

**CAP MEETING – 10 JANUARY 2024**

**ITEM 8.1**

<b>DEVELOPMENT NO.:</b>	23018174
<b>APPLICANT:</b>	Development Holdings Pty Ltd
<b>ADDRESS:</b>	35 PARATOO ROAD STIRLING SA 5152 CT 5767/919
<b>NATURE OF DEVELOPMENT:</b>	Two storey child care facility with attached signage, retaining walls, combined fence & retaining walls, decking & associated car parking
<b>ZONING INFORMATION:</b>	<p><b>Zones:</b></p> <ul style="list-style-type: none"> <li>• Rural Neighbourhood</li> </ul> <p><b>Subzones:</b></p> <ul style="list-style-type: none"> <li>• Adelaide Hills</li> </ul> <p><b>Overlays:</b></p> <ul style="list-style-type: none"> <li>• Hazards (Bushfire - Medium Risk)</li> <li>• Hazards (Flooding - Evidence Required)</li> <li>• Mount Lofty Ranges Water Supply Catchment (Area 2)</li> <li>• Native Vegetation</li> <li>• Prescribed Water Resources Area</li> <li>• Regulated and Significant Tree</li> </ul> <p><b>Technical Numeric Variations (TNVs):</b></p> <ul style="list-style-type: none"> <li>• Minimum Site Area (Minimum site area is 2,000 sqm)</li> </ul>
<b>LODGEMENT DATE:</b>	29 June 2023
<b>RELEVANT AUTHORITY:</b>	Assessment Panel at Adelaide Hills Council
<b>PLANNING &amp; DESIGN CODE VERSION:</b>	2023.9
<b>CATEGORY OF DEVELOPMENT:</b>	Code Assessed - Performance Assessed
<b>NOTIFICATION:</b>	Yes 13 November 2023 – 1 December 2023
<b>RECOMMENDING OFFICER:</b>	Marie Molinaro Statutory Planner
<b>REFERRALS STATUTORY:</b>	<ul style="list-style-type: none"> <li>• Native Vegetation Council</li> </ul>
<b>REFERRALS NON-STATUTORY:</b>	<ul style="list-style-type: none"> <li>• Council Environmental Health</li> <li>• Council Engineering</li> </ul>

**CONTENTS:**

<b>ATTACHMENT 1:</b>	<b>Application Documents</b>	<b>ATTACHMENT 5:</b>	<b>Response to Representations</b>
<b>ATTACHMENT 2:</b>	<b>Subject Land Map</b>	<b>ATTACHMENT 6:</b>	<b>Referral Response</b>
<b>ATTACHMENT 3:</b>	<b>Zoning Map</b>	<b>ATTACHMENT 7:</b>	<b>Relevant P&amp;D Code Policies</b>
<b>ATTACHMENT 4:</b>	<b>Representations</b>		

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

#### DETAILED DESCRIPTION OF PROPOSAL:

The proposal is for demolition of a dwelling and associated outbuildings and construction of a child care facility.

A child care facility is described in the Planning & Design Code as:

*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.*

The child care facility will comprise the following:

- Construction of one (1) two storey building:
  - Ground level - 27m x 12.9m containing two (2) nursery rooms for 24 children with associated sleep rooms, toilets and food preparation space, reception area, staff amenities (meeting room, staff room, office and toilet), storage space with lift and stair access up to level 1. The ground level is sited lengthways into the land.  
  
Associated with the ground level is a 30m x 6.4m outdoor play area on the southern side of the building, 12.9m x 6.4m service yard at the rear of the building and 6.5m x 3.9m enclosed waste storage space accessible from the front of the building. The ground floor outdoor play area is partly covered by a verandah.
  - Level 1– irregular shape, but approximately 29.5m x 22m containing four (4) toddler rooms for 45 children with associated toilet and food preparation spaces, two (2) kindy rooms for 59 children with associated toilet and food preparation spaces, separate kitchen, laundry and drying space, staff toilets and book storage space with lift and stair access down to ground level. Level 1 is sited lengthways across the land.  
  
Associated with level 1 are two (2) irregular shaped outdoor play areas, one on the southern side of the building and one at the rear of the building both partly covered with timber deck flooring.
- The total floor area of the building is 1060 square metres.
- The total area of associated outdoor play areas is 986 square metres.
- The building has a maximum height of 8.7m, measured from ground level to the roof peak.
- External materials and colours are as follows:
  - Ground level walls – white weatherboard cladding and rendered beige wall on the front façade with remainder in white weatherboard.
  - Level 1 walls – white weatherboard and vertical brown timber cladding on the front façade with rendered white hebel panel on the northern side and rear facades and white weatherboard on the southern façade.
  - Roof – Colorbond sheeting in white colour for the building and Colorbond sheeting in grey colour for the verandah cover over part of the ground level outdoor play area.
- The facility is setback:
  - 22m from the front boundary as measured from the front of the building, with car park between the front of the building and the front boundary.
  - 13m from the southern side boundary as measured from the edge of the outdoor play area.
  - 17m from the northern side boundary as measured from the edge of the outdoor play area.

Associated with the construction of the child care facility are the following:

- Two (2) non-illuminated advertising signs to display the name of the child care facility on the front elevation.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

- Earthworks comprising:
  - Approximately 2.5-3m of fill at the south-eastern corner of the land below the car park area, to be supported by two-tiered retaining walls, wrapping around the front and southern side of the car park area. The maximum height of the individual retaining walls is 1.5m.
  - Approximately 3m of cut to create the outdoor level 1 play areas, to be supported by two-tiered retaining walls. The maximum height of the retaining walls is 3.5m. An additional 1.3m high cut retaining is required along the northern edge of the car park.
  - The fill retaining walls supporting the car park are to be a Bluestone finish, with the remainder to be concrete sleeper material.
- 1.8m high white timber picket fencing along the street facing frontage of the ground level and level 1 outdoor play areas.
- 1.8m high Colorbond 'Monument' fencing around the southern, rear and northern perimeters of the outdoor play areas attached to the retaining walls.
- Provision of a 6.2m wide cross-over to Paratoo Road with upgrading of the surrounding footpath and inclusion of drainage infrastructure. The cross-over will allow for two-way vehicle movements.
- Asphalt car park between the building and the front boundary with the provision of 33 car parking spaces, including three (3) designated staff parking spaces and one (1) universal access space. Included within the car park are four (4) bollard lights, with additional wall mounted lighting on the building.
- The car park has a total area of 955 square metres and is supported by a crash barrier attached to the top-tier retaining walls.
- Removal of native vegetation comprising 16 tree saplings, one medium tree and three young trees.
- Planting of landscaping between the edge of the car parking area and the front boundary and around the perimeter of the ground level and level 1 outdoor play areas. Landscaping is partly comprised of species from Council's Native Habitat and Landscaping Guide.
- Roof stormwater will be managed by 3 x 5,000L above ground detention tanks.
- Ground level run-off from the outdoor play areas will be directed to a swale on Paratoo Road and car park run-off will be directed to a gross pollutant trap connected to 4 x 10,000L underground detention tanks.
- Plant equipment of the facility will be located at ground level within a service yard space at the rear of the building.

Operational matters of the child care facility are as follows:

- Total capacity for a maximum of 128 children at any one time.
- Hours of operation – Monday to Friday, 6:30am until 6:30pm.
- Waste will be stored in an enclosed space on the ground level and collected by a private contractor between 9:00am and 7:00pm on Sunday or public holidays.
- Deliveries undertaken by small trucks and passenger vehicles will occur between 7:00am and 5:00pm Monday to Friday.

The plans and application information are included as **Attachment 1 – Application Documents**.

## **CAP MEETING – 10 JANUARY 2024**

### **ITEM 8.1**

#### **BACKGROUND:**

There are no development approvals on Council record relating to the subject land.

#### **SUBJECT LAND & LOCALITY:**

##### **Site Description:**

**Location reference:** 35 PARATOO RD STIRLING SA 5152

**Title ref.:** CT 5767/919 **Plan Parcel:** F210897 AL111 **Council:** ADELAIDE HILLS COUNCIL

The subject land is a triangular shaped allotment, with an area of 1.04 hectares. It is wider at the front, with a frontage to Paratoo Road of 100 metres.

The land is approximately 15m south of the intersection of Paratoo Road and Old Mount Barker Road, 50m north of the intersection of Paratoo Road and Yam Street and 200m north of the intersection of Paratoo Road and Braeside Road.

Old Mount Barker Road is the zone boundary, with land on the northern side of Old Mount Barker Road being within the Productive Rural Landscape Zone.

The use of the land is residential, comprised of a single storey detached dwelling with associated outbuildings. The dwelling is sited away from the road frontage, near the northern side boundary. It is surrounded by a cluster of trees at the rear, with garden between the dwelling and the front boundary.

The land is sloping, with a north-south cross-fall of approximately 1 in 6 through the development area. It is serviced by mains water, sewer and electricity supply. There is an easement at the rear of the land, which is unaffected by the proposal.

Paratoo Road is sealed Council roadway, provided in-part with upright kerb & gutter. It is a two-way road until near the southern boundary of the subject land, where at this point it narrows to a one-way road. Vehicles can only travel north past the frontage of the subject land.

The adjoining land to the south is the Stirling East Primary School, which has a main frontage to Braeside Road. A staff and student drop-off and pick-up car park is located on the Paratoo Road frontage. Entry to this car park is at the southern end and the exit point is at the northern end of the subject land. Road signage restricts vehicles leaving the car park from turning right. Road signage also restricts vehicles turning right onto Yam Street from Paratoo Road.

There is a sealed footpath in front of the primary school frontage, which turns into a compacted gravel footpath in front of the subject land. The footpath in front of the subject land is approximately 6m wide.

Road signage prevents on-street parking in front of the primary school frontage between 3:00pm and 4:00pm, however there are two unrestricted indented off-street parking spaces available near the southern boundary of the subject land. There is an un-signalised pedestrian crossing just below the indented street parking spaces and pedestrian warning signs on the approach to the primary school.

Aside from the primary school, the surrounding land use is residential comprised of single storey and two storey detached dwellings generally set well back from the boundaries and surrounded by vegetation and landscaped gardens. The area of these residential allotments is generally around 2000-3000 square metres.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

The subject land is identified on **Attachment 2 – Subject Land Map**. The zoning is shown in **Attachment 3 – Zoning Map**.

#### CONSENT TYPE REQUIRED:

Planning Consent

#### CATEGORY OF DEVELOPMENT:

- **PER ELEMENT:** Fence: Code Assessed - Performance Assessed  
Child Care Facility: Code Assessed - Performance Assessed  
Fences and walls  
Retaining wall: Code Assessed - Performance Assessed  
Deck: Code Assessed - Performance Assessed  
Advertisement: Code Assessed - Performance Assessed
- **OVERALL APPLICATION CATEGORY:**  
Code Assessed - Performance Assessed
- **REASON**  
The proposal is not listed as Accepted, Deemed to Satisfy or Restricted in the Planning & Design Code, so it defaults to being a Performance Assessed type of development.

#### PUBLIC NOTIFICATION

- **REASON**  
A child care facility is not listed as being exempt from public notification in Table 5 procedural matters of the Rural Neighbourhood Zone. The proposal is not considered to be a minor form of development, and therefore public notification was required.
- **LIST OF REPRESENTATIONS**  
Eight (8) representations were received during the public notification period. Two (2) representors wish to be heard in support of their written representation.

The representor details are below:

Representor Name	Representor's Address	Wishes to be Heard	Nominated Speaker (if relevant)
Tony Lockwood	142 Old Mount Barker Road, Aldgate	Yes	Simon Grose of Advantage Planning
Nicola Hastings	140 Old Mount Barker Road, Aldgate	Yes	Nick Simos of SA Urban and Regional Planning
Simon Gamble	3 Sharon Court, Aldgate	No	
Fenella Dermody	27 Ashenden Road, Aldgate	No	
Jace Haggett-Carmody	34 Paratoo Road, Aldgate	No	
Peter Rischbieth	10 St Margarets Drive, Aldgate	No	
Helene Nielsen	Not supplied	No	
Tina Comely	6 St Margarets Drive, Aldgate	No	

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

- **SUMMARY**

The issues contained in the representations can be summarised as follows:

- Seeking further information regarding the location of plant equipment.
- Seeking the inclusion of noise attenuation methods as part of the proposal.
- Seeking a reduction in the opening time of the facility & seeking assurance that it will not operate beyond 6:30pm.
- Seeking further information regarding waste management to minimise potential odour impact.
- Seeking an amendment to the time for when waste is collected by the external contractor.
- Seeking further information regarding northern side boundary fencing treatment.
- Seeking further information regarding possible further development of the land.
- Concern regarding potential negative light spill impact on adjacent residential properties and wildlife, including from vehicle headlight glare.
- Comment that the scale and design of the facility is out character in the residential locality.
- Concern regarding potential traffic congestion resulting from the proposal as compounded by purported traffic and pedestrian hazard/danger associated with the adjoining primary school.
- Concern that the proposal will reduce the availability of off-street parking.
- Concern that the proposal will increase existing traffic and pedestrian hazard/danger in the area as compounded by purported traffic and pedestrian hazard/danger associated with the adjoining primary school.
- Comment that commercial development is out character in a residential area.

The representations are included in ***Attachment 4 – Representations*** and the applicant's response is provided in ***Attachment 5 – Response to Representations***.

No amendments were made to the design of the proposal in response to the representations. However, there was an alteration to the operation of external lighting.

#### AGENCY REFERRALS

- Native Vegetation Council

The Native Vegetation Council referral response is discussed further in the Planning Assessment section of the report.

This response is included in ***Attachment 6 – Referral Response***.

#### INTERNAL REFERRALS

- Council Environmental Health

Advised the applicant of food health requirements.

- Council Engineering

Reviewed the proposal for access/traffic and stormwater management arrangements with assistance of a peer review by BE Engineering Solutions. Their referral response is discussed further in the Planning Assessment section of the report.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

#### PLANNING ASSESSMENT

##### **Desired outcomes**

*Desired outcomes are policies designed to aid the interpretation of performance outcomes by setting a general policy agenda for a zone, subzone, overlay or general development policies module. Where a relevant authority is uncertain as to whether or how a performance outcome applies to a development, the desired outcome(s) may inform its consideration of the relevance and application of a performance outcome, or assist in assessing the merits of the development against the applicable performance outcomes collectively.*

##### **Performance outcomes**

*Performance outcomes are policies designed to facilitate assessment according to specified factors, including land use, site dimensions and land division, built form, character and hazard risk minimisation.*

##### **Designated performance features**

*In order to assist a relevant authority to interpret the performance outcomes, in some cases the policy includes a standard outcome which will generally meet the corresponding performance outcome (a designated performance feature or DPF). A DPF provides a guide to a relevant authority as to what is generally considered to satisfy the corresponding performance outcome but does not need to necessarily be satisfied to meet the performance outcome, and does not derogate from the discretion to determine that the outcome is met in another way, or from the need to assess development on its merits against all relevant policies.*

The application has been assessed against the relevant provisions of the Planning & Design Code, which are contained in **Attachment 7 – Relevant P&D Code Policies**.

#### Rural Neighbourhood Zone

<b>Desired Outcome</b>	
DO1	Housing on large allotments in a spacious rural setting, often together with large outbuildings. Easy access and parking for cars. Considerable space for trees and other vegetation around buildings, as well as on-site wastewater treatment where necessary. Limited goods, services and facilities that enhance rather than compromise rural residential amenity.
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
Land Use & Intensity	PO 1.1 & DTS/DPF 1.1, PO 1.2 & DTS/DPF 1.2, PO 1.3, PO 1.4
Building Height	PO 2.1
Primary Street Setback	PO 3.1 & DTS/DPF 3.1
Side Boundary Setback	PO 5.1 & DTS/DPF 5.1
Rear Boundary Setback	PO 6.1 & DTS/DPF 6.1
Advertisements	PO 10.1 & DTS/DPF 10.1

The Land Use and Intensity Performance Outcomes of the Rural Neighbourhood Zone are discussed in full as they relate directly to the proposal.

## **CAP MEETING – 10 JANUARY 2024**

### **ITEM 8.1**

#### *PO 1.1*

*Predominantly residential development with complementary ancillary non-residential uses compatible with a spacious and peaceful lifestyle for individual households.*

Performance Outcome 1.1 anticipates non-residential uses, provided they are compatible with a spacious and peaceful lifestyle for individual households. Corresponding Designated Performance Feature 1.1 and Performance Outcome 1.4 lists child care facility (pre-school) as one of the contemplated non-residential uses.

The siting of the child care facility is considered to achieve a sense of spaciousness for the adjoining residential property to the north as it is sited away from this boundary, closer to the adjoining primary school. The 17m setback of the fenced northern outdoor play area is approximately 7m closer to the shared boundary than the existing dwelling and further, existing open-style post and wire fencing on this shared boundary is to remain. In addition, the building itself is setback approximately 35m from the dwelling on the adjoining land to the north (140 Old Mount Barker Road, Stirling), which is the nearest dwelling. On the side of this dwelling facing the shared boundary is a carport and solid wall.

With further regard to spaciousness the setbacks to the other side boundary and front boundary are large and considered to achieve the Performance Outcomes 3.1 and 5.1 which generally seek for setbacks to minimise impacts on adjoining properties. The adjoining property on the southern side is the primary school, and it is the car park area of this site which is adjacent the proposed child care facility.

The proposed use is considered to be compatible with a peaceful lifestyle for the adjoining and adjacent residential uses, as interface between land uses matters with regard to hours of operation, noise, light spill and traffic impact are considered to be adequately addressed. These matters are however discussed later in the report.

In consideration of this though the locality is not wholly residential, with the presence of the adjoining primary school. So in this sense the 'peacefulness' of this locality would not be the same as other parts of the Zone that are wholly residential.

#### *PO1.2*

*Commercial activities improve community access to services, are of a scale and type to maintain residential amenity.*

The scale of the proposed child care use is considered to maintain residential amenity with regard to hours of operation & capacity and its linked association with additional traffic movements on the surrounding road network. These matters are however discussed later in the report.

Further, considering scale relative to hours of operation and capacity this proposed facility is somewhat similar to another other recent child care facility proposal approved in Bridgewater and also in the Rural Neighbourhood Zone. The capacity of the Bridgewater facility is 80 children and hours of operation 6:30am to 6:30pm Monday to Friday.



## **CAP MEETING – 10 JANUARY 2024**

### **ITEM 8.1**

#### *PO1.3*

*Non-residential development sited and designed to complement the residential character and amenity of the neighbourhood.*

The siting of the proposed facility is well away from the site boundaries, which is typical of built form in the locality, and which assists in maintaining visual amenity in the form of providing a sense of spaciousness as desired in the Zone.

The proposed facility is sited on the cleared part of the land, meaning that substantial mature trees are for the most part retained, which is also desired in the Zone and common to the locality. The design of the proposal incorporates new landscaping around the car park and outdoor areas. This further assists with retention of landscape amenity. Landscaping is discussed further later in the report.

Despite the representations, the design of the built form is considered to complement the mostly residential character of the locality.

The two-storey building has a larger floor area than dwellings in the locality, but it is considered unreasonable to expect a desired form of community service development to be of a similar floor area to inherently smaller-scale residential development in the locality. Performance Outcome 4.1 only seeks non-residential development in the form of shops, consulting rooms and offices to be 'small-scale'. There is no such desired scale guide statement for community service development in Performance Outcome 4.1.

With that said, the design of the two-storey building is considered to be of a high standard and respectful of visual amenity. The bulk of the building is broken up by its articulated design, incorporation of different size openings and use of varying materials and colours. The mostly lighter colour shades are considered to be acceptable as they are of neutral tones. The height of the building is considered to not offend Performance Outcome 2.1 which seeks for buildings to contribute to a low-rise residential character and complement the height of nearby buildings. In this regard, the building is cut into the land so that level 1 is flush with ground level around the existing dwelling, resulting in the full two storeys only being apparent from the street and southern side elevation.

This design respects the privacy amenity of the adjoining residential property to the north with regard to overlooking potential. Privacy treatment to the level 1 south facing openings were not considered necessary as the adjoining site is the primary school and they provide potential for increased passive surveillance of the school car park.

Further, a single storey building design of the same floor area would result in more disturbance to the land both in terms of earthworks and tree removal and result in the facility being closer to the site boundaries.

Other built form elements of the proposal are fencing and retaining walls.

Solid 1.8m high Colorbond fencing is proposed around the perimeter of the outdoor play areas. Whilst solid fencing is considered uncommon in the Rural Neighbourhood Zone, this fencing should not impact on adjoining amenity as it is off-set from the boundaries. Further, the chosen 'Monument' colour is dark, which will help the solid fencing blend with the vegetated surrounds. Open style timber picket fencing to the outdoor play areas is included along the street facing elevation.

The fill retaining walls at the front of the land, supporting the car park are tiered, which breaks up the vertical profile/mass; and at the request of staff were altered from a concrete sleeper to natural Bluestone finish to blend with the surrounds. This is considered an acceptable design approach for a sloping site, and which supports the requirement of a level car park.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

#### PO1.4

*Non-residential development located and designed to improve community accessibility to services, primarily in the form of:*

- a) small-scale commercial uses such as offices, shops and consulting rooms*
- b) community services such as educational establishments, community centres, places of worship, pre-schools and other health and welfare services*
- c) services and facilities ancillary to the function or operation of support accommodation or retirement facilities*
- d) open space and recreation facilities*

The location of the proposed child care facility adjoining a primary school is considered to provide potential improved accessibility for parents/care-givers of both pre-school and school age children.

The proposal is one of the primarily desired non-residential uses as per part b) of the Performance Outcome.

#### Adelaide Hills Subzone

Desired Outcome	
DO1	Additional residential and tourist accommodation that retains and embraces the values of the established mature vegetation as a defining characteristic of the area.
Performance Outcomes (PO) & Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria	
Land Use & Intensity PO 1.1 & DTS/DPF 1.1	

In the opinion of staff, the Subzone considers tourist accommodation as an additional desired commercial use in this part of the Rural Neighbourhood Zone. The Subzone is not viewed as aiming to restrict development to only residential and tourist accommodation development.

The proposal is considered to meet the part of Desired Outcome 1 which seeks for the retention and embracement of established mature vegetation as a defining characteristic of the area.

The proposed child care facility, comprising the two storey building, outdoor play spaces and car parking areas are sited on the most cleared part of the land. This results in the retention of most of the existing mature vegetation.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

#### Overlays

##### Hazards (Bushfire – Medium Risk) Overlay

<b>Desired Outcome</b>	
DO 1	Development, including land division responds to the medium level of bushfire risk and potential for ember attack and radiant heat by siting and designing buildings in a manner that mitigates the threat and impact of bushfires on life and property taking into account the increased frequency and intensity of bushfires as a result of climate change.
DO 2	To facilitate access for emergency service vehicles to aid the protection of lives and assets from bushfire danger.
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
Siting PO 1.1	
Built Form PO 2.1	

Unlike the Hazards (Bushfire – High Risk) Overlay, the Hazards (Bushfire – Medium Risk) Overlay does not specifically address child care facility development.

However, with regard to Desired Outcome 2 the surrounding sealed, public road network facilitates emergency service access to the land and the car park area would provide on-site access to emergency service vehicles.

The building itself is fully enclosed and will be constructed of materials commonly used in dwellings to which the Overlay applies.

Recommended advisory note five (5) encourages the facility operator to develop a bushfire risk management plan.

##### Hazards (Flooding – Evidence Required) Overlay

<b>Desired Outcome</b>	
DO 1	Development adopts a precautionary approach to mitigate potential impacts on people, property, infrastructure and the environment from potential flood risk through the appropriate siting and design of development.
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
Flood Resilience PO 1.1 & DTS/DPF 1.1	

The floor level of the building, car park area and outdoor play areas are more than 300mm above top of kerb. A swale has been included around the northern and rear perimeter of level 1 to restrict potential overland flows from entering the facility.

There are no nearby watercourses and the land is not within a flood prone area.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

#### Mount Lofty Ranges Water Supply Catchment (Area 2) Overlay

<b>Desired Outcome</b>	
DO 1	Safeguard Greater Adelaide's public water supply by ensuring development has a neutral or beneficial effect on the quality of water harvested from secondary reservoirs or diversion weir catchments from the Mount Lofty Ranges.
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
Water Quality PO 1.1 & PO 1.2 & DTS/DPF 1.2	
Wastewater PO 2.1, DTS/DPF 2.1	
Stormwater PO3.1, PO3.3, PO3.9 & DTS/DPF3.9	
Landscapes and Natural Features PO4.1	

As per Desired Outcome 1, and Performance Outcome 1.1 the proposal is considered to have a neutral effect on water quality.

This is because the land is connected to mains sewer as sought by Performance Outcome 2.1 and the corresponding Designated Performance Feature 2.1.

In addition, Council Engineering are satisfied with the stormwater management detail, that post-development stormwater discharged will not exceed pre-development quantities as desired by Performance Outcome 3.1. Water quality management specifically from the car park area is discussed later in the report.

#### Native Vegetation Overlay

<b>Desired Outcome</b>	
DO 1	Areas of native vegetation are protected, retained and restored in order to sustain biodiversity, threatened species and vegetation communities, fauna habitat, ecosystem services, carbon storage and amenity values.
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
Environmental Protection PO 1.1 & DTS/DPF 1.1, PO 1.2, PO 1.4	

The construction of the proposed child care facility will require the associated removal of native vegetation comprising 16 sapling Stringybark (*Eucalyptus obliqua*) trees, one (1) medium size Stringybark (*Eucalyptus obliqua*) tree and three young (3) Blackwood (*Acacia melanoxylon*) trees (20 native trees/saplings total).

A data report produced by an accredited native vegetation consultant was included with the application, and the consultant categorised this clearance as of 'Level 3' category. As per Overlay procedural matters this designated level of clearance required the proposal to be referred to the Native Vegetation Council.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

Performance Outcome 1.1 recognises that where development cannot practically avoid native vegetation clearance, clearance should be minimised. It is considered that the level of clearance has been minimised by the siting of the facility and as noted in the data report:

*The concept aimed to be further than 10m away from any remnant trees – this has been achieved, except in the case of small regrown of Stringybarks and Blackwoods, which have regenerated amongst dense exotic amenity planted shrubs and trees.*

The native vegetation clearance is supported by the Native Vegetation Council, with the direction to include one (1) condition and one (1) advisory note. See condition 15 and advisory note nine (9).

A separate arborist report advises that for the remaining native vegetation the development comprises a minor level of encroachment into Tree Protection Zones and is “acceptable.” The tree canopy outlines on the civil plans show only a minor level of canopy extension into the outdoor play areas.

The arborist advice was that level of encroachment into the Tree Protection Zone of the medium size Stringybark to be removed is “major”, which is why it is required to be removed. This is tree 4 on figure 5.6 of the vegetation removal detail of the Ekistics Planning Statement document, but noting it is identified as tree 5 in the data report assessment.

#### Prescribed Water Resources Area Overlay

Desired Outcome	
DO 1	Sustainable water use in prescribed water resources areas maintains the health and natural flow paths of surface water, watercourses and wells.
Performance Outcomes (PO) & Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria	
N/A	

This Overlay is not relevant to the proposal as it relates to water taking activities such as horticulture and intensive animal husbandry or the alteration to a water body.

#### Regulated and Significant Tree Overlay

Desired Outcome	
DO 1	Conservation of regulated and significant trees to provide aesthetic and environmental benefits and mitigate tree loss.
Performance Outcomes (PO) & Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria	
Tree Retention and Health PO 1.1, PO 1.4	
Ground Work Affecting Trees PO 2.1	

After public notification it was discovered that tree 4 is within 20m of the existing dwelling on the land. Trees within 20m of dwellings in the Hazards (Bushfire – Medium Risk) Overlay are excluded from being regulated or significant.

The description of the proposal was altered accordingly to remove regulated tree removal.

**CAP MEETING – 10 JANUARY 2024**

**ITEM 8.1**

**General Development Policies**

Advertisements

<b>Desired Outcome</b>	
DO 1	Advertisements and advertising hoardings are appropriate to context, efficient and effective in communicating with the public, limited in number to avoid clutter, and do not create hazard.
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
Appearance PO 1.1 & DTS/DPF 1.1, PO 1.3 & DTS/DPF 1.3, PO1.5	
Proliferation of Advertisements PO 2.3 & DTS/DPF 2.3	
Advertising Content PO 3.1 & DTS/DPF 3.1	

Proposed are two (2) non-illuminated signs attached to the front elevation, which will identify the name of the facility operator. The proposed signage is considered to be discrete and meet Desired Outcome 1 and Performance Outcome 10.1 of the Zone, which relates directly to advertising.

Clearance from Overhead Powerlines

<b>Desired Outcome</b>	
DO 1	Protection of human health and safety when undertaking development in the vicinity of overhead transmission powerlines.
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
Environmental Protection PO 1.1 & DTS/DP F1.1	

As part of their submission the applicant has declared that the development will not be contrary to the regulations prescribed for the purposes of section 86 of the Electricity Act 1996. This is consistent with Designated Performance Feature 1.1.

**CAP MEETING – 10 JANUARY 2024**

**ITEM 8.1**

Design

<b>Desired Outcome</b>	
DO 1	<p>Development is:</p> <ul style="list-style-type: none"> <li>a) contextual – by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributes to the character of the immediate areas.</li> <li>b) dural – fit for purpose, adaptable and long lasting.</li> <li>c) inclusive – by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access, and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm for occupants and visitors.</li> <li>d) sustainable – by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.</li> </ul>
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
All Development PO 1.4 & DTS/DPF 1.4, PO 1.5	
Safety PO 2.1, PO2.3, PO 2.3	
Landscaping PO 3.1, PO 3.2	
Carparking Appearance PO 7.2, PO 7.3, PO 7.4, PO 7.5, PO 7.6, PO7.7	
Earthworks & Sloping Land PO 8.1 & DTS/DPF 8.1, PO 8.4, PO 8.5	
Fences and Walls PO 9.1 & PO 9.2 & DTS/DPF 9.2	
Massing PO 15.1	
Car Parking, Access and Manoeuvrability PO 19.2 & DTS/DPF 19.2, PO19.3 & DTS/DPF 19.3, PO 19.4 & DTS/DPF 19.4, PO19.5 & DTS/DPF19.5, PO 19.6 & DTS/DPF 19.6	
All Non-Residential Development – Water Sensitive Design PO 31.1, PO 31.2	

The proposal is considered to meet part a) of Desired Outcome 1 in that the design is considered to carefully respond to the natural surrounds and built environment. Vegetation retention is maximised, the two-storey component of the building is away from the adjoining residential property and the facility including associated fencing and retaining walls will be constructed of non-reflective materials and finished in a neutral colour scheme.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

Earthworks associated with the proposal exceed the desired 1m depth sought by Designated Performance Feature 8.1, but it is recognised that level areas are required for outdoor play spaces and the car park area to ensure the facility is fit for purpose as per part b) of Desired Outcome 1. The outdoor play areas are excavated into the land, so the supporting retaining walls will not be visible from the adjoining residential property or the street. The car park is built up, however the supporting retaining walls are stepped, finished in a natural material and landscaped.

However, in recognition of the extent of earthworks it is recommended that submission of a satisfactory soil, erosion and drainage management plan (SEDMP) is required as a Reserved Matter prior to Development Approval. Further to this, recommended condition 14 seeks the inclusion of the accepted soil, erosion and drainage management details to be implemented prior to construction commencing.

The inclusion of landscaping around the car park perimeter achieves Performance Outcomes 7.4, 7.5 and 7.6 which all speak to the inclusion of landscaping within vehicle parking areas to improve appearance and enhance visual amenity. The inclusion of some plant species selected from Council's Native Habitat for Landscaping Guide achieves in part Performance Outcome 3.1.

The submitted landscaping plan is however considered by staff to be somewhat conceptual in nature and a further recommended Reserved Matter seeks a more detailed landscaping plan with the plant species and number of plants prepared by a Landscape Designer prior to Development Approval.

Furthermore, regarding the car park, Performance Outcome 7.2 seeks for car parking spaces to be located and designed to minimise impacts on adjacent receivers. There was representor concern that there may be nuisance caused by vehicle headlight glare. Vehicle headlight glare nuisance is considered to be limited noting the large landscaped separation distances to adjoining and adjacent residential properties and that the facility will close at a reasonable time of 6:30pm.

A gross-pollutant trap is included in the design of the car park, which achieves Performance Outcome 31.1.

A designated enclosed waste storage area is included at the front of the building on the ground level. This achieves Performance Outcome 1.5 and responds to representor feedback.

#### Infrastructure and Renewable Energy Facilities

<b>Desired Outcome</b>	
DO 1	Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and manages adverse visual impacts on natural and rural landscapes and residential amenity.
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
Water Supply PO 11.1 & DTS/DPF 11.1	

The development will be serviced by mains water supply as sought by Performance Outcome 11.1. This module is silent on electricity and wastewater management, regardless the development will also be serviced by mains electricity and sewer.



## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

#### Interface between Land Uses

<b>Desired Outcome</b>	
DO 1	Development is located and designed to mitigate adverse effects on or from neighbouring and proximate uses.
<b>Performance Outcomes (PO) &amp; Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria</b>	
General Land Use Compatibility PO 1.2	
Hours of Operation PO 2.1 & DTS/DPF 2.1	
Activities Generating Noise or Vibration PO 4.1 & DTS/DPF 4.1, PO 4.2	
Light Spill PO 6.1, PO 6.2	

#### *Hours of Operation*

The proposed hours of operation of the child care facility, including deliveries are Monday to Friday from 6:30am to 6:30pm.

Performance Outcome 2.1 seeks for hours of operation of non-residential development to not unreasonably impact the amenity of sensitive receivers and sets-out that the following should be taken into account in determining if hours of operation will have an unreasonable impact – the nature of the development, measures to mitigate off-site impacts, the extent to which the development is desired in the zone and measures that might be taken in an adjacent zone primarily for sensitive receivers that mitigate adverse impacts without unreasonably compromising the intended use that land.

The Rural Neighbourhood Zone primarily desires residential development; however, some non-residential development is envisaged, particularly child care facilities are described as a form of community service development in the Zone. As this is a desired type of non-residential use in this Zone, this is considered to recognise that the nature of the development is appropriate and can sit comfortably with residential uses.

By its definition, child care facility includes out-of-school-hours care, and in light of the above the proposed hours of operation are not considered to have an unreasonable impact on sensitive receivers in the locality. Further, and as detailed earlier in the report these hours of operation are the same as the child care facility recently approved in Bridgewater within the Rural Neighbourhood Zone.

Therefore, despite the representations it is not considered necessary to setback the opening time of the facility to 7:00am.

The hours of operation are listed in recommended condition three (3). Any change to the hours of operation would require separate Development Approval to vary this condition.

Hours of waste collection are discussed later in the report.

## **CAP MEETING – 10 JANUARY 2024**

### **ITEM 8.1**

#### *Activities Generating Noise or Vibration*

Performance Outcome 4.1 seeks for development emitting noise to not unreasonably impact the amenity of adjacent receivers, through the achievement of the relevant Environment (Noise) Protection Policy. The Policy applicable at the time of application lodgement was the Environment Protection (Noise) Policy 2007.

An environmental noise impact assessment (acoustic) report by Sonus Engineers is included in support of the application. Advice in the report is that the Environment Protection (Noise) Policy 2007 excludes child care facilities, so instead an assessment of noise impact was made against a World Health Organisation (WHO) guideline.

The report concludes that without any acoustic treatments noise from the outdoor play areas would meet the WHO guideline. This finding was based on the maximum capacity of 128 children being outdoors for eight (8) hours per day.

A separate noise impact assessment was undertaken of plant equipment associated with the facility and from general car park use. The assessment found that both day and night time predicted noise levels will be within the Environment Protection (Noise) Policy 2007 Goal Noise levels. The assessment recommended housing plant equipment of the facility within the ground level rear service yard area to achieve compliance with the Noise Policy.

The representations sought noise attenuation methods to be included in the design of the proposal, mainly the addition of solid fencing along the street facing outdoor play areas and around the car park. However, based on the above findings of the noise impact assessment, no such noise attenuation methods are required. The street facing open style fencing and parking barriers are considered to be a better design approach, allowing for passive surveillance opportunity.

The representations also sought for clarification of where the plant equipment will be located. In response, the applicant has confirmed that plant equipment will be contained within the enclosed ground floor service yard at the rear of the building, in accordance with the recommendation of the noise impact assessment.

Recommended condition four (4) requires all plant equipment to be contained within the enclosed ground floor service yard area at the rear of the building.

#### *Light Spill*

Performance Outcome 6.1 seeks for external lighting to be positioned and designed so as to not cause unreasonable light spill impact to adjacent sensitive receivers.

The proposal includes lighting in the car park and attached to the building. In response to the representations, the applicant has agreed to only turn on external lighting during hours operation.

This is considered to be a reasonable response and recognising that positioning of lighting on the building is well away from adjoining and residential development and the design of lighting in the car parking is limited to four (4) low-level bollards.

Recommended condition seven (7) controls external lighting.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

#### Site Contamination

Desired Outcome	
DO 1	Ensure land is suitable for the proposed use in circumstances where it is, or may have been, subject to site contamination.
Performance Outcomes (PO) & Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria	
PO 1.1 & DTS/DP F1.1	

The proposed child care facility use is not a more sensitive use than the existing residential use of the land. Therefore, the land is considered suitable for its intended use with regard to the risk of site contamination and site history investigation information was not requested. This is in accordance with Practice Direction 14.

#### Transport, Access and Parking

Desired Outcome	
DO 1	A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.
Performance Outcomes (PO) & Deemed to Satisfy (DTS)/Designated Performance Feature (DPF) criteria	
Movement Systems PO 1.1, PO 1.4	
Sightlines PO 2.2	
Vehicle Access PO 3.1 & DTS/DP F3.1, PO 3.3, PO 3.4, PO 3.5 & DTS/DPF3.5, PO 3.6, PO3.8	
Access for People with Disabilities PO 4.1	
Vehicle Parking Rates PO5.1 & DTS/DPF5.1	
Vehicle Parking Areas PO 6.2, PO 6.4, PO 6.5	

Access to the car park of the facility is in the same location as the existing cross-over to the land. The cross-over will however be upgraded to be 6.2m wide and include some road verge/footpath alterations. Regarding the representations, there will therefore be no loss of on-street car parking as a result of the proposal. However, it is noted that vehicles should not be parked on the footpath in any event.

A traffic and parking report by Cirqa Traffic Engineers has been included in support of the proposal. A finding of the report is that sightline distances at the entry/exit point are above that of the relevant Australian standard.

The car park of the facility will include 33 parking spaces, one (1) of which is for universal access. Performance Outcome 5.1 and corresponding Designated Performance Feature 5.1 seek for sufficient on-site car parking with regard to Transport, Access and Parking Table 1 – General Off-Street Car parking Requirements. For a child care centre Table 1 seeks the provision of 0.25 parking spaces per child, which for this proposal would mean the provision of 32 parking spaces.

## CAP MEETING – 10 JANUARY 2024

### ITEM 8.1

The traffic and parking report advises that the design of the parking spaces and manoeuvring areas, including for universal access meet the relevant Australian standards. Therefore, Performance Outcome 5.1 for vehicle parking rates and Performance Outcome 4.1 for access for people with disabilities are met.

Further, regarding the design of the car park the traffic and parking report includes modelling to demonstrate that it will cater for forward entry and exit of larger vehicles associated with waste collection. The modelling shows the waste collection vehicle turnaround will be partly over vehicle parking spaces, so despite concern raised in the representations it is considered necessary for waste collection to occur outside of the hours of operation of the facility.

The nominated waste collection times are however considered within the parameters of the *Local Nuisance and Litter Control Act (2016)*, whereby noise generated by waste collection before 9:00am or after 7:00pm on any Sunday or public holiday or before 7:00am or after 7:00am any other day is a declared local nuisance.

Waste collection is considered unlikely to be undertaken for extended periods, so noise generated by this activity is not considered to be unreasonable with regard to duration. This is supported by a staff review of a waste management plan included for a recent 95 place child care facility elsewhere in, Stirling. The waste management plan with this application detailed that separate general waste and cardboard recycling waste pick-up by external contractors would occur once per week, with waste collection vehicles expected to be stopped on-site for 2-3 minutes (6-8 minutes total per week).

Recommended condition four (4) requires external contractors collecting waste to be provided with access to the enclosed waste storage area, to ensure waste is not put out into in the car park for pick-up.

Regarding movement systems, the traffic report includes estimates of vehicle trip movements likely to be generated by the facility; and modelling for how peak vehicle trip movements will affect intersection performance near the subject land. The report findings are that the adjacent road network will operate below capacity even during the adjacent school related traffic peaks.

Therefore, despite the concerns of the representors, it is considered unlikely that the proposal will lead to unreasonable traffic congestion. Council Engineering accept the findings of the Cirqa report.

In regard to representor concern regarding potential for increased traffic and pedestrian hazard, it is considered that peak vehicle movement times of the proposed child care facility are dispersed and not directly aligned with peak vehicle movement times of the adjoining primary school. Further, line of sight distance at the access to the facility are in excess of the relevant Australian standard.

