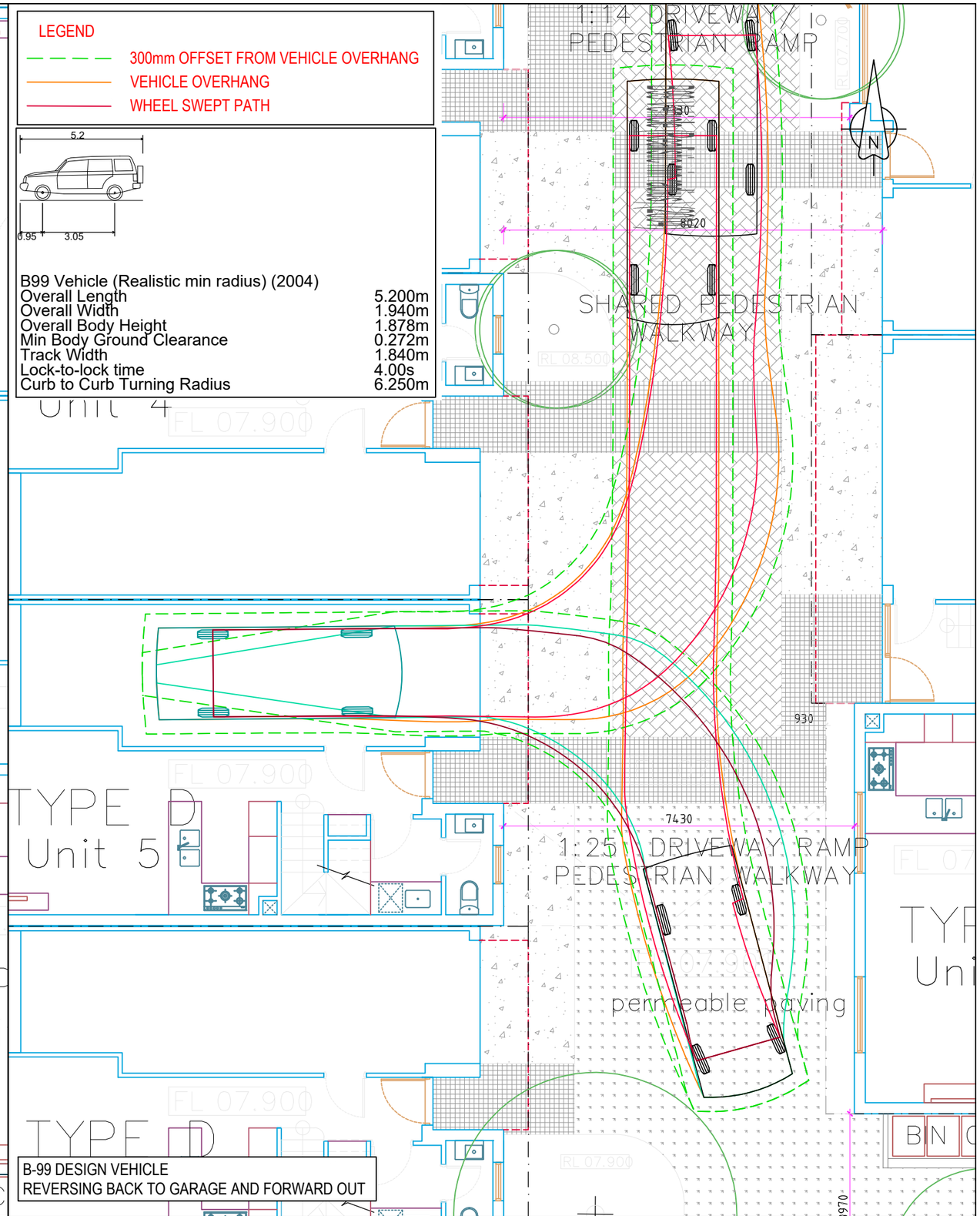
300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH

B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m



B-99 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

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Project
29 & 31 DAVILAK STREET, COMO

Title
SWEPT PATH ANALYSIS: UNIT 5

Client
BIRCHGROUP

Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

Donald Veal Consultants
6 Burgess Street
Midland WA 6056
Telephone +61 8 9274 7076
Facsimile +61 8 9274 4854

DVC DONALD VEAL CONSULTANTS

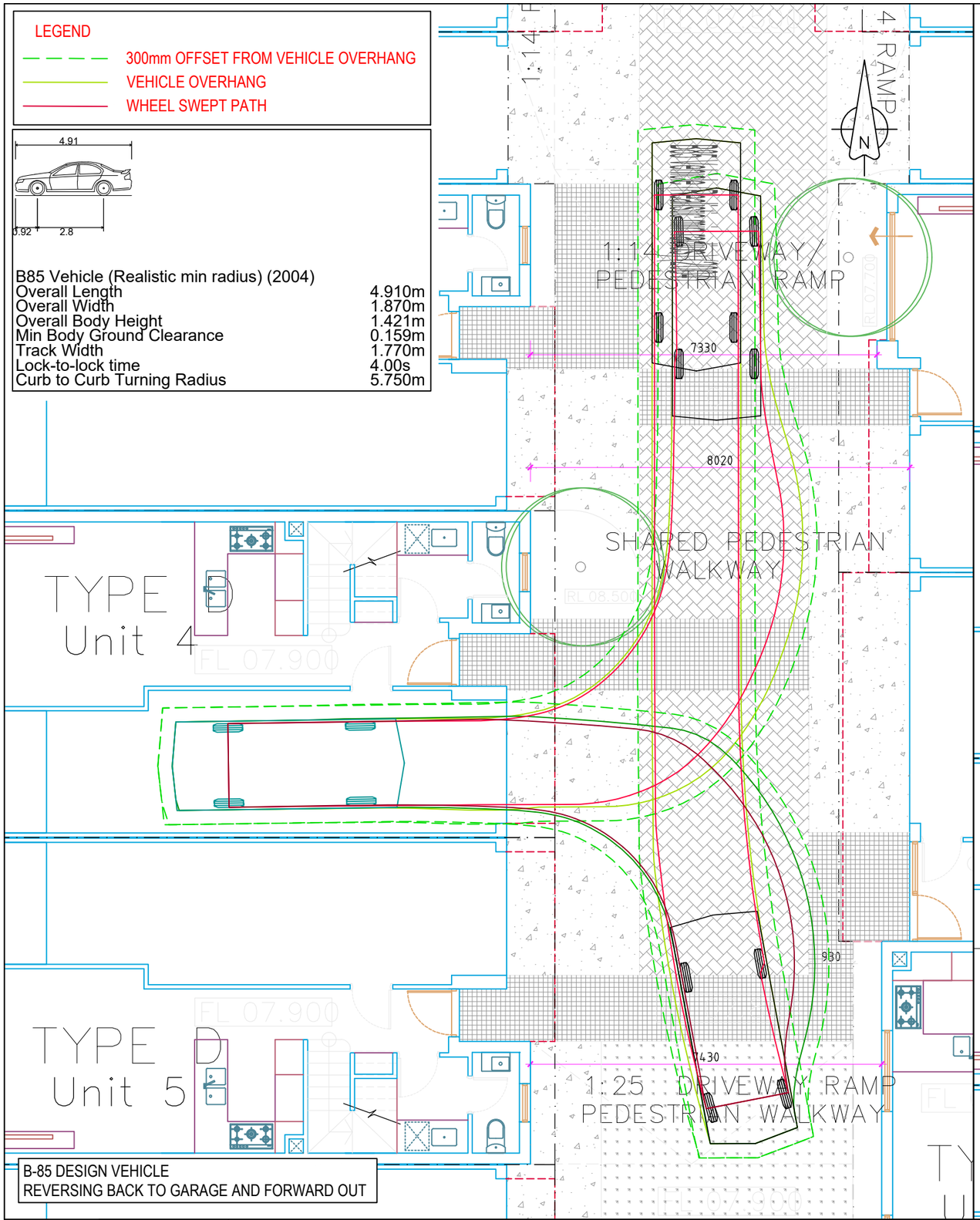
Project Number	Drawing File Name	Drawing Number	Revision
Z1081	DVC-Z1081-I	SK16	B

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG
VEHICLE OVERHANG
WHEEL SWEPT PATH

B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



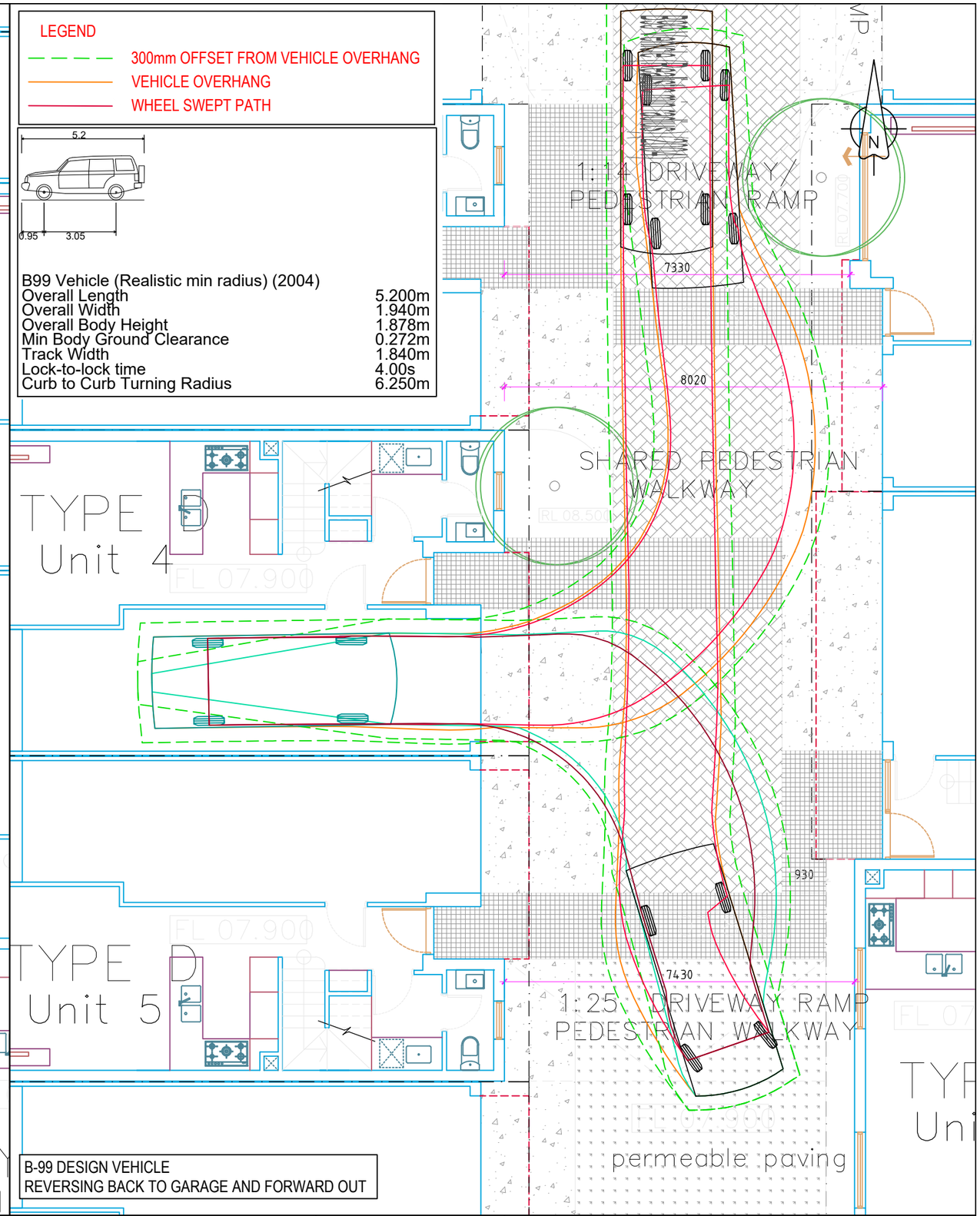
B-85 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG
VEHICLE OVERHANG
WHEEL SWEPT PATH

B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m



B-99 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

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Project
29 & 31 DAVILAK STREET, COMO

Title
SWEPT PATH ANALYSIS: UNIT 4

Client
BIRCHGROUP

Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

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Facsimile +61 8 9274 4854

DVC DONALD VEAL CONSULTANTS

Project Number	Drawing File Name	Drawing Number	Revision
Z1081	DVC-Z1081-I	SK17	B

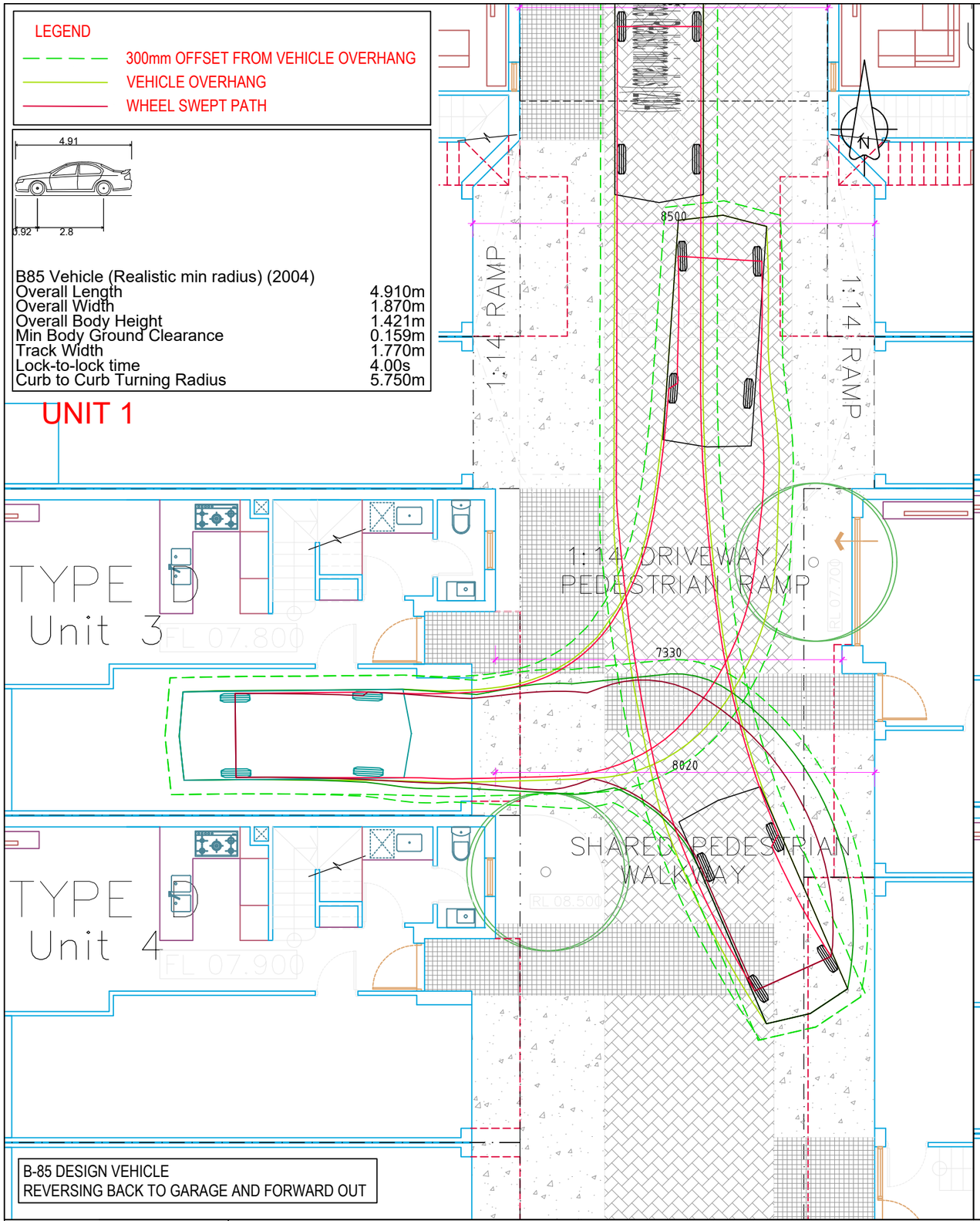
LEGEND

300mm OFFSET FROM VEHICLE OVERHANG
VEHICLE OVERHANG
WHEEL SWEPT PATH

B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m

UNIT 1



B-85 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

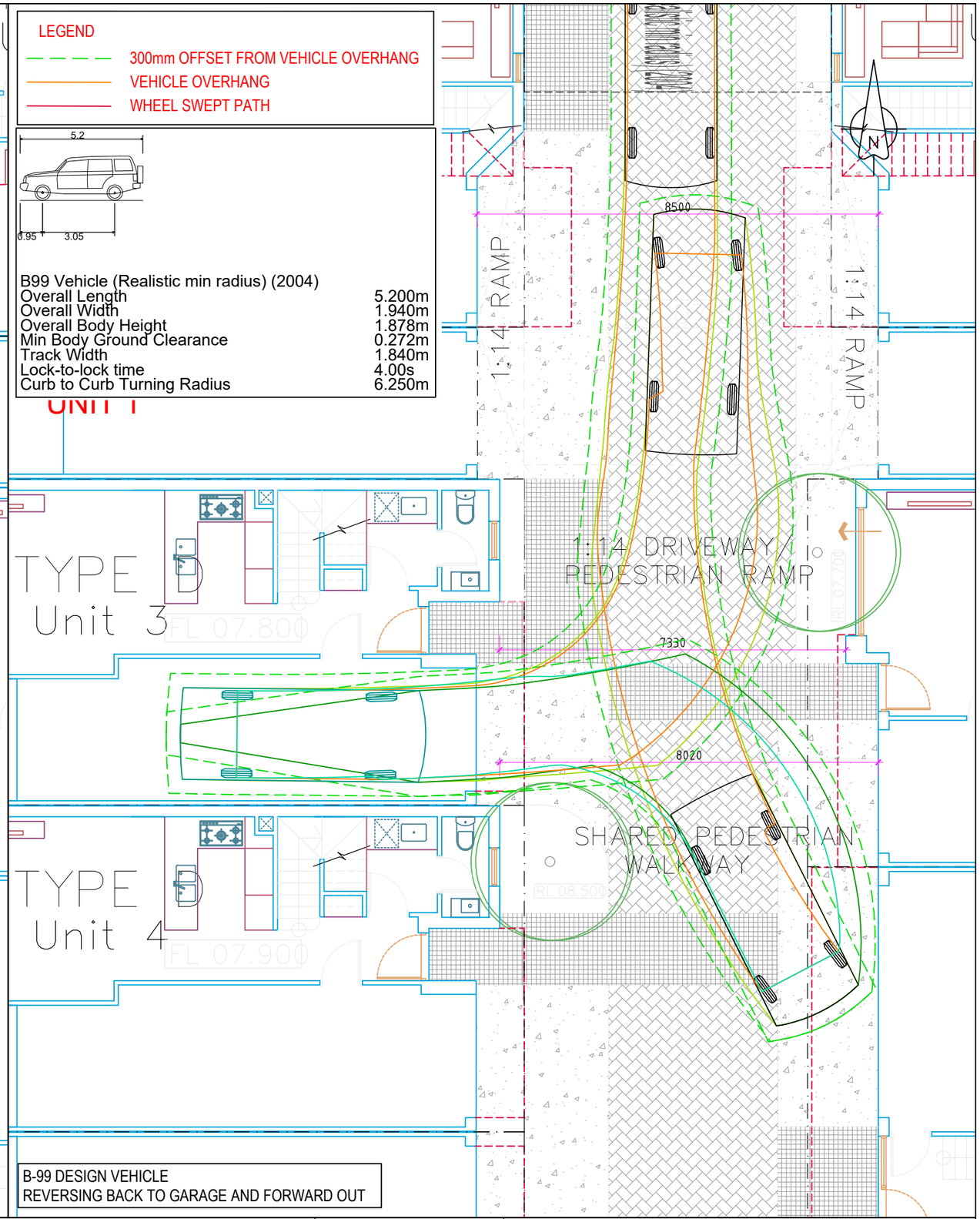
LEGEND

300mm OFFSET FROM VEHICLE OVERHANG
VEHICLE OVERHANG
WHEEL SWEPT PATH

B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

UNIT 1



B-99 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

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Project
29 & 31 DAVILAK STREET, COMO

Title
SWEPT PATH ANALYSIS: UNIT 3

Client
BIRCHGROUP

Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

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Midland WA 6056
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Facsimile +61 8 9274 4854

DVC DONALD VEAL CONSULTANTS

Project Number	Drawing File Name	Drawing Number	Revision
Z1081	DVC-Z1081-I	SK18	D

LEGEND

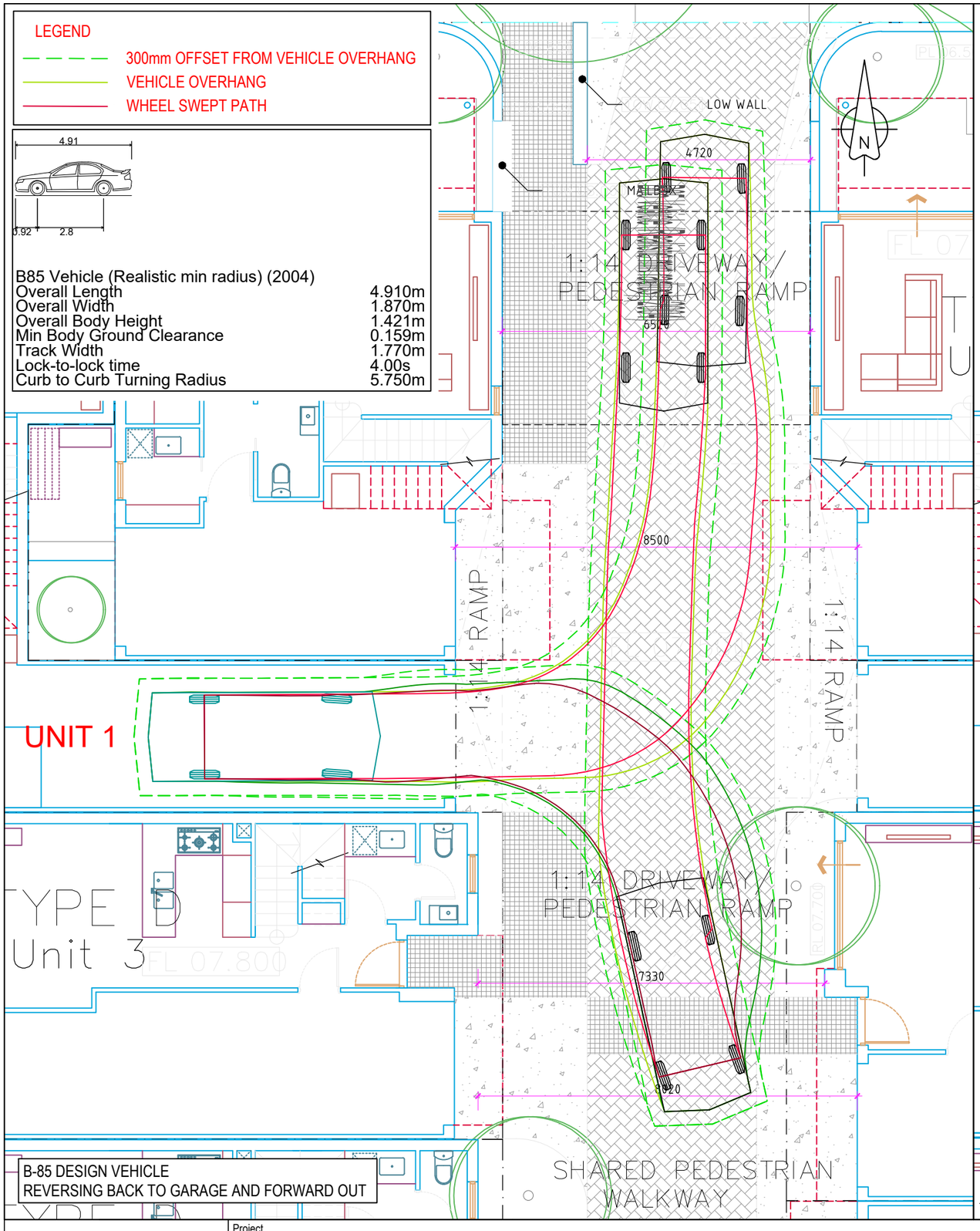
300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH

B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B-85 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

LEGEND

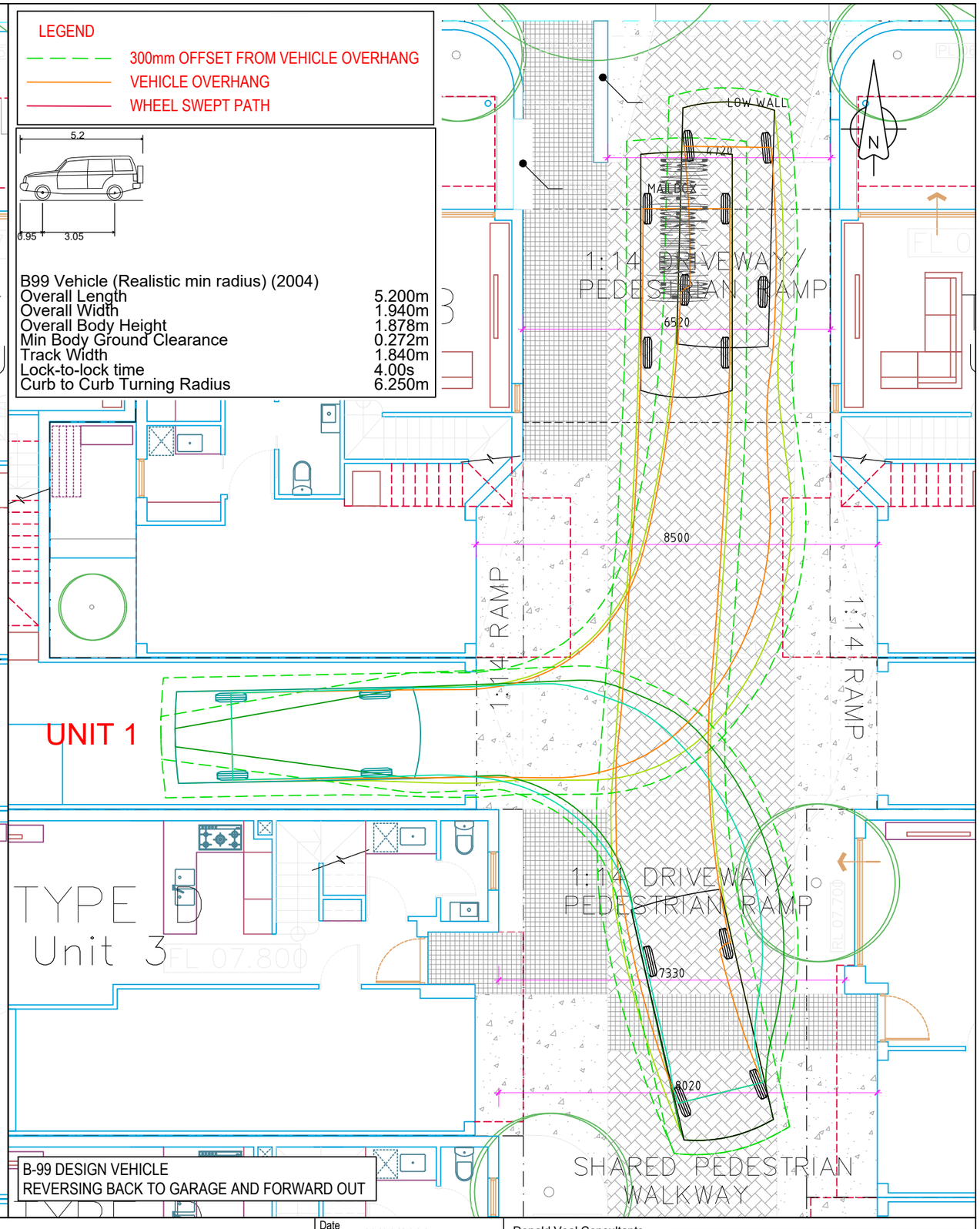
300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH

B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m



B-99 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

birchgroup

Project
29 & 31 DAVILAK STREET, COMO

Title
SWEPT PATH ANALYSIS: UNIT 1

Client
BIRCHGROUP

Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

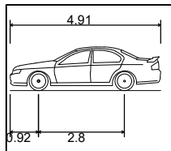
Donald Veal Consultants
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Midland WA 6056
Telephone +61 8 9274 7076
Facsimile +61 8 9274 4854

DONALD VEAL CONSULTANTS

Project Number	Drawing File Name	Drawing Number	Revision
Z1081	DVC-Z1081-I	SK19	B

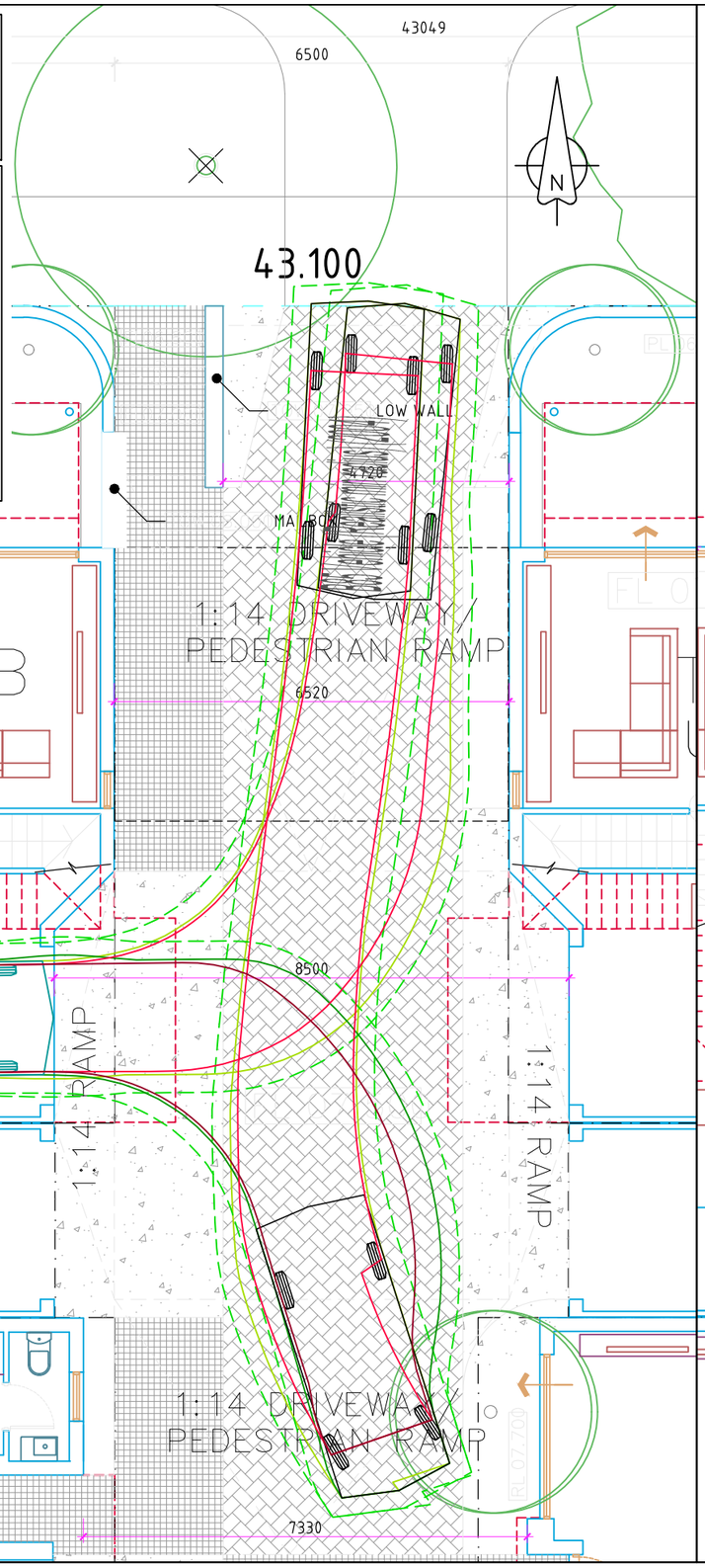
LEGEND

300mm OFFSET FROM VEHICLE OVERHANG
VEHICLE OVERHANG
WHEEL SWEPT PATH



B85 Vehicle (Realistic min radius) (2004)

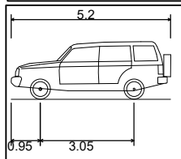
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B-85 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

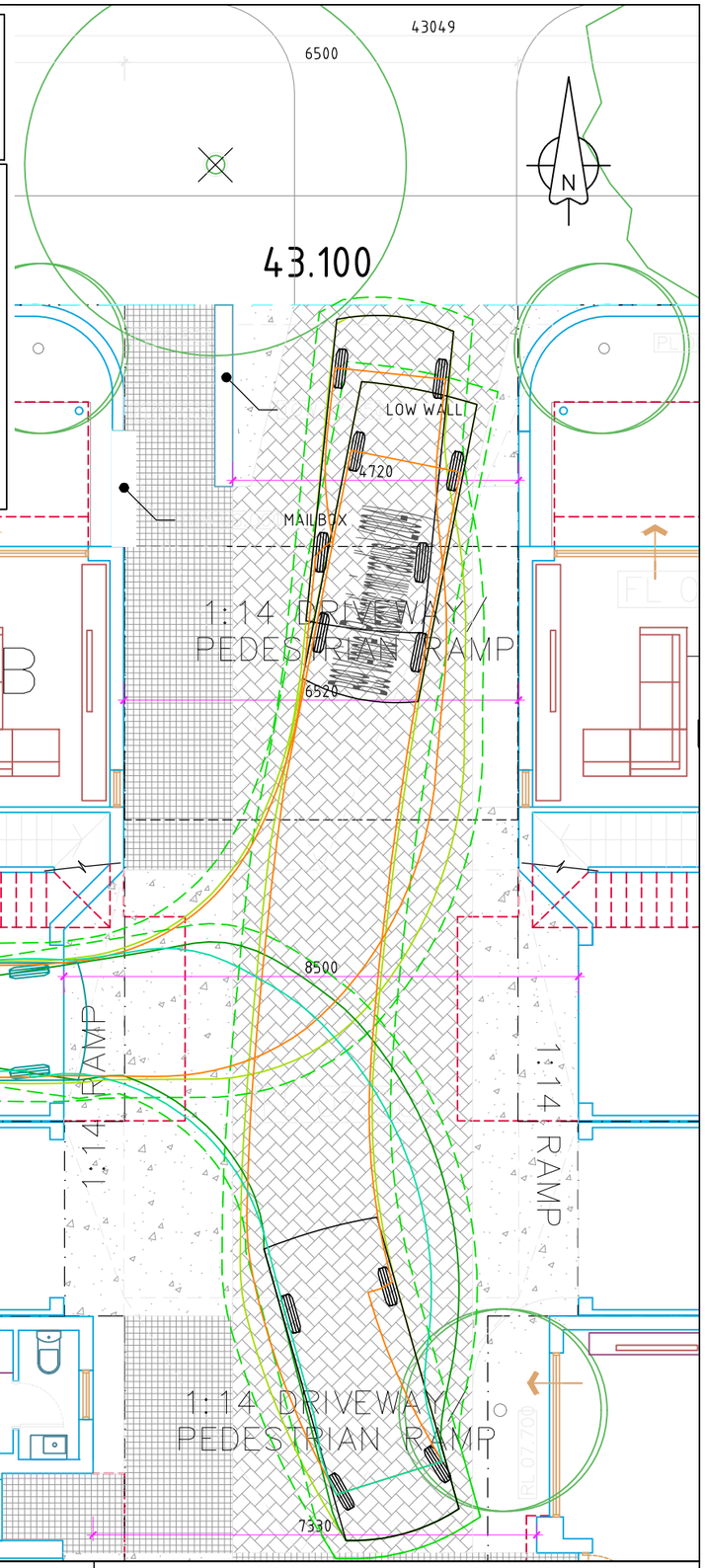
LEGEND

300mm OFFSET FROM VEHICLE OVERHANG
VEHICLE OVERHANG
WHEEL SWEPT PATH



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m



B-99 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

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Project
29 & 31 DAVILAK STREET, COMO

Title
SWEPT PATH ANALYSIS: UNIT 2

Client
BIRCHGROUP

Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

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6 Burgess Street
Midland WA 6056
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Facsimile +61 8 9274 4854

DVC DONALD VEAL CONSULTANTS

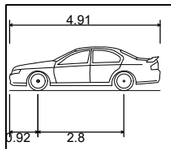
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Z1081	DVC-Z1081-I	SK20	B

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH



B85 Vehicle (Realistic min radius) (2004)	
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m

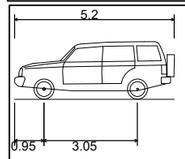
B-85 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH



B99 Vehicle (Realistic min radius) (2004)	
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

B-99 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

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Project
29 & 31 DAVILAK STREET, COMO

Title
SWEPT PATH ANALYSIS: UNIT 10

Client
BIRCHGROUP

Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

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6 Burgess Street
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Telephone +61 8 9274 7076
Facsimile +61 8 9274 4854

DVC DONALD VEAL CONSULTANTS

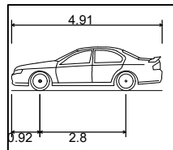
Project Number	Drawing File Name	Drawing Number	Revision
Z1081	DVC-Z1081-I	SK21	E

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH



B85 Vehicle (Realistic min radius) (2004)	
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m

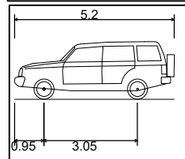
B-85 DESIGN VEHICLE
REVERSE BACK TO GARAGE AND FORWARD OUT

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH



B99 Vehicle (Realistic min radius) (2004)	
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

B-99 DESIGN VEHICLE
REVERSE BACK TO GARAGE AND FORWARD OUT

Project
29 & 31 DAVILAK STREET, COMO

Title
SWEPT PATH ANALYSIS: UNIT 9

Client
BIRCHGROUP

Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

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Midland WA 6056
Telephone +61 8 9274 7076
Facsimile +61 8 9274 4854

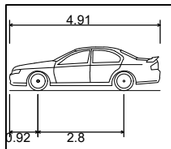
Project Number	Drawing File Name	Drawing Number	Revision
Z1081	DVC-Z1081-I	SK22	D

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH



B85 Vehicle (Realistic min radius) (2004)	
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m

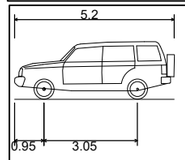
B-85 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

LEGEND

300mm OFFSET FROM VEHICLE OVERHANG

VEHICLE OVERHANG

WHEEL SWEPT PATH



B99 Vehicle (Realistic min radius) (2004)	
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

B-99 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

Project
29 & 31 DAVILAK STREET, COMO

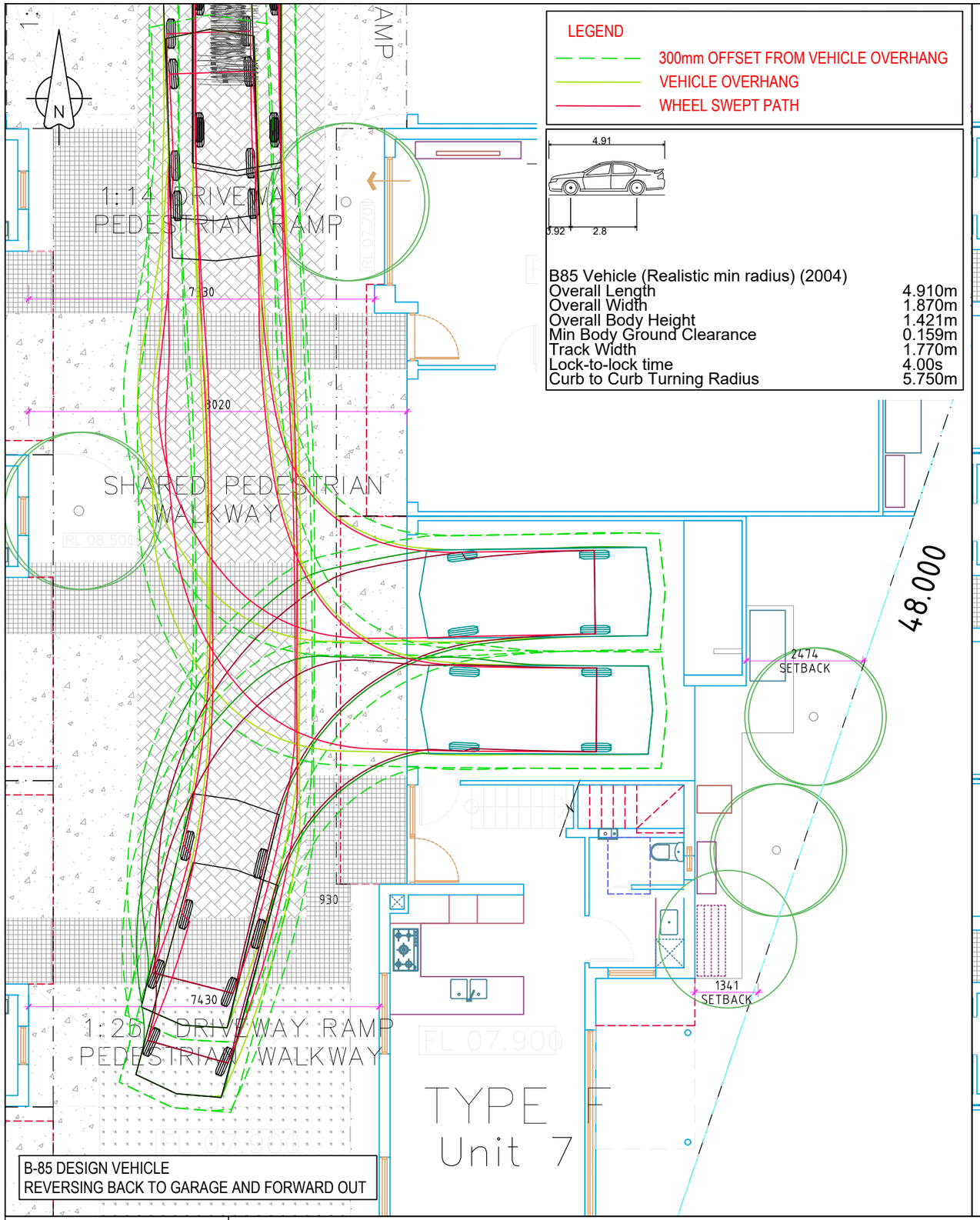
Title
SWEPT PATH ANALYSIS: UNIT 8

Client
BIRCHGROUP

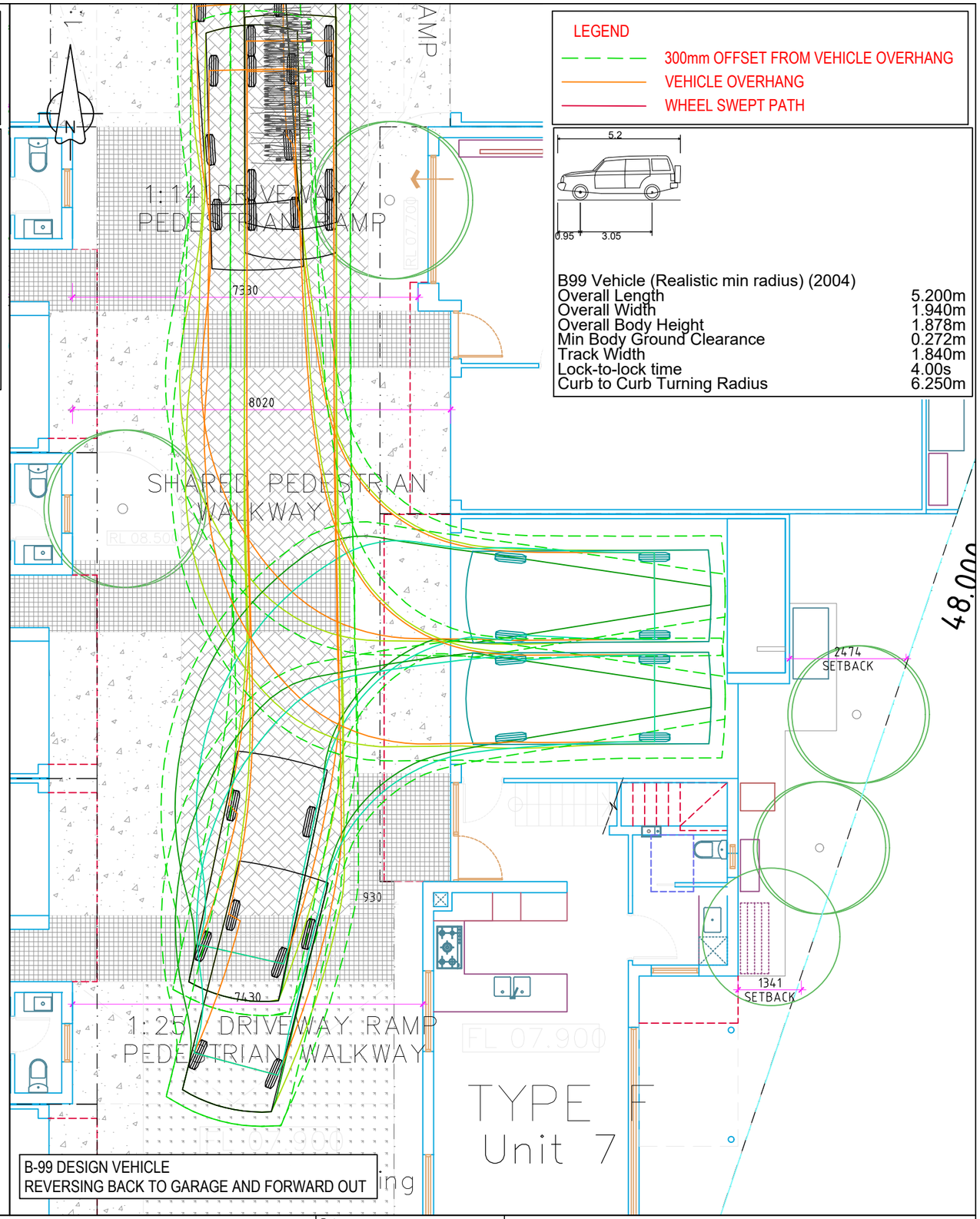
Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

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6 Burgess Street
Midland WA 6056
Telephone +61 8 9274 7076
Facsimile +61 8 9274 4854

Project Number	Drawing File Name	Drawing Number	Revision
Z1081	DVC-Z1081-I	SK23	B



B-85 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT



B-99 DESIGN VEHICLE
REVERSING BACK TO GARAGE AND FORWARD OUT

birchgroup
architecture project management property development

Project
29 & 31 DAVILAK STREET, COMO

Title
SWEPT PATH ANALYSIS: UNIT 7A & 7B

Client
BIRCHGROUP

Date 19/03/2026
Designed
Drawn G TRANG
Checked D VEAL
Scale 1:100 @ A3

Donald Veal Consultants
6 Burgess Street
Midland WA 6056
Telephone +61 8 9274 7076
Facsimile +61 8 9274 4854

DVC DONALD VEAL CONSULTANTS

Project Number	Drawing File Name	Drawing Number	Revision
Z1081	DVC-Z1081-I	SK24	B

PART C – CITY OF STIRLING

1. Declarations of Due Consideration

2. Disclosure of Interests

3. Form 1 DAP Applications

3.1 Lot 101 (No.22) Muriel Avenue, Innaloo - Mixed Use Development - Two shops and six multiple dwellings – DAP/26/03046

4. Form 2 DAP Applications

Nil.

5. Section 31 SAT Reconsiderations

Nil.

PART C – ITEM 3.1 - LOT 101 (NO. 22) MURIEL AVENUE, INNALOO – MIXED USE DEVELOPMENT – TWO SHOPS AND SIX MULTIPLE DWELLINGS

Form 1 – Responsible Authority Report
(Regulation 12)

DAP Name:	Metro Inner DAP
Local Government Area:	City of Stirling
Applicant:	CF Town Planning & Development
Owner:	Helen Christou, Victor Jason Christou and Natasha Lee Stavretis
Value of Development:	$3.5 million
Responsible Authority:	City of Stirling
Authorising Officer:	Giovanna Lumbaca, Acting Director Planning & Development
LG Reference:	DA26/0037
DAP File No:	DAP/26/03046
Application Received Date:	20 January 2026
Report Due Date:	21 April 2026
Application Statutory Process Timeframe:	84 Days, with 7 days excluded as part the Excluded Holiday Period
Attachment(s):	1. Development Application Plans (received 30 March 2026) 2. Aerial Location Plan 3. Metropolitan Region Scheme Zoning Map 4. City of Stirling Local Planning Scheme No. 3 Zoning Map 5. City of Stirling Draft Local Planning Scheme No. 4 Zoning Map 6. City of Stirling Planning Assessment 7. Applicant's Final Submission: a) Applicant's Planning Report received 19 January 2026 b) Acoustic Report, prepared by Herring Storer Acoustics (dated 18 December 2025, Rev. 2) c) Landscaping Plan, prepared by Childscapes (dated 30 March 2026, Rev. 1) d) Transport Impact Statement, prepared by Premise (dated 16 December 2025, Rev. B) e) Waste Management Plan prepared by CF Town Planning &

	Development (dated 27 March 2026) f) Public Art Strategy, prepared by Peter McMeikan (date stamped 30 March 2026) 8. Applicant's Response to Public Consultation received on 30 March 2026 9. City's Design Review Report dated 20 November 2025

Responsible Authority Recommendation

That the Metro Inner DAP resolves to:

1. **Approve** DAP Application reference DAP/26/03046 and accompanying plans as listed in Condition 2 in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, and the provisions of the City of Stirling Local Planning Scheme No. 3, for the proposed Mixed Use Development – Two Shops and Six Multiple Dwellings at Lot 101, House Number 22, Muriel Avenue, Innaloo subject to the following conditions:

Conditions

1. This decision constitutes planning approval only and is valid for a period of four (4) from the date of approval. If the subject development is not substantially commenced within the specified period, the approval shall lapse and be of no further effect.

2. The development shall comply in all respects with the attached approved plans, as dated, marked and stamped, together with any requirements and annotations detailed thereon by the Development Assessment Panel. The plans approved as part of this application form part of the planning approval issued (including any modifications required by conditions of approval).

PLAN TITLE	DATE	REVISION	DRAWING No.
Model View – Front	Stamped 30 March 2026	N/A	N/A
Existing Site Survey	30/03/2026	8.00	02 of 13
Site Plan	30/03/2026	8.00	03 of 13
Context Plan	30/03/2026	8.00	04 of 13
Ground Floor Plan	30/03/2026	8.00	05 of 13
First Floor Plan	30/03/2026	8.00	06 of 13
Second Floor Plan	30/03/2026	8.00	07 of 13
Roof Plan	30/03/2026	8.00	08 of 13
Elevations	30/03/2026	8.00	09 of 13
Elevations	30/03/2026	8.00	10 of 13
First Floor Solar Study	30/03/2026	8.00	11 of 13
Second Floor Solar Study	30/03/2026	8.00	12 of 13
Section	30/03/2026	8.00	13 of 13

Building Design

3. The colours, materials and finishes of the development shall be in accordance with the details and annotations as specified on the approved plans unless alternatives are otherwise accepted by the City of Stirling.

4. Prior to occupation of the development, the external finish of the boundary walls shall be finished to the same standard as the rest of the development, provided any requisite access is granted by abutting landowners, to the satisfaction of the City of Stirling.

5. Prior to occupation of the development, the awning on the Muriel Avenue frontage shall have a minimum headroom clearance of 3.5m, to the satisfaction of the City of Stirling.

Construction Management

6. Prior to lodgement of the Building Permit application, a Construction Management Plan (CMP) shall be submitted to, and approved by, the City of Stirling in consultation with any relevant referral agencies. The CMP shall include specific details on the management of aspects including but not limited to; dust, noise, vibration, waste management, parking, traffic, street tree protection zones (including for the existing street trees located within Muriel Avenue immediately abutting the subject site), storage of materials, site safety / security and any other relevant matters to the satisfaction of the City of Stirling. The CMP shall be implemented upon commencement of development, and shall be complied with for the duration of construction, to the satisfaction of the City of Stirling.

Landscaping

7. Prior to occupation of the development, a further amended Landscaping Plan shall be submitted to, and approved by, the City of Stirling with the following modification:

    a. The species *Camelia sasanqua* shall be replaced with a 'shade-tolerate' tree species for the two small trees.

8. Prior to occupation of the development, all landscaped areas shall be planted, reticulated and mulched to a minimum depth of 100mm and maintained thereafter for the life of the development, to the satisfaction of the City of Stirling.

Lighting and Security

9. Lighting shall be provided to all public spaces including under awnings, parking areas, service areas, entry and exit points and thereafter maintained for the life of the development, to the satisfaction of the City of Stirling.

10. Details of any outside lighting shall be submitted at the Building Permit application stage demonstrating compliance with *Australian/New Zealand Standard 4282:2023 - Control of the obtrusive effects of outdoor lighting (AS/NZS 4282*). External lighting shall thereafter be installed prior to occupation so as not to adversely affect the amenity of the locality in accordance with AS/NZS 4282.

Noise

11. Prior to the submission of the Building Permit application, an amended Acoustic Report shall be submitted to, and approved by, the City of Stirling with the following modifications:

    a. Measures to address noise from the rooftop mounted air-conditioning system, considering its location and design; and
    b. Measures to consider noise emissions from the commercial tenancies.

    All recommendations provided in the amended Acoustic Report shall be implemented for the life of the development.

12. Prior to submission of the Building Permit application, the landowner shall provide written confirmation that all recommendations of the Acoustic Report prepared by Herring Storer Acoustics (dated 18 December 2025, Rev. 2) have been incorporated into the working drawings of the certified Building Permit application, to the satisfaction of the City of Stirling.

Parking and Vehicle Access

13. The number and allocation of car, bicycle parking bays on-site shall be provided as follows:

    a. Nine residential car parking bays;
    b. Two residential visitor car parking bays;
    c. Three residential bicycle parking spaces;
    d. One residential visitor bicycle parking space;
    e. One accessible car parking bay; and
    f. Five commercial car parking bays.

14. Prior to occupation of the development all parking bays, manoeuvring and circulation areas shall be sealed/paved, drained and shall comply with *Australian/New Zealand Standard 2890.1-2004 - Off-street car parking*. The accessible parking bay indicated on the approved plans shall comply with *Australian Standard 2890.6:2022 - Off-street Parking for People with Disabilities.* The parking bays and manoeuvring areas shall be maintained for the life of the development, to the satisfaction of the City of Stirling.

15. Prior to occupation of the development, visitor car parking bays shall be line marked, maintained and be permanently accessible for the exclusive use of visitors to the property. The design and construction of the bicycle parking spaces shall be in accordance with *Australian Standard 2890.3-2015 – Bicycle Parking.*

16. Prior to occupation of the development, signage shall be erected to advise that the two visitor parking bays located abutting the Right-of-Way (Azurite Lane) are for residential visitors only. The signage shall thereafter be maintained for the life of the development, to the satisfaction of the City of Stirling.

17. All signage is to be in strict accordance with the City's *Local Planning Policy 6.1 – Advertising Signs*, unless further development approval is obtained.

18. Prior to occupation of the development, the redundant Right-of-Way vehicle crossover shall be removed and kerbing, verge, and footpath (where relevant) reinstated with landscaping, to the satisfaction of the City of Stirling.

19. Prior to occupation of the development, the proposed vehicle crossover shall be designed, constructed, and installed to the satisfaction of the City of Stirling.

Development Contributions and Right of Way Ceding

20. Prior to occupation of the development, a public art proposal for the subject development to the value of 1% of the construction value shall be submitted to, and approved by, the City of Stirling. The approved public art proposal shall be completed and installed by the developer prior to occupation and thereafter maintained by the landowner for the life of the development, to the satisfaction of the City of Stirling.

21. Prior to occupation of development, the Right-of-Way (Azurite Lane) along the eastern boundary of the subject land to be widened by 0.49m and the required land ceded free of costs to the Crown,

22. The landowner shall pay to the City a development contribution towards the cost of providing lighting infrastructure within the Right-of-Way (Azurite Lane) abutting the land in accordance with the City's Local Planning Scheme. The contribution shall be paid to the City prior to the building permit application or within 60 days from the commencement of the development, whichever occurs first unless otherwise agreed in writing by the City.

Universal Design

23. Prior to occupation of the development, pedestrian pathways providing wheelchair accessibility from all entries to buildings to public footpath and car parking areas shall comply with *Australian Standard 1428.1:2021 - Design for access and mobility, Part 1: General requirements for access – New building work,* to the satisfaction of the City of Stirling.

Utilities, Facilities and External Fixtures

24. Where a concealed drying area is not provided for the exclusive use of each dwelling, a mechanical dryer shall be installed in the relevant dwelling prior to occupation of the development, to the satisfaction of the City of Stirling. The mechanical dryer shall be maintained for the life of the development.

25. All external fixtures, building services, roof equipment (including air-conditioning) and utilities of the development are to be integrated into the building and/or screened for the life of the development, to the satisfaction of the City of Stirling.

26. Each storeroom shall be appropriately numbered on its access door to identify its dedicated use to the corresponding dwelling.

Waste Management and Stormwater

27. The development shall be consistent with the approved Waste Management Plan (WMP) prepared by CF Town Planning & Development (dated 27 March

2026). The WMP shall be implemented and thereafter complied with by the landowner for the life of the development, to the satisfaction of the City of Stirling.

28. Stormwater from all roofed and paved areas shall be collected and contained on site. Stormwater shall not affect or be allowed to flow onto or into any other property or road reserve. There shall be no connection to the City's drainage infrastructure without the written consent of the City of Stirling.

Advice Notes

General

1. Where an approval has so lapsed, no development shall be carried out without the further approval of the Development Assessment Panel or City of Stirling.

2. If an Applicant is aggrieved by this determination there is a right of appeal under Part 14 of the Planning and Development Act 2005. An appeal must be lodged within 28 days of the determination with the State Administrative Tribunal. 3.

3. This is a Development Approval issued under the City of Stirling Local Planning Scheme and related policies. It is not a Building Permit or an approval to commence or carry out development under any other law. It is the responsibility of the Applicant to obtain any other necessary approvals, consents and licenses required under any other law, and to commence and carry out development in accordance with all relevant laws.

4. This approval is not an authority to ignore any constraint to development on the land, which may exist through statute, regulation, contract or on title, such as an easement or restrictive covenant. It is the responsibility of the Applicant and not the Development Assessment Panel or City of Stirling to investigate any such constraints before commencing development. This approval will not necessarily have regard to any such constraint to development, regardless of whether or not it has been drawn to the Development Assessment Panel or City of Stirling's attention.

5. The Applicant is responsible for ensuring all lot boundaries as shown on the approved plans are correct.

6. Development shall comply in all respects with the attached approved plans and any requisite amended plans required by a condition of this approval which have been stamped accordingly.

7. Where, in the opinion of the City of Stirling, achieving compliance with the conditions of approval requires significant modifications to the approved plans, a Form 2 application shall be required for consideration in accordance with *Clause 17 or 17A of the Planning and Development (Development Assessment Panels) Regulations 2011.*

8. The landowner is advised that any future strata title or community title subdivision of the property must be consistent with this approval and the lot sizes demonstrated in the application.

9. The proposed crossover configuration is subject to the approval of the City of Stirling's Verge Control and Swimming Pool Business Unit. A "Crossover

Installation Application" is required to be submitted and approved prior to the commencement of the crossover installation.

Construction Management

10. In relation to the Construction Management Plan, the City advises that during construction adequate tree protection zones shall be established for the existing mature street trees. Any damage to the road reserve and existing mature street trees will require remediation, to the satisfaction to the City of Stirling.

Noise

11. The location, installation and operation of all fixed plant and equipment shall ensure that noise emissions will comply with the assigned levels of the *Environmental Protection (Noise) Regulations 1997.*

12. All construction works shall comply with the requirements of the *Environmental Protection Act 1986* and the *Environmental Protection (Noise) Regulations 1997*. Noisy construction work outside the period 7:00am to 7:00pm Monday to Saturday and at any time on Sundays and Public Holidays is not permitted unless an approved Noise Management Plan for the construction site has been approved in writing by the City of Stirling.

Development Contributions and Right of Way Ceding

13. In relation to the Public Art condition, please refer to the *City of Stirling Developer's Guide to Public Art, Public Art Masterplan and City of Stirling Local Planning Policy 6.12 - Public Art on Private Land*. Based upon the estimated cost of development identified on the development application forms, the 1.0% public art contribution equates to $35,000.

14. In relation to the Right-of-Way monetary contribution condition, the required contribution amount is currently estimated to be $4,510.42 (being 19.19m x $235.04 per linear metre). Please note this estimate is subject to change and the amount payable will need to be confirmed with the City prior to payment.

Waste Management and Stormwater

15. The bin enclosure shall comply with the requirements of the City of Stirling's *Waste Management Local Law 2010.*

Utilities, Facilities and External Fixtures

16. Any fire boosters, meter boxes or other utilities required to service the development site shall not be attached to neighbouring property walls.

Details: outline of development application

Region Scheme	Metropolitan Region Scheme
Region Scheme - Zone/Reserve	Urban
Local Planning Scheme	City of Stirling Local Planning Scheme No. 3
Local Planning Scheme - Zone/Reserve	Local Centre
Structure Plan/Precinct Plan	N/A
Structure Plan/Precinct Plan - Land Use Designation	N/A
Use Class and permissibility:	Shop – 'P' (permitted) Multiple dwelling – 'D²' (Discretionary; use not permitted on the ground floor fronting a road reserve greater than 10m in width)
Lot Size:	772m²
Existing Land Use:	Shop
State Heritage Register	No
Local Heritage	☒ N/A ☐ Heritage List ☐ Heritage Area
Design Review	☐ N/A ☒ Local Design Review Panel ☐ State Design Review Panel ☐ Other
Bushfire Prone Area	No
Swan River Trust Area	No

Proposal:
The key components of the proposed development are summarised as follows:

- Demolition of the existing commercial buildings.
- Construction of a three-storey Mixed Use development fronting Muriel Avenue comprising:
  - Six three-bedroom, two-bathroom apartments; and
  - Two ground floor commercial tenancies, each 77.48m² in area (154.96m² in total area) with direct frontage to Muriel Avenue.
- Vehicular access from the rear Right-of-Way (Azurite Lane) with a total of 17 on-site car parking bays dedicated as:
  - nine residents' bays;
  - two visitor bays; and
  - six commercial bays, including one accessible bay.
- Landscaping comprising the following:
  - 79.4m² (10.2%) of the site area being provided as deep soil planting area with three medium and two small trees;
  - 34.1m² of additional landscaping within a 2m wide planter box incorporated into the Muriel Avenue façade of the first floor; and
  - 0.8m² landscaping area within planter boxes to the balcony of each dwelling with the exception of 'Apartment 4'.

Proposed Land Use	'Shop' and 'Multiple Dwelling'
Proposed Net Lettable Area	154.96m²
Proposed No. Storeys	Three storeys
Proposed No. Dwellings	Six Multiple Dwellings

Background:

The subject site is located at Lot 101, House Number 22, Muriel Avenue, Innaloo. The total site area is 772m² with 19.19m frontages to both Muriel Avenue and Azurite Lane, on its respective western and eastern lot boundaries.

The subject site currently includes three single-storey commercial tenancies, various patio structures, an outbuilding and car parking. All structures are proposed to be demolished as part of this proposal.

The subject site is located within Local Centre No. 35 - 'Muriel Avenue' (Local Centre 35) as identified in the City's *Local Planning Strategy.*

Muriel Avenue is classified as a 'Local Road' under the City's Functional Road Hierarchy. On-street and embayed car parking bays also exists within Muriel Avenue with a two-hour time limited parking requirement (refer Figures 1 and 2).

Muriel Avenue is characterised by its landscaping and prominent Hills Fig trees (*Ficus microcarpa*) approximately 12m in height with a canopy coverage of approximately 15m-20m in diameter per tree.



Figure 1: Muriel Avenue – looking north (site inspection photograph taken 13 April 2026)



Figure 2: Muriel Avenue – looking south (site inspection photograph taken 13 April 2026)

From a built form perspective Local Centre 35 contains predominately older, single-storey commercial tenancies with nil setbacks and pedestrian awnings overhanging the footpath.

To the west of Muriel Avenue, properties are zoned 'Residential' R40 and are predominantly single-storey grouped dwellings.

The subject site obtains vehicle access from the existing 5m wide Right-of-Way (Azurite Lane) at the rear. To the east of Azurite Lane are predominately single-storey grouped dwellings. These dwellings obtain access from King George Street and Thrall Street located to the north and south of the subject site respectively.

Legislation and Policy:

The following legislation is applicable to the proposed development.

Legislation

- Metropolitan Region Scheme
- Planning and Development Act 2005
- Planning and Development (Development Assessment Panels) Regulations 2011
- Planning and Development (Local Planning Schemes) Regulations 2015
- City of Stirling Local Planning Scheme No. 3 (LPS 3)
- City of Stirling Local Planning Strategy
- City of Stirling Draft Local Planning Scheme No. 4

Planning Codes

- Residential Design Codes Volume 2 (R-Codes Vol 2)

State Government Policies

- State Planning Policy 7.0 - Design of the Built Environment

Local Planning Policies

- Local Planning Policy 4.2 - Mixed Use Design Guidelines (LPP4.2)
- Local Planning Policy 6.1 – Advertising Signs (LPP6.1)
- Local Planning Policy 6.3 - Bins Storage Areas (LPP6.3)
- Local Planning Policy 6.5 - Developments and Subdivisions Abutting Rights of Way (LPP6.5)
- Local Planning Policy 6.6 – Trees and Landscaping – Non-Residential (LPP6.6)
- Local Planning Policy 6.7 - Parking and Access (LPP6.7)
- Local Planning Policy 6.12 - Public Art on Private Land (LPP6.12)
- Local Planning Policy 6.18 - Public Consultation (LPP6.18)

Consultation:

Public Consultation

The proposed development was advertised for a period of 28 days in accordance with the 'complex application' requirements of Schedule 2, Clause 64 of the Planning and Development (Local Planning Schemes) Regulations 2015 and the City's Local Planning Policy 6.18 - Public Consultation.

The consultation period commenced on 19 February 2026 and concluded on 19 March 2025. During the consultation period 12 submissions were received comprising, seven objections, one submission of support and three submissions providing commentary on other matters for the City's consideration. The submissions received during the consultation period and their relative proximity to the development site are tabled below.

Submissions Received	Within 100m Radius of proposed site	Within 200m Radius of proposed site	Within the City of Stirling	Outside of the City or Stirling
SUPPORT	1 (8.3%)	0 (0%)	100%	0%
OBJECT	6 (50%)	2 (16.66%)	100%	0%
Changes Requested	0 (0%)	0 (0%)	100%	0%
OTHER (Comment)	2 (16.6%)	1 (8.33%)	100%	0%

All matters raised in submissions received during the advertising period have been summarised in the below table, including the number of submissions in which the matter was raised, and the City's response to each matter.

Public Consultation Submissions		
Number of submissions to raise matter	**Submission Comment**	**Officer Comment**
6	Concerns around parking and access, from increased traffic use of Azurite Lane. Concerns relate to	The City has reviewed the Applicant's Traffic Impact Statement (TIS). The anticipated traffic generated by the proposal is considered to be

Public Consultation Submissions		
Number of submissions to raise matter	**Submission Comment**	**Officer Comment**
	safety for vehicles and pedestrians using Azurite Lane which increase congestion.	acceptable and within the design capacity of the surrounding road network including Azurite Lane. Azurite Lane is a low-speed environment, and pedestrian movements are expected to be minimal. The majority of pedestrian movements associated with the proposed development are expected via Muriel Avenue as the active frontage.
3	Concerns around the site being overdeveloped (built form).	It is acknowledged that discretion is sought on the proposed plot ratio. The built form is considered acceptable having regard to regard to the City's planning framework requirements within Local Centre and that the adjoining properties are not unduly adversely impacted. The built form is provided with contrasting colours, materials and articulation to minimise a perception of building bulk. The built form is therefore considered acceptable within Local Centre context.
3	Concerns around insufficient parking allocation.	The traffic generation predicted in the TIS has been reviewed and the conclusions of the document are accepted. Onsite parking has been assessed and is acceptable particularly given the availability of existing public parking bays within Muriel Avenue.
3	Concerns the development will set an undesirable precedent.	Each application is assessed on its own merit against the planning framework applicable at the time of determination.
3	Concerns around commercial impacts with limited	The statutory planning framework does not control commercial considerations.

Public Consultation Submissions		
Number of submissions to raise matter	**Submission Comment**	**Officer Comment**
	commercial space offered and businesses on site being reduced from three to two. Associated economic/employment impacts to existing displaced businesses.	
3	Concerns around damage to the Azurite Lane fencing resulting from increased traffic.	Potential damage to fencing is a civil matter to be addressed between individual landowners.
3	Concerns around loss of amenity due to: • Visual privacy / overlooking due to windows • Noise impacts	Visual privacy setbacks are discussed in detail under the visual privacy section of this RAR. However, in summary the abutting properties are commercial in nature and the rear facing balconies comply with the setback requirements of the R-Codes Vol 2. The Acoustic Report has been reviewed and is considered acceptable, noting the impacts from noise are dealt with under separate *Environmental Protection (Noise) Regulations 1997)*. Notwithstanding, the Acoustic Report is to be updated to specify the location and design of the roof mounted air-conditioning system. A condition is recommended requiring the air conditioning system to be screened from view of Muriel Avenue and Azurite Lane.
2	Potential for crime and security issues.	The proposal has four residential balconies which face Azurite Lane and two balconies which face Muriel Avenue providing passive surveillance and mitigating potential safety risks.

Public Consultation Submissions		
Number of submissions to raise matter	**Submission Comment**	**Officer Comment**
		The commercial tenancies and balconies have been considered against the Crime Prevention Through Environmental Design (CPTED) principles. The proposal positively reinforces these principles through the extensive use of glazing and balcony spaces providing passive surveillance, the provision of lighting, and controlled access to the site with associated security fencing.
2	Concerns around waste collection and waste vehicle access from Azurite Lane.	The submitted WMP demonstrates waste can be safely and efficiently collected from Azurite Lane. The bin store is of an appropriate size and bin pad location is suitable for collection. A condition is recommended requiring the WMP to implemented for the life of the development.
1	Concerns relating to insufficient landscaping provision, accessibility of planter box area on first floor and reticulation.	A condition is recommended to be included requiring the submission of a further revised Landscaping Plan to address matters including shade tolerant trees, mulching and irrigation on all communal landscaped areas.
1	Concerns the proposal will be out of character with the area.	The proposal is considered consistent with the objectives of the Local Centre zone under the planning framework. The built form is considered acceptable within the Local Centre taking into account the City's planning framework requirements and that the adjoining properties are not adversely impacted.

Public Consultation Submissions		
Number of submissions to raise matter	**Submission Comment**	**Officer Comment**
1	Concerns relating to impacts of construction, with noise from tradesman / machinery noise and parking issues during construction.	A condition is recommended to be imposed for a CMP which is required to address these matters in further detail.
1	Concern relating to contradiction of several of the Design Principles from Design Review Panel (DRP).	The DRP comments have been addressed by the Applicant with justification in the development application report.

At the conclusion of public consultation, the City provided the Applicant with copies of submissions received during public consultation, to provide the Applicant an opportunity to address the matters raised. The Applicant's response to submissions is contained in Attachment 8.

Design Review Panel Advice

The City's DRP is to provide design advice and is to supplement the City's overall planning assessment. The proposal was considered by the City's DRP at its 20 November 2025 Meeting. The City's DRP dated 20 November 2025 is contained within Attachment 9.

