Proposed Development

4 CARIGNANE ST WYNN VALE SA 5127

PlanSA



APPLICATION NUMBER

26017026

NATURE OF DEVELOPMENT

Construction of a Child care facility (108 places), Alterations to existing Educational facility including demolition of an existing car park and construction of a new staff car park, Signage, Retaining walls, Fencing, plus associated landscaping

VIEW THE PLANS AND HAVE YOUR SAY ON THE APPLICATION

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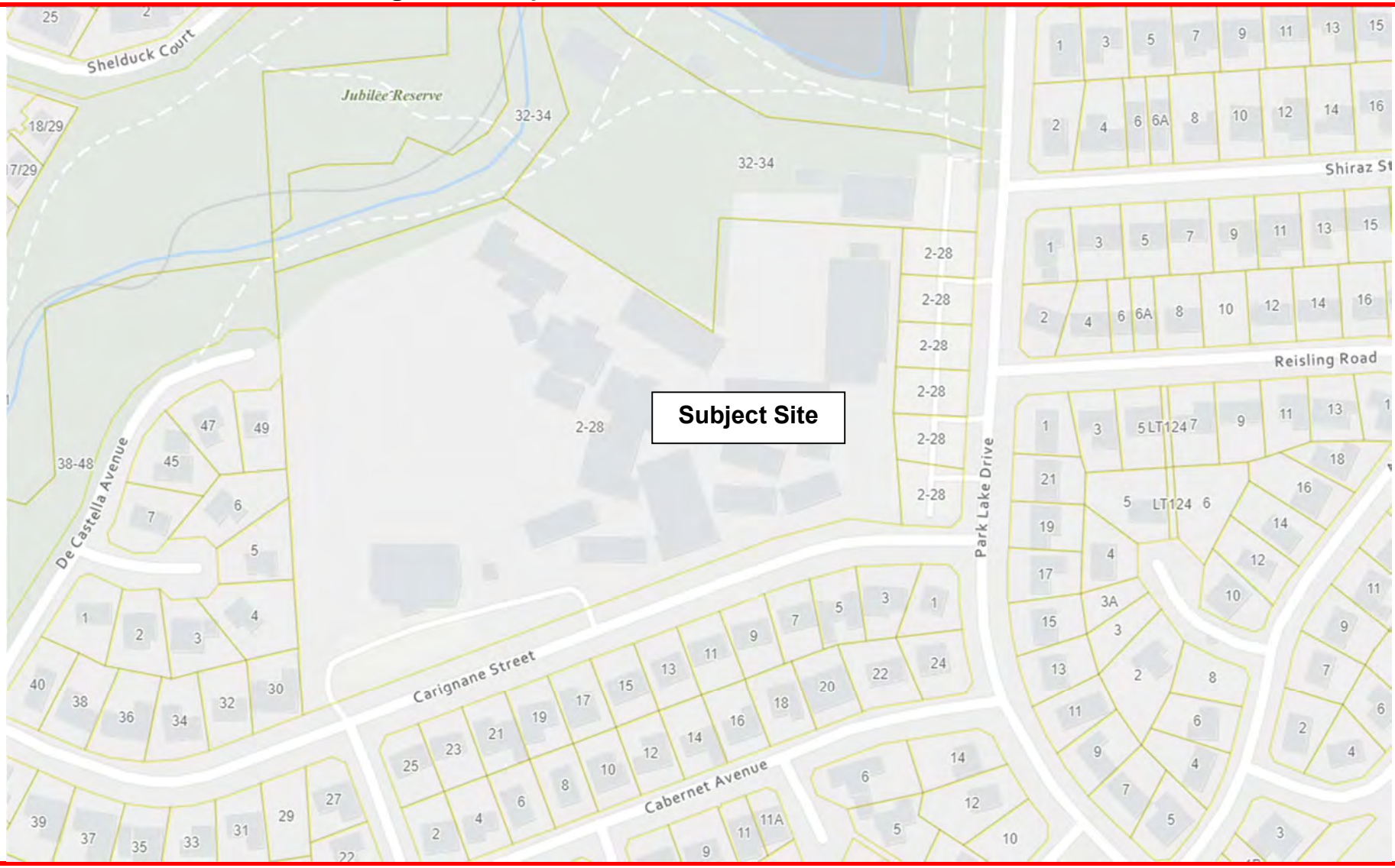
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Public Notification – 26017026 - 4 Carignane St Wynn Vale



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ekistics

Wynn Vale Childcare Centre

Planning Statement

August 2026

REF#01697-001

ACKNOWLEDGEMENT TO COUNTRY

Ekistics respectfully acknowledges the traditional owners and custodians of the land on which we work and we pay our respects to Elders past and present.

PROPRIETARY INFORMATION STATEMENT

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Revision	Description	Author	Date
DRAFT	Planning Statement	JB	January 2026
R1	Reviewed/Settled Planning Statement	RG	23 February 2026
R2	Amended Draft	JB	18 March 2026
DRAFT	Amended Draft	JB	25 May 2026
V2	Minor Updates and Incorporate RFI Responses	RH	4 August 2026

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7. SA WATER CORRESPONDENCE

1. EXECUTIVE SUMMARY

Category	Details	
ADDRESS OF SITE	4 Carignane Street, Wynn Vale	
FIRST NATIONS COUNTRY	Kaurna	
CERTIFICATES OF TITLE	• Certificate of Title Volume 5476 Folio 121 (Allotment 99 Deposited Plan 9816) • Certificate of Title Volume 5476 Folio 122 (Allotment 100 Deposited Plan 9816) • Certificate of Title Volume 5999 Folio 434 (Allotment 71 Filed Plan 132662)	
ALLOTMENT AREA	Approximately 39,355m²	
SITE AREAS	Childcare centre: approximately 1,668m² Car parking: 1,858m²	
SITE FRONTAGES	Childcare centre: 52m on Carignane Street and 41m on Park Lake Drive Car parking: 69m on Carignane Street	
RELEVANT AUTHORITY	City of Tea Tree Gully Assessment Manager or Council Assessment Panel	
PLANNING AND DESIGN CODE	Version 2026.10 (Published on 28 May 2026)	
ZONE	General Neighbourhood Zone	
OVERLAYS	• Airport Building Heights (Regulated) (All structures over 15 metres) • Affordable Housing • Building Near Airfields • Defence Aviation Area (All structures over 15m) • Hazards (Flooding) • Hazards (Flooding – Evidence Required) • Prescribed Wells Area • Regulated and Significant Tree • Stormwater Management • Traffic Generating Development • Urban Tree Canopy • Water Resources	
TECHNICAL & NUMERIC VARIATIONS (TNVs)	N/A	
EXISTING USE	Educational Facility	
PROPOSAL DESCRIPTION	Alterations to the existing Educational Facility comprising the demolition of an existing carpark and the construction of a new staff carpark, together with the construction of a 108-place child care facility, signage, retaining walls, fencing, as well as associated landscaping.	
CLASSIFICATION OF DEVELOPMENT	Childcare facility, Advertisement, Retaining Wall, Fence, Carpark	Code Assessed - Performance Assessed
	Alteration to Education Facility (carpark demolition)	Exempt
PUBLIC NOTIFICATION	Subject to public notification	
REFERRALS	N/A	
APPLICANT	Lease Holdings Pty Ltd	

Category	Details
CONTACT PERSON	Rick Hutchins – Ekistics Planning and Design – (08) 7231 0286

2. INTRODUCTION/BACKGROUND

This planning statement has been prepared in support of a development application by Lease Holdings Pty Ltd (the 'Applicant') for the construction of a childcare facility, signage, retaining walls, fencing, together with associated landscaping. To accommodate the development, alterations to the existing Educational Facility are required, including demolition of an existing school carpark, and construction of a new staff carpark positioned in the south-western corner of the school site. The development will occur over land located 4 Carignane Street, Wynn Vale (the 'subject site') which is occupied by the Saint Francis Xavier Regional Catholic School.

This planning statement provides information about the subject site and proposed development and addresses the merits of the development application against the relevant provisions of the Planning and Design Code (Version 2026.8).

For the purpose of this statement, the Planning, Development and Infrastructure Act 2016 will be referred to as the 'PDI Act', the Planning, Development and Infrastructure (General) Regulations 2017 will be referred to as the 'PDI Regulations' and the Planning and Design Code will be referred to as the 'Code'.

This planning statement also incorporates information in response to the Council Request for Information dated 16 June 2026 that sought additional information on traffic matters, stormwater management and other planning matters.

This planning statement has been prepared on the basis of the plans, elevations and supporting documentation summarised below:

- **Appendix 1** – Certificate of Title;
- **Appendix 2** – Architectural Drawings, prepared by ON Architecture;
- **Appendix 3** – Environmental Noise Assessment, prepared by Sonus;
- **Appendix 4** – Traffic and Parking Report (including additional traffic advice), prepared by CIRQA;
- **Appendix 5** – Stormwater Management Plan, prepared by CPR Engineers
- **Appendix 6** – Arboricultural Impact Assessment Report, by Ecological Tree Consulting; and
- **Appendix 7** – SA Water correspondence.
- **Appendix 8** – Response to Council RFI dated, 16 June 2026

3. THE SITE AND LOCALITY

3.1. The Site

The subject site covers a portion of a larger group of land parcels located at 4 Carignane Street, Wynn Vale which are formally recognised as:

- Certificate of Title Volume 5476 Folio 121 (Allotment 99 Deposited Plan 9816)
- Certificate of Title Volume 5476 Folio 122 (Allotment 100 Deposited Plan 9816)
- Certificate of Title Volume 5999 Folio 434 (Allotment 71 Filed Plan 132662)

All CTs are provided in **Appendix 1**.

Although an easement is located at the rear of allotments 99 and 100 in favour of SA Water for sewerage purposes, diverting the sewer pipes was investigated and approved by SA Water, as indicated in correspondence dated 10th October 2024 (**Appendix 7**). This in-turn will allow the easement to be extinguished to avoid any potential conflict with the proposed location of the childcare facility.

The subject site, illustrated in Figure 3.1, is owned by St Francis Xavier's Regional Catholic School. The allotment is irregular in shape, measures approximately 39,355m² in area, and features a 285m frontage onto Carignane Street and a 120m frontage onto Park Lake Drive. Both roads are under the care and control of the City of Tea Tree Gully.

The land is presently used as a school and generally features various buildings used for educational purposes, a school sporting oval, sports courts and ancillary car parking.

The proposal includes a childcare facility and ancillary car parking area, which are to be located in two separate areas (the 'development sites') of the subject site. The childcare facility is to be located in the southeast corner of the subject site, while the car parking area is to be in the southwest corner, as per Figure 3.1 below.

Several trees are present on the development sites, some of which are regulated or significant and will require either removal or appropriate tree protection measures to facilitate the construction of the proposal. Details are discussed in Section 6.6 of this report.

The subject sites and subject allotment are depicted in Figure 3.1, with photographs of the site (dated 11/11/24) provided in Figures 3.2 to Figure 3.5.



Figure 3-1: Map of the subject site (Source: Graphica)



Figure 3-2: Childcare facility development site - Intersection of Carignane Street and Park Lake Drive (Source: Ekistics)



Figure 3-3: Childcare facility site - from the existing carpark (Source: Ekistics)



Figure 3-4: Carpark area development site - Internal view from the northeast corner (Source: Ekistics)



Figure 3.5: Carpark area development site - Existing access point in southwest corner (Source: Ekistics)

3.2. The Locality

The locality surrounding the existing school site is predominantly residential in nature and is characterised by low density, single and double storey dwellings on allotments of varying sizes, as well as several forms of public open space including the Wynn Vale Dam to the north, which connects within a watercourse and linear reserve corridor comprising mature vegetation cycling and pedestrian paths. The surrounding road network is characterised by a series of short, curved roads and cul-de-sacs. The St Francis Xavier Regional Catholic School is also notable feature of the locality.

Access to the locality is provided via Grenfell Road and Golden Grove Road, two State Maintained Roads, as well as a network of local roads. The locality features a robust network of pedestrian footpaths, with both frontages on Carignane Street and Park Lake Drive featuring a dedicated footpath, with connections to the pedestrian and cycling paths traversing the linear corridor or public open space. The allotment features a total of eight vehicular access points to the local road network, including seven connections with Carignane Street and Park Lake Drive, and one to the rear of the school, connecting with a De Castella Avenue. The existing crossover to the southwest corner, currently granting access to the development site of the proposed car parking area, is to be closed off with new access granted via the existing crossover and car parking to the east.

Topography of the locality is uneven, reflecting an undulating terrain following several natural and artificial creeks. Given this feature, boundary retaining of the locality.

Photographs of the locality are provided in Figures 3.6 to Figure 3.8.



Figure 3.6: Street view of the locality from Carignane Street – looking west (Source: Ekistics)



Figure 3.7: View of the locality from Carignane Street – looking east (Source: Ekistics)



Figure 3-8: View of the locality from Carignane Street - looking south (Source: Ekistics)

4. PROPOSED DEVELOPMENT

4.1.Overview

The development includes the construction of a childcare facility, signage, retaining walls, fencing, the removal of two Regulated Trees (Tree Damaging Activity), and associated landscaping. The childcare facility will operate as a separate entity to the existing school, notwithstanding its co-location on the same site and the shared use of ancillary car parking areas.

To accommodate the development, alterations to the existing Educational Facility are required, including demolition of an existing school carpark, and construction of a new staff carpark positioned in the south-western corner of the school site.

Childcare facility

The childcare facility is proposed to have a capacity of 108 children and will operate between the hours of 6:30am and 6:30pm, Monday to Friday. The facility is proposed to be located on the southeast portion of the subject site, currently used for car parking, with all existing trees proposed to be retained, and Tree Damaging Activity to be limited to the encroachment of landscaping and fencing within Tree Protection Zones (discussed further in Section 6.6) The childcare facility will be serviced by the existing 68-space carpark which adjoins the site to the north.

Carpark

The development includes the construction of a 50-place carpark positioned in the south-western corner of the school site. This carpark is proposed to offset the removal of an existing carpark comprising 52 spaces, to accommodate the proposed childcare facility and will only be available to staff with access controlled via boom gates. The carpark will not feature a direct access to Carignane Street and will instead connect to the adjoining carpark and access point to the east.

Advertising

Advertising for the childcare facility consists of nine signs, including five affixed to building facades and four affixed to a masonry feature wall orientated to the address the Carignane Street/Park Lake Drive intersection. All signs feature a ‘Eden Grove’ logo, with the addition of the St Francis Xavier School branding on the corner wall. None of the signs are proposed to be illuminated.

Fencing and Retaining Walls

Retaining is proposed along all boundaries of the site to allow construction of the facility on an otherwise uneven topography. The maximum heights of retaining reach 1.8m in the southeast corner and the 1.6m in the northeast corner, at the front of the building facing Park Lake Drive. Lower retaining is required at the rear of the site. Six (6) types of fencing are proposed to be located on the boundaries, including two without spacing, in addition to one (1) signage wall also positioned on a retaining wall. The building has been designed with an internal split level, which will not be visible from the public realm, to minimise the extent of earthworks required.

4.2. Building Design & Siting

Architectural plans, including site plans, floor plans, elevations, perspectives, demolition plan, and a landscape plan have been prepared by ON Architecture (refer to **Appendix 2**).

The childcare facility will occupy the southeastern corner of the existing school grounds, with a footprint sited towards the eastern boundary. All setbacks are as follows:

- East: 8.5m (approx.) from Park Lake Drive;
- South: at least 1.3m (approx.) from Carignane Street;
- West: 20m (approx.);
- North: At least 0.8m (approx.);

The childcare facility will have a gross floor area of 818m^2. The building is generally rectangular in shape, with recesses in the building line on three elevations. The internal layout of the building includes a reception/waiting area, staff and meeting rooms, kitchen, laundry and six activity rooms for children grouped by age, with associated amenities. Two outdoor play areas are proposed, one along the boundary with Park Lake Drive measuring 168sqm, and a second one located at the rear of the building, measuring 600sqm and featuring three trees to be retained. The building entrance faces the adjoining carpark to the north connecting directly onto the existing internal footpath.

The single storey building features a pitched roof design incorporating Dutch-gables to all elevations. The building will have a maximum wall height of 2.7m with the roof ridge reaching 6.1m above ground floor level. The roof projects forward above the entrance of the building, with eaves projecting from the east and west façades to provide shade and shelter.

The proposed dwelling incorporates a varied material palette, including timber-look elements, rendered walls, Axon cladding and Colorbond® roof sheeting. These materials, combined with a neutral colour scheme, create a refined and contemporary architectural expression.

A diversity of roof forms, window designs and external finishes, together with projecting verandahs and integrated landscaping, provide articulation and visual interest to the built form. These elements work together to break up the building mass, enhance streetscape presence, and ensure the dwelling presents attractively when viewed from the public realm.

Figures 4.1 and 4.2 below details and illustrates the material palette for the proposed development.



Figure 4-1: Corner elevations (southeast - left / northeast - right) (Source: On Architecture)



Figure 4-2 Schedule of materials and colours proposed (Source: On Architecture)

4.3. Advertising

All proposed advertisements are depicted on the elevations contained within **Appendix 2**.

The development includes a total of nine non-illuminated signs featuring the 'Eden Grove' logo or school branding, detailed as follows:

One 1.7m x 0.9m ‘Eden Grove’ sign will be affixed above an arched window on the north elevation adjacent the building entrance, as illustrated in Figure 4-3.



Figure 4-3: North facing advertisement

One 2.2m x 1.1m ‘Eden Grove’ sign affixed to the gable end on the eastern elevation, facing Park Lake Drive, as illustrated in Figure 4-4.



Figure 4-4: East facing advertisement

One 2.5m x 1.3m ‘Eden Grove’ sign affixed to the gable end on the southern elevation, facing Carignane Street, as illustrated in Figure 4-5.



Figure 4-5: South facing advertisement

Two sets of 2.5m x 1.5m signs containing the ‘Eden Grove’ logo and the school branding affixed to the 1.5m high (excl. retaining wall) masonry wall facing the two street frontages, as illustrated in Figure 4-6.



Figure 4-6: Corner advertisement

One 2.6m x 1.3m ‘Eden Grove’ sign affixed to the western elevation Dutch gable, facing Carignane Street, as illustrated in Figure 4-7.



Figure 4-7: West facing advertisement

4.4.Fencing & Retaining Walls

4.4.1. Childcare Facility

The site of childcare facility slopes from the south-east to north-west by approximately 3m. Earthworks and retaining required to accommodate site’s natural topography is mitigated by the split-level design which provides a 1.1m level difference between upper and lower Finished Floor Levels.

Within Outdoor Play Area 1 on the eastern side of the building, retaining walls reach maximum heights of 1.8m in the southeastern corner and 1.6min the northeastern corner. To the west of the building, within Outdoor Play Area 2 (adjacent to the southwestern boundary), retaining walls taper from a maximum height of 1.4m down to natural ground level. Additional retaining walls are integrated into both the southern and northern building elevations to support the proposed split-level arrangement.

Fencing for the childcare facility comprises a combination of 1.2m high picket fencing affixed to retaining walls, 1.8m high picket fencing, and timber batten fencing enclosing the safe zone and extending to the underside of the verandah soffit. Fence types FT6 and FT7 are solid in their construction and do not incorporate spacing between pickets.

Materiality and colours of proposed fencing have been selected to align with the neutral tones and general aesthetic of the building while providing partial visibility into the site from the public realm, minimising visual impact. These include a combination of timber batten and picket fence in neutral colours.

4.4.2. Carpark

The existing site topography for the carpark site grades from east to west by approximately 3m. Levels for the carpark have been graded to be close to the existing levels and battered down along the northern side of the carpark so no retaining is needed.

Earthworks for the balance of the carpark's perimeter will be battered. Batters to the southern perimeter of the carpark will retain excavation, extending to heights of between 0.57m and 0.69m (south-eastern and south-western corners).

4.5. Landscaping & Trees

A landscape plan has been prepared by ON Architecture for the development and is provided within **Appendix 2**.

4.5.1. Childcare Facility

The proposed landscaping, illustrated in Figures 4-8 and 4-9, includes a mix of medium size trees, screen planting, shrubs and ground covers, enhancing the street presentation by providing a green and softer appearance. This landscaping is proposed along all the interfaces with the public realm, including Carignane Street, Park Lake Drive and the adjoining carpark to the north. The proposed landscaping will not impact on the retained mature trees which will only add to the greenery of the site.

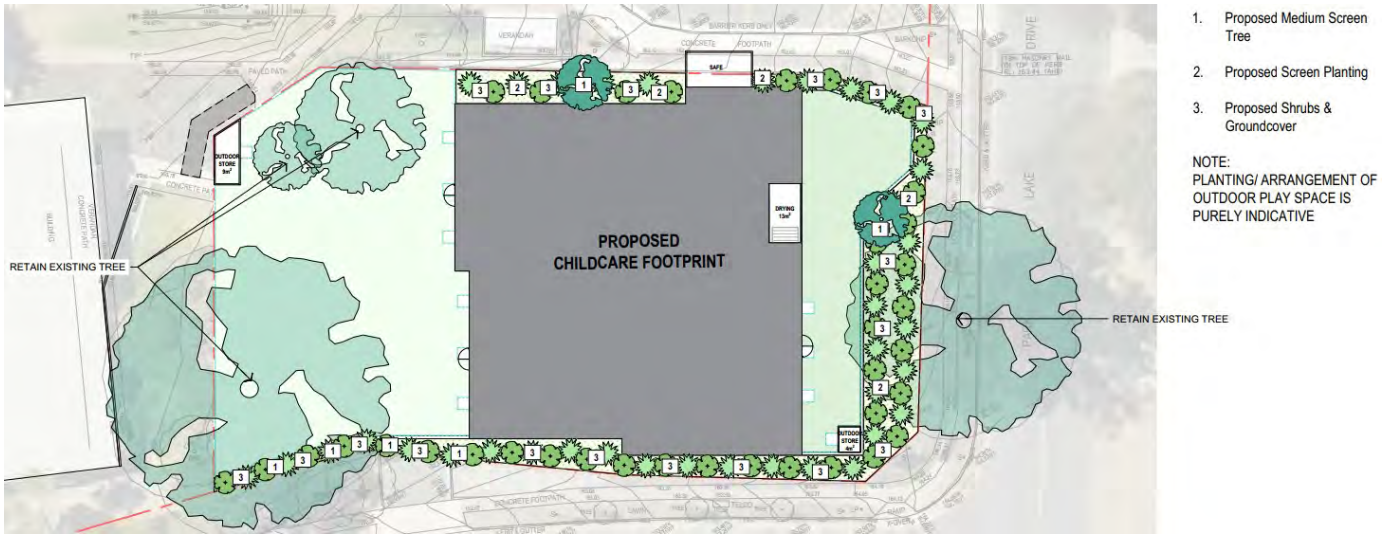


Figure 4-8: Soft landscaping for the proposed childcare facility (Source: On Architecture)

CODE		COMMON NAME	SPACING	POT SIZE	Height & Width at Maturity (m)
1.	**MEDIUM SCREEN TREE**				
Pyr	*Pyrus salicifolia 'Pendula'*	Willow-leaved Pear,	As Shown	100L	4 x 7
2.	**SCREEN PLANTING**				
Gah	*Gahnia filum*	Thatching Grass	750mm	140mm	0.4 x 1.5
Gre	*Grevillea lanigera 'Lutea'*	Woolly Grevillea	750mm	140mm	1.5 x 3
3.	**SHRUBS & GROUNDCOVERS**				
Bux	Buxus sempervirens 'Suffruticosa'	English Box	500mm	140mm	0.4 x 0.5
Bra	Brachyscome 'Country Lights'	Asteraceae	300mm	140mm	0.2 x 0.3
Cen	Centaurea cineraria	Dusty Miller	250mm	140mm	0.1 x 0.2

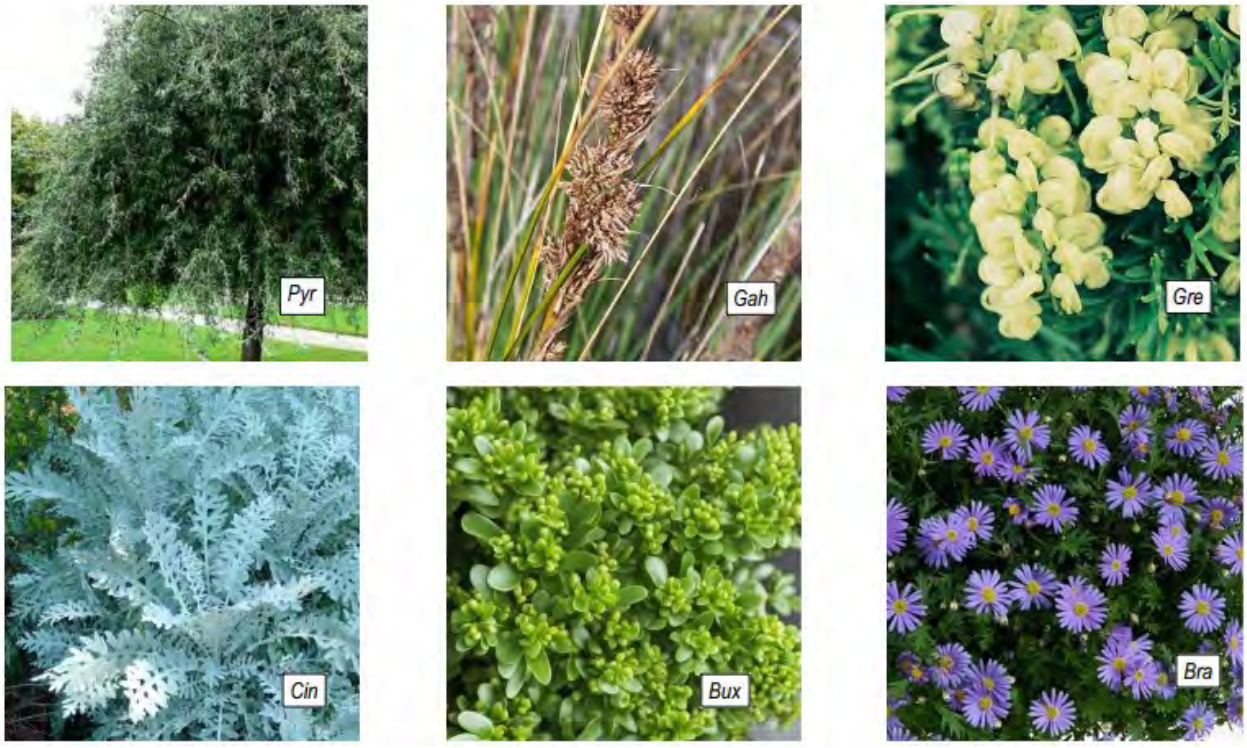


Figure 4-9: Proposed planting schedule (Source: On Architecture)

Part 18 of Schedule 4 to the Planning, Development and Infrastructure (General) Regulations 2017 provides that tree-damaging activity in relation to a regulated tree, including a significant tree, does not constitute development where the tree is located on land on which a school providing primary or secondary education is located or proposed to be built. As the relevant trees are located within the existing school site, approval is not required for tree-damaging activity affecting those trees. Notwithstanding this exclusion, the proposal has been designed to retain and incorporate Trees 98, 99 and 100 within the childcare facility's outdoor play area, with works arranged to minimise encroachment within their relevant protection zones and maintain their

contribution to the landscaped setting of the site. For Tree A, located within the Council verge adjacent to the site, the Tree Protection Plan sets out measures to protect the tree's ongoing health during the works. The proposed Tree Protection Plan is illustrated in Figure 4.10.

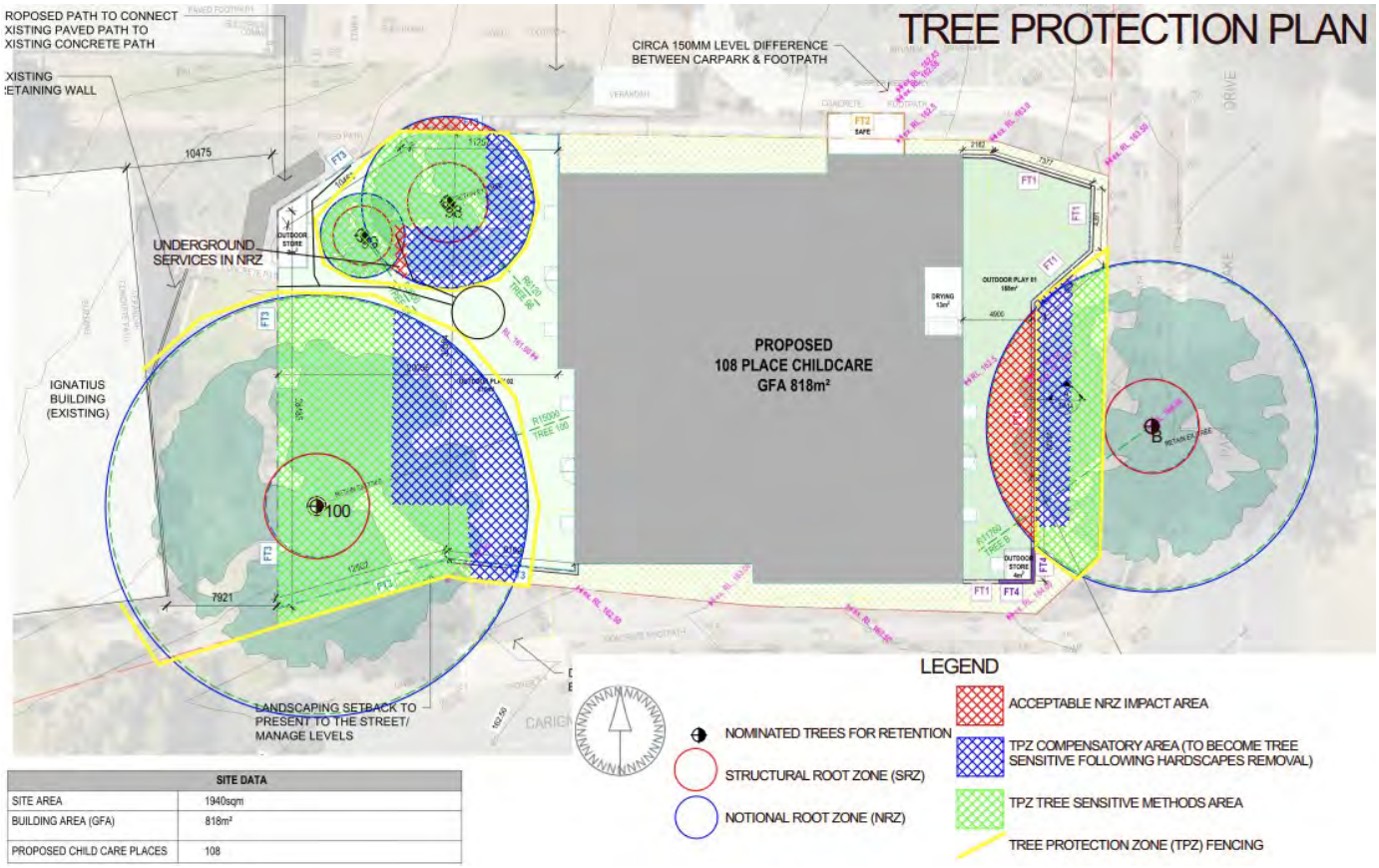


Figure 4-10: Tree protection plan for the proposed childcare facility (Source: Ecological Tree Consulting)

4.5.2. Carpark

Construction of the carpark will result in the removal of 13 trees, including two 'Eucalyptus torquata' that would otherwise be considered Regulated if not located on the grounds of a 'school', as per Part 18 of Schedule 4 to the PDI Regulations, 2017. Although not located within the footprint of the proposed carpark, TPZ will be set up around the large trees located north of the carpark to ensure no damage will result from construction. Figure 4-11 below illustrates the trees proposed to be removed (in red) and the proposed TPZ (in yellow). Full detail of the Tree Protection Plan is available in **Appendix 6**.

The proposed acoustic fence and underground services will result in a marginal encroachment within the TPZs of Trees A and 59, as well as minimal encroachment within the NRZ of Tree A. Tree A is a Significant Tree located on the adjoining residential allotment and therefore any 'tree-damaging activity' to this tree requires approval. Extent of the work has been estimated at greater than 10% encroachment within the TPZ of the tree, due to the installation of an acoustic fence along the western boundary of the carpark and underground services. Assessment of the impact has been deemed as acceptable, as stated in the

attached Arboricultural Impact Assessment Report, and appropriately mitigated by the tree protection measures to be implemented. Therefore, no impact to the health of the tree is anticipated.

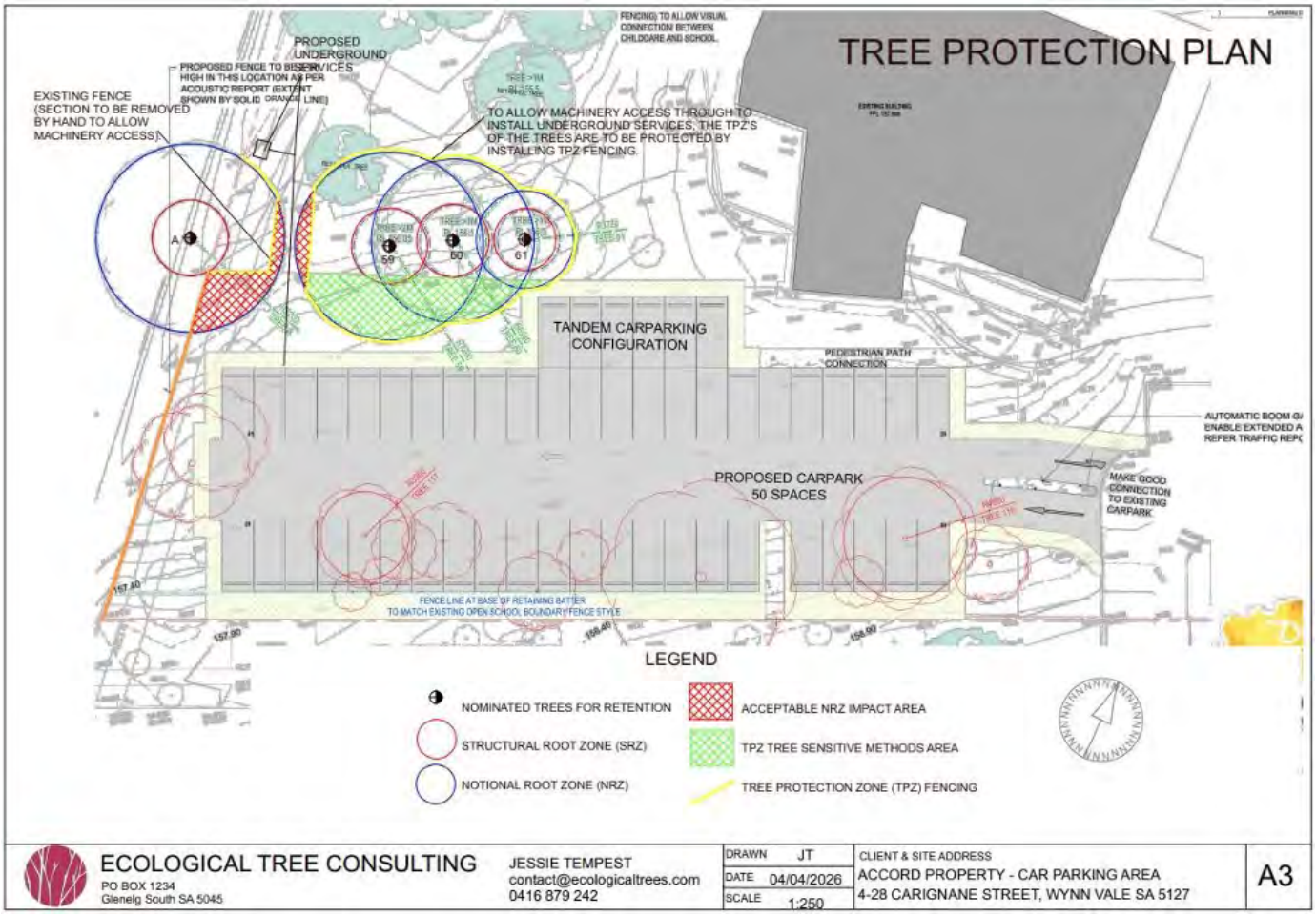


Figure 4-11: Tree protection plan for the proposed carpark (Source: Ecological Tree Consulting)

To contribute the landscape and visual amenity, this application proposes the planting of five (5) medium sized trees (Willow-leaved Pears) along the carpark's boundary to Carignane Street, as illustrated in Figure 4-12.



Figure 4-12: Soft landscaping for the proposed childcare facility (Source: On Architecture)

4.6.Transport, Access & Parking

CIRQA have undertaken a traffic and parking review of the proposed development (refer to **Appendix 4**)

4.6.1. Childcare Facility

Parking for the childcare facility will be serviced by the existing 68 spaces carpark to the north, with vehicular access provided via an existing 6m wide crossover onto Park Lake Drive. The childcare facility entry has been designed to provide a direct connection to the established pedestrian pathway traversing the existing carpark, which in-turn connects with the school and the existing pedestrian path traversing Park Lake Drive.

The CIRQA report estimates that the childcare facility will generate in the order of 88 and 55 trips during the am and pm network peak hours, respectively, which can be accommodated by the existing carpark, and the adjacent local road network, as detailed in Section 6.8 of this report as well as CIRQA's report, in **Appendix 4**.

Onsite waste collection will be undertaken beyond the hours of operation of the childcare facility, by a private contractor using a 10m long rigid vehicle. More details on waste management are provided in Section 6.8.

4.6.2. Carpark

Construction of the childcare facility requires the demolition of an existing 52 space carpark. To offset the loss of these spaces, this application proposes the construction of a new 50 space carpark, of which 6 are in a tandem configuration, positioned in the south-western corner of the school site. The proposed carpark will be accessed via the existing carpark to the east and Carignane Street via an existing crossover accommodating two-way movements. Use of the carpark will be reserved to staff only, which will be made possible through the installation of boom gates. The proposed tandem arrangement is a common feature of staff carparks in metropolitan Adelaide and is not expected to result in a detrimental impact on manoeuvring, either internally or externally to the site, as staff members can organise their movements based on start and finish time.

A pedestrian footpath is proposed from the street through the carpark and connecting to the existing internal footpath network, providing safe and convenient pedestrian movement.

The proposed parking area will comply with the requirements of Australian/New Zealand Standard, Parking Facilities Part 1: Off-street car parking (AS/NZS 14 2890.1:2004) and Australian/New Zealand Standard, Parking Facilities Part 6: Off-street parking for people with disabilities (AS/NZS 2890.6:2022).

4.7.Stormwater Management

CPR Engineers have prepared a stormwater management plan and civil concept (**Appendix 5**), based on advice received from the engineering department of the City of Tea Tree Gully.

4.7.1. Childcare Facility

Stormwater is to be captured and detained in an underground tank located within Outdoor Play Area 02, prior to discharging into new Junction Box, before entering the existing school drainage network.

Stormwater run-off is to be treated prior to discharge into council system through the installation of appropriate treatment measure, such as a gross pollutant trap (GPT). This will result in an improved quality of stormwater run-off compared to the current situation which provides no treatment. Similarly, the proposed childcare facility will result in an increase in soft landscaping improving onsite filtration and in-turn reducing the volume of water discharging into Council's drainage network.

4.7.2. Carpark

As an undeveloped portion of the school ground, the site of the proposed carpark does not accommodate a formal stormwater management system.

Stormwater collected from the carpark will be treated in a GPT before discharging into a below ground, 34kL detention tank with a controlled discharge rate of 3L/s. The tank is to have a low level orifice restricting flows to 4.5L/s. A secondary outlet is to be provided at a capacity of 24kL providing an additional 2L/s flow rate (6.5L/s total). A high level overflow above the required minimum capacity is to be provided

5. PROCEDURAL REQUIREMENTS

5.1. Applicable Policies

The Planning and Design Code (Version 2026.10 – Published 28 May 2026), in conjunction with the SA Property and Planning Atlas (SAPPA), identifies that the **General Neighbourhood Zone** applies to the subject site, with no applicable Subzones. Zoning for the Site and immediate locality is illustrated in **Figure 5.1** below.

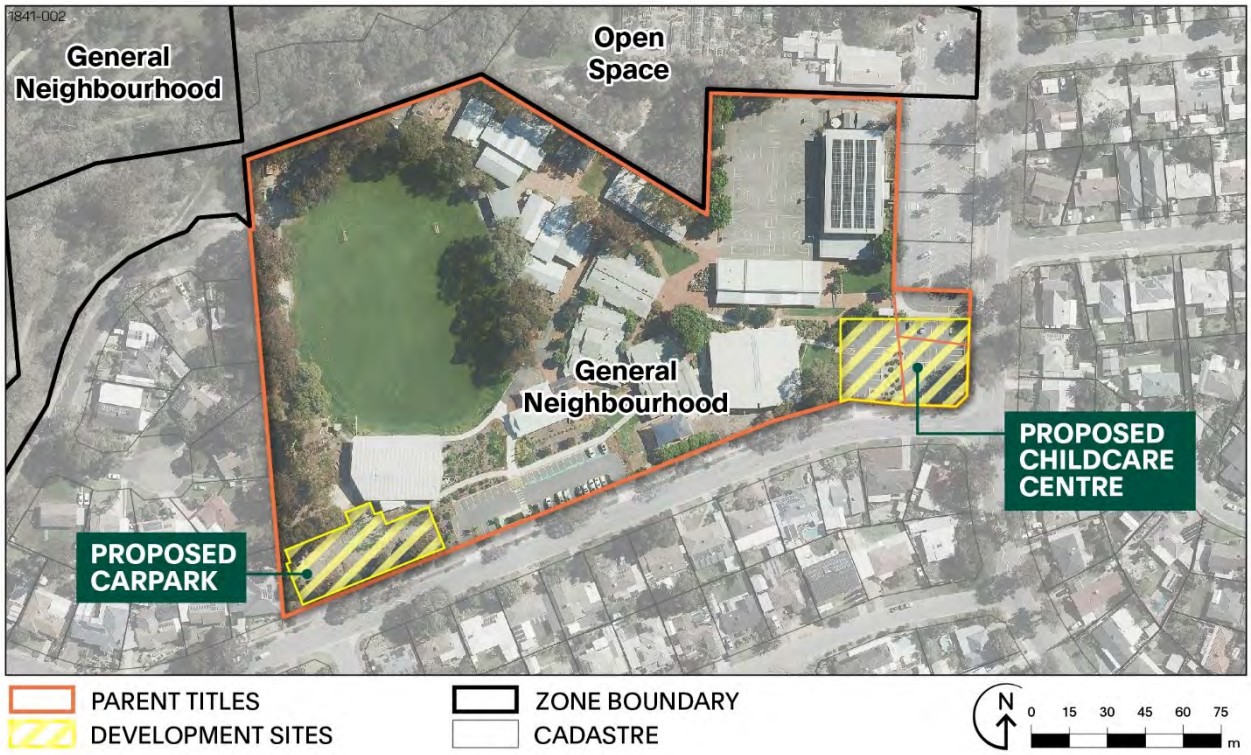


Figure 5-1: Zoning framework applicable to the site and locality (Source: Graphica)

The following **Overlays** apply to the sites, although not all are relevant to the proposed developments (strikethrough):

- ~~Airport Building Heights (Regulated) (All structures over 15 metres)~~
- ~~Affordable Housing~~
- Building Near Airfields
- ~~Defence Aviation Area (All structures over 15 metres)~~
- Hazards (Flooding)
- Hazards (Flooding - Evidence Required)
- ~~Prescribed Wells Area~~
- Regulated and Significant Tree
- Stormwater Management
- Traffic Generating Development
- ~~Urban Tree Canopy~~
- ~~Water Resources~~

As the proposed building height is under 15m the Airport Building Heights (Regulated) Overlay and the Defence Aviation Area Overlay are not relevant.

The proposal does not include any residential component, and as such the Affordable Housing Overlay, Prescribed Wells Area Overlay, Stormwater Management Overlay and the Urban Tree Canopy Overlay are not relevant.

