Metro Outer Development Assessment Panel Agenda

Meeting Date and Time: Tuesday, 25 November 2025; 9:30am
Meeting Number: MODAP/116
Meeting Venue: 140 William Street, Perth

A live stream will be available at the time of the meeting, via the following link:
MODAP/116 - 25 November 2025 - City of Gosnells

PART A – INTRODUCTION

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

PART B – CITY OF GOSNELLS

1. Declarations of Due Consideration
2. Disclosure of Interests
3. Form 1 DAP Applications
   - 3.1 Lot 317 (23) Ballyronan Road, Maddington - Proposed Child Care Facilities - DAP/25/02951
4. Form 2 DAP Applications
5. Section 31 SAT Reconsiderations

PART C – 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
Clayton Higham (Presiding Member)
Karen Hyde (Deputy Presiding Member)
Dale Page
Cr Serena Williamson (Part B – City of Gosnells)
Cr Aaron Adams (Part B – City of Gosnells)

DAP Secretariat
Tenielle Brownfield
Ashlee Kelly

PART A – INTRODUCTION

1. Opening of Meeting, Welcome and Acknowledgement

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PART B – CITY OF GOSNELLS

1. Declarations of Due Consideration

2. Disclosure of Interests

3. Form 1 DAP Applications

3.1 Lot 317 (23) Ballyronan Road, Maddington - Proposed Child Care Facilities - DAP/25/02951

4. Form 2 DAP Applications

Nil

5. Section 31 SAT Reconsiderations

Nil

Part B – Item 3.1 – Lot 317 (23) Ballyronan Road, Maddington – Proposed Child Care Premises

Form 1 – Responsible Authority Report
(Regulation 12)

DAP Name:	Metro Outer DAP
Local Government Area:	City of Gosnells
Applicant:	Alan Stewart – Lateral Planning
Owner:	Kaibo Pty Ltd
Value of Development:	$3 million
Responsible Authority:	City of Gosnells
Authorising Officer:	Brenton Scambler (Manager Development Services)
LG Reference:	DA25/00257
DAP File No:	DAP/25/02951
Application Received Date:	30 July 2025
Report Due Date:	12 November 2025
Application Statutory Process Timeframe:	90 Days
Attachment(s):	1. Location/ Site Area Plan 2. Development Plans - Site Plan - Ground Floor Plan - Elevations - Perspectives 3. Lateral Planning Report 4. Operational Management Plan 5. Transport Impact Statement 6. Environmental Acoustic Assessment 7. Landscaping Plan 8. Drainage Plan 9. BAL Assessment

Responsible Authority Recommendation

That the Metro Outer Development Assessment Panel resolves to:

1. **Approve** DAP Application reference DAP/25/02951 and accompanying plans (*Site Plan, Ground Floor Plan, Elevations and Perspectives – revision 01*) dated 12/09/2025 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 Gosnells Local Planning Scheme No. 24, subject to the following conditions:

Conditions

1. This decision constitutes planning approval only and is valid for a period of 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. Prior to applying for a Building Permit, the proponent shall submit amended plans reducing the height of the front street fence to 1.8m to the satisfaction of the City of Gosnells.

3. Prior to applying for a Building Permit, the applicant shall submit, have approved, and thereafter implement a drainage design, prescribing a functional drainage system, including detailed engineering drawings, and necessary technical information to demonstrate functionality of the design, to the satisfaction of the City of Gosnells.

   It should be noted that a maximum stormwater runoff coefficient equivalent to pre-development levels and/or in accordance with an existing Urban Water Management Plan approved for the development area shall be applied to calculate the critical permissible site discharge (PSD) from the development. This PSD shall not be exceeded in all storm events up to the 1 in 20-year Average Recurrence Interval. All excess stormwater shall be detained and/or infiltrated on-site through suitable structural means.

4. Prior to applying for a Building Permit, a Construction Management Plan shall be prepared by the applicant and/or landowner and submitted to the City of Gosnells for approval. The Construction Management Plan shall be implemented by the applicant and/or landowner to the satisfaction of the City of Gosnells and detail how the construction of the development will be managed including the following:

   a) Public safety and site security
   b) Hours of operation
   c) Dust management
   d) Waste and material disposal
   e) Traffic management plans
   f) Parking arrangements for contractors and sub-contractors
   g) Delivery and access arrangements
   h) The storage of materials and equipment on site (no storage of materials within the public realm will be permitted)

   Any other matters likely to impact upon the surrounding properties or public realm.

5. Prior to occupation of the development, vehicle parking, manoeuvring and circulation areas shall be designed, constructed, sealed, drained, line-marked and kerbed in accordance with:

   (i) The approved plan(s);
   (ii) Australian/New Zealand Standard AS/NZS 2890.1:2004, Parking facilities, Part 1: Off-street car parking;
   (iii) Australian/New Zealand Standard AS/NZS 2890.6:2009, Parking facilities, Part 6: Off-street parking for people with disabilities.

(iv) Australian Standard AS 1428.1-2009, Design for access and mobility, Part 1: General Requirements for access-new building work (by providing a link to the main entrance of the development by a continuous accessible path of travel);
(v) Council's engineering requirements and design guidelines.

The car parking is to be maintained to the satisfaction of the City of Gosnells for the duration of the development.

6. Prior to occupation of the development, all crossovers are to be located and constructed to the City of Gosnells' specifications.

7. Prior to occupation of the development, the existing access easement into Lot 317 to be extinguished.

8. Waste management must be designed, operate, and all works must be carried out in accordance with the Operational Management Plan prepared by Lateral Planning, dated May 2025 to the satisfaction of the City of Gosnells for the duration of development.

9. Prior to occupation of the development, the landscaping and irrigation of the development site and the adjoining verge is to be installed in accordance with the approved landscape plan and thereafter maintained to the satisfaction of the City of Gosnells.

10. Prior to applying for a Building Permit, a schedule of materials, finishes and colours shall be submitted to and approved by the City of Gosnells. Prior to occupation of the development, the approved external finishes and colour schemes are to be implemented to the satisfaction of the City of Gosnells and maintained thereafter.

11. Prior to applying for a Building Permit, the proponent shall submit to the City of Gosnells for approval a preliminary proposal for an artwork at a cost of 1% of the total project cost (to a maximum of $250,000), to be located within the subject site as an integral part of the development. Alternatively, prior to occupation of the development, the owner/applicant shall make a cash contribution towards public art in lieu of the above.

    Prior to commencement of development, and if not making a cash contribution, the proponent shall submit to the City of Gosnells for approval an 'Application for Artwork Design' and the proponent is to enter into a contract with a professional artist/s to design and install (if appropriate) the artwork approved by the City of Gosnells.

    Prior to occupation of the development, the artwork shall be installed and maintained thereafter to the satisfaction of the City of Gosnells.

12. Prior to occupation of the development, line markings and signage shall be completed in accordance with the recommendations of the Transport Impact Statement, by Rechitects dated May 2025 (or as amended) to the satisfaction of the City of Gosnells.

13. Prior to applying for a Building Permit, the proponent shall submit an amended Environmental Acoustic Assessment to include the noise impacts from

mechanical services within the proposed development on the nearest noise sensitive premises and mitigation measures to be implemented to ensure compliance with the Environmental Protection (Noise) Regulations 1997.

The development must operate in accordance with the amended Environmental Acoustic Assessment to the satisfaction of the City of Gosnells.

14. The building must be designed, constructed and maintained to BAL-12.5 as specified in Australian Standards AS3959-2018: Construction of Buildings in Bushfire-Prone Areas (AS3959).

    Prior to issuing a Building Permit, amended plans must be submitted to the City of Gosnells demonstrating the building has been designed to the required BAL as specified in AS3959. The building must be maintained in accordance with the specified requirements of the BAL for the duration of the development.

15. Prior to applying for a Building Permit, the proponent shall submit a Bushfire Management Plan and Bushfire Emergency Evacuation Plan to the satisfaction of the City of Gosnells.

16. The hours of operation are restricted to between 6:30am and 7:00pm Monday to Friday.

17. A maximum of 94 children shall be accommodated on site at any one time.

Advice Notes

1. The applicant is advised of the need to obtain a Building Permit prior to the commencement of work. The submitted Building Permit application plans are to be consistent with the plans that form part of the relevant Development Approval, to the satisfaction of the City of Gosnells.

2. The applicant is advised of the following to minimise the impact of development works:
    i) All development works must be carried out in accordance with Control of Noise Practices set out in section 6 of AS2436-1981. For further details please contact the Department of Water and Environmental Regulation.

    ii) Development work shall only be permitted between 0700 hours and 1900 hours on any day which is not a Sunday or public holiday, without the written approval of the City.

    iii) Development work shall comply in all respects with the Environmental Protection (Noise) Regulations 1997.

3. The applicant is advised that with regard to food preparation, the applicant is required to submit appropriate forms to the City in accordance with the Food Act 2008 and shall design and construct the food premises in accordance with Standard 3.2.3 of the Australia New Zealand Food Standards Code.

4. The applicant is advised that the operation/development is to comply with the Environmental Protection (Noise) Regulations 1997.

5. This is a development approval issued under the City of Gosnells Local Planning Scheme No. 24. It is not an approval or consent to commence or carry out development under any other written law, act, statute, or agreement, whether administered by the City of Gosnells or not. It is the applicant's responsibility to ensure all relevant approvals are obtained prior to the commencement of any development covered by this approval.

Details: outline of development application

Region Scheme	Metropolitan Region Scheme
Region Scheme - Zone/Reserve	Urban
Local Planning Scheme	City of Gosnells Local Planning Scheme No. 24
Local Planning Scheme - Zone/Reserve	Residential R30
Structure Plan/Precinct Plan	Maddington Road A Structure Plan
Structure Plan/Precinct Plan - Land Use Designation	Residential R30
Use Class and permissibility:	Child Care Premises – 'A' use class
Lot Size:	2,162m^2
Existing Land Use:	Vacant
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	Yes
Swan River Trust Area	No

Proposal:

The proposal involves the development of a Child Care Premises on the subject lot comprising of the following:

- A single storey building with 700m^2 of floor area.
- A maximum of 94 children and up to 18 staff.
- Operating hours from 6:30am to 7:00pm Monday to Friday.
- 25 car parking bays comprising 10 parent bays (including an ACROD bay), 14 staff bays and one reversing/loading bay.
- A 2.3m high front fence comprising a 1.2m rendered brick fence with 1.1m high infill panels above to 1.1m, and a 2m high brick wall along side and rear lot boundaries.
- Vehicle access provided from a 6m wide crossover to Ballyronan Road.

Development plans are contained in Attachment 2.

Background:

The subject land is located within the Maddington Road A Structure plan area and is surrounded by residential homes to the north, west and south of the site, a public open space reserve is located on the opposite side of Ballyronan Road, to the east of the subject site. The site is generally flat.

The subject land is vacant and undeveloped and forms part of a new residential subdivision within Maddington. The site was previously granted development approval for six grouped dwellings on 9 June 2023.

Legislation and Policy:

Legislation

- *Planning and Development Act 2005*
- *Planning and Development (Local Planning Schemes) Regulations 2015*
- Metropolitan Region Scheme
- Local Planning Scheme No. 24

State Government Policies

- State Planning Policy 3.7 Bushfire
- Planning Bulletin 72/2009 Child Care Premises

Structure Plans/Activity Centre Plans

- Maddington Road Precinct A Structure Plan – no statutory requirements pertain to this Lot

Local Policies

- Local Planning Policy 1.4 - Parking
- Local Planning Policy 4.1 – Public Consultation
- Local Planning Policy 4.11 – Public Art
- Local Planning Policy 4.9 - Signage

Consultation:

Public Consultation

The proposal was advertised to properties within a 100m radius of the subject site from 13 August 2025 to 3 September 2025 by way of letter on the City's 'Your Say' website. A total of nine submissions were received, with five stating no-objection and four submitters objecting to the proposal. A summary of all issues raised is as follows:

- Disruption during construction of works.
- Noise disturbance during operating hours.
- Inclusion of a childcare centre would add to the existing road congestion and may pose safety risks to pedestrians.
- Insufficient on-site parking will spill over to the street.
- Negative impacts on the amenity of the neighbourhood.
- Concerned about an oversupply of childcare centres within the area

These issues are discussed in the Planning Assessment part of the report below.

Referrals/consultation with Government/Service Agencies

The proposal was not required to be referred to any Government or Service Agencies for comment.

Planning Assessment:

Local Planning Scheme No.24 (LPS 24)

Zoning

Under LPS 24, the subject site is zoned Residential R30. A Child Care Premises is an 'A' use class which requires the local government to exercise its discretion by granting approval after giving notice in accordance with clause 64 of the deemed provisions. The proposal was advertised and is therefore capable of approval.

Development requirements

Clause 32 of LPS 24 sets out the development standards for non-residential development in a Residential Zone. Table 7 indicates that non-residential development shall comply with the relevant R-Codes provisions. The proposed setbacks, open space, building height, privacy and solar access satisfy the deemed-to-comply provisions of the R-Codes Vol. 1.

The development proposes a 2.3m boundary fence along the primary street. The height of 2.3m is considered to be unnecessary. Should the DAP approve the proposal, a condition should be imposed requiring amended plans reducing the front fencing to 1.8m.

Car Parking

The City's Local Planning Policy 1.4 Parking (LPP 1.4) sets out the vehicle parking standards for development within the City. An assessment of the parking requirements for the proposal is shown below:

Use Class	LPP 1.4: Car Parking Standards	LPP 1.4 Car Parking Requirements	Proposed
Child Care Premises	1 space for every 10 children the facility is designed to accommodate, plus 0.5 space for every employee	The Child Care Premises will accommodate 94 children (10 bays) and 18 employees (9 bays).	10 parent bays 14 staff bays
Total		**19 bays required**	**24 bays proposed**

As shown above, the proposal results in a surplus of five parking bays and is compliant with the requirements of LPP 1.4.

Traffic and Access

Vehicular access to the site is proposed from a 6m wide crossover facing Ballyronan Road allowing two-way access. A Transport Impact Statement (TIS) (refer Attachment 5) was provided with the application concluding that the development is expected to generate a total of 279 vehicle trips per day, with 76 vehicle trips in the AM peak and 75 vehicle trips in the PM peak. The TIS concludes that the development will generate less than 10% of the operating capacity of the surrounding local road network being Wattlebird Entrance, Ballyronan Road and Woodswallow Parkway. It is considered that the surrounding road network has sufficient capacity to accommodate the traffic generated by the development. The City has assessed the TIS and agrees with its conclusion.

Waste Management

The application identified that 8 x 240L bins will be required to service the development. The application proposes an 8.8m^2 bin store in the south-west corner of the building which is screened from view from the street. Waste collection will be from the Ballyronan Road verge. Waste bins are proposed to be collected via a bin pad on the verge suitable for 8 bins. Waste collection will be scheduled to occur between 9:30am and 3:30pm to avoid conflicts with drop-off / pick-up times. The City has considered and supports the proposed waste management arrangements for the development.

Noise

An Environmental Acoustic Assessment by Herring Storer Acoustics dated 21 March 2025 (refer Attachment 6) was provided with the application which identifies that the primary sources of noise from the development will be from children during outdoor play and noise from mechanical services.

The report has identified that the two noise emissions will comply with the *Environmental Protection (Noise) Regulations 1997*, subject to the inclusion of the following measures:

1. The outdoor play area shall not be used prior to 7:00am.
2. A 2m acoustic barrier to the south, north and west boundaries is required to be installed prior to the commencement of operation.
3. Mechanical plant to be installed within the enclosed drying court requires a noise barrier to be provided 500mm above the top of the plant.

The City has considered the findings of the acoustic assessment and accepts its recommendations. However, as the proponent has not provided final designs of the mechanical plant required for the development, should the DAP approve the proposal, a condition should be imposed requiring an amended acoustic report to be submitted prior to the lodgement of a building permit application. This is to ensure the design of the mechanical plant and any measures to mitigate noise are implemented during construction.

Public Art

The City of Gosnells Local Planning Policy 4.11 – Public Art (LPP 4.11) requires development to contribute toward the provision of public art, where the estimated cost exceeds $2 million. Should the DAP approve the proposal, a condition should be imposed requiring a contribution towards public art in accordance with LPP 4.11.

State Planning Policy 3.7: Bushfire

The subject site is located within a declared Bushfire Prone Area 1 – Urban. A BAL assessment (refer Attachment 9) was provided with the application and is summarised as follows:

- The Bushfire Attack Level for the development has been determined as BAL-12.5.
- The nearest class A vegetation is 64m from the subject site and is located within the existing POS reserve managed by the City of Gosnells.

In accordance with State Planning Policy 3.7: Bushfire, the proposed development meets the definition of a 'vulnerable land use'. For a 'vulnerable land use', if the BAL assessment indicates that the proposed development will have a BAL rating above BAL-LOW, a Bushfire Management Plan and Bushfire Emergency Plan should accompany the application. Therefore, should the DAP approve the proposal, a condition should be imposed requiring a Bushfire Management Plan and Bushfire Emergency Evacuation Plan to be submitted prior to issuing the building permit to the satisfaction of the City of Gosnells.

Planning Bulletin No. 72/2009 – Child Care Centres

The WAPC's Planning Bulletin No. 72/2009 outlines guidelines in relation to the location and development of childcare centres. The bulletin notes that childcare activities are to be broadly located in residential areas, and in assessing such applications, consideration should be given to a range of factors, including site characteristics, traffic impacts and noise impacts. Specifically, the bulletin suggests facilities should be:

- Strategically located to maximise benefits to the community it serves;
- Within easy walking distance of commercial, recreational or community nodes;
- Located where adjoining uses are compatible with a child care centre, with outdoor play areas located away from noise-sensitive premises such as dwellings;
- Serviced by public transport;
- Easily and safely accessible by car;
- On a regular shaped lot over 1,000m^2.

With regards to the above, the following is relevant:

- The subject site is located within a new residential precinct and is located directly opposite 11,345m^2 of public open space.
- Most roads within the vicinity of the subject site feature pedestrian paths which provide adequate connectivity.
- The development abuts noise-sensitive premises, which has been addressed in the relevant Environment Noise Assessment and is discussed above.
- The development is easily and safely accessible by car.
- The subject site is regular shaped and exceeds 1,000m².

In considering the above, the proposal is generally consistent with Planning Bulletin 72/2009.

Conclusion:

As outlined in this report, the proposed development aligns with the requirements of the relevant planning framework, and as such, the development is recommended for approval subject to conditions.

CITY OF GOSNELLS

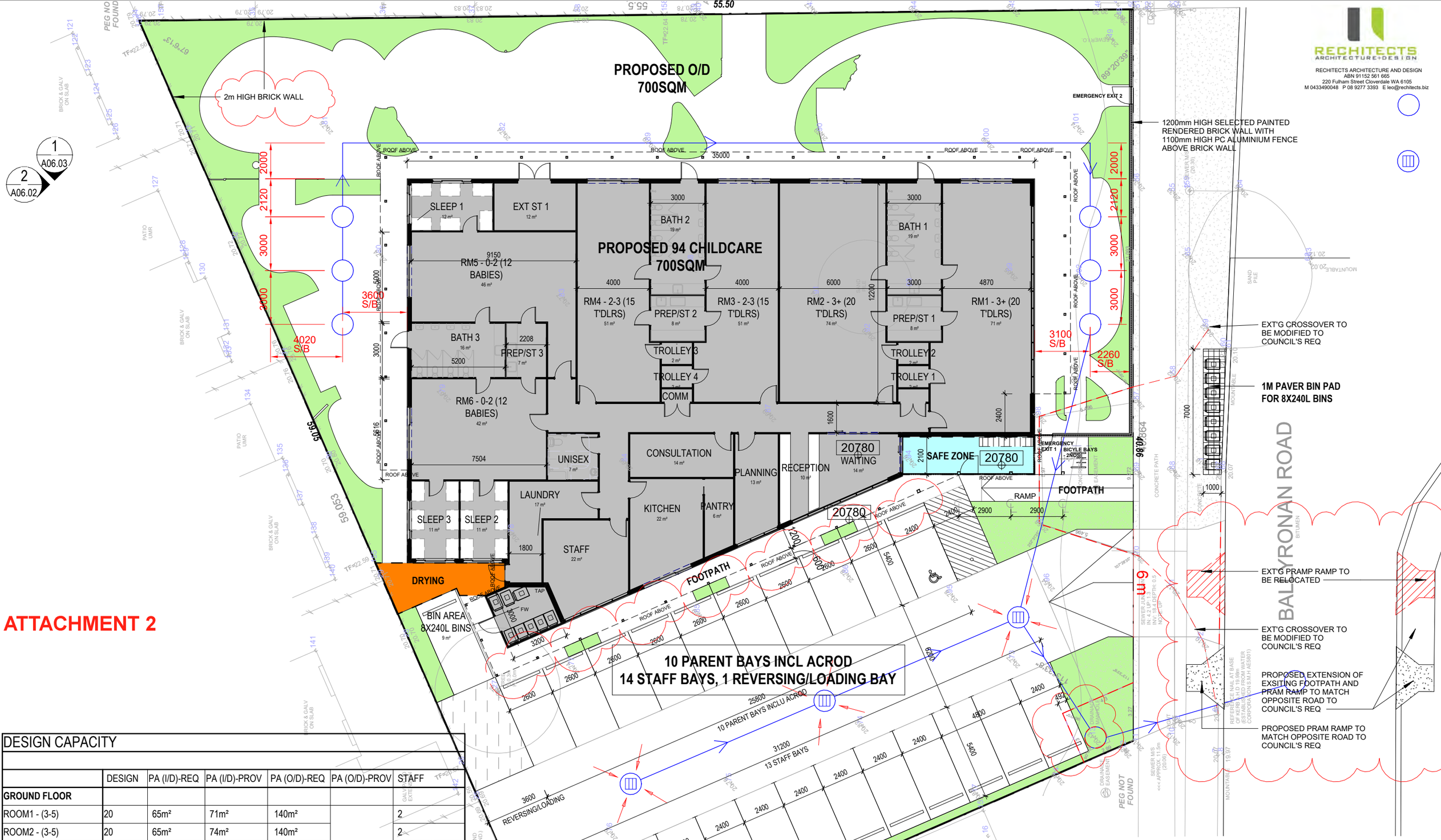
The City of Gosnells provides the information contained herein. The Council of the City of Gosnells shall not be liable for any loss or damage howsoever caused as a result of reliance upon information contained in these documents.

ATTACHMENT 1

Date: 21/10/2025

Scale: 1:1500

N



ATTACHMENT 2

DESIGN CAPACITY						
	DESIGN	PA (I/D)-REQ	PA (I/D)-PROV	PA (O/D)-REQ	PA (O/D)-PROV	STAFF
GROUND FLOOR						
ROOM1 - (3-5)	20	65m²	71m²	140m²		2
ROOM2 - (3-5)	20	65m²	74m²	140m²		2
UPPER FLOOR						
ROOM3 - (2-3)	15	49m²	51m²	105m²	700m²	3
ROOM4 - (2-3)	15	49m²	51m²	105m²		3
ROOM5 - (0-2)	12	39m²	46m²	84m²		3
ROOM6 - (0-2)	12	39m²	42m²	84m²		3
MANAGER AND COOK						2
TOTAL	**94**	**306m²**	**335m²**	**658m²**	**700m²**	**18**

SUBJECT TO COUNCIL APPROVAL

RECHITECTS ARCHITECTURE+DESIGN
RECHITECTS ARCHITECTURE AND DESIGN
ABN 91152 561 665
220 Fulham Street Cloverdale WA 6105
M 0433490048 P 08 9277 3393 E leo@rechitects.biz

Scale: 1 : 200 (A3)

PROJECT
PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

SITE PLAN

DESIGNED BY	DRAWN BY	DATE	
LC	BV/LC	12/09/2025	A01.01

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SLEEP 1 12 m²
EXT ST 1 12 m²
RM5 - 0-2 (12 BABIES) 46 m²
BATH 3 16 m²
PREP/ST 3 7 m²
RM6 - 0-2 (12 BABIES) 42 m²
BATH 2 19 m²
RM3 - 2-3 (15 T'DLRS) 51 m²
RM4 - 2-3 (15 T'DLRS) 51 m²
PREP/ST 2 8 m²
TROLLEY 3 2 m²
TROLLEY 4 2 m²
COMM 1 m²
BATH 1 19 m²
RM2 - 3+ (20 T'DLRS) 74 m²
PREP/ST 1 8 m²
TROLLEY 2 2 m²
TROLLEY 1 2 m²
REEC[EE 1 m²
RM1 - 3+ (20 T'DLRS) 71 m²
20780
UNISEX 7 m²
CONSULTATION 14 m²
RECEPTION 10 m²
WAITING 14 m²
PLANNING 13 m²
SLEEP 3 11 m²
SLEEP 2 11 m²
LAUNDRY 17 m²
STAFF 22 m²
PANTRY 6 m²
KITCHEN 22 m²
BIN AREA 8X240L BINS 8 m²
RAMP
HLW
ROOF ABOVE

SUBJECT TO COUNCIL APPROVAL

12/09/2025 2:41:35 PM

Scale: 1 : 100 (A3)

PROJECT
PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

GROUND FLOOR PLAN (GA)

DESIGNED BY	DRAWN BY	DATE	
LC	BV	12/09/2025	A02.03

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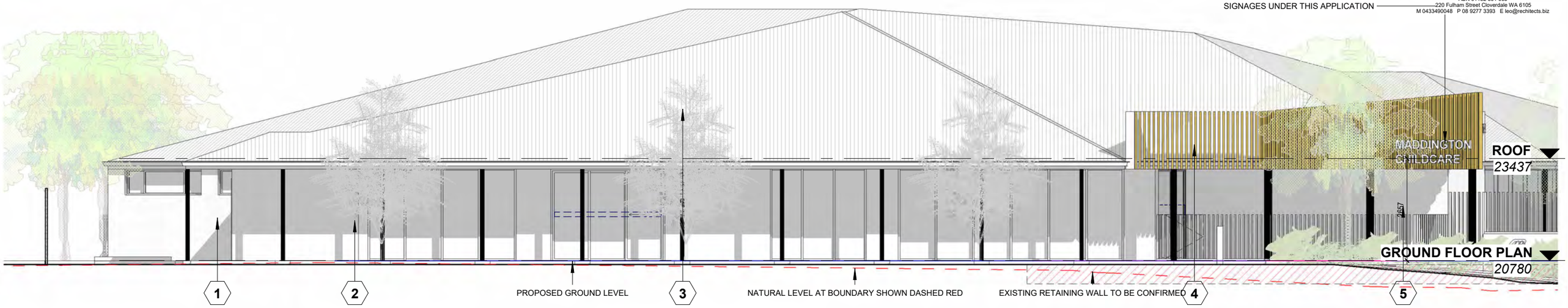
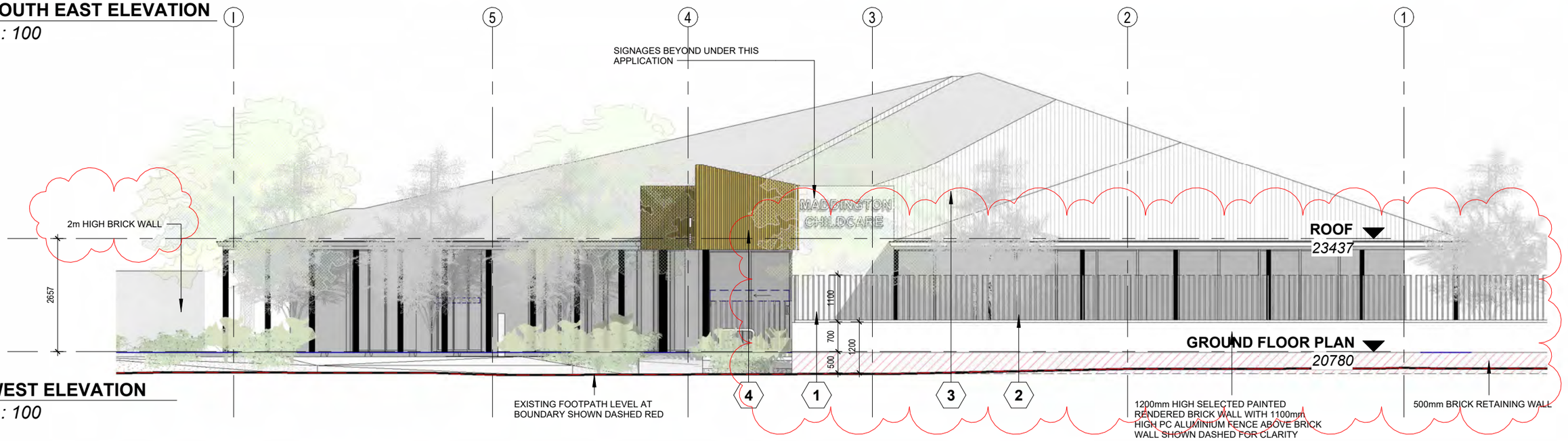


1 A01.01 **SOUTH EAST ELEVATION**
1 : 100



2 A01.01 **WEST ELEVATION**
1 : 100

ELEVATIONS - MATERIALS / FINISHES	
NO	DESCRIPTIONS
1	SELECTED PAINTED RENDERED WALL
2	PC ALUMINIUM FRAMED GLAZING
3	SURFMIST COLORBOND ROOF @ 19 DEGREE
4	PC ALUMINIUM VERTICAL FEATURE SCREEN
5	PC ALUMINIUM FENCE

SUBJECT TO COUNCIL APPROVAL

M Scale: 1 : 100 (A3)

PROJECT
PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

ELEVATIONS

DESIGNED BY	DRAWN BY	DATE	
LC	BV	12/09/2025	A06.01

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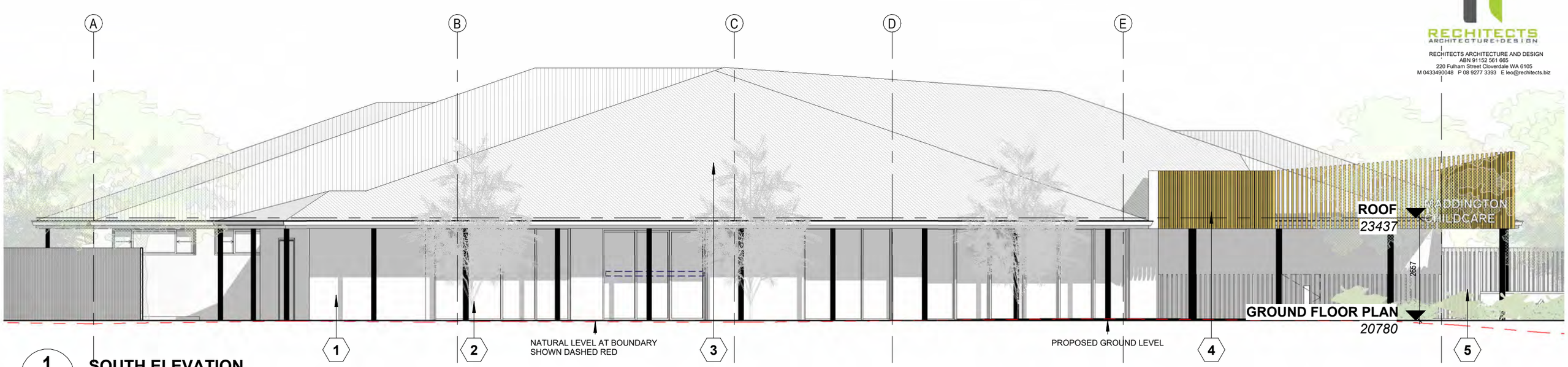
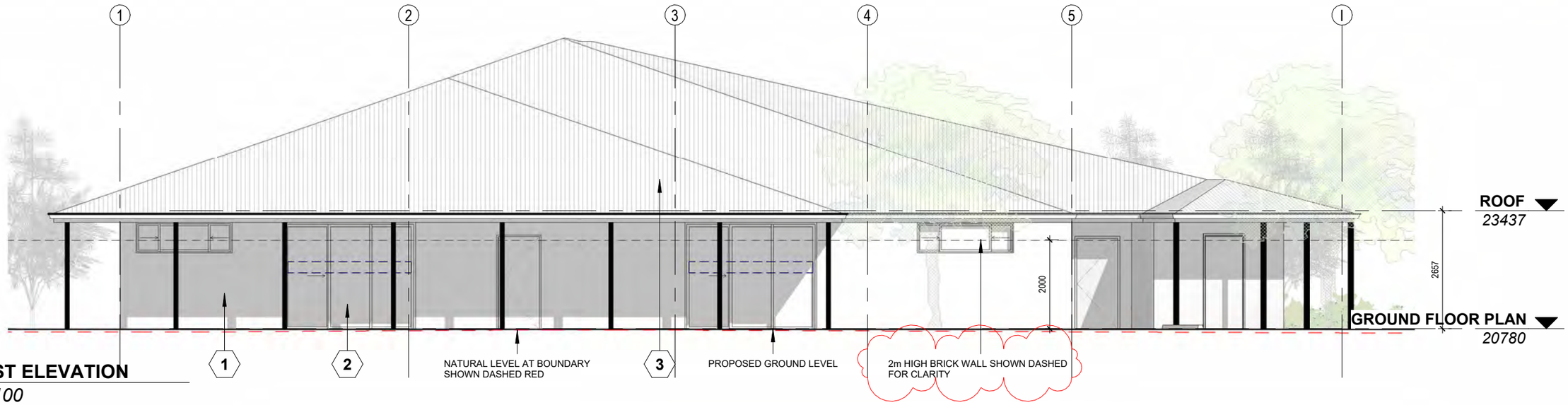


1 A01.01 **SOUTH ELEVATION**
1 : 100



2 A01.01 **EAST ELEVATION**
1 : 100

ELEVATIONS - MATERIALS / FINISHES	
NO	DESCRIPTIONS
1	SELECTED PAINTED RENDERED WALL
2	PC ALUMINIUM FRAMED GLAZING
3	SURFMIST COLORBOND ROOF @ 19 DEGREE
4	PC ALUMINIUM VERTICAL FEATURE SCREEN
5	PC ALUMINIUM FENCE

SUBJECT TO COUNCIL APPROVAL

M Scale: 1 : 100 (A3)

PROJECT
PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

ELEVATIONS

DESIGNED BY	DRAWN BY	DATE	
LC	BV	12/09/2025	A06.02

RECHITECTS ARCHITECTURE+DESIGN
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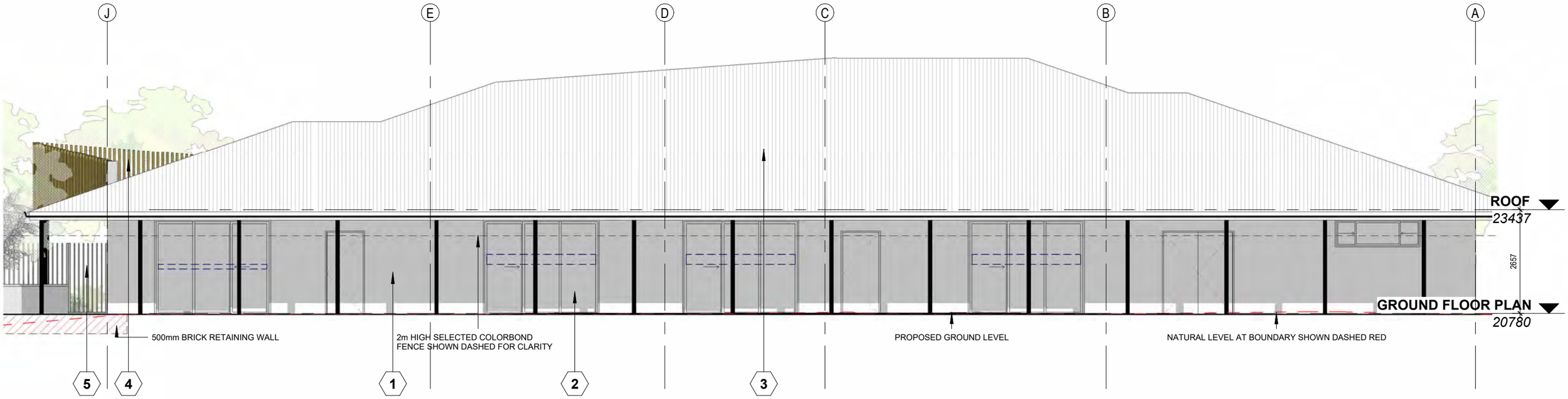

1 / A01.01 **NORTH ELEVATION**
1 : 100

ELEVATIONS - MATERIALS / FINISHES	
NO	DESCRIPTIONS
1	SELECTED PAINTED RENDERED WALL
2	PC ALUMINIUM FRAMED GLAZING
3	SURFMIST COLORBOND ROOF @ 19 DEGREE
4	PC ALUMINIUM VERTICAL FEATURE SCREEN
5	PC ALUMINIUM FENCE

SUBJECT TO COUNCIL APPROVAL

M Scale: 1 : 100 (A3)

PROJECT
PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

ELEVATIONS

DESIGNED BY	DRAWN BY	DATE	
LC	BV	12/09/2025	A06.03

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1 **3D_ENTRANCE**

2 **3D_STREET VIEW**

SUBJECT TO COUNCIL APPROVAL

M Scale: (A3)

PROJECT
PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

PERSPECTIVES

DESIGNED BY	DRAWN BY	DATE	
LC	LC.BV	12/09/2025	A40.01

ATTACHMENT 3

Application for Development Approval

Child Care Centre

Lot 317 (No. 23) Ballyronan Road
Maddington

LATERAL PLANNING

Document Control

Reference	0376
Location	Lot 317 (No. 23) Ballyronan Road, Maddington
Client	Jaystone (Aus) Pty Ltd
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Contents

1.0 Introduction

Lateral Planning acts for Jaystone Homes Pty Ltd, the registered proprietor of the land situated at Lot 317 (No. 23) Ballyronan Road, Maddington ('site').

This Town Planning Statement has been prepared in support of an Application for Development Approval ('Application') for the construction of a Child Care Centre on the site.

The Town Planning Statement provides an assessment of the proposed development against the applicable town planning framework and demonstrates the proposal is consistent with the amenity and orderly and proper planning of the locality. This Application is accompanied by the following technical documents.

Document	Consultant
Feature Survey	Cottage Surveys
Architectural Drawings	Rechitects Architecture + Design
Landscape Plan	Nature Plan Solutions
Town Planning Statement	Lateral Planning
Operational Management Plan	Lateral Planning
Acoustic Assessment	Herring Storer Acoustics
Traffic Impact Statement	Premise
Stormwater Concept Plan	Aurelia

Table 1: Consultant Team

2.0 Subject Site

2.1 Overview

Local Authority	City of Gosnells
Locality	Maddington
Address	23 Ballyronan Road
Cadastral	Lot 317 on Plan 413890
Certificate of Title	Volume 2968 Folio 839
Registered Proprietor	Kaibo Pty Ltd
Land Area	2,162m^2
Frontages	Ballyronan Road 40.86m
Existing Land Use	Vacant

Table 2: Site Overview

2.2 Context

The site is situated 17 kilometres south-east of Perth in the suburb of Maddington, in the City of Gosnells ('City'). Maddington is a predominantly low-density residential neighbourhood with a population of 12,419 people and 4,897 dwellings at the time of the 2021 Census (Australian Bureau of Statistics).

The site is within an emerging residential neighbourhood to the south of where Maddington Road passes under Tonkin Highway. Maddington Road is a Local Distributor Road under Main Roads WA Road Information Mapping System. Maddington Road comprises a single carriageway with a footpath on both sides of the road. An employment area is located north of Maddington Road. The site is in close proximity to three schools: Bramfield Park Primary School (one kilometre to the west), Orange Grove Primary School (700 metres to the north) and Yule Brook College (600 metres to the south).