The DRP was generally supportive of the proposal and its built form proportions and street presence, however also noted that further attention to detail was required in relation to landscaping. In this regard, the DRP considered there to be limited deep soil areas and an inadequate number of trees. In addition, the DRP commented that some proposed landscaping spaces appeared to be inaccessible or not suitably located. It was also noted by the DRP that internal functionality could be improved, along with privacy concerns due to boundary setbacks and window orientations.

The City values the commentary of the DRP and in particular reference to landscaping, has recommended conditions to improve the proposed landscaping, especially with regard to its survivability via shade-tolerant species.

Based on the above, and subject to a condition requiring an amended Landscaping Plan prior to occupation of the development, the City considers the proposal to adequately address the design principles of State Planning Policy 7.0 - Design of the Built Environment.

Planning Assessment:

The development has been assessed against the relevant planning framework including LPS3, State Planning Policies and Local Planning Policies. The following matters have been identified as the relevant key considerations in the assessment of this application:

1. Proposed Land Use
2. Primary Planning Controls (Built Form)
3. Car and Bicycle Parking; Traffic, Access and ROW Widening
4. Landscaping and Communal Open Space
5. Public Art
6. Signage

An assessment of the proposal against the relevant planning framework including reference to when discretion is sought is contained in Attachment 6.

1. Proposed Land Use

The subject site is zoned 'Urban' under the Metropolitan Region Scheme and 'Local Centre' under the City's LPS3.

The below table summarises the use class of the proposed land uses as prescribed by Clause 4.3 of LPS3 and its associated Zoning Table.

LPS3 Clause 4.3 and Land Use Permissibility		
Land Use	**Use Class**	
Multiple Dwelling	*D²*	'D²' means the use is not permitted unless Council, or in this instance the DAP, has exercised its discretion by granting planning approval. Condition Note 2 states that Multiple Dwellings are not permitted on the ground floor fronting a road reserve greater than 10m in width.
Shop	*P*	'P' means that the use is permitted by the Scheme providing the use complies with the relevant development standards and the requirements of the Scheme.

With respect to the above, the proposal does not include any ground floor multiple dwellings. Accordingly, Condition 2 is not applicable, and the Multiple Dwelling aspect of the proposal can be considered, subject to the use of discretion.

To inform the use of discretion, it is considered appropriate to undertake an assessment of the Multiple Dwellings against the Local Centre zone objectives of Clause 4.2.7 of LPS3. This is contained in the below Table.

Local Centre Zone Objectives Assessment (Clause 4.2.7 of LPS3)	
Objective	**Officer Comment**
a) To provide for a limited range of small-scale retail, commercial and community facilities to	The proposal includes two shop tenancies capable of accommodating anticipated day-to-day retail needs of the immediate

Local Centre Zone Objectives Assessment (Clause 4.2.7 of LPS3)	
Objective	**Officer Comment**
meet the day-to-day needs of the immediate neighbourhood.	neighbourhood which is broadly R40 housing stock. The proposed built form is considered capable of accommodating future commercial and community uses, subject to a potential future development application. **Objective considered satisfied**
b) To ensure safe and convenient access to facilities, in an environment which is conducive to pedestrian movement.	A 2-metre-wide pedestrian awning is proposed over the existing Muriel Avenue footpath. This effectively represents a "like-for-like" replacement of the current awning. The proposed awning is considered to contribute to a safe and convenient pedestrian amenity for visitors to the site, and other businesses within the Local Centre. An associated condition is recommended for the inclusion of lighting to be provided to the building entry. **Objective considered satisfied (subject to condition imposition)**
c) To ensure development is sited and designed so as to reinforce a sense of place and attractive streetscapes.	The development has been designed and sited in accordance with the City's relevant planning framework, in particular the R-Codes Vol. 2 and *Local Planning Policy 4.2 - Mixed Use Design Guidelines*. The proposal provides a renewed façade to Muriel Avenue which includes a nil setback, pedestrian awning, extensive glazing and dedicated shop-front entrances from the street. These elements are considered to enhance activation and presentation to the public realm, in turn improving the attractiveness of the streetscape. **Objective considered satisfied**

The City's assessment concludes that the proposed land uses satisfy the relevant provisions of the City's planning framework and is supported.

2. Primary Planning Controls (Built Form)

The Development proposed Multiple Dwellings within the Local Centre zone. Clause 5.3.2 (*Special Application of Residential Design Codes*) of LPS3 states:

"Except as otherwise required in the Scheme, Local Planning Policy, Structure Plan, Activity Centre Plan or Local Development Plan, residential development not within the Residential Zone is to comply with the relevant requirements under the R80 density coding in the Residential Design Codes."

In accordance with Clause 5.3.2, the City has assessed the proposal against the R80 code of the R-Codes Vol 2, as well as the other relevant planning instruments applicable to the site. The below table identifies the key elements of the planning framework applicable to the development and relevant to design aspects:

Primary Controls Assessment		
Element	**Instrument / Provisions**	**Proposed**
Building height	LPP4.2: • Maximum 3-storey building height.	3-storey building proposed, to a maximum height of 12.6m. **Complies with provision**
Street wetbacks	LPP4.2: • Nil building setback to primary and secondary streets. *LPP6.5 - Developments and Subdivisions Abutting Rights of Way* (LPP6.5): • Azurite Lane is a '*Category 1*' Right of Way (ROW) • LPP6.5 prevails over LPP4.2 regarding minimum setbacks to the ROW • Ground floor: Minimum 2m setback to ROW required • Upper floors: Minimum 3m setback required	<u>Muriel Avenue (Primary Street) setback:</u> Nil setback provided **Complies with provision** <u>Azurite Lane (Secondary Street) setback:</u> Ground: 3.3m to undercroft piers **Complies with provision** Upper floors: 2.85m provided after the required 0.49m ROW widening. The ROW widening is discussed in the Access section of this RAR. A condition has been recommended relating to the ROW widening requirement. **Element objectives pathway sought**
Boundary walls	LPP4.2: • Buildings shall have a Nil setback to side boundaries, except where adjoining sites are zoned Residential.	No Residential zoned sites abut the side boundaries. Azurite Lane is a dedicated ROW. A three storey boundary wall proposed to the

Primary Controls Assessment		
Element	**Instrument / Provisions**	**Proposed**
		northern lot boundary, abutting an existing two storey boundary wall within the Local Centre zone. A single storey parapet wall is provided to the southern side within the Local Centre zone. **Complies with provision**
Building separation	R-Codes Vol 2 - Acceptable Outcomes: • 3m setback to side and rear boundaries	Building separation to the northern and southern sides at 2.05m. Building setback to Azurite Lane 2.85m is detailed above in street setbacks. **Element objectives pathway sought**
Plot ratio	R-Codes Vol 2: • Plot Ratio: 1.0 772m² (current lot area) – 0.49m ceding = 762.6m² effective lot area	1.26 (960.6m²) plot ratio proposed **Element objectives pathway sought**
Visual privacy & side and rear setbacks	R-Codes Vol 2 - Acceptable Outcomes: • 3m for major openings to bedroom, study and open access walkways	Bed 2 on each level includes a side setback (north and south) of 2.05m instead of 3m. Master Suite to Apartment 2 and 5 proposes a side setback of 2.45m instead of 3m to the northern lot boundary. **Element objectives pathway sought**

The relevant areas of the primary planning control where discretion is being sought are discussed further below:

<u>Street setbacks</u>

The development proposes a street setback of 2.85m to Azurite Lane. LPP6.5 has a setback requirement of 3m for upper floor residential components which prevails over the requirement of the R-Codes. Where a discretionary decision is required, the proposal is to be assessed against the objectives of the policy.

The objectives of LPP6.5 are as follows:

2.1. To facilitate the improved management of Rights of Way ('ROW');
2.2. To promote better urban design by encouraging the use of ROW for vehicle access;
2.3. More efficient use of individual sites;
2.4. Create unique streetscapes along the ROW through sympathetic building orientation and design;
2.5. Maintain existing streetscapes, by minimising the need for and impact of additional garages/carports and paved areas within the street setback area, and better allowing the retention of existing buildings and landscaping;
2.6. Support the objectives of the City's Rights of Way Management Strategy; and
2.7 To facilitate future widening of ROW.

With respect to the above objectives, the following considerations are relevant regarding the proposed 0.15m setback difference:

- The proposed setback compliments the existing Azurite Lane character as its primary function is servicing the existing Local Centre commercial properties. Figure 3 below shows the current character of Azurite Lane. The proposed 2.85m setback will assist in a providing a transition to the commercial properties abutting Azurite Lane.
- The proposal provides a clear transition between the public realm and private realm with the inclusion of fencing and security gates on the ground floor.
- Visual privacy setbacks from all rear facing apartments meet the acceptable outcomes of the R-Codes Vol. 2 and notwithstanding provide passive surveillance opportunities.
- The proposal uses contrasting colours, materials and articulation to minimise building bulk. Articulation is provided to the elevations, and the main building volume is located centrally within the site to minimise overall mass.

Based on the above, the proposed setback is considered to meet the objectives of LPP 6.5 and the setback to Azurite Lane is considered acceptable.



Figure 3 – Current character of Azurite Lane looking north with subject site to the left (site inspection photograph taken 13 April 2026)

Plot Ratio

The development proposes a plot ratio of 1.26 with a total gross floor area proposed of 960.6m². Table 2.1 of the R-Codes Vol. 2 has an acceptable outcome plot ratio of 1.0 being a floor area of 762.6m² as the effective lot area, following ROW ceding.

The element objective under Element 2.1 – Plot ratio of the R-Codes Vol. 2 is as follows:

> *"The overall bulk and scale of development is appropriate for the existing or planned character of the area."*

The proposed plot ratio is considered to satisfy the element objective, and the overall bulk and scale is appropriate for the following reasons:

- The proposal enhances pedestrian amenity within the Local Centre due to its active frontages, including balconies oriented toward the Muriel Avenue and Azurite Lane to enhance surveillance of the public realm, thus contributes to the existing character.
- The development uses contrasting colours and materials as well as articulation. This articulation is provided to each elevation and the main building volume is located centrally within the site. It is considered that the contribution of these elements minimise overall mass imposed on adjoining properties.
- An awning to Muriel Avenue assists in providing a pedestrian scale of built form to the street.
- The mixed-use nature of the proposal is consistent with the objectives of the Local Centre zone noting that the ground floor commercial uses can provide retail and commercial facilities for the neighbourhood and residential apartments above are provided with a sense of place in Muriel Avenue Local Centre. Strict adherence with the R-Codes requirement would unnecessarily limit dwelling yield in this well serviced area.

The compliant three-storey building height, proposed setbacks, articulation, siting and design combine to deliver an appropriate outcome when assessed against the prevailing planning policy framework including existing and likely future character.

Visual Privacy Setbacks and Building Separation

Identical dwelling layouts are proposed on the first and second storeys of the development. This includes major openings from bedrooms, facing the north and south lot boundaries with proposed 2m visual privacy setbacks. The acceptable outcomes for visual privacy are for a 3m setback to adjoining sites for major openings to bedrooms, studies and open access walkways.

The element objective under Element 3.5 – Visual Privacy of the R-Codes Vol. 2 is as follows:

> *"The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms."*

With respect to the above objective, the following considerations are relevant regarding the proposed visual privacy and building separation difference of 1m.

The below Figure 4 shows the adjoining northern commercial site has a nil setback with a two-storey parapet wall abutting the subject site. Accordingly, any views from habitable rooms are directed toward blank walls or roof structures. In this regard, it is considered that the element objective for visual privacy and the overall design intent is achieved.

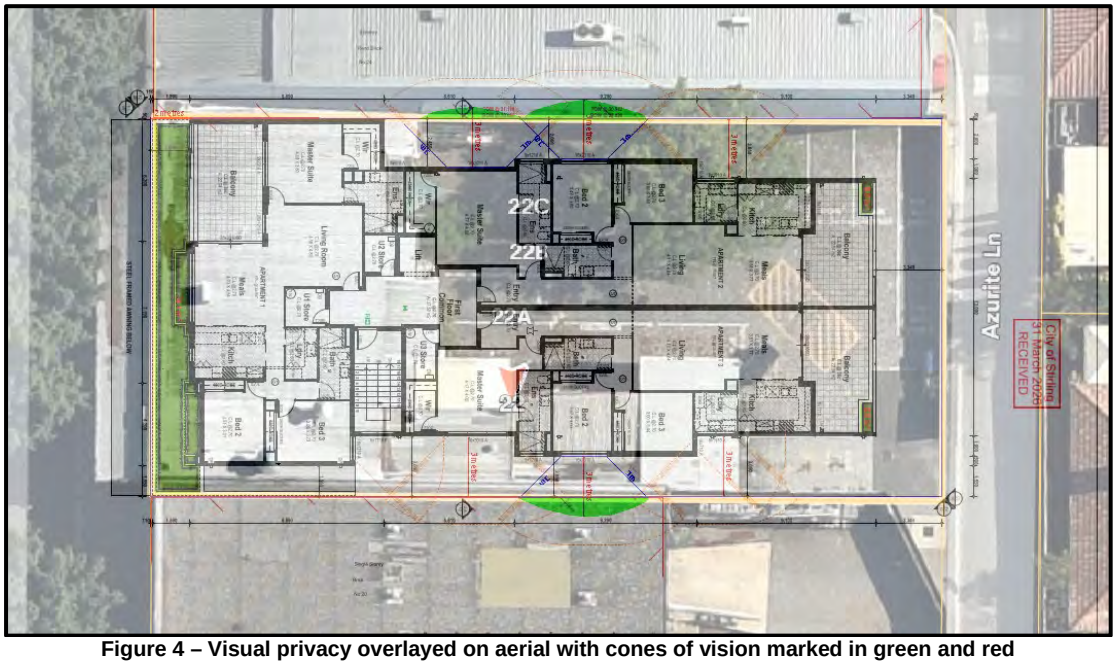


Figure 4 – Visual privacy overlayed on aerial with cones of vision marked in green and red

The adjoining southern commercial site is a single storey building with a parapet wall abutting the subject site. Views from habitable rooms of the proposal are directed primarily to the roof structure and the open car parking area at the rear eastern portion of the site. Further the proposed development has been designed to minimise overlooking impacts by orientating major openings and the balconies away from adjoining side properties, which are commercial in nature and contain no sensitive uses or habitable spaces at this juncture. Notwithstanding the southern commercial property is capable of being redeveloped in the future. The future setbacks, in conjunction with the proposed visual privacy setbacks are expected to provide adequate building separation. Accordingly, the City considers that the element objectives and design intent with respect to visual privacy and building separation have been satisfied.

3. Car and Bicycle Parking; Traffic, Access and ROW Widening

Car Parking

As contained in the following respective tables, the proposal has been assessed against Element 3.9 – Car and Bicycle Parking of the R-Codes Vol. 2 and LPP6.7 for the non-residential component

Car Parking Assessment		
Land Use	**Provision**	**Bays Required**
Residential Multiple Dwelling	1.25 bay per two+ bedroom dwelling (6 dwellings)	7.5 (8) bays*
Visitor bays	1 bay per four dwellings up to 12 dwellings	1.5 (2) bays*
Commercial 'Shop'	1 bay per 25m² GFA as per Local Centre (LC35)	6.45 bays (6)** Based off 161.4m² GFA
Residential Total Required (Minimum):		8 residential bays and 2 visitor bays
Residential Total Provided:		9 residential bays and 2 visitor bays
Non-Residential Required:		6 bays
Non-Residential Provided:		6 bays
Total Car Parking Required:		16 bays
Total Car Parking Provided:		17 bays
Total Shortfall/Surplus		Surplus of one residential bay
**Rounded up the nearest whole number as per the R-Codes* ***Rounded to the nearest whole number as per the City's LPP6.7* *GFA is defined under LPP6.7 as: means the total floor area within the building measured over the enclosing walls (including the portion of any common or party wall forming part of the building) exclusive of parking facilities sited within the building.*		

It is noted that visitor parking bays are to be used by the residential component of the development only, as detailed in the Applicants TIS, while the on-street Muriel Avenue bays are expected to be utilised by commercial visitors.

The car parking provided is appropriate and allows additional space for landscaping and tree planting within the development site to enhance the outlook for residents. The City supports the proposed parking bays allocation, and conditions have been recommended accordingly.

Based on the above, the proposal is considered acceptable from a car parking perspective.

Bicycle Parking

Bicycle Parking Assessment		
Land Use	**Provision**	**Spaces Required**
Residential Multiple Dwelling (6)	0.5 spaces per dwelling (6 dwellings)	3 spaces
Residential Visitors	1 space per 10 dwellings	1 space
Shop	As per LPP6.7: 0-5,000m² 1 space per 150m² of GFA	1.07 (1) space Based off 161.4m² GFA
Residential Total Required (Minimum):		4 bicycle spaces
Residential Total Provided:		4 bicycle spaces
Non-Residential Provided:		Nil
Total Bicycle Parking Required:		5 spaces
Total Bicycle Parking Required:		4 spaces
Total Shortfall / Surplus:		1 space shortfall

The table above shows that there is a shortfall of one bicycle space for the commercial component. Where a discretionary decision is required, the proposal is to be assessed against the objectives of the policy.

The objectives of LPP6.7 are as follows:

a) *To ensure development provides an appropriate level of car parking, reflecting supply and demand so that a major parking problem is unlikely to occur;*
b) *To ensure safe, convenient, and efficient access for pedestrians, cyclists, and motorists;*
c) *To prioritise access by public transport, walking and cycling;*
d) *To facilitate the provision of adequate bicycle parking and end of trip facilities;*
e) *To provide a balanced parking supply that does not exceed the capacity of the road network, with sufficient publicly accessible parking;*
f) *To ensure that an oversupply of parking does not occur that discourages alternative forms of transport; and*
g) *To ensure the amount of parking is not detrimental to the urban design and character of the locality.*

With respect to the above objectives, the following considerations are relevant regarding the proposed one bicycle space difference:

- The difference applies to the non-residential component only. Residential bicycle spaces and a residential visitor bay are proposed in accordance the R-Codes requirements.
- Given the nil setback required by the planning framework, there is limited opportunity for the commercial component to provide on-site bicycle parking spaces which would not otherwise overhang into the public realm. In this regard, the area abutting the site in the Muriel Avenue reserve is maintained as a clear throughfare for safe, convenient and efficient use for pedestrians and cyclists.
- The subject site is provided with access to high frequency bus routes on bus routes 410, 650, 990 and Surf CAT on Scarborough Beach Road which is approximately 275m to the south of the subject site.
- There is no formal bicycle spaces currently located within Muriel Avenue, however there are signposts and other street furniture which may be used informally.
- The parking provision is in line with the urban design and character of the locality.

Notwithstanding the proposed bicycle parking provision satisfies the objectives of LPP6.7 by providing an appropriate level of proposed bicycle parking. Accordingly, the bicycle parking shortfall of one space is considered acceptable.

Traffic

In support of the proposed development, the Applicant submitted a TIS which anticipates the development to generate approximately 103 vehicles per day, with an estimated seven vehicular trips per hour in AM over the period from 7am to 9am and 11 vehicle trips per hour in PM peak periods from 5pm to 7pm.

The findings of the TIS state that there would be a medium impact on the surrounding network and that the surrounding road network, however the network is able adsorb the additional traffic generated by the development. The predicted traffic generation in

the Applicant's TIS has been reviewed and the conclusions of the document have been reviewed and are accepted by the City.

Located directly in front of the subject site in the Muriel Avenue road reserve is a series of embayed and time limited (2 hour) parking bays. Given the time limit will result in high parking turnover, use of these parking bays are more likely to be frequented by the commercial customers and visitors to the local centre. The City's review of the TIS found no concerns from a traffic perspective with the TIS demonstrating it meets the relevant Standards and Guidelines.

On the basis of the above findings, traffic generated by the proposal is considered acceptable.

Access and ROW widening

Vehicle access to the site is proposed via a 6m wide at-grade crossover into the site from Azurite Lane.

Azurite Lane is identified within the Development Contribution Area 5 (DCA5) under LPS3 with details relating to Rights of Way Improvement Works being contained in Schedule 11A.

Azurite Lane is currently 5m wide and there is a requirement for a 0.49m road widening to be provided to each side of Azurite Lane so that the future 6m wide carriageway in accordance with the provisions of LPP6.5. The purpose of the widening is to promote more efficient use of individual sites and to facilitate the City's commitment for improved management and use of ROWs. In this case the nexus for ROW widening is that proposal abuts a Category 1 ROW which is described under LPP6.5 as:

> ***Category 1 - Traffic Management and Commercial ROW***
> *Located in areas with significant traffic safety / management issues (including the majority of commercial developments capable of utilising ROW for service and/or parking access) or adjoins properties fronting major roads;*

The development plans have accommodated this requirement as indicated by the red hatching on the development plans. As a mixed-use development which uses the ROW for site access, the proposal meets the relevant application criteria. On this basis a condition of development approval has been recommended for the ROW widening area (0.49m) on Azurite Lane to be ceded to the City.

The access, manoeuvring and turning pathways satisfy the requirement for accommodating this widening. Subject to the imposition of this condition, the proposal is consistent with LPP6.5 and Schedule 11A of LPS3 and is therefore acceptable.

Pedestrian access from Muriel Avenue is available for both the commercial and residential components of the mixed-use development. The proposal demonstrates residential visitor parking bays being directly accessible off Azurite Lane outside of the security gates consistent with the provisions of the City's LPP6.5.

The submitted TIS demonstrates the proposed parking and access arrangements is sufficient to accommodate the peak traffic movements and is appropriate for the development. The submitted TIS has been reviewed and is supported by the City.

4. Landscaping and Communal Open Space

Landscaping

As contained in the following table, the proposal has been assessed against Element 3.3 – Tree canopy and deep soil areas of the R-Codes Vol. 2 and LPP6.6. The City's LPP6.6 applies to non-residential development and prevails over the R-Codes to the extent of any inconsistency.

Landscaping Assessment	
Provision	**Proposed**
Minimum deep soil area: • 10% of site area (762.6m² effective lot area) • 76.26m² required	79.4m² deep soil area is proposed. **Complies**
Minimum requirement for trees: • 2 medium trees **OR** • 1 large tree and small trees to suit area.	Two medium trees (*Hymenosporum flavum)* and two small trees (*Camellia Sasanqua*) are proposed abutting the northern lot boundary. One additional medium tree (*Waterhousea floribunda*) is proposed abutting the southern lot boundary. **Complies**
LPP6.6 Medium Trees: Minimum soil deep soil area: • 16m² Minimum dimension of deep soil area • 3m	The two medium trees abutting the northern lot boundary are provided with a deep soil area of 9m² per tree with 3m minimum dimensions in a half diamond and linear landscaped area configuration. The one medium tree abutting the southern lot boundary is provided with a deep soil area of 14.8m² with a 2.8m minimum dimension in a regular configuration. **Policy objectives pathway sought**

The objectives of LPP6.6 are as follows:

a) *To improve the amenity of areas by providing suitable landscaping for development sites;*
b) *To protect existing trees, and ensure new trees are planted to contribute to tree canopy coverage;*
c) *To provide shade coverage to car parking areas;*
d) *To ensure development provides optimal growing conditions to enable existing trees, new trees and landscape planting to reach maturity;*
e) *To provide a diversity of plant and tree species that are resilient to climatic, soil and site conditions; and*
f) *To encourage waterwise landscaping through appropriate species selection, reduced water demand, and improved stormwater utilisation.*

With respect to the above objectives, the following considerations are relevant regarding the proposed landscaping provision.

No existing trees on site proposed to be retained. Whilst there is an existing tree located in the rear carpark currently, it is not positioned on site within a favourable location to enable its long-term retention while facilitating redevelopment of the site.

The residents are afforded convenient access to high quality landscaping within the existing Muriel Avenue streetscape. The Muriel Avenue road reserve has a series of large prominent Hills Fig trees (*Ficus microcarpa*) that provide extensive tree canopy cover for the area. This pre-development setting affords the future residents and users of the Local Centre a high degree of amenity value.

Other landscaping features of the development site include an extra 36.5m² of landscaping on the first floor, which provides additional foliage to the streetscape façade on Muriel Avenue. Furthermore, each apartment except for Apartment 4 contains a 0.8m² planter box for exclusive access and use.

Based on the above, and subject to the imposition of a revised landscaping plan, the proposal is considered to be acceptable from a landscaping perspective. A further revised landscape plan to the satisfaction of the City is recommended as a condition of approval will ensure selected plant species can withstand long periods of shade to ensure long term resilience.

Based on the above, the proposal is considered acceptable, subject to landscaping plan amendments by way of the recommended condition of approval.

Communal open space

The proposal has been assessed against Element 3.4 – Communal open space of the R-Codes Vol. 2. Table 3.4 – Provision of communal open space states the overall communal open space requirement as being:

> *Informal seating associated with deep soil or other landscaped areas.*

The City acknowledges the intended provision of onsite communal open space which is annotated on the development plans as an “informal meeting” area. This space is 4.2m² in area and is located adjacent to the bicycle racks on the ground floor rather than being associated with a deep soil or landscaped area.

The element objectives under Element 3.4 – Communal Open Space of the R-Codes Vol. 2 are as follows:

O 3.4.1	*Provision of quality communal open space that enhances resident amenity and provides opportunities for landscaping, tree retention and deep soil areas.*
O 3.4.2	*Communal open space is safe, universally accessible and provides a high level of amenity for residents.*
O 3.4.3	*Communal open space is designed and oriented to minimise impacts on the habitable rooms and private open space within the site and of neighbouring properties.*

With respect to the above Element objectives, the following considerations are relevant regarding the proposed communal open space.

Less than 10 dwellings are proposed, as previously stated it is acknowledged that deep soil area of 79.4m² (10.2%) with three medium and two small trees proposed are considered appropriate given this scale. The deep soil area is of a suitable size with suitable landscaping provided throughout the site, subject to landscaping plan amendments.

The subject site is located conveniently within the existing Muriel Avenue Local Centre which is universally accessible and provides a high level of amenity with landscaping provided in the form of a series of established mature Hills Fig trees, as well as commercial land uses that contribute to recreational and amenity opportunities for the residents of the development.

The subject site is within a walkable catchment to Millet Park located approximately 300m from the site and offers the residents passive and recreational use opportunities. Access to this open space area is via safe and accessible footpaths.

Considering the above and given the small number of dwellings to be developed the City is of the view that provision of communal open space in accordance the R-Codes requirement can be appropriately waived.

5. Public Art

LPP6.12 applies to all development with a development cost of $2 million and above, with a minimum 1% contribution cost of development provided as public art. The cost of the development is $3.5 million which will result in a $35,000 public art contribution. The Applicant has indicated the public art proposal will be located within the pedestrian entrance of the development. The City considers that this matter can adequately addressed via a condition of approval and assessed further as part of the City's public art panel and conditions clearance process.

6. Signage

Detailed assessment of the proposed signage is contained in Attachment 6 which is assessed against the specific development standards contained in Local Planning Policy 6.1 – Advertising Signs (LPP6.1). In summary, the proposed signage meets the specified development standards as there are two wall signs per commercial tenancy and the area of signage does not cover more than 30% of the visible area per tenancy at 10.4% per tenancy. Based on the above, the signage of the development is considered to be appropriate. The City considers that this matter can adequately addressed via a condition of approval.

Conclusion:

The proposed development is consistent with the planning framework and the desired character of the Local Centre. The development is designed and sited to ensure adverse amenity impacts are minimised with consideration of the existing and future character of the Local Centre.

As viewed from the public realm along Muriel Avenue, the proposed built form and its use of contrasting colours, materials and wall articulation is consistent with the site Local Centre setting. The proposal is provided with active frontages, including extensive glazing to the commercial tenancies, landscaping on the first floor provides and public art to be incorporated within the building design.

The proposed plot ratio, communal open space and landscaping are considered appropriate in the context of the development site, which is well located to nearby communal facilities and public open space and maximises the connectivity to the established prominent trees in the Muriel Avenue road reserve. Accordingly, the application is recommended for approval subject to conditions.

Attachment 1 - Development Application Plans (Recieved 30 March 2026)

Stavertis

Address:22 Muriel Ave INNALOO

Apartment Complex

Job Number: 23011

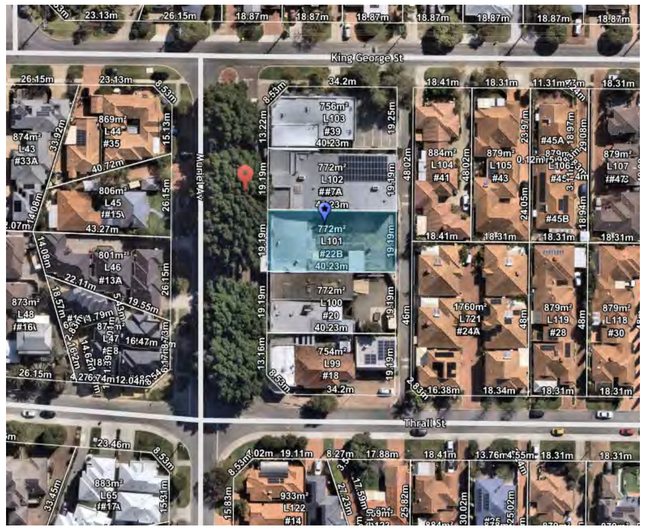
Drawing No	Description
01	Cover Page
02	Existing Site Survey
03	Site Plan
04	Context Plan
05	Ground Floor Plan
06	First Floor Plan
07	Second Floor Plan
08	Roof Plan
09	Elevations
10	Elevations
11	FF Solar Study
12	SF Solar Study
13	Section



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Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and
need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features

- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

Revision	Description	Date
8.00	Council Comments	30.03.26
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

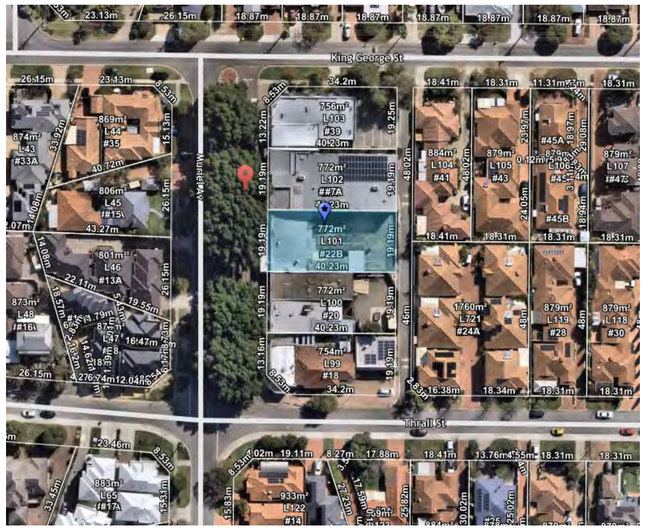
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Existing Site Survey

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Project No:	**Revision Number:**
23011	8.00

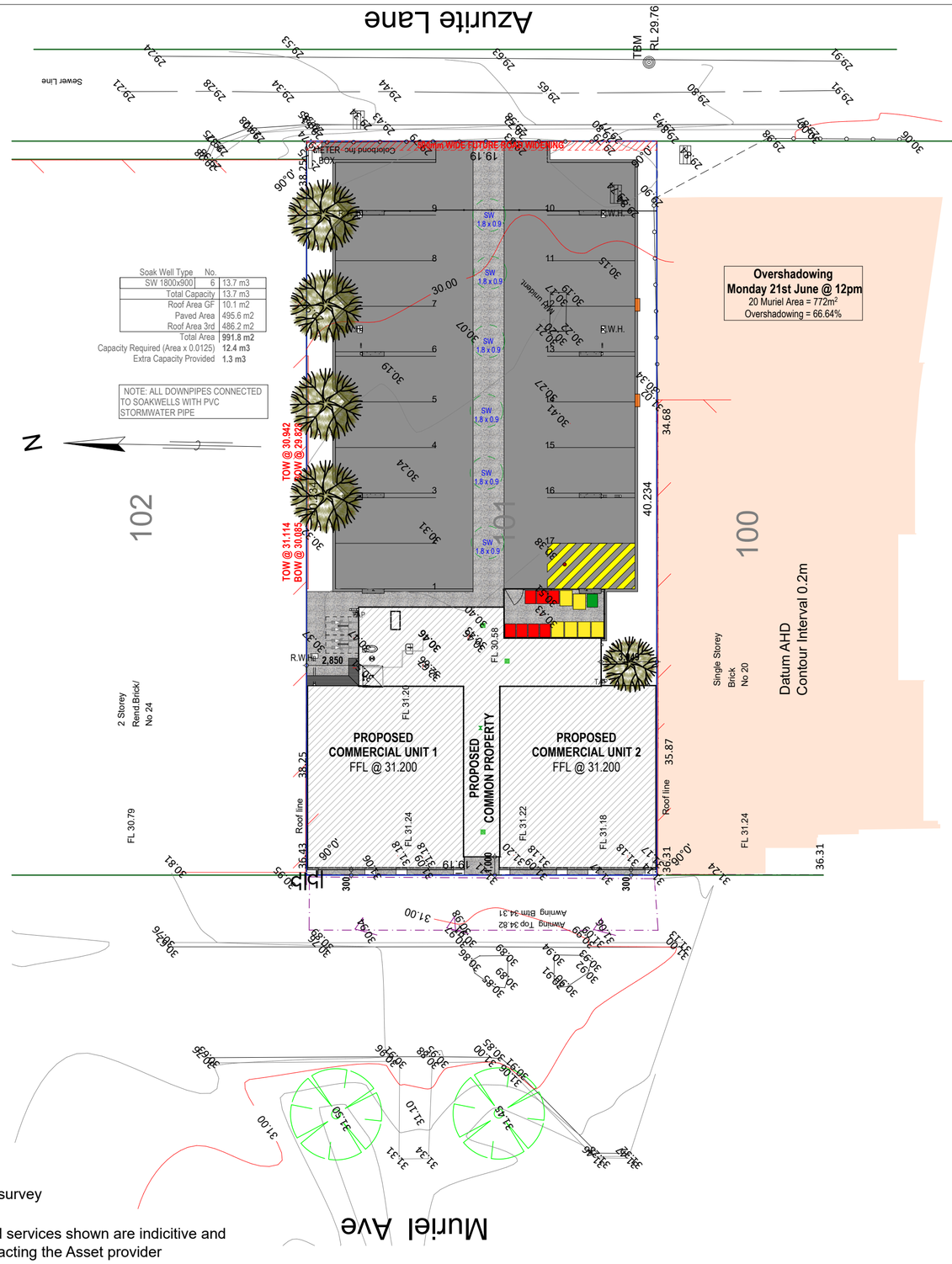
Drawing No.:
02 of 13

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Soak Well Type	No.	
SW 1800x900	6	13.7 m3
Total Capacity		13.7 m3
Roof Area GF		10.1 m2
Paved Area		495.6 m2
Roof Area 3rd		486.2 m2
Total Area		**991.8 m2**
Capacity Required (Area x 0.0125)		**12.4 m3**
Extra Capacity Provided		**1.3 m3**

NOTE: ALL DOWNPIPES CONNECTED TO SOAKWELLS WITH PVC STORMWATER PIPE

Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

PLOT RATIO

COMMERCIAL
Site Area: 762.46m²
Building Footprint: 170.41m²
22.35%

RESIDENTIAL
Site Area: 762.46m²
Building Footprint: 815.14m²
106.90%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	14.90	16,440	47.57
Commercial Unit 1	85.21	37,160	255.63
Commercial Unit 2	85.22	37,160	255.65
Common Property	67.24	53,960	219.00
	252.57 m²	144,720 mm	777.85 m³
	1,291.28 m²	**710,480 mm**	**3,751.81 m³**

Revision	Description	Date
8.00	Council Comments	30.03.26
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Site Plan

Scale: 1:200
Sheet Size: A2
Project No: 23011
Revision Number: 8.00
Drawing No.: 03 of 13

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

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Key Features
Telecom
Water meter
Power Pole
Power Dome
Sewer M/H

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COMMERCIAL DEVELOPMENTS MURIEL ROAD



RESIDENTIAL DEVELOPMENTS THRALL STREET



COMMERCIAL SHOPPING COMPLEX SCARBOROUGH BEACH RD

Revision	Description	Date
8.00	Council Comments	30.03.26
7.00	Development Approval	11.12.25
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

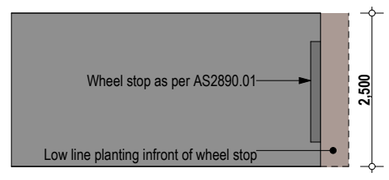
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Context Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	8.00

Drawing No.:
04 of 13

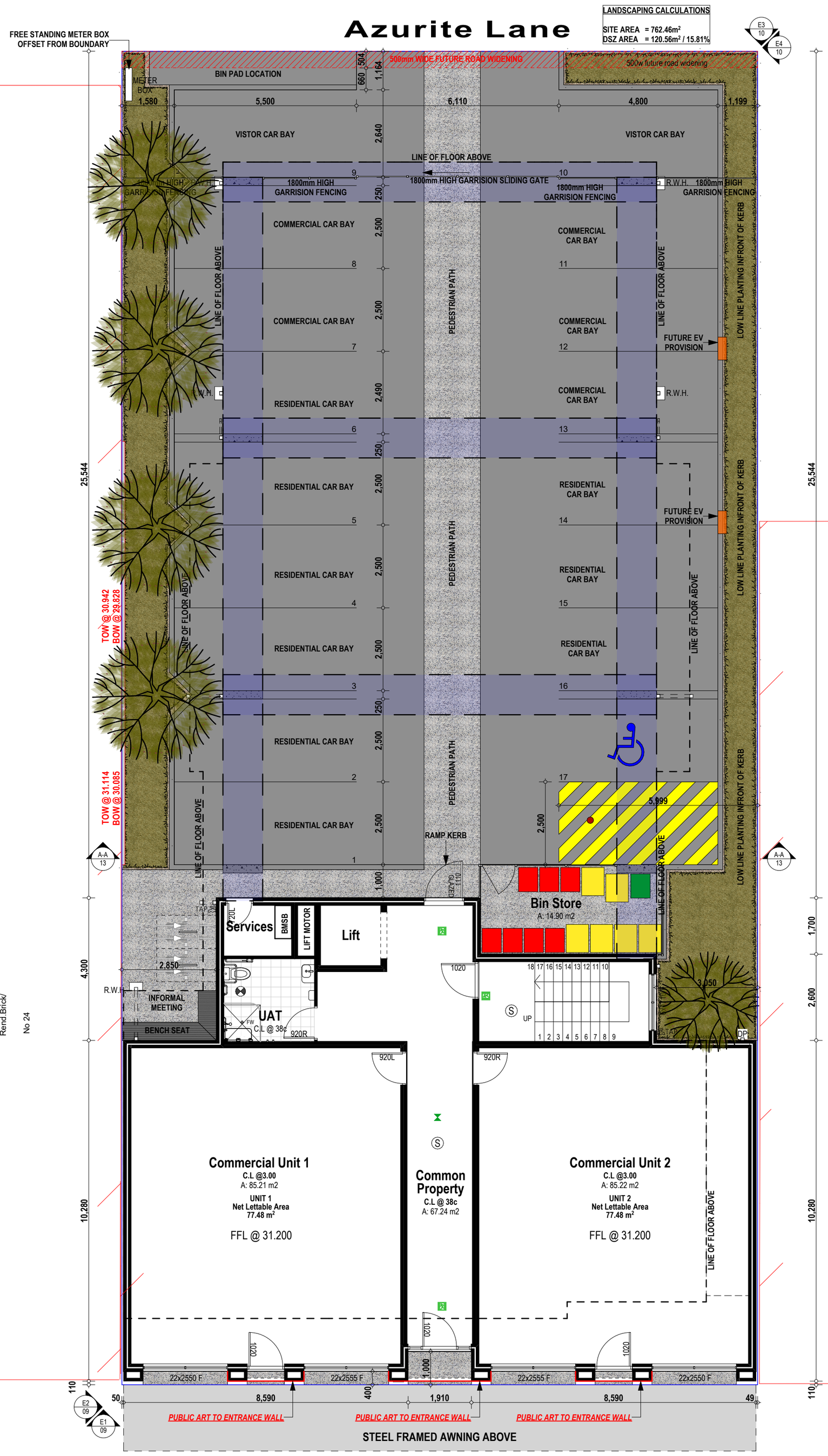
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Carbay Detail

Azurite Lane



Muriel Ave

PLOT RATIO

COMMERCIAL

Site Area:	762.46m²
Building Footprint:	170.41m²
	22.35%

RESIDENTIAL

Site Area:	762.46m²
Building Footprint:	815.14m²
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Zone	Area	Perim	Vol
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Balcony	22.54	20,790	70.18
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	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	14.90	16,440	47.57
Commercial Unit 1	85.21	37,160	255.63
Commercial Unit 2	85.22	37,160	255.65
Common Property	67.24	53,960	219.00
	252.57 m²	144,720 mm	777.85 m³
	1,291.28 m²	**710,480 mm**	**3,751.81 m³**

Revision	Description	Date
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5.00	DRP	23.10.25
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3.00	Concept	10.09.25

Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

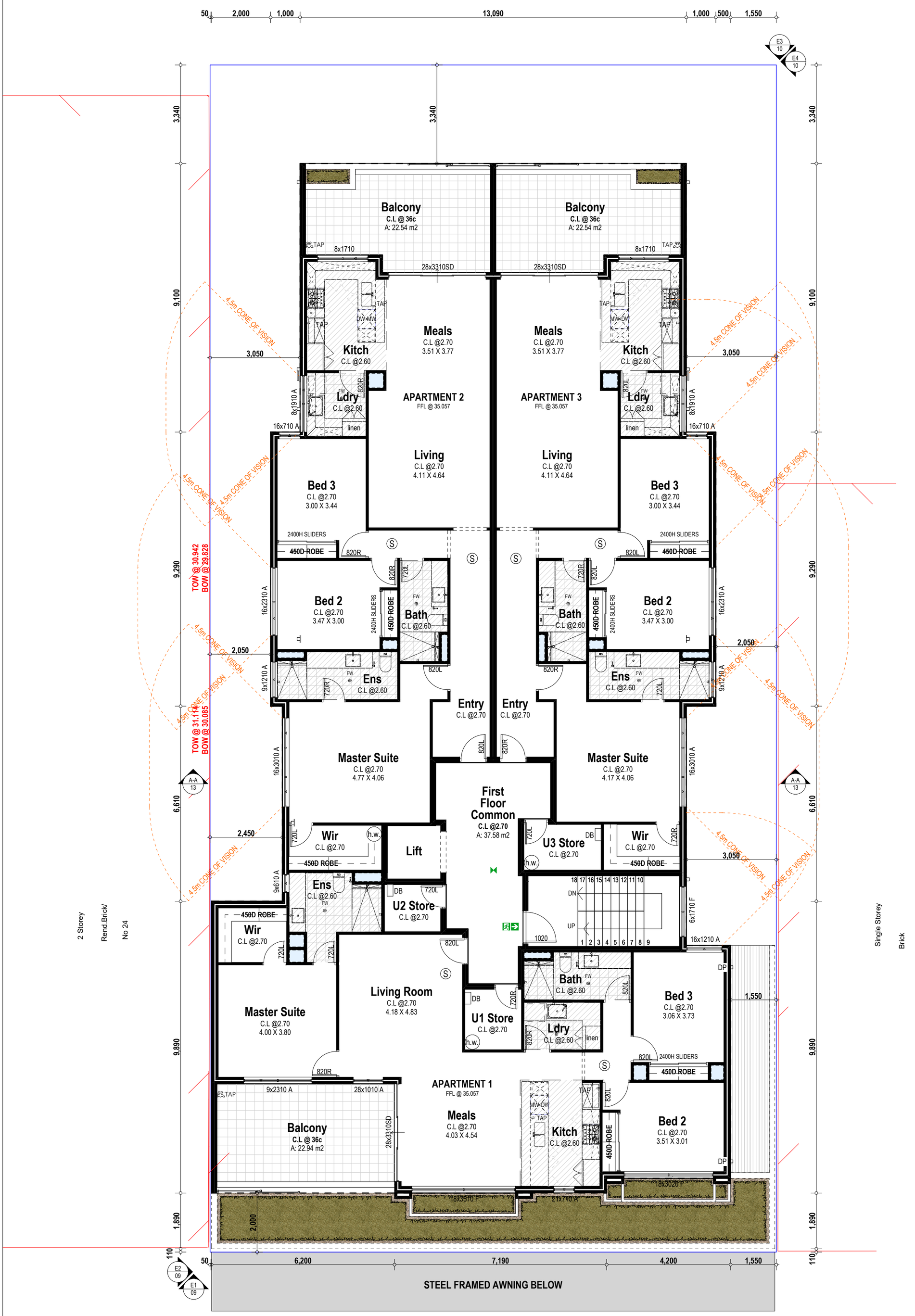
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Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	8.00

Drawing No.:
05 of 13

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PLOT RATIO

COMMERCIAL

Site Area:	762.46m²
Building Footprint:	170.41m²
	22.35%

RESIDENTIAL

Site Area:	762.46m²
Building Footprint:	815.14m²
	106.90%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
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Apartment 3			
Balcony	22.54	20,790	70.18
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Apartment 4			
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Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

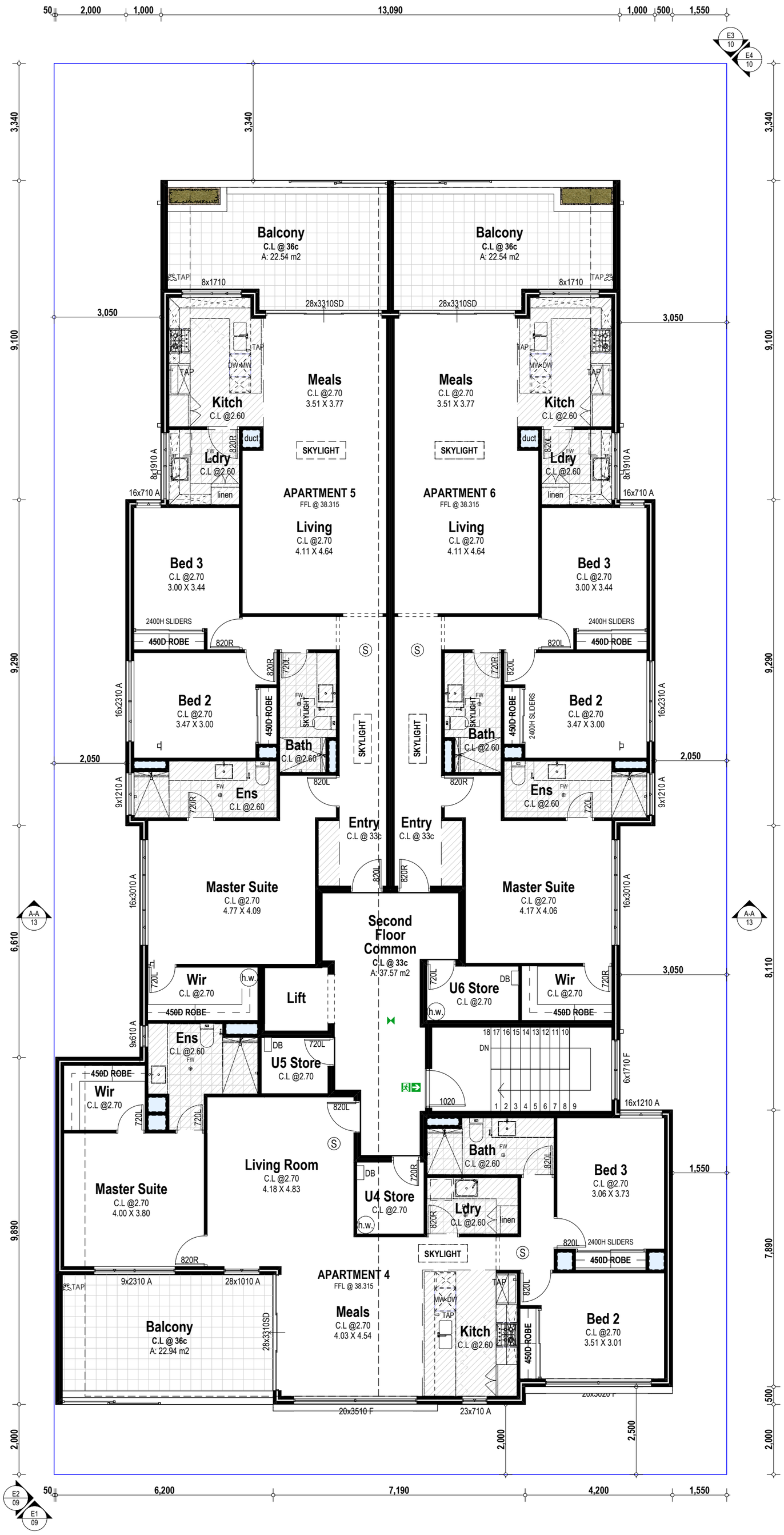
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23011	8.00

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Building Footprint:	170.41m²
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RESIDENTIAL

Site Area:	762.46m²
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Zone	Area	Perim	Vol
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Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
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Project North:

Client
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Project Name
Apartment Complex

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22 Muriel Ave INNALOO

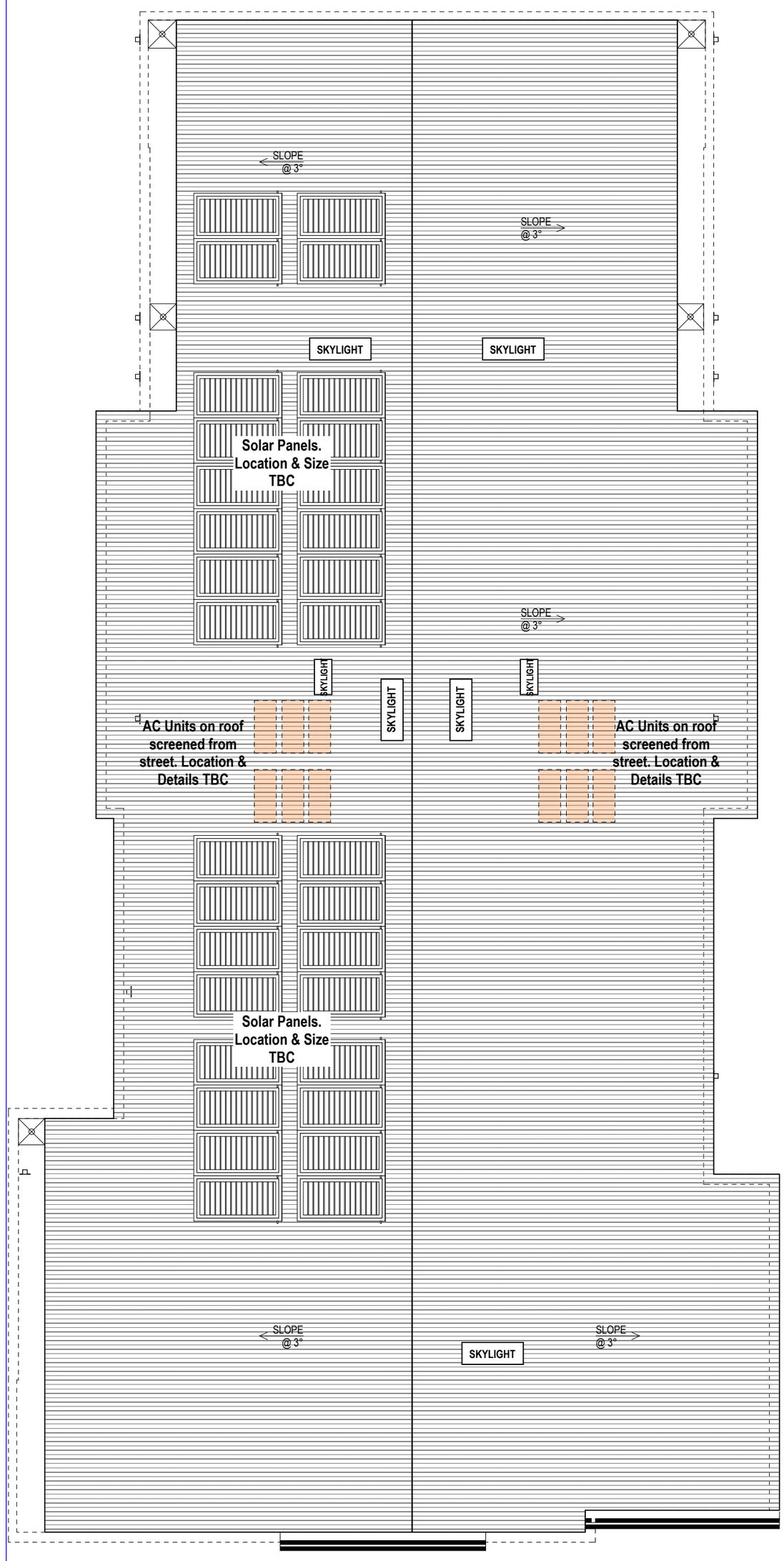
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Second Floor Plan

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Project No:	**Revision Number:**
23011	8.00

Drawing No.:
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3.00	Concept	10.09.25

Project North:

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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Roof Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	8.00

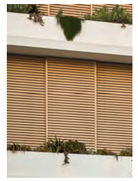
Drawing No.:
08 of 13

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KNOTWOOD ALUMIN SCREENING



DULUX RENDER MONUMENT

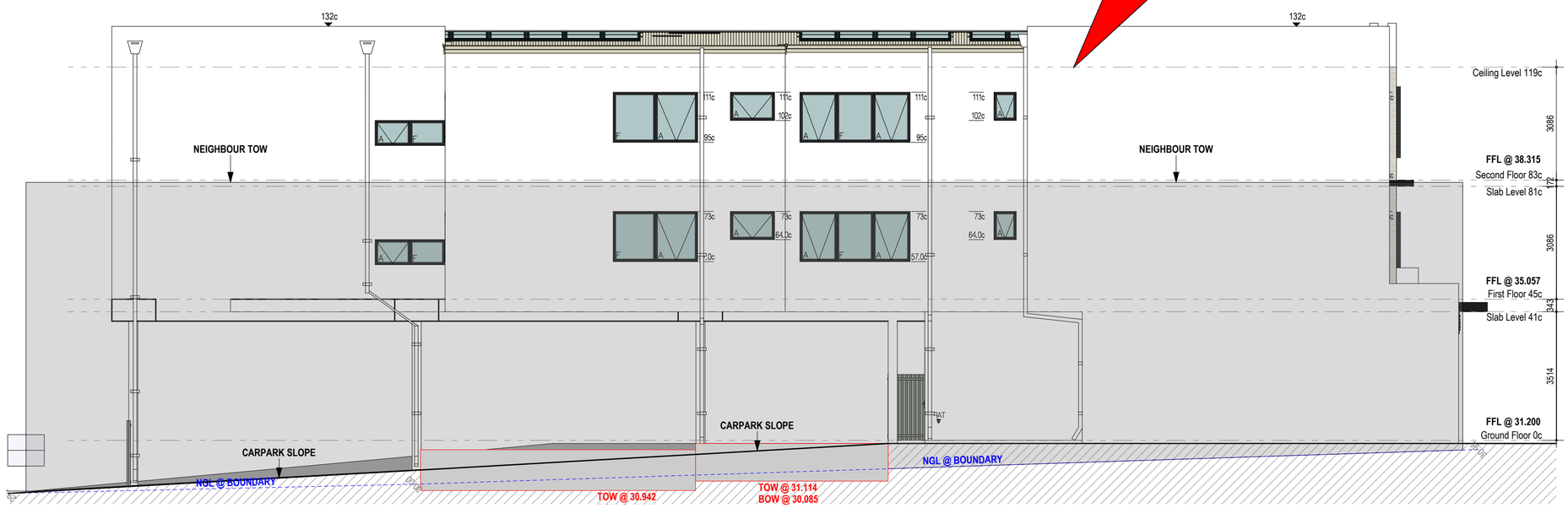
BOWRAL 76 SIMMENTAL SILVER





E1 West Elevation
1:100

DULUX RENDER VIVID WHITE



E2 North Elevation
1:100

Revision	Description	Date
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Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Elevations

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	8.00

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E3 East Elevation
1:100



E4 South Elevation
1:100

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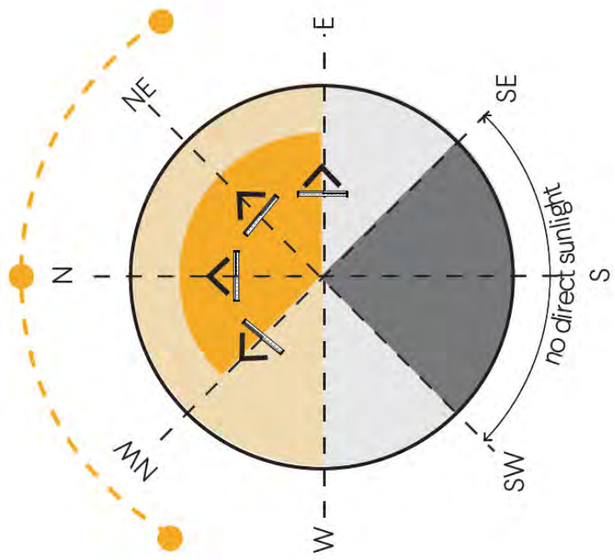
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Elevations

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SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH



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Project North:

Client
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22 Muriel Ave INNALOO

Drawing Title:
FF Solar Study

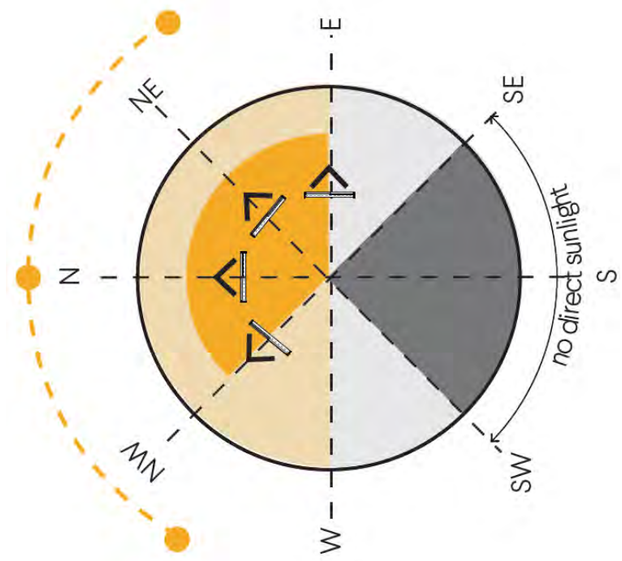
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Project No:	**Revision Number:**
23011	8.00

Drawing No.:
11 of 13

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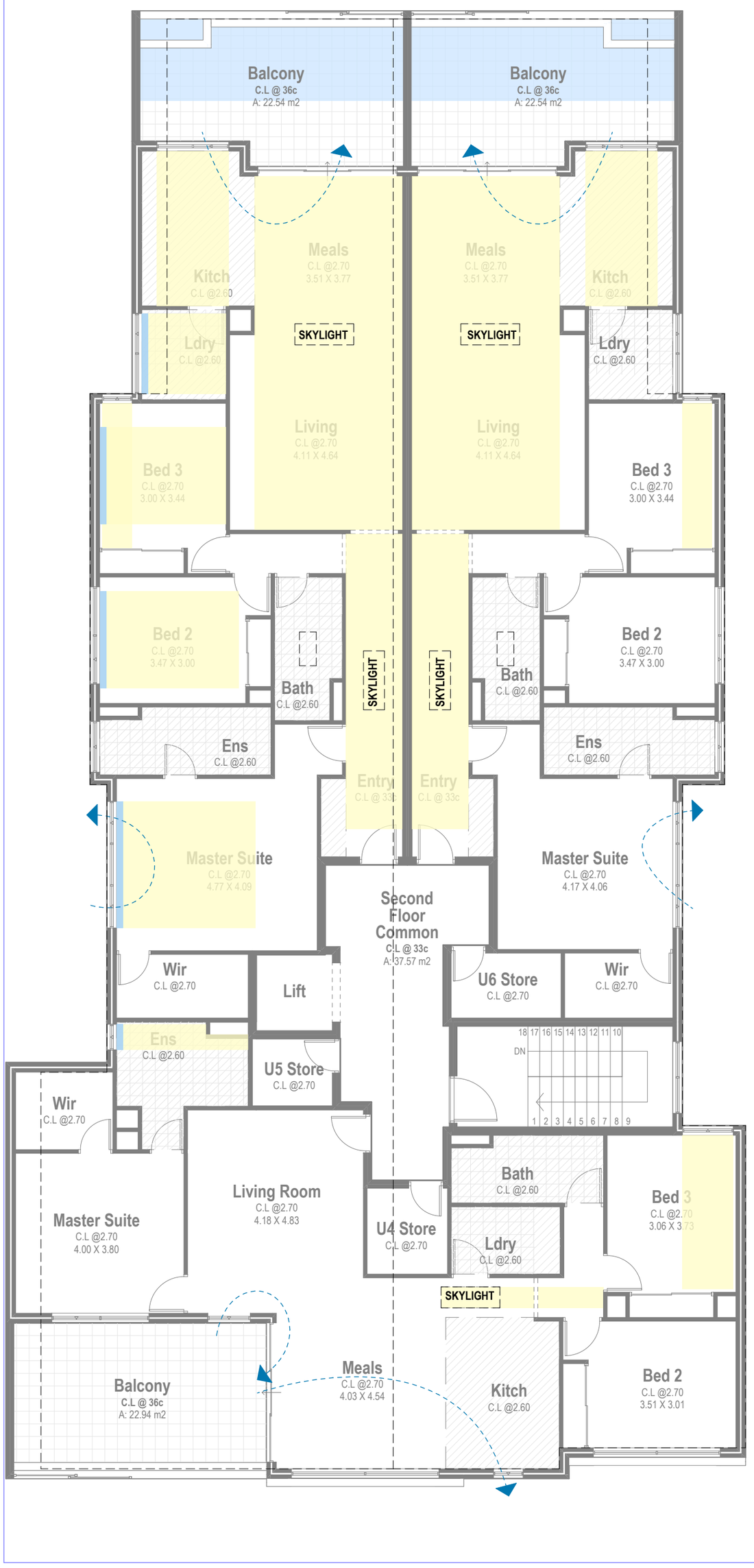


SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH



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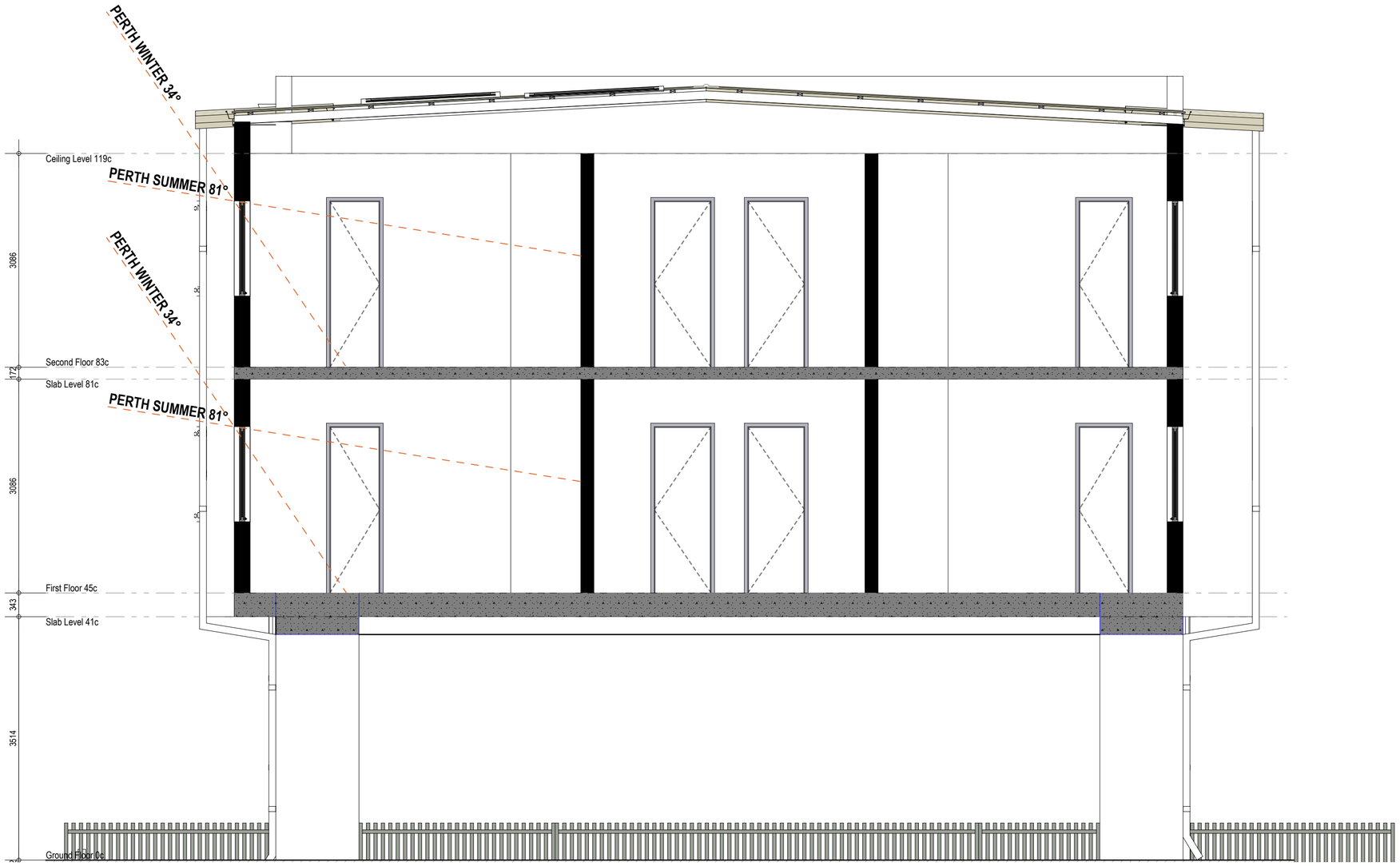
Drawing Title:
SF Solar Study

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	8.00

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Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Section

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Project No:	**Revision Number:**
23011	8.00

Drawing No.:
13 of 13

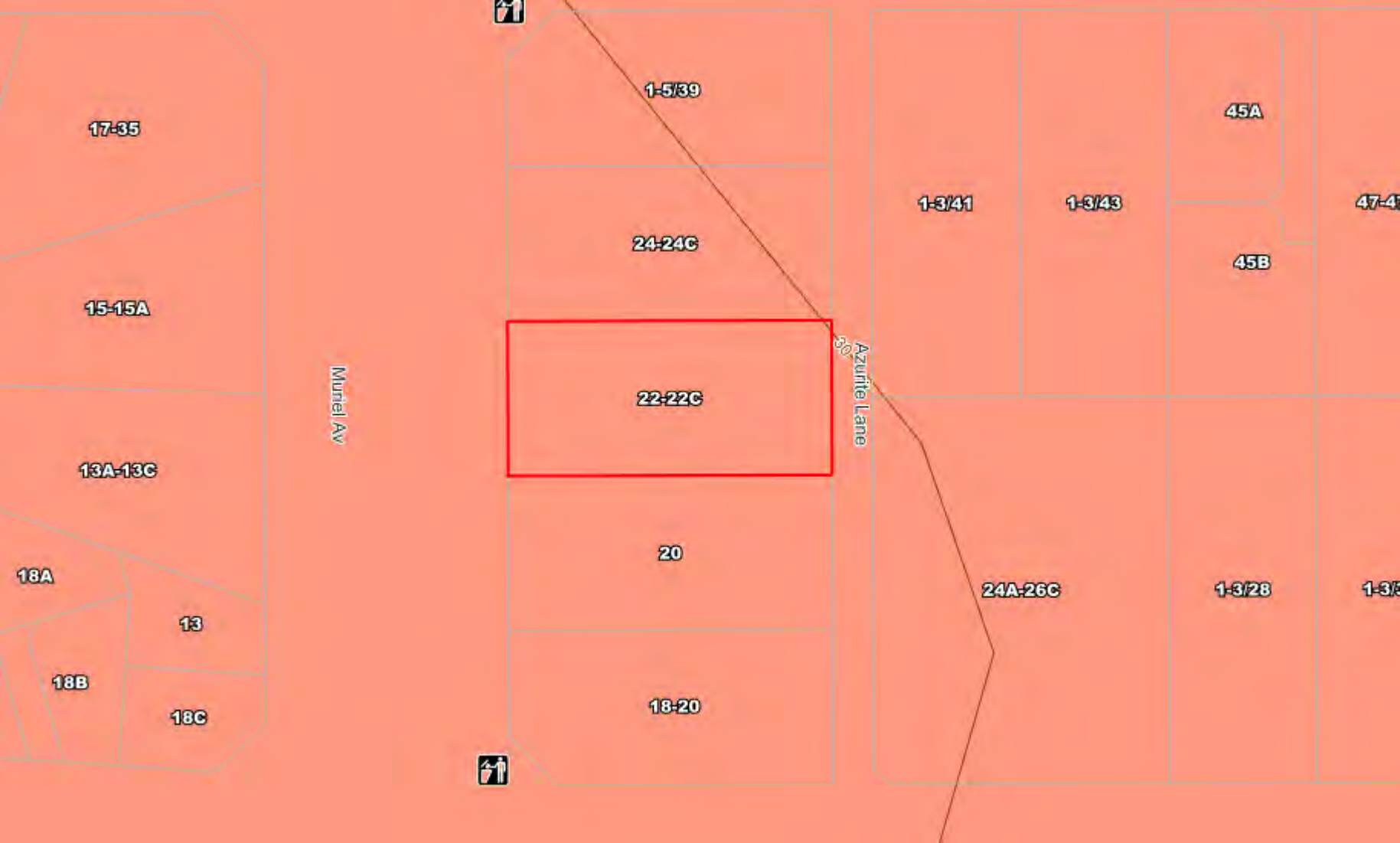
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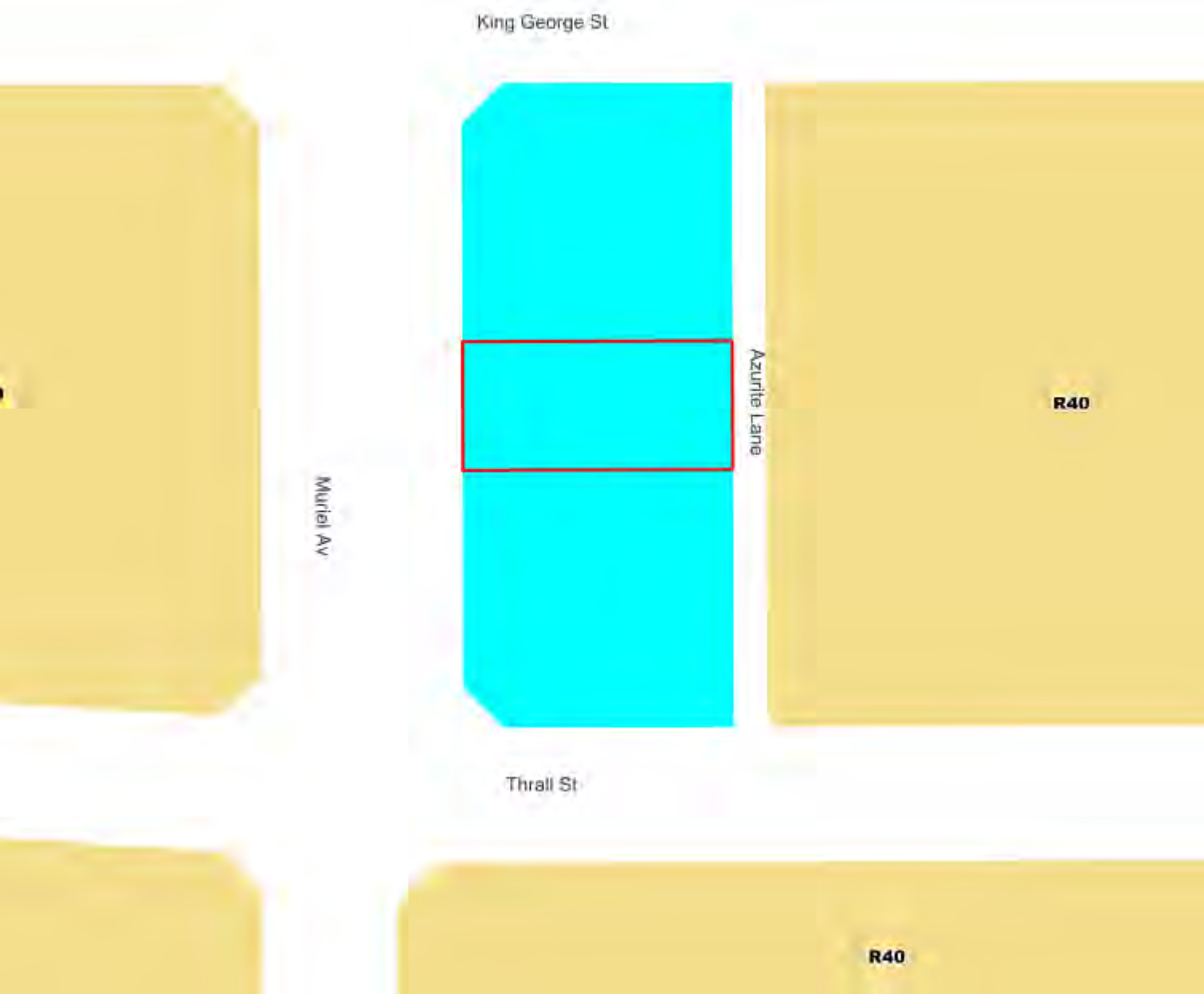
Attachment 2 - Aerial Location Plan



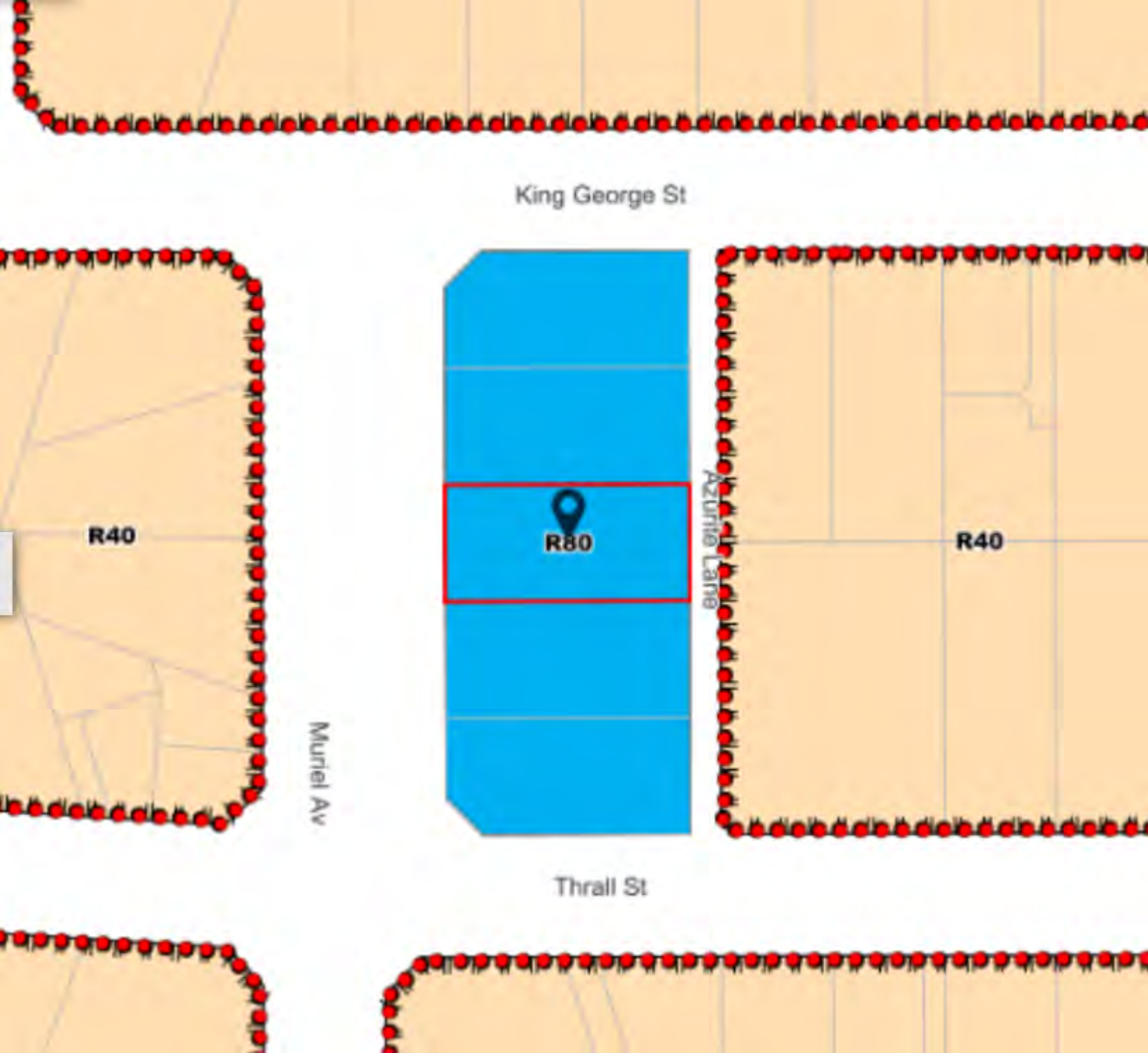
Attachment 3 - Metropolitan Region Scheme Zoning Map


1-5/39
17-35
45A
1-3/41
1-3/43
24-24C
45B
15-15A
Muriel Av
22-22C
Azurite Lane
13A-13C
20
18A
24A-26C
1-3/28
13
18B
18C
18-20

Attachment 4 - City of Stirling Local Planning Scheme No. 3 Zoning Map


King George St
Azurite Lane
R40
Muriel Av
Thrall St
R40

Attachment 5 - City of Stirling Draft Local Planning Scheme No. 4 Zoning Map


King George St
R40
R80
R40
Azurite Lane
Muriel Av
Thrall St

Attachment 6 - City of Stirling Planning Assessment

1. State Planning Policy 7.0 – Design of the Built Environment (SPP 7.0)

SPP 7.0 applies to all development in Western Australia. The purpose of SPP 7.0 is to inform and guide landowners, proponents, designers, reviewers and decision-makers to achieve good design outcomes in the built environment.