None of the policies listed under the Traffic Generating Development Overlay are relevant to the proposal as all DPFs list a minimum capacity of 250 students for an educational facility, which is well above the 108-place childcare facility proposed. The Traffic Generating Development Overlay is therefore not applicable as it is concerned with developments of a greater intensity than the proposal.

Although the Water Resources Overlay applies to the subject site, it does not apply to either development sites, being located over Wynn Vale Dam and the creek running along the norther edge of the site. In addition, none of the policies contained within the Overlay are relevant to the proposed land use. The Water Resources Overlay is therefore not applicable.

No **Technical Numerical Variations (TNVs)** apply to the development sites.

5.2. Relevant Authority

The relevant authority to determine the development application will be the **Council Assessment Panel** or the **Assessment Manager** at the City of Tea Tree Gully as per Section 93(1)(a) and section 96 of the PDI Act.

5.3. Nature of Development

The following provides a description of the proposed development:

> 'Alterations to the existing Educational Facility comprising the demolition of an existing carpark and the construction of a new staff carpark, together with the construction of a 108-place childcare facility, signage, retaining walls, fencing, as well as landscaping.'

Accordingly, the proposed development comprises the following elements:

- Alterations to an existing Educational Facility comprising the demolition of the existing school carpark and the construction of a new carpark
- Childcare facility;
- Advertisement;
- Retaining walls;
- Fencing;

Part 7 of the Code defines a 'childcare facility' as:

> **Childcare facility '**Means a place primarily for the care or instruction of children of less than primary school age, children with special needs or out-of-school-hours care (including vacation care) and not resident on the site.
> Includes: Pre-school; Childcare centre; Early learning centre; Kindergarten; Nursery.'

Part 18(1)(da) of Schedule 4 (Exclusions from definition of development – General) of the PDI Regulations, 2017, identifies that the following works involving a tree-damaging activity in relation to a regulated tree (including a tree that also constitutes a significant tree) do not constitute 'development' and thus do not require approval:

> "(1)(da) the tree is on land on which a school that provides course of instruction in primary or secondary education is located or is proposed to be built".

Accordingly, as the subject site is a 'school' that provides primary school education, any tree-damaging activity on the land does not require approval. The Arborist Assessment has identified a Significant Tree, Corymbia citriodora / Lemon Scented Gum (identified as Tree A in the Arborist Report) on the adjoining land to the west of the proposed car park as being affected by the proposed works, thus any works that are deemed a 'tree-damaging activity' would constitute development and require approval. This is addressed in the planning assessment below.

5.4. Classification of Development

Alterations to an existing Educational Facility including the construction of a shared staff carpark, together with a childcare facility, advertisements, retaining walls, fencing are all Code Assessed, **'Performance Assessed'** classes of development within the General Neighbourhood Zone.

5.5. Public Notification

As a 'childcare facility' and 'advertisement' are not listed under Table 5 of the Zone, both elements are **subject to public notification.**

'Fencing and Retaining walls' are listed under Clauses 7(d) and 7(l) respectively and are therefore **exempt from public notification**.

'Tree-damaging activity' is listed under Clause 7(q) of Table 5 and is therefore **exempt from public notification**.

5.6. Agency Referrals

No agency referrals are anticipated to be required.

5.7.Other Consents

The application proposes the closure of two existing crossovers onto Carignane Street, one to accommodate the proposed childcare facility and another at the site of the proposed carpark. In both instances, kerbing will be reinstated to Council's satisfaction. The Applicant understands that the alteration to a public road, including creation and closure of crossovers, and removal of any street trees will be subject to a separate Council approval under Section 221 of the Local Government Act 1999.

6. CODE ASSESSED DEVELOPMENT

The following section provides an assessment of the proposal against the relevant Planning and Design Code Desired Outcomes (DOs) and Performance Outcomes (POs). This assessment is grouped under a series of headings which address specific aspects of the proposed development.

6.1.Land Use & Intensity

The following provisions of the General Neighbourhood Zone are relevant to the assessment of the proposed land use and its intensity.

General Neighbourhood Zone	Overlay	General Development Policies
DO 1 **POs:** 1.1, 1.2, 1.3, 1.5	Nil	Nil

The proposal being for a childcare facility located on the site of an existing educational facility, St Francis Xavier's Regional Catholic School, is intended to expand on the current offering of the school and provide an additional complementary service to the local community in one convenient location. The co-location both the childcare facility and educational facility is in line with Zone PO 1.1, and DPF 1.1 which lists both land uses as contemplated forms of development.

PO 1.2 provides further guidance on the type and scale of various forms of non-residential development contemplated for the Zone, including "community service uses such as educational facilities, community centres, places of worship, childcare facilities and other health and welfare services." (PO 1.2(b))

Whereas the Zone provisions (PO 1.2 and PO 1.4) specifically seek to restrict the 'scale' of commercial uses (such as offices, shops, and consulting rooms), the Code does not apply scale limitations to community service uses (including childcare facilities). In addition, the other community service uses listed (e.g. educational establishments and places of worship) are, by their very nature, generally larger in scale and of greater intensity that childcare centres.

Notwithstanding the use being expressly contemplated within the Zone, non-residential development should be "...sited and designed to complement the residential character and amenity of the neighbourhood." (Zone PO 1.3). The assessment below demonstrates how the proposal has been sited and designed to complement residential character and will not result in unreasonable amenity impact because of its intensity (operational hours, noise, and traffic).

Further to the above discussion we are of the opinion that the proposed use, scale, and intensity is aligned with the provisions of the Code.

6.2. Building Design

6.2.1. Building Siting and Scale

As discussed above, PO 1.3 seeks to ensure non-residential development is 'sited and designed' to complement the residential character and amenity of the neighbourhood. With this provision in mind, the design approach has been informed by the relevant Zone POs and DPFs pertaining to site coverage, building height, and building setbacks.

General Neighbourhood Zone	Overlay	General Development Policies
POs: 1.3, 1.5, 3.1, 4.1, 5.1, 6.1, 8.1, 9.1	Nil	Nil

The proposed childcare facility incorporates a range of design and siting elements that align with relevant provisions of the Code.

The total site coverage is projected at 42%, significantly below the 60% maximum stipulated in DPF 3.1. This ensures generous open areas around the facility, reducing visual bulk, supporting natural ventilation and daylight access, and enhancing the overall presentation, consistent with PO 3.1. Limited to a single storey with a maximum height of 5.9m, the development remains well beneath the 9m / 2-storey threshold recommended by DPF 4.1, supporting the low-rise character envisaged under the associated Performance Outcome.

The building is sited in accordance with the following setbacks:

- East boundary (primary street boundary – Park Lake Drive): approximately 8.5m;
- South boundary (secondary street boundary – Carignane Street): approximately from 1.3m to 2.45m (angled boundary);
- West boundary: approximately from 13m to 20m (angled boundary);
- North boundary: approximately from 0.8m to 2.2m;

As there are no existing buildings along the immediate street frontage, the proposed 8.5m setback from Park Lake Drive exceeds the 5m minimum under PO 5.1 and aligns with the observed pattern of 6-8m setbacks along Carignane Street and Park Lake Drive, contributing to a cohesive streetscape. Variable setbacks with the northern interface (0.8-2.2m) facilitate pedestrian access from the adjacent carpark path and reduce visual impact by positioning the main building wall further from the boundary. A varied setback (0.8–2.45m) from the southern boundary with Carignane Street accommodates the angled boundary line. The wall has been recessed to accommodate boundary landscaping that will soften the building's visual impact when viewed from Carignane Street. Combined with the low-rise building, this creates an appropriate and respectful relationship with the public realm, consistent with PO 6.1. Finally, the generous 13-20m rear setback enables the inclusion of a large outdoor play space. This arrangement facilitates the retention of one Regulated and two Significant trees, integration of soft landscaping and shaded play areas, visual separation from the adjacent Ignatius Building to the west and access to light and ventilation, in accordance with PO 9.1.

The development satisfies the intent of DPF 1.5 by forming a sensitive extension to the adjoining educational facility, designed in scale and character to complement the surrounding residential environment.

6.2.2. Architectural Expression

The following Design in Urban Areas General Development Policies of the Code are most relevant to an assessment of the external appearance of the building.

General Neighbourhood Zone	Overlay	General Development Policies
Nil	Nil	**Design in Urban Areas** **POs:** 1.1, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5

The proposed design features a high degree of articulation in the street presenting façades and roof form (south and east), together with the northern elevation addressing the carpark. This, in combination to the proposed materiality and colours will result in a high-quality and elegantly designed building, with a legible presentation clearly conveying the purpose and access point, as per PO 1.3 of the GDP. The proposed 1.5m masonry wall with signage at the intersection of Carignane Street and Park Lake Drive, in addition to the extensive soft landscaping, reinforces the corner and enhances the development's appearance in accordance with PO 1.1

Plant equipment will not be visible from the public realm, or protrude beyond the roofline, resulting in no negative impact on residential amenities of the locality. Similarly, the drying area being located within the footprint of the building and screened by a 1.2m picket fence will only be partially visible from Park Lake Drive.

Fencing design various according to its specific function. The lower 1.2m high picket fence (sitting above a retaining wall) along Park Lake Drive is proposed to minimise the visual impact and maintain the open suburban character of the locality. A 1.5m timber batten fence is proposed on the northern façade facing the carpark, adding to the materiality of the entrance to the building and signifying its location. Finally, a taller 1.8m white picket fence will enclose Outdoor Play Area 2 to ensure adequate levels of privacy and security is maintained. All proposed fencing will provide a safe and secure environment for users of the site while contributing to the attractive outlook of the proposal and allowing passive surveillance of the public realm and interior of the building by day and night, as per POs 2.1 and 2.4 of the GDP.

The proposed design makes a clear distinction between the public realm, communal and private spaces through the use of fencing, signage and soft landscaping. A safe and convenient pedestrian access is provided via the footpaths of the existing carpark to the north, satisfying POs 2.2 and 2.3 of the GDP.

As discussed above, in our opinion, the proposed building articulation and materiality defines the building entrance, provides visual interest and will complement the streetscape, while also aligning with the relevant safety provisions of the Code.

6.2.3. Environmental Performance

The environmental performance of the building is raised by the following Design in Urban Areas provisions:

General Neighbourhood Zone	Overlay	General Development Policies
Nil	Nil	**Design in Urban Areas** **POs:** 4.1, 4.2, 4.3

Due to the low site coverage and extensive landscaping proposed on-site, the urban heat island effect will be managed, particularly when compared to the existing state of the land. The building's central location and proposed fenestration enable sunlight access and cross ventilation, minimising the need for mechanical cooling. Projecting canopies adjacent the outdoor play areas and entrance to the building will provide shade to the facility and footpath, improving comfort for users of the site and further minimising the need for mechanical cooling system. Accordingly, the proposed building has been designed to maximise passive environmental performance and reduce the building's reliance on mechanic heating and cooling, as per the relevant POs of the Design in Urban Areas GDP.

Although the proposed carpark replaces an existing undeveloped area of the school, established mature vegetation to the north of the carpark and supplementary tree planting to the south of the carpark will provide shade to parked vehicles to assist with the management of urban heat loads.

6.3.Advertisements

General Neighbourhood Zone	Overlay	General Development Policies
POs: 12.1 **DPFs:** 12.1	Nil	**Advertisements** **POs:** 1.1, 1.2, 1.5, 2.1, 2.3, 3.1, 5.2

PO 12.1 of the Zone recommends advertisements which are used for business identification purposes where they do not detract from the residential character of the locality. In this case, seven of the nine signs proposed directly relate to the childcare facility, while the last two identify the school. Accordingly, all signage relates to community service activities which are to occur from the allotment. The signs will not be illuminated and are designed to integrate with and complement the aesthetic of the building. This, combined with the reasonably low number of signs, will effectively avoid visual clutter and maintain the residential character of the locality, as per POs 1.1, 1.2 ,1.5 as well as 2.1 and 2.3 of the Advertisements GDP.

The 'Eden Grove' logo and school name signage, both on the building façades and corner wall, will assist with wayfinding to find the entrance of the facility, thereby satisfying Advertisements PO 3.1 of the Advertisements GDP. The corner wall is located and design to maintain the 4.5m corner cut-off to ensure adequate sight distances are maintained, as recommended by DPF 5.3 of

the Advertisements GDP. Additionally, as the signs will not be illuminated, they do not represent a hazard to drivers along Park Lake Drive and Carignane Street, consistent with POs 5.2 and 5.3 of the Advertisements GDP.

For the reasons expressed above, the proposed advertising is consistent with the intent of the advertising provisions, providing an acceptable level of business exposure whilst preserving residential amenity.

6.4. Fencing and Retaining Walls

The relevant Design in Urban Areas provisions relating to fencing and retaining walls are listed below.

General Neighbourhood Zone	Overlay	General Development Policies
Nil	Nil	**Design in Urban Areas - POs:** 8.1, 8.2, 9.1

6.4.1. Childcare Facility

Three types of fencing are proposed for the childcare facility, including white picket fencing to heights of 1.2m and 1.8m height around outdoor play areas 1 and 2 respectively, together with a 1.5m timber batten fence to the entrance and around the safe zone of the building and to the underside of the verandah sofit. All fencing is designed in a manner which ensures adequate privacy and security is maintained in balance with preserving visual amenity and achieving a design outcome that is compatible with the established residential character.

As previously mentioned, although retaining walls are required to accommodate the topography of the site, most retaining walls will not be visible from the public realm. The only retaining wall visible from the public realm is located to the left of the entrance and will be partly screened with appropriate soft landscaping, as illustrated in Figure 6-1 below.



Figure 6-1: Illustration of retaining wall on the northern facade of the building (Source: On Architecture)

6.4.2. Carpark

The natural terrain of the carpark site grades from the south-east to north-west, away from Carignane Road. The southern end of the carpark will be sited some 0.53m and 0.69m below natural ground level, with earthworks for the carpark minimised by adopting design levels which generally follow the natural terrain of the land. Setting the carpark surface below natural ground level together with landscaping placed between Carignane Street and the carpark will assist with softening the appearance of the carpark when viewed from the public realm.

The carpark's frontage to the street will remain unfenced to ensure opportunities passive surveillance is maintained. Instead, fencing for the carpark will be limited to a 2.1m Colorbond® fence, sited along the western boundary to attenuate sound emissions from carpark activity in accordance with the acoustic recommendations set out within the Sonus report. The height of the fence is both reasonable and expected for the residential locality.

In addition to the excavation proposed along the southern end of the carpark, fill embankments proposed for the northern end of the carpark will extend to a maximum approximate height of 1 mete in the carpark's northern corner. Accordingly, the carpark design requires negligible earthworks with excavation and fill heights not exceed 1m and combined heights of both not exceeding 2m as per PO 8.1 and DPF 8.1 of the GDP.

In a locality characterised by steep topography and boundary retaining walls, the extent and height of boundary development in this instance is appropriate and will not result in unreasonable visual impacts on adjoining residences or the broader residential character of the locality.

6.5. Landscaping

A landscaping plan has been prepared by On Architecture and is available in **Appendix 2.**

The following Design in Urban Areas General Development Policies are relevant to the landscape design assessment of the proposal:

General Neighbourhood Zone	Overlay	General Development Policies
Nil	Nil	**Design in Urban Areas** **POs:** 3.1, 7.2, 7.4, 7.5, 7.6, 7.7

6.5.1. Childcare Facility

Landscaping proposed for the childcare facility includes six different species of plants including trees, screening plants, shrubs and groundcovers along the interfaces with the public realm, Carignane Street and Park Lake Drive, as well as around the entrance of the building along the northern façade. This will strongly contribute to a positive street presentation, effectively softening the visual impact of the building and other hard surfaces and providing a pleasant environment for pedestrian to walk along.

In addition, to enhancing the appearance of the proposal, the landscaping will contribute to minimising solar heat absorption, assist with stormwater management through natural infiltration and support local biodiversity, satisfying PO 3.1 of the GDP.

6.5.2. Carpark

The design of the proposal features soft landscaping located along the south boundary of the site, facing Carignane Street, providing a softer and attractive outlook when viewed from the public realm and integrating with the existing streetscape, in accordance with POs 7.2 and 7.6 of the GDP. In addition, the proposal includes five medium size trees along the carpark boundary with Carignane Street providing further shading and softer visual appearance, as per POs 7.4 and 7.5 of the GDP.

Further the above discussion, we are of the opinion that the proposed landscape design is aligned with the relevant landscape provisions of the Code.

6.6.Regulated and Significant Trees

General Neighbourhood Zone	Overlay	General Development Policies
Nil	**Regulated and Significant Tree** **POs:** 1.2, 1.4, 2.1	Nil

As outlined in Section 5 of this planning statement, Part 18(1)(da) of Schedule 4 of the PDI Regulations, 2017, identifies that tree-damaging activity in relation to a regulated tree (including a significant tree) do not constitute 'development' on this land (as the site is used for a 'school') and thus do not require approval.

A Significant Tree, Corymbia citriodora / Lemon Scented Gum (identified as Tree A in the Arborist Report), and shown in Figure 6-2 is located on the neighbouring property and its root zone extends into the subject site close to the area where the proposed new car parking area is to be established.

The assessment by Ecological Tree Consulting (as provided in **Appendix 6**) has identified that the proposed overall encroachment into the root zone is 'moderate' when consider the installation of the acoustic wall on the boundary and minor service installations. Ecological have advised that the protection of the ongoing health of the tree can be actively managed in accordance with the Tree Protection Specification, Tree Protection Plan and the requirements of AS 4970-2025. With the inclusion of these tree protection measures, the proposed works have been designed to retain the significant tree in accordance with Regulated and Significant Trees Overlay POs 1.2, 1.4 and 2.1.



Figure 6-2: Tree A located on the neighbouring property (Source: Ecological Tree Consulting)

6.7.Noise Emissions

An Environmental Noise Assessment has been prepared by Sonus (contained within **Appendix 3**), using SoundPLAN noise modelling software to assist with identifying anticipated noise impacts.

The following Interface between Land Uses General Development Policies are relevant to the design of the proposal:

General Neighbourhood Zone	Overlay	General Development Policies
Nil	Nil	**Interface between Land Uses - POs:** 2.1, 3.1, 4.1

6.7.1. Method of Assessment

Noise sources associated with the operation of the childcare facility includes:

- Children playing in the designated outdoor play spaces;

- The operation of air conditioning units (within the drying/services area);
- Activities related to the carpark near the childcare facility; and
- Activities related with the proposed carpark.

Noise related activities associated with the use of a carpark includes:

- People talking as they vacate or approach vehicles, the opening and closing of vehicle doors, vehicles idling and vehicles moving into and accelerating from parking spaces; and
- Vehicle movements travelling into, through and out of the parked positions.

PO 4.1 of the Interface between Land Uses GDP refers to the Environment Protection (Commercial and Industrial Noise) Policy (the 'Policy') as a guide for the management of noise related impacts. The Noise Policy specifies 'Goal Noise Levels' to the closest noise sensitive receivers, as listed below:

- An equivalent noise level (LAeq) of 47 dB(A) during the day (7:00am to 10:00pm);
- An equivalent noise level (LAeq) of 40 dB(A) during the night (10:00pm to 7:00am); and,
- An instantaneous maximum noise level (Lmax) of 60 dB(A) during the night (10:00pm to 7:00am).

However, as the Policy does not address noise generated by the use of outdoor play spaces within childcare facilities, Sonus has assessed such impacts against the provisions of the Guidelines for Community Noise (the 'Guidelines') published by the World Health Organisation (WHO) which prescribe a maximum average 'sound pressure level' of 50 dB(A).

6.7.2. Noise Assessment

6.7.2.1. Outdoor play spaces

The childcare facility will not have an unreasonable impact on adjacent sensitive receivers due to its location away from nearby residential land uses, as well as the hours of operation of 6:30am and 6:30pm Monday to Friday, resulting in the facility being closed when most of the local residents are expected to be home. Noise levels at the closest residential land uses are estimated to be kept under 50 dB(A), according to investigations conducted by Sonus, achieving the WHO recommendation and, therefore, the relevant POs of the Code without the need for acoustic treatment.

6.7.2.2. Mechanical plants

All mechanical plants associated with the childcare facility will be located withing the drying area, centrally located along the eastern elevation of the building. Average noise levels provided by the Policy in regard to mechanical plants are comprised between 40 dB(A) to 47 dB(A) during the night and day respectively, and a maximum noise level of 60 dB(A) at night.

As the definitive models of air conditioning units have not yet been selected, the assessment conducted by Sonus is based on measurements and observations taken at similar facilities as well as a typical selection of two air conditioning units with a sound power level of 76 dB(A). The units have been assumed to be continuously running during the day and night and predicted maximum noise levels at any nearby sensitive receivers were estimated at no more than 58 dB(A), therefore achieving the maximum noise level recommended by the Policy.

6.7.2.3. Carpark near childcare

The existing carpark adjoining the proposed childcare facility is anticipated to be operating as usual in terms of number and frequency of usage. Parents and carers dropping children to the facility are likely to the use this carpark, while the staff will be using the proposed carpark to the west and other current users will be readily accommodated in the extensive carpark already provided to the north. As such, no additional noise source or increased levels of noise are expected to result from the change in users at this particular location.

It is assumed that waste collection will take place during times in accordance with the Local Nuisance and Litter Control Act 2016, so as to not constitute a 'local nuisance'.

6.7.2.4. Proposed carpark

A 2.1m acoustic fence has been recommended by Sonus and implemented into the design of the proposed carpark, along the western boundary, to minimise noise impact on the residential land uses to the west of the carpark. With the above-mentioned acoustic treatment in place, estimated noise levels are no higher than 41 dB(A) during the day and 34 dB(A) during the night, which satisfies the requirements of the Policy and therefore the relevant POs of the Code by not unreasonably impacting on the amenity of sensitive receivers in the locality.

6.8. Transport, Access and Parking

CIRQA has undertaken a detailed traffic and parking assessment of the proposal (refer to **Appendix 4**). The findings of that assessment have been considered against the relevant Transport, Access and Parking General Development Policies.

The following Transport, Access and Parking General Development Policies are relevant to the design of the proposal:

General Neighbourhood Zone	Overlay	General Development Policies
Nil	Nil	**Transport, Access and Parking** **DO** 1 **POs:** 1.1, 1.4, 2.1, 3.1, 3.8, 5.1, 6.1, 6.4

6.8.1. Traffic Generation

CIRQA adopted a conservative approach to estimating traffic generation for the proposed childcare facility. On that basis, the proposal is expected to generate 122 site peak hour trips in the morning peak, comprising 60% inbound and 40% outbound movements, and 97 site peak hour trips in the afternoon peak, comprising 50% inbound and 50% outbound movements. For distribution to and from the broader road network, 20% of movements are forecast to be to or from the north, 15% to or from the east, 35% to or from the south and 30% to or from the west, as illustrated in Figure 6-4 below.



Figure 6-3: Forecast distribution of traffic (Source: CIRQA)

In comparison, CIRQA estimates that the proposal will generate 88 trips in the morning network peak and 55 trips in the afternoon network peak, being the periods most relevant to the operation of the surrounding road network. These movements can be readily accommodated by the proposed access arrangements and adjacent roads. Actual traffic generation during network peak periods may be lower due to shared-purpose trips, such as parents dropping off children at both the school and the childcare facility within a single journey.

CIRQA also undertook SIDRA modelling of the Golden Grove Road and Park Lake Drive intersection, being a key movement corridor in the locality. That modelling indicates the forecast traffic volumes will be readily accommodated, as illustrated in Figures 6-5 and 6-6 below, with queuing comfortably contained within the existing channelised right-turn lane into Park Lake Drive.

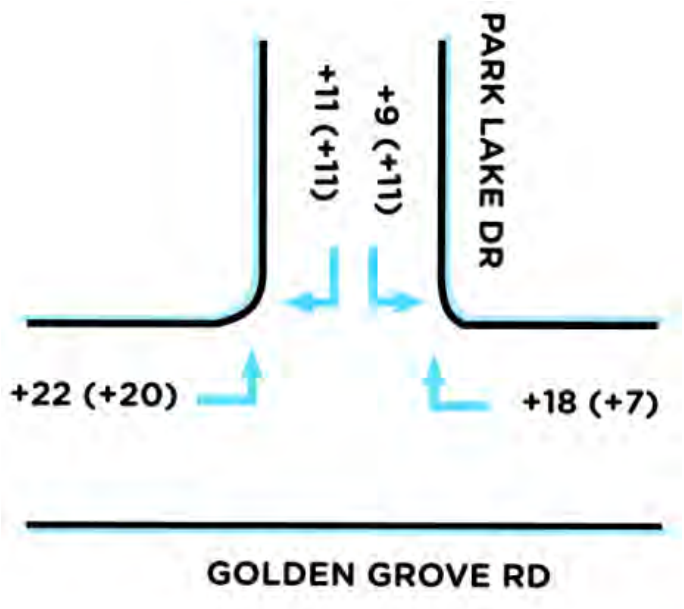


Figure 6-4: Forecast am (pm) site peak hour movements at Park Lake Drive and Golden Grove Road intersection (Source: CIRQA)

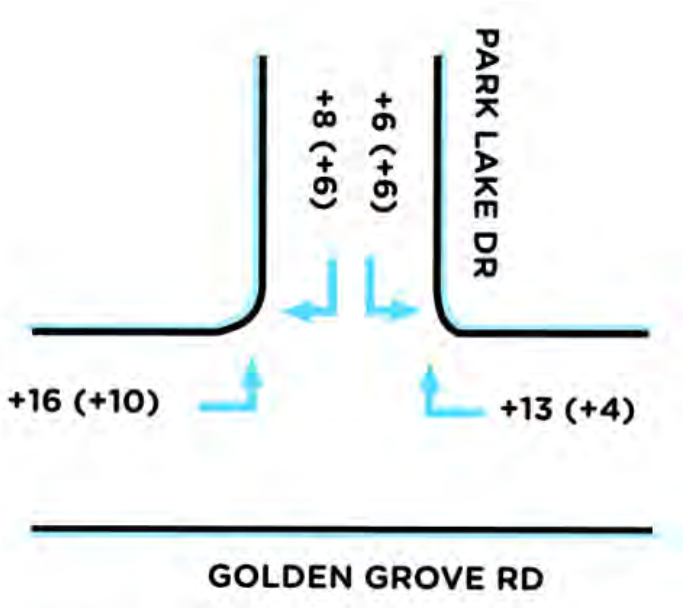


Figure 6-5: Forecast am (pm) network peak hour movements at Park Lake Drive and Golden Grove Road intersection (Source: CIRQA)

Overall, the proposal will result in a localised redistribution of traffic associated with the school, influenced by both the addition of the childcare facility and the construction of the new staff carpark on the western side of the site. The existing access points are adequate to accommodate this redistribution, with only minor effects on queuing and delay. The proposal therefore provides for safe and efficient vehicular movement and is consistent with PO 1.1 of the GDP.

6.8.2. Access and Manoeuvring

No new vehicular access points are proposed for either the childcare facility or the carpark. Instead, the proposal utilises the existing carpark to the north of the childcare facility, which is accessed via an existing 6m wide separated ingress and egress crossover onto Park Lake Drive. Access to the proposed 50-space staff carpark from Carignane Street is provided via the existing carpark and crossover to the east. By relying on established access points, the proposal avoids additional conflict with street infrastructure, maintains appropriate sightlines and minimises interruptions to the local road network, consistent with POs 2.1 and 3.1. No modifications are proposed to the existing carpark serving the childcare facility, and its existing access and manoeuvring arrangements will therefore remain unchanged.

All manoeuvring will occur on-site, enabling vehicles, including waste collection vehicles, to enter and exit in a forward direction, as demonstrated in Figure 6-7 below. The internal connection between the existing and proposed carparks also reduces the need for vehicles to rely on the surrounding local road network for circulation, as contemplated by POs 1.4 and 6.1 of the GDP.

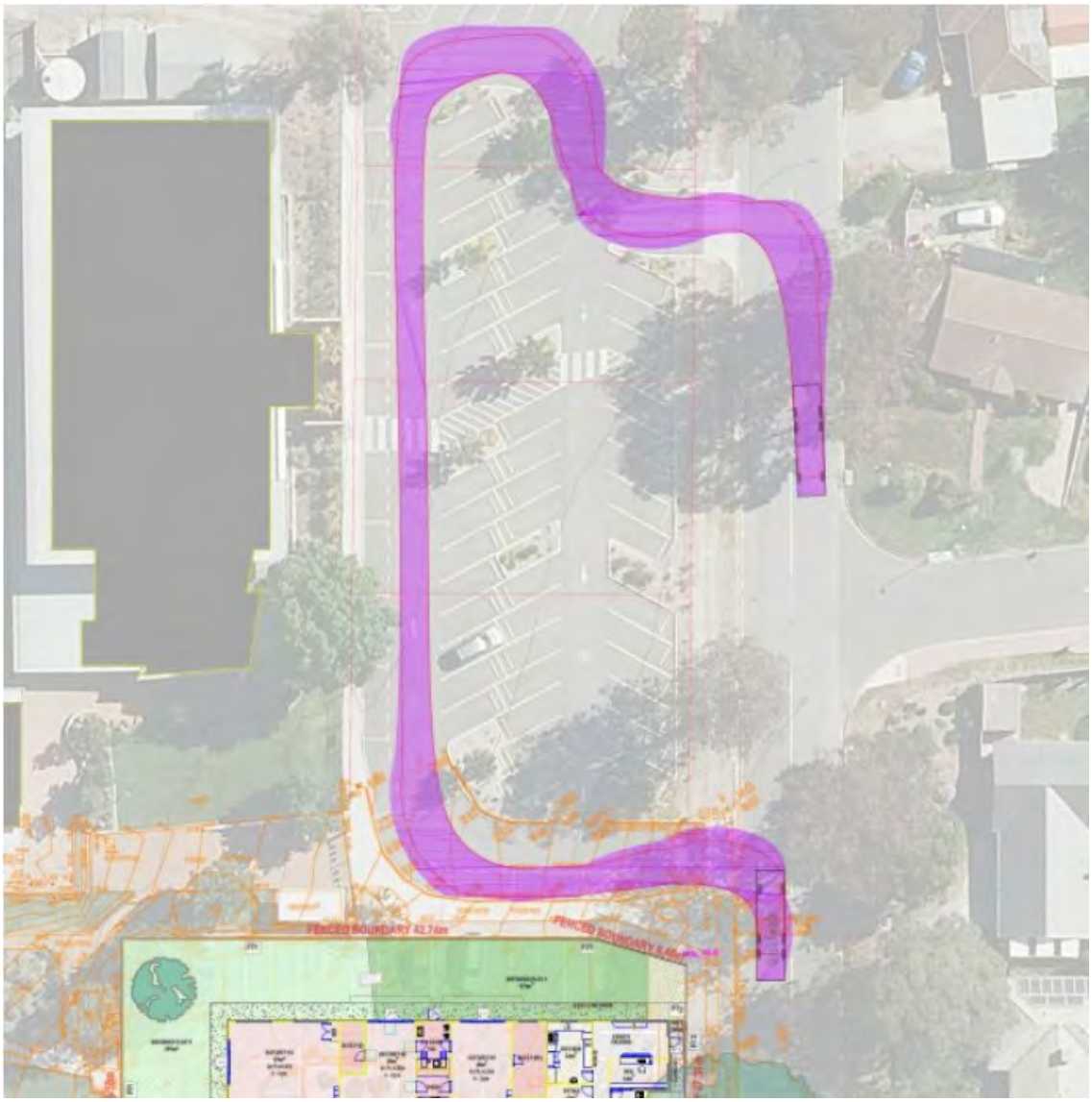


Figure 6-6: Waste collection turning paths – Childcare facility carpark (Source: CIRQA)

The proposed carpark on the western side of the site will be reserved for staff and controlled by boom gates. Access to Carignane Street is provided via the adjoining carpark and existing crossover, with the turning path shown in Figure 6-8 confirming that entry and exit can be accommodated in a forward direction.

A pedestrian connection is also proposed from the street through the carpark to the internal footpath network, providing safe and convenient pedestrian access to and from Carignane Street. The proposal is therefore consistent with PO 6.4.

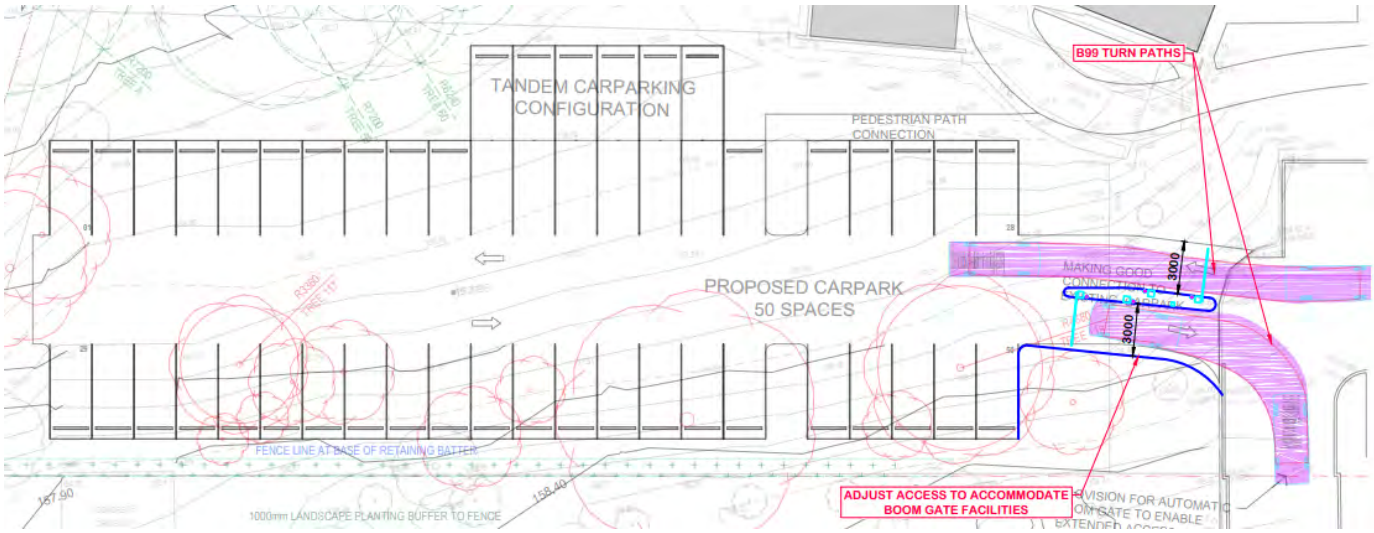


Figure 6-7: Small vehicles turn paths - proposed carpark (Source: CIRQA)

6.8.3. Parking

Table 1 - Off-Street Car Parking Requirements of the Zone, together with DPF 5.1 of the Transport, Access and Parking GDP, prescribes the following minimum parking rates for the existing school and the proposed childcare facility:

- Primary school: 1.1 spaces per full-time equivalent employee, plus 0.25 spaces per student for pick-up and set-down, either on-site or within 300m of the site in the public realm; and
- Childcare facility: 0.25 spaces per child.

Based on these rates, and the information provided by the school, the existing school requires a minimum of 60 on-site spaces and 141 pick-up and set-down spaces, with the latter to be provided either on-site or within 300m of the site. The proposed childcare facility requires a minimum of 27 spaces.

As detailed in the Traffic and Parking Report prepared by CIRQA, parking demand can be readily accommodated. A total of 156 spaces will be provided across the subject site, which is sufficient to meet the 52 spaces required for school staff and visitors and the 27 spaces required for the proposed childcare facility.

It is also noted that the school has recently obtained Planning Approval for an increase in student capacity. On that basis, student numbers could increase to 848 students and 64.71 FTE staff, resulting in a theoretical parking demand of 72 staff and visitor spaces and 212 pick-up and set-down spaces, with the latter to be provided either on-site or within 300m of the site.

Under that scenario, the primary school's pick-up and set-down demand would be accommodated by the remaining 77 on-site spaces and the kiss-and-drop area on Carignane Street immediately adjacent to the subject site, which can accommodate approximately 37 vehicles. The remaining 42 spaces can be readily accommodated on surrounding local roads within 300m of the subject site, as contemplated by the Planning and Design Code.

A recent parking survey undertaken by Austraffic identified 775 vacant parking spaces within 300m of the subject site, including at least 629 spaces available during peak pick-up and set-down periods. This confirms that the remaining demand can be readily

absorbed within the available on-street parking supply and supports the conclusion that PO 5.1 of the GDP is satisfied. The proposed carpark will be reserved for staff and controlled by a boom gate, ensuring it is not used for student pick-up and set-down. This will preserve the more conveniently located parking areas for school and childcare facility collection and drop-off activity.

CIRQA notes that tandem staff parking spaces are a common arrangement in metropolitan Adelaide and can be managed by the school to avoid conflicting movements. For example, spaces at the rear of tandem pairs can be allocated for shorter-term parking, while the front spaces are allocated to all-day parking. As the carpark will be used by staff only, the tandem arrangement is not expected to create manoeuvring or operational issues and is therefore consistent with PO 3.8 of the GDP.

The proposed parking area will comply with Australian/New Zealand Standard, Parking Facilities Part 1: Off-street car parking (AS/NZS 2890.1:2004), including the following design measures:

- Regular parking spaces will be 2.4m wide and 5.4m long.
- Parking aisles will be at least 6.2m wide.
- A 1.0m end-of-aisle extension will be provided beyond the last parking space in each aisle.
- A clearance of 0.3m will be provided to all objects greater than 0.15m in height.

6.9.Stormwater Management

The Stormwater Management Plan and associated stormwater methodology prepared by CPR is provided in **Appendix 5.**

The following Design in Urban Areas General Development Policies are relevant to the design of the proposal:

General Neighbourhood Zone	Overlay	General Development Policies
Nil	Nil	**Design in Urban Areas** **DO** 1 **POs:** 42.1, 42.2, 42.3

The stormwater management system for the childcare facility and new car park includes a network of inlet pits, down pipes stormwater pipes designed to effectively convey all roof and surface water to the underground detention tanks before being released. Water flow is to follow the topography of the land and naturally flow from the southeast to the northeast corner. The stormwater system has been designed by the Project Engineers, CPR, so that post-development flows match pre-development flows for 5% AEP and 1% AEP events. This outcome satisfies PO42.1.

Prior to leaving the site, all surface water will be treated by a GPT in accordance with the water quality provisions set out within PO 42.1 and PO 42.2.

6.10. Site Contamination

The following Site Contamination General Development Policies are relevant to the site contamination considerations of the proposal:

General Neighbourhood Zone	Overlay	General Development Policies
Nil	Nil	**Site Contamination** **DO** 1 **PO:** 1.1

The Site Contamination GDP provisions of the Code seek to ensure land is suitable for the intended use where an increase in land use sensitivity is proposed (PO 1.1). The application proposes a childcare facility (listed under 'Item 1' of Table 1: Land Use Sensitivity Hierarchy of Practice Direction 14), on a site currently used as a primary school (also listed under 'Item 1' of Table 1,). Accordingly, the proposal does not, in our opinion, represent a change of land use to a more sensitive use. As such, PO 1.1 of the Site Contamination GDP is satisfied.

7. CONCLUSION

This development application seeks Planning Consent for alterations to the existing Educational Facility comprising the demolition of an existing carpark and the construction of a new staff carpark, together with the construction of a 108-place childcare facility, signage, retaining walls, fencing, as well as an associated and landscaping. The proposal features two distinct development sites over the allotment, one dedicated to the childcare facility on the southeast corner of the allotment and another proposing a new carpark on the southwest corner of the allotment.

Following a site and locality inspection, a review of the proposed plans and associated specialist reports, and the comprehensive assessment against the relevant Code provisions, we have formed the opinion that the proposed development has been sited and designed to complement the character and amenity of the neighbourhood and is aligned with the relevant provisions of the Planning and Design Code. Our reasoning is summarised below:

- The General Neighbourhood Zone contemplates the development of a 'childcare facility' under PO 1.1 and DPF 1.1.
- Whilst the Code specifically seeks to restrict the scale of 'commercial' uses (such as offices, consulting rooms and shops), such restrictions are not applied to 'community service' uses (such as educational establishments, childcare facilities and places of worship).
- The proposal is located within an allotment already used as a primary school and would result in the convenient location of a complementary activity, catering to the needs of the local residents.
- The proposed development is complementary to and compatible with the local residential character (Zone PO 1.3) in that:
  - The proposed development satisfies all Zone POs relating to site coverage, building height and scale and building setbacks;
  - The external appearance (including colours, materiality, and architectural features) of the building is aligned with the relevant Design in Urban Areas provisions relating to building articulation and safety;
  - Signage is limited to nine signs which will identify the childcare facility and existing school, are non-illuminated, are modest in scale and complement the façade of the building;
  - The proposed scheme of fencing and retaining walls will not have an unreasonable visual impact on adjoining landowners/occupiers noting the location of the childcare facility on the school site and given the height and appearance of the fencing is typical for a residential setting;
  - The extent of earthworks for childcare facility and carpark is limited and appropriate for a residential locality. The split-level design of the childcare facility appropriately minimises the need for further retaining while also maintaining useable and function outdoor areas for children;
  - Extensive landscaping is proposed to soften and enhance the appearance of the building, retaining walls and carpark as viewed from adjoining properties and from the public realm; and
  - Noise generated by all proposed land use activities is expected to achieve the relevant objective noise criteria (the Noise Policy and WHO Guidelines) and accordingly, the development will not result in unreasonable noise impacts for adjacent sensitive receivers.
- The traffic and parking assessment performed by CIRQA confirms that:
  - The carpark and access arrangements have been designed in accordance with the relevant Australian Standards;

  - Sufficient on-site carparking will be provided to cater for the needs of the existing and new land uses, as per the prescribed ratee outlined within the Code;
  - Projected traffic generation rates and traffic distribution will have negligible impact on the function and/or capacity of the surrounding road network.

- The proposal will not result in the removal of any Regulated or Significant Tree, and only includes minor encroachment into the TPZ of two Significant trees along the eastern and western edges of the site;
- The provided Stormwater Management Plan demonstrates stormwater runoffs can be adequately management on both development sites, with an improved in runoff quality for the childcare facility site compared to the existing carpark; and
- The proposal does not represent a change to a more sensitive land use as the site is currently being used as a primary school, listed, alongside a childcare facility, under Item 1 of Table 1 of Practice Direction 14.

On this basis, the proposed development is aligned with the most relevant provisions of the Planning and Design Code and warrants Planning Consent, subject to reasonable and relevant conditions.

APPENDIX 1

Certificates of Title

APPENDIX 2

Architectural Drawings *ON Architecture*

APPENDIX 3

Environmental Noise Assessment

Sonus

APPENDIX 4

Traffic and Parking Report

CIRQA

APPENDIX 5

Stormwater Management Plan

CPR Engineers

APPENDIX 6

Arboricultural Impact Assessment Report

Ecological Tree Consulting

APPENDIX 7

SA Water Correspondence

APPENDIX 8

Response to Council RFI, 16 June 2026

Level 3, 431 King William St, Adelaide SA 5000 P 08 7231 0286 E contact@ekistics.com.au W ekistics.com.au ABN 39 167 228 944

APPENDIX 1

Certificate of Title

9816

A. CERTIFIED AND DEPOSITED
G. M. Lee Steere
CHIEF DRAUGHTSMAN OFFICER
Pro Registrar General
14/5/1974
ENTERED

Additional Allotment Numbers
vide Dkt. 4187/1975
pro. RG. 15/4/91

S.P.O. Dkt. 1585/71.
City of Tea Tree Gully.

D.P. 21707 20801

D.P. 10361

PT. 2132.

RESERVE. ~~"C"~~ 118
2A 3R 29P

D.P. 21707 20801

D. P. 11225

D.P.

ENLGT.

EASEMENT 'D'(T/F) 12' wide

EASEMENT 'C' (T/F) 12' wide

ENLGT.

WALKWAY 10' wide

EASEMENT 'A' (T/F) 12' wide

EASEMENT 'B' (T/F) 12' wide

EASEMENT 'E' (T/F) 12' wide

EASEMENT 'A' 12' wide

EASEMENT A 12' wide

EASEMENT ~~'E'~~ 12' M.P.FD. 9.11

P.M. VIDE ENLGT.

SHIRAZ PT. 121 2127. STREET.

DRIVE.

LAKE

PARK

REISLING 122 ROAD.