Council Engineering are of the view that the recommended signage and line-marking upgrades to the Old Mount Barker Road and St Margaret's Drive intersections detailed in the traffic and parking report are not particularly required. This view was formed on the basis that Council traffic data has recorded only one (1) accident in this location. The accident occurred at 10:00am, outside of the peak traffic times of the primary school.

## **CAP MEETING – 10 JANUARY 2024**

### **ITEM 8.1**

#### **CONCLUSION**

The proposal is for demolition of a dwelling and construction of a child care facility in the Rural Neighbourhood Zone.

Regarding the use, child care facilities are a desired form of community service development in the Zone; and the proposal is considered to achieve all the performance outcomes of the Zone that speak directly to non-residential development.

The design of the two-storey building and associated supporting structures is considered to be of a high-standard; and its siting minimises disturbance to the land in the form of earthworks and tree removal to an acceptable level.

Recommended conditions of consent pertaining to capacity, hours of operation, waste management, management of lighting and noise generated from associated plant equipment are expected to manage off-site amenity impacts to an acceptable level.

Traffic concerns from the representors are noted, however the expert traffic advice is that there should be no adverse traffic congestion or increased hazard resulting from the proposal.

#### **RECOMMENDATION**

**It is recommended that the Council Assessment Panel resolve that:**

- 1) Pursuant to Section 107(2)(c) of the Planning, Development and Infrastructure Act 2016, and having undertaken an assessment of the application against the Planning and Design Code, the application is NOT seriously at variance with the provisions of the Planning and Design Code; and**
- 2) Development Application Number 23018174 by Development Holdings Pty Ltd for two storey child care facility with attached signage, retaining walls, combined fence & retaining walls, decking, & associated car parking at 35 Paratoo Road, Stirling, is GRANTED Planning Consent subject to the following reserved matters and conditions:**

#### **RESERVED MATTERS**

**Pursuant to section 102 (3) of the Planning, Development and Infrastructure Act of 2016, the following matters shall be reserved for further assessment prior to the granting of Development Approval. The Assessment Manager is delegated to undertake this further assessment:**

- 1) A detailed landscaping plan shall be prepared by a suitably qualified person and submitted with further details regarding plant species, locations, plant numbers and plant spacing, irrigation and mulching detail.**
- 2) A detailed soil, erosion and drainage management plan (SEDMP) shall be provided for construction of the child care facility. The SEDMP shall comprise a site plan and design sketches that detail erosion control methods and installation of sediment collection devices that will prevent soil moving off site during construction and soil transfer onto roadways by vehicles and machinery.**

**Pursuant to Section 127(1) of the *Planning, Development and Infrastructure Act 2016*, the power to impose further conditions of consent in respect of the reserved matter above is delegated to the Assessment Manager.**

## **CAP MEETING – 10 JANUARY 2024**

### **ITEM 8.1**

#### **CONDITIONS**

##### **Planning Consent**

- 1) The development granted shall be undertaken and completed in accordance with the stamped plans and documentation, except where varied by conditions below.
  - 2) The maximum capacity of the child care facility shall be 128 children at any one time.
  - 3) The hours of operation of the child care facility, including deliveries (but excluding waste collection) shall be 6:30am to 6:30pm, Monday to Friday.
  - 4) All solid waste shall be stored in closed containers with close fitting lids in the enclosed bin area shown on the approved site plan (drawing DA04, Rev. 2 dated 24/05/2023) prepared by Brown Falconer. External contractors accessing the site for waste collection shall be provided with access to enclosed bin area to ensure waste is not stored in the car park area for collection.
  - 5) The collection of waste shall not occur before 9:00am or after 7:00am Saturday, Sunday or public holidays, or before 7:00am or after 7:00pm Monday to Friday.
  - 6) Plant equipment of the child care facility shall only be located within the service yard area shown on the approved ground floor plan (drawing DA05, Rev. 2 dated May 2023) prepared by Brown Falconer.
  - 7) External lighting shall be installed in accordance with the approved lighting plans by TMK engineers; and once installed shielded if necessary in such a manner so to not cause unreasonable nuisance to adjoining and adjacent residential properties.
  - 8) External lighting shall be not be switched on before 6:30am Monday to Friday; and all external lighting shall be switched off no later than 6:30pm Monday to Friday.
  - 9) The cross-over & kerb and footpath alterations, vehicle-parking spaces, driveways and manoeuvring areas shall be constructed in accordance with the approved site plan (drawing DA04, Rev. 2 dated 24/05/2023) prepared by Brown Falconer and the approved stormwater management plan (drawing 220216-C201, Rev. C dated June 2023) prepared by CPR Engineers prior to the occupation of the child care facility. Clear visible line marking of vehicle parking spaces shall be completed prior to the occupation of the child care facility. The car park and line-marking shall thereafter be maintained in good condition at all times.
  - 10) Materials and goods shall not be stored on the land in areas delineated for use as vehicle parking.
  - 11) The external finishes to the child care facility shall be as follows:
    - Two storey building:**
      - Walls:** White weatherboard cladding, rendered beige hebel panels & timber panelling.
      - Roof:** Colorbond sheeting in a white colour tone.
    - Fencing:** Open style white timber picket fencing to the play area street facing elevation and Colorbond 'Monument' to the remainder of the play area fencing.
- Retaining**
- Walls:** Street facing retaining walls supporting the car park shall be of Bluestone construction.

## **CAP MEETING – 10 JANUARY 2024**

### **ITEM 8.1**

- 12) Landscaping accepted in the detailed landscaping plan shall be planted within the next available planting season following occupation of the child care facility. Such landscaping shall be maintained in good health and condition at all times, including through the installation of irrigation and mulching. Any such landscaping shall be replaced in the next planting season if and or when it dies or becomes seriously diseased.
- 13) All roof run-off from the building and run-off from the outdoor play areas and car park shall be managed in accordance with the approved stormwater management plan (drawing 220216-C201, Rev. C dated June 2023) prepared by CPR Engineers. All roof run-off generated by the development shall be directed to the stormwater management system within one (1) month of the roof cladding being installed.
- 14) Prior to construction of the approved development, straw bales or other soil erosion control methods as accepted in the soil, erosion and drainage management plan shall be placed and secured below areas of excavation and fill to prevent soil moving off the site during construction.

#### **Conditions imposed by Native Vegetation Council under Section 122 of the Act**

- 15) Prior to any clearance of native vegetation, the Native Vegetation Council must provide written confirmation that the Significant Environmental Benefit requirements under the *Native Vegetation Act 1991* have been satisfied.

#### **ADVISORY NOTES**

##### **Planning Consent**

- 1) No work can commence on this development unless a Development Approval has been obtained. If one or more consents have been granted on this Decision Notification Form, you must not start any site works or building work or change of use of the land until you have received notification that Development Approval has been granted.
- 2) Appeal rights – General rights of review and appeal exist in relation to any assessment, request, direction or act of a relevant authority in relation to the determination of this application, including conditions.
- 3) This Planning Consent is valid for a period of twenty-four (24) months commencing from the date of the decision, subject to the below or subject to an extension having been granted by the relevant authority. If applicable, Building Consent must be obtained prior to expiration of the Planning Consent.
- 4) Where an approved development has been substantially commenced within 2 years from the operative date of approval, the approval will then lapse 3 years from the operative date of the approval (unless the development has been substantially or fully completed within those 3 years, in which case the approval will not lapse).
- 5) It is recommended that the operator of the child care facility prepare and display a Bushfire Survival Plan (BSP) designed specifically for the purpose of staff, children or visitors that may be present during a bushfire event, especially during the Fire Danger Season.

The SA CFS 'Bushfire Safety Guide for Business' document should be utilised as a basis for information and the drafting of the BSP, along with industry body guidelines and recommendations.

- 6) The operator of the child care facility should consider reducing operating hours and including other restrictions on days of heightened bushfire danger and/or bushfire events and consider including any alterations to services offered due to actual or predicted conditions during the Fire Danger Season.

## **CAP MEETING – 10 JANUARY 2024**

### **ITEM 8.1**

- 7) It is the responsibility of the child care facility operator to ensure compliance with the relevant food safety legislation before operating. Food business notification must be provided to commencing any food (or consumable product) handling activities. This may be provided on-line at [www.fbn.sa.gov.au](http://www.fbn.sa.gov.au) or by obtaining a notification form from Council Environmental Health.
- 8) The onus of ensuring that the development is located in the approved position on the correct allotment is the responsibility of the applicant/developer. This may necessitate a boundary survey being undertaken by a licensed surveyor prior to the work commencing and when building work is complete.

#### **Advisory Note imposed by Native Vegetation Council under Section 122 of the Act**

- 9) The clearance of native vegetation must be undertaken in accordance with the approval of the Native Vegetation Council under the *Native Vegetation Act 1991* as set out in Decision Notification 2023/3272/473.

#### **OFFICER MAKING RECOMMENDATION**

**Name:** Marie Molinaro  
**Title:** Senior Statutory Planner





# Stirling Childcare Centre

## Planning Statement

35 Paratoo Road, Stirling

NOVEMBER 2023

REF#1321



## 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

The information contained in this document produced by Ekistics Planning and Design is solely for the use of the Client as identified on the cover sheet for the purpose for which it has been prepared and Ekistics Planning and Design undertakes no duty to or accepts any responsibility to any third party who may rely upon this document. All rights reserved. No section or element of this document may be removed from this document, reproduced, electronically stored or transmitted in any form without the written permission of Ekistics Planning and Design.

Revision	Description	Author	Date
Version 1	Planning Statement	RG	13 June 2023
Version 2	Planning Statement	BS	14 June 2023
Version 3	Minor updates to policy wording to address Technical Miscellaneous enhancement Code Amendment	RG	10 July 2023
Version 4	Report updates to address Council RFI	RG	02 November 2023
Reviewed by	Ben Schnell	Position	Planning Consulting



## CONTENTS

1. EXECUTIVE SUMMARY	6
2. INTRODUCTION	8
3. BACKGROUND	9
4. THE SITE AND LOCALITY	10
5. PROPOSED DEVELOPMENT	17
6. PROCEDURAL REQUIREMENTS	25
7. PLANNING ASSESSMENT	28
8. CONCLUSION	48
APPENDICES	
CERTIFICATE OF TITLE	50
ARCHITECTURAL DRAWINGS	51
LANDSCAPE PLAN AND RENDER	52
ACOUSTIC REPORT	53
TRAFFIC AND PARKING REPORT	54
CIVIL PLANS AND DOCUMENTATION	55
VEGETATION PLAN (REGULATED AND NATIVE)	56
ARBORICULTURAL LETTER	57



---

NATIVE VEGETATION DATA REPORT

58

---

LIGHTING PLAN

59

---

## 1. EXECUTIVE SUMMARY

Category	Details		
PROJECT	Stirling Childcare Centre		
ADDRESS OF SITE	35 Paratoo Road, Stirling		
FIRST NATIONS COUNTRY	Kaurna		
CERTIFICATES OF TITLE	Certificate of Title Volume 5767 Folio 919 (Allotment 111 Filed Plan 210897)		
ALLOTMENT AREA	Approximately 10,420m <sup>2</sup> .		
ALLOTMENT FRONTAGE/S	Approximately 100m to Paratoo Road		
LOCAL GOVERNMENT	Adelaide Hills Council		
RELEVANT AUTHORITY	Adelaide Hills Council Assessment Panel or Assessment Manager		
PLANNING AND DESIGN CODE	Version 2023.8 (Gazetted 15 June 2023)		
ZONE	Rural Neighbourhood Zone		
SUBZONE	Adelaide Hills Sub Zone		
OVERLAYS	<ul style="list-style-type: none"> <li>• Hazards (Bushfire – Medium Risk)</li> <li>• Hazards (Flooding – Evidence Required)</li> <li>• Mount Lofty Ranges Water Supply Catchment (Area 2)</li> <li>• Native Vegetation</li> <li>• Prescribed Water Resources Area</li> <li>• Regulated and Significant Tree</li> </ul>		
TECHNICAL & NUMERIC VARIATIONS (TNVs)	<ul style="list-style-type: none"> <li>• Minimum Site Area of 2,000m<sup>2</sup></li> </ul>		
EXISTING USE	Residential (detached dwelling and ancillary domestic structures)		
PROPOSAL DESCRIPTION	To establish a construct a 128-place childcare centre (split level construction) together with the removal of one regulated tree, associated non-illuminated façade signage, decking, carparking, retaining walls, fencing, earthworks and landscaping		
CLASSIFICATION OF DEVELOPMENT	Element 1	Child care facility	Performance Assessed
	Element 2	Retaining Walls and Earthworks	Performance Assessed
	Element 3	Fencing	Performance Assessed



	Element 4	Decking	Performance Assessed
	Element 5	Tree Damaging Activity	Performance Assessed
	Element 6	Façade Signage	Performance Assessed
PUBLIC NOTIFICATION	Notifiable development		
REFERRALS	N/A		
APPLICANT	Development Holdings Pty Ltd		
CONTACT PERSON	Rob Gagetti – Senior Associate Ph: 0426 246 297		
OUR REFERENCE	01321-001		



## 2. INTRODUCTION

This planning statement has been prepared in support of a development application by Development Holdings Pty Ltd to establish a childcare centre on land located 35 Paratoo Road, Stirling.

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.

For the purposes 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'.



### 3. BACKGROUND

The application was lodged with the relevant authority (the Adelaide Hills Council) in June of 2023. Following Council's initial assessment of the application, additional information was subsequently requested in relation to the following matters:

- The location and impacts of the development on the health and structural integrity of both regulated and native trees;
- Traffic, parking and stormwater-related matters;
- Retaining wall heights, location and materiality; and
- Landscape design and selection.

This Planning Statement has been updated to address the following revised plans and supporting documentation appended to this report:

- **Appendix 1:** Certificate of Title
- **Appendix 2:** Architectural Drawings (Brown Falconer)
- **Appendix 3:** Landscape Plan (Das Studio)
- **Appendix 4:** Acoustic Report (Sonus)
- **Appendix 5:** Traffic and Parking Report (CIRQA)
- **Appendix 6:** Civil Plans and Documentation (CPR)
- **Appendix 7:** Vegetation Plan (Regulated Trees and Native Vegetation)
- **Appendix 8:** Arboricultural letter (Project Green)
- **Appendix 9:** Native Vegetation Data Report (JS Ayre and Associates)
- **Appendix 10:** Lighting Plan (TMK)

The plans referenced above have also been provided separately in correspondence dated 26 September (updated on 02 November 2023), responding to Council's request for additional information.

## 4. THE SITE AND LOCALITY

### 4.1. The Site

Located at 35 Paratoo Road in Stirling, the subject site is formally recognised in Certificate of Title Volume 5767 Folio 919, (provided in the **Appendix 1**). As illustrated on the Title, an easement marked 'A' to the Council traverses the north-western corner of the allotment and will remain unaffected by the development. No other easements, Rights of Way or caveats are registered on the Title.

The triangular-shaped allotment comprises an area of some 10,420m<sup>2</sup> with a frontage to Paratoo Road (a local road under the care and control of the Adelaide Hills Council). Paratoo Road is a narrow, one-way road which carries east-bound traffic. The western side of Paratoo Road accommodates roll-over kerbing, whilst the eastern side of the road is devoid of kerb and gutter. The wide verge area adjacent the Site is presently undeveloped and is devoid of street furniture and infrastructure, but for a stobie pole adjacent the Site's southern corner.

The Site accommodates a notable crossfall from east to west and also falls towards the Paratoo Road. Located centrally on the Site is a detached dwelling together with associated domestic outbuildings. Dense, mature vegetation is a key feature of the Site, and is particularly concentrated centrally on the land, as well as to the rear of the existing dwelling and along the northern property boundary.

Trees in proximity of the proposed development have been surveyed by Project Green (arborists) together with a Native Vegetation expert accredited by the Native Vegetation Council. The location of all native and regulated trees are reflected on the tree plan contained within **Appendix 7**.

We note that the Site also accommodates other non-regulated native trees, protected from removal under the *Native Vegetation Act, 1991*.

Images of the Site are displayed in Figure 4-1 below.

Figure 4-1: Site Images

*Image 1: Paratoo Rd. frontage (looking north-east)*



*Image 2: View of south-western boundary*



*Image 3: View into Site (looking north)*



*Image 4: Paratoo Rd. frontage (looking south-west)*



*Image 5: View into Site (looking north-west)*



*Image 6: View of northern boundary*



Figure 4-2: Site Images Map



## 4.2. The Locality

Figure 4-3 identifies the subject site and the defined locality determined for the purposes of this assessment.

Figure 4-3: Locality map



The defined locality has been informed by an inspection of the Site and the surrounding neighbourhood. The locality illustrated in Figure 4-3 is largely influenced by the following site, locality and environmental features:

1. The size of the Site and the building's position on the land, with generous setbacks from all proposed boundaries;
2. The scale, form and intensity of the development and its visibility from private and public land;
3. Environmental features of the Site and locality, including land topography and existing vegetation throughout the Site and on adjacent public and private land;
4. Traffic generation and distribution (as outlined within CIRQA report); and
5. Land uses within the locality (including the adjoining educational establishment).



Residential development is a key feature of the locality and includes detached dwellings (predominantly single storey) set at low densities, on densely vegetated, large allotments with generous side, rear and front boundary setbacks. Also forming a notable feature of locality is the Stirling East Primary school which adjoins the Site to the south-west.

Although somewhat notable in its scale and proportions, the development's visibility is expected to be significantly restricted and screened by established mature vegetation. Densely vegetated areas to the rear of the childcare centre will substantially obscure views of the development from adjoining residences to the north and north-east. This vegetation, coupled with generous side setbacks and a building FFL which is several metres below natural ground level will assist to mitigate the building's visual impact (including vertical scale) when viewed from residential properties to the north and north-east.

Similarly, mature trees and hedging which lines the opposite side of Paratoo Road will also obscure direct views of the childcare centre, associated carpark and proposed commercial activities from adjacent residential properties to the south/south-east.

Although beyond the defined locality, other non-residential development evident within area includes several Places of Worship, namely, the Our lady of the Rosary Catholic Church situated at 135 Old Mount Barker Road and the Stirling Seventh-day Adventist Church located at 45 Snows Road.



## 5. PROPOSED DEVELOPMENT

### 5.1. Hours of Operation

The application seeks consent to operate the childcare centre between the hours of 6:30am and 6:30pm, Monday to Friday.

### 5.2. Capacity

The childcare centre will accommodate up to 128 children on any given day.

### 5.3. Design and Siting

Displayed in Figure 5-1 is a perspective of the proposed childcare centre, as viewed from Paratoo Road.



Figure 5-1: Paratoo Road Perspective

### 5.3.1. Height, Materiality and Design

To minimise earthworks and retaining, the building comprises a split-level design which follows the contours of the land. At its north-eastern end, the childcare centre comprises one level and 5.2 metres, and increases in height to two levels and 8.8 metres at its south-western end to account for the notable decline in land topography, with roof form comprising a series of gable ends.

External finishes and colours have been selected to replicate an appearance which is typical of a suburban residential area. As illustrated in the below materials palette, wall cladding comprises Hebel Panelling, Weatherboard, face brick, vertical timber battens above the building’s entrance and Colorbond® roofing. The colour palette for the development comprises a variety of neutral tones including off-white, browns and various shades of grey.



Figure 5-2: Colour and material palette

Building facades are characterised by a combination of rectilinear and arched windows, staggered walls and projecting canopies for visual interest.

### 5.3.2. Setbacks

Centrally located on the Site, the childcare centre has a setback of 22.3 metres from Paratoo Road, 18.4 metres from the north-eastern boundary and 20 metres from the south-western boundary (approximates)<sup>1</sup>. Adjoining land to the north-east accommodates detached dwellings situated on the high side of the Site. Adjoining land to the south-west accommodates the Stirling East primary school.

<sup>1</sup> Scaled off plans contained within Appendix 2.

## 5.4. Earthworks and Retaining

The Site has a notable crossfall of approximately 16 metres, down to the southern corner. Whilst the split-level building design significantly reduces the required bulk earthworks, excavation, fill and retaining is largely unavoidable, particularly noting the nature of the development proposed and the need for benched, useable outdoor play spaces.

The architectural plans and civil plans contained within **Appendix 2** and **Appendix 6** respectively illustrates the extent of retaining required. Referencing the civil plans (Dwg. No. 220216-C201), walls in blue identify retained excavation, whilst walls in red identify retained fill. Walls in green identify retaining concealed by the building footprint.

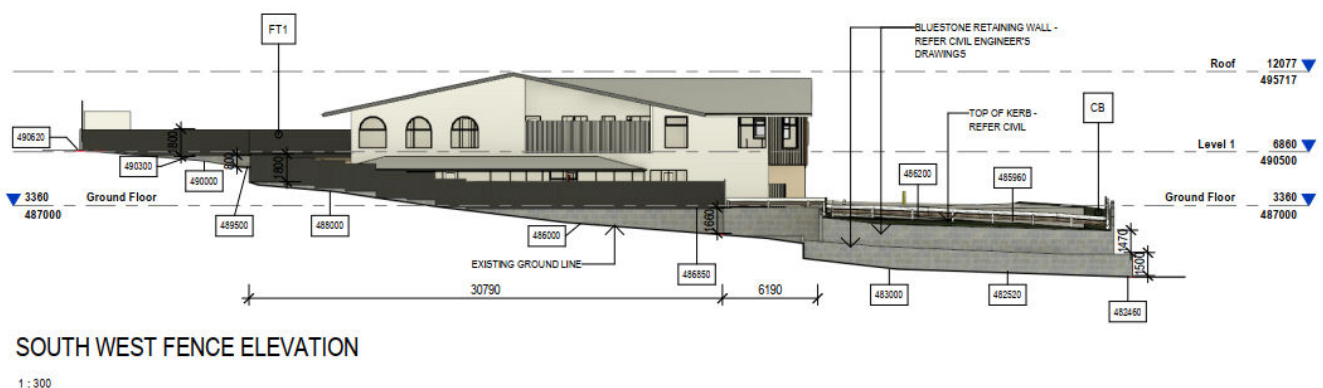
To achieve compliant gradients, site benching for the carpark will be retained by several terraced walls, each comprising maximum heights of 1.5 metres. A retaining wall is also required to create a useable space for Outdoor Play Area 3. However, the function of this wall is concealed by its design and takes on the appearance of a building wall which forms part of the childcare centre (refer to the Paratoo Road elevation in Dwg. No. DA07).

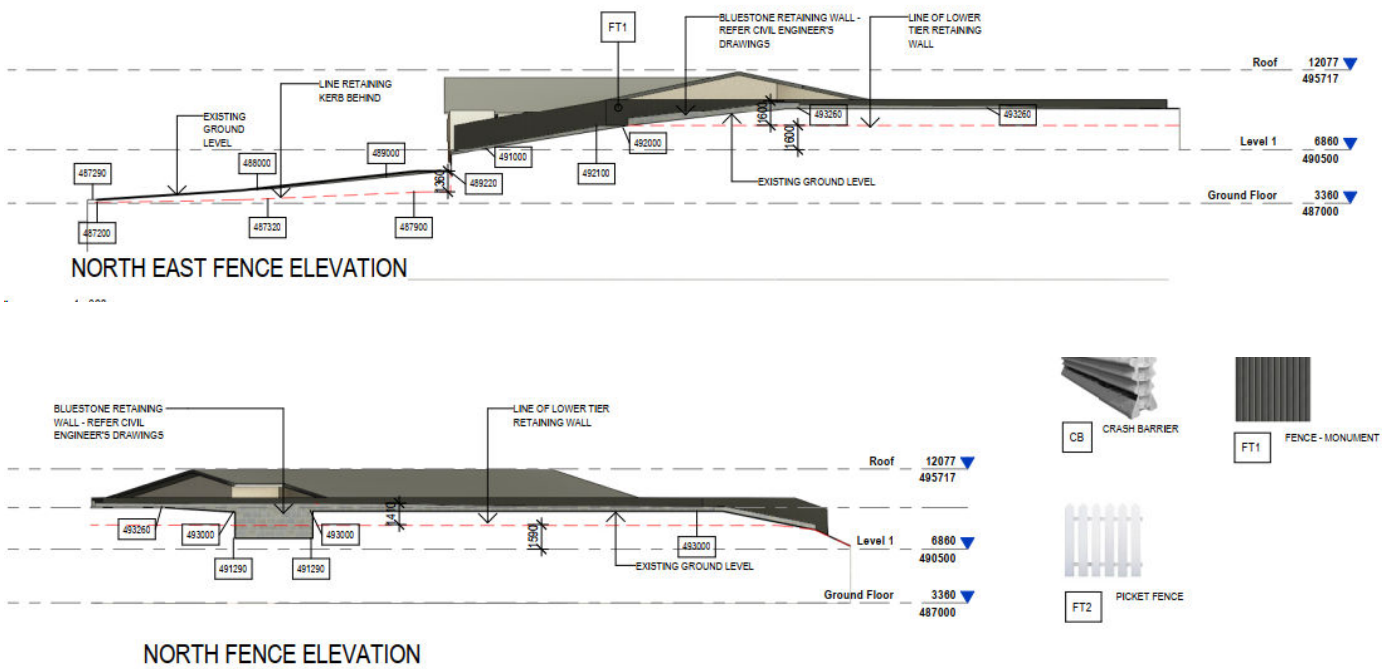
To the rear (north-west) of the childcare centre are a series of retaining walls which are to retain excavation. To minimise heights, these retaining walls are to be constructed over two terraces, with maximum retaining wall heights of 2 metres (excluding concealed retaining walls to the ground level service yard). As these walls are positioned to the rear of the building and are also retaining excavation, their visibility from adjoining residences, the primary school and the public realm will be largely concealed.

Bluestone retaining walls will be used to retain earthworks required for the construction of the carpark. Elsewhere, concrete sleeper walls will be used to retain excavated areas which are not visible from the public realm.

The elevations provided in **Appendix 2** and illustrated in Figure 5-3 below illustrated the extent of earthworks and retaining at various sections.

Figure 5-3: Cross Sectional Drawings





## 5.5. Landscaping Fencing and Decking

The conceptual landscape plan prepared by Das Studio is contained within **Appendix 3**. A streetscape render with landscaping depicted is illustrated in Figure 5-4 below.



Figure 5-4 - Streetscape Render

The landscape design comprises a mix of small to medium sized trees, together with shrubs, ground covers and creepers. With respect to landscaping, a fundamental design intent has been to screen terraced retaining walls and carparking visible for the public realm, provide shade to parked vehicles and outdoor play spaces and to improve the appearance of the building as viewed from the public realm. The landscape design also includes plantings from Council's preferred list of plantings (Landscaping Schedule taken from the now repealed Development Plan).

Proposed fencing includes white picket fencing to outdoor play spaces visible from the public realm, as well Monument Colorbond® fencing enclosing outdoor play spaces to rear of the building and along the north-eastern end of the carpark. Internal activity kindy and activity spaces will open out onto two (2) decked areas occupying Outdoor Play Areas 2 and 3. Both decked areas will be constructed at ground level.

## 5.6. Access, Parking and Waste Collection

A comprehensive traffic and parking report has been prepared by CIRQA (*Appendix 5*).

The proposed development is serviced by a carpark accommodating 33 spaces, inclusive of one disabled space and three staff spaces (including two tandem spaces), set aside for employees. Access to the carpark will be via a two-way driveway positioned at the eastern end of the carpark. The carpark incorporates a crossfall, and grades down to the south-western corner of the Site to minimise earthworks. However, the need to maintain appropriate gradients in accordance with the relevant Australian Standards necessitates the installation of retaining walls which gradually increase in height to the south-west.

A dedicated waste storage area is concealed by the retaining wall which forms an extension to the south-eastern building elevation. All refuse will be collected by a private waste contractor who will access the empty carpark whilst the centre is not in operation. Waste collection will occur between the hours of 9:00am and 7:00pm Sundays or public holidays, and between 7:00am and 7:00pm on any other day.

Other service vehicle movements associated with the operation of the childcare centre will be limited to deliveries of food and linen, which will occur between the hours of 7:00am and 5:00pm Monday's to Fridays. Such deliveries will be made by domestic vehicles capable of parking within designated parking bays. Where required (and subject to demand) supplies may also be collected by staff on an as needed basis.

## 5.7. Stormwater Management

The stormwater management letter and associated calculations prepared by CPR are contained within *Appendix 6*. We understand the design methodology adopted for stormwater management has been informed by pre-lodgement and post lodgement input/feedback provided by the Council. In accordance with these requirements, the design includes the following the detention:

- 15KL of detention via above ground detention tanks positioned to the rear of the building and capturing roof water, and with discharge rates restricted to 14.4L/s; and

- 40KL of detention via underground tanks collecting overflows from landscaped and parking areas, with discharge rates restricted to 15.5L/s.

A gross pollutant trap installed within the carpark will be used to treat water, prior to discharge into the detention tank, and to the Paratoo Road water table.

In accordance with Council’s request, the stormwater system includes a 2 metre wide grassed swale installed along outer perimeter of the childcare centre site to capture and manage stormwater flows from the balance of the allotment.

## 5.8. Vegetation Removal

A plan illustrating the location of all regulated trees and native vegetation is provided in Appendix 7, reproduced in Figure 5-5 and Figure 5-6 below.

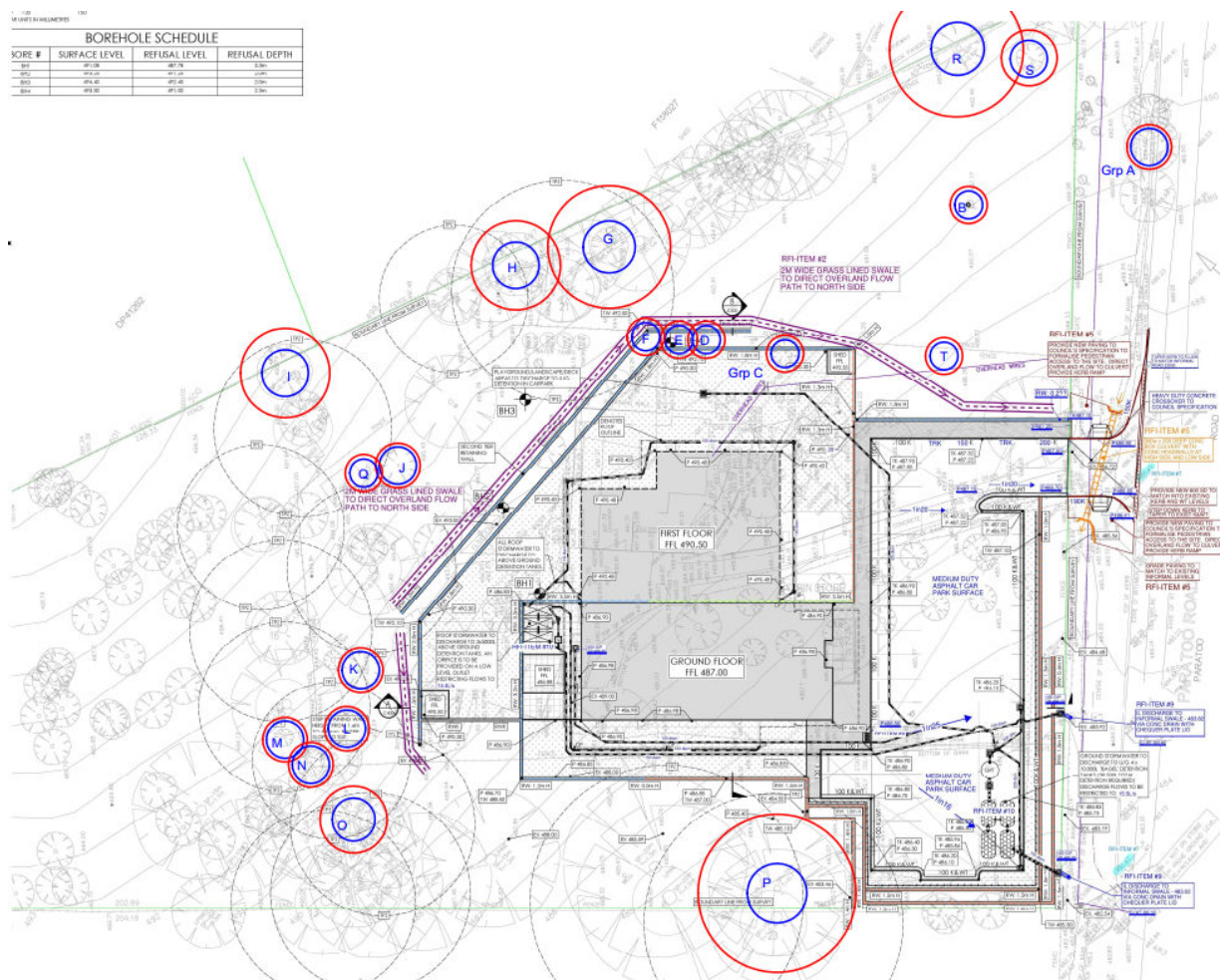


Figure 5-5 – Non-regulated Native Trees

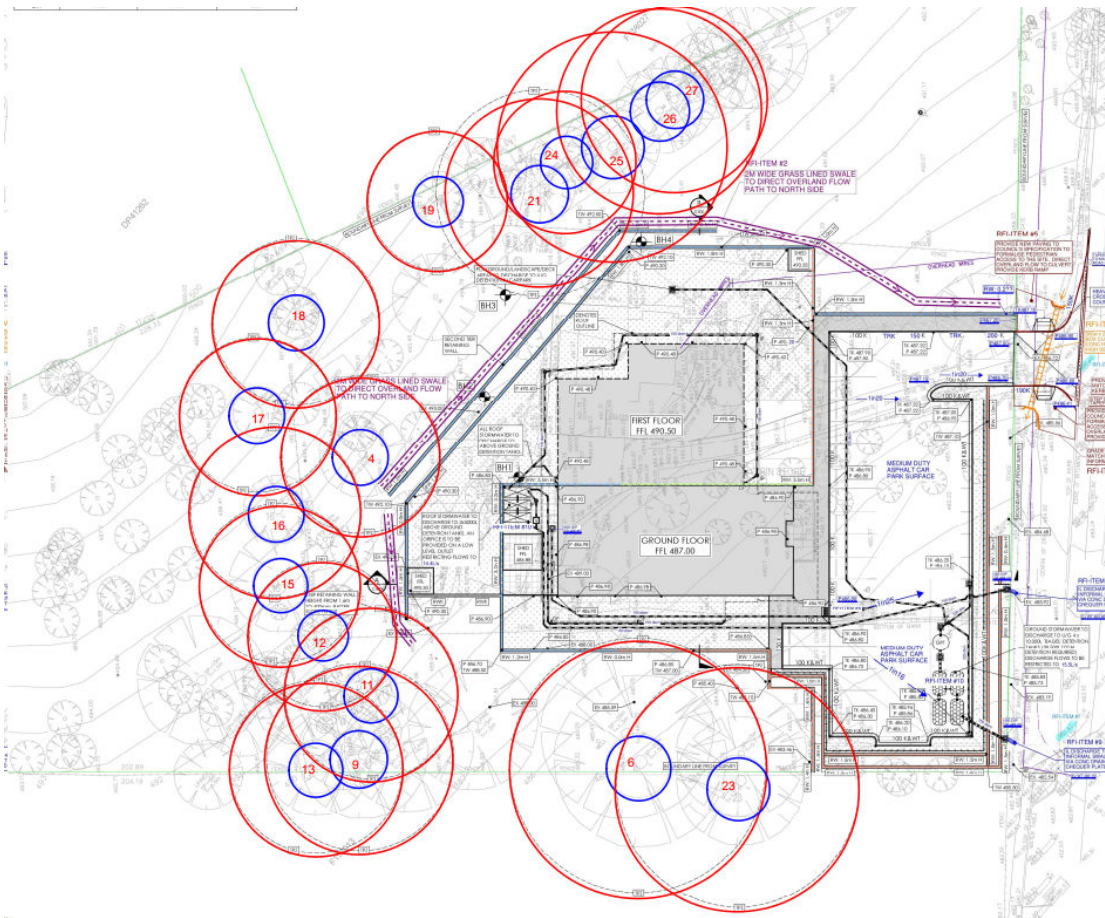


Figure 5-6 - Regulated and Native Trees

Tree damaging activities are identified in the supporting letter by Project Green provided in Appendix 8, whilst a Native Vegetation Data Report prepared by JS Ayre and Associates is provided in Appendix 9.

Referencing the native vegetation report, the development involves the removal of the 20 trees including:

- 16 Eucalyptus Oblique saplings (Trees DEF in Figure 5-5);
- Three (3) young Acacia Melanoxyloids (Group C in Figure 5-5); and
- One (1) medium sized Eucalyptus Oblique (Tree 4 in Figure 5-6).

However, the development will retain 16 non-regulated native trees and 17 regulated native trees including five significant native trees.

The medium sized Eucalyptus Oblique is also a Regulated Tree. Although not earmarked for removal, as the proposed development works constitute a 'major encroachment' into the identified Tree Protection Zone, this application also seeks consent to remove this tree.

All other regulated, significant and native trees are to be retained.



## 5.9. External Lighting

A lighting plan prepared by TMK is attached as **Appendix 10**. The location of all proposed lighting has also been reflected on the revised architectural drawings.

Lighting is wall mounted and flood lights attached to the building and bollard style lights installed along the south-eastern end of the carpark. All lighting will be designed in accordance with the Australian Standards.

## 5.10. Advertising

The application seeks consent for two non-illuminated advertising areas comprising dimensions of 1.9 metres x 0.67 metres and 1.5 metres x 1.5 metres. As the operator for the facility is yet to be confirmed, the content to displayed remains unknown at this stage. Notwithstanding, we confirm that the advertising will be for identification purposes and limited to the name of the operator.



## 6. PROCEDURAL REQUIREMENTS

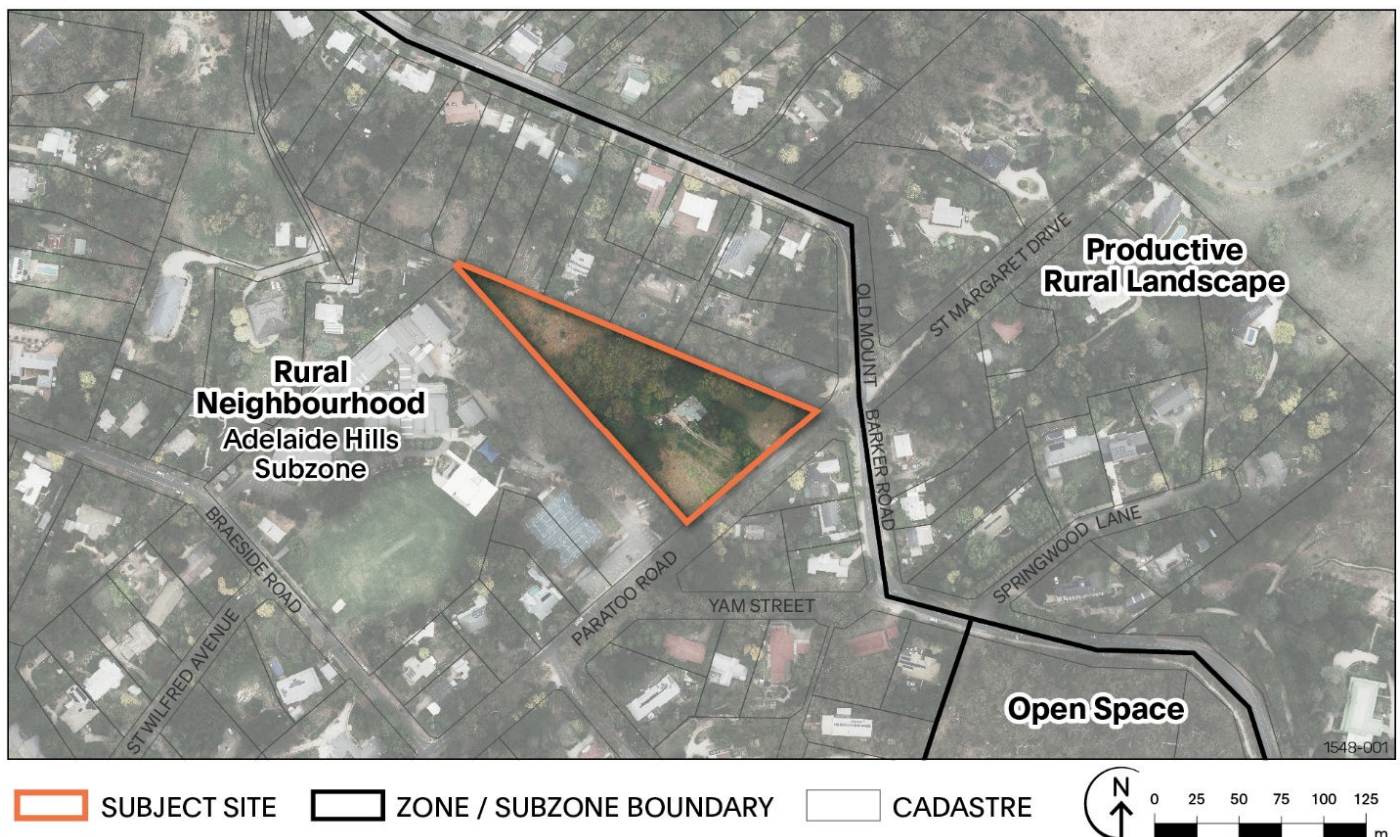
### 6.1. Relevant Authority

The relevant authority to determine the development application will be the Adelaide Hills Council Assessment Panel or the Council Assessment Manager as per Section 93(1)(a) or 96 of the PDI Act.