The site is located on the west side of Ballyronan Road opposite a recently established park, while Woodswallow Park is 150 metres to the west. Single storey dwellings abut the site's north, west and south boundaries.

There are no trees in the verge abutting the site. Infrastructure adjacent to the site includes light poles and a footpath.

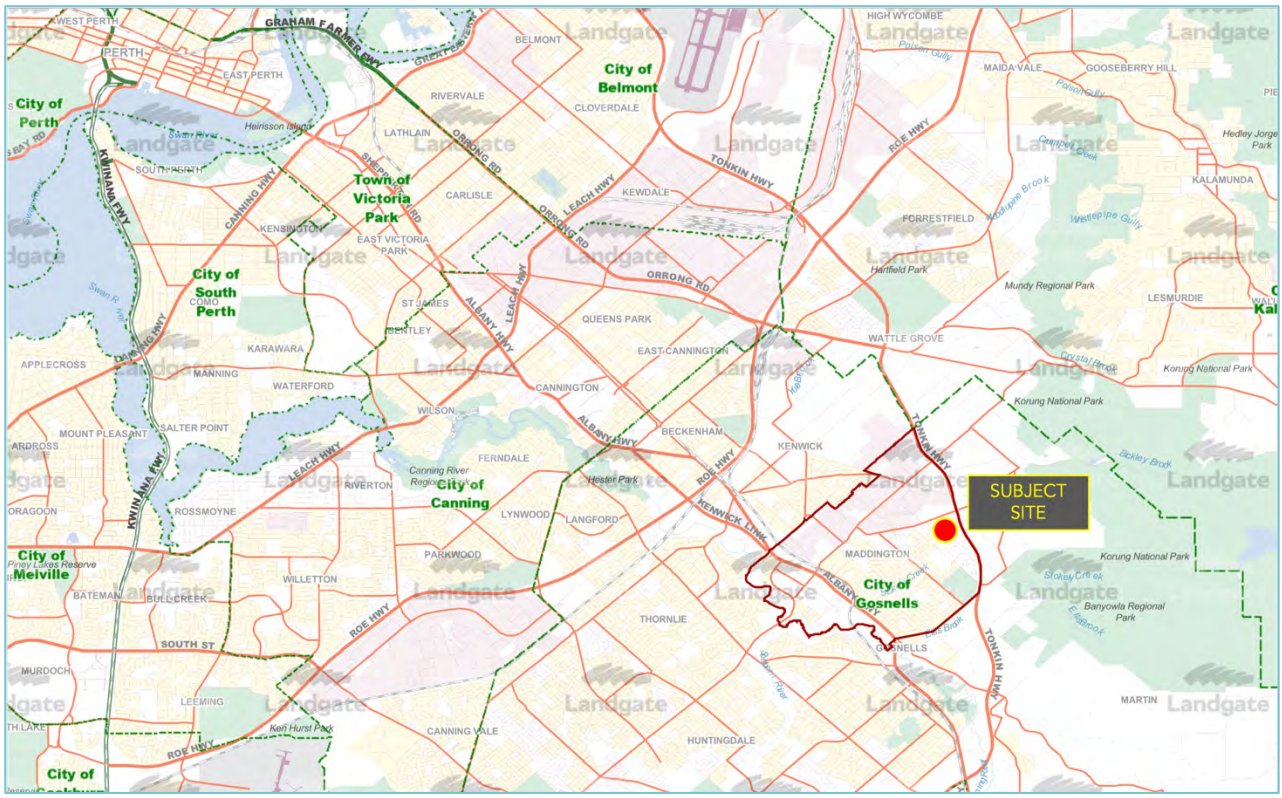

Figure 1: Regional Context

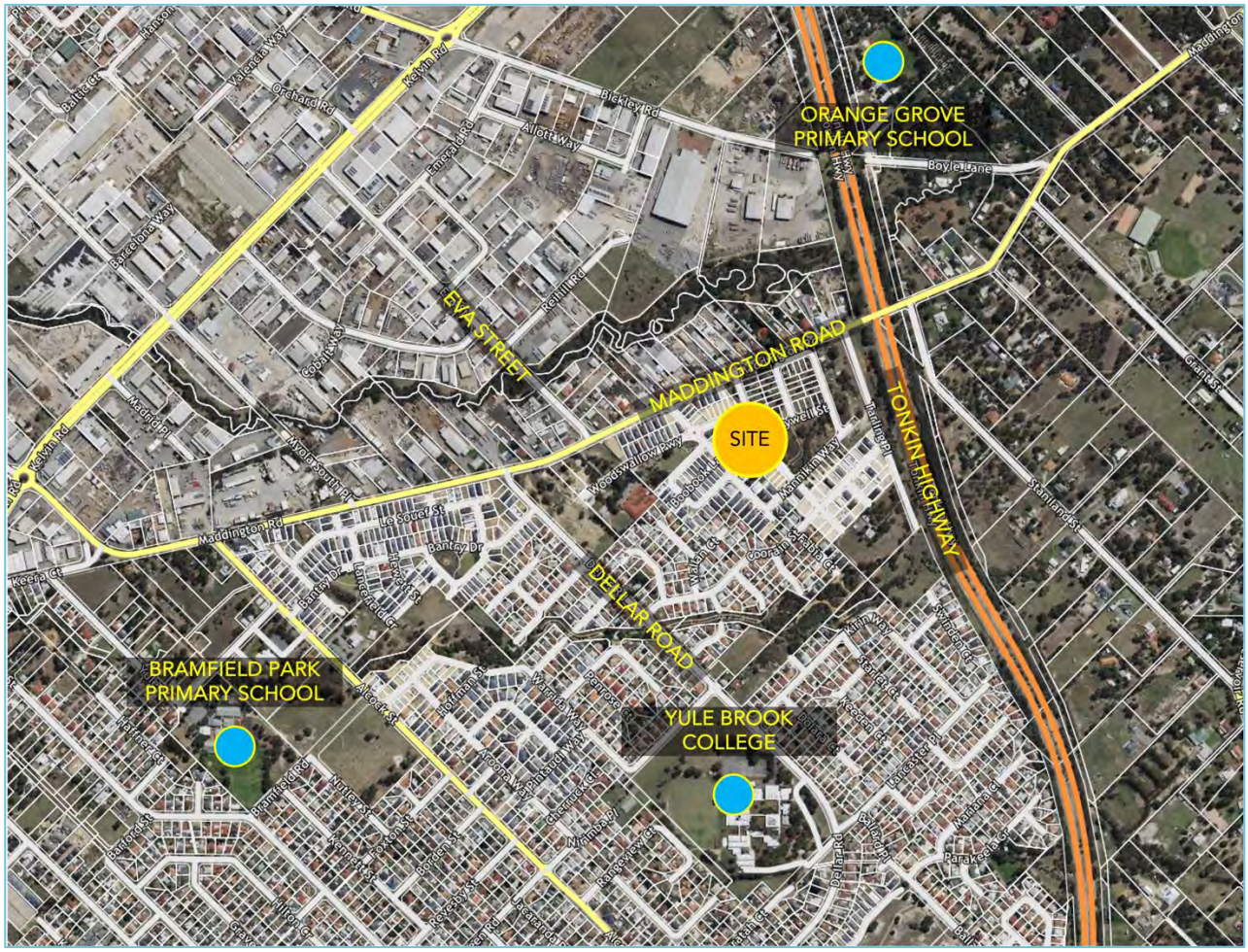

Figure 2: Local Context

Figure 3: Site Surrounds

2.3 Characteristics

The site has an area of 2,162m^2 with a frontage of 41 metres to Ballyronan Road. The site forms part of a new residential subdivision and is vacant with no vegetation. The site is generally flat.

Figure 4: Subject Site

3.0 Description of Proposed Development

Item	Proposed			
Description of Development	Child Care Centre			
External Play Area	Total External Play Area		700m²	
Activity Rooms	Room	Age (Years)	Area	Places
	1	3 to 5	71m²	20
	2	3 to 5	74m²	20
	3	2 to 3	51m²	15
	4	2 to 3	51m²	15
	5	0 to 2	46m²	12
	6	0 to 2	42m²	12
	Total		**335m²**	**94**
Staff	Educators		16	
	Centre Manager		1	
	Cook		1	
	Total		**18**	
Operating Times	Trading Days		Monday to Friday	
	Staff Arrival / Departure		6.30am to 7.00pm	
	Customer Arrival / Departure		7.00am to 6.30pm	
	External Play Areas		7.00am to 6.00pm	
Parking	Car Bays		24	
	Bike Bays		2	
Trees	Trees Removed - Verge		0	
	Trees Retained - Verge		0	
	Trees Removed - Site		0	
	Trees Retained - Site		0	
	Trees Proposed - Site		24	

Table 3: Operational Details

4.0 Town Planning Considerations

4.1 Metropolitan Region Scheme

The site is zoned Urban under the Metropolitan Region Scheme ('MRS'). No portion of the site is reserved under the MRS.

4.2 State Planning Policies

4.2.1 State Planning Policy No. 3.7 – Planning in Bushfire Prone Areas

State Planning Policy No. 3.7 – Planning in Bushfire Prone Areas ('SPP3.7') applies to land in a Bushfire Prone Area declared under the Fire and Emergency Services Act 1998.

The land to the east of Tonkin Highway is within a declared Bushfire Prone Area 2 (Non-Urban), while land to the west of Tonkin Highway, including the site, is within a declared Bushfire Prone Area 1 – Urban. It appears the Bushfire Prone Area 1 to the west of Tonkin Highway is based on vegetation that existed prior to the land being cleared and subdivided for residential purposes. Additionally, the public open space to the east of Ballyronan Road contains minimal remnant vegetation and will be managed by the City.

For these reasons, it is not considered necessary for a Bushfire Management Plan or Bushfire Emergency Evacuation Plan to be prepared for the Application. A Bushfire Attack Level ('BAL') Assessment can be undertaken pursuant to a condition of approval to determine the BAL rating of the site and if required the premises will be constructed to a suitable BAL rating pursuant to Australian Standard 3959: Construction of Buildings in Bushfire-Prone Areas.

4.2.2 State Planning Policy No. 5.4 – Road and Rail Noise

State Planning Policy No. 5.4 – Road and Rail Noise ('SPP5.4') seeks to minimise the adverse impacts of transport noise on sensitive land uses in proximity to major transport routes.

Tonkin Highway is defined as a Strategic Freight / Major Traffic Route under SPP5.4. Table 1 of SPP5.4 requires noise-sensitive land uses within the Trigger Distance (300 metres) of Strategic Freight / Major Traffic Routes to implement traffic noise mitigation measures. In this instance, the site is partially within the Trigger Distance for Tonkin Highway, meaning an Acoustic Assessment is required. A Noise Management Plan has been prepared to address the requirements of SPP5.4. The Noise Management Plan finds that traffic noise mitigation measures are not required to be incorporated into the premises.

4.2.3 State Planning Policy No. 7.0 – Design of the Built Environment

State Planning Policy No. 7.0 – Design of the Built Environment ('SPP7.0') seeks to achieve 'good design' through the application of ten (10) Design Principles. Consideration has been given to the Design Principles set out in SPP7, as summarised below.

Design Principle	Response
Context and Character	The design of the development is compatible with the character of the area, which consists of single storey buildings in a suburban setting.
Landscape Quality	The Application is accompanied by a Landscape Plan that demonstrates a high-quality landscape design to all external areas.
Built Form and Scale	The following design elements ensure the form and scale of the building is compatible with its setting: • Single storey; • Verandah to all elevations; • Painted render finish to walls; • Colorbond pitched roof; • Visually permeable fencing to the street frontage (above 1.2 metres); • Car park sleeved to the side of the building.
Functionality and Build Quality	The building is designed to function as a Child Care Centre in accordance with all applicable Regulations.
Sustainability	The development will incorporate: • Roof mounted photovoltaic cells for solar energy; • Water and energy efficient appliances. The building incorporates passive design features: • North facing external play area; • All activity rooms have direct access to external play areas to maximise daylight; • The verandah depth provides shade during summer whilst allowing winter sun penetration into activity rooms; • Limited openings facing west to avoid hot summer sun in the afternoon.
Amenity	The external play space has been designed and divided into age groups. The intent of this is to have the quieter children (aged -3) playing in the outdoor areas to the west and north-west of the site, with the louder children (3+) playing in the outdoor areas closest to Ballyronan Road. The development will incorporate Construction and Operational Measures to mitigate noise impacts on adjacent residential properties. Refer Acoustic Assessment and Operational Management Plan.
Legibility	The Child Care Centre has a legible front entry with subtle signage and separate pedestrian path leading to the entry lobby. Bicycle parking spaces are provided near the building entrance.
Safety	A large window is orientated to face the street and provide a high level of casual visual surveillance of the public realm. Visually permeable fencing is proposed to the street frontage. The reception has direct line of sight to the entry footpath and 'safe zone.'
Community	A child care centre is a low-impact, daytime activity that is a compatible use within a residential area. The child care centre will benefit the community by providing an important service to young families in the local area. Having children embedded in neighbourhoods fosters a sense of community, supports social connections and can contribute to local identity.

Design Principle	Response
	A study by Victoria University (*Deserts and Oases: How Accessible is Childcare in Australia? March 2022*) found that there are 4.6 children per place in Maddington, Orange Grove and Martin, compared to a nation-wide median of 2.6 children per place. Almost 95% of Maddington, Orange Grove and Martin was classified by the study as a "childcare desert".
Aesthetics	The building design has features similar to a home, incorporating a single-storey design, cladding and pitched roof, consistent with the character of the area.

Table 4: Design Principles Assessment

4.3 City of Gosnells Local Planning Scheme No.6

4.3.1 Zoning

The site is zoned Residential Development under Local Planning Scheme No.6 ('LPS6').

The intent of the Residential development zone is to provide for the progressive and planned development of future urban areas generally in accordance with a Structure Plan (refer below).

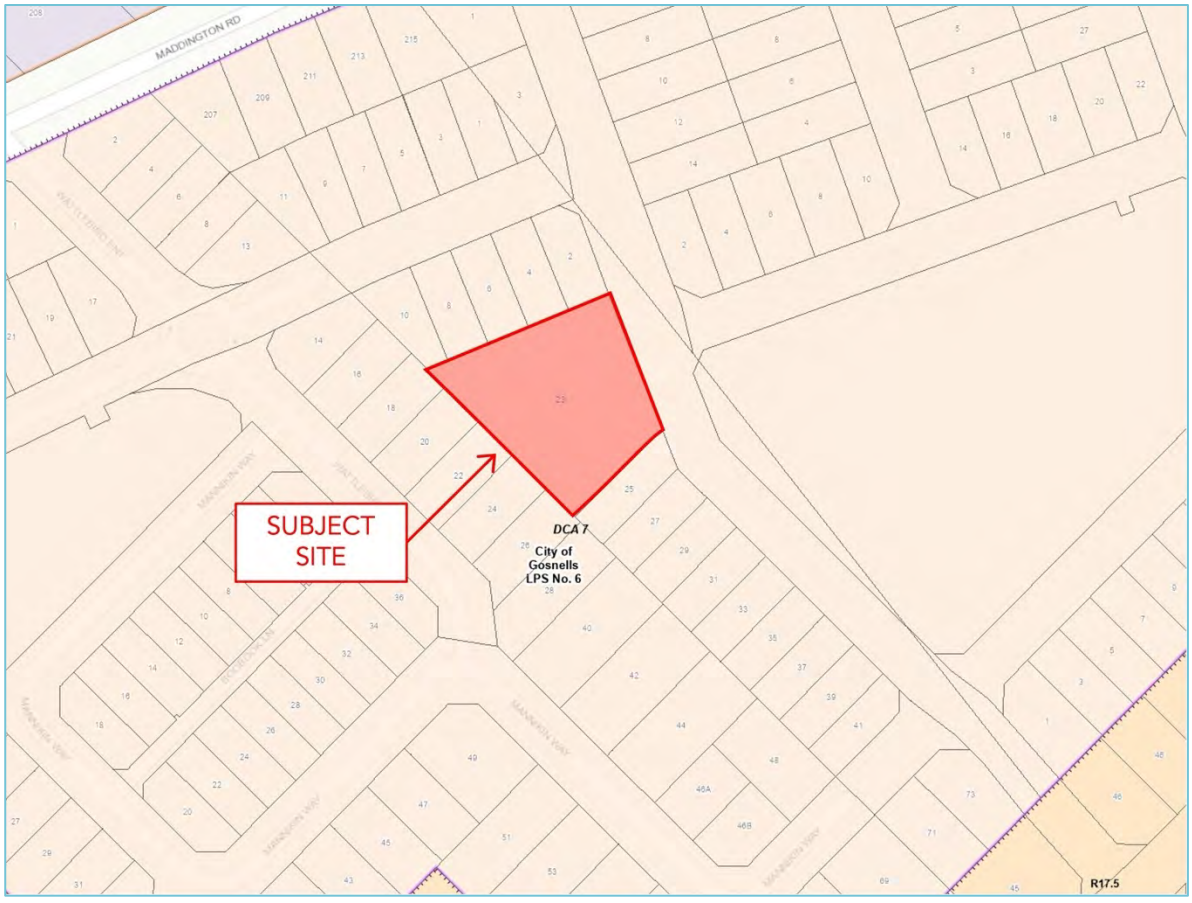

Figure 5: LPS6 Map

4.3.2 Land Use

The proposed use falls within the definition of a 'Child Care Premises' under LPS6, which is designated as a 'D' use in the Residential Development Zone.

The proposed use is therefore capable of being approved at the discretion of the decision-maker, having regard to all relevant considerations pursuant to Deemed Provision 67 of LPS6.

4.3.3 Structure Plans

Maddington Road Precinct A Outline Development Plan

The site is within the Maddington Road Precinct A Outline Development Plan ('ODP'). The ODP identifies the site as being suitable for Grouped Housing with a density code of R30.

The ODP indicates that a Local Development Plan may be required prior to development of the site. In this instance, a Local Development Plan is not required as the site will be developed for a single purpose and matters such as the interface to adjoining lots, the street and public open space are all addressed by the Application.

Figure 6: Outline Development Plan Maddington Road Precinct A

4.3.4 Special Control Areas

Development Contribution Areas

The site is located in Development Contribution Area No.7 – Maddington Road Precincts.

4.3.5 Development Requirements

The relevant development requirements of LPS6 are summarised in the table below.

Requirement	Response
Setbacks for Non-residential Development	Required Setbacks • Primary Street 4 metres • Lot Boundaries 1 metre Minor projections may encroach into the lot boundary setback by up to 0.75 metres. The development achieves the required setbacks under of LPS6.
Control of Advertisements	A separate Application for Development Approval will be submitted for any signage requiring Development Approval.
Car Parking	Required Car Parking (Table 3A of LPS6): • 1 bay per staff member (18): 18 • 1 bay per 10 places (94): 9 Total Required: 27 Total Proposed 24 Further discussion of Car Parking is provided below. The Operational Management Plan explains how car bays will be allocated to meet demand from customers, staff and visitors.
Car Parking Design Requirements	The dimensions of car bays and aisles satisfy Table 3B of LPS6. Customer car bays are 2.6 metres in width as required by AS2890.1. for short-term parking bays. One (1) ACROD permit parking bay is provided.
Alternative Vehicle Parking	Two (2) bicycle parking bays near the entrance of the building.

Table 5: TPS6 Compliance

Car Parking

The table below summarises the required and proposed amount of car parking.

Requirement		Response	
TOTAL REQUIRED	27	TOTAL PROVIDED	24
Staff Car Parking:		Allocation of Car Bays	
• 1 bay / staff member (18)	18	• Staff Bays (all day):	14
Customer Car Parking:		• General Purpose Bays:	
• 1 bay / 10 places (94)	9	- Customer Drop-off / Pick-Up (peak times)	9
		- Staff / Visitors (non-peak):	9
		• ACROD Bay (all day):	1
		Refer to Operational Management Plan.	

Table 6: Car Parking Summary

Clause 4.13.3 of LPS6 and Deemed Provision 77D allow the decision-maker to vary the on-site parking requirement. In this instance, while the Application proposes a three (3) bay parking shortfall, sufficient parking is available to meet demand from staff, customers and other visitors throughout the day, due to the different peak times of each user group. This allows car bays to be allocated to specific user groups at different times of the day to meet demand.

Customer Parking

Nine (9) car bays will be set aside exclusively for customer use during the morning drop-off (prior to 9.30am) and afternoon pick-up (after 3.30pm). The Traffic Impact Statement anticipates 75% to 80% of customers will arrive prior to 9.30am to drop-off children and after 3.30pm to collect children. Between 9.30am and 3.30pm, very few customers will visit the premises.

Staff Parking

The number of staff at the premises on any given day will vary depending on enrolments in each age group, with staff work times staggered to meet the needs of the centre during the day. Two (2) staff will typically be rostered to open the premises and commence work by 7am. No staff will arrive prior to 6.30am. During a typical day (for a full occupancy scenario), it is expected up to 12 educators will be rostered to commence work prior to 9.30am, commensurate with anticipated customer drop-off times, increasing to the maximum of 16 educators during the day. Staff levels will gradually decrease as shifts finish and children are collected. No more than 12 educators would typically be working at the commencement of the afternoon peak (3.30pm), with 2 staff typically rostered to close the premises at 6.30pm. All staff would depart by 7pm latest. The cook will work part-time and attend the premises between 9.30am and 3.30pm. The Centre Manager will attend at varying times and be provided with one (1) dedicated car bay.

With 14 car bays set aside for staff use, sufficient parking is provided to meet demand prior to 9.30am and after 3.30pm, with the general purpose car bays available off-peak (9.30am to 3.30pm) to meet the additional demand for up to 4 staff to park during the day.

Other Visitors & Service Vehicles

Other visitors to the premises include contractors, suppliers and clients who may wish to meet with staff and / or inspect the centre. Such visitations are infrequent and will be scheduled to occur during the day (between 9.30am and 3.30pm) when use of the car park is at its lowest.

ACROD Parking

One (1) car bay will be available for ACROD permit parking.

4.3.6 Local Planning Policies

Local Planning Policy No. 4.11 – Public Art

LPP4.11 requires non-residential development with an estimated cost exceeding $2 million to provide public art to the value of 1% of the construction cost. The estimated construction cost of the development is $2.1 million meaning public art to the value of $21,000 is required. Details of the public art strategy can be provided in accordance with a condition of Development Approval.

Local Planning Policy No. 4.9 – Signage

This Application seeks approval for two signs as depicted on the architectural drawings: one on the front façade and one on the front entry canopy. Both signs depict the intended name of the premises ('MADDINGTON CHILDCARE') with lettering not exceeding a height of 0.3 metres. The signs will not be illuminated.

Under Local Planning Policy 4.9 ('LPP4.9'), the signs fall within the definition of a Wall Sign. LPP4.9 indicates that Wall Signs shall:

- Not occupy more than 40% of the façade area;
- Have a minimum height clearance of 2.7 metres if protruding more than 0.03 metres from the wall surface;
- Not project above the top of the wall; and
- Be limited to one sign per tenancy.

The Wall Signs satisfy LPP4.9 with the exception of the number of signs. It is considered the provision of two signs facing the street is acceptable given the wide frontage of the site and the subtle design of the signs, which are integrated into the design of the building.

It is further noted that Schedule 5 of LPS6 identifies various types of signs that do not require Development Approval, including *"a building name sign on any building, where it is of a single line of letters not exceeding 300mm in height, fixed to the facade of the building."* The lettering of the proposed Wall Signs does not exceed a height of 300mm but each sign comprises two rows of lettering, suggesting that the Schedule 5 exemption may not apply.

For the avoidance of doubt, the Wall Signs are depicted on the drawings of the proposed development to ensure that any necessary approval is obtained as part of this Application. A separate Application for Development Approval will be submitted for any additional proposed signs that may not qualify for an exemption under Schedule 5 of LPS6.

4.3.7 Deemed Provisions

Deemed Provision Clause 67 of Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations sets out the various matters a decision-maker is required to consider in determining this Application. The table below explains how the Application addresses each of the relevant matters listed in Deemed Provision 67.

Deemed Provision 67		Response
(a)	Local Planning Scheme	The Application is capable of approval under LPS6.
(b)	Orderly and proper planning	The use is consistent with the orderly and proper planning of the locality. Draft Local Planning Scheme No.24 (refer below).
(c)	State Planning Policies	State Planning Policy 3.7 – Planning in Bushfire Prone Areas State Planning Policy 5.4 – Road and Rail Noise State Planning Policy 7.0 – Design of the Built Environment.

(d)	Environmental Protection Policies	Not applicable.
(e)	Any policy of the WAPC	WAPC Draft Position Statement - Child Care Premises.
(f)	Any policy of the State	Not applicable.
(g)	Local Planning Policies	Local Planning Policy 4.11 – Public Art.
(h)	Structure Plans, Centre Plans and Local Development Plans	Maddington Road Precinct A Outline Development Plan.
(i)	Review of Local Planning Scheme	The use is capable of approval under draft LPS24.
(j)	Reserved land	Not applicable
(k)	Built heritage conservation of any place of cultural significance	The development does not have an adverse impact on the built heritage conservation of any place of cultural significance.
(l)	Cultural heritage significance	The site is not within an area of cultural heritage significance. The development will not have any effect on a known site or place of Aboriginal heritage significance.
(m)	Compatibility with setting	The development is compatible with its setting, being a low impact non-residential use within a residential zone.
(n)	Amenity of the locality:	
	(i) Environmental impacts	The proposal will not have any adverse impact on the environment.
	(ii) Character of locality	The design of the development is compatible with the character of the area.
	(iii) Social impacts	The development will not have any adverse social impacts.
(o)	Effect on natural environment	The development will not have an adverse effect on the natural environment.
(p)	Landscaping and tree retention	There are no existing trees on the site. Tree planting is proposed as per the Landscape Plan.
(q)	Environmental risks	None
(r)	Risk to human health or safety	None
(s)	Access and parking	Parking for 24 cars is provided with access from Ballyronan Road. The Operational Management Plan demonstrates how the car bays will be allocated during the day to meet peak demand from different user groups
(t)	Traffic impacts	The traffic generated by the development will not have an adverse effect on traffic flow and safety. Refer to Traffic Impact Statement.
(u)	(i) Public Transport	Bus No. 229: Carousel Shopping Centre – Maddington via Kenwick.
	(ii) Public Utilities	All utilities required to service the development are available.
	(iii) Waste Management	A bin store is proposed of sufficient capacity to service the development. Refer Operational Management Plan.
	(iv) Pedestrian & Cyclist Access	2 bike bays are proposed near the entry to the child care premises. A pedestrian path connects the building entry to the car park and footpath.
	(v) Elderly & Disability Access	One 'ACROD' bay is provided.
(v)	Loss of community benefit or service	The Application will not result in any loss of a community service. The Child Care Premises will benefit the local community by providing access to child care services in the area. The proposed centre would provide critical and much needed long day care services for the Maddington community.

		A study by Victoria University (*Deserts and Oases: How Accessible is Childcare in Australia? March 2022*) found that there are 4.6 children per place in Maddington, Orange Grove and Martin, compared to a nation-wide median of 2.6 children per place. Almost 95% of Maddington, Orange Grove and Martin was classified by the study as "childcare desert".
(w)	History of the site	No relevant site history.
(x)	Impact on the community	The Child Care Premises will benefit the local community by providing improved access to child care services. The site is in an emerging residential area where demand for child care is expected to be strong.
(y)	Submissions on the proposal	To be determined
(za)	Comments from agencies	To be determined
(zb)	Other planning considerations	None

Table 7: Deemed Provision Clause 67

4.4 Draft Local Planning Scheme No.24

Draft Local Planning Scheme No.24 ('LPS24') was endorsed by the City's Elected Members on 23 February 2021 and subsequently advertised for public comment. Draft LPS24 was considered by the Statutory Planning Committee of the Western Australian Planning Commission ('WAPC') on 11 December 2024. Draft LPS24 is now with the Minister for Planning for approval.

Draft LPS24 is a seriously entertained planning proposal and is required to be given due regard by the decision-maker. Under draft LPS24, the site is proposed to be zoned Residential where a Child Care Premises is classed as an 'A' use, meaning the use is capable of being approved at the discretion of the decision-maker.

5.0 Conclusion

This Town Planning Statement has been prepared in support of an Application for Development Approval for a childcare centre at Lot 317 (No. 3) Ballyronan Road, Maddington.

The site is ideally placed to accommodate a child care centre. This site is zoned Residential Development under City of Gosnells Local Planning Scheme No.6 and is situated in an emerging residential community where demand for child care services is expected to be strong. The child care centre is a compatible non-residential use and proposed to be situated on a site earmarked for grouped housing and located within a short walk to two small parks.

The Traffic Impact Statement finds that the road network surrounding the site can successfully accommodate additional traffic associated with the proposed development and that sufficient parking is provided on-site to meet the parking demand for the centre.

The Acoustic Assessment finds that the proposal is capable of satisfying applicable noise regulations.

The Operational Management Plan explains how the premises will be operated to mitigate any adverse impacts on the locality with respect to car parking, noise and waste.

Accordingly, the proposed development satisfies the relevant considerations of Deemed Provision 67, is consistent with the principles of orderly and proper planning, and will not have any detrimental impact on the amenity of the locality.

ATTACHMENT 4

Operational Management Plan

Child Care Centre

Lot 317 (No. 23) Ballyronan Road
Maddington

LATERAL PLANNING

Document Control

Reference	0376
Location	Lot 317 (No. 23) Ballyronan Road, Maddington
Client	Jaystone Homes Pty Ltd
Document Title	Operational Management Plan
Document File Name	0376 Operational Management Plan.docx
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Author	Nathan Stewart

Contents

1.0 Introduction

This Operational Management Plan ('OMP') has been prepared in support of an Application for Development Approval for a Child Care Centre at Lot 317 (No. 23) Ballyronan Road, Maddington ('site'). The purpose of the OMP is to document how the Child Care Centre will operate to minimise impacts on the locality.

2.0 Site Description

Local Authority	City of Gosnells
Locality	Maddington
Address	23 Ballyronan Road
Cadastral	Lot 317 on Plan 413890
Certificate of Title	Volume 2968 Folio 839
Registered Proprietor	Kaibo Pty Ltd
Land Area	2,162m^2

Table 1: Site Overview

Figure 1: Site Plan

3.0 Proposed Development

3.1 Operating Times

Business Days	Monday to Friday
Staff Arrival / Departure	6.30am to 7.00pm
Customer Arrival / Departure	7.00am to 6.30pm
External Play Areas (EPA)	7.00am to 6.00pm

Table 2: Operating Times

3.2 Capacity

Activity Room	Age Group	Places	Educators	Indoor Area	External Area
1	3 to 5	20	2	71m²	700m²
2	3 to 5	20	2	74m²	
3	2 to 3	15	3	51m²	
4	2 to 3	15	3	51m²	
5	0 to 2	12	3	46m²	
6	0 to 2	12	3	42m²	
Total		**94**	**16**	**335m²**	**700m²**

Required Indoor Area: 3.25m² per child.

Required Outdoor Area: 7m² per child.

Required Educators:

- 0 to 2 age group: 1 supervisor per 4 children
- 2 to 3 age group: 1 supervisor per 5 children
- 3 to 5 age group: 1 supervisor per 10 children

Table 3: Capacity

3.3 Staff

Educators	16
Centre Manager (Part-Time)	1
Cook (Part-Time)	1
Total	**18**

Table 4: Staff

Educators

In practice, the number of staff on any given day will vary depending on enrolments in each age group, with work times staggered to meet the needs of the centre throughout the day.

Typical staff levels in a full occupancy scenario would be as follows:

- Two (2) staff will be rostered to open the premises and commence work by 7am. No staff will arrive prior to 6.30am.
- A further ten (10) educators will typically be rostered to commence work during the morning peak (up to 9.30am).
- The highest staffing level occurs between 9.30am and 3.30pm when a further four (4) educators (total 16 educators) could be working at the premises.
- Staff levels gradually decrease after 3.30pm, as shifts finish and children are collected.
- No more than 12 educators would typically be working at the start of the afternoon peak (3.30pm).
- Two (2) staff will be rostered to close the premises at 6.30pm. All staff will depart by 7pm.

Centre Manager

The Centre Manager will oversee operations at the premises. The Centre Manager will also be a qualified Educator and will provide additional cover on the floor, as required.

Cook

A cook will be employed on a part-time basis between 9.30am and 3.30pm.

Maximum Staff

The table below shows the proposed maximum number of staff at the premises throughout the day assuming a full occupancy scenario. At no point would more than 18 staff be present.

	OPENING	MORNING PEAK	OFF-PEAK	AFTERNOON PEAK	CLOSE
	6.30am to 7.00am	7.00am to 9.30am	9.30am to 3.30pm	3.30pm to 6.30pm	6.30pm to 7.00pm
Educators	2	12	16	12	2
Manager		1	1	1	
Cook			1		
Total Staff	**2**	**13**	**18**	**13**	**2**

4.0 Traffic and Parking

4.1 Overview

Car Parking

A total of 24 car bays will be provided for use by staff, parents / guardians, and other visitors.

The proposed allocation of car bays is depicted in Figure 2 below.

Customer Parking

Nine (9) car bays will be set aside exclusively for customer use during the morning drop-off peak (7.00am to 9.30am) and afternoon pick-up peak (3.30pm to 6.30pm).

The ACROD car bay will also be available for customer drop-off / pick-up to provide additional capacity during peak times. Customers without an ACROD permit will be subject to a maximum 10-minute stay in the ACROD bay.

The customer car bays are positioned on the north side of the car park with direct access to the entry to the premises via the pathway.

Staff Parking

The Staff Roster assuming 100% occupancy is shown above.

At no point during the AM peak (prior to 9.30am) and PM peak (after 3.30pm) will the number of staff exceed 13. The greatest number of staff working at the premises at any time will be 18, between 9.30am and 3.30pm. A total of 14 car bays will be set aside exclusively for staff use throughout the entire day, with an additional four (4) general purpose car bays available to staff between 9.30am and 3.30pm, when customer parking demand is low. The Centre Manager will attend at varying times and be provided with one (1) dedicated car bay.

Every staff member will therefore have access to a car bay.

Other Visitors & Service Vehicles

Other visitors to the premises include contractors, suppliers and clients who may wish to meet with staff and / or inspect the centre. Such visitations are infrequent and will be scheduled to occur during the day (between 9.30am and 3.30pm) when use of the car park is at its lowest.

ACROD Parking

One (1) car bay will be available for ACROD permit parking. As noted above, the ACROD bay will also be available to customers without an ACROD permit for a maximum stay of 10 minutes.

Vehicle Access

Access is proposed from Ballyronan Road. No security gate is proposed to the car park, allowing vehicles to enter the site without having to wait on the road carriageway or across the verge. A turning zone is provided at the end of the car park.

Sufficient car bays will be allocated to staff and customers to meet demand at all times of the day. This assumes full occupancy, all staff attending in a separate car as per the roster times shown above, and all children arriving in a separate car as per the expected arrival / departure times set out in the Traffic Impact Statement.

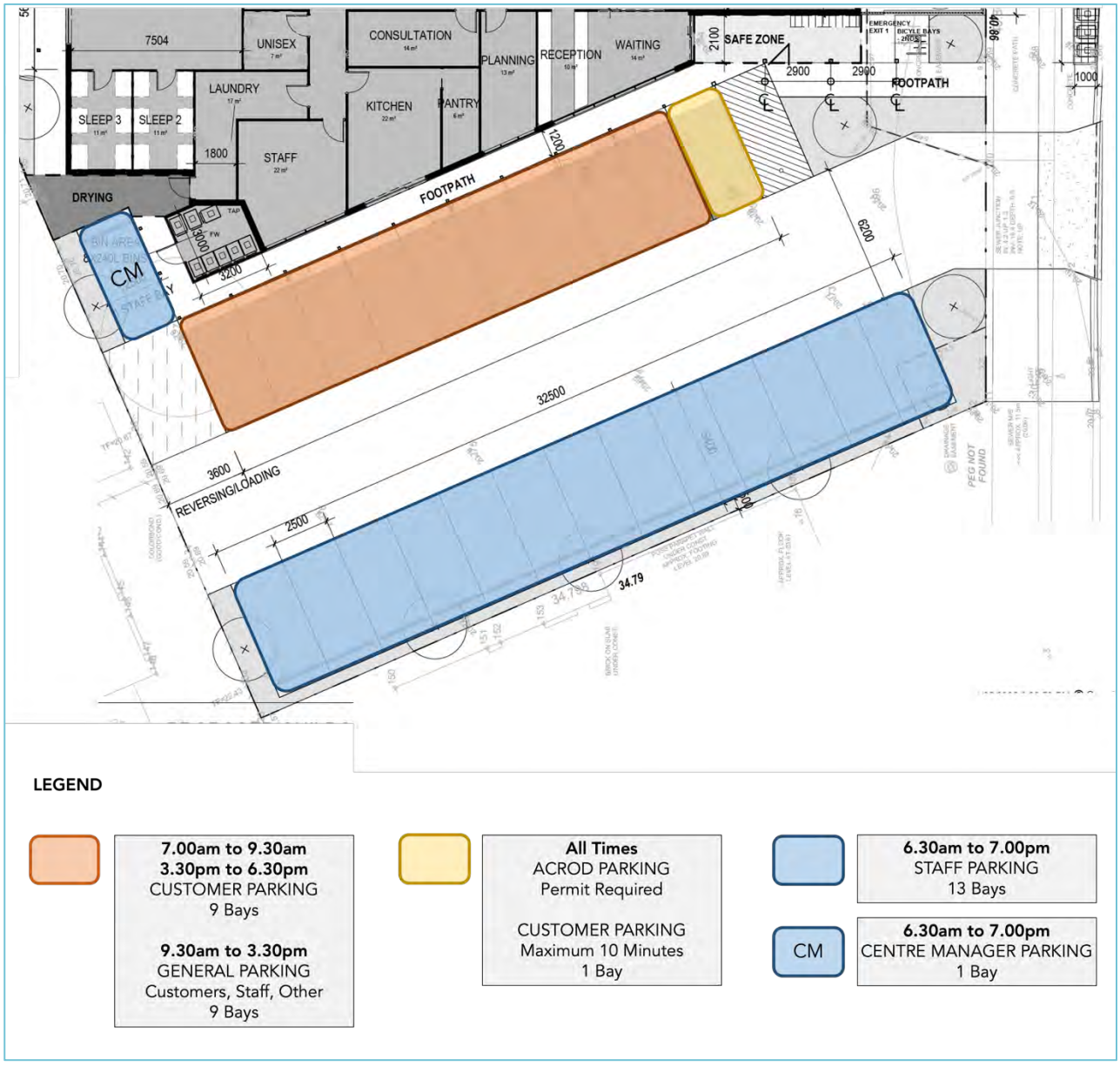

Figure 2: Car Parking Allocation

Bicycle Parking

Bike racks are provided at the front of the premises. Staff will have access to a shower / change facility and secure lockers will be provided.

Public Transport

The site is serviced by public transport (bus service). Bus #292 runs between Maddington and Cannington via Maddington Road / Eva Street, with bus stops being approximately 500 metres from the site.

4.2 Traffic and Parking Management

Operational Measures

The following operational measures will be implemented to mitigate any potential adverse impacts associated with traffic and parking.

These measures will be implemented on an on-going basis by Child Care Centre management, pursuant to a condition of Development Approval that gives effect to this OMP.