ALICANTE AVENUE.

RESERVE 22

MALAGA CRES.

GOLDEN GROVE (GOVT.) RD. 66'

SERVICE RD. 30' wide

L. T. O. PLAN 9817

D.P. 10361

~~2131.~~ 23092

D.P. 24697

PT.

~~2128.~~ 9016

11,665

9721

WE, MOUNTADAM ESTATE PTY. LTD.,
HAVING AN INTEREST IN THE LAND DEPICTED
HEREON, AS REGISTERED PROPRIETORS (G.T. 4007/690)
HEREBY SIGNIFY CONSENT TO THIS SUBDIVISION.
THE COMMON SEAL WAS HERETO AFFIXED
THIS 11TH. DAY OF APRIL 1973.

Director

Secretary

CURVE DATA.

CURVE.	I. A.	T. D.	RADIUS.
X.	138° 59'	22·44	60.
Y	"	41·15	110.

PORTION OF ALLOT. 4 MARKED EASEMENT 'E'(T/F), ALLOT. 5 MARKED EASEMENT 'E'(T/F), ALLOT. 40 MARKED EASEMENT 'D'(T/F), ALLOT. 41 MARKED EASEMENT 'C'(T/F) ARE TO BE SUBJECT TO AN EASEMENT TO THE ELECTRICITY TRUST OF SOUTH AUSTRALIA FOR ELECTRICITY SUPPLY PURPOSES.

PORTION OF ALLOTS. 20, 22, 23, 91, 95 TO 100 & RESERVE 'C' (Lot 118) & RESERVE 'D' (Lot 119) MARKED EASEMENT HEREON ARE TO BE SUBJECT TO AN EASEMENT TO THE MINISTER OF WORKS FOR SEWERAGE PURPOSES, & PORTION OF ALLOTS. 30 TO 40 MARKED EASEMENT 'B' HEREON ARE TO BE SUBJECT TO AN EASEMENT TO THE CITY OF TEA TREE GULLY FOR DRAINAGE PURPOSES.

LAID OUT AS PORTION OF THE TOWNSHIP OF

WYNN VALE.

SUBDN. OF PT. SECS. 2127 & 2132.
HD. OF YATALA.

SCALE:
0. 40. 80. 160. 240 FEET.

Lodged No. X15084
Checked 83 F. 297 TER
Examined 10-4-74

I HENRY DONALD MORRISON, 558
Licensed Surveyor of South Australia, do hereby certify that this plan has been made from surveys executed by me, or under my own personal supervision, inspection and field check and that both plan and survey are correct and have been made in accordance with Regulations under the Surveyors' Act 1935-1961, & that the field survey was completed on 4/3/73.
Dated this 10TH. day of JANUARY. 1973.

LICENSED SURVEYOR

NOTE:—Permanent marks to Surveyor General's specifications shown thus— P.M.

FORM 4

ALEXANDER & SYMONDS
PTY. LTD.
SURVEYING CONSULTANTS
LICENSED · MINING · ENGINEERING
259 HUTT STREET, ADELAIDE
PHONE: 23 3566
Ref: 24920/4960.

NOTE: M.P.'s HAVE BEEN PLACED AT ALL TRUE ROAD INTERSECTIONS, UNLESS OTHERWISE SHOWN PERMANENT MARKS HAVE BEEN PLACED AT POSITIONS THUS.

P.M. 8' 10' CHORD.

MICROFILMED
18-4-91

38.4%

Product	Register Search Plus (CT 5476/121)
Date/Time	07/02/2025 12:43PM
Customer Reference	01697
Order ID	20250207004940

REAL PROPERTY ACT, 1886
South Australia

The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.

Certificate of Title - Volume 5476 Folio 121

Parent Title(s) CT 4016/840

Creating Dealing(s) CONVERTED TITLE

Title Issued 27/11/1997 **Edition** 1 **Edition Issued** 27/11/1997

Estate Type

FEE SIMPLE

Registered Proprietor

CATHOLIC CHURCH ENDOWMENT SOCIETY INC.
OF C/- CATHOLIC CHURCH OFFICE 91 WEST TERRACE ADELAIDE SA 5000

Description of Land

ALLOTMENT 99 DEPOSITED PLAN 9816
IN THE AREA NAMED WYNN VALE
HUNDRED OF YATALA

Easements

SUBJECT TO SERVICE EASEMENT(S) OVER THE LAND MARKED EASEMENT A FOR SEWERAGE PURPOSES TO SOUTH AUSTRALIAN WATER CORPORATION (223LG RPA)

Schedule of Dealings

NIL

Notations

Dealings Affecting Title NIL

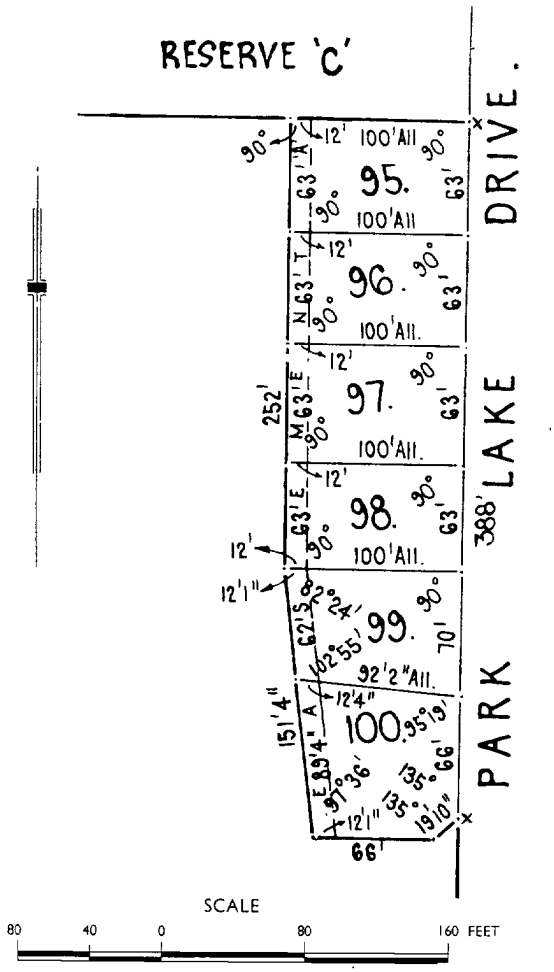
Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes NIL

Administrative Interests NIL

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1 INCH = 0.0254 metres

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Product	Historical Search
Date/Time	07/02/2025 12:43PM
Customer Reference	01697
Order ID	20250207004940

Certificate of Title

Title Reference:	CT 5476/121
Status:	CURRENT
Parent Title(s):	CT 4016/840
Dealing(s) Creating Title:	CONVERTED TITLE
Title Issued:	27/11/1997
Edition:	1

Dealings

No lodged Dealings found.

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9816

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SUBDN. OF PT. SECS. 2127 & 2132.
HD. OF YATALA.

SCALE:
0. 40. 80. 160. 240 FEET.

Lodged No. X15084
Checked 83 F. 297 TER
Examined 10-4-74

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P.M. 8' 10' CHORD.

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Product	Register Search Plus (CT 5476/122)
Date/Time	07/02/2025 12:47PM
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Order ID	20250207005020

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Parent Title(s) CT 4016/841

Creating Dealing(s) CONVERTED TITLE

Title Issued 27/11/1997 **Edition** 1 **Edition Issued** 27/11/1997

Estate Type

FEE SIMPLE

Registered Proprietor

CATHOLIC CHURCH ENDOWMENT SOCIETY INC.
OF C/- CATHOLIC CHURCH OFFICE 91 WEST TERRACE ADELAIDE SA 5000

Description of Land

ALLOTMENT 100 DEPOSITED PLAN 9816
IN THE AREA NAMED WYNN VALE
HUNDRED OF YATALA

Easements

SUBJECT TO SERVICE EASEMENT(S) OVER THE LAND MARKED EASEMENT A FOR SEWERAGE PURPOSES TO SOUTH AUSTRALIAN WATER CORPORATION (223LG RPA)

Schedule of Dealings

NIL

Notations

Dealings Affecting Title NIL

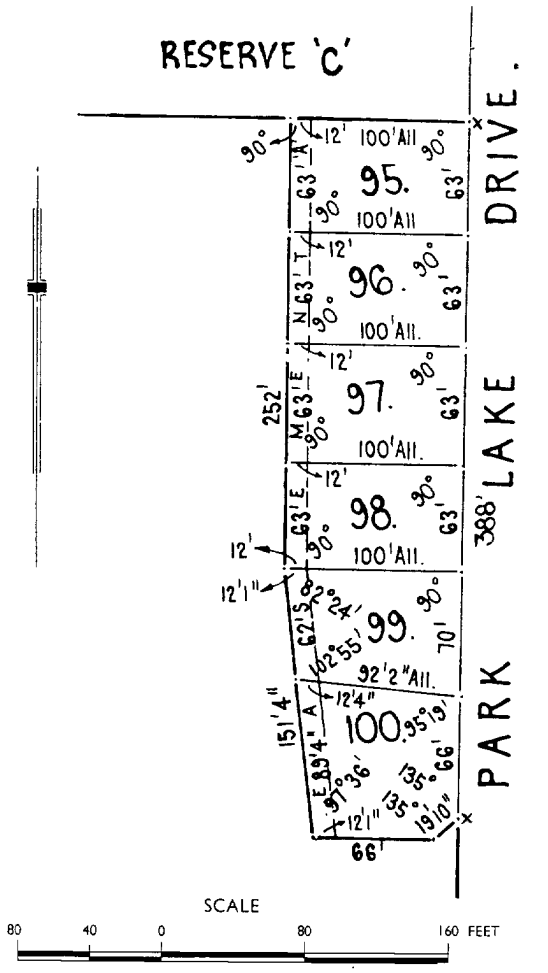
Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes NIL

Administrative Interests NIL

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Product	Historical Search
Date/Time	07/02/2025 12:47PM
Customer Reference	01697
Order ID	20250207005020

Certificate of Title

Title Reference:	CT 5476/122
Status:	CURRENT
Parent Title(s):	CT 4016/841
Dealing(s) Creating Title:	CONVERTED TITLE
Title Issued:	27/11/1997
Edition:	1

Dealings

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S.A. LANDS TITLES OFFICE RE-IDENTIFICATION PLAN

PLAN NUMBER

FP 132662

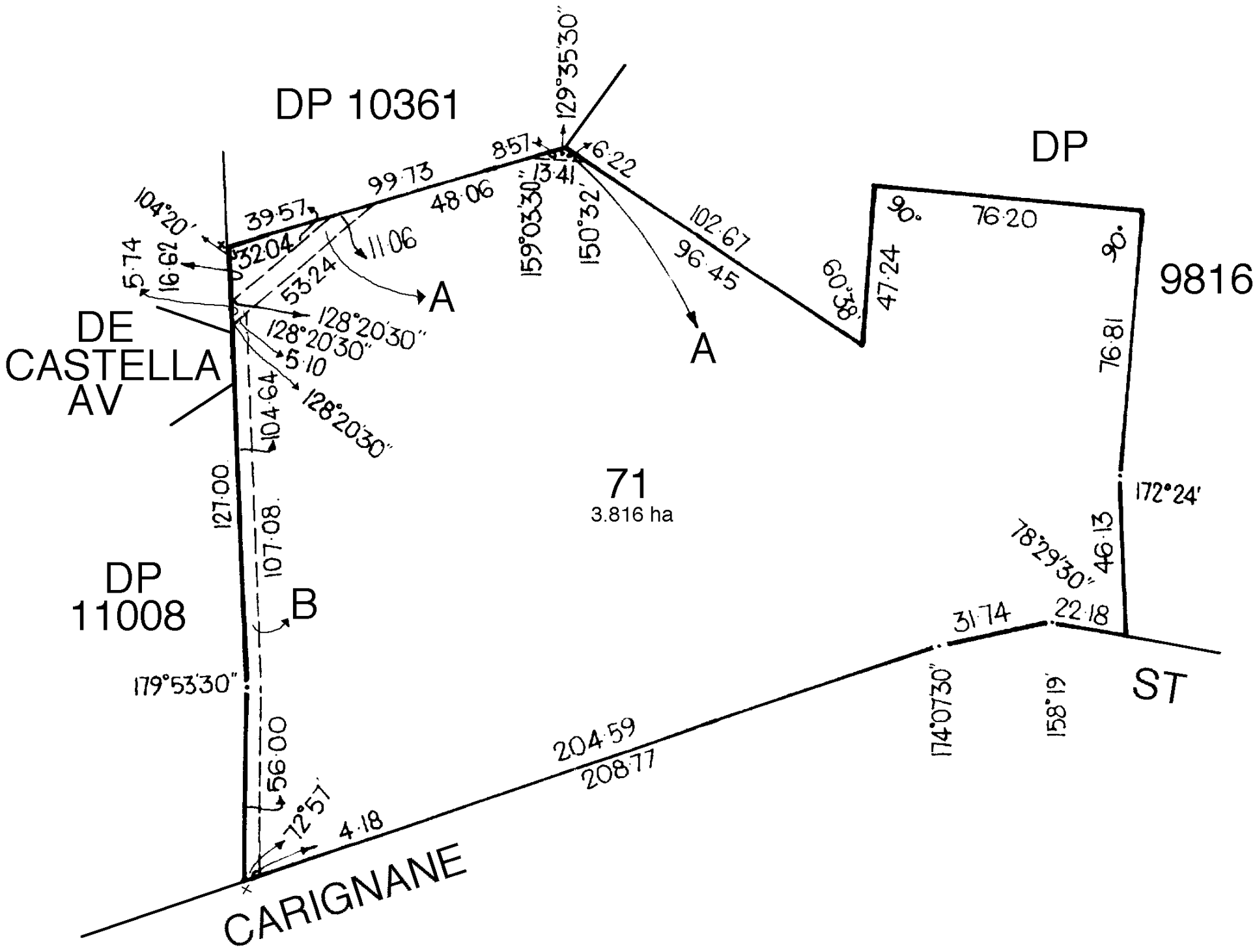
SHEET 1 OF 1

ACCEPTED FOR FILING
24/01/1995

REGISTRAR-GENERAL

AREA : WYNN VALE
LGA : CITY OF TEA TREE GULLY
HUNDRED : YATALA
SECTION : P S 2127

THIS PLAN IS SCANNED FOR CERTIFICATE OF TITLE 4073/381
SEE TITLE TEXT FOR EASEMENT DETAILS



0 20 40 60 80 Metres

NOTE: SUBJECT TO ALL LAWFULLY EXISTING PLANS OF DIVISION

Product	Register Search Plus (CT 5999/434)
Date/Time	07/02/2025 12:45PM
Customer Reference	01697
Order ID	20250207004983

REAL PROPERTY ACT, 1886
South Australia

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Certificate of Title - Volume 5999 Folio 434

Parent Title(s) CT 5761/595

Creating Dealing(s) TG 10766670

Title Issued 12/12/2007 **Edition** 1 **Edition Issued** 12/12/2007

Estate Type

FEE SIMPLE

Registered Proprietor

CATHOLIC CHURCH ENDOWMENT SOCIETY INC.
OF 39 WAKEFIELD STREET ADELAIDE SA 5000

Description of Land

ALLOTMENT 71 FILED PLAN 132662
IN THE AREA NAMED WYNN VALE
HUNDRED OF YATALA

Easements

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED C TO DISTRIBUTION LESSOR CORPORATION (SUBJECT TO LEASE 8890000) (TG 10766670)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED A AND B TO THE MINISTER FOR INFRASTRUCTURE (T 3676750 AND T 3909307 RESPECTIVELY)

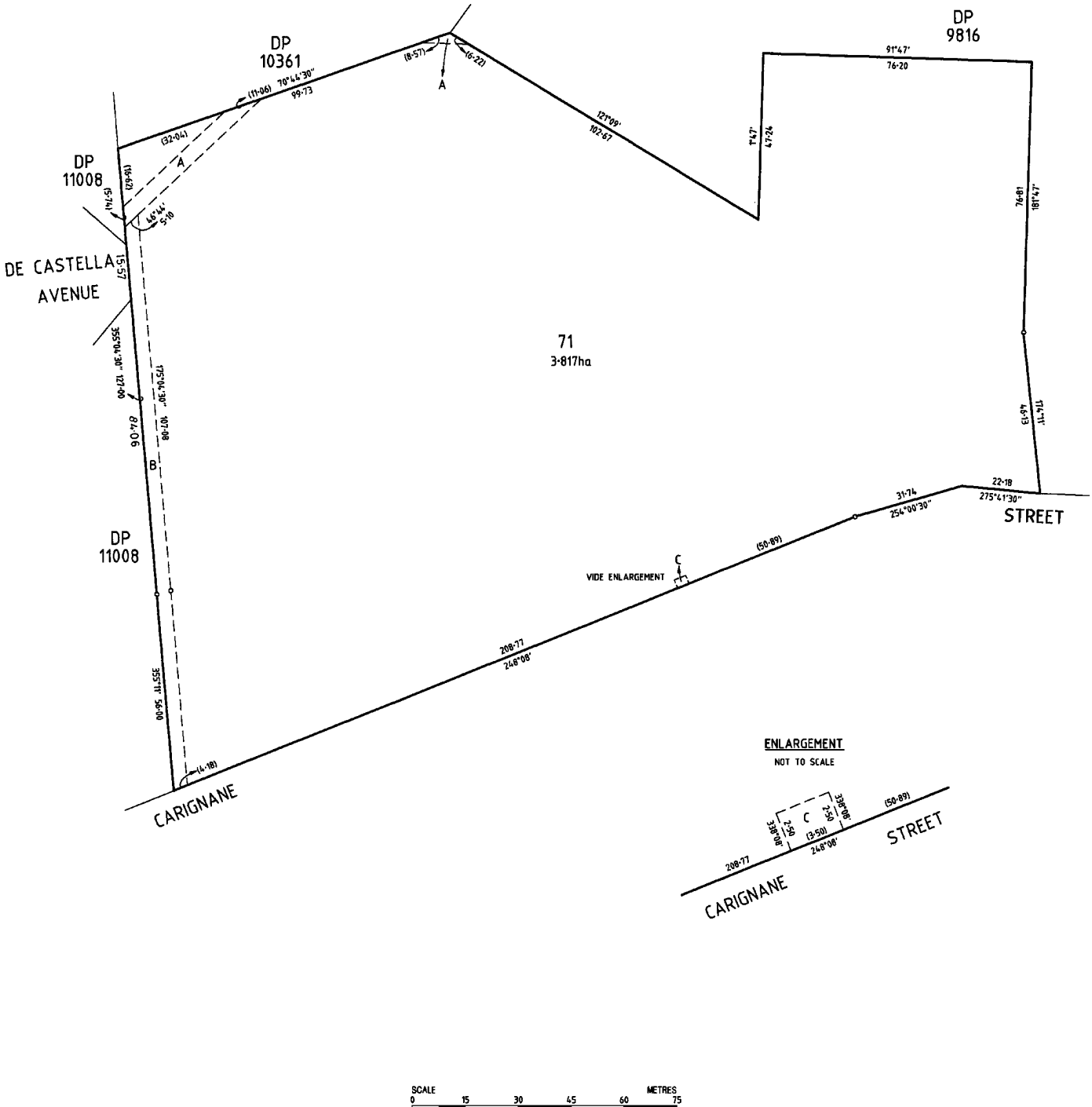
Schedule of Dealings

NIL

Notations

Dealings Affecting Title	NIL
Priority Notices	NIL
Notations on Plan	NIL
Registrar-General's Notes	NIL
Administrative Interests	NIL

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Product	Historical Search
Date/Time	07/02/2025 12:45PM
Customer Reference	01697
Order ID	20250207004983

Certificate of Title

Title Reference:	CT 5999/434
Status:	CURRENT
Parent Title(s):	CT 5761/595
Dealing(s) Creating Title:	TG 10766670
Title Issued:	12/12/2007
Edition:	1

Dealings

No lodged Dealings found.

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P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025



ARCH DRAWING SCHEDULE

No.	Sheet Name
DA00	FRONT COVER/ DRAWING SCHEDULE
DA01	PROPOSED CHILD CARE LOCALITY PLAN
DA02	PROPOSED CHILD CARE SITE PLAN
DA03	PROPOSED CHILD CARE GROUND FLOOR
DA04	PROPOSED ROOF PLAN
DA05	PROPOSED DEMOLITION CAR PARKING PLAN
DA06	PROPOSED CAR PARKING PLAN
DA07	BUILDING ELEVATIONS
DA08	BUILDING ELEVATIONS
DA09	MATERIAL SELECTIONS
DA10	EXISTING BUILDING
DA11	3D CONCEPT IMAGES
DA12	PLANTING PLAN - CHILDCARE
DA13	PLANTING PLAN - CARPARK
DA14	LANDSCAPE PLANTING SCHEDULE

ON ARCHITECTURE

Project

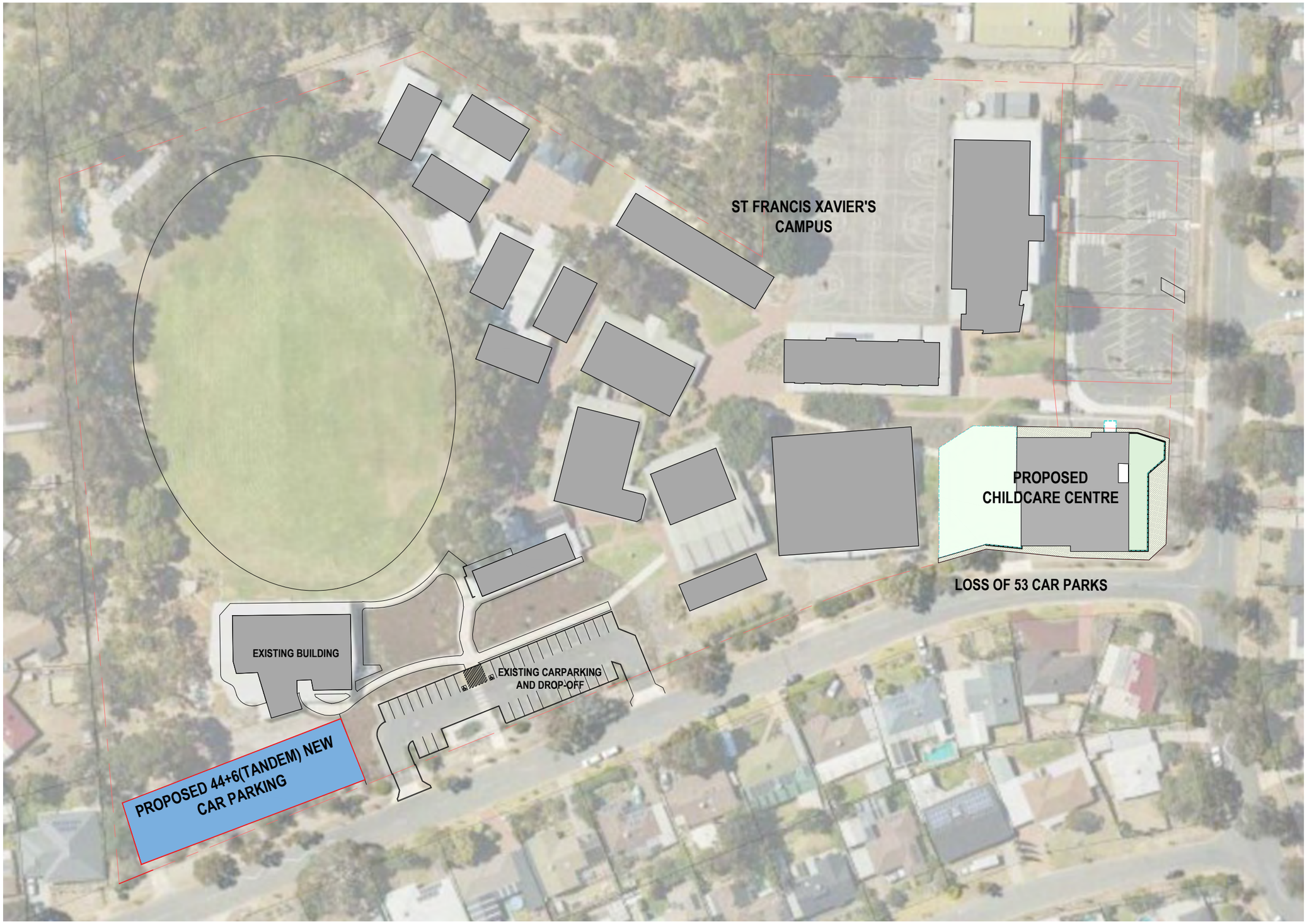
108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S

CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing

COVER/ DRAWING SCHEDULE

Scale	-	Drawn	MD		
Client	-				
Date	03/08/2026				
Job No.	202400017				
Dwg No.	**DA00**		Rev:	1	A3 SHEET



LOCALITY PLAN
1:1000

P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025

ON ARCHITECTURE

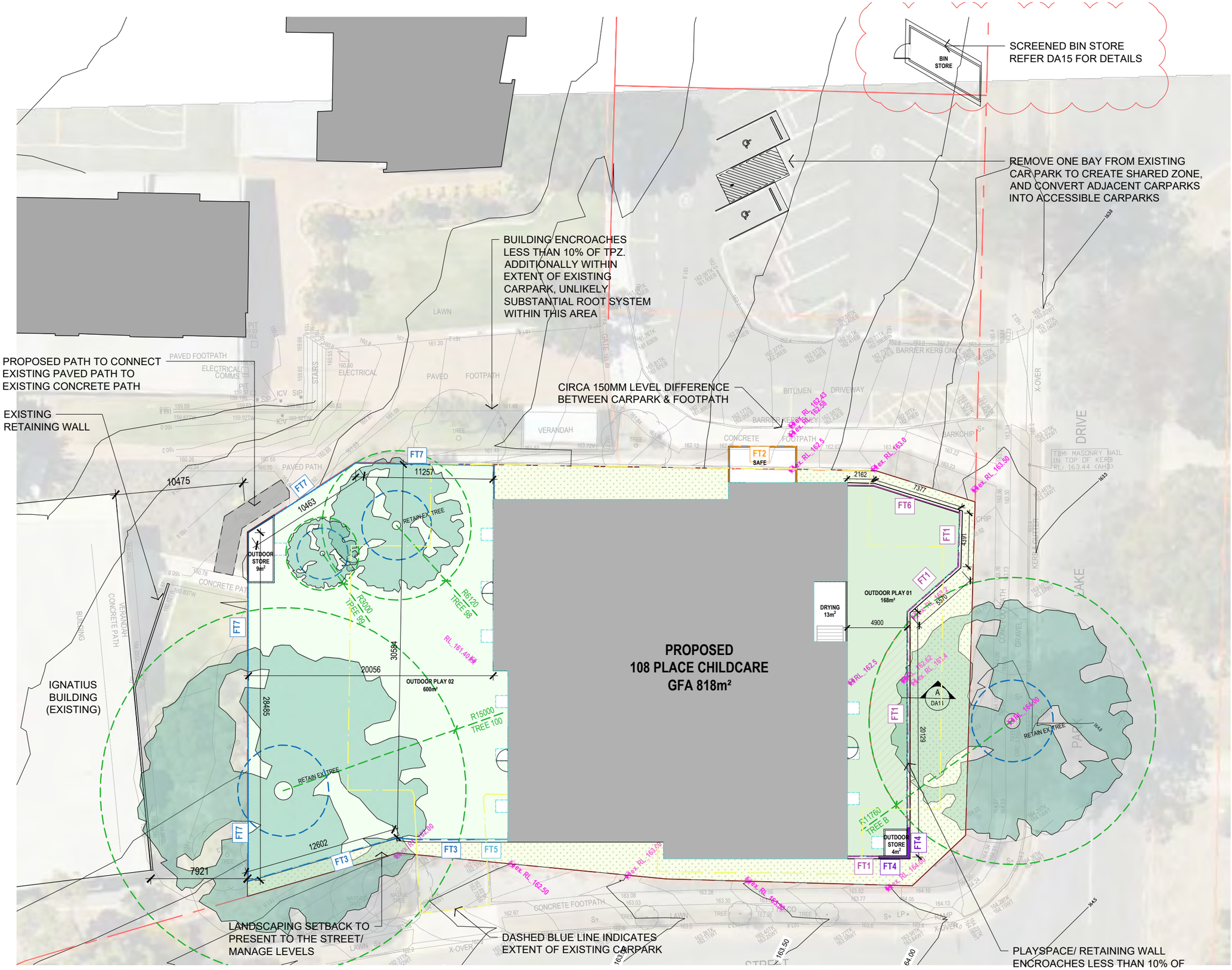
Project
108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
LOCATION PLAN - ST FRANCIS XAVIER'S CAMPUS

Scale	1:1000	Drawn	MD
Client	-		
Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA01**	Rev:	1

N

A3 SHEET



PROPOSED SITE PLAN

1:250

P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025

FENCE TYPE KEY

- FT1 — 1200h PICKET FENCE ON RETAINING WALL
- FT2 — 1500h TIMBER BATTEN FENCE TO SAFE ZONE
- FT3 — 1800h PICKET FENCE
- FT4 — 1500h SIGNAGE WALL ON RETAINING WALL
- FT5 — TIMBER BATTEN SCREEN ON RETAINING WALL TO UNDERSIDE OF SOFFIT
- FT6 — 1200h PICKET FENCE ON RETAINING WALL (NO SPACING/ SOLID)
- FT7 — 1800h PICKET FENCE (NO SPACING/ SOLID)

SITE DATA	
SITE AREA	1940sqm
BUILDING AREA (GFA)	818m²
PROPOSED CHILD CARE PLACES	108

ON ARCHITECTURE

Project

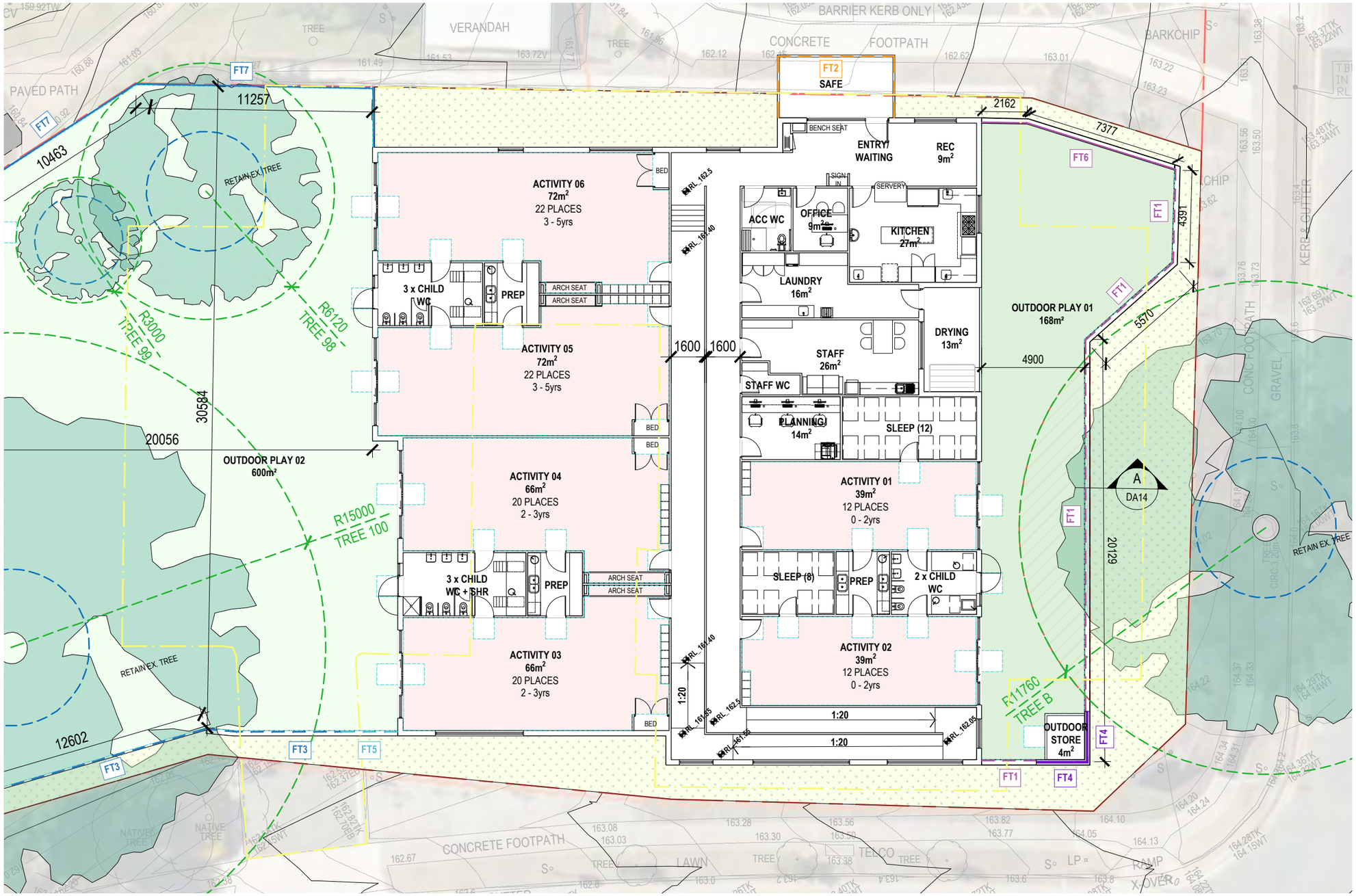
108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S

CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing

CHILDCARE SITE PLAN

Scale	As indicated	Drawn	MD	N
Client	-			
Date	03/08/2026			
Job No.	202400017			
Dwg No.	**DA02**	Rev:	1	A3 SHEET



GROUND FLOOR PLAN

1:200

ACTIVITY AREA SCHEDULE								
ROOM	PLACES	AGE	STAFF RATIO	STAFF No.	AREA REQ	UNENCUMBERED AREA	ENCUMBERED AREA	TOTAL AREA PROVIDED
ROOM 1	12	0-2	1:4	4	39	41sqm	6sqm	47sqm
ROOM 2	12	0-2	1:4	4	39	41sqm	6sqm	47sqm
ROOM 3	20	2-3	1:5	3	65	67sqm	6sqm	73sqm
ROOM 4	20	2-3	1:5	3	65	67sqm	6sqm	73sqm
ROOM 5	22	3-5	1:11	2	71.5	72sqm	8sqm	80sqm
ROOM 6	22	3-5	1:11	2	71.5	72sqm	8sqm	80sqm
TOTALS	108			18	351	360sqm	40sqm	400sqm

OUTDOOR PLAY AREA SCHEDULE					
ROOMS	PLACES	AREA REQ	UNENCUMBERED AREA	ENCUMBERED AREA	TOTAL AREA PROVIDED
ROOM 1 ROOM 2	12 12	168	168sqm	4sqm	172
ROOM 3 ROOM 4	20 20	280	290sqm	3sqm	293
ROOM 5 ROOM 6	22 22	308	310sqm	4sqm	314
TOTALS	108	756	768sqm	11sqm	779sqm

PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025

FENCE TYPE KEY

- FT1 — 1200h PICKET FENCE ON RETAINING WALL
- FT2 — 1500h TIMBER BATTEN FENCE TO SAFE ZONE
- FT3 — 1800h PICKET FENCE
- FT4 — 1500h SIGNAGE WALL ON RETAINING WALL
- FT5 — TIMBER BATTEN SCREEN ON RETAINING WALL TO UNDERSIDE OF SOFFIT
- FT6 — 1200h PICKET FENCE ON RETAINING WALL (NO SPACING/ SOLID)
- FT7 — 1800h PICKET FENCE (NO SPACING/ SOLID)

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
GROUND FLOOR PLAN

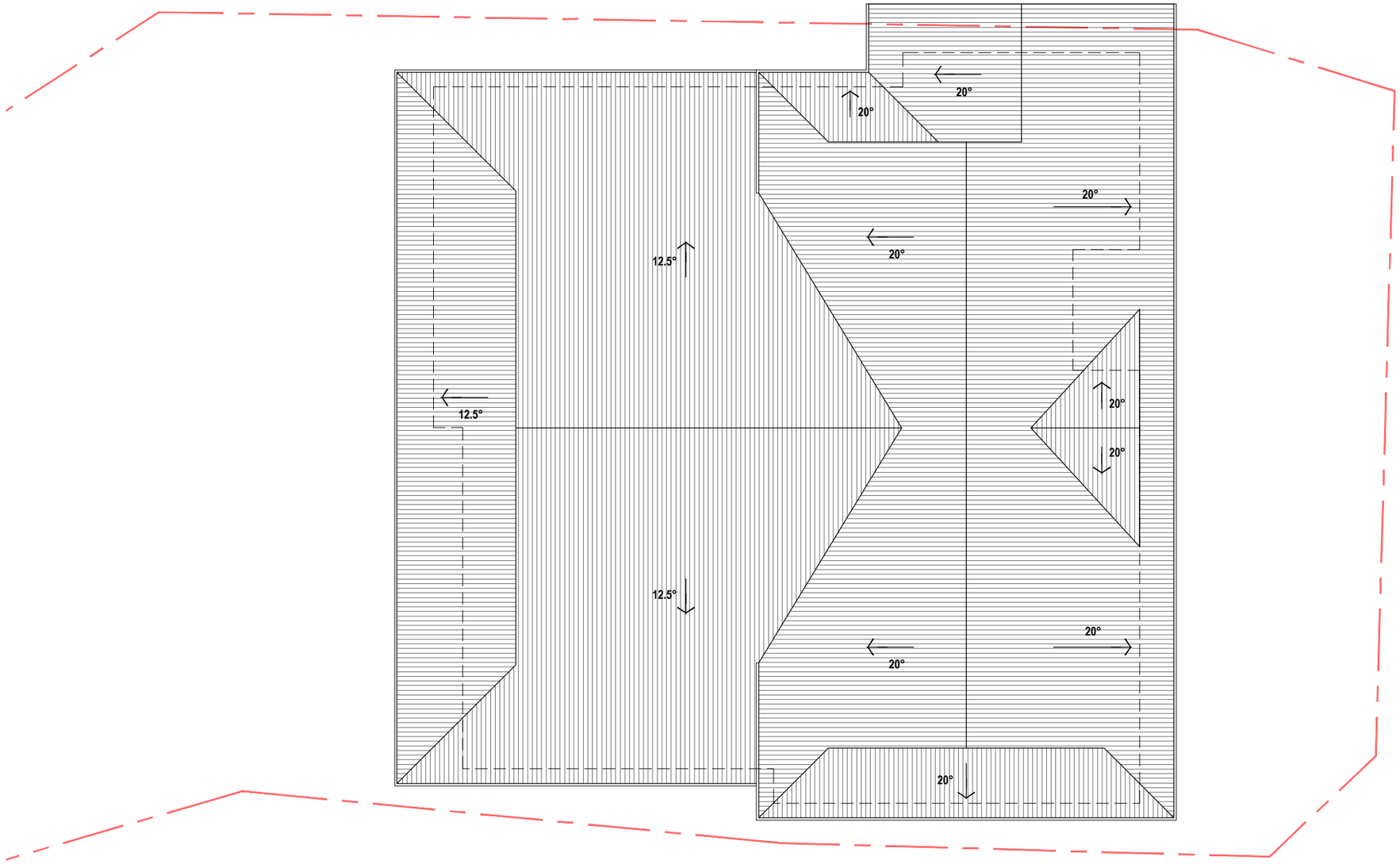
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Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA03**	Rev:	1

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A3 SHEET

P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025



PROPOSED ROOF PLAN

1:200

ARCHITECTURE

Project

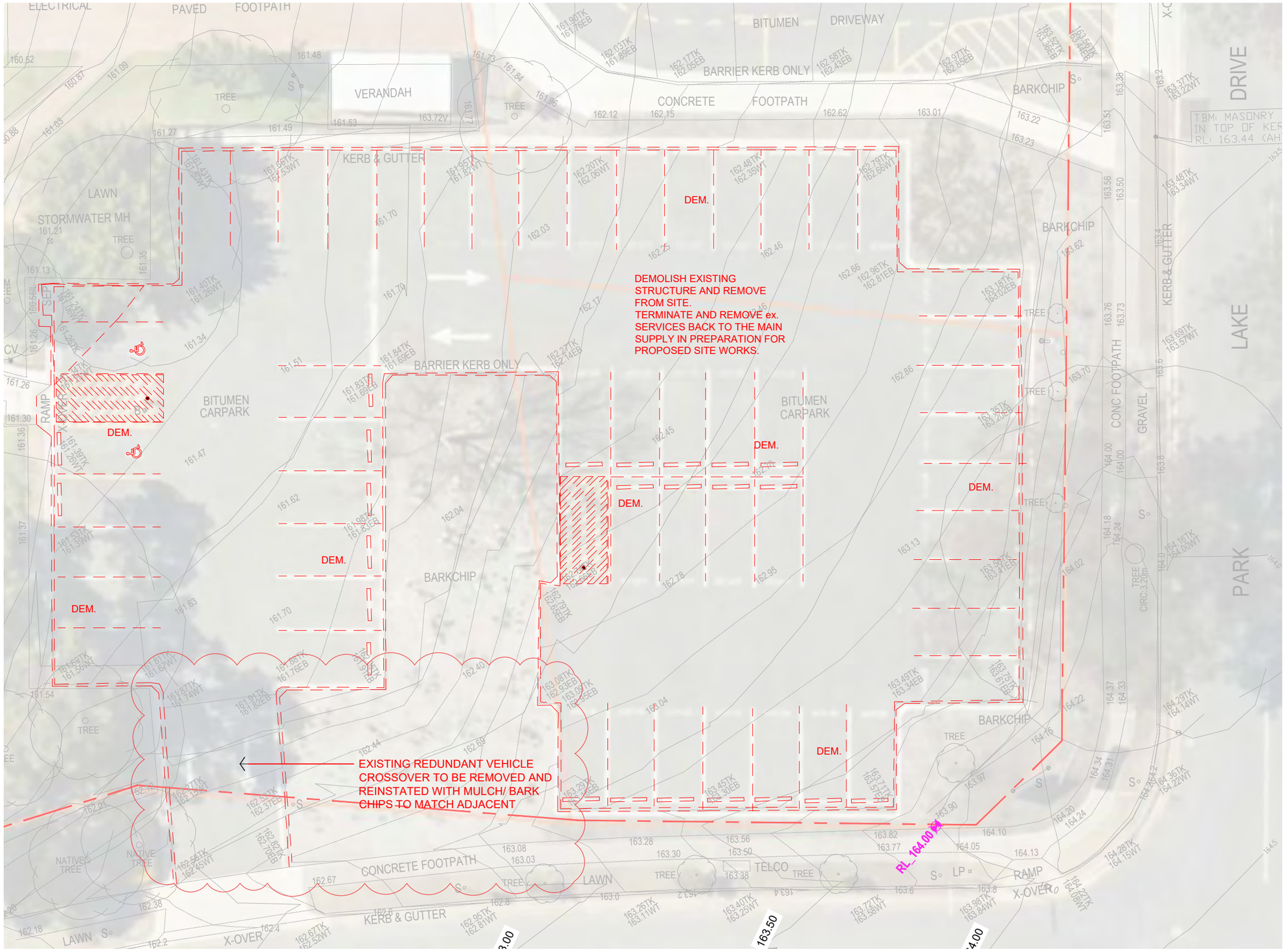
108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S

CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing

ROOF PLAN

Scale	As indicated	Drawn	MD	N
Client	-			
Date	03/08/2026			
Job No.	202400017			
Dwg No.	**DA04**		Rev: 1	A3 SHEET



PROPOSED CARPARK DEMOLITION

1:200

P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025

DEMOLITION LEGEND

DEMOLITION EXTENTS (BUILDING/STRUCTURE)

DEMOLITION WORKS SCOPE
INCLUDES BUT IS NOT LIMITED TO:

- DEMOLISH EXISTING BUILDINGS - ALL ROOF, EXTERNAL AND INTERNAL WALLS, FLOORS,STRUCTURAL ELEMENTS AND UNDERFLOOR STRUCTURES AND CONCRETE SLABS,INCLUDING ANY BASEMENT AREA UNDER MAIN BUILDING IN PRESENT.
- DEMOLISH EXISTING FENCES. DEMOLISH ALL EXTERNAL PATHS, KERBS, DRIVEWAYS, BITUMEN, GRAVEL AND CONCRETE SLABS ON SITE.
- CLEAR VEGETATION AND REMOVE TREES UNLESS OTHERWISE INDICATED. VEGETATION DEMOLITION AND REMOVAL SCOPE INCLUDES STUMP REMOVAL AND SIMILAR.
- DISCONNECT, CAP AND SEAL ALL SERVICES
- REMOVE EXISTING SERVICES BACK TO MAIN SUPPLY POINT AT PROPERTY BOUNDARY.
- REMOVE ALL FURNITURE, JOINERY ITEMS ANDVFIXTURES REMAINING WITHIN THE BUILDING AND EXTERNAL FIXED AND NON FIXED ITEMS UNLESS OTHERWISE NOTED.
- REMOVE ALL EXTERNAL SIGNAGE AND LOOSE DEBRIS IN PREPARATION FOR NEW WORKS,

GENERAL DEMOLITION NOTES:

- DIMENSIONS AND AREAS ARE SUBJECT TO SURVEY
- REFER TO EXISTING SURVEY PLAN FOR DETAILS OF EXISTING ELEMENTS AND LEVELS
- THE CONTRACTOR SHALL BE AWARE OF ALL SITE RESTRICTIONS AND SHALL ENSURE THE SAFETY OF THEIR STAFF, SUBCONTRACTORS, VISITORS AND SIMILAR.
- THE CONTRACTOR SHALL ENSURE THAT THEY AND THEIR STAFF ARE AWARE OF ANY SUBSTANCES OR MATERIALS PRESENT ON SITE THAT ARE HAZARDOUS TO HEALTH AND HAVE READ ALL SITE SPECIFIC HEALTH AND SAFETY INFORMATION PRIOR TO COMMENCEMENT OF DEMOLITION WORKS. ANY MATERIAL OR SUBSTANCE THAT IS DISCOVERED, AND UNREPORTED UP UNTIL ITS DISCOVERY SHOULD BE REPORTED TO THE LEAD CONTRACTOR IMMEDIATELY.
- THE BUILDING TO BE REMOVED. CAP AND SEAL AND REMOVE BACK TO SERVICE SUPPLY POINT AT SITE BOUNDARY TO AUTHORITIES' REQUIREMENTS AND IN PREPARATION FOR FUTURE NEW WORKS.
- LOCATION OF EXISTING SERVICES INDICATED ON THE WORKING DRAWINGS ARE INDICATIVE ONLY.
- ENSURE ALL EXISTING PROPERTY IS PROTECTED DURING DEMOLITION. RETAIN EXISTING BOUNDARY FENCING WHERE NOT INDICATED FOR REMOVAL. REINSTATE OR MAKE GOOD ANY DAMAGE TO MATCH EXISTING.
- RESTRICT DUST AND NOISE CAUSED BY DEMOLITION WORKS TO A PRACTICABLE MINIMUM.
- REMOVE ALL DEMOLISHED MATERIALS FROM SITE UNLESS OTHERWISE NOTED.
- ON COMPLETION OF DEMOLITION WORKS, SITE TO BE GENERALLY LEVELED TO CIVIL ENGINEERS DOCUMENTATION.
- IF ANY, BASEMENT VOLUME AND ANY TRENCHING TO BE FILLED TO PROVIDE A SAFE LEVEL SURFACE IN PREPARATION FOR SITE WORKS.