### 6.2. Policy Framework

The Planning and Design Code (Version 2023.8), in conjunction with the SA Property and Planning Atlas (SAPPA), identifies that the Site is located within the **Rural Neighbourhood Zone**, and the **Adelaide Hills Sub Zone**. Zoning for the Site and immediate locality is illustrated in Figure 6-1 below.

Figure 6-1: Zoning Map



The following Overlays and Technical and Numeric Variations (TNVs) also apply to the subject site:

**Overlays**

- Hazards (Bushfire – Medium Risk)
- Hazards (Flooding – Evidence Required)
- Mount Lofty Ranges Water Supply (Catchment (Area 2)
- Native Vegetation
- Prescribed Water Resources Area
- Regulated and Significant Trees

**Local Variation (TNV)**

- Minimum Site Area of 2,000m<sup>2</sup>

### 6.3. Nature of Development

The nature of development is described as follows:

*“Proposed two-storey childcare centre with 128 places, together with the removal of one (1) regulated tree, associated earthworks, retaining walls, fencing, decking, carparking and landscaping.”*

A child care centre is a form of ‘child care facility’ which is defined within Part 7 of the Code as follows:

*“Means a place primarily for the care or instruction of a 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.”*

The following classifications are assigned to each ‘element’:

Element	Classification	Provisions assigned by Code?
Child care facility (child care centre)	Performance Assessed	No
Retaining Walls & earthworks	Performance Assessed	Yes
Decking	Performance Assessed	Yes
Fencing	Performance Assessed	Yes
Tree Damaging Activity	Performance Assessed	No
Non-illuminated advertising display	Performance Assessed	No

## 6.4. Public Notification

All forms of development within the Rural Neighbourhood Zone are subject to notification except where otherwise listed as an excluded (exempt) form of development within Table 5. Because a ‘child care facility’ is not listed as an exempt form of development, the proposal will be subject to public notification.

## 6.5. Agency Referrals

Agency referrals are prescribed by individual Overlays (Procedural Matters – Referral), with additional agency referrals prescribed within Part 9 – Referrals of the Planning and Design Code.

The application is subject to an assessment against the provisions of the Native Vegetation Overlay which prescribes that a referral to the Native Vegetation Council is required for development where the level of native vegetation clearance (or potential clearance) is categorised as a ‘Level 3’ or ‘Level 4’ clearance.

The Native Vegetation Data Report prepared by JS Ayre and Associates categorises the level of native vegetation clearance (or potential clearance) as a ‘Level 3 clearance’. On this basis, the application is subject to a referral to the Native Vegetation Council.

## 7. PLANNING ASSESSMENT

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.

### 7.1. Land Use and Intensity

The following PO's of the Rural Neighbourhood Zone and Adelaide Hills Subzone are relevant to the assessment of the proposed land use and its intensity.

#### **Rural Neighbourhood Zone**

- PO 1.1:** *Predominantly residential development with complementary ancillary non-residential uses compatible with a spacious and peaceful lifestyle for individual households.*
- PO 1.3:** *Non-residential development sited and designed to complement the residential character and amenity of the neighbourhood.*
- PO 1.4:** *Non-residential development located and designed to improve community accessibility to services, primarily in the form of:*
- (a) small-scale commercial uses such as offices, shops and consulting rooms*
  - (b) community services such as educational establishments, community centres, places of worship, pre-schools and other health and welfare services*
  - (c) services and facilities ancillary to the function or operation of supported accommodation or retirement facilities*
  - (d) open space and recreation facilities*

#### **Adelaide Hills Subzone**

- PO 1.1:** *A limited additional range of accommodation options that complement the prevailing residential character.*

PO 1.1 of the Rural Neighbourhood Zone contemplates rural residential development together with a range of complementary non-residential uses which are compatible with the amenity and character of the locality. The corresponding DPF lists a 'child care facility' as a contemplated use. The Adelaide Hills subzone also contemplates other forms of accommodation, including Supported Accommodation and Tourist Accommodation, where the establishment of such accommodation 'embraces' the values of established mature vegetation which is characteristic of a locality. Importantly, those uses listed for the subzone are *additional* to those referenced more generally for the Rural Neighbourhood Zone. Accordingly, as a contemplated use, it is our view that a child centre is an appropriate use for the Site.

Zone PO 1.3 seeks to ensure non-residential development is sited and designed to complement the residential character and amenity of the neighbourhood. PO 1.4 provides further guidance and is particularly relevant to the intent of the policy with respect to the scale of various forms of non-residential development. PO 1.4(a) refers to 'commercial uses' including "*offices, shops and consulting rooms*" whilst PO 1.4(b) refers to 'community service' uses including "*educational facilities, community centres, places of worship, child care facilities and other health and welfare services*".

Whereas the Zone provisions (PO 1.2 and PO 1.4(a)) specifically seek to restrict the ‘scale’ of commercial uses, the Code does not apply such limitations to community service uses (including child care centres). Conversely, various community service uses specifically contemplated within the Zone (including educational establishments and places of worships) are (by their very nature) generally larger in scale and of greater intensity when compared with childcare centres.

As previously discussed, the subject site is ideally positioned next to the Stirling East Primary School which occupies a site of some 33,500m<sup>2</sup>, accommodates several carparks and various institutional buildings and recreational facilities (including a sports ground and two tennis courts). The school is also situated within the Rural Neighbourhood Zone and Adelaide Hills Subzone and forms a notable visual element and feature of the locality. In-light of this adjoining land use and its significant influence on the existing character of the locality, we are of the opinion the proposed childcare centre is compatible with the established character of the locality and is thus aligned with the intent of PO 1.1, 1.3 and 1.4.

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.

## 7.2. Design

### 7.2.1. Building Heights and Setbacks

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 PO’s and DPF’s pertaining to building height, setbacks and site coverage, as detailed in the analysis provided in Table 1 below.

Table 1 – Height and Setback Analysis

Performance Outcome and Designated Performance Feature	Assessment
<p><b>PO 2.1</b> <i>Buildings contribute to a low-rise residential character and complement the height of nearby buildings.</i></p> <p><b>DPF 2.1</b> <i>Building height (excluding garages, carports and outbuildings) is no greater than 2 building levels and 9m and wall height no greater than 7m (not including a gable end)</i></p>	<p>At its north-eastern end, the childcare centre comprises one level and 5.2 metres, and increases in height to two levels and 8.8 metres at its south-western end to account for the notable decline in land topography. Accordingly, the proposed building height and scale satisfies DPF 2.1.</p>
<p><b>PO 3.1</b> <i>Buildings are set back from primary street boundaries consistent with the existing streetscape.</i></p> <p><b>DPF 3.1</b> <i>Buildings setback from the primary street boundary in accordance with the following table:</i></p>	<p>The adjoining residence to the north which occupies 140 Old Mount Barker Road comprises an approximate setback of 17 metres from primary frontage, whilst the closest adjacent residence to the south-west (29 Paratoo Road) accommodates a front setback of some 13 metres. There is no comparable building setback for the adjoining school.</p> <p>In the absence of a clearly defined and consistent setback within this section of Paratoo Road, we are of the opinion that the proposed</p>

Performance Outcome and Designated Performance Feature		Assessment										
<table border="1"> <thead> <tr> <th>Development Context</th> <th>Minimum setback</th> </tr> </thead> <tbody> <tr> <td>There is an existing building on both abutting sites sharing the same street frontage as the <u>site</u> of the proposed building.</td> <td>The average setback of the existing buildings.</td> </tr> <tr> <td>There is an existing building on only one abutting <u>site</u> sharing the same street frontage as the <u>site</u> of the proposed building and the existing building is not on a corner <u>site</u>.</td> <td>The setback of the existing building.</td> </tr> <tr> <td>There is an existing building on only one abutting <u>site</u> sharing the same street frontage as the <u>site</u> of the proposed building and the existing building is on a corner <u>site</u>.</td> <td>(a) Where the existing building shares the same <u>primary street</u> frontage – the setback of the existing building (b) Where the existing building has a different <u>primary street</u> frontage - 8m</td> </tr> <tr> <td>There is no existing building on either of the abutting sites sharing the same street frontage as the <u>site</u> of the proposed building.</td> <td>8m</td> </tr> </tbody> </table>	Development Context	Minimum setback	There is an existing building on both abutting sites sharing the same street frontage as the <u>site</u> of the proposed building.	The average setback of the existing buildings.	There is an existing building on only one abutting <u>site</u> sharing the same street frontage as the <u>site</u> of the proposed building and the existing building is not on a corner <u>site</u> .	The setback of the existing building.	There is an existing building on only one abutting <u>site</u> sharing the same street frontage as the <u>site</u> of the proposed building and the existing building is on a corner <u>site</u> .	(a) Where the existing building shares the same <u>primary street</u> frontage – the setback of the existing building (b) Where the existing building has a different <u>primary street</u> frontage - 8m	There is no existing building on either of the abutting sites sharing the same street frontage as the <u>site</u> of the proposed building.	8m		<p>building setback is appropriate, with the positioning and setback of the carpark generally consistent with that associated within the adjoining school.</p>
Development Context	Minimum setback											
There is an existing building on both abutting sites sharing the same street frontage as the <u>site</u> of the proposed building.	The average setback of the existing buildings.											
There is an existing building on only one abutting <u>site</u> sharing the same street frontage as the <u>site</u> of the proposed building and the existing building is not on a corner <u>site</u> .	The setback of the existing building.											
There is an existing building on only one abutting <u>site</u> sharing the same street frontage as the <u>site</u> of the proposed building and the existing building is on a corner <u>site</u> .	(a) Where the existing building shares the same <u>primary street</u> frontage – the setback of the existing building (b) Where the existing building has a different <u>primary street</u> frontage - 8m											
There is no existing building on either of the abutting sites sharing the same street frontage as the <u>site</u> of the proposed building.	8m											
<p><b>PO 5.1</b> <i>Buildings are set back from side boundaries to allow maintenance and access around buildings and minimise impacts on adjoining properties.</i></p> <p><b>DPF 5.1</b> <i>Building walls are set back from the side boundaries at least 2m.</i></p>		<p>The building is set back approximately 18.4 metres from the north-eastern boundary and approximately 20 metres from the south-western boundary. Building setbacks maintain the semi-rural character of the locality and also assists with the management of visual impacts and the preservation of residential amenity. The development comfortably exceeds the minimum prescribed side setbacks set out in DPF 5.1.</p>										
<p><b>PO 6.1</b> <i>Buildings are set back from rear boundaries to provide:</i></p> <p>(a) <i>separation between dwellings in a way that complements the established character of the locality</i> (b) <i>access to natural light and ventilation for neighbours</i> (c) <i>open space recreational opportunities</i> (d) <i>space for landscaping and vegetation.</i></p> <p><b>DPF 6.1</b> <i>Building walls are set back from the rear boundary at least 6m.</i></p>		<p>The building's rear setback comfortably exceeds the minimum setback of 6 metres referenced within DPF 6.1. This generous setback, coupled with dense vegetation to be retained will ensure that no part of the childcare centre will be visible from adjoining residences to the rear.</p>										

Further to the above discussion, the proposed development has been designed to satisfy all DPF provisions pertaining to height and setbacks.

We also note that the Code does not prescribe a maximum site coverage rate for development proposed within the Rural Neighbourhood Zone. Notwithstanding, the proposed site coverage rate of 10% is extremely low and is consistent with the low-density residential development which characterises the locality.

## 7.2.2. Building Materiality

The following General Policy (Design) provisions of the Code are particularly relevant to the external appearance of the building:

### **Design in Urban Areas**

- PO 1.1:** *Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).*
- PO 1.2:** *Where zero or minor setbacks are desirable, development provides shelter over footpaths (in the form of verandahs, awnings, canopies and the like, with adequate lighting) to positively contribute to the walkability, comfort and safety of the public realm.*
- PO 1.3:** *Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points and complement the streetscape.*
- PO 1.4:** *Plant, exhaust and intake vents and other technical equipment are integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity by:*
- (a) positioning plant and equipment discretely, in unobtrusive locations as viewed from public roads and spaces*
  - (b) screening rooftop plant and equipment from view*
  - (c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses.*
- PO 1.5:** *The negative visual impact of outdoor storage, waste management, loading and service areas is minimised by integrating them into the building design and screening them from public view (such as fencing, landscaping and built form), taking into account the form of development contemplated in the relevant zone.*

The external material palette (including hebel panelling, weatherboard, vertical timber battens and Colorbond® roofing) and neutral colour tones comprising off whites, browns and greys are highly compatible with the residential setting and are also materials typically applied to the construction of dwellings.

Similarly, architectural features of the building, including modest gable ended roof forms, projecting verandahs, window design, size and placement will create visual interest and are also reflective of architectural features typically applied to dwellings. Accordingly, the building design generally aligns with the intent of Zone PO 1.3:

- PO 1.3:** *Non-residential development sited and designed to complement the residential character and amenity of the neighbourhood.*

Vertical timber battens to the first floor articulates this primary façade, defines the primary point of entrance to the building whilst also reinforcing the building's south-western corner (PO 1.1, 1.2 and 1.3).

In accordance with PO 1.4, mechanical plant is positioned to the rear (north-west) of the building and will not be visible from the public realm, whilst the upper level 'dry court' facing south-west will be enclosed and screened from public view. Similarly, the dedicated waste storage area will be entirely concealed from public viewing as required by PO 1.5.

As discussed above, in our opinion the proposed material and colour palette and building form will complement the established residential character of the locality in accordance with the relevant Zone and Design in Urban Areas provisions of the Code.

### 7.2.3. Crime Prevention Through Environmental Design

The General Policy (Design - Safety) provisions seek to ensure development incorporates design techniques to discourage crime by maintaining and maximising opportunities for passive surveillance, the differentiation of public and private spaces and accommodating safe and perceptible paths of travel to a clearly defined building entrance.

The proposed development incorporates an open carpark positioned between the childcare centre and Paratoo Road. The landscape design includes plantings selected to soften the visual impact of the carpark whilst still maintaining lines-of-sight for passive surveillance. This landscaping, combined with terraced walling along the Paratoo Road frontage will create a clear demarcation between public and private spaces.

Windows overlooking the carpark together with picket-styled fencing enclosing Outdoor Play Space 1 will also create opportunities for passive surveillance of the carpark.

Light affixed to the building and throughout the carpark (detailed within **Appendix 10**) will also facilitate views for passive surveillance, and deter antisocial activity within the carpark whilst the facility is not in operation.

Further to the above discussion, the proposed development is aligned with the relevant 'safety' provisions of the Code.

## 7.3. Fencing, Retaining Walls, Decking Landscaping

### 7.3.1. Fencing, Retaining Walls and Decking

The relevant Code provisions relating to fencing retaining walls and decking are listed within Table 3 (Applicable Policies for Performance Assessed Development) of the Rural Neighbourhood Zone. Our assessment against the relevant provisions is provided in Table 2 below.

Table 2. Retaining Walls, Fencing and Decking Analysis

Performance Outcome and Designated Performance Feature	Assessment
<b>Native Vegetation Overlay</b>	
<b>PO 1.1:</b> <i>Development avoids, or where it cannot be practically avoided, minimises the clearance of native vegetation taking into account the siting of buildings, access points, bushfire protection measures and building maintenance.</i>	The native vegetation data report (Appendix 9) addresses those native trees which require removal to accommodate the development. We note that the majority of vegetation designated for removal are



Performance Outcome and Designated Performance Feature	Assessment
<p><b>DPF 1.1 (Decking Only)</b> An application is accompanied by: .... (b) a report prepared in accordance with Regulation 18(2)(a) of the Native Vegetation Regulations 2017 that establishes that the clearance is categorised as 'Level 1 clearance'.</p> <p><b>PO 1.2:</b> Native vegetation clearance in association with development avoids the following: (a) significant wildlife habitat and movement corridors (b) rare, vulnerable or endangered plants species (c) native vegetation that is significant because it is located in an area which has been extensively cleared (d) native vegetation that is growing in, or in association with, a wetland environment.</p> <p><b>PO 1.4</b> Development restores and enhances biodiversity and habitat values through revegetation using locally indigenous plant species.</p>	<p>saplings, and the applicant has committed to making the SEB payment to offset the intended removal of native vegetation.</p> <p>The vegetation plan contained within <b>Appendix 7</b> illustrates that the development footprint has been sympathetically designed and sited to minimise impacts to the majority of mature vegetation (including regulated and significant trees which occupy the site). In this regard the development is generally aligned with requirement of PO 1.2.</p>
<b>Mount Lofty Ranges Water Supply Catchment (Area 2) Overlay</b>	
<p><b>PO 3.9</b> Stormwater from excavated and filled areas is managed to protect water quality.</p> <p><b>PO 4.1</b> Development minimises the need to modify landscapes and natural features.</p>	<p>Earthworks in form of excavation and fill is required to accommodate the proposed development, and is largely unavoidable given the notable grade of the land. Notwithstanding, the split-level building has been designed to follow the contours of the land, and thus minimise earthworks. Terracing and tiered retaining walls are also proposed to minimise retaining wall heights and to preserve the natural landform wherever practical. The landscape design includes plantings specifically selected to screen retaining walls and the stormwater management plan prepared by CPR demonstrates how all surface water will be collected and treated to preserve water quality.</p>
<b>Regulated and Significant Tree Overlay</b>	
<p><b>PO 3.1</b> Land division results in an allotment configuration that enables its subsequent development and the retention of regulated and significant trees as far as is reasonably practicable.</p>	<p>Whilst the development does not involve the division of land, the development (including earthworks, retaining walls and fencing) has been sited and designed to minimise adverse impacts on existing regulated and significant trees. In particular Section 6.4 confirms that no part of the development will encroach defined Structural Root Zones and will only result 'minor' encroachments into Tree Protection Zones.</p>
<b>Clearance from Overhead Powerlines -General Development Policies</b>	
<p><b>PO 1.1</b> Buildings are adequately separated from aboveground powerlines to minimise potential hazard to people and property.</p> <p><b>DPF 1.1</b> One of the following is satisfied:</p>	<p>Proposed fencing and retaining walls will not interfere with any overhead powerlines, and the prescribed electricity declaration form has been signed as per DPF 1.1.</p>

Performance Outcome and Designated Performance Feature	Assessment
<p>(a) a declaration is provided by or on behalf of the applicant to the effect that the proposal would not be contrary to the regulations prescribed for the purposes of section 86 of the Electricity Act 1996</p> <p>(b) there are no aboveground powerlines adjoining the site that are the subject of the proposed development.</p>	

Design – General Development Policies	
<p><b>PO 9.1</b> Fences, walls and retaining walls are of sufficient height to maintain privacy and security without unreasonably impacting the visual amenity and adjoining land's access to sunlight or the amenity of public places.</p> <p><b>PO 9.2</b> Landscaping incorporated on the low side of retaining walls is visible from public roads and public open space to minimise visual impacts</p>	<p>The proposed fencing has been sited and designed to maintain the natural character which defines the locality. In particular, all proposed fencing is positioned to the side or rear of the building, with no fencing extending forward of the building line.</p> <p>Solid Colorbond® fencing is positioned to the rear and side of the building, with fencing visible from the public realm limited to 1.8 metre high picket style fencing to complement the natural character of the locality.</p> <p>Retaining consists of a series of tiered walls to support terraces and landscaping designed to minimise visual impacts. In addition to the tiered retaining walls required for the carpark, the visible retaining wall beneath Outdoor Play 3 (adjacent the carpark) is to be rendered and finished in a colour to match the proposed building. The retaining wall also includes a door which provides access to the waste store and has been designed to appear as an extension to the ground level of the south-eastern elevation. Accordingly, whilst highly visible from the public realm, this retaining wall has been designed as an integrated element of the proposed building.</p>

Transport Access and Parking – General Development Policies	
<p><b>PO 2.2</b> Walls, fencing and landscaping adjacent to driveways and corner sites are designed to provide adequate sightlines between vehicles and pedestrians.</p> <p><b>PO 10.1</b> Development is located and designed to ensure drivers can safely turn into and out of public road junctions.</p>	<p>The traffic and parking assessment performed by CIRQA confirms that the access points maintain adequate sightlines in accordance with the relevant Australian Standards. Similarly, this same assessment confirms that driveway has been designed to accommodate safe and convenient vehicle movements.</p>

Design – General Development Policies (Decking Only)	
<p><b>PO 8.1</b> Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.</p> <p><b>DPF 8.1</b> Development does not involve any of the following:</p> <p>(a) excavation exceeding a vertical height of 1m</p> <p>(b) filling exceeding a vertical height of 1m</p> <p>(c) a total combined excavation and filling vertical height of 2m or more.</p>	<p>The proposed decking will be constructed at the ground level and will be screened entirely from the public realm by proposed fencing. The decking is also generously separated from all adjoining residential properties and will not result in any overlooking.</p>

Performance Outcome and Designated Performance Feature	Assessment
<p><b>PO 33.1</b> Decks are designed and sited to:</p> <ul style="list-style-type: none"> <li>(a) complement the associated building form</li> <li>(b) minimise impacts on the streetscape through siting behind the building line of the principal building (unless on a significant allotment or open space)</li> <li>(c) minimise cut and fill and overall massing when viewed from adjacent land.</li> </ul> <p><b>DPF 33.1</b> Decks:</p> <ul style="list-style-type: none"> <li>(b) where in association with a non-residential use:               <ul style="list-style-type: none"> <li>(i) are set back at least 2 metres from the boundary of an allotment used for residential purposes.</li> <li>(ii) are set back at least 2 metres from a public road.</li> <li>(iii) have a floor area not exceeding 25m<sup>2</sup></li> </ul> </li> <li>(c) in all cases, has a finished floor level not exceeding 1 metre above natural ground level at any point.</li> </ul>	
<p><b>PO 33.2</b> Decks are designed and sited to minimise direct overlooking of habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones through suitable floor levels, screening and siting taking into account the slope of the subject land, existing vegetation on the subject land, and fencing.</p>	
<p><b>DPF 33.2</b> Decks with a finished floor level/s 500mm or more above natural ground level facing side or rear boundaries shared with a residential use in a neighbourhood-type zone incorporate screening with a maximum of 25% transparency/openings, permanently fixed to the outer edge of the deck not less than 1.5 m above the finished floor level/s.</p>	
<p><b>PO 33.3</b> Decks used for outdoor dining, entertainment or other commercial uses provide carparking in accordance with the primary use of the deck.</p>	
<p><b>DPF 33.3</b> Decks used for commercial purposes do not result in less on-site car parking for the primary use of the subject land than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.</p>	

Further to above analysis, we are of the opinion that the proposed design and height of the retaining walls and all associated fencing is aligned with the prescribed provisions of the Code.

### 7.3.2. Landscaping

The following General Development Policies (Design) provisions are relevant to the landscape design prepared by Das Studio (**Appendix 3**):

- PO 3.1:** *Soft landscaping and tree planting are incorporated to:*
  - (a) minimise heat absorption and reflection*
  - (b) maximise shade and shelter*
  - (c) maximise stormwater infiltration*
  - (e) enhance the appearance of land and streetscapes.*
- PO 7.2:** *Vehicle parking areas appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like.*
- PO 7.4:** *Street-level vehicle parking areas incorporate tree planting to provide shade, reduce solar heat absorption and reflection.*
- PO 7.5:** *Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.*
- PO 7.6:** *Vehicle parking areas and associated driveways are landscaped to provide shade and positively contribute to amenity.*
- PO 7.7:** *Vehicle parking areas and access ways incorporate integrated stormwater management techniques such as permeable or porous surfaces, infiltration systems, drainage swales or rain gardens that integrate with soft landscaping.*
- PO 9.2:** *Landscaping incorporated on the low side of retaining walls is visible from public roads and public open space to minimise visual impacts.*

Retaining walls to the perimeter of the carpark have been terraced to support landscaping, including plant species specifically selected to screen these walls when viewed from the public realm, as per PO 9.2.

Plantings at the carpark level incorporate low lying shrubs, grounds covers and mass plantings interspersed between small trees selected to soften the visual impact of hard-stand areas, provide shade to parked vehicles and soften the visual impact of the childcare centre whilst still maintaining sightlines for passive surveillance (PO 3.1, 7.2, 7.4, 7.5, 7.6, 7.7).

Plantings are also proposed throughout the lower and upper levels of the outdoor play areas, with such plantings including small-to-medium sized trees capable of growing above the height of boundary fencing to soften the vertical scale of the building. Importantly, the proposed landscape will supplement existing mature vegetation which is to be retained.

Further the above discussion, we are of the opinion that the proposed landscape design is well considered, with plantings specifically selected to positively contribute to the amenity, soften the appearance of the building and provide visual relief for the proposed carpark and terraced retaining walls. In our opinion, the landscape design is highly aligned with the relevant landscape provisions of the Code.

## 7.4. Earthworks

PO's 8.1 to 8.5 of the General Development (Design) Module seek to ensure development is designed to minimise earthworks, limit disturbance to natural topography, whilst still facilitating safe and convenient access to/from carparks (including compliant gradients).

As previously discussed, the building incorporates a split-level design, which follows the natural grade of the land to limit bulk earthworks as well as the extent of cut and fill required for the development. Notwithstanding this split-level design, earthworks are unavoidable given the notable slope of the land, towards the south-western corner of the allotment.

As mentioned above, the visual impact of both cut and fill is minimised and managed via the use of terraced retaining walls and landscaping to obscure/screen views of the walls from the public realm. Retaining walls visible from the public realm are required to accommodate a grade compliant carpark. Notwithstanding, the carpark incorporates a downward gradient of approximately 2 metres from north-east to the south-west. This design feature maintains a compliant carpark crossfall whilst also limiting the extent of earthworks and retaining required for the carpark.

In relation to environmental impacts during construction, we note the following commentary provided by CPR Engineers:

*"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." (CPR SMP, Rev. B, June 23)*

Further to the above discussion, we are of the opinion that the proposed development has been designed to minimise earthworks in accordance with relevant Design provisions of the Code. Additionally, the visual impacts of such earthworks has been addressed via the use of terraced retaining walls, designed and located to limit heights and to accommodate landscaping to mitigate visual impacts.

## 7.5. Tree Impacts

The proposed development is subject to an assessment against the Native Tree Overlay and Regulated and Significant Tree Overlay.

Native trees are protected under the *Native Vegetation Act 1991*, whilst regulated and significant trees are protected under the *PDI Act 2016*. Section 137(1) of the PDI Act provides the following additional guidance in relation to the interaction of controls under the PDI Act and the *Native Vegetation Act 1991*:



*The requirement to obtain approval under this Act for a tree-damaging activity in relation to a regulated tree applies despite the fact that the activity may be permitted under the Native Vegetation Act 1991.*

There are 32 native trees located in proximity to the subject site, including 17 regulated trees, of which five of these are significant. An assessment against the provisions of the Native Vegetation Tree Overlay and Regulated and Significant Tree Overlay is provided below.

### 7.5.1. Native Vegetation

The Native Vegetation Clearance Data Report prepared by JS Ayre and Associates identifies and evaluates the impacts of the development on native vegetation (**Appendix 9**). The discussion below makes reference to the tree numbering contained within the Native Vegetation Clearance Data Report.

PO 1.1 of the Native Vegetation Overlay seeks to ensure development is designed to minimise impacts on native vegetation:

**PO 1.1:** *Development avoids, or where it cannot be practically avoided, minimises the clearance of native vegetation taking into account the siting of buildings, access points, bushfire protection measures and building maintenance.*

As detailed in the Native Vegetation Clearance Data Report, the proposed development will require the removal of the 20 native trees. However, of these those trees proposed for removal, 16 are saplings and three are young trees (Tree groups 11 and 18 respectively) which offer limited aesthetic, habitat or environmental value. Although not referenced within the report (which deals only with those native trees being removed), the building footprint has also been sympathetically designed and sited to retain 32 native trees, including 12 regulated trees and five (5) significant trees which provide the greatest aesthetic and environmental benefit.

Further, the removal of the tree groups 11 and 18 is largely unavoidable and is attributable to the extensive slope of the land and associated earthworks and retaining required to create a benched area for useable outdoor play space. In relation to Tree 5, its removal is required to accommodate drainage infrastructure requested by Council.

On this basis, the development has been designed to minimise native vegetation removal and the proposal is generally aligned with the provisions of the Native Vegetation Overlay.

### 7.5.2. Regulated and Significant Trees

The letter prepared by Project Green identifies each Regulated and Significant Tree (including Structural Root Zones and Tree Protection Zones) and provides commentary on the development-related impacts on each tree (**Appendix 8**).

Situated in proximity to the proposed development are 17 regulated trees (including five significant trees). The location of each tree and their Tree Protection Zones (TPZ's) and Structural Root Zone (SRZ's) are illustrated in **Figure 7-1**. Encroachment levels into nominated TPZ's are illustrated in **Table 3**.

The following provisions of the Regulated and Significant Tree Overlay apply to the development:

**PO 1.1:** *Regulated trees are retained where they:*

- (a) make an important visual contribution to local character and amenity*
- (b) are indigenous to the local area and listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species and / or*
- (c) provide an important habitat for native fauna.*

**PO 1.2:** *Significant trees are retained where they:*

- (a) make an important contribution to the character or amenity of the local area*
- (b) are indigenous to the local area and are listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species*
- (c) represent an important habitat for native fauna*
- (d) are part of a wildlife corridor of a remnant area of native vegetation*
- (e) are important to the maintenance of biodiversity in the local environment and / or*
- (f) form a notable visual element to the landscape of the local area.*

**PO 1.4:** *A tree-damaging activity in connection with other development satisfies all the following:*

- (a) it accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible*
- (b) in the case of a significant tree, all reasonable development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.*

**PO 2.1:** *Regulated and significant trees, including their root systems, are not unduly compromised by excavation and / or filling of land, or the sealing of surfaces within the vicinity of the tree to support their retention and health.*

PO 1.3, 1.4 and 2.1 of the Regulated and Significant Tree Overlay seek to ensure development is designed to minimise 'tree damaging activities' including such activities generated by earthworks, trenching for infrastructure, retaining walls etc.

As noted within Table 3, the development has been sited to completely avoid the TPZ's of 12 trees and will result in only 'minor encroachments' (of less than 10%) into the TPZ's of four trees. In this regard, Project Green notes the following:

*"For most trees the proposed works comprise a minor encroachment under AS4970 (<10% of TPZ and outside SRZ). This encroachment can be offset by the open areas of the site contiguous with the TPZs and would be acceptable in relation to the trees"*

In relation to Regulated Tree 4 (also a native tree), Project Green notes that the inclusion of a drainage swale for the development will result in a major encroachment of greater than 10% into the TPZ. The inclusion of a drainage swale follows a request from Council to manage external drainage flows. Accordingly, the damage associated with the installation of drainage swale is largely unavoidable if stormwater drainage is to occur in accordance with Council's requirements, as per PO 1.4(a) of the Regulated and Significant Tree Overlay. We note that the clients preference is to modify the design of the drainage swale to enable the retention of Tree 4.

Further to the above discussion, the proposed development has been carefully designed to preserve and protect all native, regulated and significant trees in accordance with the relevant overlay provisions within the Code.

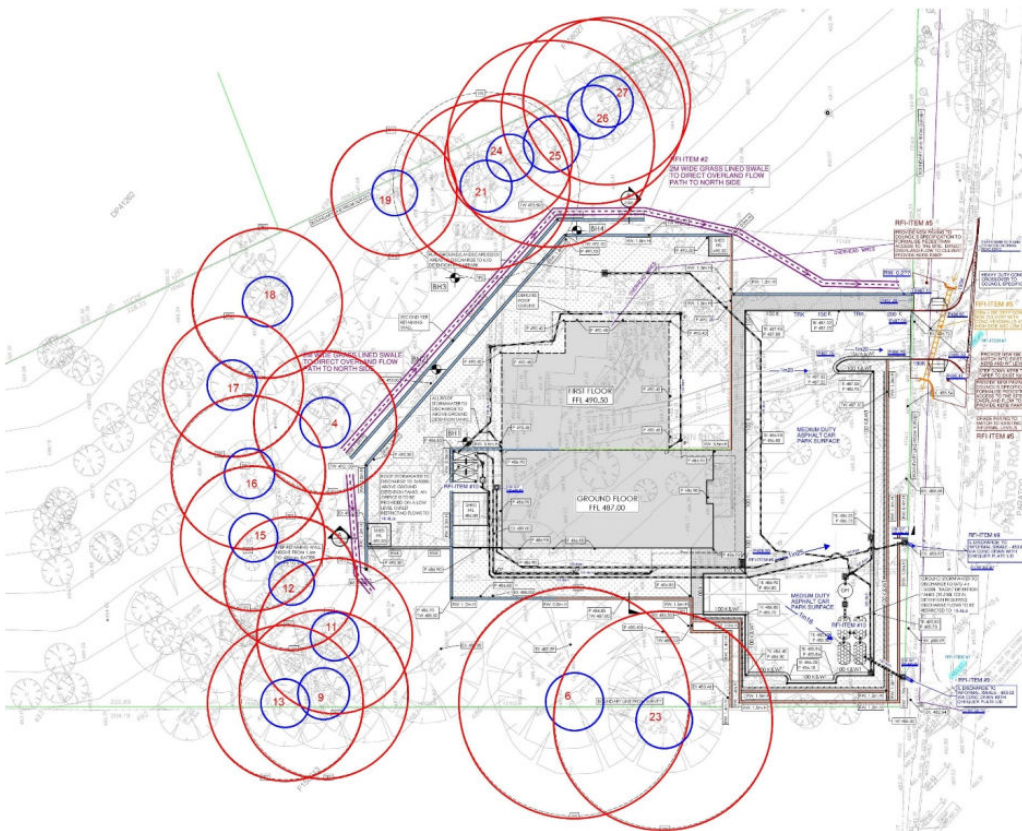


Figure 7-1 - Regulated and Significant Trees



Tree No.	Species	Circ. @1m	TPZ (radius m)	SRZ (radius m)	Encroachment (%)
<b>Native &gt;2m circ.</b>					
4	<i>Eucalyptus obliqua</i>	2.4m	9.12	3.2	16.5
6	<i>Eucalyptus obliqua</i>	3.7m	14.76	3.7	2.2
9	<i>Eucalyptus obliqua</i>	2.8m	10.80	3.3	-
11	<i>Eucalyptus obliqua</i>	2.6m	9.96	3.1	3.0
12	<i>Eucalyptus obliqua</i>	2.1m	8.52	2.9	-
13	<i>Eucalyptus obliqua</i>	2.6m	9.96	3.1	-
15	<i>Eucalyptus obliqua</i>	2.4m	9.24	3.1	-
16	<i>Eucalyptus obliqua</i>	2.6m	9.84	3.2	-
17	<i>Eucalyptus obliqua</i>	2.4m	9.0	3.2	-
18	<i>Eucalyptus obliqua</i>	2.5m	9.60	3.2	-
19	<i>Eucalyptus obliqua</i>	2.1m	8.04	2.9	-
21	<i>Eucalyptus obliqua</i>	3.0m	10.8	3.3	5.2
23	<i>Eucalyptus obliqua</i>	>3m	14.0	3.6	6.5
24	<i>Eucalyptus obliqua</i>	2.2m	8.16	3.0	-
25	<i>Eucalyptus obliqua</i>	3.5m	13.20	3.6	7.8
26	<i>Eucalyptus obliqua</i>	3.1m	11.76	3.4	-
27	<i>Eucalyptus obliqua</i>	2.8m	10.68	3.3	-

Table 3 - Regulated tree data summary

## 7.6. Acoustic Impacts

Provided in **Appendix 4** is the Environmental Noise Assessment performed by Sonus.

Noise source features/activities associated with the operation of the childcare centre includes:

- Noise generated by child activities occurring within designated outdoor play spaces;
- Noise generated by carpark activity including:

- 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 onto the site;
- The operation of air conditioning units; and
- Refuse collection.

### 7.6.1. Outdoor play spaces

The Interface between Land Uses module of the Code refers to the Environment Protection (Noise) Policy (the 'Noise Policy') as a guide for the management of noise related impacts. However, as the Policy does not address noise generated by the use of outdoor play spaces within childcare centres, Sonus has assessed such impacts against the provisions of the World Health Organisation standards (Guidelines for Community Noise) which prescribes a maximum 'sound pressure level' of 50 dB  $L_{aeq}$ .

Further to the noise modelling performed by Sonus, the highest predicted noise level within outdoor play spaces is 49 dB(A) when measured at the closest residential properties. Accordingly, no additional acoustic treatments have been recommended to manage noise-related impacts.

### 7.6.2. Carpark and Mechanical Plant Noise

PO 4.1 of the General Policy (Interface between Land Uses) module applies to the assessment of noise generated by carpark and mechanical plant:

**PO 4.1:** *Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).*

The corresponding DPF suggests that PO 4.1 will be satisfied where noise levels are managed to meet the criteria set out within the Noise Policy. 'Goal Noise Levels' applicable to the closest noise sensitive receivers are listed below:

#### ***Residences within the Adelaide Hills Sub Zone of the Rural Neighbourhood Zone***

- An equivalent noise level of 42 dB(A) during the day (7:00am to 10:00pm);
- An equivalent noise level of 35 dB(A) during the night (10:00pm to 7:00am); and
- An instantaneous maximum noise level of 60 dB(A) during the night (10:00pm to 7:00am)

#### ***Residences within the Productive Rural Landscape Zone***

- An equivalent noise level of 47 dB(A) during the day (7:00am to 10:00pm); and

- An equivalent noise level of 40 dB(A) during the night (10:00pm to 7:00am).

The selection of mechanical plant generally occurs during the detailed design phase of commercial projects. Accordingly, noise levels associated with mechanical plant operation is based on 'typical' plant selected for a land use of this nature. Mechanical plant generating noise levels exceeding those levels referenced within the Sonus report would be subject to a separate assessment as part of a variation application pursuant to S. 128 of the PDI Act.

Noise level predictions for the carpark assumes a particular level of activity and a particular number of vehicle movements over a 15-minute period (as set out Pg. 8 of the Sonus Report).

Subject to mechanical plant being positioned to the north of childcare centre (adjacent 'Nursery 1' as proposed), Sonus notes that predicted noise levels of 43 dB(A) during the day (7:00am to 10:00pm) and 35 Db(a) during the evening (10:00pm to 7:00am) aligns within the Goal Noise Levels set out within the Noise Policy.

Similarly, Sonus concludes that the predicted maximum noise level of 57 dB(A) will not exceed the 'Instantaneous Maximum Noise Level' criterion outlined within the Policy.

### 7.6.3. Refuse collection

To manage noise generated by waste collection activities, the Noise Policy prescribes waste collection hours of between 9:00am and 7:00pm on a Sunday or public holiday, and 7:00am and 7:00pm on any other day. As waste is to be collected onsite by a private waste contractor, collection hours can be managed to ensure compliance with the noise policy.

## 7.7. Traffic and Parking Considerations

Traffic and parking considerations are addressed in the Traffic and Parking Report prepared by CIRQA (**Appendix 5**). The findings of the CIRQA assessment have been considered with reference to the relevant General Policy (Transport, Access and Parking) module of the Code.

### 7.7.1. Onsite parking

PO 5.1 seeks to ensure development is provided with sufficient onsite parking to meet anticipated demands. The corresponding DPF outlines one way to achieve the desired outcomes of the corresponding performance outcome and suggests that parking should be provide in accordance with the rates expressed in Transport, Access and Parking Table 1 – General Off-Street Car Parking Requirements. In relation to the childcare centres, Table 1 prescribes a parking rate of 0.25 spaces per child, which equates to 32 parking spaces for the proposed 128-place childcare centre. The proposed onsite provision of 33 spaces therefore exceeds the minimum rates prescribed by the Code.

The assessment performed by CIRQA also confirms that the carpark has been designed facilitate safe and convenient vehicle movements and in particular:

- All parking spaces have been designed in accordance with the relevant Australian Standards;
- The parking aisle will be at least 6.2 metres in width to facilitate two-way movements, including at the site entrance to avoid queuing along Paratoo Road;
- The driveway access incorporates compliant pedestrian sightlines;
- The carpark incorporates a turn-around bay positioned at the end of the aisle; and
- The carpark aisle incorporate a 1.0 metre extension to facilitate safe and convenient movements.

In accordance with PO 4.1, the carpark also incorporates a designated and conveniently positioned disabled parking space, located directly adjacent the building entry.

The carpark includes four (4) tandem spaces, of which two of these are staff parking spaces. Subsequent to the preparation of the CIRQA report, the plans contained within the **Appendix 2** were updated at Council's request to include a third staff parking space positioned in the northern corner of the carpark.