The City's summary of the proposed development against SPP 7.0 is as follows:

State Planning Policy 7.0 – Design of the Built Environment	
Design Principle	**Officer Comment**
1. Context and character *Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.*	***Design Principle Satisfied*** The proposed development provides for a high-quality built form outcome through the articulation of the façade through the use of contrasting materials, colours and glazing. The ground floor of the proposed development incorporates distinctive commercial and business opportunities along with passive surveillance and new/refreshed amenities to the Local Centre, contributing to a sense of place for residents.
2. Landscape quality *Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.*	***Design Principle Satisfied*** The proposal includes 84.2m² landscaping on the ground floor in common areas. Landscaping and the planting of 5 small trees will provide for an improved quality of outlook internal to the subject site. The proposed landscaping on the first floor will provide some green relief to the streetscape. The development includes landscaping to all boundaries, with significant areas provided to the side and rear, providing a buffer to adjoining lots.
3. Built form and scale *Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.*	***Design Principle Satisfied*** The proposed development has been designed to address the City's relevant planning framework providing for a high-quality built form outcome through the articulation of the façade through the use of contrasting materials, colours and glazing. The proposed development also incorporates landscaping features and tree plantings. The proposed development is consistent in its mass and aligns with the intended further character of the local area.
4. Functionality and build quality *Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.*	***Design Principle Satisfied*** The proposed development provides for safe and legible access for pedestrians, cyclists and vehicles with adequate parking facilities provided. The proposed development includes separate pedestrian access points to facilitate separate entry and exit to the site, providing for improved functionality and efficiency.
5. Sustainability *Good design optimises the sustainability of the built environment, delivering*	***Design Principle Satisfied*** The proposal includes 83.3m² of landscaping and the planting of three medium and two small trees

positive environmental, social and economic outcomes.	that will provide for an improved quality of outlook internal to the subject site. The proposed landscaping on the first floor will provide some green relief to the streetscape which already includes extensive green space and high quality landscaping within the abutting road reserve area.
6. Amenity *Good design provides successful places that offer a variety of uses and activities while optimising internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy.*	The scale of the development is consistent with the City's planning framework and will not have an adverse impact on the adjoining properties. The proposed development will provide for a high quality built form outcome through the articulation of the façade through the use of contrasting materials, colours and glazing. The proposed development also incorporates landscaping within the site and tree plantings for an improved outlook for residents.
7. Legibility *Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.*	***Design Principle Satisfied*** The development has a legible layout, with evident pathways and entrances internally and externally within the development. Subject to the recommendation condition setting, the proposed development provides for safe and legible access for pedestrians, cyclists and vehicles with adequate parking facilities provided. A clearly identifiable entry point is provided to via Muriel Avenue, additionally pedestrians are able to directly access the subject site via its right of way on Azurite Lane.
8. Safety *Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use*	***Design Principle Satisfied*** The development incorporates passive surveillance measures and minimises safety risks from vehicle movements by having all vehicle movements from Azurite Lane. Vehicle circulation areas have been designed to allow vehicles to enter the street in forward gear with unobstructed sightlines provided to minimise potential conflict to pedestrians, cyclists and vehicles. Subject to the recommended condition setting, there are no significant safety design issues present within the development.
9. Community *Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.*	***Design Principle Satisfied*** The proposed development provides for a high-quality built form outcome, relevant to its setting within a Local Centre zone on a Local Road as per the City's Functional Road Hierarchy. The development provides for social interaction particularly along the Muriel Avenue frontage and fosters a streetscape relationship through the integration of glazing and balconies, delivering a positive social outcome and facilitating social interaction opportunities.

10. Aesthetics *Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.*	***Design Principle Satisfied*** The proposed development provides for a high-quality built form outcome through the articulation of the façade through the use of contrasting materials, colours and glazing. The proposed development also incorporates landscaping and tree plantings around to the site, improving outlook for residents. The proposed development is expected to improve the locality and will provide for an improved streetscape over the existing built form.

2. Planning and Development (Local Planning Schemes) Regulations 2015

The proposed development is required to be considered against the relevant matters listed under Clause 67 (2) of the Deemed Provisions of the Planning and Development (Local Planning Schemes) Regulations 2015.

Commentary on the relevant considerations is provided below:

Deemed Provisions Clause 67 – Consideration of application by local government	
Provision	**Officer Comment**
(a) the aims and provisions of this Scheme and Scheme and any other local planning scheme operating within the Scheme area;	The proposed development provides for a high-quality built form outcome through the articulation of the façade through the use of contrasting materials, colours and glazing. The ground floor of the proposed development incorporates distinctive commercial and business opportunities along with passive surveillance and new amenities to the Local Centre, contributing to a sense of place for residents.
(b) the requirements of orderly and proper planning including scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving;	The development has been assessed in accordance with the applicable local and state planning instruments and is supported. Although the City has prepared Draft LPS4 and commenced advertising, the final form of LPS4 is not imminent nor certain at this time. Accordingly, no weight should be given to Draft LPS4 when determining this application. The development is consistent with LPS3 and the relevant planning instruments and therefore is consistent with the requirements of orderly and proper planning.
(c) any approved State planning policy;	The City's assessment of the development application has considered the relevant State Planning Policies. The proposal satisfies the objectives and requirements of those policies.
(g) any local planning policy for the Scheme area;	The City's assessment of the development application has considered the relevant local planning policies. As assessed earlier in this report the proposal satisfies the objectives and provisions of those policies.
(m) the compatibility of the development with its setting, including –	The proposed development is appropriate within its the setting with the development

(i) the compatibility of the development with the desired future character of its setting; and *(ii) the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development.*	designed to mitigate any adverse impacts in terms of height bulk and scale.
(n) the amenity of the locality including the following – *(i) environmental impacts of the development;* *(ii) the character of the locality;* *(iii) social impacts of the development;*	The proposal includes 79.4m² (10.2%) of deep soil area and 34.1m² of planting on the first-floor area of the building and the planting of two medium trees and three small trees on site. The proposed development is appropriate within its setting and positively contributes to the area. The development provides for activation and passive surveillance of the public realm. The proposed development does not result in any anti-social issues.
(s) the adequacy of – *(i) the proposed means of access to and egress from the site; and* *(ii) arrangements for the loading, unloading, manoeuvring and parking of vehicles;*	Subject to the recommended condition setting, the development provides for suitable vehicle access and egress. The development provides for sufficient car parking for the commercial and residential components.
(t) the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety;	The Applicant submitted a Transport Impact Statement in support of the development, with additional traffic generated by the proposal being minimal and safely accommodated within the road network. The TIS has been reviewed and is supported by the City.
(u) the availability and adequacy for the development of the following – *(i) public transport services;* *(ii) public utility services;* *(iii) storage, management and collection of waste;* *(iv) access for pedestrians and cyclists (including end of trip* *(v) access by older people and people with disability;*	The subject site located close proximity to a number of high frequency bus stops running along Scarbrough Beach Road approximately 275m to the south, providing the site with access to public transport services. Utility services are available to the development. A Waste Management Plan has been provided and meets the City's requirements. The development provides pedestrian access from the entrance of the site and from the car parking area at the rear. The development accommodates access and parking for bicycles as per the planning framework. The development provides 'at grade' car parking and universal access design features throughout the site.
(y) any submissions received on the application;	The application has been formally advertised in accordance requirements of Clause 64(3) and (6)(a) of the Planning and Development (Local Planning Schemes) Regulations 2015 with comments received. These submissions have

	been considered as part of the City's assessment.

3. Local Planning Policy 4.2 – Mixed Use Design Guidelines (LPP 4.2)

The proposed development seeks discretion regarding the following provisions of LPP 4.2:

- Built Form and Design - Street setbacks

Development Standard

- Building shall have a Nil setback to primary and secondary streets.

The proposed development does not propose a nil setback to the secondary street (Azurite Lane) and consideration is therefore required against the overall objectives of LPP 4.2.

A 'secondary street' is defined under the R-Codes Volume 2 as:

> *in the case of a site that has access from more than one public road, a road that is not the primary street.*

As the development proposes seeks discretion in relation to the above provisions of LPP 4.2, the proposed development is considered against the following objectives of LPP 4.2:

Objective 1: Building Setbacks
- *To ensure that building setback provides street setback continuity and suitable transition between land uses.*

Objective 2: Landscaping and Fencing
- *To improve the visual appeal of development and provide landscaping to increase tree canopy cover.*

Objective 3: Building Height
- *To ensure the height of buildings does not adversely impact on the streetscape and amenity of adjoining residents by minimising building bulk and maintaining daylight and solar access.*

Objective 4: Car Parking
- *To ensure car parking areas do not detract from the amenity of the streetscape.*

Objective 5: Services Access and Waste Facilities
- *To ensure sufficient space is provided for the delivery of good and the removal of waste materials. These areas are to be located to minimise the impact of service and waste areas on residential properties.*

The proposed development comprises six multiple dwellings and two commercial units on land zoned Local Centre under the City's Local Planning Scheme No. 3 (LPS 3). The appearance of the development improves visual appeal of the development and enhances the streetscape through appropriate green relief and interesting design features to ensure that the amenity of residents is not compromised. Car parking has been identified as being sufficient for the intended uses on site. As such, car parking is expected to not detract from the amenity of the streetscape. Additionally, sufficient space is provided for service and waste areas and is not considered to dominate views from the public realm. All balconies are provided with hit-and-miss batten screens, to provide articulation in the building façade with a variety of building materials. Sufficient natural lighting and ventilation is provided to each dwelling.

The development satisfies the objectives of LPP 4.2.

4. Local Planning Policy 6.1 – Advertising signs

The Application indicates four signs (two per tenancy) above the window glazing area and located under the awning for the commercial tenancies facing Muriel Avenue. Advertising signs are assessed against the relevant provisions of *Local Planning Policy 6.1 – Advertising Sings (LPP6.1)* as follows:

Development Standard

LPP 6.1 – Advertising signs	
Specific Development Standard	**Comment**
4.3.3.3 - Wall sign *a) Wall Signs are not to extend more than 0.3 metres beyond the edges of a wall.* *b) Wall Signs (except within the Residential Zone and Suburban Residential Category) are:* *(i) limited to a maximum two signs per tenancy on a lot; and* *(ii) not to cover more than 30% of the visible area of any one façade per tenancy, excluding glazed portions and awnings.*	• No indication of wall sign depth. N/A • 2 x signs per commercial tenancy indicated. OK • 10.4% per tenancy. Less than 30% of Muriel Avenue façade provided. OK ***Specific Development Standard Satisfied***

Note: The commercial tenancies have not been specified at this juncture, and the signage shown on the plans are therefore indicative only.

The development satisfies LPP6.1 with the signage currently indicated, subject to any future advertising sign being in accordance with the LPP6.1 policy requirements. A condition is to be recommended to this effect.

5. Local Planning Policy 6.3 – Bin Storage Areas (LPP 6.3)

Development Standard

- Bin storage areas in non-residential zones shall have the following minimum sizes of 10m² and 3.5m width. In this case the proposed development proposed a bin storage area of 14.8m^2 and a minimum width of 2.7m.

The City's comments against LPP6.3's Objectives are contained in the table below, which is considered acceptable from a waste perspective against the objectives of the policy:

LPP 6.3 – Policy Objectives	
Objectives	**Officer comment**
To provide sufficient space for the storage of bulk refuse bins; and	***Objective Satisfied*** Sufficient space has been provided for a bin storage area to satisfy the needs of the proposed use. Given the nature of the proposal 6 Multiple Dwellings and 2 commercial tenancies, there is expected to be minimal disposal of refuse on-site. Should additional bin storge area be required there is sufficient space available onsite for this to occur.

To ensure that bin areas are screened from the street and are in harmony with the materials and finishes of the building.	***Objective Satisfied*** The bin storage area is integrated into the development and will not be visible from the street.

6. Local Planning Policy 6.5 – Development and Subdivision Abutting Rights of Way (LPP 6.5)

The proposed development seeks discretion regarding the following provisions of LPP6.5:

- 7.1.5.1.2 - Setback at upper storey level

Right of Way Category 1		
CLAUSE	**CHECK**	**NOTES**
7.1.5 SETBACKS		
7.1.5.1 All buildings are to be setback from the ROW:		
7.1.5.1.1 A minimum of 2.0m at ground floor level;	Comply	3.3m setback to near post on ground floor.
7.1.5.1.2 A minimum of 3.0m at upper storey level;	Non-Comply	2.85m setback upper floor from the Right of way (after 0.5m widening is taken from ROW) - discretion sought
7.1.8 UP-GRADING OF ROW		
Developments and subdivisions are required to comply with the relevant construction and/or development contribution requirements of the Scheme and the Development Contribution Plan for Rights of Way Improvement Works.	Comply	Condition is to be applied for Developer contribution to applied as per Schedule 11A of the City's LPS 3
7.1.9 WIDENING OF ROW		
7.1.9.1 The City is seeking to widen Rights of Way to which it has committed to upgrading to 6.0m. The City will seek to have lots abutting the Category 1 ROW transfer an appropriate widening (in the majority of cases, 0.5m) along the ROW boundary to the City free of cost as a condition of development or subdivision approval in the following circumstances:	Comply	0.5m right of way widening has been shown on the plans. Condition is to be applied with widening area to be ceded free of cost to the City.
7.1.9.1.1 Subdivisions;	N/A	N/A – not a subdivision
7.1.9.1.2 The development of a new single house, grouped dwelling or multiple dwelling;	N/A	
7.1.9.1.3 The development of a new commercial or mixed use development; or	Comply	0.5m widening of Azurite Lane required. Condition to be applied.
7.1.9.1.4 A development or a change of use that will, in the opinion of the City, result in increased traffic in the ROW.	N/A	N/A
7.1.9.2 Notwithstanding, commercial developments or subdivisions may be required to cede the full width of land required for widening given the traffic	Comply	0.5m widening of Azurite Lane required. Condition to be applied.

generating potential and the benefit the land will derive from using the ROW		

Variations

Variations to this policy will be assessed against the objectives of this policy:

- Setback to right of way (after 0.5m ceding of Right of Way) – 2.85m setback instead of 3m (Note: nil setback permitted under LPP 4.2)

6.5 – Developments and Subdivisions Abutting Rights of Way		
Objectives	**Check**	**Notes**
2.1. *To facilitate the improved management of Rights of Way ('ROW');*	Comply	The development will be able to effectively improve management of the right of way by consolidating vehicle access and pedestrian movements and with provision for landscaping and waste services delivery collections.
2.2. *To promote better urban design by encouraging the use of ROW for vehicle access;*	Comply	All vehicle access and egress use is being taken from the ROW.
2.3. *More efficient use of individual sites;*	Comply	There is a more efficient use of the site with all vehicle access being from one point
2.4. *Create unique streetscapes along the ROW through sympathetic building orientation and design;*	Comply	The proposal includes orientating the upper floor dwelling/balconies to the right of way.
2.5. *Maintain existing streetscapes, by minimising the need for and impact of additional garages/carports and paved areas within the street setback area, and better allowing the retention of existing buildings and landscaping;*	Comply	One vehicle access point is provided to the undercroft carparking area from the right of way, with provision for new landscaping.
2.6. *Support the objectives of the City's Rights of Way Management Strategy; and*	Comply	Ceding of the right of way for widening and contributing to the lighting/upgrades costs is consistent with the
2.7 *To facilitate future widening of ROW.*	Comply	0.5m widening of ROW has been indicated on plans.

7. Local Planning Policy 6.7– Car Parking and Access (LPP 6.7)

Local Planning Policy 6.7 – Parking and Access	
Objective	**Officer Comment**
a) To ensure development provides an appropriate level of car parking, reflecting supply and demand so that a major parking problem is unlikely to occur;	A total parking provision of 17 bays is proposed on site, comprising 9 residential bays, 5 commercial bays, 2 visitor bays and 1 ADROD parking bay. A provision of 5 car parking spaces for the Commercial Units have been proposed which is considered to be acceptable given the small footprints/space available to these tenancies. While there may be opportunity to provide services to customers external to the site on an ad-hoc basis, it is expected that the demand for commercial car parking spaces is relatively low as majority of customers would reside on-site.

	The Traffic Impact Statement (TIS) prepared by Premise concludes that the proposed development will not have a negative impact on the surrounding road network. The predicted traffic generation in the Applicant's TIS has been reviewed by the City and is noted that there are no issues with the proposed development from a traffic perspective.
b) To ensure safe, convenient, and efficient access for pedestrians, cyclists, and motorists;	The proposed development ensures safe, convenient, and efficient access for pedestrians and motorists with the suitable on-site suitable parking arrangements. The City have recommended a condition outlining the required car parking spaces, inclusive of installation of bicycle bays.
c) To prioritise access by public transport, walking and cycling;	The subject site is located in close proximity to high frequency bus routes 410, 650, 990 and Surf CAT on Scarborough Beach Road which is approximately 275m to the south of the subject site. Bus routes 422 is located on King George Street proximality 63m to the north of the subject site. Bus routes 410 also runs along Odin Road approximately 300m to the east of the subject site. The proposed development proposes to use the existing pathway to Muriel Avenue that would see direct access to the subject site, prioritising direct access for residents or visitors who utilise the bus services.
d) To facilitate the provision of adequate bicycle parking and end of trip facilities;	The City have recommended a condition for the applicant to provide 4 bicycle bays for the site. End of trip facilities are not required, as the small commercial units are unlikely to generate high employees.
e) To provide a balanced parking supply that does not exceed the capacity of the road network, with sufficient publicly accessible parking;	A provision of 5 commercial car parking spaces has been proposed which is considered to be acceptable given the small footprints/space available to these tenancies. The Traffic Impact Statement (TIS) prepared by Premise Consultants concludes the additional traffic generated by the development can be accommodated by the existing road network. The predicted traffic generation in the Applicant's TIS has been reviewed by the City and is noted that there are no issues with the proposed development from a traffic perspective.
f) To ensure that an oversupply of parking does not occur that discourages alternative forms of transport; and	N/A – no oversupply of parking in accordance with Local Planning Policy 6.7.
g) To ensure the amount of parking is not detrimental to the urban design and character of the locality.	The car parking provided is appropriate and allows additional space for landscaping and tree planting within the development to enhance the outlook for residents and commercial tenants.

LPP 6.7 Parking and Access			
Land Use	**Policy Rate**	**Variable**	**Bays Required**
Activity Centre (LC35 - Muriel Avenue)	1 bay 25m² GFA	N/A	6.26 bays (6)**
	161.4m² GFA	N/A	
		Total Required:	6
		Total Provided:	6
		Total Surplus / Shortfall: without the application of car parking reductions	Nil
		Parking Reductions: The site is located within 200 metres of a stop on a high frequency bus route - 15% The additional bicycle parking and end-of-journey facilities are provided - 10%	N/A
		Total Required:	6
		Total Provided:	6
		Total Surplus / Shortfall: with the application of car parking reductions	Nil – as required

** Rounded to the nearest whole number as per the City's LPP 6.7
Note: Accessible (ACROD) bay included in non-residential parking calculation.
Note: *GFA is defined under LPP6.7 as: means the total floor area within the building measured over the enclosing walls (including the portion of any common or party wall forming part of the building) exclusive of parking facilities sited within the building.*

LPP 6.7 Parking and Access

As per LPP 6.7 Table 1 and car parking ratios of LPP 6.7 do not apply where *"(c) to residential components of a residential or mixed-use development. The car parking requirements of State Planning Policy 7.3 Residential Design Codes apply to all residential development;"*

Residential Component (6 Dwellings)
Location B
Required: 1 bay per dwelling minimum
Proposed: 9 bays – complies

Visitor Parking requirements:
Required: 1 bay per four dwellings up to 12 dwellings and 1 bay per eight dwellings for the 13th dwelling and above.
Proposed: 2 visitor bays across 6 x multiple dwellings - complies

General bicycle requirements:
Required: 0.5 bicycle bays required per dwelling i.e. 3 bays
Proposed: 4 x bicycle parking bays indicated on plans – City to recommend condition to install 3 x bicycle spaces for residents as per plans. Non-residential component does not meet 400m² threshold to trigger bicycle parking provision.

Commercial Tenancy
Commercial (Shop)
Parking requirement: 6 bays
Proposed: 6 bays (including us of accessible bay)

Applicable reductions:

N/a – the subject site is excluded from applying car parking reductions. Site is also not located within:

- 800m of rail station
- 400m of rail station
- Regional Centre, District Centre, Neighbourhood Centre

5. Car Parking Ratios	
5.1 Delivery Bay Ratio All non-residential components of developments, where works increase the number of non-residential car parking bays provided on-site, the following specific purpose bays are to be provided	N/A
5.1.1 Delivery Bay Ratio In non-residential developments with over 500m² of GFA, a minimum of one bay shall be permanently set aside and marked for the exclusive use of delivery, service, and courier vehicles.	N/A - non-residential component less than 500m²
5.1.2 Education Facility Ratios For all Primary and Secondary Education Establishment developments, atleast one 'Kiss and Drive' drop-off/pickup drive-through facility is to be provided and managed on-site, to the satisfaction of the City.	N/A
5.1.3 Electric Vehicle Charging Bay Ratio In non-residential developments with over 500 car parking bays on-site, a minimum of three electric car charging bays shall be provided on the site.	N/A
6 Motorcycle Parking Ratio	
All non-residential components of developments with 500m² or more of gross floor area, where works increase the number of non-residential car parking bays provided on site, one motorcycle parking space shall be provided for every 1,000m² of gross floor area. This requirement for motorcycle parking bays for non-residential components of developments are in addition to requirements in the State Planning Policy 7.3 Residential Design Codes for residential components.	N/A - non-residential component less than 500m²
7 Bicycle Parking Facilities	
7.1 Bike Ratios 1 space per 400m² of gross floor area (GFA) or more GFA - means the total floor area within the building measured over the enclosing walls (including the portion of any common or party wall forming part of the building) exclusive of parking facilities sited within the building.	GFA of commercial space: 156.58m² N/A – subject site does not meet the 400m² threshold so does require non-residential bicycle parking.
7.2 End Of bike journey facilities End of Journey facilities support the use of bicycle transport by allowing cyclists the opportunity to shower and change at the beginning or end of their journey to and from work. The following facilities shall be provided for all developments	N/A - Less than 10 bicycle bays required for non-residential space.

that are required to provide 10 or more bicycle parking spaces	
7.3 Location of Bike Parking Facilities a) Bicycle parking spaces and end of trip facilities are to be within close proximity to each other, with easy navigation between; b) Parking facilities shall be located at ground floor level and not require access via steps; c) Parking facilities shall be located as close as possible to main entrance points; d) Parking facilities shall be located in an area that allows informal surveillance of the facility to occur wherever possible; and e) Parking facilities shall be located away from areas of high pedestrian activity in order to minimise inconvenience or danger to pedestrians.	No provisions for bicycle bays – as the non-residential component is less than 400m².
9. NON-RESIDENTIAL PARKING DESIGN	
9.1 Non-Residential Parking Design a) Shall be sealed, drained, marked and maintained thereafter to the satisfaction of the City; b) Shall be designed so as to enable all vehicles to return to the street in forward gear; c) Shall have entry and exit points and vehicle circulation patterns that are clearly indicated; d) That include Universal Access parking bays, are required to be provided in accordance with Australian Standard AS 2890.6 (as amended); e) That include tandem car parking bays, shall be a minimum length of 5.4 metres for each bay; f) That include car stacking systems or other such systems, may be supported subject to the submission on an acoustic report and parking management plan detailing the operation and specification of the system to the satisfaction of the City; and g) That include visitor parking which is to be outside any security barriers during operating hours and is to be clearly identifiable from the driveway or have signage as per the Australian Standards AS 1742 where necessary.	Recommend condition on determination notice for parking areas to drained, marked and designed as per the relevant Australian Standards.
9.2 Non-Residential Access a) Shall be sealed, drained, marked and maintained thereafter to the satisfaction of the City; b) Shall be designed so as to enable all vehicles to return to the street in forward gear;	The parking layout has been reviewed by the City's Engineer and is supported accordingly.

c) Shall have entry and exit points and vehicle circulation patterns that are clearly indicated; d) That include Universal Access parking bays, are required to be provided in accordance with Australian Standard AS 2890.6 (as amended); e) That include tandem car parking bays, shall be a minimum length of 5.4 metres for each bay; f) That include car stacking systems or other such systems, may be supported subject to the submission on an acoustic report and parking management plan detailing the operation and specification of the system to the satisfaction of the City; and g) That include visitor parking which is to be outside any security barriers during operating hours and is to be clearly identifiable from the driveway or have signage as per the Australian Standards AS 1742 where necessary.	

8. Draft Local Planning Scheme No. 4 (LPS4)

On 15 August 2023, Council resolved (Council Resolution Number 0823/034) to prepare Local Planning Scheme No.4 (LPS4). City officers have prepared draft LPS4 with a report prepared for consideration by Council at its Ordinary Meeting on 5 December 2023. The purpose of this report was to obtain resolution of Council to support the commencement of advertising of draft LPS4 and to obtain advice from the Western Australian Planning Commission (WAPC) on any modifications to LPS4 prior to the commencement of advertising. At its Ordinary Meeting held on 5 December 2023, Council resolved to proceed to advertise draft LPS4 and the draft Scheme Map, subject to consent from the WAPC. Advertising of Draft LPS4 commenced on October 18 2024 and will conclude on 24 January 2025.

In relation to draft LPS4, a decision-maker can give due regard to a seriously entertained planning proposal when determining an application, in accordance with Schedule 2 Clause 67(2)(b) of the Planning and Development (Local Planning Schemes) Regulations 2015. The final form of draft LPS4 is not imminent nor certain at this time and accordingly no weight should be given to the proposed development controls when determining this application. Accordingly, the City has not assessed the development against draft LPS4. Notwithstanding the proposed planning provisions for the subject site include:

- Zoning: Local Centre with a Density Coding of R80.
- Dwelling is proposed to be a 'D' Land Use under Draft LPS4.
- Shop is proposed to be a 'P' Land Use under Draft LPS4.
- The objectives for the Local Centre are proposed to be:

    - *To provide a range of small-scale retail and service uses for the immediate neighbourhood, that are easily accessible, but which do not adversely impact on the amenity of adjoining residential areas.*
    - *To focus on the main daily household shopping and community needs.*
    - *To encourage high quality, pedestrian friendly, street-orientated development.*
    - *To ensure non-residential uses are located at street level and are compatible with adjoining residential us*



Figure 1 - Annotated draft LPS4 Zoning showing development site

9. Residential Design Codes Volume 2 (R-Codes – Vol. 2)

- The City's Assessment summary of the proposed development against the relevant element objectives of the Residential Design Codes Volume 2 (R-Codes Vol. 2) where key matters of discretion are being sought are summarised in following table:

ELEMENT OBJECTIVES	ACCEPTABLE OUTCOMES	ASSESSOR COMMENT
2.5 Plot ratio		
O 2.5.1 The overall bulk and scale of **development** is appropriate for the existing or planned character of the area.	**A2.5.1** – Development complies with the plot ratio requirements set out in Table 2.1, except where modified by the local planning framework, in which case development complies with the plot ratio set out in the applicable local planning instrument.	Site area: 772m² Applicable density coding: R80 as per Clause 5.3.2 of LPS 3. Ground Floor coverage excludes at grade parking spaces, communal passage, dedicate internal storage, bin storage, lift shaft and stairs – as not contributing to plot ratio area. Permitted Plot Ratio: 1.0 (772m²) **Laneway Widening** Note: 0.49m to the rear laneway is to be ceded as per the City's Local Planning Policy 6.5, meaning the effective lot area will be as follows: 772 – 9.4 = **762.6m²** Adjusted Permitted Plot Ratio: 1.0 (772m²) GF: 86.2 x 2 = 172.4m² (Commercial) 1F:134.4+ 131.1+128.6 =394.1m² 2F: 394.1m² (as above) Total = 960.6m² Proposed Plot ratio **1.26 (960.6m²)** **Element objectives decision sought**
2.7 Building separation		

ELEMENT OBJECTIVES	ACCEPTABLE OUTCOMES	ASSESSOR COMMENT
O 2.7.1 New **development** supports the desired future **streetscape** character with spaces between **buildings**. **O 2.7.2 Building** separation is in proportion to building height. **O 2.7.3 Buildings** are separated sufficiently to provide for residential **amenity** including visual **and acoustic privacy**, **natural ventilation**, **sunlight** and **daylight** access and outlook. **O 2.7.4** Suitable areas are provided for **communal** and **private open space**, **deep soil areas** and **landscaping** between **buildings**.	**A2.7.1** – Development complies with the separation requirements set out in Table 2.7.	There are currently no other residential dwellings to either side of the subject site. Instead, the immediate abutting sites to the north and south comprise non-residential tenancies only. The residential dwellings on the upper levels will be provided with a separation to the existing commercial properties. Building Separation to the northern side is at 2.05m instead of 3m, as per 2.4 side and rear setbacks Table 2.1 – Discretion sought. Building Separation to the southern side is at 1.55m-2.05m instead of 3m, as per 2.4 side and rear setbacks Table 2.1 – Discretion sought. **<u>Element objectives decision sought</u>** Buildings are separated sufficiently to provide for residential amenity including visual and acoustic privacy, natural ventilation form the south-west prevailing winds, sunlight and daylight access and outlook. Building separation is in proportion to building height which allows for 3 storeys - refer to LPP 4.2 Assessment. . Boundary/parapet walls which partially abut existing parapet walls to the commercial tenancies (two storeys to the north and single store to the south). **O 2.7.2 achieved** The nearest residences are separated by Azurite Lane to the east some 8m. **O 2.7.1 achieved.** Suitable areas are provided for communal and private open space, deep soil areas and landscaping between buildings. See Clause 3.3. The nearest residences are separated by Azurite Lane to the east. As per Table 2.7 building separation is provided in accordance with *Clause 3.5 Visual privacy and Clause 2.4 side and rear setbacks.* **O 2.7.4 achieved.**
3.3 Tree canopy and deep soil areas		
O 3.3.1 Site planning maximises retention of existing healthy and appropriate and protects the viability of **adjoining trees**. **O 3.3.2** Adequate measures are taken to improve tree canopy (long term) or to offset reduction of tree canopy	**A3.3.1** – Retention of existing trees that meet the following criteria: – healthy specimens with ongoing viability **AND** – species is not included on a State or local area weed register **AND**	Tree provision: 3 small proposed. 2 x medium trees per Table 3.3a – However the required 36m² area is for each medium tree in the 3m x 3m configuration is not met. LPP6.6 provides for 16m² per Medium tree for non-residential development. **<u>Element objectives decision sought</u>**

ELEMENT OBJECTIVES	ACCEPTABLE OUTCOMES	ASSESSOR COMMENT
from pre-**development** condition. **O 3.3.3 Development** includes **deep soil areas**, or other infrastructure to support planting on structures, with sufficient area and volume to sustain healthy plant and tree growth.	– height of at least 4m **AND/OR** – trunk diameter of at least 160mm, measured 1m from the ground **AND/OR** – average canopy diameter of at least 4m. **A3.3.2 –** The removal of existing trees that meet any of the criteria at A3.3.1 is supported by an arboriculture report. **A3.3.3** – The development is sited and planned to have no detrimental impacts on, and to minimise canopy loss of adjoining trees. **A3.3.4** – Deep soil areas are provided in accordance with Table 3.3a. Deep soil areas are to be co-located with existing trees for retention and/or adjoining trees, or alternatively provided in a location that is conducive to tree growth and suitable for communal open space. **A3.3.5** – Landscaping includes existing and new trees with shade producing canopies in accordance with Tables 3.3a and 3.3b. **A3.3.6** – The extent of permeable paving or decking within a deep soil area does not exceed 20 per cent of its area and does not inhibit the planting and growth of trees. **A3.3.7** – Where the required deep soil areas cannot be provided due to site restrictions, planting on structure with an area equivalent to two times the shortfall in deep soil area provision is provided.	10% minimum deep soil area required from original 772m² site. 79.4m^2 (10.2%) total deep soil proposed. Complies <u>Objectives are achieved via the below alternative means/solution(s):</u> No retention of existing trees. Existing street trees to be protected during construction. **O3.3.1 achieved** The provision of small trees and additional vegetation improve the outlook for residents which is provided with existing mature trees in Muriel Avenue. These trees will require adequate measures to be applied for their protection and to offset on-site tree canopy provision **O 3.3.2 achieved** The effectiveness of the deep soil areas are to be improved by the selection of plants species that suit the available space. Irrigation & mulching to all planting areas are to be included as a condition with regard to the necessary updates to the Landscaping plans. **O 3.3.3 achieved**
3.4 Communal open space		
O 3.4.1 Provision of quality **communal open space** that enhances resident **amenity** and provides opportunities for **landscaping**, tree retention and **deep soil areas.** **O 3.4.2 Communal open space** is safe, **universally accessible**	**A3.4.1** – Developments include communal open space in accordance with Table 3.4 **A3.4.2** – Communal open space located on the ground floor or on floors serviced by lifts must be accessible from the primary street entry of the development.	As per Table 3.4, for up to 10 dwellings: *informal seating associated with deep soil or other landscaped areas -* Amended plans provided show small informal seating next to bike racks. Not associated with a deep soil or landscaped area however. **<u>Element objectives decision sought</u>**

ELEMENT OBJECTIVES	ACCEPTABLE OUTCOMES	ASSESSOR COMMENT
and provides a high level of **amenity** for residents. **O 3.4.3 Communal open space** is designed and oriented to minimise impacts on the **habitable rooms** and **private open space** within the **site** and of neighbouring properties.	**A3.4.3** – There is 50 per cent direct sunlight to at least one communal open space area for a minimum of two hours between 9am and 3pm on 21 June. **A3.4.4** – Communal open space is co-located with deep soil areas and/or planting on structure areas and/ or co-indoor communal spaces **A3.4.5** – Communal open space is separated or screened from adverse amenity impacts such as bins, vents, condenser units, noise sources and vehicle circulation areas. **A3.4.6** – Communal open space is well-lit, minimises places for concealment and is open to passive surveillance from adjoining dwellings and/or the public realm **A3.4.7** – Communal open space is designed and oriented to minimise the impacts of noise, odour, light-spill and overlooking on the habitable rooms and private open spaces within the site and of neighbouring properties	Small communal open space area is located on the ground floor or on floors serviced by lifts must be accessible from the primary street entry of the development. **O 3.4.2 achieved** Small informal communal open space is capable of being incorporated within the indoor communal spaces/lobby. Given the limited site area of just 772m² and number of dwellings being less than 10, the scale is such that there is limited opportunity for meaningful communal open space to be incorporated. **O 3.4.3 achieved**
3.5 Visual privacy		
O 3.5.1 The orientation and design of **buildings**, windows and **balconies** minimises direct overlooking of **habitable rooms** and private outdoor living areas within the **site** and of neighbouring properties, while maintaining **daylight** and **solar access**, ventilation and the external outlook of habitable rooms.	**A3.5.1** – Visual privacy setbacks to side and rear boundaries are provided in accordance with Table 3.5. **A3.5.2** – Balconies are unscreened for at least 25 per cent of their perimeter (including edges abutting a building). **A3.5.3** - Living rooms have an external outlook from at least one major opening that is not obscured by a screen. **A3.5.4** – Windows and balconies are sited, oriented, offset or articulated to restrict direct overlooking, without excessive reliance on high sill levels or permanent screening of windows and balconies	North and South: Bed 2 on each level includes a side setback (north and south) of 2.05m instead of 3m. North only: Master Suite to Apartment 2 and 5 proposes a side setback of 2.45m instead of 3m to the northern lot boundary. **<u>Element objective decision sought</u>** The cone of vision from upper floors extends into the rear laneway only (Azurite Lane) and adjoining commercial (non-residential) tenancies to the north and south. All other raised habitable spaces are sufficiently screened with devices that permit daylight, solar access and ventilation. The outlook for each of the bedrooms is to the existing commercial properties (roof tops, car parking or parapet walls). **O 3.5.1 achieved**

Attachment 7 - Applicant's Final Submission

a) Applicant's Planning Report Received 19 January 2026

2026

DEVELOPMENT APPLICATION



LOT 101 (NO.22) MURIEL AVENUE, INNALOO

PROPOSED MIXED USE DEVELOPMENT

(INCLUDING TWO COMMERCIAL TENANCIES & SIX MULTIPLE DWELLINGS)
CITY OF STIRLING

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CF Town Planning & Development

Prepared for

Germano Designs and the landowners for the construction of a new mixed use development (including 6 multiple dwellings and two commercial tenancies) on Lot 101 (No.22) Muriel Avenue, Innaloo.

Prepared by

CF Town Planning & Development
Planning & Development Consultants

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Carlo Famiano
Director
CF Town Planning & Development

Name	Position	Document Revision	Date
Mr Carlo Famiano	Town Planner	Planning Report	15 December 2025
Mr Carlo Famiano	Town Planner	Planning Report	19 January 2026

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Appendix 1: Certificates of Title
Appendix 2: Site Development Plans

1.0 INTRODUCTION

CF Town Planning & Development acts on behalf Germano Desings and the landowners as their consultant town planners and hereby prepare the following report in support of an Application for Development Approval for the construction of a new mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo to provide much additional housing and commercial uses within a well serviced area.

This report provides details regarding the following:

- Site details;
- Proposed development;
- Planning considerations; and
- Provision of justification in support of the proposed development, addressing the relevant planning framework.

In light of the above, we respectfully request the Metro Inner Development Assessment Panel (DAP) and the City of Stirling's favorable consideration and conditional approval of the application at their earliest possible convenience.

Should you have any queries or require any additional information regarding any of the matters raised above please do not hesitate to contact Mr Carlo Famiano on 0407384140 or carlo@cftp.com.au.

1.1 List of Consultant Reports/Consultants

The following consultant reports have been prepared in support of this development application:

i) Landscaping Plan from 'Childscapes';
ii) Transport Impact Statement from 'Premise';
iii) Acoustic report from 'Herring Storer Acoustics'; and
iv) Waste Management Plan from 'CF Town Planning & Development'.

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Planning & Development Consultants

2.0 BACKGROUND & PURPOSE

The subject land is situated east of the Innaloo Activity Centre, within a vibrant commercial strip along Muriel Avenue ('Local Centre'). It is noted that the Innaloo area is currently undergoing a transitional period from the older single dwelling type developments to more intense multiple dwelling, grouped dwelling developments. The area is also well serviced with public transport and contains good access to a regional road network.

A review of the immediate locality has identified that the subject land is located within a well-established and well serviced part of the Innaloo area, with convenient access to the following key nodes:

i) Various public open space reserves;

ii) The Osborne Park Industrial areas (i.e. employment nodes);

iii) The Innaloo Activity Centre, which contains a number of retail, entertainment and healthcare uses;

iv) Various bus services within the area, along with the subject land being located with good access to the Stirling Train Station (see Figure 7 – Public transport network), The train service, which provide a service to the Perth Central Business District;

v) A regional road network (including Scarborough beach Road, Cedric Street and the Mitchell Freeway);

vi) The coastal foreshore area and Scarborough Tourism Precinct to the west; and

vii) Various schools (both private and public schools).

Given the above, this application seeks the relevant development approval for the construction of a new mixed use development that includes two (2) commercial tenancies on the ground floor and six (6) multiple dwellings on the upper two floors of the building. The development will provide much needed housing and housing diversity within the Innaloo area, along with providing commercial tenancies that will accommodate small businesses.

3.0 LOCATION

The subject land is located within the southern part of the Innaloo locally, approximately 700 metres north-west of the Innaloo Activity Centre (core area) and approximately 1.2 kilometres south-west of the Stirling Train Station (see Figure 1 – Location Plan).

The subject land is also located within a well serviced area that contains a variety of shopping/retail uses, entertainment venues, civic uses, public open space, medical facilities, recreational facilities, various commercial uses and employment opportunities. As such, the proposed development on the subject land will foster the future growth of the Innaloo locality and will assist with providing much needed housing in a well-established/serviced area.

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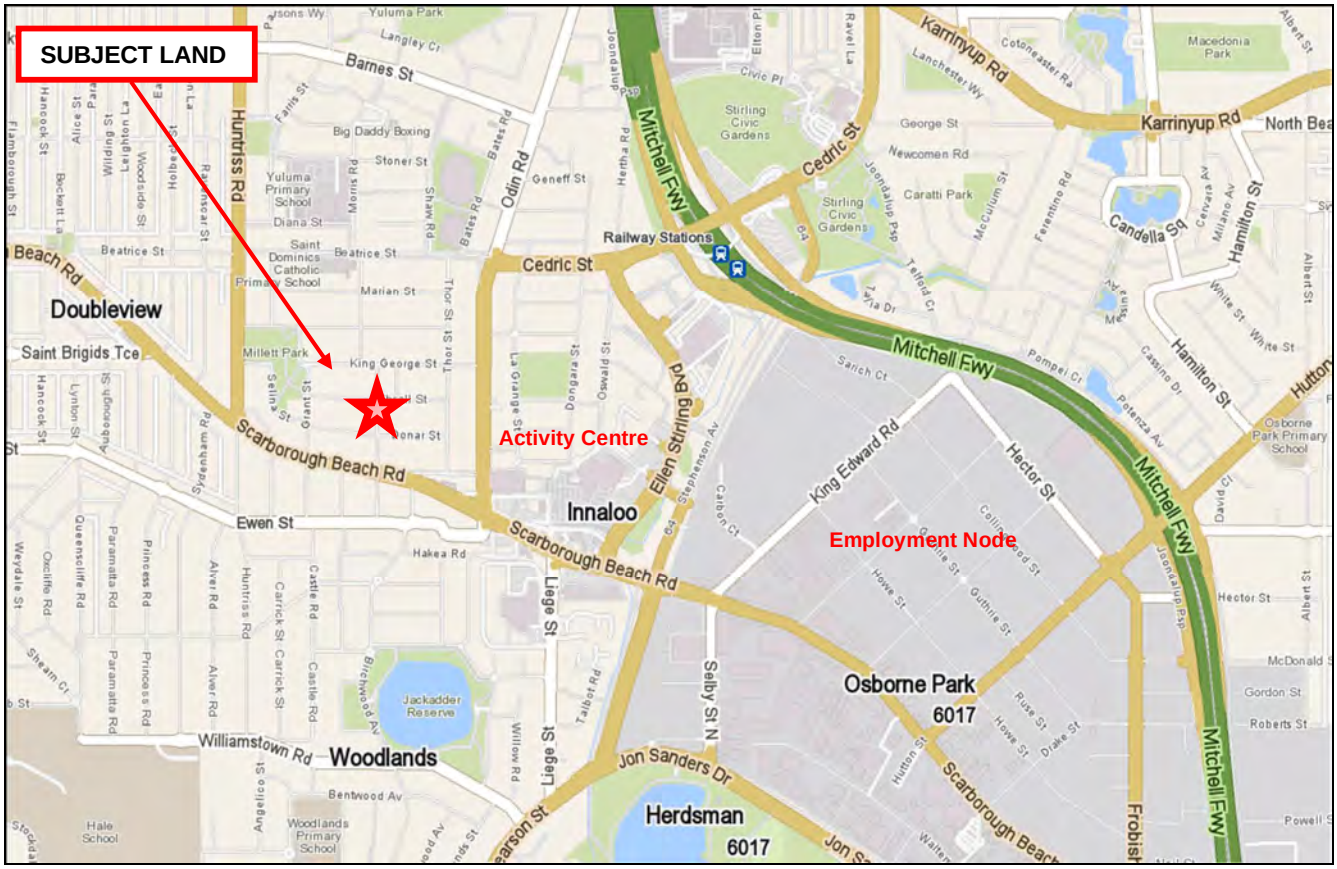


Figure 1 – Location Plan

4.0 PHYSICAL CHARACTERISTICS

4.1 Property Details

The subject land is legally described as Lot 101 on Plan 6290 on Certificate of Title Volume 1157, Folio 302 and is owned by Helen Christou, Victor Jason Christou and Natasha Lee Stavretis (see Appendix 1 - Certificate of Title).

The subject land is irregular in shape, comprises a total combined area of 772m^2 and has frontage to Muriel Avenue along the land's western lot boundary and Azurite Lane along the land's eastern lot boundary.

The subject land is relatively flat with a fall natural ground levels (NGL) from 31.17 metres along the land's front boundary to 29.74 metres along land's rear boundary. This equates to a fall in NGL of 1.43 metres down/across the site (see site development plans).

Lot 101 is currently developed and used for commercial/retail purposes and contains a number of physical improvements including a single storey commercial building, patio structures, an outbuilding, , sealed car parking and boundary fencing (see Figure 2 – Aerial Site Plan & Figure 3). It is viewed that

the existing development on the subject land is run-down and does not provide any positive contributions to the streetscape and represents the underutilisation of land within a commercial strip and in close proximity to a key Activity Centre. As such, this application proposes that all physical improvements on the subject land will be removed to accommodate the new development.

It is significant to note that the existing dwelling and associated structures on the subject land are not identified on the City of Stirling's Municipal Heritage Inventory (MHI) and can therefore be removed subject to the issuance of a demolition permit by the City.

The subject land does not contain any significant vegetation that is worthy of retention, with the Muriel Avenue road reserve abutting the subject land containing a number of large mature street trees that will be retained as part of this application.



Figure 2 - Aerial Site Plan (Nearmap). The subject land contains various structures, which will be removed as part of this application.

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Figure 3 -The existing development on the subject land. The top photo is along the land's Muriel Avenue frontage and the bottom photo is from the Azurite Lane.

4.2 Character of Locality

A review of the existing and future character of the immediate locality has concluded that there is no defined or heritage character worthy of retention. The subject and forms part of an existing commercial strip along Muriel Avenue, which comprises both single and two storey buildings (see Figure 4). It is viewed that the current commercial development on the subject land is low scale and represents under development within the Murial Avenue commercial precinct.

The surrounding has been experiencing a transition from the older housing stock to more grouped dwelling type development. The current housing stock within the includes single and two storey developments of single and two storey built form (predominantly pitched roof structures) (see Figure 5).

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Figure 4 – Examples of existing developments within the Muriel Avenue commercial strip. The current development on the subject and comprises a poor built form character and represents under development of land within an established local centre.



Figure 5 – Examples of residential developments within the immediate area.

In addition to the above, the subject land is located in close proximity to the Innaloo Activity Centre which comprises greater intensification of developments. As such, the proposed development on the subject land is considered to be appropriate in terms of orderly and proper planning.

It is considered reasonable to conclude that the character of the locality and the local streetscapes are not uniform, is varied in terms of the current built form, does not reflect any specific character or form and is currently in a transitional period of re-development to reflect the medium density coding of the immediate area.

In light of the above, it is contended that the proposed construction of a mixed use development on the subject land is unlikely to have a negative impact on the existing character and amenity of the local streetscape or within the Muriel Avenue commercial strip and that the development reflects the intended

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character and built form anticipated within the commercial areas. As such, it is contended that the proposed development will provide a positive contribution to the immediate locality, whilst providing a diversity of housing types and deliver employment opportunities within close proximity to various services and infrastructure.

4.3 Essential Services

The subject land is served by an extensive range of essential service infrastructure including power, water, reticulated sewerage, stormwater drainage, gas and telecommunications (see Figure 6).



Figure 6 – The existing services in and around the subject land. Services include water, sewerage, electricity and telecommunications (MNG Mapping).

The subject land is also served by an efficient local and district road network with convenient access to Scarborough Beach Road, Cedric Street and the Mitchell Freeway. The area is well serviced by public transport, including bus routes along various nearby roads and easy access to the Stirling Trains Station (see Figure 7 – Public Transport Network).

The subject land is also well served by a pedestrian path network along the local road network (including along Muriel Avenue). It is contended that the subject land's good access to public transport and a pedestrian path network will provide an alternative form of transport for the future occupants and visitors to the development.

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Figure 7 – Public Transport Network ('Premise')

5.0 DEVELOPMENT PROPOSAL

This application proposes to construct a three (3) storey building to accommodate a mixed use development comprising six (6) multiple dwellings to provide much needed housing within the Innaloo locality and the provision of two (2) commercial tenancies on the ground floor.

The key details of the proposed development on the subject land includes the following:

i) The development will include the following dwelling configurations:

- Six (6) three bedroom/two bathroom dwellings; and
- Two (2) commercial tenancies comprising an area of 78.29m^2 each (i.e. 'Shop') on the ground/street level of the development with frontage to Muriel Avenue;

ii) The development will have a central foyer area than will provide access to both the residential and commercial components of the development;

iii) Construction of seven (17) on-site car parking bays at ground level, including one (1) ACROD bay. All vehicular access will be from the rear right of way;

iv) Each dwelling will be provided with a storeroom with easy access;

v) Provision of four (4) on-site bicycle parking bays to service the development;

vi) Energy initiative to be incorporated within the development to satisfy the provisions of Element 4.15 ('Energy efficiency') of Volume 2 of the R-Codes include the installation of instantaneous constant flow hot water units to service the multiple dwellings in lieu electric storage system, installation of solar panels to provide an energy innovative solution, roof structures will provide shading for windows to reduce internal temperatures, installation of high-quality insulation, installation of LED lighting throughout the facility and installation of waterwise fixtures;

vii) Construction of bin storage area located to the rear of the building, with all bins being services from the right of way (refer to the waste management plan); and

viii) Installation of landscaping throughout the development, including the planting of new mature trees and associated deep soil zones. A landscaping plan has been prepared in support of the application.

The external facades of the proposed new development will be constructed using high quality finishes that will complement and enhance the local streetscape, with all on-site car parking being screened from the public realm (i.e. access located along the right of way frontage of the site). All street/laneway frontages of the development will include balconies and/or major openings to habitable rooms to assist with providing an active frontage and improved passive surveillance of the public realm (see Figure 8 – Front Facade).

Copies of the proposed site development plans and building elevation drawings are provided herewith for review and consideration (see Appendix 2 – Site Development Plans).

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Figure 8 – The proposed facades of the development.

Anticipated Operations - Non-Residential Uses

At this stage tenants for the ground floor commercial tenancies have yet to be established. As such, the following details are provided as an indication of the operation of the various non-residential ('Shop') uses:

- Each shop would have one to two staff (maximum total of 4 staff for both tenancies) at any one given time; and
- The hour/days of operation of the shop would reflect other similar uses along the commercial strip. As such, the anticipated operating hours would 8.30am to 5pm Mondy to Saturday and closed on Sundays.

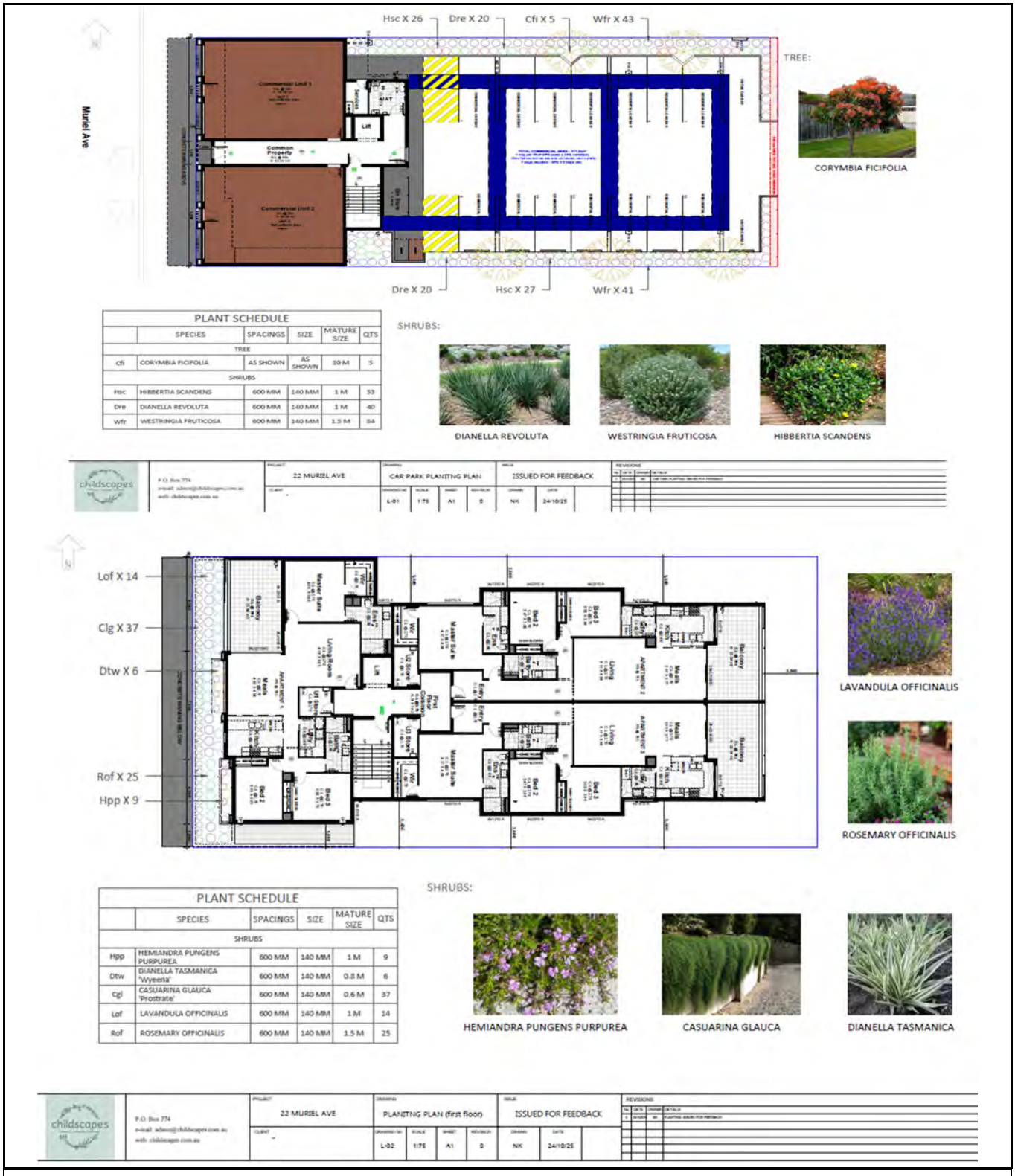
Landscaping Plan

A landscaping plan has been prepared by 'Childscapes' in support of the proposed development on the land (see Figure 9). The plan illustrates the planting of various tree/shrubs throughout the development, including within the car parking area and along the front façade of the building on the upper floor.

The proposed landscaping will enhance the development when viewed from the public realm and will provide for sufficient protection from the elements (in particular during the hot summer months).

As outlined previously within the report, the Muriel Avenue road reserve comprises large mature street trees that will not be impacted by the proposed development on the subject land (see Figure 2 – Aerial

Site Plan). The street trees provide shade (protection from the western summer sun) for the building and provide a impressive streetscape.



	SPECIES	SPACINGS	SIZE	MATURE SIZE	QTS
TREE					
cfi	CORYMBIA FICIFOLIA	AS SHOWN	AS SHOWN	10 M	5
SHRUBS					
Hsc	HIBBERTIA SCANDENS	600 MM	140 MM	1 M	53
Dre	DIANELLA REVOLUTA	600 MM	140 MM	1 M	40
Wfr	WESTRINGIA FRUTICOSA	600 MM	140 MM	1.5 M	84

	SPECIES	SPACINGS	SIZE	MATURE SIZE	QTS
SHRUBS					
Hpp	HEMIANDRA PUNGENS PURPUREA	600 MM	140 MM	1 M	9
Dtw	DIANELLA TASMANICA 'Wyeena'	600 MM	140 MM	0.8 M	6
Clg	CASUARINA GLAUCA 'Prostrate'	600 MM	140 MM	0.6 M	37
Lof	LAVANDULA OFFICINALIS	600 MM	140 MM	1 M	14
Rof	ROSEMARY OFFICINALIS	600 MM	140 MM	1.5 M	25

Figure 9 – Landscaping plan prepared in support of the proposed development of the subject land.

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6.0 STATUTORY CONSIDERATIONS

6.1 Metropolitan Region Scheme

The subject land is currently classified 'Urban' zone under the Metropolitan Region Scheme (MRS) (see Figure 10 – MRS Map).

It should be noted that the zones and reservations prescribed by the MRS are broad categories only that are intentionally not precisely defined or limited in order to enable a flexible approach to town planning. The following definition is provided as a guide to its stated purpose/s in the MRS:

*"**Urban Zone** - Areas in which a range of activities are undertaken, including residential, commercial recreational and light industry."*

The proposed development (i.e. mixed use, including multiple dwellings) is considered to be consistent with the defined intent of the land's current 'Urban' zoning classification under the MRS, as the development will allow for increased housing and housing diversity within a well serviced area. Given this, the proposed development may therefore be approved.

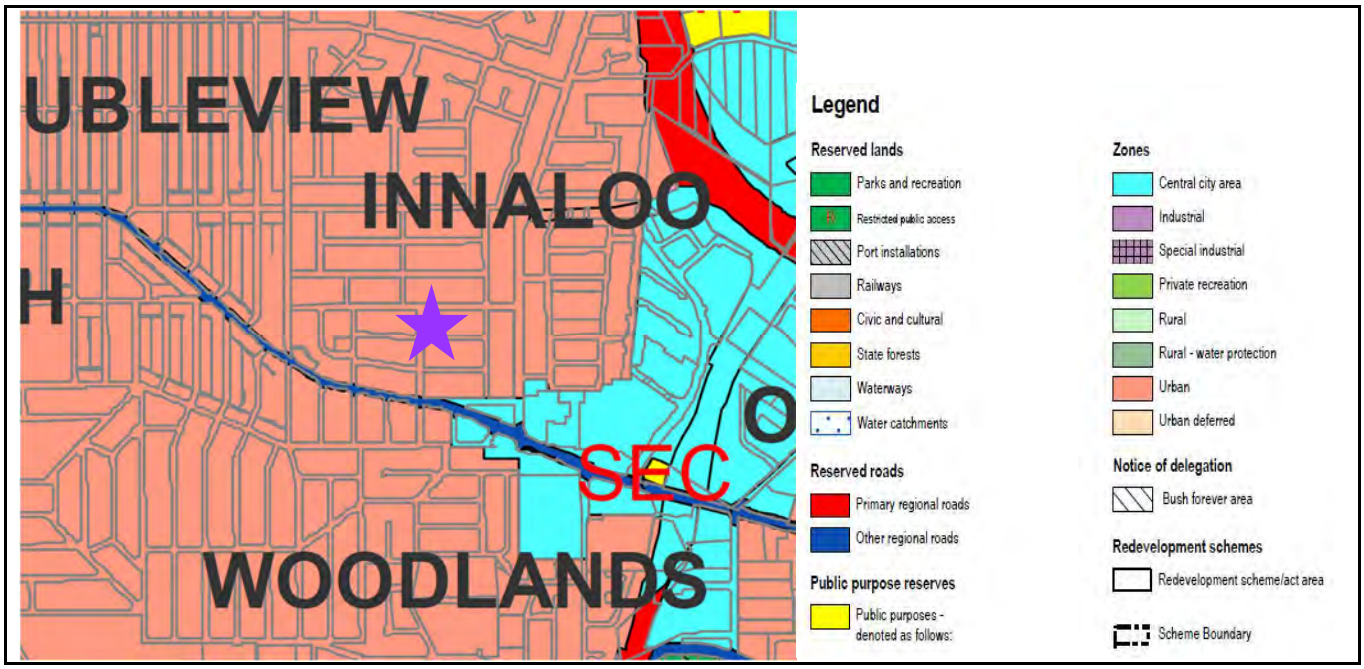


Figure 10 – MRS Map

6.2 City of Stirling Local Planning Scheme No.3

Lot 101 is classified 'Local Centre' zone under the City of Stirling's current operative Local Planning Scheme No.3 (LPS No.3 (see Figure 11).

Clause 5.3.2 of the City's LPS No.3 prescribes that any residential developments not within 'Residential' zone (such as the subject land) is to comply with the relevant requirements under the R80 density coding.

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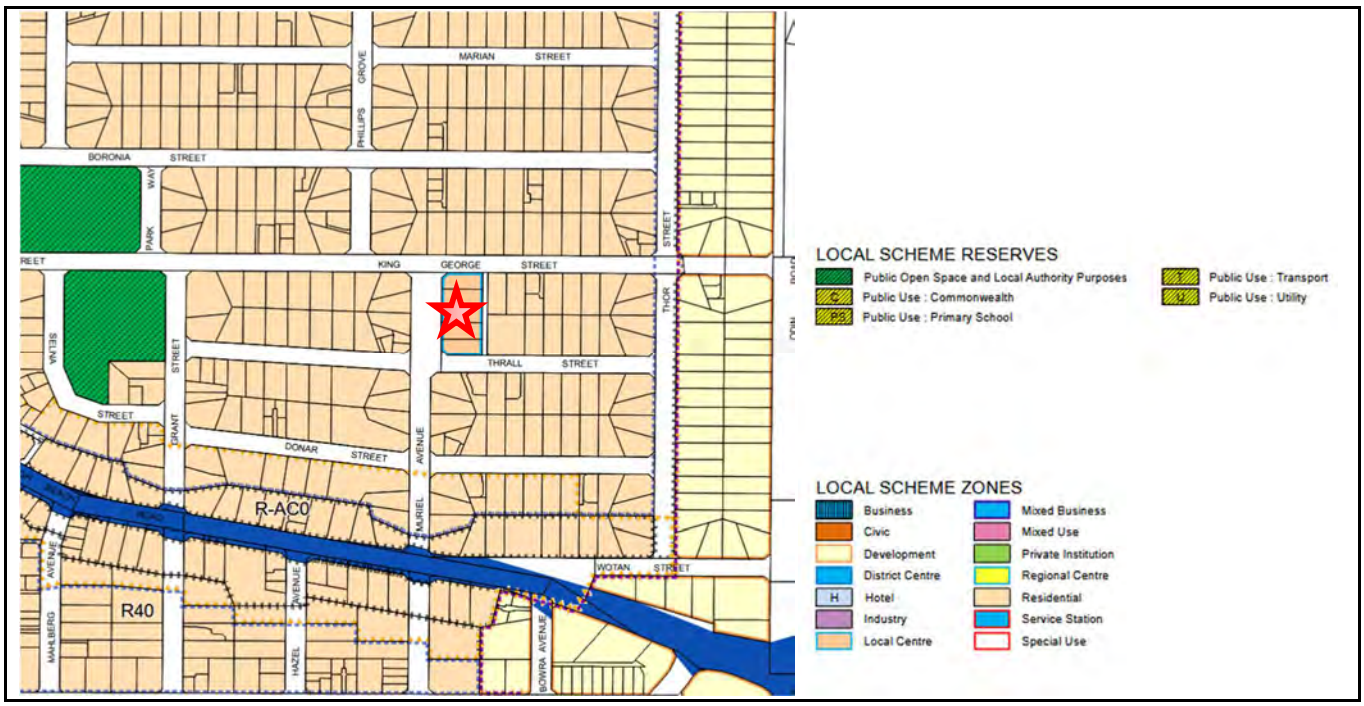


Figure 11 – Zoning Map (LPS No.2)

Schedule 1 of LPS No.3 provides the definitions for the various uses that would apply to this application. Table 1 below provides an overview of the land use definitions and permissibility within the zone:

Table 1– Land Use & Permissibility

LAND USE	DEFINITION	USE PERMISSIBILITY
Shop	*Means premises used to sell goods by retail, or hire goods, but does not include a showroom or fast food outlet.*	*Permitted ("P") use meaning that the use is permitted by the Scheme providing the use complies with the relevant development standards and the requirements of the Scheme.*
Multiple Dwelling	*Means a dwelling in a group of more than one dwelling on a lot where any part of the plot ratio area of a dwelling is vertically above any part of the plot ratio area of any other but:* • *does not include a grouped dwelling; and* • *includes any dwellings above the ground floor in a mixed*	*Discretionary ("D") use meaning that the use is not permitted unless the Council has exercised its discretion by granting planning approval.*

In addition to the above, LPS No.3 provides a note under the Table 1 ('Zoning Table') that 'Multiple Dwellings' are not permitted at ground level on land classified 'Local Centre' zone.

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It is contended the proposed development and use of the land as depicted in this application falls comfortably within the aforementioned land use definitions prescribed in the relevant planning document and in Table 1 above.

Council's stated objectives for all land classified 'Local Centre' zone under LPS No.3 are:

a) *To provide for a limited range of small-scale retail, commercial and community facilities to meet the day-to-day needs of the immediate neighbourhood.*

b) *To ensure safe and convenient access to facilities, in an environment which is conducive to pedestrian movement.*

c) *To ensure development is sited and designed so as to reinforce a sense of place and attractive streetscapes*

It is contended that the proposed mixed use development on the subject and is consistent with the stated objectives of the 'Local Centre' zone for the following reasons:

- It will provide for a range of housing choice/diversity and allows for an increase in density to service the needs of the community;
- It will provide for active uses at ground level including small retail tenancies that could accommodate business that offer day-today needs for the immediate neighbourhood;
- It will provide for a development that contains a high density and creation of employment opportunities in close proximity to various key nodes, including a key public transport hub;
- It will assist with providing a wide range of housing types and densities within the immediate locality, which will cater for varying household structures and demographics;
- It will foster the re-development of the land to provide for significant improvements to the current levels of passive surveillance of the local streetscape, will add to the diversity of housing stock within the immediate locality and provide a development that will include good connectivity between both the public and private realms;
- It will provide for increased usage of the nearby public transport network, reduced the dependency of motor vehicle usage and support the nearby activity centres; and
- It will provide for greater usage of the commercial strip and reinforce a sense of place and enhance the streetscape.

6.3 City of Stirling Local Planning Policy No.6.12 - 'Public Art on Private Land'

The City of Stirling's Local Planning policy No.6.12 entitled 'Public Art on Private Land' seeks to improve the appearance and amenity of places and improve the vibrancy and character of an area. The proposed development intends to local/place the artwork along the land's Muriel Avenue frontage (i.e. underside of the awning of the development) (see Figure 12).