ON ARCHITECTURE

Project

108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S

CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing

PROPOSED CARPARK DEMOLITION

Scale	As indicated	Drawn	AR	N
Client	-			
Date	03/08/2026			
Job No.	202400017			
Dwg No.	**DA05**	Rev:	1	A3 SHEET

PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025

PERMEABKE FENCING (IE. BATTEN OR PALISADE FENCING) TO ALLOW VISUAL CONNECTION/ BETWEEN CHILDCARE AND SCHOOL.

PROPOSED FENCE TO BE 2.1m HIGH IN THIS LOCATION AS PER ACOUSTIC REPORT (EXTENT SHOWN BY SOLID YELLOW LINE)

EXISTING BUILDING
FFL 157.000

RETAIN EX. TREE

TREE >1M
RL 155.5

TREE >2M
RL 156.05

TREE >1M
RL 156.1

TREE >1M
RL 156.3

R3720
TREE 61

R7200
TREE A

R7200
TREE 58

R9240
TREE 60

TANDEM CARPARKING CONFIGURATION

PEDESTRIAN PATH CONNECTION

AUTOMATIC BOOM GATES TO ENABLE EXTENDED ACCESS, REFER TRAFFIC REPORT

PROPOSED CARPARK
50 SPACES

R3360
TREE 117

R4680
TREE 118

MAKE GOOD CONNECTION TO EXISTING CARPARK

FENCE LINE AT BASE OF RETAINING BATTER
TO MATCH EXISTING OPEN SCHOOL BOUNDARY FENCE STYLE

1000mm LANDSCAPE PLANTING BUFFER TO FENCE

157.40

157.90

158.40

158.90

CARPARK DATA	
PROPOSED TANDEM CARPARK	6
PROPOSED CARPARKING (reg.)	44
TOTAL CARPARKING	50

PROPOSED CAR PARKING PLAN

1:250

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

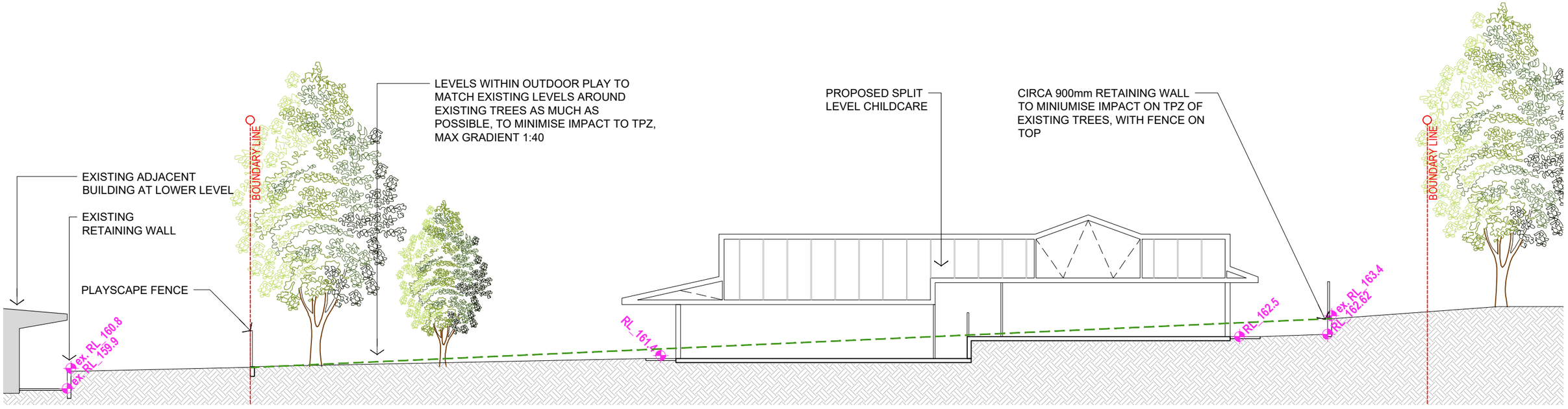
Drawing
PROPOSED CAR PARKING

Scale	As indicated	Drawn	MD
Client	-		
Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA06**	Rev:	1

A3 SHEET

PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025



SECTION A

1:100

ARCHITECTURE

Project

108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S

CARRIGNANE STREET, WYNN VALE, SA. 5127

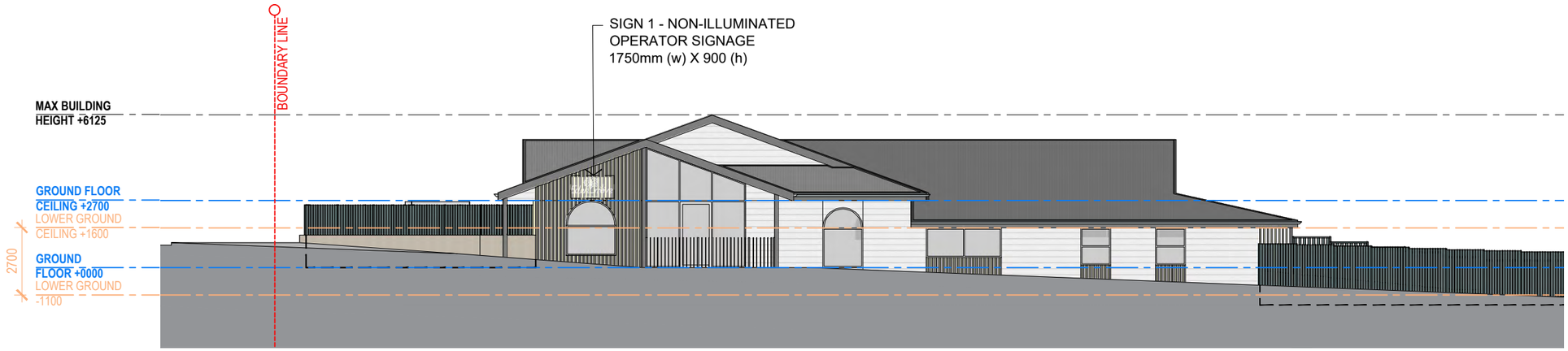
Drawing

CARPARK SECTIONS

Scale	As Indicated	Drawn	MD		
Client	-				
Date	03/08/2026				
Job No.	202400017				
Dwg No.	**DA07**		Rev: 1		A3 SHEET

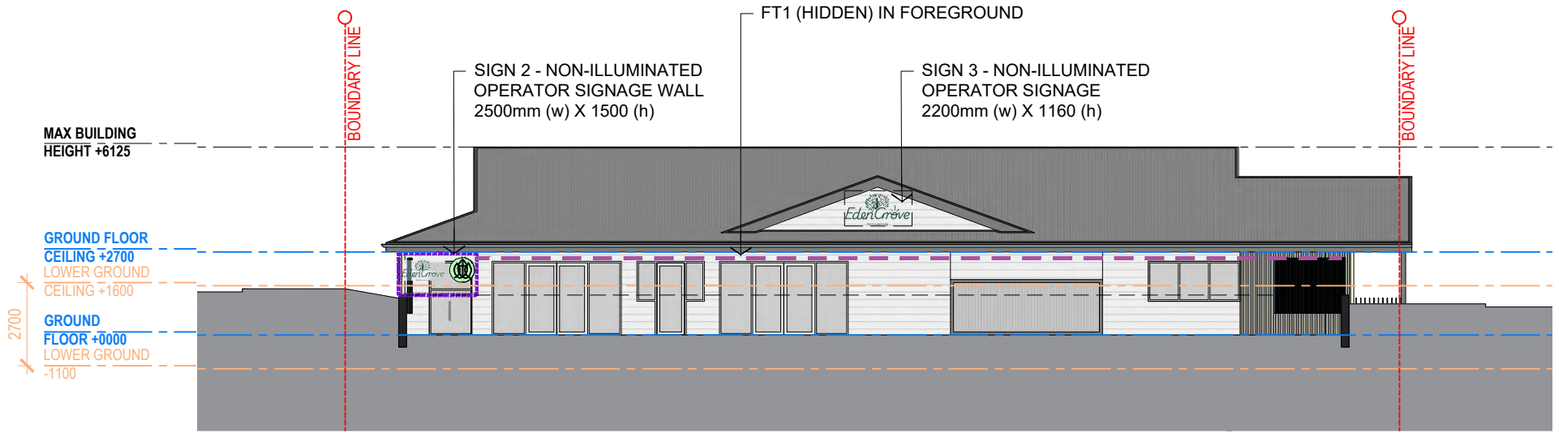
PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025



NORTH - ELEVATION

1:200



EAST - ELEVATION

1:200

ON ARCHITECTURE

Project

108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

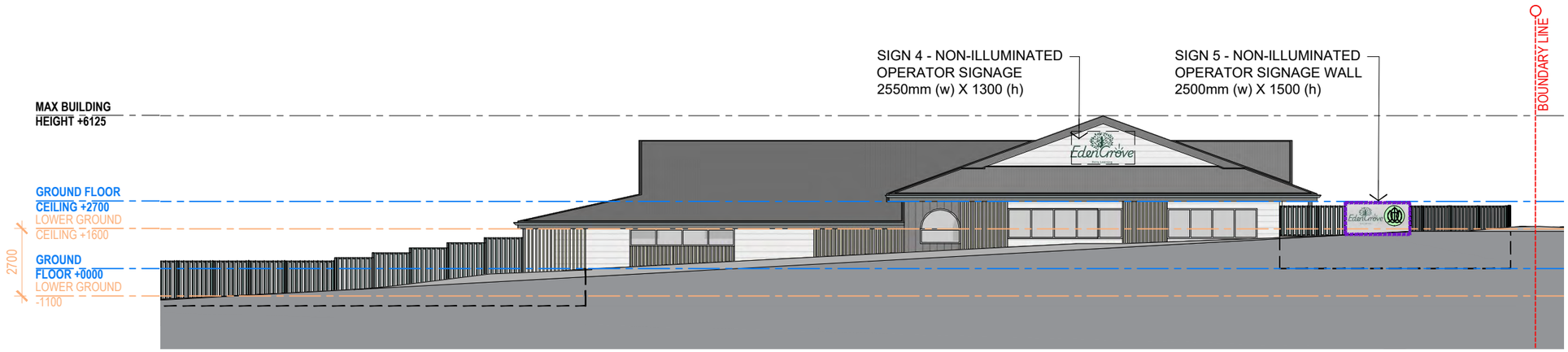
Drawing

ELEVATIONS

Scale	As Indicated	Drawn	MD
Client	-		
Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA07**	Rev: 1	A3 SHEET

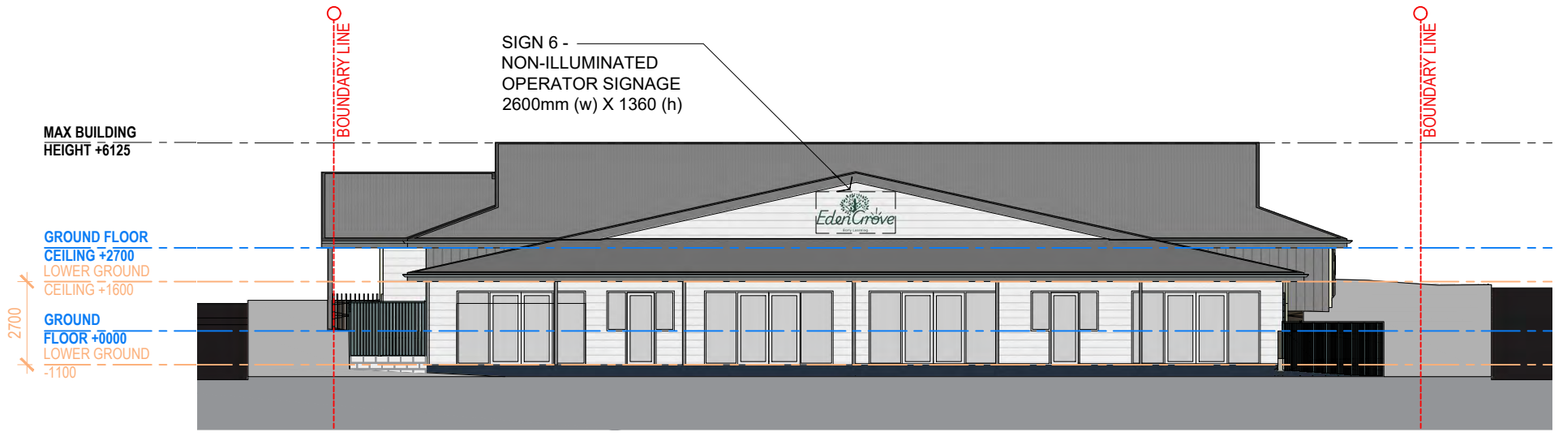
PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025



SOUTH - ELEVATION

1:200



WEST - ELEVATION

1:200

ON ARCHITECTURE

Project

108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing

ELEVATIONS

Scale	As Indicated	Drawn	MD
Client	-		
Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA08**	Rev:	1 A3 SHEET

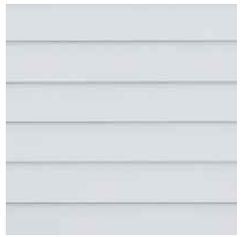
PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025





1 KNOTWOOD 'WHITE ASH' ALUMINIUM BATTENS

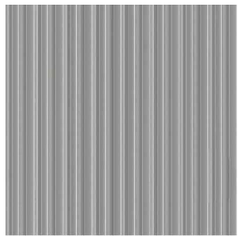


2 JAMES HARDIE LINEA - WHITE ON WHITE

3 DULUX DURALLOY WHITE SATIN WINDOW FRAMES



4 JAMES HARDIE FC SHEET - AXON CLADDING - EDEN COLOURS



5 ROOF SHEETING - COLORBOND SURFMIST



6 PICKET FENCE WITH RAILS AT TOP & BOTTOM - BLACK, SPACING VARIES TO SUIT REQUIRED PRIVACY



7 DULUX POWDERCOAT- SURFMIST
- COLUMNS
- ROOF FASCIA FLASHINGS
- GUTTERS
- DOWNPIPES

MATERIAL SELECTION

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
MATERIAL SELECTION

Scale	NA	Drawn	MD
Client	-		
Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA09**	Rev:	1 A3 SHEET

P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025



PROPOSED BUILDING



EXISTING SITE

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
EXISTING AND PROPOSED BUILDING

Scale	NA	Drawn	MD
Client	-		
Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA10**	Rev:	1 A3 SHEET

P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025







CONCEPT IMAGES

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
CONCEPT IMAGE

Scale	NA	Drawn	MD
Client	-		
Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA11**	Rev:	1 A3 SHEET



PLANTING PLAN - CHILDCARE

1:300

P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025

1. Proposed Medium Screen Tree
2. Proposed Screen Planting
3. Proposed Shrubs & Groundcover

NOTE:
PLANTING/ ARRANGEMENT OF OUTDOOR PLAY SPACE IS PURELY INDICATIVE

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
PLANTING PLAN - CHILDCARE

Scale	As Indicated	Drawn	MD
Client	-		
Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA12**	Rev:	1 A3 SHEET



PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025

1. Proposed Medium Screen Tree

NOTE:
PLANTING/ ARRANGEMENT IS PURELY INDICATIVE

PLANTING PLAN - CARPARK

1:300

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
PLANTING PLAN - CARPARK

Scale	As Indicated	Drawn	MD
Client	-		
Date	03/08/2026		
Job No.	202400017		
Dwg No.	**DA13**	Rev:	1 A3 SHEET

PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025

CODE		COMMON NAME	SPACING	POT SIZE	Height & Width at Maturity (m)
1.	**MEDIUM SCREEN TREE**				
Pyr	*Pyrus salicifolia 'Pendula'*	Willow-leaved Pear,	As Shown	100L	4 x 7
2.	**SCREEN PLANTING**				
Gah	*Gahnia filum*	Thatching Grass	750mm	140mm	0.4 x 1.5
Gre	*Grevillea lanigera 'Lutea'*	Woolly Grevillea	750mm	140mm	1.5 x 3
3.	**SHRUBS & GROUNDCOVERS**				
Bux	Buxus sempervirens 'Suffruticosa'	English Box	500mm	140mm	0.4 x 0.5
Bra	Brachyscome 'Country Lights'	Asteraceae	300mm	140mm	0.2 x 0.3
Cen	Centaurea cineraria	Dusty Miller	250mm	140mm	0.1 x 0.2











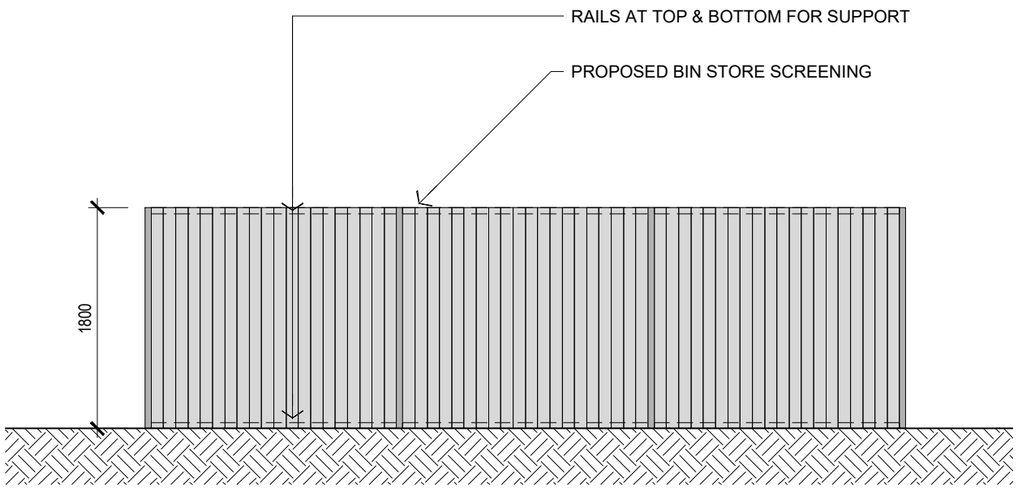


ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
LANDSCAPE PLANTING SCHEDULE

Scale	NA	Drawn	AR		
Client	-				
Date	03/08/2026				
Job No.	202400017				
Dwg No.	**DA14**		Rev:	1	A3 SHEET



BIN STORE TYPICAL ELEVATION

1:50







PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
2	PLANNING ISSUE	03/08/2025

ON ARCHITECTURE

Project

108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S

CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing

BIN STORE DETAILS

Scale	As Indicated	Drawn	MD		
Client	-				
Date	03/08/2026				
Job No.	202400017				
Dwg No.	**DA15**		Rev:	1	A3 SHEET

Child Care Centre Wynn Vale

Environmental Noise Assessment

S8232C4

February 2026

sonus.

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Document Title	: Child Care Centre Wynn Vale Environmental Noise Assessment
Client	: Accord
Document Reference	: S8232C4
Date	: February 2026
Author	: Adam Cook, MAAS
Reviewer	: Chris Turnbull, MAAS

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1 INTRODUCTION

An environmental noise assessment has been conducted for the proposed child care centre located at Carignane street, Wynn Vale (the **Development**). The Development is comprised of a new childcare centre and carpark.

The nearest noise sensitive receivers to the Development are residences to the west, to the south across Carignane Street and to the east across Park Lake Drive. The site and its surroundings are shown in Figure 1 and the proposed layout of the site is shown in Appendix A.



Figure 1: The Site and its Surroundings

The assessment considers the noise levels at the surrounding sensitive receivers from children playing in outdoor areas, carparking and mechanical plant operation associated with the Development.

The assessment has been based on the following:

- On Architecture drawings of the development, Job No: 202400017, Drawing No's: DA02, DA03, DA06, DA07 dated 12 August 2025.
- The understanding that the total number and age of the children at the centre will be:
    - 24 x 0-2 year olds
    - 40 x 2-3 year olds
    - 44 x 3-5 year olds
- The understanding that children will be in the outside areas for an average of 8 hours per day.
- The assumption that any private rubbish collection will be limited to the times of the day defined to not constitute 'local nuisance' in the Local Nuisance and Litter Control Act 2016, these are:
    - Between 9:00 am and 7:00 pm on any Sunday or public holiday.
    - Between 7:00 am and 7:00 pm on any other day.

2 PLANNING AND DESIGN CODE

The site and the closest receivers are located within the *General Neighbourhood Zone* of the *South Australian Planning and Design Code* (the **Code**) under the *Planning, Development and Infrastructure Act 2016.*

The Code has been reviewed and the provisions considered most relevant to the noise assessment are included in Appendix B.

3 OUTDOOR PLAY AREAS

Preschools, schools, child care centres and playgrounds are often located immediately adjacent to residences and the sound of children playing during the day is rarely a concern. However, in some situations the noise can be annoying if adjacent residences are sensitive to the sound of children's voices. For the purposes of this assessment, it has been assumed that the residents in the vicinity of the proposed development are sensitive to the sound of children's voices.

3.1 Criteria

Performance Outcome (**PO**) 4.1 of the *Interface between Land Uses* module of the *General Development Policies* section of the Code specifically requires that noise from a development does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers). The Deemed-to-Satisfy / Designated Performance Feature (**DTS/DPF**) for PO 4.1 references the *Environment Protection (Commercial and Industrial Noise) Policy 2023* (the **Policy**).

However, noise from children playing is specifically excluded from assessment under the Policy. In these circumstances, reference is made to the recommendations of the *Guidelines for Community Noise 1999* (the **Guidelines**) published by the *World Health Organisation* (the **WHO**) with regard to annoyance during the day.

The Guidelines include:

> "*To protect the majority of people from being seriously annoyed during the daytime, the sound pressure level on balconies, terraces and outdoor living areas should not exceed 55 dB L_{Aeq} for a steady continuous noise. To protect the majority of people from being moderately annoyed during the daytime, the outdoor sound pressure level should not exceed 50 dB L_{Aeq}.*"

Based on the above, it is proposed that noise reduction measures be designed for the proposal such that the average noise levels (L_{eq}) during the daytime hours from children playing are no greater than 50 dB(A) at the residences.

3.2 Assessment

The noise from the proposed facility has been predicted, based on the centre operating at full capacity in all age groups, totalling 108 children.

The noise levels generated from children playing in outdoor areas, which have been used as the basis of this assessment, are provided in Appendix C (provided as *sound power levels* for children of various ages) and are taken from the *Association of Australasian Acoustical Consultants Guideline for Child Care Centre Acoustic Assessment Version 3.0*.

In order to predict the level of noise from the Development, a noise model of the Development and surrounding area has been developed using SoundPLAN noise modelling software. This model considers the sound power generated by each noise source associated with the Development, the distance between the noise sources and receivers, shielding provided by structures or terrain and worst-case meteorological conditions for the propagation of noise that results in the highest noise level at the receiver.

The highest predicted noise level (L_{eq}) at the residences from children playing is 50 dB(A) at the residences, therefore achieving the WHO recommendation to protect against annoyance, without the provision of specific noise mitigation.

4 MECHANICAL PLANT

4.1 Criteria

The DTS/DPF provision for PO4.1 of the Interface between Land Uses section of the Code requires achieving the criteria of the Policy. The Policy provides objective noise criteria to assess the environmental noise emissions from a proposed development. The noise criteria provided by the Policy are based on the WHO Guidelines, which provide acceptable noise levels to prevent annoyance, sleep disturbance and unreasonable interference on the amenity of an area. Therefore, compliance with the Policy is considered to satisfy the WHO Guidelines, and all relevant provisions in the Code related to environmental noise.

The goal noise levels to be achieved at sensitive receivers, based on the principally promoted land uses of the Code zones in which the noise source (the Development) and the noise receivers are located. The Policy also applies noise goals which are 5 dB(A) lower for a development, when assessed at existing residences.

In this instance, the Policy provides the following goal noise levels:

- An average noise level (L_{eq}) of 47 dB(A) during the day (7:00am to 10:00pm).
- An average noise level (L_{eq}) of 40 dB(A) during the night (10:00pm to 7:00am).
- A maximum noise level (L_{max}) of 60 dB(A) during the night (10:00pm to 7:00am).

When measuring or predicting noise levels for comparison with the Policy, adjustments may be made to the equivalent noise levels for each “annoying” characteristic of tonality, impulsiveness, low frequency, intermittency and modulation of the noise sources. The characteristic must be dominant in the acoustic environment for adjustments to apply, and therefore the application of a penalty varies depending on the assessment location, time of day, the noise source being assessed, and the measured or predicted noise level. The application of penalties is discussed further in the Assessment section.

4.2 Assessment

The noise levels at the closest sensitive receivers from the proposed site activity have been predicted based on a range of previous noise measurements and observations taken at similar facilities. These include:

- General car park activity such as people talking as they vacate or approach their vehicles, the opening and closing of car doors, vehicles starting, vehicles idling, and vehicles moving into and accelerating away from parked positions.
- Mechanical plant serving the building.

As is typical at the Development Application stage, the proposed mechanical plant units have not yet been designed or selected. Therefore, the assessment of the mechanical plant has been based on a typical selection, consisting of two outdoor air conditioning units with a sound power level of 76 dB(A).

The predicted noise levels consider the following assumed activity levels:

- Day (7:00am to 10:00pm):
    - 25 vehicles movements into or out of the car park and corresponding general car park activity at the available car parks.
    - Continuous operation of the mechanical plant within the *"Drying"* area.
- Night (10:00pm to 7:00am):
    - 5 vehicles movements into or out of the car park and corresponding general car park activity at the available car parks.
    - Continuous operation of the mechanical plant within the *"Drying"* area.

Noise levels are predicted to exceed the relevant criteria from the Policy without the provision of noise mitigation. To achieve the criteria, a 2.1 metre tall boundary fence is required to be installed to the property boundary west of the carpark, for the extent shown in Figure 2. Suitable fencing materials include the following constructions:

- Tubular steel fencing, backed with an acoustically-solid transparent material such as acrylic or glass.
- Sheet metal (e.g. Colorbond sheeting).
- Masonry, blockwork, precast concrete or aerated concrete.
- Timber pales (if pales are overlapped and free from gaps).

Fencing should be free from gaps or holes along the entire length, including at the interface with the ground.

Based on the above, the predicted noise levels are no higher than 41 dB(A) during the day (7:00am to 10:00pm) and 34 dB(A) during the night (10:00pm to 7:00am), thereby easily achieving the average noise level (L_{eq}) criteria of the Policy.

Noise that is experienced at receivers from the Development may fluctuate to an extent, but it is not expected that this would occur in such a way or to an extent to warrant either a modulation or intermittency penalty under the Policy. Similarly, the noise is unlikely to comprise significant impulsive, low frequency or tonal components and therefore does not warrant a penalty for these characteristics under the Policy. It is noted that compliance with the Policy criteria would still be achieved even if a penalty was to be applied.

Predicted maximum noise levels at any existing residences are no more than 58 dB(A), therefore achieving the maximum noise level (L_{max}) criterion of the Policy.



Figure 2: Recommended boundary fencing

5 CONCLUSION

An environmental noise assessment has been conducted for the proposed child care centre located at Carignane street, Wynn Vale.

The assessment has considered noise at noise sensitive receivers in the vicinity, from children playing in outdoor areas and mechanical plant operation.

Relevant assessment criteria have been established based on the *South Australian Planning and Design Code*, *the Environment Protection (Commercial and Industrial Noise) Policy 2023* and the *World Health Organisation* recommendations to protect against annoyance.

Specific boundary fence constructions have been recommended to achieve the assessment criteria.

Based on the above, the Development will *not unreasonably impact the amenity of sensitive receivers*, thereby achieving the relevant provisions of the *South Australian Planning and Design Code* related to environmental noise.

APPENDIX A: SITE LAYOUT



APPENDIX B: SOUTH AUSTRALIAN PLANNING AND DESIGN CODE PROVISIONS

PART 4 – General Development Policies

Interface between Land Uses

Desired Outcome

DO 1: Development is located and designed to mitigate adverse effects on or from neighbouring and proximate land uses.

<table>
<tr><th>Performance Outcome</th><th>Deemed-to-Satisfy Criteria / Designated Performance Feature</th></tr>
<tr><td colspan="2">General Land Uses Compatibility</td></tr>
<tr><td>PO 1.2
Development adjacent to a site containing a sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers is designed to minimise adverse impacts.</td><td>DTS/DPF 1.2
None are applicable</td></tr>
<tr><td colspan="2">Hours of Operation</td></tr>
<tr><td>PO 2.1
Non-residential development does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) or an adjacent zone primarily for sensitive receivers through its hours of operation having regard to:
a) the nature of the development
b) measures to mitigate off-site impacts
c) the extent to which the development is desired in the zone
d) measures that might be taken in an adjacent zone primarily for sensitive receivers that mitigate adverse impacts without unreasonably compromising the intended use of that land.</td><td>DTS/DPF 2.1
Development operating within the following hours:
<table>
<tr><th>Class of Development</th><th>Hours of Operation</th></tr>
<tr><td>Consulting room</td><td>7am to 9pm, Monday to Friday
8am to 5pm, Saturday</td></tr>
<tr><td>Office</td><td>7am to 9pm, Monday to Friday
8am to 5pm, Saturday</td></tr>
<tr><td>Shop, other than any one or combination of the following:
a) restaurant
b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone</td><td>7am to 9pm, Monday to Friday
8am to 5pm, Saturday and Sunday</td></tr>
</table></td></tr>
</table>

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Activities Generating Noise or Vibration	
PO 4.1 Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).	DTS/DPF 4.1 Noise that affects sensitive receivers achieves the relevant Environment Protection (Commercial and Industrial Noise) Policy criteria.
PO 4.2 Areas for the on-site manoeuvring of service and delivery vehicles, plant and equipment, outdoor work spaces (and the like) are designed and sited to not unreasonably impact the amenity of adjacent sensitive receivers (or lawfully approved sensitive receivers) and zones primarily intended to accommodate sensitive receivers due to noise and vibration by adopting techniques including: a) locating openings of buildings and associated services away from the interface with the adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers b) when sited outdoors, locating such areas as far as practicable from adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers c) housing plant and equipment within an enclosed structure or acoustic enclosure d) providing a suitable acoustic barrier between the plant and / or equipment and the adjacent sensitive receiver boundary or zone.	DTS/DPF 4.2 None are applicable.

APPENDIX C: SOUND POWER LEVELS

Activity		Sound Power Level
Carparking activity	General activity	83 dB(A)
Mechanical Plant	A/C Condenser Unit (per unit)	73 dB(A)
Children	0–2-year-old (per child)	68 dB(A)
	2–3-year-old (per child)	75 dB(A)
	3–5-year-old (per child)	77 dB(A)

APPENDIX 4

Traffic and Parking Report

CIRQA



PROPOSED CHILD CARE CENTRE
4 CARIGNANE STREET, WYNN VALE

TRAFFIC AND PARKING REPORT

CIRQA™

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DOCUMENT CONTROL

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Project number:	24013
Client:	Accord Property Pty Ltd
Client contact:	Jake Lazzeri

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1. INTRODUCTION

CIRQA has been engaged to provide design and assessment advice for a proposed child care centre at 4 Carignane Street, Wynn Vale. Specifically, CIRQA has been engaged to provide advice in respect to traffic and parking aspects of the proposal.

This report provides a review of the subject site, the proposed development, its access and parking provisions and the associated traffic impact on the adjacent road network. The traffic and parking assessments have been based upon plans prepared by On Architecture (job no. 202400017 drawing no. DA01, DA02 & DA06, dated 01 Jul 2025, refer Appendix A). It is noted that changes have been recommended by CIRQA to accommodate boom gate facilities for the proposed western parking area (refer C24013_01E, Appendix B). The following assessment assumes that these changes will be adopted.

2. BACKGROUND

2.1 SUBJECT SITE

The subject site comprises a portion of St Francis Xavier Regional Catholic School site. St Francis Xavier Regional Catholic School is located at 4 Carignane Street, Wynn Vale, and is bounded by Wynn Vale Community House and Kindergarten to the north, Park Lake Drive to the east, Carignane Street to the south and residential dwellings to the west.

The School is currently service by three parking areas. The south eastern car park (the site of the proposed child care centre) comprises 52 parking spaces (including two parking spaces reserved exclusively for people with disabilities) accessed via a single two-way access point on Carignane Street. The western car park (located adjacent Carignane Street) comprises 38 parking spaces and the northern car park (located adjacent Park Lake Drive) comprises 68 spaces (including 13 parallel parking spaces). Both the western and northern car parks are accessed via separated ingress and egress crossovers.

Figure 1 illustrates the location of the St Francis Xavier Regional Catholic School and the subject site with respect to the adjacent road network.



Figure 1 – Location of St Francis Xavier Regional Catholic School and the subject site with respect to the adjacent road network

The Planning and Design Code identifies that the subject site is located within a General Neighbourhood Zone, with the following Overlays applicable:

- Airport Building Heights (Regulated) All structures over 15 metres;
- Affordable Housing;
- Building Near Airfields;
- Defence Aviation Area All structures over 15 metres;
- Hazards (Flooding);
- Hazards (Flooding - Evidence Required);
- Prescribed Wells Area;
- Regulated and Significant Tree;
- Stormwater Management;
- Significant Retirement Facility Supported Accommodation Sites;
- Traffic Generating Development;
- Urban Tree Canopy; and
- Water Resources.

2.2 ADJACENT ROAD NETWORK

Golden Grove Road is a sub-arterial road under the care and control of the Department for Infrastructure and Transport (DIT). Adjacent the site, Golden Grove Road comprises two traffic lanes in each direction. Traffic data obtained from DIT indicates that this section of Golden Grove Road has an Annual Average Daily Traffic (AADT) volume in the order of 15,000 vehicles per day (vpd), of which approximately 4.5% are commercial vehicles. Adjacent the site, a 60 km/h speed limit applies on Golden Grove Road.

Grenfell Road is a sub-arterial road under the care and control of the Department for Infrastructure and Transport (DIT). Adjacent the site, Grenfell Road comprises two traffic lanes in each direction. Traffic data obtained from DIT indicates that this section of Grenfell Road has an Annual Average Daily Traffic (AADT) volume in the order of 12,700 vehicles per day (vpd), of which approximately 2.5% are commercial vehicles. Adjacent the site, a 60 km/h speed limit applies on Grenfell Road.

Carignane Street is a local road under the care and control of City of Tea Tree Gully. Carignane Street comprises an 8.8 m wide carriageway (approximate) with a single traffic lane in each direction. No Stopping parking restrictions apply on the southern side of Carignane Street during the hours of 8:00 am to 9:00 am and 2:00 pm to 4:00 pm on School Days. A 15-minute timed parking control applies to the northern side of Carignane Street (immediately adjacent the subject area) between the hours 9:00 am and 5:00 pm on School Days. These parking controls effectively create an on-street "Kiss and Drop" area adjacent the school for school set-down/pick-up movements. Adjacent the site, a School Zone speed limit of 25 km/h applies when children are present on Carignane Street. The default urban speed limit of 50 km/h applies when children are not present.

Park Lake Drive is a local road under the care and control of City of Tea Tree Gully. Park Lake Drive comprises an 9.3 m wide carriageway (approximate) with a single traffic lane in each direction. No Stopping parking restrictions apply on both sides of Park Lake Drive during the hours of 8:00 am to 9:00 am and 2:00 pm to 4:00 pm on school days. Adjacent the site, a School Zone speed limit of 25 km/h applies when children are present on Park Lake Drive. The default urban speed limit of 50 km/h applies when children are not present.

De Castella Avenue is a local road under the care and control of City of Tea Tree Gully. De Castella Avenue comprises a 7.9 m wide carriageway (approximate) with a single traffic lane in each direction. Parking is unrestricted on both sides of the road. The default urban speed limit of 50 km/h applies on De Castella Avenue.

Grenfell Road and De Costella Avenue form a priority-controlled T-intersection (with priority assigned to Grenfell Road). Sheltered right turns are provided through the median on Grenfell Road.

Golden Grove Road and Park Lake Drive form a priority-controlled T-intersection (with priority assigned to Golden Grove Road). Right and left turning lanes are provided for vehicles entering Park Lake Drive from Golden Grove Road. Existing peak hour movements (obtained from DIT) are illustrated in Figure 2, below

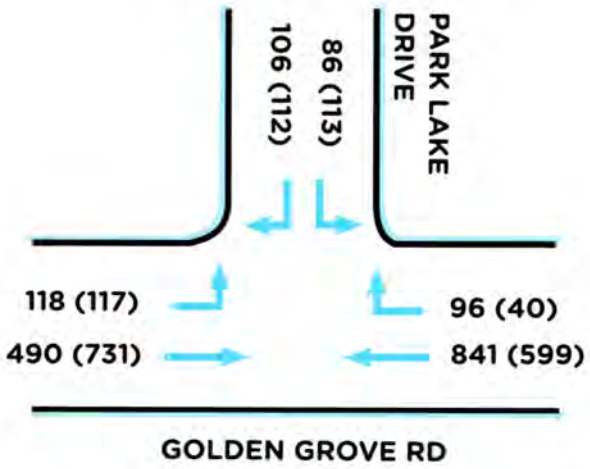


Figure 2 – am(pm) peak hour movements at the intersection of Golden Grove Road and Park Lake Drive

Park Lake Drive and Carignane Street form a priority-controlled T-intersection (with priority assigned to Park Lake Drive).

Carignane Street and De Castella Avenue meet at a three-way single lane roundabout.

2.3 WALKING AND CYCLING

Sealed footpaths are provided on both sides of Carignane Street, Golden Grove Road and Grenfell Road, as well as on the western side of De Castella Avenue and Park Lake Drive, servicing both pedestrians and cyclists. Cyclists are also able to ride on-street sharing the road with motorists or utilising the bike lanes provided on Golden Grove Road.

2.4 PUBLIC TRANSPORT

Public bus services operate regularly in the vicinity of the subject site. Bus stops are located within 300 m of the subject site on both sides of Golden Grove Road. These stops are serviced by the following bus routes:

- 548 - Greenwith and Tea Tree Plaza Interchange to City;
- C1X - Golden Grove Interchange to City;
- C2 - Greenwith to City;
- C2X - Greenwith to City;
- G40X - Golden Grove Interchange to Flinders University;
- J1 - Elizabeth Interchange to Adelaide Airport and Glenelg;
- J1A - Elizabeth Interchange to Adelaide Airport;
- J1G - Glenelg to Golden Grove Interchange;
- J2 - Greenwith to Adelaide Airport and Harbour Town;
- J2G - Greenwith to Glenelg; and
- N1 - After Midnight Saturday PM - Sunday AM Golden Grove Interchange and Tea Tree Plaza Interchange to City.

Many of the above services utilise the O-Bahn guided busway allowing for faster travel between the City and Tea Tree Plaza Interchange.

2.5 ON-SITE OBSERVATIONS

On-site observations were undertaken by CIRQA on Wednesday the 11th of March during the afternoon pick-up period. This is considered to be the peak period of the adjacent road network as it coincides with the end of school day (i.e. the pick-up period for St Francis Xavier's Regional Catholic School). During the on-site observations, a large proportion of student pick-up activity was observed to occur either within the School site or on the roadside directly adjacent the School. Pedestrian crossing activity were observed to be relatively low and were generally distributed widely across the surrounding roads (i.e. there was not a specific crossing point that accommodated high levels of pedestrian crossing activity. The School Zones provided ample safe road crossing opportunities for parents and children (as intended by the School Zone treatment). Vehicle movements were observed to occur in an orderly manner with minimal congestion at the intersections adjacent the School.

3. PROPOSED DEVELOPMENT

3.1 LAND USE AND YIELD

The proposed development comprises the demolition of an existing 52-space parking area within the St Francis Xavier's Regional Catholic School site (the School's south-eastern car park) to facilitate construction of a 108-place child care centre.

The development also includes construction of a new 50-space parking area west of the School's existing western car park.

3.2 ACCESS AND PARKING DESIGN

The new 50-space parking area will be constructed on the south-western boundary of the School site and will be accessed via the School's existing western car park's separated ingress and egress crossovers on Carignane Street. Access to the new parking area will be restricted to staff of the School and proposed child care centre (i.e. a staff only car park with access controlled by boom gates). All vehicles will be able to enter and exit the site in a forward direction.

The proposed parking area will comply with the requirements of Australian/New Zealand Standard, *Parking Facilities Part 1: Off-street car parking* (AS/NZS 2890.1:2004) in that:

- regular parking spaces will be 2.4 m wide and 5.4 m long;
- the parking aisle will be at least 6.2 m wide;
- a 1.0 m end-of-aisle extension will be provided beyond the last parking space in the aisle; and
- 0.3 m clearance will be provided to all objects greater than 0.15 m in height.

Of the 50 spaces provided in the proposed car park, six (6) will be provided in a stacked (tandem) arrangement. Such parking arrangements are common within commercial sites in metropolitan Adelaide and are suitable for parking spaces designated for staff use only (as staff from the same organisation are able to coordinate access to and from spaces at the 'head' of the tandem parking module).