It is important to note that the Australian Standards do not prohibit the establishment of tandem parking arrangements, with CIRQA also noting that *“such parking arrangements are common at child care centres within metropolitan Adelaide and are easily managed”*.

The carpark gradient has also been designed to address the requirements for site access by emergency service vehicles, as per PO 5.1 of the Hazards (Bushfire – Medium Risk) Overlay. In particular, CIRQA notes that the carpark gradient satisfies those requirements outlined within the Australian Standards with respect to the access arrangements for emergency service vehicles (as well as refuse vehicles).

### 7.7.2. Pedestrian movements

PO 6.4 of the General Policy (Traffic, Access and Parking) module seeks to ensure development incorporates safe and convenient pedestrian paths. Consistent with this provision, the carpark incorporates a designated pedestrian path which connects with the Paratoo Road verge. At Council's request, the paving will installed on either side of the driveway crossover to accommodate pedestrian movements.

### 7.7.3. Traffic generation

The CIRQA report includes a comprehensive assessment of anticipated traffic volumes, and their potential impacts on the operation/function of the adjacent road network, including road intersections.

The following provisions of the General Development Policy (Transport, Access and Parking) module are relevant to this aspect of the traffic assessment:

- PO 1.1:** *Development is integrated with the existing transport system and designed to minimise its potential impact on the functional performance of the transport system.*
- PO 3.3:** *Access points are sited and designed to accommodate the type and volume of traffic likely to be generated by the development or land use.*

The CIRQA analysis identifies existing surveyed peak traffic volumes (base model) and compares these with the following future scenarios:

- Future Scenario 1: Peak childcare traffic generation rates plus the existing surveyed network peak;
- Future Scenario 2: Predicted childcare centre traffic generation rates during the surveyed network peak,

With respect to both scenarios, CIRQA notes the following:

*“Future Scenario 1 represents a highly conservative assessment as it assumes both the centre’s peak hours overlap with the general road network peaks. As detailed above, this is highly unlikely. The Future Scenario 2 provides a more realistic assessment of the impacts of the proposal. Nevertheless, both approaches have been assessed for conservatism and as a sensitivity analysis.”*

The analysis conducted by CIRQA has been informed by SIDRA modelling to determine the impact of both future scenarios on the operation and capacity of all effected road intersections. The following provides a summary of the findings of the CIRQA analysis:

- All intersections will continue to operate within capacity and with a high Level of Service (i.e. LoS of ‘A’ – being the highest achievable LoS) in both scenarios;
- Survey peaks coincide with the set-down and pick-up period of the Stirling East Primary School. However, beyond this 10-to-15-minute period, movements at key intersections are much lower;
- The proposed long-stay childcare centre does not have set start and finish times and accordingly, peak movements associated with the proposed development are less intense and are spread over a greater period of time (when compared with the adjoining primary school);
- Further to the above, the peak conditions associated with both scenarios would only be for very limited periods until the traffic associated with the adjoining primary school has dissipated;
- Each future scenario assessed by CIRQA does not account for ‘passing trade’ and shared trips as parents drop off and collect children whilst travelling to/from the adjoining primary school.

In light of the above findings, CIRQA makes the following conclusions:

*“The conservative modelling has shown that peak traffic volumes can be easily accommodated at the key intersections. Even in the highly conservative and unlikely model for Scenario 1, movements were readily accommodated at the key intersections. Key intersections will perform better than indicated by the models.”*

Further to the above discussion, the analysis conducted by CIRQA suggests that additional traffic volumes to be generated by the proposed childcare centre are capable of being sustained by the adjacent road network (including key intersections), as per PO 1.1 and PO 3.3.

#### 7.7.4. Waste management

PO 6.7 of the General Development Policies (Transport Access and Parking) module seeks to ensure carparks are designed to accommodate the onsite loading and unloading of service vehicles.

Swept turning paths for a medium rigid waste vehicle provided within the CIRQA report demonstrates that service vehicles are capable of entering and exiting the subject site in a forward direction (following collection of waste from the dedicated and screened waste storage area). As all waste will be collected by a private waste contractor, timing for collection is capable of being controlled by the operator and will occur whilst the centre is not in operation.

### 7.8. Stormwater Management

The stormwater management letter and associated stormwater methodology prepared by CPR is provided in **Appendix 6**.

The stormwater design prepared by CPR has been assessed against the relevant provisions of the Mount Lofty Ranges Water Supply Catchment (Area 2) Overlay (the ‘Mounty Loft Ranges Water Supply’ Overlay) together with the Hazards (Flooding – Evidence Required) Overlay.

The fundamental intent of the of the Mount Lofty Ranges Water Supply Overlay is to ensure development is appropriately designed to safeguard Greater Adelaide’s public water supply.

In accordance with PO 3.1 of this Overlay, the development incorporates a total of 55kL of detention (combined above and below ground detention) with discharge rates from these tanks restricted to ensure post development stormwater flows do not exceed pre-developed rates.

PO 1.1, 1.3, 3.2 and 3.3 of this same Overlay seeks to ensure water is appropriately treated to protect water-quality. Consistent with these provisions, all roof and surface water will be treated within Gross Pollutant Trap prior discharging to Paratoo Road.

PO 1.1 of the Hazards (Flooding -Evidence Required) Overlay seeks to ensure development is sited and designed to protect buildings against the potential entry of floodwaters. Consistent with the corresponding DPF, the building’s FFL is generally positioned in excess of 300mm above the top of kerb within Paratoo Road. Additionally, we note the following comments provided CPR with respect to the FFL and the management of flooding impacts:

*“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 overload flows from 1:100 ARI storm events to exit the site in an appropriate manner and so as not to affect the neighbouring properties.” (CPR Stormwater Management Plan, Rev. B, 9 Jun. 23).*

Additionally, the stormwater design has been revised to include grassed drainage swales surrounding the perimeter of the childcare centre and designed to capture and redirect external surface flows.

Further to the above discussion, it is our view the stormwater system has been designed to appropriately manage the collection and disposal of stormwater in accordance with the relevant Overlay provisions.

## **7.9. Wastewater Management**

In addition to the stormwater management provisions addressed above, the Mount Lofty Ranges Water Supply Overlay also includes provisions which seek to ensure wastewater generated by the development is captured and disposed of in manner which protects Greater Adelaide’s water supply from pollution/contamination (PO 2.1 and 2.4). Consistent with the recommendations set out with each corresponding DPF, the childcare centre will be connected to mains sewer which runs through Paratoo Road.

## 8. CONCLUSION

This development application seeks Planning Consent to establish a 128-place childcare centre together with the removal of one Regulated Tree, associated decking, carparking, retaining walls, fencing, earthworks and landscaping at 35 Paratoo Road, Stirling. The Site is located within the Rural Neighbourhood Zone and the Adelaide Hills Subzone.

Following an inspection of the subject site and locality, a review of the proposed plans and associated specialist reports accompanying the application, and a detailed assessment of the proposed development against the relevant provisions of the Planning and Design Code, we have formed the opinion that the proposed development represents appropriate and orderly development which accords with the relevant provisions of the Code for the reasons summarised below:

- The Rural Neighbourhood Zone contemplates various non-residential uses, including a 'child care facility'.
- The proposed childcare centre is ideally situated next to the Stirling East Primary school, which is a compatible and complementary non-residential use.
- Whilst the Code specifically seeks to restrict the scale of 'commercial' uses (such as offices, consulting rooms and shops), such restrictions are not specifically referenced for 'community service' uses.
- Notwithstanding the above, the proposed development satisfies all zone DPF's relating to building height, scale and setbacks, to achieve a built form outcome which is compatible with the established residential character.
- The external appearance (including colours, materiality and architectural features) of the building is generally aligned with the relevant 'Design' provisions of the Code and has been enhanced by an appropriate landscape design.
- The split-level building design seeks to minimise earthworks and retaining wall heights, which have been carefully designed and terraced to accommodate landscaping, with plant species selected to screen visible retaining walls, soften the appearance of and provide shade to the carpark appearance of the childcare centre.
- The Sonus acoustic report confirms that the proposed development will not result in unreasonable noise impacts when assessed against the relevant Interface between Land Uses provisions of the Code.
- The development requires the removal of 16 native saplings, 3 young native trees, and 1 regulated tree to accommodate drainage infrastructure (as per Council's request) and a useable outdoor play space for children. Notwithstanding, the building footprint and design overcomes the need to remove the majority of mature vegetation which occupies the site, including 32 native trees of which 12 are also regulated trees and five are significant trees. In this context, the development has been designed to minimise tree impacts and tree removal in accordance with the provisions set out within the Native Vegetation Overlay and the Regulated and Significant Tree Overlay.
- The traffic and parking assessment performed by CIRQA confirms that:
  - the development has been designed with sufficient onsite parking in accordance with the prescribed rates set out within the Code;
  - the carpark and access arrangements have been designed in accordance with the relevant Australian Standards; and



- projected traffic generation rates and traffic distribution will have negligible impact on the function and/or capacity of the surrounding road network.
- The stormwater management plan prepared by CPR demonstrates a stormwater methodology that supports the safe and efficient collection, detention, treatment and disposal of stormwater in accordance with Council's design standards and the relevant provisions of the Code.

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



**APPENDIX 1**  
**Certificate of Title**



REAL PROPERTY ACT, 1886



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 5767 Folio 919

Parent Title(s) CT 4092/429  
Creating Dealing(s) CONVERTED TITLE  
Title Issued 04/05/2000 Edition 3 Edition Issued 23/06/2022

### Estate Type

FEE SIMPLE

### Registered Proprietor

BRUCE MEANEY  
OF 227 REYNELL ROAD HAPPY VALLEY SA 5159  
AS THE EXECUTOR(S) WITH LEAVE BEING RESERVED OF  
JILL MEANEY WHO DIED 14/03/2022

### Description of Land

ALLOTMENT 111 FILED PLAN 210897  
IN THE AREA NAMED STIRLING  
HUNDRED OF NOARLUNGA

### Easements

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED A TO THE COUNCIL FOR THE AREA (T 3954164)

### Schedule of Dealings

NIL

### Notations

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

THIS PLAN IS SCANNED FOR CERTIFICATE OF TITLE 4092/429  
 SEE TITLE TEXT FOR EASEMENT DETAILS

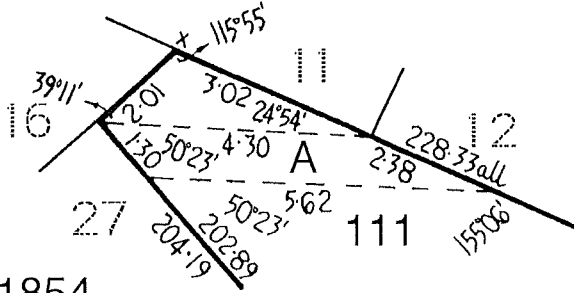
LAST PLAN REF: GP 101/1854

**ENLARGEMENT**

(NOT TO SCALE)

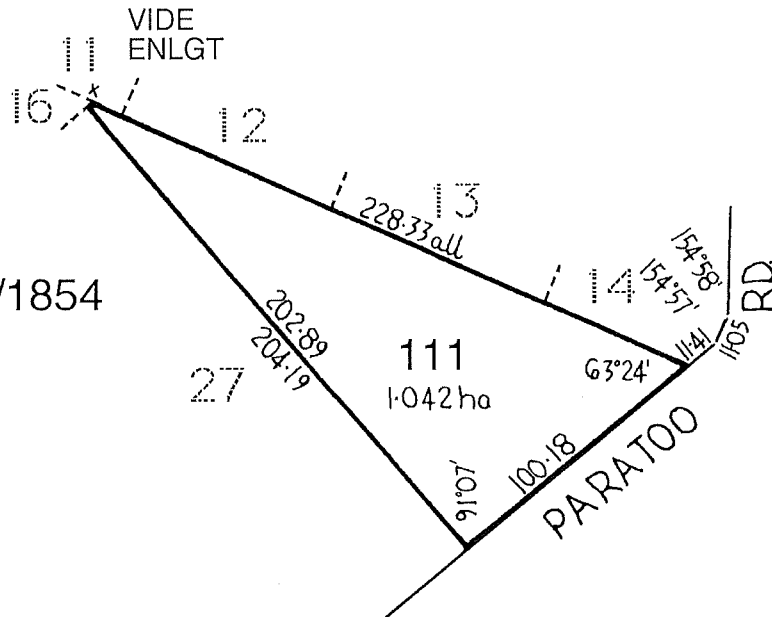


GP



101/1854

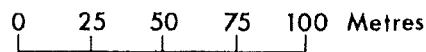
GP



101/1854

111  
1.042 ha

PARATOO



NOTE: SUBJECT TO ALL LAWFULLY EXISTING PLANS OF DIVISION

## Certificate of Title

Title Reference: CT 5767/919  
Status: CURRENT  
Parent Title(s): CT 4092/429  
Dealing(s) Creating Title: CONVERTED TITLE  
Title Issued: 04/05/2000  
Edition: 3

## Dealings

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
15/06/2022	23/06/2022	13809544	TRANSMISSION APPLICATION	REGISTERED	JILL MEANEY (DECD), BRUCE MEANEY (EXEL)
02/02/2004	05/02/2004	9777307	APPLICATION TO NOTE DEATH	REGISTERED	BERNARD ROY MEANEY (DECD), JILL MEANEY



**APPENDIX 2**  
**Architectural Drawings**

The page features decorative white line art. On the left side, there are two overlapping semi-circular shapes. On the right side, there is a large, stylized white outline of the letters 'ENI'.

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

13/10/2023 9:39:02 AM

Rev	Amendment	Date
1	DA ISSUE	08/06/23



## PARATOO ROAD, STIRLING CHILDCARE CENTRE

35 PARATOO ROAD, STIRLING SA 5152

PLANNING APPROVAL DRAWINGS, OCTOBER 2023

### ARCHITECTURAL DRAWING SCHEDULE

SHEET LIST - DA			
Sheet Number	Sheet Name	Revision	Revision Date
DA01	COVER SHEET	1	08/06/23
DA02	EXISTING CONDITIONS	1	08/06/23
DA03	CONTEXT & SITE ANALYSIS	1	08/06/23
DA04	SITE PLAN	2	10/10/23
DA05	GROUND FLOOR PLAN	2	10/10/23
DA05A	LEVEL 1 FLOOR PLAN	2	10/10/23
DA06	ROOF PLAN	1	08/06/23
DA07	ELEVATIONS	2	10/10/23
DA07A	ELEVATIONS	2	10/10/23
DA08	SECTIONS	1	08/06/23
DA08A	SECTIONS 2	1	08/06/23
DA09	3D IMAGES	1	08/06/23
DA10	TREE PLAN	1	08/06/23
DA11	TREE PLAN TABLES	1	08/06/23
DA12	FENCE ELEVATIONS	1	10/10/23

**BROWN  
FALCONER**

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

COVER SHEET

Scale 1 : 1

Drawn Author

Date 06/06/2023

Job No. 2022107

Dwg No. **3567 DA01** Rev: **1** A3 SHEET

#### PRINTING NOTE



THIS DRAWING IS TO BE PRINTED IN COLOUR.  
THIS NOTE IS RED.

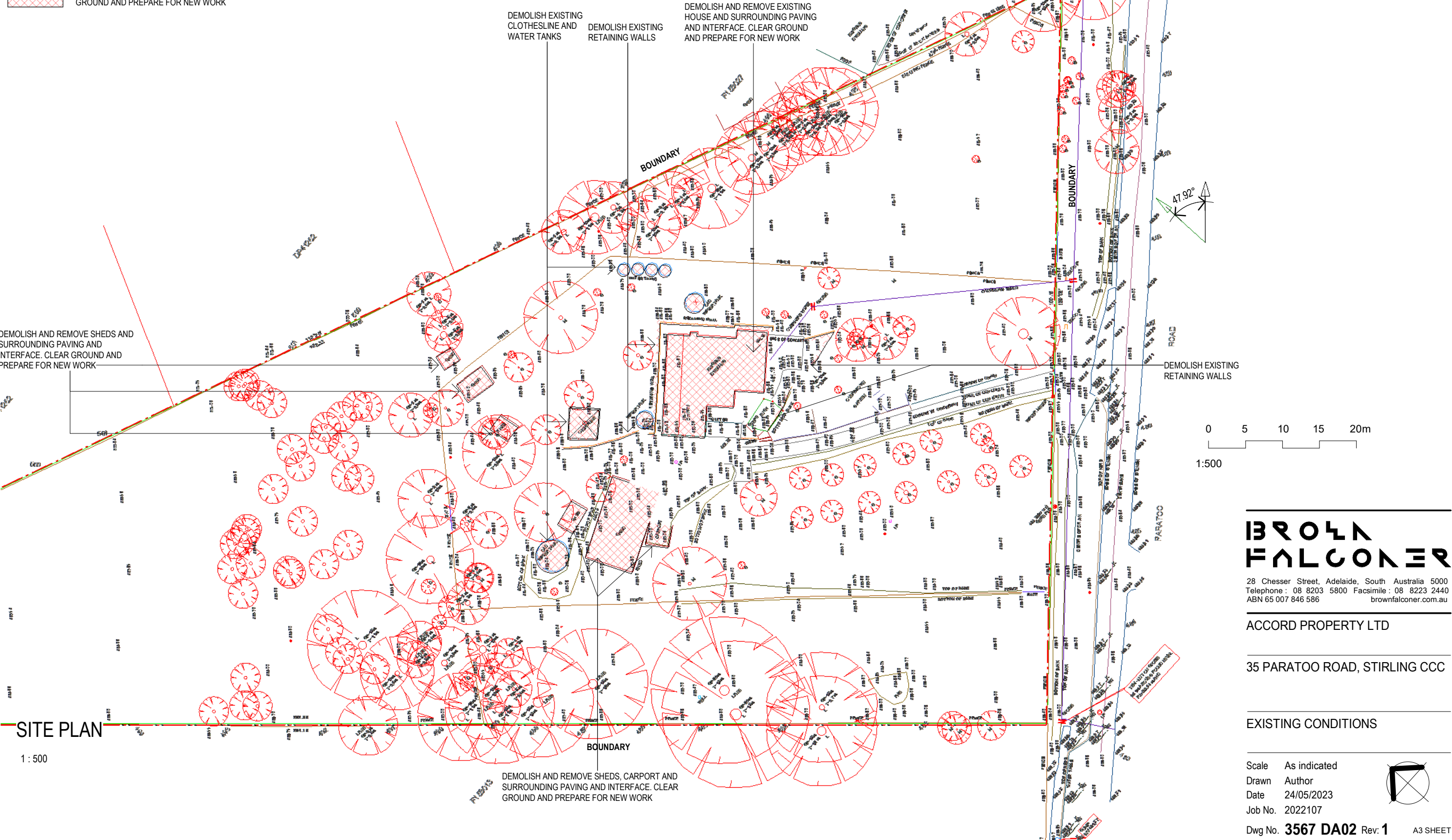
# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23

## LEGEND

-  SITE BOUNDARY
-  TO BE DEMOLISHED AND REMOVED INCLUDING SURROUNDING PAVING AND INTERFACE. CLEAR GROUND AND PREPARE FOR NEW WORK



SITE PLAN

1 : 500

## BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

EXISTING CONDITIONS

Scale As indicated  
Drawn Author  
Date 24/05/2023  
Job No. 2022107  
Dwg No. **3567 DA02** Rev: **1** A3 SHEET



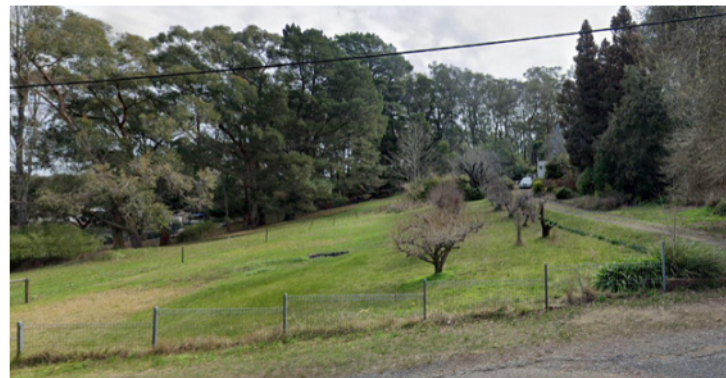


# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

13/10/2023 9:39:09 AM

Rev	Amendment	Date
1	DA ISSUE	08/06/23



## BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

### CONTEXT & SITE ANALYSIS

Scale 1 : 1000

Drawn Author

Date 06/06/2023

Job No. 2022107

Dwg No. **3567 DA03** Rev: **1** A3 SHEET

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23
2	DA RFI RESPONSES	10/10/23

NUMBER OF PLACES	128
SITE AREA	10,420m <sup>2</sup>
SITE AREA USED	3200m <sup>2</sup>
SITE AREA PER PLACE	25m <sup>2</sup>
BUILDING AREA	1060m <sup>2</sup>
BUILDING AREA PER PLACE	8.3m <sup>2</sup>
OUTDOOR PLAY AREA	986m <sup>2</sup>
NUMBER OF CAPARKS	33

FT1: 1800mm COLOURBOND FENCE (MONUMENT)

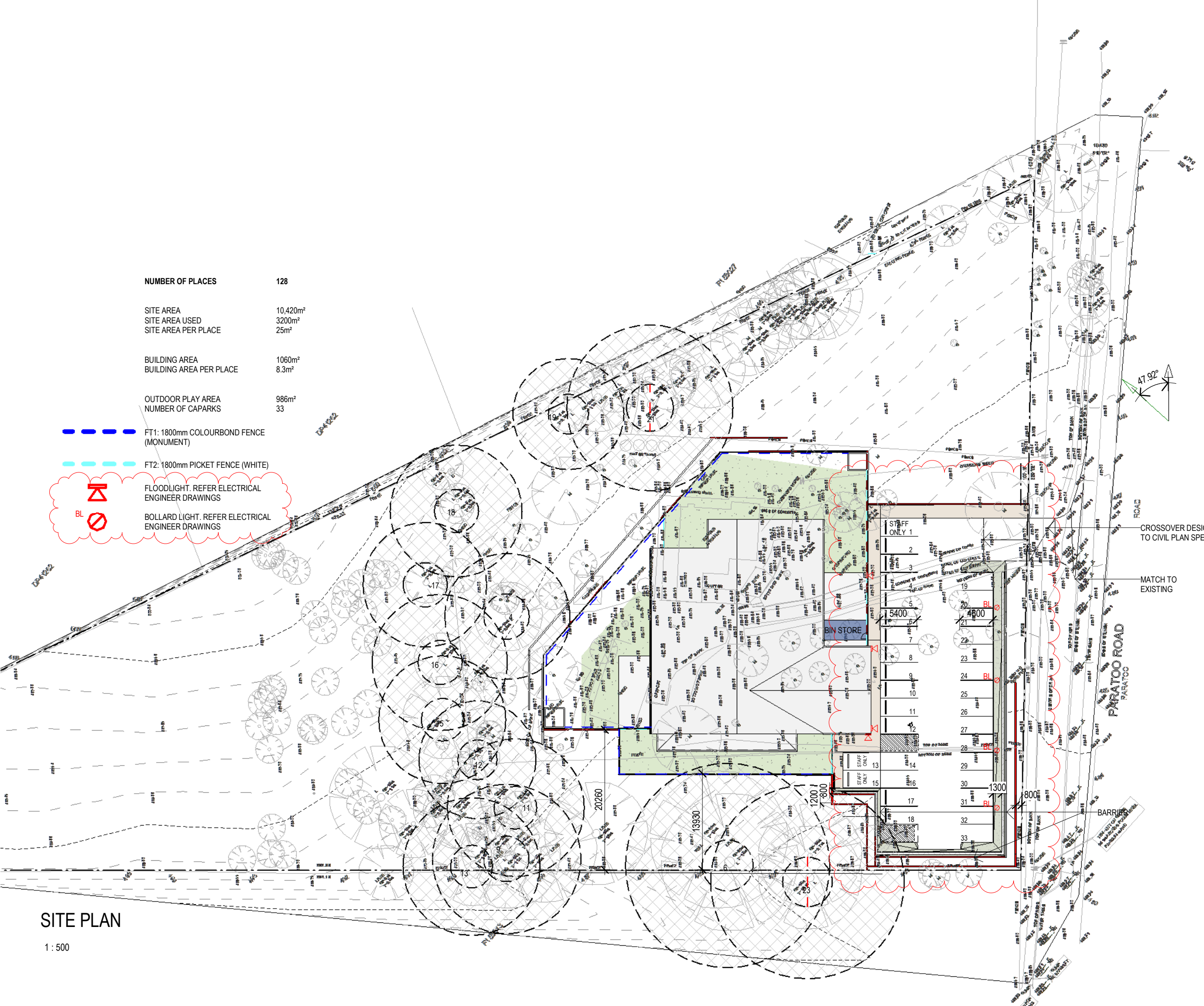
FT2: 1800mm PICKET FENCE (WHITE)

FLOODLIGHT. REFER ELECTRICAL ENGINEER DRAWINGS

BL BOLLARD LIGHT. REFER ELECTRICAL ENGINEER DRAWINGS

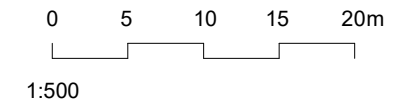
## SITE PLAN

1 : 500



CROSSOVER DESIGN TO CIVIL PLAN SPECIFICATION

MATCH TO EXISTING



# BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
 Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
 ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

## SITE PLAN

Scale 1 : 500  
 Drawn TR  
 Date 24/05/2023  
 Job No. 2022107

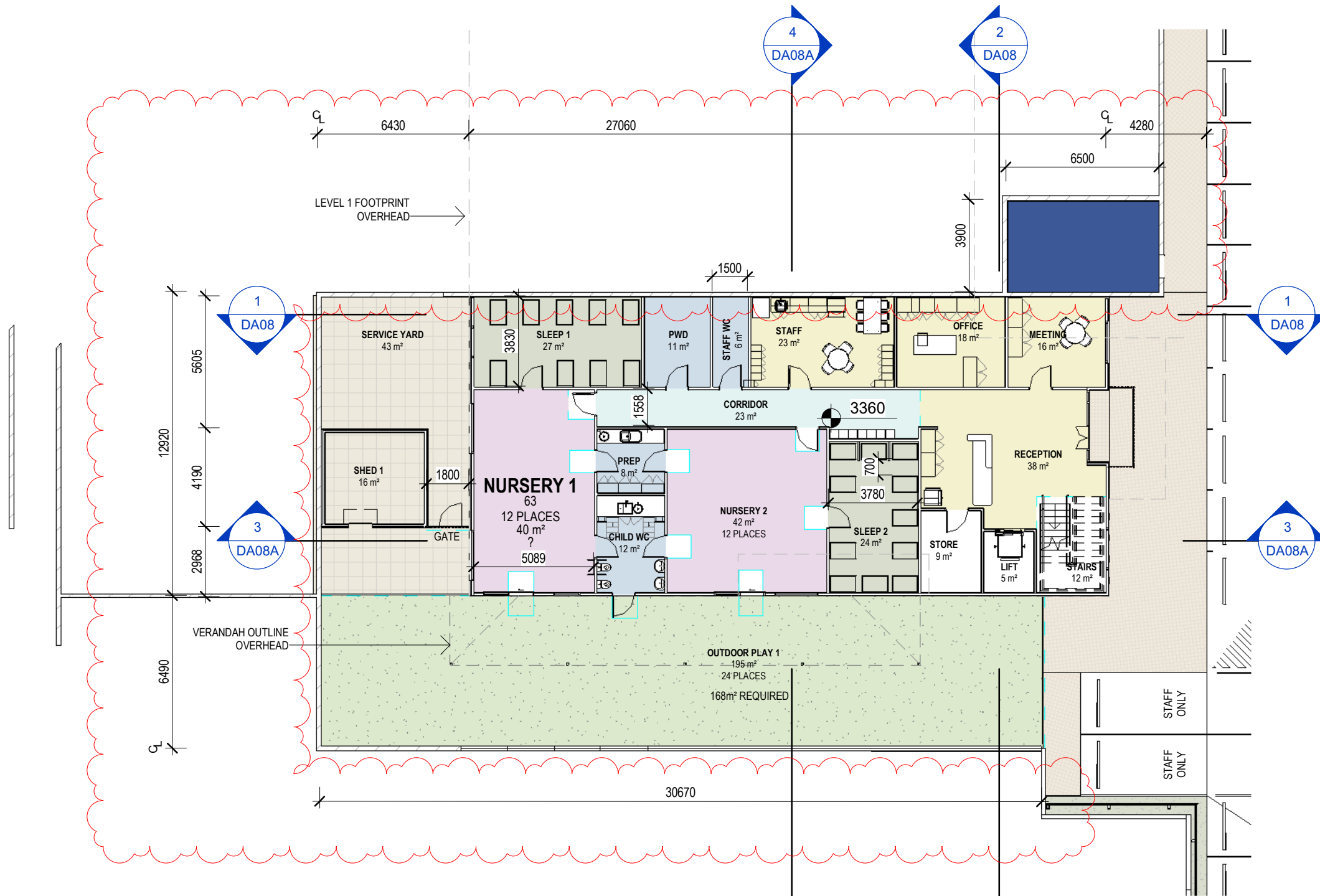


Dwg No. **3567 DA04** Rev: **2** A3 SHEET

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

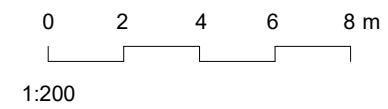
Rev	Amendment	Date
1	DA ISSUE	08/06/23
2	DA RFI RESPONSES	10/10/23



NUMBER OF PLACES	128
SITE AREA	10,250m <sup>2</sup>
SITE AREA USED	3200m <sup>2</sup>
SITE AREA PER PLACE	25m <sup>2</sup>
BUILDING AREA	1060m <sup>2</sup>
BUILDING AREA PER PLACE	8.3m <sup>2</sup>
OUTDOOR PLAY AREA	986m <sup>2</sup>
NUMBER OF CAPARKS	32

## GROUND FLOOR PLAN

1 : 200



# BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
 Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
 ABN 65 007 846 586 [brownfalconer.com.au](http://brownfalconer.com.au)

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

GROUND FLOOR PLAN

Scale 1 : 200  
 Drawn TR  
 Date MAY 2023  
 Job No. 2022107

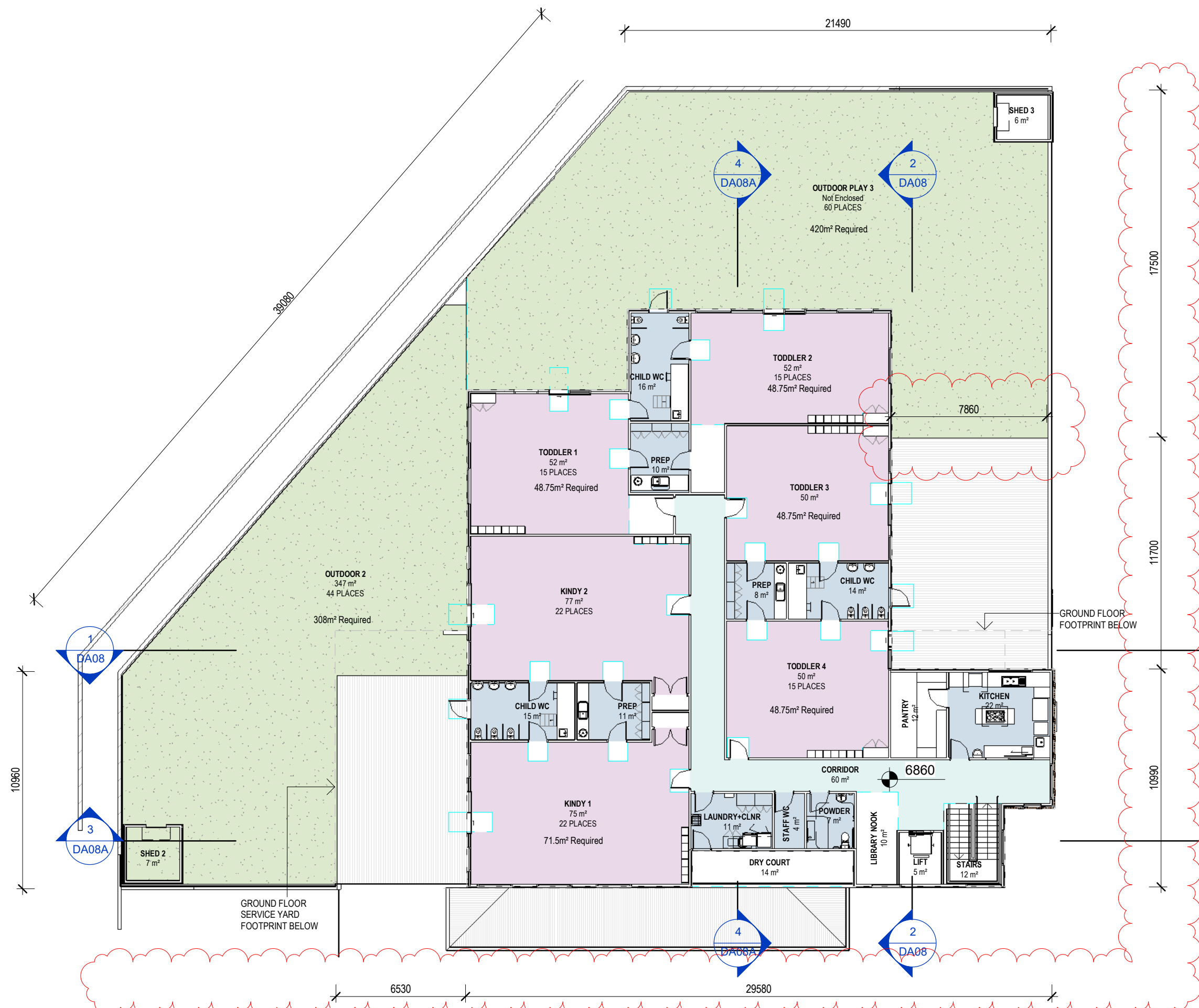


Dwg No. **3567 DA05** Rev: **2** A3 SHEET

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

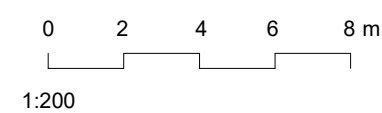
Rev	Amendment	Date
1	DA ISSUE	08/06/23
2	DA RFI RESPONSES	10/10/23



NUMBER OF PLACES	128
SITE AREA	10,250m <sup>2</sup>
SITE AREA USED	3200m <sup>2</sup>
SITE AREA PER PLACE	25m <sup>2</sup>
BUILDING AREA	1060m <sup>2</sup>
BUILDING AREA PER PLACE	8.3m <sup>2</sup>
OUTDOOR PLAY AREA	986m <sup>2</sup>
NUMBER OF CAPARKS	32

## LEVEL 1 FLOOR PLAN

1 : 200



# BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

LEVEL 1 FLOOR PLAN

Scale 1 : 200  
Drawn TR  
Date MAY 2023  
Job No. 2022107

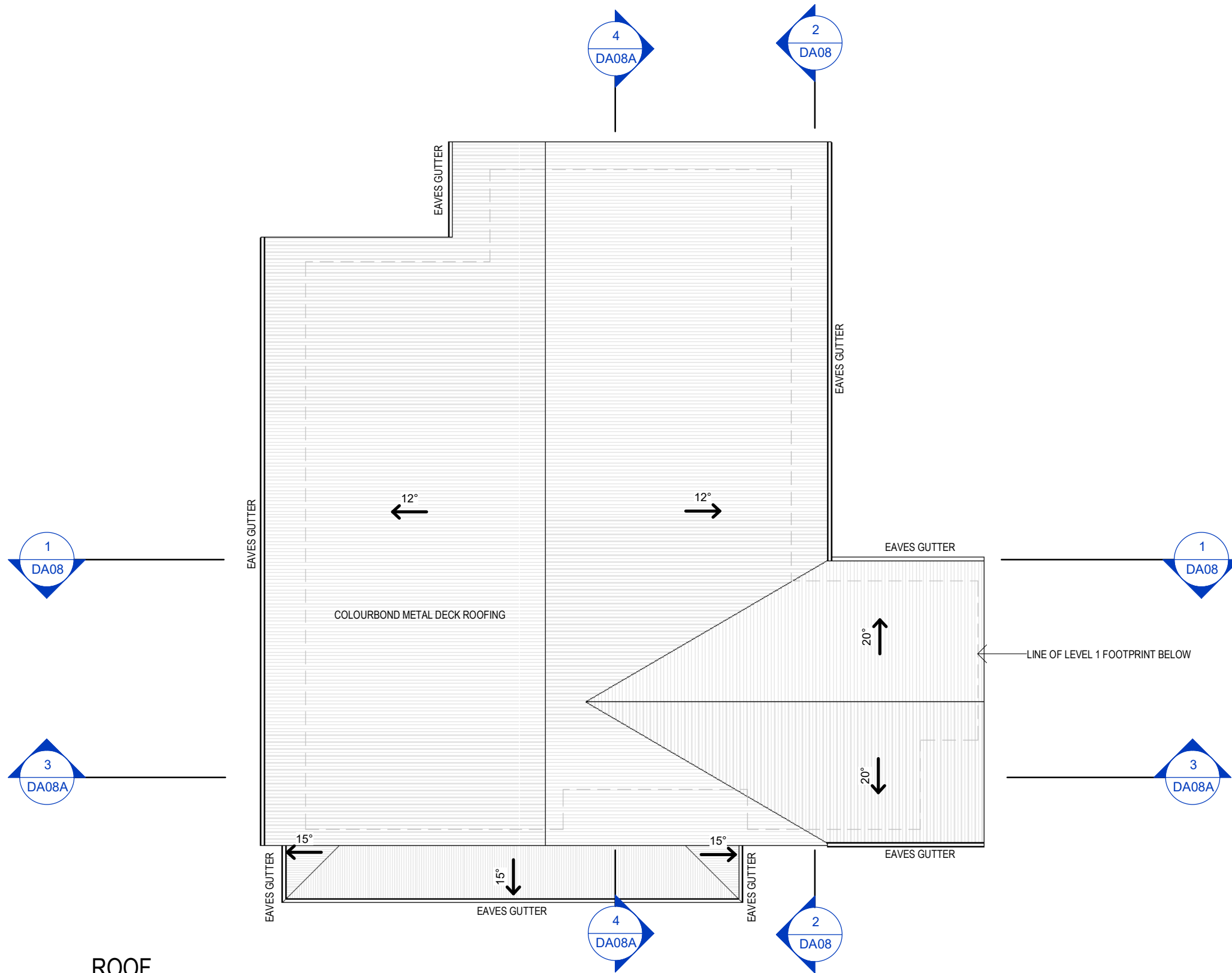


Dwg No. **3567 DA05A**ev. 2 A3 SHEET

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23



ROOF

1 : 200



1:200

## BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
 Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
 ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

ROOF PLAN

Scale 1 : 200  
 Drawn TR  
 Date 24/05/2023  
 Job No. 2022107

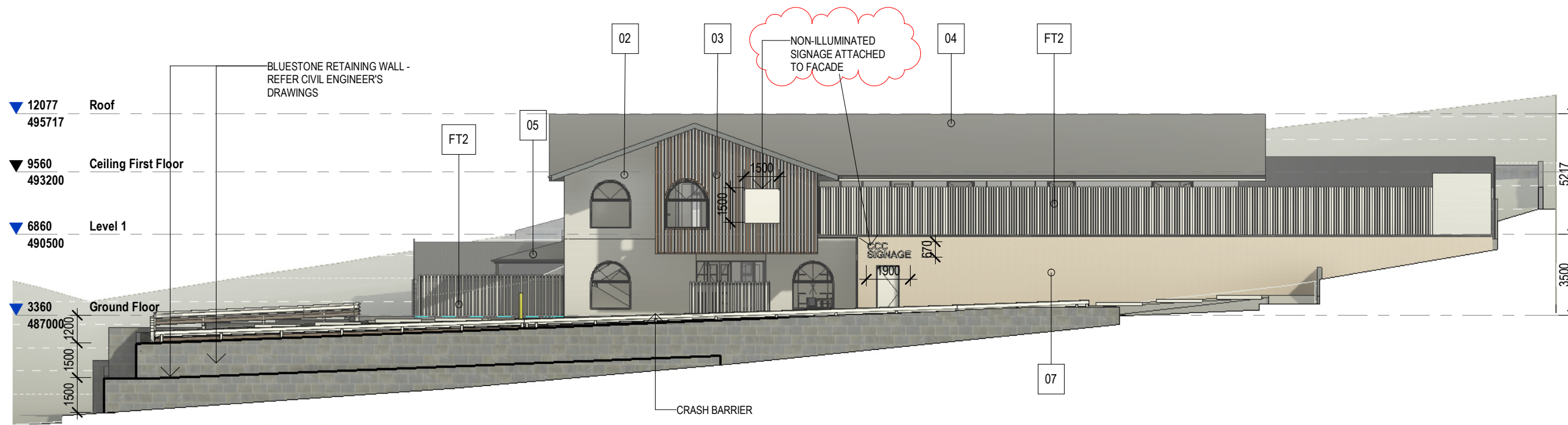


Dwg No. **3567 DA06** Rev: **1** A3 SHEET

# DA ISSUE

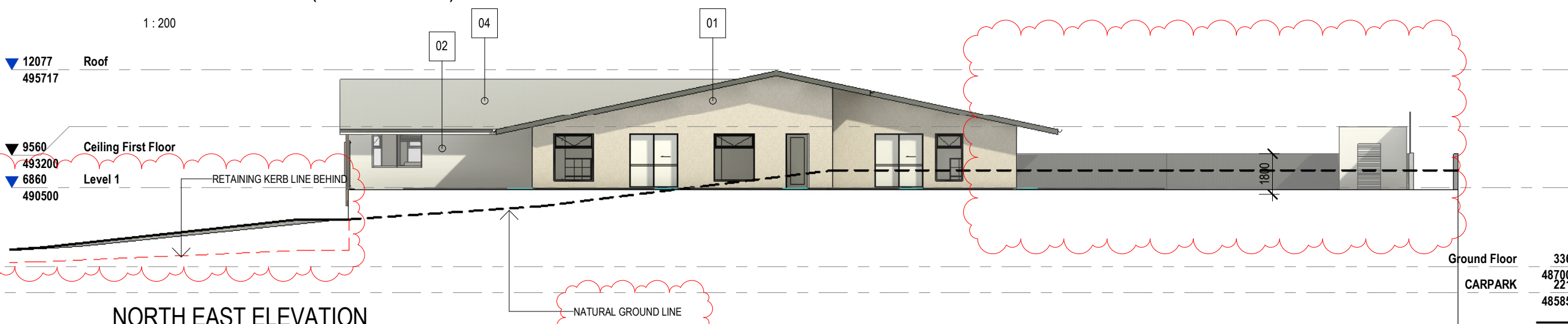
ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23
2	DA RFI RESPONSES	10/10/23