Operational Measures – Traffic and Parking
Car Park
1. Line-marking and signage will be installed to depict the authorised use of each car bay throughout the day.
2. Staff, customers and other visitors will be advised of the requirement to park in designated car bays only.
3. Customers will be requested not to park or stand their vehicle in any roads surrounding the site and to observe on-street parking restrictions.
4. Staff will be responsible for monitoring use of the car park and customers will be reminded of the car park operation procedures on an as-required / as-needed basis.
5. Management of the Child Care Centre will endeavour to schedule non-urgent visitations and deliveries during non-peak times only (9.30am to 3.30pm).
6. All suppliers / contractors will be advised that access to the site during the morning drop-off (before 9.30am) and afternoon pick-up (after 3.30pm) will not be permitted (except for emergency maintenance).
7. Management will encourage deliveries to occur between 10.30am and 2.30pm, when vehicle movements at the Child Care Centre will typically be at their lowest.
8. Any car park security gate that might be provided in the future will remain open throughout the day.
Public Transport and Cycling
9. Staff will be advised of available bus services in the area.
10. Staff will also be advised of the provision of bike parking and end-of-trip facilities, which include a shower / change room and secure lockers.

Table 5: Operational Measures – Traffic and Parking

5.0 Noise

5.1 Overview

Environmental Protection (Noise) Regulations

The Child Care Centre is required to satisfy the Environmental Protection (Noise) Regulations and will incorporate measures to mitigate the impacts of noise on nearby residential properties.

State Planning Policy 5.4 – Road and Rail Noise

State Planning Policy 5.4 – Road and Rail Noise ('SPP5.4') seeks to minimise the adverse impacts of road and rail noise on noise-sensitive land use. The Noise Management Plan finds the premises is capable of satisfying SPP5.4 and no traffic noise amelioration measures are required.

5.2 Noise Management

The Acoustic Assessment recommends various noise mitigation measures relating to the construction and operation of the premises. The construction measures will be implemented prior to occupation of the premises, pursuant to a suitable condition of Development Approval.

The operational measures will be implemented on an on-going basis by Child Care Centre management, pursuant to a condition of Development Approval that gives effect to this OMP.

Operational Measures

The following operational noise mitigation measures will be implemented.

Operational Measures – Nosie Mitigation
Hours of Operation 1. The Childcare Centre is to be operational for customer use form 7.00am to 6.30pm Monday to Friday, excluding public holidays. 2. Staff will be instructed not to arrive prior to 6.30am and to be off-site by 7.00pm 3. Typically, not more than two (2) staff will be rostered to open the premises at 7.00am. 4. Typically, not more than two (2) staff will be rostered to close the premises at 6.30pm. External Play Areas 5. Children are not permitted outdoors for play purposes prior to 7.00am. 6. Play equipment in the external play areas should be non-metallic. If metal fixed play equipment is used, then hollow metal sections shall be filled with expanding foam or sand. Music 7. Keep external windows and doors closed when playing music indoors. 8. Do not play music outdoors (except light children's music if authorised by the local authority). Car Park 9. Staff will be instructed to park in the designated staff parking bays only. 10. Signage will be placed in the car park advising staff / visitors not to slam doors or play music in the car park

Table 6: Operational Measures – Nosie Mitigation

6.0 Waste

6.1 Waste Management Generation

The Commercial and Industrial Waste Management Guidelines published by the Western Australian Local Government Association ('WALGA') include estimated waste generation rates for various land uses. The WALGA rates were derived from the *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities* published by the New South Wales Environmental Protection Authority. Neither document includes a waste generation rate for Child Care Centres.

Waste generation rates published by the City of Melbourne and City of Casey in Victoria suggest a Child Care Centre generates 350 litres of General (including FOGO) waste and 350 litres of Recyclable waste per 100m^2 of floor area per week. A review of other Waste Management Plans indicates this rate is based on 7 days a week, equating to 50 litres per trading day per 100m^2.

A waste generation rate of 50 litres per trading day per 100m^2 has been applied, with floor area based on the total area of the Activity Rooms.

It is understood the City will soon commence a FOGO waste collection, however, it is not clear if a FOGO service will be available to non-residential premises. For the purpose of this OMP, it is assumed a separate FOGO service will not be provided, however this can be reviewed at a later date. All FOGO waste will be included in the General waste collection service.

6.2 Estimated Waste Generation

General and Recyclable Waste

It is estimated the proposed Child Care Centre will generate the following amount of waste.

Item	General Waste	Recyclable Waste
Waste Generation Rates	50 litres / 100m^2 / day	50 litres / 100m^2 / day
Activity Room Floor Area	335m^2	335m^2
Trading Days	5	5
Daily Waste	167.5 litres	167.5 litres
Weekly Waste	837.5 litres	837.5 litres

Table 7: Waste Generation

Other Waste Requirements

- Liquid or Hazardous Waste: Not Applicable
- Medical Waste: Not Applicable
- Food Processing: Not Applicable

6.3 Bin Selection

Bin Size and Collection Frequency

- General Waste: 240 litre bins collected weekly;
- Recyclable Waste: 240 litre bins collected weekly.

Type and Number of Bins

Item	General Waste	Recyclable Waste
Collection Frequency	Weekly	Weekly
Waste per Week	837.5 litres	837.5 litres
Number of Bins	4 x 240 litre bins	4 x 240 litre bins
Capacity of Bins	960 litres	960 litres
Total Bins Required	8 x 240 litre bins	

Table 8: Type and Number of Bins

6.4 Bin Store

The Bin Store is of sufficient size to accommodate the required bins, as illustrated below.

The Bin Store is located at the rear of the car park and provided with gates. The Bin Store will be fitted with a tap and floor waste and all finished surfaces will be impervious.

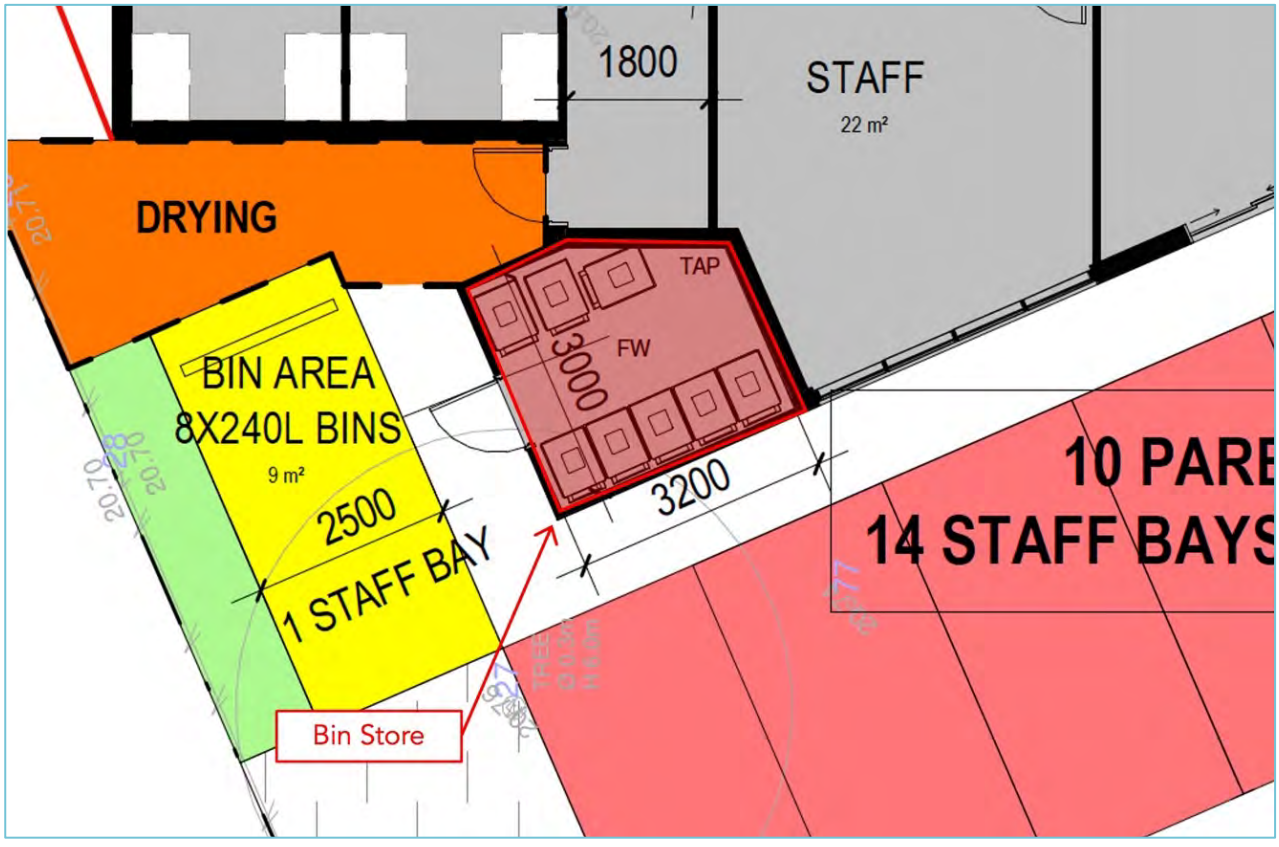

Figure 3: Bin Store

6.5 Waste Collection

Collector

Private Contractor or Local Authority.

Collection Point

It is intended that waste be collected from the verge in front of the site. A concrete bin pad will be provided adjacent to the kerb as shown below.

Waste collection will be scheduled to occur during the day (i.e. between 9.30am and 3.30pm) to avoid conflicts with the peak drop-off and pick-up times for the proposed Child Care Centre.

Staff will be responsible for wheeling bins to the kerb in the evening before the day of collection and returning bins to the compound after collection.

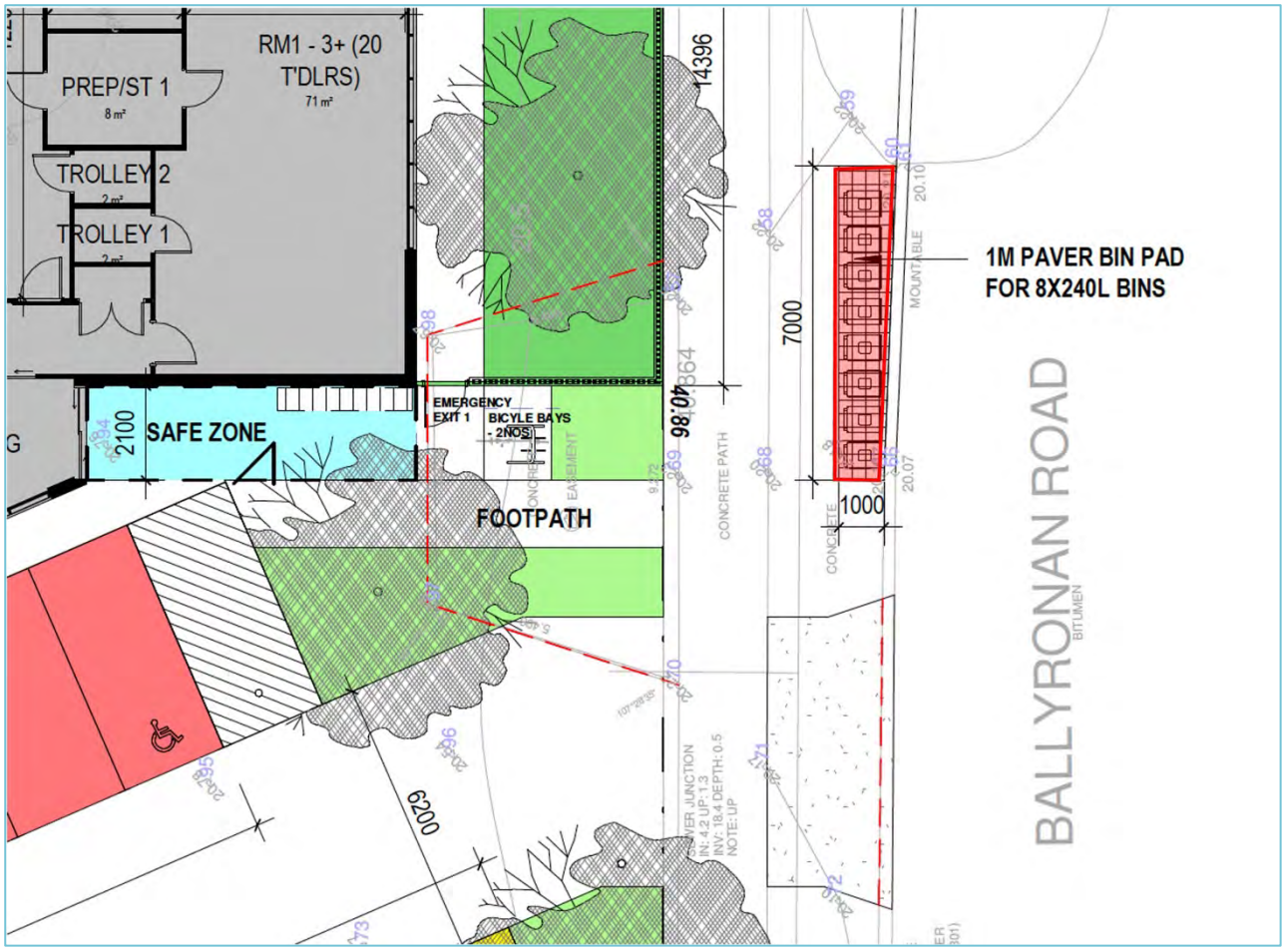

Figure 4: Bin Placement (Verge Collection)

7.0 Review of Operational Management Plan

Management of the Child Care Centre will review the OMP on an annual basis to ensure it remains effective and consistent with regulatory requirements.

Complaints relating to the operation of the Child Care Centre should be directed to the Centre Manager, who will endeavour to respond in a timely manner.

The contact details of the Child Care Centre shall be included in this OMP prior to the Child Care Centre commencing operations, as per the details below (to be completed).

Contact Details	
Trading Name of Centre	
Name of Centre Manager	
Telephone Number – Business Hours	
Telephone Number – After Hours	
Email Address	

ATTACHMENT 5

RECHITECTS

Lot 317 (No 23) Ballyronan Road, Maddington

TRANSPORT IMPACT STATEMENT

Job No: P002792

Rev A

21 May 2025

Premise

DOCUMENT AUTHORISATION		
Revision	**Revision Date**	**Proposal Details**
Rev A Draft	25/03/25	Issued for Review
Rev A	21/05/25	Proposed Layout Amended

Rev A Draft Prepared By	**Reviewed By**	**Authorised By**
Jelena Simic	Marina Kleyweg	Marina Kleyweg
Current Revision Prepared By	**Reviewed By**	**Authorised By**
Nemanja Marijanovic	Marina Kleyweg	Marina Kleyweg

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1. EXECUTIVE SUMMARY

Site Context

- The subject site, Lot 317 (No. 23) Ballyronan Road, Maddington, is presently vacant and has its frontage along the eastern side of Ballyronan Road.
- Covering an area of 2,162 square meters, the property falls within the Maddington Road Precincts A and B Outline Development Plan, as outlined by the City of Gosnells.
- Under the City's Local Planning Scheme No. 6, the land is designated as "Residential Development."
- The proposed development consists of a childcare centre designed to accommodate up to 94 children and 18 staff members.

Technical Findings

- The proposed parking area has been assessed using a B99 passenger vehicle (5.2m), with no navigability issues identified. Additionally, the layout has been checked with an 8.8m service vehicle which will be able to enter and exit the site in a forward motion outside of hours of business.
- The proposed development will generate up to 279 vehicular trips per day; 76 vehicular trips per hour in AM and 75 vehicular trips per hour in PM peak.
- According to the WAPC Guidelines, this is a moderate impact on the surrounding road network.

Relationship with Policies

- The City of Gosnells Local Planning Scheme No. 6 specifies a requirement of 27 car parking bays for the proposed childcare centre. The development plans provide 24 on-site parking bays, accessible from Ballyronan Road. This includes 10 bays designated for parent drop-off and pick-up (comprising 1 ACROD bay and 9 standard bays) and 14 bays allocated for staff. Additionally, a dedicated area for reversing and loading is incorporated into the design.
- The calculated shortfall is 3 parking bays. Premise have provided extensive analysis based on previous experience and on information received from the proponent; showing that a maximum of 20 parking bays would be required at any given time (13 for staff members and 7 for parents in peak times); therefore, all parking requirements will be met.
- The City of Gosnells Local Planning Scheme No. 6 does not specify bicycle parking requirements and the proposed development plans do not currently include bike racks.
- The proposed plans demonstrate 1 ACROD bay, meeting the requirements outlined by the Building Code of Australia.

Conclusion

- Most of the roads surrounding the subject site, including Wattlebird Entrance, Ballyronan Road and, Woodswallow Parkway and others within a 400m radius, are classified as Access Roads under the MRWA classification, with a maximum capacity of 3,000 vehicles per day. While, Maddington Road is classified as a Local Distributor, with a maximum desirable volume of 6,000 vehicles per day in build-up areas.
- Considering that the proposed development is expected to generate a total of 279 vehicle trips per day, which is less than 10% of the nominal capacity for an Access Road, the impact of the subject development on the surrounding road network will be minimal. The roads surrounding the subject site have sufficient capacity to accommodate the generated traffic.
- In summary Premise believe that the proposed development will not have a negative impact on the surrounding road network.

2. INTRODUCTION

2.1 Background

Premise Australia Pty Ltd **(Premise)** has been engaged by Rechitects Capability Statement to conduct a Transport Impact Statement (TIS) the proposed childcare centre at Lot 317 (No 23) Ballyronan Road, Maddington within the City of Gosnells.

The proposed childcare centre will have a capacity for 94 children and 18 staff members.

2.2 Scope and Study Area

This report outlines the traffic impact statement for the proposed childcare centre at Lot 317 (No 23) Ballyronan Road, Maddington. The site is currently vacant.

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 800-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.

3. EXISTING CONDITIONS

3.1 Site location and description

The subject property, Lot 317 (No. 23) Ballyronan Road, Maddington is currently vacant and fronts Ballyronan Road to the east. This 2,162 square meter parcel is situated within the Maddington Road Precincts A and B Outline Development Plan area, as designated by the City of Gosnells. According to the City's Local Planning Scheme No. 6, the land is zoned as ''Residential Development''.

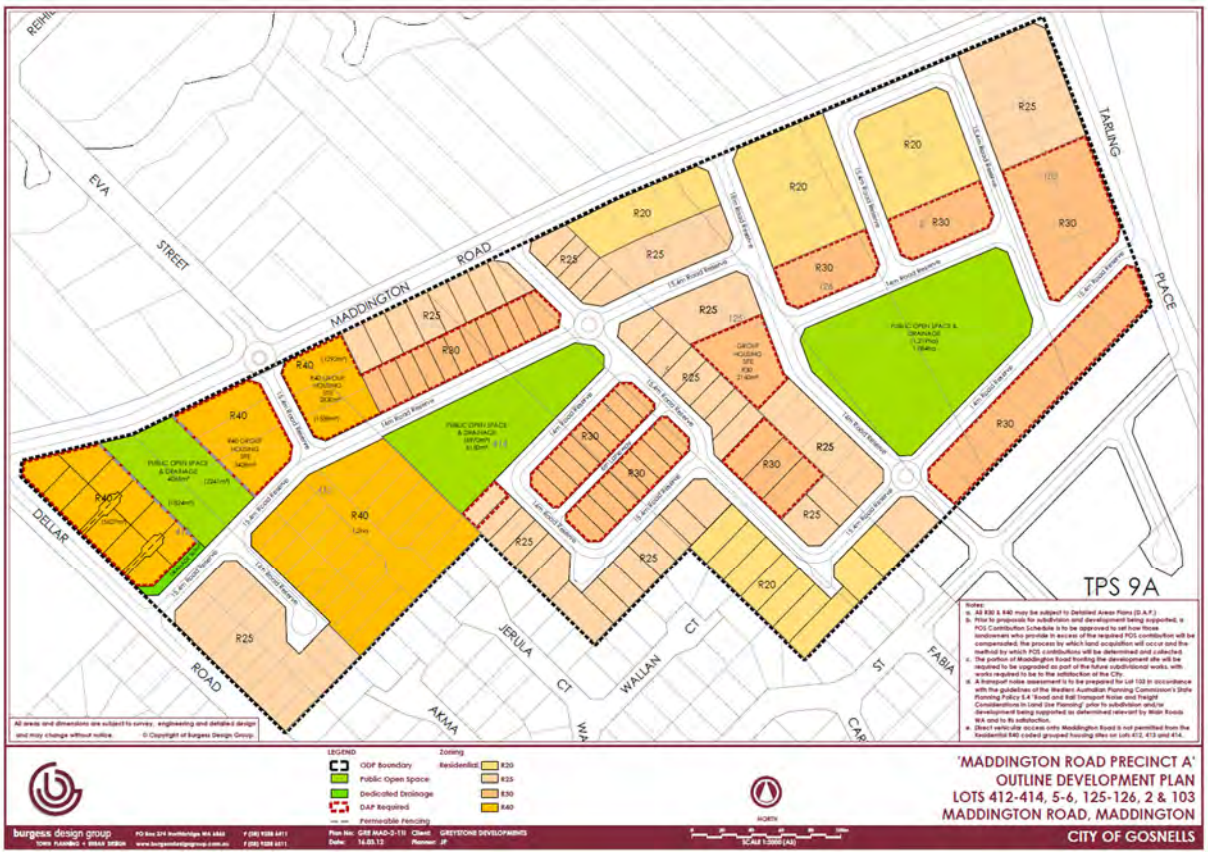


Figure 1 – Maddington Road Precinct A – Outline Development Plan

3.2 Existing road conditions

Table 1 – Road Classification and Description

Road Name	Ballyronan Road
Number of Lanes	two way, one lane (no linemarking), undivided
Road Reservation Width	18.2m
Road Pavement Width	6.0m
Classification	Access Road*
Speed Limit	50kph*
Bus Route	NO
On-street parking	NO

Note* - the subject road and surrounding road network and lots are recently developed or under construction at present. Therefore, according to the expected road classification and the surrounding area's character, Premise assumed the proposed speed limits and roads classification shown in the table above.

Road Name	Maddington Road
Number of Lanes	two way, one lane each direction, undivided
Road Reservation Width	20.4m
Road Pavement Width	7.2m
Classification	Local Distributor
Speed Limit	60kph
Bus Route	YES*
Note* - Bus Route 229 pass along section between intersections with Dellar Road and Eva Street	
On-street parking	NO

3.3 Traffic Safety

A review of the MRWA crash database for the period 2019–2024 indicates no recorded crashes within the immediate vicinity of the subject site. This aligns with expectations, as the area has been recently developed or remains under construction.

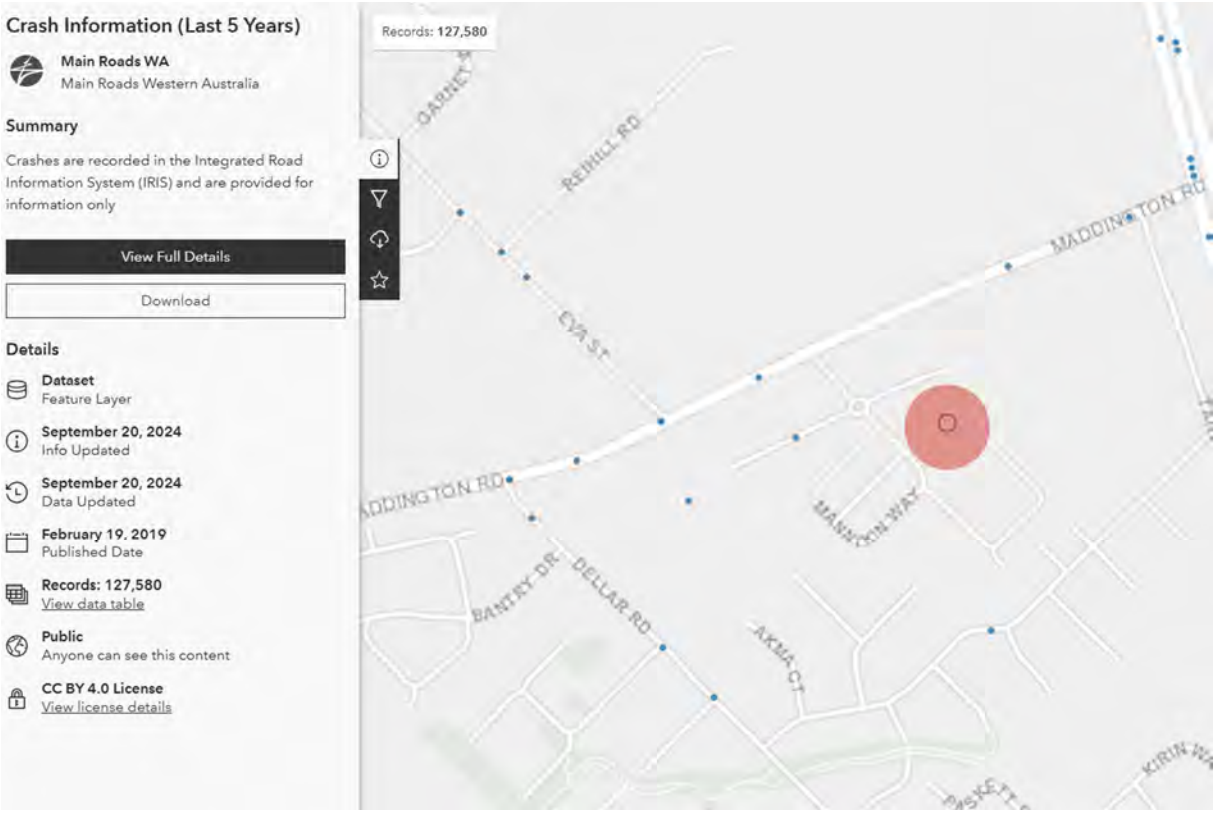


Figure 2 - Crash Map - Subject Area (indicated by a red dot)

The nearest higher-order road, Maddington Road (Local Distributor), recorded three crashes between Eva Street and Tonkin Highway during this period. Two were medical incidents: one involving a vehicle entering or leaving a driveway (December 2020) and another non-collision event (January 2020). The third, recorded in August 2022, was classified as Property Damage Only (PDO) Major, resulting from a same-direction sideswipe.

The absence of recorded crashes since 2022 suggests an improvement in safety conditions. Furthermore, the types of incidents recorded were isolated and not indicative of broader road safety concerns, as there were no severe or high-speed collisions. Given the relatively new nature of the area, traffic volumes may have been lower in previous years, contributing to the low crash rate.

Based on the available data, the neighbourhood currently exhibits a safe traffic environment with no significant safety concerns. However, as development progresses and traffic patterns evolve, continued monitoring is recommended.

3.4 Existing Traffic Flow

The table below presents an overview of traffic count data for roads near the subject site. A graphical representation of this data is provided in Appendix B. Given that the subject site and surrounding area have been recently developed or are still under construction, there are no available traffic data for the analysed surrounding road network.

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		
Maddington Road	South of Kelvin Road (SLK 0.32)	8,146	08:15 – 605	15:00 – 717	8.8	2023 /24
Tonkin Highway	South of Kelvin Road (SLK 59.79)	50,945	07:00 – 3,901	16:00 – 4,400	13.5	2023 /24
Alcock Street	South of Maddington Road (SLK 0.11)	4,497	07:45 – 364	17:00 – 407	4.8	2023 /24

**Note – These traffic counts were obtained from MRWA*

3.5 Public Transport

Public transport options for subject Lot are limited. The Walk Score for the area is 22, indicating minimal access to transit. While there is a bus stop located along Maddington Road, public transport connectivity is not extensive and access to the nearest bus routes may require walking a considerable distance. The closest train station, Maddington Train Station, is approximately 2 km away, further limiting transit accessibility in the immediate vicinity.

Table 3 - Bus routes and frequencies

Bus Route	Description	Peak Frequency	Off-Peak Frequency
229	Carousel Shopping Centre - Maddington via Kenwick	20 minutes	60 minutes on Saturdays No Sunday & Public Holiday service

Walk Score Rating for Accessibility to Public Transport	
22	Minimal Transit. It is possible to get on a bus.

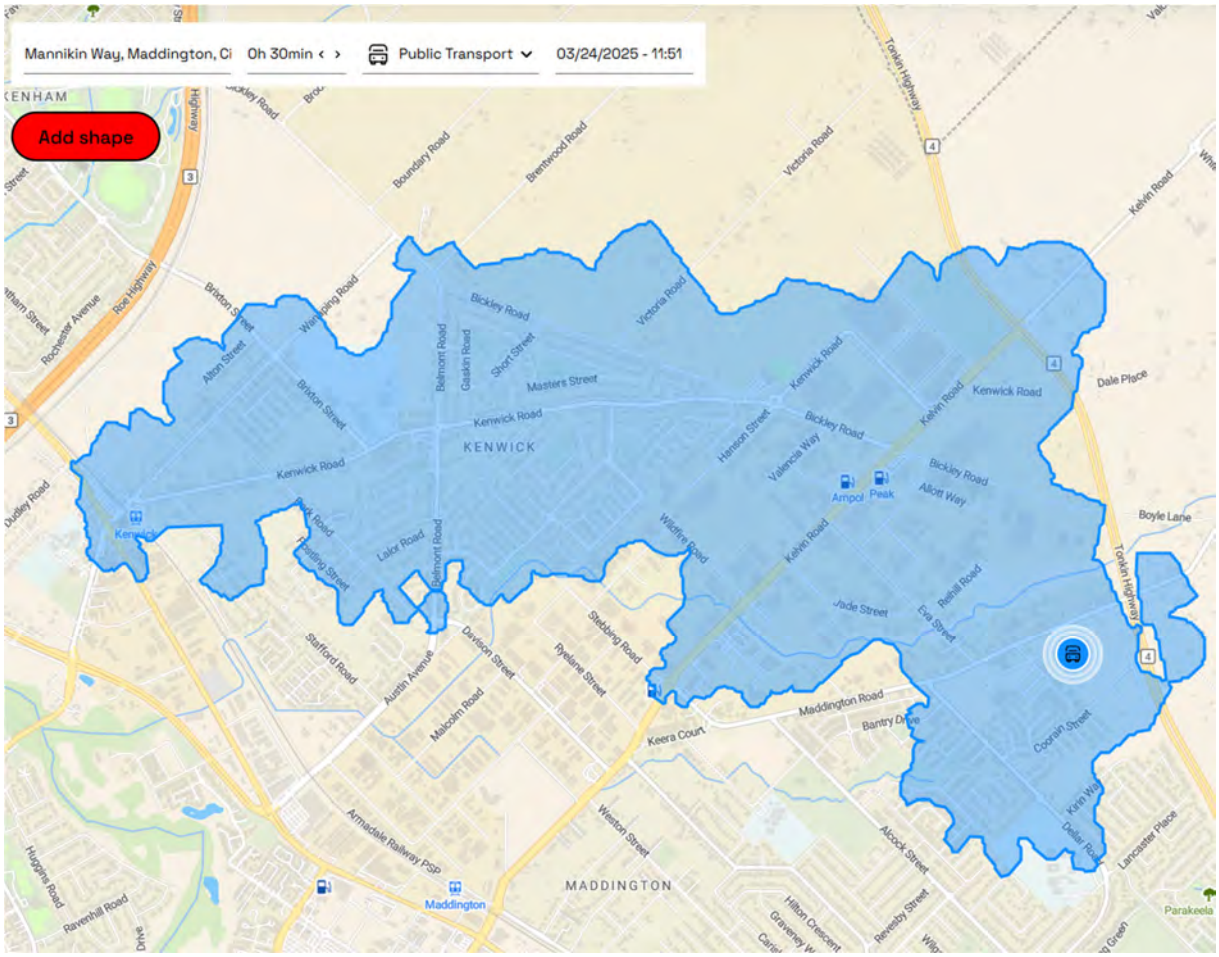


Figure 3 - 30min public transport catchment (app.traveltime.com)

3.6 Pedestrian and Cyclist Infrastructure

Premise has conducted a desktop review of the pedestrian and shared paths surrounding the proposed facility. Most roads in the vicinity of the subject site feature pedestrian paths on one or both sides of the road reservation. These paths appear to be in good condition and provide adequate connectivity. For a graphical representation of this data, refer to Appendix B.

Table 4 - PBN routes in the vicinity of the subject site

Classification	Road Name
"Other Shared Path (Shared by Pedestrians and Cyclists)"	Maddington Road
"Good Road Riding Environment"	Maddington Road

What is the Walk Score Rating?
3 Car-Dependent. Almost all errands require a car.

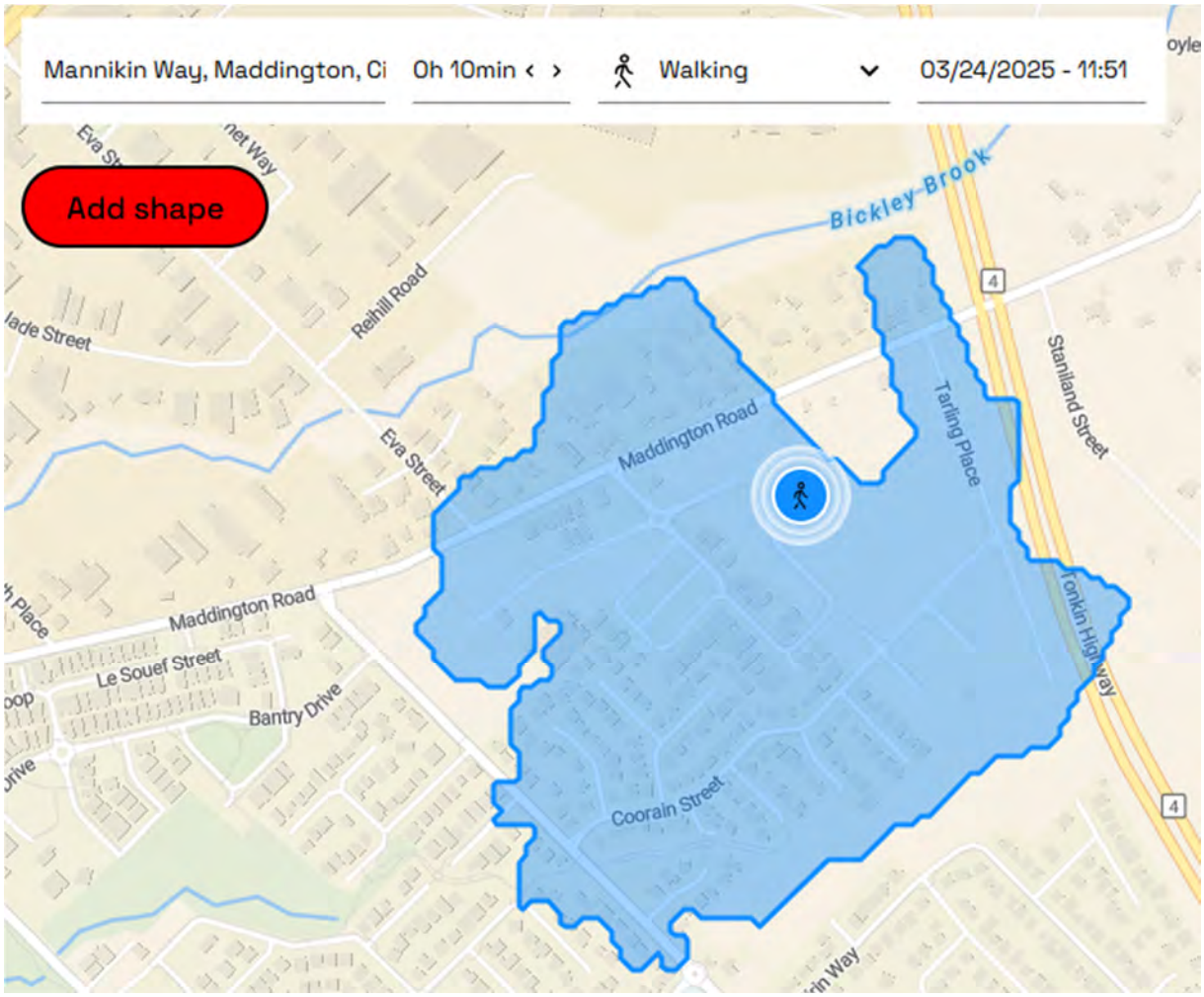


Figure 4 - 10min walking catchment (app.traveltime.com)

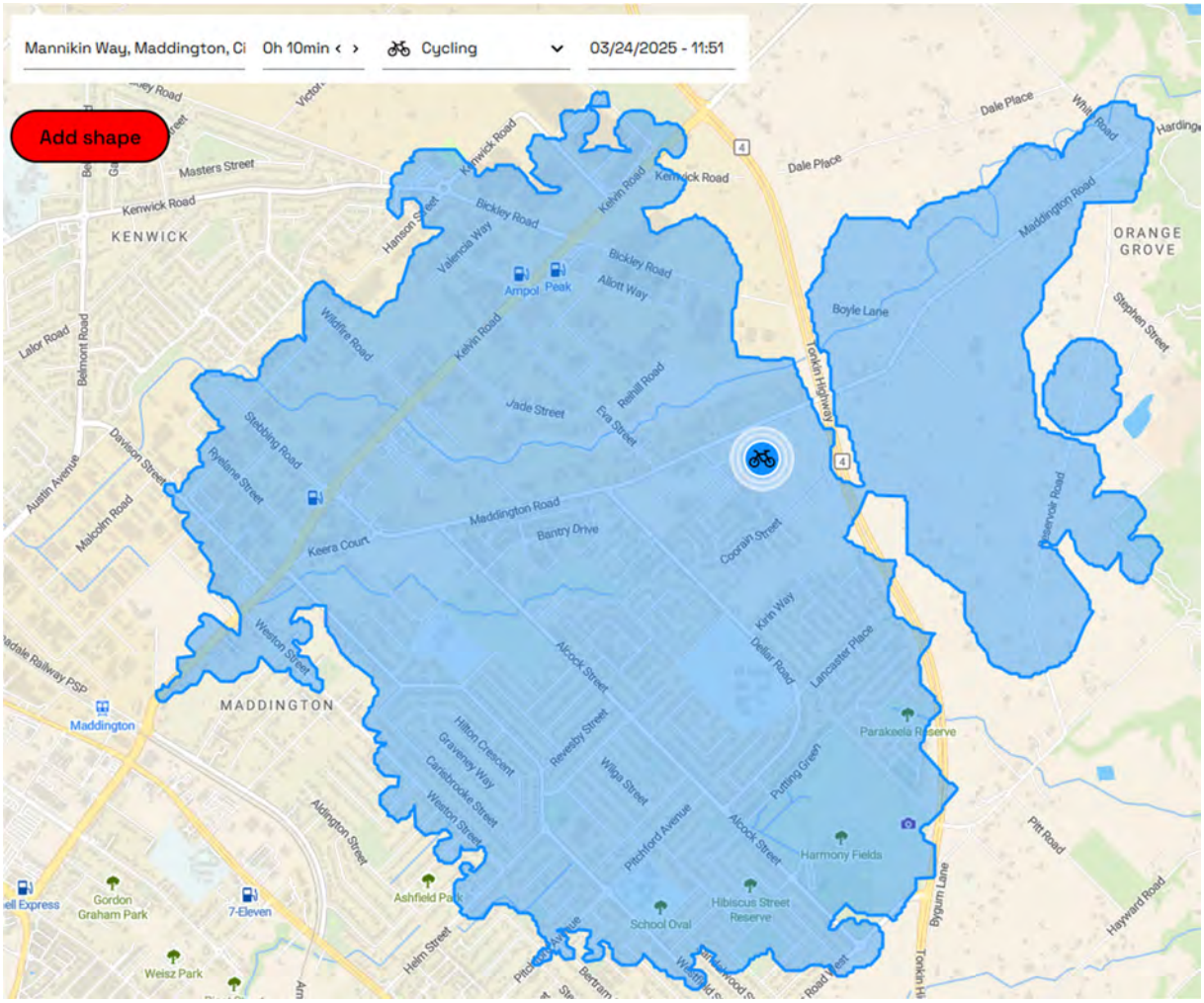


Figure 5 - 10min cycling catchment (app.traveltime.com)

4. PROPOSED DEVELOPMENT

4.1 Overview of Proposed Development

The development proposal includes a childcare centre as shown on plans enclosed in Appendix A for clarity.