The proposed child care centre will also be serviced by the existing 68-space parking area located north of the subject site (the School's northern car park). Vehicle access to the existing northern car park is provided by separated ingress and egress crossovers on Park Lake Drive.

It is recommended that an accessible parking space is provided within the northern car park. The accessible parking space would service both the child care centre and School. Given the location of existing walkways through the northern car park, this additional accessible parking space can be readily accommodated without impacting existing parking numbers (refer Figure 3). The accessible parking space shall comply with the Australian/New Zealand Standard, *Parking Facilities Part 6: Off-street parking for people with disabilities* (AS/NZS 2890.6:2022).

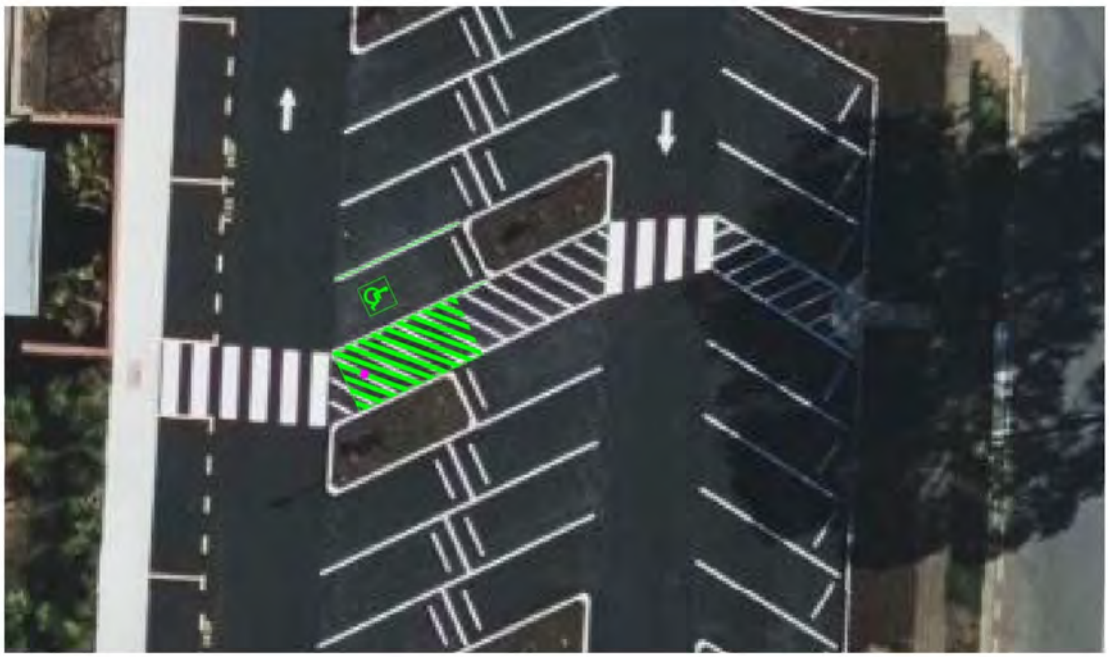


Figure 3 – Accessible parking within the existing northern parking area

3.3 REFUSE COLLECTION

Refuse collection will be undertaken via private contractor with the associated manoeuvres accommodated on-site within the northern car park. The existing northern car park will accommodate forward-in/forward-out movements for a 10 m long Rigid Vehicle. It is anticipated that such movements would be undertaken outside of opening hours. Figure 4 illustrates the turn path for a refuse vehicle to enter and exit the site in a forward direction.

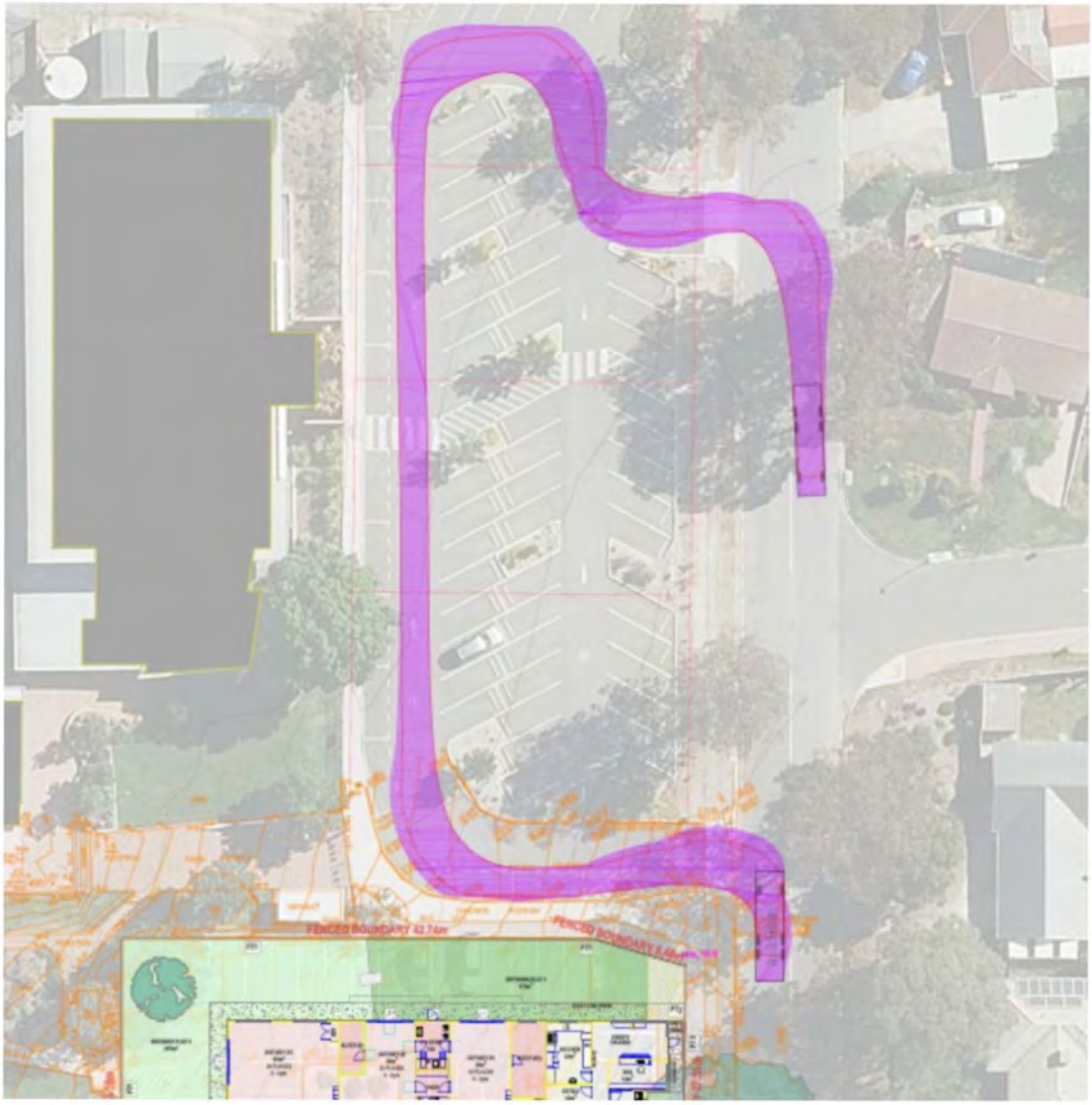


Figure 4 – 10m Rigid Vehicle turning movements into and out of the site

4. PARKING ASSESSMENT

The Planning and Design Code identifies the following Deemed-to-Satisfy/Designated Performance Feature (DTS/DPF) vehicle parking criteria which are applicable to the proposal:

- child care facility – 0.25 spaces per child; and
- primary school – 1.1 space per full time equivalent employee plus 0.25 spaces per student for a pickup/set down area either on-site or on the public realm within 300 m of the site.

Based upon the above rates, the proposed child care centre would be required to provide 27 parking spaces in order to satisfy the criteria specified in the Planning and Design Code.

Information provided by the Australian Curriculum, Assessment and Reporting Authority indicates that St Francis Xavier's Regional Catholic School had 54.2 full-time equivalent employees with 561 students enrolled in 2025. On this basis, the School would have a theoretical requirement for 60 general parking spaces (rounded up) and a further 141 spaces for pickup/set down either on-site or on the public realm within 300 m of the site.

It is noted that a Development Application submitted by the School has recently received Planning Approval, allowing an increase to the School's student capacity. Based upon the recent approval, the student capacity could increase up to 848 students and 64.71 FTE staff. The increased capacity would have a theoretical parking requirement of 72 spaces staff and visitor spaces and 212 spaces for set-down/pick-up (either on-site or in the public realm within 300 m of the site).

Given that 156 spaces will be provided across the parking areas within the School site, the 27 spaces required by the proposed child care centre and the 72 spaces required for the School (staff and visitor parking) will be readily accommodated on site with an on-site surplus of 57 parking spaces (in comparison to the parking criteria specified in the Planning and Design Code).

The pickup/set down requirements associated with the School will be accommodated across the remaining 57 spaces on-site and on the surrounding local roads within 300 m of the subject site (as assumed by the Planning and Design Code criteria and typically observed at schools throughout metropolitan Adelaide).

A recent parking survey undertaken by Austraffic (a third party traffic surveying company) identified 775 parking spaces within 300 m of the subject site and a minimum of 629 available parking spaces during the peak set-down/pick-up periods (i.e. a maximum of 146 vehicles were parked on-street during the survey period). This takes into consideration the existing cumulative parking demand in the survey area generated by the surrounding residential development and the School (i.e. parents/caregivers picking up/dropping off children). The parking survey therefore indicates that the 155 set-down/pick-up spaces required to satisfy Code criteria (after consideration of the site's 57 set-down/pick-up spaces) would be readily accommodated on-street within the 629 available on-street parking spaces.

It is noted that the proposed child care will result in a relatively low redistribution of the School's set-down/pick-up demands. A total of 29 set-down/pick-up spaces (i.e. 27 parking spaces required to satisfy the Planning and Design Code plus 2 on-site parking spaces that are proposed to be removed) will be

redistributed on-street as a result of the proposal. However, set-down/pick- up demands occur over a short period of time and can be readily accommodated on-street with minimal impacts to the overall parking availability for residents (as supported by the on-street parking survey).

In respect to the designation of parking spaces within the site, 32% of spaces are proposed to be designated for staff use only (within the proposed staff only parking area) with the remaining spaces shared between additional staff and parents. In CIRQA's experience, such a proportion of staff only spaces is reasonable, noting that there are 54.2 FTE staff at St Francis Xavier's Regional Catholic School and there will be additional staff associated with the proposed child care centre. It is noted that staff will also be able to utilise the site's undesignated general parking spaces in the event that the proposed 'staff only' parking area is fully occupied.

Based upon the above discussion, the proposed parking provision satisfies the criteria specified in the Planning and Design Code in relation to both primary school and child care centre car parking.

5. TRAFFIC ASSESSMENT

5.1 TRAFFIC GENERATION AND DISTRIBUTION

5.1.1 SITE PEAK HOURS

The RTA's "*Guide to Traffic Generating Developments*" (the RTA Guide, now Transport for NSW), and its subsequent updates, are documents commonly used by traffic engineers in order to determine the forecast traffic generation of a variety of land uses.

An update to the original RTA child care centre traffic generation rate was prepared by TEF Consulting and the RTA in September 2015. The updated study identified that the previously recommended rates were based on surveys from 1992 and were considered out of date. Based on detailed statistical analysis, the updated TEF Consulting report identified the following rates for assessment of peak traffic generation at child care centres (where X_1 is the number of licensed places for children):

- am peak hour trips – $0.0118\ X_1^2 - 0.3585\ X_1 + 22.968$; and
- pm peak hour trips – $0.004\ X_1^2 + 0.4117\ X_1 + 6.0276$.

On the basis of the above equations, it is forecast that the proposed child care centre will generate 122 am peak hour trips and 97 pm peak hour trips. In CIRQA's experience, such rates are higher than typically experienced at child care centres

in Greater Adelaide. Nevertheless, these forecasts have been adopted for conservatism.

Vehicle movements will be distributed via the access points of the northern carpark on Park Lake Drive and the western car park on Carignane Street. All movements are permitted at each of the access points. For the purposes of this assessment, the following distribution assumptions have been adopted:

- am peak hour – 60% of trips are inbound and 40% of trips are outbound (based on the comparable survey data);
- pm peak hour – 50% of trips are inbound and 50% of trips are outbound (based on the comparable survey data);
- in respect to the high-level distribution to/from the broader road network, in the order of 20% of movements are to/from the north, 15% are to/from the east, 35% are to/from the south and 30% to/from the west (refer Figure 5); and
- the distribution of turning movements at the key intersection of Park Lake Drive and Golden Grove Road is based upon data obtained from DIT.



Figure 5 – Forecast distribution of traffic generated by the development

Based upon the above assumptions, and the layout of the surrounding road network the am and pm centre peak hour movements (associated with the proposed child care centre) have been forecast at the key intersection of Golden Grove Road and Park Lake Drive (Figure 6).

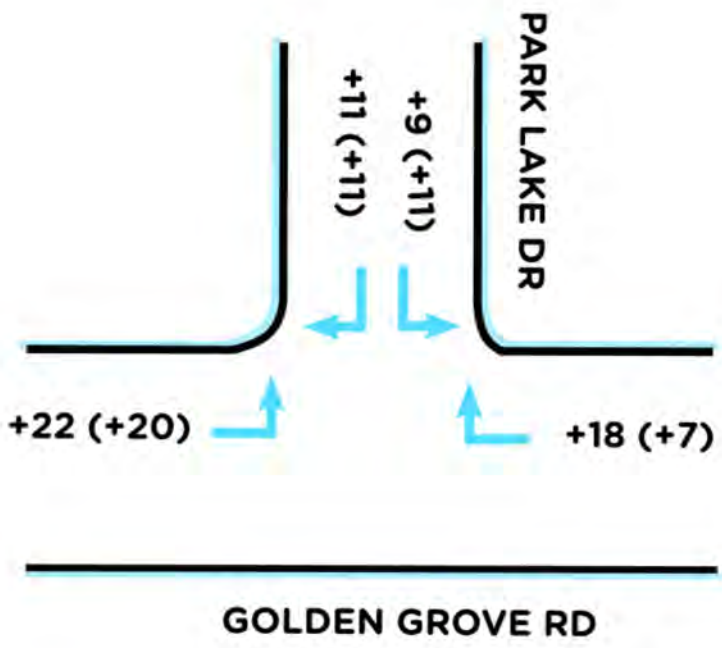


Figure 6 – Forecast am (pm) centre peak hour movements associated with the child care centre at the intersection of Park Lake Drive and Golden Grove Road

5.1.2 NETWORK PEAK HOURS

The forecasts detailed in Section 5.1 above relate to the absolute peak periods associated with the child care centre. However, such periods do not typically directly align with the network peak hour periods on adjacent road networks. Therefore, adopting a combination of the child care centre's forecast peak hour movements plus the existing peak hour movements on the adjacent roads would result in a highly conservative (and unrealistic) traffic assessment.

In comparison to the above forecasts for the centre's peak periods, the RMS (TEF Consulting) update study also identified the following rates for traffic generation of such sites during the road network peak hours (where X_1 is the number of licensed places for children):

- am peak hour trips – $0.0065\ X_1^2 - 0.0452\ X_1 + 16.943$; and
- pm peak hour trips – $0.0015\ X_1^2 + 0.3227\ X_1 - 2.7273$.

On the basis of the above equations, it is forecast that the proposal will generate 88 and 55 trips during the am and pm network peak hours, respectively. The

above assessment assumes that there are no shared purpose trips between different land uses within the proposal (i.e. 'passing trade'). For instance, a child care centre located on the same site as a school would be likely to generate lower traffic volumes as a proportion of children may have siblings at the school and be set-down/picked-up during the same trip (reducing overall peak trips). Nevertheless, these forecasts have been adopted for conservatism.

As with the centre's peak hour volumes, vehicle movements generated during the network peaks will be distributed via the site's two parking areas. The distribution assumptions noted above for the peak child care traffic generation have been adopted for the network peak child care traffic generation. Figure 7 (below) illustrate the forecast additional movements generated by the proposed child care centre at the key intersection during the network peak hours.

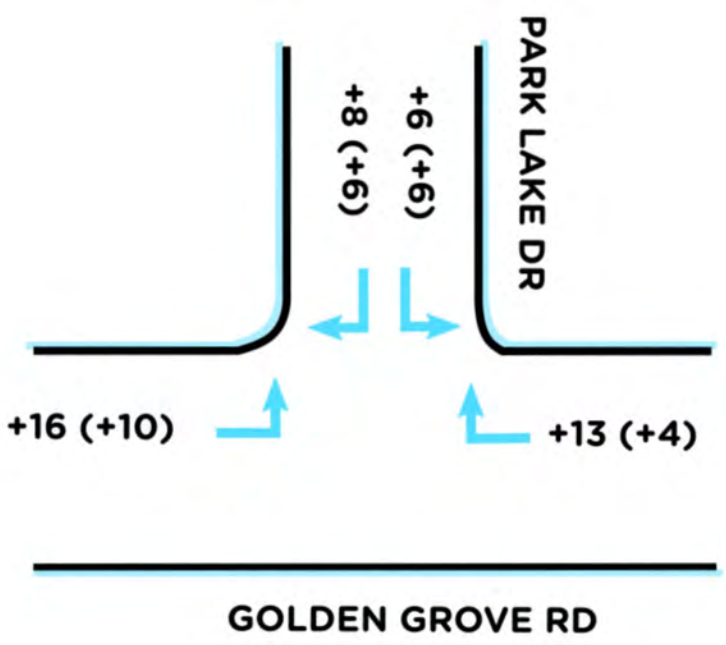


Figure 7 – Forecast am (pm) network peak hour movements associated with the child care centre at the intersection of Park Lake Drive and Golden Grove Road

5.2 TRAFFIC IMPACT

The proposal will result in a localised redistribution of existing traffic volumes associated with the School (noting that an existing parking area on Carignane Street will be demolished and relocated further west on Carignane Street).

The addition of the conservatively forecast traffic volumes to the redistribution of existing traffic volumes will be within the capacity of the site access points and readily accommodated. Noting that the access design separates ingress and egress movements, the traffic volumes will be appropriately accommodated with relatively low impacts to existing queuing and delays. These movements will be

further distributed to the various surrounding intersections (noting that multiple access routes are available to/from the subject site). This includes the intersections of Carignane Street/De Castella Avenue, De Costella Avenue/Grenfell Road, Highgrove Road/Golden Grove Road, Carignane Street/Park Lake Drive and Park Lake Drive/Golden Grove Road.

The intersection of Golden Grove Road and Park Lake Drive is considered to be a key intersection due to the existing traffic volumes on Golden Grove Road (a sub-arterial road) and the large proportion of traffic travelling to/from the proposed child care centre via that intersection. As such, SIDRA modelling for the future am and pm network peak hours has been undertaken for the intersection.

Noting the recent Planning Approval granted for the School expansion, the traffic volumes associated with the proposal have been added to the forecast traffic generation associated with the School's future enrolment capacity. The SIDRA modelling adopts the existing left/right turn distribution observed at the intersection.

The 'existing' base scenario (i.e. traffic volumes) adopted for the assessment of the recent approved expansion of St Francis Xavier's Regional Catholic School has been adopted for the assessment of the current proposal (i.e. am peak between 8:00 am and 9:00 am and a pm peak between 3:15 pm and 4:15 pm).

On-site observations have been undertaken at the intersection of Golden Grove Road and Park Lake Drive during the am and pm peak periods (i.e. at the start and end of the school day). It was observed that outside of the peak period, traffic volumes were readily accommodated with low delays generally observed for all turning movements. Longer delays and queues were observed for the right-out during a 10-minute period (approximate) prior to the school start time. Similarly, longer delays and queues were observed for the right-turns out of Park Lake Drive for approximately 10-minutes after school finished. After this period, the queue dissipates.

The intersection has been conservatively modelled as a single-stage right-turn from Park Lake Drive. Occasional two-stage movements were observed from Park Lake Drive. However, the single stage model had been adopted for conservatism. Based upon the survey data, a peak flow period of 30 minutes has been adopted for the am peak hour and 15 minutes for the pm peak hour.

The single stage model indicates that all movements except for the right-turn out of Park Lake Drive currently operate with a Degree of Saturation (DoS) of 0.450 or less and a Level of Service (LoS) of 'B' or greater during the modelled am and pm hours. The model indicates that the right-turn out of Park Lake Drive is

currently oversaturated with a DoS of 1.202 (am) to 1.319 (pm) reported and a LoS of 'F'.

The high DoS reported is due to the arrival flow exceeding the departure flows during the short 10-minute period (approximate based upon on-site observations) associated with the set-down/pick-up period. Outside of this period, traffic volumes were readily accommodated with minimal queues and delays observed. Occasional two-stage movements (for the right-out) and platooning of traffic on Golden Grove Road were also observed during the am and pm peak periods allowing ample opportunities for drivers to turn out of Park Lake Drive. The observations indicate that the single-stage modelling results are conservative.

The single-stage model for the future scenario indicated that the DoS for the right-out movement will increase to 1.773 and 1.776 in the modelled am and pm hours, respectively with a LoS of 'F'. Importantly, all other movements operated with a DoS of 0.537 or less and a LoS of 'B' or greater during the modelled hours. This indicates that the proposed expansion will have a minimal impact on the existing movements on Golden Grove Road and the increase in delays and queues will be confined to Park Lake Drive (occurring for a short duration).

In reality, a portion of the right-turn movements will undertake a two-stage movement from Park Lake Drive, which will increase the capacity of the movement, reducing queues and delays in comparison to that reported by the single-stage model.

It is highlighted that, should delays increase at the intersection of Golden Grove Road and Park Lake Drive (particularly for right-turn movements), drivers will re-route and use alternate streets such as Grenfell Road and De Castella Avenue. This alternative route will generally have a high capacity as drivers will be able to turn left out of De Castella Avenue onto Grenfell Road and then turn onto Golden Grove Road at the signalised intersection. On-site observations indicate that the additional movements distributed to the intersection will be readily accommodated. It is also noted that the intersection has a wide median which would readily accommodate two-stage turning movements for right-turning vehicles.

Based upon the above, the conservative modelling has indicated that queues and delays will increase for the right-turn movement from Park Lake Drive. However, this will occur over a short period of time (approximately 10 minutes) at the start and end of the school day. Outside of this period, delays and queues will be low for all movements and the intersection will operate within capacity. Should drivers experience long delays and queues, alternative routes will be available (i.e. accessing the site via De Castella Drive).

6. SUMMARY

The proposal comprises the construction of a 108-place child care centre within the St Francis Xavier Regional Catholic School site, with associated access and parking provisions. Vehicle access to the development will be provided via two (2) existing separated ingress and egress crossovers on Carignane Road and two (2) existing separated ingress and egress crossovers on Park Lake Drive. The site has been designed such that all vehicles can enter and exit the site in a forward direction.

A total of 156 parking spaces will be provided on-site with a further 629 on-street parking spaces available within 300 m of the site (based on survey data). The parking criteria specified in the Planning and Design Code will therefore be satisfied. The new and amended parking areas will be provided in accordance with the relevant Australian Standard.

The proposal is forecast to generate in the order of 88 am and 55 pm trips during the network peak hours, which are considered to be the critical traffic periods on the adjacent road network. Based on traffic modelling outputs and site observations, such a level of traffic generation will be accommodated at the School's access points and on the adjacent road network.

APPENDIX A

PLANS PREPARED BY ON ARCHITECTURE



LOCALITY PLAN
1:1000

P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
-	-	-

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
LOCATION PLAN - ST FRANCIS XAVIER'S CAMPUS

Scale	1:1000	Drawn	MD
Client	-		
Date	01/07/2025		
Job No.	202400017		
Dwg No.	**DA01**	Rev:	1

N

A3 SHEET



SITE DATA	
SITE AREA	1940sqm
BUILDING AREA (GFA)	818m²
PROPOSED CHILD CARE PLACES	108

PROPOSED SITE PLAN

1:250

P L A N N I N G

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
-	-	-

FENCE TYPE KEY

- FT1 — 1200h PICKET FENCE ON RETAINING WALL
- FT2 — 1500h TIMBER BATTEN FENCE TO SAFE ZONE
- FT3 — 1800h PICKET FENCE

ON ARCHITECTURE

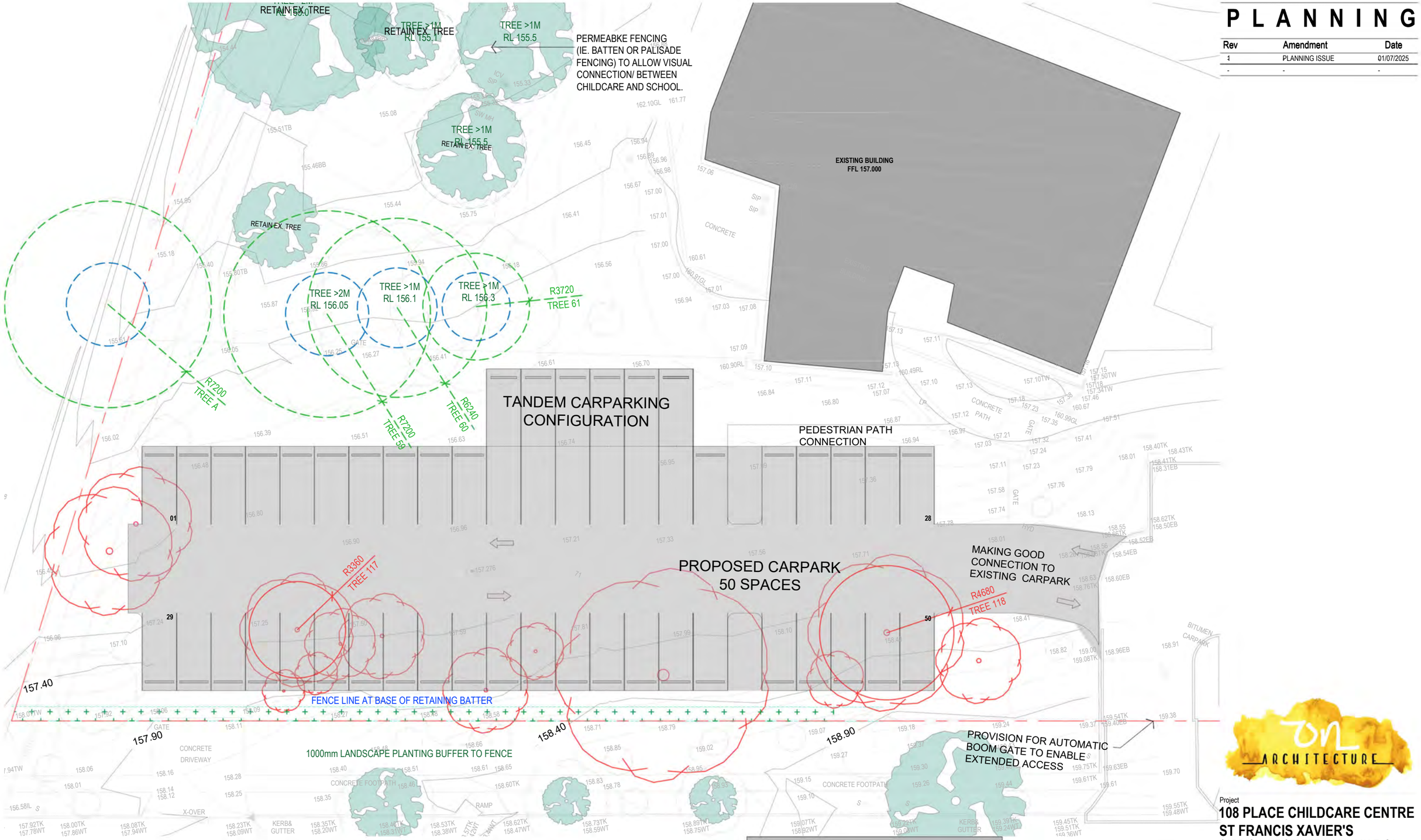
Project
108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
CHILDCARE SITE PLAN

Scale	As indicated	Drawn	MD	N
Client	-			
Date	01/07/2025			
Job No.	202400017			
Dwg No.	**DA02**	Rev:	1	A3 SHEET

PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025
-	-	-



PROPOSED CAR PARKING PLAN

1:250

CARPARK DATA	
PROPOSED TANDEM CARPARK	6
PROPOSED CARPARKING (reg.)	44
TOTAL CARPARKING	50

ON ARCHITECTURE

Project

108 PLACE CHILDCARE CENTRE
ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

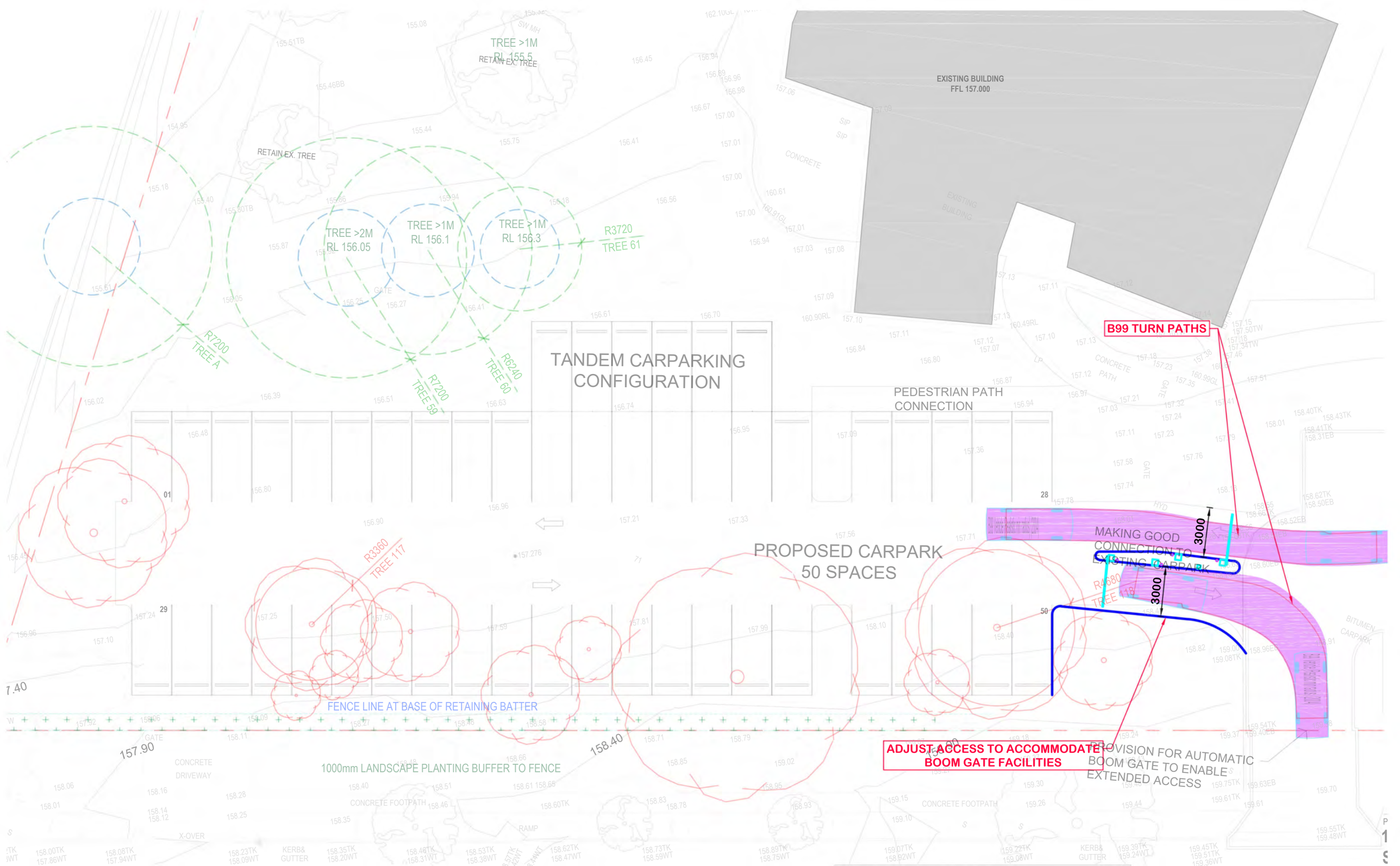
Drawing

PROPOSED CAR PARKING

Scale	As indicated	Drawn	MD	
Client	-			
Date	01/07/2025			
Job No.	202400017			
Dwg No.	**DA06**	Rev:	1	A3 SHEET

APPENDIX B

PLAN PREPARED BY CIRQA



CIRQA™
ABN: 17 606 952 309 | PO Box 144, Glenside SA 5065 | E: info@cirqa.com.au

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DRAWING AMENDMENTS

VER	DATE	DESCRIPTION	DWN	CHK
B	30/04/2025	CONCEPT	JJB	TAW
C	27/06/2025	UPDATE	JJB	TAW
E	09/07/2025	BOOM GATE	JJB	TAW

C24013_01E.DWG 9/7/2025 12:47 PM

N

..... @ A3

PROPOSED PARKING AREA

4 CARIGNANE STREET, WYNN VALE
WESTERN PARKING AREA WITH BOOM GATE PROVISION

PROJECT # ..... SHEET # 01_SH01

APPENDIX C

SIDRA MODELLING OUTPUTS

MOVEMENT SUMMARY

Site: 101 [am existing (Site Folder: School Expansion)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
NorthEast: Golden Grove Rd (NE)															
8	T1	All MCs	870	3.9	870	3.9	0.450	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
9	R2	All MCs	150	0.0	150	0.0	0.185	8.8	LOS A	0.8	5.4	0.57	0.77	0.57	50.4
Approach			1020	3.3	1020	3.3	0.450	1.4	NA	0.8	5.4	0.08	0.11	0.08	58.1
NorthWest: Park Lake Dr (NW)															
10	L2	All MCs	126	1.2	126	1.2	0.148	8.1	LOS A	0.6	4.1	0.49	0.71	0.49	51.0
12	R2	All MCs	140	0.9	140	0.9	1.202	260.8	LOS F	19.4	136.7	1.00	2.30	6.50	11.3
Approach			266	1.0	266	1.0	1.202	141.1	LOS F	19.4	136.7	0.76	1.55	3.66	17.9
SouthWest: Golden Grove Rd (SW)															
1	L2	All MCs	174	1.7	174	1.7	0.096	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
2	T1	All MCs	492	4.9	492	4.9	0.256	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			666	4.1	666	4.1	0.256	1.5	NA	0.0	0.0	0.00	0.15	0.00	57.8
All Vehicles			1952	3.3	1952	3.3	1.202	20.5	NA	19.4	136.7	0.15	0.32	0.54	44.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [pm existing (Site Folder: School Expansion)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
NorthEast: Golden Grove Rd (NE)															
8	T1	All MCs	620	1.8	620	1.8	0.317	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
9	R2	All MCs	72	0.0	72	0.0	0.122	10.8	LOS B	0.5	3.2	0.64	0.85	0.64	49.1
Approach			692	1.6	692	1.6	0.317	1.2	NA	0.5	3.2	0.07	0.09	0.07	58.5
NorthWest: Park Lake Dr (NW)															
10	L2	All MCs	268	0.0	268	0.0	0.427	12.0	LOS B	2.2	15.5	0.68	0.95	0.95	48.3
12	R2	All MCs	176	0.9	176	0.9	1.319	201.9	LOS F	17.8	125.5	1.00	2.01	5.20	13.8
Approach			444	0.4	444	0.4	1.319	87.4	LOS F	17.8	125.5	0.81	1.37	2.64	24.2
SouthWest: Golden Grove Rd (SW)															
1	L2	All MCs	164	0.0	164	0.0	0.090	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
2	T1	All MCs	731	3.0	731	3.0	0.376	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			895	2.5	895	2.5	0.376	1.1	NA	0.0	0.0	0.00	0.11	0.00	58.4
All Vehicles			2031	1.7	2031	1.7	1.319	20.0	NA	17.8	125.5	0.20	0.38	0.60	44.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [am future - w/ CCC (Site Folder: Distribution based upon survey)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
NorthEast: Golden Grove Rd (NE)															
8	T1	All MCs	870	3.9	870	3.9	0.450	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
9	R2	All MCs	205	0.0	205	0.0	0.269	9.6	LOS A	1.2	8.5	0.62	0.83	0.67	49.8
Approach			1074	3.2	1074	3.2	0.450	2.0	NA	1.2	8.5	0.12	0.16	0.13	57.5
NorthWest: Park Lake Dr (NW)															
10	L2	All MCs	167	0.9	167	0.9	0.195	8.2	LOS A	0.8	5.5	0.51	0.72	0.51	50.9
12	R2	All MCs	184	0.7	184	0.7	1.773	752.1	LOS F	53.3	375.4	1.00	3.59	12.11	4.5
Approach			351	0.8	351	0.8	1.773	397.9	LOS F	53.3	375.4	0.77	2.23	6.59	7.9
SouthWest: Golden Grove Rd (SW)															
1	L2	All MCs	248	1.2	248	1.2	0.137	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
2	T1	All MCs	492	4.9	492	4.9	0.256	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			740	3.7	740	3.7	0.256	1.9	NA	0.0	0.0	0.00	0.19	0.00	57.3
All Vehicles			2165	3.0	2165	3.0	1.773	66.1	NA	53.3	375.4	0.18	0.50	1.13	28.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [pm future - w/ CCC (Site Folder: Distribution based upon survey)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
NorthEast: Golden Grove Rd (NE)															
8	T1	All MCs	620	1.8	620	1.8	0.317	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
9	R2	All MCs	95	0.0	95	0.0	0.170	11.3	LOS B	0.6	4.5	0.68	0.87	0.68	48.7
Approach			715	1.6	715	1.6	0.317	1.6	NA	0.6	4.5	0.09	0.12	0.09	58.1
NorthWest: Park Lake Dr (NW)															
10	L2	All MCs	336	0.0	336	0.0	0.537	13.2	LOS B	3.3	22.8	0.73	1.02	1.16	47.6
12	R2	All MCs	222	0.7	222	0.7	1.776	398.0	LOS F	34.0	239.2	1.00	2.54	7.41	7.9
Approach			558	0.3	558	0.3	1.776	166.0	LOS F	34.0	239.2	0.83	1.62	3.65	15.9
SouthWest: Golden Grove Rd (SW)															
1	L2	All MCs	215	0.0	215	0.0	0.117	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
2	T1	All MCs	731	3.0	731	3.0	0.376	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			946	2.3	946	2.3	0.376	1.4	NA	0.0	0.0	0.00	0.13	0.00	58.0
All Vehicles			2219	1.6	2219	1.6	1.776	42.9	NA	34.0	239.2	0.24	0.50	0.95	34.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Ref: 24013|JJB

22 July 2026

Rick Hutchins
Ekistics
Level 3, 431 King William Street
ADELAIDE SA 5000

Dear Rick,

PROPOSED CHILD CARE CENTRE
4 CARIGNANE STREET, WYNN VALE
RESPONSE TO REQUEST FOR INFORMATION

I refer to the proposed child care centre at 4 Carignane Street, Wynn Vale. As requested, I have reviewed the traffic and parking aspects of Council's Request for Information. This letter summarises the key items raised by Council (in *italics*), followed by my response.

> *"The assessment does not adequately address the combined effects of the approved school expansion and the proposed childcare centre. Likely overlap in school and childcare peak periods has not been fully considered. Real-world behaviour (e.g. shared trips, siblings) may result in greater peak concentration than assumed."*

As outlined in CIRQA's Traffic and Parking Report, the traffic volumes associated with the recently approved expansion of St Francis Xavier's Regional Catholic School has been considered and included within the subject development's traffic and parking assessments. The assessments conservatively assume that there are no shared trips between the School and the proposed child care centre whereas, in reality, parents may undertake a single trip to the site to drop-off/pick-up multiple children attending the School and/or child care centre. This would therefore reduce the traffic generated by the proposal as well as the resulting impacts reported in CIRQA's report (i.e. the impacts would be less than that identified).

It is also noted that the peak periods associated with child care centres typically do not align with the peak periods of schools. It is therefore highlighted that there are multiple layers of conservatism in CIRQA's traffic and parking assessments and that 'real world behaviour' would result in a lower cumulative number of trips in comparison to that reported in CIRQA's assessment.

To further highlight the conservative rates applied in the assessment, numerous recent studies/surveys on child care centres have demonstrated that the rate identified within the Planning and Design Code is conservative and realistic demands are below the DTS/DPF rate. These include (but are not limited to):

- the TEF Consulting study for the RTA identified demand rates of 1 per 4 places (for centres with 20 to 35 children), 1 space per 5 places (for centres with 40 to 65 children) and 1 space per 6 children (for centres with 70 to 100 children) – with demand rates reducing as the number of places increases; and
- an Austraffic survey (undertaken for CIRQA in 2018) at the Seacliff Casa Bambini Child Care Centre identified peak parking demand rates of 1 space per 6.5 children and 1 space per 6.0 children for the am and pm peak hours, respectively.

Notably, the above parking rates include parking associated with both staff and visitors (i.e. parents/carers dropping off or picking up children).

Based upon the above, realistic peak parking demands for the child care centre would be in the order of 18 parking spaces which is less than the conservative rate (1 per 4 children as identified within the Planning and Design Code) adopted in CIRQA's Traffic and Parking Report. The TEF Consulting study also indicated that peak parking demands for child care centres typically do not align with peak school periods. For example, at St Francis Xavier's Regional Catholic School's finish time (3.05 pm), realistically, the child care centres parking demands during this period will be in the order of 50% of the peak (i.e. nine parking spaces). However, CIRQA's assessment has conservatively assumed that a peak child care centre demand of 27 parking spaces will occur during the school's peak parking periods.

The above demonstrates that numerous conservative assumptions have been adopted in CIRQA's assessment. Therefore, the cumulative impact of the development is anticipated to be less than identified in the assessment and will be readily accommodated.

> *"The right-turn movement from Park Lake Drive is already operating at Level of Service 'F' under existing conditions. Future modelling shows further deterioration (DoS ≈ 1.77, LOS F). This failure condition coincides with school peak periods, when pedestrian activity is highest. Worsening performance at this location presents a safety concern, irrespective of duration. Applicant to submit TMS data of the intersection."*

Child care centres operate differently to schools in that there is no set start or finish time for the attending children. Child care centres therefore do not create short intense peak traffic and parking demands like schools as child care set-down/pick-up occurs over multiple hours rather than all at a single time.

The peak traffic generating periods associated with child care centres typically do not align with school set-down/pick-up periods. However, peak traffic conditions for the intersection of Park Lake Drive and Golden Grove Road will align with the start/end of school day where some additional traffic will be generated by the child care centre (albeit not the centre's peak period). Accordingly, this period has been assessed in CIRQA's traffic and parking report.

The 'worsening performance' is associated with an increase to the right-turn delays onto Golden Grove Road. The peak will only occur for a very short duration, primarily associated with traffic generated by the School's pick-up period where arrival flows exceed the departure flows due to a large number of school students starting and finishing at the same time. Localised increases to delays and queues is common at intersections surrounding school sites during peak periods and in particular for right-turn movements onto arterial roads (such as Golden Grove Road). Importantly, there are alternative routes to/from the school where drivers will be able to divert if desired. These delays will only occur for short periods (i.e. in the order of 10 minutes). At all other times, delays and queues associated with turns from Park Lake Drive will generally be very low.

Although Council have noted that the pedestrian activity is highest during the School peak periods, on-site pedestrian observations during these periods have indicated that pedestrian activity on the adjacent road network is relatively low as School children are mostly collected/dropped off either on-site or on the streets directly adjacent the School. Pedestrians activity associated with the School at the intersection of Park Lake Drive and Golden Grove Road (approximately 250 m away from the subject site) would be very low with potential increases to queues on Park Lake Drive having a minimal impact on the existing ability of pedestrians being able to cross Park Lake Drive at the intersection of Golden Grove Road.

It is reiterated that the peak traffic periods of the child care centre typically do not align with the peak periods of schools. For example, during the pm network peak, it is forecast that the child care centre will have less than one vehicle entering and exiting the site every two minutes (on average). Noting the multiple access routes to/from the School, the child care centre would realistically only add a few vehicles onto the queues on Park Lake Drive (noting that these queues only occur for a short duration).