## PARATOO ROAD (SOUTH EAST) ELEVATION

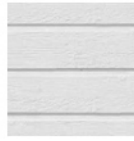
1 : 200





## NORTH EAST ELEVATION


1 : 200


- 


01 HEBEL PANEL-WHITE
- 

02 WEATHERBOARD PAINT WHITE
- 


03 TIMBER BATTANS
- 


04 COLORBOND METAL ROOF IN WHITE
- 


05 COLORBOND METAL ROOF IN GREY
- 

06 BRICK
- 

07 RENDERED RETAINING WALL

- 

CB CRASH BARRIER
- 

FT1 FENCE - MONUMENT
- 

FT2 PICKET FENCE

# BROWN FALCONER

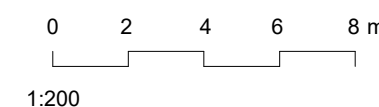
28 Chesser Street, Adelaide, South Australia 5000  
 Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
 ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

## ELEVATIONS

Scale As indicated  
 Drawn Author  
 Date 24/05/2023  
 Job No. 2022107

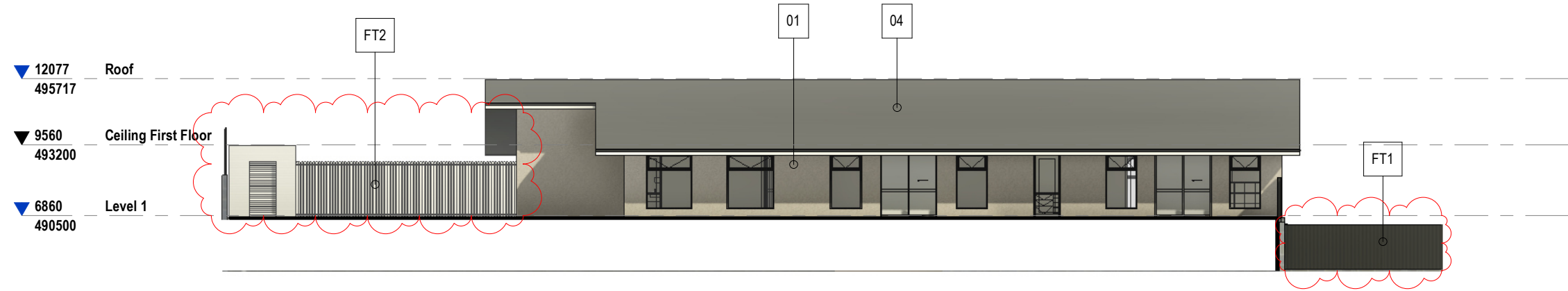


Dwg No. **3567 DA07** Rev: **2** A3 SHEET

# DA ISSUE

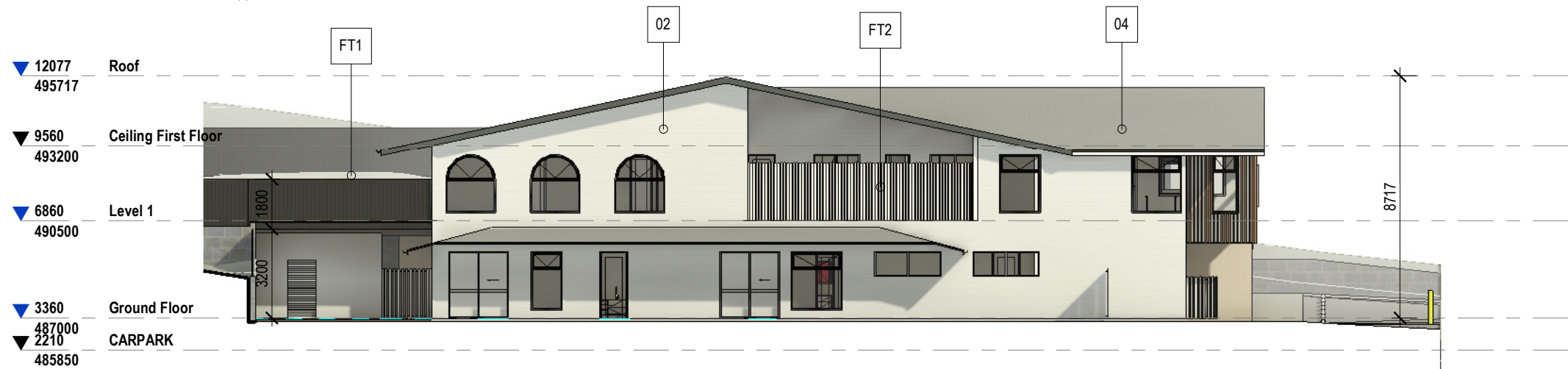
ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23
2	DA RFI RESPONSES	10/10/23



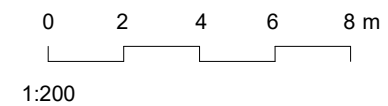
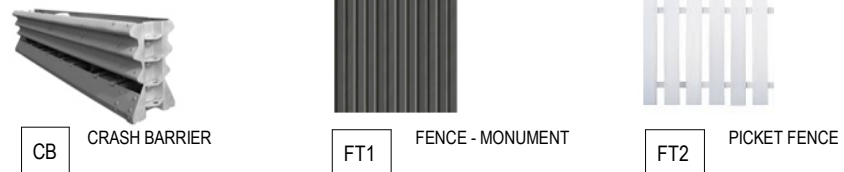
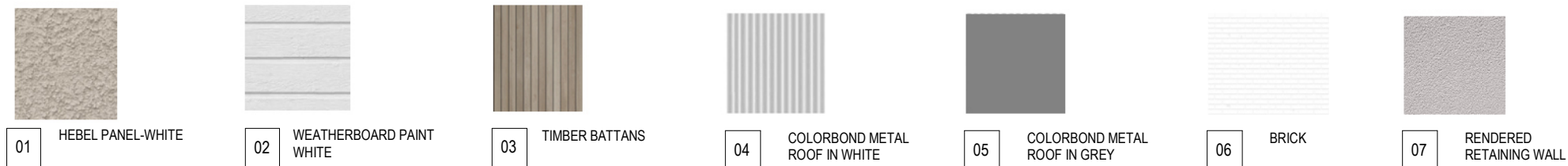
## NORTH WEST ELEVATION

1:200



## SOUTH WEST ELEVATION

1:200



# BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

## ELEVATIONS

Scale As indicated  
Drawn Author  
Date 24/05/2023  
Job No. 2022107

Dwg No. **3567 DA07A**ev: 2 A3 SHEET

# DA ISSUE

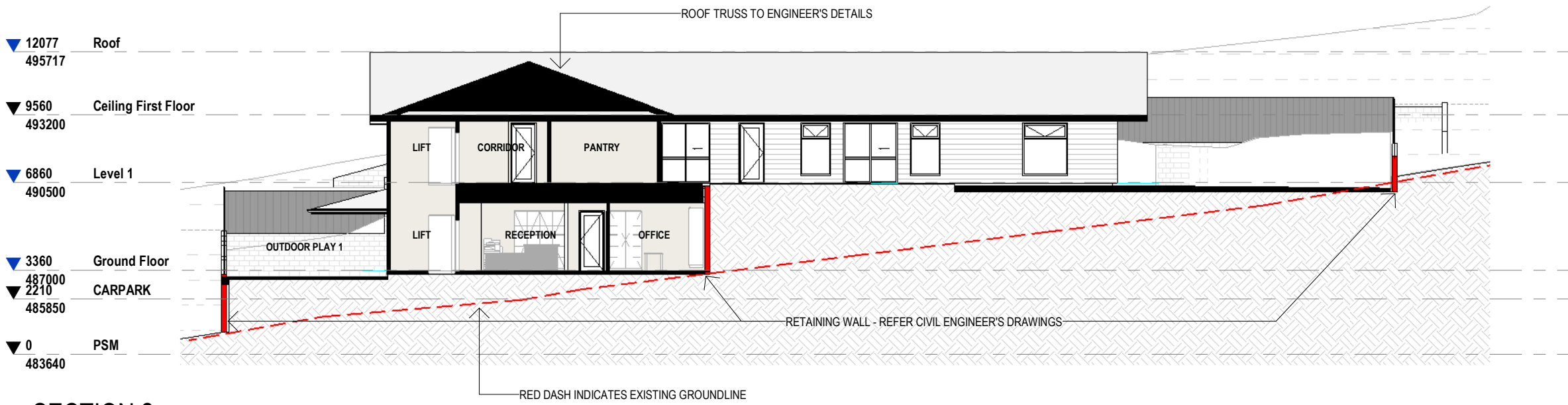
ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23



## SECTION 1

1 : 200



## SECTION 2

1 : 200



1:200

# BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 [brownfalconer.com.au](http://brownfalconer.com.au)

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

SECTIONS

Scale 1 : 200

Drawn Author

Date 24/05/2023

Job No. 2022107

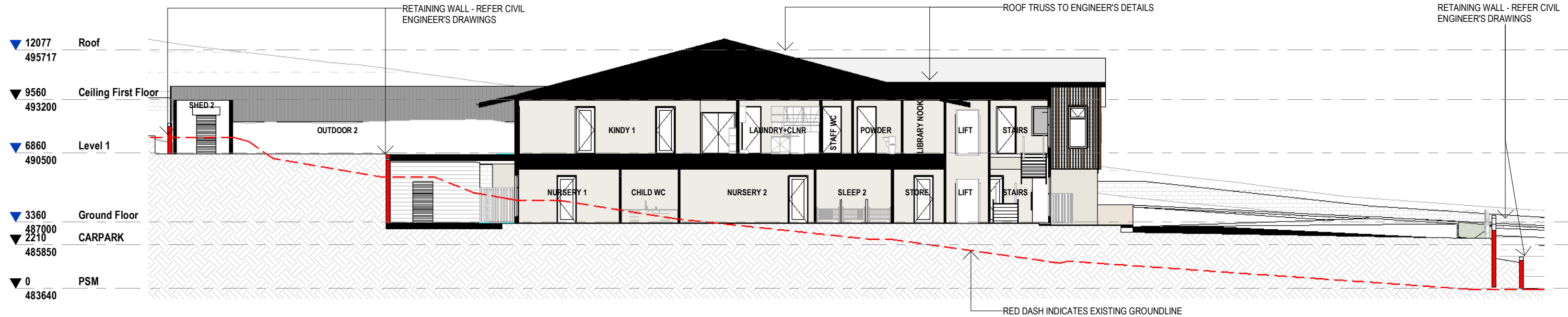
Dwg No. **3567 DA08** Rev: 1 A3 SHEET



# DA ISSUE

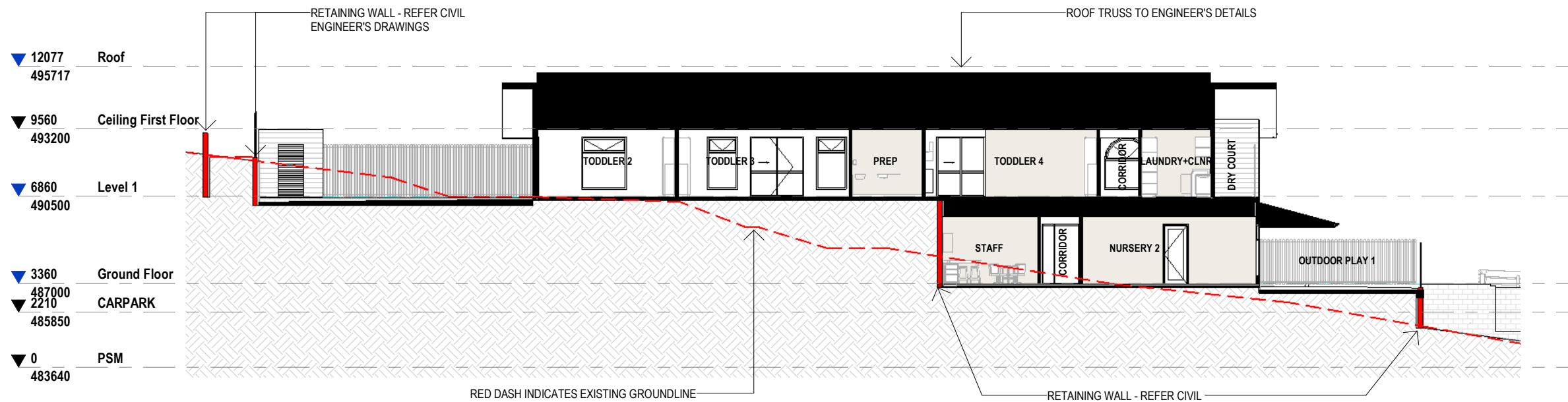
ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23



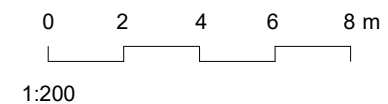
## SECTION 3

1 : 200



## SECTION 4

1 : 200



# BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
 Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
 ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

SECTIONS 2

Scale 1 : 200

Drawn Author

Date 24/05/2023

Job No. 2022107

Dwg No. **3567 DA08A**ev: 1

A3 SHEET

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23



**BROWN  
FALCONER**

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 [brownfalconer.com.au](http://brownfalconer.com.au)

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

3D IMAGES

Scale 1 : 1  
Drawn Author  
Date 06/06/2023  
Job No. 2022107

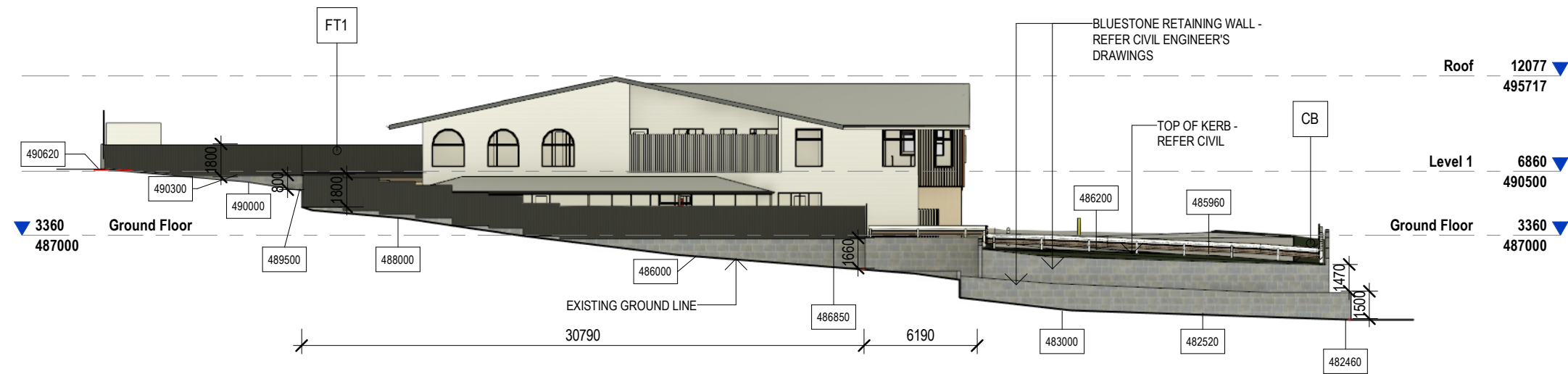
Dwg No. **3567 DA09** Rev: **1** A3 SHEET

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

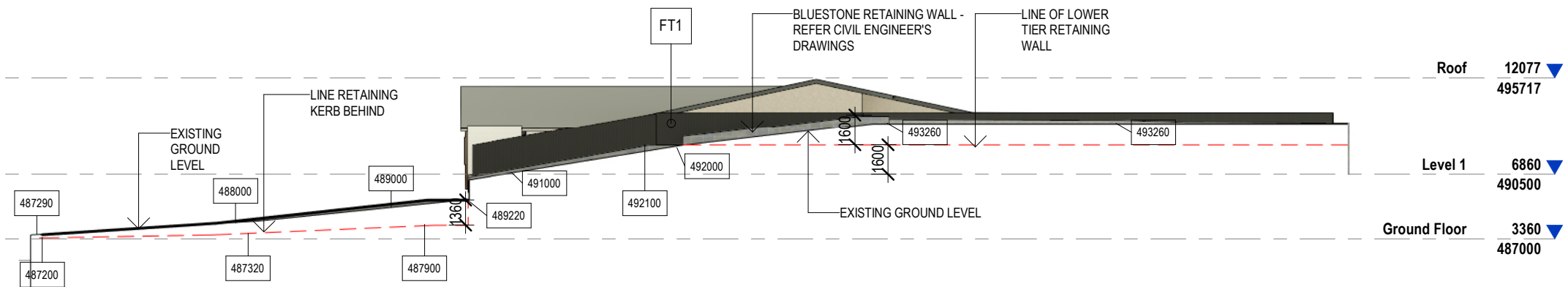
13/10/2023 10:29:50 AM

Rev	Amendment	Date
1	DA RFI RESPONSES	10/10/23



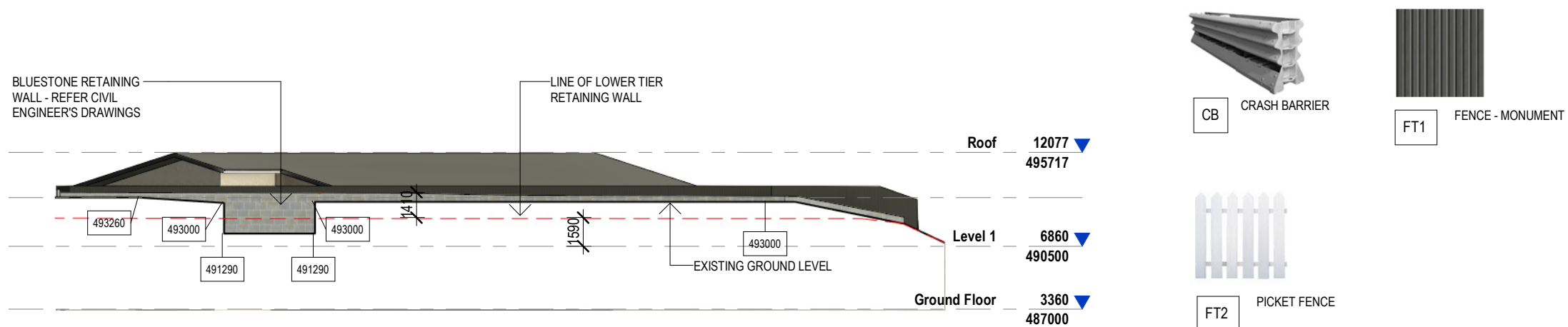
## SOUTH WEST FENCE ELEVATION

1 : 300



## NORTH EAST FENCE ELEVATION

1 : 300



## NORTH FENCE ELEVATION

1 : 300

# BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
 Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
 ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

FENCE ELEVATIONS

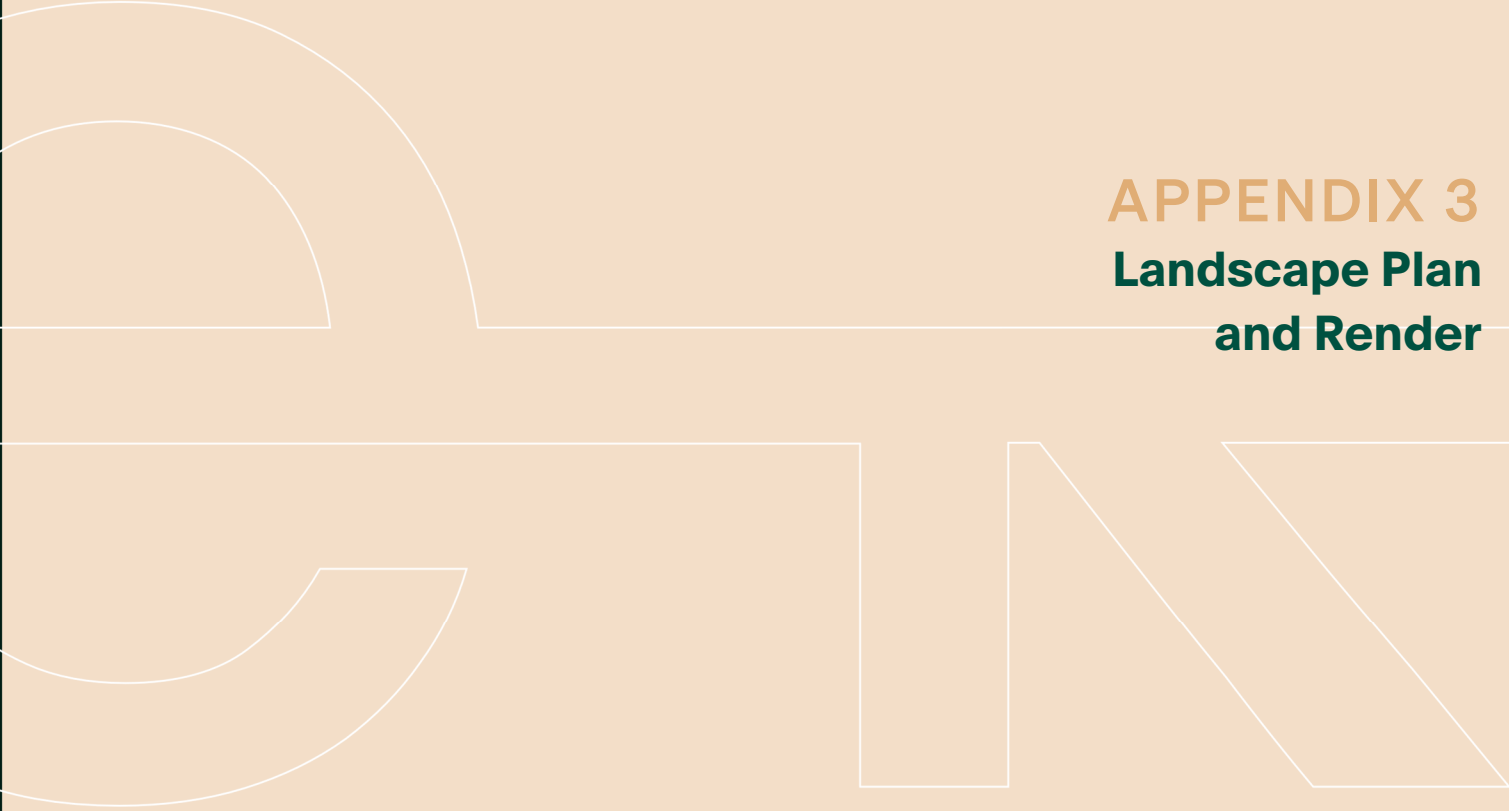
Scale As indicated

Drawn Author

Date 09/13/23

Job No. 2022107

Dwg No. **3567 DA12** Rev: **1** A3 SHEET

A series of white line art elements are scattered across the page. On the left side, there are two overlapping semi-circles of different radii. Below these, there is a large, stylized white outline that resembles a 'P' or a similar shape. To the right of this, there is a tall, narrow rectangular shape. Further right, there is a large, stylized white outline that resembles an 'N' or a similar shape. A horizontal white line runs across the page, passing behind the text.

## APPENDIX 3 Landscape Plan and Render

# Paratoo Road Childcare Centre

## Landscape Design

### Submission:

08 June 2326\_Paratoo Road Childcare Centre\_Landscape Design\_Issue 01

02 August 2326\_Paratoo Road Childcare Centre\_Landscape Design\_Issue 02

### Client:

**Accord Property**

### Location:

**35 Paratoo Road, Stirling SA 5152**

# Contents

- 01 Ground Floor Landscape Design
- 02 First Floor Landscape Design
- 03 Indicative Planting Palette

# 01 Ground Floor Landscape Design

## Legend

- Property boundary
- RW- Proposed retaining wall (varying heights)  
Refer Civil Engineering package
- F1- Proposed fencing type 01  
Refer Architectural package
- F2- Proposed fencing type 02  
Refer Architectural package
- Proposed all-weather sealed concrete to all access ways, walkways and footpaths
- Proposed all-weather sealed asphalt to proposed carparks and crossovers
- Proposed mains irrigated assorted species of mass planted low-lying shrubs and groundcovers along car parking areas first 600mm of vehicle overhang to AS2890.1 Clause 2.4.1(a)(i)
- Proposed mains irrigated assorted species of mass planted small shrubs, low-lying shrubs and groundcovers to provide visual amenity to the entry and car park while maintaining clear sightlines
- Proposed mains irrigated assorted species of mass planted medium shrubs, small shrubs, low-lying shrubs and groundcovers to provide visual amenity
- 01 Proposed mains irrigated assorted species of large trees with understory low-lying shrubs and groundcovers to provide visual amenity and shading
- 02 Proposed mains irrigated assorted species of medium and small trees with understory low-lying shrubs and groundcovers to provide visual amenity and minor shading
- 03 Proposed mains irrigated assorted species of large shrubs to provide visual amenity and screening



**Note:**


- Refer to Architectural package for all proposed demolition/modifications and existing trees proposed to be retained/removed
- Refer to Engineering package(s) for any proposed RL's, contours, stormwater connections, pit locations, cut and fill requirements and retaining wall information
- Refer to '03 Indicative Planting Palette' sheet for sample suitable planting types and species
- Planting extents in playspaces to be finalised

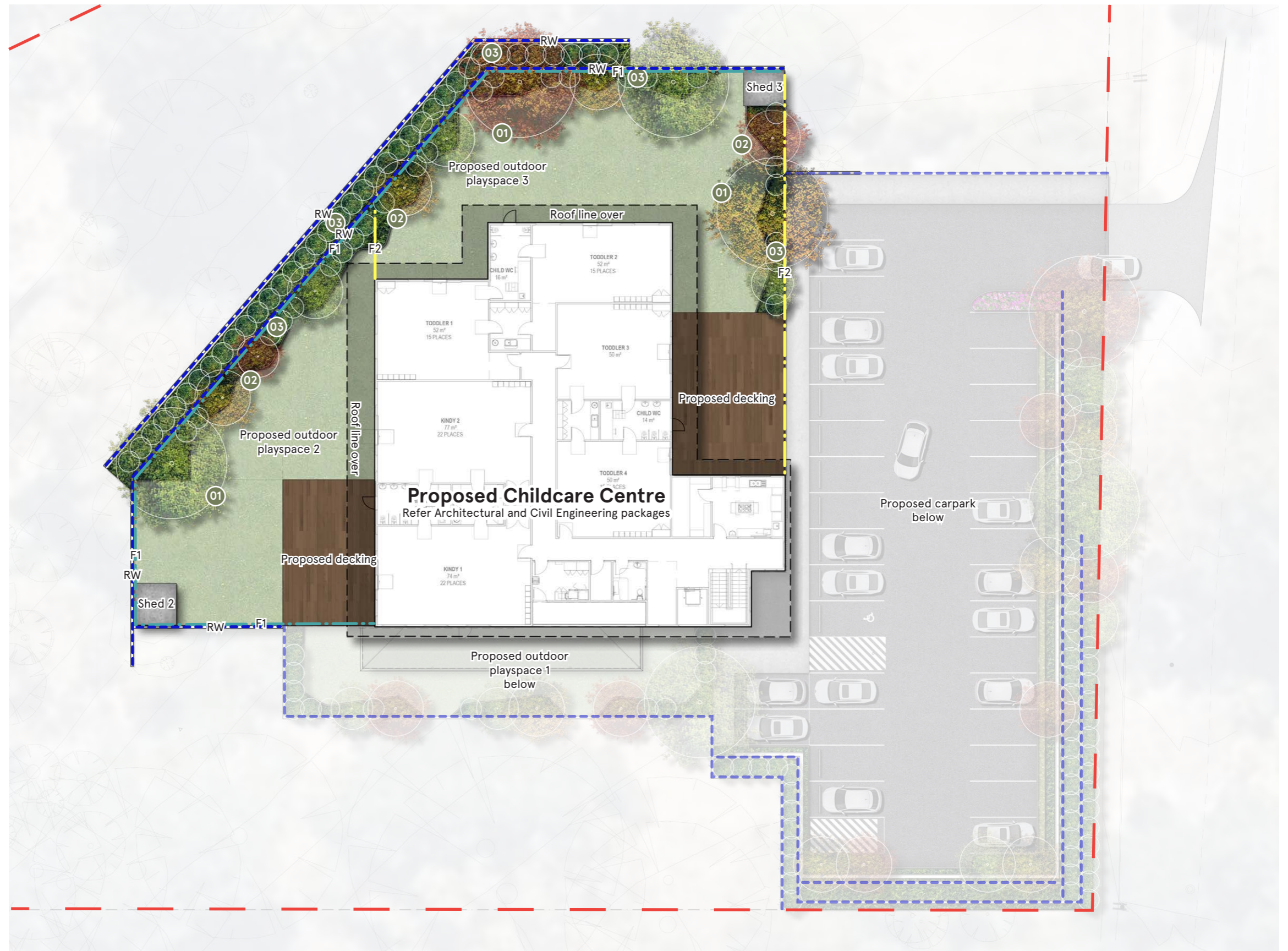


Date 02 August 2023  
Scale 1:300  
Sheet A3

# 02 First Floor Landscape Design

## Legend

- Property boundary
- RW- Proposed retaining wall (varying heights)  
Refer Civil Engineering package
- F1- Proposed fencing type 01  
Refer Architectural package
- F2- Proposed fencing type 02  
Refer Architectural package
-  Proposed mains irrigated assorted species of mass planted medium shrubs, small shrubs, low-lying shrubs and groundcovers to provide visual amenity
- 01 Proposed mains irrigated assorted species of large trees with understory low-lying shrubs and groundcovers to provide visual amenity and shading
- 02 Proposed mains irrigated assorted species of medium and small trees with understory low-lying shrubs and groundcovers to provide visual amenity and minor shading
- 03 Proposed mains irrigated assorted species of large shrubs to provide visual amenity and screening



**Note:**

- Refer to Architectural package for all proposed demolition/modifications and existing trees proposed to be retained/removed
- Refer to Engineering package(s) for any proposed RL's, contours, stormwater connections, pit locations, cut and fill requirements and retaining wall information
- Refer to '03 Indicative Planting Palette' sheet for sample suitable planting types and species
- Planting extents in playspaces to be finalised



Date 02 August 2023  
Scale 1:300  
Sheet A3



# 03 Indicative Planting Palette



## INDICATIVE PLANTING PALETTE

CODE	BOTANICAL NAME	COMMON NAME	SPACING	HEIGHT & WIDTH AT MATURITY (m)
<b>LARGE TREES</b>				
Ls	<i>Liquidambar styraciflua</i> *	Liquidambar	As shown	20+ x 6 (H x W)
Qc	<i>Quercus coccinea</i> *	Scarlet Oak	As shown	12 x 8 (H x W)
Qr	<i>Quercus robur</i> *	English Oak	As shown	11 x 11 (H x W)
Up	<i>Ulmus parvifolia</i> *	Chinese Elm	As shown	13 x 10 (H x W)
<b>MEDIUM AND SMALL TREES</b>				
An	<i>Acer negundo</i> 'Sensation' *	Box Elder	As shown	9 x 6 (H x W)
Fg	<i>Fraxinus griffithii</i> *	Evergreen Ash	As shown	6-8 x 4 (H x W)
Mi	<i>Malus ioensis</i> 'Plena' *	Iowa Crab Apple	As shown	6 x 4 (H x W)
Pc	<i>Pyrus calleryana</i> 'Chanticleer' *	'Chanticleer' Ornamental Pear	As shown	11 x 6 (H x W)
<b>LARGE SHRUBS</b>				
Ag	<i>Abelia grandiflora</i> *	Glossy Abelia	2000mm	1-2 x 1-2 (H x W)
Nd	<i>Nandina domestica</i> *	Sacred Bamboo	1500mm	1.5-2 x 1-1.5 (H x W)
PJ	<i>Pittosporum</i> 'James Stirling' *	'James Stirling' Pittosporum	1000mm	2-3 x 1 (H x W)
Pe	<i>Pittosporum eugenioides</i> 'Tarata' *	Green Tarata	4000mm	6 x 4 (H x W)
Vo	<i>Viburnum odoratissimum</i> 'Green Emerald' *	Sweet Viburnum	2000mm	3.5-4 x 1.5-2 (H x W)
<b>MEDIUM SHRUBS</b>				
Br	<i>Bauera rubioides</i> *	River Rose	1000mm	0.3-1.5 x 0.5-1 (H x W)
CA	<i>Correa</i> 'Aldgate Pink' *	'Aldgate pink' Correa	3000mm	0.2-1 x 0.6-3 (H x W)
CD	<i>Correa</i> 'Dusky Bells'	'Dusky Bells' Correa	3000mm	0.2-1 x 0.6-3 (H x W)
Dr	<i>Dianella revoluta</i> *	Black-anther Flax-lily	2000mm	0.3-1 x 0.5-2 (H x W)
Pm	<i>Philotheca myoporoides</i> *	Wax Flower	1000mm	0.8-1 x 0.8-1 (H x W)
Ro	<i>Rosmarinus officinalis</i> *	Rosemary	1000mm	1-1.5 x 0.8-1 (H x W)
Wf	<i>Westringia fruticosa</i>	Coastal Rosemary	1000mm	0.8-1 x 0.8-1 (H x W)
<b>SMALL SHRUBS</b>				
Bm	<i>Brachyscome multifida</i>	Cut Leaf Daisy	600mm	0.3-0.4 x 0.5-0.6 (H x W)
Dc	<i>Dianella caerulea</i> 'Little Jess'	'Little Jess' Dianella	400mm	0.3-0.4 x 0.3-0.4 (H x W)
Lm	<i>Lomandra multiflora</i>	Mat-rush	1500mm	0.2-0.3 x 0.5-1.5 (H x W)
SM	<i>Scaevola</i> 'Mauve Clusters'	Fan Flower	800mm	0.3-0.5 x 0.7-0.8 (H x W)
<b>LOW-LYING SHRUBS AND GROUNDCOVERS</b>				
Ca	<i>Chrysocephalum apiculatum</i>	Common Everlasting	400mm	0.1-0.2 x 0.3-0.4 (H x W)
Eg	<i>Eremophila glabra</i> 'Kalbarri Carpet'	Common Emu Bush	2000mm	0.1-0.2 x 1-2 (H x W)
Kp	<i>Kennedia prostrata</i>	Running Postman	4000mm	0-0.1 x 1-4 (H x W)
Mp	<i>Myoporum parvifolium</i>	Creeping Boobialla	3000mm	0.15-0.3 x 3 (H x W)

\* Endorsed by local Council

### Note:

- Indicative palette to showcase potential, suitable planting opportunities only
- Planting types, species, number of selections and spacings to be finalised
- Planting selections and pot sizes subject to location and supplier availability

**daStudio**

76 McLaren Street  
Adelaide SA 5000

(08) 7078 8110

[hello@das-studio.com.au](mailto:hello@das-studio.com.au)

[das-studio.com.au](https://das-studio.com.au)

# 03 Streetscape Perspective



Large, thin white line art elements are scattered across the page. On the left side, there are two semi-circles of different radii. In the lower-left quadrant, there is a shape resembling a stylized 'S' or a curved line. On the right side, there is a large, angular shape that looks like a stylized 'N' or a series of connected lines.

**APPENDIX 4**  
**Acoustic Report**

# Paratoo Road Child Care Centre

Environmental Noise Assessment

S7601C1

May 2023

sonus.

**Sonus Pty Ltd**  
17 Ruthven Ave  
Adelaide SA 5000  
Phone: +61 (8) 8231 2100  
Email: [info@sonus.com.au](mailto:info@sonus.com.au)  
[www.sonus.com.au](http://www.sonus.com.au)

**Document Title** : Paratoo Road Child Care Centre  
Environmental Noise Assessment

**Client** : Accord Property

**Document Reference** : S7601C1

**Date** : May 2023

**Author** : Chris Turnbull, MAAS

---

© Sonus Pty Ltd. All rights reserved.

This report may not be reproduced other than in its entirety. The report is for the sole use of the client for the particular circumstances described in the report. Sonus accepts no responsibility to any other party who may rely upon or use this report without prior written consent.

---

## 1 INTRODUCTION

An environmental noise assessment has been conducted for the proposed child care centre to be located at 35 Paratoo Road, Stirling (the **Development**).

The proposed child care centre will include three outdoor play areas, with associated car parking areas accessed via Paratoo Road. The closest existing noise sensitive receivers to the Development are located to the north, west, east and across Paratoo road to the south. The site and its surroundings are shown in Figure 1 and the layout of the site is shown in Appendix A.



*Figure 1: The Site and its Surroundings*

The assessment considers the noise levels at the closest residences from children playing in outdoor areas, car park activity, and mechanical plant operation.

The assessment has been based on the following:

- Brown Falconer drawing of the site, Job No: 2022107, drawing DA04 dated 28 March 2023, DA05 and DA5A dated April 2023;
- CPR Engineers markup of the elevation levels, Drawing No 220216-C300, Dated 09 May 2023;
- Previous noise measurements and noise data from similar sites for mechanical plant and car parking activity;
- The understanding that the total number and age of the children at the centre will be:
  - 24 x 0–2-year-olds;
  - 60 x 2–3-year-olds; and,
  - 44 x 3–5-year-olds.
- The understanding that children will be outside for an average of 8 hours per day.

## 2 PLANNING AND DESIGN CODE

The site is located within the *Rural Neighbourhood Zone and the Adelaide Hills Sub Zone*. The closest residences are also located within the *Adelaide Hills Sub Zone* with residences on the opposite side of Old Mount Barker Road within the *Productive Rural Landscape Zone* of the *South Australian Planning and Design Code* (the **Code**).

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, where adjacent residences are sensitive to the sound of children's voices, the noise can be annoying. For the purposes of this assessment, it has been assumed that the existing residents in the vicinity of the proposed development are sensitive to the sound of children's voices.

#### 3.1 Criteria

The *Deemed-to-Satisfy / Designated Performance Feature* provision for PO4.1 of the Code references the *Environment Protection (Noise) Policy 2007* (the **Policy**). However, the noise from child care centres is specifically excluded from assessment under the Policy. In these circumstances, reference is made to the recommendations of the *Guidelines for Community Noise* (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 equivalent noise levels ( $L_{Aeq}$ ) during the daytime hours, from children playing, are no greater than 50 dB(A) at the residences.

### 3.2 Assessment

The noise from children in outdoor areas has been assessed based on the sound power levels provided in Table 1 of the *Association of Australasian Acoustical Consultants - Guideline for Child Care Centre Acoustic Assessment* document. Based on these levels, the noise from the proposed facility has been predicted for the centre operating at full capacity in all age groups, totalling 128 children.

The noise levels generated from children of various ages, playing in outdoor areas, used as the basis of this assessment, are provided in Appendix C.

Based on the above, the assessment criterion is achieved without incorporating any additional acoustic treatments to the site. The highest predicted noise level resulting from the children playing is 49 dB(A) at any residence.

## 4 CAR PARK ACTIVITY AND MECHANICAL PLANT

### 4.1 Criteria

The *Deemed-to-Satisfy / Designated Performance Feature* provision for *PO4.1* of the Code references the *Environment Protection (Noise) Policy*. The Policy is based on preventing adverse impacts on the amenity of a locality and it is therefore considered that where the noise from car park activity and mechanical plant at the facility achieve the Policy, other *Performance Outcomes* are also achieved.