Preliminary discussions have been held with the appointed artist, more details of the artwork being provided to the City of Stirling once a development approval has been issued. As such, it is requested that an appropriately worded condition be imposed on any development approval granted that the details, approval and installation of the public artwork be obtained prior to the completion/occupancy of the development.

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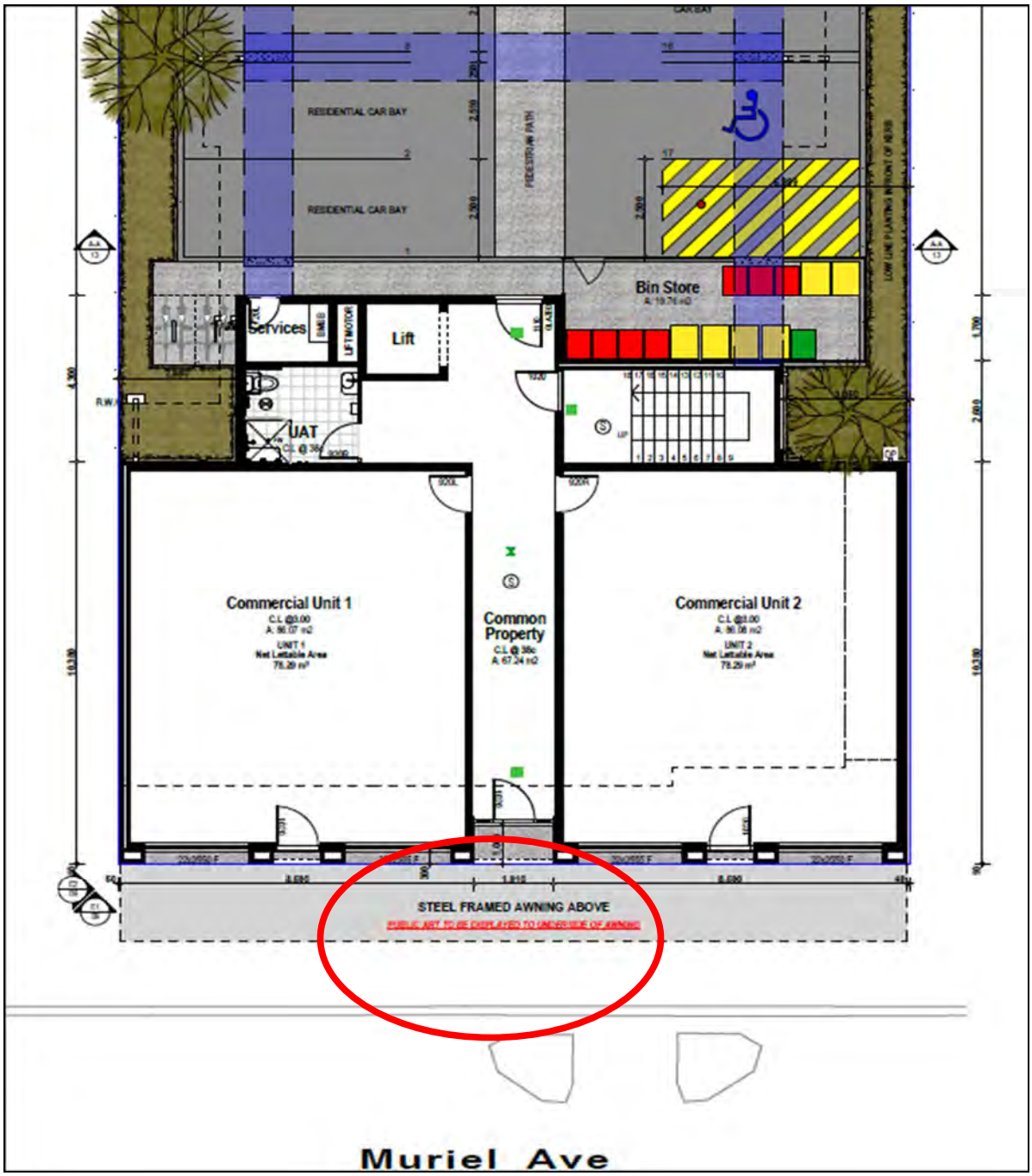


Figure 12 – Location of public artwork (marked in red)

6.4 Directions 2031 and Beyond

'*Directions 2031 and Beyond*' is the Western Australian Planning Commission's (WAPC) strategic framework for guiding development of the Perth Metropolitan Region to a sustainable future. At the centre of '*Directions 2031*' is an enhanced emphasis on growth management in a bid to accommodate future anticipated population growth within Perth, obtain better use of existing infrastructure and provide for a sustainable city including improved housing affordability. This philosophy is also being depicted in the Commission's recent document entitled *'Perth and Peel 3.5 million'*.

The future development of the subject land to accommodate a mixed use development, including six (6) multiple dwellings will facilitate the provision of additional housing within an established commercial area and in close proximity to a key Activity Centre within the Perth Metropolitan Region that contains a wide range of existing infrastructure (including public transport, commercial use, public open space reserves and a comprehensive cycle network). Overall, the development will provide for additional housing, housing diversity and promote the consolidation of urban growth within an existing urban area in a manner consistent with the strategic framework outlined in 'Directions 2031 and Beyond'.

As such it is contended that the proposed development on the subject land is consistent with the aims and objectives of '*Directions 2031 and Beyond*' and will make a beneficial contribution to the future development and sustainable growth of the Perth Metropolitan Region in general.

6.5 Perth & Peel @ 3.5 Million

'Perth & Peel @ 3.5 Million' is the State Government's high-level vision for the growth of the Perth and Peel region to accommodate the future anticipated population growth, which is predicated to be 2.9 million people before 2031 and 3.5 million people before 2050.

In order to accommodate the aforementioned population growth, the document aims at the creation of a more consolidated urban form that includes 53% of future development within the greenfield area and 47% of future development in the current urban area (i.e. infill development). The proposed development will allow for the provision of increased housing availability within the Innaloo area. As such, the development will assist with the City of Stirling meeting the targets set by the State Government for the delivery of additional housing within the existing urban area, within a commercial strip and in close proximity to a key Activity Centre.

In light of the above, the proposed multiple dwelling development on the subject land accords with the aims of '*Perth & Peel @ 3.5 Million'*.

6.6 Bushfire Prone Areas

The subject land has not been identified by the Department of Fire & Emergency Services (DFES) as being located within a designated 'bushfire prone area' (see Figure 13).

In light of the above, this application does not require the preparation of a BAL report to address any bushfire matters.

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Figure 13 – DFES Bushfire Mapping

6.7 State Planning Policy No.5.4 – 'Road & Rail Noise'

The subject land is not located within close proximity to a regional road and/or railway network (see Figure 14 - PlanWA). As such, this development application is not required to address the provisions of State Planning Policy No. 5.4 entitled *'Road and Rail Noise' (SPP 5.4) in terms of road and/or railway noise.*

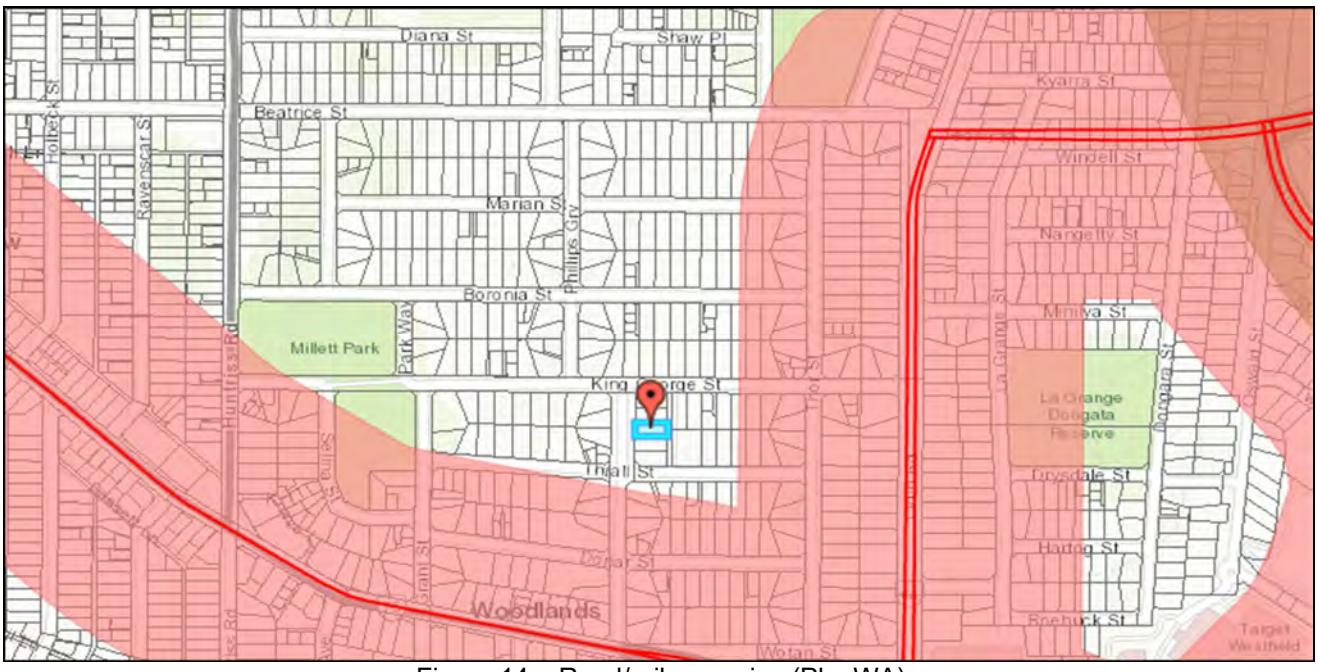


Figure 14 – Road/railway noise (PlanWA)

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6.8 Contaminated Site Investigation

A search of the site under the contaminated sites register has revealed that the land does not have any contamination (see Figure 15). In addition, the subject land is not impacted by floods plains, Bush Forever site and/or acid sulphate soils.



Figure 15 – The subject land is not identified as a contaminated site (MNG Mapping). Contaminated sites are identified in purple.

7.0 STATE PLANNING POLICY NO.7.0 – DESIGN OF BUILT FORM ENVIRONMENT

State Planning Policy No.7.0 entitled 'Design of Built Environment' (SPP No.7.0) addresses the design quality of the built environment across all planning and development types in order to deliver broad economic, environmental, affordable and cultural benefit. The aim is to provide for improved development outcomes throughout the State and is a key consideration when assessing developments.

The following table provides responses to the 'design principles' outlined with the Western Australian Planning Commission's State Planning Policy No.7.0 for consideration by the City of Stirling and the DAP:

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Table 2 – Design Principles

DESIGN PRINCIPLE	RESPONSE
Context and character *"Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place."*	• A review of the immediate locality has identified that there is no distinct character or heritage value within the area. The current built form varies from the older single dwellings which reflects the historical low density development of the area, to large grouped and multiple dwelling developments emerging in the recent years. • The subject land is located within the Muriel Avenue commercial strip that services the local community/catchment. • The commercial strip include a number of older (run-down) buildings ranging from single storey to two storey. • The proposed development will include commercial use on the ground floor (activation of the street) and six (6) multiple dwellings to provide housing diversity. • The proposed mixed use development on the subject land has been designed to reflect a modern built form and an active frontage. It is viewed that the proposed development will enhance the streetscape by removing/replacing the existing run-down building on the land. • Vehicle parking will be from the rear right of way and screened from the public realm. • The new development on the subject land will provide distinguishable architectural features and high level of passive surveillance of the public realm. The articulated front façade of the development is distinctive and will provide a sense of place for the future occupants of the development. • It is concluded that the proposed development reflects upon the anticipated development within a commercial centre encouraged by the City's planning framework. As such, the proposed built form on the new development on the subject land reflects the current planning framework and is mindful of the anticipated built form for the locality.  
Landscape quality *"Good design recognises that together landscape and buildings operate as an*	• A review of the subject land has revealed that there is no significant vegetation on the subject land. As such, there is no opportunity to retain existing vegetation and that the proposed development will be an improvement on the current situation on the land, including increasing the canopy coverage over the land.

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integrated and sustainable system, within a broader ecological context."	• The Muriel Avenue road reserve contains large mature trees that provides protection from the western summer sun and enhances the streetscape. The proposed development on the land will not impact the existing tree canopy. • Given the 'city centre' type development proposed for the land, the development will include some landscaping at ground level and landscaping along the façade of the first floor. • All car parking areas will be covered to reduce hardstand exposure to the sun. • A landscaping plan has been prepared by a consultant. 
Built Form and scale *"Good design provides development with massing and height that is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area."*	• The proposed development features good massing as the façade is broken up by multiple elements and articulation, including the use of varying materials (i.e. render, glass, landscaping planters and feature panelling) and the inclusion of open balconies along the street façades. Given these key elements, it is contended that the future development on the land will contribute to the desired built form character of the streetscape and the commercial centre in general. • The ground floor will include commercial tenancies to provide activation at street level. • The development includes an entry corridor from the street to the lift or foyer area for the residential component. • The development reflects a modern built form/style that will enhance the existing commercial strip and reflects the current planning framework. • The proposed development will be three (3) storeys and is reflective of a 'city centre' type development anticipated within a commercial centre. • The development will also provide activation of the rear right of way and include improved passive surveillance. • The bulk and scale of the development reflects similar built form expected and encouraged within a commercial centre. In addition, the proposed built form is consistent with the emerging bulk and scale anticipated within the area. • The development will include the concealment of the resident car parking area behind the front setback area and screened from view from the public realm.

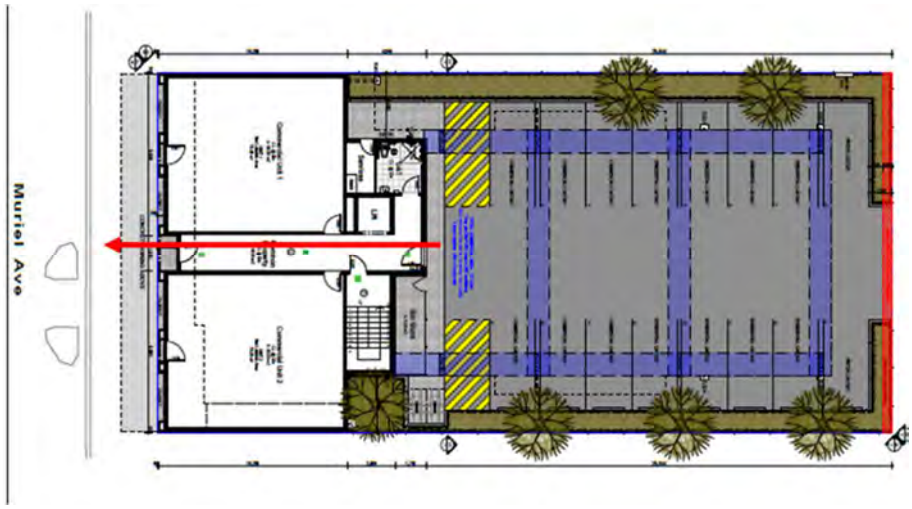
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Functionality & build quality *"Good design meets the needs of users efficiently and effectively, balancing functional requirements to deliver optimum benefit and performing well over the full life-cycle."*	• The development will have good activation of the street, with balconies and major openings overlooking both Muriel Avenue and the rear right of way. • Good access to the building will be provided from both the street and the car parking area. • The design of each dwelling within the development is considered to be functional, with the internal living area for each dwelling being designed to be utilised in conjunction with the external living areas to create large entertainment areas. • The development has been designed to conceal the car parking area on the ground floor. Sufficient parking will be provided for the occupants and visitors. • The internal living area will have good access to outdoor space to provide for a large usable space of entertainment. • The commercial tenancies will have good exposure to the street and allow for activation of the street. • The development will include the use of robust materials and construction methods that will comprise a long life cycle. Furthermore, the proposed development will be constructed to comply with the National Construction Codes and appropriately engineered. • The good access to natural light and ventilation for each dwelling will allow for reduced usage of artificial lighting and ventilation of the dwellings and reduce long term running cost of the dwellings (reduce electrical use). • The bin storage area is enclosed and located so that is will not be visible from the public realm and will not impact the amenity of any dwellings in terms of appearance and/or odours. • Each dwelling has been provided with sufficient storage, on-site car parking and an outdoor living area of sufficient dimension and width to meet the needs of the future occupants. This will provide for usable internal and external areas.
Sustainability *"Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes."*	• The proposed development has been designed to access natural light where possible (given the orientation of the lot), It is contended that the design of the proposed development will assist with reduced running costs of each dwelling. • Some energy initiative that could be applied include instantaneous hot water systems, installation of waterwise fittings and solar panels. • The new building has been provided with good cross ventilation and an open outlook to adjoining street/ROW. • The existing trees within the Muriel Avenue road reserve will provide adequate shading during the hot summer months. • The design of the development has allowed for the car parking area to be under the building and therefore providing protection of the hardstand area from the sun (reduce heat generated by the hardstand). • The proposed development will assist with the provision of a diversity of housing stock within an existing commercial centre, in close proximity to a key transport node and an Activity Centre. The close proximity to public transport will assist with reducing motor vehicle dependency and assist with reducing pollution generated by car usage. In addition, the proposed development will assist with

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	the provision of additional housing within a well services area which is consistent with the State Government's aim to increase the use of the existing infrastructure and creating vibrant community hubs. • The development will include bicycle parking bays to encourage bike usage and limit motor vehicle usage.
Amenity *"Good design optimises internal and external amenity for occupants, visitors and neighbours, contributing to living and working environments that are comfortable and productive."*	• Each dwelling features a living area which can be used in conjunction with the external living area. This creates a usable internal and external area that is functional and will accommodate the needs of the future occupants of the development, which provides sufficient area to entertain visitors to each dwelling. • The outdoor living areas are considered to be well designed, with all dwellings containing an outlook over the street or ROW to provide a view, promote passive surveillance of the street and allows for effective connectivity with the public realm. This includes providing passive surveillance over street. • Adequate boundary setbacks have been provided for adequate separation between the building on the subject land and the adjoining properties, therefore limiting any potential impacts associated with bulk, scale, visual privacy, noise etc. • Given that the subject land is located within an existing commercial centre, there are opportunities for the future residents of the development to live and work locally. As such reducing travel time and improving the living quality for the occupants. • Adequate storage and bicycle parking is also provided within the development, along with a bin storage area located in a position to minimise any impact on the future occupants of the development and allow for easy access. • The development has been designed to allow for easy access for both the occupants and visitors to the development. • The car parking area will be concealed within the development and will not have an adverse impact on the streetscape. • The development, including various openings and balconies orientated towards Muriel Avenue and the rear right of way to provide an outlook and provide for improved passive surveillance. • Good pedestrian paths are provided for the occupant and visitors. • The commercial tenancy on the ground floor will have good exposure to the public realm and provide activation of the development at street level.
Legibility *"Good design results in buildings and places that are legible, with clear connections and memorable elements to help people find their way around."*	• The development is legible in that it provides pedestrian access along Muriel Avenue (easy & safe access). • The vehicular access driveway and pedestrian entry are well separated (i.e. provides safe access). • The development provides screening of the car parking area to reduce the overall impact on the streetscape. • The upper floor frontage of the development will include large windows and balconies that will provide an active frontage along the street.

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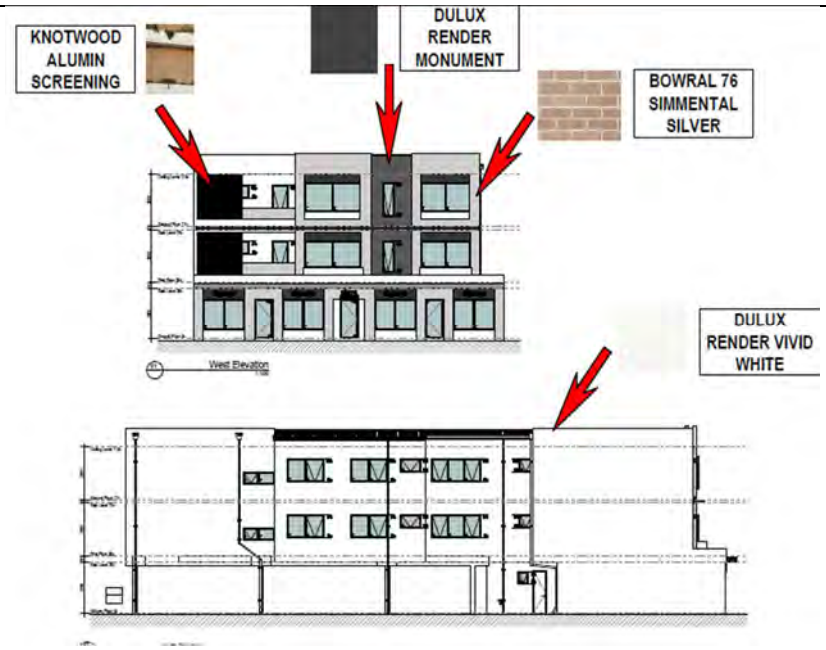
	• The main pedestrian entrance to the building is clear and secure. This will include signage. • The development comprises good connectivity for both the commercial and residential uses. 
Safety *"Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use."*	• The development proposal provides multiple major openings for various dwellings facing the street to avoid enticing criminal activity and intrusion. The development will have sufficient surveillance over both the public and private realms. • The resident car parking area and associated facilitated such as the stores and bin storage are appropriately located within the development to avoid enticing criminal activity and intrusion. • The development will include security card access (and intercoms) to restrict access to lifts and the internal foyer areas. This will provide an element of security for the future occupants. • The inclusion of major openings and balconies overlooking Muriel Avenue and the rear right of way will provide a sense of security for local residents. • The vehicle access point comprises adequate visual sightlines to provided a safe pedestrian environment and adeaute two-way vehicle movemnts to allow for safe access and egress for the vehicles associated with the development. • The develoment has been designed to allow for all vehicles to entry the street in a forward gear. The vehicle access point comprises adeqaute visual sighlines to provided a safe pedstrian envionment.
Community *"Good design responds to local community needs as well as the wider social context, providing buildings and spaces that support a*	• The proposed development will include open balconies facing the adjoining street and right of way to provide activation of the street and an element of community interaction between the public and private realms (improved passive surveillance of the public realm). • The development will assist with urban consolidation and assist with slowing down urban sprawl.

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diverse range of people and facilitate social interaction."	• The smaller dwelling size (as opposed to a single detached dwelling) will provide an opportunity for residents within the locality to downsize and remain within the suburb with easy access to public open space and the various nodes/services offered by the commercial centre. The proposed dwelling types also cater for a variety of demographics such as first homebuyers, singles and couples without children. • The development provides affordable housing to the community, whilst increasing the housing density within the Muriel Avenue commercial centre. In addition, the development will provide small housing typology to accommodate occupants working within the centre. • The proposed development has easy access to large public open space reserve and recreational facilities that provide a recreational space for the future occupants of the development. • The proposed development accords with the State Government's directive to increase residential densities within an existing commercial centre, in close proximity to a key Activity Centres and in close proximity to public transport network to provide affordable housing within these important nodes. • The increase of densities and the provision of additional housing within close proximity to public transport will assist with reducing motor vehicle usage and reduce the extent of the Perth Metropolitan area expanding into the rural and bushland areas along the City's urban fringe. This will assist with providing a positive outcome for the environment and the community in general. • In addition to the above point, the increase in densities and housing within the existing urban fabric will limit the extension of the Perth urban area outwards (i.e. reduce the impacts of 'Urban Sprawl', which results in high costs to the community in terms of infrastructure costs).
<u>Aesthetics</u> *"Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses."*	• Aesthetics of the proposed street facing facades is highly demonstrated by the use of a variety of materials and renders, inclusion of balconies/terrace and major openings of varying sizes. • The proposed façade provides visual interest and an active frontage that provides a connection between the public and private realms within the residential complex. This includes providing an articulated front facade. • The design of the proposed development incorporates sufficient and safe pedestrian movements, whilst allowing for ease of access to various on-site facilities such as bin storage areas, storerooms and car parking. • The proposed development allows for good massing and bulk and the street, which is expected within a commercial centre environment. • The proposed development has been designed to include active spaces (i.e. balconies, outdoor living area) and landscaping, which will provide an attractive and articulated front façades. The impressive façade designs will appeal to all passers-by and engage interest from the public realm.

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8.0 DEVELOPMENT STANDARDS

8.1 General Development Standards

The City of Stirling have adopted Local Planning Policy No.4.2 entitled 'Mixed Use Design Guidelines' that will apply to this application, along with any other relevant Local Planning Policy. Where a development standard is not prescribed within the Local Planning Policies, the standards prescribed within Volume 2 of the Residential Design Codes (R-Codes) will apply. As previously mentioned, the R80 density coding will apply to the subject and.

Table 3 below provides an assessment of the proposed development to assist with the consideration of the application against the applied development standards:

Table 3 – Assessment Table

DEVELOPMENT COMPONENT	PRESCRIBED DEVELOPMENT STANDARDS	PROPOSED	COMPLIANCE
SETBACKS			
Primary street	Nil setback	Nil setback proposed	Yes
Secondary street (right of way)	Nil setback	Min setback – 3.34 metres	Yes
North side setback (commercial)	Nil setback	Min – Nil setback	Yes
South side setback (commercial)	Nil setback	Min – Nil setback	Yes

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GENERAL/OTHER			
Building height	Maximum 3 storey (Max – 18 metres)	Maximum 12.4 metres & three (3) storeys	Yes
Ground Floor Use	Commercial use (i.e. café & shops)	Proposed commercial uses (i.e. shop tenancies)	Yes
Ground floor glazing	Minimum 50% glazing		
Awning over verge	• A depth of 2.0 metres • Minimum2.7 metre clearance to signage/lights	• Minimum clearance of 3.514 metres • A depth of 2.0 metres	Yes
Articulation along street frontages	Primary street facade to include an active frontage varying use of materials/colours, balconies & openings	Proposed development include varying setback, use of materials and colours to provide articulation and visual interest. The façade will include balconies and major openings	Yes
Storage/refuse areas	One bin store required, screened from the street.	Screened bin store provided.	Yes
Vehicle access/egress	Vehicle access from ROW, setback from corner truncation and vehicles to return to street in a forward gear.	Access from ROW, not a corner lot and all vehicles to return to local street network in a forward gear	Yes
Pedestrian access	Definable entry point from street, universal access.	The building comprises a definable entry point, provides pedestrian connection with foot path network along the street. In addition, universal access is provided.	Yes
KEY R-CODE PROVISIONS			
Element 2.4 – Side & rear setbacks	Min - 3 metres (parapet wall allowed to side boundaries as per Local Planning Policy 4.2)	Parapet wall to residential level is nil to the northern boundary (allowed) North- 2.05 metres South – 1.55 metres	No (Refer to justification)
Element 2.5 - Plot Ratio	Min – 1.0 (772m^2)	Proposed – 944.35m^2 or 1.22	No (Refer to justification)
Element 3.5 - Visual privacy (R50)	• Bedroom/study – 3.0m • Other habitable rooms – 4.5m • Balcony – 6.0m	• Bedroom/study – Bedroom 2 on each level comprises a setback of 2.05 metres • Other habitable rooms – Complies • Balcony – Complies	No (Refer to justification)
Element 4.1 – Solar & daylight access	70% of dwellings providing solar access	Greater than 70% of dwellings provided with solar access	Yes
Element 4.2 – Natural ventilation	60% of dwelling comprising natural ventilation	Greaer 60% of dwellings provide with natural ventilation.	Yes

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Element 4.3 – Size & layout of dwellings	**Table 4.3a Minimum floor areas for dwelling types** Dwelling type: Studio — Minimum internal floor area: 37m² 1 bed — 47m² 2 bed × 1 bath[1] — 67m² 3 bed × 1 bath[1] — 90m² [1]An additional 3m² shall be provided for designs that include a second or separate toilet, and 5m² for designs that include a second bathroom. **Table 4.3b Minimum floor areas and dimensions for habitable rooms** Habitable room type: Master bedroom — Minimum internal floor area: 10m² — Minimum internal dimension: 3m Other bedrooms — 9m² — 3m Living room – studio and 1 bed apartments — N/A — 3.6m Living room – other dwelling types — N/A — 4m [1]Excluding robes	• Dwelling sizes comply • Bedroom dimensions greater than 3 metres. • Bedroom area greater than 9m² • Living area dimensions min 4 metres	Yes
R-Code Element 4.4 – Private open space & balconies	• Single bed – 8m² • Two bed 12m² • Minim dimension of 2.4 metres.	Required areas and dimensions provided as pert R-Codes	Yes
R-Code Element 4.6 – 'Storage'	Each dwelling requires a 5m² storeroom, Min dimension of 1.5 metres	Sufficient storage is provided for each dwelling	Yes
Element 4.8 – Dwelling Mix	20% of apartments have different bedrooms for developments comprising 10 or more dwellings	Development comprises less than 10 dwellings	N/A

The following table provides justification for those aspects of the proposed development on the subject land seeking a variation to the 'deemed to comply requirements' of the relevant planning framework.

Table 4 – Justification

DEVELOPMENT STANDARD & 'ELEMENT OBJECTIVES'	PROPOSED VARIATION TO 'DEEMED TO COMPLY REQUIREMENTS'	JUSTIFICATION
R-Code Element 2.4 – 'Side and rear setbacks' *O 2.4.1 Building boundary setbacks provide for adequate separation between neighbouring properties.*	The application proposes that the following aspects of the proposed development on the subject land do not meet the 'acceptable outcomes' of Element 2.4 of the R-Codes (Vol 2): i) First floor comprises a minimum setback	1. The City's Local Planning Policy No.2.4 allows for a nil setback to the side boundaries for a mixed use development. As such, the proposed variation to the side lot boundaries when considering the R-Code provisions is deemed to be minor and will not have an adverse impact on the adjoining properties and/or the streetscape in terms of bulk and scale. 2. The building comprises varying setbacks from the side boundary to provide articulation when viewed from the adjoining properties, which is considered to be a better planning outcome than a façade comprising a flat 3 metre

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O 2.4.2 Building boundary setbacks are consistent with the existing streetscape pattern or the desired streetscape character. *O 2.4.3 The setback of development from side and rear boundaries enables retention of existing trees and provision of deep soil areas that reinforce the landscape character of the area, support tree canopy and assist with stormwater management.* *O 2.4.4 The setback of development from side and rear boundaries provides a transition between sites with different land uses or intensity of development.*	of 2.05 metres from the northern side boundary in lieu of 3 metres; ii) Second floor comprises a minimum setback of 2.05 metres from the northern side boundary in lieu of 3 metres; iii) Second floor comprises a minimum setback of 1.55 metres from the southern side boundary in lieu of 3 metres; and iv) Second floor comprises a minimum setback of 1.55 metres from the southern side boundary in lieu of 3 metres.	setback or a parapet wall along the boundary. 3. The proposed development has avoided the use of parapet walls to limit the overall impact on the adjoining properties in terms of bulk and scale. 4. Further to the above points, the bulk/scale and lot boundary setbacks of the proposed development reflects the anticipated built form within the 'Local Centre' zone. 5. The development provides a compliant rear setback to allow for a sense of separation, natural light to penetrate into the adjoining lots and allow for good levels of passive surveillance over the adjoining right of way. 6. Sufficient landscaping is provided throughout the development. 7. Sufficient separation is provided between the existing buildings on the adjoining lots and the proposed new building on the subject land. 8. The proposed development makes effective use of all available space and provides for the creation of adequate internal and external living areas for each dwelling which will benefit all future occupants. 9. The proposed development will provide an attractive and safe residential environment comprising modern, affordable, high quality housing within a well-established urban area within close proximity to public transport route (i.e. Stirling train station) and the Stirling City Centre ('Activity Centre'). 10. Given that the property is located within a commercial strip/centre and given the development potential, it is contended that overtime all adjoining properties will be developed in a similar manner and may include such minor setback variations. 11. The proposed development is located within a commercial centre which allows for a greater extent of shadow to be cast over the adjoining properties. The shadow cast over the adjoining lots will not have an adverse impact on access to light and ventilation for those developments on the adjoining properties. 12. Those portions of the proposed development comprising a reduced setback from the northern and southern side boundaries will abut existing commercial developments on the adjoining properties (see Figure 2 – Aerial Site Plan). As such, the proposed development on the subject and will not have an adverse impact on any sensitive habitable spaces on the adjoining properties. Having regard for all of the above it is contended that the portion of the new mixed use development on the subject land comprising reduced setbacks from the side lot boundaries satisfies the Objectives of Element 2.4 of the R-Codes, will not have an adverse impact on the local streetscape or the adjoining properties and may therefore be approved.

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R-Code Element 2.5 – 'Plot ratio' *O 2.5.1 The overall bulk and scale of development is appropriate for the existing or planned character of the area*	The application proposes that the new mixed use development on the subject and will comprise a plait ratio of 1.22 (i.e. 944.35m^2) in lieu of 1.0 (i.e. 770m^2) permitted by the 'acceptable outcomes' of Element 2.5 of the R-Codes (Vol 2).	1. The proposed development has been designed to include open balconies and major openings orientated towards both the street and the right of way to assist with improved connectivity and passive surveillance of the public realm. 2. The proposed development comprises a commercial component (i.e. shops) and a residential component on the upper floors that will contribute to consolidating the Muriel Avenue commercial centre as an employment and key commercial hub/destination. 3. The proposed mix of residential and commercial plot ratio areas for the new development on the land is consistent with the land use mixes of similar developments within the nearby Stirling Citty Centre area. Furthermore, the development is consistent with the type and scale of development commonly found within an Activity Centre or commercial strip. 4. The proposed variation to the maximum allowable plot ratio for the new mixed use development on the subject land will not have any adverse impacts on the adjoining properties and will in fact enhance development within the Muriel Avenue commercial centre. 5. The proposed development will provide an attractive and safe residential environment comprising modern, affordable, high quality housing within a well-established commercial centre. It is contended that the design of the proposed development, including the use of varying materials, colours and architectural features, will make a positive contribution to the local streetscapes. 6. The proposed development will provide a diversity of housing stock and therefore greater choice for future potential residents in the Innaloo locality. It is significant to note that the proposed development will have access to a variety of amenities including public open space, public transport and other keys activities/uses commonly found within a commercial centre or in close proximity to a key Activity Centre. 7. The extent of variation being sought for this application is consistent with other mixed-use developments approved within the locality and commonly found within key commercial area and/or an Activity Centre throughout the Perth Metropolitan Area. 8. The overall development will comprise a bulk and scale that is reflective of the anticipated built form within a commercial strip and/or within close proximity to a key Activity Centre. 9. The subject land is ideally located within close proximity to the 'Stirling City Centre' and the proposed development will assist with providing increased population within the locality. The strict compliance with the development provisions of the City's local planning policy and Element 2.5 of the R-Codes will result in the loss of dwelling yield within a well serviced area and therefore be contrary State Governments strategic

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		direction on increasing housing numbers within the existing metropolitan area. 10. The dwelling within the development have been designed to comprise good internal living areas that will meet the moderns needs of the future occupants. 11. The proposed development will enhance the Muriel Avenue commercial strip by replacing a run-down development with a more modern development. Having regard for all of the above it is contended that the proposed variation to the maximum allowable plot ratio for the overall development on the subject land will not have an adverse impact on the streetscape, reflects the future anticipated development within an existing commercial centre and in close proximity to the Stirling City Centre, will enhance the streetscape, it satisfies the 'objectives' of Element 2.5 of the R-Codes and may therefore be supported and approved.
R-Code Element 3.5 – 'Visual privacy' *O 3.5.1 The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms*	The application proposes that the 3 metre 'cone of vision' from the bedroom 2 windows of each dwelling within the new development on the subject and will extend over the adjoining northern and southern lots contrary to the 'acceptable outcomes' prescribed within Element 3.5 of the R-Codes (Vol 2).	1. The proposed development has been designed to effectively locate all major openings to habitable rooms and the balcony in a manner which avoids direct overlooking of the adjoining properties. It should be noted that the adjoining properties are commercial development and do not have any sensitive habitable spaces they require protecting. In fact, the overlooking from the bedroom windows over the adjoining properties will provide an element of passive surveillance and added security for the commercial uses on the adjoining properties. 2. In addition to the above point, the development on the adjoining northern property compromises a nil setback along the side lot boundaries. As such, any overlooking from the bedroom 2 windows from those dwellings on the northern side of the development will be into a blank wall or roof structure. 3. The extent of the intrusion from the bedroom 2 windows over the adjoining properties (i.e. 950mm) is considered to be minor in nature. 4. The overlooking from the bedroom windows can be attributed to the City's DRP requiring that no highlight windows be provided to enable an outlook from the bedrooms. Any changes to the bedroom 2 windows (i.e. highlight of obscure glazing) would be contrary to the advice received from the City's DRP. 5. It should be noted that a most cases, the area being overlooked on the adjoining properties can be seen from the right of way by the general public. Having regard for the above it is contended that those portions of the 'cone of vision' extending from the bedroom 2 windows of all dwellings within the new mixed use development on the subject and extending over the adjoining properties are minor in nature, do not impact any sensitive habitable spaces associate with the

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		existing developments on the adjoining properties, it satisfies the 'objectives' of Element 3.5 of the R-Codes and may therefore be approved.

8.2 On-site Car Parking & Access

The proposed development on the subject land has been designed to provide a total of seventeen (17) on-site car parking bays (including visitor parking and ACROD bays) with vehicular access via the rear right of way known as Azurite Lane (see Site Development Plans). It should be noted that Location B provision of the R-Codes apply due to the land's not being in close proximity to a high frequency public transport network.

Figure 1 of the City's Local Planning Policy (LPP) No.6.7 entitled 'Parking & Access' identified that the subject and is located within 'Local Centre 35 – Muriel Avenue'(LC35). In addition, the Table 1 of the Policy outlines the on-site car parking standards for land within LC35 (i.e. 1 bay per 25m^2 GFA).

The following car parking calculations are provided to assist the City of Stirling and the DAP's assessment of the application and have been formulated with due regard for the parking standards prescribed within the City's Local Planning Policy No.6.7 entitled 'Parking and Access' and Volume 2 of the Residential Design Codes (R-Codes):

Table 5 – Car Parking Calculations

LAND USE	PRESCRIBED PARKING STANDARD	FLOOR AREA OR DWELLING NO.	PARKING BAYS REQUIRED
Multiple Dwelling (3 bedroom)	1.25 bays per dwelling	6 dwellings	7.5 bays
Residential Visitor Parking	1 bay per four dwellings up to 12 dwellings	6 dwellings	1.5 bays
Local Centre (LC35)	1 bays per 25m^2 GFA	156.58m^2 GFA	6.34 bays
Total number of on-site parking bays required for the multiple dwellings			**16 bays**
Total number of on-site parking bays provided			**17 bays**
Total on-site car parking surplus			**1 bay**

As demonstrated by the above table, the proposed mixed use development on the subject land complies with the on-site car parking requirements prescribed within the City's Local Planning Policy No.6.7. in fact, the proposed development will result in an on-site car parking surplus of one (1) bay.

9.0 CONSULTANT REPORTS

9.1 Traffic Impact Statement

A Traffic Impact Statement has been prepared by 'Premise' (Consulting Engineers) in support of this application (see copy attached herewith). The Traffic Impact Statement (TIS) comprises the following conclusions in terms of the proposed development on the subject land:

i) The expected traffic of the proposed subject site is expected to be a 103 vehicular trips per day, 7 vehicular trips in the AM peak hour and 11 vehicular trips in the PM peak hour respectively.

ii) In summary Premise believe that the proposed development will not have a negative impact on the surrounding road network.

In light of the above, it is concluded that the design and location of the proposed development on the land is suitable in terms of traffic movement and generation. Furthermore, it is concluded that the local road network is more than capable of accommodating the traffic movements generated by the proposed development on the subject land.

9.2 Acoustics Report

An acoustic report has been prepared in support of the application by 'Herring Storer Acoustics' (see copy attached herewith). The report has undertaken an assessment of the noise emissions generated by the proposed mixed use development and the potential impact that noise may have on the adjoining and surrounding residential properties.

In light of the above, the acoustic report provide the following conclusion/recommendations:

i) The main source of noise from the proposed development will be from mechanical services consisting of air-conditioning plant. Noise received at neighbouring premises, and premises within the development, from these items need to comply with the assigned noise levels as determined under the *Environmental Protection (Noise) Regulations 1997*.

ii) As the mechanical services could operate during the night, noise emissions from the development needs to comply with the assigned LA10 night period noise level of 43 dB(A) at residential premises. Potentially, noise emissions from mechanical services could be tonal, in which case an +5 dB(A) penalty for a tonal component could be applied to the resultant noise levels. Therefore, the design level at the neighbouring residential premises would be 38 LA10 dB.

iii) The air conditioning for the units is not yet known. Once the design of the system is finalised, an acoustic assessment will be carried out of noise emissions from the mechanical plant and any noise amelioration required will be incorporated into the design to ensure compliance with the *Environmental Protection (Noise) Regulations 1997*.

iv) From experience, we believe that compliance with the above criteria for the night period would be achievable, however, some noise mitigation is likely to be required.

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9.3 Waste Management

A waste management plan (WMP) has been prepared by 'CF Town Planning & Development' in support of this application (see copy attached herewith). The proposed waste collection for the development will be undertaken along rear right of way (i.e. Azurite Lane) using a range of bin sizes to address the needs of the various uses proposed within the development.

The WMP concludes that sufficient measures are proposed to ensure that the development can adequately be serviced in terms of waste disposal & collection.

10.0 DESIGN REVIEW PANEL (DRP)

The application has been referred to the Design Review Panel (DRP) at the City of Stirling on 20 November 2025 for consideration and comment. It is noted that the proposed use and development on the land is encouraged by the Panel, with the panel raising a number of design concerns and providing a number of recommendations to assist with improving the functionality/appearance of the development.

Following a review of the comments, the plans prepared in support of this application were significantly amended and has resulted in vast improvements to the design layout of the development. The key changes undertaken include the following:

i) The foyer area on the ground floor has been reconfigured to provide a greater space and an open aspect. This include amend the front door along the building's Muriel Avenue frontage to allow for more glazing to provide improved passive surveillance;

ii) A defined pathway (use of an alternative material) has been illustrated through the car parking area;

iii) Wheel stops have been introduced within the car parking area to allow for more landscaping, along with more trees. This has introduced more deep soil zones for the site;

iv) The concreate awning over the Muriel Avenue footpath has been removed and replaced with the conventional light weight awning;

v) Additional landscaping has been provided to those balconies orientated towards the right of way to enhance the appearance of the building;

vi) The ceiling height for the ground floor has been increased to 3.5 metres;

vii) The bicycle and bin storage areas have been redesigned;

viii) Windows have been included to the stairwell to allow for natural light to penetrate into the area;

ix) The storage room and foyer for the upper floors has been amended to create a large more spacious area;

x) The bedroom 3 window has been reorientated to face east and not to the side boundaries;

xi) Location of the air-conditioning units on the roof, which will be screened;

xii) Security gates have been included along the rear of the property (along the right of way to provide security to the parking area; and

xiii) Skylights added to the upper floor to allow for the penetration of natural light into the buildings.

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11.0 SUMMARY OF JUSTIFICATIONS

Having regard for all of the above, it is contended the proposed mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo is suitable and capable of being approved for the following reasons:

- It is consistent with the general objectives of the land's current 'Urban' zoning classification under the Metropolitan Region Scheme.
- The proposed development and use on the subject land are identified as either permitted or discretionary under the City's Local Planning Scheme No.3 and reflects the current planning framework.
- The proposed development on the subject land will complement other similar land use activities that will be developed within this part of the Innaloo and within an existing commercial centre.
- The proposed development will assist with the provision of housing variety within the Innaloo locality within close proximity to various nodes and infrastructure (such as public transport). The development will also assist with providing increased densities within a well-established/serviced area.
- The proposed development will include commercial tenancies at ground level to provide activation of the street, along with providing employment opportunities for residents within the building and immediate locality.
- The proposed development has been designed to have due regard for the development standards prescribed within the relevant planning framework.
- The proposed development will improve the streetscape and levels of passive surveillance along Muriel Avenue.
- The development has been designed to incorporate design features, an active frontage and improved passive surveillance of the adjoining street (i.e. it will oversee the public realm).
- The proposed development will provide opportunity for the development of an attractive and safe residential environment comprising affordable, modern and high quality housing within a well-established urban area.
- The proposed development is unlikely to compromise the existing character, amenity or compatibility of land usage in the immediate locality and is consistent with the future anticipated development for the area.
- The proposal development for the land of 'multiple dwelling' purposes is consistent with the aims and objectives of '*Directions 2031*' and '*Perth & Peel @ 3.5 Million'* and will make a beneficial contribution to the future development and sustainable growth of the Perth Metropolitan Region generally.
- The proposal will assist with the City of Stirling meeting the target set by the State Government for the delivery of additional housing within the existing metropolitan area and will assist with fostering the sustainable growth of the Innaloo area and nearby Activity Centres.
- The proposed development will add to the diversity of housing stock and provide a variety of choice for future potential residents in the Innaloo locality and will help to accommodate the increased demand for housing within a well-developed residential area. Specifically, the development will provide much needed housing for members of the community.

12.0 CONCLUSION

The Innaloo area in and around the Activity Centres is currently experiencing a transitional phase, wherein the older low density housing stock is being replaced by new higher density developments that reflects the City of Stirling's vision for area and accords with the strategic planning framework adopted by the State Government to achieve infill development within the existing metropolitan area and in close proximity to key nodes, whilst providing for commercial activity at ground level. The proposed development has been designed to reflect the scale, built form and character expected within a key centre.

The proposed development has been designed to reflect the scale, built form and character expected within a commercial centre and in close proximity to public transport. Furthermore, the proposed development and location of the property provides a perfect environment to deliver much needed high quality accommodation with premium access to various key nodes.

Whilst the proposed development does seek some variations to the prescribed development standards, it is viewed that this has merit in delivering additional housing densities within a strategic area. As such, the proposed variations comprises sound planning merit and reflects proper and orderly planning for the area.

In light of the above information and justifications, we respectfully request the Metro Inner Development Assessment Panel and the City of Stirling's favorable consideration and conditional approval for the construction of a new mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo at their earliest possible convenience.

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CF Town Planning & Development
Planning & Development Consultants

APPENDIX 1 – CERTIFICATES OF TITLE

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WESTERN AUSTRALIA

TITLE NUMBER	
Volume	Folio
1157	302

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts
REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 101 ON PLAN 6290

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

HELEN CHRISTOU OF 45 FLOYD STREET TRIGG WA 6029
VICTOR JASON CHRISTOU OF 13 TROY AVENUE MARMION WA 6020
NATASHA LEE STAVRETIS OF 18 SHOLL AVENUE NORTH BEACH WA 6020
AS JOINT TENANTS

(T O457891) REGISTERED 28/7/2020

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. M743027 LEASE TO MARIOS THEODOSIADES, PHYLLIS THEODOSIADES, BOTH OF 3 GREENBUSHES PLACE, DIANELLA EXPIRES: SEE LEASE. AS TO PORTION ONLY. REGISTERED 20/8/2014.
   O275610 EXTENSION OF LEASE M743027. REGISTERED 7/11/2019.
2. O503252 CAVEAT BY THE REGISTRAR OF TITLES LODGED 22/9/2020.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:
The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1157-302 (101/P6290)
PREVIOUS TITLE: 1144-985
PROPERTY STREET ADDRESS: 22 MURIEL AV, INNALOO.
LOCAL GOVERNMENT AUTHORITY: CITY OF STIRLING

NOTE 1: M253673 SECTION 138D TLA APPLIES TO CAVEAT C3290/1968
NOTE 2: M253674 SECTION 138D TLA APPLIES TO CAVEAT A352199
NOTE 3: M253675 SECTION 138D TLA APPLIES TO CAVEAT A438676
NOTE 4: M253676 SECTION 138D TLA APPLIES TO CAVEAT B188622
NOTE 5: M253677 SECTION 138D TLA APPLIES TO CAVEAT B380965

END OF PAGE 1 - CONTINUED OVER

LANDGATE COPY OF ORIGINAL NOT TO SCALE 16/12/2025 02:55 PM Request number: 69188844
Landgate
www.landgate.wa.gov.au

APPENDIX 2 – – SITE DEVELOPMENT PLAN

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Planning & Development Consultants
Address: 3/1 Mulgul Road, Malaga WA 6090
Tel: 9249 2158 Mb: 0407384140 Email: carlo@cftp.com.au
CVF Nominees Pty Ltd ABN: 86 110 067 395

Stavertis

Address:22 Muriel Ave INNALOO

Apartment Complex

Job Number: 23011

Drawing No	Description
01	Cover Page
02	Existing Site Survey
03	Site Plan
04	Context Plan
05	Ground Floor Plan
06	First Floor Plan
07	Second Floor Plan
08	Roof Plan
09	Elevations
10	Elevations
11	FF Solar Study
12	SF Solar Study
13	Section

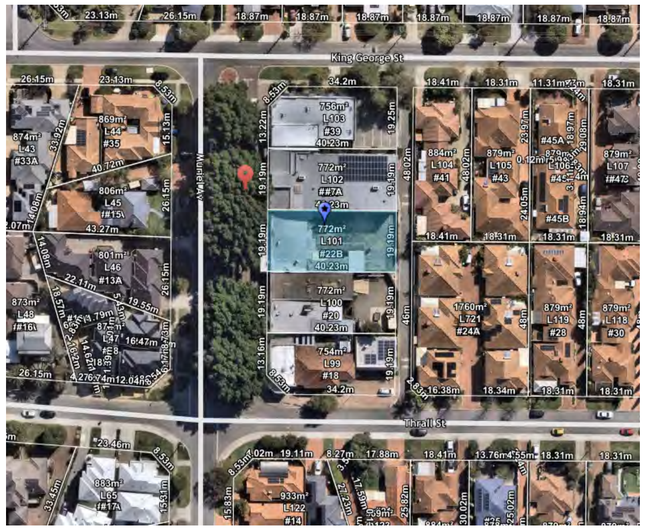


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Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Existing Site Survey

Scale:	Sheet Size:
1:200	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
02 of 13

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

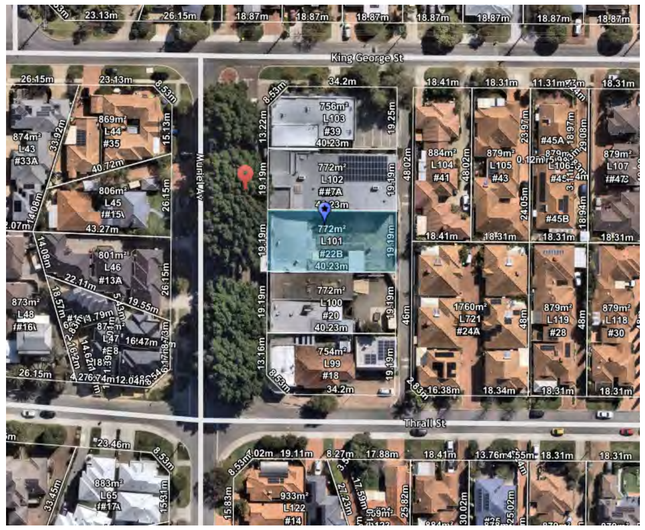
Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

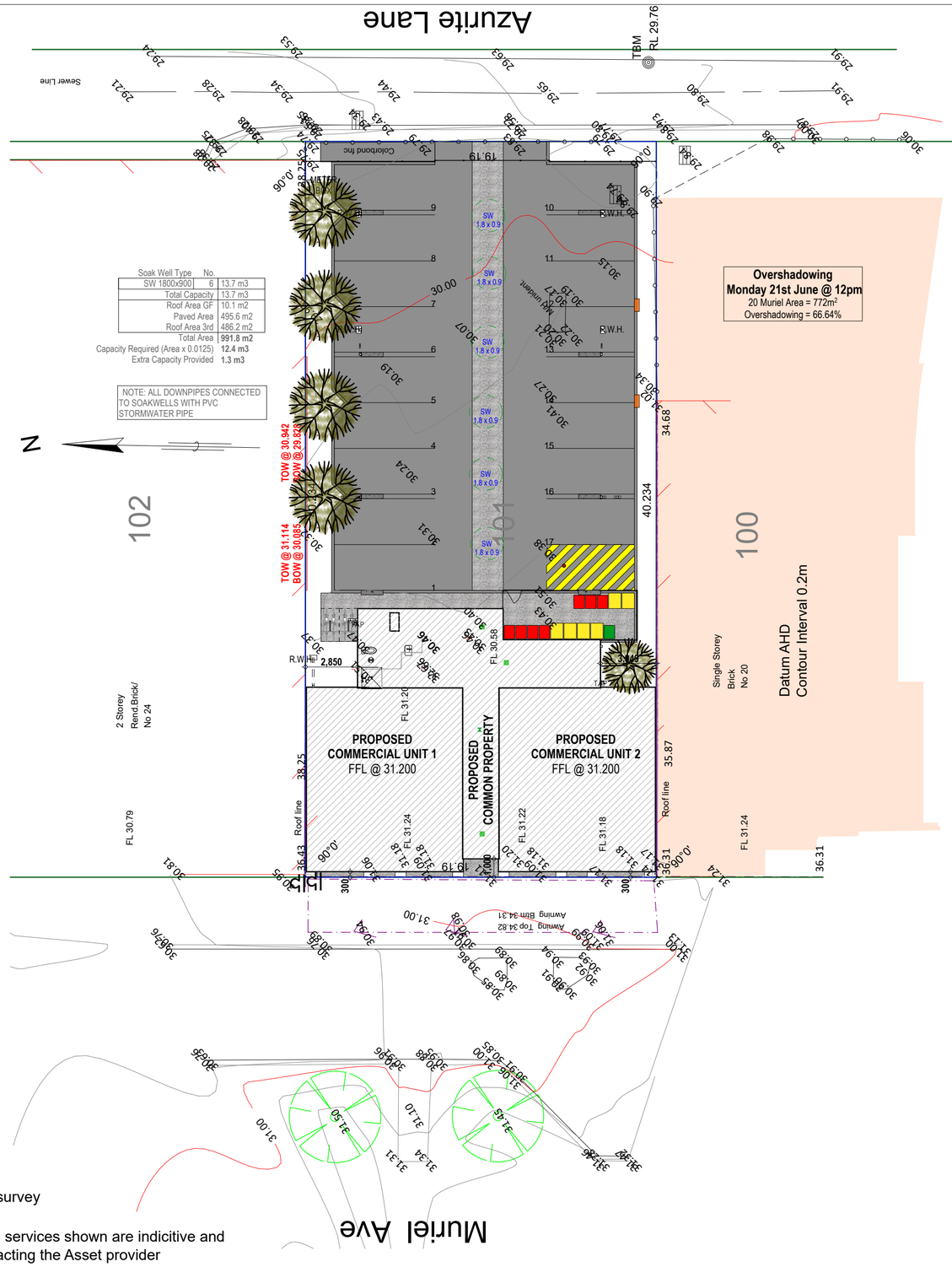
Key Features
- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

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Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Site Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
03 of 13

Scale 1:200 @ A3

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features
- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

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COMMERCIAL DEVELOPMENTS MURIEL ROAD



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RESIDENTIAL DEVELOPMENTS THRALL STREET



COMMERCIAL SHOPPING COMPLEX SCARBOROUGH BEACH RD

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Context Plan

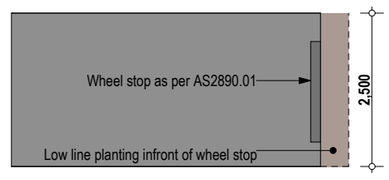
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
04 of 13

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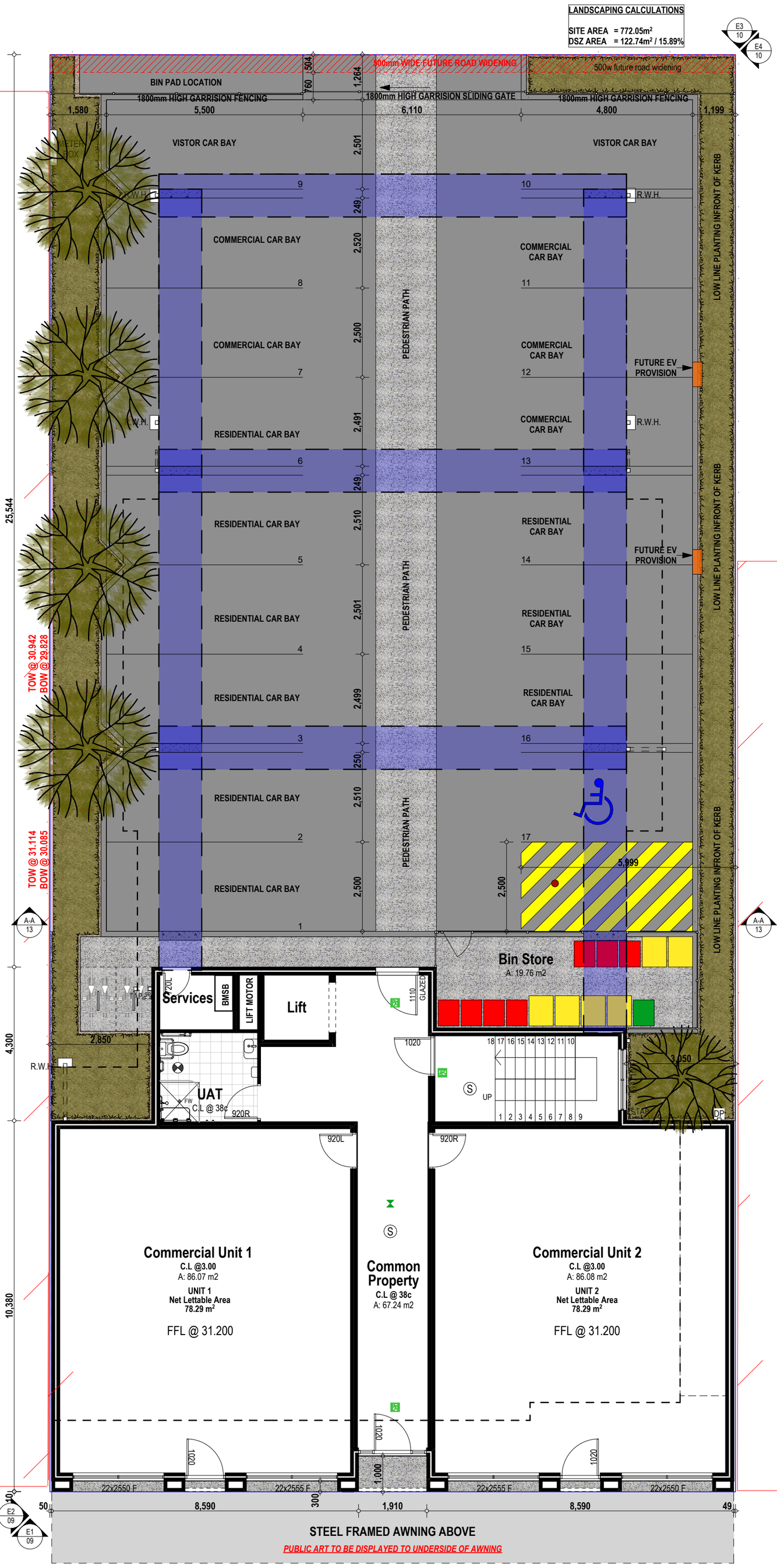
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Carbay Detail

LANDSCAPING CALCULATIONS

SITE AREA = 772.05m²
DSZ AREA = 122.74m² / 15.89%



PLOT RATIO

COMMERCIAL
Site Area: 772.05m²
Building Footprint: 172.36m²
22.32%

RESIDENTIAL
Site Area: 772.05m²
Building Footprint: 803.02m²
104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
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6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Ground Floor Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	7.00

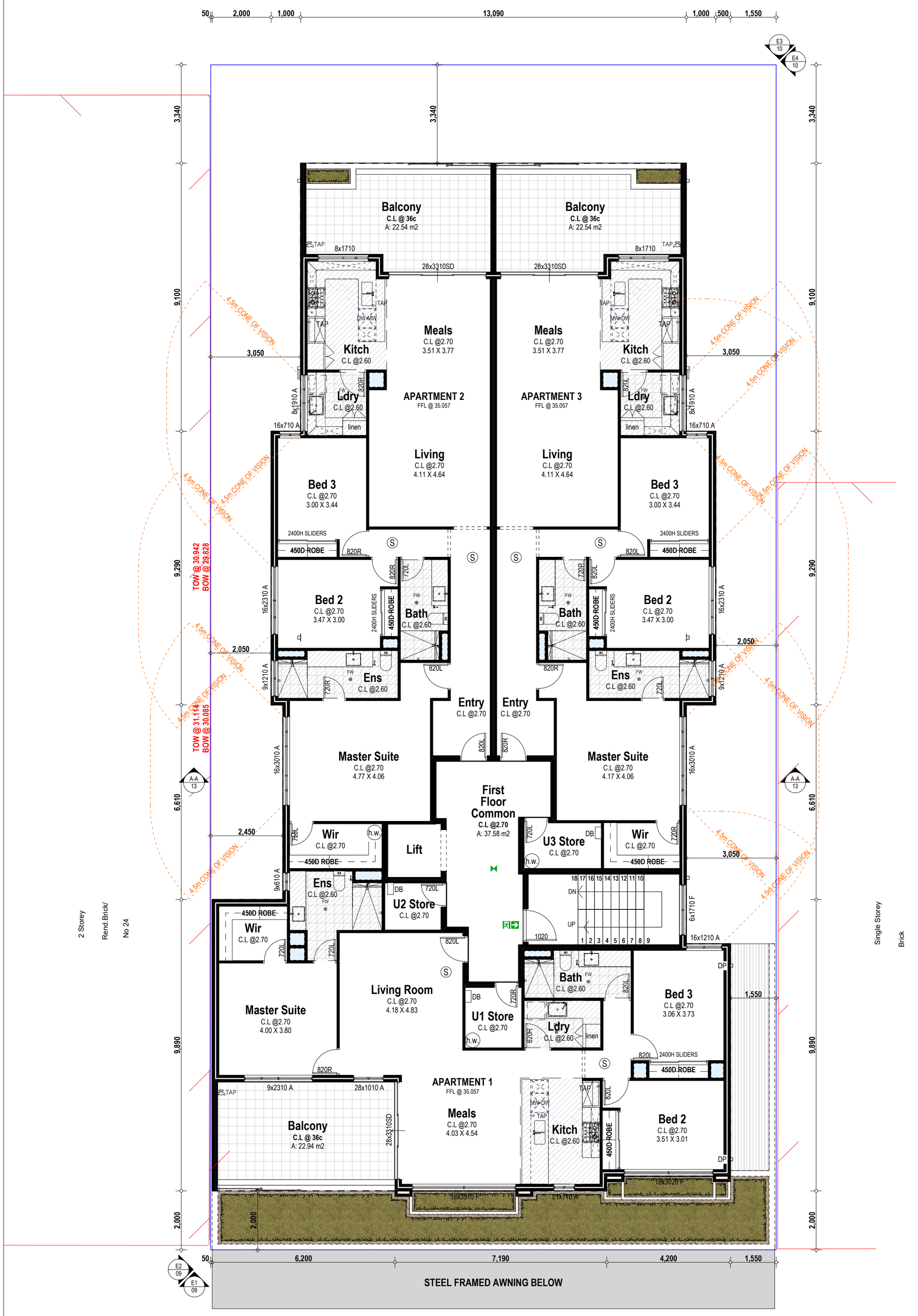
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Muriel Ave

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2 Storey
Rend.Brick/
No 24

Single Storey
Brick
No 20

PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
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Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
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Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
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Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
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Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

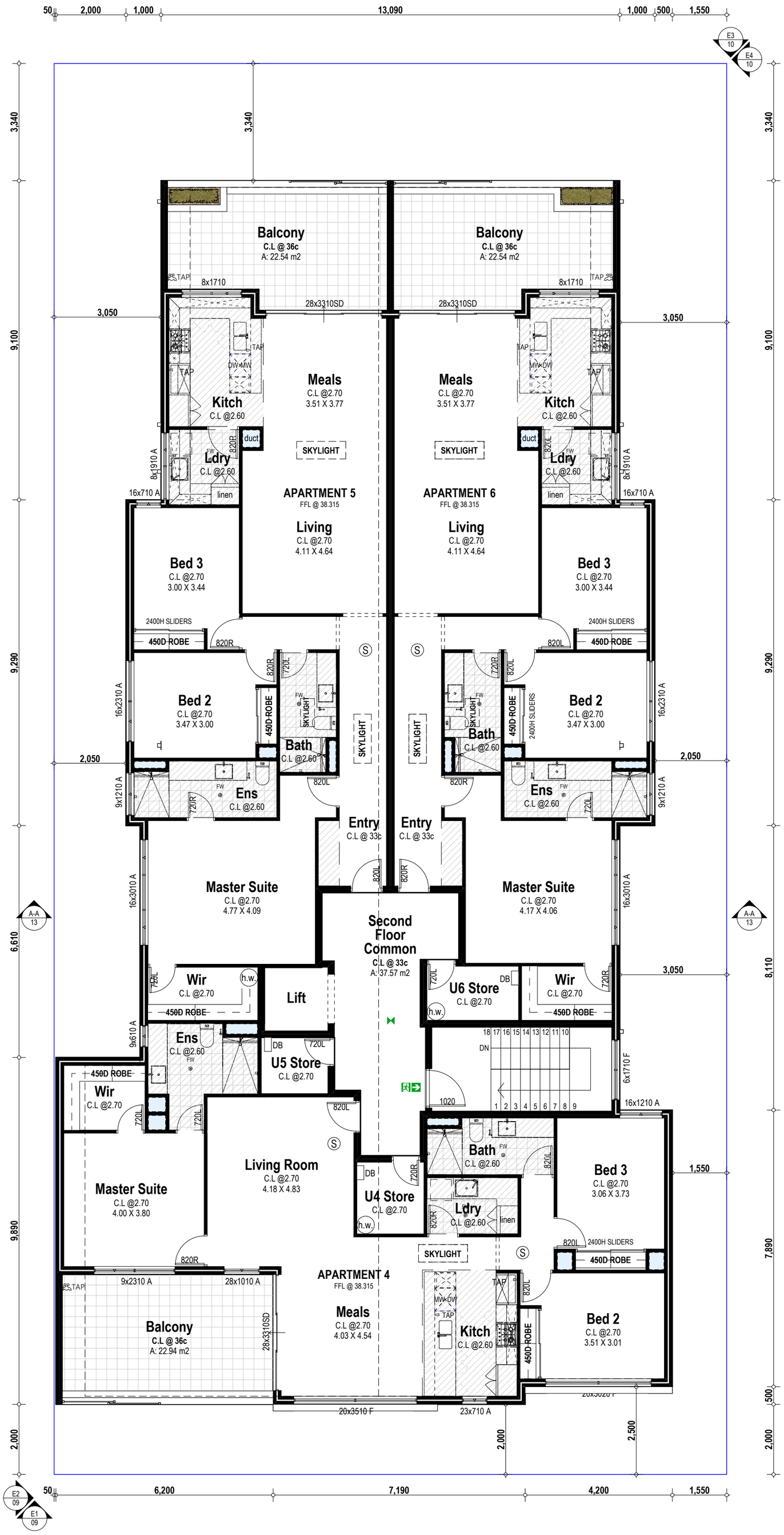
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23011	7.00

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PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
7.00	Development Approval	11.12.25
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Project Name
Apartment Complex

Project Address
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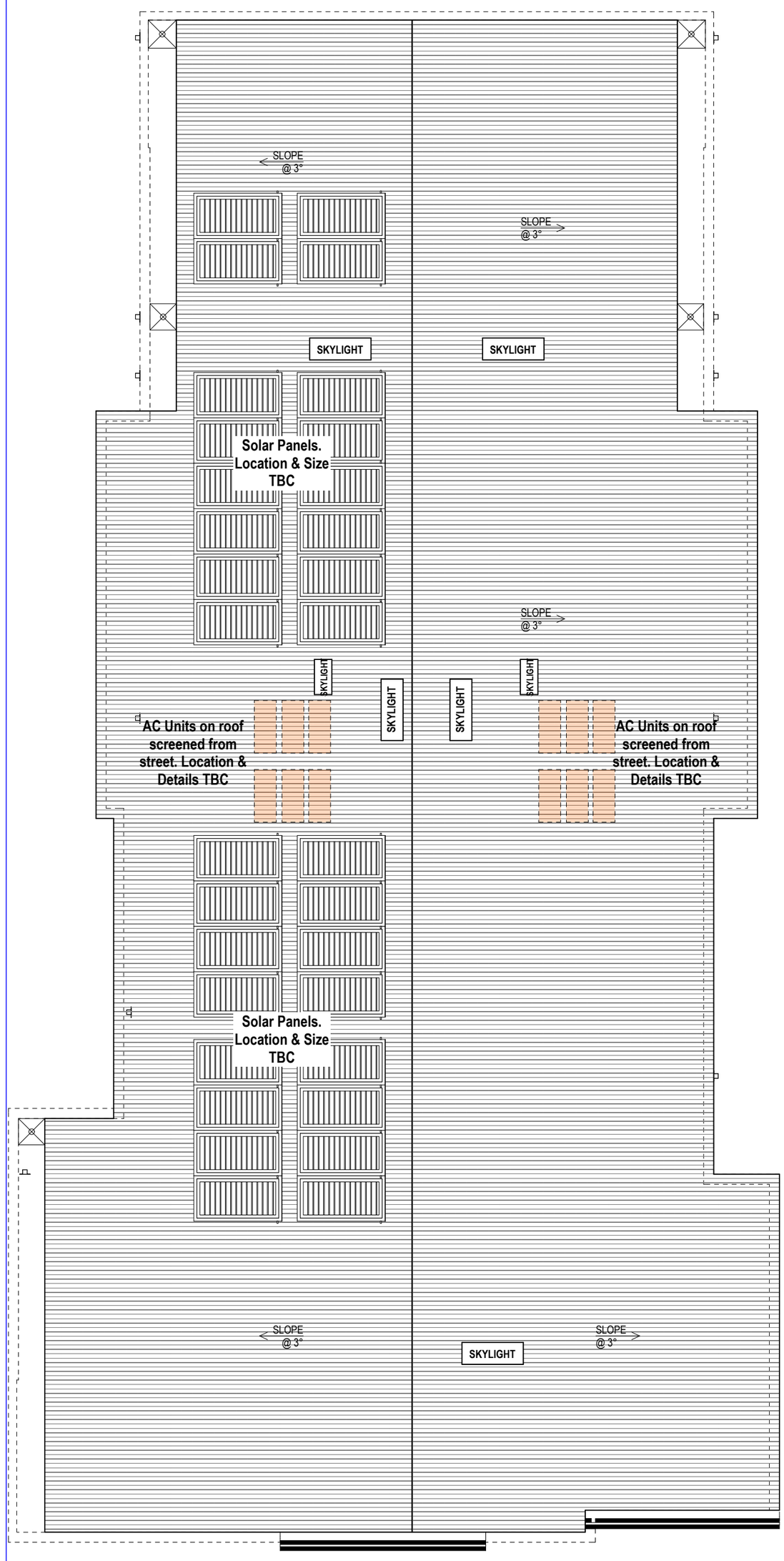
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Project Address
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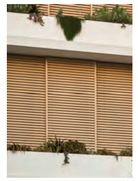
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Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