Table 5 - Proposed land uses and yields

Land use	Yield
Childcare Centre	• 94 children • 18 staff members - 16 educators plus 2 full-time equivalent staff, as follows: · 1 part-time cook (starting after 9am and finishing before 3pm). · 1 centre manager / admin person (who also provides cover on the floor for educators if required).

4.2 Vehicular Parking

City of Gosnells Local Planning Scheme No. 6 states that the car parking requirements for subject developments are to be in line with the extracted rates from the table below.

Table 6 - Car parking provision rates

Guideline document	Car parking requirement
City of Gosnells Local Planning Scheme No. 6 (Updated to include AMD 184 GG 24/12/2024)	1 space for every 10 children the facility is designed to accommodate, plus 1 space for every employee Minimum 4 spaces

Table 7 - Car parking requirements

Land Use / Type	Yield	Required Parking
Childcare Centre	94 children 18 staff members	9.4 18
	Total Parking Required:	**27**
	Total Parking Provided:	**24**

The City of Gosnells Local Planning Scheme No. 6, stipulates a requirement for a total of 27 car parking bays.
The proposed development plans indicate the provision of 24 car parking bays on-site, accessible from Ballyronan Road. This includes 10 bays for parent's drop-off and pick-up (including 1 ACROD bay and 9 standard bays) and 14 bays dedicated to staff members. Additionally, area for reversing and loading is proposed.
Therefore, the calculated parking shortfall is 3 car parking bays. Premise believe the 24 car parking bays provision will be sufficient based on the below analysis.

Premise believes that the following points demonstrate the adequacy of the proposed parking provision:

- **Drop off function of the childcare centre**

It is highly unlikely that the childcare centre would always operate at its maximum capacity. The peak time for childcare centres is typically a 2-hour period. The average length of stay, as stated in NSW RTA - Guide to Traffic Generating Developments, is 6.8 minutes. Our experience in surveying dwell times for childcare centres outside of commercial zones confirms this finding. Even assuming conservative 10 minutes average length of stay, the actual arrivals/departure rate of parents' vehicles is likely to be spread throughout the 2-hour peak time.
The AM peak is likely to be the peak development period as most parents drop off their children before going to work, whereas the PM peak tends to be more spread out with pick up times depending on when parents become available.

The following tables were derived through many years of practice and research in this field that our office completed. We have worked with several established childcare providers who have provided sign-in data for a full week. The percentages outlined below have emerged as the current average arrival/departure pattern. As per our transport impact assessment, the estimated average dwell time is 10 minutes, which is significantly higher than the dwell time suggested by NSW RTA Guide to Traffic Generating Developments.

While this pattern shows that up to 95% of children attend for the day (as practically recorded), the distribution still does not allow for siblings attending the centre. Furthermore, the distribution assumes that all children in attendance are driven to the childcare in a separate personal vehicle (not walked or brought on bicycles); therefore, the distribution below has a degree of conservativism.

In our previous experience, we have come across data indicating that siblings usually make up 15-25% of attendees. More than one child will be brought in a single vehicle in these cases, reducing the parking requirement. The table below was developed on the following assumptions:

- The arrival percentage is derived from data provided to Premise and described above.
- It was assumed there were no siblings in the centre.
- It was assumed that all children in attendance would be driven to the centre.

Table 8 - Changes in parking needs during the sign-in period

Sign-in Time	**Extracted Arrival Percentages** (of the maximum number of children)	**Expected Number of Children Signing In**	**Parking demand** (assumed dwell time 10 minutes per vehicle)
07:00 - 07:30	13.97%	13	5
07:30 - 08:30	**40.55%**	**38**	**7**
08:30 - 09:30	30.68%	29	5
09:30 - 10:30	7.67%	7	2
After 10:30	1.37%	1	1
Total:	**94.25%**	**89 children (94 children – 100% capacity)**	

Table 9 - Changes in parking needs during the sign-out period

Sign-Out Time	Extracted Arrival Percentages (of the maximum number of children)	Expected Number of Children Signing Out	Parking demand (assumed dwell time 10 minutes per vehicle)
Before 13:30	0.55%	1	1
13:30 - 14:30	1.92%	2	1
14:30 - 15:30	11.23%	11	2
15:30 - 16:30	24.93%	23	4
16:30 - 17:30	**45.21%**	**42**	**7**
17:30 - 18:30	10.41%	10	2
Total:	**94.25%**	**89 children (94 children – 100% capacity)**	

The previous tables show that the parking demand is the strongest in the periods 07.30 - 08:30 and 16:30-17:30. When applied to the subject development, with an assumed dwell time of 10 minutes per vehicle, the childcare centre would require a maximum of 7 car bays to cater for the expected parking demand for the drop off and 7 car bays for pick-up function.

> **Staff arrival and presence on site**

The below table shows the information received from the proponent on the staff roster schedule (cumulative presence on site). The table shows that all 18 staff members will be present on site in the off-peak period. In peak times (between 07:00 – 09:30 and 15:30 – 18:30 there will be 13 staff members present at most.

Table 10 - Staff arrival and attendance patterns

	Opening	Morning Peak	Off-Peak	Afternoon Peak	Closing Time
	06:30 – 07:00	07:00 – 09:30	09:30 – 15:30	15:30 – 18:30	18:30 – 19:00
Educators	2	12	16	12	2
Managers	0	1	1	1	0
Cook	0	0	1	0	0
Total Staff	**2**	**13**	**18**	**13**	**2**

During the middle of the day (outside of drop off and pick up times), when the majority of staff are expected to be on-site, staff will be able to use some of the visitors' bays, with plenty of spare capacity left. Furthermore, it is anticipated that some staff members might cycle or walk to the development site, given the walkable surrounding network. Additionally, it is not uncommon for the childcare centres to take on junior staff that is below driving age, therefore not inducting parking demand for prolonged period.

The graph below shows hourly parking demand for staff and parents (drop-off), showing maximum parking demand of 20 parking bays in both peak hours. It should be noted that the below graph is with a conservative approach where from 07:30 all 13 staff members arrive at the same time which will not

be the case in practice. Their arrival will be spread out over the entire AM peak period and departure will be spread out over the entire PM peak period.

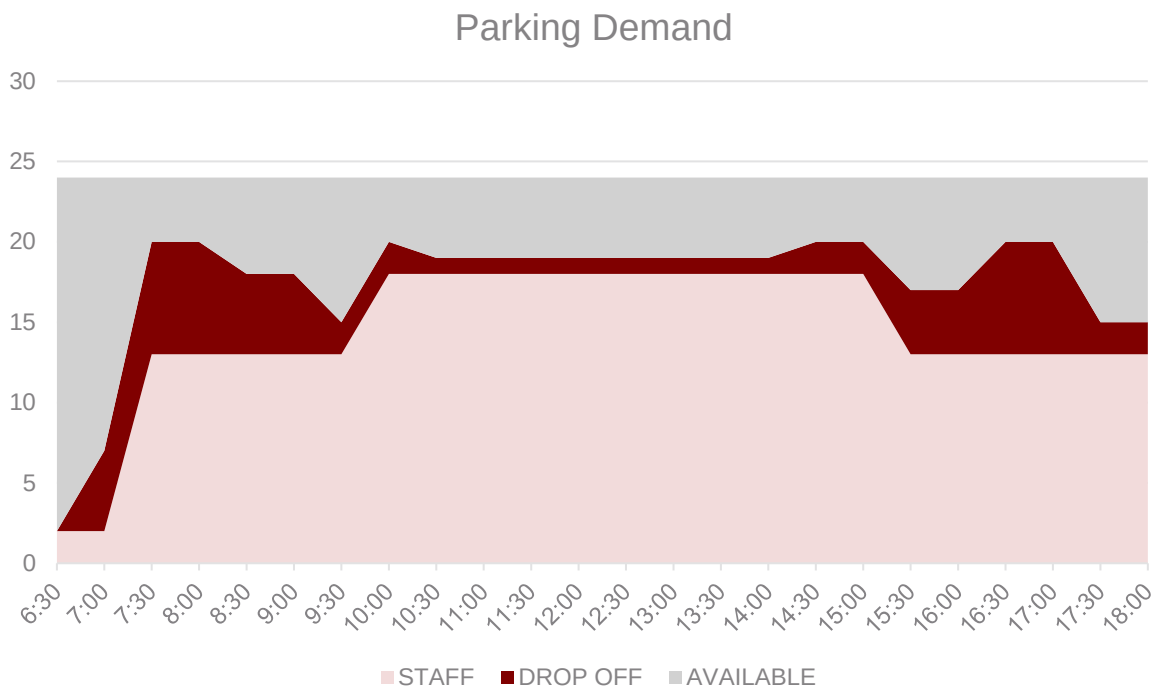


Figure 6 - Parking Demand Graph

Considering all the points mentioned above, Premise believes that the actual parking demand for the proposed childcare centre is lower than the anticipated requirement - a total of 20 parking bays required in the busiest hours of the day (7 for parents and 13 for staff members). The provision of 24 on-site car parking bays is more than sufficient to accommodate the practical parking demand of the development.

4.2.1 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 a total of 24 parking bays.

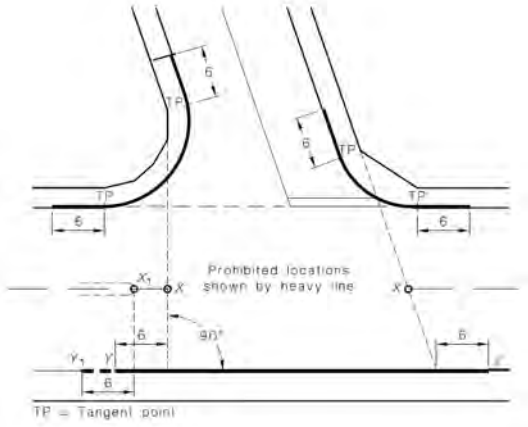
4.2.1.1 Comparison of proposed layout to AS2890.01 requirements

Table 11 - 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) **STAFF**	5.4m	5.4m	2.4m	2.5m	5.8m	6.2m
All bays at 90° (User Class 2) **VISITORS**	5.4m	5.4m	2.5m	2.6m	5.8m	6.2m
ACROD Parking	5.4m	5.4m	2.4m (ACROD) 2.4m (shared space)	2.4m (ACROD) 2.4m (shared space)	5.8m	6.2m

Table 12 – 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.*	1.1m blind aisle provided
"3.2 ACCESS DRIVEWAYS — WIDTH AND LOCATION *(a) 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 6m-wide driveway is designed to accommodate the passing of passenger vehicles and is positioned in compliance with relevant standards. Its location ensures it does not interfere with the exclusion zone, maintaining the required 6m setback from the road reserve at the nearest intersection.



"3.2.4 Sight distance at access driveway exits *(b) 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."*	provided

4.2.2 VEHICLE SWEPT PATHS

The proposed parking area has been assessed using a B99 passenger vehicle (5.2m) with no navigability issues identified. Additionally, the layout was reviewed with an 8.8m service vehicle, considering a turning radius of 12.5m. The assessment confirms that, if necessary, the tested vehicle can access the site via the proposed crossover, manoeuvre through the parking layout by reversing into the loading area and two designated staff bays and exit in a forward motion utilizing the designated drop-off area. This confirms that on-site waste collection can be accommodated outside the development's operational or peak hours. For further details, refer to the swept path analysis in Appendix C.

4.3 ACROD Parking

The provision of accessible parking for this development has been determined in accordance with the requirements set out in the Building Code of Australia (BCA) as shown on the table below.

Table 13 - Accessible car parking provision rates

Guideline document	Building class	Car parking provision
NCC 2015 Building Code of Australia - Volume One	Class 9b — (b) Other assembly building — (i) up to 1000 carparking spaces; - 1 space for every 50 carparking spaces or part thereof	1 Space

The proposed plans demonstrate 1 ACROD bay, meeting the requirements outlined by the Building Code of Australia.

4.4 Bicycle Parking

The City of Gosnells Local Planning Scheme No. 6 does not specify bicycle parking requirements. While it is unlikely that patrons will access the site by bicycle, the layout plans show 2 bicycle parking spaces provided for promotion of alternative means of transportation.

4.5 Delivery and Service

Deliveries will be conducted using regular passenger vehicles or small vans outside the development's peak hours, utilizing any available car bays. Therefore, a dedicated set-down bay is not required. However, a designated reversing/loading area is provided at the end of the blind aisle, enhancing overall functionality.

Waste collection is planned from the verge, with bin placement designed to facilitate efficient and unobstructed servicing. If required, on-site waste collection can be accommodated outside peak hours, as previously stated and confirmed by the swept path analysis.

4.6 Traffic Impact of the Proposed Development

Data on the trip-generating potential of the various land uses is fairly limited in Western Australia including for childcare premises.

The NSW Guide to Transport Impact Assessment (GTIA) was updated and published in 2024, after extensive engagement with industry professionals, therefore these rates will be used.

Table 14 - Trip generation rates

Guideline document	Trip generation rates
NSW Guide to Transport Impact Assessment	Childcare Centres • AM peak hour = 0.81 vehicle trips/licensed child places • PM peak hour = 0.80 vehicle trips/licensed child places • Daily = 2.97 vehicle trips/licensed child places

Table 15 - Calculation of vehicular trips

Land Use Type	Occupancy	Daily Traffic Generation	Peak Hour Traffic Generation	
			AM	PM
Childcare Centre	94 Children	279 VPD	76 VPH	75 VPH

According to WAPC guidelines, developments generating between 10-100 vehicular trips in the peak hours can be considered to have a moderate impact on the road network.

The proposed development is expected to generate 76 vehicular trips in the AM peak and 75 vehicular trips in the PM peak with an expected daily traffic generation of 279 vehicle trips. The surrounding road network is expected to accommodate the additional traffic.

4.7 Trip Distribution

The total projected traffic movements to and from the site have been based on the surrounding land uses, anticipated desire lines and the nature of the proposed development. These estimates consider peak hour flows, nearby intersections and likely distribution patterns. Estimated traffic distribution percentages are outlined in the table below for reference.

Table 16 - Trip Distribution Routes

Route	Percentage
> from east via Maddington Road >> Ballyronan Road >> subject development and reverse	**10%**
> from west via Maddington Road >> Ballyronan Road >> subject development and reverse.	**15%**
> from west via Maddington Road >> Wattlebird Entrance >> Woodswallow Parkway Ballyronan Road >> subject development and reverse.	**45%**
> from south via Ballyronan Road >> subject development and reverse.	**25%**
> from east via Holeywell Road >> Ballyronan Road >> subject development and reverse	**5%**

For graphical representation of the distribution refer to Appendix B.

4.7.1 IMPACT OF EXPECTED TRAFFIC ON KEY ROADS

Most of the roads surrounding the subject site, including Wattlebird Entrance, Ballyronan Road and, Woodswallow Parkway and others within a 400m radius, are classified as Access Roads under the MRWA classification, with a maximum capacity of 3,000 vehicles per day. While, Maddington Road is classified as a Local Distributor, with a maximum desirable volume of 6,000 vehicles per day in build-up areas.

Considering that the proposed development is expected to generate a total of 279 vehicle trips per day, which is less than 10% of the nominal capacity for an Access Road, the impact of the subject development on the surrounding road network will be minimal. The roads surrounding the subject site have sufficient capacity to accommodate the generated traffic.

4.8 Site-Specific Issues and Proposed Remedial Measures

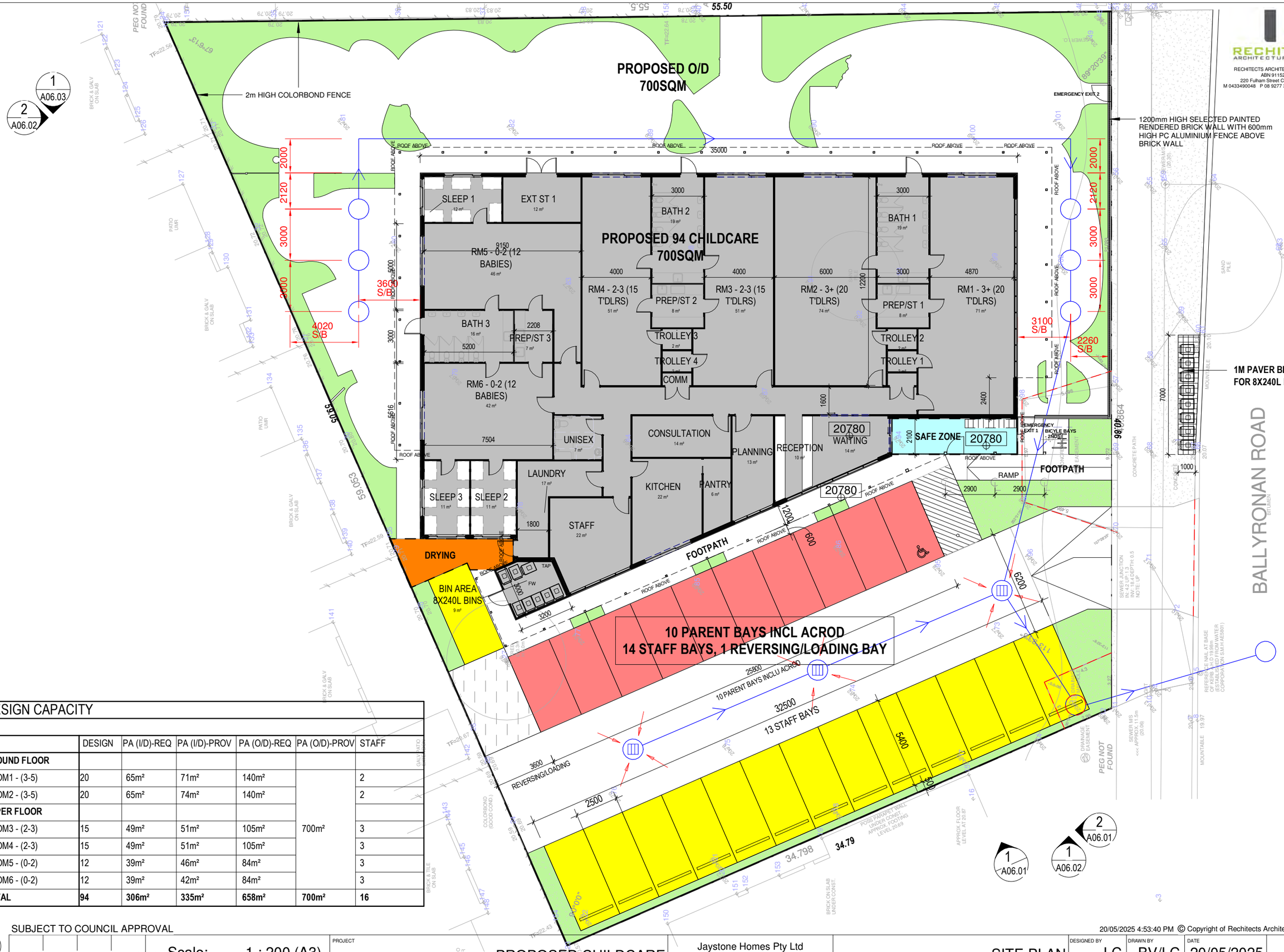
The assessment of the additional traffic generated by the proposed development, concluded the following:

How many site-specific issues need to be discussed?	
Site-Specific Issue No 1	Parking Shortfall
Remedial Measure / Response	The City of Gosnells Local Planning Scheme No. 6, stipulates a requirement for a total of 27 car parking bays. The proposed plans show 24 car bays proposed; therefore, the total calculated shortfall is 3 car parking bays. As detailed in section 4.2, the analysis of expected children sign in/sign out times and the information from the proponent on staff cumulative presence on time shows that the maximum number of vehicles at any given time is expected to be 20 (13 staff members and 7 parents). Therefore, the proposed 24 parking bays are expected to be sufficient to cater for all parking requirements.

APPENDICES

APPENDIX A

DEVELOPMENT SITE PLAN



RECHITECTS ARCHITECTURE+DESIGN

RECHITECTS ARCHITECTURE AND DESIGN
ABN 91152 561 665
220 Fulham Street Cloverdale WA 6105
M 0433490048 P 08 9277 3393 E leo@rechitects.biz

DESIGN CAPACITY						
	DESIGN	PA (I/D)-REQ	PA (I/D)-PROV	PA (O/D)-REQ	PA (O/D)-PROV	STAFF
GROUND FLOOR						
ROOM1 - (3-5)	20	65m²	71m²	140m²		2
ROOM2 - (3-5)	20	65m²	74m²	140m²		2
UPPER FLOOR						
ROOM3 - (2-3)	15	49m²	51m²	105m²	700m²	3
ROOM4 - (2-3)	15	49m²	51m²	105m²		3
ROOM5 - (0-2)	12	39m²	46m²	84m²		3
ROOM6 - (0-2)	12	39m²	42m²	84m²		3
TOTAL	**94**	**306m²**	**335m²**	**658m²**	**700m²**	**16**

SUBJECT TO COUNCIL APPROVAL

2 4 6 8 M Scale: 1 : 200 (A3)

PROJECT

PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

SITE PLAN

DESIGNED BY	DRAWN BY	DATE	
LC	BV/LC	20/05/2025	A01.01

RECHITECTS ARCHITECTURE+DESIGN
RECHITECTS ARCHITECTURE AND DESIGN
ABN 91152 561 665
220 Fulham Street Cloverdale WA 6105
M 0433490048 P 08 9277 3393 E leo@rechitects.biz

SLEEP 1
12 m²
EXT ST 1
12 m²
BATH 2
19 m²
BATH 1
19 m²
RM5 - 0-2 (12 BABIES)
46 m²
RM3 - 2-3 (15 T'DLRS)
51 m²
RM2 - 3+ (20 T'DLRS)
74 m²
RM4 - 2-3 (15 T'DLRS)
51 m²
PREP/ST 2
8 m²
PREP/ST 1
8 m²
BATH 3
16 m²
PREP/ST 3
7 m²
TROLLEY 3
2 m²
TROLLEY 2
2 m²
RM1 - 3+ (20 T'DLRS)
71 m²
TROLLEY 4
2 m²
TROLLEY 1
2 m²
COMM
1 m²
REEC[EE
1 m²
RM6 - 0-2 (12 BABIES)
42 m²
20780
20780
UNISEX
7 m²
CONSULTATION
14 m²
RECEPTION
10 m²
WAITING
14 m²
PLANNING
13 m²
RAMP
SLEEP 3
11 m²
SLEEP 2
11 m²
PANTRY
6 m²
LAUNDRY
17 m²
KITCHEN
22 m²
STAFF
22 m²
BIN AREA
8X240L BINS
8 m²
HLW
ROOF ABOVE
SUBJECT TO COUNCIL APPROVAL

2 4 6 8 M Scale: 1 : 100 (A3)

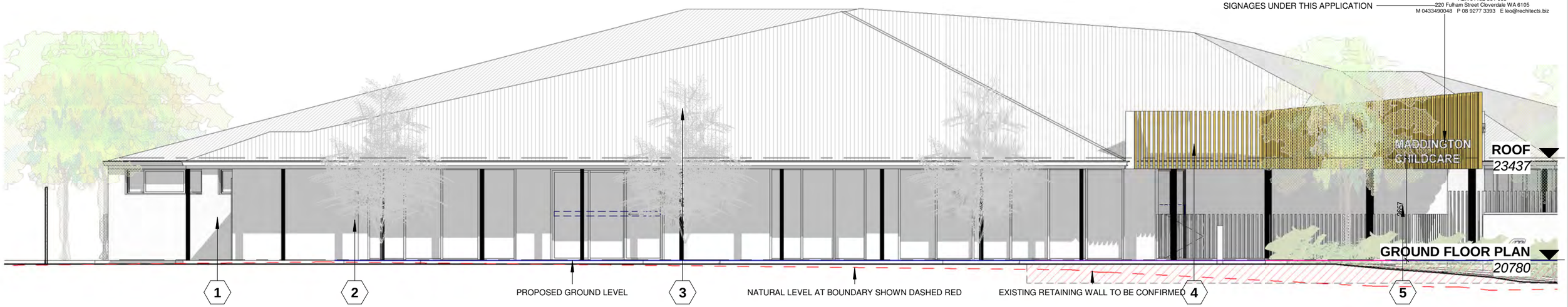
PROJECT
PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

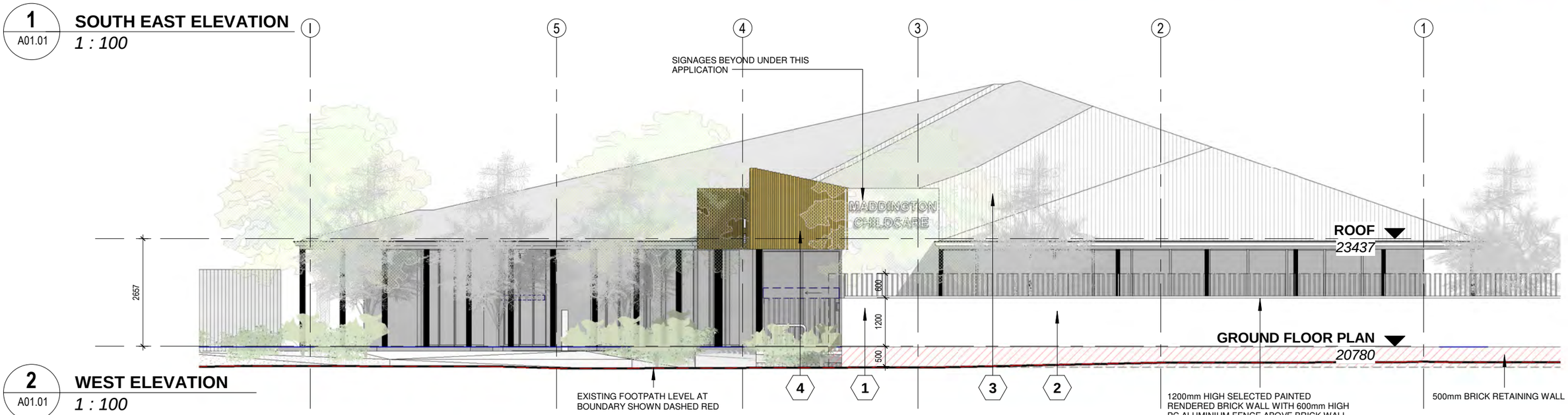
GROUND FLOOR PLAN (GA)

DESIGNED BY	DRAWN BY	DATE	
LC	BV	20/05/2025	A02.03

RECHITECTS ARCHITECTURE+DESIGN
RECHITECTS ARCHITECTURE AND DESIGN
ABN 91152 561 665
220 Fulham Street Cloverdale WA 6105
M 0433490048 P 08 9277 3393 E leo@rechitects.biz



1 A01.01 **SOUTH EAST ELEVATION**
1 : 100



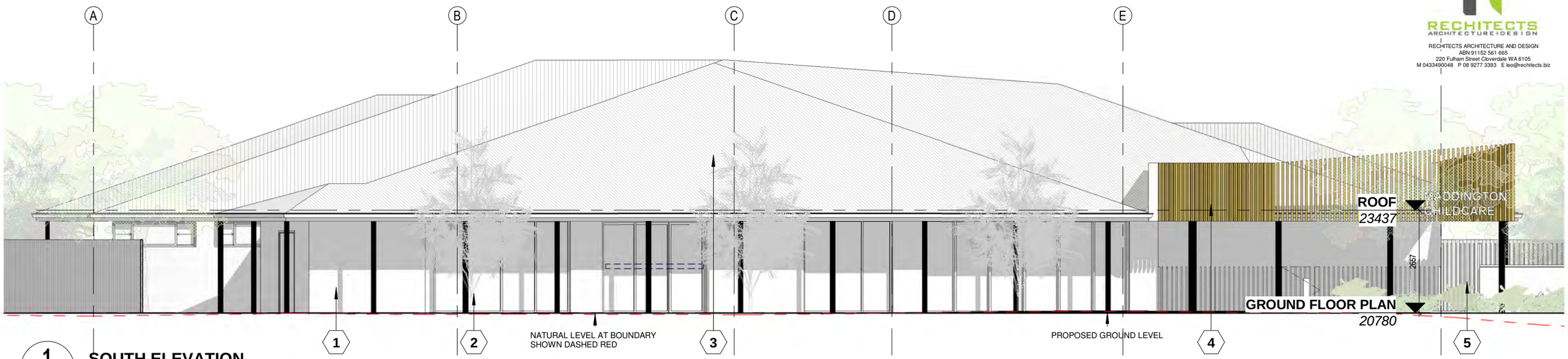
2 A01.01 **WEST ELEVATION**
1 : 100

ELEVATIONS - MATERIALS / FINISHES	
NO	DESCRIPTIONS
1	SELECTED PAINTED RENDERED WALL
2	PC ALUMINIUM FRAMED GLAZING
3	SURFMIST COLORBOND ROOF @ 19 DEGREE
4	PC ALUMINIUM VERTICAL FEATURE SCREEN
5	PC ALUMINIUM FENCE

SUBJECT TO COUNCIL APPROVAL

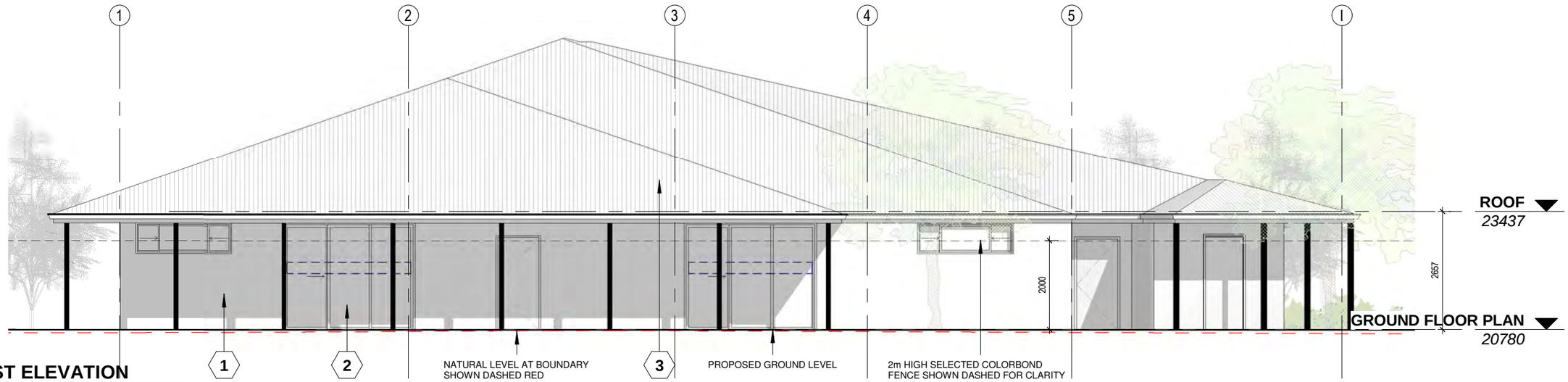
M	Scale: 1 : 100 (A3)	PROJECT	PROPOSED CHILDCARE 23 BALLYRONAN ROAD, MADDINGTON	Jaystone Homes Pty Ltd	ELEVATIONS	DESIGNED BY LC	DRAWN BY BV	DATE 20/05/2025	A06.01

RECHITECTS
ARCHITECTURE+DESIGN
RECHITECTS ARCHITECTURE AND DESIGN
ABN 91152 561 665
220 Fulham Street Cloverdale WA 6105
M 0433490048 P 08 9277 3393 E leo@rechitects.biz



1 A01.01 **SOUTH ELEVATION**

1 : 100



2 A01.01 **EAST ELEVATION**

1 : 100

ELEVATIONS - MATERIALS / FINISHES	
NO	DESCRIPTIONS
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2	PC ALUMINIUM FRAMED GLAZING
3	SURFMIST COLORBOND ROOF @ 19 DEGREE
4	PC ALUMINIUM VERTICAL FEATURE SCREEN
5	PC ALUMINIUM FENCE

SUBJECT TO COUNCIL APPROVAL

M Scale: 1 : 100 (A3)

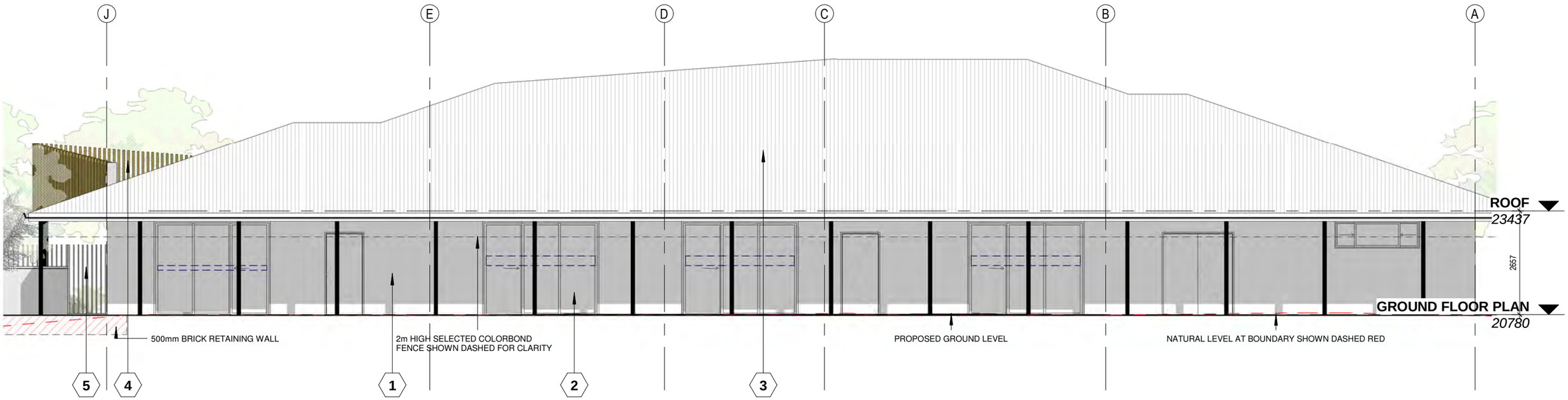
PROJECT: PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

ELEVATIONS

DESIGNED BY	DRAWN BY	DATE	
LC	BV	20/05/2025	A06.02

RECHITECTS ARCHITECTURE+DESIGN
RECHITECTS ARCHITECTURE AND DESIGN
ABN 91152 561 665
220 Fulham Street Cloverdale WA 6105
M 0433490048 P 08 9277 3393 E leo@rechitects.biz



1 / A01.01 **NORTH ELEVATION**
1 : 100

ELEVATIONS - MATERIALS / FINISHES	
NO	DESCRIPTIONS
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2	PC ALUMINIUM FRAMED GLAZING
3	SURFMIST COLORBOND ROOF @ 19 DEGREE
4	PC ALUMINIUM VERTICAL FEATURE SCREEN
5	PC ALUMINIUM FENCE

SUBJECT TO COUNCIL APPROVAL

M Scale: 1 : 100 (A3)

PROJECT
PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

ELEVATIONS

DESIGNED BY	DRAWN BY	DATE	
LC	BV	20/05/2025	A06.03

RECHITECTS ARCHITECTURE+DESIGN

RECHITECTS ARCHITECTURE AND DESIGN
ABN 91152 561 665
220 Fulham Street Cloverdale WA 6105
M 0433490048 P 08 9277 3393 E leo@rechitects.biz

1 **3D_ENTRANCE**

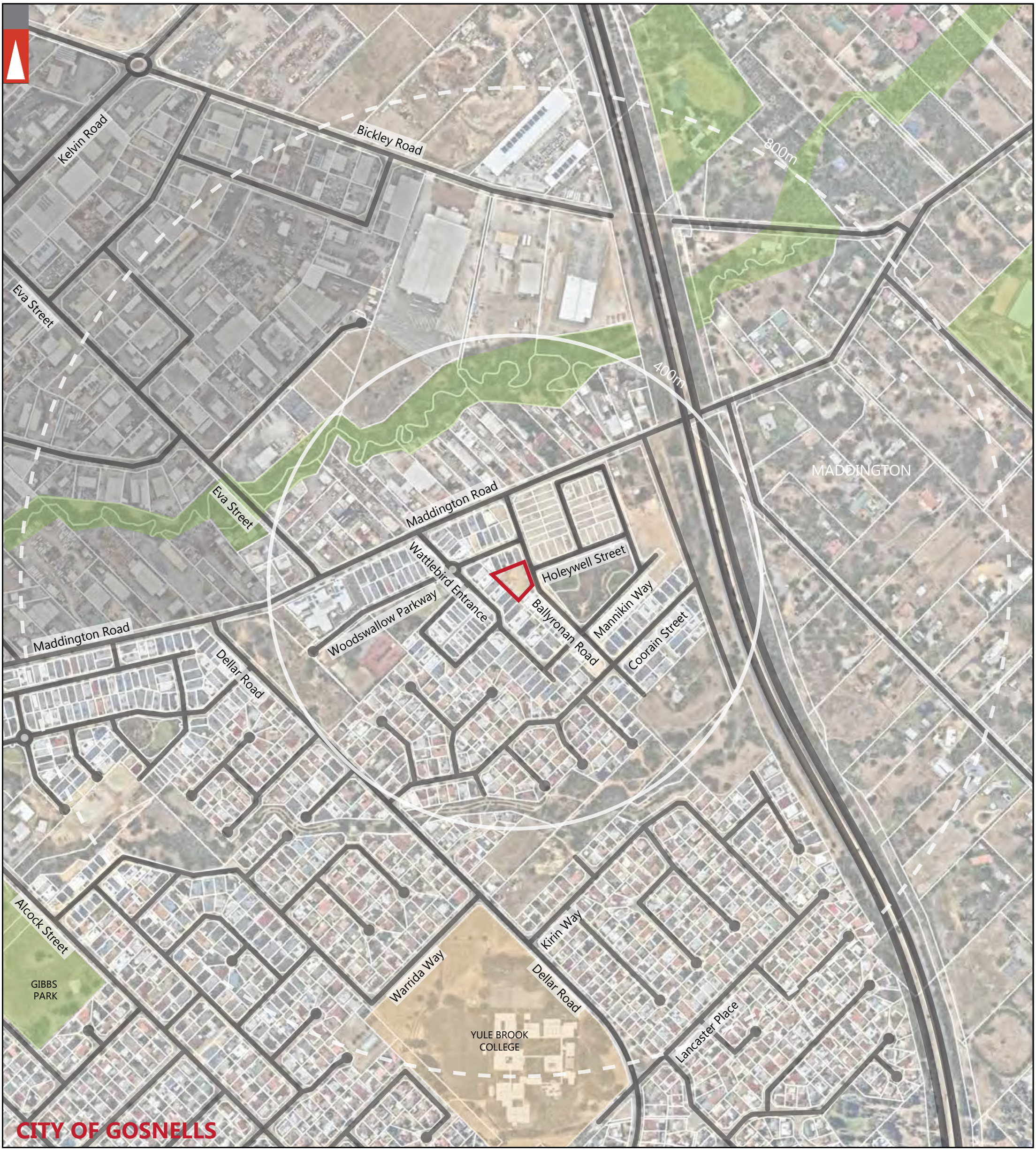
2 **3D_STREET VIEW**

SUBJECT TO COUNCIL APPROVAL

M Scale: (A3)	PROJECT PROPOSED CHILDCARE 23 BALLYRONAN ROAD, MADDINGTON	Jaystone Homes Pty Ltd	PERSPECTIVES	DESIGNED BY LC	DRAWN BY LC.BV	DATE 20/05/2025	A40.01

APPENDIX B

TRANSPORT PLANNING AND TRAFFIC PLANS



PARKS AND RECREATION

WATERWAYS

PUBLIC PURPOSE

INDUSTRIAL AREA

LOCATION BOUNDARY

DISTANCE FROM LOCATION

CITY OF GOSNELLS — LOCAL GOVERNMENT NAME

MADDINGTON — SUBURB NAME

ROAD

Hay Street — STREET NAME

LEGEND

REV	DATE	AMENDMENT
A	25-03-2025	ISSUED FOR REVIEW

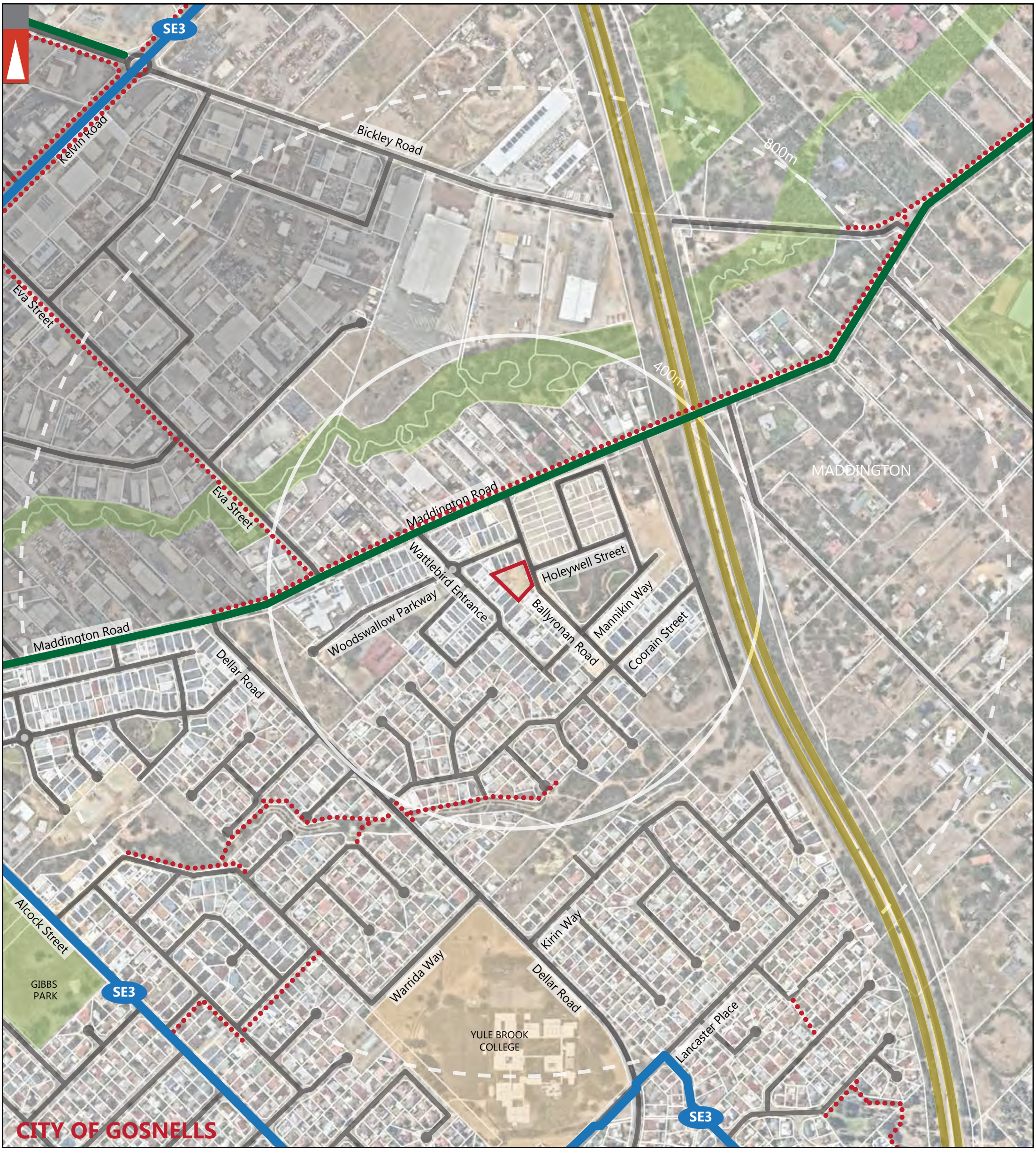
PROJECT: LOT 317 (NO 23) BALLYRONAN ROAD, MADDINGTON

TITLE: LOCALITY PLAN - 800M RADIUS

DRAWING NUMBER: P002792_S01

DRAWN BY: J.S.