The Policy provides goal noise levels to be achieved at residences, based on the principally promoted land uses of the zones within the Code in which the noise source (child care centre) and the noise receivers (the residences) are located. The Policy applies noise goals that are 5 dB(A) lower when assessed at existing residences. In this instance, the Policy provides the following goal noise levels:

- Residences within the Adelaide Hill Sub Zone:
  - An equivalent noise level ( $L_{Aeq}$ ) of 42 dB(A) during the day (7:00am to 10:00pm);
  - An equivalent noise level ( $L_{Aeq}$ ) of 35 dB(A) during the night (10:00pm to 7:00am); and,
  - An instantaneous maximum noise level ( $L_{max}$ ) of 60 dB(A) during the night (10:00pm to 7:00am).
  
- Residences within the Productive Rural Landscape Zone:
  - An equivalent noise level ( $L_{Aeq}$ ) of 47 dB(A) during the day (7:00am to 10:00pm); and,
  - An equivalent noise level ( $L_{Aeq}$ ) of 40 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 for each “annoying” characteristic of tonality, impulsiveness, low frequency, and modulation of the noise sources. The characteristic must be considered dominant in the acoustic environment and therefore the application varies depending on the assessment location, time of day, the noise source being assessed and the predicted noise levels. The application of penalties is discussed further in the following section.

## 4.2 Assessment

The noise levels at residences from the proposed site activity have been predicted based on a range of previous noise measurements and observations 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;
- Vehicle movements on site; and,
- 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. The sound power level of the equipment is as shown in Appendix C.

The predictions have been based on the following assumed activity levels within any 15-minute period (the default assessment period of the Policy):

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

A 5 dB(A) penalty has been applied at all residences exposed to the character of noise from the onsite vehicles.

In order to achieve the assessment criteria, the mechanical plant could be located within the area shown as **YELLOW** in Figure 2.

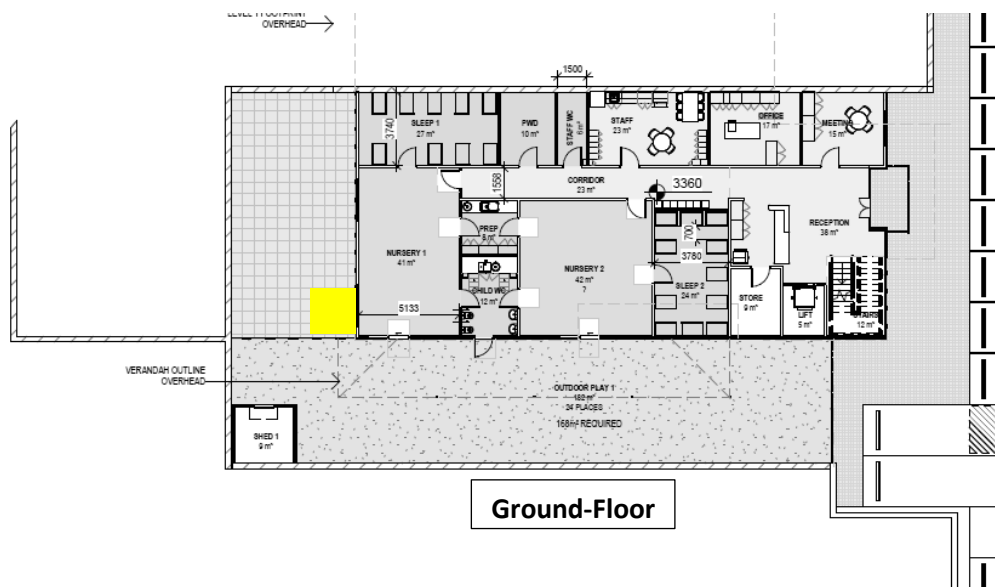


Figure 2: Treatment Summary

With this location, the assumed level of activity at the site and the application of the penalty, the highest equivalent noise levels ( $L_{eq}$ ) predicted are 43 dB(A) during the day time (7:00am to 10:00pm) and 35 dB(A) during the night (10:00pm to 7:00am).

The instantaneous maximum noise levels have also been predicted for all the residences within the Adelaide Hills Sub Zone. Predicted maximum noise levels have been based on measurements at a variety of different similar sites and include noise sources such as car doors slamming and vehicles accelerating.

The predicted maximum noise levels at any existing residence are no higher than 57 dB(A), therefore achieving the instantaneous maximum noise level ( $L_{max}$ ) criterion of the Policy.

## 5 CONCLUSION

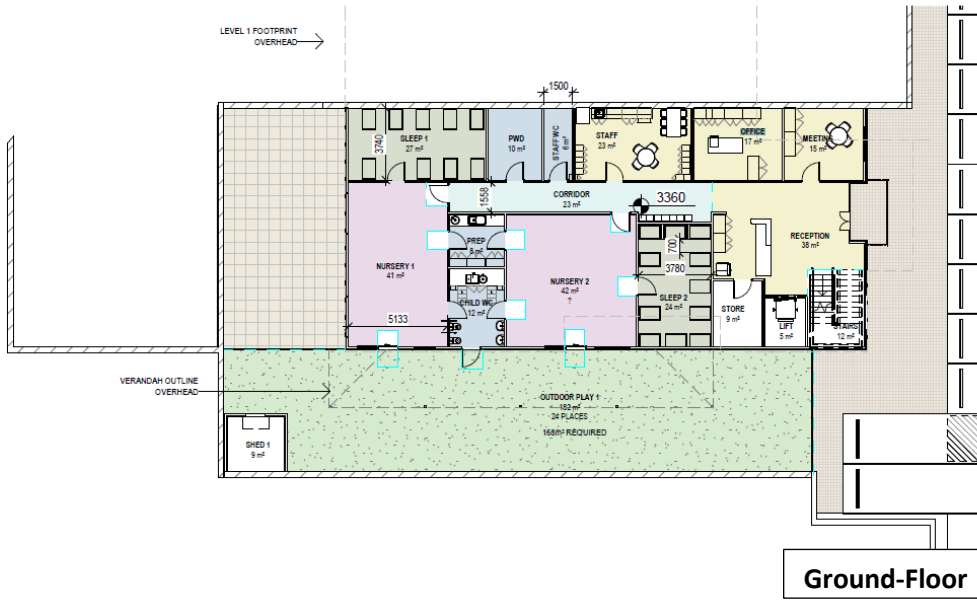
An environmental noise assessment has been conducted for the proposed child care centre to be located at 35 Paratoo Road, Stirling.

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

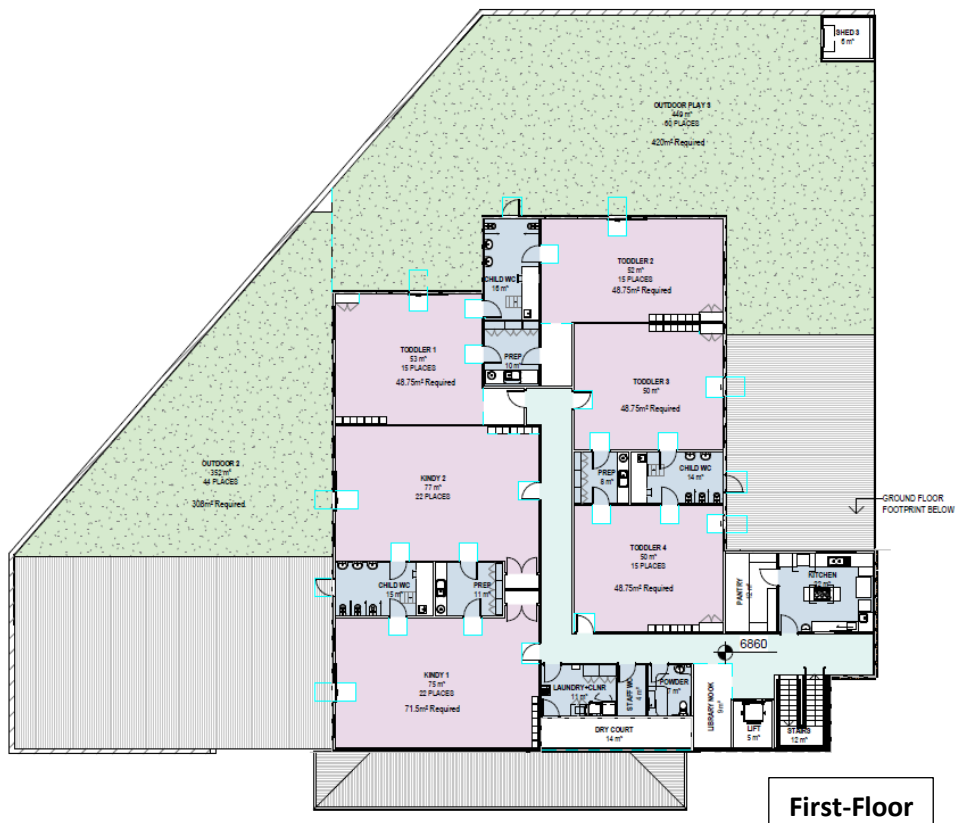
Relevant assessment criteria have been established based on the *South Australian Planning and Design Code*, the *Environment Protection (Noise) Policy 2007* and the *World Health Organisation* recommendations to protect against annoyance. A mechanical plant location has been recommended in order to achieve the noise criteria.

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

APPENDIX A: SITE LAYOUT



Ground-Floor



First-Floor

**APPENDIX B: SOUTH AUSTRALIAN PLANNING AND DESIGN CODE – RELEVANT PROVISIONS**

**PART 4 – GENERAL DEVELOPMENT POLICIES**

**Interface between Land Uses**

**Desired Outcome (DO)**

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

<b>Performance Outcome</b>	<b>Deemed-to-Satisfy Criteria / Designated Performance Feature</b>								
<b>General Land Use Compatibility</b>									
<p><b>PO 1.2</b>                      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.</p>	<p><b>DTS/DPF 1.2</b>                      None are applicable.</p>								
<b>Hours of Operation</b>									
<p><b>PO 2.1</b>                      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:</p> <p>(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.</p>	<p><b>DTS/DPF 2.1</b>                      Development operating within the following hours:</p> <table border="1"> <thead> <tr> <th><b>Class of Development</b></th> <th><b>Hours of operation</b></th> </tr> </thead> <tbody> <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> </tbody> </table>	<b>Class of Development</b>	<b>Hours of operation</b>	Consulting room	7am to 9pm, Monday to Friday 8am to 5pm, Saturday	Office	7am to 9pm, Monday to Friday 8am to 5pm, Saturday	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	7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday
	<b>Class of Development</b>	<b>Hours of operation</b>							
	Consulting room	7am to 9pm, Monday to Friday 8am to 5pm, Saturday							
	Office	7am to 9pm, Monday to Friday 8am to 5pm, Saturday							
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	7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday								



<b>Activities Generating Noise or Vibration</b>	
<p><i>PO 4.1</i>            Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).</p>	<p><i>DTS/DPF 4.1</i>            Noise that affects sensitive receivers achieves the relevant Environment Protection (Noise) Policy criteria.</p>
<p><i>PO 4.2</i>            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:</p> <ul style="list-style-type: none"> <li><i>(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</i></li> <li><i>(b) when sited outdoors, locating such areas as far as practicable from adjacent sensitive receivers and zones primarily intended to accommodate sensitive receivers</i></li> <li><i>(c) housing plant and equipment within an enclosed structure or acoustic enclosure</i></li> <li><i>(d) providing a suitable acoustic barrier between the plant and / or equipment and the adjacent sensitive receiver boundary or zone.</i></li> </ul>	<p><i>DTS/DPF 4.2</i>            None are applicable.</p>

**APPENDIX C: SOUND POWER LEVELS**

Activity		Sound Power Level
Car Park Activities	Vehicle Movement	82 dB(A)
	General Activity	83 dB(A)
Mechanical Plant	A/C Condenser 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 5**  
**Traffic and Parking Report**





**PROPOSED CHILD CARE CENTRE  
35 PARATOO ROAD, STIRLING**

**TRAFFIC AND PARKING REPORT**



## DISCLAIMER

The information and data contained within this document are the property of CIRQA Pty Ltd and copyright. This document and the information contained therein is for the use of the authorised Client noted below. The document may not be used, copied, reproduced or modified in whole or in part for any purpose other than for which it was supplied by CIRQA Pty Ltd. CIRQA Pty Ltd accepts no responsibility or liability to any other party who may use or rely upon this document or the information contained therein.

## DOCUMENT CONTROL

Report title: Proposed Child Care Centre, 35 Paratoo Road, Stirling  
Traffic and Parking report

Project number: 22362

Client: Development Holdings Pty Ltd

Client contact: Brad Steinert

Version	Date	Details/status	Prepared by	Approved by
Draft	02 Jun 23	For review	JJB	BNW
V1.0	20 Jun 23	For submission	JJB	BNW

### CIRQA Pty Ltd

ABN 12 681 029 983

PO Box 144, Glenside SA 5065

150 Halifax Street, Adelaide SA 5000

(08) 7078 1801

[www.cirqa.com.au](http://www.cirqa.com.au)

## **1. INTRODUCTION**

CIRQA has been engaged to provide design and assessment advice for a proposed child care centre at 35 Paratoo Road, Stirling. 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 Brown Falconer (drawing no. 3567 DA04, refer Appendix A).

## **2. BACKGROUND**

### **2.1 SUBJECT SITE**

The subject site is located on the northern side of Paratoo Road. The site is bound by residential dwellings to the east, Paratoo Road to the south and Stirling East Primary School to the west.

The Planning and Design Code identifies that the site is located within a Rural Neighbourhood Zone (Adelaide Hills Sub Zone), with the following Overlays applicable:

- Hazards (Bushfire – Medium Risk);
- Hazards (Flooding – Evidence Required);
- Mount Lofty Ranges Water Supply Catchment (Area 2);
- Native Vegetation;
- Prescribed Water Resources Area; and
- Regulated and Significant Tree.

The subject site is currently occupied by a residential dwelling. Vehicle access is provided via a crossover on Paratoo Road, at which left-in/left-out turning movements are permitted (due to the one-way direction of the adjacent section of Paratoo Road).

Figure 1 illustrates the location of the subject site with respect to the adjacent road network.



*Figure 1 – Location of the subject site with respect to the adjacent road network*

## **2.2 ADJACENT ROAD NETWORK**

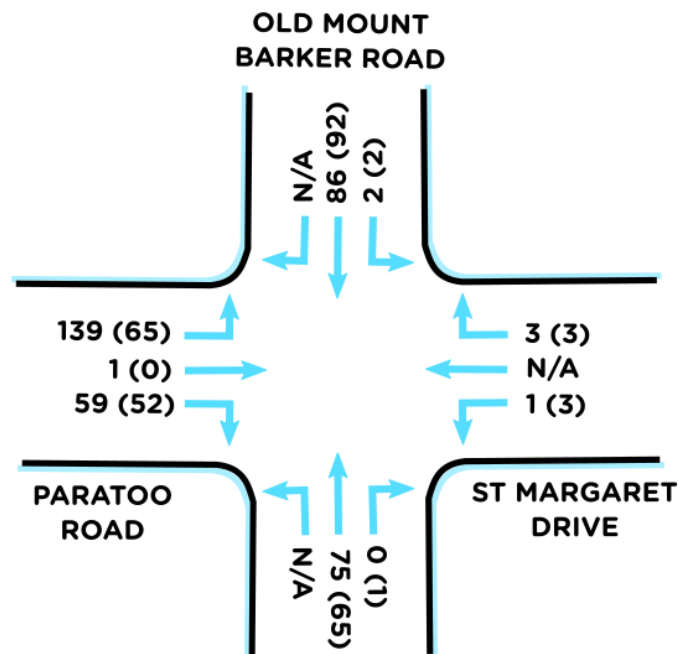
Old Mount Barker Road is a sub-arterial road under the care and control of the Adelaide Hills Council. Nearby the site, Old Mount Barker Road comprises a 6.6 m wide carriageway (approximate) with a single traffic lane in each direction. A speed limit of 50 km/h applies on Old Mount Barker Road albeit a 25 km/h School Zone applies (when children are present). During set-down/pick-up periods associated with the school, parents/care givers were observed parking along Old Mount Barker Road. Parking demands associated with the school were observed to last for a short period of time during the start and end of the school day.

Paratoo Road is a local road under the care and control of the Adelaide Hills Council. Adjacent the site, Paratoo Road comprises a single 3.5 m wide northbound (one-way) traffic lane. In the section between Snows Road and Yam Street, Paratoo Road comprises a single traffic lane in both directions (i.e. accommodates two-way flow). A speed limit of 50 km/h applies on Paratoo Road albeit when children are present a 25 km/h applies within the School Zone (associated with the adjacent Stirling East Primary School). An off-street parking area for the Stirling East Primary School is accessed via Paratoo Road. Set-down/pick-up movements for the Primary School occur within the off-street parking area as well as on-street, adjacent the site. It was observed during peak periods associated with the school (particularly end of school pick-up), vehicles parked on both sides of Paratoo Road. The high parking demand associated with the school

was observed to last for a short period of time. In particular, end of school pick-up parking demands on Paratoo Road dissipated approximately 15 minutes after school finished.

Yam Street is a local road under the care and control of the Adelaide Hills Council. Yam Street comprises a 3.8 m wide (approximate) southbound traffic lane accommodating movements between Old Mount Barker Road and Paratoo Road. A speed limit of 50 km/h generally applies on Yam Street albeit a 25 km/h School Zone applies (when children are present). During set-down/pick-up periods associated with the school, parents/care givers were observed parking along Yam Street. This was more prolific during the end of school pick-up. However, the high parking demand only lasted for a short period of time and dissipated approximately 15 minutes after school finished.

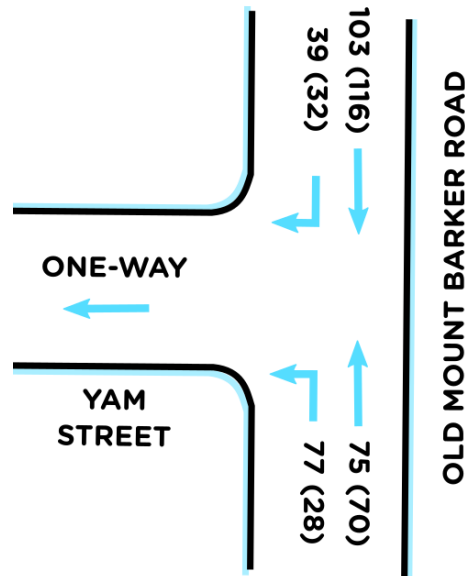
Old Mount Barker Road, Paratoo Road and St Margaret Drive form a priority-controlled (Give Way) four-way intersection. It is noted that entry is restricted to Paratoo Road from the intersection (No Entry). Austraffic conducted a traffic movement survey at the intersection as well as other surrounding intersections detailed below on 5 December 2022 (this included the peak am and pm periods of set-down/pick-up activity at Stirling East Primary School). Peak movements during the am and pm peak hours at the intersection are illustrated in Figure 2.



*Figure 2 – Surveyed traffic volumes at the intersection of Old Mount Barker Road, Paratoo Road and St Margaret Drive during the am (pm) peak hours*



Old Mount Barker Road and Yam Street form a priority-controlled T-intersection (with priority assigned to Old Mount Barker Road). Yam Street is one-way, accommodating westbound movements from the intersection. The am and pm peak hour movements recorded at this intersection during the Austraffic survey are illustrated in Figure 3.



*Figure 3 – Surveyed traffic volumes at the intersection of Old Mount Barker Road and Yam Street during the am (pm) peak hours*

Paratoo Road and Yam Street form a priority-controlled (Give Way) T-intersection (with priority assigned to Paratoo Road). Yam Street is one-way, accommodating ingress only movements from the intersection. The am and pm peak hour movements recorded at this intersection during the Austraffic survey are illustrated in Figure 4.

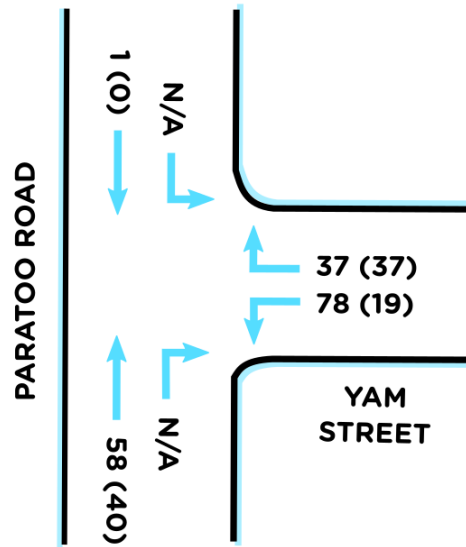


Figure 4 – Surveyed traffic volumes at the intersection of Paratoo Road and Yam Street during the am (pm) peak hours

Paratoo Road and Braeside Street form a priority-controlled (Give Way) T-intersection (with priority assigned to Paratoo Road). It is noted that left-turns from Braeside Road are restricted between 3:00 to 3:45 pm, Monday to Friday. The am and pm peak hour movements recorded at this intersection during the Austrafic survey are illustrated in Figure 5.

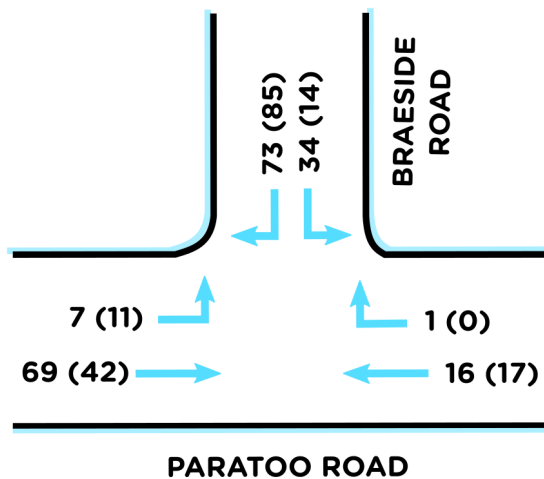


Figure 5 – Surveyed traffic volumes at the intersection of Paratoo Road and Braeside Road during the am (pm) peak hours

### 2.3 RECENT CRASH HISTORY

Crash data has been obtained from the Department for Infrastructure and Transport (DIT) for the road network surrounding the subject site (for the period between 2017 to 2021). The DIT data indicates that there has been one crash reported at the intersection of Paratoo Road, Old Mount Barker Road and St

Margaret Drive within the above period. The crash was a 'right angle' collision resulting in property damage only. The four-way intersection is currently unsigned and without Give Way linemarking which may have contributed to the reported accident. It was observed that Old Mount Barker Road formed the major approaches with vehicles on St Margaret Street and Paratoo Road giving way to vehicles on Old Mount Barker Road. It would be recommended that appropriate Give Way signage and linemarking be installed on the minor approaches to formalise the priorities at the intersection, regardless of the child care proposal.

No other accidents have been reported within close proximity of the subject site.

## **2.4 WALKING AND CYCLING**

A sealed footpath is provided to the south-west of the subject site on the north-western side of Paratoo Road. An unsealed path is provided in front of and to the north-east of the site on the north-western side of Paratoo Road. A sealed path is also provided on the southern side of Yam Street which connects to a short section of sealed path on the south-eastern side of Paratoo Road and an associated pedestrian crossing on Paratoo Road (servicing the school). Cyclists are able to share the footpaths with pedestrians or ride on-street sharing the road with motorists (no formal cycling facilities are provided on Paratoo Road or the other surrounding roads).

## **2.5 PUBLIC TRANSPORT**

Public bus services operate regularly in the vicinity of the subject site. Bus stops are located within 60 m of the subject site on both sides of Paratoo Road. These stops are serviced by the 866/866A Stirling to Crafers routes.

# **3. PROPOSED DEVELOPMENT**

## **3.1 LAND USE AND YIELD**

The proposed development comprises the demolition of the existing dwelling on the subject site and the construction of a 128-place child care centre. The child care centre will be serviced by 33 parking spaces.

## **3.2 ACCESS AND PARKING DESIGN**

Vehicle access to the site will be provided via a 6.2 m wide two-way crossover on Paratoo Road. Movements at the access will be restricted to left-in/left-out due to the one-way traffic direction on Paratoo Road. Such restrictions will be reinforced with linemarking and signage. The access point will accommodate two-way movements with entering vehicles able to be driven past another vehicle stored waiting to exit the site. All vehicles will be able to enter and exit the site in a forward direction.

Sight distance at the access driveway exit will be provided above the minimum distance required by the Australian/New Zealand Standard, *Parking Facilities Part 1: Off-street car parking* (AS/NZS 2890.1:2004).

As noted above, the site is proposed to be serviced by a 33-space parking area, of which one space will be reserved exclusively for use by persons with disabilities. The parking area will comply with the requirements of AS/NZS 2890.1:2004 and Australian/New Zealand Standard, *Parking Facilities Part 6: Off-street parking for people with disabilities* (AS/NZS 2890.6:2009) in that:

- regular (90 degree) parking spaces will be 2.6 m wide and 5.4 m long;
- the parking space for use by persons with disabilities will be 2.4 m wide and 5.4 m long (with an adjacent shared space of the same dimension);
- 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;
- a turn-around bay will be provided at the end of the parking aisle;
- 0.3 m clearance will be provided to all objects greater than 0.15 m in height; and
- pedestrian sightlines will be provided at the site's access point.

Grades within the proposed parking area shall satisfy the requirements identified within the following Australian Standards to accommodate commercial vehicle access (for refuse collection and emergency services access) and light vehicle parking:

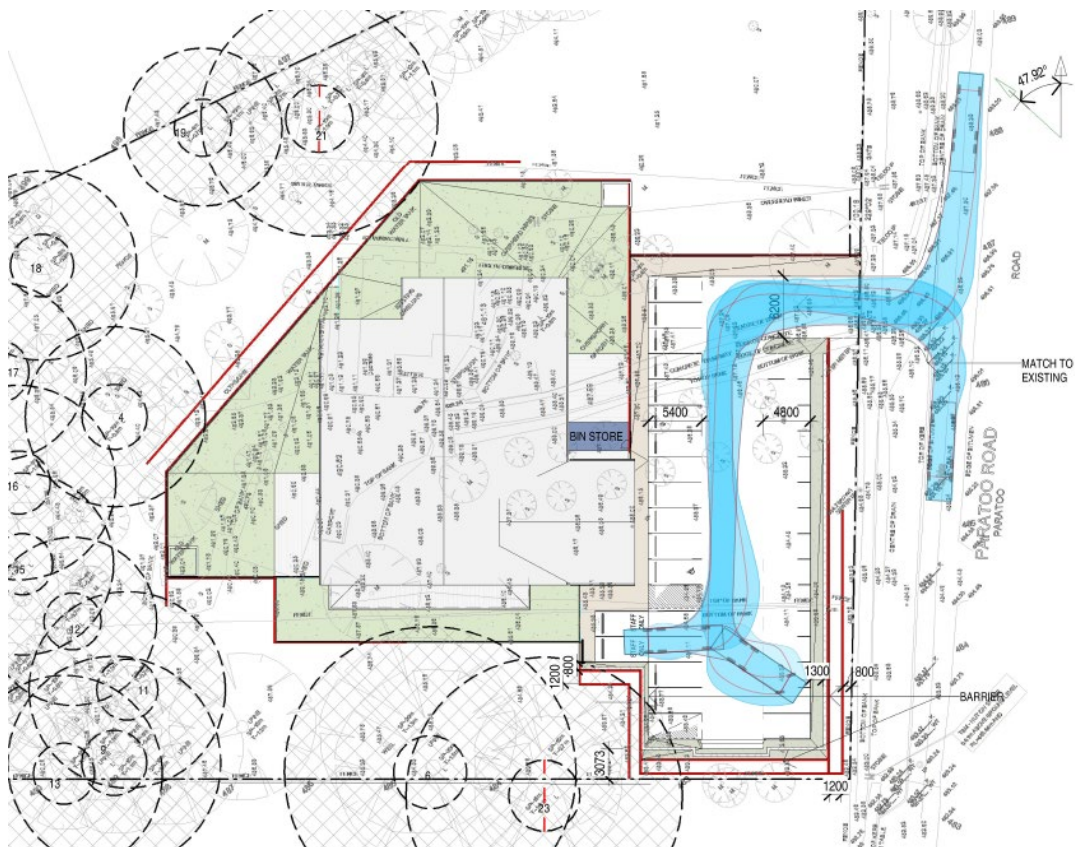
- Australian/New Zealand Standard, *Parking Facilities Part 1: Off-street car parking* (AS/NZS 2890.1:2004);
- Australian/New Zealand Standard, *Parking Facilities Part 6: Off-street parking for people with disabilities* (AS/NZS 2890.6:2009); and
- Australian/New Zealand Standard, *Parking Facilities Part 2: Off-street commercial vehicle facilities* (AS/NZS 2890.2:2018).

Two of the parking spaces will be provided in a stacked (tandem) arrangement (behind other spaces). These spaces will be designated for staff use only. Such parking arrangements are common at child care centres within metropolitan Adelaide and are easily managed.

Pedestrian access within the site to/from the public road reserve will be provided via a 1.5 m wide (minimum) sealed footpath.

### 3.3 REFUSE COLLECTION

Refuse collection will be undertaken via private contractor with the associated manoeuvres accommodated on-site (forward-in/forward-out). The site will be able to accommodate movements by a 10 m long (rear-lift) rigid vehicle. It is anticipated that such movements would be undertaken outside of opening hours. Figure 6 illustrates the turn path for a 10 m rigid vehicle entering and exiting the site in a forward direction.



*Figure 6 – 10 m rigid vehicle turning movements into and out of the site*

### 4. PARKING ASSESSMENT

The Planning and Design Code identifies a Deemed-to-Satisfy/Designated Performance Feature (DTS/DPF) parking requirement of 0.25 spaces per child for land uses classified as ‘child care centres’ (equivalent to a rate of one space per four children). Such a rate includes allowance for parent/visitor and staff parking during the peak demand periods (as well as other times). Based upon a capacity of 128 children, the proposed child care centre would have a DTS/DPF requirement for 32 spaces. Given that 33 spaces will be provided, the DTS/DPF parking requirement identified within the Planning and Design Code will be satisfied (and exceeded). Parking demands associated with the child care centre will therefore be wholly accommodated within the site with no reliance on external (i.e. on-street) parking.

## 5. TRAFFIC ASSESSMENT

### 5.1 CENTRE PEAK TRAFFIC GENERATION AND DISTRIBUTION

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 proposal will generate 171 am peak hour trips and 125 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 site's access point on Paratoo Road. All movements at the access point will be restricted to left-in/left-out of the site due to Paratoo Road being restricted to northbound traffic only. For the purposes of this assessment, the following distribution assumptions have been adopted (including consideration of the existing distribution of movements at the adjacent intersection):

- 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); and
- 60% of am inbound movements occur via Old Mount Barker Road and Yam Street, and 40% via the section of Paratoo Road south-east of the site;
- 70% of am outbound movements are distributed to the north on Old Mount Barker Road and 30% to the south on Old Mount Barker Road;
- 50% of pm inbound movements occur via Old Mount Barker Road and Yam Street and 50% via the section of Paratoo Road south-east of the site; and

- 60% of pm outbound movements are to the north on Old Mount Barker Road and 40% to the south on Old Mount Barker Road.

Based upon the above assumptions, the am and pm peak hour movements (associated with the proposed child care centre) have been forecast at key intersections (Figure 7, Figure 8, Figure 9 and Figure 10).

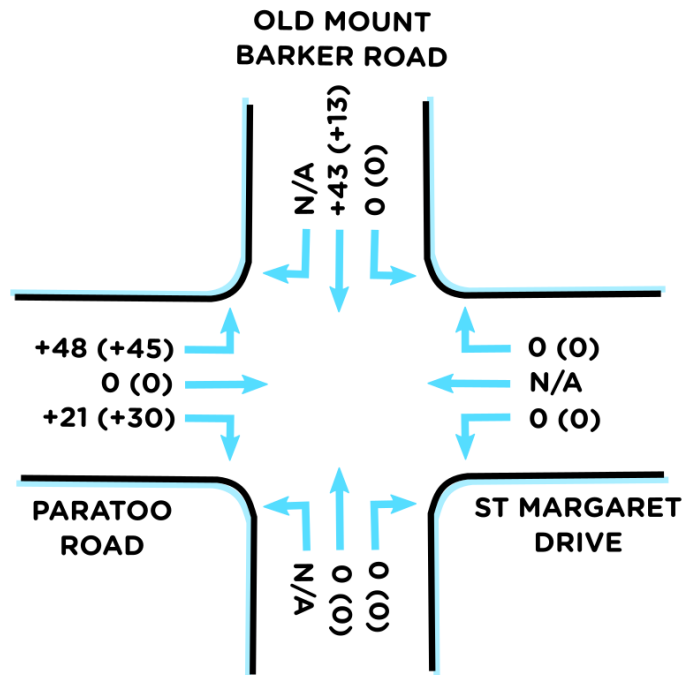


Figure 7 – Additional volumes forecast at the intersection of Old Mount Barker Road, Paratoo Road and St Margaret Drive during the centre’s peak am and (pm) peak hours

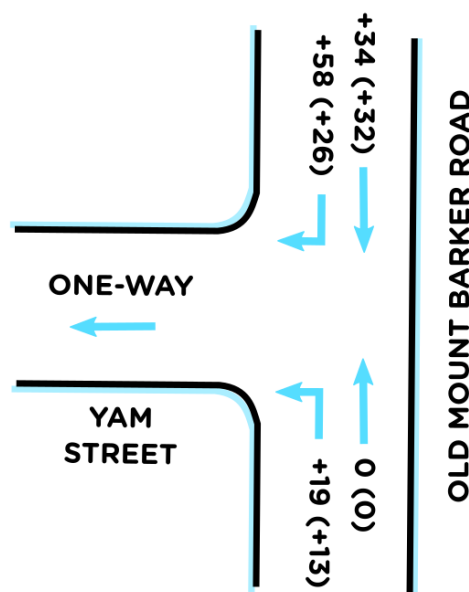


Figure 8 – Additional volumes forecast at the intersection of Old Mount Barker Road and Yam Street during the centre’s peak am and (pm) peak hours

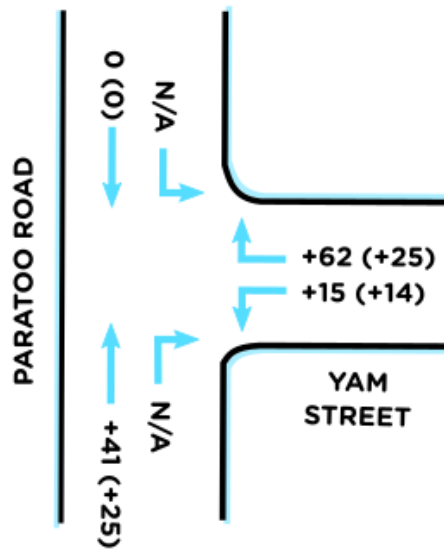


Figure 9 – Additional volumes forecast at the intersection of Paratoo Road and Yam Street during the centre’s peak am and (pm) peak hours

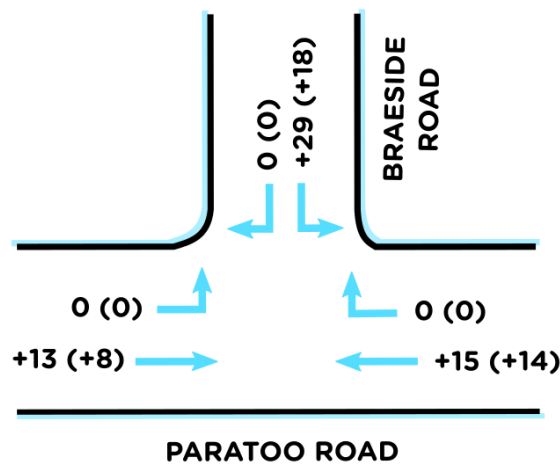


Figure 10 – Additional forecast volumes at the intersection of Paratoo Road and Braeside Road during the centre’s peak am and (pm) peak hours

## 5.2 NETWORK PEAK TRAFFIC GENERATION AND DISTRIBUTION

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 commuter 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. Of particular relevance, peak afternoon/evening periods associated with child care centres typically occur after 4:00 pm with volumes generated during the 3:00 pm to 4:00 pm much lower (i.e. when the traffic volumes currently peak for the pick-up period associated with the adjacent school).



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 128 and 64 trips during the am and pm commuter peak hours, respectively.

As with the centre’s peak hour volumes, vehicle movements generated during the commuter peaks will be distributed via the site’s access points on Paratoo Road. The distribution assumptions noted above for the peak child care traffic generation have been adopted for the network peak child care traffic generation. Figure 11, Figure 12, Figure 13 and Figure 14, (below) illustrate forecast additional movements generated by the proposed child care centre during the network peak hours.

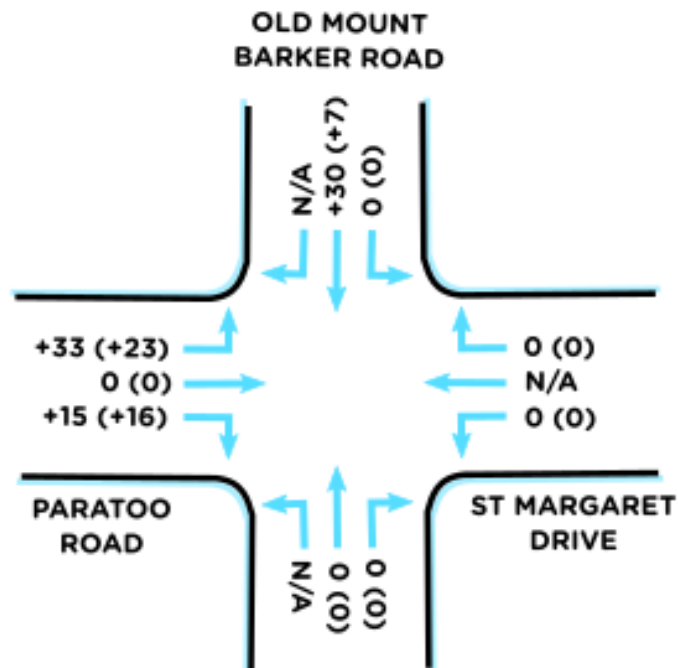


Figure 11 – Additional volumes forecast at the intersection of Old Mount Barker Road, Paratoo Road and St Margaret Drive during the road network (commuter) peak am and (pm) peak hours

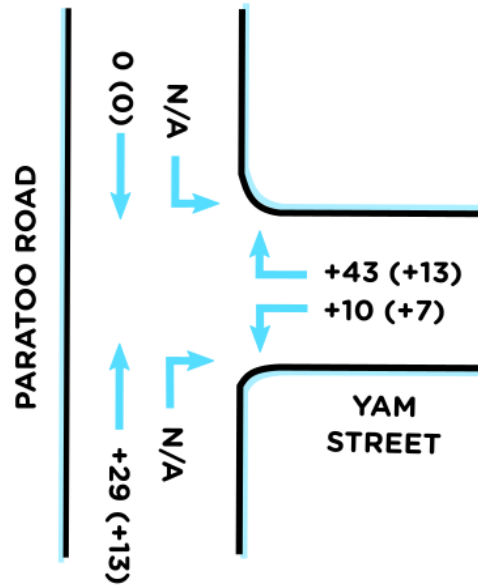


Figure 12 – Additional forecast volumes at the intersection of Paratoo Road and Yam Street during the road network (commuter) peak am and (pm) peak hours

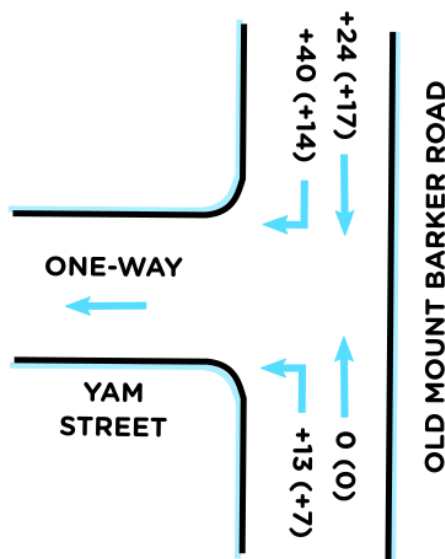
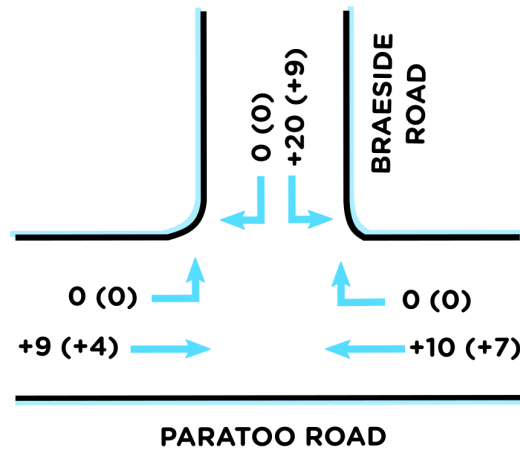


Figure 13 – Additional forecast volumes at the intersection of Old Mount Barker Road and Yam Street during the road network (commuter) peak am and (pm) peak hours



*Figure 14 – Additional forecast volumes at the intersection of Paratoo Road and Braeside Road during the road network (commuter) peak am and (pm) peak hours*

### 5.3 TRAFFIC IMPACT

To determine the potential impact of the proposed child care centre, SIDRA modelling of the key intersections has been undertaken for the following three scenarios for the am and pm peak hours:

- **Existing (Base Case) Scenario** – surveyed movements (i.e. current conditions);
- **Future Scenario 1** – the (centre’s) peak child care traffic generation plus the surveyed movements; and
- **Future Scenario 2** – the network peak child care traffic generation plus the surveyed movements.