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KNOTWOOD ALUMIN SCREENING



DULUX RENDER MONUMENT

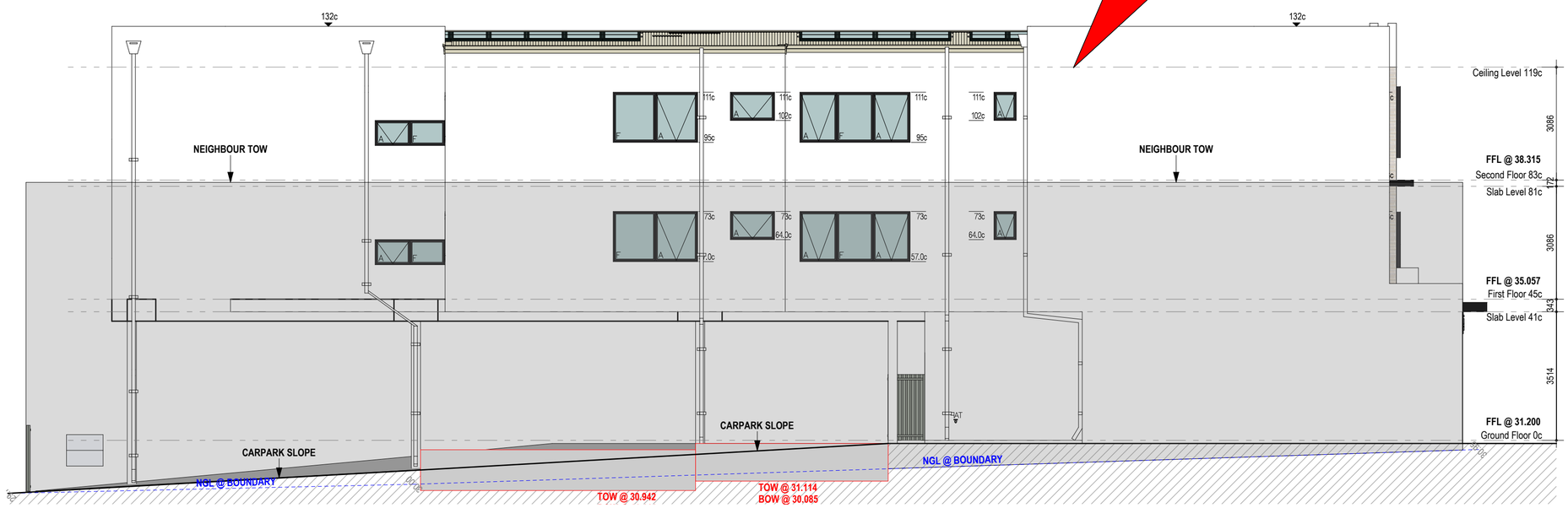
BOWRAL 76 SIMMENTAL SILVER





E1 West Elevation
1:100

DULUX RENDER VIVID WHITE



E2 North Elevation
1:100

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Project Address
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Drawing Title:
Elevations

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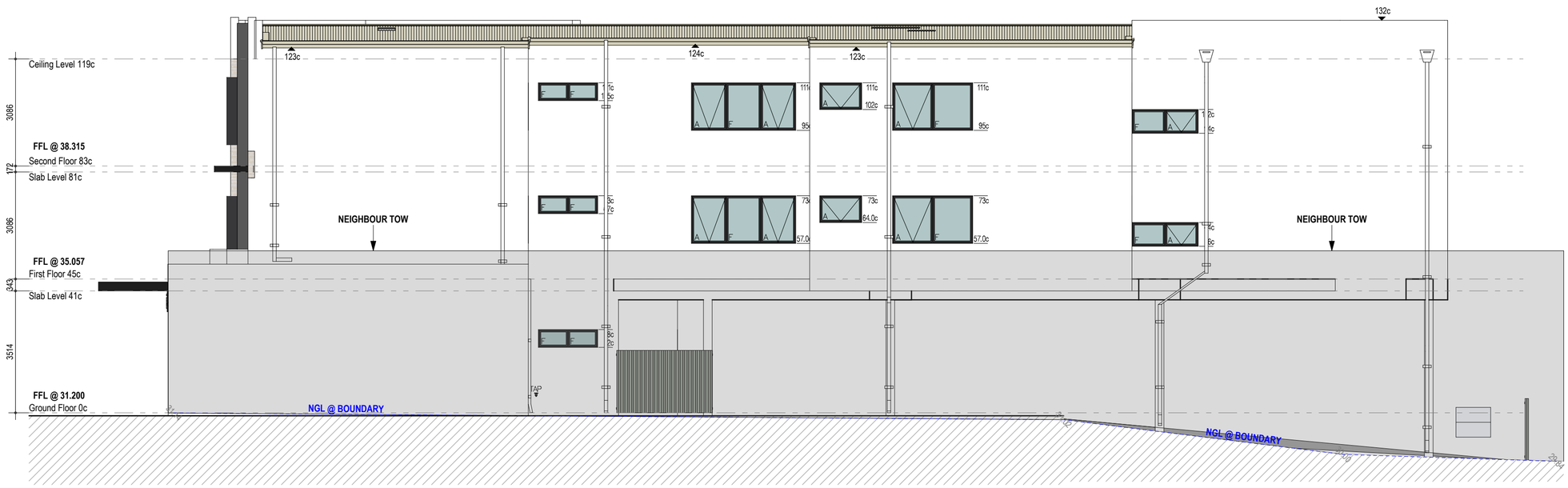
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E4 South Elevation
1:100

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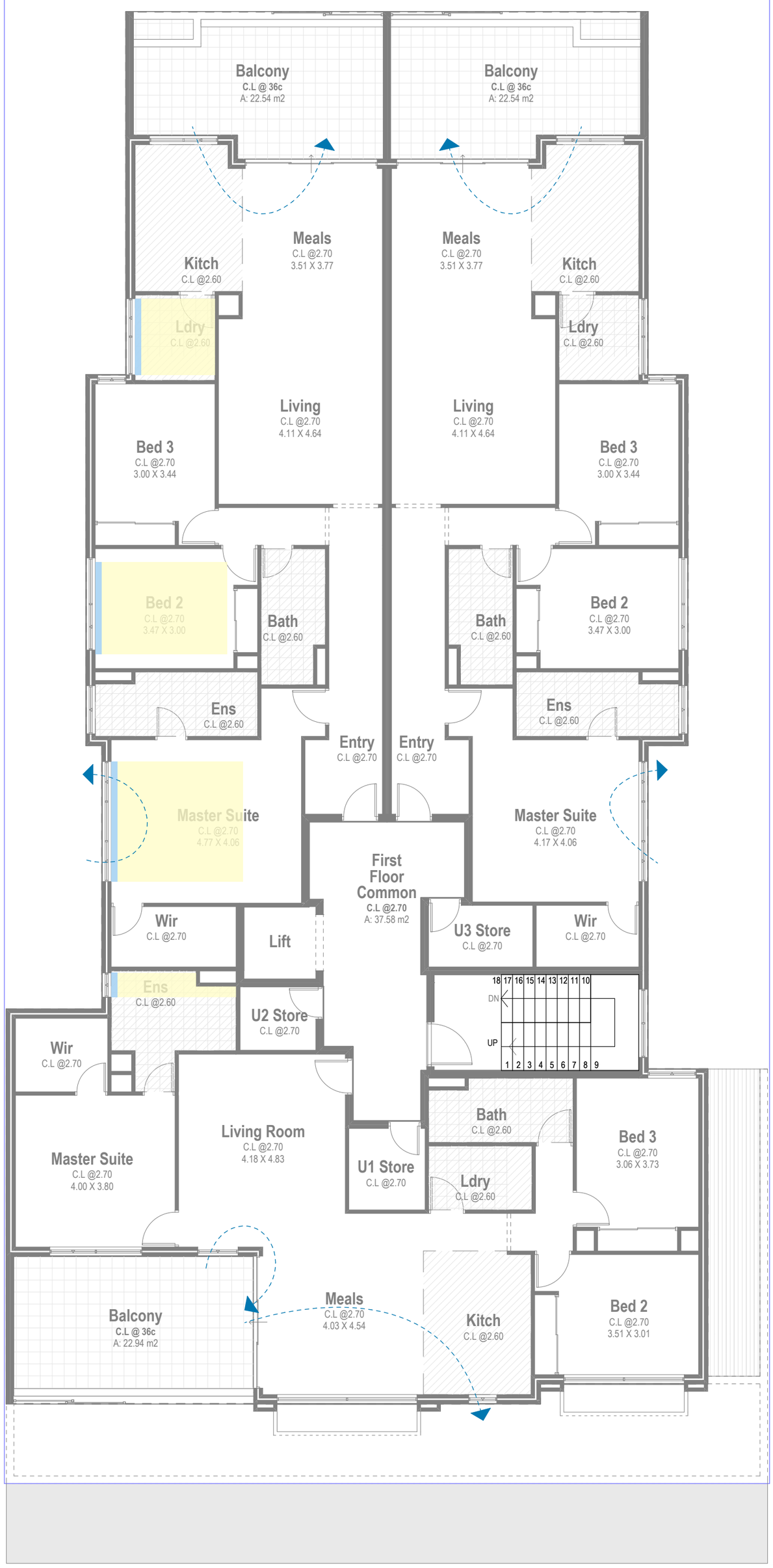
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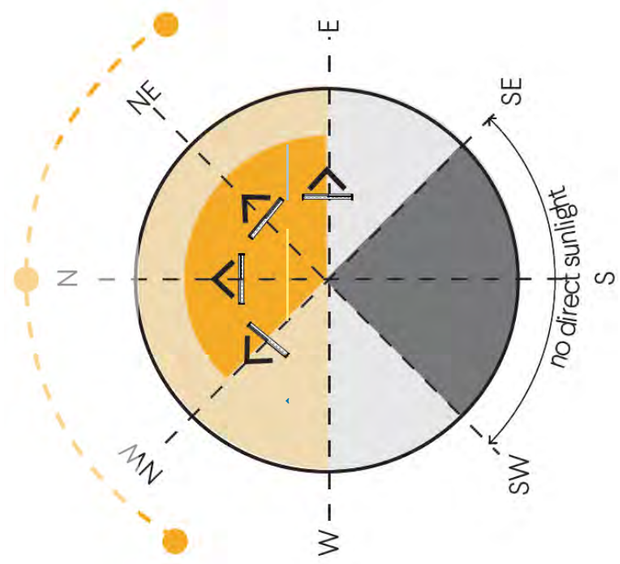
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SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH

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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
FF Solar Study

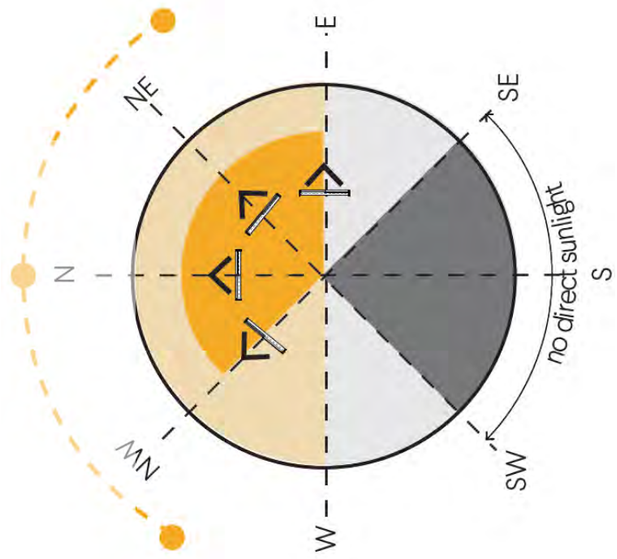
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11 of 13

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SUN DIAL

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SUMMER SUN @ 81.00°

BREEZE PATH



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Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
SF Solar Study

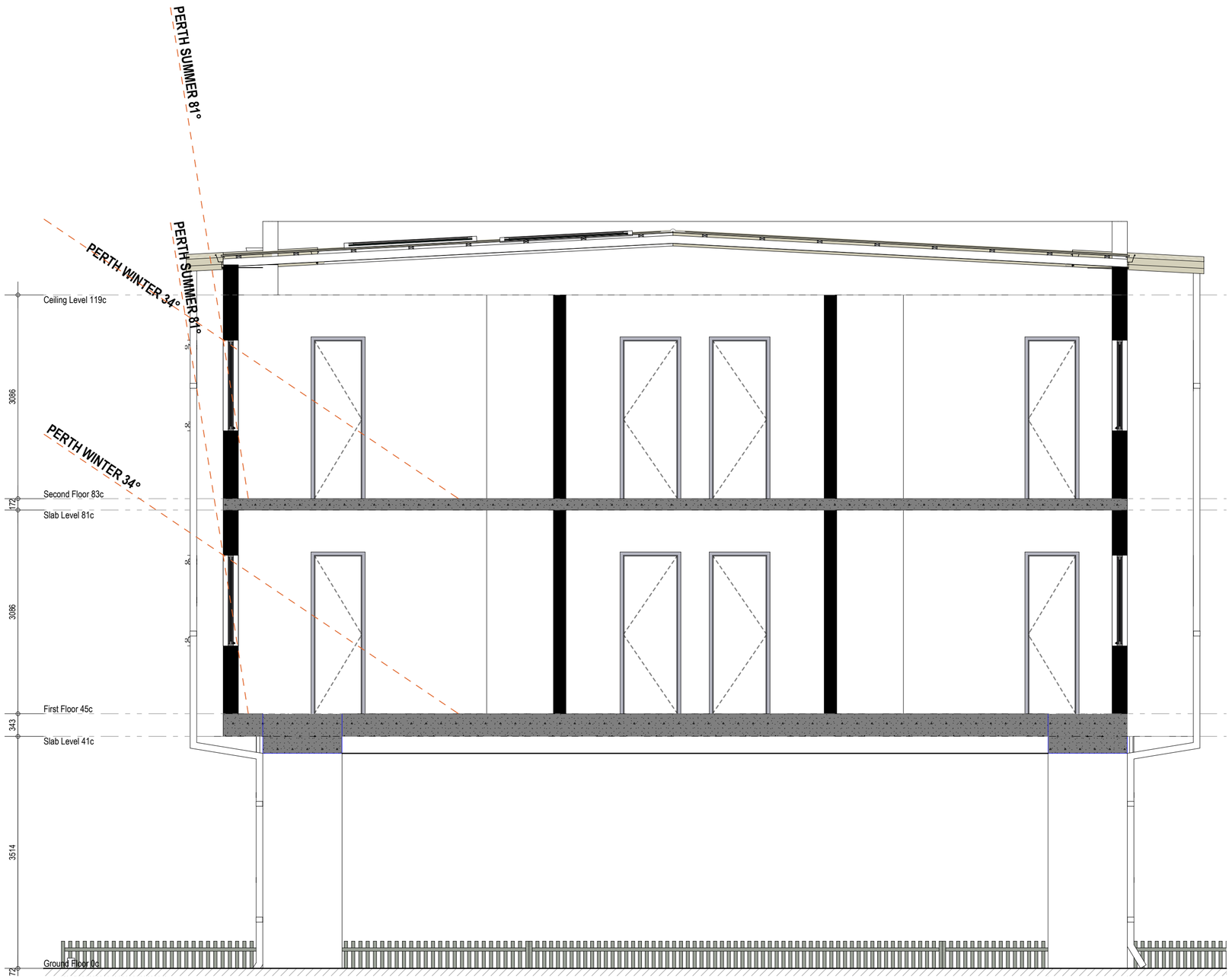
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Apartment Complex

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22 Muriel Ave INNALOO

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Section

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b) Acoustic Report, prepared by Herring Storer Acoustics (dated 18 December 2025, Rev 2).

GERMANO DESIGNS

22 MURIEL AVENUE
INNALOO

DEVELOPMENT APPLICATION - ACOUSTICS

OCTOBER 2025

OUR REFERENCE: 35486-2-25413

Rochdale Holdings Pty Ltd A.B.N. 85 009 049 067 trading as:
HERRING STORER ACOUSTICS
P.O. Box 219, Como, W.A. 6952
(08) 9367 6200
hsa@hsacoustics.com.au

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DEVELOPMENT APPLICATION - ACOUSTICS

22 MURIEL AVENUE
INNALOO

Job No: 25413
Document Reference: 35486-2-25413

FOR

GERMANO DESIGNS

DOCUMENT INFORMATION			
Author:	Geoff Harris	**Checked By:**	George Watts
Date of Issue:	23 October 2025		

REVISION HISTORY				
Revision	**Description**	**Date**	**Author**	**Checked**
1	Original Isse	23/10/25	GH	GW
2	Updated Plans	18/12/25	GH	GW

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APPENDICIES

A DRAWINGS

B EXTRACT OF PART F7 OF NCC

1.0 INTRODUCTION

Herring Storer Acoustics was commissioned to undertake a review of the proposed development of 22 Muriel Avenue, Innaloo with regards to compliance with Part F7 of the NCC.

Part F7 of the NCC details the requirements for sound transmission and insulation of residential type buildings.

2.0 CRITERIA

2.1 BCA PROVISIONS

For Class 1 buildings, the appropriate sections of Part F7 "Sound transmission and insulation" relating to the acoustic criteria are attached in Appendix B for information. Table 2.1 summarises the deemed to satisfy requirements of Part F7.

TABLE 2.1 – SUMMARY OF NCC REQUIREMENTS

Space of separation	Acoustic Rating	Discontinuous Construction Required
WALLS		
Wet to wet	$R_W + C_{tr}$ not less than 50 dB	NO
Living to living	$R_W + C_{tr}$ not less than 50 dB	NO
Wet to living	$R_W + C_{tr}$ not less than 50 dB	YES
Kitchens to living	$R_W + C_{tr}$ not less than 50 dB	YES
Unit to plantroom, stairway Public corridor / lobby or alike	R_W not less than 50 dB.	NO
Unit to Lift shaft	R_W not less than 50 dB.	YES
FLOORS		
Between Sole Occupancy Units	$R_W + C_{tr}$ not less than 50 dB.	N/A
	$L_{n,w}$ not more than 55 dB is recommended	N/A
SERVICE RISERS / STORM WATER DOWN PIPES		
to Habitable Rooms	$R_W + C_{tr}$ not less than 40 dB.	NO
to Non-Habitable Rooms	$R_W + C_{tr}$ not less than 25 dB	NO

Notes:

1 Where kitchens are part of an open living area, kitchens are considered to be part of the living area and in these cases discontinuous construction is required. This also includes cases where kitchens are back-to-back, however, discontinuous construction is only required on one side.

2 Wet area include bathrooms, ensuites, sanitary compartments/powder rooms, laundries and kitchens.

3 For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and—

(a) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and
(b) for other than masonry, there is no mechanical linkage between leaves except at the periphery.

2.2 ENVIRONMENTAL PROTECTION (NOISE) REGULATIONS 1997

The *Environmental Protection (Noise) Regulations 1997* stipulate the allowable noise levels at any noise sensitive premises from other premises. The allowable or assigned noise levels for noise sensitive premises are determined by the calculation of an influencing factor, which is added to the baseline criteria set out in Table 1 of the Regulations. The baseline assigned noise levels are listed in Table 3.1. For commercial premises, the allowable or assigned noise levels are the same for all hours of the day. Table 3.1 also lists the assigned noise levels for commercial premises.

TABLE 3.1 – ASSIGNED NOISE LEVELS

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		$L_{A\ 10}$	$L_{A\ 1}$	$L_{A\ max}$
Noise sensitive premises within 15 metres of a dwelling	0700 - 1900 hours Monday to Saturday	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	35 + IF	45 + IF	55 + IF

Note: The L_{A10} noise level is the noise that is exceeded for 10% of the time.
The L_{A1} noise level is the noise that is exceeded for 1% of the time.
The L_{Amax} noise level is the maximum noise level recorded.

It is a requirement that noise from the site be free of annoying characteristics (tonality, modulation and impulsiveness) at other premises, defined below as per Regulation 9.

"impulsiveness" means a variation in the emission of a noise where the difference between L_{Apeak} and $L_{Amax\ Slow}$ is more than 15dB when determined for a single representative event;

"modulation" means a variation in the emission of noise that –

(a) is more than 3dB $L_{A\ Fast}$ or is more than 3dB $L_{A\ Fast}$ in any one-third octave band;
(b) is present for more at least 10% of the representative assessment period; and
(c) is regular, cyclic and audible;

"tonality" means the presence in the noise emission of tonal characteristics where the difference between –

(a) the A-weighted sound pressure level in any one-third octave band; and
(b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands,

is greater than 3 dB when the sound pressure levels are determined as $L_{Aeq,T}$ levels where the time period T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as $L_{A\ Slow}$ levels.

Where the above characteristics are present and cannot be practicably removed, the following adjustments are made to the measured or predicted level at other premises.

TABLE 3.2 – ADJUSTMENTS FOR ANNOYING CHARACTERISTICS

Where tonality is present	Where modulation is present	Where impulsiveness is present
+ 5 dB	+ 5 dB	+ 10 dB

Figure 1 shows the development location and surrounds.



FIGURE 1 – AERIAL OF DEVELOPMENT LOCATION AND SURROUNDS

From a review of the development, the influencing factor for the premises identified in proximity to the development would be 4 dB, based on the following :

Minor Roads within inner circle;	
Odin Road	+ 2 dB
Scarborough Beach	+ 2 dB
Total IF	**+ 4 dB**

Hence the influencing factor would be + 4 dB and the assigned noise levels would be as listed in Table 3.3.

TABLE 3.3 - ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises within 15 metres of a dwelling	0700 - 1900 hours Monday to Saturday	49	59	69
	0900 - 1900 hours Sunday and Public Holidays	44	54	69
	1900 - 2200 hours all days	44	54	59
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	39	49	59

Note: L_{A10} is the noise level exceeded for 10% of the time.
L_{A1} is the noise level exceeded for 1% of the time.
L_{Amax} is the maximum noise level.

We note that noise emissions from the premises need to comply with the requirements of the *Environmental Protection (Noise) Regulations 1997*. This includes noise associated with mechanical services (ie air conditioning and ventilation systems).

2.3 NOISE INGRESS

Due to the location, the development does not fall under the trigger distance for State Planning Policy 5.4. Similarly, the surrounds are limited to small commercial tenancies and residential developments with minimal noise emissions.

3.0 WALL CONSTRUCTIONS

3.1 PARTY WALLS

Walls separating sole-occupancy units are required to provide an $R_w + C_{tr}$ rating of not less than 50 dB. In some areas, a discontinuous construction is required.

These walls are marked up on plans in Appendix A.

3.2 LIFT SHAFTS

Lift shafts walls are required to provide an R_w rating of not less than 50 dB and provide a discontinuous construction.

3.3 LOBBY, STAIRWELL AND STORE WALLS

Walls separating sole occupancy units from stairwells, lobbys/corridors and stores are required to provide an R_w rating of at least 50 dB.

3.4 RISER SHAFTS

Riser shafts are required to provide an R_w C_{tr} rating of not less than 40 dB if the adjacent room is a habitable room, or an R_w C_{tr} of not less than 25 dB if the adjacent room is a non-habitable area.

The riser shaft constructions are understood to be proposed to consist of 13mm thick plasterboard.

Where shafts are separated from wet areas, internally lined with 50mm thick 11kg/m^3 insulation (i.e. between the studs) - the construction is sufficient.

Where the riser shaft abuts habitable areas (including kitchens), to comply, the pipework located within the riser (assuming PVC piping) is to be wrapped with 25mm foam backed 5kg/m^2 loaded vinyl.

If quiet type pipe is used (e.g. Gerberit, Silenta or Raupiano Pipe), the wrapping detailed to habitable areas is not required.

Note: Access panels are not permitted in risers abutting habitable areas (including kitchens).

4.0 PROPOSED FLOOR CONSTRUCTION

Based on the information provided, it is understood that the floor construction would be a minimum of 200mm thick concrete, which complies with the airborne requirements of the NCC. This is sufficient for all vertical separation areas (i.e. apartment to apartment and apartment to commercial areas).

The NCC also calls for impact isolation and as previously discussed, it is recommended the $L_{n,w}$ of 55 be adopted. This can be achieved by either using:

- Carpet with underlay; or
- Install impact isolation layer under hard flooring.

Tiled / hard finished areas require additional treatment to meet the impact isolation requirement. This can be achieved with the use of impact isolation matting between the floor and tile / floorboard. There are several products available on the market. Evidence of acceptability should be provided, with testing in accordance with ISO 717.2.

The proposed construction is understood to consist of suspended ceiling.

Areas with a suspended ceiling below are likely to require a 5mm thick mat for hard floor finished areas.

It is noted that typically balconies do not require impact isolation treatment where they are not located above internal areas of apartments below. However, if located partially above internal areas of SOU's below, the criteria is required to be met. This includes the trafficable areas of the rooftop communal areas.

It is noted that the impact isolation criteria are not required to be met for apartments located above carparks, development facilities or commercial tenancies.

Note: To achieve compliance, it is important that the flooring does not breech the acoustic underlay and should not be installed up to and in contact with the walls and is to be installed as per the manufacture's recommendations / details.

4.1 TYPICAL FLOORING CONSTRUCTS

The following summarises the typical flooring constructs that would be considered to be required for the project. It is noted that the following is a general guide only, with the final selection dependent on the exact floor finish selection.

At the stage of final selection of matting/flooring finish, it is recommended that either data from the intended product manufacturer is attained confirming the level of isolation expected to be achieved, or testing be carried out on samples during construction to confirm the effectiveness.

It is noted that carpet has been removed from the summary as, with underlay, carpet will typically provide an $L_{n,W}$ rating in the order of 20 – 35 dB, hence, complying with all potential criteria for impact isolation. This is also applicable to carpet in corridors.

5.0 PROPOSED SOIL & WASTE PIPES CONSTRUCTION

No details regarding the proposed treatment of the pipes have been provided for apartment services at this preliminary stage, hence, the following is provided as a guide for acceptable constructions.

5.1 PIPEWORK ABOVE HABITABLE ROOMS

Quiet Type Pipe

No Penetrations in Ceiling

If the pipes used are "quiet type" pipe (e.g. Silenta or Raupiano Plus Pipe) and there are no penetrations in the ceilings/bulkheads for exhaust fans, down lights etc. and 50mm thick insulation is laid over the ceiling then only single wrapping of pipes using a minimum 12mm foam backed 4kg/m^2 loaded vinyl wrap is required.

Penetrations in Ceiling

If the ceiling contains penetrations, but with 50mm thick insulation laid over the ceiling, then pipes require to be wrapped with a minimum 25mm foam backed 5kg/m^2 loaded vinyl.

PVC Pipe

No Penetrations in Ceiling

If the pipes used are PVC and there are no penetrations in the ceilings/bulkheads for exhaust fans, down lights etc. and 50mm thick insulation is laid over the ceiling then wrapping of pipes using minimum 12mm foam backed 4kg/m^2 loaded vinyl wrap and an additional layer of 25mm foam backed 5kg/m^2 loaded vinyl is required.

Penetrations in Ceiling

If the ceiling contains penetrations, but with 50mm thick insulation laid over the ceiling, then pipes require to be wrapped with a minimum of two layers of 25mm foam backed 5kg/m^2 loaded vinyl.

5.2 PIPEWORK ABOVE WET AREAS

Quiet Type Pipe

No Penetrations In Ceiling

If the pipes used are quiet type pipe (e.g. Silenta or Raupiano Plus Pipe) and there are no penetrations in the bulkheads for exhaust fans, down lights etc. and 50mm thick insulation is laid over the ceiling then no further treatment is required.

Penetrations in Ceiling

If the ceiling contains penetrations and with 50mm thick insulation, pipes require minimum 12mm foam backed 4kg/m^2 loaded vinyl wrap.

PVC Pipe

No Penetrations in Ceiling

If PVC pipe is to be used and there are no penetrations, then compliance can be achieved using 75mm thick insulation laid over a 13mm thick plasterboard ceiling. If 50mm thick insulation is laid over a 10mm thick plasterboard ceiling, then pipework needs to be wrapped in 12mm foam backed 4kg/m2 loaded vinyl.

Penetrations in Ceiling

If the ceiling contains penetrations, then compliance can be achieved by laying 50mm thick insulation over a 10mm plasterboard ceiling and wrapping the pipework in 25mm foam backed 5kg/m^2 loaded vinyl.

6.0 GENERAL CONSTRUCTION COMMENTS

The following general construction comments are provided :

6.1 ELECTRICAL OUTLETS IN PARTY WALLS

The wall types proposed to be used are masonry and therefore where electrical outlets are located in party walls, they are not to be located back-to-back, but rather offset by a minimum of :

- 100mm from each other for masonry walls.

7.0 NOISE FROM DEVELOPMENT

The main source of noise from the proposed development will be from mechanical services consisting of air-conditioning plant. Noise received at neighbouring premises, and premises within the development, from these items need to comply with the assigned noise levels as determined under the *Environmental Protection (Noise) Regulations 1997*.

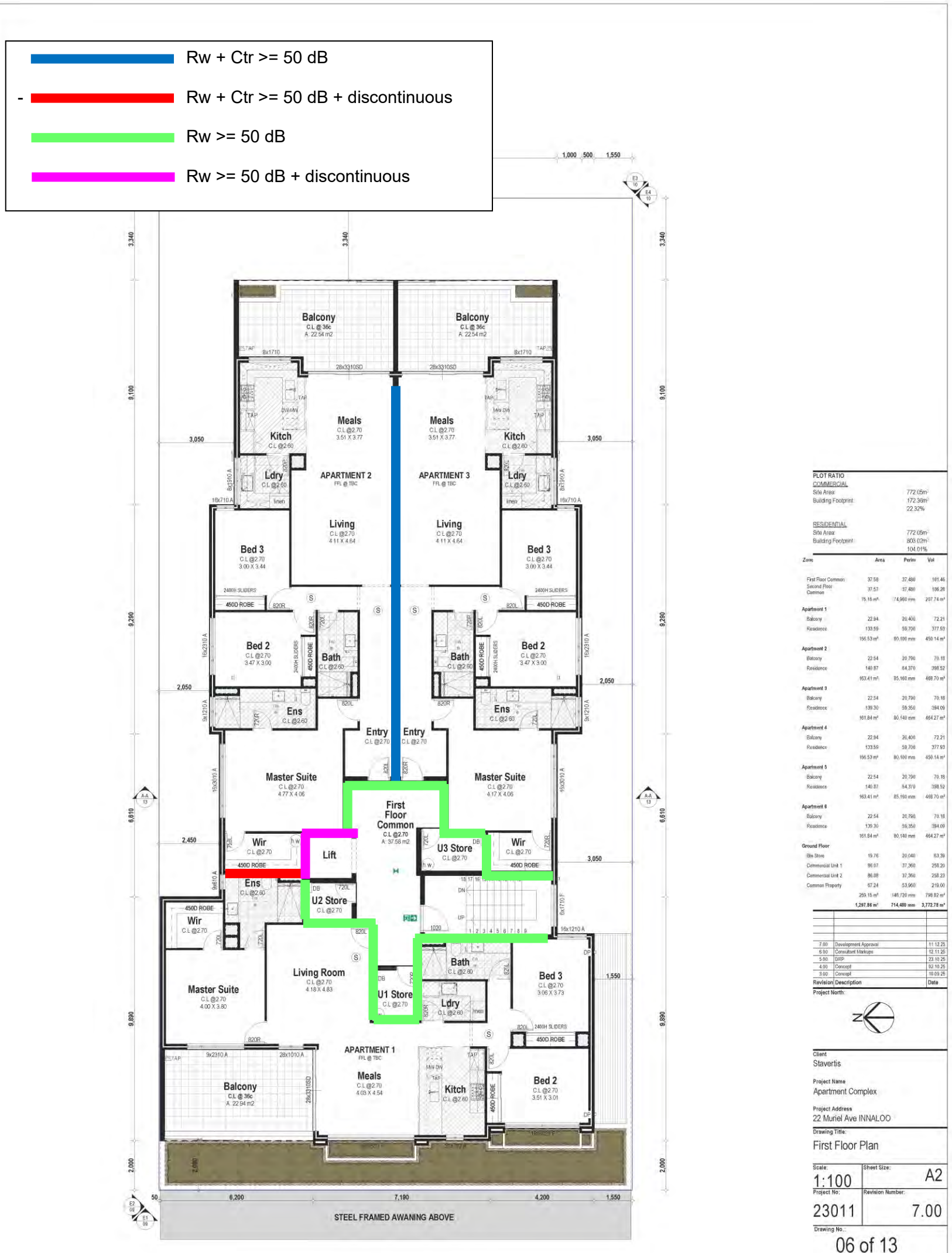
As the mechanical services could operate during the night, noise emissions from the development needs to comply with the assigned L_{A10} night period noise level of 43 dB(A) at residential premises. Potentially, noise emissions from mechanical services could be tonal, in which case an +5 dB(A) penalty for a tonal component could be applied to the resultant noise levels. Therefore, the design level at the neighbouring residential premises would be 38 L_{A10} dB.

The air conditioning for the units is not yet known. Once the design of the system is finalised, an acoustic assessment will be carried out of noise emissions from the mechanical plant and any noise amelioration required will be incorporated into the design to ensure compliance with the *Environmental Protection (Noise) Regulations 1997*.

From experience, we believe that compliance with the above criteria for the night period would be achievable, however, some noise mitigation is likely to be required.

APPENDIX A

Drawings



PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37.480	101.46
Second Floor Common	37.57	37.480	106.28
	75.15 m²	74.960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20.400	72.21
Residence	133.59	59.700	377.93
	156.53 m²	80.100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20.790	70.18
Residence	140.87	64.370	398.52
	163.41 m²	85.160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20.790	70.18
Residence	139.30	59.350	394.09
	161.84 m²	80.140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20.400	72.21
Residence	133.59	59.700	377.93
	156.53 m²	80.100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20.790	70.18
Residence	140.87	64.370	398.52
	163.41 m²	85.160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20.790	70.18
Residence	139.30	59.350	394.09
	161.84 m²	80.140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20.040	63.39
Commercial Unit 1	86.67	37.360	258.20
Commercial Unit 2	86.88	37.360	258.23
Common Property	67.24	53.960	219.00
	259.15 m²	148.720 mm	798.82 m³
	1,297.86 m²	714.480 mm	3,772.78 m³

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	19.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

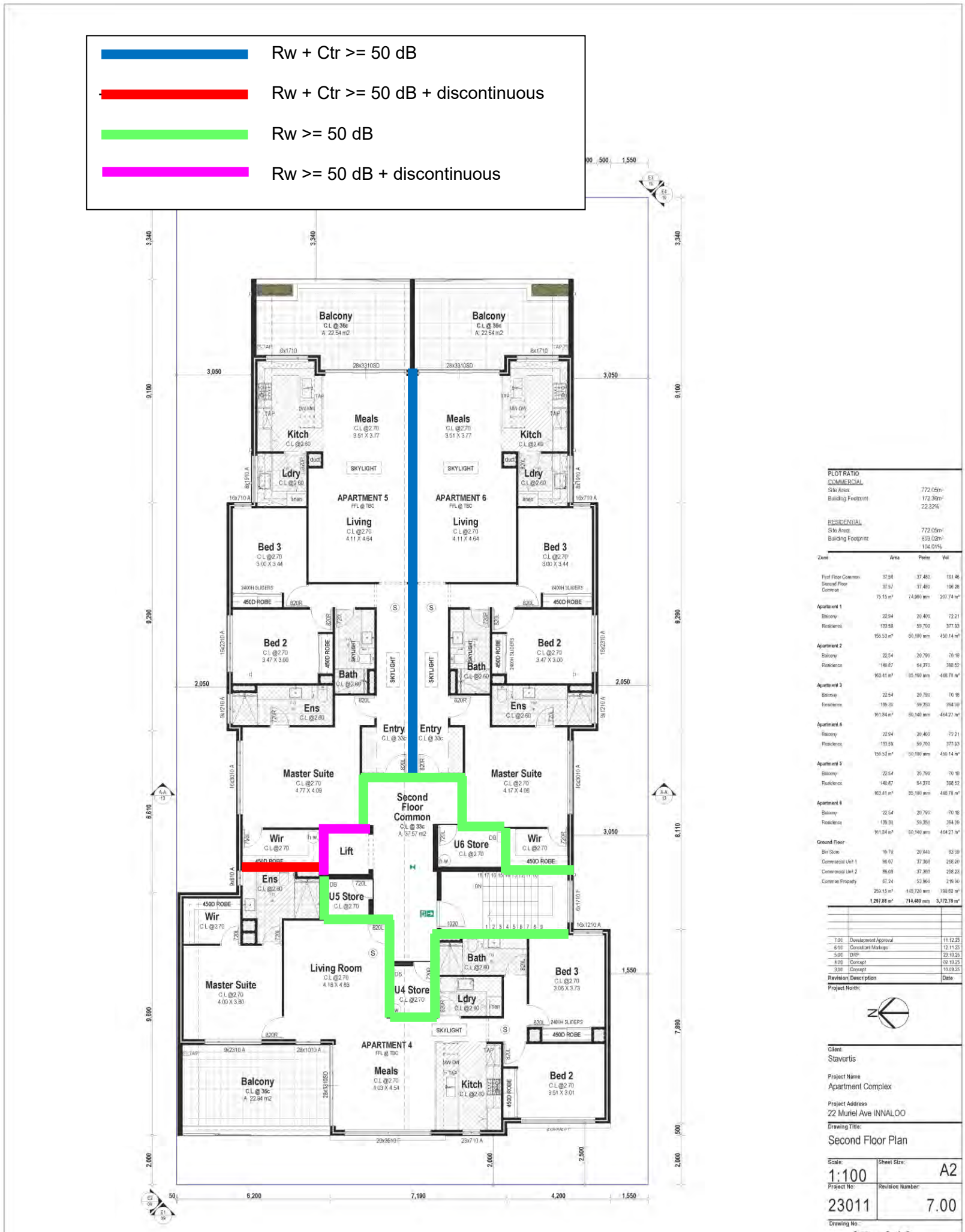
Drawing Title:
First Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	Revision Number:
23011	7.00

Drawing No.:
06 of 13

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PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
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	104.01%

Zone	Area	Perim	Vol
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Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
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	156.53 m²	80,100 mm	450.14 m³
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Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.38
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.03	37,360	258.23
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	259.15 m²	148,720 mm	798.82 m³
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Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client:
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Second Floor Plan

Scale:	Sheet Size:
1:100	A2
Project No:	Revision Number:
23011	7.00

Drawing No.:
07 of 13

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APPENDIX B

Extract of NCC

WALLS

F7D6 Sound insulation rating of walls

(1) A wall in a Class 2 or 3 building must—(a)have an $R_w + C_{tr}$ (airborne) not less than 50, if it separates sole-occupancy units; and

(b) have an R_w (airborne) not less than 50, if it separates a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification; and

(c) comply with F7D4(2) if it separates—

(i) a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit; or

(ii) a sole-occupancy unit from a plant room or lift shaft.

(2) A door may be incorporated in a wall in a Class 2 or 3 building that separates a sole-occupancy unit from a stairway,public corridor, public lobby or the like, provided the door assembly has an R_w not less than 30.

(3) A wall in a Class 9c building must have an R_w not less than 45 if it separates—

(a) sole-occupancy units; or
(b) a sole-occupancy unit from a kitchen, bathroom, sanitary compartment (not being an associated ensuite), laundry, plant room or utilities room.

(4) In addition to (3), a wall separating a sole-occupancy unit in a Class 9c building from a kitchen or laundry must comply with F7D4(2).

(5) Where a wall required to have sound insulation has a floor above, the wall must continue to—

(a) the underside of the floor above; or
(b) a ceiling that provides the sound insulation required for the wall.

(6) Where a wall required to have sound insulation has a roof above, the wall must continue to—

(a) the underside of the roof above; or
(b) a ceiling that provides the sound insulation required for the wall.

F7D4 Determination of impact sound insulation ratings

(1) A floor in a building required to have an impact sound insulation rating must—

(a) have the required value for weighted normalised impact sound pressure level ($L_{n,w}$) determined in accordance with AS ISO 717.2 using results from laboratory measurements; or
(b) comply with Specification 28.

(2) A wall in a building required to have an impact sound insulation rating must—

(a) for a Class 2 or 3 building be of discontinuous construction and
(b) for a Class 9c building, must—
(i) for other than masonry, be two or more separate leaves without rigid mechanical connection except at the periphery; or
(ii) be identical with a prototype that is no less resistant to the transmission of impact sound when tested in accordance with Specification 29 than a wall listed in S28C4 to S28C7.

(3) For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2separate leaves, and—

(a) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and
(b) for other than masonry, there is no mechanical linkage between leaves except at the periphery.

FLOORS

F7D5 Sound insulation rating of floors

(1) A floor in a Class 2 or 3 building must have an $R_w + C_{tr}$ (airborne) not less than 50 and an $L_{n,w}$ (impact) not more than62 if it separates—

(a) sole-occupancy units; or
(b) a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification.

As recommended by the Association of Australian Acoustical Consultants, the design objective of an $L_{n,w}$ of 55 is recommended to be utilised for impact isolation between floors of apartments.

SOIL & WASTE PIPES

F7D7 Sound insulation rating of internal services

(1) If a duct or soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any sole-occupancy unit by construction with an R_w + Ctr (airborne) not less than—

(a) 40 if the adjacent room is a habitable room (other than a kitchen); or
(b) 25 if the adjacent room is a kitchen or non-habitable room.

(2) If a stormwater pipe passes through a sole-occupancy unit, it must be separated in accordance with (1)(a) and (b).

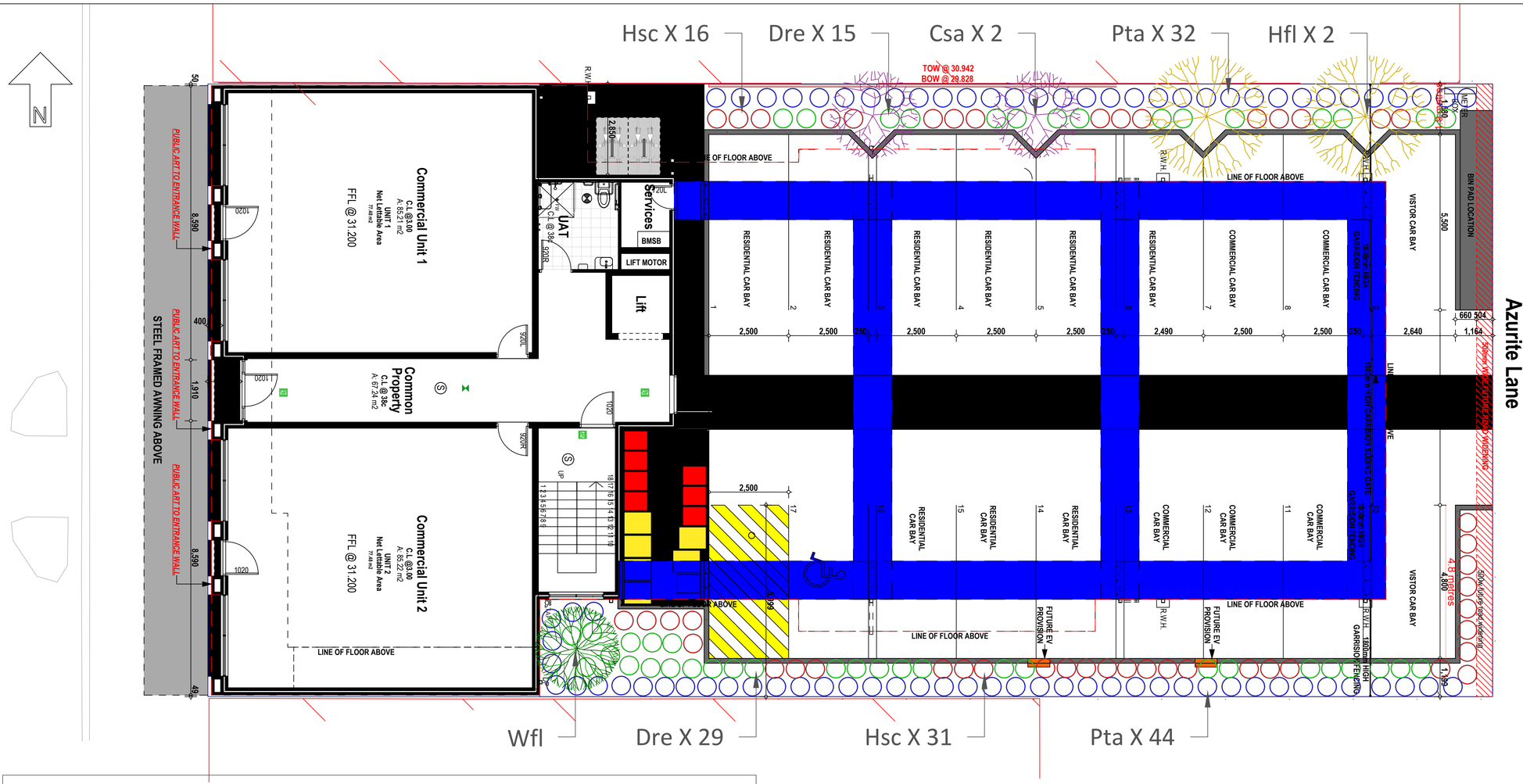
PUMPS

F7D8 Sound isolation of pumps

A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.

DOCUMENT END

c) Landscaping Plan, prepared by Childscapes (dated 30 March 2026, Rev. 1)



TREES:



CAMELLIA SASANQUA



WATERHOUSEA FLORIBUNDA 'GREEN AVENUE'



HYMENOSPORUM FLAVUM

PLANT SCHEDULE

	SPECIES	SPACINGS	SIZE CAT.	MATURE SIZE	SHADE TOL.	QTS
			TREE			
Wfl	WATERHOUSEA FLORIBUNDA 'GREEN AVENUE'	AS SHOWN	MEDIUM	8M Height 5M Canopy	HIGH	1
Hfl	HYMENOSPORUM FLAVUM	AS SHOWN	MEDIUM	8M Height 4M Canopy	MEDIUM	2
Csa	CAMELLIA SASANQUA	AS SHOWN	SMALL	4M Height 3M Canopy	HIGH	2
			SHRUBS			
Hsc	HIBBERTIA SCANDENS	600 MM	140 MM	1 M	HIGH	44
Dre	DIANELLA REVOLUTA	600 MM	140 MM	1 M	HIGH	47
Pte	PITTOSPORUM TENUIFOLIUM 'GOLF BALL'	600 MM	140 MM	1.2 M	MEDIUM-HIGH	76

SHRUBS:



DIANELLA REVOLUTA



PITTOSPORUM TENUIFOLIUM 'GOLF BALL'



HIBBERTIA SCANDENS

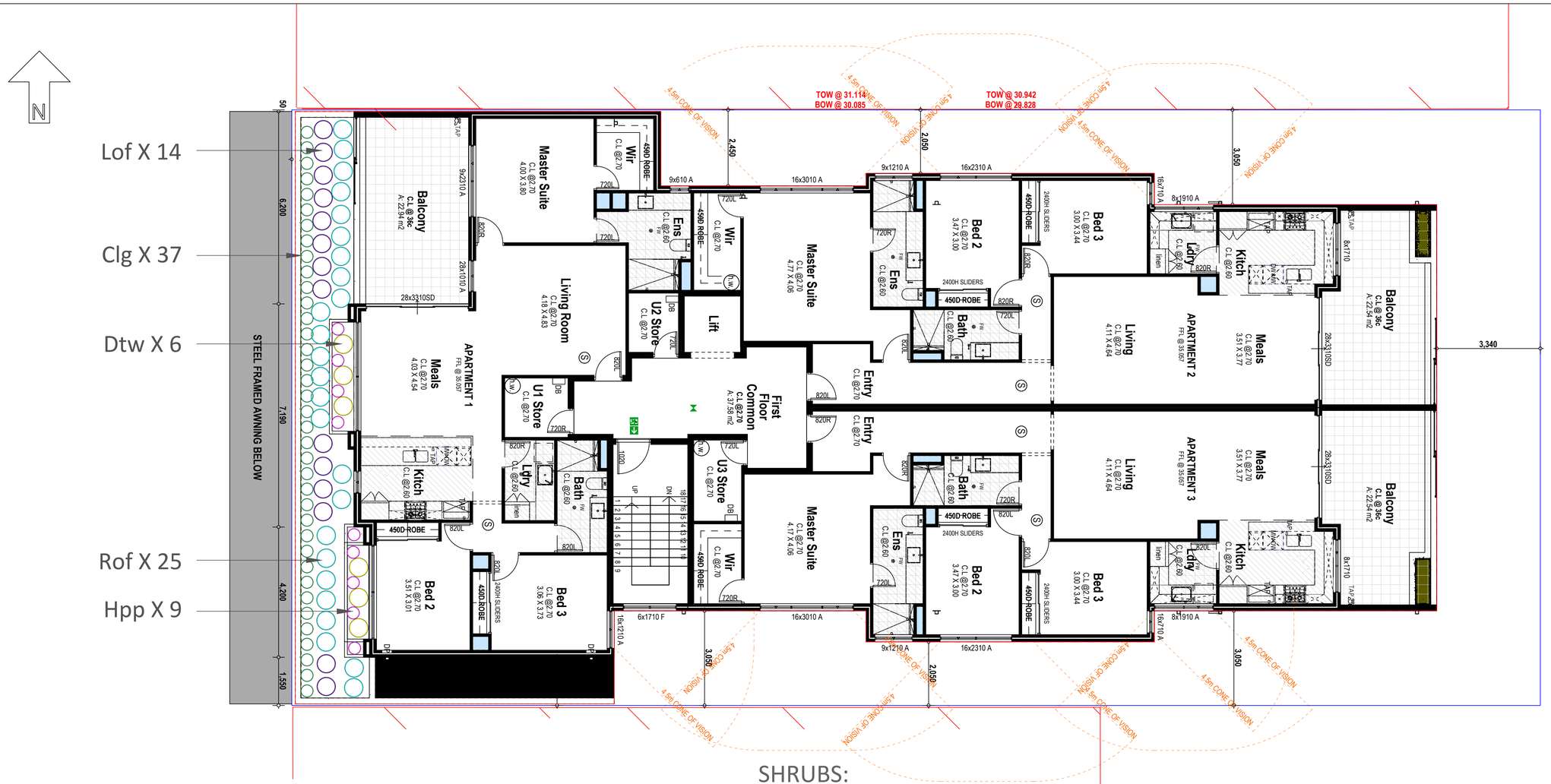
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e-mail: admin@childscapes.com.au
web: childscapes.com.au

PROJECT	DRAWING	ISSUE
22 MURIEL AVE	CAR PARK PLANITNG PLAN	ISSUED FOR FEEDBACK

CLIENT	DRAWING N0	SCALE	SHEET	REVISION	DRAWN	DATE
-	L-01	1:75	A1	1	NK	30/03/26

REVISIONS

No	DATE	DRAWN	DETAILS
0	24/10/25	NK	CAR PARK PLANTING- ISSUED FOR FEEDBACK
1	30/03/26	NK	CAR PARK PLANTING- ISSUED FOR FEEDBACK





LAVANDULA OFFICINALIS



ROSEMARY OFFICINALIS

SHRUBS:

PLANT SCHEDULE					
	SPECIES	SPACINGS	SIZE	MATURE SIZE	QTS
SHRUBS					
Hpp	HEMIANDRA PUNGENS PURPUREA	600 MM	140 MM	1 M	9
Dtw	DIANELLA TASMANICA 'Wyeena'	600 MM	140 MM	0.8 M	6
Cgl	CASUARINA GLAUCA 'Prostrate'	600 MM	140 MM	0.6 M	37
Lof	LAVANDULA OFFICINALIS	600 MM	140 MM	1 M	14
Rof	ROSEMARY OFFICINALIS	600 MM	140 MM	1.5 M	25



HEMIANDRA PUNGENS PURPUREA



CASUARINA GLAUCA



DIANELLA TASMANICA

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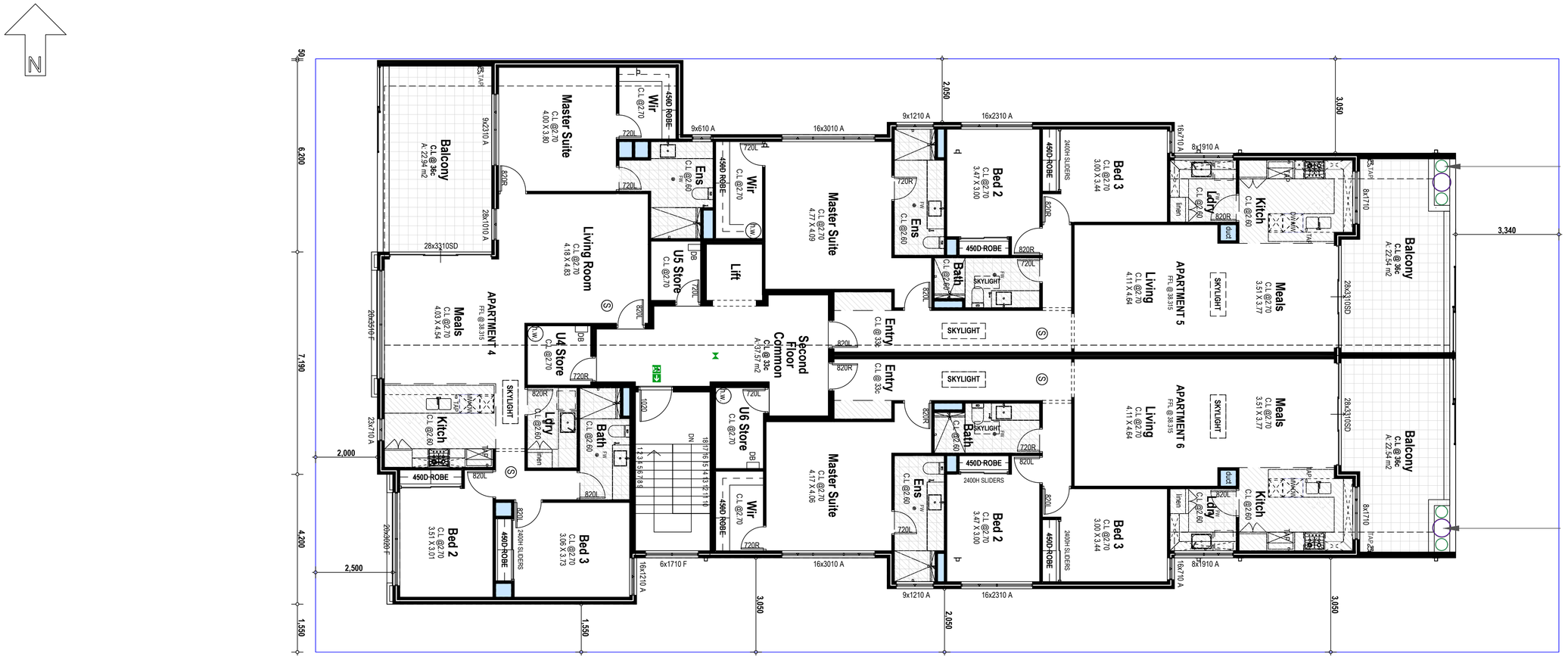
P.O. Box 774
e-mail: admin@childscapes.com.au
web: childscapes.com.au

PROJECT	DRAWING	ISSUE
22 MURIEL AVE	PLANITNG PLAN (first floor)	ISSUED FOR FEEDBACK

CLIENT	DRAWING N0	SCALE	SHEET	REVISION	DRAWN	DATE
-	L-02	1:75	A1	1	NK	30/03/26

REVISIONS

No	DATE	DRAWN	DETAILS
0	24/10/25	NK	PLANTING- ISSUED FOR FEEDBACK
1	30/03/26	NK	PLANTING- ISSUED FOR FEEDBACK



SHRUBS:

PLANT SCHEDULE					
	SPECIES	SPACINGS	SIZE	MATURE SIZE	QTS
SHRUBS					
Cgl	CASUARINA GLAUCA 'Prostrate'	600 MM	140 MM	0.6 M	4
Lof	LAVANDULA OFFICINALIS	600 MM	140 MM	1 M	2



CASUARINA GLAUCA



LAVANDULA OFFICINALIS

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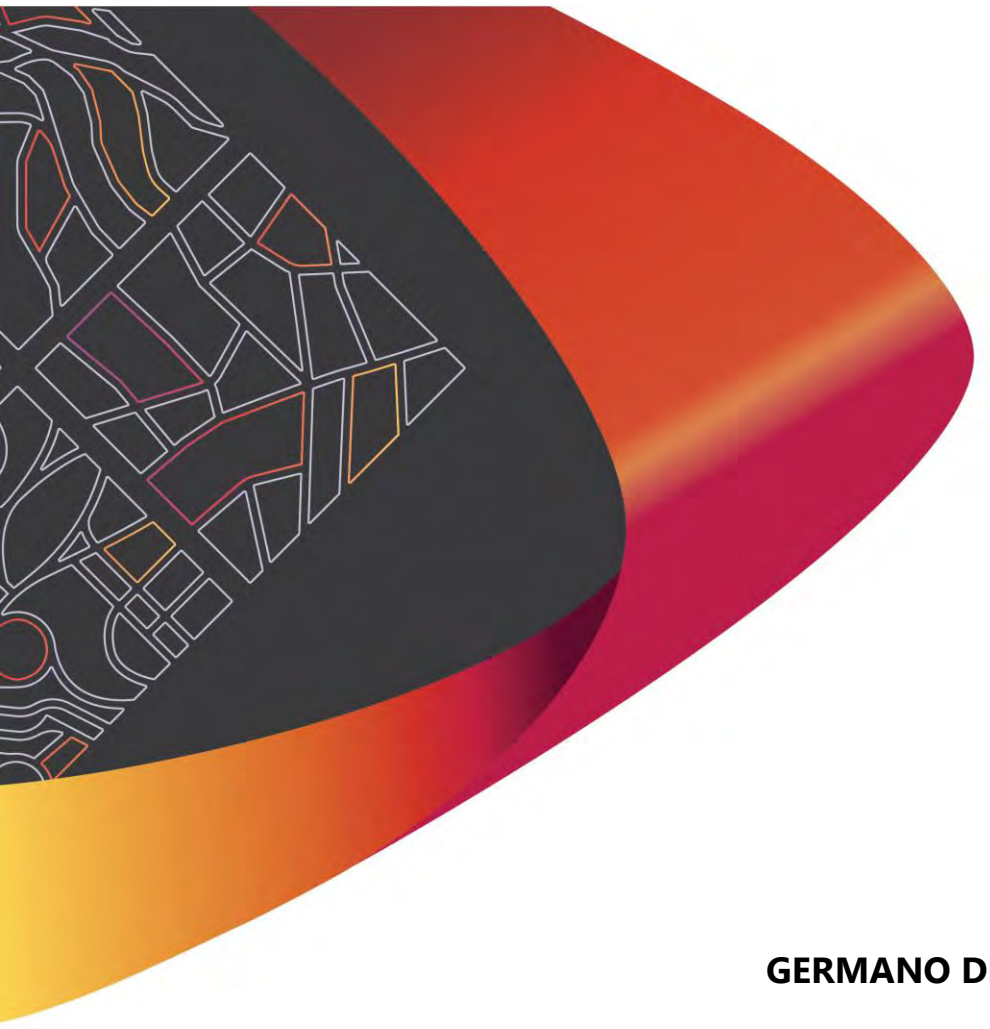
PROJECT	DRAWING	ISSUE
22 MURIEL AVE	PLANITNG PLAN (second floor)	ISSUED FOR FEEDBACK

CLIENT	DRAWING N0	SCALE	SHEET	REVISION	DRAWN	DATE
-	L-03	1:75	A1	0	NK	30/03/26

REVISIONS

No	DATE	DRAWN	DETAILS
0	30/03/26	NK	PLANTING- ISSUED FOR FEEDBACK

d) Tranport Impact Statement prepared by Premise (dated 16 December 2025, Rev. B)



GERMANO DESIGNS

22 Muriel Avenue, Innaloo

TRANSPORT IMPACT STATEMENT

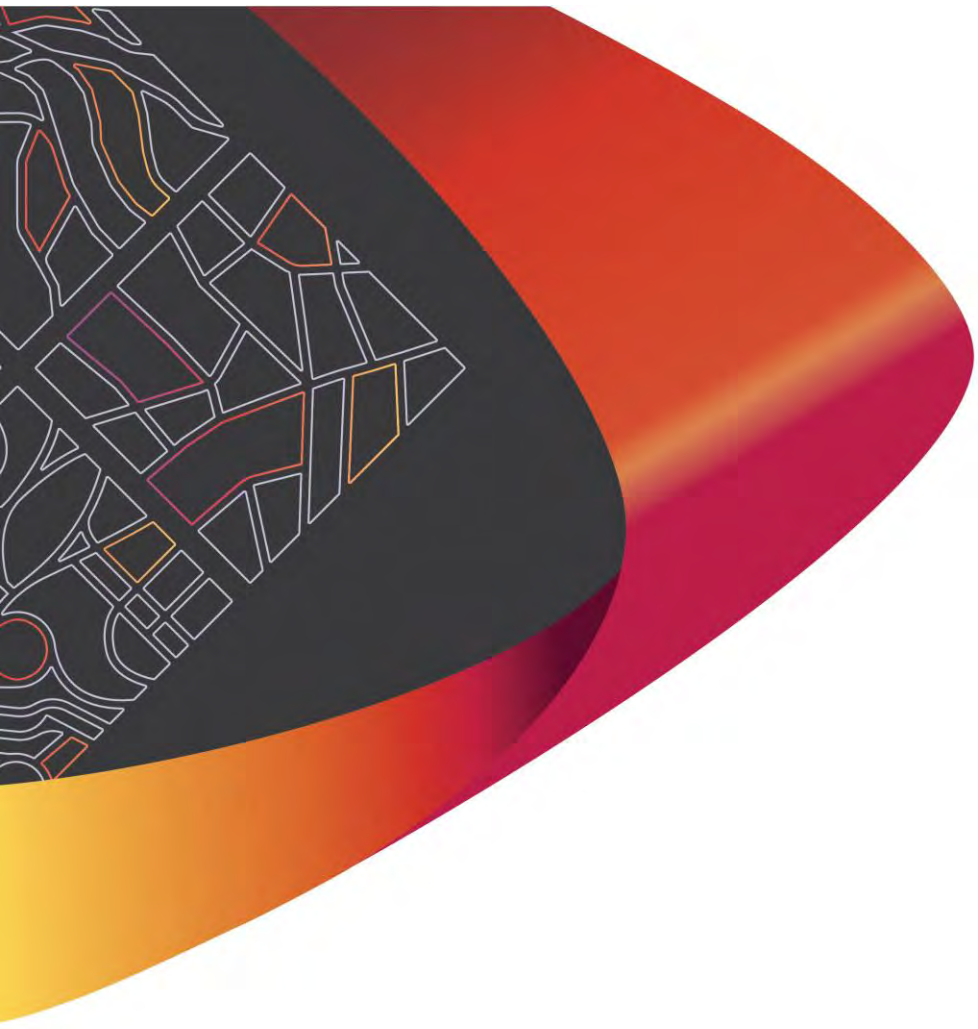
Job No: P004157

Rev B

16 December 2025

Premise

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DOCUMENT AUTHORISATION					
Revision	**Revision Date**	**Proposal Details**			
Rev A Draft	11/11/25	Issued for Review			
Rev A	18/11/25	Updated plans			
Rev B	16/12/25	Updated plans			
Prepared By		**Reviewed By**		**Authorised By**	
Abel Tan Jelena Simic		Jelena Simic		Marina Kleyweg	

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1. EXECUTIVE SUMMARY

Site Context

- The project location is 22 Muriel Avenue, Innaloo on previously developed land.
- The proposed development consists of two commercial developments and 6 residential dwellings as part of a mixed-use development.
- The site is fronted by Muriel Avenue to the west and Azurite Lane to the east.
- The proposed access point to the site is on the Azurite Lane.

Technical Findings

- The proposed development will generate up to 103 vehicular trips per day; 7 vehicular trips per hour in AM and 11 vehicular trips per hour in PM peak.
- According to the WAPC Guidelines, this is a medium impact on the surrounding road network.
- The surrounding road network is expected to successfully absorb the additional traffic.

Relationship with Policies

- The City of Stirling's Local Planning Policy (LPP) 6.7 requires a total of 18 parking spaces for the proposed development, including 11 bays for the residential component and 7 bays for the commercial component. The development proposal has a statutory shortfall of one bay for both the residential dwellings and the commercial component. This shortfall has been justified within this report, and Premise considers that it will have no negative impact on the overall functioning of the development.
- The parking and access facilities align with the requirements set in AS 2890.1 with the exception of driveway access width, however this width is in accordance with the City of Stirling's crossover policy.
- The proposed development is required to have one accessible parking space and provides two accessible parking spaces.

Conclusion

- As stated above the expected traffic of the proposed subject site is expected to be a 103 vehicular trips per day, 7 vehicular trips in the AM peak hour and 11 vehicular trips in the PM peak hour respectively.
- In summary Premise believe that the proposed development will not have a negative impact on the surrounding road network.

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2. INTRODUCTION

2.1 Background

Premise Australia Pty Ltd **(Premise)** has been engaged by Germano Designs to prepare a Transport Impact Statement (TIS) for the proposed mixed-use development at 22 Muriel Avenue, Innaloo within the City of Stirling.

The proposed development will comprise commercial premises on ground level and residential dwellings above.

2.2 Scope and Study Area

This report outlines the traffic impact statement for the proposed mixed-use development.

The purpose of this assessment is to evaluate the suitability of the site for the intended land use from a traffic impact perspective, taking into account local transport networks, safety concerns, and relevant regulatory requirements.

The scope of work for the Traffic Impact Statement is as follows:

- Collate all existing traffic data for relevant traffic networks in the vicinity of the subject site.
- Undertake a detailed review of crash data between in the last five (5) year reporting period and provide commentary on the road safety aspects of the data and potential reasons for the number and type of incidents.
- Provide an assessment of the likely additional traffic impact of the proposed development.
- Review all existing public transport routes, pedestrian and cyclist infrastructure, and show graphical images overlaid on aerial imagery within 400-metre radius of the subject site.
- Calculate trip generation for AM / PM peak and daily traffic based on the proposed yield and land use.
- Provide a report according to the set-out requirements as nominated in the WAPC Transport Impact Assessment Guidelines: Individual Developments.
- Provide further analysis of any site-specific issues that may be encountered during the assessment.

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3. EXISTING CONDITIONS

3.1 Site Location and Description

The proposed mixed-use development is located at Lot 101, No 22 Muriel Avenue, Innaloo. The site is situated within the local government area of the City of Stirling.

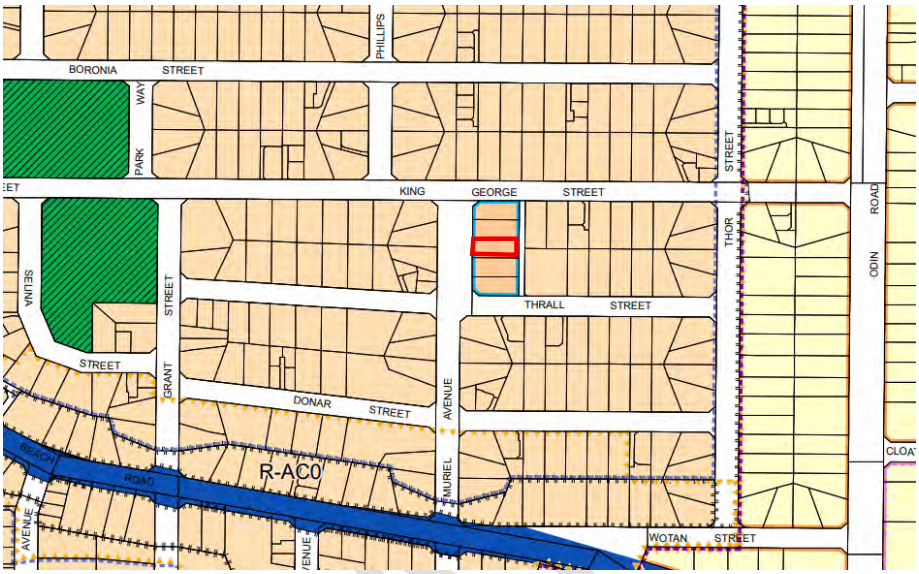
The development site is a rectangular-shaped lot with an area of 772m². It has direct frontage to Muriel Avenue along its western boundary and Azurite Lane on its eastern boundary. The site is currently occupied by a commercial hair dressing salon.

Figure 1 - Site Location



Under the City of Stirling's Local Planning Scheme, the site is designated as a 'Local Centre', reflecting its strategic location for integrated commercial and residential development. The immediate vicinity of the site is characterized by a mixture of land uses. The area is predominantly low to medium-density residential, comprising single dwellings, duplexes, and villas. Muriel Avenue and surrounding local streets also contain a number of small-scale local businesses and home occupations.

Figure 2 - Zoning Map of Area



3.2 Existing Road Conditions

Table 1 – Road Classification and Description

Road Name	Muriel Avenue
Number of Lanes	Two-way, one lane in each direction, divided near the lot
Road Reservation Width	approximately 30m
Road Pavement Width	varies between 12m to 16m
Classification	Access Road
Speed Limit	50kph or State Limit
Bus Route	YES
On-street parking	YES

Road Name	Thrall Street
Number of Lanes	two-way, one lane in each direction (no line marking), undivided
Road Reservation Width	approximately 20m
Road Pavement Width	approximately 7.5m
Classification	Access Road
Speed Limit	50kph or State Limit
Bus Route	NO
On-street parking	YES

Road Name	Scarborough Beach Road
Number of Lanes	two-way, two lanes per direction, undivided
Road Reservation Width	approximately 20m to 25m
Road Pavement Width	approximately 13.5m
Classification	Distributor A
Speed Limit	60kph
Bus Route	YES
If YES Nominate Bus Routes	410 and 990
On-street parking	NO

Road Name	King George Street
Number of Lanes	two-way, one lane in each direction (no line marking), undivided
Road Reservation Width	approximately 20m
Road Pavement Width	approximately 7.2m
Classification	Access Road
Speed Limit	50kph or State Limit
Bus Route	YES
If YES Nominate Bus Routes	422
On-street parking	NO

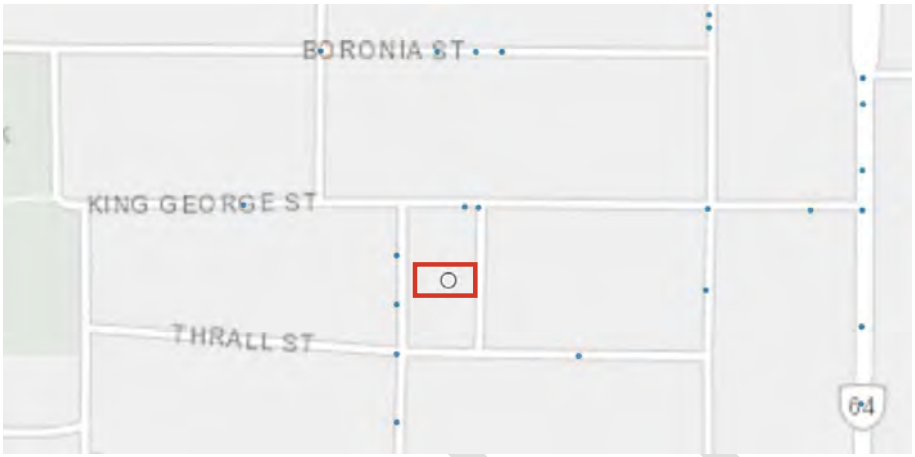
Road Name	Azurite Lane
Number of Lanes	One-way, one lane
Road Reservation Width	approximately 5m
Road Pavement Width	approximately 5m
Classification	Access Road
Speed Limit	50kph or State Limit
Bus Route	NO
On-street parking	NO

3.3 Traffic Safety

A review of the MRWA crash database for the five-year period from 2020 to 2024 has been undertaken for the road network in the vicinity of the subject site. The database includes the location and severity of all recorded crashes.

The subject site is accessed via Azurite Lane, and no crashes have been identified along this laneway. The closest recorded incident occurred at the intersection of Azurite Lane and King George Street in October 2023, classified as a PDO Minor (hit object) at approximately 07:00. Another PDO Minor crash involving two vehicles was recorded nearby on King George Street in September 2020 at approximately 13:00. Overall, the crash history indicates a very low level of safety concerns in the immediate surroundings of the site. Given the class of road and crash types, it is concluded that the road network is currently operating in a manner consistent with access roads.