Premise



PARKS AND RECREATION
WATERWAYS
PUBLIC PURPOSE
INDUSTRIAL AREA
LOCATION BOUNDARY
DISTANCE FROM LOCATION
CITY OF GOSNELLS — LOCAL GOVERNMENT NAME
MADDINGTON — SUBURB NAME
ROAD
Hay Street — STREET NAME
OTHER SHARED PATH (SHARED BY PEDESTRIANS & CYCLISTS)
GOOD ROAD RIDING ENVIRONMENT
BICYCLE LANES OR SEALED SHOULDER EITHER SIDE
NW12 — PERTH BICYCLE NETWORK (PBN) - CONTINUOUS SIGNED ROUTES

LEGEND

REV	DATE	AMENDMENT
A	25-03-2025	ISSUED FOR REVIEW

PROJECT: LOT 317 (NO 23) BALLYRONAN ROAD, MADDINGTON

TITLE: BICYCLE NETWORK PLAN - 800M RADIUS

DRAWING NUMBER: P002792_S02

DRAWN BY: J.S.

Premise

PARKS AND RECREATION
WATERWAYS
PUBLIC PURPOSE
INDUSTRIAL AREA
LOCATION BOUNDARY
DISTANCE FROM LOCATION
CITY OF GOSNELLS — LOCAL GOVERNMENT NAME
MADDINGTON — SUBURB NAME
ROAD
Hay Street — STREET 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	25-03-2025	ISSUED FOR REVIEW

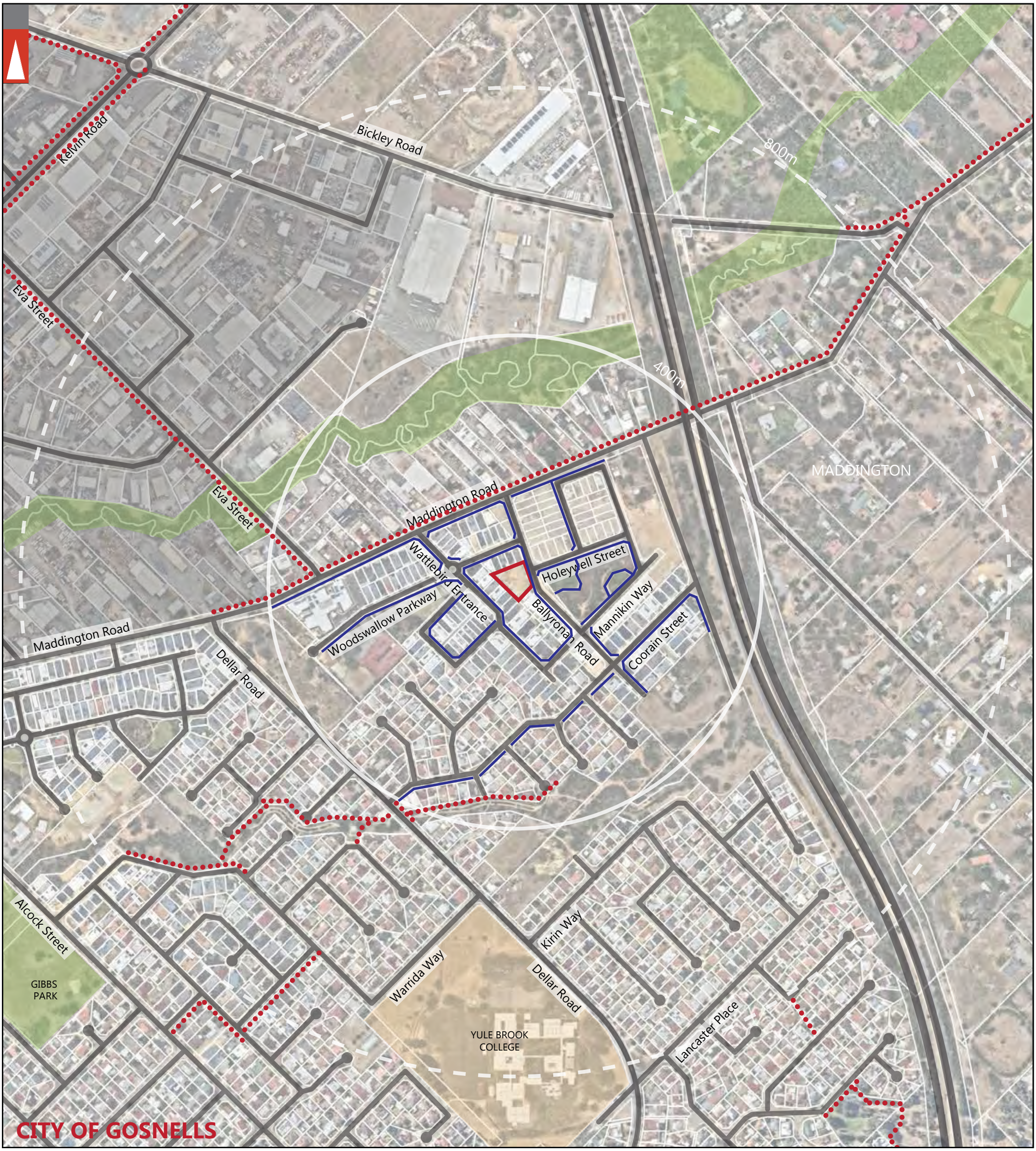
PROJECT: LOT 317 (NO 23) BALLYRONAN ROAD, MADDINGTON

TITLE: PUBLIC TRANSPORT PLAN - 800M RADIUS

DRAWING NUMBER: P002792_S03

DRAWN BY: J.S.

Premise



PARKS AND RECREATION
WATERWAYS
PUBLIC PURPOSE
INDUSTRIAL AREA
LOCATION BOUNDARY
DISTANCE FROM LOCATION
CITY OF GOSNELLS — LOCAL GOVERNMENT NAME
MADDINGTON — SUBURB NAME
ROAD
Hay Street — STREET NAME
OTHER SHARED PATH (SHARED BY PEDESTRIANS & CYCLISTS)
PEDESTRIAN PATH NETWORK WITHIN 400M RADIOUS FROM THE SUBJECT SITE

LEGEND

REV	DATE	AMENDMENT
A	25-03-2025	ISSUED FOR REVIEW

PROJECT: LOT 317 (NO 23) BALLYRONAN ROAD, MADDINGTON

TITLE: PEDESTRIAN PATHS PLAN - 800M RADIUS

DRAWING NUMBER: P002792_S04

DRAWN BY: J.S.

Premise

PARKS AND RECREATION
WATERWAYS
PUBLIC PURPOSE
INDUSTRIAL AREA
LOCATION BOUNDARY
DISTANCE FROM LOCATION
CITY OF GOSNELLS — LOCAL GOVERNMENT NAME
MADDINGTON — SUBURB NAME
ROAD
Hay Street — STREET 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	25-03-2025	ISSUED FOR REVIEW

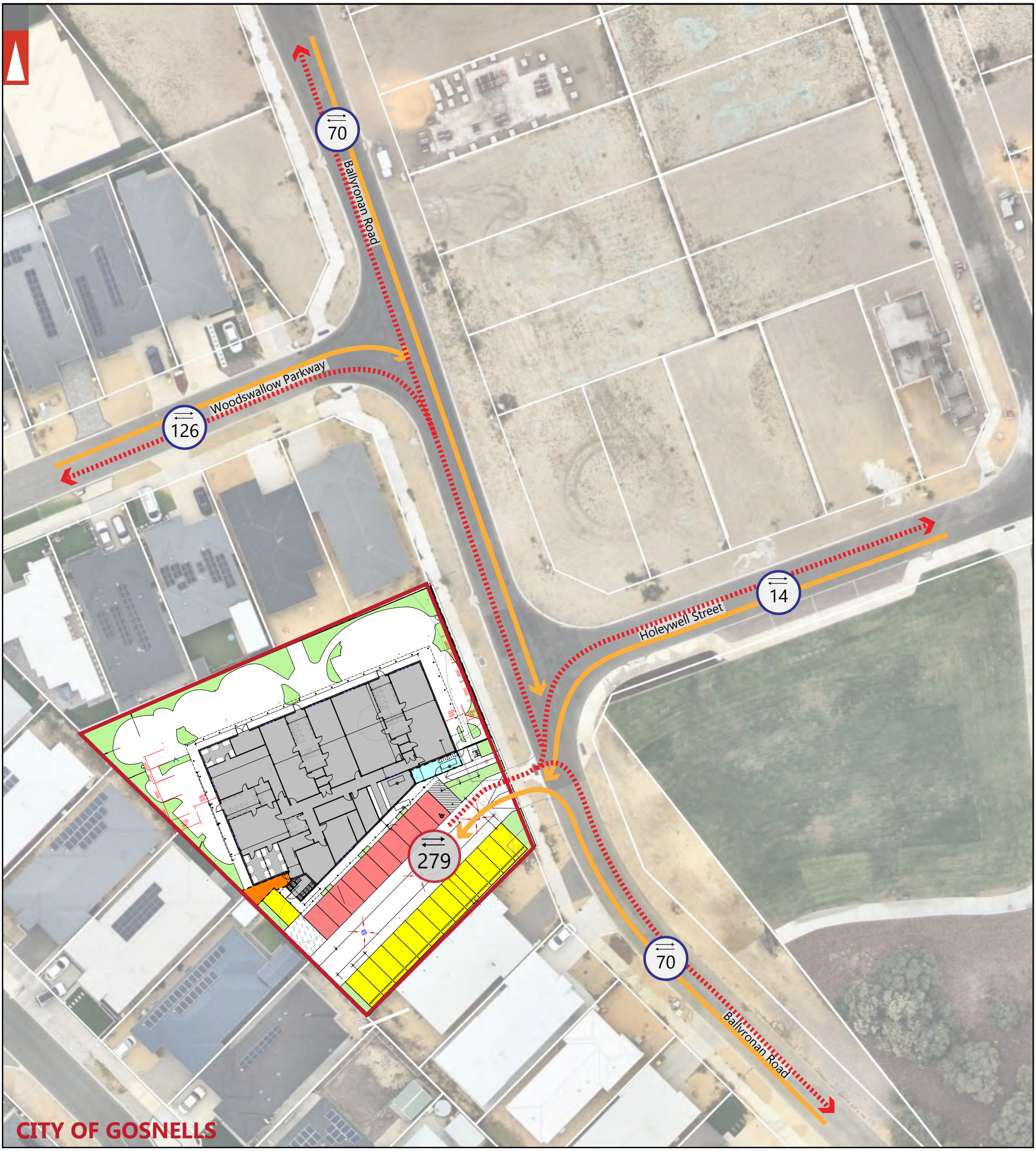
PROJECT: LOT 317 (NO 23) BALLYRONAN ROAD, MADDINGTON

TITLE: EXISTING TRAFFIC COUNTS - 800M RADIUS

DRAWING NUMBER: P002792_S05

DRAWN BY: J.S.

Premise



LOCATION BOUNDARY

Lewis Road ROAD NAME

1,389 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 RECHITECTS CAPABILITY STATEMENT

LEGEND

REV	DATE	AMENDMENT
B	21-05-2025	PROPOSED LAYOUT AMENDED
A	25-03-2025	ISSUED FOR REVIEW

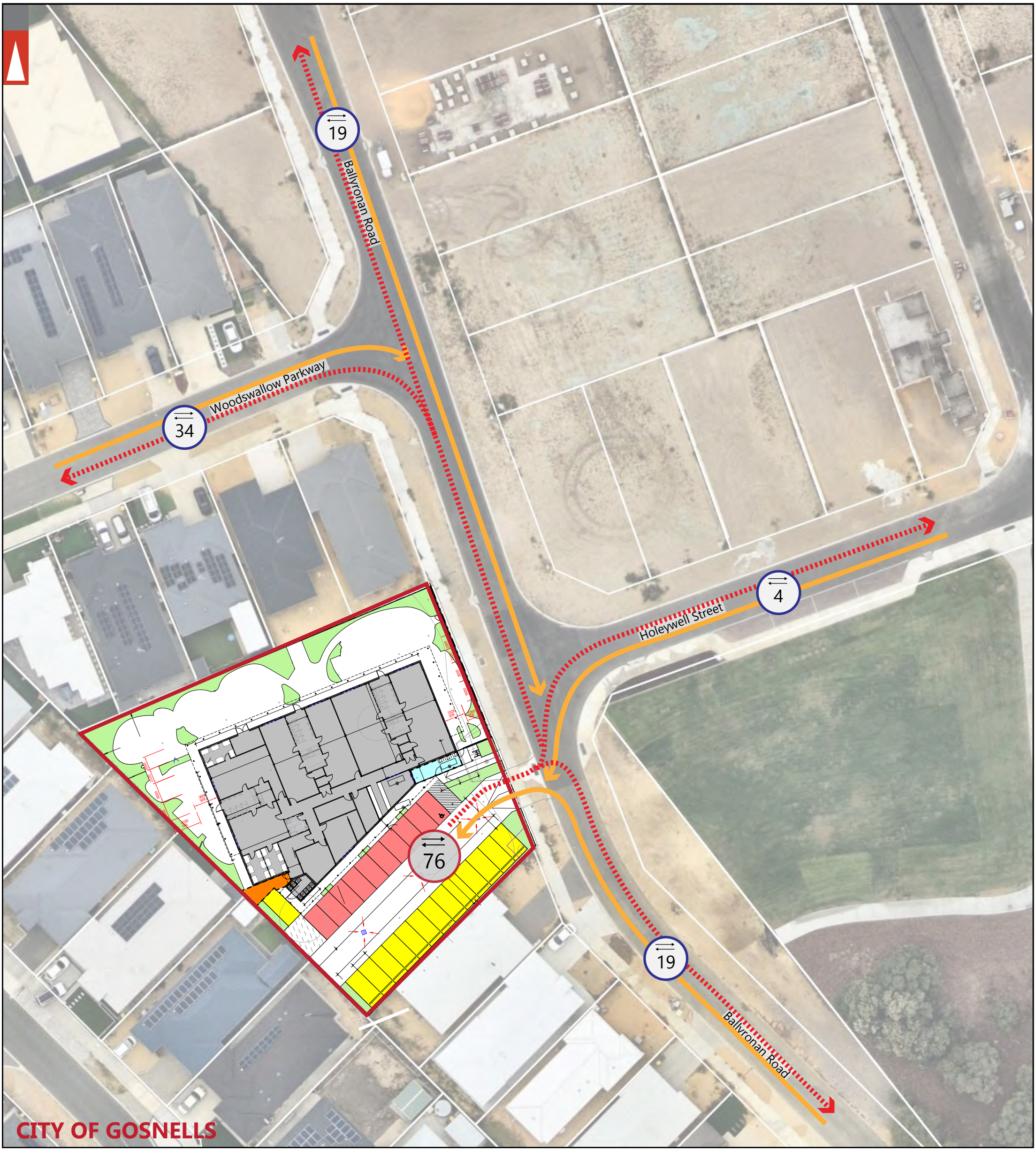
PROJECT: LOT 317 (NO 23) BALLYRONAN ROAD, MADDINGTON

TITLE: TRAFFIC FLOW DIAGRAM - DAILY

DRAWING NUMBER: P002792_S06

DRAWN BY: N.M.

Premise



LOCATION BOUNDARY

Lewis Road ROAD NAME

1,389 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 RECHITECTS CAPABILITY STATEMENT

LEGEND

REV	DATE	AMENDMENT
B	21-05-2025	PROPOSED LAYOUT AMENDED
A	25-03-2025	ISSUED FOR REVIEW

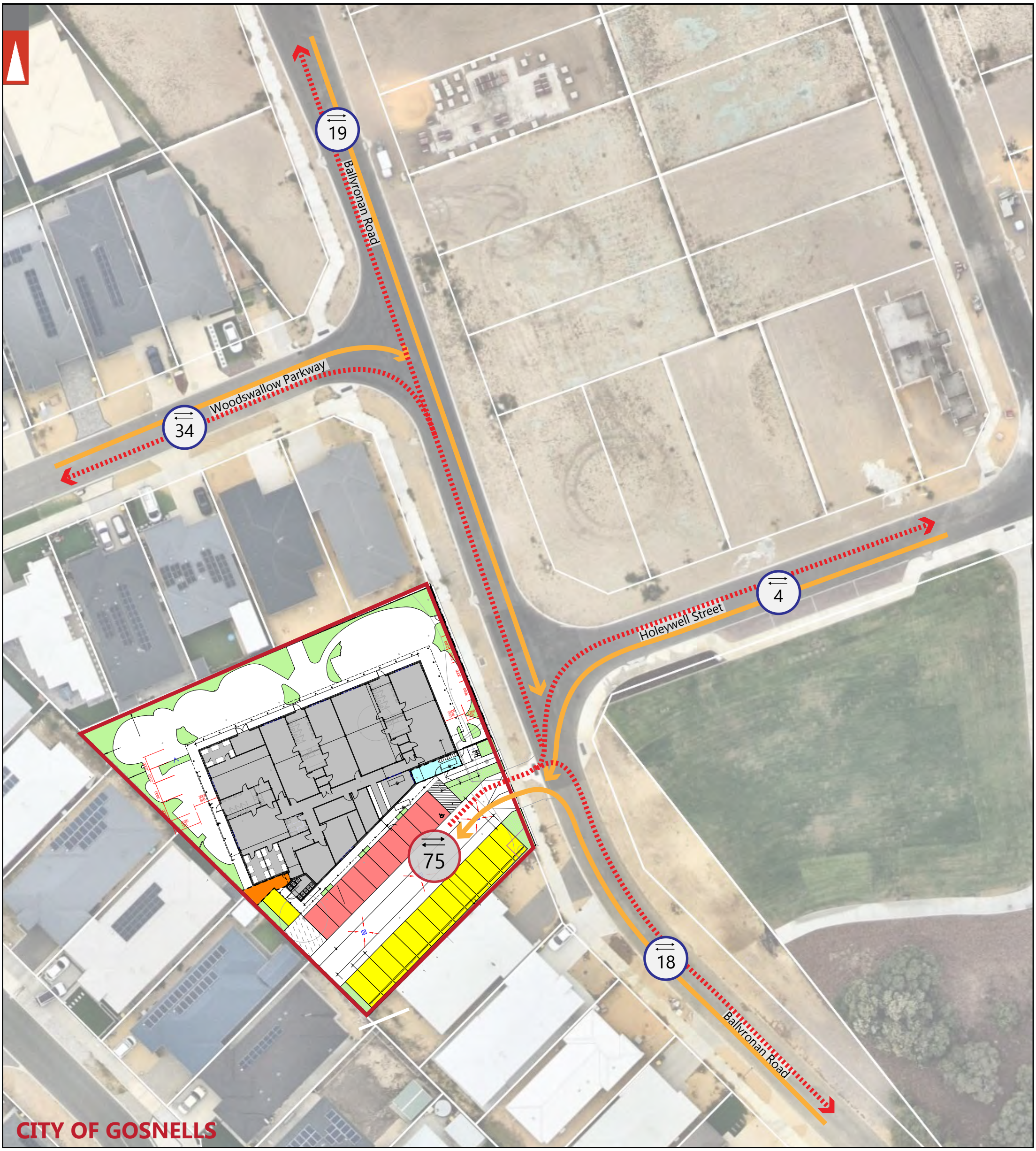
PROJECT: LOT 317 (NO 23) BALLYRONAN ROAD, MADDINGTON

TITLE: TRAFFIC FLOW DIAGRAM - AM PEAK

DRAWING NUMBER: P002792_S07

DRAWN BY: N.M.

Premise



LOCATION BOUNDARY

Lewis Road ROAD NAME

1,389 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 RECHITECTS CAPABILITY STATEMENT

LEGEND

REV	DATE	AMENDMENT
B	21-05-2025	PROPOSED LAYOUT AMENDED
A	25-03-2025	ISSUED FOR REVIEW

PROJECT: LOT 317 (NO 23) BALLYRONAN ROAD, MADDINGTON

TITLE: TRAFFIC FLOW DIAGRAM - PM PEAK

DRAWING NUMBER: P002792_S08

DRAWN BY: N.M.

Premise

APPENDIX C

VEHICLE SWEPT PATH ANALYSIS

Ballyronan Road

55.50

PROPOSED O/D
700SQM

2m HIGH COLORBOND FENCE

1200mm HIGH SELECTED PAINTED RENDERED BRICK WALL WITH 600mm HIGH PC ALUMINIUM FENCE ABOVE BRICK WALL

EMERGENCY EXIT 2

ROOF ABOVE

2000
2120
3000
3000

3600 S/B

4020 S/B

PROPOSED 94 CHILDCARE
700SQM

SLEEP 1
EXT ST 1
RM5 - 0-2 (12 BABIES)
BATH 2
RM4 - 2-3 (15 T'DLRS)
PREP/ST 2
RM3 - 2-3 (15 T'DLRS)
RM2 - 3+ (20 T'DLRS)
BATH 1
PREP/ST 1
RM1 - 3+ (20 T'DLRS)
BATH 3
PREP/ST 3
TROLLEY 3
TROLLEY 4
COMM
TROLLEY 2
TROLLEY 1
RM6 - 0-2 (12 BABIES)
UNISEX
CONSULTATION
PLANNING
RECEPTION
WAITING
SAFE ZONE
LAUNDRY
KITCHEN
PANTRY
SLEEP 3
SLEEP 2
STAFF
DRYING
BIN AREA 8X240L BINS
FOOTPATH
TAP
FW

3100 S/B

2260 S/B

1M PAVER BIN PAD FOR 8X240L BINS

BALLYRONAN ROAD

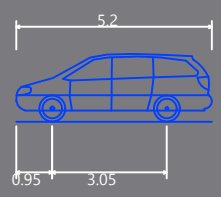
10 PARENT BAYS INCL ACROD
14 STAFF BAYS, 1 REVERSING/LOADING BAY

34.79

A06.01
A06.02

DESIGN CAPACITY

	DESIGN	PA (I/D)-R
GROUND FLOOR		
ROOM1 - (3-5)	20	65m²
ROOM2 - (3-5)	20	65m²
UPPER FLOOR		
ROOM3 - (2-3)	15	49m²
ROOM4 - (2-3)	15	49m²
ROOM5 - (0-2)	12	39m²
ROOM6 - (0-2)	12	39m²
TOTAL	**94**	**306m²**



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
B	21-05-2025	PROPOSED LAYOUT AMENDED
A	24-03-2025	ISSUED FOR REVIEW

PROJECT:
Lot 317 (No 23) Ballyronan Road, Maddington

TITLE:
Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER:
P002792_S20

DRAWN BY:
N.M.

Premise

Ballyronan Road

55.50

PROPOSED O/D
700SQM

PROPOSED 94 CHILDCARE
700SQM

2m HIGH COLORBOND FENCE

1200mm HIGH SELECTED PAINTED RENDERED BRICK WALL WITH 600mm HIGH PC ALUMINIUM FENCE ABOVE BRICK WALL

EMERGENCY EXIT 2

SLEEP 1
EXT ST 1
RM5 - 0-2 (12 BABIES)
BATH 2
RM4 - 2-3 (15 T'DLRS)
PREP/ST 2
RM3 - 2-3 (15 T'DLRS)
RM2 - 3+ (20 T'DLRS)
BATH 1
PREP/ST 1
RM1 - 3+ (20 T'DLRS)
BATH 3
PREP/ST 3
RM6 - 0-2 (12 BABIES)
TROLLEY 3
TROLLEY 4
COMM
TROLLEY 2
TROLLEY 1
UNISEX
CONSULTATION
PLANNING
RECEPTION
WAITING
SAFE ZONE
LAUNDRY
KITCHEN
PANTRY
SLEEP 3
SLEEP 2
STAFF
DRYING
FOOTPATH
BIN AREA
8X240L BINS
TAP
FW

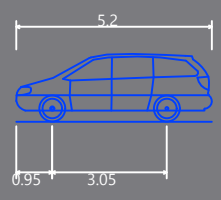
10 PARENT BAYS INCL ACROD
14 STAFF BAYS, 1 REVERSING/LOADING BAY

1M PAVER BIN PAD
FOR 8X240L BINS

ROOF ABOVE

2000
2120
3000
3000
3600 S/B
4020 S/B
3100 S/B
2260 S/B
4096
3305
34.79

DESIGN CAPACITY		
	DESIGN	PA (I/D)-R
GROUND FLOOR		
ROOM1 - (3-5)	20	65m²
ROOM2 - (3-5)	20	65m²
UPPER FLOOR		
ROOM3 - (2-3)	15	49m²
ROOM4 - (2-3)	15	49m²
ROOM5 - (0-2)	12	39m²
ROOM6 - (0-2)	12	39m²
TOTAL	**94**	**306m²**



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
B	21-05-2025	PROPOSED LAYOUT AMENDED
A	24-03-2025	ISSUED FOR REVIEW

PROJECT:
Lot 317 (No 23) Ballyronan Road, Maddington

TITLE:
Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER:
P002792_S21

DRAWN BY:
N.M.

Premise

Ballyronan Road

55.50

PROPOSED O/D
700SQM

2m HIGH COLORBOND FENCE

EMERGENCY EXIT 2

1200mm HIGH SELECTED PAINTED RENDERED BRICK WALL WITH 600mm HIGH PC ALUMINIUM FENCE ABOVE BRICK WALL

PROPOSED 94 CHILDCARE
700SQM

SLEEP 1
EXT ST 1
BATH 2
BATH 1
RM5 - 0-2 (12 BABIES)
RM4 - 2-3 (15 T'DLRS)
PREP/ST 2
RM3 - 2-3 (15 T'DLRS)
RM2 - 3+ (20 T'DLRS)
PREP/ST 1
RM1 - 3+ (20 T'DLRS)
BATH 3
PREP/ST 3
TROLLEY 3
TROLLEY 4
TROLLEY 2
TROLLEY 1
COMM
RM6 - 0-2 (12 BABIES)
UNISEX
CONSULTATION
PLANNING
RECEPTION
WAITING
SAFE ZONE
LAUNDRY
KITCHEN
PANTRY
SLEEP 3
SLEEP 2
STAFF
DRYING
BIN AREA 8X240L BINS
FOOTPATH
10 PARENT BAYS INCL ACROD
14 STAFF BAYS, 1 REVERSING LOADING BAY

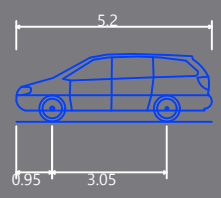
2000
2120
3000
3000
3600 S/B
4020 S/B
3100 S/B
2260 S/B
4096
39.05
34.79

1M PAVER BIN PAD FOR 8X240L BINS

BALLYRONAN ROAD

DESIGN CAPACITY

	DESIGN	PA (I/D)-R
GROUND FLOOR		
ROOM1 - (3-5)	20	65m²
ROOM2 - (3-5)	20	65m²
UPPER FLOOR		
ROOM3 - (2-3)	15	49m²
ROOM4 - (2-3)	15	49m²
ROOM5 - (0-2)	12	39m²
ROOM6 - (0-2)	12	39m²
TOTAL	**94**	**306m²**



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
B	21-05-2025	PROPOSED LAYOUT AMENDED
A	24-03-2025	ISSUED FOR REVIEW

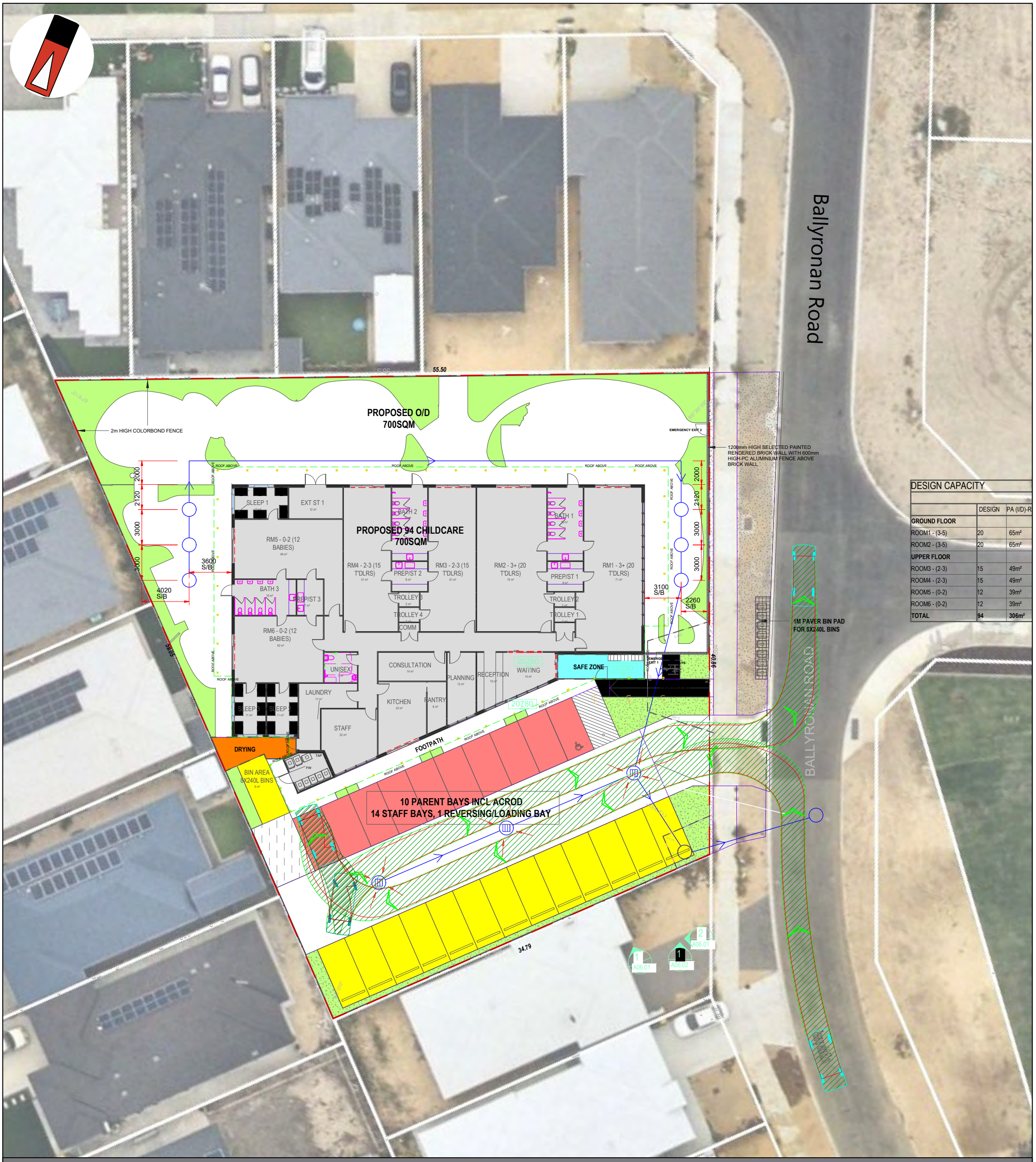
PROJECT:
Lot 317 (No 23) Ballyronan Road, Maddington

TITLE:
Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

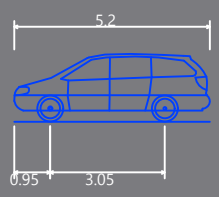
DRAWING NUMBER:
P002792_S22

DRAWN BY:
N.M.

Premise



DESIGN CAPACITY		
	DESIGN	PA (I/D)-R
GROUND FLOOR		
ROOM1 - (3-5)	20	65m²
ROOM2 - (3-5)	20	65m²
UPPER FLOOR		
ROOM3 - (2-3)	15	49m²
ROOM4 - (2-3)	15	49m²
ROOM5 - (0-2)	12	39m²
ROOM6 - (0-2)	12	39m²
TOTAL	**94**	**306m²**



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
B	21-05-2025	PROPOSED LAYOUT AMENDED
A	24-03-2025	ISSUED FOR REVIEW

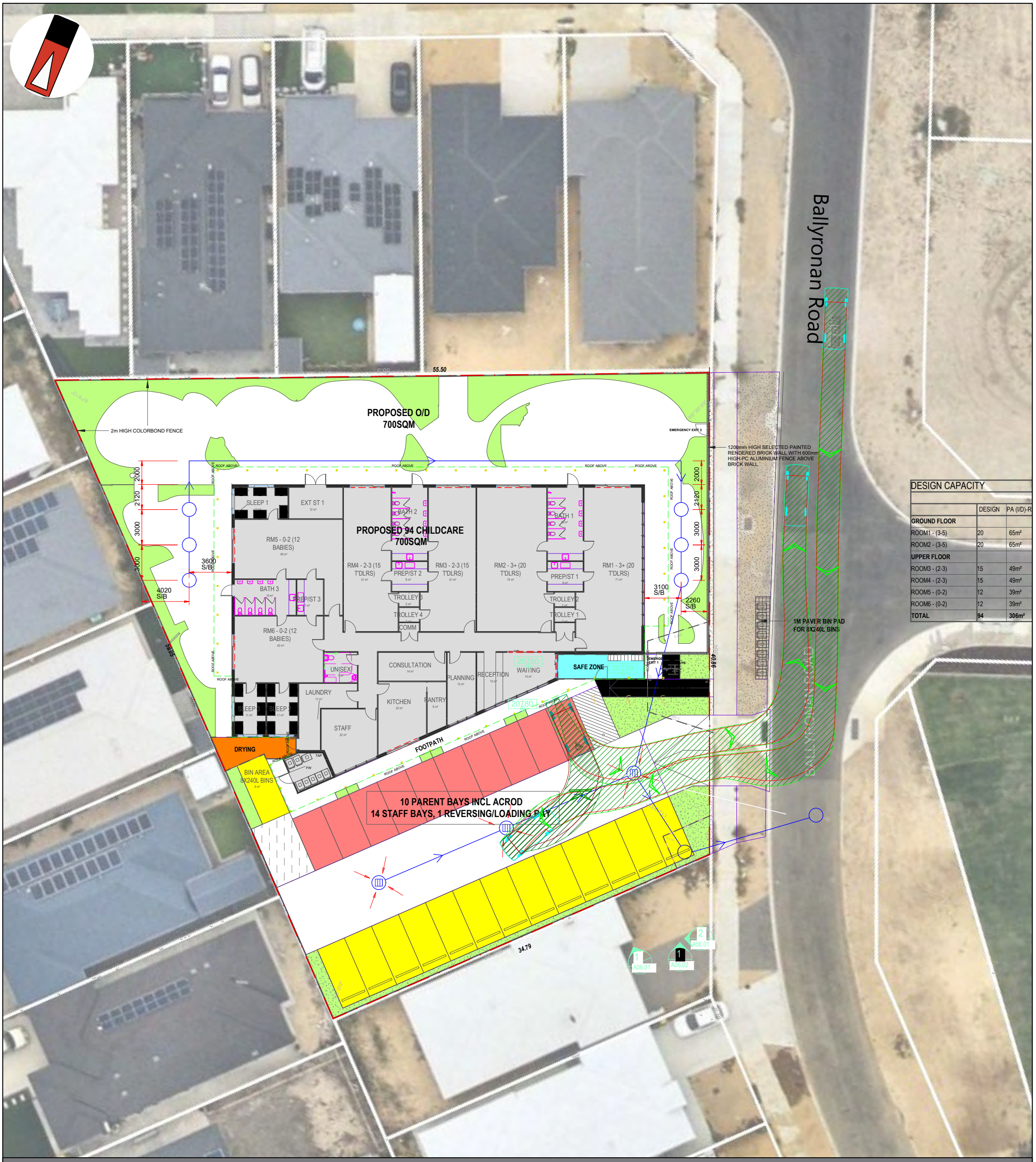
PROJECT: Lot 317 (No 23) Ballyronan Road, Maddington

TITLE: Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

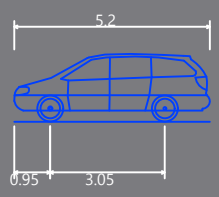
DRAWING NUMBER: P002792_S23

DRAWN BY: N.M.