The base traffic data used in CIRQA's analyses was obtained from DIT and included in CIRQA's Traffic and Parking Report. However, a detail summary of the survey data provided by DIT has been attached to this letter. It is noted that CIRQA has adopted the same base traffic turning movement volumes as used in the recently approved expansion of St Francis Xavier's Regional Catholic School. It is highlighted that the assessment (and base data adopted) was accepted by the Department for Infrastructure and Transport (DIT).

"The report relies on drivers rerouting via surrounding local streets. This assumption is not supported by behavioural modelling. Potential for unintended traffic impacts on local residential roads has not been assessed. This represents a transfer of impact rather than mitigation."

The suggestion that drivers will self-divert is based upon behavioural evidence observed during the assessment of other school sites and typical driver behaviour. Drivers typically seek to minimise their travel 'cost' which includes choosing a route with the shortest travel distance and/or travel time. This assumption forms the foundation of traffic modelling software packages and navigation software which reroutes traffic where long delays are observed in a network.

The assessment considers the realistic impacts of the proposal where a portion of traffic may redistribute to optimise their travel route (which includes minimising travel time). This forms the foundation of traffic impact assessments for new developments and strategic assessments of the broader road network.

"Limited assessment of pedestrian–vehicle interaction during peak periods. No clear identification of crossing behaviour, conflict areas and the proposal completely rely on on-street parking spaces which directly highlights there will be expectancy of more foot traffic around the school. To note there are no formal pedestrian crossing points either on Carignane street or on Park Lake Drive for vulnerable users. Increased traffic in a school environment introduces additional risk to vulnerable users."

As part of the proposal, a new parking area will be constructed for staff (replacing the demolished parking area) with the existing on-site parking area (north of the proposed child care centre) to be shared between the School and child care centre. Pedestrians will be able to use the existing footpath network (which the child care centre will connect to) to access the parking area.

It is highlighted that peak parking demands for School's typically occurs during the end of school day pick-up period (typically only occurring for 10 to 15 minutes).

As noted above, realistic child care parking demands during the School's pick-up period (where peak parking demands occur for schools) will be in the order of nine parking spaces. The nine space parking demand includes consideration of both staff and parents but does not include discounts for shared trips (i.e. parents picking up children at both the child care centre and School).

The low additional parking demand may result in a very minor increase in on-street parking demands and the resulting need for people to cross roads to access the child care centre. An on-site pedestrian survey undertaken by CIRQA, indicated the number of pedestrians

crossing roads adjacent the subject site is low and spread over multiple crossing points. Notably, the expansion of the School was not considered to warrant a dedicated crossing.

> *"While the proposal does not adequately resolve cumulative traffic impacts, existing intersection constraints, peak-period congestion, safety risks around school environment with vulnerable road users."*

CIRQA's conservative assessment has indicated that forecast traffic volumes can be accommodated within the surrounding road network with minimal impacts to the safety of pedestrians accessing the school site. Notably, there will be a very low increase to the site's on-street parking reliance (as outlined above), potentially resulting in a low increase in pedestrian crossing movements adjacent the site. The overall safety risk is considered low due to the significant number of parking spaces located either on-site or directly adjacent the site and the existing School Zones located on key roads reducing vehicles speeds and providing adequate crossing opportunities.

> *"Applicant to remove the redundant existing crossover opposite to the intersection of Chasselas Ave and reinstate with upright kerb. The operational and safety impacts during peak periods remain unresolved, and further work is required to ensure the surrounding road network functions safely and effectively."*

The redundant crossover will be removed and reinstated with upright kerb. Refer above for my response to Council's operational and safety queries.

I trust that the above adequately responds to Council's queries. Please feel free to contact me on (08) 7078 1801 should you require any additional information.

Yours sincerely,



JEREMY BAYLY
Senior Consultant | CIRQA Pty Ltd

Encl. – Vehicle turning movement summary data obtained from DIT

DEPARTMENT FOR INFRASTRUCTURE AND TRANSPORT

VEHICLE TURNING MOVEMENT SURVEY

Golden Grove / Grenfell Road (East), Wynn Vale

TG895458 Arm 1

Wednesday 6-Apr-22 0630 To 1900 Job No 606 Golden Grove Road (NE)

15 min Ending	LEFT TURN								STRAIGHT THROUGH							
	RIGID	BUS	ARTICULATED	B-DOUBLE	ROAD TRAIN	TOTAL CVs	CAR	Total Vehicles	RIGID	BUS	ARTICULATED	B-DOUBLE	ROAD TRAIN	TOTAL CVs	CAR	Total Vehicles
6:30																
6:45	0	0	0			0	4	4	0	1	1	0		2	73	75
7:00	0	0	0			0	6	6	3	3	2	0		8	107	115
7:15	0	0	0			0	6	6	6	3	2	0		11	87	98
7:30	0	0	0			0	11	11	4	5	2	0		11	111	122
7:45	0	0	0			0	2	2	2	5	0	0		7	112	119
8:00	0	0	0			0	9	9	3	4	0	0		7	164	171
8:15	1	0	0			1	5	6	2	6	0	0		8	136	144
8:30	0	0	0			0	10	10	1	4	1	0		6	181	187
8:45	0	0	0			0	18	18	2	4	3	0		9	191	200
9:00	0	0	0			0	11	11	2	2	0	0		4	193	197
9:15	0	0	0			0	9	9	4	3	1	0		8	136	144
9:30	0	0	0			0	7	7	4	2	4	2		12	133	145
9:45	0	0	0			0	8	8	2	2	0	0		4	134	138
10:00	0	0	0			0	7	7	5	1	0	0		6	85	91
10:15	0	0	0			0	10	10	2	3	2	0		7	89	96
10:30	1	0	0			1	6	7	2	1	2	0		5	102	107
10:45	0	0	0			0	9	9	6	2	1	1		10	99	109
11:00	0	0	0			0	9	9	1	2	2	0		5	108	113
11:15	0	0	0			0	8	8	4	1	3	0		8	94	102
11:30	0	0	0			0	8	8	3	1	0	0		4	83	87
11:45	0	0	0			0	8	8	4	1	3	0		8	109	117
12:00	1	0	0			1	13	14	6	2	2	0		10	99	109
12:15	0	0	0			0	10	10	0	2	1	0		3	82	85
12:30	0	0	0			0	12	12	2	2	0	0		4	101	105
12:45	0	0	0			0	9	9	0	1	1	0		2	104	106
13:00	1	0	0			1	11	12	0	2	1	0		3	83	86
13:15	0	0	0			0	6	6	3	1	0	0		4	74	78
13:30	0	0	0			0	13	13	0	1	1	0		2	91	93
13:45	1	0	0			1	9	10	1	1	2	0		4	71	75
14:00	0	0	0			0	9	9	3	2	2	0		7	83	90
14:15	0	0	0			0	10	10	2	1	0	0		3	66	69
14:30	0	0	0			0	17	17	0	3	0	0		3	69	72
14:45	1	0	0			1	15	16	0	2	0	0		2	103	105
15:00	1	0	0			1	9	10	0	2	1	0		3	95	98
15:15	0	0	0			0	9	9	3	2	0	0		5	100	105
15:30	0	0	0			0	34	34	1	0	0	0		1	163	164
15:45	0	0	0			0	17	17	5	2	0	0		7	148	155
16:00	1	0	0			1	24	25	0	3	1	0		4	114	118
16:15	0	0	0			0	33	33	3	1	0	0		4	153	157
16:30	0	0	0			0	22	22	0	4	1	1		6	109	115
16:45	0	0	0			0	31	31	0	4	0	0		4	110	114
17:00	0	0	0			0	27	27	1	2	0	0		3	108	111
17:15	0	0	0			0	28	28	1	2	0	0		3	140	143
17:30	0	0	0			0	24	24	1	2	0	0		3	110	113
17:45	0	0	0			0	13	13	2	4	0	0		6	102	108
18:00	0	0	0			0	27	27	0	2	2	0		4	90	94
18:15	0	0	0			0	11	11	0	3	0	0		3	104	107
18:30	0	0	0			0	15	15	0	2	1	0		3	100	103
18:45	0	0	0			0	15	15	0	3	1	0		4	93	97
19:00	0	0	0			0	16	16	0	1	0	0		1	80	81
Totals	8	0	0	0	0	8	660	668	96	115	46	4	0	261	5472	5733
0700-1900																
Totals	8	0	0	0	0	8	650	658	93	111	43	4	0	251	5292	5543

DEPARTMENT FOR INFRASTRUCTURE AND TRANSPORT

VEHICLE TURNING MOVEMENT SURVEY

Golden Grove / Grenfell Road (East), Wynn Vale

TG895458 **Arm 2**

Wednesday **6-Apr-22** **0630 To 1900** **Job No 606** **Grenfell Road (East)**

15 min Ending	LEFT TURN								RIGHT TURN							
	RIGID	BUS	ARTICULATED	B-DOUBLE	ROAD TRAIN	TOTAL CVs	CAR	Total Vehicles	RIGID	BUS	ARTICULATED	B-DOUBLE	ROAD TRAIN	TOTAL CVs	CAR	Total Vehicles
6:30																
6:45	2	0	0			2	69	71	0	0	0			0	5	5
7:00	1	0	1			2	73	75	0	0	0			0	13	13
7:15	1	0	0			1	81	82	0	0	0			0	13	13
7:30	0	1	0			1	86	87	0	0	0			0	13	13
7:45	2	0	0			2	121	123	0	0	0			0	29	29
8:00	0	0	2			2	115	117	2	0	0			2	23	25
8:15	2	0	0			2	154	156	1	0	0			1	25	26
8:30	1	1	1			3	166	169	0	0	0			0	27	27
8:45	3	0	0			3	138	141	2	0	0			2	35	37
9:00	0	0	0			0	106	106	0	0	0			0	24	24
9:15	1	0	0			1	99	100	2	0	0			2	14	16
9:30	3	0	0			3	58	61	0	0	0			0	13	13
9:45	1	0	0			1	58	59	1	0	0			1	10	11
10:00	2	0	0			2	52	54	1	0	0			1	8	9
10:15	4	0	0			4	60	64	1	0	0			1	13	14
10:30	1	0	0			1	49	50	0	0	0			0	13	13
10:45	0	0	0			0	65	65	0	0	0			0	18	18
11:00	0	0	0			0	55	55	0	0	0			0	13	13
11:15	1	0	0			1	53	54	1	0	0			1	17	18
11:30	1	0	0			1	53	54	0	0	0			0	14	14
11:45	0	1	0			1	66	67	1	0	0			1	10	11
12:00	1	0	0			1	61	62	2	0	0			2	10	12
12:15	0	0	0			0	44	44	3	0	0			3	9	12
12:30	1	0	0			1	54	55	1	0	0			1	10	11
12:45	0	0	0			0	50	50	3	0	0			3	13	16
13:00	0	0	0			0	49	49	0	0	0			0	15	15
13:15	0	0	2			2	58	60	0	0	1			1	14	15
13:30	1	1	0			2	53	55	0	0	0			0	10	10
13:45	2	0	2			4	55	59	1	0	0			1	17	18
14:00	3	0	0			3	41	44	1	0	0			1	9	10
14:15	1	0	0			1	44	45	0	0	0			0	13	13
14:30	1	0	0			1	57	58	1	0	0			1	19	20
14:45	1	0	0			1	77	78	0	0	0			0	15	15
15:00	1	0	0			1	87	88	0	0	0			0	23	23
15:15	0	0	0			0	108	108	0	0	0			0	36	36
15:30	1	0	0			1	120	121	0	0	0			0	12	12
15:45	1	0	0			1	68	69	0	0	0			0	13	13
16:00	0	0	0			0	60	60	2	0	0			2	20	22
16:15	0	0	0			0	64	64	0	0	0			0	20	20
16:30	0	0	0			0	58	58	0	0	0			0	20	20
16:45	0	1	0			1	81	82	0	0	0			0	13	13
17:00	2	0	0			2	57	59	0	0	0			0	20	20
17:15	0	1	0			1	73	74	0	0	0			0	18	18
17:30	0	1	0			1	76	77	0	0	0			0	17	17
17:45	0	1	0			1	63	64	0	0	0			0	21	21
18:00	1	0	0			1	77	78	0	0	0			0	21	21
18:15	1	0	0			1	77	78	0	0	0			0	17	17
18:30	0	1	0			1	56	57	0	0	0			0	16	16
18:45	0	0	0			0	62	62	0	0	0			0	17	17
19:00	1	1	0			2	57	59	0	0	0			0	14	14
Totals	45	10	8	0	0	63	3664	3727	26	0	1	0	0	27	822	849
0700-1900																
Totals	42	10	7	0	0	59	3522	3581	26	0	1	0	0	27	804	831

DEPARTMENT FOR INFRASTRUCTURE AND TRANSPORT

VEHICLE TURNING MOVEMENT SURVEY

Golden Grove / Grenfell Road (East), Wynn Vale

TG895458 Arm 3

Wednesday 6-Apr-22 0630 To 1900 Job No 606 Golden Grove Road (SW)

15 min Ending	STRAIGHT THROUGH								RIGHT TURN							
	RIGID	BUS	ARTICULATED	B-DOUBLE	ROAD TRAIN	TOTAL CVs	CAR	Total Vehicles	RIGID	BUS	ARTICULATED	B-DOUBLE	ROAD TRAIN	TOTAL CVs	CAR	Total Vehicles
6:30																
6:45	2	1	0	0		3	44	47	0	0	0			0	13	13
7:00	2	3	0	0		5	60	65	0	0	0			0	18	18
7:15	1	2	0	0		3	43	46	1	1	0			2	25	27
7:30	5	2	1	0		8	56	64	2	1	1			4	29	33
7:45	4	2	0	0		6	70	76	0	1	3			4	41	45
8:00	1	3	0	0		4	75	79	0	1	1			2	29	31
8:15	4	2	0	0		6	70	76	0	0	0			0	43	43
8:30	1	3	1	0		5	94	99	2	0	0			2	74	76
8:45	2	1	0	0		3	121	124	1	1	0			2	97	99
9:00	1	2	0	0		3	100	103	0	0	0			0	72	72
9:15	3	3	1	0		7	65	72	1	0	0			1	53	54
9:30	1	2	0	0		3	81	84	1	1	0			2	57	59
9:45	0	1	1	0		2	63	65	0	0	0			0	52	52
10:00	6	4	0	0		10	71	81	0	0	0			0	61	61
10:15	2	1	1	0		4	80	84	2	0	0			2	45	47
10:30	0	3	1	0		4	60	64	1	0	0			1	49	50
10:45	3	1	1	0		5	81	86	4	0	0			4	60	64
11:00	2	1	2	0		5	69	74	1	0	1			2	53	55
11:15	0	2	0	0		2	68	70	2	0	0			2	50	52
11:30	3	2	1	0		6	84	90	1	0	0			1	68	69
11:45	3	3	0	0		6	91	97	1	0	0			1	68	69
12:00	2	1	1	0		4	98	102	1	0	0			1	75	76
12:15	1	3	0	0		4	87	91	1	0	0			1	68	69
12:30	2	2	0	0		4	82	86	0	0	0			0	73	73
12:45	1	1	1	0		3	91	94	0	0	0			0	56	56
13:00	8	1	0	0		9	98	107	0	0	1			1	52	53
13:15	2	2	1	0		5	94	99	1	0	1			2	62	64
13:30	2	2	0	0		4	84	88	1	0	0			1	42	43
13:45	6	2	1	0		9	86	95	0	0	1			1	50	51
14:00	1	2	0	0		3	92	95	1	0	0			1	59	60
14:15	0	3	3	0		6	101	107	1	0	1			2	51	53
14:30	2	2	0	0		4	96	100	2	0	0			2	67	69
14:45	4	1	3	0		8	120	128	1	0	0			1	101	102
15:00	2	0	0	1		3	127	130	1	0	1			2	104	106
15:15	1	3	4	1		9	156	165	1	0	0			1	76	77
15:30	3	3	2	0		8	150	158	0	0	1			1	149	150
15:45	0	2	0	0		2	162	164	1	0	0			1	147	148
16:00	1	3	0	0		4	128	132	0	0	0			0	106	106
16:15	3	1	0	0		4	146	150	0	0	0			0	127	127
16:30	0	3	0	0		3	143	146	1	0	0			1	138	139
16:45	1	4	0	0		5	187	192	0	0	0			0	162	162
17:00	3	3	1	0		7	168	175	0	1	0			1	114	115
17:15	0	4	0	0		4	168	172	2	0	0			2	137	139
17:30	1	3	0	0		4	157	161	0	0	0			0	132	132
17:45	0	3	0	0		3	159	162	1	0	0			1	112	113
18:00	0	3	0	0		3	151	154	1	0	0			1	110	111
18:15	0	4	0	0		4	100	104	2	0	0			2	102	104
18:30	1	3	0	0		4	93	97	0	0	1			1	90	91
18:45	0	3	0	0		3	76	79	0	0	0			0	72	72
19:00	0	2	0	0		2	77	79	0	0	0			0	46	46
Totals	93	113	27	2	0	235	5023	5258	39	7	13	0	0	59	3737	3796
0700-1900																
Totals	89	109	27	2	0	227	4919	5146	39	7	13	0	0	59	3706	3765

FINAL REPORT

ACCORD PROPERTY

108 Place Childcare Centre

St Francis Xavier's, Carignane Street, Wynn Vale

> STORMWATER MANAGEMENT PLAN

cpr engineers

REV C | 27 July 2026

108 PLACE CHILDCARE CENTRE
STORMWATER MANAGEMENT PLAN

Site Address: St Francis Xavier's, Carignane Street, Wynn Vale

Project Number: 240004

DOCUMENT ISSUE REGISTER:

REVISION	ISSUE DATE	REASON	PREPARED	REVIEWED
A	08/07/25	Planning Approval	Costa Morias	Costa Morias
B	18/02/26	Planning Approval	Costa Morias	Costa Morias
C	27/07/26	Planning Approval	Costa Morias	Costa Morias

Visit
174 Fullarton Road
Dulwich SA 5065

T 08 8332 1344

Post
PO Box 2832
Kent Town SA 5071

E admin@cprengineers.com.au

108 PLACE CHILDCARE CENTRE

STORMWATER MANAGEMENT PLAN

240004 – 18 February 2026

INTRODUCTION

The following report outlines the key requirements to manage the disposal of stormwater from the post development site. The site is situated at St Francis Xavier's, Carignane Street, Wynn Vale.

The stormwater concept has been based upon the architectural plans prepared by ON Architecture, and the survey provided.

The project is split over two locations across the school. A new split-level building will be constructed over the top of the existing carpark on the corner of Carignane Street and Park Lake Drive, Wynn Vale. The existing bitumen carpark will be demolished, the new split-level building constructed with associated paving and landscape play space.

A new carpark will be constructed over a greenfield site at the southwest corner of the site on Carignane Street.

This Stormwater Management Plan has been prepared in accordance with design advice received from the engineering department of the City of Tea Tree Gully outlining requirements of detention.
This document is to be read in conjunction with:

- Architectural drawings, 202400017-DA00 to DA13 site plans,
- CPR Engineers Stormwater Management Plan 240004-WV-CSK01 to CSK02: and
- CPR Engineers Stormwater Calculations
- CPR Engineers Catchment Plans

This Stormwater Management Plan establishes the principles to manage the stormwater on the site and is submitted for review by the City of Tea Tree Gully as a part of the Development Approval process.

Should further details be required during this period, CPR Engineers will be able to provide these as necessary.

GENERAL STORMWATER MANAGEMENT

The new works will be designed for the following stormwater criteria:

- Post-development flows to match pre-development flows for 5% AEP and 1% AEP events

It is proposed that stormwater from the building development will:

- Be detained on site by use of an underground stormwater detention tank with pumped discharge to an existing side entry pit within the existing carpark.

It is proposed that stormwater from the new carpark development will:

- Be detained on site by use of an underground stormwater detention tank with discharge to existing drainage easement to the west of the site.

FINISHED FLOOR LEVEL REQUIREMENTS

Flood mapping sourced from the SAPPA website notes there is no flooding to the subject sites within the "Hazard (Flooding)" and "Hazard (Flooding – General)" overlays.



Figure 1: Flood Map (Source: SAPPA Website)

Due to the sloping nature of the site, to mitigate height of retaining walls and encroachment into existing tree protection zones, a split-level approach has been adopted for the building finished floor level. The upper floor level has been set at 162.50m to tie into the existing footpath to the north of the site. The lower floor level has been set at 161.40m to tie into the existing levels within the tree protection zone of the significant tree to the west of the building.

The perimeter pavements around the buildings shall grade away from the building and as such divert any chance for overland flows to elsewhere on the site.
The above measures have been addressed in order to maintain an appropriate freeboard level higher than surrounding formed ground surfaces to enable overland flows from 1:100 ARI storm events to exit the site in an appropriate manner and so as not to affect the neighbouring properties.

STORMWATER DETENTION

Detention calculations have been completed in accordance with the requirements outlined with the "General Stormwater Management" section of this report. Refer appendix A for the catchment plans and appendix B for the calculations.

Post development 1% AEP detention summarised below.

- The childcare site will discharge to an underground tank to the west of the building (positioned outside of the tree protection zones of the existing trees). The tank is to have a minimum detention capacity of 23.15kL and be

fitted with a submersible pump discharging at 17L/s. A high level overflow above the required minimum capacity is to be provided.

- The carpark site will discharge to an underground tank providing a minimum detention capacity of 34kL. The tank is to have a low level orifice restricting flows to 4.5L/s. A secondary outlet is to be provided at a capacity of 24kL providing an additional 2L/s flow rate (6.5L/s total). Ahigh level overflow above the required minimum capacity is to be provided.

QUALITY OF WATER

As outlined by City of Tea Tree Gully storm water run-off is to be treated prior to discharge into council system to comply with the targeted values below.

- 80% retention of the typical urban annual load for Total Suspended Solids (TSS)
- 60% retention of the typical urban annual load for Total Phosphorus (TP)
- 45% retention of the typical urban annual load for Total Nitrogen (TN)
- 100% retention of the typical urban annual load for Gross Pollutants (litter)

For the purpose of this report a proprietary in ground system is proposed. An Atlan "Vorceptor" or similar approved has been noted on the drawings.

These measures will improving the quality of stormwater run-off exiting the site in comparison to current predevelopment conditions which provides no treatment.

ISSUES DURING CONSTRUCTION

The management of stormwater during construction will be under constant monitoring by the appointed builder.

The builder will be employed to maintain control measures on site and to minimise run-off from the site which may contain fine earth particles and any deleterious material that washes off site will be cleaned up by the contractor.

Open swales rock and earth beds as well as hay bales will be used to manage stormwater during Construction and in particular during the earthworks phase of the project. The contractor will be required to submit a sediment and stormwater control plan during the different phases of the development.

Prepared by

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CPR ENGINEERS

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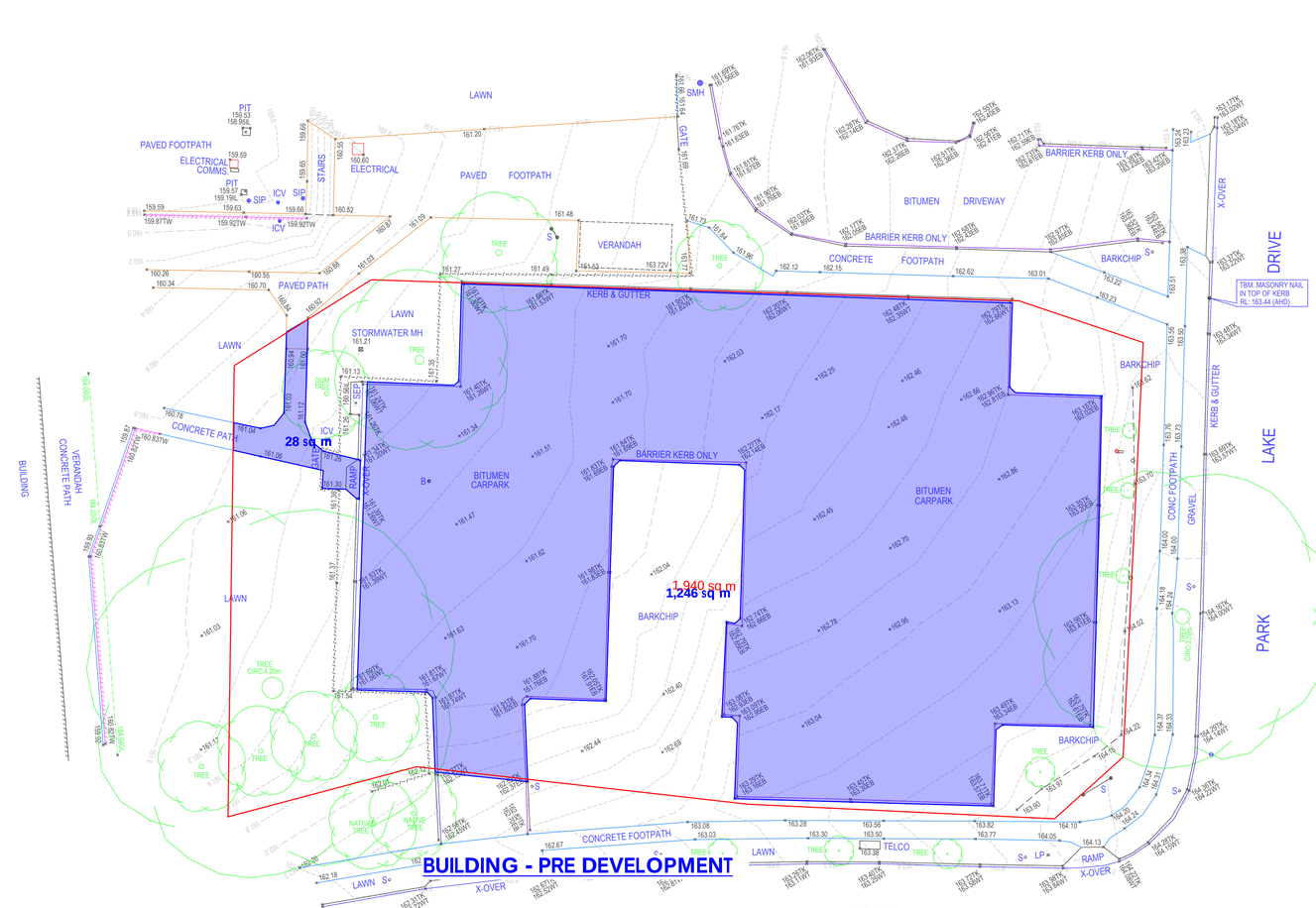
Attachments:

- Appendix A – Stormwater detention calculations
- Appendix B – Catchment Plans
- Appendix C – 240004-WV-CSK01-Chilcare-Stormwater Management plan, 240004-WV-CSK02-Carpark-Stormwater Management plan

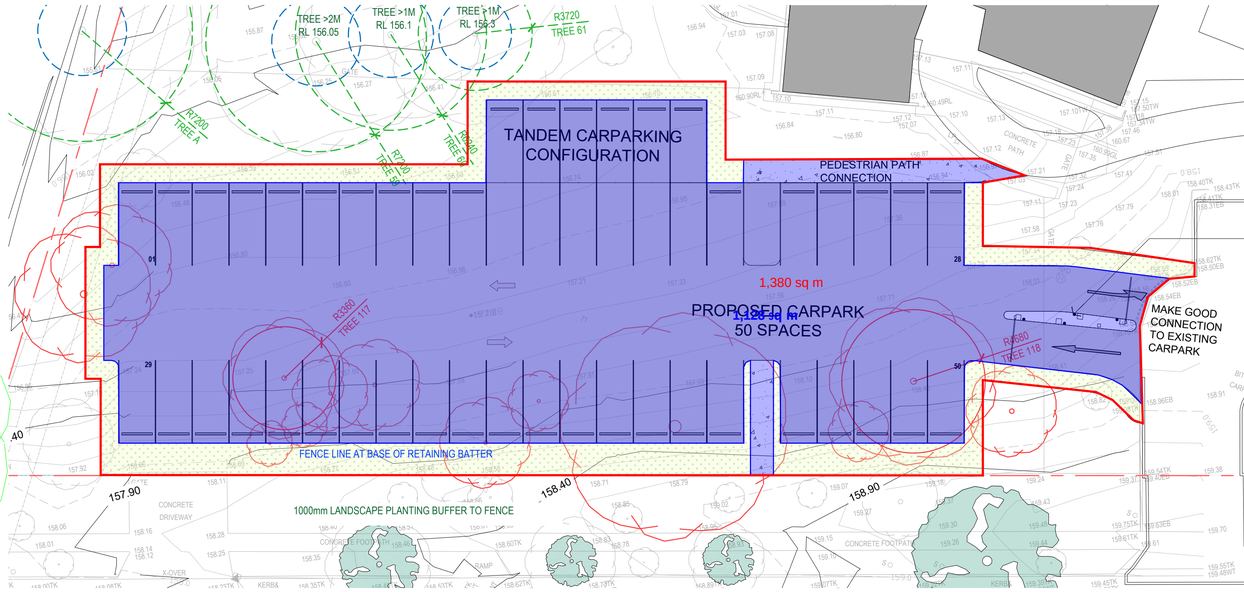
APPENDIX A – STORMWATER DETENTION CALCULATIONS

ALLOTMENT 71 IN F132662
ALLOTMENT 100 IN D9816
ALLOTMENT 99 IN D9816
HUNDRED OF YATALA
CT 5999/434

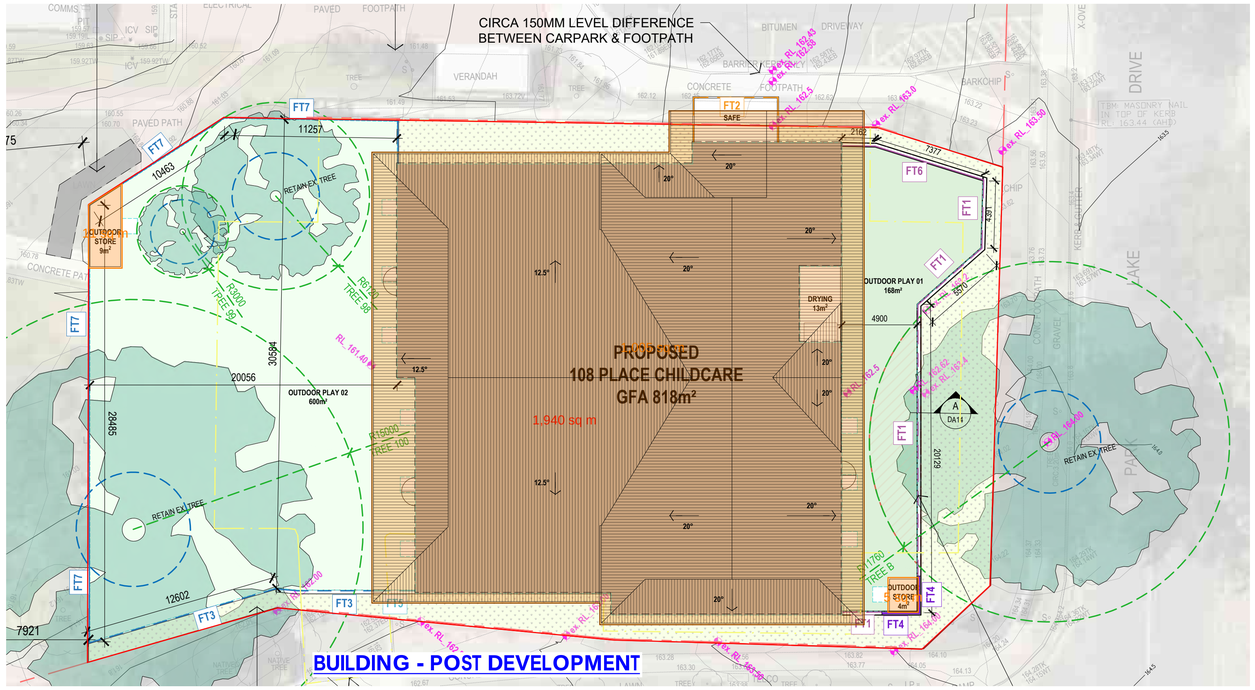
N



BUILDING - PRE DEVELOPMENT



CARPARK - POST DEVELOPMENT



BUILDING - POST DEVELOPMENT

LEGEND

??	TOTAL SITE AREA
??	PAVED AREA
??	ROOF AREA

UNHATCHED AREAS WITHIN THE TOTAL SITE AREA ARE LANDSCAPE

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Project: 108 PLACE CHILDCARE CENTRE
Site: CARIGNANE STREET, WYNN VALE
Sketch Title: CATCHMENT PLAN
Date: 16/07/26
Scale: 1: 200 @ A1

APPENDIX B – STORMWATER DETENTION CALCULATIONS

Job No: 240004
Date : 16-07-26
Design: CM
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WYNN VALE CCC - BUILDING

PRE-DEVELOPMENT - 5 % AEP Flows

Roof Area		m^2	**Pervious Area**	666 m^2
Roof Pitch	5	degrees	**Run-Off Coefficient**	0.25
Run-Off Coefficient	1			
			Pavement Area	1274 m^2
			Run-Off Coefficient	0.9
			Total Site =	1940 m^2

Storm Design Recurrence Interval	5	% AEP	
Time of Concentration	10.0	minutes	
Max Allowable Outflow	17.08	L/s	Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m^3)
1	185	67.53	4.05
2	162	59.13	7.10
3	144	52.56	9.46
4	131	47.82	11.48
5	120	43.80	13.14
10	87.3	31.86	19.12
15	70.4	25.70	23.13
20	59.8	21.83	26.19
25	52.3	19.09	28.63
30	**46.8**	**17.08**	**30.75**
45	36.2	13.21	35.68
60	30.1	10.99	39.55
90	23	8.40	45.33
120	18.9	6.90	49.67
180	14.4	5.26	56.76
270	10.9	3.98	64.45
360	8.92	3.26	70.33

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WYNN VALE CCC - BUILDING

PRE-DEVELOPMENT - 1 % AEP Flows

Roof Area		m^2	**Pervious Area**	666 m^2
Roof Pitch	5	degrees	**Run-Off Coefficient**	0.25
Run-Off Coefficient	1			
			Pavement Area	1274 m^2
			Run-Off Coefficient	0.9
			Total Site =	1940 m^2

Storm Design Recurrence Interval	1	% AEP	
Time of Concentration	10.0	minutes	
Max Allowable Outflow	24.42	L/s	Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m^3)
1	264	96.36	5.78
2	233	85.05	10.21
3	207	75.56	13.60
4	187	68.26	16.38
5	172	62.78	18.83
10	125	45.63	27.38
15	100	36.50	32.85
20	85.3	31.13	37.36
25	74.8	27.30	40.95
30	**66.9**	**24.42**	**43.95**
45	51.9	18.94	51.15
60	43	15.70	56.50
90	32.8	11.97	64.65
120	27	9.86	70.96
180	20.4	7.45	80.42
270	15.3	5.58	90.47
360	12.5	4.56	98.55

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Date : 16-07-26
Design: CM
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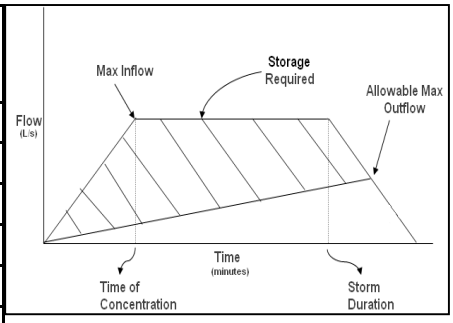
WYNN VALE CCC - BUILDING

POST-DEVELOPMENT - 5 % AEP Flows

Roof Area	1021 m^2	**Pervious Area**	919 m^2
Roof Pitch	5 degrees	**Run-Off Coefficient**	0.25
Run-Off Coefficient	1		
		Pavement Area	0 m^2
		Run-Off Coefficient	0.9
		Total Site =	1940 m^2

Storm Design Recurrence Interval 5 % AEP
Time of Concentration 10.0 minutes
Max Allowable Outflow 17 L/s Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m^3)	Max Storage (m^3)
1	185	66.91	4.01	-1.62
2	**162**	**58.59**	**7.03**	**0.88**
3	144	52.08	9.37	2.71
4	131	47.38	11.37	4.20
5	120	43.40	13.02	5.33
10	87.3	31.57	18.94	8.69
15	70.4	25.46	22.92	10.10
20	59.8	21.63	25.95	10.58
25	52.3	18.92	28.37	10.44
30	46.8	16.93	30.47	9.97
45	36.2	13.09	35.35	7.16
60	30.1	10.89	39.19	3.32
90	23	8.32	44.92	-6.33
120	18.9	6.84	49.22	-17.40
180	14.4	5.21	56.25	-41.12
270	10.9	3.94	63.86	-79.63
360	8.92	3.23	69.68	-119.93



Minimum Tank Size	**10.58 m^3**

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Design: CM
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WYNN VALE CCC - BUILDING

POST-DEVELOPMENT - 1 % AEP Flows

Roof Area 1021 m^2
Roof Pitch 5 degrees
Run-Off Coefficient 1

Pervious Area 919 m^2
Run-Off Coefficient 0.25

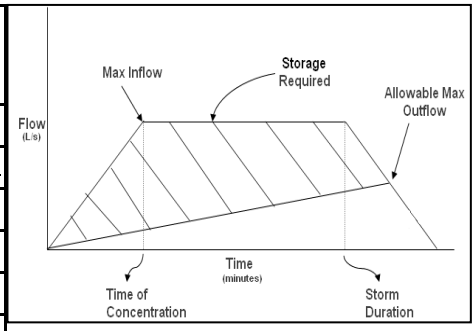
Pavement Area m^2
Run-Off Coefficient 0.9

Total Site = 1940 m^2

Storm Design Recurrence Interval 1 % AEP
Time of Concentration 10.0 minutes
Max Allowable Outflow 17 L/s

Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m^3)	Max Storage (m^3)
1	264	95.48	5.73	0.12
2	**233**	**84.27**	**10.11**	**3.99**
3	207	74.87	13.48	6.85
4	187	67.63	16.23	9.09
5	172	62.21	18.66	11.01
10	125	45.21	27.13	16.93
15	100	36.17	32.55	19.80
20	85.3	30.85	37.02	21.72
25	74.8	27.05	40.58	22.73
30	66.9	24.20	43.55	23.15
45	51.9	18.77	50.68	22.63
60	43	15.55	55.99	20.29
90	32.8	11.86	64.06	13.06
120	27	9.77	70.31	4.01
180	20.4	7.38	79.68	-17.22
270	15.3	5.53	89.64	-53.16
360	12.5	4.52	97.65	-91.05



Minimum Tank Size	**23.15** m^3

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IFD Design Rainfall Intensity (mm/h)
Issued: 20-Nov-24
Location Label:
Requested coor Latitude -34.802 Longitude 138.7
Nearest grid cel Latitude 34.8125 (S Longitude 138.7125 (E)

		Annual Exceedance Probability (AEP)						
Duration	Duration in min	63.20%	50%	20%	10%	5%	2%	1%
1 min	1	78.9	89.8	127	155	185	228	264
2 min	2	69.7	79	111	135	162	200	233
3 min	3	62	70.3	98.9	121	144	178	207
4 min	4	56.1	63.7	89.7	109	131	161	187
5 min	5	51.3	58.3	82.3	100	120	148	172
10 min	10	37.2	42.4	60.1	73.3	87.3	108	125
15 min	15	30	34.2	48.4	59.1	70.4	86.8	100
20 min	20	25.5	29.1	41.1	50.2	59.8	73.7	85.3
25 min	25	22.4	25.5	36	43.9	52.3	64.6	74.8
30 min	30	20.1	22.8	32.2	39.3	46.8	57.8	66.9
45 min	45	15.6	17.7	25	30.4	36.2	44.7	51.9
1 hour	60	13	14.8	20.7	25.2	30.1	37.1	43
1.5 hour	90	10.1	11.4	15.9	19.3	23	28.3	32.8
2 hour	120	8.35	9.43	13.1	15.9	18.9	23.3	27
3 hour	180	6.42	7.23	10	12.1	14.4	17.6	20.4
4.5 hour	270	4.93	5.54	7.63	9.2	10.9	13.3	15.3
6 hour	360	4.09	4.59	6.29	7.57	8.92	10.9	12.5
9 hour	540	3.14	3.52	4.8	5.75	6.74	8.17	9.36
12 hour	720	2.6	2.91	3.95	4.72	5.52	6.66	7.6
18 hour	1080	1.99	2.23	3	3.57	4.14	4.97	5.65
24 hour	1440	1.65	1.84	2.47	2.91	3.37	4.03	4.56
30 hour	1800	1.42	1.58	2.11	2.49	2.87	3.41	3.86
36 hour	2160	1.26	1.4	1.86	2.18	2.5	2.98	3.35
48 hour	2880	1.03	1.15	1.51	1.76	2.02	2.38	2.68
72 hour	4320	0.777	0.86	1.12	1.3	1.47	1.73	1.93
96 hour	5760	0.631	0.697	0.899	1.03	1.17	1.36	1.51
120 hour	7200	0.536	0.59	0.755	0.864	0.969	1.12	1.24
144 hour	8640	0.467	0.513	0.652	0.743	0.83	0.952	1.04
168 hour	10080	0.415	0.455	0.575	0.653	0.726	0.827	0.902

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WYNN VALE CCC - CARPARK

PRE-DEVELOPMENT - 5 % AEP Flows

Roof Area	0 m^2	**Pervious Area**	1380 m^2
Roof Pitch	5 degrees	**Run-Off Coefficient**	0.25
Run-Off Coefficient	1		
		Pavement Area	0 m^2
		Run-Off Coefficient	0.9
		Total Site =	1380 m^2

Storm Design Recurrence Interval 5 % AEP
Time of Concentration 10.0 minutes
Max Allowable Outflow 4.49 L/s Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m^3)
1	185	17.73	1.06
2	162	15.53	1.86
3	144	13.80	2.48
4	131	12.55	3.01
5	120	11.50	3.45
10	87.3	8.37	5.02
15	70.4	6.75	6.07
20	59.8	5.73	6.88
25	52.3	5.01	7.52
30	**46.8**	**4.49**	**8.07**
45	36.2	3.47	9.37
60	30.1	2.88	10.38
90	23	2.20	11.90
120	18.9	1.81	13.04
180	14.4	1.38	14.90
270	10.9	1.04	16.92
360	8.92	0.85	18.46

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WAYNE VALE CCC - CARPARK

PRE-DEVELOPMENT - 1 % AEP Flows

Roof Area	m^2	**Pervious Area**	1380 m^2
Roof Pitch	5 degrees	**Run-Off Coefficient**	0.25
Run-Off Coefficient	1		
		Pavement Area	0 m^2
		Run-Off Coefficient	0.9
		Total Site =	1380 m^2

Storm Design Recurrence Interval	1	% AEP
Time of Concentration	10.0	minutes
Max Allowable Outflow	6.41	L/s

Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m^3)
1	264	25.30	1.52
2	233	22.33	2.68
3	207	19.84	3.57
4	187	17.92	4.30
5	172	16.48	4.95
10	125	11.98	7.19
15	100	9.58	8.63
20	85.3	8.17	9.81
25	74.8	7.17	10.75
30	**66.9**	**6.41**	**11.54**
45	51.9	4.97	13.43
60	43	4.12	14.84
90	32.8	3.14	16.97
120	27	2.59	18.63
180	20.4	1.96	21.11
270	15.3	1.47	23.75
360	12.5	1.20	25.88

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WYNN VALE CCC - CARPARK

POST-DEVELOPMENT - 5 % AEP Flows

Roof Area 0 m^2
Roof Pitch 5 degrees
Run-Off Coefficient 1

Pervious Area 252 m^2
Run-Off Coefficient 0.25

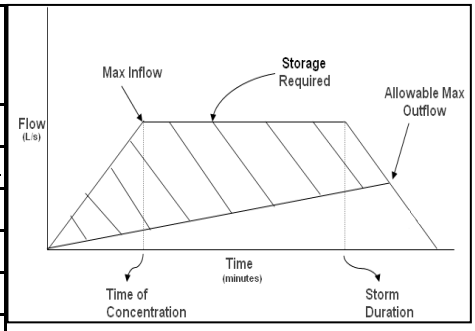
Pavement Area 1128 m^2
Run-Off Coefficient 0.9