Figure 3 - Crash Map - Subject Area



3.4 Existing Traffic Flow

The following table provides an overview of traffic count data for roads in the vicinity of the subject site. Refer to Appendix B for graphical representation of this data.

Table 2 – Traffic counts data

Road Name	Location of Traffic Count	Vehicles Per Day (VPD)	Vehicles per Peak Hour (VPH) Peak Time - Peak VPH		Heavy Vehicle %	Date
			AM	PM		
Scarborough Beach Road	East of Odin Road (SLK 4.11)	31,336	08:00 – 2,504	16:30 – 2,760	6%	2020/ 2021
	West of Huntriss Road (SLK 2.87)	23,947	08:00 – 1,780	16:45 – 1,860	7.4%	2021/ 2022
	West of King Edward Street (SLK 4.7)	30,014	11:30 – 2,433	12:00 – 2,452	6.8%	2024/ 2025

Note – These traffic counts were collected from the Main Roads Western Australia Traffic Map.

3.5 Public Transport

The development site at 22 Muriel Avenue, Innaloo, is well-serviced by a robust public transport network. Several high-frequency and standard bus routes operate within a convenient walking distance of the site, primarily along the major thoroughfares of Scarborough Beach Road, Odin Road and King George Street. The key routes serving the development are detailed in the following table.

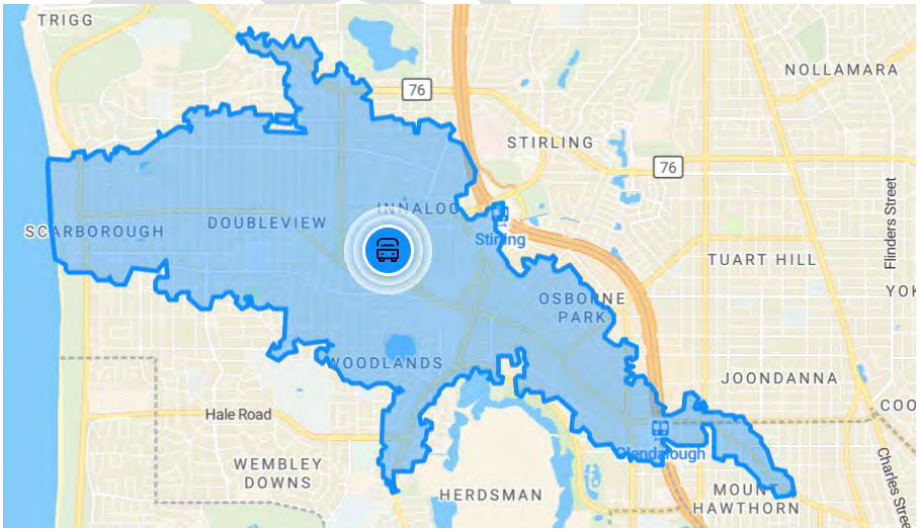
Table 3 - Bus routes and frequencies

Bus / Rail Route	Description	Peak Frequency	Off-Peak Frequency
410	Stirling Station - Scarborough Beach Bus Station	Every 60 minutes	Every 60 minutes on weekends
422	Stirling Station - Scarborough Beach Bus Station	Every 60 minutes	No service on Sunday
990	Perth - Scarborough Beach Bus Station	Every 10 minutes	Every 15 minutes
Yanchep Line	Perth Underground Station Platform 2 to Mandurah Station Platform 2	Every 5 minutes	Every 30 minutes

Walk Score Rating for Accessibility to Public Transport	
59	Good Transit. Many nearby public transportation options.

The combination of the high-frequency Route 990 on Scarborough Beach Road and the standard hourly services of Routes 410 and 422 provides comprehensive bus coverage. This level of service offers future residents, employees, and visitors a viable and convenient alternative to private vehicle use for trips to the Perth CBD, local shopping centres and other key destinations. Furthermore, the strong bus and active transport connections to the nearby Stirling Train Station integrate the site with the broader metropolitan rail network.

Figure 4 - 30min public transport catchment (app.traveltime.com)



3.6 Pedestrian and Cyclist Infrastructure

Premise have done a desktop review of the pedestrian and shared paths surrounding the subject lot. Refer to Appendix B for graphical representation of the below table.

Table 4 - PBN routes in the vicinity of the subject site

Classification	Road Name
"Other Shared Path (Shared by Pedestrians and Cyclists)"	Scarborough Beach Road (east of Bowra Avenue), Bowra Avenue
"Good Road Riding Environment"	Grant Street, Park Way, Boronia Street (west of Park Way)
"Perth Bicycle Network - Continuous Signed Routes"	Thor Street, Wotan Street, Bowra Avenue

What is the Walk Score Rating?	
69	Somewhat Walkable. Some errands can be accomplished on foot.

Figure 5 - 10min walking catchment (app.traveltime.com)

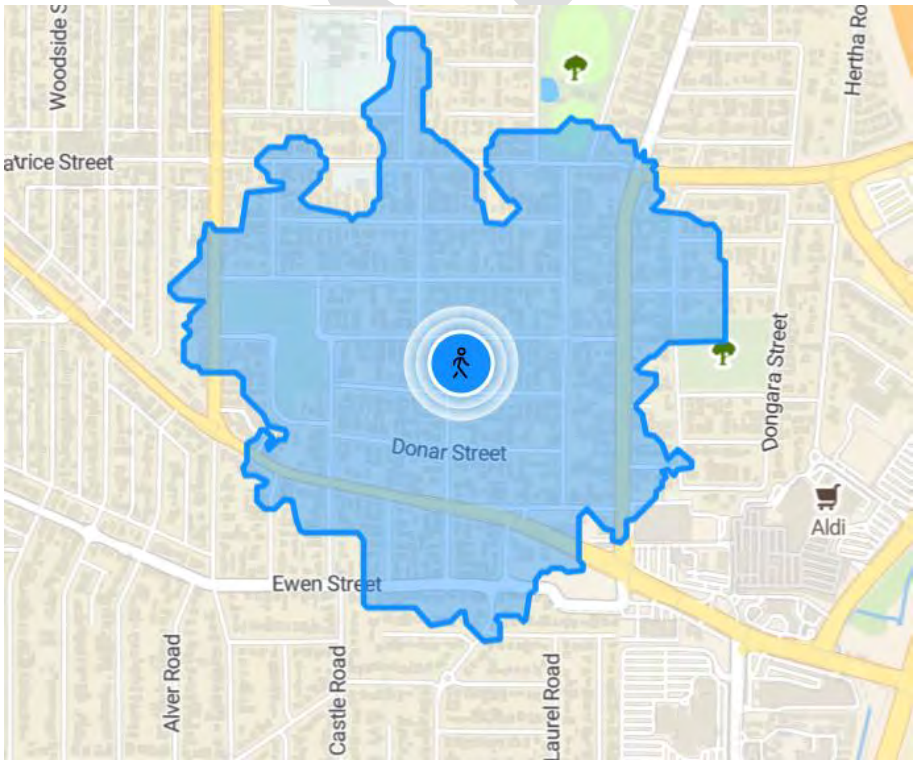
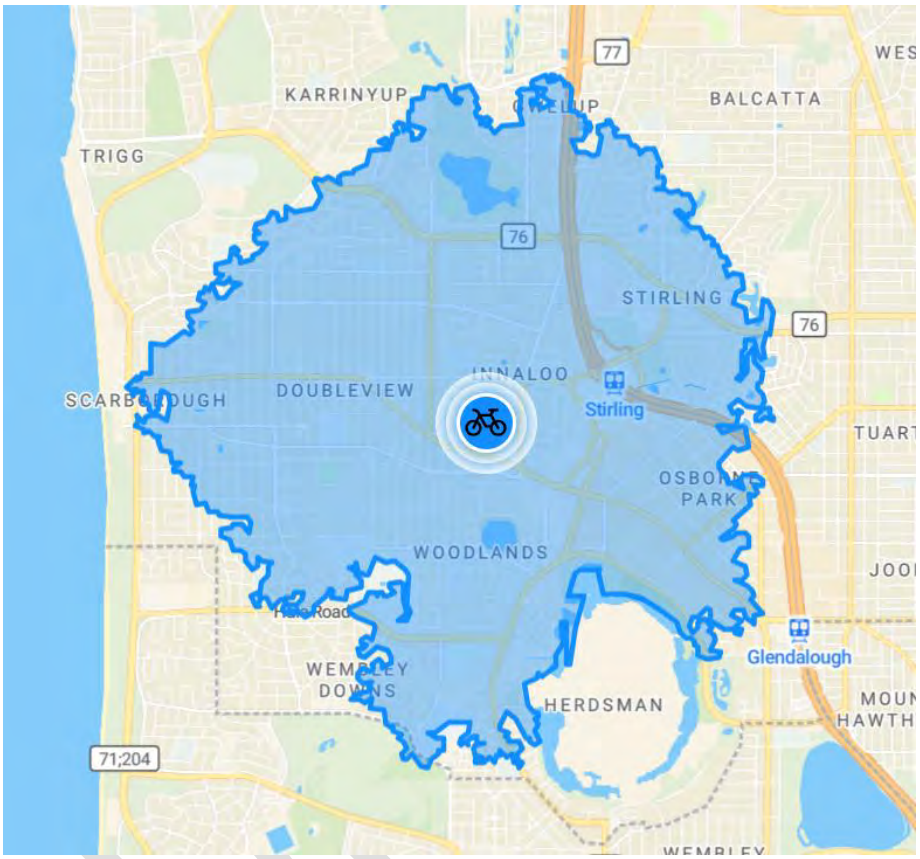


Figure 6 - 15min cycling catchment (app.traveltime.com)



4. PROPOSED DEVELOPMENT

4.1 Overview of Proposed Development

The proposal involves the construction of a three-storey mixed-use development at Lot 101, No 22 Muriel Avenue, Innaloo. The development is designed to align with the site's 'Local Centre' zoning under the City of Stirling Local Planning Scheme, introducing a blend of commercial and residential uses to enhance the local streetscape and community amenity.

The ground floor is dedicated to commercial activity and will feature two individual commercial units. These tenancies are intended to accommodate local businesses such as retail shops, cafes or professional offices, contributing to the activation of Muriel Avenue at street level. The upper two levels of the development will comprise a total of 6 residential apartments.

Table 5 - Proposed land uses and yields

Proposed Land Use	Yield
2 Commercial Units	Total Commercial area – 172.15m^2 GFA / 156.58 m^2 GLFA 86.08m^2 GFA / 78.29 m^2 NLA each Commercial Unit
Three Bedroom Residential Unit	6 apartments

4.2 Vehicular Parking

The provision of parking has been determined in accordance with the City of Stirling's Local Planning Policy 6.7 - Parking and Access (LPP 6.7). As per LPP 6.7 (Clause 5.3, Table 2), the car parking requirements for all residential development are governed by State Planning Policy 7.3 - Residential Design Codes (R-Codes).

Table 6 - Car parking provision rates

Guideline document	Car parking requirement		
City of Stirling's LPP 6.7	Activity Centre (Local Centre LC35) - 1 bay per 25m^2 GFA		
State Planning Policy 7.3 - Residential Design Codes (R-Codes) – C3.3 Multiple Dwelling		**Location A**	**Location B**
	Less than 110m^2 and or 1 or 2 bedrooms	1 bay / dwelling	1.25 bay / dwelling
	110m^2 or greater and or 3 or more bedrooms	1.25 bay / dwelling	1.5 bays / dwelling
	Visitors	0.25 bays / dwelling	0.25 bays /dwelling

Definitions:
Location A: includes all land located within:

- 800m walkable catchment of a train station on a high frequency rail route
- 250m walkable catchment of a transit stop:
  - On a high frequency transit route; or
  - That has multiple transit routes, that when combined stop every 15 minutes during weekday peak periods (7am – 9am and 5pm – 7pm)

Location B: not within Location A (***Note – Location B will be used to calculate parking rates)***

Table 7 – Car parking requirement calculations

Land Use / Type	Yield	Required Parking
Activity Centres	172.15m^2	7 bays
2+ Bedroom Dwelling	6 Dwellings	9 bays
Residential Visitors		2 bays
Total Parking Required:		**18 Bays**
Total Parking Provided:		**17 bays**

The proposed development provides a total of 17 on-site parking bays, allocated as follows:

- 9 bays for residents,
- 2 bays for residential visitors and
- 6 bays for commercial staff members, including the potential provision of 1 accessible bay.

This results in a shortfall of 1 bay when compared with the calculated parking requirement.

4.2.1 JUSTIFICATION FOR PARKING SHORTFALL

The 1-bay commercial shortfall can easily be managed given there is common on-street and lane access parking intended to service all of the visitors' parking in the centre. Furthermore, if the parking requirement was assessed under Table 2 of the LPP 6.7, the parking requirement for commercial component of the development would be 5.7 bays. This requirement is subject to percentage-based reduction criteria outlined in Table 3 of the City's Local Planning Policy 6.7:

- Proximity to High-Frequency Public Transport (10% Reduction): The site's location within 400m of Route 990 qualifies the development for a 10% reduction in the commercial parking requirement.
- Location within a Designated Activity Centre (10% Reduction): The site is located within the Muriel Avenue Local Centre (LC35), making it eligible for a further 10% reduction.

This would bring the parking requirement down to 4.6 parking bays for the commercial component. Given that an alternative assessment route would result in surplus parking (1 parking bay) and the fact that the LC35 has centralised reciprocal parking for visitors, we believe that the shortfall can be easily managed and will not cause any unacceptable impact on the operations of the centre.

4.2.2 OVERVIEW OF COMPLIANCE WITH AS2890 PARKING FACILITIES

The proposed development should adhere to the Australian/New Zealand Standard for parking facilities (AS 2890.01), which prescribes geometric and design requirements for off-street car parking facilities; and Part 6: Off-street parking for people with disabilities – AS2890.06.

The site will provide 17 parking bays.

Parking areas are designed to accommodate User Class 1 - Employee and commuter parking (generally, all-day parking) , User Class 2 - Long-term city and town centre parking, sport facilites, entertainment centres, hotels, motels (generally medium-term parking) and User Class 4 - Parking for people with disabilities

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The access driveway is classified as Category 1, allowing direct access to the parking bays from Azurite Lane.

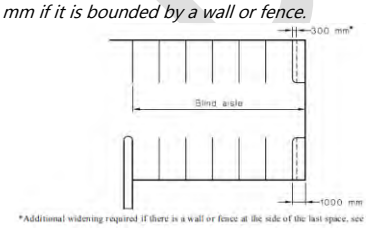
4.2.2.1 Comparison of proposed layout to AS2890.01 requirements

Table 8 - Parking dimensions comparisons

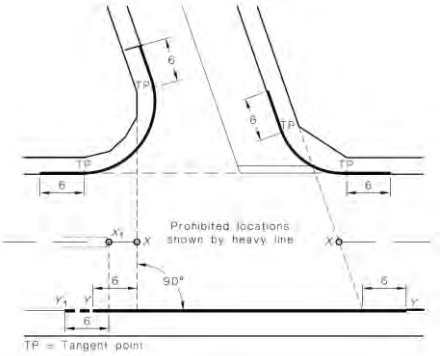
Parking Bay Type	AS2890.1:2004 Off-street car parking					
	Parking Bay Length		Parking Bay Width		Aisle Width	
	Required	Proposed	Required	Proposed	Required	Proposed
All bays at 90° (User Class 1A) Residents/Staff	5.4m	5.5m / 4.8m+0.6m*	2.4m	2.5m	5.8m	6.1m
All bays at 90° (User Class 2) Visitors	5.4m	5.5m / 4.8m+0.6m*	2.5m	2.5m	5.8m	6.1m
ACROD Parking	5.4m	5.5m / 4.8m+0.6m*	2.4m–ACROD 2.4m–shared space	2.5m 2.5m	5.8m	6.1m

Note * - Parking bays on the northern side of the aisle are 5.5 m long, while the bays on the southern side are 4.8m long and terminate with a wheelstop, behind which is a landscaped strip. In accordance with AS 2890.1:2004, parking bays controlled by wheelstops should have a length of 5.4 m. Alternatively, low kerbs could be provided for the 4.8 m bays, together with an additional 0.6 m allowance for vehicle overhang. If this option is adopted, the kerb and the 0.6 m landscaped strip must be kept low, which precludes planting trees within that 0.6 m zone.

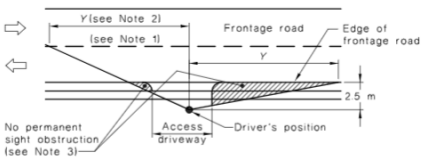
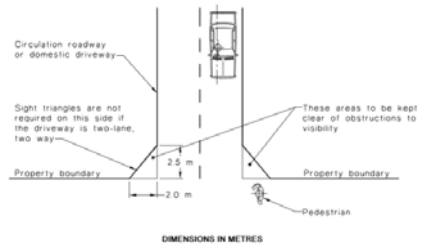
Table 9 – Parking design and layout comparison

REQUIREMENT	COMPLIANCE
"2.4.2 Angle parking aisle *(c) Blind aisles* *At blind aisles, the aisle shall be extended a minimum of 1 m beyond the last parking space, as shown in Figure 2.3, and the last parking space widened by at least 300 mm if it is bounded by a wall or fence.* 	• Blind aisles are extended by 1 meter beyond the last parking space • There are no parking spaces that are bounded by a wall or fence
"3.2.1 Access Driveway widths	• The proposed access driveway is 6m in width, higher than the typical maximum for category 1 access driveways. However, the requirements for a standard non-residential crossover according to the

Commented [AT1]: tbc

REQUIREMENT	COMPLIANCE
TABLE 3.2 **ACCESS DRIVEWAY WIDTHS** metres Category | Entry width | Exit width | Separation of driveways 1 | 3.0 to 5.5 | (Combined) (see Note) | N/A 2 | 6.0 to 9.0 | (Combined) (see Note) | N/A 3 | 6.0 | 4.0 to 6.0 | 1 to 3 4 | 6.0 to 8.0 | 6.0 to 8.0 | 1 to 3 5 | To be provided as an intersection, not an access driveway, see Clause 3.1.1. | NOTE: Driveways are normally combined, but if separate, both entry and exit widths should be 3.0 m min.	City of Stirling's Crossover Policy requires crossover width in range of 6-10m supporting this layout.
"3.2.3 Access Driveway Location *Driveway Categories 1 and 2* *At unsignalized intersections of sub-arterial, collector or local streets with each other or with an arterial road, access driveways in Categories 1 and 2 (see Table 3.1) shall not be located in the sections of kerb shown by heavy lines in Figure 3.1. This requirement shall not apply to accesses to domestic driveways in the kerb section opposite the entering road at any intersection including signalized intersections. Furthermore, it shall not apply to any access driveway serving a property which would otherwise be denied access due to the physical impossibility of meeting the requirement."*  	• The proposed driveway is located outside the restricted 6m zone from the tangent point of the Azurite Lane / King George Street and the Azurite Lane / Thrall Street Intersections.
"3.2.4 Sight distance at access driveway exits *Entering sight distance* *Unsignalized access driveways shall be located so that the intersection sight distance along the frontage road is available to drivers leaving the car park or domestic driveway is at least shown in Figure 3.2*	• There are no obstructions within the required sight distance area preventing vision to the point of the minimum SSD.

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REQUIREMENT	COMPLIANCE
 **Distance (Y) along frontage road m** **Frontage road speed (Note 4) km/h** / **Access driveways other than domestic (Note 5)** — **Desirable 5 s gap** / **Minimum SSD** / **Domestic property access (Note 6)** 40: 55 / 35 / 30 50: 69 / 45 / 40 60: 83 / 65 / 55 70: 97 / 85 / 70 80: 111 / 105 / 95 90: 125 / 130 / Use values from 2nd and 3rd columns 100: 139 / 160 110: 153 / 190	
Sight distance to pedestrians *Clear sight lines as shown in Figure 3.3 shall be provided at the property line to ensure adequate visibility between vehicles leaving the car park or domestic driveway and pedestrians on the frontage road footpath."*  DIMENSIONS IN METRES FIGURE 3.3 MINIMUM SIGHT LINES FOR PEDESTRIAN SAFETY	• Plans show no obstructions potentially preventing sight distance to pedestrians

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4.3 Vehicle Swept Paths

The proposed parking area has been tested using a B99 Passenger Vehicle (5.2m). No navigability issues were found. For further details, please refer to the swept path analysis plans in Appendix C.

4.4 ACROD Parking

Table 10 - Accessible car parking provision rates

Guideline document	Building class	Car parking provision
	• Class 6 — (a) Up to 1000 carparking spaces - 1 space for every 50 carparking	1 space

	spaces or part thereof. (b) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces. - 1 space.	
NCC 2022 Building Code of Australia - Volume One	• Class 2 – Not required unless dwelling is set as accessible	N/A

In addition to the general parking supply, the proposal provides for the potential inclusion of one dedicated accessible parking bay, which is compliant to the requirements for one ACROD bay as set out in the NCC 2022 Building Code of Australia – Volume One.

4.5 Bicycle Parking

Bicycle parking requirements are to be in line with City of Melville's LPP 1.6 provisions as outlined in the **Table 11**:

Table 11 – Bicycle parking provision rates and calculation

Guideline document	Bicycle parking requirement	Yield	Calculation
City of Stirling's LPP 6.7 (Section 7.1)	• the requirement for bicycle parking is triggered for non-residential developments of 400m² GFA or more	172.15m²	0 bays
State Planning Policy 7.3 - Residential Design Codes (R-Codes) – Table 2.3b	• Resident: 0.5 x the total number of dwellings	6 dwellings	3 Bays
	• Visitor: No visitor bicycle parking required	6 dwellings	0 Bay
	Total Bicycle parking Required:		**3 bays**
	Total Bicycle parking Provided:		**4 bays**

The development proposes to provide 4 dedicated bicycle bays, which represents a surplus of 1 bay against the policy requirement.

4.6 Delivery and Service

All delivery and servicing activities are proposed to be managed in a way that minimises disruption to the surrounding road network and ensures safety for pedestrians and other road users. It is expected that the proposed development will be included in the regular waste collection along with other developments in LC35. Waste collection vehicle and delivery vehicles will service the site from the unnamed laneway connecting King George St and Thrall St.

Based on the requirements of LPP 6.7, the proposed development does not require a dedicated delivery/service bay on-site.

Table 12 – Delivery/service parking provision rates and calculation

Guideline document	Delivery/service parking requirement	Yield	Calculation
City of Stirling's LPP 6.7 (Section 5.1.1)	In non-residential developments with over 500m² of GFA, a minimum of one bay shall be permanently set aside and marked for the exclusive use of delivery, service, and courier vehicles.	172.15m²	0 bays required
		Total Required:	0 bays

4.7 Traffic Impact of the Proposed Development

The NSW Guide to Transport Impact Assessment (GTIA) was updated and published in 2024 following extensive consultation with industry professionals, and these new rates are generally adopted where available.

The proposed development plans indicate commercial units at the ground floor level, which include a wide spectrum of uses such as café, hair salon, office, retail and takeaway food, each generating different traffic patterns. The site is part of LC35, and as part of a Local Centre, a variety of these uses are permitted and may change during the operation of the development. The rate for a shopping centre has been adopted because it generally accounts for all of the above-mentioned uses, providing a valid and conservative estimate of traffic generation.

Table 13 - Trip generation rates

Guideline document	Trip generation rates
NSW Guide to Transport Impact Assessment (GTIA)	**Shopping Centres** (Regional) • AM peak hour = 3.34 trips / 100m² GLFA • PM peak hour = 4.67 trips / 100m² GLFA • Daily = 51.53 trips / 100m² GLFA
	Medium Density Residential (Regional) • AM peak hour = 0.41 trips / dwelling • PM peak hour = 0.60 trips / dwelling • Daily = 3.67 trips / dwelling

Table 14 - Calculation of vehicular trips

Land Use Type	Yield	Daily Traffic Generation (VPD)	Peak Hour Traffic Generation (VPH)	
			AM	PM
Shopping Centres	156.58 m^2 GLFA	81	5	7
Medium Density Residential	6 apartments	22	2	4
	Total	**103**	**7**	**11**

According to WAPC guidelines, developments generating fewer than 10 vehicular trips during peak hours are considered to have a low impact on the road network, while those generating between 10 and 100 peak-hour trips are considered to have a moderate impact.

The proposed development is expected to generate 103 daily vehicular trips, 7 vehicular trips in the AM peak and 11 vehicular trips in the PM peak. The surrounding road network is expected to successfully absorb the additional traffic.

4.8 Trip Distribution

The distribution of trips is based on the site's location relative to major employment centres, residential catchments and the arterial road network. As shown in the proposed development plans in Appendix A, the facility fronts Muriel Avenue, while vehicle access to the parking area is taken from the rear via Azurite Lane.

Azurite Lane currently operates as a one-way street, carrying traffic from south to north (from Thrall Street toward King George Street). A future 0.5 m widening is anticipated to allow two-way operation. For the purpose of this assessment, the existing one-way arrangement has been considered, with the note that traffic patterns may change once the planned upgrade is implemented. **Table 15** summarises the expected main trip distribution routes.

Table 15 - Trip Distribution Routes

Route	Percentage	
	INbound	OUTbound
> From the south along Muriel Avenue >> Thrall Street >> Azurite Lane >> subject development site and	**23%**	
> From subject development site via Azurite Lane >> King George Street >> Muriel Avenue to the south		**23%**
> From the east along King George Street >> Muriel Avenue >> Thrall Street >> Azurite Lane >> subject development site and	**15%**	
> From subject development site via Azurite Lane >> King George Street to the east		**15%**
> From the east along Thrall Street >> Azurite Lane >> subject development site and	**2%**	
> From subject development site via Azurite Lane:		**1%**

	• >> King George Street to the east and • >> King George Street >> Muriel Avenue >> Thrall Street to the east		**1%**
>	From the west along King George Street >> Muriel Avenue >> Thrall Street >> Azurite Lane >> subject development site and	**6%**	
>	From subject development site via Azurite Lane >> King George Street to the west		**6%**
>	From the west along Thrall Street >> Azurite Lane >> subject development site and	**4%**	
>	From subject development site via Azurite Lane: • >> King George Street to the west and • >> King George Street >> Muriel Avenue >> Thrall Street to the west		**2%** **2%**
	Total generated traffic	**50%**	**50%**

For a graphical presentation of these volumes, please refer to Plans S06–S08 in Appendix B.

4.9 Review of Available Planning Information

4.9.1 CITY OF STIRLING LOCAL PLANNING SCHEME NO 4 DRAFT

The City of Stirling is currently in the process of replacing LPS3 with the new draft Local Planning Scheme No. 4 (LPS4). A review of the draft scheme maps and text confirms that the 'Local Centre' zoning for the site at 22 Muriel Avenue is proposed to be carried over into the new scheme.

The draft LPS4 reinforces the planning direction established in the Local Planning Strategy and LPS3. The proposed development is therefore considered to be consistent with both the current and emerging statutory planning framework for the site.

4.10 Site-Specific Issues and Proposed Remedial Measures

Site-specific issues identified during the assessment, along with corresponding remedial measures, are summarised in **Table 16** below.

Table 16 – Analysed Site-Specific Issues and Proposed Remedial Measures

How many site-specific issues need to be discussed?	
Site-Specific Issue No 1	> Parking provision
Remedial Measure / Response	The proposed parking provision results in a shortfall of one car bays when assessed against the relevant requirement. However, this matter has been elaborated within the report, and the proposed provision can be considered adequate given the specific characteristics of the site and the nature of the proposed development.

APPENDICES

APPENDIX A

DEVELOPMENT SITE PLAN

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APPENDIX B

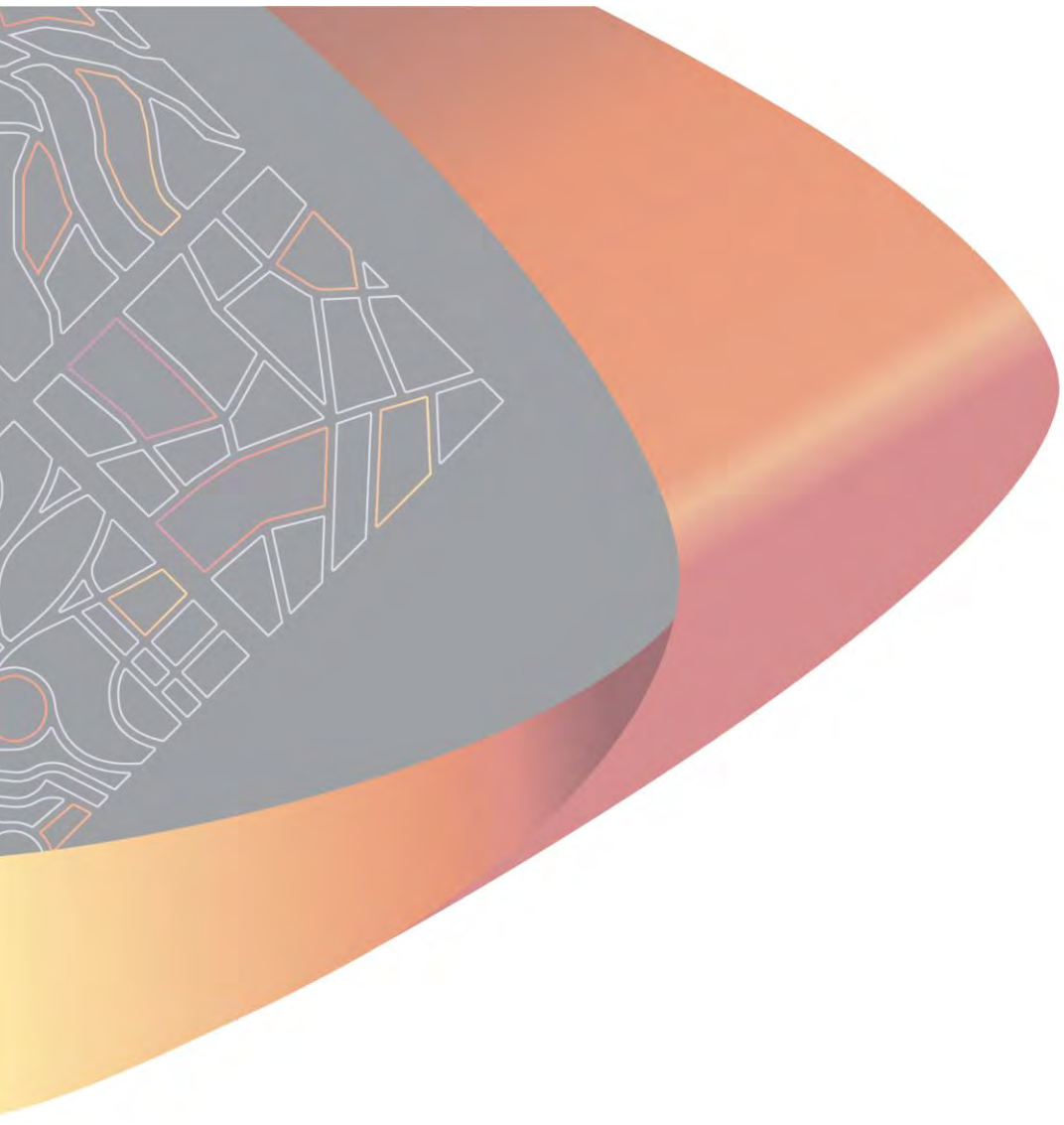
TRANSPORT PLANNING AND TRAFFIC PLANS

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APPENDIX C

VEHICLE SWEPT PATH ANALYSIS

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Premise

Stavertis

Address:22 Muriel Ave INNALOO

Apartment Complex

Job Number: 23011

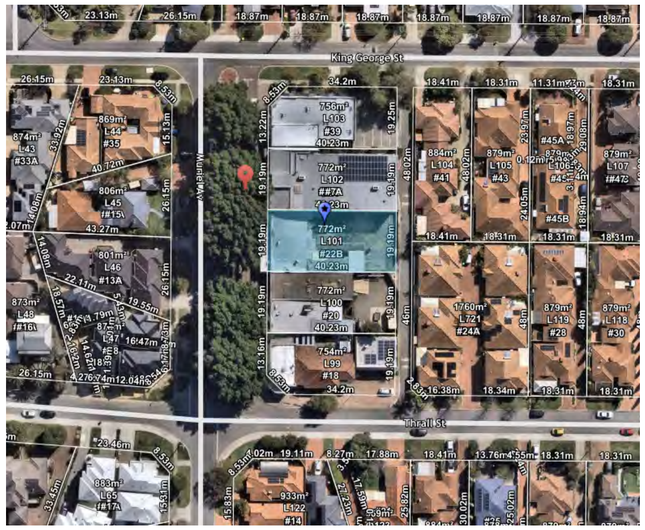
Drawing No	Description
01	Cover Page
02	Existing Site Survey
03	Site Plan
04	Context Plan
05	Ground Floor Plan
06	First Floor Plan
07	Second Floor Plan
08	Roof Plan
09	Elevations
10	Elevations
11	FF Solar Study
12	SF Solar Study
13	Section



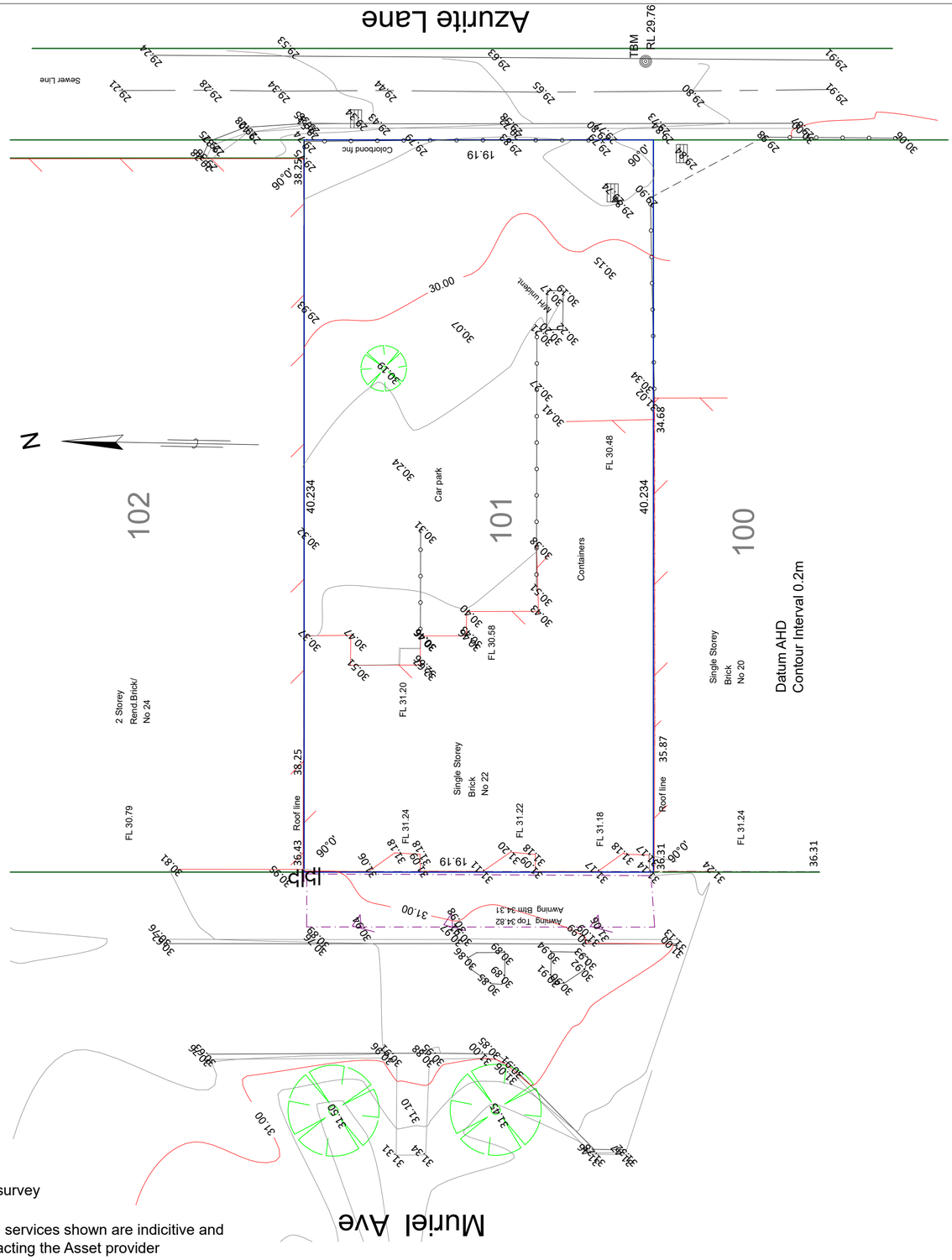
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Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Existing Site Survey

Scale:	Sheet Size:
1:200	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
02 of 13

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

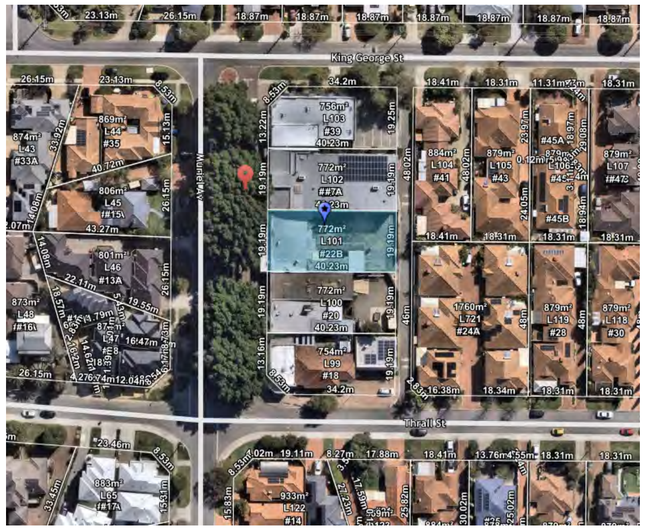
Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

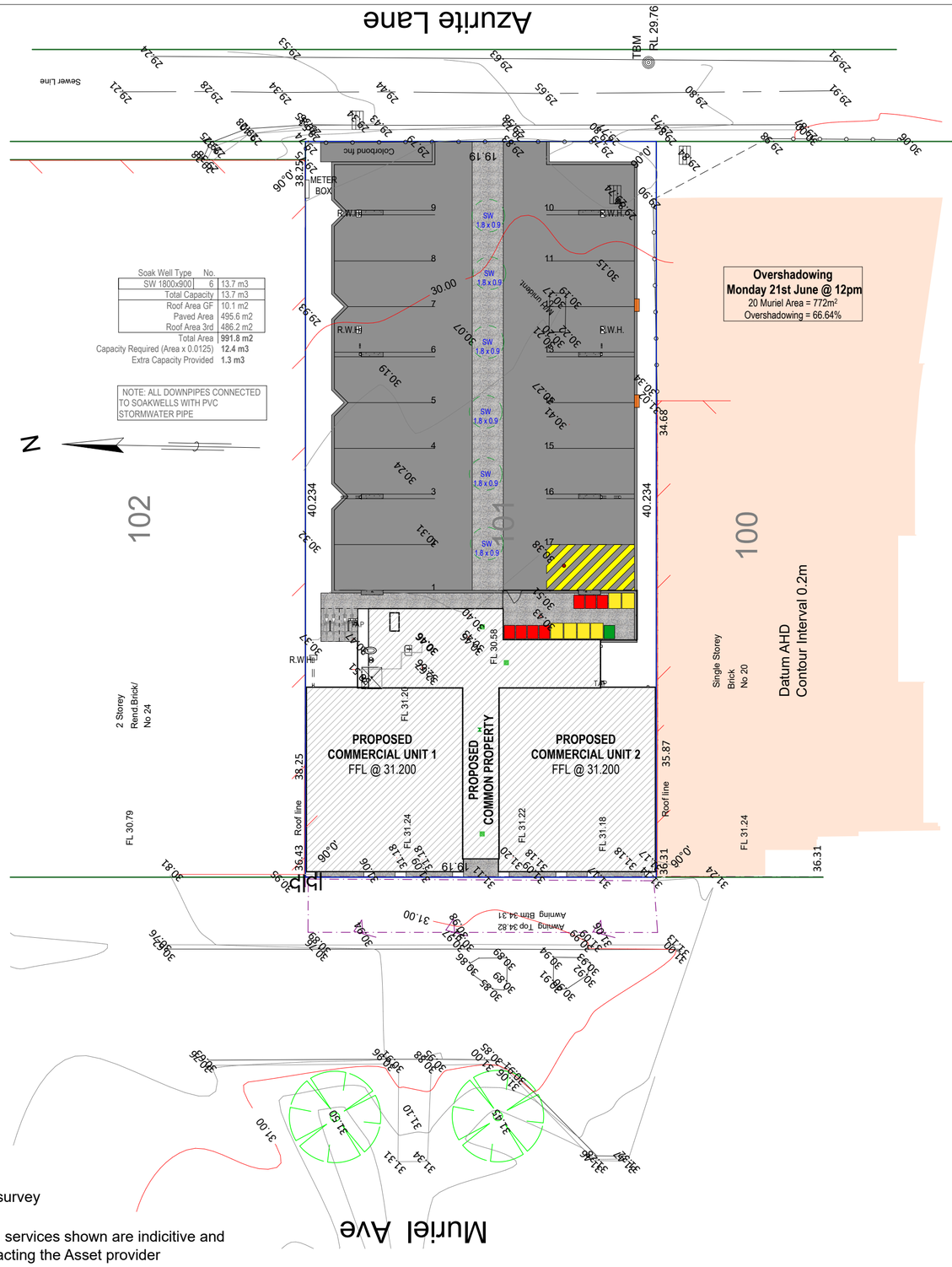
Key Features
- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

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Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Site Plan

Scale: 1:200
Sheet Size: A2
Project No: 23011
Revision Number: 7.00
Drawing No.: 03 of 13

Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features
Telecom
Water meter
Power Pole
Power Dome
Sewer M/H

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COMMERCIAL DEVELOPMENTS MURIEL ROAD



RESIDENTIAL DEVELOPMENTS THRALL STREET



COMMERCIAL SHOPPING COMPLEX SCARBOROUGH BEACH RD

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

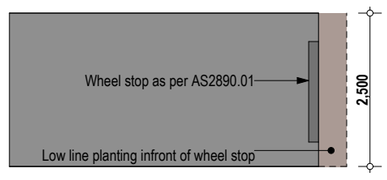
Drawing Title:
Context Plan

Scale:	Sheet Size:
	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
04 of 13

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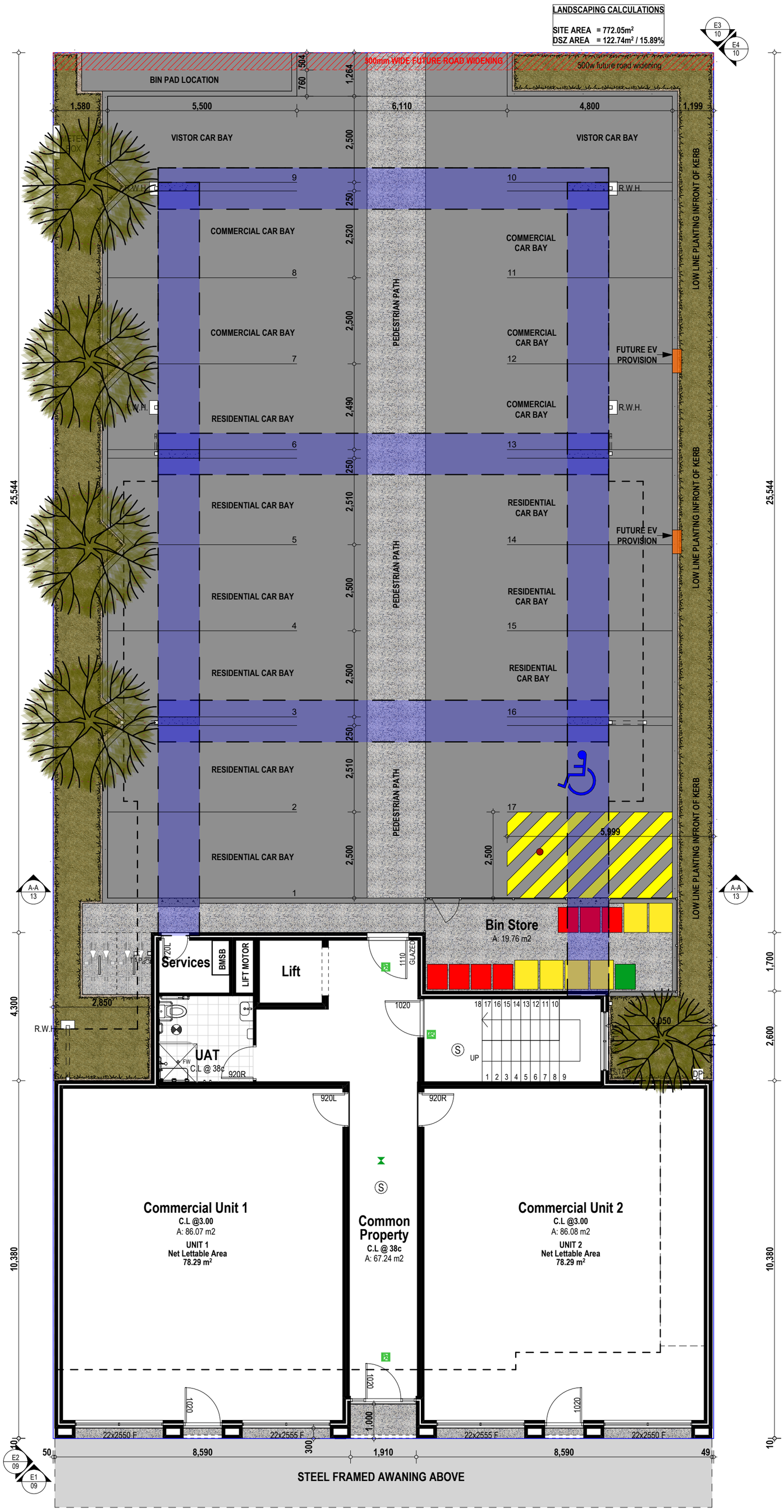
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Carbay Detail

LANDSCAPING CALCULATIONS

SITE AREA = 772.05m²
DSZ AREA = 122.74m² / 15.89%



PLOT RATIO

COMMERCIAL
Site Area: 772.05m²
Building Footprint: 172.36m²
22.32%

RESIDENTIAL
Site Area: 772.05m²
Building Footprint: 803.02m²
104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	19.76	20,040	63.39
Commercial Unit 1	86.07	37,360	258.20
Commercial Unit 2	86.08	37,360	258.23
Common Property	67.24	53,960	219.00
	259.15 m²	148,720 mm	798.82 m³
	1,297.86 m²	**714,480 mm**	**3,772.78 m³**

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3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Ground Floor Plan

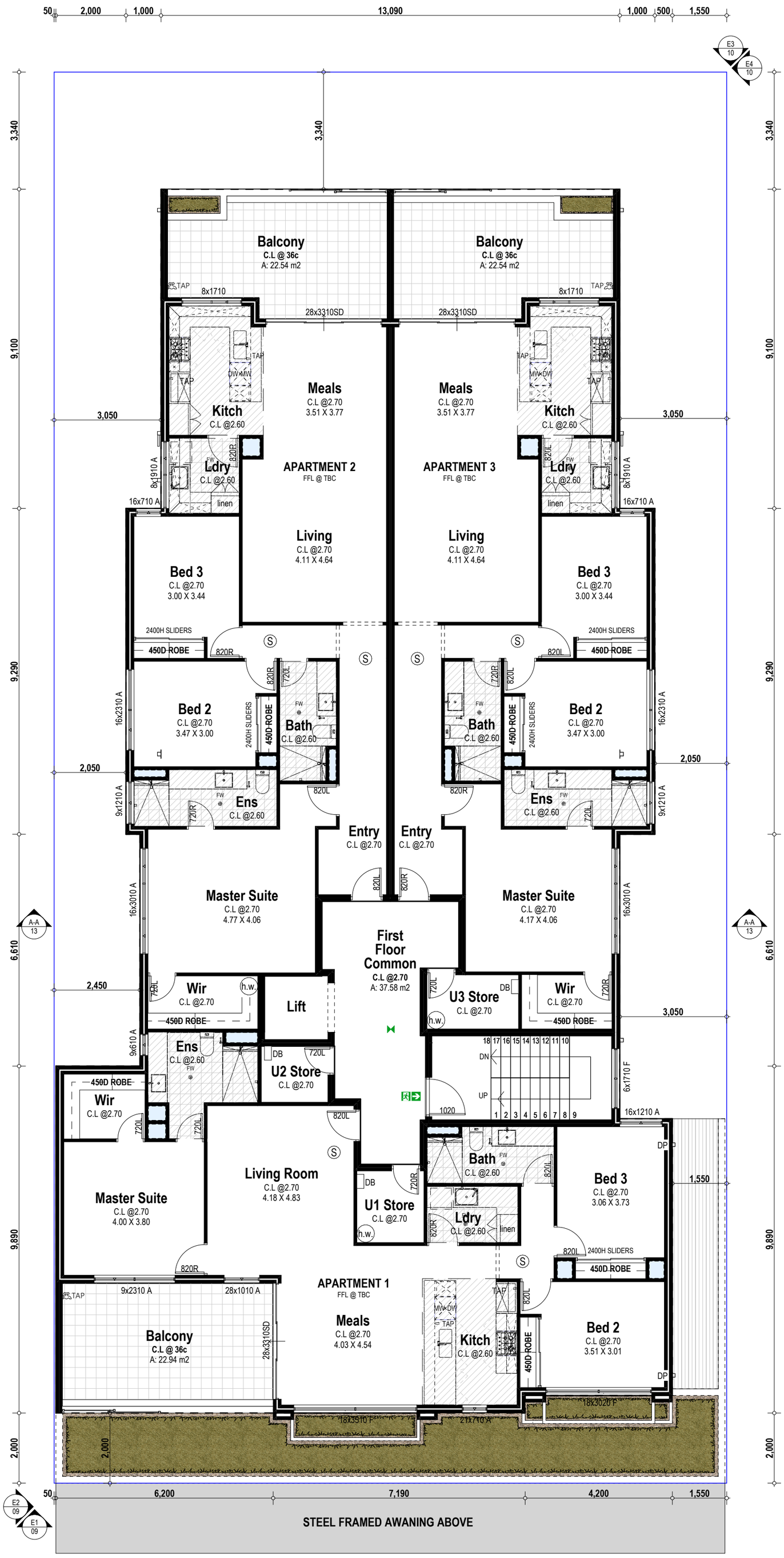
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
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Muriel Ave



PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
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Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
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Apartment 4			
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Revision	Description	Date
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

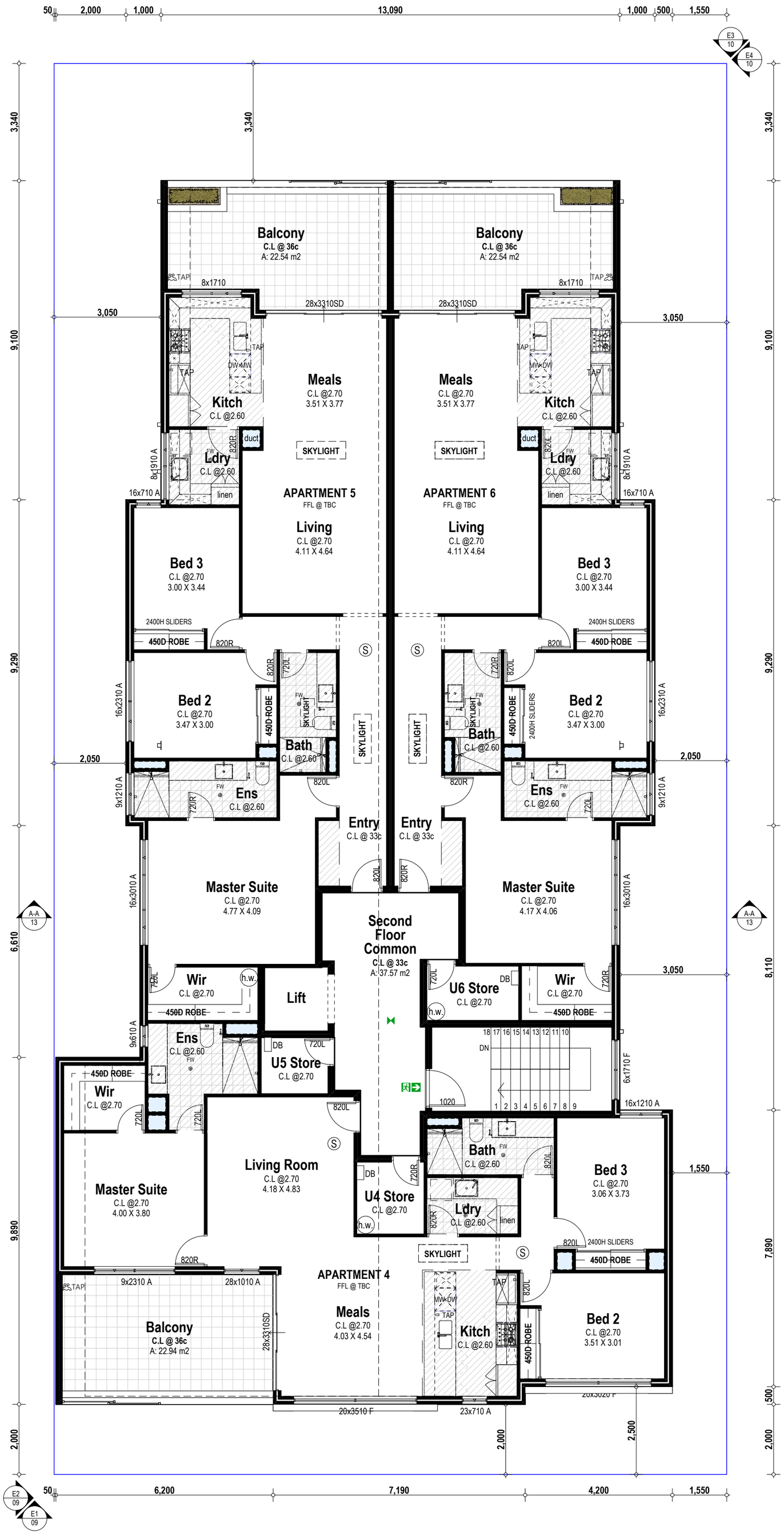
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First Floor Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
06 of 13

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PLOT RATIO

COMMERCIAL

Site Area:	772.05m²
Building Footprint:	172.36m²
	22.32%

RESIDENTIAL

Site Area:	772.05m²
Building Footprint:	803.02m²
	104.01%

Zone	Area	Perim	Vol
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Ground Floor			
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Common Property	67.24	53,960	219.00
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3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

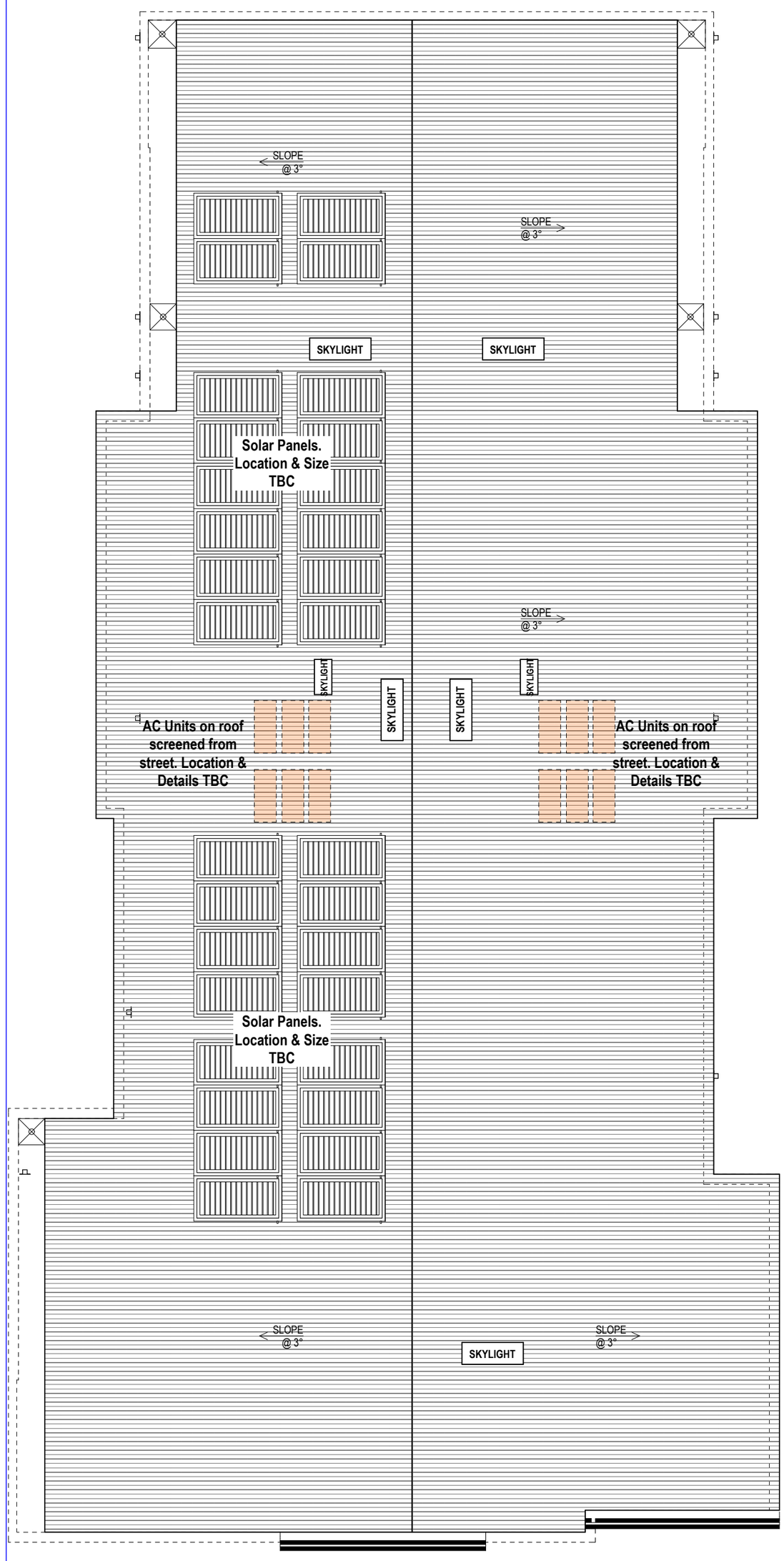
Drawing Title:
Second Floor Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
07 of 13

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5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Roof Plan

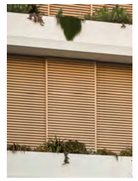
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
08 of 13

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KNOTWOOD ALUMIN SCREENING



DULUX RENDER MONUMENT

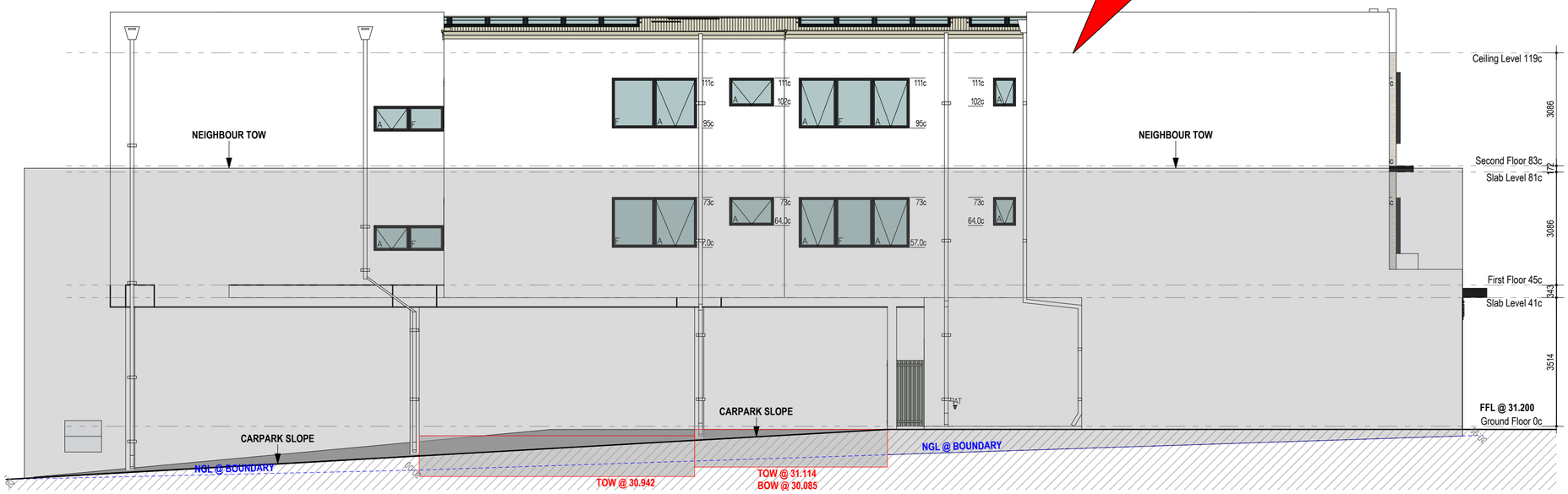
BOWRAL 76 SIMMENTAL SILVER





E1 West Elevation
1:100

DULUX RENDER VIVID WHITE



E2 North Elevation
1:100

Revision	Description	Date
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Elevations

Scale: 1:100
Sheet Size: A2
Project No: 23011
Revision Number: 7.00
Drawing No.: 09 of 13

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E3 East Elevation
1:100



E4 South Elevation
1:100

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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

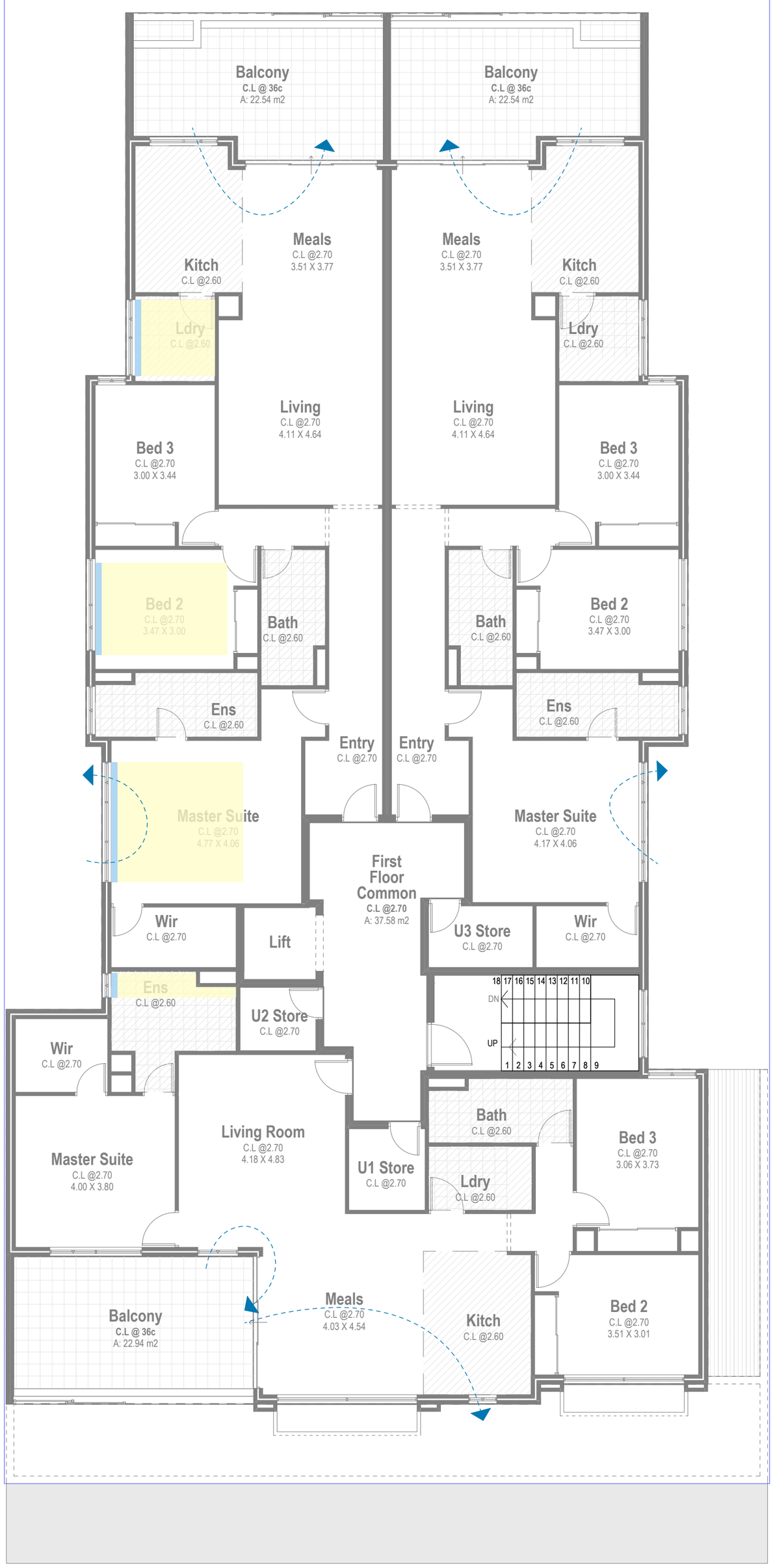
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Elevations

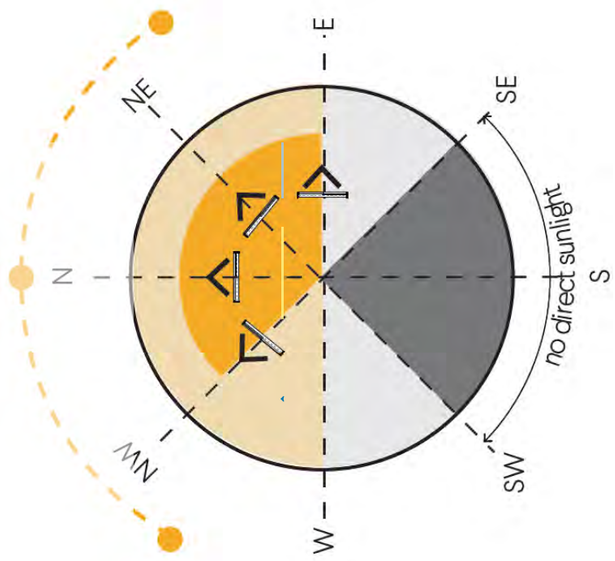
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
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SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH

Revision	Description	Date
7.00	Development Approval	11.12.25
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5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
FF Solar Study

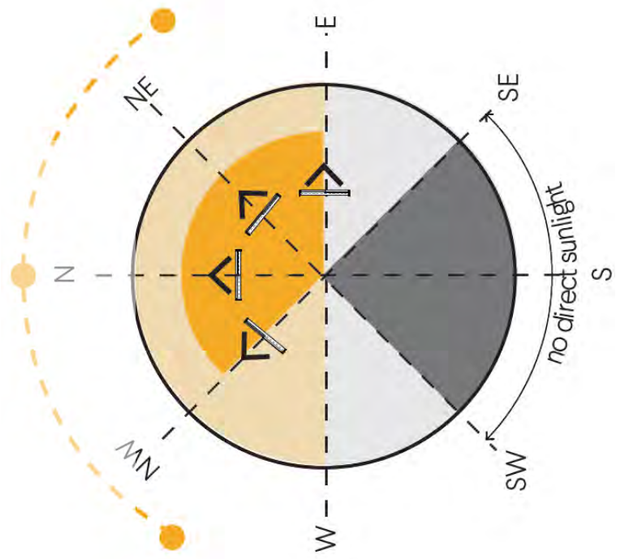
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Project No:	**Revision Number:**
23011	7.00

Drawing No.:
11 of 13

Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

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SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH



Revision	Description	Date
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3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
SF Solar Study

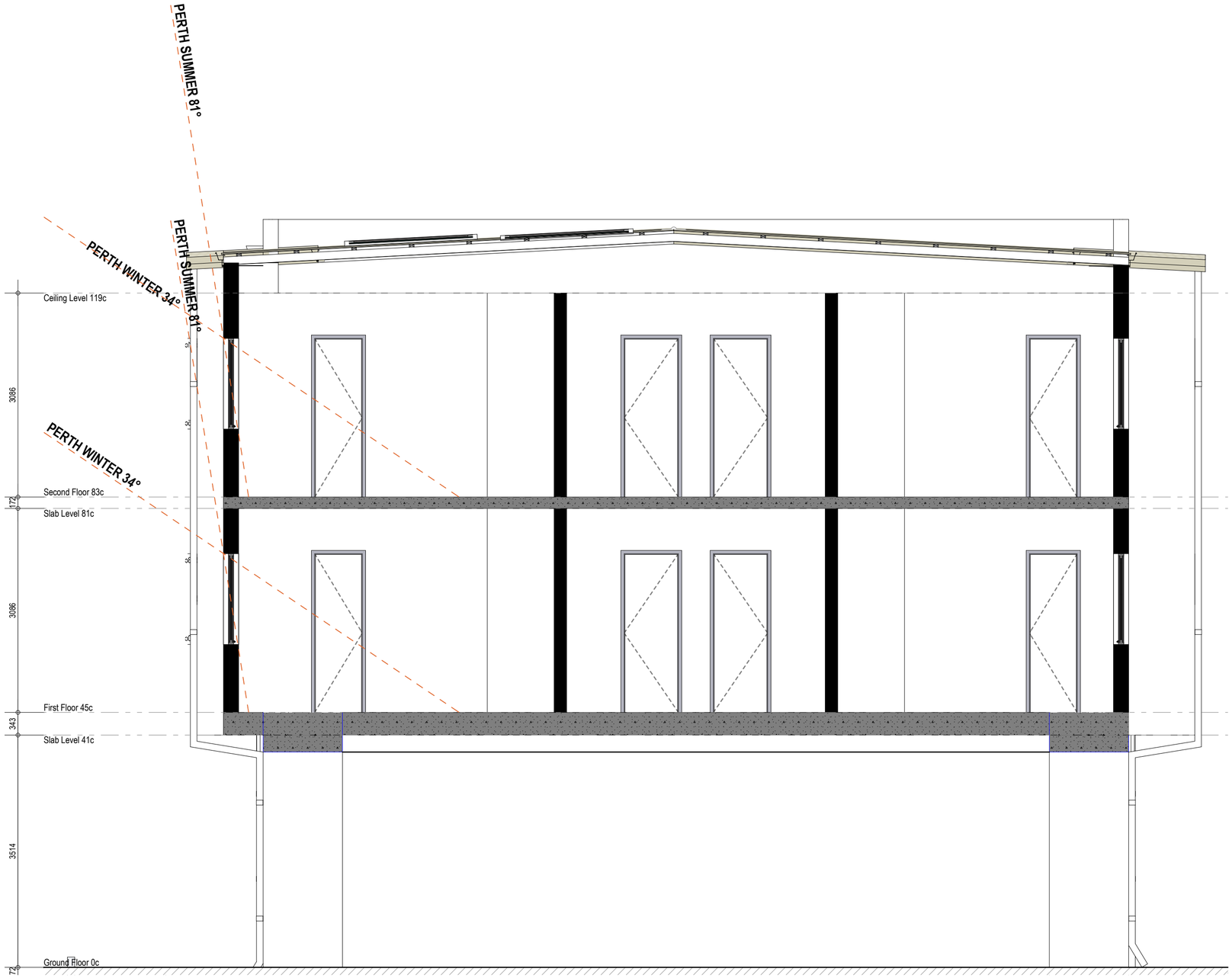
Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
12 of 13

Our proposed Apartment Complex has been thoughtfully designed with sustainability in mind. The building will include solar panels to support renewable energy use and reduce our carbon footprint. Roof structures will provide shading for windows, helping to naturally regulate indoor temperatures and reduce reliance on air conditioning. To further conserve energy, we are installing high-quality insulation and LED lighting throughout the facility. Water conservation measures will be implemented, alongside a dedicated recycling program to minimize waste. Additionally, bike bays will be provided to encourage environmentally friendly transport and promote a healthy lifestyle. Landscaping will feature native planting within the carpark, supporting local biodiversity and reducing water usage.