Premise



DESIGN CAPACITY		
	DESIGN	PA (I/D)-R
GROUND FLOOR		
ROOM1 - (3-5)	20	65m²
ROOM2 - (3-5)	20	65m²
UPPER FLOOR		
ROOM3 - (2-3)	15	49m²
ROOM4 - (2-3)	15	49m²
ROOM5 - (0-2)	12	39m²
ROOM6 - (0-2)	12	39m²
TOTAL	**94**	**306m²**



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
B	21-05-2025	PROPOSED LAYOUT AMENDED
A	24-03-2025	ISSUED FOR REVIEW

PROJECT: Lot 317 (No 23) Ballyronan Road, Maddington

TITLE: Vehicle Turning Circle Plan - B99 Passenger Vehicle (5.2m)

DRAWING NUMBER: P002792_S24

DRAWN BY: N.M.

Premise

Ballyronan Road

55.50

PROPOSED O/D
700SQM

PROPOSED 94 CHILDCARE
700SQM

2m HIGH COLORBOND FENCE

1200mm HIGH SELECTED PAINTED RENDERED BRICK WALL WITH 600mm HIGH PC ALUMINIUM FENCE ABOVE BRICK WALL

EMERGENCY EXIT 2

ROOF ABOVE

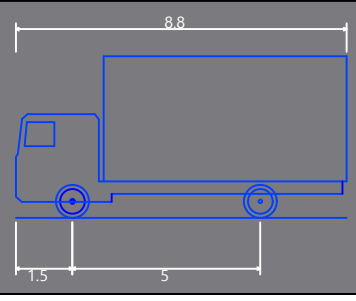
SLEEP 1
EXT ST 1
BATH 2
BATH 1
RM5 - 0-2 (12 BABIES)
RM4 - 2-3 (15 T'DLRS)
PREP/ST 2
RM3 - 2-3 (15 T'DLRS)
RM2 - 3+ (20 T'DLRS)
PREP/ST 1
RM1 - 3+ (20 T'DLRS)
BATH 3
PREP/ST 3
TROLLEY 3
TROLLEY 2
TROLLEY 4
TROLLEY 1
COMM
RM6 - 0-2 (12 BABIES)
UNISEX
CONSULTATION
PLANNING
RECEPTION
WAITING
SAFE ZONE
LAUNDRY
KITCHEN
PANTRY
SLEEP 3
SLEEP 2
STAFF
DRYING
FOOTPATH
TAP
FW
BIN AREA
8X240L BINS

10 PARENT BAYS INCL ACROD
14 STAFF BAYS, 1 REVERSING/LOADING BAY

1M PAVER BIN PAD
FOR 8X240L BINS

2000
2120
3000
3000
3600 S/B
4020 S/B
3100 S/B
2260 S/B
4096
9305
34.79

DESIGN CAPACITY		
	DESIGN	PA (I/D)-R
GROUND FLOOR		
ROOM1 - (3-5)	20	65m²
ROOM2 - (3-5)	20	65m²
UPPER FLOOR		
ROOM3 - (2-3)	15	49m²
ROOM4 - (2-3)	15	49m²
ROOM5 - (0-2)	12	39m²
ROOM6 - (0-2)	12	39m²
TOTAL	**94**	**306m²**



Service Vehicle (8.8 m)	
Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.427m
Track Width	2.500m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	12.500m

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
B	21-05-2025	PROPOSED LAYOUT AMENDED
A	24-03-2025	ISSUED FOR REVIEW

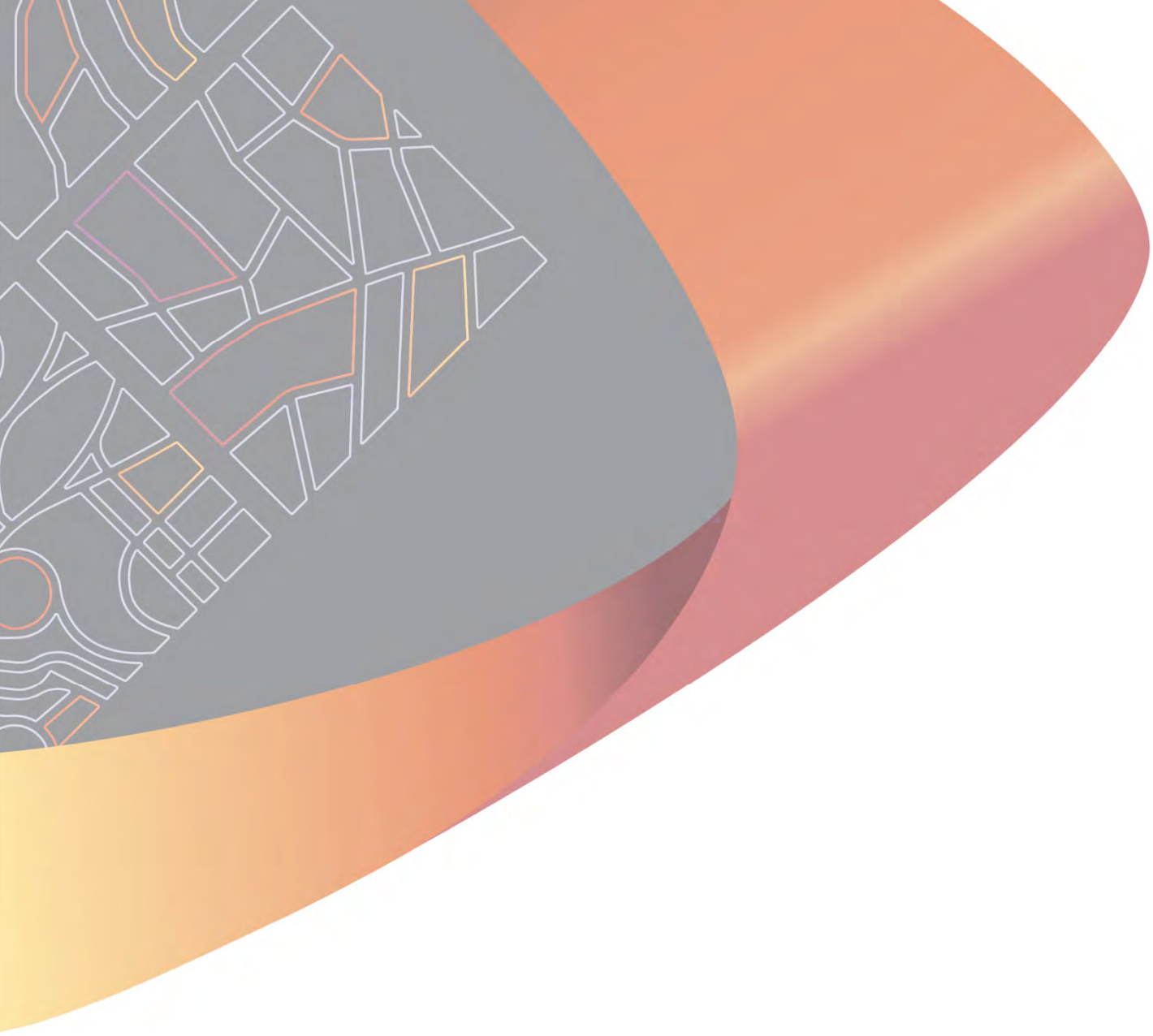
PROJECT:
Lot 317 (No 23) Ballyronan Road, Maddington

TITLE:
Vehicle Turning Circle Plan - Service Vehicle (8.8m)

DRAWING NUMBER:
P002792_S30

DRAWN BY:
N.M.

Premise



Premise

ATTACHMENT 6

HERRING STORER ACOUSTICS

PROPOSED CHILDCARE CENTRE
23 BALLYRONAN ROAD
MADDINGTON

ENVIRONMENTAL ACOUSTIC ASSESSMENT

MARCH 2025

OUR REFERENCE: 34325-2-25108

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

DOCUMENT CONTROL PAGE

ENVIRONMENTAL ACOUSTIC ASSESSMENT

PROPOSED CHILD CARE CENTRE
23 BALLYRONAN ROAD, MADDINGTON

Job No: 25108

Document Reference: 34325-2-25108

FOR

RECHITECTS

DOCUMENT INFORMATION			
Author:	Geoff Harris	**Checked By:**	Tim Reynolds
Date of Issue:	21 March 2025		

REVISION HISTORY

Revision	Description	Date	Author	Checked

DOCUMENT DISTRIBUTION

Copy No.	Version No.	Destination	Hard Copy	Electronic Copy
1	1	Rechitects Attn: Leo Chong Email: leo@rechitects.biz		✓
1	2	Rechitects Attn: Leo Chong Email: leo@rechitects.biz		✓

CONTENTS

APPENDICIES

1. INTRODUCTION

Herring Storer Acoustics were commissioned by Rechitects to undertake an acoustic assessment of noise emissions associated with the proposed child care centre to be located at 23 Ballyronan Road, Maddington.

The report considers noise received at the neighbouring premises from the proposed development for compliance with the requirements of the *Environmental Protection (Noise) Regulations 1997.* This report considers noise emissions from:

- Children playing within the outside play areas of the centre.
- Mechanical Plant

We note that from information received from DWER, the bitumised area would be considered as a road, thus noise relating to motor vehicles is exempt from the *Environmental Protection (Noise) Regulations 1997*. We note that these noise sources are rarely critical in the determination of compliance. However, as requested by council and for completeness, they have been included in the assessment, for information purposes only.

For information, a plan of the proposed development is attached in Appendix A.

2. SUMMARY

Noise received at the neighbouring residences from the outdoor play areas would comply with the requirements of the *Environmental Protections (Noise) Regulations 1997*, provided outdoor play is limited to the day period (ie after 7am).

Noise from the mechanical services has also been assessed to comply with the relevant criteria given the implementation of a barrier. However, as the design of the mechanical services has not been undertaken at this stage of the project, it is recommended that the mechanical services design be reviewed for compliance with the Regulatory requirements.

It is noted that noise associated with cars movements and cars starting are exempt from complying with the Regulations. However, noise emissions from car doors is not strictly exempt from the Regulations. Noise received at the existing neighbouring residences from these noise sources would comply with the Regulatory requirements, at all times given the conditions listed below.

Thus, noise emissions from the proposed development, would be deemed to comply with the requirements of the *Environmental Protection (Noise) Regulations 1997* for the proposed hours of operation, with the inclusion of the following:

1 Although the proposed facility would open before 0700 (ie during the night period), the outdoor play area would not be used until after 0700. Thus, noise received at the neighbouring existing residences from the outdoor play area needs to comply with the assigned day period noise level.

2 Mechanical plant has been allocated to drying court with a barrier 500mm above the height of the plant. Once mechanical selection is confirmed an additional assessment may be required to ensure compliance.

3 A 2000mm boundary fence to the south, west and north (as shown on Appendix A).

4 No car bays are required to be restricted.

3. CRITERIA

The allowable noise level at the surrounding locales is prescribed by the *Environmental Protection (Noise) Regulations 1997*. Regulations 7 & 8 stipulate maximum allowable external noise levels. For highly sensitive area of a noise sensitive premises this is determined by the calculation of an influencing factor, which is then added to the base levels shown below in Table 3.1. The influencing factor is calculated for the usage of land within two circles, having radii of 100m and 450m from the premises of concern. For other areas within a noise sensitive premises, the assigned noise levels are fixed throughout the day, as listed in Table 3.1.

TABLE 3.1 - BASELINE ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
Noise sensitive premises: highly sensitive area	0700 - 1900 hours Monday to Saturday (Day)	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays (Sunday / Public Holiday Day)	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days (Evening)	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays (Night)	35 + IF	45 + IF	55 + IF
Commercial Premises	All Hours	60	75	80
Noise sensitive premises: any area other than highly sensitive area	All hours	60	75	80

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.
IF is the influencing factor.

Under the Regulations, a highly sensitive area means that area (if any) of noise sensitive premises comprising –

(a) A building, or a part of a building, on the premises that is used for a noise sensitive purpose; and

(b) Any other part of the premises within 15 m of that building or that part of the building.

It is a requirement that received noise be free of annoying characteristics (tonality, modulation and impulsiveness), 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 15 dB when determined for a single representative event;

"modulation" means a variation in the emission of noise that –

(a) is more than 3 dB L_{AFast} or is more than 3 dB L_{AFast} 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_{ASlow} levels.

Where the noise emission is not music, if the above characteristics exist and cannot be practicably removed, then any measured level is adjusted according to Table 3.2 below.

TABLE 3.2 - ADJUSTMENTS TO MEASURED LEVELS

Where **tonality** is present	Where **modulation** is present	Where **impulsiveness** is present
+5 dB(A)	+5 dB(A)	+10 dB(A)

Note: These adjustments are cumulative to a maximum of 15 dB.

The neighbouring locations have been identified as :

- R1 – Residential to the North,
- R2 – Residential to the West
- R3 – Residential to the South,
- R4 – Residential (undeveloped) to the East.

Note, these locations have been identified from the City of Gosling Intramaps.

Location R1 have an influencing factor of +6 dB due to being within 100m of Maddington Drive, within 450m of Tonkin Highway and having 20% Industrial in the outer circle, whereas R2 to R4 would have an influencing factor of +4 dB due to being within 450m of Tonkin Highway and having 20% Industrial in the outer circle.

TABLE 3.3 - ASSIGNED OUTDOOR NOISE LEVEL

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		L_{A10}	L_{A1}	L_{Amax}
R1	0700 - 1900 hours Monday to Saturday (Day)	51	61	71
	0900 - 1900 hours Sunday and Public Holidays (Sunday / Public Holiday Day)	46	56	71
	1900 - 2200 hours all days (Evening)	46	56	61
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays (Night)	41	51	61
R2-4	0700 - 1900 hours Monday to Saturday (Day)	49	59	69
	0900 - 1900 hours Sunday and Public Holidays (Sunday / Public Holiday Day)	44	54	69
	1900 - 2200 hours all days (Evening)	44	54	59
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays (Night)	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.

4. PROPOSAL

From information supplied, we understand that the child care centre normal hours of operations would likely between 0700 and 1800 hours, Monday to Friday (closed on public holidays). It is understood that the proposed childcare centre will cater for 94 children broken up as follows

0-2 years	24 Children
2-3 years	30 Children
3-4 years	40 Children

It is noted that the outdoor play area would not be intended to be used until after 0700.

Similarly, mechanical plant would possibly operate all hours of the day.

5. MODELLING

To assess the noise received at the neighbouring premises from the proposed development, noise modelling was undertaken using the noise modelling program SoundPlan.

Calculations were carried out using the DWER's weather conditions, which relate to worst case noise propagation, as stated in the Department of Environment Regulation *"Draft Guidance on Environmental Noise for Prescribed Premises"*. These conditions include winds blowing from sources to the receiver(s).

Calculations were based on the sound power levels used in the calculations are listed in Table 5.1, as well as plans and contours provide by the client.

TABLE 5.1 – SOUND POWER LEVELS

Item	Sound Power Level, dB(A)
Children Playing	<24 months 78 (per 10 children) Between 24 and 36 months 85 (per 10 children) >36 months 87 (per 10 children)
Car Moving in Car Park	79
Car Starting	85
Door Closing	87
Childcare Air conditioning condensing Unit (4x)	71 each

Notes:

1 Acoustic modelling of outdoor play noise was made, based on 94 children within the outdoor play area (ie worst case scenario).

2 The noise level for the mechanical plant has been based on the sound power levels used for previous assessment of child care centres. From other studies, we understand that the noise associated with the condensing units would be conservative.

3 For this child care centre, the mechanical plant units have been considered to be placed in the drying court of the development, barriered by a noise barrier at least 500mm above the top of the units.

4 An updated noise assessment is to be undertaken once mechanical selection has been finalised.

5 For the outdoor play area, a 2000mm barrier to the north, west and south (as shown in Appendix A) is required.

6 To determine the restriction to the parking, a point noise source was located in each car bay.

7 Modelling shows that noise received at the neighbouring residences from car doors closing would comply with the assigned noise level for all time periods.

8 With only staff arriving before 0700, there would be no car starts before 0700.

9 Calculations were undertaken for the receivers at 1.5 metres above the ground level.

10 Noise modelling was undertaken to a number of different receiver locations for each of the neighbouring residences. However, to simplify the assessment, only the noise level in the worst case location (ie highest noise level), have been listed.

6. ASSESSMENT

The tables below show the assessment of noise emissions of concern from the operation. Standard building construction will be sufficient to ensure that noise from inside the building will meet the regulations.

The resultant noise levels at the neighbouring residence from children playing outdoors and mechanical plant are tabulated in Table 6.1.

From previous measurements, noise emissions from children playing does not contain any annoying characteristics, however mechanical plant emissions would be considered tonal and attract a +5 dB(A) Penalty. Noise emissions from outdoor play needs to comply with the assigned L_{A10} noise levels.

TABLE 6.1 - ACOUSTIC MODELLING RESULTS FOR L_{A10} CRITERIA
OUTDOOR PLAY AREAS AND MECHANICAL PLANT

Neighbouring Premises	Calculated Noise Level (dB(A))	
	Children Playing	Mechanical Plant
R1 Residential	50	15 (20)
R2 Residential	50	34 (39)
R3 Residential	34	23 (28)
R4 Residential	47	8 (13)

( ) Includes +5 dB(A) penalty for tonality

With regards to noise associated with cars within the parking area, resultant noise levels are tabulated in Tables 6.2 and 6.3. It is noted that noise emissions from a moving car being an L_{A1} noise level, with noise emissions from cars starting and doors closing being an L_{Amax} noise level.

Based on the definitions of tonality, noise emissions from car movements and car starts, being an L_{A1} and L_{AMax} respectively, being present for less than 10% of the time, would not be considered tonal. Thus, no penalties would be applicable, and the assessment would be as listed in Table 6.2 (Car Moving) and Table 6.3 (Car Starting). However, noise emissions from car doors closing could be impulsive, hence the +10dB penalty has been included in the assessment.

TABLE 6.2 - ACOUSTIC MODELLING RESULTS L_{A1} CRITERIA
CAR MOVING

Neighbouring Premises	Calculated Noise Level (dB(A))
R1 Residential	34
R2 Residential	48
R3 Residential	44
R4 Residential	40

TABLE 6.3 - ACOUSTIC MODELLING RESULTS L_{Amax} CRITERIA
CAR STARTING / DOOR CLOSING

Neighbouring Premises	Calculated Noise Level (dB(A))			
	Car Start		Car Door	
	Day Period	Night Period	Day Period	Night Period
R1 Residential	25	N/A	27 [37]	27 [37]
R2 Residential	48	N/A	49 [59]	49 [59]
R3 Residential	48	N/A	49 [59]	49 [59]
R4 Residential	42	N/A	43 [53]	43 [53]

[ ] Includes +10 dB(A) penalty for impulsiveness.

Tables 6.4 to 6.19 summarise the applicable Assigned Noise Levels, and assessable noise level emissions for each identified noise.

TABLE 6.4 – ASSESSMENT OF L_{A10} NOISE LEVEL EMISSIONS
OUTDOOR PLAY (DAY PERIOD)

Location	Assessable Noise Level dB(A)	Applicable Assigned Noise Level (dB(A))	Exceedance to Assigned Noise Level
R1 Residential	50	51	Complies
R2 Residential	50	49	Complies
R3 Residential	34	49	Complies
R4 Residential	47	49	Complies

TABLE 6.5 – ASSESSMENT OF L_{A10} NIGHT PERIOD NOISE LEVEL EMISSIONS
MECHANICAL PLANT

Location	Assessable Noise Level dB(A)	Applicable Assigned Noise Level (dB(A))	Exceedance to Assigned Noise Level
R1 Residential	20	41	Complies
R2 Residential	39	39	Complies
R3 Residential	28	39	Complies
R4 Residential	13	39	Complies

TABLE 6.6 – ASSESSMENT OF L_{A1} NIGHT PERIOD NOISE LEVEL EMISSIONS
CAR MOVEMENTS

Location	Assessable Noise Level dB(A)	Applicable Assigned Noise Level (dB(A))	Exceedance to Assigned Noise Level
R1 Residential	34	51	Complies
R2 Residential	48	49	Complies
R3 Residential	44	49	Complies
R4 Residential	40	49	Complies

TABLE 6.7 – ASSESSMENT OF L_{Amax} DAY PERIOD NOISE LEVEL EMISSIONS
CAR STARTING

Location	Assessable Noise Level dB(A)	Applicable Assigned Noise Level (dB(A))	Exceedance to Assigned Noise Level
R1 Residential	25	71	Complies
R2 Residential	48	69	Complies
R3 Residential	48	69	Complies
R4 Residential	42	69	Complies

TABLE 6.8 – ASSESSMENT OF L_{Amax} DAY PERIOD NOISE LEVEL EMISSIONS
CAR DOOR

Location	Assessable Noise Level dB(A)	Applicable Assigned Noise Level (dB(A))	Exceedance to Assigned Noise Level
R1 Residential	37	71	Complies
R2 Residential	59	69	Complies
R3 Residential	59	69	Complies
R4 Residential	53	69	Complies

TABLE 6.9 – ASSESSMENT OF L_{Amax} NIGHT PERIOD NOISE LEVEL EMISSIONS
CAR DOOR

Location	Assessable Noise Level dB(A)	Applicable Assigned Noise Level (dB(A))	Exceedance to Assigned Noise Level
R1 Residential	37	61	Complies
R2 Residential	59	59	Complies
R3 Residential l	59	59	Complies
R4 Residential	53	59	Complies

7. CONCLUSION

Noise received at the neighbouring residences from the outdoor play area would comply during the day period, thus, outdoor play would be limited to the day period (ie – after 0700) with an acoustic barrier.

Noise received at the neighbouring residences from the mechanical plant would comply at all hours given the use of a localised barrier at least 500mm above the top of the plant.

Noise received at the neighbouring residences from noise associated with vehicles would also comply at all hours.

Thus, noise emissions from the proposed development, would be deemed to comply with the requirements of the *Environmental Protection (Noise) Regulations 1997* for the proposed hours of operation, with the inclusion of the following:

1 For the outdoor play area, a 2000mm barrier to the south, north and west (as shown in Appendix A) would be required.

2 Mechanical plant have been placed in the drying court with a barrier 500mm above the top of the plant is required. Once mechanical selection has been finalised an updated acoustic report based upon selection would be required.

3 No car bays required to be restricted.

Finally, it is recommended to adopt best practices in managing a child care centre to reduce noise, including but not limited to no amplified music to be played outside, and favouring soft finishes in the outdoor play area.

APPENDIX A

PLANS

SUBJECT TO COUNCIL APPROVAL

2 4 6 8 M Scale: 1 : 200 (A3)

PROJECT

PROPOSED CHILDCARE

23 BALLYRONAN ROAD, MADDINGTON

TBC

SITE PLAN

DESIGNED BY	DRAWN BY	DATE	
LC	BV/LC	18/03/2025	A01.01

ATTACHMENT 7

NOT TO SCALE

JAYSTONE - BALLYRONAN RD

PLAY SPACE DESIGN

CONTENTS

SCOPE OF WORKS

PLAYSPACE
711 sqm

AREA 1 (0-2 years)
24 places

AREA 2 (2-3 years)
30 places

AREA 3 (3+ years)
40 places

CARPARK & VERGE
182 sqm

GENERAL NOTES

HYDRAULIC
- 20mm water points to water play (fountains/pumps/misters) locations
- 25mm retic cut-in close to the water meter

ELECTRICAL
- Power to retic controller location

CIVIL
- Ground level on site to be set 150mm lower than FFL of slab prior to us commencing on site
- Stormwater pit/grate locations and heights to be coordinated with this concept plan

SHADE SAIL
- The connection of shade sails to the building is to be accommodated structurally and any adjustments to connection locations is to be communicated so that they can be shown on the landscape drawings.

WATER PROOFING
- Where required, all water proofing is provided by the builder, including the water proofing of penetrations. Nature Play Solutions will advise and coordinate the requirement for penetrations if they are to occur after the main water proofing has been completed

HARD DIGGING
- No allowance has been made for hard digging in the costing provided

8 Burchell Way
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(08) 9361 1355
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- HYBRID TURF
- ARTIFICIAL TURF
- ARTIFICIAL TURF WITH IAS RUBBER UNDER
- WHITE SAND (MIN 300mm DEEP)
- MULCH
- CONCRETE (PISTACHIO) - ROCK SALT FINISH
- CONCRETE (GREY MIST) - ROCK SALT FINISH
- COBBLESTONE
- RECYCLED BRICK PAVING
- CONCRETE KERB (CREAM)
- LIMESTONE BLOCK EDGE
- SHADE SAIL (COLOUR TBC)
- SHADE SAIL POST - STRAIGHT
- SHADE SAIL POST - CURVED
- SHADE SAIL CONNECTION TO BUILDING
- CONCRETE STEPPER - LIGHT BROWN (L010505)
- TIMBER STEPPER (L005001)
- STEPPING STONE - EXPOSED (L010501)
- ROCK BOULDERS
- LOG
- PROPOSED TREE
- PLANTS
- FALL ZONE (MIN 300mm DEPTH)
- ROOF OVER
- POOL FENCE FT5 - 1.2m
- SINGLE GATE GT2
- TIMBER BOUNDARY FENCE FT19 - 1.8m
- ISOLATION VALVE
- BOUNDARY EXCLUSION
- SCOPE OF WORKS

LEGEND

- A HIDEY TUNNEL (L016201)
- B PULL UP BAR - LINEAR (L030003)
- C MIRROR PANEL (L007005)
- D WALL CUBBY WITH DISCOVERY FENCE (L010326)
- E LYPA INDOORS ACCESSORY PACK (W002317)
- F BALANCE SLEEPER - 1.8m (L005211)
- G SHOPFRONT - SKILLION ROOF (L006809)
- H WATER PLAY FOUNTAIN - PUSH BUTTON (L006202)
- I POTION MAKING STONE (L001201)
- J TRI CLIMBER - MAIN PLATFORM (L002509)
- K GUMNUT ARBOUR (L000836)
- L VEGE GARDEN - SMALL (L020300)
- M SHED (2.45m x 1.54m)
- N CAMPFIRE (L027800)
- O FAIRY GARDEN (L008001)
- P MINI CUBBY WITH KITCHEN BENCH (L019117)
- Q WATER PUMP (L003002)
- R GRINDING STONE (L001200)
- S BOX HANGOUT WITH CONCRETE SLIDE (L036011)
- T DUAL TIGHT ROPE WALK (L006300)
- U SENSORY STEPPER - 600mm (L029214)
- V CURVED BENCH (L009001)
- W LETTERBOX (L051300)
- X ARBOUR TUNNEL WITH MISTERS (L000807)

Scale Approx 1:100 @ A1
1:200 @ A3
0 1 2 3 4 5 10m

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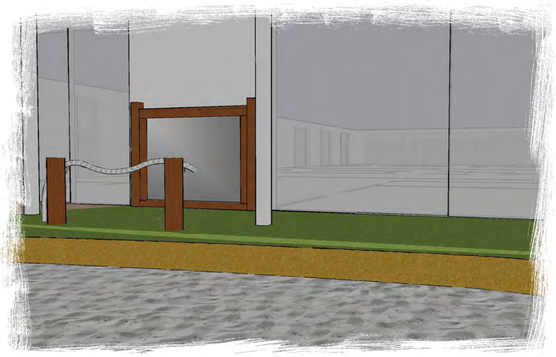
JAYSTONE - BALLYRONAN RD

23 BALLYRONAN ROAD, MADDINGTON WA

LS 102 - CONCEPT PLAN

N

Job No: 6608
Rev: C
Date: May 2025
Design: BW



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JAYSTONE - BALLYRONAN RD

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LS 103 - PERSPECTIVES - AREA 1 (0-2)

Job No: 6608
Rev: C
Date: May 2025
Design: BW

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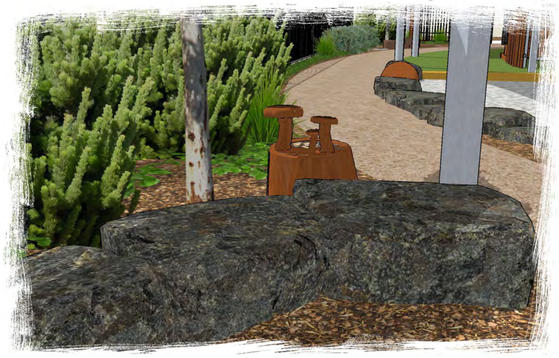
JAYSTONE - BALLYRONAN RD

23 BALLYRONAN ROAD, MADDINGTON WA

LS 104 - PERSPECTIVES - AREA 2 (2-3)

Job No: 6608
Rev: C
Date: May 2025
Design: BW



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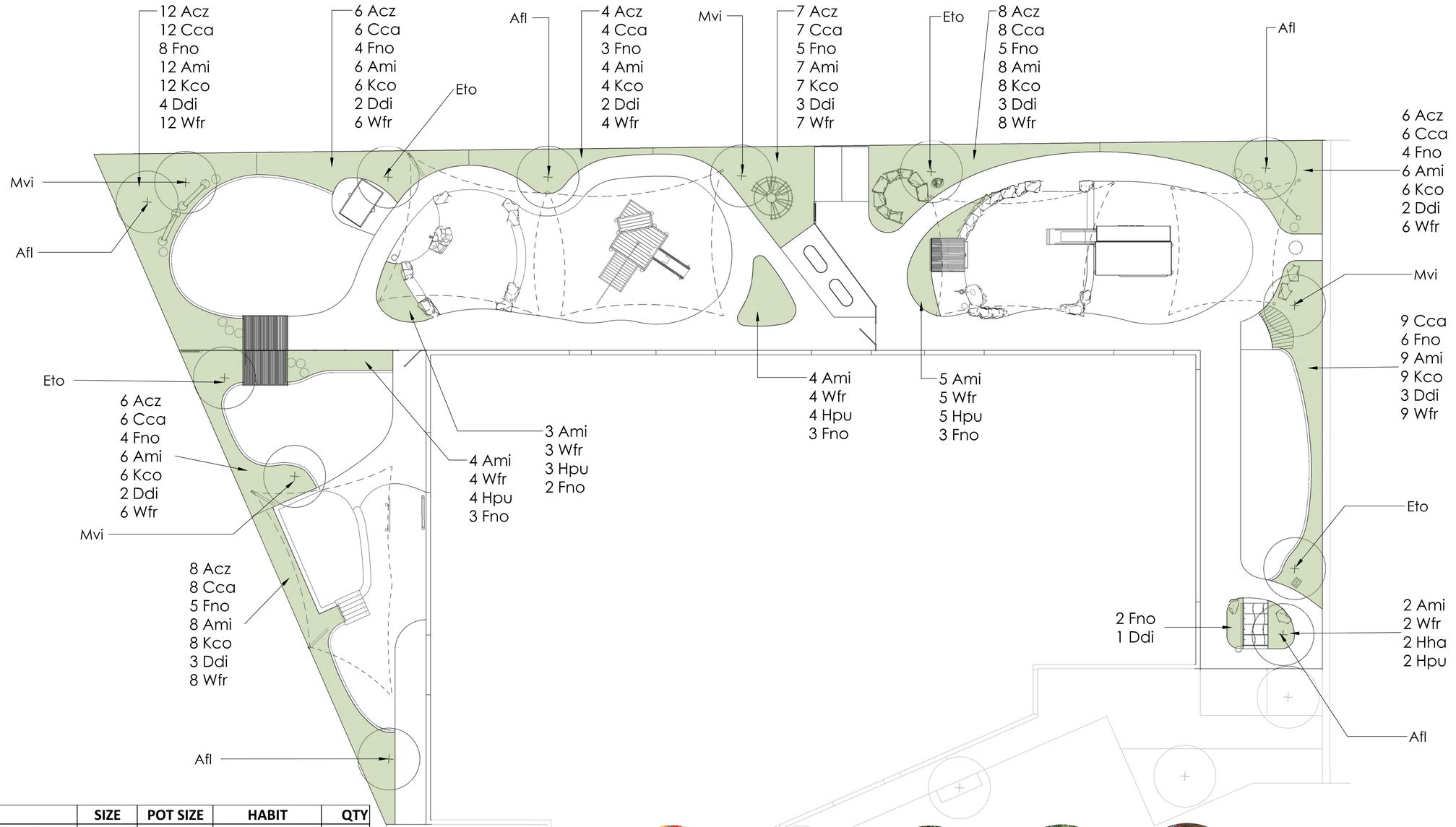
play@natureplaysolutions.com.au

JAYSTONE - BALLYRONAN RD

23 BALLYRONAN ROAD, MADDINGTON WA

LS 105 - PERSPECTIVES - AREA 3 (3+)

Job No: 6608
Rev: C
Date: May 2025
Design: BW



PLANTING SCHEDULE

TYPE	CODE	SPECIES	SIZE	POT SIZE	HABIT	QTY
Plants	Acz	Adenanthos cunninghamii 'Lighthouse	'1m	140mm	Shrub	66
	Ami	Anigozanthos humilis	0.5m	140mm	Strappy	84
	Cca	Conostylis candicans	0.3m	140mm	Strappy	66
	Ddi	Damperia diversifolia	0.5m	140mm	Ground Cover	25
	Fno	Ficinia nodosa	0.5m	140mm	Strappy	57
	Hha	Hardenbergia happy wanderer	2m	140mm	Creeper	2
	Hpu	Hemiandra pungens	0.2m	140mm	Ground Cover	18
	Kco	Kennedia coccinea	0.2m	140mm	Ground Cover	66
	Wfr	Westringia fruiticosa 'Grey box'	0.5m	140mm	Shrub	84
Trees	Afl	Agonis flexuosa	8m	100L	Tree Evergreen	5
	Eto	Eucalyptus torquata	5-8m	100L	Tree Evergreen	4
	Mvi	Melaleuca viridiflora	8m	100L	Tree Evergreen	4
					TOTAL PLANTS	**468**
					TOTAL TREES	**13**

Scale Approx 1:100 @ A1
1:200 @ A3
0 1 2 3 4 5 10m

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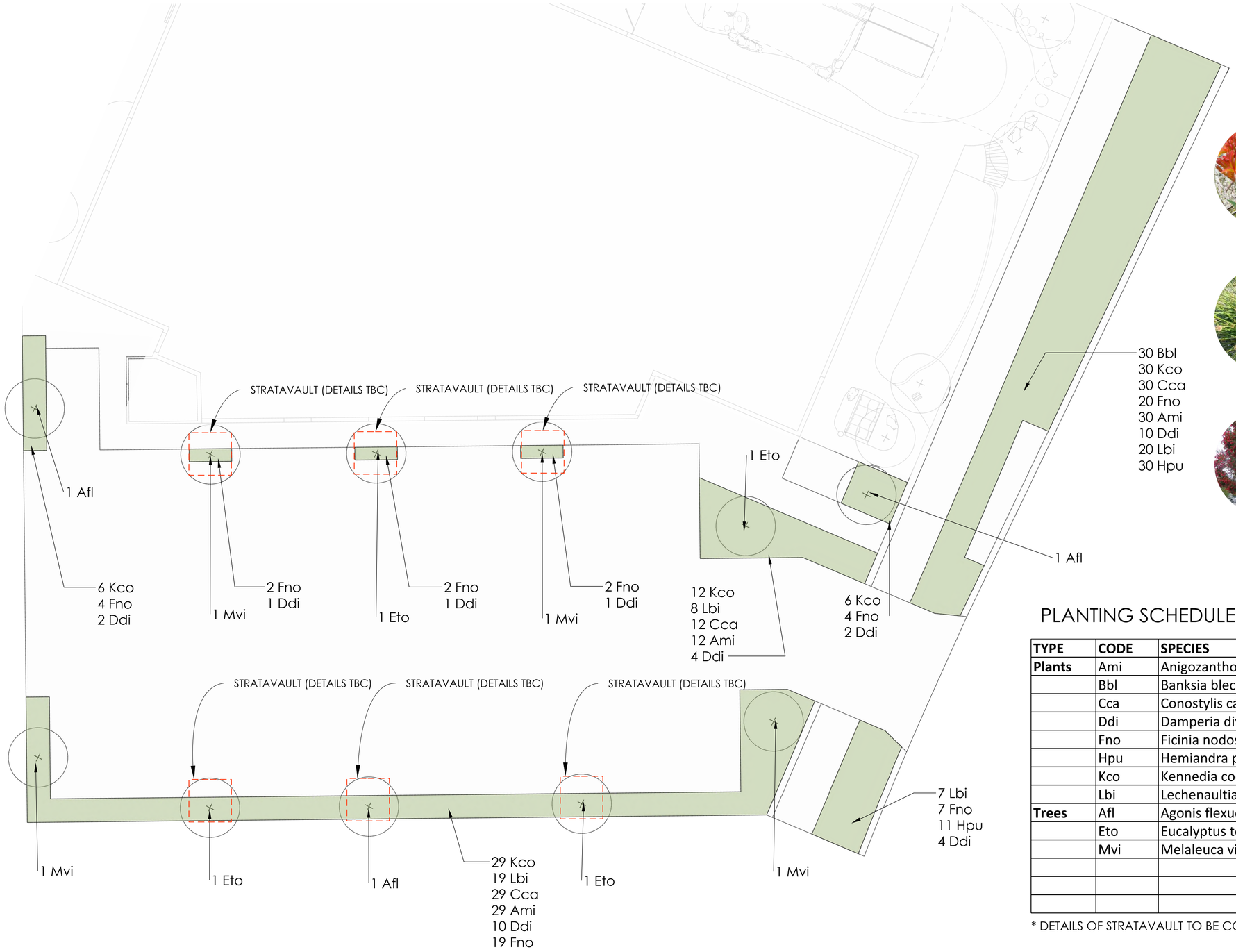
JAYSTONE - BALLYRONAN RD

23 BALLYRONAN ROAD, MADDINGTON WA

LS 106 - PLANTING PLAN - PLAYSPACE

N

Job No: 6608
Rev: C
Date: May 2025
Design: BW




Ami


Bbl


Cca


Ddi


Fno


Hpu


Kco


Lbi


Mvi


Afl


Eto

PLANTING SCHEDULE

TYPE	CODE	SPECIES	SIZE	POT SIZE	HABIT	QTY
Plants	Ami	Anigozanthos humilis	0.5m	140mm	Strappy	71
	Bbl	Banksia blechnifolia	0.2m	140mm	Ground Cover	30
	Cca	Conostylis candicans	0.3m	140mm	Strappy	71
	Ddi	Damperia diversifolia	0.5m	140mm	Ground Cover	37
	Fno	Ficinia nodosa	0.5m	140mm	m	64
	Hpu	Hemiandra pungens	0.2m	140mm	Ground Cover	41
	Kco	Kennedia coccinea	0.2m	140mm	Ground Cover	89
	Lbi	Lechenaultia biloba	0.3m	140mm	Shrub	54
Trees	Afl	Agonis flexuosa	8m	100L	Tree Evergreen	3
	Eto	Eucalyptus torquata	5-8m	100L	Tree Evergreen	4
	Mvi	Melaleuca viridiflora	8m	100L	Tree Evergreen	4
					TOTAL PLANTS	**457**
					TOTAL TREES	**11**