Total Site = 1380 m^2

Storm Design Recurrence Interval 5 % AEP
Time of Concentration 10.0 minutes
Max Allowable Outflow 4.485 L/s Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m^3)	Max Storage (m^3)
1	185	55.45	3.33	1.85
2	**162**	**48.56**	**5.83**	**4.21**
3	144	43.16	7.77	6.02
4	131	39.26	9.42	7.54
5	120	35.97	10.79	8.77
10	87.3	26.17	15.70	13.01
15	70.4	21.10	18.99	15.63
20	59.8	17.92	21.51	17.47
25	52.3	15.68	23.51	18.80
30	46.8	14.03	25.25	19.87
45	36.2	10.85	29.29	21.89
60	30.1	9.02	32.48	23.06
90	23	6.89	37.23	23.77
120	18.9	5.66	40.79	23.29
180	14.4	4.32	46.61	21.05
270	10.9	3.27	52.92	15.25
360	8.92	2.67	57.75	7.96

Minimum Tank Size	**23.77** m^3



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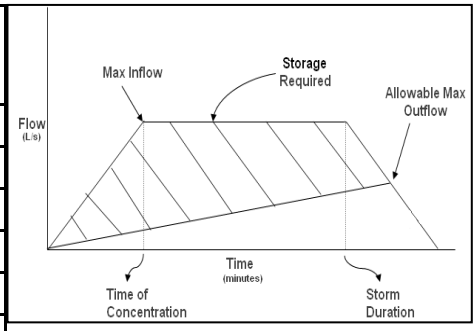
WYNN VALE CCC - CARPARK

POST-DEVELOPMENT - 1 % AEP Flows

Roof Area	0 m^2	**Pervious Area**	252 m^2
Roof Pitch	5 degrees	**Run-Off Coefficient**	0.25
Run-Off Coefficient	1		
		Pavement Area	1128 m^2
		Run-Off Coefficient	0.9
		Total Site =	1380 m^2

Storm Design Recurrence Interval 1 % AEP
Time of Concentration 10.0 minutes
Max Allowable Outflow 6.411 L/s Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m^3)	Max Storage (m^3)
1	264	79.13	4.75	2.63
2	233	69.84	8.38	6.07
3	207	62.04	11.17	8.67
4	187	56.05	13.45	10.76
5	172	51.55	15.47	12.58
10	**125**	**37.47**	**22.48**	**18.63**
15	100	29.97	26.98	22.17
20	85.3	25.57	30.68	24.91
25	74.8	22.42	33.63	26.90
30	66.9	20.05	36.09	28.40
45	51.9	15.56	42.00	31.42
60	43	12.89	46.40	32.93
90	32.8	9.83	53.09	33.85
120	27	8.09	58.27	33.26
180	20.4	6.11	66.03	29.49
270	15.3	4.59	74.29	20.43
360	12.5	3.75	80.93	9.76



Minimum Tank Size	**33.85** m^3

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IFD Design Rainfall Intensity (mm/h)
Issued: 20-Nov-24
Location Label:
Requested coor Latitude -34.802 Longitude 138.7
Nearest grid cel Latitude 34.8125 (S Longitude 138.7125 (E)

		Annual Exceedance Probability (AEP)						
Duration	Duration in min	63.20%	50%	20%	10%	5%	2%	1%
1 min	1	78.9	89.8	127	155	185	228	264
2 min	2	69.7	79	111	135	162	200	233
3 min	3	62	70.3	98.9	121	144	178	207
4 min	4	56.1	63.7	89.7	109	131	161	187
5 min	5	51.3	58.3	82.3	100	120	148	172
10 min	10	37.2	42.4	60.1	73.3	87.3	108	125
15 min	15	30	34.2	48.4	59.1	70.4	86.8	100
20 min	20	25.5	29.1	41.1	50.2	59.8	73.7	85.3
25 min	25	22.4	25.5	36	43.9	52.3	64.6	74.8
30 min	30	20.1	22.8	32.2	39.3	46.8	57.8	66.9
45 min	45	15.6	17.7	25	30.4	36.2	44.7	51.9
1 hour	60	13	14.8	20.7	25.2	30.1	37.1	43
1.5 hour	90	10.1	11.4	15.9	19.3	23	28.3	32.8
2 hour	120	8.35	9.43	13.1	15.9	18.9	23.3	27
3 hour	180	6.42	7.23	10	12.1	14.4	17.6	20.4
4.5 hour	270	4.93	5.54	7.63	9.2	10.9	13.3	15.3
6 hour	360	4.09	4.59	6.29	7.57	8.92	10.9	12.5
9 hour	540	3.14	3.52	4.8	5.75	6.74	8.17	9.36
12 hour	720	2.6	2.91	3.95	4.72	5.52	6.66	7.6
18 hour	1080	1.99	2.23	3	3.57	4.14	4.97	5.65
24 hour	1440	1.65	1.84	2.47	2.91	3.37	4.03	4.56
30 hour	1800	1.42	1.58	2.11	2.49	2.87	3.41	3.86
36 hour	2160	1.26	1.4	1.86	2.18	2.5	2.98	3.35
48 hour	2880	1.03	1.15	1.51	1.76	2.02	2.38	2.68
72 hour	4320	0.777	0.86	1.12	1.3	1.47	1.73	1.93
96 hour	5760	0.631	0.697	0.899	1.03	1.17	1.36	1.51
120 hour	7200	0.536	0.59	0.755	0.864	0.969	1.12	1.24
144 hour	8640	0.467	0.513	0.652	0.743	0.83	0.952	1.04
168 hour	10080	0.415	0.455	0.575	0.653	0.726	0.827	0.902

APPENDIX C – 240004-WV-CSK01- CHILDCARE-STORMWATER MANAGEMENT PLAN,
240004-WV-CSK02- CARPARK - STORMWATER MANAGEMENT PLAN

LEGEND

STORMWATER PIPE

RETAINING WALL

DP — DOWNPIPE. LOCATIONS ARE INDICATIVE. TBC IN DETAILED DESIGN

IP — INSPECTION POINT

GRATED INLET PIT. SIZE TBC IN DETAILED DESIGN

UPSTAND TO RAFT FOOTING

P ??.?? — DESIGN LEVEL

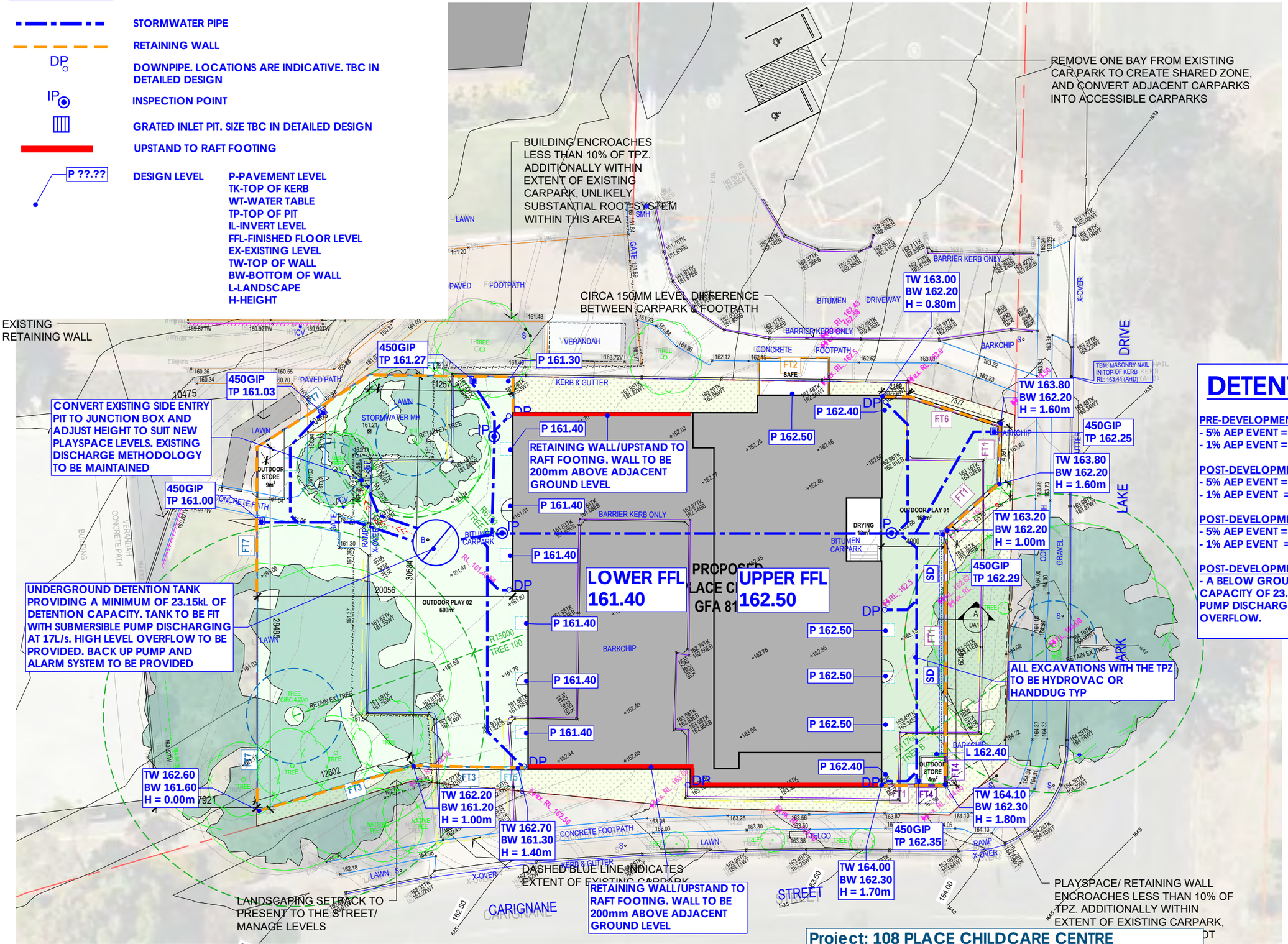
- P-PAVEMENT LEVEL
- TK-TOP OF KERB
- WT-WATER TABLE
- TP-TOP OF PIT
- IL-INVERT LEVEL
- FFL-FINISHED FLOOR LEVEL
- EX-EXISTING LEVEL
- TW-TOP OF WALL
- BW-BOTTOM OF WALL
- L-LANDSCAPE
- H-HEIGHT

PLANNING

Rev	Amendment	Date
1	PLANNING ISSUE	01/07/2025

FENCE TYPE KEY

- FT1 — 1200h PICKET FENCE ON RETAINING WALL
- FT2 — 1500h TIMBER BATTEN FENCE TO SAFE ZONE
- FT3 — 1800h PICKET FENCE



DETENTION ASSESSMENT

PRE-DEVELOPMENT FLOWS
- 5% AEP EVENT = 17.08L/s
- 1% AEP EVENT = 24.42L/s

POST-DEVELOPMENT FLOWS
- 5% AEP EVENT = 17L/s
- 1% AEP EVENT = 17L/s

POST-DEVELOPMENT DETENTION REQUIRED
- 5% AEP EVENT = 10.58kL
- 1% AEP EVENT = 23.15kL

POST-DEVELOPMENT DETENTION PROVIDED
- A BELOW GROUND DETENTION TANK OF MINIMUM DETENTION CAPACITY OF 23.15kL. THE TANK IS TO BE FIT WITH A SUBMERSIBLE PUMP DISCHARGING 17/s. TANK TO BE FIT WITH HIGH LEVEL OVERFLOW.

SITE DATA	
SITE AREA	1940sqm
BUILDING AREA (GFA)	818m²
PROPOSED CHILD CARE PLACES	108

cpr engineers

Project: 108 PLACE CHILDCARE CENTRE
Site: CARIGNANE STREET, WYNN VALE
Sketch Title: CHILDCARE - STORMWATER MANAGEMENT PLAN
Sketch Ref: 240004-WV-CSK01
Date: 16/07/26 Scale: 1: 300 @ A3

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
CHILDCARE SITE PLAN

Scale	As indicated	Drawn	MD	
Client	-			
Date	12/08/2025			
Job No.	202400017			
Dwg No.	**DA02**		Rev: 1	A3 SHEET

LEGEND

- STORMWATER PIPE
- KERB/KERB & WATER TABLE/KERB RETAINING WALL
- SLEEPER RETAINING WALL
- IP — INSPECTION POINT
- GPT — GROSS POLLUTANT TRAP. ATLAN VORCEPTOR OR SIMILAR APPROVED. TBC IN DETAILED DESIGN
- GRATED INLET PIT.
- P ??.?? — DESIGN LEVEL

P-PAVEMENT LEVEL
TK-TOP OF KERB
WT-WATER TABLE
TP-TOP OF PIT
IL-INVERT LEVEL
FFL-FINISHED FLOOR LEVEL
EX-EXISTING LEVEL
TW-TOP OF WALL
BW-BOTTOM OF WALL
L-LANDSCAPE
H-HEIGHT

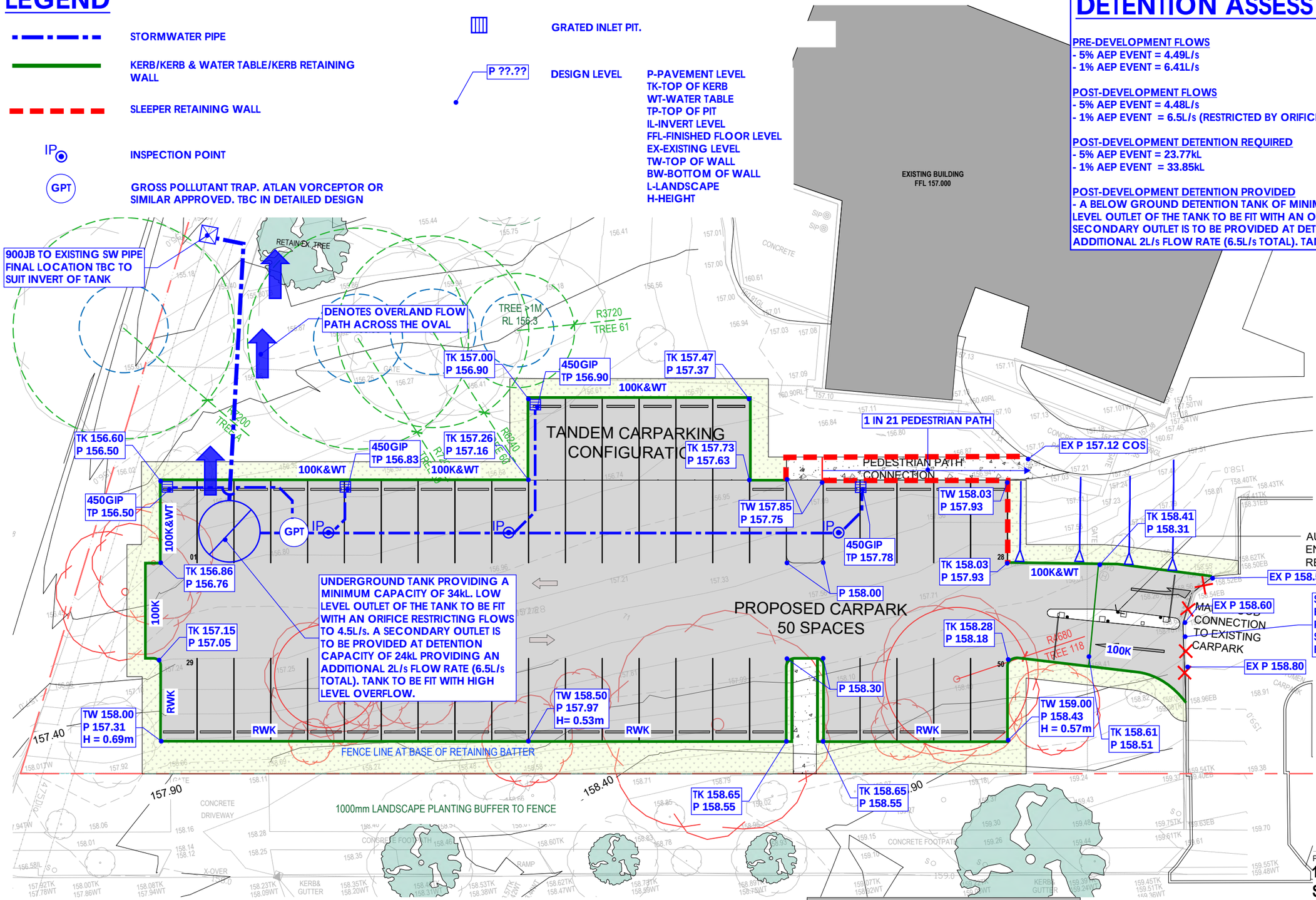
DETENTION ASSESSMENT

PRE-DEVELOPMENT FLOWS
- 5% AEP EVENT = 4.49L/s
- 1% AEP EVENT = 6.41L/s

POST-DEVELOPMENT FLOWS
- 5% AEP EVENT = 4.48L/s
- 1% AEP EVENT = 6.5L/s (RESTRICTED BY ORIFICE PLATE TO THE TANK)

POST-DEVELOPMENT DETENTION REQUIRED
- 5% AEP EVENT = 23.77kL
- 1% AEP EVENT = 33.85kL

POST-DEVELOPMENT DETENTION PROVIDED
- A BELOW GROUND DETENTION TANK OF MINIMUM DETENTION CAPACITY OF 34kL. LOW LEVEL OUTLET OF THE TANK TO BE FIT WITH AN ORIFICE RESTRICTING FLOWS TO 4.5L/s. A SECONDARY OUTLET IS TO BE PROVIDED AT DETENTION CAPACITY OF 24kL PROVIDING AN ADDITIONAL 2L/s FLOW RATE (6.5L/s TOTAL). TANK TO BE FIT WITH HIGH LEVEL OVERFLOW.



PROPOSED CAR PARKING PLAN

1:250

CARPARK DATA	
PROPOSED TANDEM CARPARK	6
PROPOSED CARPAR	

Project: 108 PLACE CHILDCARE CENTRE
Site: CARIGNANE STREET, WYNN VALE
Sketch Title: CARPARK - STORMWATER MANAGEMENT PLAN
Sketch Ref: 240004-WV-CSK02
Date: 16/07/26 Scale: 1: 250 @ A3

cpr engineers

ON ARCHITECTURE

Project
108 PLACE CHILDCARE CENTRE ST FRANCIS XAVIER'S
CARRIGNANE STREET, WYNN VALE, SA. 5127

Drawing
PROPOSED CAR PARKING

Scale	As indicated	Drawn	MD	
Client	-			
Date	12/08/2025			
Job No.	202400017			
Dwg No.	**DA06**		Rev: 1	A3 SHEET

Ecological Tree Consulting

Arborist Services with an ethical approach

ARBORICULTURAL IMPACT ASSESSMENT REPORT, TREE PROTECTION SPECIFICATION AND TREE PROTECTION PLAN REV B

4 - 28 Carignane Street, Wynn Vale SA 5127

4 April 2026

Client: Accord Property
Contact: Jake 0477 274 746
Email: jlazzeri@accord.property

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QTRA Quantified Tree Risk Assessor User No. 6987
ISA TRAQ International Society of Arboriculture Tree Risk Assessment Qualification
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2. INTRODUCTION:

2.1 Jake Lazzeri representing Accord Property engaged Ecological Tree Consulting to complete an Arboricultural Impact Assessment, Tree Protection Specification and Tree Protection Plan for the site 4 – 28 Carignane Street, Wynn Vale SA 5127. The client stated the trees have been nominated to be inspected in relation to a proposed development. This report will assess all nominated trees protected under the *Planning, Development and Infrastructure Act 2016* and the *Planning, Development and Infrastructure (General) Regulations 2017* that may be impacted upon by the proposed development works or the associated activities.

2.2 The site inspection of the nominated trees occurred on 4 March 2025. This report will detail the condition of the nominated trees, specify the notional root zone (NRZ), and structural root zone (SRZ) as a radius from the centre of each tree trunk at ground level and recommend tolerable impacts into these areas. The Tree Protection Zone (TPZ) will also be specified in the Tree Protection Plan (TPP). Recommendations for removal or retention of a tree will be based on each tree's retention rating and hazard potential (SULE Rating), coupled with the compatibility of the tree with the proposed works.

2.3 To achieve the objectives of the report, the trees will be assessed noting the species, size and general condition. The trees will be assessed from the ground using the internationally recognised Visual Tree Assessment (VTA) technique. Tree characteristics and eventual size will be taken into consideration as will the tree's position in relation to structures and hardscapes. Recommendations will be outlined in section 5 of the report.

2.4 An existing numerical system has been used to identify the trees for this report and future reference on this job site. The nominated trees are indicated in Appendix 3.

3. METHODOLOGY:

3.1 The trees were assessed using the standard Visual Tree Assessment technique (VTA). The trees were assessed from the ground for this report.

3.2 A Yamayo Million Diameter Tape was used to obtain the diameter at standard height (DSH) as recommended at 1.4 metre, the circumference at one metre above ground level and the root buttress diameter (RBD). Where access was not available, reasonable estimates were made.

3.3 The height and spread of the trees were estimated.

3.4 A smart phone and SA Property and Planning Atlas were used to take all photographs in this report.

3.5 The health of the trees were assessed and rated within the following parameters,

1. Good (G): The tree / vegetation demonstrates a full canopy of foliage or living tissue for the species. The tree/ vegetation should be free of or exhibit only minor signs of decline or pest or disease signs and symptoms.

2. Average (A): The tree / vegetation demonstrates a moderate canopy of foliage or living tissue for the species. The canopy may contain dead branches and may exhibit minor to moderate signs of decline or pest or disease signs or symptoms.

3. Below Average (BA): The tree/ vegetation demonstrates a declining canopy of foliage or failing tissue for the species. The canopy may contain multiple dead or dying sections and may display moderate to significant signs of decline or pest or disease signs or symptoms.

4. Poor (P): The tree/ vegetation shows signs of extreme stress and or decline. A high percentage of the canopy foliage may be made up of declining epicormic growth. A high percentage of the canopy foliage may be chlorotic or necrotic. A high percentage of the canopy foliage and tissue may be dead. Or the tree has declined and is not producing defenses sufficient to stop secondary insect and or pathogen attack.

5. Dead (D): The tree / vegetation shows no signs of life.

3.6 The structure of the trees were assessed and rated within the following parameters,

1. Good (G): The approximate structural root zone appears unaffected; the trunk exhibits proportional buttressing and taper. Stem and branch unions are free of recognisable flaws, few if any insect or fungal signs or symptoms are visible.
   The tree is considered a good example of the species.

2. Average (A): Minor impacts may have occurred in the approximate structural root zone, the trunk exhibits proportional buttressing and taper, some second or third order branch unions may contain minor recognisable flaws, insect or fungal signs or symptoms may be visible. The tree could be retained with some corrective pruning.

3. Below Average (BA): Moderate impacts may have occurred in the approximate structural root zone, the trunk may exhibit moderate disproportional buttressing and taper, some second or third order branch unions may contain recognisable flaws, minor branch over extension may be occurring, minor to moderate inappropriate pruning may have occurred, the tree may have a moderate lean, insect or fungal signs or symptoms may be visible. The tree may not be able to be reasonably retained with some corrective pruning.

4. Poor (P): Damage to the structural root zone may be likely, damage to the trunk may be likely, the tree may exhibit multiple branch failures, trunk buttressing and taper may be disproportionate, the main union has recognisable flaws, first, second and/or third order branch unions may contain recognisable flaws, moderate to major branch over extension may be occurring, major inappropriate pruning may have occurred, the tree may have a lean near or above 25°, insect or fungal signs or symptoms are visible and have progressed to beyond moderate levels, the tree is unlikely to be reasonably retained with corrective pruning.

3.7 The SULE rating system has been used as a guide to assist in determining the Safe Useful Life Expectancy of the trees surveyed (Refer Appendix 1).

3.8 The landscape / retention rating of the trees were assessed using the Legend for S.T.A.R.S Footprint Green Matrix Assessment System (Refer Appendix 2).

3.9 ArborCAD was used to quantify the NRZ impacts and encroachments (refer Appendix 4).

4. DISCUSSION:

4.1 Project Arborist Engagement and Responsibilities

1. The Project Arborist must be engaged to advise and supervise the required tree protection actions to be undertaken during all of the development stages. The Project Arborist has the responsibility of both monitoring and certifying the Tree Protection Specification (TPS) and Tree Protection Plan (TPP). No deviations or alterations to the TPS or TPP shall occur without the written approval of both the Project Arborist and the relevant governing authority, as required by AS 4970-2025 *Protection of Trees on Development Sites*.

    i. Unauthorised alteration of recommendations in this report actions absolute nullity of this report.

    ii. Only the Project Arborist can write and submit the staged supervising and reporting as required within section 4.7 Tree Protection Specification and section 5 Recommendations within this report as required by AS 4970-2025.

4.2 Tree Protection Zone (TPZ) Management Requirements

1. A TPZ (inclusive of the NRZ, SRZ and tree crown) is not an absolute exclusion zone; however, some activities within these zones must employ tree-sensitive techniques that result in low or no impact to tree health. Such activities may require supervision by the Project Arborist and must adhere to AS 4970-2025. When properly monitored tree-sensitive designs are implemented, the impacts on trees within the NRZ and SRZ, as defined by AS 4970-2025, are significantly reduced or eliminated.

2. An engineering bore log must be used to assess the site soil.

3. Removal of soil within an NRZ can damage roots and compromise tree health. If fill is proposed within any NRZ, it must be designed to maintain adequate aeration and permeability to prevent root asphyxiation. The fill material specification and depth must be approved in writing by the Project Arborist and the local authority.

4. Further to the above, specific sub-zones and impact areas within the TPZ are defined to guide management approaches as follows:

    I. NRZ Impact - the calculated portion of the Tree Protection Zone (TPZ) directly affected by encroachment due to development. Maintaining a minor impact (<10%) is recommended; encroachments considered moderate (>10-20%) or major (>20%) require tree sensitive methods to maintain tree viability.

    II. TPZ Compensatory Area – an area within the TPZ with existing hardscapes. "Like for like" replacements of existing hardscapes may occur in this area (e.g. replacing an old driveway with a new driveway, or a dwelling footprint with a new dwelling) are acceptable, provided no cutting of the grade occurs and the tree roots remain undisturbed. Conversion from hardscape to soft landscaping is also acceptable and can benefit root health, provided no grade cutting occurs. All activities within this area must follow the Tree Protection Specification (TPS). This approach acknowledges that tree roots have adapted to existing hard surfaces and ensures ongoing stability and health in line with AS 4970-2025.

III. TPZ Tree Sensitive Methods Area – an area associated within the TPZ where controlled works must occur as specified in the Tree Protection Plan (TPP). Some works may require direct Project Arborist supervision. Only low-impact techniques are permitted (e.g. hand digging, hydro-vacuum excavation), minimising root and soil disturbance.

4.3 Proposed Works

1. Based on the information provided by the client, the development involves two areas at the site:
   i. Childcare Centre: The work will involve the demolition of the existing car park and the construction of a new childcare centre with associated landscaping.
   ii. Car Parking Area: The work will involve the installation of an acoustic wall, removal of existing vegetation and the construction of a new car parking area with associated landscaping.

2. To achieve the works, the nominated trees that are proposed to be retained, will be protected for the duration of the works in accordance with AS 4970-2025 *Protection of Trees on Development Sites*. The nominated trees will be retained using tree sensitive development activities and protections where required, to allow the works to proceed.

3. Options for managing the trees nominated for retention in this report to be retained will be provided as required by AS 4970-2025 and will form part of the conditions of consent.

4. The trees nominated to be retained that may be affected by this development will be kept in good condition for the duration of the works. This will be achieved using the Australian Standard AS 4970-2025 *Protection of Trees on Development Sites* and science based arboricultural literature for the basis of all tree management practices.

AS4970-2025 section 1.3.17 defines the SRZ as,

"structural root zone SRZ
theoretical area around the base of a tree required for the tree's stability in the ground
Note 1 to entry: The woody root growth and soil cohesion in the SRZ are necessary to hold the tree upright. The SRZ is an area with the trunk at its centre and is expressed by its radius.
Note 2 to entry: The SRZ considers a tree's structural stability only, not the root zone required for a tree's health and long-term viability, which is typically a much larger area".

AS4970-2025 section 1.3.11 defines the NRZ as,

"notional root zone NRZ
zone enclosed by a radius of 12 times DSH that is a primary trigger for arboricultural input on a development site.

4.5.2 AS4970-2025 section 1.3.19 defines the TPZ as,

"tree protection zone TPZ
specified zone above and below ground and at given offsets from the trunk set aside to protect a tree's roots and crown where these might be damaged by development."

4.5.3 AS4970-2025 section 3.3.4 defines a minor NRZ encroachment as,

3.3.4 Minor NRZ encroachment
The proposed encroachment is considered minor if it is less than or equal to 10 % of the area of the

NRZ, has not had recent NRZ encroachments and is outside of the SRZ (see clause 3.4) Generally, it is unlikely that there will be a significant impact to tree health, longevity or structure. Tree protection should be implemented during site works. To avoid a net loss of soil area and volume, an area equivalent to the encroachment shall be incorporated into the TPZ, unless the project arborist otherwise demonstrates that the tree will remain viable."

AS4970-2025 section 3.3.5 defines a moderate NRZ encroachment as,

"3.3.5 Moderate NRZ encroachment

"The proposed encroachment is considered moderate if it is greater than 10 % and less than or equal to 20 % of the area of the NRZ and is outside of the SRZ (see clause 3.4) A project arborist shall be engaged to review the proposed impact and undertake any other necessary investigation to address the factors listed in Clause 3.3.2 to demonstrate how the tree will remain viable. This may be through the implementation of suitable design measures and construction controls to mitigate impacts during the development process as part of a TPS and TPP. To avoid a net loss of soil area and volume, an area equivalent to the encroachment shall be incorporated into the TPZ, unless the project arborist otherwise demonstrates that the tree will remain viable."

AS4970-2025 section 3.3.6 defines a major NRZ encroachment as,

"3.3.6 Major NRZ encroachment

The proposed encroachment is considered major if it is greater than 20 % of the area of the NRZ or inside the SRZ (see clause 3.4) The project arborist shall be engaged to explore alternative designs with the design team and/or demonstrate that the tree will remain viable. Relevant factors listed in Clause 3.3.2 should also be considered.

For assessment of major encroachment a more detailed investigation is necessary. This can include research such as root investigation, soil analysis, historical records of the tree or site, relevant literature and examples of similar encroachments. A TPS and TPP should be prepared to support the retention of the tree. To avoid a net loss of soil area and volume, an area equivalent to the encroachment shall be incorporated into the TPZ, unless the project arborist otherwise demonstrates that the tree will remain viable.

4.4 Assessment of the Nominated trees

Car Parking Area

TREE NUMBER	SPECIES	CIRCUMFERENCE (mm)	LEGAL STATUS *	HEIGHT (m)	SPREAD (m)	DSH (mm)	RBD (mm)	NRZ (m)	SRZ (m)	HEALTH	STRUCTURE	SULE	STARS	NRZ IMPACT	NOTES
A	*Corymbia citriodora* Lemon Scented Gum	>2000	**SIGNIFICANT** (neighbours' tree)	20	20	600	730	7.2	2.9	G	G	1	H	**13.7%**	**RETAIN AND PROTECT**
59	*Eucalyptus cladocalyx* Sugar Gum	>2000	**SIGNIFICANT**	12	10	600	730	7.2	2.9	A	A	2	M	**3.4%**	**RETAIN AND PROTECT**
60	*Eucalyptus cladocalyx* Sugar Gum	>1, <2	**REGULATED**	11	8	520	660	6.24	2.78	G	G	2	M	**-**	**RETAIN AND PROTECT**
61	*Eucalyptus astringens* Brown Mallet	>1, <2	**REGULATED**	8	8	310	450	3.72	2.37	G	G	2	M	**-**	**RETAIN AND PROTECT**

Table 1: Assessment data for the nominated trees in the proposed car parking area.

LEGEND FOR ABOVE TABLE

Explanatory Notes for Table

- *DSH = Diameter of the trunk at standard height - used to measure the Notional Root Zone (NRZ).
- ** RBD = Root Buttress Diameter - used to measure the Structural Root Zone (SRZ).
- ***NRZ = 12x the DSH
- ***SRZ = (D × 50) ^0.42 × 0.64
- **** SULE Explanation can be found in Appendix 1.
- + IACA Landscape value and S.T.A.R.S Rating system. Refer to Appendix 3.
- # Health values represented above are D = Dead, P = Poor, BA = Below Average, A = Average, G = Good (refer section 3.5).
- # Structure values represented as P = Poor, BA = Below Average, A = Average, G = Good (refer section 3.6).
- ## Circumference at 1 metre above ground level.
- ### Legal status under the *South Australian Planning, Development and Infrastructure Act 2016* and the *South Australian Planning, Development and Infrastructure (General) Regulations 2017*.

Childcare Centre

TREE NUMBER	TREE SPECIES	CIRCUMFERENCE (mm) ##	LEGAL STATUS ###	HEIGHT (m)	SPREAD (m)	DSH (mm) *	RBD (mm) **	NRZ (m) ***	SRZ (m) ***	HEALTH #	STRUCTURE #	SULE ****	STARS +	NRZ IMPACT	NOTES
B	*Eucalyptus sideroxylon* Iron Bark	>2000	**SIGNIFICANT** (tree also protected under the *Local Government Act 1999*)	20	12	980	1030	11.76	3.35	G	G	2	H	**9.0%**	**RETAIN AND PROTECT**
98	*Ceratonia siliqua* Carob	>1, <2	**SIGNIFICANT**	6	8	510	700	6.12	2.85	G	A	2	M	**6.4%**	**RETAIN AND PROTECT**
99	*Lophostemon confertus* Queensland Box	>1, <2	**REGULATED**	6	5	250	340	3.0	2.1	G	A	2	M	**4.6%**	**RETAIN AND PROTECT**
100	*Eucalyptus camaldulensis* River Red Gum	>1, <2	**SIGNIFICANT**	20	20	1300	1330	15.0	3.73	G	A	2	H	**-**	**RETAIN AND PROTECT**

Table 2: Assessment data for the nominated trees in the proposed childcare centre.

LEGEND FOR ABOVE TABLE

Explanatory Notes for Table

- * DSH = Diameter of the trunk at Standard Height - used to measure the Notional Root Zone (NRZ).
- ** RBD = Root Buttress Diameter - used to measure the Structural Root Zone (SRZ).
- ***NRZ = 12x the DSH
- ***SRZ = (D × 50) ^0.42 × 0.64
- **** SULE Explanation can be found in Appendix 1.
- + IACA Landscape value and S.T.A.R.S Rating system. Refer to Appendix 3.
- # Health values represented above are D = Dead, P = Poor, BA = Below Average, A = Average, G = Good (refer section 3.5).
- # Structure values represented as P = Poor, BA = Below Average, A = Average, G = Good (refer section 3.6).
- ## Circumference at 1 metre above ground level.
- ### Legal status under the *South Australian Planning, Development and Infrastructure Act 2016* and the *South Australian Planning, Development and Infrastructure (General) Regulations 2017*.

4.5 Tree Encroachments and Impacts

AS4970-2025 recommends the encroachments into the root zones be assessed. AS4970-2025 differentiates between encroachments and impacts stating that tree sensitive design solutions reduce the impact of encroachments.

Tree A - *Corymbia citriodora*

a. Tree A is located within the neighbouring property and its NRZ and SRZ extend into the proposed carparking area.
b. The NRZ impact for the proposed underground service installation is 2.6% (refer red hatching in appendix 4).
c. The NRZ impact for the proposed acoustic wall installation is 11.1% (refer red hatching in appendix 4).
d. The overall encroachment is considered moderate and will be actively managed in accordance with the TPS, TPP, and the requirements of AS 4970-2025.
e. **Tree A is to be retained and protected** (refer 4.6 AS4970-2025 Considerations in Determining the TPZ).

Tree 59 - *Eucalyptus cladocalyx*

a. Tree 59 is located within the school site and its NRZ and SRZ extend into the proposed carparking area.
b. The NRZ impact for the proposed underground service installation is 3.4% (refer red hatching in appendix 4).
c. Works within the TPZ tree sensitive methods area must follow the Tree Protection Specification (refer green hatching in appendix 4)
d. The overall encroachment is considered minor and will be actively managed in accordance with the TPS, TPP, and the requirements of AS 4970-2025.
e. **Tree 59 is to be retained and protected** (refer 4.6 AS4970-2025 Considerations in Determining the TPZ).

Tree 60 - *Eucalyptus cladocalyx*

a. Tree 60 is located within the school site and its NRZ extends into the proposed carparking area.
b. Works within the TPZ tree sensitive methods area must follow the Tree Protection Specification (refer green hatching in appendix 4)
c. The overall encroachment is considered minor and will be actively managed in accordance with the TPS, TPP, and the requirements of AS 4970-2025.
d. **Tree 60 is to be retained and protected** (refer 4.6 AS4970-2025 Considerations in Determining the TPZ).

Tree 61 - *Eucalyptus astringens*

a. Tree 61 is located within the school site and its NRZ extends into the proposed carparking area.
b. Works within the TPZ tree sensitive methods area must follow the Tree Protection Specification (refer green hatching in appendix 4)
c. The overall encroachment is considered minor and will be actively managed in accordance with the TPS, TPP, and the requirements of AS 4970-2025.
d. **Tree 61 is to be retained and protected** (refer 4.6 AS4970-2025 Considerations in Determining the TPZ).

Tree B - *Eucalyptus sideroxylon*

a. Tree B is located within the council verge, and its NRZ extends into the proposed childcare centre site.
b. The NRZ impact for the proposed retaining wall is 9.0% (refer red hatching in appendix 4).
c. No additional NRZ impact from demolition of the carpark is anticipated as works within the TPZ compensatory area and TPZ tree sensitive methods area must follow the Tree Protection Specification (refer green and blue hatching in appendix 4).

d. The overall encroachment is considered minor and will be actively managed in accordance with the TPS, TPP, and the requirements of AS 4970-2025.
e. **Tree B is to be retained and protected** (refer 4.6 AS4970-2025 Considerations in Determining the TPZ).

Tree 98 - *Ceratonia siliqua*

a. Tree 98 is located within the proposed childcare centre site.
b. The NRZ impact for the proposed underground services is 2.4% (refer red hatching in appendix 4).
c. The NRZ impact for the proposed fencing is 4.0% (refer red hatching in appendix 4).
d. Works within the TPZ Compensatory area and the TPZ tree sensitive methods area must follow the Tree Protection Specification (refer blue and green hatching in appendix 4)
e. The overall encroachment is considered minor and will be actively managed in accordance with the TPS, TPP, and the requirements of AS 4970-2025.
f. **Tree 98 is to be retained and protected** (refer 4.6 AS4970-2025 Considerations in Determining the TPZ).

Tree 99 - *Lophostemon confertus*

a. Tree 99 is located within the proposed childcare centre site.
b. The NRZ impact for the proposed underground services is 4.6% (refer red hatching in appendix 4).
c. Works within the TPZ tree sensitive methods area must follow the Tree Protection Specification (refer green hatching in appendix 4)
d. The overall encroachment is considered minor and will be actively managed in accordance with the TPS, TPP, and the requirements of AS 4970-2025.
e. **Tree 99 is to be retained and protected** (refer 4.6 AS4970-2025 Considerations in Determining the TPZ).

Tree 100 - *Eucalyptus camaldulensis*

1. Tree 100 is located within the proposed childcare centre site.
2. No measurable NRZ encroachment is anticipated, as all works occur within the TPZ compensatory area and are limited to surface-level disturbance without root removal and all works within the TPZ compensatory area and TPZ tree sensitive methods area must follow the Tree Protection Specification (refer green and blue hatching in appendix 4)
3. The encroachments will be actively managed in accordance with the TPS, TPP, and the requirements of AS 4970-2025.
4. **Tree 100 is to be retained and protected** (refer 4.6 AS4970-2025 Considerations in Determining the TPZ).

4.6 AS4970-2025 Considerations in Determining the TPZ

When determining a TPZ the following factors should be considered where relevant:

(a) Location and distribution of the roots.

The Nominal Root Zone (NRZ) has been calculated in line with AS 4970-2025, providing a scientifically informed basis for TPZ determination. The TPZ of trees to be retained are located within fenced areas (refer yellow markings in the TPP). Work within the TPZ's must be completed via tree sensitive methods as specified within section 4.7 herein this report (the Tree Protection Specification).

(b) Potential loss of root mass resulting from the encroachment (number of roots and diameter of roots).

The acoustic wall will replace an existing fence within the NRZ of Tree A, where prior disturbance has already occurred. As a result, any roots impacted are likely to be minor. The calculated 11.1% impact for the acoustic wall is therefore likely to overestimate actual root loss and is considered acceptable. This forms part of a total NRZ encroachment of 13.7% when combined with minor service installation impacts.

Other TPZ encroachments will follow tree sensitive work methods where required to minimise impacts (refer to the Tree Protection Specification in section 4.7 herein this report) Furthermore, the acceptable amounts of roots lost will quickly be replaced as trees replace fine feeder roots every week to six months depending on thickness (Hirons and Thomas 2018).

(c) Tree species and tolerance to root disturbance.

The following summary includes the root disturbance tolerance and performance of the trees nominated for retention:

Common Name	Scientific Name	Root Disturbance Tolerance	Performance
River Red Gum	*Eucalyptus camaldulensis*	High	Excellent; resilient in drought; iconic SA species; prefers open space.
Sugar Gum	*Eucalyptus cladocalyx*	Moderate to High	Strong performer; suited for local shelter and street planting; drought resistant.
Brown Mallet	*Eucalyptus astringens*	Moderate	Tolerates poor soils; drainage-sensitive; good in exposed sites.
Lemon-scented Gum	*Corymbia citriodora*	Moderate	Attractive form; risk of surface roots; moderate drought tolerance.
Queensland Box	*Lophostemon confertus*	High	Popular street tree; excellent in compacted urban soils; strong canopy.
Carob	*Ceratonia siliqua*	Moderate to High	Hardy; reliable in arid climates; low maintenance; tolerates pruning.
Ironbark	*Eucalyptus sideroxylon*	High	Durable, tough urban performer; long lifespan; suited to local climate.

(d) If the works will result in a temporary (e.g. service trench) or permanent (e.g. basement carpark) loss of available soil volume.

The works within the NRZ of Tree A will result in a minor permanent loss of soil volume from the new acoustic wall footing. However, as this replaces an existing fence in the same location, the net impact is limited. The surrounding area will remain as a garden bed, maintaining permeable soil conditions.

(e) Age, health, current size and projected size of the tree.

For the childcare centre area trees, transitioning from a car park to soft landscaping is anticipated to improve tree health, increase soil moisture availability, and allow for future growth. The encroachments to the car parking area trees are within acceptable thresholds and will not hinder tree health or their projected size.

(f) Presence of other trees with overlapping NRZ or grafted roots.

Other vegetation within the NRZ of Tree A will be removed. There is no evidence of root grafting. Impacts are therefore limited to general root zone disturbance.

(g) Proposed staging and timing of excavation or root-cutting.

Excavation works will be staged and undertaken using tree sensitive methods to minimise root disturbance.

(h) Proposed tree maintenance and tree care activities.

Tree watering is required. Please refer to section 4.7 here in this report (Tree Protection Specification) for tree maintenance and tree care activities.

(i) Lean and stability of the tree.

The nominated trees for retention appear stable in the ground. The proposed NRZ impacts will not destabilise the trees. There will be no SRZ impacts for the proposed development.

(j) Soil characteristics and volume, topography and drainage.

The trees have acclimated well in their environment. Soft landscaping is expected to further benefit root health and reduce surface runoff, supporting urban climate resilience.

(k) Presence of existing or past structures, obstacles affecting root growth or recent encroachments.

The existing fence and footing within the NRZ of Tree A have already disturbed the NRZ. Root growth in this area is therefore likely constrained. The new wall represents replacement within an already impacted zone, reducing the significance of additional encroachment. Following the car park demolition for the childcare centre area, the TPZ Compensatory area will be converted to a tree sensitive methods area. Converting this area to soft landscaping will benefit root expansion and overall tree health.