Future Scenario 1 represents a highly conservative assessment as it assumes both the centre’s peak hours overlap with the general road network peaks. As detailed above, this is highly unlikely. The Future Scenario 2 provides a more realistic assessment of the impacts of the proposal. Nevertheless, both approaches have been assessed for conservatism and as a sensitivity analysis.

SIDRA modelling software is utilised to assess the operation and performance of intersections. The modelling for the subject site has been based on observed conditions during the surveyed peak periods and the base case has been adjusted accordingly to reflect realistic conditions (for instance, the peak flow factor has been adjusted to reflect the condensed period of activity associated with the adjacent school). Key metrics reported by the software, and used for this assessment, include the Degree of Saturation (DoS) and the Level of Service (LoS). The Degree of Saturation is a measure of capacity with a value of less than one being under capacity and a value of one or more indicating that the movement/intersection is over capacity. The Level of Service is a performance metric based upon delays. ‘A’ is the highest LoS and ‘F’ the lowest.

These key SIDRA results are summarised and discussed below. Additional data/results such as queuing and delays also been considered and are included in the detailed modelling reports provided in Appendix B.

### 5.3.1 OLD MOUNT BARKER ROAD/PARATOO ROAD/ST MARGARET ROAD

Key SIDRA outputs for the three modelling scenarios are summarised in Table 1, below.

*Table 1 – Key SIDRA outputs for the intersection of Old Mount Barker Road, Paratoo Road and St Margaret Road*

Approach	Turn	Existing DoS	Existing LoS	Scen. 1 DoS	Scen. 1 LoS	Scen. 2 DoS	Scen. 2 LoS
Old Mount Barker Road (S)	T	0.057 (0.043)	A (A)	0.057 (0.043)	A (A)	0.057 (0.043)	A (A)
	R	0.057 (0.043)	A (A)	0.057 (0.043)	A (A)	0.057 (0.043)	A (A)
St Margaret Drive (E)	L	0.023 (0.010)	A (A)	0.029 (0.010)	A (A)	0.027 (0.010)	A (A)
	R	0.023 (0.010)	A (A)	0.029 (0.010)	A (A)	0.027 (0.010)	A (A)
Old Mount Barker Road (N)	L	0.077 (0.069)	A (A)	0.114 (0.075)	A (A)	0.103 (0.075)	A (A)
Paratoo Road (W)	L	0.387 (0.266)	A (A)	0.541 (0.345)	A (A)	0.493 (0.345)	A (A)
	T	0.387 (0.266)	A (A)	0.541 (0.345)	A (A)	0.493 (0.345)	A (A)
	R	0.387 (0.266)	A (A)	0.541 (0.345)	A (A)	0.493 (0.345)	A (A)

The SIDRA modelling indicates that all movements for the Existing Scenario operate well within capacity (low DoS) and with high LoS. All movements in the existing am peak hour operate with a DoS of 0.387 or less and a LoS of 'A' (the highest LoS achievable). During the pm peak hour, all movements operate with a DoS of 0.266 or less and a LoS of 'A'. This is supported by observations of existing conditions at the intersection (during peak periods). Although queues were observed for a short period of time on Paratoo Road (W), the queue was 'rolling' with minimal delays at the intersection (as indicated by the high LoS).

The SIDRA modelling for Scenarios 1 and 2 indicate that even in the worst-case scenario (Scenario 1), the intersection would operate well below capacity (maximum DoS of 0.541) during the peak periods and with a high LoS 'A'. The

modelling has indicated that the proposal will have a low impact on the performance of the intersection.

Notwithstanding the above impact assessment, it is noted that the existing intersection does not have the vehicle priorities formally linemarked and signed (as noted above, it would be desirable that this be addressed regardless of the proposal). The intersection has been modelled with Old Mount Barker Road forming the two major approaches and Paratoo Road and St Margaret Road forming the minor approaches. The intersection was modelled with a single shared left, through and right-turn lane from Paratoo Road. In reality, the widening of the Paratoo Road approach at the intersection with Old Mount Barker Road allows two vehicles to store side by side at the intersection (i.e. accommodating left and right-turn movements simultaneously). The results of the modelling are therefore considered conservative for the above Scenarios. The traffic generated by the proposal could therefore be easily accommodated at the intersection with the intersection to perform better than indicated by the modelling.

### 5.3.2 OLD MOUNT BARKER ROAD/YAM STREET

Key SIDRA outputs for the three modelling scenarios are summarised in Table 2, below.

*Table 2 – Key SIDRA outputs for the intersection of Old Mount Barker Road and Yam Street*

Approach	Turn	Existing DoS	Existing LoS	Scen. 1 DoS	Scen. 1 LoS	Scen. 2 DoS	Scen. 2 LoS
Old Mount Barker Road (E)	L	0.147 (0.079)	A (A)	0.177 (0.097)	A (A)	0.168 (0.088)	A (A)
	T (R)	0.147 (0.079)	A (A)	0.177 (0.097)	A (A)	0.168 (0.088)	A (A)
Old Mount Barker Road (N)	T (L)	0.165 (0.156)	A (A)	0.292 (0.217)	A (A)	0.252 (0.187)	A (A)
	R	0.165 (0.156)	A (A)	0.292 (0.217)	A (A)	0.252 (0.187)	A (A)
Yam Street (W)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

The SIDRA modelling indicates that all movements for the Existing Scenario operate well within capacity (low DoS) and a high LoS. All movements in the am peak hour operate with a DoS of 0.165 or less and a LoS of A. During the pm peak hour, all movements operate with a DoS of 0.156 or less and a LoS of 'A'. These results were supported by the observations of the intersections performance during the peak periods.

The SIDRA modelling for Scenarios 1 and 2 have indicated that the proposed child care centre will have a low impact on the overall performance of the intersection. Only a minor increase in the DoS was indicated by the modelling (maximum DoS of 0.292 in Scenario 1) and no changes to the LoS 'A'. The intersection will therefore readily accommodate movements associated with the proposal as shown by the conservative assessment.

### 5.3.3 PARATOO ROAD/YAM STREET

Key SIDRA outputs for the three modelling scenarios are summarised in Table 3, below.

*Table 3 – Key SIDRA outputs for the intersection of Paratoo Road and Yam Street*

Approach	Turn	Existing DoS	Existing LoS	Scen. 1 DoS	Scen. 1 LoS	Scen. 2 DoS	Scen. 2 LoS
Yam Street (SE)	L	0.157 (0.096)	A (A)	0.317 (0.181)	A (A)	0.266 (0.138)	A (A)
	R	0.157 (0.096)	A (A)	0.317 (0.181)	A (A)	0.266 (0.138)	A (A)
Paratoo Road (SW)	T	0.059 (0.040)	A (A)	0.099 (0.070)	A (A)	0.087 (0.055)	A (A)
Paratoo Road (NE)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

The SIDRA modelling indicates that all movements for the Existing Scenario operate well within capacity (low DoS) and a high LoS. All movements in the am peak hour operate with a DoS of 0.157 or less and a LoS of 'A'. During the pm peak hour, all movements operate with a DoS of 0.040 or less and a LoS of 'A'.

Observations during peak periods indicated that movements at the intersection flowed relatively well. However, increased delays were observed due to illegal parking in or adjacent the intersection. Delays also occurred when vehicle queues extended back from the Stirling East Primary School access point (towards Yam Street) albeit it was observed for a short duration.

The modelling indicates that in the worst-case scenario (Scenario 1), all movements would operate with a low DoS (0.317 or less). There were also no changes to the LoS. A reduced impact was indicated for Scenario 2, reducing the low impact indicated by Scenario 1.

It is noted that the intersection was modelled with a single shared left and right-turn lane from Yam Street. In reality, the widening of the Yam Street approach at the intersection with Paratoo Road allows vehicles to turn left and right simultaneously from Yam Street. The results of the modelling are therefore

considered conservative for the above Scenarios. The traffic generated by the proposal could therefore be easily accommodated at the intersection.

### 5.3.4 PARATOO ROAD/BRAESIDE ROAD

Key SIDRA outputs for the three modelling scenarios are summarised in Table 4, below.

*Table 4 – Key SIDRA outputs for the intersection of Paratoo Road and Braeside Road*

Approach	Turn	Existing DoS	Existing LoS	Scen. 1 DoS	Scen. 1 LoS	Scen. 2 DoS	Scen. 2 LoS
Paratoo Road (NE)	T	0.014 (0.022)	A (A)	0.024 (0.037)	A (A)	0.020 (0.029)	A (A)
	R	0.014 (0.022)	A (A)	0.024 (0.037)	A (A)	0.020 (0.029)	A (A)
Braeside Road (NW)	L	0.242 (0.259)	A (A)	0.298 (0.298)	A (A)	0.280 (0.280)	A (A)
	R	0.242 (0.259)	A (A)	0.298 (0.298)	A (A)	0.280 (0.280)	A (A)
Paratoo Road (SW)	L	0.090 (0.053)	A (A)	0.105 (0.062)	A (A)	0.100 (0.058)	A (A)
	T	0.090 (0.053)	A (A)	0.105 (0.062)	A (A)	0.100 (0.058)	A (A)

The SIDRA modelling indicates that all movements for the Existing Scenario operate with a low DoS and a high LoS. All movements in the am and pm peak hours operate with a DoS of 0.259 or less and a LoS of 'A'. Observations at the intersection during peak periods supported the results of the modelling.

The SIDRA modelling indicated that in Scenario 1 (the worst case scenario), the change in DoS would be minimal (maximum increase of 0.056). The modelling also indicated that the intersection would continue to operate with a LoS of 'A'. The proposal would therefore have a minimal impact on the performance of the intersection. The intersection will therefore readily accommodate movements associated with the proposal as shown by the conservative assessment.

## 5.4 DISCUSSION

On-site observations and the SIDRA modelling have indicated that the key intersections currently operate well below capacity and with a high LoS during peak periods. The surveys indicate that the road networks am and pm peak hours occur at the start and end of the school day due to the traffic peaks generated by the Stirling East Primary School set-down/pick-up period. Outside of the peak 10 to 15 minute period associated with the school set-down/pick-up, overall movements at the key intersections were much lower.

As child care centres do not have a set start and finish time (unlike schools and pre-schools), peak movements associated with child care centres are less intense and spread over a greater period of time in comparison to schools.

The peak conditions indicated by the modelling for Scenarios 1 and 2 would only occur for a short period until the primary school traffic has dissipated. Nevertheless, the modelling indicates that the adjacent road network would still operate well below capacity and with a high LoS even during the school related peak periods.

Furthermore, the assessment has not taken into account 'passing trade'. It has been assumed that all movements associated with the proposal are 'new' trips on the network. In reality, a portion of traffic generated by the child care may be existing with parents/caregivers potentially dropping-off/picking-up their children off as part of their commute/school run, etc.

The conservative modelling has shown that peak traffic volumes can be easily accommodated at the key intersections. Even in the highly conservative and unlikely model for Scenario 1, movements were readily accommodated at the key intersections. Key intersections will perform better than indicated by the models.

## **6. SUMMARY**

The proposal comprises the construction of a 128 place child care centre with associated access and parking provisions. Vehicle access to the site will be provided via a 6.2 m wide two-way access point on Paratoo Road. The site has been designed such that all movements can enter and exit in a forward direction.

A total of 33 parking spaces are proposed to be provided on-site. Such a provision will satisfy (and exceed) the DTS/DPF parking requirements of the Planning and Design Code. The parking area will be provided in accordance with the relevant Australian Standard.

The proposal is forecast to generate in the order of 171 am and 125 pm peak hour trips or 128 am and 64 pm trips during the network/commuter peaks. As confirmed by modelling of the adjacent intersections, such movements will be readily accommodated at the proposed site access and on the adjacent road network with minimal impact.



# **APPENDIX A**

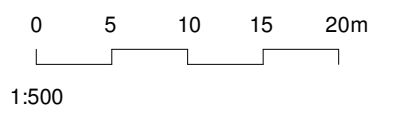
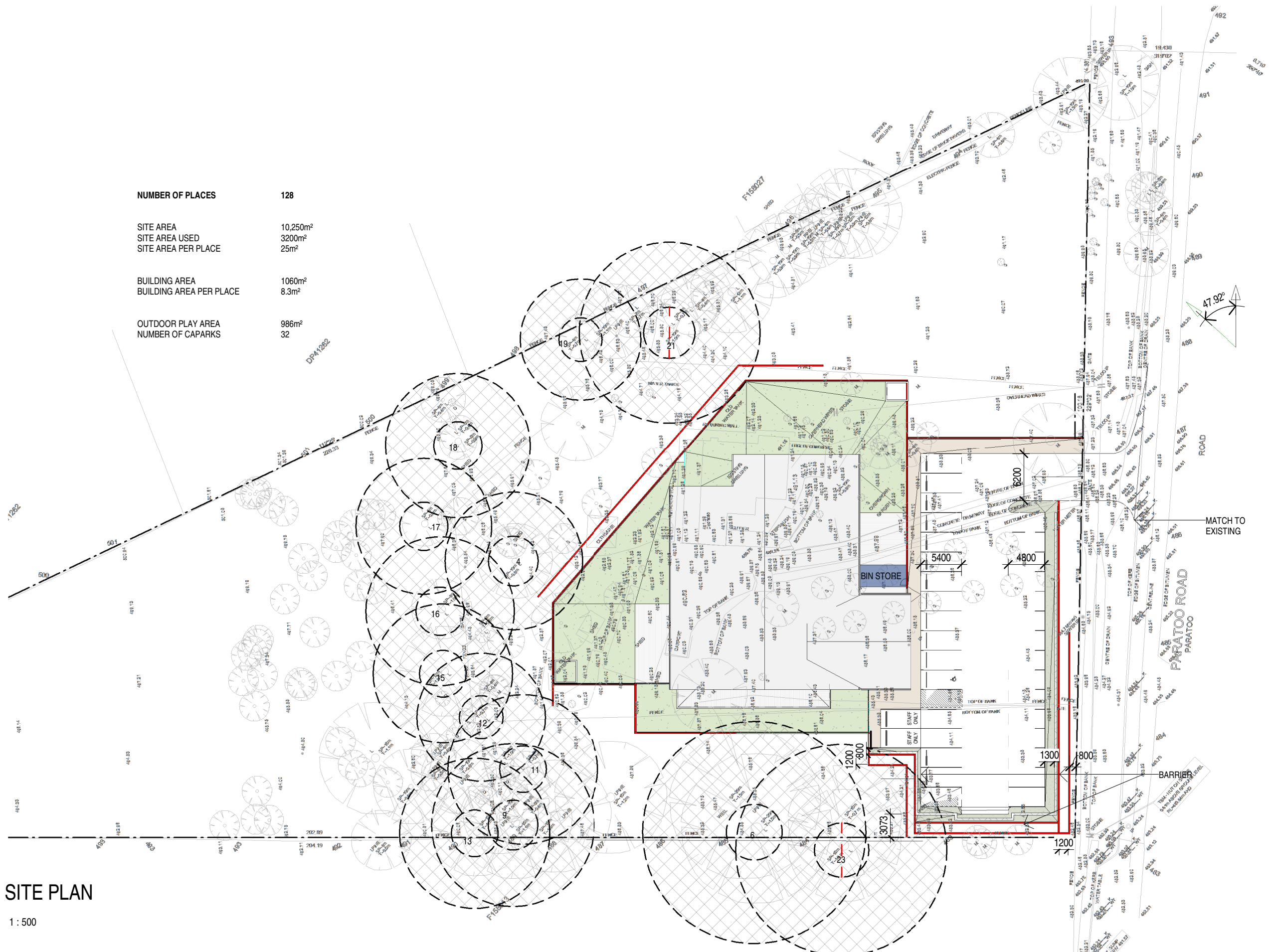
## **BROWN FALCONER PLANS**

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
-----	-----------	------

NUMBER OF PLACES	128
SITE AREA	10,250m <sup>2</sup>
SITE AREA USED	3200m <sup>2</sup>
SITE AREA PER PLACE	25m <sup>2</sup>
BUILDING AREA	1060m <sup>2</sup>
BUILDING AREA PER PLACE	8.3m <sup>2</sup>
OUTDOOR PLAY AREA	986m <sup>2</sup>
NUMBER OF CAPARKS	32



## BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
 Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
 ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

### SITE PLAN

Scale 1 : 500  
 Drawn TR  
 Date 24/05/2023  
 Job No. 2022107



Dwg No. **3567 DA04** Rev: A3 SHEET

### SITE PLAN

1 : 500

# **APPENDIX B**

## **SIDRA MODELLING OUTPUTS**

# APPENDIX B.1

## OLD MT BARKER ROAD/PARATOO ROAD

# MOVEMENT SUMMARY

Site: 101 [EXAM - Old Mount Barker Road / Paratoo Road  
(Site Folder: Existing)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] m				
South: OLD MOUNT BARKER ROAD														
2	T1	75	1	106	1.3	0.057	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	49.9
3	R2	1	0	1	0.0	0.057	5.2	LOS A	0.0	0.1	0.01	0.01	0.01	48.9
Approach		76	1	107	1.3	0.057	0.1	NA	0.0	0.1	0.01	0.01	0.01	49.9
East: ST MARGARET DRIVE														
4	L2	1	0	4	0.0	0.023	5.0	LOS A	0.1	0.5	0.37	0.63	0.37	45.0
6	R2	3	0	12	0.0	0.023	8.2	LOS A	0.1	0.5	0.37	0.63	0.37	44.5
Approach		4	0	16	0.0	0.023	7.4	LOS A	0.1	0.5	0.37	0.63	0.37	44.6
North: OLD MOUNT BARKER ROAD														
7	L2	2	0	4	0.0	0.077	4.6	LOS A	0.0	0.0	0.00	0.01	0.00	49.4
8	T1	86	0	144	0.0	0.077	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	49.9
Approach		88	0	148	0.0	0.077	0.1	NA	0.0	0.0	0.00	0.01	0.00	49.9
West: PARATOO ROAD														
10	L2	139	1	317	0.7	0.387	5.0	LOS A	2.0	13.8	0.29	0.57	0.29	45.9
11	T1	1	0	4	0.0	0.387	4.7	LOS A	2.0	13.8	0.29	0.57	0.29	46.0
12	R2	59	0	148	0.0	0.387	6.8	LOS A	2.0	13.8	0.29	0.57	0.29	45.4
Approach		199	1	469	0.5	0.387	5.6	LOS A	2.0	13.8	0.29	0.57	0.29	45.7
All Vehicles		367	2	740	0.5	0.387	3.7	NA	2.0	13.8	0.19	0.38	0.19	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:23:59 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

# MOVEMENT SUMMARY

Site: 101 [EXPM - Old Mount Barker Road / Paratoo Road  
(Site Folder: Existing)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] m				
South: OLD MOUNT BARKER ROAD														
2	T1	65	2	76	3.1	0.043	0.0	LOS A	0.0	0.2	0.03	0.03	0.03	49.8
3	R2	1	0	4	0.0	0.043	5.2	LOS A	0.0	0.2	0.03	0.03	0.03	48.7
Approach		66	2	80	2.9	0.043	0.3	NA	0.0	0.2	0.03	0.03	0.03	49.7
East: ST MARGARET DRIVE														
4	L2	3	0	8	0.0	0.010	4.9	LOS A	0.0	0.2	0.23	0.52	0.23	46.1
6	R2	3	0	3	0.0	0.010	6.7	LOS A	0.0	0.2	0.23	0.52	0.23	45.5
Approach		6	0	11	0.0	0.010	5.4	LOS A	0.0	0.2	0.23	0.52	0.23	45.9
North: OLD MOUNT BARKER ROAD														
7	L2	2	0	4	0.0	0.069	4.6	LOS A	0.0	0.0	0.00	0.02	0.00	49.4
8	T1	92	1	128	1.1	0.069	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	49.9
Approach		94	1	132	1.1	0.069	0.2	NA	0.0	0.0	0.00	0.02	0.00	49.9
West: PARATOO ROAD														
10	L2	63	2	178	3.2	0.266	4.9	LOS A	1.2	8.4	0.22	0.56	0.22	46.0
11	T1	1	0	1	0.0	0.266	4.3	LOS A	1.2	8.4	0.22	0.56	0.22	46.1
12	R2	52	0	132	0.0	0.266	6.3	LOS A	1.2	8.4	0.22	0.56	0.22	45.5
Approach		116	2	312	1.8	0.266	5.5	LOS A	1.2	8.4	0.22	0.56	0.22	45.8
All Vehicles		282	5	535	1.8	0.266	3.4	NA	1.2	8.4	0.14	0.34	0.14	47.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:23:59 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

# MOVEMENT SUMMARY

Site: 101 [NPAM - Old Mount Barker Road / Paratoo Road  
(Site Folder: Network Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] m				
South: OLD MOUNT BARKER ROAD														
2	T1	75	1	106	1.3	0.057	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	49.9
3	R2	1	0	1	0.0	0.057	5.4	LOS A	0.0	0.1	0.01	0.01	0.01	48.9
Approach		76	1	107	1.3	0.057	0.1	NA	0.0	0.1	0.01	0.01	0.01	49.9
East: ST MARGARET DRIVE														
4	L2	1	0	4	0.0	0.027	5.1	LOS A	0.1	0.6	0.44	0.67	0.44	44.5
6	R2	3	0	12	0.0	0.027	9.4	LOS A	0.1	0.6	0.44	0.67	0.44	44.0
Approach		4	0	16	0.0	0.027	8.4	LOS A	0.1	0.6	0.44	0.67	0.44	44.1
North: OLD MOUNT BARKER ROAD														
7	L2	2	0	4	0.0	0.103	4.6	LOS A	0.0	0.0	0.00	0.01	0.00	49.4
8	T1	116	0	194	0.0	0.103	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	49.9
Approach		118	0	198	0.0	0.103	0.1	NA	0.0	0.0	0.00	0.01	0.00	49.9
West: PARATOO ROAD														
10	L2	172	1	392	0.6	0.493	5.4	LOS A	3.3	23.4	0.32	0.59	0.35	45.7
11	T1	1	0	4	0.0	0.493	5.7	LOS A	3.3	23.4	0.32	0.59	0.35	45.7
12	R2	74	0	186	0.0	0.493	7.9	LOS A	3.3	23.4	0.32	0.59	0.35	45.1
Approach		247	1	582	0.4	0.493	6.2	LOS A	3.3	23.4	0.32	0.59	0.35	45.5
All Vehicles		445	2	903	0.4	0.493	4.2	NA	3.3	23.4	0.22	0.40	0.23	46.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [NPPM - Old Mount Barker Road / Paratoo Road  
(Site Folder: Network Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] m				
South: OLD MOUNT BARKER ROAD														
2	T1	65	2	76	3.1	0.043	0.0	LOS A	0.0	0.2	0.03	0.03	0.03	49.7
3	R2	1	0	4	0.0	0.043	5.2	LOS A	0.0	0.2	0.03	0.03	0.03	48.7
Approach		66	2	80	2.9	0.043	0.3	NA	0.0	0.2	0.03	0.03	0.03	49.7
East: ST MARGARET DRIVE														
4	L2	3	0	8	0.0	0.010	4.9	LOS A	0.0	0.3	0.25	0.53	0.25	46.0
6	R2	3	0	3	0.0	0.010	7.3	LOS A	0.0	0.3	0.25	0.53	0.25	45.5
Approach		6	0	11	0.0	0.010	5.6	LOS A	0.0	0.3	0.25	0.53	0.25	45.9
North: OLD MOUNT BARKER ROAD														
7	L2	2	0	4	0.0	0.075	4.6	LOS A	0.0	0.0	0.00	0.02	0.00	49.4
8	T1	100	1	139	1.0	0.075	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	49.9
Approach		102	1	143	1.0	0.075	0.1	NA	0.0	0.0	0.00	0.02	0.00	49.9
West: PARATOO ROAD														
10	L2	85	2	241	2.4	0.345	4.9	LOS A	1.7	11.8	0.24	0.56	0.24	46.0
11	T1	1	0	1	0.0	0.345	4.5	LOS A	1.7	11.8	0.24	0.56	0.24	46.1
12	R2	65	0	165	0.0	0.345	6.5	LOS A	1.7	11.8	0.24	0.56	0.24	45.4
Approach		151	2	407	1.4	0.345	5.6	LOS A	1.7	11.8	0.24	0.56	0.24	45.8
All Vehicles		325	5	642	1.5	0.345	3.7	NA	1.7	11.8	0.16	0.37	0.16	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



# MOVEMENT SUMMARY

Site: 101 [CPAM - Old Mount Barker Road / Paratoo Road  
(Site Folder: Centre Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] m				
South: OLD MOUNT BARKER ROAD														
2	T1	75	1	106	1.3	0.057	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	49.9
3	R2	1	0	1	0.0	0.057	5.5	LOS A	0.0	0.1	0.01	0.01	0.01	48.9
Approach		76	1	107	1.3	0.057	0.1	NA	0.0	0.1	0.01	0.01	0.01	49.9
East: ST MARGARET DRIVE														
4	L2	1	0	4	0.0	0.029	5.2	LOS A	0.1	0.6	0.47	0.69	0.47	44.2
6	R2	3	0	12	0.0	0.029	10.1	LOS B	0.1	0.6	0.47	0.69	0.47	43.7
Approach		4	0	16	0.0	0.029	8.9	LOS A	0.1	0.6	0.47	0.69	0.47	43.8
North: OLD MOUNT BARKER ROAD														
7	L2	2	0	4	0.0	0.114	4.6	LOS A	0.0	0.0	0.00	0.01	0.00	49.4
8	T1	129	0	216	0.0	0.114	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	49.9
Approach		131	0	220	0.0	0.114	0.1	NA	0.0	0.0	0.00	0.01	0.00	49.9
West: PARATOO ROAD														
10	L2	187	1	426	0.5	0.541	5.7	LOS A	4.4	30.9	0.34	0.61	0.40	45.4
11	T1	1	0	4	0.0	0.541	6.3	LOS A	4.4	30.9	0.34	0.61	0.40	45.5
12	R2	80	0	201	0.0	0.541	8.7	LOS A	4.4	30.9	0.34	0.61	0.40	44.9
Approach		268	1	631	0.4	0.541	6.7	LOS A	4.4	30.9	0.34	0.61	0.40	45.2
All Vehicles		479	2	974	0.4	0.541	4.5	NA	4.4	30.9	0.23	0.41	0.27	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:24:04 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

# MOVEMENT SUMMARY

Site: 101 [CPPM - Old Mount Barker Road / Paratoo Road  
(Site Folder: Centre Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h	HV ] veh/h	[ Total veh/h	HV ] %				[ Veh. veh	Dist ] m				
South: OLD MOUNT BARKER ROAD														
2	T1	65	2	76	3.1	0.043	0.0	LOS A	0.0	0.2	0.03	0.03	0.03	49.7
3	R2	1	0	4	0.0	0.043	5.2	LOS A	0.0	0.2	0.03	0.03	0.03	48.7
Approach		66	2	80	2.9	0.043	0.3	NA	0.0	0.2	0.03	0.03	0.03	49.7
East: ST MARGARET DRIVE														
4	L2	3	0	8	0.0	0.010	4.9	LOS A	0.0	0.3	0.25	0.53	0.25	46.0
6	R2	3	0	3	0.0	0.010	7.3	LOS A	0.0	0.3	0.25	0.53	0.25	45.5
Approach		6	0	11	0.0	0.010	5.6	LOS A	0.0	0.3	0.25	0.53	0.25	45.9
North: OLD MOUNT BARKER ROAD														
7	L2	2	0	4	0.0	0.075	4.6	LOS A	0.0	0.0	0.00	0.02	0.00	49.4
8	T1	100	1	139	1.0	0.075	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	49.9
Approach		102	1	143	1.0	0.075	0.1	NA	0.0	0.0	0.00	0.02	0.00	49.9
West: PARATOO ROAD														
10	L2	85	2	241	2.4	0.345	4.9	LOS A	1.7	11.8	0.24	0.56	0.24	46.0
11	T1	1	0	1	0.0	0.345	4.5	LOS A	1.7	11.8	0.24	0.56	0.24	46.1
12	R2	65	0	165	0.0	0.345	6.5	LOS A	1.7	11.8	0.24	0.56	0.24	45.4
Approach		151	2	407	1.4	0.345	5.6	LOS A	1.7	11.8	0.24	0.56	0.24	45.8
All Vehicles		325	5	642	1.5	0.345	3.7	NA	1.7	11.8	0.16	0.37	0.16	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:24:05 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

## APPENDIX B.2

### OLD MT BARKER ROAD/YAM STREET

# MOVEMENT SUMMARY

Site: 101 [EXAM - Old Mount Barker Road / Yam Street (Site Folder: Existing)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
East: OLD MOUNT BARKER ROAD														
5	T1	77	0	180	0.0	0.147	0.1	LOS A	0.5	3.6	0.13	0.18	0.13	48.7
6	R2	75	1	84	1.3	0.147	5.0	LOS A	0.5	3.6	0.13	0.18	0.13	47.6
Approach		152	1	264	0.4	0.147	1.7	NA	0.5	3.6	0.13	0.18	0.13	48.3
North: OLD MOUNT BARKER ROAD														
7	L2	103	0	196	0.0	0.165	4.9	LOS A	0.6	4.1	0.20	0.47	0.20	46.1
9	R2	39	0	88	0.0	0.165	5.5	LOS A	0.6	4.1	0.20	0.47	0.20	45.6
Approach		142	0	284	0.0	0.165	5.1	NA	0.6	4.1	0.20	0.47	0.20	45.9
All Vehicles		294	1	548	0.2	0.165	3.4	NA	0.6	4.1	0.17	0.33	0.17	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [EXPM - Old Mount Barker Road / Yam Street (Site Folder: Existing)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV ] veh/h	[ Total veh/h ]	[ HV ] %				[ Veh. veh ]	[ Dist ] m				
East: OLD MOUNT BARKER ROAD														
5	T1	28	0	52	0.0	0.079	0.2	LOS A	0.4	2.6	0.15	0.34	0.15	47.8
6	R2	70	2	84	2.9	0.079	4.9	LOS A	0.4	2.6	0.15	0.34	0.15	46.7
Approach		98	2	136	1.8	0.079	3.1	NA	0.4	2.6	0.15	0.34	0.15	47.1
North: OLD MOUNT BARKER ROAD														
7	L2	116	1	216	0.9	0.156	4.6	LOS A	0.4	2.8	0.07	0.51	0.07	46.4
9	R2	32	0	64	0.0	0.156	5.0	LOS A	0.4	2.8	0.07	0.51	0.07	45.9
Approach		148	1	280	0.7	0.156	4.7	NA	0.4	2.8	0.07	0.51	0.07	46.3
All Vehicles		246	3	416	1.0	0.156	4.2	NA	0.4	2.8	0.10	0.45	0.10	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [NPAM - Yam Street / Paratoo Road (Site Folder: Network Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
SouthEast: YAM STREET														
1	L2	88	0	163	0.0	0.266	4.6	LOS A	1.2	8.2	0.26	0.51	0.26	46.0
3	R2	80	0	225	0.0	0.266	5.9	LOS A	1.2	8.2	0.26	0.51	0.26	45.4
Approach		168	0	388	0.0	0.266	5.3	LOS A	1.2	8.2	0.26	0.51	0.26	45.6
SouthWest: PARATOO ROAD														
11	T1	87	2	162	2.3	0.087	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		87	2	162	2.3	0.087	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		255	2	550	0.7	0.266	3.8	NA	1.2	8.2	0.19	0.36	0.19	46.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:24:10 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

# MOVEMENT SUMMARY

Site: 101 [NPPM - Old Mount Barker Road / Yam Street (Site Folder: Network Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
East: OLD MOUNT BARKER ROAD														
5	T1	36	0	67	0.0	0.088	0.2	LOS A	0.4	2.8	0.18	0.31	0.18	47.9
6	R2	70	2	84	2.9	0.088	5.0	LOS A	0.4	2.8	0.18	0.31	0.18	46.8
Approach		106	2	151	1.6	0.088	2.9	NA	0.4	2.8	0.18	0.31	0.18	47.3
North: OLD MOUNT BARKER ROAD														
7	L2	130	1	242	0.8	0.187	4.7	LOS A	0.6	4.1	0.10	0.50	0.10	46.3
9	R2	46	0	92	0.0	0.187	5.1	LOS A	0.6	4.1	0.10	0.50	0.10	45.8
Approach		176	1	334	0.6	0.187	4.8	NA	0.6	4.1	0.10	0.50	0.10	46.2
All Vehicles		282	3	485	0.9	0.187	4.2	NA	0.6	4.1	0.13	0.44	0.13	46.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [CPAM - Old Mount Barker Road / Yam Street (Site Folder: Centre Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV ] veh/h	[ Total veh/h ]	[ HV ] %				[ Veh. veh ]	[ Dist ] m				
East: OLD MOUNT BARKER ROAD														
5	T1	96	0	224	0.0	0.177	0.3	LOS A	0.6	4.3	0.21	0.16	0.21	48.6
6	R2	75	1	84	1.3	0.177	5.5	LOS A	0.6	4.3	0.21	0.16	0.21	47.6
Approach		171	1	308	0.4	0.177	1.8	NA	0.6	4.3	0.21	0.16	0.21	48.3
North: OLD MOUNT BARKER ROAD														
7	L2	137	0	261	0.0	0.292	5.2	LOS A	1.5	10.5	0.33	0.47	0.33	45.8
9	R2	97	0	219	0.0	0.292	5.8	LOS A	1.5	10.5	0.33	0.47	0.33	45.3
Approach		234	0	480	0.0	0.292	5.5	NA	1.5	10.5	0.33	0.47	0.33	45.6
All Vehicles		405	1	788	0.1	0.292	4.0	NA	1.5	10.5	0.28	0.35	0.28	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:24:03 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9



# MOVEMENT SUMMARY

Site: 101 [CPPM - Old Mount Barker Road / Yam Street (Site Folder: Centre Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV ] veh/h	[ Total veh/h ]	[ HV ] %				[ Veh. veh ]	[ Dist ] m				
East: OLD MOUNT BARKER ROAD														
5	T1	44	0	82	0.0	0.097	0.3	LOS A	0.4	3.1	0.21	0.28	0.21	47.9
6	R2	70	2	84	2.9	0.097	5.1	LOS A	0.4	3.1	0.21	0.28	0.21	46.9
Approach		114	2	166	1.4	0.097	2.7	NA	0.4	3.1	0.21	0.28	0.21	47.4
North: OLD MOUNT BARKER ROAD														
7	L2	143	1	266	0.7	0.217	4.7	LOS A	0.8	5.3	0.13	0.49	0.13	46.3
9	R2	59	0	118	0.0	0.217	5.2	LOS A	0.8	5.3	0.13	0.49	0.13	45.7
Approach		202	1	384	0.5	0.217	4.8	NA	0.8	5.3	0.13	0.49	0.13	46.1
All Vehicles		316	3	550	0.8	0.217	4.2	NA	0.8	5.3	0.15	0.43	0.15	46.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:24:03 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

## **APPENDIX B.3**

### **PARATOO ROAD/YAM STREET**

# MOVEMENT SUMMARY

Site: 101 [EXAM - Yam Street / Paratoo Road (Site Folder: Existing)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
SouthEast: YAM STREET														
1	L2	78	0	144	0.0	0.157	4.6	LOS A	0.7	4.6	0.19	0.49	0.19	46.1
3	R2	37	0	104	0.0	0.157	5.7	LOS A	0.7	4.6	0.19	0.49	0.19	45.6
Approach		115	0	248	0.0	0.157	5.0	LOS A	0.7	4.6	0.19	0.49	0.19	45.9
SouthWest: PARATOO ROAD														
11	T1	58	2	108	3.4	0.059	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		58	2	108	3.4	0.059	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		173	2	356	1.0	0.157	3.5	NA	0.7	4.6	0.13	0.34	0.13	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [EXPM - Yam Street / Paratoo Road (Site Folder: Existing)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
SouthEast: YAM STREET														
1	L2	19	0	36	0.0	0.096	4.6	LOS A	0.3	2.4	0.14	0.54	0.14	46.2
3	R2	37	0	104	0.0	0.096	5.2	LOS A	0.3	2.4	0.14	0.54	0.14	45.6
Approach		56	0	140	0.0	0.096	5.0	LOS A	0.3	2.4	0.14	0.54	0.14	45.8
SouthWest: PARATOO ROAD														
11	T1	40	2	72	5.0	0.040	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		40	2	72	5.0	0.040	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		96	2	212	1.7	0.096	3.3	NA	0.3	2.4	0.09	0.36	0.09	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:24:01 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

# MOVEMENT SUMMARY

Site: 101 [CPAM - Yam Street / Paratoo Road (Site Folder: Centre Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
SouthEast: YAM STREET														
1	L2	93	0	172	0.0	0.317	4.6	LOS A	1.5	10.2	0.30	0.52	0.30	45.9
3	R2	99	0	279	0.0	0.317	6.1	LOS A	1.5	10.2	0.30	0.52	0.30	45.3
Approach		192	0	451	0.0	0.317	5.5	LOS A	1.5	10.2	0.30	0.52	0.30	45.5
SouthWest: PARATOO ROAD														
11	T1	99	2	184	2.0	0.099	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		99	2	184	2.0	0.099	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		291	2	635	0.6	0.317	3.9	NA	1.5	10.2	0.21	0.37	0.21	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:24:05 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

# MOVEMENT SUMMARY

Site: 101 [CPPM - Yam Street / Paratoo Road (Site Folder: Centre Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
SouthEast: YAM STREET														
1	L2	31	0	59	0.0	0.181	4.6	LOS A	0.7	4.8	0.21	0.55	0.21	46.0
3	R2	69	0	194	0.0	0.181	5.4	LOS A	0.7	4.8	0.21	0.55	0.21	45.5
Approach		100	0	253	0.0	0.181	5.2	LOS A	0.7	4.8	0.21	0.55	0.21	45.6
SouthWest: PARATOO ROAD														
11	T1	72	2	130	2.8	0.070	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		72	2	130	2.8	0.070	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		172	2	383	0.9	0.181	3.5	NA	0.7	4.8	0.14	0.36	0.14	47.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:24:06 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

# MOVEMENT SUMMARY

Site: 101 [NPAM - Yam Street / Paratoo Road (Site Folder: Network Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
SouthEast: YAM STREET														
1	L2	88	0	163	0.0	0.266	4.6	LOS A	1.2	8.2	0.26	0.51	0.26	46.0
3	R2	80	0	225	0.0	0.266	5.9	LOS A	1.2	8.2	0.26	0.51	0.26	45.4
Approach		168	0	388	0.0	0.266	5.3	LOS A	1.2	8.2	0.26	0.51	0.26	45.6
SouthWest: PARATOO ROAD														
11	T1	87	2	162	2.3	0.087	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		87	2	162	2.3	0.087	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		255	2	550	0.7	0.266	3.8	NA	1.2	8.2	0.19	0.36	0.19	46.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: CIRQA PTY LTD | Licence: NETWORK / 1PC | Processed: Thursday, 25 May 2023 12:24:10 PM

Project: C:\Users\JeremyBayly\Cirqa Pty Ltd\Cirqa Pty Ltd Team Site - Public\2022\22362 Child Care Centre 35 Paratoo Road Stirling\SIDRA \22362 Paratoo Road Stirling V2 25May23.sip9

# MOVEMENT SUMMARY

Site: 101 [NPPM - Yam Street / Paratoo Road (Site Folder: Network Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
SouthEast: YAM STREET														
1	L2	25	0	47	0.0	0.138	4.6	LOS A	0.5	3.5	0.18	0.54	0.18	46.1
3	R2	53	0	149	0.0	0.138	5.3	LOS A	0.5	3.5	0.18	0.54	0.18	45.6
Approach		78	0	197	0.0	0.138	5.1	LOS A	0.5	3.5	0.18	0.54	0.18	45.7
SouthWest: PARATOO ROAD														
11	T1	56	2	101	3.6	0.055	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		56	2	101	3.6	0.055	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		134	2	298	1.2	0.138	3.4	NA	0.5	3.5	0.12	0.36	0.12	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