* DETAILS OF STRATAVAULT TO BE CONFIRMED

Scale Approx 1:100 @ A1
1:200 @ A3
0 1 2 3 4 5 10m

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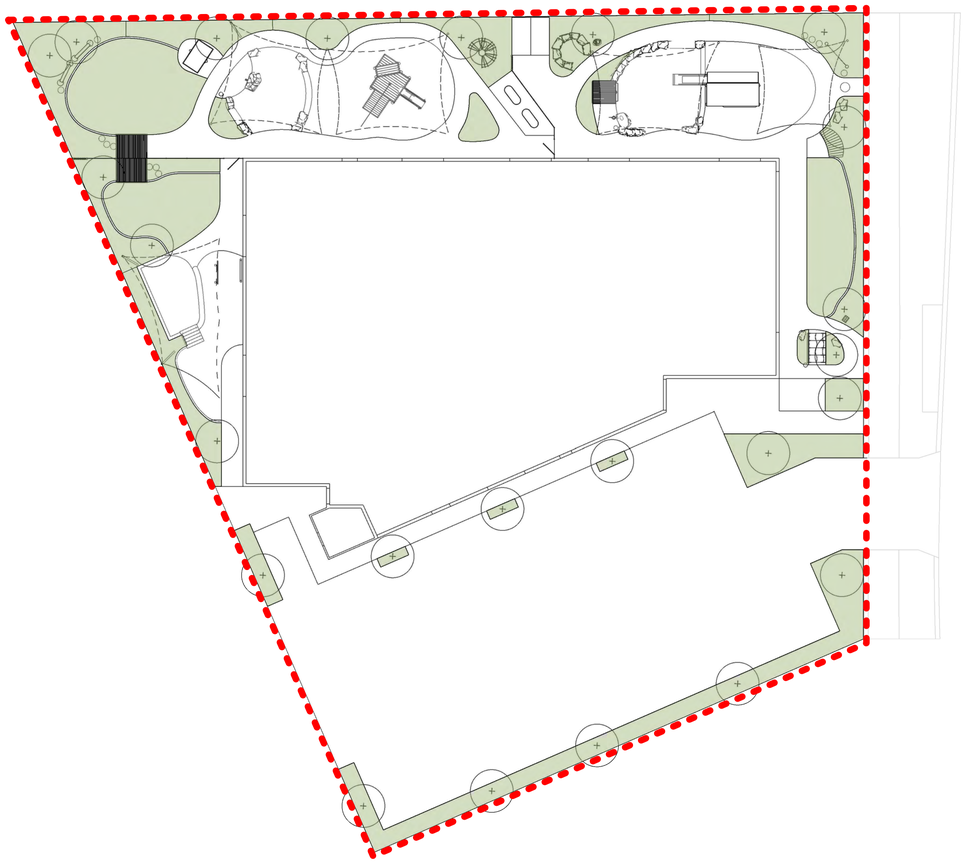
JAYSTONE - BALLYRONAN RD

23 BALLYRONAN ROAD, MADDINGTON WA

LS 107 - PLANTING PLAN - CARPARK & VERGE

N

Job No: 6608
Rev: C
Date: May 2025
Design: BW



APPROX AREA OF WORKS

DEEP SOIL AREA

SITE AREA	m2	SITE %
TOTAL SITE	2162	
DEEP SOIL AREA	360	16.65

Scale Approx 1:200 @ A1
1:400 @ A3

0 5 10 20m

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JAYSTONE - BALLYRONAN RD

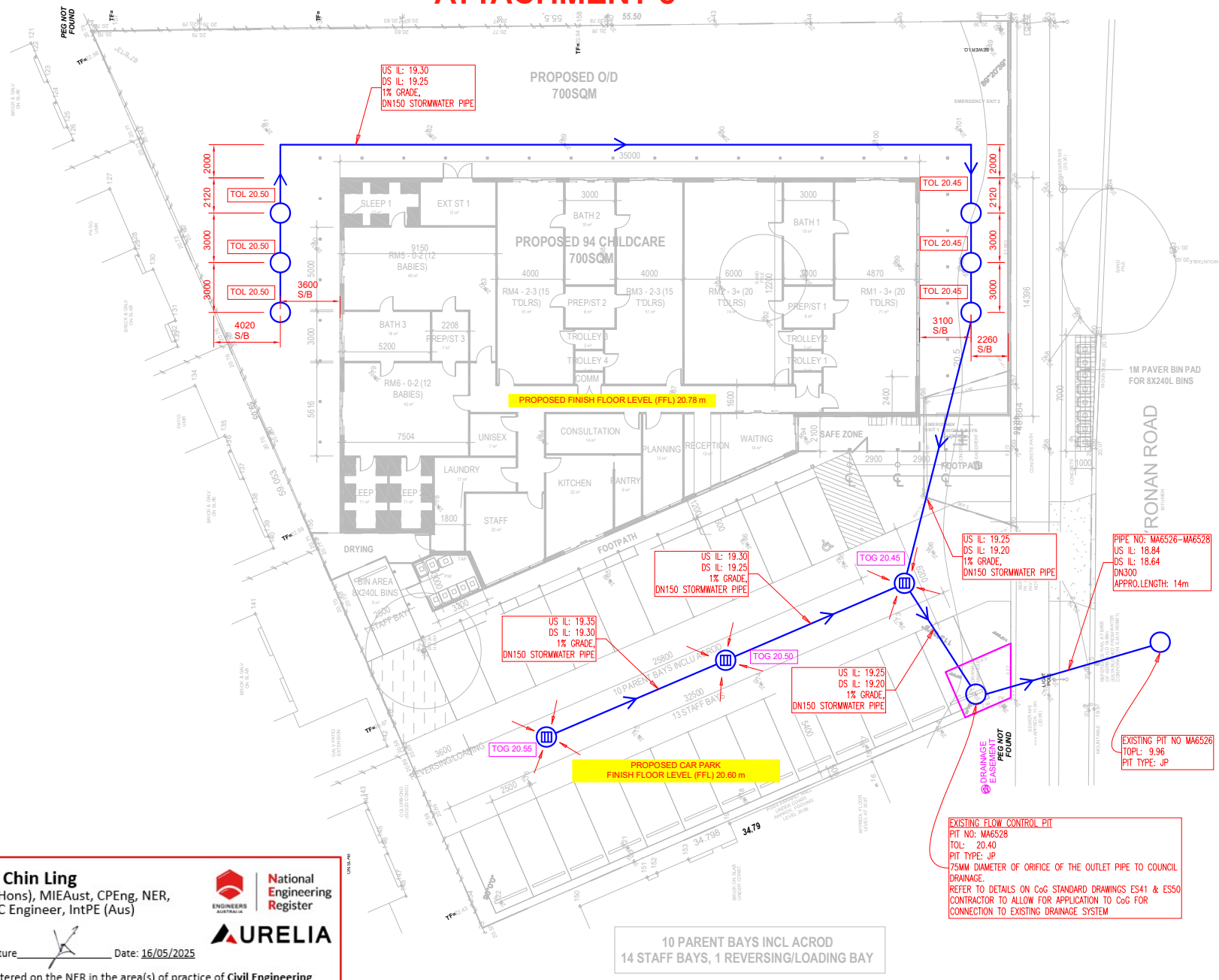
23 BALLYRONAN ROAD, MADDINGTON WA

LS 108 - DEEP SOIL AREA PLAN

N

Job No: 6608
Rev: C
Date: May 2025
Design: BW

ATTACHMENT 8



LEGEND:

TOL 20.50	TOP OF LID
TOG 20.50	TOP OF GRATING
US IL	UPSTREAM INLET
DS IL	DOWNSTREAM INLET
○	1800 DIA x 1200 DEEP SOLID BASE PIT. BURIED PIT LID. MAXIMUM 150mm BELOW SURFACE LEVEL. REFER TO CoG ES19-1 or 41 FOR DETAILS.
⊞	1800 DIA x 1200 DEEP SOLID BASE PIT. GRATED PIT LID TO BE FLUSH WITH SURFACE. REFER TO CoG ES19-1 or 41 FOR DETAILS.

NOTE:

1. ALL TANKS ARE STORAGE TANKS OF SIZE 1800mm (D) x 1200mm (H), ALL THE STORAGE TANKS IN PAVED AREA SHOULD BE GRATED AND TRAFFICABLE.
2. ALL THE STORAGE TANKS IN PAVED AREA SHOULD BE GRATED AND TRAFFICABLE REINFORCE COVER WITH RAISED 600mm X 600mm WAVE BAR BICYCLE PROOF GRATE FLUSH WITH SURFACE LEVEL.
3. DOWN PIPES TO BE CONNECTED THE NEAREST STORAGE TANK BY BUILDER.
4. STORM WATER COLLECTED IN THE SUBDIVISION WILL BE DRAINED OFF SITE TO THE COUNCIL DRAINAGE.
5. MINIMUM COVER FOR PIPES SHOULD BE MAINTAINED.
6. THE CONTRACTOR SHALL LIAISE WITH ALL RELEVANT AUTHORITIES TO LOCATE ALL EXISTING SERVICES WITHIN THE CONTRACT AREA PRIOR TO THE COMMENCEMENT OF WORK WHERE EXISTING AND PROPOSED WORKS INTERSECT. LEVELS ARE TO BE TAKEN AND SUPPLIED TO THE CONTRACTOR.
7. THE CONTRACTOR SHALL INSTALL ALL DUCTS FROM SERVICE PROVIDERS ROAD CROSSING.
8. ALL CONSTRUCTION SHALL MAKE SMOOTH CONNECTION TO EXISTING WORK.
9. STORMWATER PIPES ARE TO BE REINFORCED UNLESS OTHERWISE NOTED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUPPORT OF ALL EXISTING SERVICES. ALL SEWER CROSSING SHALL BE PROVIDED WITH EITHER TIMBER BEARERS OR KILL WITH TIMBER PILES AS REQUIRED.
11. ALL BACKFILL TO THE PIPES AND SOAKWELLS/STORAGE TANKS TO BE WITH CLEAN SAND COMPACTED IN LAYERS TO A MIN OF 95% MMDD.
12. THE SIZE OF THE GUTTER AND THE NUMBER OF DOWN PIPES SHOULD COMPLY WITH THE BUILDING CODES OF AUSTRALIA.
13. THIS IS A STORMWATER MANAGEMENT PLAN AND SHOULD NOT BE CONSIDERED AS A WORKING DRAWING DOCUMENT. ANY EXISTING STRUCTURAL NON-COMPLIANCE ISSUES DURING THE CONSTRUCTION PHASE IS NOT PART OF THIS MANAGEMENT PLAN.

DESIGN SUMMARY	
TOTAL ROOF AREA (m^2)	700.83
TOTAL PAVED AREAS (m^2)	678.68
TOTAL LOT AREA (m^2)	2162
SOIL TYPE (SELECT SOIL TYPE)	SANDY CLAY
VOLUME REQUIRED TO BE RETAINED/DETAINED (m^2)	27.8900
DIAMETER OF ORIFICE OF THE OUTLET PIPE TO COUNCIL DRAINAGE (mm)	75

STORAGE TANK VOLUME DETAILS				
ITEM	DIAMTER (mm)	DEPTH (mm)	TANK (No.)	VOLUME (m^3)
1.0	1800	1200	9	27.8900

Mr Chin Ling
BE (Hons), MIEAust, CPEng, NER,
APEC Engineer, IntPE (Aus)

National Engineering Register

Signature _____ Date: 16/05/2025

Registered on the NER in the area(s) of practice of **Civil Engineering**
EA Membership No: 2815570; Contact no. 0499 195 588

CLIENT ACCEPTANCE OF PROJECT PROPOSAL					
NO.23 BALLYRONAN ROAD MADDINGTON - PROPOSED CHILD CARE CENTRE					
SIGNED:					
NAME:					
POSITION:	0	16.05.25	ISSUED FOR USE		CL
ORGANISATION:	REV	ISSUE	COMMENTS		APPROVED
PDATE:					

DO NOT SCALE FROM DRAWINGS. VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK. ALL ARCHITECTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH CONSULTANTS DRAWINGS.

AURELIA
A 19 Dupont Way, Canning Vale, Perth WA. 6155
T 0499195588
W www.aureliaconstruction.com.au

PROJECT
PROPOSED CHILDCARE
JAYSTONE- BALLYRONAN RD
23 BALLYRONAN ROAD, MADDINGTON WA

CLIENT

DRAWING TITLE
STORMWATER DRAINAGE SYSTEM LAYOUT

SCALE NTS | PROJECT No. I_AUR0041
DRAWN CL | CHECKED CL | DRAWING N° A01.01 | REV 0
CAD FILE 6.0 23 Ballyronan Road_250513.dwg

CITY OF GOSNELLS

Stormwater Design Calculator

For 20 year and 100 year ARI
Applies to Infill areas and Structure plans

Note: A 5% AEP event is equivalent to a 20 year ARI event and a 1% AEP event is equivalent to a 100 year ARI event

Owner's name: Leo Chong

Property address: 23 Ballyronan Road, Maddington WA

Builder's name

Daytime phone number

Select design event:	1 in 20	ARI
Total lot area:	2162	m²
Roof area (Must be connected to soakwells/pits)	700.83	m²
Paved areas (Intended for soakwell/pit connection)	678.68	m²
Soil type (select soil type)	Sandy clay	
Permission to connect to council drainage? (select yes/no)	yes	
Volume required to be retained/detained	27.89	m3
Proposed soakwell/pit diameter (select size)	1800	mm
Proposed soakwell/pit depth (select size)	1200	mm
Number of soakwells/pits required	9	
Diameter of orifice of the outlet pipe to council drainage	75	mm

(Refer to City's standard drawing number ES-41)

14-May-25

Copy and forward this spreadsheet with your drainage submission

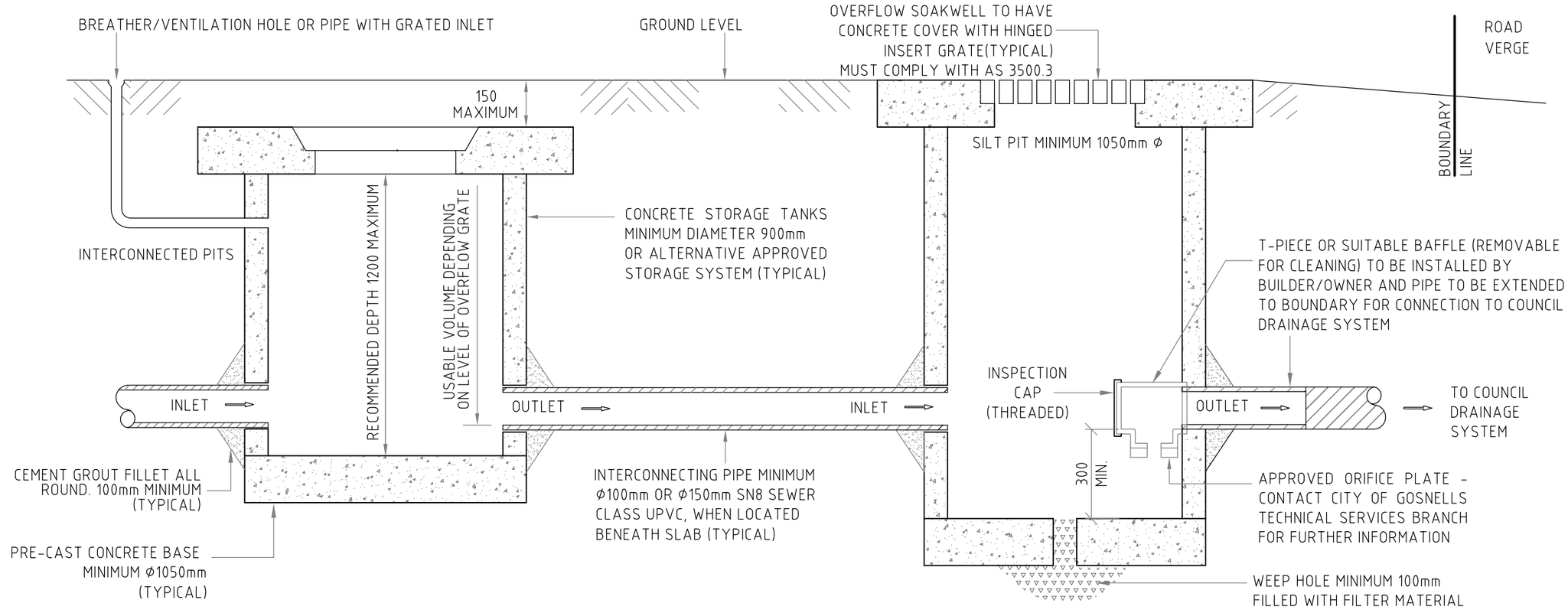
Mr Chin Ling
BE (Hons), MIEAust, CPEng, NER,
APEC Engineer, IntPE (Aus)

National Engineering Register

AURELIA

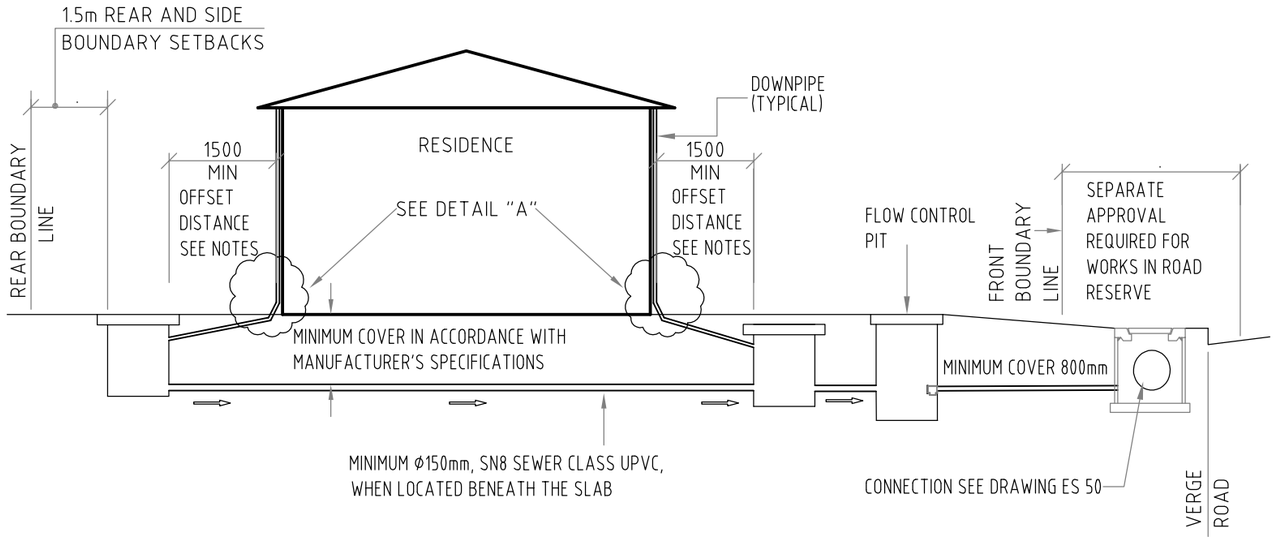
Signature _____ Date: 16/05/2025

Registered on the NER in the area(s) of practice of **Civil Engineering**
EA Membership No: 2815570; Contact no. 0499 195 588

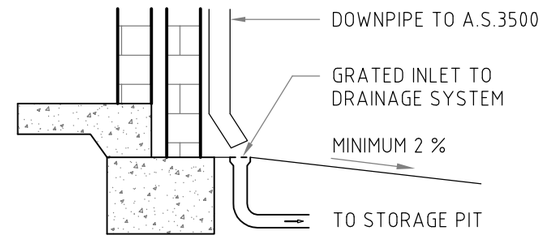


FLOW CONTROL PIT

SEE ALSO LOT CONNECTION PIT DETAIL DRAWING ES50



SIDE ELEVATION - DETENTION SYSTEM ARRANGEMENT



TYPICAL DOWNPIPE CONNECTION DETAIL "A"

NOTES:

1. FOR CLAY/SILTY SOIL SITES
2. TO ENABLE INSPECTION BEFORE BACKFILL, THE CITY'S TECHNICAL SERVICE DEPARTMENT IS TO BE NOTIFIED 48 HOURS PRIOR TO CONNECTION TO THE CITY'S SYSTEM
3. REFER TO SEPARATE INFORMATION SHEET FOR FURTHER NOTES

AMENDMENTS

REVISION	DATE	DESCRIPTION	BY	CHECKED	APPROVED
3	09/04/2015	DRAWING NO'S UPDATED, DWG AMENDED	SA	MB	MB
2	09/09/13	UPDATE DETENTION REFERENCE	SA	AT	MB
1	31/01/11	UPDATE TITLE BLOCK	GL	MB	MB

GENERAL NOTES

1. THIS DRAWINGS ALWAYS REMAINS THE PROPERTY OF THE CITY OF GOSNELLS AND MUST NOT BE RETAINED OR REPRODUCED WITHOUT PERMISSION
2. IN THE ABSENCE OF THE APPROVED SIGNATURE (ie MANAGER TECHNICAL SERVICES) THIS DRAWING SHALL BE TREATED AS PRELIMINARY
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

CITY OF GOSNELLS
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PO Box 662, GOSNELLS 6990
WESTERN AUSTRALIA
Telephone 08 9397 3000
Facsimile 08 9397 3333
Online www.gosnells.wa.gov.au

STANDARD DRAWING

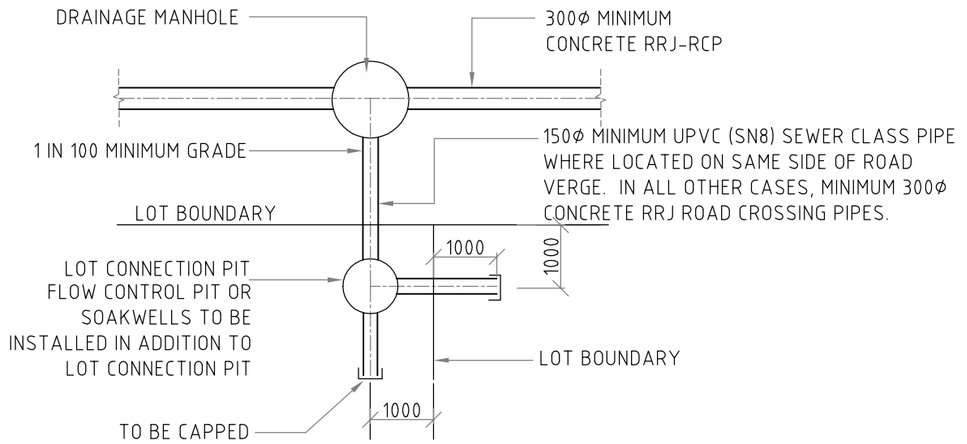
RESIDENTIAL STORMWATER DISPOSAL
CLAY/SILTY SANDY SOIL SITE ≥ 350m²

DESIGN MJJ/MB	DRAWN GL	DRAWING A3
SCALE NTS	CHECKED MB	DATE 07/04/09

STANDARD DRAWING NUMBER
ES-41

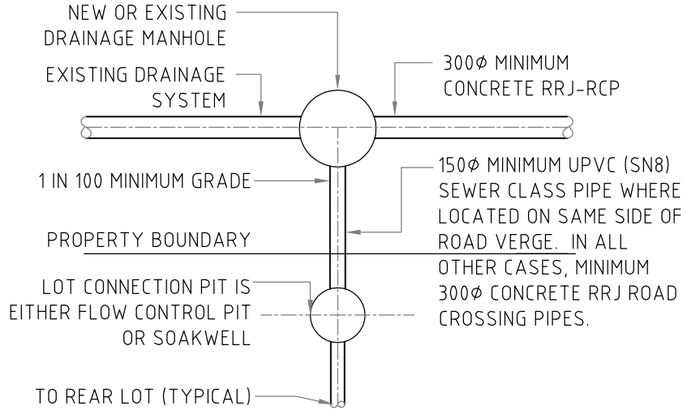
MANAGER TECHNICAL SERVICES
M.BOTTE 09/04/15
M. BOTTE

23/05/2017 10:50:28 AM S:\STANDARD DRAWINGS\ES-41 STORMWATER DISPOSAL - CLAY SITE.DWG



TYPICAL CONNECTION - MULTIPLE LOTS

N.T.S.



TYPICAL CONNECTION - SINGLE LOTS

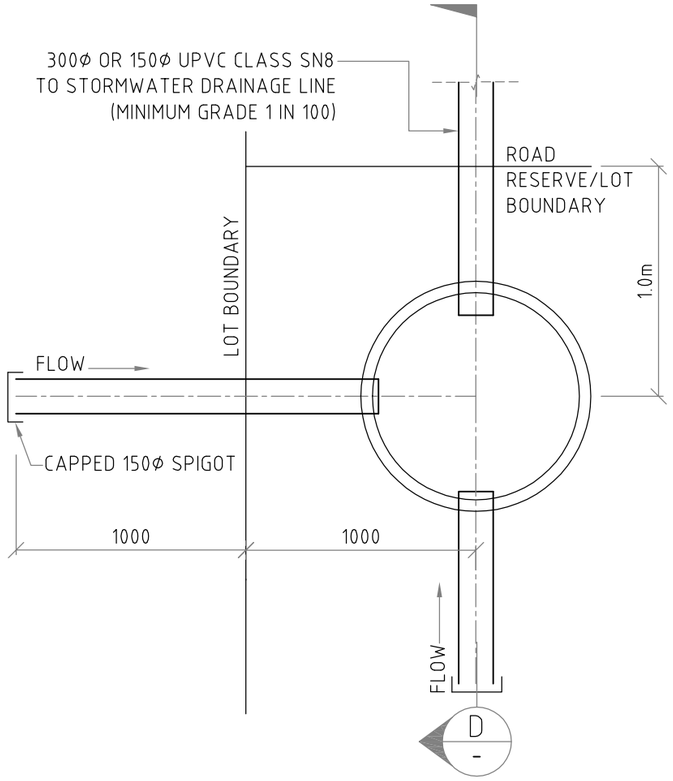
N.T.S.

LOT CONNECTION PIT DIAMETER SELECTION

DEPTH TO INVERT OF OUTLET PIPE	LOT CONNECTION PIT NOMINAL I.D. (mm)
800 TO 1300	900 MINIMUM - NO STEP IRONS
> 1300	1050 MINIMUM - STEP IRONS

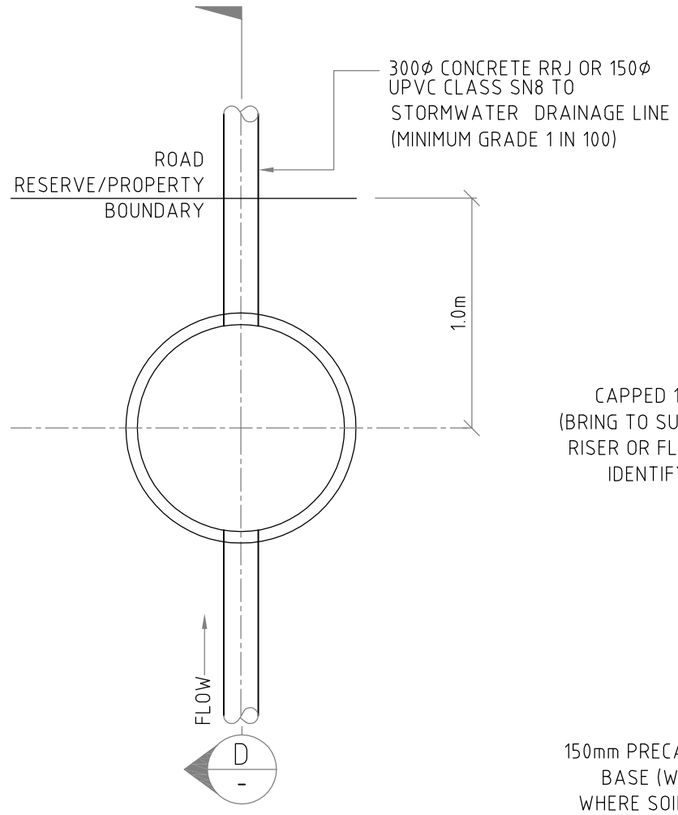
NOTES:

1. THE GRANTING OF AN EASEMENT - 2m x 2m MINIMUM, BENEFITING AND BURDENING THE APPROPRIATE LOTS, IS REQUIRED IN ALL SITUATIONS WHERE THE LOT CONNECTION IS PROVIDED FOR MULTIPLE PROPERTIES
2. TYPICALLY THE LOT CONNECTION PIT FOR CLAY / SILTY SANDY < SOILS SITES WILL BE A FLOW CONTROL PIT - REFER TO STANDARD DRAWING ES-40-3
3. TYPICALLY THE LOT CONNECTION PIT FOR SANDY SOIL SITES WILL BE A SOAKWELL - REFER TO STANDARD DRAWING ES-40-2
4. NEW MANHOLES TO BE INSTALLED IN ACCORDANCE WITH THE CITY'S' STANDARD SPECIFICATIONS - ES19-8



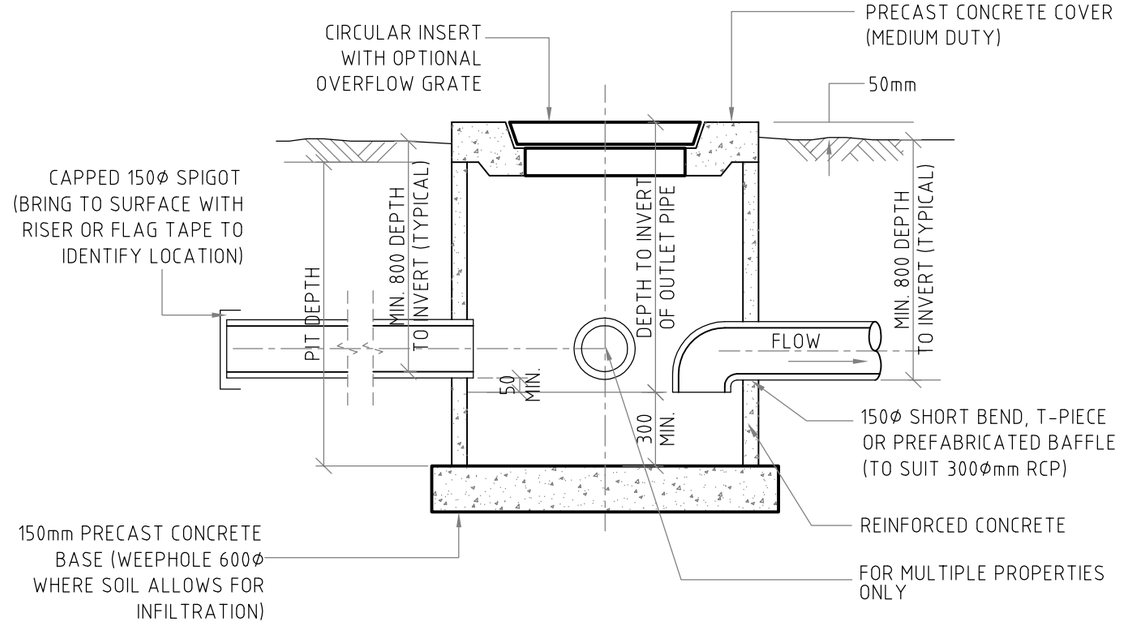
TYPICAL LOT CONNECTION PIT - MULTIPLE LOTS

N.T.S.



TYPICAL LOT CONNECTION PIT - SINGLE LOTS

N.T.S.



SECTION D-D

N.T.S.

AMENDMENTS

REVISION	DATE	DESCRIPTION	BY	CHECKED	APPROVED
2	09/04/2015	MULTIPLE LOTS CONNECTION PITS DETAILS ADDED	SA	MB	MB
1	31/01/11	UPDATE TITLE BLOCK	GL	MB	MB

GENERAL NOTES

1. THIS DRAWINGS ALWAYS REMAINS THE PROPERTY OF THE CITY OF GOSNELLS AND MUST NOT BE RETAINED OR REPRODUCED WITHOUT PERMISSION
2. IN THE ABSENCE OF THE APPROVED SIGNATURE (ie MANAGER TECHNICAL SERVICES) THIS DRAWING SHALL BE TREATED AS PRELIMINARY
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

CITY OF GOSNELLS
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PO Box 662, GOSNELLS 6990
WESTERN AUSTRALIA
Telephone 08 9397 3000
Facsimile 08 9397 3333
Online www.gosnells.wa.gov.au

STANDARD DRAWING

LOT CONNECTION

DESIGN	MJJ/MB	DRAWN	GL
SCALE	NTS	CHECKED	MB
DRAWING	A3	DATE	07/04/09

STANDARD DRAWING NUMBER
ES-50

MANAGER TECHNICAL SERVICES
M.BOTTE 09/04/15
M. BOTTE

ATTACHMENT 9

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

This Certificate has been issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme. The certificate details the conclusions of the full Bushfire Attack Level Assessment Report (full report) prepared by the Accredited Practitioner.

Property Details and Description of Works

Address Details	**Unit no** N/A	**Street no** 23	**Lot no** 317	**Street name / Plan Reference** Ballyronan Drive	
	Suburb Maddington			**State** WA	**Postcode** 6109
Local government area	City of Gosnells				
Main BCA class of the building	Class 1	**Use(s) of the building**	Childcare/Assembly		
Description of the building or works	Proposed Childcare Centre				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class A - Forest	Flat 0°	64 m	BAL-12.5

BPAD Accredited Practitioner Details

Name
Gearoid Fitzmaurice

Company Details
BPP Group Pty Ltd ABN 39 166 551 784

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

I hereby declare that I am a BPAD accredited bushfire practitioner.

Accreditation No. BPAD: 61156

Signature

Date 07/10/2025

Authorised Practitioner Stamp

Reliance on the assessment and determination of the Bushfire Attack Level contained in this certificate should not extend beyond a period of 12 months from the date of issue of the certificate. If this certificate was issued more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated certificate issued.

Local Government Use

BUSHFIRE PRONE PLANNING

Bushfire Attack Level Assessment Report

Produced Applying AS 3959:2018 Bushfire Attack Level Determination Methodology

Lot 317
23 Ballyronan Drive Maddington
Maddington

City of Gosnells

Report Date: 7 October 2025

Job Reference No: 250918

COMPANY AND BUSHFIRE CONSULTANT DETAILS	
BPP GROUP PTY LTD T/A BUSHFIRE PRONE PLANNING ACN: 39 166 551 784 | ABN: 39 166 551 784 SUITE 11, 36 JOHNSON STREET GUILDFORD WA 6055 PO BOX 388 GUILDFORD WA 6935 08 6477 1144 | admin@bushfireprone.com.au	I hereby declare that I am a BPAD accredited bushfire practitioner. Accreditation No. BPAD 61156 Signature Date 7 October 2025 *Authorised Practitioner Stamp*
Author:	Gearoid Fitzmaurice (BPAD Level 1 No.61156)
Reviewed:	Kathy Nastov (BPAD Level 3 No. 27794)

ASSESSMENT AND REPORT DETAILS			
Version	Details	Site Assessment Date	Report Date
1.0	Original	12 September 2025	7 October 2025
-	-		

Report Preparation: This report has been prepared by an accredited BPAD practitioner using the simplified BAL determination procedure (Method 1) as detailed in section 2 of AS 3959:2018

Warranty of the Accrediting Body: FPA Australia makes no warranties as to the accuracy of the information provided in the report. All enquiries related to the information and conclusions presented in this report must be made to the BPAD Accredited Practitioner.

Period of Validity: Reliance on the assessment and determination of the Bushfire Attack Level contained in this report should not extend beyond a period of 12 months from the date of issue of the report. If this report was issued more than 12 months ago, it is recommended that the validity of the determination be confirmed with the accredited practitioner and where required an updated report and/or BAL certificate issued.

Limitations: The protection measures that will be implemented based on information presented in this report are minimum requirements and they do not guarantee that buildings or infrastructure will not be damaged in a bushfire, persons injured, or fatalities occur either on the subject site or off the site while evacuating.

This is substantially due to the unpredictable nature and behaviour of fire and fire weather conditions. Additionally, the correct implementation of the required protection measures (including bushfire resistant construction) and any other required or recommended measures, will depend upon, among other things, the ongoing actions of the landowners and/or operators over which Bushfire Prone Planning has no control.

All surveys, forecasts, projections and recommendations made in this report associated with the proposed development or use are made in good faith based on information available to Bushfire Prone Planning at the time. All maps included herein are indicative in nature and are not to be used for accurate calculations.

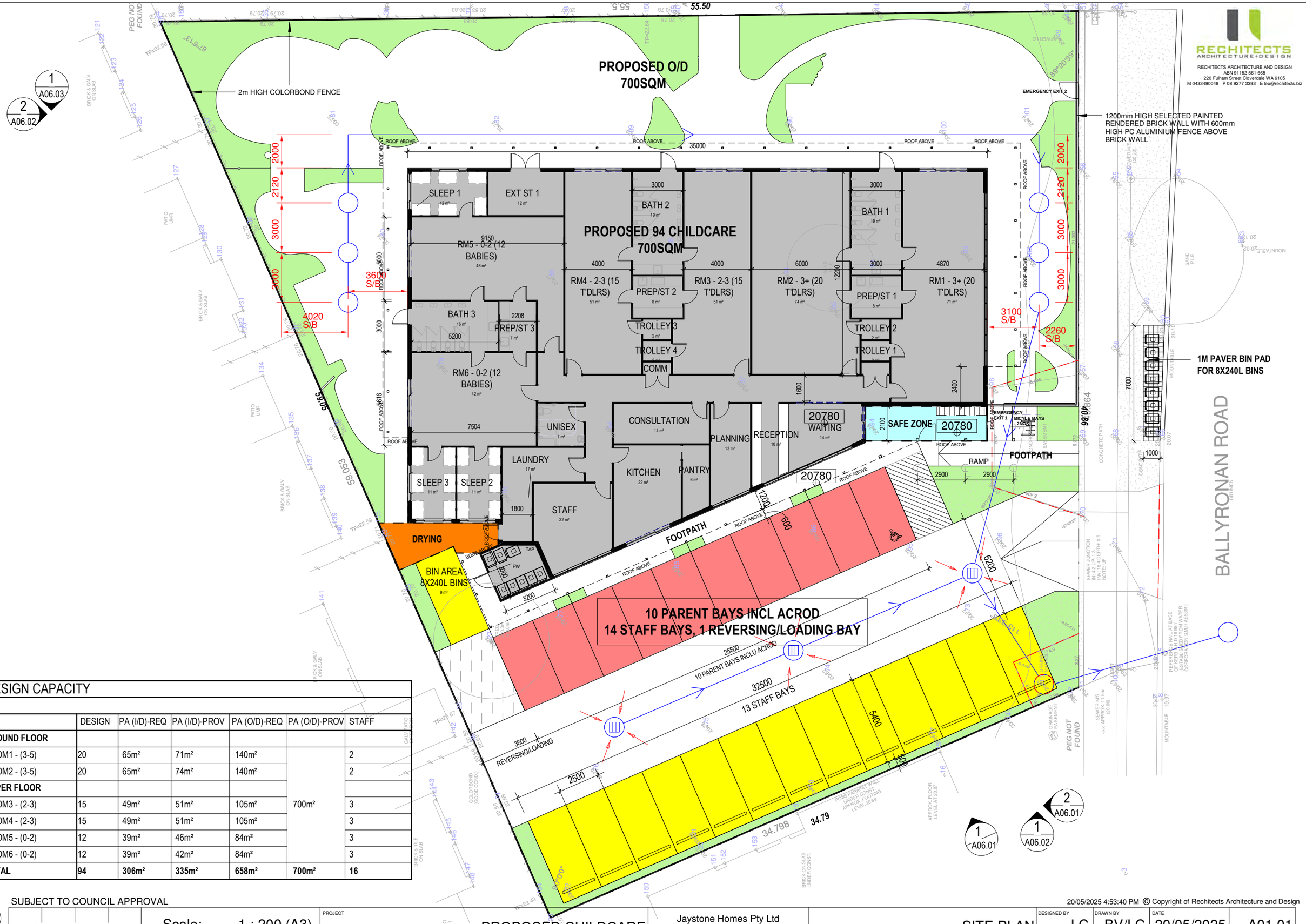
Notwithstanding anything contained therein, Bushfire Prone Planning will not, except as the law may require, be liable for any loss or other consequences whether or not due to the negligence of their consultants, their servants or agents, arising out of the services provided by their consultants.