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3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Section

Scale:	Sheet Size:
1:50	A2
Project No:	**Revision Number:**
23011	7.00

Drawing No.:
13 of 13

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PARKS AND RECREATION	LOCATION BOUNDARY
WATERWAYS	DISTANCE FROM LOCATION
PUBLIC PURPOSE	CITY OF STIRLING — LOCAL GOVERNMENT NAME
SHOPPING AREA	INNALOO — SUBURB NAME

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

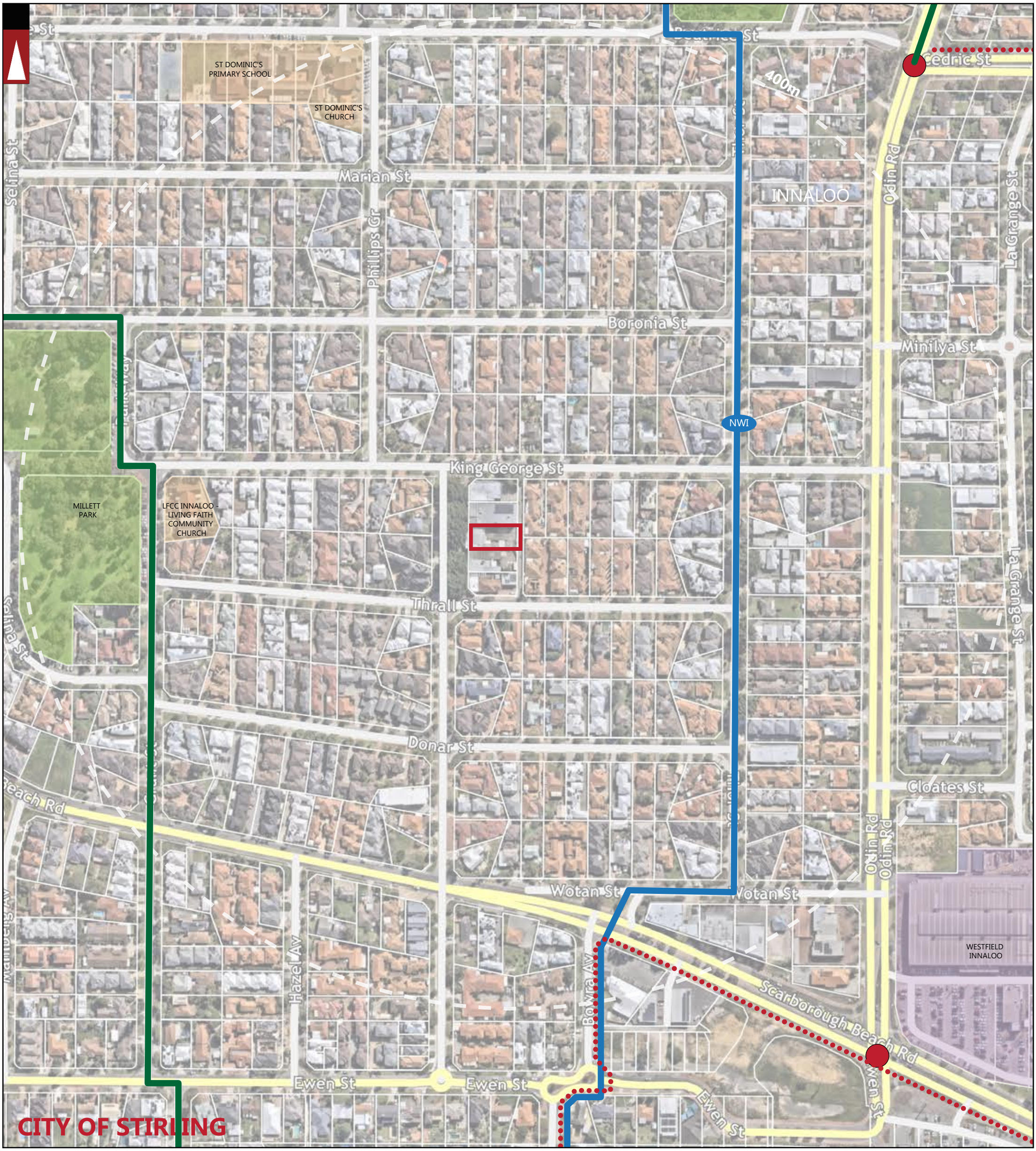
PROJECT: 22 MURIEL AVENUE, INNALOO

TITLE: LOCALITY PLAN - 400M RADIUS

DRAWING NUMBER: P004157_ S01

DRAWN BY: J.S.

Premise — PART OF THE Amey GROUP



PARKS AND RECREATION
WATERWAYS
PUBLIC PURPOSE
SHOPPING AREA

LOCATION BOUNDARY
DISTANCE FROM LOCATION
CITY OF STIRLING — LOCAL GOVERNMENT NAME
INNALOO — SUBURB NAME

OTHER SHARED PATH (SHARED BY PEDESTRIANS & CYCLISTS)
GOOD ROAD RIDING ENVIRONMENT
NW12 — PERTH BICYCLE NETWORK (PBN) - CONTINUOUS SIGNED ROUTES
TRAFFIC LIGHT

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

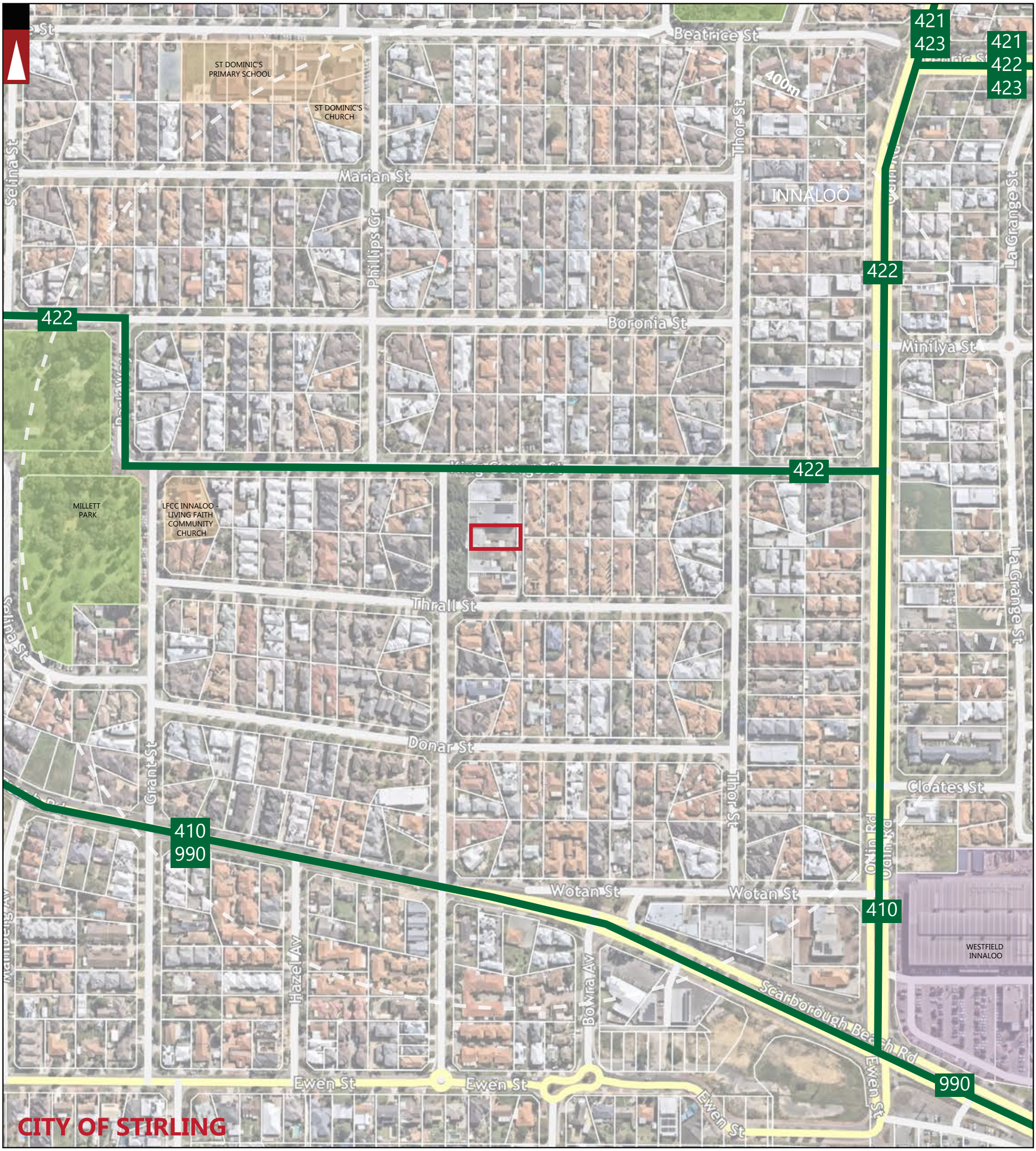
PROJECT:
22 MURIEL AVENUE, INNALOO

TITLE:
BICYCLE NETWORK PLAN - 400M RADIUS

DRAWING NUMBER:
P004157_ S02

DRAWN BY:
J.S.

Premise
PART OF THE Amey GROUP



PARKS AND RECREATION

WATERWAYS

PUBLIC PURPOSE

SHOPPING AREA

LOCATION BOUNDARY

DISTANCE FROM LOCATION

CITY OF STIRLING — LOCAL GOVERNMENT NAME

INNALOO — SUBURB NAME

BUS ROUTES

103 — BUS ROUTE NUMBER

NOTE : FOR MORE INFORMATION REGARDING THE DESCRIPTION OF BUS ROUTES AND THEIR INDICATIVE PEAK AND OFF-PEAK FREQUENCIES REFER TO THE REPORT.

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT:
22 MURIEL AVENUE, INNALOO

TITLE:
PUBLIC TRANSPORT PLAN - 400M RADIUS

DRAWING NUMBER:
P004157_ S03

DRAWN BY:
J.S.

Premise
PART OF THE Arney GROUP



PARKS AND RECREATION

WATERWAYS

PUBLIC PURPOSE

SHOPPING AREA

LOCATION BOUNDARY

DISTANCE FROM LOCATION

CITY OF STIRLING — LOCAL GOVERNMENT NAME

INNALOO — SUBURB NAME

PEDESTRIAN PATH WITHIN 400M RADIOUS FROM THE SUBJECT SITE

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT: 22 MURIEL AVENUE, INNALOO

TITLE: PEDESTRIAN PATHS PLAN - 400M RADIUS

DRAWING NUMBER: P004157_ S04

DRAWN BY: J.S.

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PARKS AND RECREATION

WATERWAYS

PUBLIC PURPOSE

SHOPPING AREA

LOCATION BOUNDARY

DISTANCE FROM LOCATION

CITY OF STIRLING — LOCAL GOVERNMENT NAME

INNALOO — SUBURB NAME

5,512 — NUMBER OF VEHICLES PER DAY

AM 1145 – 381
PM 1630 – 480
NUMBER OF VEHICLES PER AM PEAK HOUR
NUMBER OF VEHICLES PER PM PEAK HOUR

2014 — YEAR

EAST OF HARLOW ROAD — LOCATION

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT:
22 MURIEL AVENUE, INNALOO

TITLE:
EXISTING TRAFFIC COUNTS - 400M RADIUS

DRAWING NUMBER:
P004157_ S05

DRAWN BY:
J.S.

Premise
PART OF THE Arney GROUP



LOCATION BOUNDARY

Lewis Road ROAD NAME

103 — Total Expected Traffic Generation from the proposed development

503 — Total Expected Traffic Generation from Subject Site on the specific section of road - **IN and OUT direction**

Traffic Flow IN Direction

Traffic Flow OUT Direction

NOTE: THE PLAN IS COURTEOUSY OF GERMANO DESIGN

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT: 22 MURIEL AVENUE, INNALOO

TITLE: TRAFFIC FLOW DIAGRAM - DAILY

DRAWING NUMBER: P004157_ S06

DRAWN BY: J.S.

Premise
PART OF THE Arney GROUP



LOCATION BOUNDARY

Lewis Road ROAD NAME

103 Total Expected Traffic Generation from the proposed development

503 Total Expected Traffic Generation from Subject Site on the specific section of road - **IN and OUT direction**

Traffic Flow IN Direction

Traffic Flow OUT Direction

NOTE: THE PLAN IS COURTEOUSY OF GERMANO DESIGN

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

PROJECT: 22 MURIEL AVENUE, INNALOO

TITLE: TRAFFIC FLOW DIAGRAM - AM PEAK

DRAWING NUMBER: P004157_ S07

DRAWN BY: J.S.

Premise
PART OF THE Arney GROUP



LOCATION BOUNDARY

Lewis Road ROAD NAME

103 — Total Expected Traffic Generation from the proposed development

503 — Total Expected Traffic Generation from Subject Site on the specific section of road - **IN and OUT direction**

Traffic Flow IN Direction

Traffic Flow OUT Direction

NOTE: THE PLAN IS COURTEOUSY OF GERMANO DESIGN

LEGEND

REV	DATE	AMENDMENT
A	10-11-2025	ISSUED FOR REVIEW

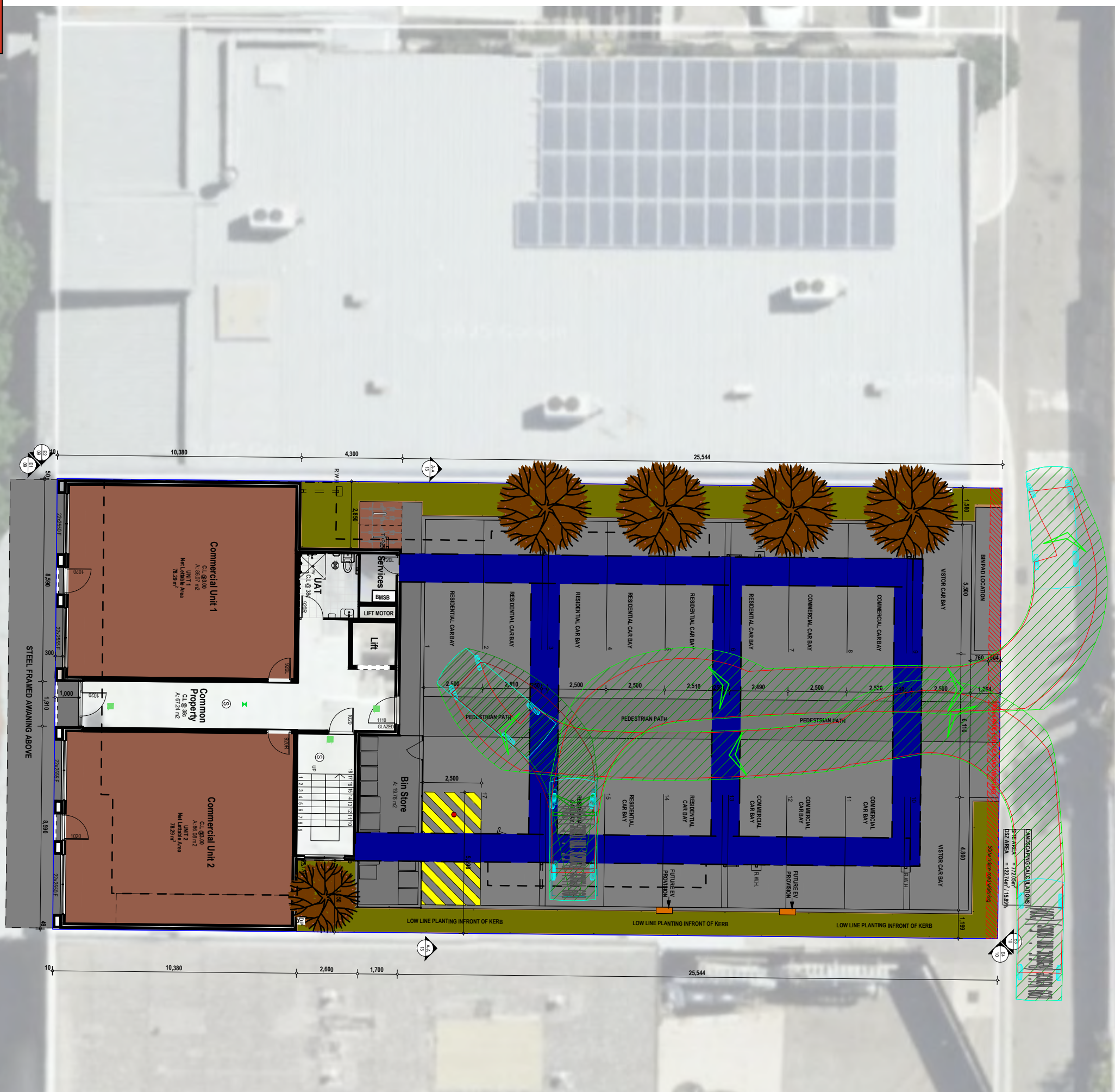
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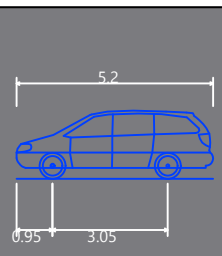
TITLE: TRAFFIC FLOW DIAGRAM - PM PEAK

DRAWING NUMBER: P004157_ S08

DRAWN BY: J.S.

Premise
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Passenger vehicle (5.2 m)
Overall Length 5.200m
Overall Width 1.940m
Overall Body Height 1.804m
Min Body Ground Clearance 0.295m
Track Width 1.840m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 6.300m

Lot boundary
Wheel Path (Forward Vehicle Motion)
Vehicle Chasis Envelope (Forward Vehicle Motion)
Wheel Path (Reverse Vehicle Motion)
Vehicle Chasis Envelope (Reverse Vehicle Motion)

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

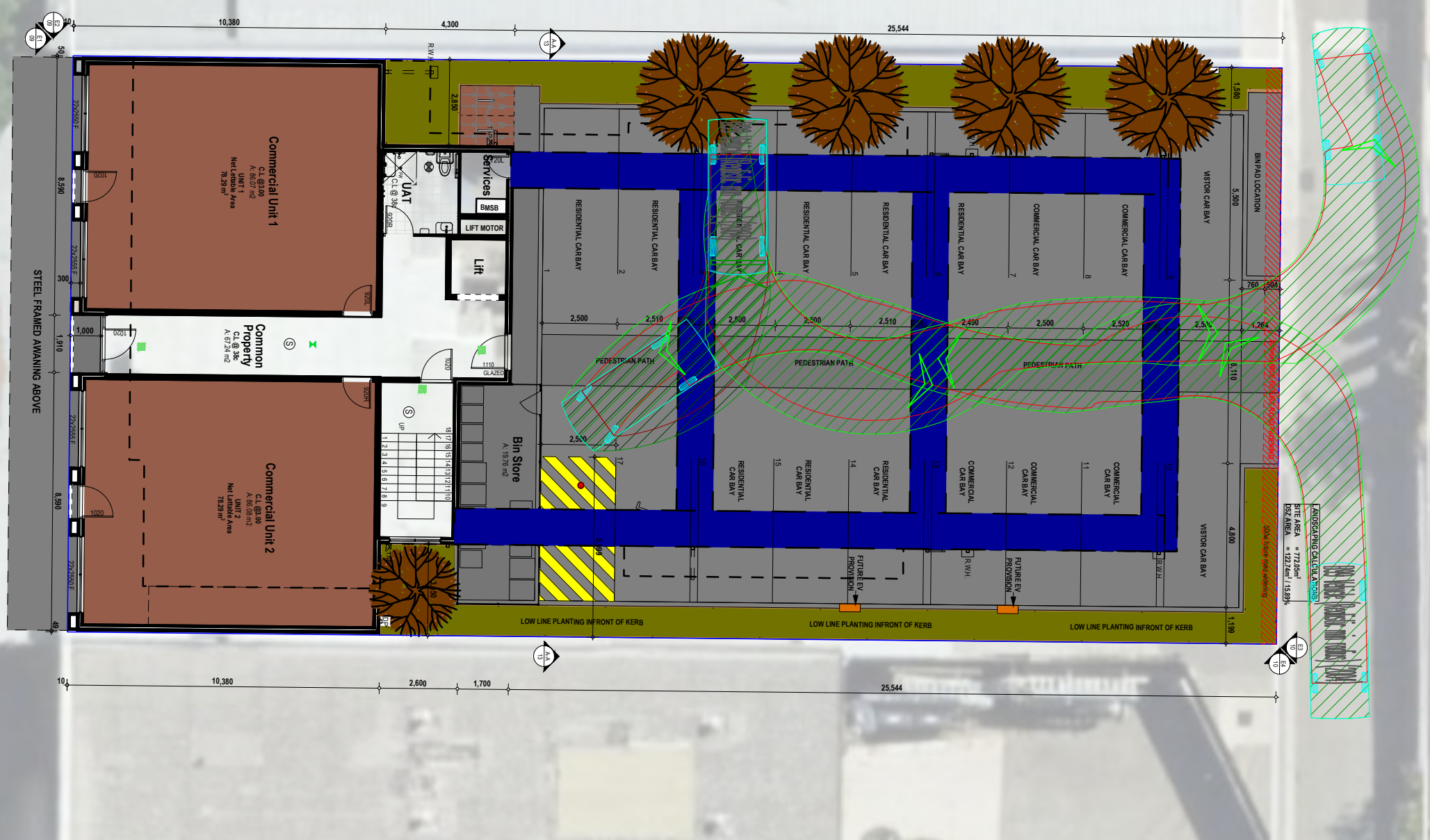
PROJECT:
22 Muriel Avenue, Innaloo

TITLE:
Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER:
P004157_S20

DRAWN BY:
A.T.

Premise
PART OF THE Amey GROUP



Passenger vehicle (5.2 m)		
Overall Length	5.200m	Lot boundary
Overall Width	1.940m	Wheel Path (Forward Vehicle Motion)
Overall Body Height	1.804m	Vehicle Chasis Envelope (Forward Vehicle Motion)
Min Body Ground Clearance	0.295m	Wheel Path (Reverse Vehicle Motion)
Track Width	1.840m	Vehicle Chasis Envelope (Reverse Vehicle Motion)
Lock to Lock Time	4.00s	
Kerb to Kerb Turning Radius	6.300m	

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

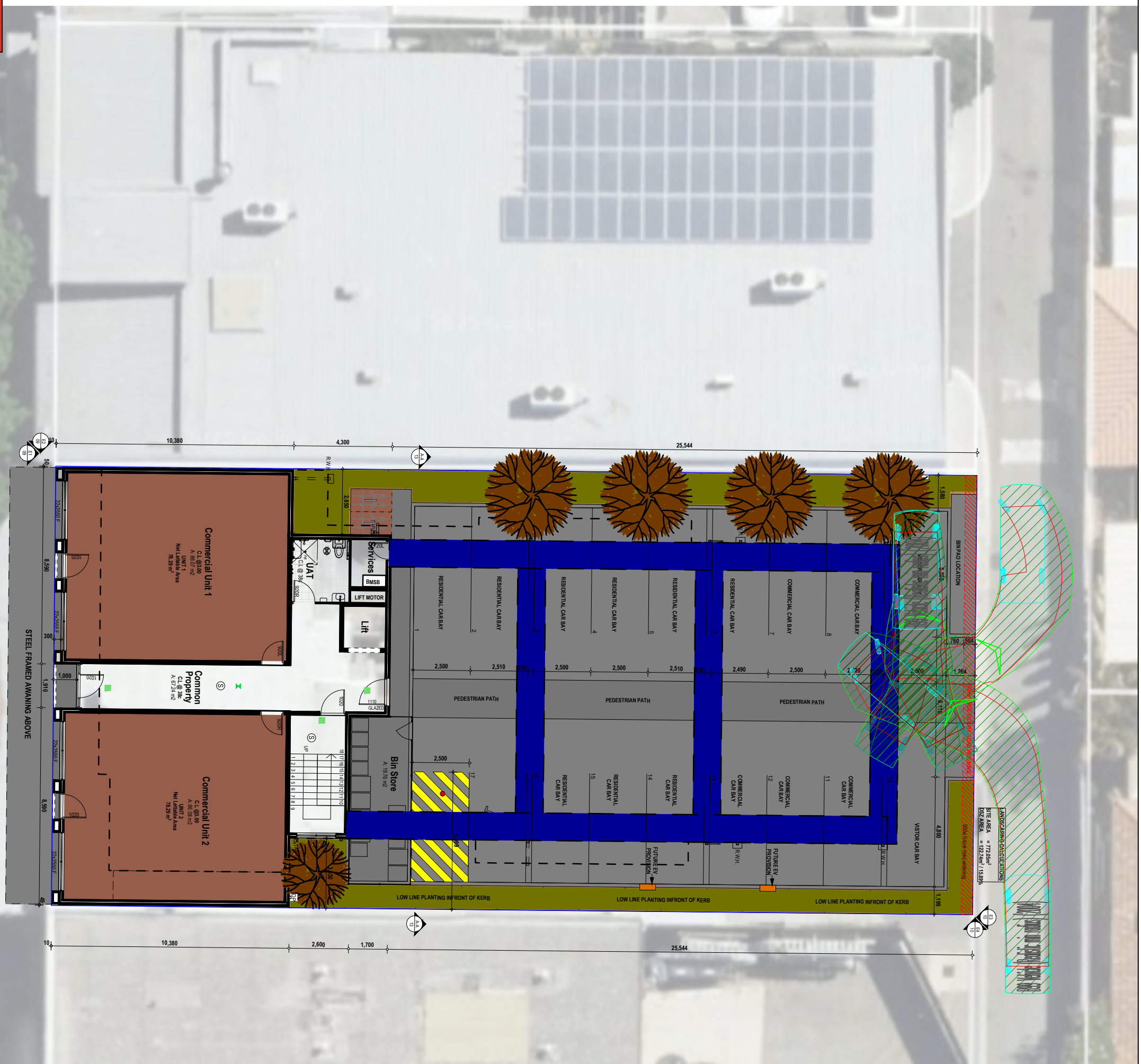
PROJECT:
22 Muriel Avenue, Innaloo

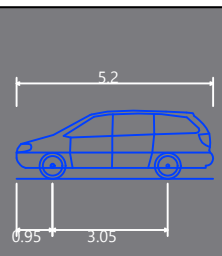
TITLE:
Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER:
P004157_S21

DRAWN BY:
A.T.

Premise
PART OF THE Amey GROUP





Passenger vehicle (5.2 m)
Overall Length 5.200m
Overall Width 1.940m
Overall Body Height 1.804m
Min Body Ground Clearance 0.295m
Track Width 1.840m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 6.300m

Lot boundary
Wheel Path (Forward Vehicle Motion)
Vehicle Chasis Envelope (Forward Vehicle Motion)
Wheel Path (Reverse Vehicle Motion)
Vehicle Chasis Envelope (Reverse Vehicle Motion)

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

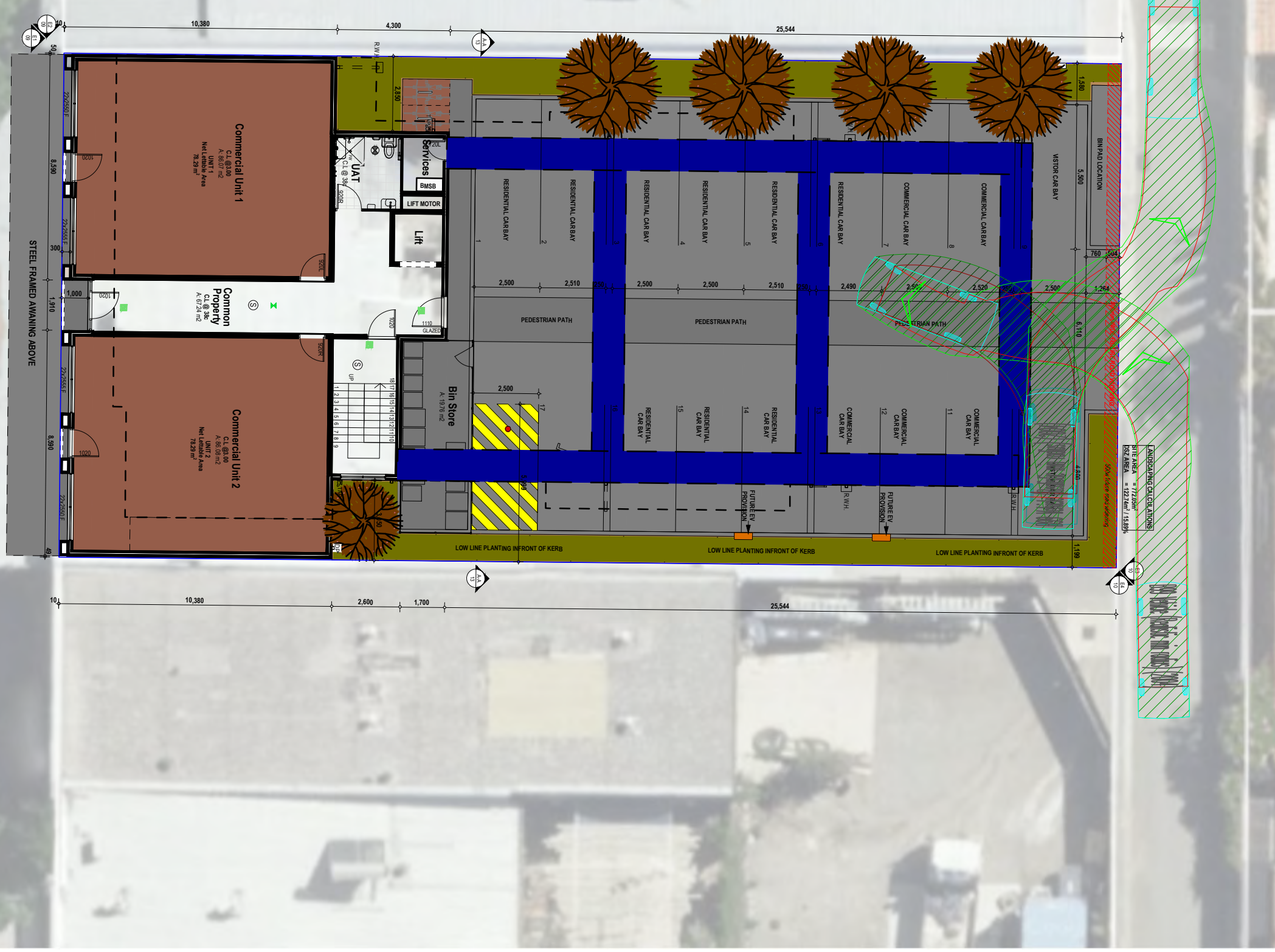
PROJECT: 22 Muriel Avenue, Innaloo

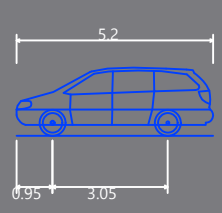
TITLE: Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER: P004157_S22

DRAWN BY: A.T.

Premise
PART OF THE Amey GROUP





Passenger vehicle (5.2 m)	
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.804m
Min Body Ground Clearance	0.295m
Track Width	1.840m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	6.300m

Lot boundary

Wheel Path (Forward Vehicle Motion)

Vehicle Chasis Envelope (Forward Vehicle Motion)

Wheel Path (Reverse Vehicle Motion)

Vehicle Chasis Envelope (Reverse Vehicle Motion)

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

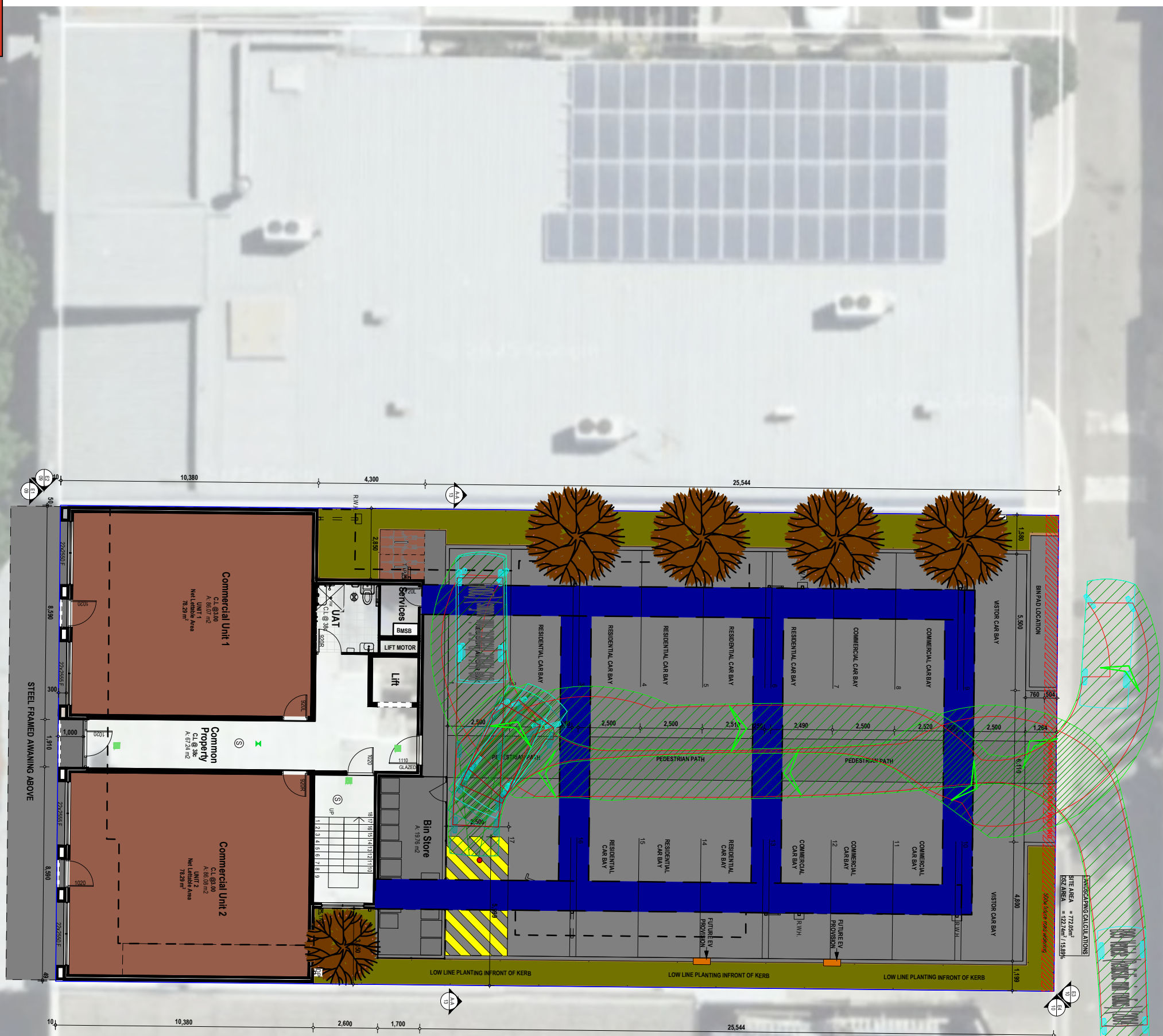
PROJECT:
22 Muriel Avenue, Innaloo

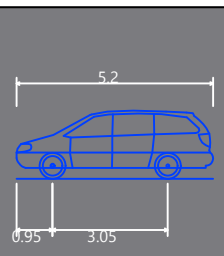
TITLE:
Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER:
P004157_S23

DRAWN BY:
A.T.

Premise
PART OF THE Amey GROUP





Passenger vehicle (5.2 m)
Overall Length 5.200m
Overall Width 1.940m
Overall Body Height 1.804m
Min Body Ground Clearance 0.295m
Track Width 1.840m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 6.300m

Lot boundary
Wheel Path (Forward Vehicle Motion)
Vehicle Chasis Envelope (Forward Vehicle Motion)
Wheel Path (Reverse Vehicle Motion)
Vehicle Chasis Envelope (Reverse Vehicle Motion)

LEGEND

NO	DATE	AMENDMENT
A	16-12-2025	ISSUED FOR REVIEW

PROJECT: 22 Muriel Avenue, Innaloo

TITLE: Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER: P004157_S24

DRAWN BY: A.T.

Premise
PART OF THE Amey GROUP

e) Waste Managment Plan prepared by CF Town Planning & Development (dated 27 March 2026)

2026

WASTE MANAGEMENT PLAN



LOT 101 (NO.22) MURIEL AVENUE, INNALOO

PROPOSED MIXED USE DEVELOPMENT
(TWO COMMERCIAL UNITS AND SIX MULTIPLE DWELLINGS)

CITY OF STIRLING

CF Town Planning & Development

This Waste Management Plan has been prepared by CF Town Planning & Development on behalf of Germano Designs and the landowners for the construction of a new mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo.



Carlo Famiano
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Name	Position	Document Revision	Date
Mr Carlo Famiano	Town Planner	Waste Management Plan	16 December 2025
Mr Carlo Famiano	Town Planner	Waste Management Plan	27 March 2026

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Appendix 1: Bin Store Location

Appendix 2 - Site Development Plans

1.0 BACKGROUND & DESCRIPTION

CF Town Planning & Development have been commissioned by Germano Designs and the landowners to prepare a Waste Management Plan (WMP) in support of the development application being considered by the Metro Inner Development Assessment Panel (DAP) and the City of Stirling for the construction of a new mixed use development on Lot 101 (No.22) Muriel Avenue, Innaloo ('Subject Land').

The development application for Subject Land proposes the construction of a three (3) storey building comprising two (2) commercial units ('Shop') and six (6) new multiple dwellings. The multiple dwellings will comprise three (3) bedrooms and two bathrooms.

According to the City of Stirling's current operative Local Planning Scheme No.3 (LPS No.3), the Subject Land is classified 'Local Centre' zone and is located within a commercial strip along Muriel Avenue.

The following table outlines the use permissibility for land classified 'Local Centre' zone for the proposed development/uses on the subject land:

Table 1– Land Use & Permissibility

LAND USE	USE PERMISSIBILITY
Multiple Dwelling	Discretionary ("D") use meaning that the use is not permitted unless the Council has exercised its discretion by granting planning approval.
Shop	Permitted ("P") use meaning that the use is permitted by the Scheme providing the use complies with the relevant development standards and the requirements of the Scheme.

A copy of the site development plans are provided in Appendix 2 (Site Development Plans).

2.0 PURPOSE OF WASTE MANAGEMENT PLAN

This Waste Management Plan has been prepared and submitted with the City of Stirling in support of the development application lodged with the DAP and the City for the construction of a new mixed use development on the Subject Land.

The aim of this Waste Management Plan is to:

1. Identify the indicative volume of waste.
2. Ensure adequate facilities are provided to serve the future occupants of the proposed mixed use development on the Subject Land.
3. Demonstrate the proposed design meets industry best practice.
4. Provide for an adequate on-street bin pick-up location (i.e. pick-up within the rear laneway).
5. Identify methods available for the future occupants of the development to minimize waste generation and reduce potential landfill.

3.0 KEY REFERENCE MATERIAL

- *WALGA Multiple Dwelling Waste Management Plan Guidelines;*
- *WALGA Commercial and Industrial Waste Management Plan Guidelines;*
- *Sustainability Victoria (Victorian State Government);*
- New South Wales (NSW) Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities; and
- Discussions with the City of Stirling Waste Management Division.

4.0 ESTIMATED VOLUMES & BIN TYPE

4.1 Types of Waste Generated

Commercial and industrial operations can generate a wide variety of the waste types. Table 2 below lists the types of waste typically generated for commercial/industrial developments (Table from WALGA *'Commercial and Industrial Waste Management Plan Guidelines'*). It is recognised that the waste type generated will vary between different business operations.

Table 2 – Waste Types

WASTE STREAM	COMMENT
General Waste	The quantity and composition of general waste generated by a commercial or industrial operation can vary significantly. General waste includes non-recyclable plastics, food waste, recyclable packaging which is contaminated with food waste and other non-recyclable materials, as well as recyclables which have not been placed in the correct bin.
Recyclables	Workers frequently consume beverages packaged in recyclable containers, such as aluminium cans and polyethylene terephthalate (PET) bottles and milk is often provided by organisations in liquid paperboard or high density polyethylene (HDPE) containers. These materials can form a significant proportion of the waste stream in commercial and industrial buildings. Occasional company events can also generate irregular but significant quantities of glass and other containers.
Glass	Glass bottles are a primary component of the waste streams generated within licensed venues such as pubs and clubs, as well as food retailers such as cafes and some take-away shops. Glass is very dense which makes it difficult to store and move efficiently
Office Paper	Waste audits have shown that by quantity, paper is by far the largest waste stream generated from offices. Office paper is generally white, A4-size and 80 grams per square metre (gsm, g/m2), although many other combinations of colour, size and grade are also generated. Office paper is a higher grade paper and as it is usually generated in large quantities it is generally collected separately and recycled.
Cardboard and Bulk Packaging	Most waste generated from non-food retail facilities is bulk packaging material that protects goods delivered to the facility for sale or distribution.
Plastic Film	Plastic film, such as shrink pallet wrap, is another major component of non-food retail building waste. This material is very bulky, but very light weight and compacts well.

Food Waste	Most commercial and industrial developments generate some quantities of food waste. The volumes of food waste generated within a development can vary significantly depending on the type and scale of the business; ranging from uneaten employee/staff meals within office buildings through to food outlets, which can produce large quantities of food waste on a daily basis.
Cooking Oil & Grease	Used cooking oil is produced in large volumes by food retailers such as fish and chips shops and fried chicken stores. Waste oil can cause significant issues if improperly disposed of to the sewage system.
Controlled Waste	The Environmental Protection (Controlled Waste) Regulations 2004 apply to a controlled waste that is produced by, or as a result of: • An industrial or commercial activity • A medical, nursing, dental, veterinary, pharmaceutical or other related activity • Activities carried out on or at a laboratory • An apparatus for the treatment of sewage. An apparatus for the treatment of sewage. Controlled Waste is defined as all liquid waste, and any waste that cannot be disposed at a Class I, II or III landfill site.
Other Wastes	These can include printers, copies, and toner cartridges, IT equipment, batteries, mobile phones, furniture, florescent lights, paint, pallets and mattresses, timber, ferrous and non-ferrous metal

All occupants and staff of the commercial tenancies and residents will be responsible to sort the waste through the provision of labeled bins throughout the buildings/site. The waste and recyclable streams that would apply to the proposed workers village on the Subject Land would be as following:

- General waste;
- Greens waste; and
- Co-mingled recycling, which includes all paper, cardboard, plastic, glass, aluminum and steel cans.

4.2 Waste Generation Volume

The proposed mixed use development on the Subject Land consists of the following configuration:

i) Six (6) three bedroom/two bathroom dwellings; and

ii) Two (2) commercial tenancies comprising an area 78.29m^2 each.

In order to provide the necessary service, this Waste Management Plan estimates the volume of waste generated by the use. The waste generation rates prescribed by 'Sustainability Victoria', *WALGA Commercial and Industrial Waste Management Plan Guidelines* and the *WALGA 'Multiple Dwelling Waste Management Plan Guidelines'* has been adopted for the proposed development.

In light of the above, the following weekly waste generations rates associated for each stream of waste (i.e. general waste and recycling) are provided:

Table 3: Waste Generation Rates

USE TYPE	GENERAL WASTE	RECYCLE WASTE
Shop	50L/100m^2 per day	25L/100m^2 floor area/day
Multiple Dwelling (3 bedroom)	240L/week	240L/fortnight

Note - The shop use has been calculated for seven (7) days, assuming that the "Shop' use has the potential to operate everyday. Furthermore, the City of Stirling has advised that the waste generation for the dwellings (i.e. general waste) is 140L per dwelling.

The following equation was used to calculate the anticipated weekly general waste and recycling generation:

- Waste, recycle generation calculations (commercial component)

  Total Amount of Waste Type = (Floor Area/100m^2) x Waste Rate

- Waste & recycle generation calculations (domestic dwelling)

  Total amount of Waste Type = Dwelling Number/Type x Waste Rate (weekly or fortnightly)

The following weekly waste generation calculations are provided in support of the development for the purpose of establishing the number of bins required in support of each component:

Table 4 – Waste Generation (Commercial Component)

USE TYPE	AREA OF BUILDING	GENERAL WASTE	RECYCLE WASTE
Shop	156.58m^2	548.03 litres/per week	274 litres/per week
	Total Waste	**548.03 litres**	**274 litres**

Table 5 – Waste Generation (Multiple Dwellings – Three Bed Rooms)

Dwelling Type	Dwellings	General Waste	Recycle Waste
Multiple Dwelling	6 dwellings	840 litres/per week	1,440 litres/per fortnight
	Total Waste	840 litres (weekly)	1,440 litres (fortnightly)

4.3 Bin Type

The City of Stirling have advised that all domestic waste collection will be undertaken by the City, with collection being preferably along the rear laneway (Azurite Lane). The commercial waste collection can be undertaken by a private contract or part of a service offered by the City of Stirling and will be collected along Azurite Lane.

In addition to the above point, the City of Stirling have advised that the following bin type can be used to service the development and is offered as part of the City's waste collection service for multiple dwellings:

Multiple Dwellings

- General Waste (red lid bins) - 240 litre
- Recycle Waste (yellow lid bins) - 360 litre
- Green Waste (green lid bins) 240 litre

Shop

- General Waste (red lid bins) - 240 litre
- Recycle Waste (yellow lid bins) - 360 litre

Figure 1 below illustrates the dimensions and details of both the 240 litre and 360 litre bins that will be adopted as part of this development.

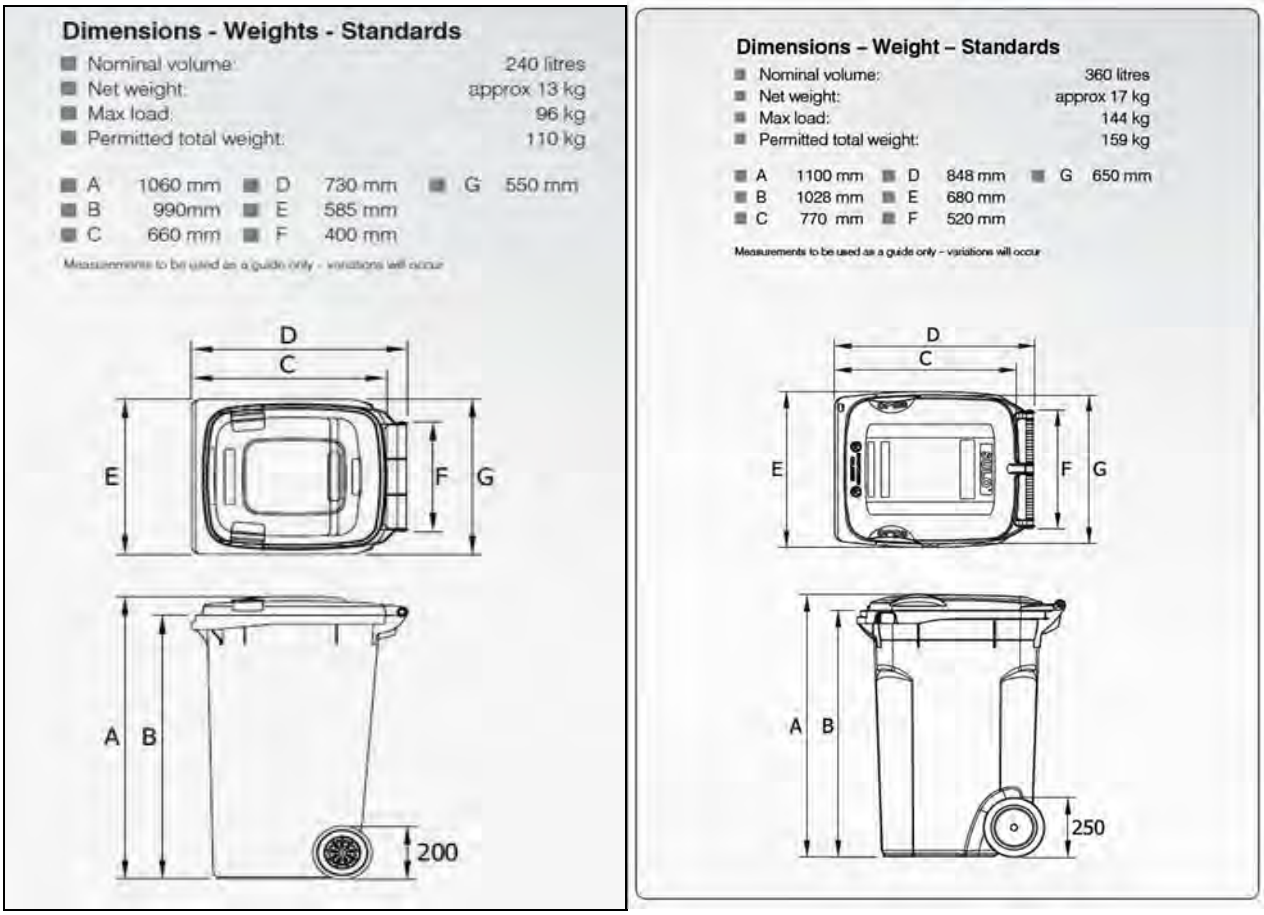


Figure 1 – Bin types & dimensions

Through discussions with the City of Stirling, the following bin requirements are to be applied to the proposed development on the land:

Multiple Dwellings

- General waste bins - 4 x 240 litre
- Recycle waste bins - 4x 360 litre
- Green waste bins - 1x 240 litre

Shop

- General waste bins - 2 x 240 litre
- Recycle waste bins - 3 x 360 litre

The following equation has been used to calculate the number of bins required to service the development and the capacity of the bins for each waste stream:

- Total bins required for general/recycle waste

  Total number of bins required = Total waste generation/bin size (i.e. 240L or 360L)

The following calculation (i.e. Table 6) is provided in support of the waste generation and the number of bins required and the bin capacity to service the proposed multiple dwelling development on the land:

Table 6 – Bin Capacity (Commercial Component)

WASTE TYPE	BIN SIZE	NUMBER OF BINS	COLLECTION INTERVALS	BIN CAPACITY	ACTUAL WASTE COLLECTION
General Waste	240L	3	1 per week	720L per week	548.03 litres
Recycle Waste	360L	2	Fortnightly	720L fortnightly	548 litres (fortnightly)

Whilst the bin capacity being provided for the commercial component is in excess of the minimum requirements, it will allow for the following:

- Convenient access for each of the commercial uses on the land.
- Allows for additional waste to be collect from bins located throughout the site and within the communal area.
- Caters for any additional waste generated by the uses or any potential change of use in the future.
- Remove the potential of odours.
- Allows for perk periods for the shop uses, where greater waste maybe generated.

In light of the above, it is recommended that the additional bin capacity be adopted.

Table 7 – Bin Capacity (Residential Component)

WASTE TYPE	BIN SIZE	NUMBER OF BINS	PROPOSED BIN CAPACITY	ACTUAL WASTE GENERATION
General Waste	240L	4	960L per week	840L per week
Recycle Waste	360L	4	1,440L per fortnight	1,440L per fortnight

It should be noted that one (1) green bin has been provided to collect any waste from the landscaping area (as recommended by the City of Stirling).

In light of the above bin capacity calculations, it is contended that the provision of the bin numbers and pick up intervals listed in Tables 6 & 7, including associated storage facilities, is sufficient to accommodate the needs of the future occupants of the development. It is noted the general waste bin provision is, but this reflects the City's advice based on a communal bin store.

In addition to the bin provision for the development, there is sufficient space along the rear portion of the Subject Land (along the laneway) to accommodate waste collection..

All bins will comprise appropriate colour coding (i.e. red & yellow, with green in the future) and signage to clearly indicate the types of waste to be placed in the relevant bins. This will assist with ensuring that cross contamination of waste is avoided by the future occupants of the development. This will also allow for the reduction of landfill and potentially increase recycling.

5.0 COLLECTION FREQUENCY & PROVIDER

The City of Stirling is the rubbish collection service provider, with the following collection services being provided to residential within the new development on the Subject Land:

- Domestic dwellings - Weekly general waste mobile bin collection (Monday).
- Domestic dwellings - Fortnightly recycle mobile bin collection (Monday).
- Commercial component – Weekly (suggested Friday)
- Fortnightly green waste mobile bin collection (every second Monday alternative to the recycle waste collection).

In addition to the above services, the City provides collection points for the general public (i.e. library/civic centres) for mobile phone, globes & battery collection.

The City of Stirling have advised that all waste collection should be undertaken from Azurite Lane abutting the Subject Land (not on-site pick-up) and will be collected using a standard truck that forms part of the City of Stirling's conventional waste service (see Figure 2).

The collection service will be undertaken on a weekly basis for general waste and fortnightly for recycling waste and green waste. It is recognized that the bins will need to be transferred to the rear of Subject Land along the laneway for collection and returned once serviced.

Adequate space has been provided along the rear of the Subject Land along Azurite Lane to accommodate the rubbish bins (see Figure 3). It should be noted that a total of eight (8) bins will be situated along the laneway at any one given time.



Figure 2 – Rubbish truck & specifications to be adopted for the development.

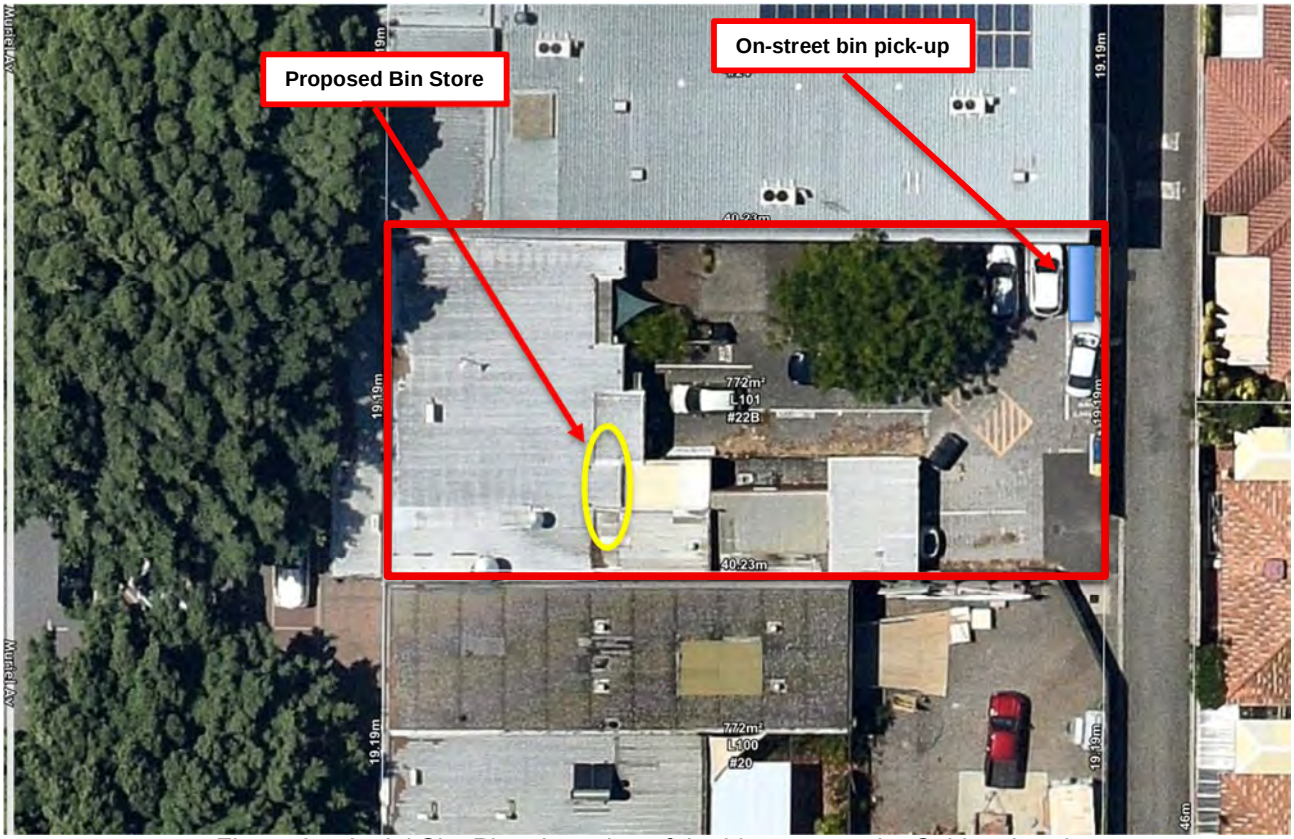


Figure 3 – Aerial Site Plan. Location of the bin store on the Subject Land.

6.0 LOCATION, SIZE & FEATURES OF BIN STORAGE AREA

6.1 Bin Store Area & layout

As previously mentioned, the proposed mixed use development on the Subject Land will include a total of eight (8) 240 litre mobile garbage bins and six (6) 360 litre mobile garbage bins.

The following table provides a breakdown of the required area for the bin storage area to accommodate the required bins (the required areas have been adopted using the New South Wales Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities):

Table 8 – Bin Storage Area

BIN SIZE	BIN AREA ALLOWANCE	QUANTITY	MANOEURING SPACE ALLOWANCE	AREA REQUIRED
240L MGB	0.43m^2	8 bins	X 2 (shared access)	6.88m^2
360L MGB	0.55m^2	6 bins	X 2 (shared access)	6.6m^2
			Total Area Required	**13.48m^2**
			Total Area provided	**14.5m^2**

As outlined above, the bin storage area proposed for the development is adequate to accommodate the needs of the development. Furthermore, the bin store area proposed for the development will comprise gates to allow for easy access and storage of the bins. The store has been designed to provide easy removal of the bins for servicing and cleaning (see Appendix 1 – Bin Store Location).

6.2 Bin Store Location & Features

Bin storage area will be located within the property boundaries, along the land's southern side boundary and abutting the car parking area (behind the building line). The bin store will be enclosed and not visible from the street and/or the adjoining properties. The bins will be moved from the bin store to the laneway for collection and returned once serviced (see Appendix 1 – Bin Store Location).

The location of the bin store on the Subject Land will be well clear of any major openings for the existing dwelling or commercial developments on the surrounding properties (the adjoining southern property is commercial and comprises a parapet wall). Given these facts, the bin store will not have an adverse impacts on the occupants/visitors of any developments on the adjoining properties (see Figure 3). Furthermore, the bin storage area will also be located away from any major openings for the dwellings or commercial tenancies within the new development on the Subject Land.

The proposed location of the bin storage area will:

i) Minimise odour levels impacting on the occupants of the development;
ii) The bin store is located abutting the parapet wall of the existing development on the adjoining southern property;
iii) Provide easy access to all future occupants of the development; and
iv) Allow for easy transfer of the bins between the storage area and the rear of the Subject Land, along the laneway.

Key design points of the common bin storage area are as follows:

- The bin storage area will comprise a tap and connection to sewer for wash-down purposes.

- The bin storage area will comprise a 100mm concrete floor.
- The bin store area will be screened and gated to hide its view from the street, common property area and provide security.
- A galvanized pipe will be installed along the walls to prevent the bins from hitting and damaging the walls of the bin store.
- The bin storage area will be secure and screened from the future occupants of the development. The screen will include a masonry wall and landscaping along the frontage of the bin store to provide additional screening from being viewed from the public realm.
- The bin store will be enclosed.
- Allow for easy transfer of the bins to the verge area for collection (see Appendix 1 – Bin Store location).

7.0 NOISE, ODOUR & MINIMIZING LANDFILL

It is anticipated that the location of the bin storage area for new multiple dwelling development on the Subject Land will provide easy access by the occupants of each individual dwelling or the commercial tenancies and minimize disruption to neighbors and residents to the rear of the Subject Land.

Noise

The bin storage area will be screened and located within the Subject Land, away from any dwellings and will be enclosed. The adjoining southern property comprises a parapet wall for a commercial development adjacent to the bin store on the Subject Land. Furthermore, the bin storage area will comprise a masonry wall around the perimeter of the compound to reduce any impact on the surrounding properties/dwellings.

It is expected that the bin storage area will generate minimal vertical and horizontal noise transfer during use. As such, it is contended that the noise generated from the bin storage area will not result in any undue noise that would not be consistent with that generated by the adjoining properties.

In light of the above, it is contended that there will be no notable impacts on the residential dwellings on the surrounding properties from the development on the Subject Land in terms of waste management.

Odour

Strategies to minimize odour are:

- Locating the common bin storage area along the side of the development, the facility being enclosed.
- The bin storage area will not abut any habitable space for the existing dwellings on any surrounding property.
- Construction of a masonry wall around the perimeter of the bin storage area.
- Screening the bin storage area.
- Allowing for natural ventilation of the bin storage area.

- Regular washing of the bins and storage area.

Minimising landfill

Given that the City of Stirling provide three (3) separate bins (i.e. general waste, recycling & greens), it allows occupants of the development to sort rubbish accordingly. The provision of recycling bins will enable occupants of the development to place the following items for recycle collection:

- Glass bottles and jars (excluding broken glass, plates, pottery etc.).
- All plastic bottles.
- Newspapers and glossy magazines, paper, envelopes
- Cardboard boxes, cereal boxes, pizza boxes, egg cartons etc.
- Cans - steel and aluminum, including aerosols cans.
- Milk and juice cartons.

Furthermore, the City of Stirling provides annual bulk waste, greens pickup and white goods pickup to reduce the amount of waste being placed within the general waste bin.

In light of the above services, it is contended that adequate measures are available for the future occupants of the development to minimize disposal of rubbish within the general waste bin resulting in long term reduction of landfill.



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Vermin

The bin lids will remain closed at all times to reduce access by vermin. The use of bait stations could be implemented/considered by the occupier of each dwelling in instances of vermin appearing.

8.0 SCREENING OF BIN STORARE AREAS

The bin storage area will be a purpose built compound specifically designed, located and screened from the public realm (i.e. screened from any adjoining roads). The bin storage area will be located within the rear car parking area of the development and will not be visible from the street and/or any adjoining properties.

9.0 IMPACT ON ADJOINING/ADJACENT PROPERTIES

The proposed mixed use development on the Subject Land and associated bin store has been designed to be relatively small and comprises a masonry wall where it abuts the adjoining property. Furthermore, the bin store area will abut a parapet wall for a commercial development on the adjoining southern property. Given this separation, it is concluded that an adequate buffer is provided between the bin store and any potential sensitive spaces on the adjoining property.

It is contended that the bin storage area for the proposed development on the Subject Land is well located and will be constructed to minimize any adverse impacts on the adjoining properties.

In light of the above, it is contended that any potential impacts on the adjoining properties from the proposed bin storage area on the Subject Land is expected to be minimal and would be consistent with the waste disposal activities of a typical mixed use or multiple dwelling development within the immediate locality.

10.0 STRATA MANAGEMENT COMPANY REQUIREMENTS

The appointed Strata Management Company contracted to manage the multiple dwellings on the Subject Land will be responsible to:

i) Appoint a site manager (i.e. a resident) to be responsible for coordinating the occupants of the complex to arrange cleaning of the bins and bin storage areas every two (2) to three (3) weeks;

ii) The site manager will be responsible to transferring the bins from the bin store area to the verge area the night prior to pick up (before 7pm) and returning the bins to the store area on the evening of collection day (before 6pm);

iii) Ensure litter is cleaned up through regular landscape maintenance;

iv) Deal promptly with any issues or complaints relating to hygiene, noise, odour or other inconvenience; and

v) Arrange for a private contractor to collect and disposal of green waste (i.e. small garden prunings etc.) as part of maintaining the landscaping areas for the development (i.e. private gardener).

The abovementioned procedure will also be implemented if a sole landowner has control of the development (i.e. appoint a tenant to undertake the aforementioned tasks).

The future prospective purchases/occupants of the complex will be provided with a copy of the approved Waste Management Plan on occupancy of a dwelling. The Waste Management Plan will also be incorporated or referred to in any Strata Management Plan or Strata By-Laws or any rental agreements prepared for the development.

11.0 CONSTRUCTION WASTE

During construction, a waste compound will be provided on-site to store any waste produced during the construction process and will be serviced regularly (when required) by a private contractor. The contractor will provide off-site sorting of the waste to ensure that waste is recycled where possible to minimize landfill waste.

Sub-contractors will be responsible for pre-sorting of waste products into appropriate areas within the waste compound as much as possible to reduce overall construction costs. The site manager will monitor the disposal of waste and sorting of recycle material.

No waste compounds or rubbish will be placed or stored on the street verge area or footpaths surrounding the project boundaries. All pedestrian and vehicle access areas will remain clear from construction debris at all times.

More details regarding on-site management during the construction phase of the development will be provided as part of a Construction Management Plan to be prepared by the builder prior to the commencement of construction.

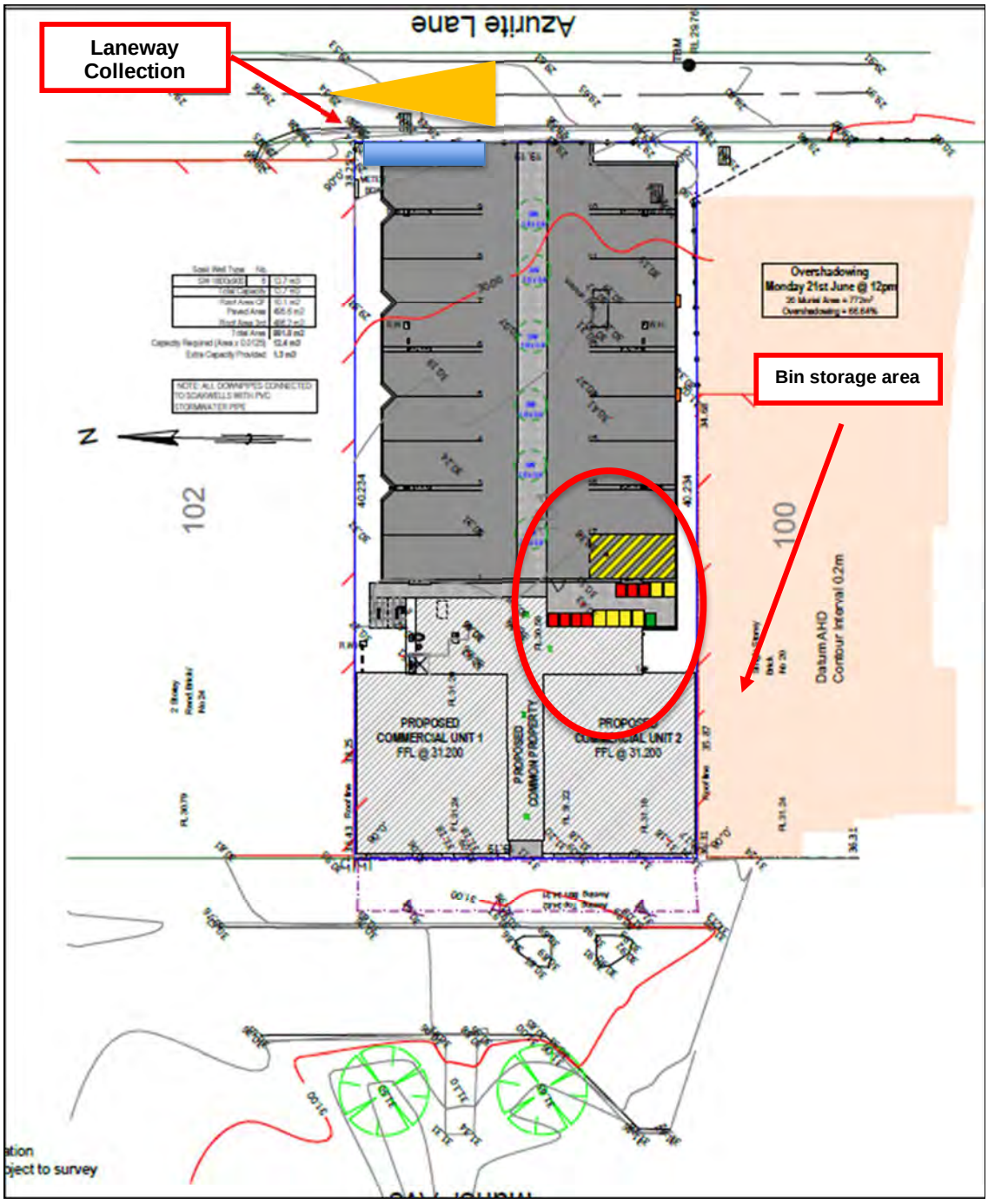
12.0 CONCLUSION

The proposed mixed use development on the Subject Land is small in nature, does not generate high quantities of waste and is consistent with other similar multiple dwelling or mixed use developments approved by the City of Stirling within the Innaloo locality. As demonstrated within this Waste Management Plan, the proposed mixed use development on Subject Land provides sufficient bin storage and adequate bins to service the needs of the occupants for each individual dwelling or the commercial tenancies for all waste streams provided by the City of Stirling, with this project reflecting the recommendation provided by the City's Waste Management team.

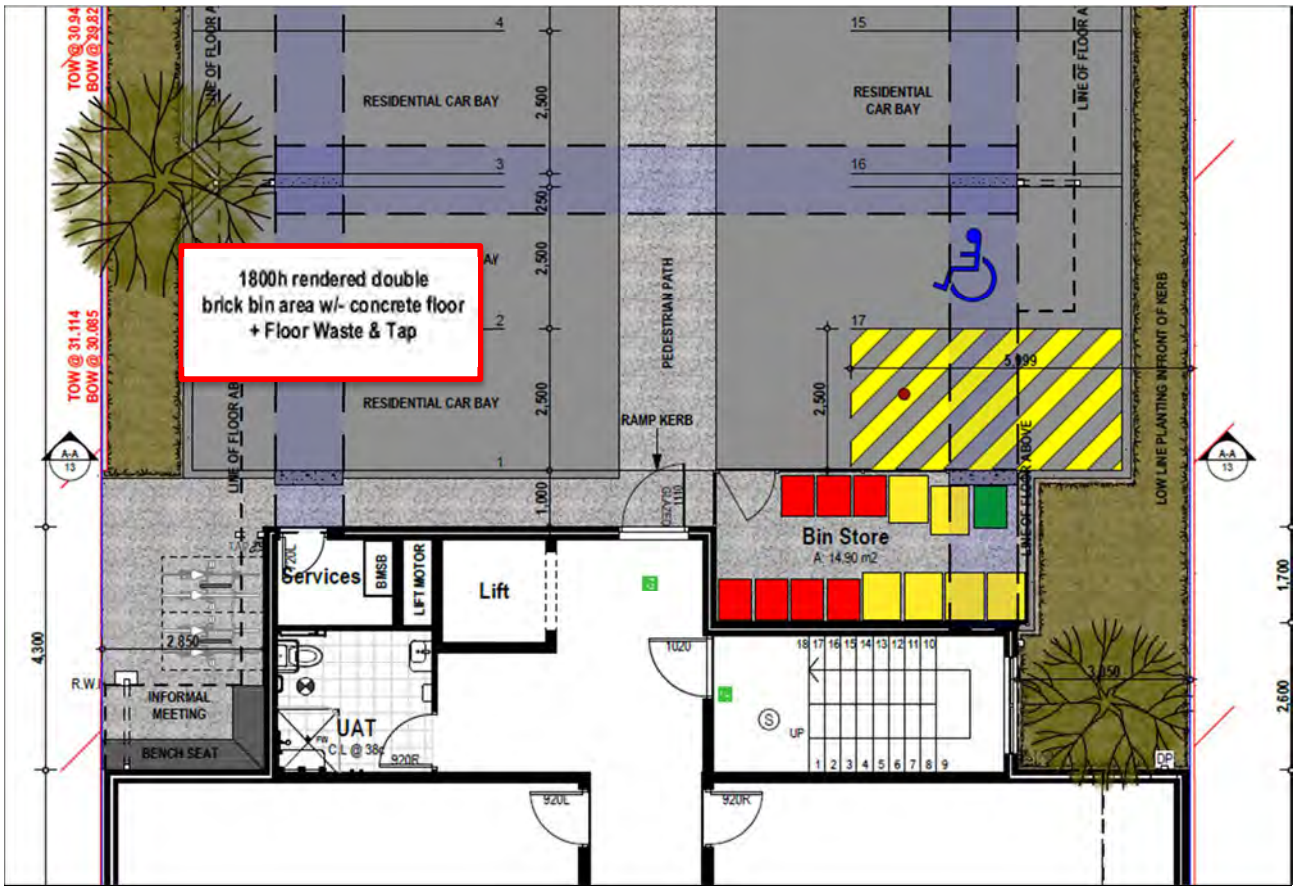
Furthermore the servicing of the bins by the City of Stirling along the rear of the Subject Land along Azurite Lane can adequately be achieved without having an adverse impact on the local residents and the local street network.