(l) Proposed construction measures that reduce the impact on trees.

Please refer to the Tree Protection Specification within section 4.7 herein this report for the tree sensitive construction measures.

(m) Whether a root investigation is required. The location and distribution of the roots should be determined through minimally destructive investigation methods (pneumatic, hydraulic, hand digging or ground penetrating radar). Photographs should be taken and, where needed to address geospatial issues, a root map should be prepared.

NOTE 1 Construction measures such as pier and beam, suspended slabs, cantilevered building sections and screw piles can reduce the impact of encroachment.

NOTE 2 Root damage should be minimized during this process. The roots should only be exposed for as long as required to meet the purposes of the investigation.

Root investigations prior to the proposed development are not required due to acceptable TPZ encroachments.

4.7 Tree Protection Specification (TPS)

1. **Visual Cross Referencing:** Please refer to appendix 4 (Tree Protection Plan) which provides visual information that will assist you in interpreting the information within this written Tree Protection Specification.

2. **Site Meeting:** A site meeting must occur between the Project Arborist and the builder addressing the tree protection plan before site works commence (AS 4970-2025).

3. **Tree Protection Fencing:** Prior to demolition, a two-metre-tall temporary chain mesh tree protection fence complying with AS 4687-2007 *Temporary Fencing and Hoardings* and AS 4970-2025 must be installed in the location as specified in Appendix 4. Any existing fencing, if not being removed, may be used in place of this fencing. Signage identifying the TPZ must be attached to the fencing complying with AS 4970-2025 and AS 1319-1994 *Safety Signs for the Occupational Environment*. The Project Arborist must certify in writing that the tree protection measures are correctly installed with certification documents submitted to the local council. These measures will protect the TPZ while allowing the works to proceed. The Tree Protection fencing may be moved to just beyond the hardscapes so demolition of the car park can occur and must be reinstated to the original position following demolition. The tree protection fenced off area is known as the Tree Protection Zone (TPZ). The tree protection fencing may be removed in consultation with the Project Arborist at the point of landscaping.

4. **Tree Watering:** The TPZ's of all trees to be retained must be irrigated and kept moist for 4 weeks before site works commence and is to continue throughout the length of the project. This must be tasked to a competent person and must occur at the rate of 3-litres of water per square metre of land on any week when less than 3mm of rain has fallen in the locality (AS4970-2025).

5. **Demolition of Car Park within the TPZ's:** Machinery must remain on the hardscapes and work in a direction away from the nominated trees, so as to not drive on and compact the soil once the hardscape is removed. Tree roots are not to be damaged during removal of the hardscapes. Demolition of the car park within the TPZ and SRZ of Tree 98 must occur under the direct supervision of the Project Arborist with certification submitted to the local council.

6. **Removal of Existing Fencing in TPZ's:** The existing fencing within the TPZ of Tree 98 is to be removed by hand. If machinery is to be used, it must occur under the direct supervision of the Project Arborist with certification submitted to the local council. The remaining existing fencing may be removed during the demolition of the car park.

7. **Underground Services:** Underground services are to remain outside the NRZ's of the nominated trees. If underground services are essential within the NRZ of any nominated tree, service trenches must be hand dug or hydrovac'd under the direct supervision of the Project Arborist with certification submitted to the local council.

8. **Machinery Access:** Following demolition, no machinery access is permitted within the tree protection zones (refer green and blue hatching in appendix 4 at any time. If access is essential, written permission from the Project Arborist is required and ground protection may be necessary.

9. **Neighbouring Sites:** No workers or machinery are to enter the neighbouring site. This will ensure TPZ protection within the neighbouring site.

10. **Retaining Wall and Fencing:** For the proposed retaining wall and fencing within the tree sensitive methods area (refer green hatching in appendix 4, existing fence post holes may be used. Any additional post excavations must be dug by hand or by hydrovac. For hydrovac, the PSI of the water jet must not exceed 1200PSI. If a tree root >40mm diameter is encountered during this process, a new offset hole must be excavated. This must occur under the direct supervision of The Project Arborist with certification submitted to the local council. Any retaining wall system under the fence must be I-beam with concrete sleeper design or similar and utilise the fence post holes. The retaining sleepers must remain above the existing grade of the site (Roberts *et al*., 2018; AS4970-2025).

11. **Grade Changes and the Soft Landscaping Areas:** Following removal of the hardscapes, the TPZ compensatory areas (blue hatching) will be included as tree sensitive methods areas (green hatching). The soil within these areas must not be cut to lower than the existing grade. Cultivation must not exceed a depth of 100 mm and must be undertaken with hand tools. If new soil is to be added, it must be of a coarser grade than the existing site soil and not exceed a depth of 200mm (AS4970-2025). Holes for planting must be dug by hand and any mulch on top of garden beds must not exceed 50 mm and comply with AS4454-2012 *Composts, Soil Conditioners and Mulches*.

12. **Project Arborist Site Inspections:** It is recommended the Project Arborist complete a site inspection every three months and complete a documented certification of each inspection (AS4970-2025). Please refer to section 5 for the further Project Arborist site compliance requirements which satisfy AS4970-2025 *Protection of Trees on Development Sites*.

13. **Further Tree Protections:** Unless specifically specified above, the following activities a - j inclusive are not permissible within any Tree Protection Zone and form part of the Tree Protection Specification for the nominated trees to be retained (AS4970-2025). This does not apply to work within the red hatching area in appendix 4.

    (a) Excavation, cultivation or disturbance of the soil, including scraping of the surface.
    (b) Equipment and material storage.
    (c) Preparation of chemicals, including preparation of cement products.
    (d) Movement or parking of vehicles and plant.
    (e) Dumping of waste.
    (f) Spreading or stockpiling of fill.
    (g) Refuelling.
    (h) Washing down and cleaning of equipment or hard surfaces.
    (i) Fires.
    (j) Physical damage to the tree.

5. RECOMMENDATIONS:

After reviewing the site and the information provided by the client, the author of this report recommends the works that are proposed at this site proceed with the following actions:

1. The assessed design enables the retention and protection of trees A, 59, 60, 61, B, 98, 99 and 100.
2. Granted development approval is required before proceeding with the recommendations herein this report.

3. All tree protection measures must be in place as described in the Tree Protection specification prior to the commencement of any works. The installation of the tree protection measures in section 4.7 of this report will assist in reducing the impact to the nominated trees for retention. The Project Arborist must certify the tree protection measures are correctly installed prior to commencement of any site works with certification submitted to the local council.

4. Some works within the tree protection zones (TPZ) of the trees nominated for retention in this report must be supervised by the Project Arborist as described in section 4.7 of this report with certification submitted to the local council. It is the client's responsibility to arrange site inspections and coordinate works with the Project Arborist.

5. TPZ inspections and reporting every three months are recommended to ensure the nominated trees are adequately protected. Upon this the compliance certificate can be issued by the Project Arborist as required by AS 4970-2025 with certification submitted to the local council. If the tree has been damaged or breaches of the Australian Standards have occurred, council will be contacted for further advice.

6. At practical completion of the development, the removal of all tree protection measures is required. The trees herein this report will be inspected by the Project Arborist to determine if the trees have been adequately maintained in accordance with this report. From this inspection the certification of tree protection can be issued by the Project Arborist as required by AS 4970-2025 with certification submitted to the local council.

7. Following the tree protection plan and supervision recommendations for the retained trees within this report will protect the nominated trees during the proposed development, therefore, the proposed development will not constitute tree damaging activity and should proceed. All site-specific tree protection instructions listed in section 4.7 and 5 must be strictly adhered to.

6. DISCLAIMER:

This report only covers identifiable defects present at the time of inspection. The author accepts no responsibility or can be held liable for any structural defect or unforeseen event/situation that may occur after the time of inspection.

The author cannot guarantee trees contained within this report will be structurally sound under all circumstances and cannot guarantee that the recommendations made will categorically result in the tree being made safe.

Unless specifically mentioned this report will only be concerned with above ground inspections, that will be undertaken visually from ground level. Trees are living organisms and as such cannot be classified as safe under any circumstances. The recommendations are made on the basis of what can be reasonably identified at the time of inspection therefore the author accepts no liability for any recommendations made.

Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the author can neither guarantee nor be responsible for the accuracy of information provided by others.

7. REFERENCES:

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Standards Australia, 1994, *Safety signs for the occupational environment*, Standards Australia, Sydney

Standards Australia, 2007, *Temporary fencing and hoardings,* Standards Australia, Sydney

8. APPENDICES:

Appendix 1, SULE Rating:

Barrell Safe Useful Life Expectancy (SULE)

1: Long SULE: Trees that appeared to be retainable at the time of assessment for more than 40 years with an acceptable level of risk.
(a) Structurally sound trees located in positions that can accommodate future growth.
(b) Trees that could be made suitable for retention in the long term by remedial tree care.
(c) Trees of special significance for historical, commemorative or rarity reasons that would warrant extraordinary efforts to secure their long-term retention.

2: Medium SULE: Trees that appeared to be retainable at the time of assessment for 15–40 years with an acceptable level of risk.
(a) Trees that may only live between 15 and 40 more years.
(b) Trees that could live for more than 40 years but may be removed for safety or nuisance reasons.
(c) Trees that could live for more than 40 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
(d) Trees that could be made suitable for retention in the medium term by remedial tree care.

3: Short SULE: Trees that appeared to be retainable at the time of assessment for 5–15 years with an acceptable level of risk.
(a) Trees that may only live between 5 and 15 more years.
(b) Trees that could live for more than 15 years but may be removed for safety or nuisance reasons.
(c) Trees that could live for more than 15 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
(d) Trees that require substantial remedial tree care and are only suitable for retention in the short term.

4: Remove: Trees that should be removed within the next 5 years.
(a) Dead, dying, suppressed or declining trees because of disease or inhospitable conditions.
(b) Dangerous trees because of instability or recent loss of adjacent trees.
(c) Dangerous trees because of structural defects including cavities, decay, included bark, wounds or poor form.
(d) Damaged trees that are clearly not safe to retain.
(e) Trees that could live for more than 5 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
(f) Trees that are damaging or may cause damage to existing structures within 5 years.
(g) Trees that will become dangerous after removal of other trees for the reasons given in (a) to (f).
(h) Trees in categories (a) to (g) that have a high wildlife habitat value and, with appropriate treatment, could be retained subject to regular review.

5: Small, young, or regularly pruned: Trees that can be reliably moved or replaced.
(a) Small trees less than 5m in height.
(b) Young trees less than 15 years old but over 5m in height.
(c) Formal hedges and trees intended for regular pruning to artificially control growth.

Appendix 2, Landscape Rating:

IACA Significance of a Tree, Assessment Rating System (STARS) © (IACA 2010) ©

In the development of this document IACA acknowledges the contribution and original concept of the Footprint Green Tree Significance & Retention Value Matrix, developed by Footprint Green Pty Ltd in June 2001.

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assist in determining the retention value for a tree. To assist this process all definitions for terms used in the Tree Significance - Assessment Criteria and Tree Retention Value - Priority Matrix, are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on or adjacent a development site. The system uses a scale of High, Medium and Low significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined.

IACA Significance of a Tree, Assessment Rating System (STARS) © (IACA 2010) ©

		Significance				
Estimated life expectancy		1. High Significance in Landscape	2. Medium Significance in Landscape	3. Low Significance in Landscape	4. Environmental Pest / Noxious Weed Species	5. Hazardous / Irreversible Decline
	Long >40 years					
	Medium 15-40 Years					
	Short <1-15 Years					
	Dead					

Legend for Matrix Assessment:

	Priority for Retention (High) - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.
	Consider for Retention (Medium) - These trees may be retained and protected. These are considered less critical; however, their retention should remain priority with removal considered

	only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.
	Consider for Removal (Low) - These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.
	Priority for Removal - These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

Tree Significance - Assessment Criteria:

1. High Significance in landscape:
The tree is in good condition and good vigour; - The tree has a form typical for the species; - The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age; - The tree is listed as a Heritage Item, Threatened Species or part of an Endangered ecological community or listed on Councils Significant Tree Register; - The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity; - The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values; - The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa in situ - tree is appropriate to the site conditions.

2. Medium Significance in landscape
The tree is in fair-good condition and good or low vigour; - The tree has form typical or atypical of the species; - The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area - The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street, - The tree provides a fair contribution to the visual character and amenity of the local area, - The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa in situ.

3. Low Significance in landscape
The tree is in fair-poor condition and good or low vigour; - The tree has form atypical of the species; - The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings, - The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area, - The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen, - The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa in situ - tree is inappropriate to the site conditions, - The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms, - The tree has a wound or defect that has potential to become structurally unsound.

4. Environmental Pest / Noxious Weed Species
The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties, - The tree is a declared noxious weed by legislation.

5. Hazardous/Irreversible Decline
The tree is structurally unsound and/or unstable and is considered potentially dangerous, - The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

Note: The assessment criteria are for individual trees only, however, can be applied to a monocultural stand in its entirety e.g. hedge.

Appendix 3, Images of Trees:



Figure 1: Nominated Tree A.



Figure 2: Nominated Trees 59, 60 and 61.



Figure 3: Nominated Tree B.



Figure 4: Nominated Trees 98 and 99.



Figure 5: Nominated Tree 100.



Figure 6: Aerial site image with trees indicatively plotted/numbered.

Appendix 4, Tree Protection Plans (TPP)

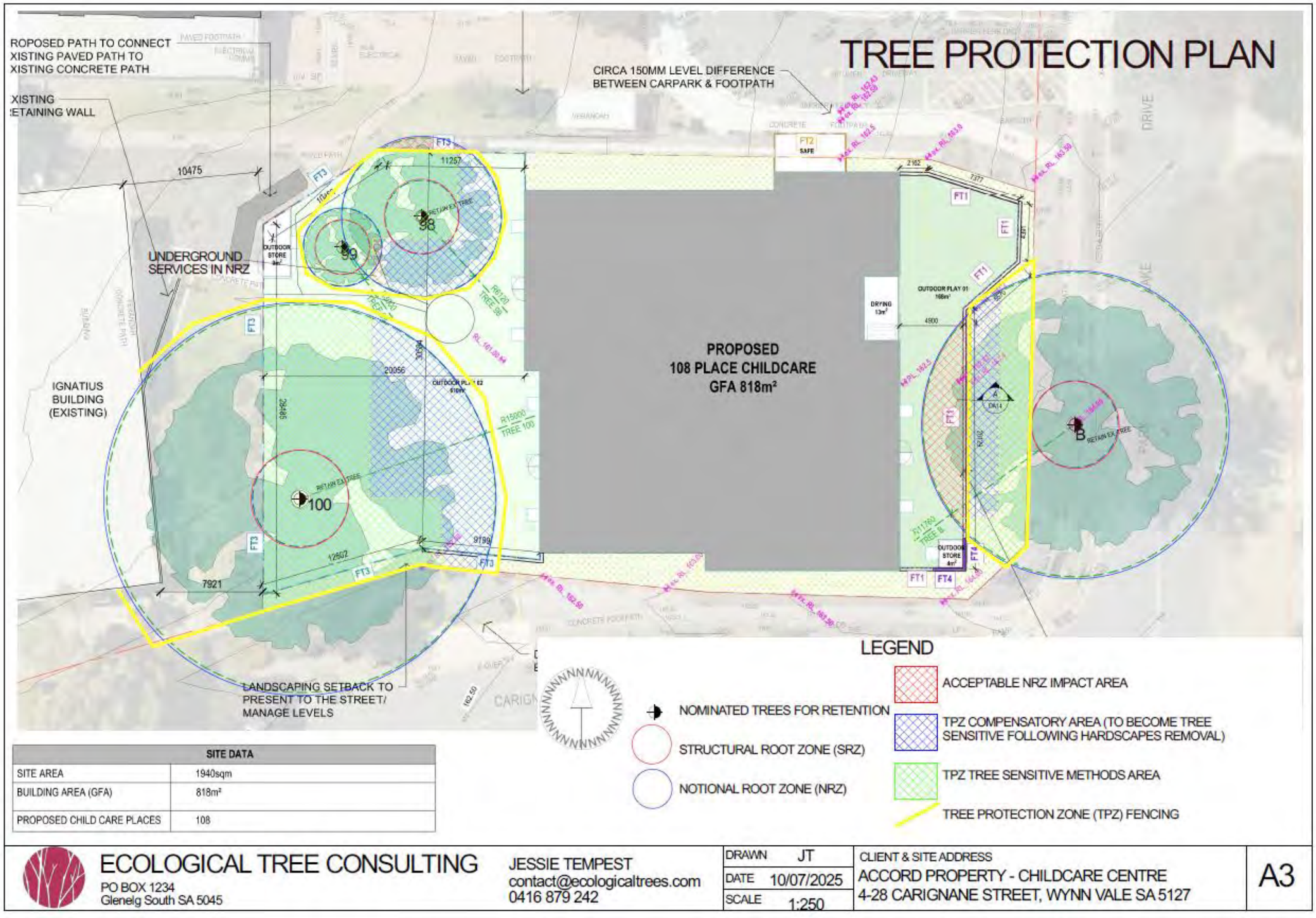


Figure 7: Tree Protection Plan for the nominated trees at the proposed childcare centre.

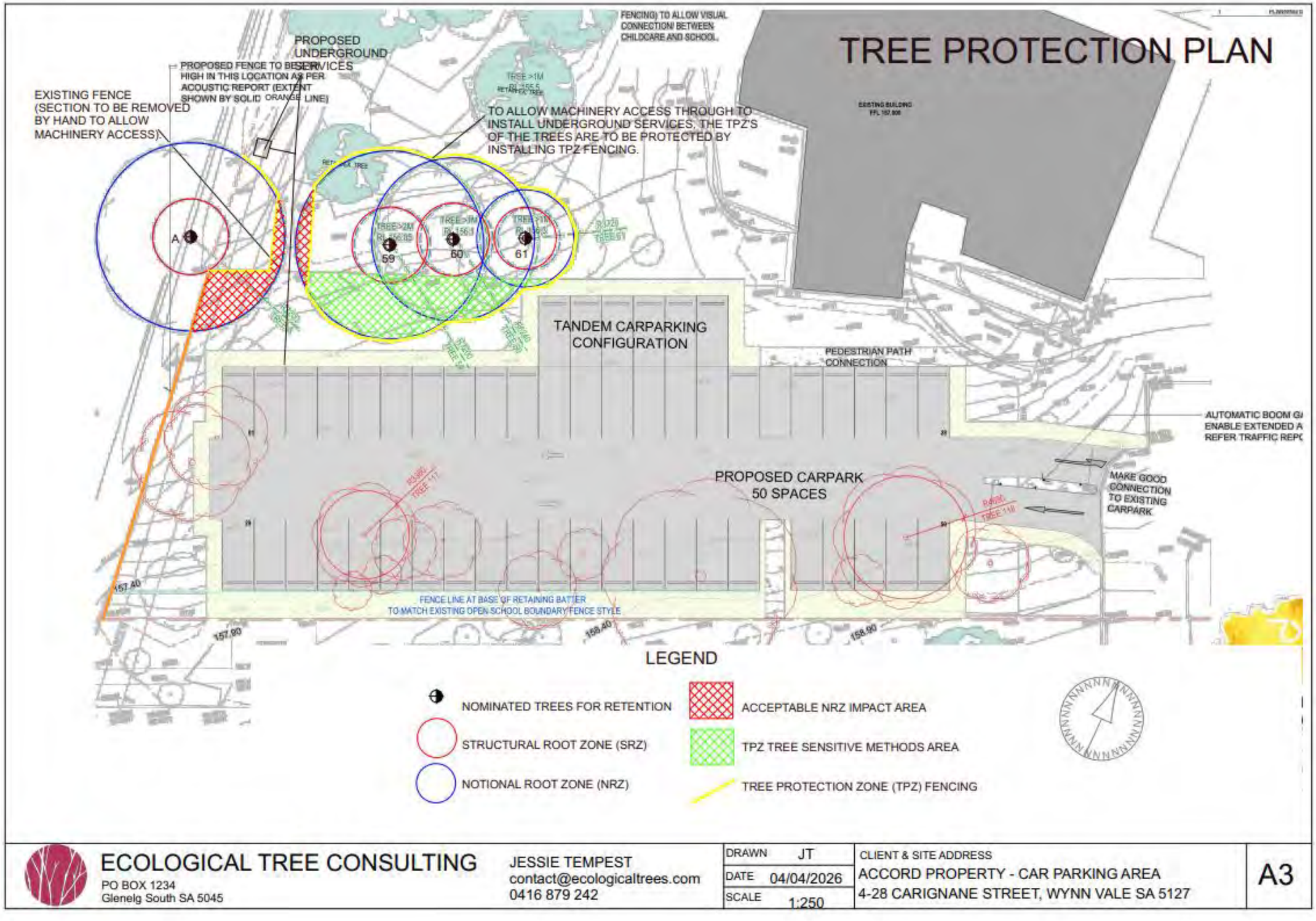


Figure 8: Tree Protection Plan for the nominated trees at the proposed car parking area

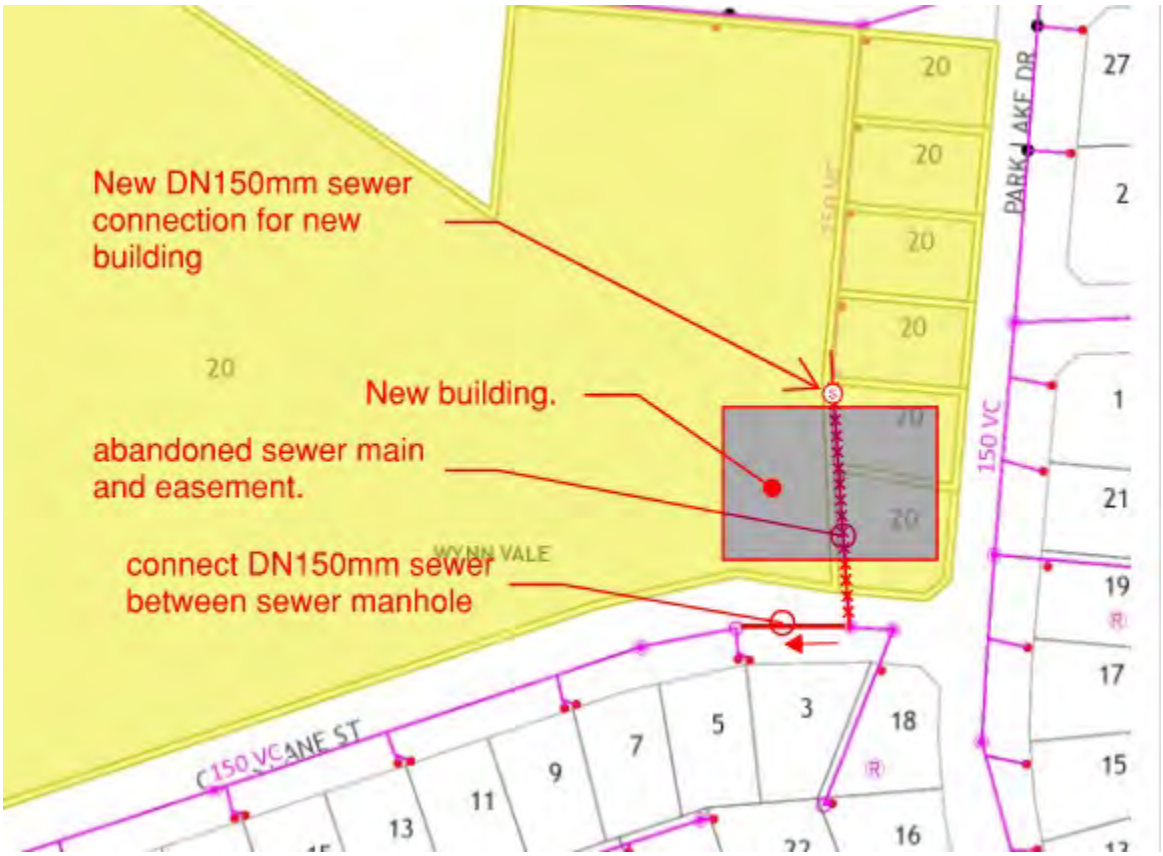
Appendix 5, Non-Compliance of Tree Protections and Legal Consequences:

NOTE: Failure to comply with any part of the tree protections within this report will result in the party taking responsibility for all associated legislated consequences under the *South Australian Planning Development and Infrastructure Act 2016,* the *South Australian Planning Development and Infrastructure (General) Regulations 2017* and the *Local Government Act 1999*.

Julien Beauvillier

From: Bao Hoang <bhoang@tmkeng.com.au>
Sent: Thursday, 10 October 2024 8:56 AM
To: Jake Lazzeri
Cc: Brad Steinert; Adrian Ko; Daniel Tieu
Subject: FW: H0162524 New Building work

Hi Jake,
See SA Water comments below. Looks like diversion is possible.
I will instruct SA Water to proceed with the design and estimate noting that the timeframe below is around 6 months.
Please let me know if this would work with you based on the below sketch.



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TMK Consulting Engineers
Civil – Geotechnical – Environmental – Structural – Mechanical – Electrical – Fire – Hydraulics – Forensic – Construction Assist

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From: Connections Services <Connections.Services@sawater.com.au>
Sent: Thursday, 10 October 2024 7:00 AM
To: Bao Hoang <bhoang@tmkeng.com.au>
Cc: Connections Services <Connections.Services@sawater.com.au>
Subject: RE: H0162524 New Building work

OFFICIAL

Hi Bao,

A desktop and field review has been undertaken and it would be possible to divert the sewer to the end of existing main.

The existing IO was unable to be opened and depth is based on as-constructed data, the manhole was opened and measured to invert indicative gradient between structures based on site measured and ascon invert data is 3.75% and within SA Water standards.

If this is to progress to design and estimate, our inspector will need to have the IO opened to accurately survey for design development.

The sewer capacity assessment has been requested and, in the queue, to be assessed. At this stage, we anticipate a timeframe of six months for a response because of the rapid, unprecedented growth across SA.

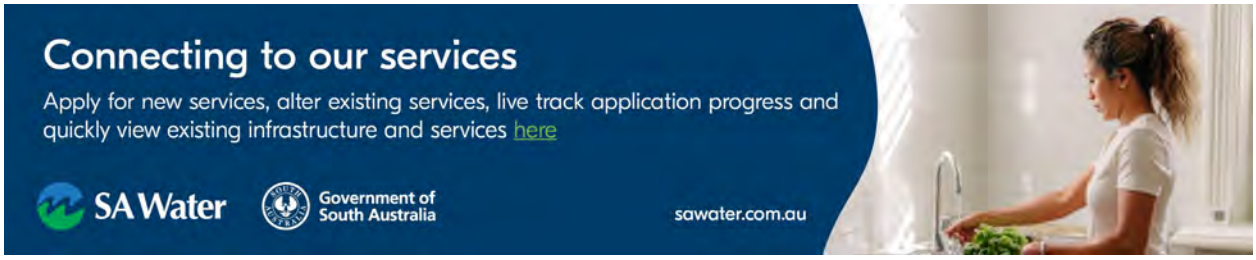
We apologise for any inconvenience this may cause.

Kind regards,

Georgina Rohacek
Senior Development Services Officer

Available 9.00am – 3.00pm

cc@sawater.com.au • **T: 1300 650 951**•
250 Victoria Square/Tarntanyangga ADELAIDE SA 5000
sawater.com.au



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From: Bao Hoang <bhoang@tmkeng.com.au>
Sent: Wednesday, October 9, 2024 4:49 PM
To: Connections Services <Connections.Services@sawater.com.au>
Subject: RE: H0162524 New Building work

OFFICIAL



Hi Josh,
Just following up to see if there has been any further update on this?

Regards

Bao Hoang
DipEng (Mech)
Discipline Leader / Senior Fire Protection Engineer
D (08) 8238 4197 **M** 0403 485 181
E bhoang@tmkeng.com.au
Level 6, 100 Pirie St, Adelaide, SA 5000
www.tmkeng.com.au

TMK Consulting Engineers
Civil – Geotechnical – Environmental – Structural – Mechanical – Electrical – Fire – Hydraulics – Forensic – Construction Assist

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From: Connections Services <Connections.Services@sawater.com.au>
Sent: Wednesday, 25 September 2024 1:23 PM
To: Bao Hoang <bhoang@tmkeng.com.au>
Subject: RE: H0162524 New Building work

OFFICIAL

Hi Bao,

Thank you for your email.

We are waiting for a site inspection to be completed to determine if a sewer mains diversion is possible. This should be returned by the 4th October.

Thank you

Josh Krueger
Development Services Officer

cc@sawater.com.au • **1300 650 951**
250 Victoria Square/Tarntanyangga ADELAIDE SA 5000

sawater.com.au

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From: Bao Hoang <bhoang@tmkeng.com.au>
Sent: Wednesday, September 25, 2024 11:34 AM
To: Connections Services <Connections.Services@sawater.com.au>
Subject: RE: H0162524 New Building work

OFFICIAL



Hi Tania,
Just wanting to see if there has been any further development with the below request or are you waiting for any info from us?
Kind Regards

Bao Hoang
DipEng (Mech)
Discipline Leader / Senior Fire Protection Engineer
D (08) 8238 4197**M** 0403 485 181
E bhoang@tmkeng.com.au
Level 6, 100 Pirie St, Adelaide, SA 5000
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From: Connections Services <Connections.Services@sawater.com.au>
Sent: Wednesday, 11 September 2024 4:15 PM
To: Bao Hoang <bhoang@tmkeng.com.au>
Subject: RE: H0162524 New Building work

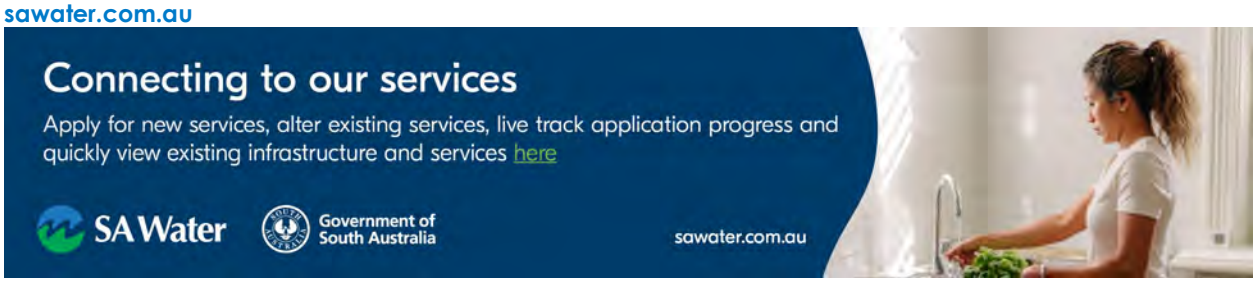
Hi Bao

Your email has been passed on to the case manager to review.
Kind regards

Tania Horvat
TEAM LEADER - DEVELOPMENT SERVICES
cc@sawater.com.au • **1300 650 951** •

250 Victoria Square/Tarntanyangga ADELAIDE SA 5000

sawater.com.au



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From: Bao Hoang <bhoang@tmkeng.com.au>
Sent: Monday, September 9, 2024 2:55 PM
To: Horvat, Tania <Tania.Horvat@sawater.com.au>; Connections Services <Connections.Services@sawater.com.au>
Subject: H0162524 New Building work



Hi Tania,
We've got a project located at 20 Carignane St, Wynn Vale whereby our client would like to place the building on top of existing sewer easement. See attached plan.
We have done some high level site investigation, given the direction of sewer fall, we thought the existing sewer serving 2 houses on the upstream of the sewer could be connected to the existing street main along Carignane St and abolished the sewer easement for the new building.
Can you please advise if this option is acceptable? If so, could you please advise on step process to get this investigated including quote for the work.
Happy to catch up and explain if unclear.
Kind Regards

Bao Hoang
DipEng (Mech)
Discipline Leader / Senior Fire Protection Engineer
D (08) 8238 4197**M** 0403 485 181

E bhoang@tmkeng.com.au
Level 6, 100 Pirie St, Adelaide, SA 5000
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ekistics

UNLOCK

YOUR VISION

REF 01697-002

Memo

To:	Rani Dhruva
From:	Rick Hutchins
Date:	4 August 2026
Applicant:	Development Holdings Pty Ltd
Application ID:	26017026
Proposed Development:	Construction of a child care facility (108 places), alterations to existing educational facility including demolition of an existing car park and construction of a new staff car park, signage, retaining walls, fencing, plus associated landscaping
Subject Land:	4 Carignane St, Wynn Vale
Subject:	Response to Request for Additional Information

Dear Rani,

Please see response below to the items identified in the Council's Request for Further Information dated 16 June 2026.

We also enclose the following documents in response to this request:

- ***Appendix 1*** – Revised Architectural Plans; (*included as Appendix 2 in the updated planning submission*);
- ***Appendix 2*** – Additional Traffic Advice (*incorporated into Appendix 4 in the updated Planning Statement*); and
- ***Appendix 3*** – Updated Stormwater Management Plan (*included as Appendix 5 in the updated Planning Statement)*.

To assist with clarify on the current set of documents for assessment, please note that we have uploaded to the Planning Portal as part of this response, an updated set of the planning application documents for assessment including an updated Planning Statement and supporting technical reports and investigations. We request that this updated set of documentation be used for public notification of the application.

1. Traffic

Further traffic advice has been obtained from CIRQA in response to the traffic matters raised by Council. A copy of CIRQA's response is enclosed at ***Appendix 4*** to the Planning Statement.

In summary, CIRQA confirms that the traffic assessment has considered the traffic and parking implications of the recently approved expansion of St Francis Xavier's Regional Catholic School together with the proposed child care facility. Importantly, the assessment adopts 'conservative' assumptions by not applying any discount for shared trips between the school and child care centre, notwithstanding that some parents/carers may undertake a single trip to drop off or collect

children attending both facilities. CIRQA also notes that child care centre peak activity periods do not typically align with school peak periods, meaning the combined traffic and parking effects are likely to be less than those outlined in the assessment undertaken.

With respect to parking demand, CIRQA advises that recent survey data for comparable child care centres indicates that actual peak parking demands are generally below the parking rate of one space per four children outlined by the Code. On that basis, realistic peak parking demand for the proposed 108-place child care facility is expected to be in the order of 18 spaces. During the school afternoon pick-up period, CIRQA expects the child care centre demand to be approximately 50% of its peak demand, or around nine spaces. This further demonstrates the conservative nature of the original assessment, which assumed the full child care parking demand of 27 spaces would occur during the school peak period.

In relation to the operation of the broader road network, CIRQA has confirmed that the traffic modelling adopted the same base traffic turning movement volumes used for the recently approved school expansion, which were accepted by the Department for Infrastructure and Transport (DIT). CIRQA also advises that some redistribution of traffic through the surrounding road network is a realistic and an accepted traffic modelling assumption, reflecting typical driver behaviour where drivers seek to minimise travel time and delay.

In relation to pedestrian safety and vehicle interaction, CIRQA has advised that the proposal will retain and connect to the existing footpath network, allowing pedestrians to access the child care centre and associated parking areas via established pedestrian routes. CIRQA's on-site pedestrian observations also indicate that pedestrian crossing activity on the roads adjacent the site is low and dispersed across multiple crossing points. The additional child care parking demand during the school pick-up period is expected to be low and is not anticipated to materially increase pedestrian safety risks in the locality.

Accordingly, having regard to the additional advice provided by CIRQA, the proposal is considered to satisfactorily address the relevant traffic, access and parking matters raised by Council. In particular, the proposal provides sufficient car parking to satisfy the Planning and Design Code requirements, maintains safe and convenient access arrangements, and is expected to operate without unacceptable impact on the surrounding road network or pedestrian environment.

2. Stormwater

Further engineering advice has been received from CPR in response to the stormwater matters raised by Council which has been included in an updated Stormwater Management Report and Plans included as ***Appendix 5*** to the Planning Statement. These documents replace Appendix 5 and 6 in the original planning application submission.

In summary, CPR have:

- Included updated catchment plans clarifying the pre-development and post-development catchment plans for both the building and the car parking catchments, and including plans and calculations to confirm that the 34KL tank is a sufficient size based on the predicted inflow;
- Removed information on the orifice sizing component that was not utilised for calculation of the discharge rates. This information is part of the standard calculation sheet used by CPR but was not used for this application;

- Confirmed that a 'wet well' scenario is not proposed as there is an alternative discharge to the pump and an overland flow path;
- Included survey information of the existing side entry pit that discharges to a stormwater manhole to the north and through the existing carpark to the north;

With regard to the use of the Grated Inlet Pits (GIPs) in preference to side entry pits, the applicant understands the risk of blockage, however prefers the installation of grated inlet pits within this zone as it is a more efficient and practical approach and is also easier to identify an issue with a GIP as the lid is visible from the surface. A side entry pit can build up with debris underneath the lid which may not be identified until there is an issue.

3. Closure of Crossover

We confirm that the unused crossover on Carignane Street will be closed and is shown on the revised Architectural Plan set in ***Appendix 2*** to the Planning Statement.

4. Proposed Car Park – Landscaping

Council has requested further clarification on how the northern part of the proposed car park satisfies Design in Urban Areas PO 7.4. PO 7.4 states:

> **PO 7.4** *Street-level vehicle parking areas incorporate tree planting to provide shade, reduce solar heat absorption and reflection.*

The proposed car park has been designed having regard to the intent of Design in Urban Areas PO 7.4. While Council has sought clarification in relation to the northern part of the car park, it is noted that the existing street trees and verge planting along the road frontage are to be retained, thereby continuing to provide established landscaping, shade and visual relief adjacent to the parking area.

In addition, existing mature trees located on the subject site immediately north of the proposed car park will also be retained. These trees will assist in providing shade and reducing solar heat absorption and reflection in the vicinity of the northern car parking area, while maintaining the established landscaped character of this part of the site.

The landscaping plan also provides for five new trees to be planted along the southern side of the proposed car park. These additional plantings will supplement the retained vegetation and provide further canopy cover and softening of the car parking area over time. An updated Landscaping Plan is included in ***Figure 4.1***.

When considered as a whole, the combination of the retained mature trees on-site, retained street trees and kerbside vegetation and new tree planting to the south will provide an appropriate landscaped response to the proposed parking area. On this basis, we are of the opinion that the proposal provides a suitable response to PO 7.4 by incorporating tree planting and retained vegetation that will contribute to shade, reduce heat absorption and reflection, and improve the amenity of the subject site.



Figure 4-1 - Updated Landscaping Plan (Source: On Architecture)

5. Waste Storage, Collection & Deliveries

In relation to the matters of waste storage, collection and deliveries we confirm as follows:

- A dedicated waste storage located within the car parking area has been agreed with the school, as shown in the updated plan set. Any waste generated from within the child care centre itself will be stored within bins within the centre and taken to the external bin storage area until collected by a commercial contractor. All bins within the storage area will be sealed with lids and emptied by the contractor as required. Bins will be taken away and cleaned by the contractor off-site, as required.
- All waste will be collected by a private waste contractor, with collection to occur between the hours of 7.00am and 7.00pm. These hours align with the *Local Nuisance and Litter Control Act* provisions for rubbish collection. As a private collection, the child care centre operator will have the ability to manage collection times to avoid conflict with the school and child care centre.
- Service and delivery vehicle movements associated with the operation of the childcare centre will be limited to deliveries of food and linen. Such deliveries will be made by vehicles capable of utilising the designated drop-off bays or car parks available on site.

6. External Lighting

Detailed external lighting design will be undertaken as part of the subsequent building and site design process. Any external lighting provided on the site will be designed in accordance with relevant Australian Standards and will incorporate measures to ensure illumination is directed toward on-site activity areas only and avoid light spill and adverse impacts on neighbouring properties.

7. Noise Modelling

The Project Acoustic Advisor has provided a diagram (refer Figure 7.1) showing predicted noise levels from SoundPLAN noise modelling software. The diagram identifies noise contours that illustrate the noise propagation from the outdoor play areas to the closest receivers.

As stated in the Environmental Noise Assessment report included with the planning submission, the noise criterion for children in the outdoor play areas is 50 dB(A) at the residences. This corresponds to the green/teal coloured noise contour line. The eastern play area has a smaller noise footprint as it is used by the quietest cohort (0-2 year old children) and has additional shielding from both the proposed retaining and the natural terrain.

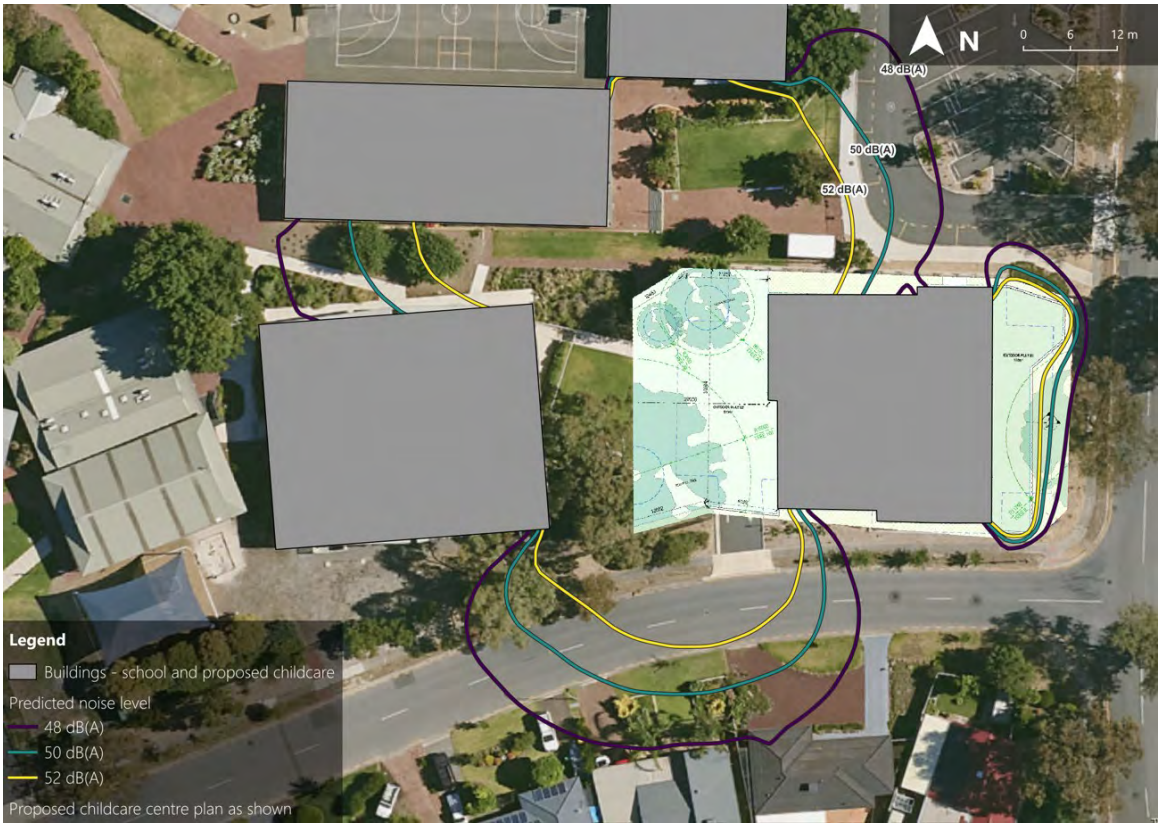


Figure 7.1 – Noise Modelling Results (Source: Sonus Acoustics)

8. Land Use Description

An updated Planning Statement will be uploaded to the Planning Portal that includes clarification that the child care centre and school will operate as independent land uses. While the proposal is located within the broader school site and will have some functional relationship with the existing educational facility, it has not been assessed as an expansion of the school use. Rather, the child care centre has been assessed as a separate land use that can operate independently and be considered on its own planning merits against the relevant provisions of the Planning and Design Code.

9. Summary

We trust this response addresses all matters raised by Council and enables an assessment of the application to proceed.

We request that the application proceed to public notification as soon as possible.

Please contact me on (08) 7231 0286 if you require any further information.

Yours sincerely,



Rick Hutchins
Senior Associate

APPENDIX 1

Revised Architectural Plans

APPENDIX 2

Additional Traffic Advice

APPENDIX 3

Additional Stormwater Engineering Advice