TABLE OF CONTENTS

LIST OF FIGURES

1 PROPERTY DETAILS AND DESCRIPTION OF BUILDING WORKS OR USE

PROPERTY DETAILS	
Address Details	Lot 317 (23) Ballyronan Drive Maddington
Applicable Local Government	City of Gosnells
Total Area of Subject Lot	2157 m^2
REPORT PURPOSE	
This BAL (Bushfire Attack Level) report has been prepared for the purposes of fulfilling the owners' obligations under Part 10A of the Planning and Development (Local Planning Schemes) Regulations 2015.	
DESCRIPTION OF THE RELEVANT BUILDING(S) AND/OR PROPOSED WORKS AND/OR USE	
EXPLANATORY INFORMATION Note: A habitable building is defined in the *Planning and Development (LPS) Regulations 2015* to mean: A permanent or temporary structure on land that: (a) Is fully or partially enclosed; and (b) Has at least one wall of solid material and a roof of solid material; and (c) Is used for a purpose that involves the use of the interior of the structure by people for living, working, studying or being entertained.	
Existing Habitable Building(s)	N/A
Change of Use:	N/A
Primary Construction Works	Construction of a habitable building other than a single house or ancillary dwelling
Associated Construction Works	N/A
BCA Classification(s)	Class 9b (assembly building) N/A
Additional Description Details:	
Proposed Childcare centre.	



RECHITECTS ARCHITECTURE+DESIGN
RECHITECTS ARCHITECTURE AND DESIGN
ABN 91152 561 665
220 Fulham Street Cloverdale WA 6105
M 0433490048 P 08 9277 3393 E leo@rechitects.biz

DESIGN CAPACITY						
	DESIGN	PA (I/D)-REQ	PA (I/D)-PROV	PA (O/D)-REQ	PA (O/D)-PROV	STAFF
GROUND FLOOR						
ROOM1 - (3-5)	20	65m²	71m²	140m²		2
ROOM2 - (3-5)	20	65m²	74m²	140m²		2
UPPER FLOOR						
ROOM3 - (2-3)	15	49m²	51m²	105m²	700m²	3
ROOM4 - (2-3)	15	49m²	51m²	105m²		3
ROOM5 - (0-2)	12	39m²	46m²	84m²		3
ROOM6 - (0-2)	12	39m²	42m²	84m²		3
TOTAL	**94**	**306m²**	**335m²**	**658m²**	**700m²**	**16**

SUBJECT TO COUNCIL APPROVAL

2 4 6 8 M Scale: 1 : 200 (A3)

PROJECT

PROPOSED CHILDCARE
23 BALLYRONAN ROAD, MADDINGTON

Jaystone Homes Pty Ltd

SITE PLAN

DESIGNED BY	DRAWN BY	DATE	
LC	BV/LC	20/05/2025	A01.01

2 INFORMATION FOR LOCAL GOVERNMENT BUILDING SERVICES (& THE LANDOWNER)

BUSHFIRE ATTACK LEVELS (BAL) - UNDERSTANDING THE RESULTS

The potential transfer (flux/flow) of radiant heat from the bushfire to a receiving object is measured in kW/m^2. The AS 3959:2018 BAL determination methodology establishes the ranges of radiant heat flux that correspond to each bushfire attack level. These are identified as BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ.

The bushfire performance requirements for certain classes of buildings are established by the Building Code of Australia (Vol. 1 & 2 of the NCC). The BAL will establish the bushfire resistant construction requirements that are to apply in accordance with AS 3959:2018 - Construction *of buildings in bushfire prone areas* and the NASH Standard – *Steel framed construction in bushfire areas (NS 300 2021),* whose solutions are deemed to satisfy the NCC bushfire performance requirements.

DETERMINED BAL RATINGS

A BAL Certificate can be issued for a determined BAL. A BAL can only be classed as 'determined' for an existing or future building/structure when:

1. It's final design and position on the lot are known and the stated separation distance from classified bushfire prone vegetation exists and can justifiably be expected to remain in perpetuity; or

2. It will always remain subject to the same BAL regardless of its design or position on the lot after accounting for any regulatory or enforceable building setbacks from lot boundaries as relevant and necessary (e.g., R-codes, restrictive covenants, defined building envelopes) or the retention of any existing classified vegetation either onsite or offsite.

INDICATIVE BAL RATINGS

A BAL Certificate cannot be issued for an indicative BAL. A BAL will be classed as 'indicative' for an existing or future building/structure when the required conditions to derive a determined BAL are not met.

This class of BAL rating indicates what BAL(s) could be achieved and the conditions that need to be met are stated.

Converting the indicative BAL into a determined BAL is conditional upon the currently unconfirmed variable(s) being confirmed by a subsequent assessment and evidential documentation. These variables will include the future building(s) location(s) being established (or changed) and/or classified vegetation being modified or removed to establish the necessary vegetation separation distance. This may also be dependent on receiving approval from the relevant authority for that modification/removal.

2.1 BAL Assessment Summary (Contour Map Format)

INTERPRETATION OF THE BAL CONTOUR MAP

The BAL contour map is a diagrammatic representation of the results of the bushfire attack level assessment.

The map presents different coloured contours extending out from the areas of classified vegetation. Each contour represents a set range of radiant heat flux that potentially will transfer to an exposed element (building, person or other defined element), when it is located within that contour.

Each of the set ranges of radiant heat flux corresponds to a different BAL rating as defined by the AS 3959:2018 BAL determination methodology.

The width of each shaded BAL contour will vary dependant on both the BAL rating and the relevant parameters (calculation inputs) for the subject site. Their width represents the minimum and maximum vegetation separation distances that correspond to each BAL rating (refer to the relevant table below for these distances).

The areas of classified vegetation to be considered in developing the BAL contours, are those that will remain at the intended end state of the subject development once earthworks, clearing and/or landscaping and re-vegetation have been completed. Variations to this statement that may apply include:

- Both pre and post development BAL contour maps are produced; and/or

- Each stage of a development is assessed independently.

2.1.1 BAL Determination Method(s) Applied and the Location of Data and Results

Procedure Method (AS 3959:2018)	Applied to the BAL Assessment	Location of the Site Assessment Data			Location of the Results
		Site Assessment Map	Calculation Input Variables		Assessed Bushfire Attack Levels and/or Radiant Heat Levels
			Summary Data	Detailed Data with Explanatory and Supporting Information	
Method 1 (Simplified)	Yes	Figure 2	Table 1	Appendix A1	Table 1 Section 2.1.2
Method 2 (Detailed)	No	N/A	N/A	N/A	N/A

2.1.2 BAL Ratings Derived from the Contour Map

Table 3.1: Indicative and determined BAL(s) for existing and/or proposed building works.

BUSHFIRE ATTACK LEVEL FOR EXISTING/PLANNED BUILDINGS/STRUCTURE [1]		
Building/Structure Description	Indicative BAL [2]	Determined BAL [2]
Childcare Centre	N/A	BAL-12.5

[1] The assessment data used to derive the BAL ratings is sourced from Table 1 and Figure 2.

[2] Refer to the start of Section 3 for an explanation of indicative versus determined BAL ratings.

2.1.3 Identification of Shielded Elevations

IDENTIFICATION OF SHIELDED ELEVATION(S) – REDUCTION IN CONSTRUCTION REQUIREMENTS		
In accordance with AS 3959:2018 Clause 3.5, where an elevation is not exposed to the source of bushfire attack, the construction requirements for that elevation can reduce to the next lower BAL, but not below BAL-12.5. This shall apply to all elements of the wall, including openings, but shall not apply to subfloors or roofs. When applicable, the shielded elevation(s) are identified on the site plan when practical, otherwise a separate diagram is provided as an addendum.		
Proposed Building Works	Childcare Centre	The shielding provisions cannot be applied.

Figure 2

Classified Vegetation & Topography (Existing)

Lot 317
23 Ballyronan Drive Maddington
Maddington
City of Gosnells

------ LEGEND ------

- Subject Site
- Cadastral
- Hydrants
- Childcare Centre
- Vegetation Distance (m)
- 150m Assessment Area
- 100m Assessment Area

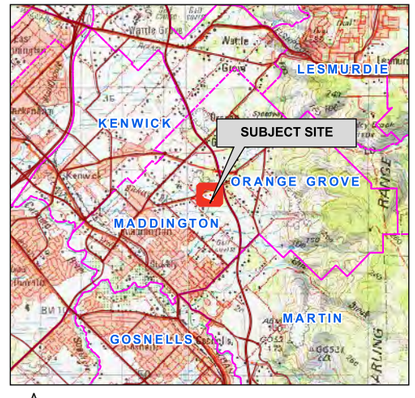
Classified Vegetation

- Forest
- Excluded 2,2,3,2 (e)

0 20 40 60 80 100

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

N

BUSHFIRE PRONE PLANNING

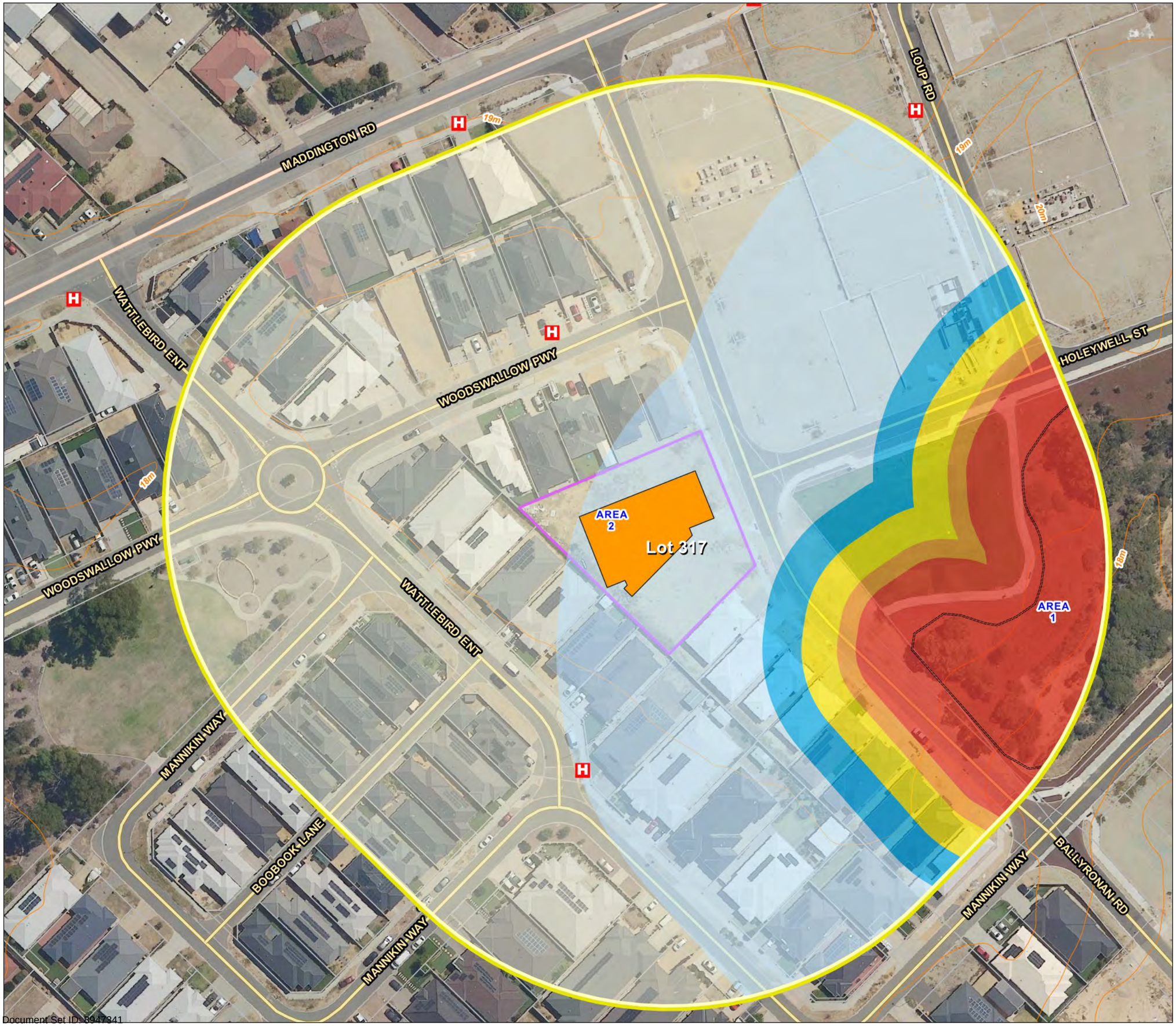
Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: 07-10-2025
SCALE (A3): 1 : 1550

250918 -FIG2VEG Ballyronan Drive Maddington.qgz

Figure 3

BAL Contour Map

Lot 317
23 Ballyronan Drive Maddington
Maddington
City of Gosnells



------ LEGEND ------

- Subject Site
- Cadastral
- Hydrants
- Childcare Centre
- 100m Assessment Area

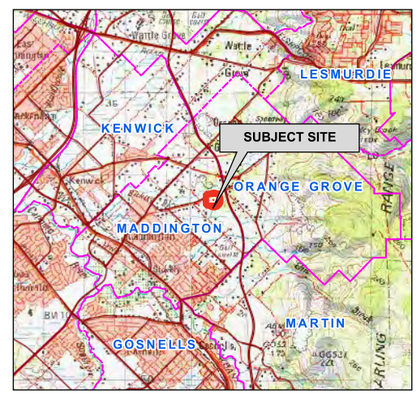
Bushfire Attack Levels

- BAL-FZ
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5
- BAL-LOW
- BAL VEG Edge and Label

0 10 20 30 40 50

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: 07-10-2025
SCALE (A3): 1 : 1000

BUSHFIRE PRONE PLANNING

250918 -FIG3 BALCON Ballyronan Drive Maddington.qgz

2.1.6 Site Assessment Data Applied to Construction of the BAL Contour Map(s)

RELEVANT CLASSIFIED VEGETATION	
Identification of Classified Vegetation that is Relevant to the Production of the BAL Contour Map(s)	Relevant Map
All identified areas of classified vegetation that exist at the time of the site assessment – both within the subject site (onsite) and external to the subject site (offsite) will be the relevant vegetation.	Figure No.2
Supporting Assessment Details: None required.	

Table 2: Vegetation separation distances corresponding to the stated levels of potential radiant heat transfer.

THE CALCULATED (SITE SPECIFIC) VEGETATION SEPARATION DISTANCES CORRESPONDING TO THE STATED LEVEL OF POTENTIAL RADIANT HEAT TRANSFER (METRES) [1]									
Vegetation Classification		Maximum Radiant Heat Transfer (Flux)							
		>40 kW/m²	40 kW/m²	29 kW/m²	19 kW/m²	12.5 kW/m²	N/A [2]	10 kW/m²	2 kW/m²
		Bushfire Attack Levels							
Area	Class	BAL-FZ	BAL-40	BAL-29	BAL-19	BAL12.5	BAL-LOW		
1	(A) Forest	<16	16-<21	21-<31	31-<42	42-<100	>100		
2	Excluded cl 2.2.3.2(e & f)	N/A	N/A	N/A	N/A	N/A	N/A		

Note 1: The calculated results are illustrated in Figure 3 as a BAL Contour Map and/or additional defining lines as necessary. All applied calculation input variables are presented in Table 1. A copy of the radiant heat calculator output for each area of classified vegetation is presented in Appendix A3.

Note 2: The BAL-LOW rating does not represent a maximum level of radiant heat transfer. The rating is applied when the separation distance is at least 100m from all classified vegetation except Grassland, for which 50m applies.

3 INFORMATION FOR LOCAL GOVERNMENT PLANNING & DEVELOPMENT (& THE LANDOWNER)

APPENDIX A: BAL ASSESSMENT DATA (DETAILED) AND SUPPORTING INFORMATION

A1: Assessed Site Inputs Common to the Method 1 and Method 2 Procedures

A1.1: FIRE DANGER INDICES (FDI/ FDI/GFDI)

When using Method 1 the relevant FDI value required to be applied for each state and region is established by AS 3959:2018, Table 2.1. Each FDI value applied in Tables 2.4 – 2.7 represents both the Forest Fire Danger Index (FFDI) and a deemed equivalent for the Grassland Fire Danger Index (GFDI), as per Table B2 in Appendix B. When using Method 2, the relevant FFDI and GFDI are applied.

The values may be able to be refined within a jurisdiction, where sufficient climatological data is available and in consultation with the relevant authority.

Relevant Jurisdiction:	WA	Region:	Whole State	Method 1	Applied FDI:	80
				Method 2	Applied FFDI:	N/A
					Applied GFDI:	N/A

A1.2: VEGETATION ASSESSMENT AND CLASSIFICATION

Vegetation Types and Classification

In accordance with AS 3959:2018 clauses 2.2.3 and C2.2.3.1, all vegetation types within 100 metres of the 'site' (defined as "the part of the allotment of land on which a building stands or is to be erected"), are identified and classified. Any vegetation more than 100 metres from the site that has influenced the classification of vegetation within 100 metres of the site, is identified and noted. The maximum excess distance is established by AS 3959: 2018 cl 2.2.3.2 and is an additional 100 metres.

Classification is also guided by the Visual Guide for Bushfire Risk Assessment in WA (WA Department of Planning February 2016) and any relevant FPA Australia practice notes.

Modified Vegetation

The vegetation types have been assessed as they will be in their natural mature states, rather than what might be observed on the day. Vegetation destroyed or damaged by a bushfire or other natural disaster has been assessed on its expected re-generated mature state. Modified areas of vegetation can be excluded from classification if they consist of low threat vegetation (refer to Appendix B) and that any required active management can be expected to continue in perpetuity, and this can be adequately justified.

The Influence of Ground Slope

Where significant variation in effective slope exists under a consistent vegetation type, these will be delineated as separate vegetation areas to account for the difference in potential bushfire behaviour, in accordance with AS 3959:2018 clauses 2.2.5 and C2.2.5.

THE INFLUENCE OF VEGETATION GREATER THAN 100 METRES FROM THE SUBJECT SITE	
Vegetation area(s) within 100m of the site whose classification has been influenced by the existence of bushfire prone vegetation from 100m – 200m from the site:	None
Assessment Statement:	No vegetation types exist close enough, or to a sufficient extent, within the relevant area to influence classification of vegetation within 100 metres of the subject site.

VEGETATION AREA 1						
Classification	A. FOREST					
Types Identified	Open forest A-03					
Exclusion Clause	N/A					
Effective Slope	Measured	flat 0 degrees	Applied Range (Method 1)	Upslope or flat 0 degrees		
Foliage Cover (all layers)	30-70%	Shrub/Heath Height	1-2m	Tree Height	6-8m	
Dominant & Sub-Dominant Layers	Mixed eucalyptus species as part of a remnant native wetland.					
Understorey	Scattered melaleuca and planted species such as eucalyptus and grevillea.					
Justification Comments:	Not Required.					
Post Development Assumptions:	None required.					

PHOTO ID: 1

PHOTO ID: 2

PHOTO ID: 3

PHOTO ID: 4

VEGETATION AREA 2	
Classification	N/A
Exclusion Clause	2.2.3.2 (e) Non-vegetated areas and (f) Low threat vegetation - minimal fuel condition.
Justification Comments:	Areas include managed lawns and verges. Neighbouring vacant lots currently being developed for residential lots which is not shown in the aerial imagery (Photo 7).
Post Development Assumptions:	Subject site to remain managed to low threat state in perpetuity.

PHOTO ID: 5

PHOTO ID: 6

PHOTO ID: 7

PHOTO ID: 8

A1.3: EFFECTIVE SLOPE

EXPLAINING THE ASSESSMENT METHODOLOGY APPLIED BY BUSHFIRE PRONE PLANNING

DEFINITION: Effective slope is "the slope under that classified vegetation which most influences the bushfire attack" (AS 3959:2018, Clause 1.5.11).

"The effective slope under the classified vegetation is not the same as the average slope for the land surrounding the site of the proposed building. The effective slope is that slope which most significantly influences bushfire behaviour" (AS 3959:2018, Clause CB4).

The slope is described as upslope, flat or downslope when viewed from an exposed element (e.g., building) and looking towards the vegetation. It is measured in degrees.

[Note: Additional relevant guidance provided by AS 3959:2018 and NSW RFS, Planning for Bushfire Protection (2019) is incorporated into the applied assessment methodology and is presented at the end of this explanation.]

COMPOUND SLOPES UNDER VEGETATION AND DETERMINING SLOPE SIGNIFICANCE

Non-Linear Slopes: When the slope of ground under the vegetation out to the distance to be assessed (100 m or further if necessary), is not a straight line or nearly straight line slope, then it is made up of several different slopes i.e., it is a compound slope. The different slope angles and lengths must be factored into the determination of the effective slope value to be applied. Different slopes will potentially influence the bushfire rate of spread and intensity, both increasing and decreasing it.

Significant Slope: The AS 3959:2018 bushfire attack level determination methodology, with default inputs, models a fully developed bushfire. Therefore, a 'significant' slope is one that will significantly influence bushfire behaviour. To be 'significant' the length of the slope must be 'sufficient' to support a fully developed fire on that slope. The angle of a significant slope could be the determined effective slope for the area of classified vegetation if it is the one that 'most influences the bushfire attack'.

Sufficient Slope Length: Is a slope that will, as a minimum, allow the entire flame depth (flaming zone) of a fully developed fire (100m flame width) to exist on that slope.

The expected flame depth of a fully developed bushfire is a function of the length of time the flaming phase will exist on a section of the fuel bed (the 'residence time') and the bushfire's 'rate of spread'. For a given rate of spread, longer residence times result in greater flame depths. Greater flame depths are correlated with greater flame temperatures and greater flows of radiant heat.

The primary factors that will increase the residence time are:

- Heavier fine fuel loads of grass, leaf litter, twigs, bark etc less than 6mm in width and existing within the surface and near surface layers (and elevated fuel layers when contiguous with the base layers); and
- A greater percentage of larger fine fuels within the fuel load.

The primary factors that increase the rate of spread (apart from fire weather factors), include finer fuels, drier fuels, horizonal continuity of fuel and steeper upward ground slope in the direction of fire travel.

Example values:

- Residence Time: Grassfire 5 – 15 seconds, Forest fire 25 -50 seconds.
- Rate of Spread: Grassfires of a few km/hr are considered fast moving, 5-10 km/hr is common and fastest in the order of 25km/hr. Forest fire typically recorded in metres/hour with 1-1.5 km/hr being considered fast moving and fastest in the order of 3–4 km/hr.
- Flame Depth: More typically, a few metres for grasses to tens of metres for forest fires.

An Isolated Slope: For scenarios where there is a single significant slope (based on the above criteria) additional consideration would need to be given to the time and distance consumed by a bushfire still in its 'developing' phase. This will require due consideration be given to how it is potentially ignited i.e., from a single or multiple points, as this will influence the time and distance required to fully develop. For such scenarios, a normally significant slope may not be sufficiently long. It may be necessary to determine the potential bushfire impact more accurately by

justifying the application of a lesser effective slope, or a lower threat vegetation classification, or calculating a reduced head fire width (using short fire run modelling).

Determined Effective Slope: Only a 'significant' slope can potentially be the effective slope by itself. In which case, for a defined area of classified vegetation area, the worst significant slope under that vegetation is to apply.

The table below presents Bushfire Prone Planning's considerations applied to assessing short and/or compound slopes in determining the effective slope.

Slope Length (m)	Considered a Significant Slope	Considerations in Determining the Effective Slope
< 5	No	Where these short slopes exist as part of a compound slope under an area of classified vegetation, they can be ignored as they will not influence the fire behaviour in that vegetation.
5-20	No	These slopes will have a range of influence on fire behaviour from very little to a degree of influence that must be accounted for to some extent by the determined effective slope that is applied (i.e., with a greater length apply to a greater extent). But the actual slope of these shorter slopes is likely not to be applied as it is not a 'significant' length.
20-30	Maybe	The same considerations applied to the 5-20m slope lengths should be applied here. However, more justification would need to be presented to support their assessment as not being 'significant' slopes. For these slope lengths, consideration must be given more broadly to the potential level of risks associated with a bushfire event in this location. The risk level will be a function of the bushfire hazard threat levels (direct attack mechanisms) within the immediate and broader assessment area as influenced by local topography, vegetation extents and types and the exposure and vulnerability of persons and/or buildings/structures to these threats. Higer risk levels require greater precaution meaning these slopes should be considered 'significant', and vice versa. Consider the potential for a bushfire on adjoining or nearby land be a source of ignition and/or pre-heating to vegetation on the subject slope. Consider if vegetation on the slope is likely be ignited by a single ignition point or is multipoint ignition possible from bushfire an adjoining slopes or the surrounding area. Single point ignition will require a fire to travel further before being fully developed (DFES considers less than 100m fire runs may be considered a short fire run for forest, woodland and scrub vegetation classifications, RFS NSW applies 150m). Isolated slopes of this length are less likely to be considered significant as compared to when part of a compound slope.
>30	Yes	Likely to always be a significant slope unless isolated (i.e., exists alone) – in which case, justifying the application of a lesser effective slope, or a lower threat vegetation classification, or calculating a reduced head fire width, are approaches that may need to be applied.

BPP Approach - Slope Variation Within Areas of Vegetation

When multiple 'significant' slope lengths with large differences in degrees of effective slope (or different applicable slope ranges when AS 3959:2018 Method 1 is applied), exists under a single vegetation classification, these will be delineated as separate vegetation areas of classified vegetation to account for the difference in potential bushfire behaviour and impact, in accordance with AS 3959:2018 clauses 2.2.5 and C2.2.5.

Effective Slope Variation Due to Multiple Development Sites

When the effective slope, under a single area of bushfire prone vegetation, will vary significantly relative to multiple proposed development sites (exposed elements), then the effective slopes corresponding to each of the different

locations, are separately identified. The relevant (worst case) effective slope is determined in the direction corresponding to the potential directions of fire spread towards the subject building(s).

AS 3959:2018 EFFECTIVE SLOPE DETERMINATION - GUIDANCE

The Standard presents a broad set of guidance statements that indicate the intent of deriving an effective slope value for use in calculations, rather than detailing the 'in the field' determination process. These include:

- Highlighting the importance of the value by stating "The slope of the land under the classified vegetation has a direct influence on the rate of fire spread, the severity of the fire and the ultimate level of radiant heat flux" (Clause C2.2.5). [Note: A common rule of thumb is that for every 10 degrees of upslope, a fire will double its rate of spread if moving in the direction of the prevailing wind].
- It may be necessary to consider the slope under the classified vegetation for distances greater than 100 m in order to determine the effective slope for that vegetation classification.
- "Where there is more than one slope within the classified vegetation, each slope shall be individually assessed, and the worst case Bushfire Attack Level shall apply" (Clause 2.2.5).

NSW RFS 2019, PLANNING FOR BUSHFIRE PROTECTION - APPENDIX A1.5 - ADDITIONAL DETERMINATION GUIDANCE

- "In identifying the effective slope - it may be found that there are a variety of slopes covering different distances within the vegetation. The effective slope is considered to be the slope under the vegetation which will most significantly influence the bushfire behaviour for each aspect. This is usually the steepest slope. In situations where this is not the case, the proposed approach must be justified".
- "Vegetation located closest to an asset may not necessarily be located on the effective slope".

SITE ASSESSMENT DETAILS - EXPLANATION & JUSTIFICATION

The effective slopes determined from the site assessment are recorded in Table 1 of this Bushfire Management Plan.

When their derivation requires additional explanation and justification, this is provided below.

For the subject site additional information is not required.

A1.4: SEPARATION DISTANCE

Measuring

The separation distance is the distance in the horizontal plane between the receiver (building/structure or area of land being considered) and the edge of the classified vegetation (AS 3959:2018, clause 2.2.4)

The relevant parts of a building/structure from which the measurement is taken is the nearest part of an external wall or where a wall does not exist, the supporting posts or columns. Certain parts of buildings are excluded including eaves and roof overhangs.

The edge of the vegetation, for forests and woodlands, will be determined by the unmanaged understorey rather than either the canopy (drip line) or the trunk (AS 3959:2018, clause C2.2.5).

Measured Separation Distance as a Calculation Input

If a separation distance can be measured because the location of the building/structure relative to the edge of the relevant classified vegetation is known, this figure can be entered into the BAL calculation. The result is a determined BAL rating.

Assumed Separation Distance as a Calculation Input

When the building/structure location within the lot is not known, an assumed building location may be applied that would establish the closest positioning of the building/structure relative to the relevant area of vegetation.

The assumed location would be based on a factor that puts a restriction on a building location such as:

- An established setback from the boundary of a lot, such as a residential design code setback or a restrictive covenant; or
- Within an established building envelope.

The resultant BAL rating would be indicative and require later confirmation (via a Compliance Report) of the building/structure actual location relative to the vegetation to establish the determined BAL rating.

SITE ASSESSMENT DETAILS - EXPLANATION & JUSTIFICATION

Measured and assumed separation distances determined from the site assessment are recorded in Table 1 (Section 2.1.5) of this report and illustrated in Figure 2 (Section 2.1.4)

When their derivation requires additional explanation and justification, including when the relevant R-Code or other regulated building setbacks are being applied, this is provided below.

For the subject site additional information is not required.

B1: The Asset Protection Zone (APZ)

THE APZ – DESCRIPTION, DIMENSION AND TECHNICAL REQUIREMENTS

DESCRIPTION AND PURPOSE

An asset protection zone (APZ) is an area surrounding a habitable or specified building that is not vegetated and/or supports retained or planted vegetation that can be considered to present a low bushfire threat as a result of flammability and/or moisture content characteristics and/or minimal fuel loads (either naturally or as a result of continual maintenance).

The primary objectives of establishing an APZ are to ensure:

- A reduction in the exposure of the building/structure to bushfire direct attack mechanisms (threats) of flame contact, radiant heat transfer and ember attack, by establishing appropriate separation from each area of classified vegetation. [The required APZ dimensions will be dependent on site specific conditions and the use of the site and are measured from the nearest part of an external wall and/or supporting posts of building parts without external walls]; and
- A reduction in the exposure of the building/structure to bushfire indirect attack mechanisms (threats) by:
    - Preventing surface fire spreading to the building/structure;
    - Minimising the potential for tree strike; and
    - Limiting the potential for consequential fire to impact the building/structure by eliminating, reducing and/or shielding consequential fire fuels. These fuels include accumulated debris, stored combustible/flammable items and constructed combustible items. Consequential fire, typically ignited by embers, is the primary cause of building loss in a bushfire event; and
- To provide a defendable space for firefighting activities.

DIMENSIONS

Established by the Guidelines

No APZ dimensions are established by the Planning for Bushfire Guidelines, DPLH/WAPC (as amended). The Guidelines are intended to inform the application of State bushfire planning policy. For planning approval purposes, it only needs to be demonstrated that a BAL-29 dimensioned APZ can be appropriately established, surrounding a building/structure for the specific development site conditions.

For certain vulnerable land uses, evidence of the ability to implement a larger APZ may be required to inform planning decisions. These include dimensions corresponding to radiant heat impact levels of 10 kW/m^2 and/or 2 kW/m^2 and calculated using a flame temperature of 1200 K rather than 1090 K.

Established by the 'Determined' BAL Rating

The dimensions of the APZ that will be the responsibility of a landowner to implement and maintain around a habitable or specified building - to align the building's bushfire resistance construction level, to its level of exposure to flames, radiant heat and embers - will be those corresponding to the building's 'determined' BAL rating.

This rating will account for the relevant physical characteristics of a specific site and the applicable building's separation distance from classified vegetation, the type of vegetation it is exposed to and the slope of the ground supporting that vegetation.

Variations to these dimensions (i.e. vegetation separation distances) will only exist as the result of either:

- A requirement presented within an associated Bushfire Management Plan to increase the size of the APZ as part of a required additional protection measure; or
- A directive of the relevant Local Government through their annual notice, issued under s.33 of the Bushfires Act 1954 (see below), that results in a larger dimension.

Established by the Relevant Local Government

To satisfy the local governments requirements, a required APZ dimension may be stated in the notice issued annually by the relevant local government under s.33 of the Bushfires Act 1954 (e.g. Bushfire Risk Reduction Notice or Firebreak and Hazard Reduction Notice etc).

For certain vegetation/sites, based on environmental considerations, a maximum allowable dimension may be established, typically that corresponding to a BAL-29 rating for the relevant building – which will vary in response to the site specific conditions.

The existence of any such restrictions is information that would need to be sought from the relevant local government planning department.

TECHNICAL REQUIREMENTS

Established by the Guidelines

The relevant technical requirements for an APZ are established in the Planning for Bushfire Guidelines (DPLH/WAPC) (as amended), Appendix B2: Siting and design and available online at Planning WA - SPP 3.7 Bushfire

Established by the Relevant Local Government

Refer to the notice issued annually by the relevant local government under s33 of the Bushfires Act 1954 (e.g. Bushfire Risk Reduction Notice or Firebreak and Hazard Reduction Notice etc). It may state technical requirements that vary from and/or are additional to those established by the Guidelines to be complied with. Refer to the ratepayer notice and/or the local government's website for the current version.

The local government's technical requirements may be established by their gazetted local planning scheme.

B2: Vegetation Excluded from Classification – Ensure Continued Low Threat Status

MAINTAINING THE LOW THREAT STATUS OF EXCLUDED VEGETATION

When applying AS 3959:2018 BAL determination methodology, vegetation adjoining or adjacent to the subject site can be excluded from classification based on being a 'low bushfire threat'. To maintain this status, certain requirements must continue to be met in accordance with the below extract from AS3959:2018. Refer to the 'Classified Vegetation and Topography Map' for the relevant low threat areas associated with the subject site.

Determination of 'low threat' vegetation is based on factors such as - proximity to the subject site / small areas of vegetation / low flammability / higher moisture content / low fuel load.

Aside from a naturally occurring low fuel load, vegetation maintained in a minimal fuel condition through active management can be excluded. The associated key requisite is that the active management can be expected to continue in perpetuity, and this can be adequately justified.

Acceptable forms of justification typically involve supportable evidence or the existence of an enforceable mechanism. Examples of enforceable mechanisms include:

- Requirements established by a Section 33 (Bush Fires Act 1954) notice issued by a local government;
- An appropriate and enforceable agreement between relevant parties (which may involve additions to land titles); and
- For public open space or crown land, written evidence that the land manager e.g. local government or a State Government department, agrees to maintain the designated area of land in a low threat state in perpetuity.

2.2.3.2 *Exclusions—Low threat vegetation and non-vegetated areas*

The following vegetation shall be excluded from a BAL assessment:

(a) Vegetation of any type that is more than 100 m from the site.

(b) Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified vegetation.

(c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other or of other areas of vegetation being classified vegetation.

(d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified vegetation.

(e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops.

(f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition, mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTES:

1 Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100 mm).

2 A windbreak is considered a single row of trees used as a screen or to reduce the effect of wind on the leeward side of the trees.

B3: BAL Ratings – Corresponding Threats and Construction References

BAL [1]	DESCRIPTION OF PREDICTED BUSHFIRE DIRECT ATTACK MECHANISMS (THREATS) AND LEVELS OF EXPOSURE	REFERENCES FOR CONSTRUCTION REQUIREMENTS	
		AS 3959:2018 Construction of Buildings in Bushfire Prone Areas	The NASH Standard (2021) – Steel Framed Construction in Bushfire Areas
		Referenced by the Building Code of Australia for Building Classes 1, 2, 3 & 10a	Referenced by the Building Code of Australia for Building Classes 1 & 10a
BAL – LOW	There is insufficient risk to warrant specific construction requirements but there is still some risk. *(Note: DFES recommend that ember attack protection features be incorporated into the design where practicable).*	Section 4. No Requirements	No Requirements
BAL – 12.5	There is a risk of ember attack. Construction elements are expected to be exposed to heat flux not greater than 12.5 kW/m^2	Sections 3 & 5.	All construction requirements for BAL-12.5 to BAL-40 are the same except for windows and external doors, which must comply with AS 3959. The construction requirements are set out as essentially non-combustible construction systems for each of the following building elements: Section 1.4: General Requirements Section 2: Roof and Ceiling System Section 3: External Wall System Section 4: Floor System Section 5: Carports Verandahs and Decks.
BAL – 19	There is a risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 19 kW/m^2.	Sections 3 & 6	
BAL – 29	There is an increased risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to an increased level radiant heat. The construction elements are expected to be exposed to heat flux not greater than 29 kW/m^2.	Sections 3 & 7.	
BAL – 40	There is a much-increased risk of ember attack and burning debris ignited by windborne embers, a likelihood of exposure to a high level of radiant heat and some likelihood of direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux not greater than 40kW/m^2.	Sections 3 & 8.	
BAL – FZ (Flame Zone)	There is an extremely high risk of ember attack and burning debris ignited by windborne embers, and a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux greater than 40 kW/m^2.	Sections 3 & 9.	The construction requirements are set out in Sections 1-5 and differ from the requirements for all other BAL ratings.

[1] AS 3959:2018 *Construction of buildings in bushfire prone areas,* defines a Bushfire Attack Level (BAL) as a *"means of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact, using increments of radiant heat flux expressed in kW/m^2, and is the basis for establishing the requirements for construction to improve protection of building elements from attack by bushfire."*

B4: BAL Contour Map Interpretation

THE BAL CONTOUR MAP
Caution! Future building works require a 'determined' BAL rating for building permit applications. When a BAL contour map is being used for planning assessment purposes, (as opposed to a building assessment purpose), the required 'determined' BAL rating typically is not able to be derived from the map (there are only limited scenarios where this is possible). *The BAL ratings identified from the map will more likely be only 'indicative' of what can be achieved – with planning compliance for this factor being achieved when BAL-29 is indicated.* *Otherwise, an additional assessment of the site data for building application purposes is required, and potentially approval will need to be obtained for native vegetation modification and/or removal from the relevant authority.* The Bushfire Attack Level (BAL) contour map, when used, is a diagrammatic representation of the results of the bushfire attack level assessment that has been conducted. It presents different coloured contours extending out from the different areas of classified vegetation. Each contour represents a set range of radiant heat, corresponding to the BAL rating as defined by the AS 3959:2018 BAL determination methodology. When an exposed element (building, person or other defined element), is fully or partly located within a specific contour, it is potentially subject to the corresponding level of radiant heat transfer. The width of each coloured BAL contour is dependent on both the BAL rating it represents, and the relevant site specific calculation inputs and will vary. It represents the minimum and maximum vegetation separation distances that correspond to each BAL rating for that site. For post development BAL contour maps, the areas of classified vegetation applied to the production of the BAL contours, are those that will remain at the intended end state of the subject development once earthworks, clearing and/or landscaping and/or re-vegetation have been completed.

PART C – OTHER BUSINESS

1. State Administrative Tribunal Applications and Supreme Court Appeals

2. Meeting Closure