CF Town Planning & Development
Planning & Development Consultants

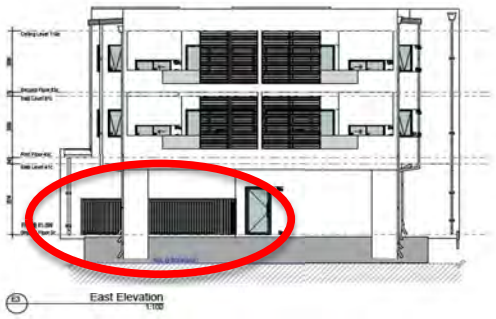
APPENDIX 1 – BIN STORE LOCATION

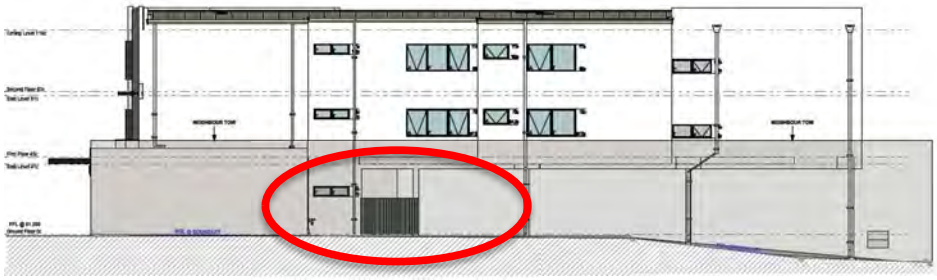


Above - Site Plan



Bin Storage Area





APPENDIX 2 – SITE DEVELOPMENT PLANS

Stavertis

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Apartment Complex

Job Number: 23011

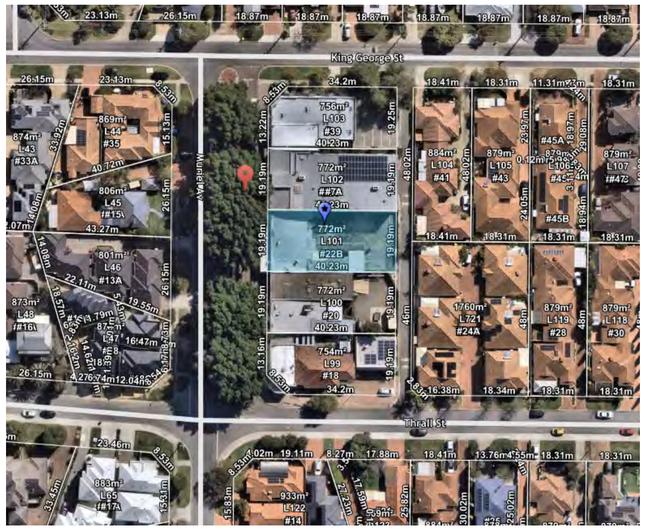
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01	Cover Page
02	Existing Site Survey
03	Site Plan
04	Context Plan
05	Ground Floor Plan
06	First Floor Plan
07	Second Floor Plan
08	Roof Plan
09	Elevations
10	Elevations
11	FF Solar Study
12	SF Solar Study
13	Section



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Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and
need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
22 Murieal Avenue Innaloo

db Surveys
55 Chrysostom Street Trigg Perth 6029
Ph/Fax 61 8 94481033
LICENSED LAND and ENGINEERING SURVEYORS

Key Features

- Telecom
- Water meter
- Power Pole
- Power Dome
- Sewer M/H

Revision	Description	Date
8.00	Council Comments	30.03.26
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

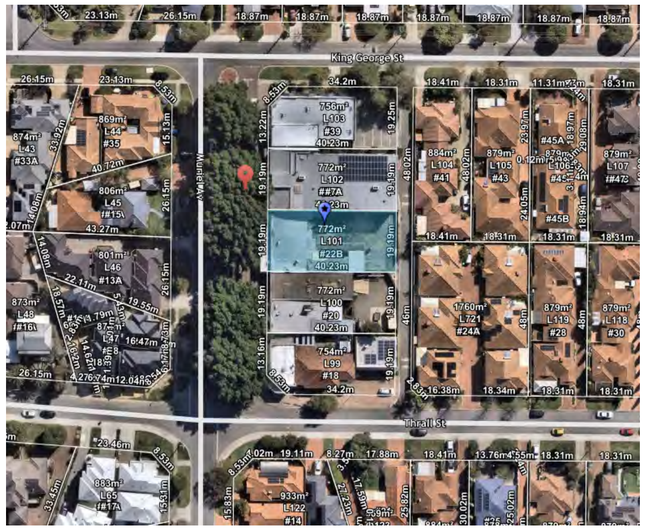
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Project No:	**Revision Number:**
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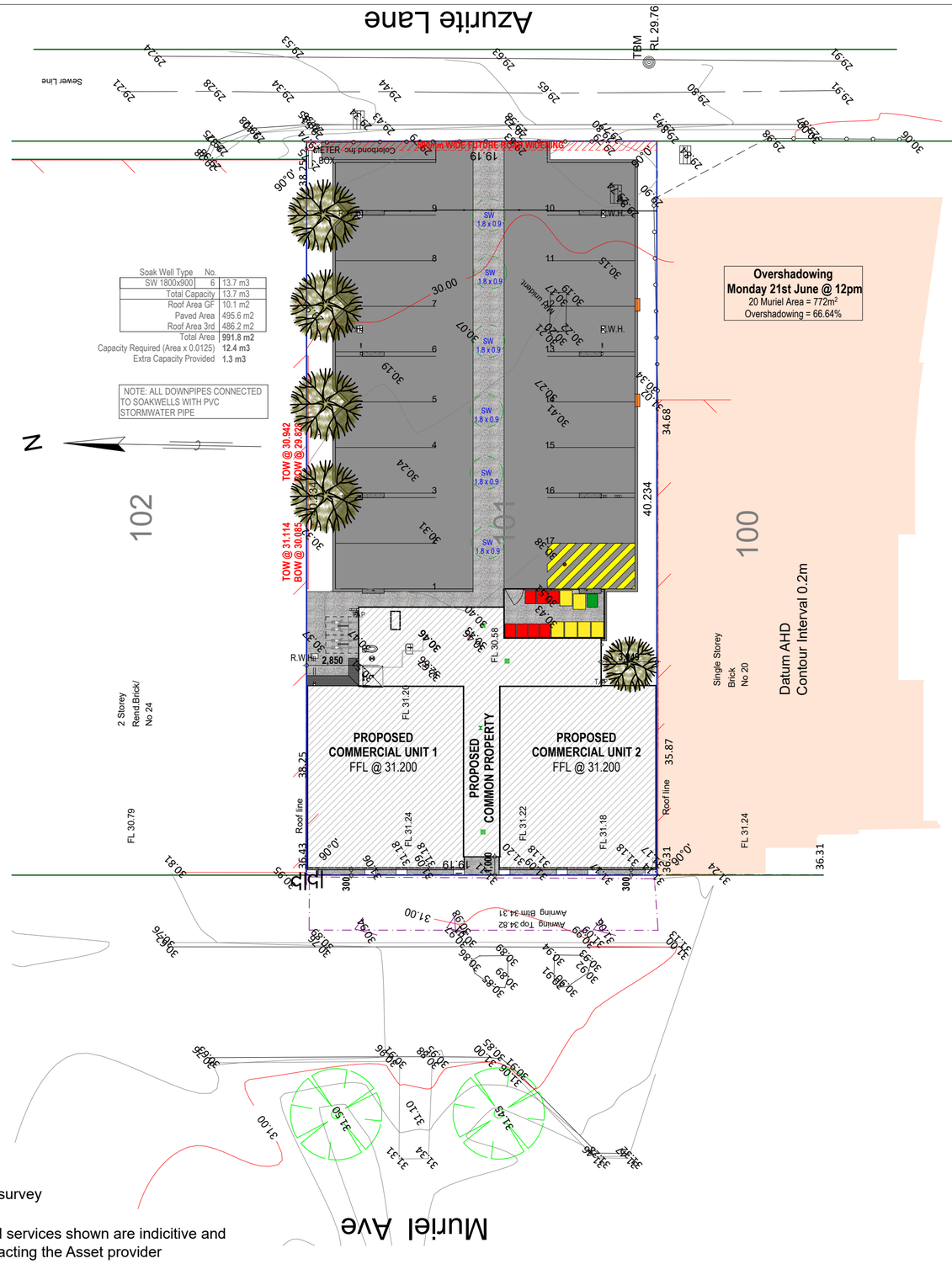
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02 of 13

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Soak Well Type	No.	
SW 1800x900	6	13.7 m3
Total Capacity		13.7 m3
Roof Area GF		10.1 m2
Paved Area		495.6 m2
Roof Area 3rd		486.2 m2
Total Area		**991.8 m2**
Capacity Required (Area x 0.0125)		**12.4 m3**
Extra Capacity Provided		**1.3 m3**

NOTE: ALL DOWNPIPES CONNECTED TO SOAKWELLS WITH PVC STORMWATER PIPE

Note:Boundary location
and dimensions subject to survey

Disclamer :All underground services shown are indicitive and need to be verified by contacting the Asset provider
Only visible surface services have been located
All other services need to be verified

Scale 1:200 @ A3

PLOT RATIO

COMMERCIAL
Site Area: 762.46m²
Building Footprint: 170.41m²
22.35%

RESIDENTIAL
Site Area: 762.46m²
Building Footprint: 815.14m²
106.90%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	14.90	16,440	47.57
Commercial Unit 1	85.21	37,160	255.63
Commercial Unit 2	85.22	37,160	255.65
Common Property	67.24	53,960	219.00
	252.57 m²	144,720 mm	777.85 m³
	1,291.28 m²	**710,480 mm**	**3,751.81 m³**

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8.00	Council Comments	30.03.26
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Site Plan

Scale: 1:200
Sheet Size: A2
Project No: 23011
Revision Number: 8.00
Drawing No.: 03 of 13

Dwg:FS386-01

db surveys
LICENSED LAND SURVEYORS

Feature Survey

Lot 101 on Plan 6290
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55 Chrysostom Street Trigg Perth 6029
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Key Features
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Water meter
Power Pole
Power Dome
Sewer M/H

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COMMERCIAL DEVELOPMENTS MURIEL ROAD



RESIDENTIAL DEVELOPMENTS THRALL STREET



COMMERCIAL SHOPPING COMPLEX SCARBOROUGH BEACH RD

Revision	Description	Date
8.00	Council Comments	30.03.26
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Project North:

Client
Stavertis

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Apartment Complex

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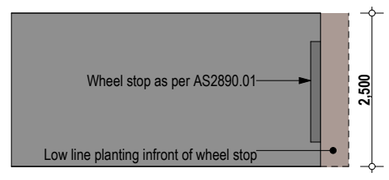
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Drawing No.:
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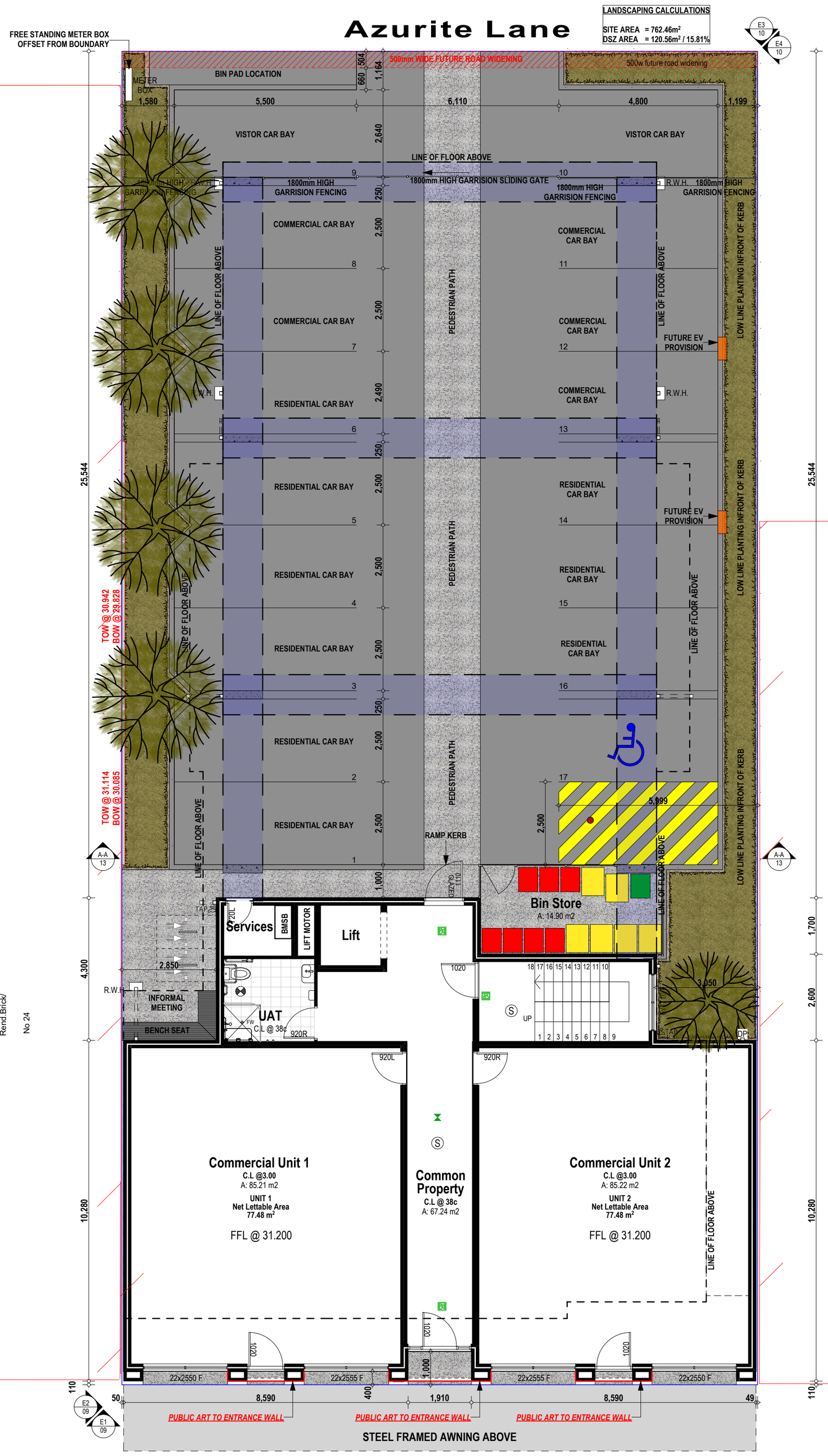
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Carbay Detail

Azurite Lane



Muriel Ave

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Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
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Apartment 6			
Balcony	22.54	20,790	70.18
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Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

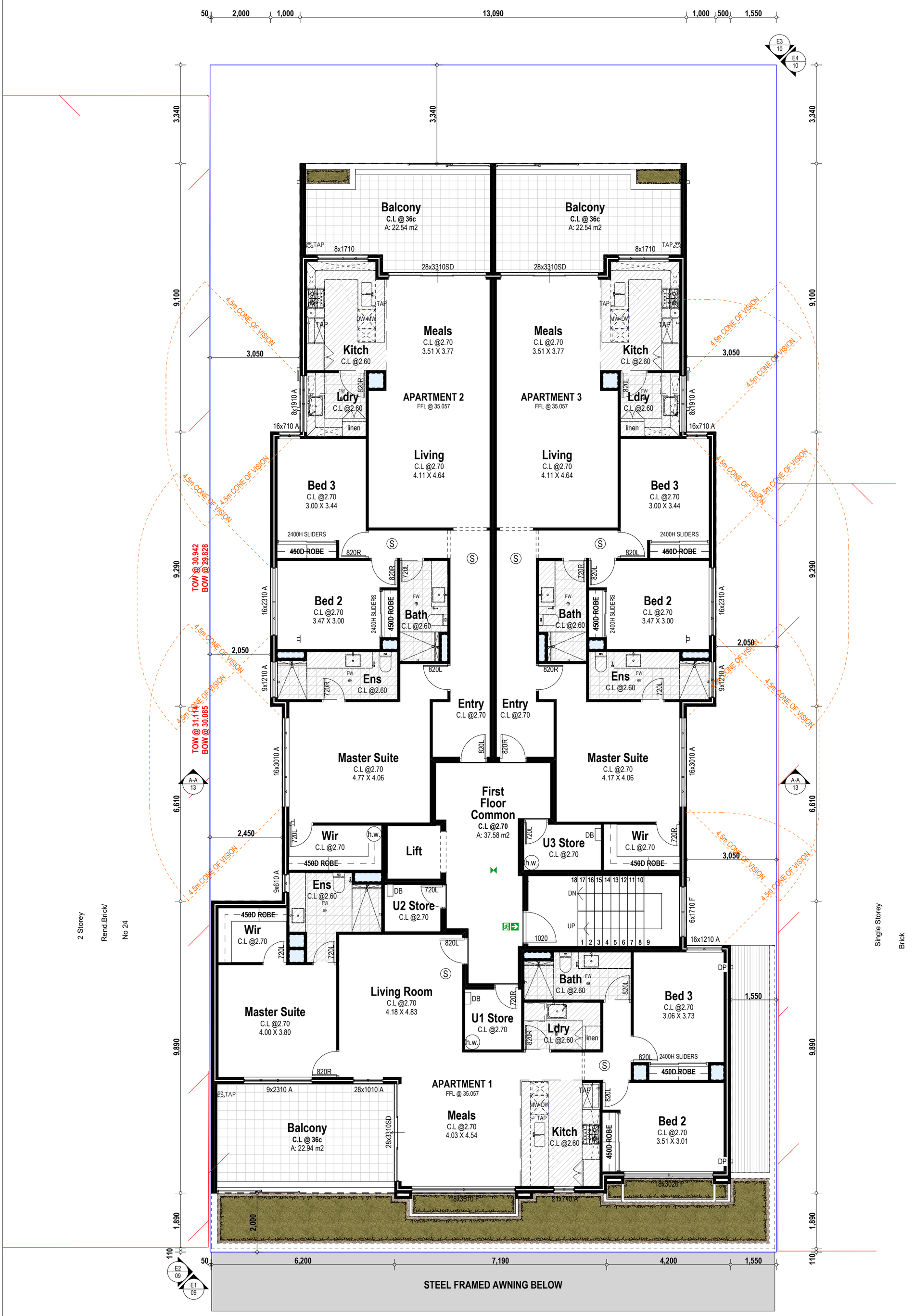
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23011	8.00

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Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Ground Floor			
Bin Store	14.90	16,440	47.57
Commercial Unit 1	85.21	37,160	255.63
Commercial Unit 2	85.22	37,160	255.65
Common Property	67.24	53,960	219.00
	252.57 m²	144,720 mm	777.85 m³
	1,291.28 m²	**710,480 mm**	**3,751.81 m³**

Revision	Description	Date
8.00	Council Comments	30.03.26
7.00	Development Approval	11.12.25
6.00	Consultant Markups	12.11.25
5.00	DRP	23.10.25
4.00	Concept	02.10.25
3.00	Concept	10.09.25

Project North:

Client
Stavertis

Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

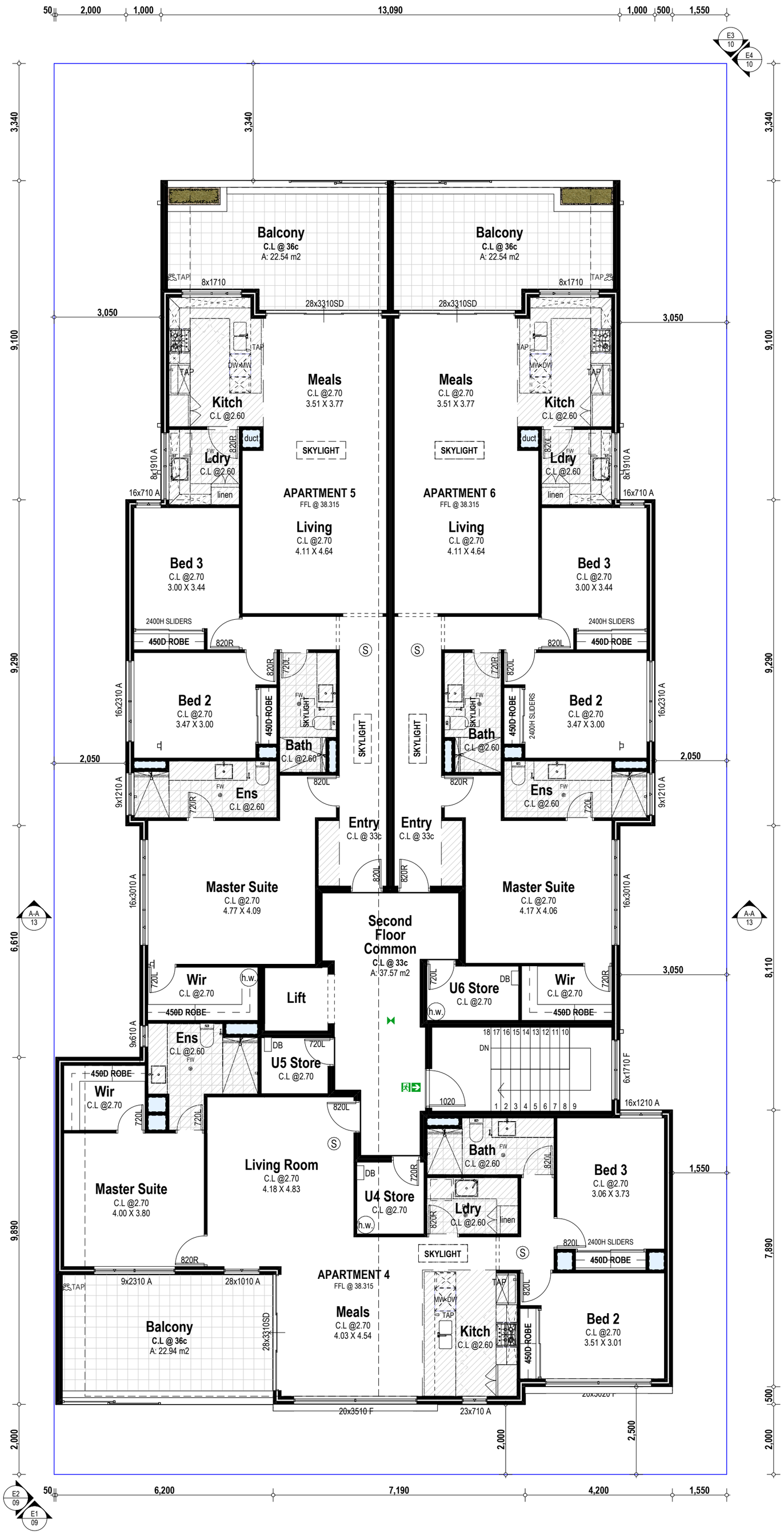
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First Floor Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	8.00

Drawing No.:
06 of 13

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PLOT RATIO

COMMERCIAL

Site Area:	762.46m²
Building Footprint:	170.41m²
	22.35%

RESIDENTIAL

Site Area:	762.46m²
Building Footprint:	815.14m²
	106.90%

Zone	Area	Perim	Vol
First Floor Common	37.58	37,480	101.46
Second Floor Common	37.57	37,480	106.28
	75.15 m²	74,960 mm	207.74 m³
Apartment 1			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 2			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 3			
Balcony	22.54	20,790	70.18
Residence	139.30	59,350	394.09
	161.84 m²	80,140 mm	464.27 m³
Apartment 4			
Balcony	22.94	20,400	72.21
Residence	133.59	59,700	377.93
	156.53 m²	80,100 mm	450.14 m³
Apartment 5			
Balcony	22.54	20,790	70.18
Residence	140.87	64,370	398.52
	163.41 m²	85,160 mm	468.70 m³
Apartment 6			
Balcony	22.54	20,790	70.18
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Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

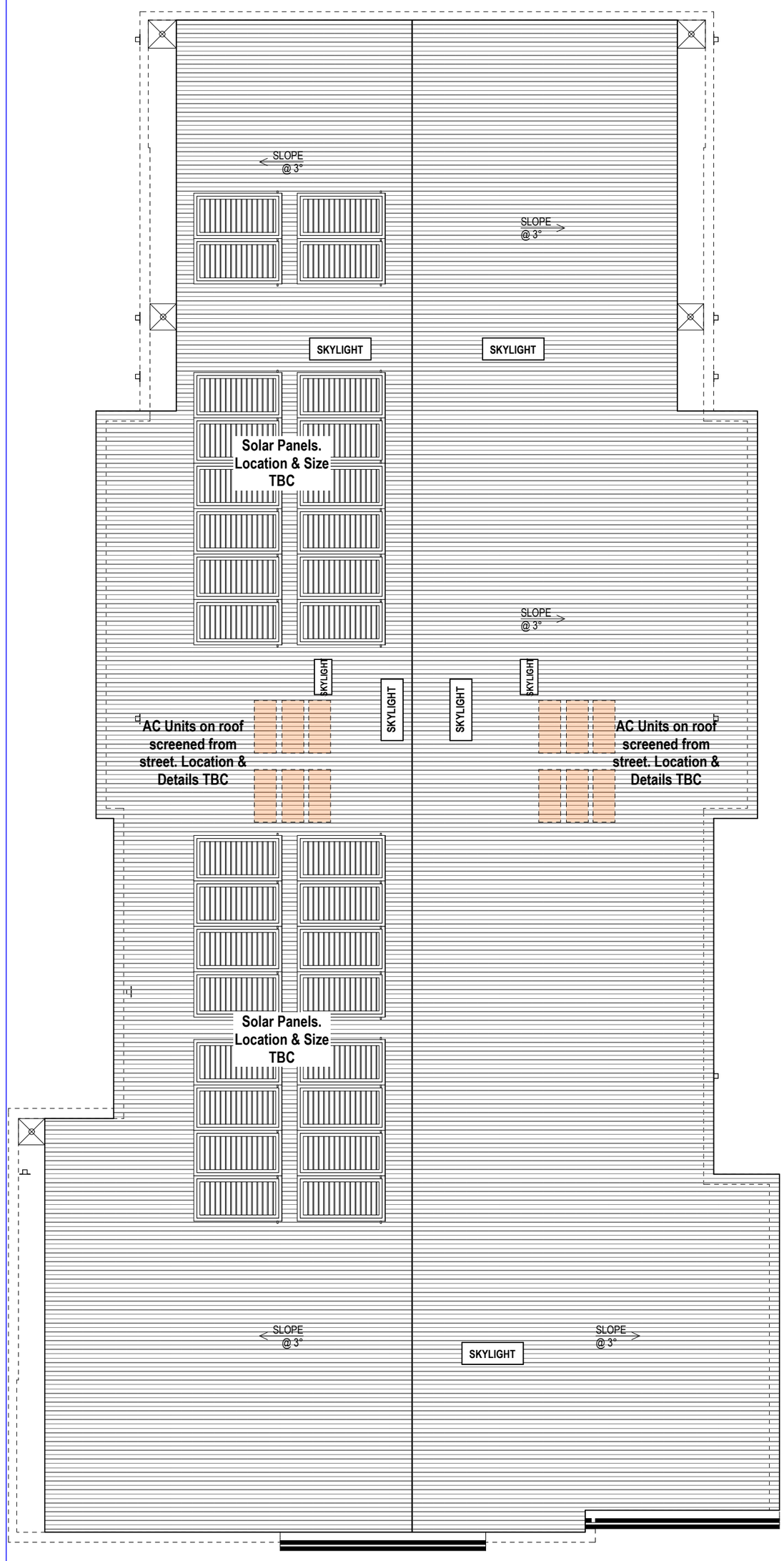
Drawing Title:
Second Floor Plan

Scale:	Sheet Size:
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Project No:	**Revision Number:**
23011	8.00

Drawing No.:
07 of 13

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3.00	Concept	10.09.25

Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Roof Plan

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	8.00

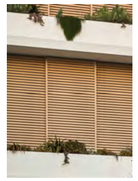
Drawing No.:
08 of 13

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KNOTWOOD ALUMIN SCREENING



DULUX RENDER MONUMENT

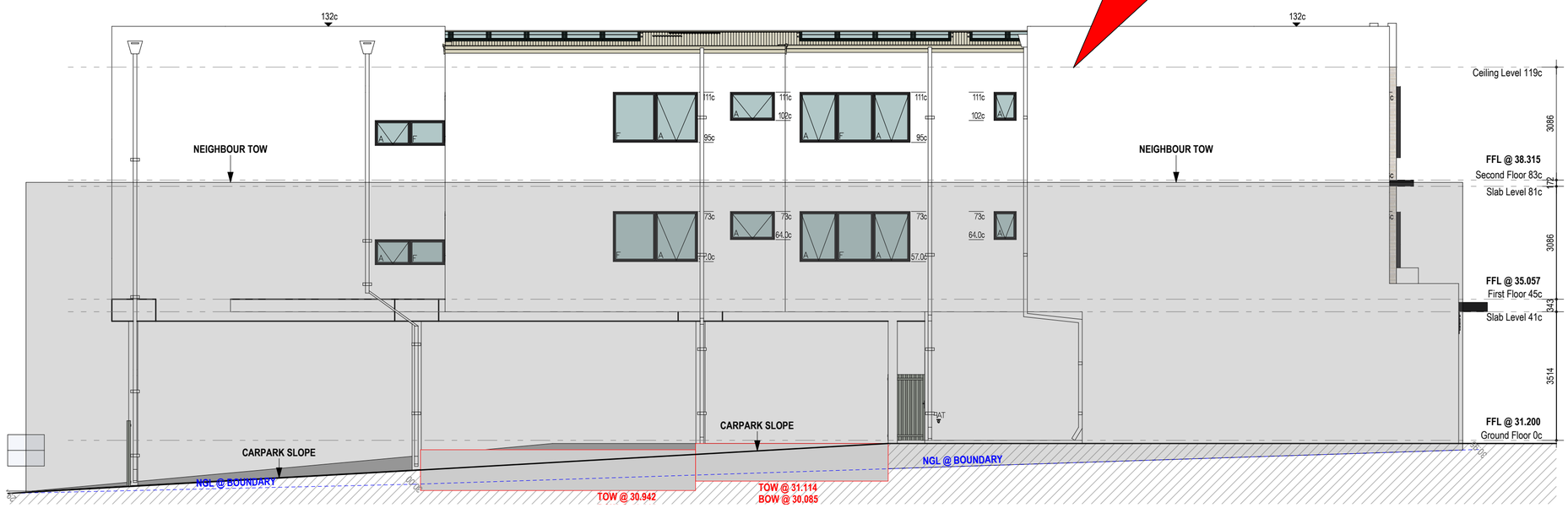
BOWRAL 76 SIMMENTAL SILVER





E1 West Elevation
1:100

DULUX RENDER VIVID WHITE



E2 North Elevation
1:100

Revision	Description	Date
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3.00	Concept	10.09.25

Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Elevations

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	8.00

Drawing No.:
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E3 East Elevation
1:100



E4 South Elevation
1:100

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Project North:

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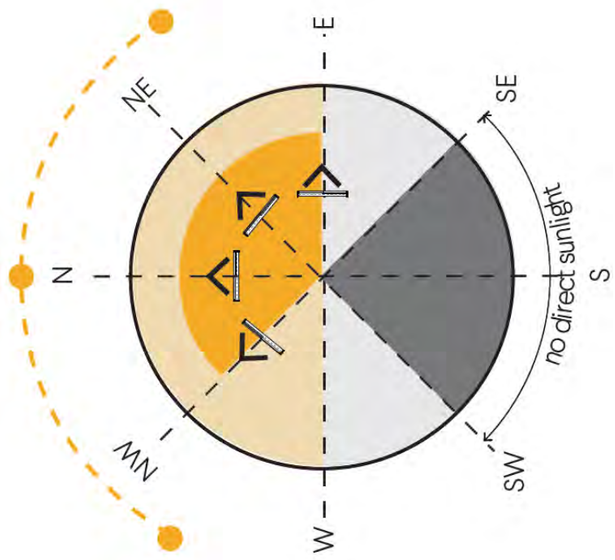
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Elevations

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SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH



Revision	Description	Date
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3.00	Concept	10.09.25

Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
FF Solar Study

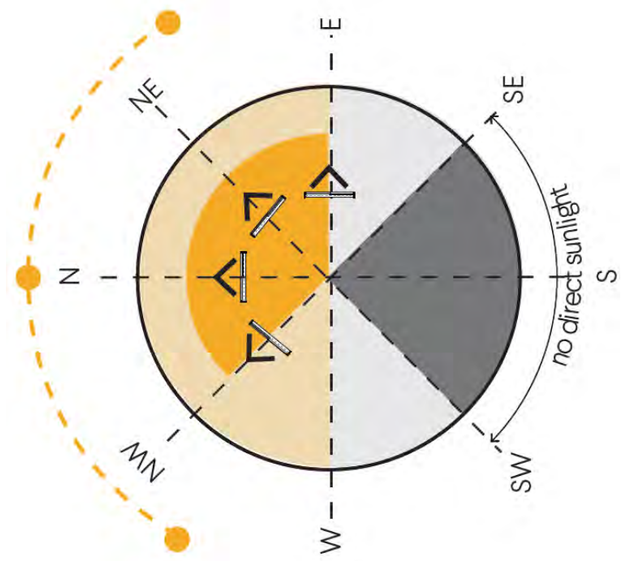
Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	8.00

Drawing No.:
11 of 13

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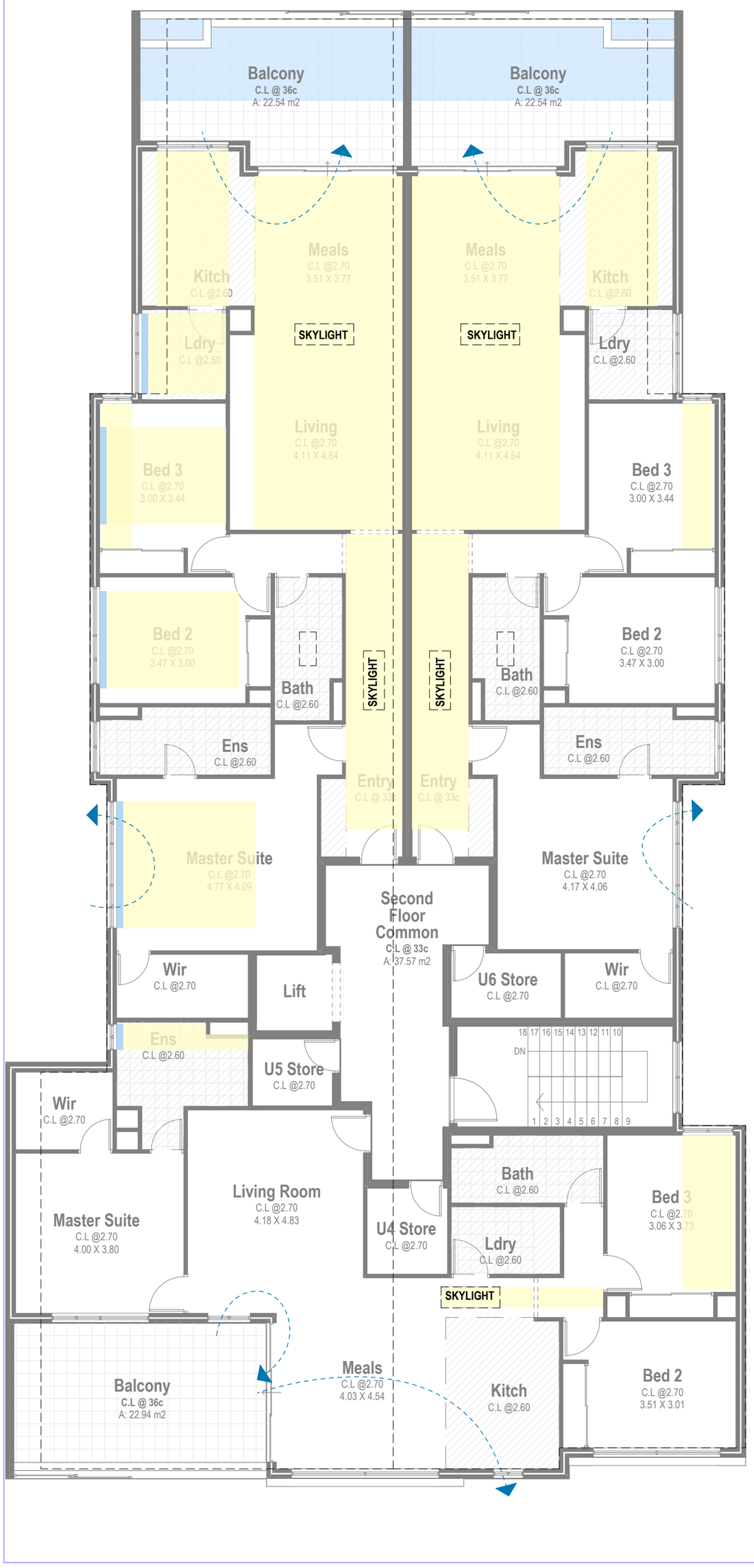


SUN DIAL

WINTER SUN @ 34.00°

SUMMER SUN @ 81.00°

BREEZE PATH



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Project Address
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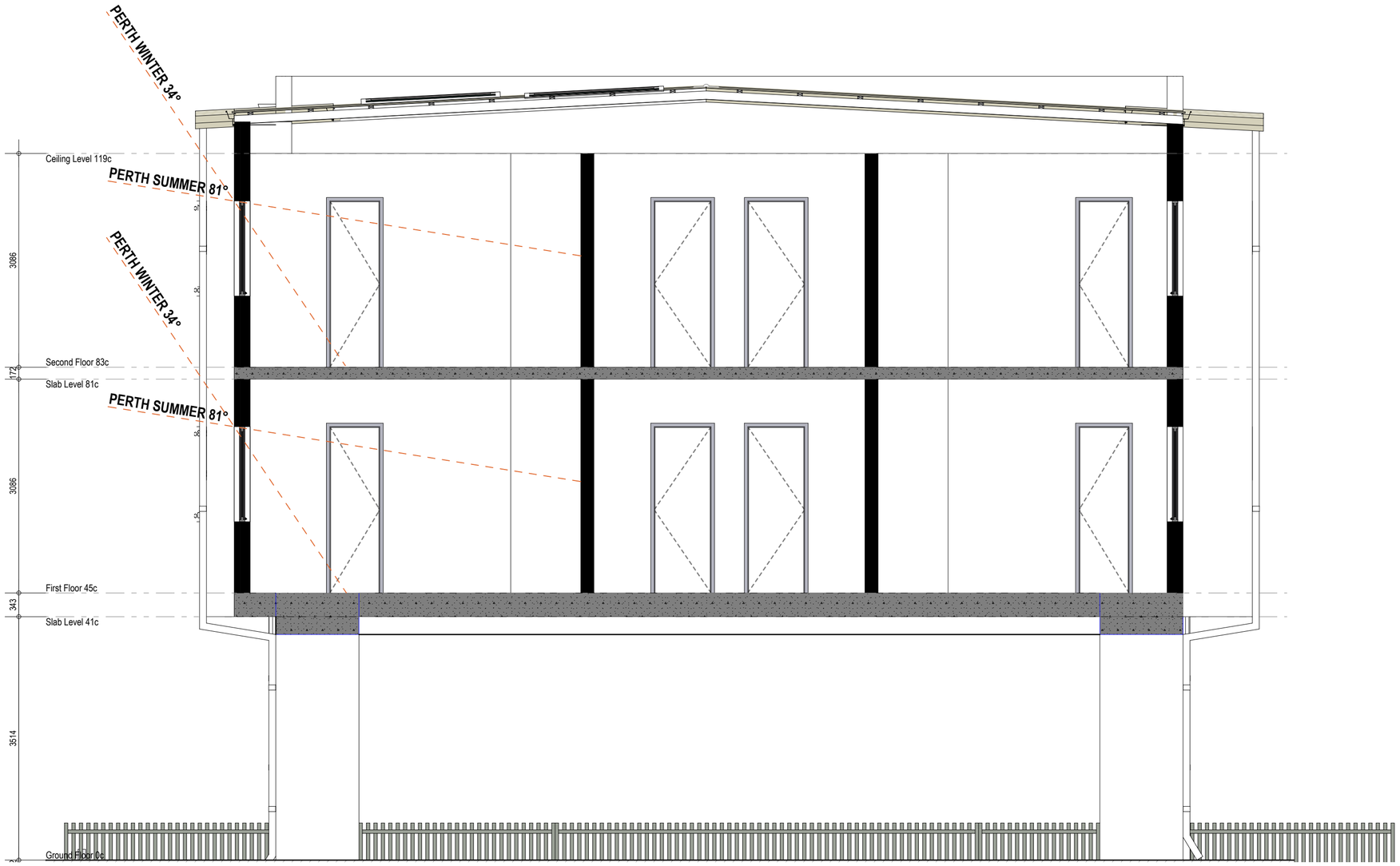
Drawing Title:
SF Solar Study

Scale:	Sheet Size:
1:100	A2
Project No:	**Revision Number:**
23011	8.00

Drawing No.:
12 of 13

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Project North:

Client
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Project Name
Apartment Complex

Project Address
22 Muriel Ave INNALOO

Drawing Title:
Section

Scale:	Sheet Size:
1:50	A2
Project No:	**Revision Number:**
23011	8.00

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13 of 13

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f) Public Art Strategy, prepared by Peter McMeikean (dated 30 March 2026)

22 MURIEL AVENUE, INNALOO CREATIVE STRATEGY

THE BRIEF

To provide public artwork that delivers a powerful and creative vision that could be imagined as possibly a historical, thought-provoking artform. The artwork will be robust and integrated into the southern façade and entry point of the building.

HISTORY OF INNALOO NAME

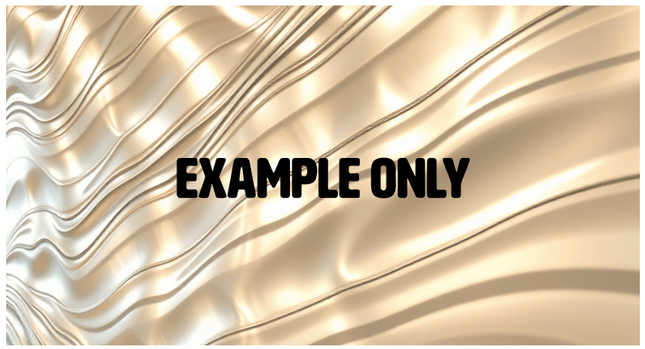
The area now known as Innaloo was originally referred to as Njookenbooroo (sometimes spelled Nookenburra, Ngurgenboro, or Noorgenbora), which is believed to be the Noongar name for Herdsman Lake or "place of the water," reflecting the area's history as a wetland. Due to difficulties with the spelling and pronunciation of Njookenbooroo, the local progress association requested changing the name to Innaloo which was adopted in 1927.

ARTWORK IN CONTEXT TO INNALOO

The artwork acknowledges the significant fresh water wetlands that once occupied this district at the time of Perth's early settlement. The creative strategy is to join elements of the suburb's history with the current day by bringing a water related theme to the development. The considered creative will depict the idea of what swirling water and bouncing reflections brings to a viewer. The artwork will be fabricated from either Stainless-Steel rod or laser cut Aluminium sheet depending on the final creative approach. The concept of flowing water movement will be pinned-off the full height wall (approximately 25mm) of the commercial entry point and door recessed cavity to allow shadow play and a depth of field to the artwork. The colour is to be determined but possibly polished stainless (rod) or powder-coat silver (aluminium).







City of Stirling
30 March 2026
RECEIVED

Peter McMeikan | artist
Public Art. Design Form. Way Finding.

Attachment 8 - Applicant's Responce to Public Consultation received on 30 March 2026

SCHEDULE OF SUBMISSIONS
PROPOSED MIXED USE DEVELOPMENT
LOT 101 (NO.22) MURIEL AVENUE, INNALOO
CITY OF STIRLING (DA26/0037)

COMMENT NUMBER	SUBMISSION DETAILS	NO. OF TIMES MATTER RAISED	APPLICANT COMMENTS
1	*Concerns relating to parking and access with increased traffic demand for the site and use of Azurite Lane. Concerns relate to safety for vehicles and pedestrians using the lane with increased risk and congestion particularly for other users.*	6	• The current planning framework requires that vehicular access for development along the Muriel Avenue commercial strip is obtained from the rear right of way. As such, the proposed development complies with the planning framework set by the City of Stirling. • The right of way has been constructed, sealed and dedicated. As such, it is capable of accommodating traffic associated with all adjoining developments. • The proposed development on the subject land complies with the planning framework (i.e. the City's Local Planning Policy No.6.7 and the R-Codes) in terms of on-site car parking. In fact, the development results in an on-site car parking surplus of one (1) bay. • In addition to the above, the Muriel Avenue road reserve abutting the commercial strip comprises on-street car parking to cater for any overflow demand in car parking that would be generated by this development or any other development within the commercial precinct. • A traffic impact statement (TIS) has been prepared by a qualified traffic engineer in support of the application, which has reviewed current and future traffic movements. The TIS confirms that the local road network is capable of accommodating the proposed traffic movements for the area and that all traffic movements can be undertaken in a safe manner. This has been reviewed by the City of Stirling's Engineering Department with no key concerns raised. In light of the above responses, the comments are incorrect and should be dismissed.
2	*Concerns suggesting that the site may be overdeveloped (built form) with a three–storey building height being too high and six apartments being too many.*	3	• The proposed development on the subject land complies with the maximum permitted building height prescribed by the current planning framework. In fact, the overall building height proposed is lower than the maximum allowable height (i.e. proposed 12.4 metres in lieu of an allowable 18 metres) prescribed by the planning framework. • The current planning framework permits a development of three storeys on the subject land. • Whilst the proposed development includes additional plot ratio floor area, the development has addressed the relevant 'design principles' of the R-Codes and reflects the expected scale of

SCHEDULE OF SUBMISSIONS
PROPOSED MIXED USE DEVELOPMENT
LOT 101 (NO.22) MURIEL AVENUE, INNALOO
CITY OF STIRLING (DA26/0037)

			development within a commercial centre (i.e. it reflects the built form character of other similar mixed use developments within the Innaloo area). • The proposed development will provide an attractive and safe residential environment comprising modern, affordable, high quality housing within a well-established commercial centre. This reflects the State Government position to intensifying development within existing established urban and commercial areas that comprise good access to public transport and other key nodes. • The proposed development will provide for the activation of the Muriel Avenue commercial centre and provided for vast improvements in passive surveillance. • The proposed development will provide a diversity of housing stock and therefore greater choice for future potential residents in the Innaloo locality. In light of the above responses, the comment has been adequately addressed and should be dismissed.
3	*Concerns that the on-site resident, commercial and visitor parking allocation will be insufficient.*	3	• The proposed development on the subject land complies with the planning framework (i.e. the City's Local Planning Policy No.6.7 and the R-Codes) in terms of on-site car parking. In fact, the development results in an on-site car parking surplus of one (1) bay. • In light of the above, the correct allocation of car parking has been provided for the future occupants/staff/visitors to the development. • The Muriel Avenue road reserve abutting the commercial strip comprises on-street car parking to cater for any overflow demand in car parking that would be generated by this development or any other development within the commercial precinct. • A traffic impact statement (TIS) has been prepared by a qualified traffic engineer in support of the application, which has reviewed the on-site car parking provisions for the development and raises no key concerns raised. • The City have reviewed the on-site car parking and have supported the numbers provided, but have requested the relocation of the security gates. Amended plans have been prepared addressing the City's concerns. In light of the above responses, the comments are incorrect and should be dismissed.

SCHEDULE OF SUBMISSIONS
PROPOSED MIXED USE DEVELOPMENT
LOT 101 (NO.22) MURIEL AVENUE, INNALOO
CITY OF STIRLING (DA26/0037)

4	*Concerns the development will set a precedent for similar developments to follow.*	3	• The proposed development will foster the growth and longevity of the Muriel Avenue commercial centre . As such, the development will provide a positive outcome to the area and may encourage redevelopment of the adjoining site that have become run-down. • The proposed development will provide for additional/much needed housing within the area, allowing for greater activation of the street and enhance passive surveillance (i.e. improved security). Such developments are encouraged by the current planning framework and will result in enhancing the streetscape environment. • Stating that this application will set a precedent is unsubstantiated and does not clarify whether further development of the area could actually be a good outcome for the Muriel Avenue commercial centre. • The City have reviewed the on-site car parking and have supported the numbers provided, but have requested the relocation of the security gates. Amended plans have been prepared addressing the City's concerns. In light of the above responses, the comment has been adequately addressed and should be dismissed.
5	*Commercial considerations regarding limited commercial space being offered and businesses on site being reduced from three to two. Associated economic /employment impacts to existing businesses being displaced.*	3	• The commercial tenancies being provided are adequate to accommodate the future needs of a business and reflect a similar floor space to the current development on the land. Furthermore, the tenancies will provide for good access, exposure and regular shape. The claim that the commercial space is limited is incorrect. • The development will offer new vibrant commercial floor space that will assist with fostering growth within the Muriel Avenue commercial centre. This is bolstered by the provision of residential dwellings within the commercial centre that will provide a large customer base. • The retention of commercial floor area on the ground level of the development will still provide employment opportunities within the area. • The displacement of current businesses within the building would be temporary, with opportunities for some of the current businesses operating on the subject land to reopening within the new development.

SCHEDULE OF SUBMISSIONS
PROPOSED MIXED USE DEVELOPMENT
LOT 101 (NO.22) MURIEL AVENUE, INNALOO
CITY OF STIRLING (DA26/0037)

			In light of the above responses, the comment is unsubstantiated and should be dismissed.
6	*Damage to the rear fence on the opposite side of Azurite Lane because of increased traffic.*	3	• The claim that fencing along the right of way will be damaged due to increased traffic movements is unsubstantiated. It should be noted that the current planning framework requires that vehicular access for development along the Muriel Avenue commercial centre is obtained from the rear right of way. In addition, the right of way has been constructed, sealed and dedicated. As such, it is capable of accommodating traffic associated with all adjoining developments. • A traffic impact statement (TIS) has been prepared by a qualified traffic engineer in support of the application, which has reviewed current and future traffic movements along the right of way. The TIS confirms that the right of way is capable of accommodating the proposed traffic movements and that traffic movements can be undertaken in a safe manner. This has been reviewed by the City of Stirling's Engineering Department, with no key concerns raised. • The proposed development is also ceding land to assist with widening the right of way, as required by the City of Stirling. • Any damage to private property caused by users/drivers along the right of way are a civil matter and is not a valid planning consideration as part of this application. • Any damage to fencing along the right of way undertaken during construction would likely be repaired by the developer. In light of the above responses, the comment is incorrect and should be dismissed.
7	*Concerns with loss of amenity loss as a result of privacy /overlooking impacts to neighbours, noise impacts and proposed positioning of windows.*	3	• In fact, the proposed development on the subject land will provide activation of both Muriel Avenue and the right of way, along with providing a greater degree of passive surveillance of the public realm. This will assist with improving security for the local community and enhance the amenity of the area. • The proposed development on the subject land complies with the R-Codes in terms of visual privacy with those residential developments to the east. The overlooking extending over the adjoining properties is of commercial areas and not any sensitive habitable spaces associated with a residential dwelling.

SCHEDULE OF SUBMISSIONS
PROPOSED MIXED USE DEVELOPMENT
LOT 101 (NO.22) MURIEL AVENUE, INNALOO
CITY OF STIRLING (DA26/0037)

			• It should be noted that the provision of unscreened balconies and large windows to habitable rooms for the proposed dwellings on the subject land are at the request of the City of Stirling's Design Review Panel (DRP), which requires an outlook from key habitable rooms. As such, the proposed development accords with the design vision set by the City of Stirling. In light of the above responses, the comment is incorrect and should be dismissed.
8.	*Concerns with potential crime and security, with regard to access to the rear parking area and through the building.*	2	• The proposed development on the subject land will provide activation of both Muriel Avenue and the right of way, along with providing a greater degree of passive surveillance of the public realm. This will assist with improving security for the local community and enhance the amenity of the area. • The proposed development will include security fencing and security gates to prevent crime and provide protection for the future occupants of the development. These areas will be accessed by security card entre only and not open to the general public. This is a far better outcome compared to other existing older developments along the right of way. • Security cameras will be installed throughout the development to provide an element of security. In light of the above responses, the comment is unsubstantiated and should be dismissed.
9	*Concerns with Waste collections, overflowing bins and there being enough space for garbage trucks/users with one way access.*	2	• A waste management plan (WMP) has been prepared in support of the application. The WMP provides waste generation rates set by WALGA for the proposed development and allocates the required number of bins to address the waste generated by the development. • The WMP has been reviewed by the City of Stirling, with no key concerns raised. An amendment to the WMP has been undertaken to address a mater raised by the City. As part of its assessment of the application. • The bin storage area provided in support of the development comprises sufficient area, is secure and screened from the street. • Waste collection will be undertaken from the right of way, which is encouraged by the City of Stirling and will not impact the local road network. In light of the above responses, the comment is incorrect/misleading and should be dismissed.

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LOT 101 (NO.22) MURIEL AVENUE, INNALOO
CITY OF STIRLING (DA26/0037)

10	*Landscaping – to be provided with more suitable trees. Planter on upper floor to be accessible so plants don't suffer. Reticulation to be ensured.*	1	• The proposed development includes the planting of five (5) new trees, which is a far better outcome than the existing development on the land. Adequate growth zone and root protection devices will be provided to enable the trees to grow. A landscaping plan has been prepared in support of the application. • The upper floor landscaping will be controlled by the occupants of Apartment No.1 and will be accessed via the balcony area for maintenance. The area will be reticulated. In light of the above responses, the comment has been adequately addressed and should be dismissed.
11	*Concerns relating to the proposal being out of character of the area and/or rest of the block.*	1	• The existing development within the Murel Avenue commercial centre is run-down, fails to meet the needs of the community and does not positively contribute to the streetscape. Furthermore, a review of the immediate locality has identified that there is no distinct character or heritage value within the area. • The proposed mixed use development on the subject land has been designed to reflect a modern built form and an active frontage. It is viewed that the proposed development will provide activation of the public realm and enhance the streetscape, along with providing greater levels of passive surveillance. • The development will include element of articulation along the street façade of the development and use of varying materials/colours which will provide an element of visual interest when viewed from the public realm. • The proposed development reflects upon the anticipated development within a commercial centre encouraged by the City of Stirling's planning framework. As such, the proposed built form character of the new development on the subject land reflects the current planning framework and anticipated built form for the area. • The proposed development adequately addresses the current planning framework for the land and properties within the Muriel Avenue commercial centre. In light of the above responses, the comment is unfounded and should be dismissed.

SCHEDULE OF SUBMISSIONS
PROPOSED MIXED USE DEVELOPMENT
LOT 101 (NO.22) MURIEL AVENUE, INNALOO
CITY OF STIRLING (DA26/0037)

12	*Concerns relating to impacts of construction, with noise from tradesman / machinery noise and parking issues during construction.*	1	• Noise generated during the construction phase of the development is addressed by alternative legislation and not part of the planning framework. As such, construction noise is not a valid planning matter that should be considered as part of this application. • Excessive noise during the construction phase will be address by the City's Health Department. In light of the above responses, the comment should be dismissed.
13	*Concern relating to contradiction of several of the Design Principles from DRP*	1	• Any comments regarding the application provided by the City of Stirling's Design Review Panel (DRP) are matters to be addressed by the City and not the applicant. • In preparing the design and development application, the applicant has addressed the current planning framework, has consulted with the City of Stirling and review/responded to the City's DRP recommendations/advice. In light of the above responses, the comment and should be dismissed.

Attachment 9 - City's Design Review Report dated 20 November 2025.

Design Review Report – Item 1

Local government:	City of Stirling	
Item no.:	Item 1 – PDA25/0058 – 22 Muriel Avenue, Innaloo – Pre Development Application – Mixed Use	
Acting Chairperson:	Jackson Liew	
Panel members:	Brett Wood-Gush Tony Blackwell Flavia Kiperman	Urban Design Landscape Architecture Conservation / Heritage Specialist
Local government officers:	Shaun Wheatland Sam Michie Nayan Khairnar Simone Palmer	Coordinator Planning Senior Planning Officer Planning Officer DRP Support Officer
Observers	Ronni Howe Amelie White Hannah McFeggan	Senior Planning Officer Heritage Undergraduate Planning Officer Strategic Planning Officer – City Future
Date:	20 November 2025	Time: 2pm
Venue:	City of Stirling – Challenger Room	

Proponent/s		
	Carlo Famiano Joe Germano	CF Town Planning & Development *(Applicant)* Germano Designs
	Owners	Ms N Stavretis and Mr V and Mrs H Christou

Observer/s

Briefings		
Development assessment overview	Sam Michie	Senior Planning Officer
Technical issues	Sam Michie	Senior Planning Officer
Design Review		
Proposed development	Item 1 – PDA25/0058 – 22 Muriel Avenue, Innaloo – Pre Development Application – Mixed Use	
Property address	22 Muriel Avenue, Innaloo	
Background		
Proposal		
Applicant or applicant's representative address to the design review panel	Carlo Famiano	CF Town Planning
Key issues / recommendations	The proposal presents a well-proportioned three-storey form with a positive street presence and a laneway elevation, which could be further strengthened through a deeper consideration of context, character, and the public realm. Several key areas require further attention. Landscape	

	quality is limited, with deep-soil targets not met and some landscape zones inaccessible or poorly located. The development may exceed the permissible plot ratio, requiring justification and clarity around potential overshadowing impacts. Amenity particularly communal open space is lacking and would benefit from further provision and consideration. Internal functionality could be improved by reconsidering the long corridor arrangement, separating commercial and residential uses, and providing clearer detail on rooftop plant screening and opportunities to introduce daylight to the lobby. Sustainability initiatives should be consolidated with a clear commitment to implementation. Privacy concerns remain due to boundary setbacks, and window orientations may require adjustment. Safety and legibility are generally supported, though a permeable vehicular gate and a dedicated pedestrian gate are recommended. While the mixed-use offering has strong community potential, a more integrated approach to signage, lighting, and Percent for Art would help strengthen the development's identity and enhance the public realm.
Acting Chairperson's signature	

Design quality evaluation **Item 1 – PDA25/0058 – 22 Muriel Avenue, Innaloo – Pre Development Application – Mixed Use** **DRP Meeting – Thursday 20 November 2025**		
	S	*Design Principle satisfied*
	P	*Design Principle pending further attention*
	N	*Design Principle not satisfied*
Principle 1 **Context and character**		*Good design responds to and enhances the distinctive characteristics of a local area, contributing to a sense of place.*
	P	1a. It was stated the real single course brick is supported and there are no major issues with the elevation. 1b. The Applicant was encouraged to think about how they are going to engage with pedestrians and what types of tenancies will be included in the development. 1c. Comment was made by the Panel the shop fronts are interesting and look original. The Applicant was urged to think about the original materials of the existing building and how they can be re-used which will benefit sustainability of the project also. 1d. It was mentioned by the Panel to apply further thought around giving something back to the community and making the context of this development unique to the area rather than creating a building which can be placed anywhere. 1e. The Applicant was encouraged to provide more contextual information including a detailed analysis of adjoining properties and streetscape circumstances. There is currently a lack of information around levels. 1f. The Panel encouraged the Applicant to provide justification to support the outcome and the increased plot ratio.
Principle 2 **Landscape quality**		*Good design recognises that together landscape and buildings operate as an integrated and sustainable system, within a broader ecological context.*
	N	2a. It was stated by the Panel there is currently limited information around the shared pavement areas and no separately defined pedestrian route. It was suggested clearly defined paving for pedestrians would be beneficial in the shared spaces. 2b. The Panel requested swept path movements to ensure turning circles are sufficient. 2c. It was recommended by the Panel additional trees could be planted on the north and west side of the development. 2d. It was stated the curb upstands in the carpark area don't seem to connect to the medium that separates the carpark. It was noted there is opportunity to utilise this area and create a parklet in this location. 2e. Comment was made by the Panel some of the landscaped areas are heavily shaded and the shrub and ground cover species chosen are not well adapted to heavy shade and have insufficient space. 2f. It was mentioned the Corymbia Ficifolia tree is high on the Polyphagous shot hole borer list and should not be used. 2g. Comment was made by the Panel the concrete awning is not supported by the Panel and this should be replaced with a steel frame awning under the City's policy 2h. It was mentioned the Fig tree creates excessive shade which will affect light penetration to the balconies. It was suggested reconsidering the additional planters in this location as they will contribute to the lack of sunlight. 2i. The Panel noted there are no metrics on the landscape plan and these will be required. 2j. It was suggested additional landscaping could be included on the balconies towards the laneway. 2k. It was suggested there is potential to introduce additional on structure landscaping.

		2l. Comment was made the planter boxes are not accessible and maintenance will be difficult. It was recommended it should be determined who is maintaining these. 2m. It was noted by the Panel the pavement north of the UAT is not providing any benefit and the Applicant should consider reorientating this paving. 2n. The proposal does not appear to achieve the target of 10% deep soil. Additionally, the proposed landscape areas are either inaccessible, of limited use, or located in less prominent or poorly visible locations—for example, the garden area between the commercial unit, stairs, and bike store is tucked away, inaccessible, and not visible from the commercial unit. 2o. While the suspended planting at the upper level contributes to greenery at the frontage, its maintenance will rely on strata to ensure it is properly cared throughout the seasons. Consideration should also be given to access, safe and fall protection. 2p. To increase deep soil target and communal amenity, a roof terrace may be an option to be considered.
Principle 3 **Built form and scale**		*Good design ensures that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.*
	P	3a. Comment was made the on the commercial tenancies should be adaptable for future use and the ceiling height should be more than 3 metres high. Refer to the city's policy. 3b. The Applicant was encouraged to be more considerate of overshadowing to the neighbouring properties. On face value, the three-storey massing appears acceptable; however, it would be useful to understand its potential overshadowing impacts on adjoining properties. It should also be noted that the property to the south is currently under commercial use but may be developed for residential purposes in the future. 3c. Comment was made by the Panel the residential corridor and commercial UAT requires tweaking. The Applicant was urged to consider separating the residential and commercial corridor. It was suggested the expectations of the residents should be managed. 3d. The site has a plot ratio of 1 and an area of 770 m²; however, the proposed development appears to total over 1,000 m², excluding car parks, common areas, balconies, and similar spaces under the standard plot ratio definition. This suggests the site may be overdeveloped, and further justification is required.
Principle 4 **Functionality and build quality**		*Good design meets the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life-cycle.*
	P	4a. The Panel stated the balconies look generous and are supported. 4b. The Panel stated the heating and cooling elements located on the roof are not to be visible to the public eye. Demonstrate this and if visible screening would be required. 4c. It was suggested by the Panel a window or open stairs could be introduced to the enclosed lobby and lift area. Another suggestion was to push the lift further north to create more space here as it feels tight. 4d. It is also likely that the lift will require an overrun so would be good to show it on the plans. 4e. The gun-barrel design of the long corridor leading to the lift requires further consideration, particularly regarding the placement of mailboxes and opportunities to encourage incidental encounters between residents. From the current design, having a shared corridor and lobby between the commercial and residential areas may not be necessary. Separating these spaces could improve privacy, reduce potential conflicts, and provide residents with a greater sense of security.

Principle 5 **Sustainability**		*Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes.*
		5a. Comment was made by the Panel further detailed information is required around sustainability and this principle was only briefly indicated. 5b. The Applicant was encouraged to explore sustainability initiatives and make a strong commitment at Development Application stage via a consolidated sustainability statement to demonstrate the adopted initiatives including potential future provisions for EV as practical 5c. It is recommended a solar study is provided to ensure solar access can be established.
Principle 6 **Amenity**		*Good design optimises internal and external amenity for occupants, visitors and neighbours providing environments that are comfortable, productive and healthy.*
	P	6a. The Panel noted that the south apartments are long and deep, resulting in limited natural light penetration. It is suggested that skylights could be introduced on the top floor. 6b. It was stated the proposal is not meeting the communal open space metrics which compromises the amenity of the proposal and requires resolution. 6c. Comment was made the footpath islands/medians along the street could be smartened up as there is wasted land here. 6d. The lift lobbies on the upper floors are fully enclosed, with no windows or external views, making orientation difficult, which is undesirable. It is recommended to explore whether light at the end of the lobby can be introduced. In addition, the stairwell could incorporate some level of permeability or openings to the south (being 3m from the boundary and subject to the NCC certifier's input) for natural daylight and visual connection. 6e. Side setbacks based on R80 require a 3m setback from the boundary for major openings to bedrooms, studies, and 4.5 m for living and dining areas. There are some privacy concerns with the secondary bedrooms. Locating windows at a higher level or using opaque/tinted glazing may not provide the most desirable outcome. Considering a window oriented towards the east or west, rather than directly overlooking the adjoining property, may help to alleviate these issues. This would require some modification to the layout.
Principle 7 **Legibility**		*Good design results in buildings and places that are legible, with clear connections and easily identifiable elements to help people find their way around.*
	S	7a. Comment was made way finding could be improved from the carpark to the main access. 7b. Pedestrian legibility from the carpark could be improved by providing pedestrian defined paving in the shared areas and a pedestrian gate could be introduced to reinforce the sense of address/arrival for the pedestrian. 7c. The brick portals at the tenancy entries and residential lobby entry are a positive treatment to assist with legibility and wayfinding.
Principle 8 **Safety**		*Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.*
	S	8a. Safety and security are supported by the shopfronts and apartments above, which provide natural surveillance ("eyes on the street") along both the main street and the laneway. 8b. Comment was made there is a lack of security in the carpark and bike storage area. This could be improved with FOBs and could be an added benefit.
Principle 9 **Community**		*Good design responds to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction.*
	S	9a. Comment was made by the Panel the Applicant has a good typology approach for the site and is positive to the area.

		9b. The commercial offering is a good outcome and supported by the Panel and gives back to the community. 9c. There is potential for this development to be a successful mixed-use development that, if well executed, responds effectively to both commercial needs and housing demand, providing a positive outcome for the community.
Principle 10 **Aesthetics**		*Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.*
	P	10a. The ground-floor shopfronts have been given greater definition through brick portal elements around entry doors which is positive. Accessibility in terms of latch side clearance to be considered for compliance. 10b. Some shopfront signage zoning has been indicated. Lighting, signage, and wayfinding should be carefully considered and integrated into the design when possible. Signage treatment on shopfront glazing remains a common issue to navigate therefore the applicant is to consider a consistent signage strategy. 10c. Early consideration of Percent for Art into the design could be used to enhance public realm and contribute to the overall quality and identity of the development.

Design Review progress
Item 1 – PDA25/0058 – 22 Muriel Avenue, Innaloo – Pre Development Application – Mixed Use
DRP Meeting – Thursday 20 November 2025

S	*Design Principle satisfied*
P	*Design Principle pending further attention*
N	*Design Principle not satisfied*

	DR1 20/11/2025	***DR2***	***DR3***
Principle 1 - **Context and character**	P		
Principle 2 - **Landscape quality**	N		
Principle 3 - **Built form and scale**	P		
Principle 4 - **Functionality and build quality**	P		
Principle 5 - **Sustainability**			
Principle 6 - **Amenity**	P		
Principle 7 - **Legibility**	S		
Principle 8 - **Safety**	S		
Principle 9 - **Community**	S		
Principle 10 - **Aesthetics**	P		

Recommendations Summary Item 1 – PDA25/0058 – 22 Muriel Avenue, Innaloo DRP Meeting – Thursday 20 November 2025			
DR1 – DRP Recommendations DRP Meeting – 20/11/2025	**DR1 – Applicant Response DRP Meeting – 20/11/2025**	**DR2 DRP Recommendations DRP Meeting –**	**DR2 – Applicant Response DRP Meeting –**
1b. The Applicant was encouraged to think about how they are going to engage with pedestrians and what types of tenancies will be included in the development. 1c. Comment was made by the Panel the shop fronts are interesting and look original. The Applicant was urged to think about the original materials of the existing building and how they can be re-used which will benefit sustainability of the project also. 1d. It was mentioned by the Panel to apply further thought around giving something back to the community and making the context of this development unique to the area rather than creating a building which can be placed anywhere. 1e. The Applicant was encouraged to provide more contextual information including a detailed analysis of adjoining properties and streetscape circumstances. There is currently a lack of information around levels. 1f. The Panel encouraged the Applicant to provide justification to support the outcome and the increased plot ratio.			
2a. It was stated by the Panel there is currently limited information around the shared pavement areas and no			

separately defined pedestrian route. It was suggested clearly defined paving for pedestrians would be beneficial in the shared spaces. 2b. The Panel requested swept path movements to ensure turning circles are sufficient. 2c. It was recommended by the Panel additional trees could be planted on the north and west side of the development. 2d. It was stated the curb upstands in the carpark area don't seem to connect to the medium that separates the carpark. It was noted there is opportunity to utilise this area and create a parklet in this location. 2g. Comment was made by the Panel the concrete awning is not supported by the Panel and this should be replaced with a steel frame awning under the City's policy 2h. It was mentioned the Fig tree creates excessive shade which will affect light penetration to the balconies. It was suggested reconsidering the additional planters in this location as they will contribute to the lack of sunlight. 2j. It was suggested additional landscaping could be included on the balconies towards the laneway. 2k. It was suggested there is potential to introduce additional on structure landscaping. 2l. Comment was made the planter boxes are not accessible and maintenance will be difficult. It was recommended it should be determined who is maintaining			

these. 2m. It was noted by the Panel the pavement north of the UAT is not providing any benefit and the Applicant should consider reorientating this paving. 2p. To increase deep soil target and communal amenity, a roof terrace may be an option to be considered.			
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4b. The Panel stated the heating and cooling elements located on the roof are not to be visible to the public eye. Demonstrate this and if visible screening would be required.			

4c. It was suggested by the Panel a window or open stairs could be introduced to the enclosed lobby and lift area. Another suggestion was to push the lift further north to create more space here as it feels tight. 4d. It is also likely that the lift will require an overrun so would be good to show it on the plans. 4e. The gun-barrel design of the long corridor leading to the lift requires further consideration, particularly regarding the placement of mailboxes and opportunities to encourage incidental encounters between residents. From the current design, having a shared corridor and lobby between the commercial and residential areas may not be necessary. Separating these spaces could improve privacy, reduce potential conflicts, and provide residents with a greater sense of security.			
5a. Comment was made by the Panel further detailed information is required around sustainability and this principle was only briefly indicated. 5b. The Applicant was encouraged to explore sustainability initiatives and make a strong commitment at Development Application stage via a consolidated sustainability statement to demonstrate the adopted initiatives including potential future provisions for EV as practical 5c. It is recommended a solar study is provided to ensure solar access can be established.			

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the adjoining property, may help to alleviate these issues. This would require some modification to the layout.			
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PART D – OTHER BUSINESS

1. State Administrative Tribunal Applications and Supreme Court Appeals

2. Meeting Closure