# APPENDIX B.4

## BRAESIDE ROAD/PARATOO ROAD

# MOVEMENT SUMMARY

Site: 101 [EXAM - Braeside Road / Paratoo Road (Site Folder: Existing)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
NorthEast: PARATOO ROAD														
5	T1	16	1	20	6.3	0.014	0.1	LOS A	0.0	0.2	0.10	0.09	0.10	49.2
26	R2	1	0	4	0.0	0.014	5.1	LOS A	0.0	0.2	0.10	0.09	0.10	48.2
Approach		17	1	24	5.2	0.014	0.9	NA	0.0	0.2	0.10	0.09	0.10	49.0
NorthWest: BRAESIDE ROAD														
27	L2	34	2	76	5.9	0.242	5.2	LOS A	1.0	7.0	0.29	0.58	0.29	45.9
29	R2	73	1	204	1.4	0.242	5.4	LOS A	1.0	7.0	0.29	0.58	0.29	45.5
Approach		107	3	281	2.6	0.242	5.4	LOS A	1.0	7.0	0.29	0.58	0.29	45.6
SouthWest: PARATOO ROAD														
30	L2	7	0	20	0.0	0.090	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	49.1
11	T1	69	1	148	1.4	0.090	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	49.6
Approach		76	1	168	1.3	0.090	0.6	NA	0.0	0.0	0.00	0.06	0.00	49.5
All Vehicles		200	5	473	2.3	0.242	3.4	NA	1.0	7.0	0.18	0.37	0.18	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [EXPM - Braeside Road / Paratoo Road (Site Folder: Existing)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
NorthEast: PARATOO ROAD														
5	T1	17	0	40	0.0	0.022	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	49.9
26	R2	1	0	1	0.0	0.022	4.9	LOS A	0.0	0.0	0.01	0.01	0.01	48.9
Approach		18	0	41	0.0	0.022	0.1	NA	0.0	0.0	0.01	0.01	0.01	49.9
NorthWest: BRAESIDE ROAD														
27	L2	14	2	28	14.3	0.259	5.0	LOS A	1.0	7.4	0.23	0.56	0.23	45.9
29	R2	85	0	277	0.0	0.259	5.2	LOS A	1.0	7.4	0.23	0.56	0.23	45.6
Approach		99	2	305	1.3	0.259	5.1	LOS A	1.0	7.4	0.23	0.56	0.23	45.7
SouthWest: PARATOO ROAD														
30	L2	11	0	28	0.0	0.053	4.6	LOS A	0.0	0.0	0.00	0.15	0.00	48.6
11	T1	42	0	72	0.0	0.053	0.0	LOS A	0.0	0.0	0.00	0.15	0.00	49.1
Approach		53	0	100	0.0	0.053	1.3	NA	0.0	0.0	0.00	0.15	0.00	49.0
All Vehicles		170	2	446	0.9	0.259	3.8	NA	1.0	7.4	0.16	0.42	0.16	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [CPAM - Braeside Road / Paratoo Road (Site Folder: Centre Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV ] veh/h	[ Total veh/h ]	[ HV ] %				[ Veh. veh ]	[ Dist ] m				
NorthEast: PARATOO ROAD														
5	T1	31	1	39	3.2	0.024	0.1	LOS A	0.0	0.2	0.06	0.05	0.06	49.5
26	R2	1	0	4	0.0	0.024	5.2	LOS A	0.0	0.2	0.06	0.05	0.06	48.5
Approach		32	1	43	2.9	0.024	0.6	NA	0.0	0.2	0.06	0.05	0.06	49.4
NorthWest: BRAESIDE ROAD														
27	L2	63	2	141	3.2	0.298	5.3	LOS A	1.3	9.2	0.34	0.59	0.34	45.8
29	R2	73	1	204	1.4	0.298	5.7	LOS A	1.3	9.2	0.34	0.59	0.34	45.4
Approach		136	3	345	2.1	0.298	5.6	LOS A	1.3	9.2	0.34	0.59	0.34	45.6
SouthWest: PARATOO ROAD														
30	L2	7	0	20	0.0	0.105	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	49.2
11	T1	82	1	176	1.2	0.105	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	49.6
Approach		89	1	196	1.1	0.105	0.5	NA	0.0	0.0	0.00	0.06	0.00	49.6
All Vehicles		257	5	584	1.8	0.298	3.5	NA	1.3	9.2	0.20	0.37	0.20	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [CPPM - Braeside Road / Paratoo Road (Site Folder: Centre Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
NorthEast: PARATOO ROAD														
5	T1	29	0	68	0.0	0.037	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	49.9
26	R2	1	0	1	0.0	0.037	4.9	LOS A	0.0	0.0	0.01	0.01	0.01	48.9
Approach		30	0	69	0.0	0.037	0.1	NA	0.0	0.0	0.01	0.01	0.01	49.9
NorthWest: BRAESIDE ROAD														
27	L2	36	2	72	5.6	0.298	5.0	LOS A	1.3	8.9	0.27	0.57	0.27	45.9
29	R2	85	0	277	0.0	0.298	5.4	LOS A	1.3	8.9	0.27	0.57	0.27	45.6
Approach		121	2	349	1.1	0.298	5.3	LOS A	1.3	8.9	0.27	0.57	0.27	45.6
SouthWest: PARATOO ROAD														
30	L2	11	0	28	0.0	0.062	4.6	LOS A	0.0	0.0	0.00	0.13	0.00	48.8
11	T1	52	0	89	0.0	0.062	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	49.2
Approach		63	0	117	0.0	0.062	1.1	NA	0.0	0.0	0.00	0.13	0.00	49.1
All Vehicles		214	2	535	0.7	0.298	3.7	NA	1.3	8.9	0.18	0.40	0.18	46.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [NPAM - Braeside Road / Paratoo Road (Site Folder: Network Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
NorthEast: PARATOO ROAD														
5	T1	26	1	33	3.8	0.020	0.1	LOS A	0.0	0.2	0.07	0.06	0.07	49.4
26	R2	1	0	4	0.0	0.020	5.1	LOS A	0.0	0.2	0.07	0.06	0.07	48.4
Approach		27	1	37	3.4	0.020	0.6	NA	0.0	0.2	0.07	0.06	0.07	49.3
NorthWest: BRAESIDE ROAD														
27	L2	54	2	121	3.7	0.280	5.3	LOS A	1.2	8.5	0.32	0.59	0.32	45.8
29	R2	73	1	204	1.4	0.280	5.6	LOS A	1.2	8.5	0.32	0.59	0.32	45.4
Approach		127	3	325	2.2	0.280	5.5	LOS A	1.2	8.5	0.32	0.59	0.32	45.6
SouthWest: PARATOO ROAD														
30	L2	7	0	20	0.0	0.100	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	49.1
11	T1	78	1	167	1.3	0.100	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	49.6
Approach		85	1	187	1.1	0.100	0.5	NA	0.0	0.0	0.00	0.06	0.00	49.6
All Vehicles		239	5	549	1.9	0.280	3.5	NA	1.2	8.5	0.20	0.37	0.20	47.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

Site: 101 [NPPM - Braeside Road / Paratoo Road (Site Folder: Network Peak)]

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
NorthEast: PARATOO ROAD														
5	T1	23	0	54	0.0	0.029	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	49.9
26	R2	1	0	1	0.0	0.029	4.9	LOS A	0.0	0.0	0.01	0.01	0.01	48.9
Approach		24	0	55	0.0	0.029	0.1	NA	0.0	0.0	0.01	0.01	0.01	49.9
NorthWest: BRAESIDE ROAD														
27	L2	26	2	52	7.7	0.280	5.0	LOS A	1.2	8.2	0.25	0.57	0.25	46.0
29	R2	85	0	277	0.0	0.280	5.3	LOS A	1.2	8.2	0.25	0.57	0.25	45.6
Approach		111	2	329	1.2	0.280	5.2	LOS A	1.2	8.2	0.25	0.57	0.25	45.7
SouthWest: PARATOO ROAD														
30	L2	11	0	28	0.0	0.058	4.6	LOS A	0.0	0.0	0.00	0.14	0.00	48.7
11	T1	47	0	81	0.0	0.058	0.0	LOS A	0.0	0.0	0.00	0.14	0.00	49.2
Approach		58	0	109	0.0	0.058	1.2	NA	0.0	0.0	0.00	0.14	0.00	49.1
All Vehicles		193	2	493	0.8	0.280	3.8	NA	1.2	8.2	0.17	0.41	0.17	46.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.  
 Delay Model: SIDRA Standard (Geometric Delay is included).  
 Queue Model: SIDRA Standard.  
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).  
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

A series of white line art shapes are scattered across the page. On the left, there are two overlapping semi-circles. Below them is a larger, more complex shape resembling a stylized 'S' or a curved bracket. To the right of this is a tall, thin vertical rectangle. Further right is a large, slanted parallelogram shape. On the far right, there is a smaller, slanted trapezoidal shape. A horizontal line runs across the middle of the page, passing through the text area.

## APPENDIX 6

### Civil Plans and Documentation



Project No: 220216

Tuesday, 31 October 2023

Accord Property  
C/- Ekistics  
Level 3, 431 King William Street,  
ADELAIDE SA 5000

Attn: Rob Gagetti

**Visit**

174 Fullarton Road  
Dulwich SA 5065

**Post**

PO Box 2832  
Kent Town SA 5071

**T** 08 8332 1344

**RE: CHILD CARE CENTRE - 35 PARATOO RD STIRLING  
APP NO - 23018174  
RESPONSE TO RFI – STORMWATER MATTERS**

We refer to the above Application before the Adelaide Hills Council, and have pleasure in responding to the RFI issued by the Council email dated 28 July 2023 by Ms Marie Molinaro.

We note that this has previously been issued under separate email cover of 13 August 2023.

The response below shall be read in accordance with the updated CPR Engineers drawings:

- CPR Engineers Stormwater Management Plan – C201 Rev B
- CPR Engineers Catchment Area & Overland Flow path – 220216-SK1

Items referenced in the RFI email dated 28 July 2023, we respond as follows:

1. In accordance with the Adelaide Hills Council Engineer Services Stormwater Drainage Design Guidelines dated April 2015, the ARI for the pre development calculation should be 1 in 5 years. The measurements / calculations for the total site areas, pervious areas, roof areas are also unclear and a catchment plan detailing the measurements should be provided.

CPR Response – SW calculations have been updated with the Pre-development calculation for the 1 in 5 year event. The development site has been identified on the revised catchment / Areas plan. Revised Calculations are attached.

2. Existing overland flow paths are not acknowledged – there are informal paths along the frontage of the site. The report doesn't mention the management of existing environmental flows on the site.

CPR Response – The existing environmental flows over the undeveloped portion of the site are captured by a swale located at the top side of the retaining walls.

3. The design must take into account the entire stormwater drainage catchment into account, not just the area included in the Development, including downstream stormwater drainage Infrastructure in order to satisfy the overlay Design in Urban Areas PO 42.3.

CPR Response – The areas of the site affected by the development is outlined on the attached plan 220216-Cathment-O-Lanf Flow diagram. This outlines the site area of 3647m<sup>2</sup> of the site being developed and used in the revised calculations.

4. The pre development flow has been notated as 38.5L/s which is based on an incorrect ARI, review and justification on the flow considering the above is required. This section specifies the detention amounts but not how they have been determined.

CPR Response – The revised calculations adopt a pre-development 5 year event to limit the post development flows. Pre-development discharge is 29.81L/s. the catchment areas are shown on the attached. The roof is 29% of the impervious area, The car park is 71% of the impervious area. The discharge rate has been proportioned for the corresponding discharge – roof discharge limited to 29% and car park 71% of pre dev flows. Revised Detention volumes are as per the calculations and 14.6kL for roof and 37.1kL for the Carpark and pervious areas. Total detention provided is 15kL for roof detention and 40kL for car park/pervious areas.

5. Clarification is required for the proposed carpark surface treatment and levels for the carpark design and the access. The stormwater management plan simply refers to the traffic engineer for a crossover profile however this has not been produced by CIRQA. The site is likely to need longitudinal drainage at the access as part of its upgrade which needs to be tied into existing formal and informal channels – further details are required for assessment.

CPR Response – The levels for the crossover have been updated. Grades on the car park surface have been shown. Box culvert has been included to deal with the informal swale at the crossover road verge.

6. The stormwater plan identifies that the carpark is bordered by a 100mm high kerb with a single ramp identified at the accessible park. This is different to the Brown and Falconer Plan and Elevations views – clarification is required to ensure the carpark design, stormwater design and pedestrian accessibility is suitable.

CPR Response – 100mm kerb is required to make the levels work.

7. The Stormwater Management Report identifies under the finished floor level requirements heading that the flood overlay “indicates no flooding” however the SAPP map identifies an interim overlay until flood studies are completed. The

report needs to acknowledge that the design incorporates at least 300mm free board above the highest point at the top of kerb or the highest point of natural ground level at the street boundary without kerb in accordance with AS/NZ 3500-2003 section 3 and the Hazards (flooding – Evidence Required) Overlay POI.1.

CPR Response – At the existing crossover – and the location of the new crossover at the north of the site, and the highest point on Paratoo road, the TK level is 486.45. At the lowest point of Paratoo on the south side of the development the TK level is 483.47. The proposed Ground Floor FFL is proposed as 487.00, which is 550mm and 3.53m above the corresponding TK levels. We consider this to be suitable protection in the absence of detailed flood mapping for the site.

8. “The above measures have been addressed in order to maintain an appropriate freeboard level higher than surrounding formed ground surfaces to enable overload flows from 1:100 ARI storm events to exit the site in an appropriate manner and so as not to affect the neighbouring properties” The report makes this statement but provides no explanation how have they been addressed. Further clarification is required.

CPR Response – Refer FFL assessment above in Item 7 and the response to item 2.

9. Grated inlet pits are shown on the stormwater plan in two locations along the frontage are within/near an existing informal swale along the edge of the boundary. Existing overland flow of the site is likely captured by this swale. The design needs to consider the existing conditions and tie in appropriately.

CPR Response – The 2 GIP’s have been moved to rest inside the property boundary and the restricted flows are to discharge into the informal swale within the road reserve via concrete drain with chequer plate lid. It is acknowledged that the WT levels are higher than the informal swale that currently provides overland flows past the site. The discharge from the development site is kept to within the pre development 5 year ARI so is not likely to impact the overland flows. Flows from the discharge points are 14.4L/s (roof) and 15.5 L/s (Carpark) in the 100 year ARI event.

10. The stormwater management plan itself doesn’t mention a pump for the underground tanks. There is also no information regarding the type of pump system proposed, its capacity etc. Further clarification is needed to review the proposed design.

CPR Response – The RL of the above ground detention storage tanks from the roof catchment are at approx. RL486.88 and discharge to the informal swale at RL483.82. No pumps required. The RL of the below ground detention storage tanks from the carpark catchment are at approx. RL484.00 and discharge to the informal swale at RL483.02. No pumps required.

11. Clarification is required regarding the features of the stormwater design including pipe and pit sizing and levels for the drainage system proposed. Provide nominal pipe and pit sizes – TBC

CPR Response – Nominal pipe and pit sizes have been added. These will be confirmed by detailed design.

12. The frontage of the site is used as overflow parking, stormwater piping and outlets should be specified in more detail to ensure they are designed trafficable to withstand vehicle loads.

CPR Response – refer item #9. Infrastructure removed from the informal car parking areas

13. The design does not cite drainage features to Council specifications/standard drawings for pits, pipes etc, further clarification is needed. Add the note to specify in the Road reserve – to suit standard

CPR Response – now referenced.

14. The design does not mention if the tanks can be flushed for maintenance purpose, further clarification is needed.

CPR Response – flush-out valve is shown to flush the above ground RWT's. Each below ground tank has access chamber.

We submit that the Council's concerns have been addressed and the revised plans are suitable for approval.

Should you have any further queries, please let me know.

Yours Faithfully



David Reynolds  
**CPR ENGINEERS**

Davidr@Cprengineers.com.au

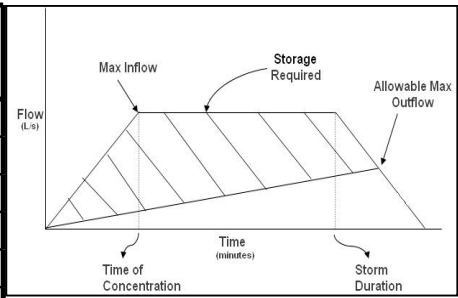
**RFI ITEM #1 & #4**

**PRE-DEVELOPMENT - 1 IN 20 YEAR ARI FLOWS**

<b>Roof Area</b>	<b>269 m<sup>2</sup></b>	<b>Pervious Area</b>	<b>3074 m<sup>2</sup></b>
<b>Roof Pitch</b>	<b>5 degrees</b>	<b>Run-Off Coefficient</b>	<b>0.25</b>
<b>Run-Off Coefficient</b>	<b>1</b>	<b>Pavement Area</b>	<b>304 m<sup>2</sup></b>
<b>Total Site Area</b>	<b>3647 m<sup>2</sup></b>	<b>Run-Off Coefficient</b>	<b>0.9</b>

**Storm Design Recurrence Interval** 5 years  
**Time of Concentration** 5.0 minutes  
**Max Allowable Outflow** 29.81 L/s Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m <sup>3</sup> )	Max Storage (m <sup>3</sup> )
5	81	29.81	8.94	
10	60	<b>22.08</b>	13.25	
15	49.1	18.07	16.26	
20	42.1	15.50	18.59	
25	37.1	13.65	20.48	
30	33.4	12.29	22.13	
35	30.5	11.23	23.57	
40	28.1	10.34	24.82	
50	24.4	8.98	26.94	
55	22.7	8.35	27.57	
60	21	7.73	27.83	
65	19.3	7.10	27.70	
70	17.6	6.48	27.21	
75	15.9	5.85	26.33	
80	14.2	5.23	25.09	
85	12.5	4.60	23.46	
90	10.8	3.97	21.46	



<b>Minimum Tank Size</b>	<b>0.00 m<sup>3</sup></b>
--------------------------	---------------------------



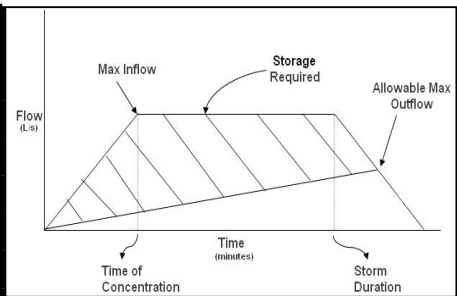
RFI ITEM #1 & #4

POST-DEVELOPMENT - 1 IN 100 YEAR ARI EVENT

Roof Area	885 m <sup>2</sup>	Pervious Area	0 m <sup>2</sup>
Roof Pitch	5 degrees	Run-Off Coefficient (PLAY AREAS)	0.6
Run-Off Coefficient	1	Pavement Area	0 m <sup>2</sup>
		Run-Off Coefficient (DECK AND CARPARK)	0.9

Storm Design Recurrence Interval	100 years	
Time of Concentration	5.0 minutes	
Max Allowable Outflow	14.339 L/s	Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m <sup>3</sup> )	Max Storage (m <sup>3</sup> )
5	186	48.05	14.42	10.11
<b>10</b>	<b>136</b>	<b>35.13</b>	<b>21.08</b>	<b>14.63</b>
15	110	28.42	25.58	16.97
20	94	24.28	29.14	18.39
25	82	21.18	31.78	18.87
30	73	18.86	33.95	18.89
35	66.5	17.18	36.08	18.87
40	61	15.76	37.82	18.46
50	53	13.69	41.08	17.42
55	49	12.66	41.77	15.96
60	45	11.63	41.85	13.89
65	41	10.59	41.31	11.20
70	37	9.56	40.14	7.88
75	33	8.52	38.36	3.95
80	29	7.49	35.96	-0.60
85	25	6.46	32.94	-5.78
90	21	5.42	29.29	-11.57



14.6 roof detention

Post development impervious areas	
total impervious	1840
roof area =	885
roof is	48% of total
car park area =	955
car park is	52% of total

Hence distribute discharge rate is similar ra

Minimum Tank Size	18.89 m <sup>3</sup>
-------------------	----------------------

Roof discharge =	14.34
Car Park discharge =	15.47

Outlet Orifice Design	
Approximate head above outlet	1 m water
Max allowable outflow	0.014339164 m <sup>3</sup> /s
Discharge Velocity	4.43 m/s
Approx Pipe area	3237.236 mm <sup>2</sup>
Approx Pipe Diameter	64.20 mm

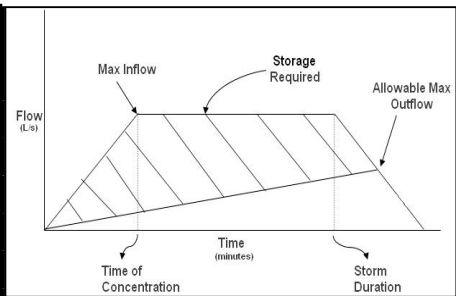
RFI ITEM #1 & #4

POST-DEVELOPMENT - 1 IN 100 YEAR ARI EVENT

Roof Area	0 m <sup>2</sup>	Pervious Area	1807 m <sup>2</sup>
Roof Pitch	5 degrees	Run-Off Coefficient (PLAY AREAS)	0.6
Run-Off Coefficient	1	Pavement Area	955 m <sup>2</sup>
		Run-Off Coefficient (DECK AND CARPARK)	0.9

Storm Design Recurrence Interval	100 years	
Time of Concentration	5.0 minutes	
Max Allowable Outflow	15.473 L/s	Based on (AR&R 2019)

Duration (Minutes)	Intensity (mm/h)	Inflow (L/s)	Inflow Volume (m <sup>3</sup> )	Max Storage (m <sup>3</sup> )
5	186	100.44	30.13	25.49
<b>10</b>	<b>136</b>	<b>73.44</b>	<b>44.06</b>	<b>37.10</b>
15	110	59.40	53.46	44.18
20	94	50.76	60.91	49.31
25	82	44.28	66.42	52.49
30	73	39.42	70.96	54.71
35	66.5	35.91	75.41	56.84
40	61	32.94	79.06	58.17
50	53	28.62	85.86	60.33
55	49	26.46	87.32	59.47
60	45	24.30	87.48	57.31
65	41	22.14	86.35	53.85
70	37	19.98	83.92	49.10
75	33	17.82	80.19	43.05
80	29	15.66	75.17	35.71
85	25	13.50	68.85	27.07
90	21	11.34	61.24	17.14



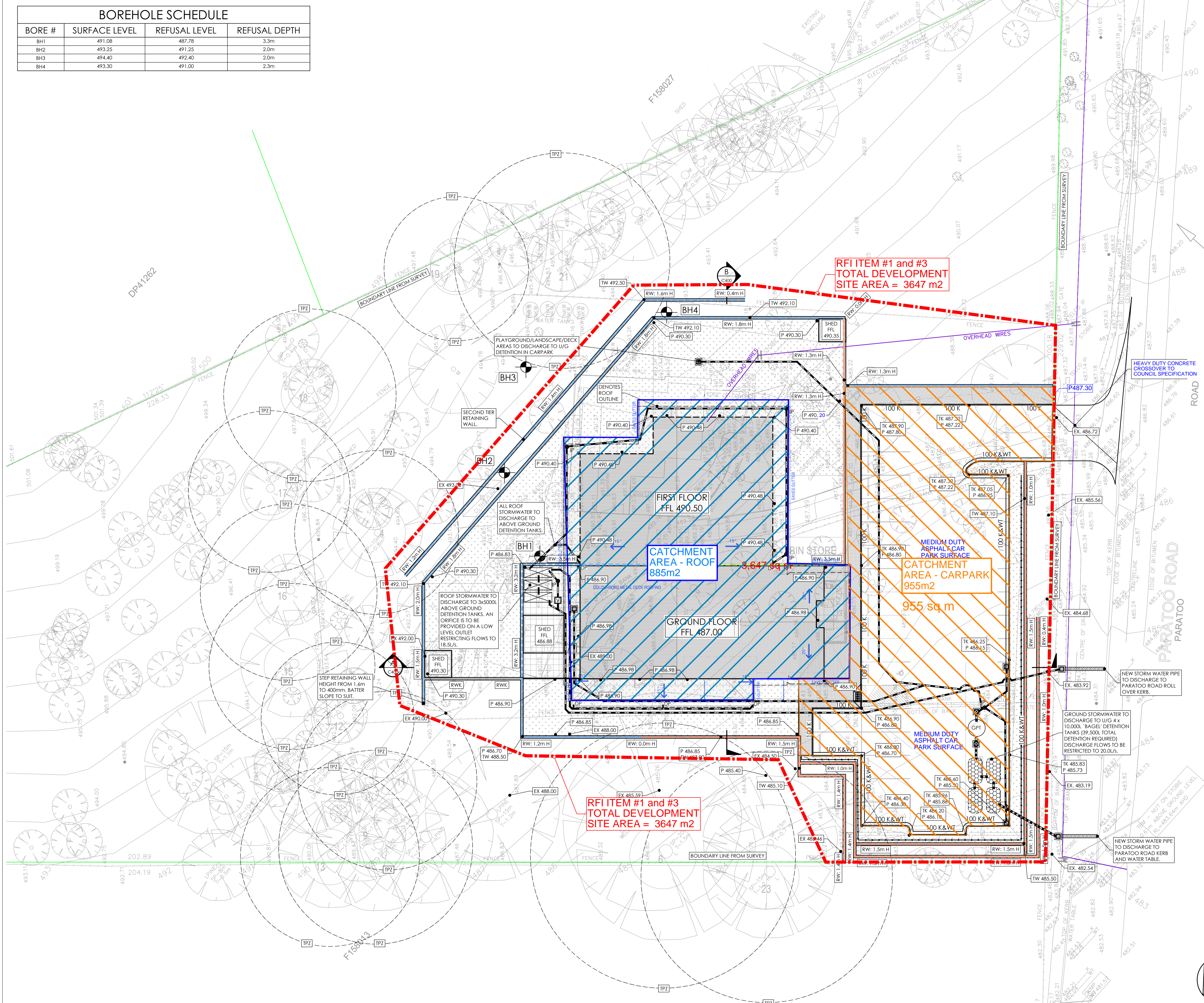
**37.10 m<sup>3</sup> for car park detention**

<b>Minimum Tank Size</b>	<b>60.33 m<sup>3</sup></b>
--------------------------	----------------------------

<b>Outlet Orifice Design</b>	
Approximate head above outlet	1 m water
Max allowable outflow	0.015473336 m <sup>3</sup> /s
Discharge Velocity	4.43 m/s
Approx Pipe area	3493.288 mm <sup>2</sup>
Approx Pipe Diameter	66.69 mm

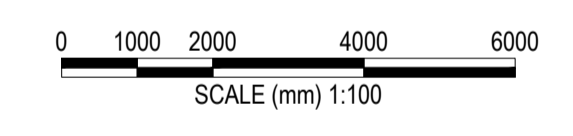
BOREHOLE SCHEDULE			
BORE #	SURFACE LEVEL	REFUSAL LEVEL	REFUSAL DEPTH
BH1	491.08	487.78	3.3m
BH2	493.25	491.25	2.0m
BH3	494.40	492.40	2.0m
BH4	493.30	491.00	2.3m

LEGEND	
	CONCRETE KERB & WATERTABLE HEIGHT AS NOTED.
	CONCRETE KERB HEIGHT AS NOTED.
	FLUSH KERB.
	NEW STORMWATER PIPE (UNSEALED SYSTEM).
	NEW STORMWATER PIPE (SEALED SYSTEM).
	GRATED INLET PIT
	JUNCTION BOX
	STORMWATER INSPECTION POINT.
	MAINTENANCE VALVE. REFER DETAIL.
	DOWN PIPES. ALL DOWN PIPES TO HAVE A uPVC TAIL MATCHING THE SIZE OF THE DOWNPIPE, CONNECTING TO MAIN STORM WATER RUN U.N.O.
	SPEEceptor IN-LINE GROSS POLLUTANT TRAP WITH 900 SQ JB'S.
	CONCRETE CULVERT WITH 6mm GALVANISED CHECKER PL.
	RETAINING WALL WITH NEW FILL BEHIND.
	RETAINING WALL CUT INTO EXISTING SURFACE.
	RETAINING WALL CUT INTO EXISTING SURFACE WITH NEW FILL BEHIND.
	DENOTES ARIMCO CRASH BARRIER
	DESIGN LEVEL
	P-PAVEMENT LEVEL
	TK-TOP OF KERB
	WT-WATER TABLE
	IP-TOP OF FIT
	IL-INVERT LEVEL
	EX-EXISTING LEVEL
	B-BOTTOM BATTER
	TW-TOP OF WALL
	L-LANDSCAPE LEVEL
	EXISTING SPOT LEVELS FROM SURVEY.
	DENOTES APPROX. LINE OF TREE PROTECTION ZONE. REFER TO ARCHITECTS DOCUMENTATION.



A	12-08-23	RESPONSE TO COUNCIL RFI	M.A./T.A.C.
	Issue	Details	Eng./DR

**APPROVAL ONLY**  
09-06-23



Visit: 174 Fullarton Road Dulwich SA 5065  
P: 08 8332 1344 E: plans@cpengineers.com.au  
Contra Pearson Reynolds Pty. Ltd. is a Trustee for the CPR Trust © Copyright  
ACN 112 731 526 ABN 12 112 731 526

**PROPOSED CHILD CARE CENTRE**

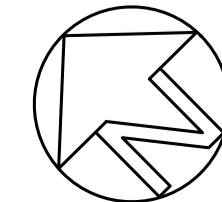
35 PARATOO ROAD  
STIRLING SA 5152

ACCORD PROPERTY LTD.

BROWN FALCONER  
28 CHESSER STREET, ADELAIDE SA 5000  
Phone (08) 8203 5800

**CATCHMENT AREA - OVERLAND FLOW OVERLAY**

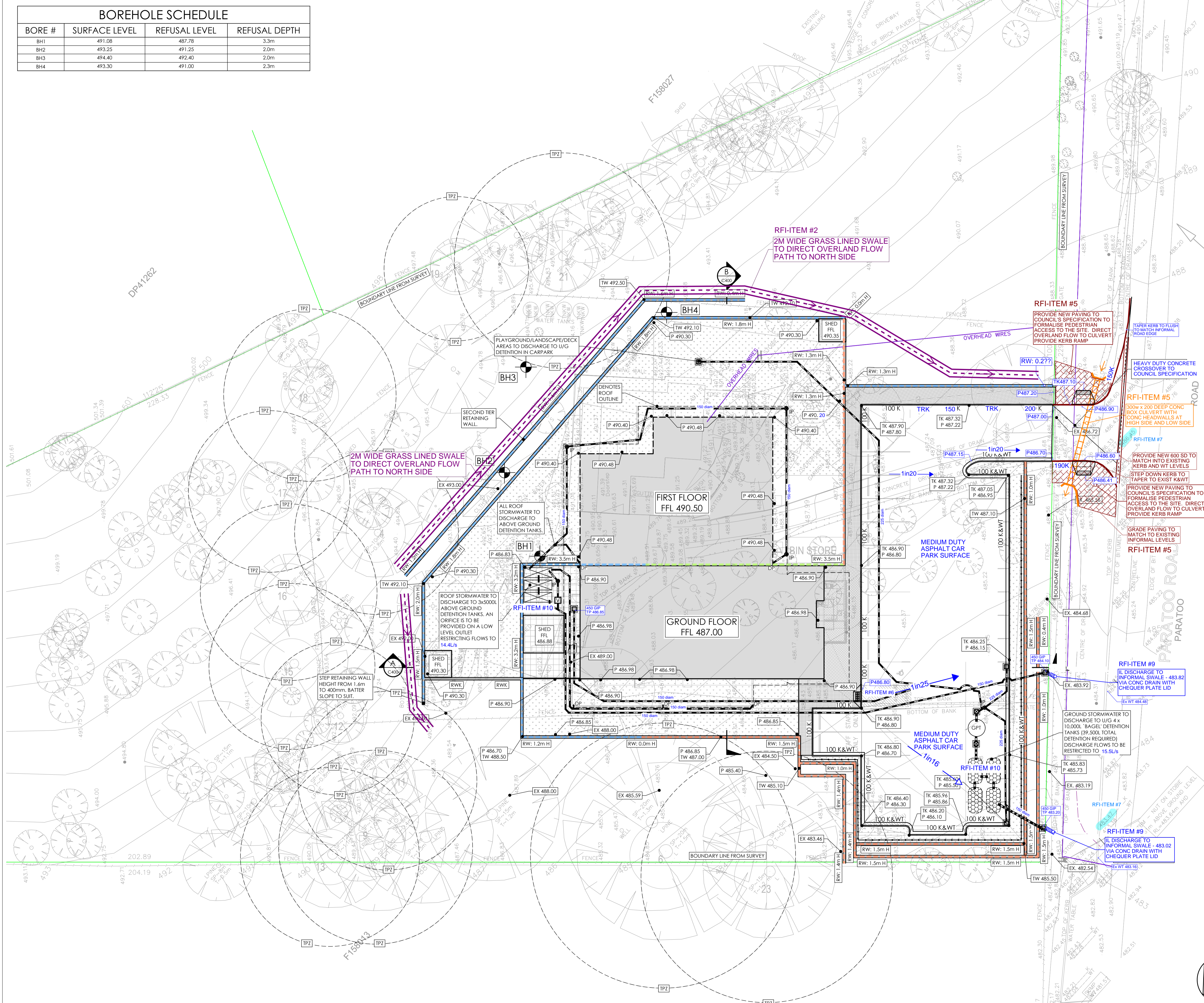
Designed	Drawn	Checked	Scale	Date
M.A.	T.A.C.	-	1:200	Jun-23
Drawing No.	220216-SK1			Rev.





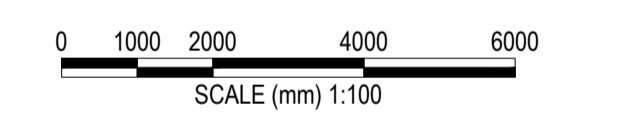
BOREHOLE SCHEDULE			
BORE #	SURFACE LEVEL	REFUSAL LEVEL	REFUSAL DEPTH
BH1	491.08	487.78	3.3m
BH2	493.25	491.25	2.0m
BH3	494.40	492.40	2.0m
BH4	493.30	491.00	2.3m

LEGEND	
	CONCRETE KERB & WATERTABLE HEIGHT AS NOTED.
	CONCRETE KERB HEIGHT AS NOTED.
	FLUSH KERB.
	NEW STORMWATER PIPE (UNSEALED SYSTEM).
	NEW STORMWATER PIPE (SEALED SYSTEM).
	GRATED INLET PIT
	JUNCTION BOX
	STORMWATER INSPECTION POINT.
	MAINTENANCE VALVE. REFER DETAIL.
	DOWN PIPES. ALL DOWN PIPES TO HAVE A uPVC TAIL MATCHING THE SIZE OF THE DOWNPIPE, CONNECTING TO MAIN STORM WATER RUN U.N.O.
	SPEEceptor IN-LINE GROSS POLLUTANT TRAP WITH 900 SQ JB'S.
	CONCRETE CULVERT WITH 6mm GALVANISED CHECKER PL.
	RETAINING WALL WITH NEW FILL BEHIND.
	RETAINING WALL CUT INTO EXISTING SURFACE.
	RETAINING WALL CUT INTO EXISTING SURFACE WITH NEW FILL BEHIND.
	DENOTES ARMO CRASH BARRIER
	DESIGN LEVEL
	P-PAVEMENT LEVEL
	TK-TOP OF KERB
	WT-WATER TABLE
	TP-TOP OF FIT
	IL-INVERT LEVEL
	EX-EXISTING LEVEL
	TB-TOP BATTER
	BB-BOTTOM BATTER
	TW-TOP OF WALL
	L-LANDSCAPE LEVEL
	EXISTING SPOT LEVELS FROM SURVEY.
	DENOTES APPROX. LINE OF TREE PROTECTION ZONE. REFER TO ARCHITECTS DOCUMENTATION.



Issue	Date	Details	M.A./T.A.C.	Eng./DR
B	12-08-23	RESPONSE TO COUNCIL RFI		
A	09-06-23	ISSUED FOR APPROVAL	M.A./T.A.C.	Eng./DR

**APPROVAL ONLY**  
09-06-23



Visit: 174 Fullarton Road Dulwich SA 5065  
P: 08 8332 1344 E: plans@cprengineers.com.au  
Combe Pearson Reynolds Pty. Ltd. is a Trustee for the CPR Trust. © Copyright  
ACN 112 731 526 - ABN 12 112 731 526

**PROPOSED CHILD CARE CENTRE**

35 PARATOO ROAD  
STIRLING SA 5152  
**ACCORD PROPERTY LTD.**

BROWN FALCONER  
28 CHESSER STREET, ADELAIDE SA 5000  
Phone (08) 8203 5800

**STORMWATER MANAGEMENT PLAN**

Designed	Drawn	Checked	Scale	Date
M.A.	T.A.C.	-	1:200	Jun-23
Drawing No.	220216-C201		Rev.	B

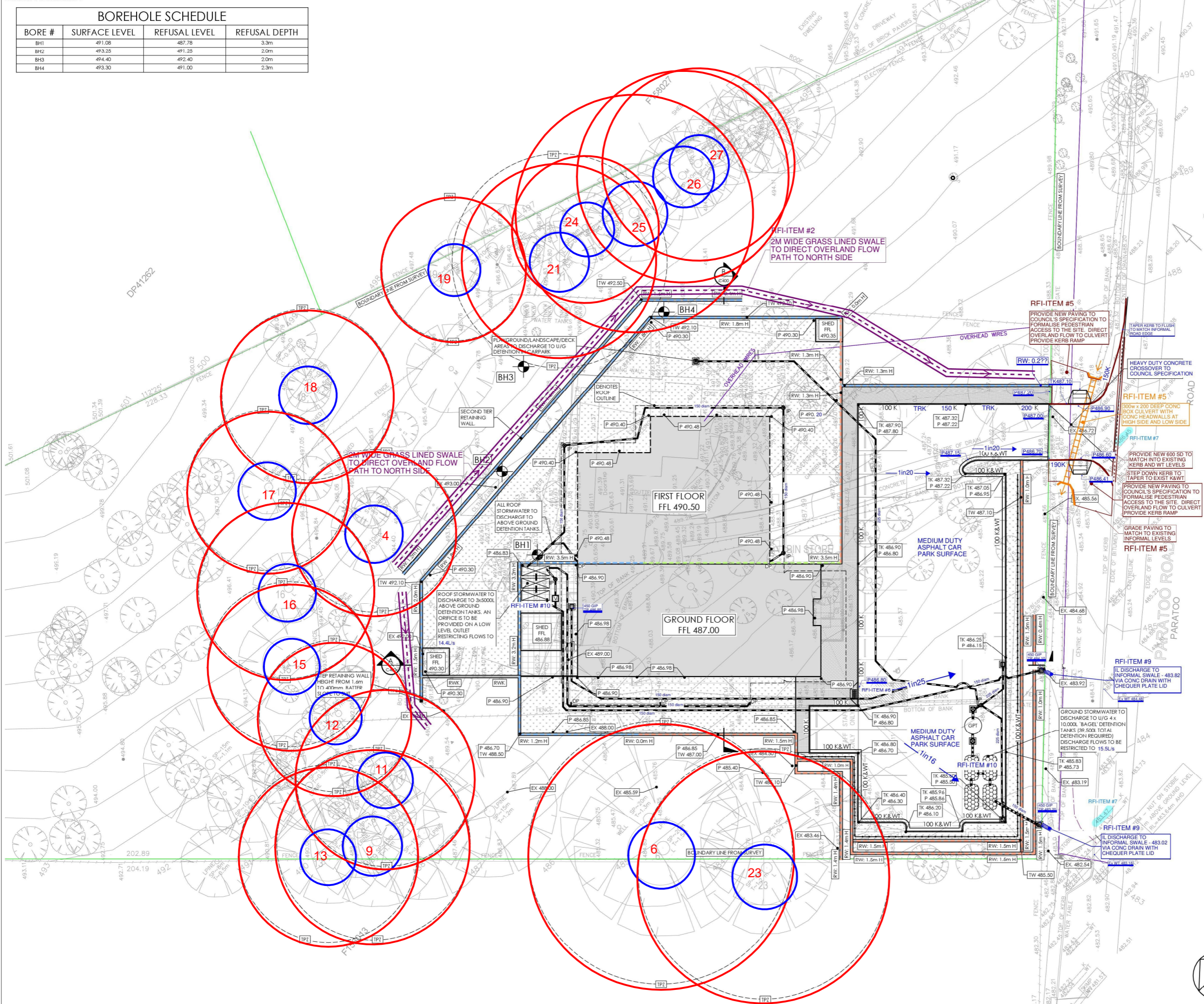
A series of white line art shapes on a light beige background, including a large semi-circle on the left, a smaller semi-circle below it, a horizontal line extending from the semi-circles, a vertical line, and a large, irregular polygonal shape on the right.

**APPENDIX 7**  
**Vegetation plan**  
**(Regulated and**  
**Native)**

SCALE BAR UNITS IN MILLIMETRES

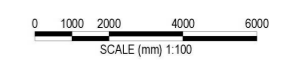
BOREHOLE SCHEDULE			
BORE #	SURFACE LEVEL	REFUSAL LEVEL	REFUSAL DEPTH
BH1	491.08	487.78	3.3m
BH2	493.25	491.25	2.0m
BH3	494.40	492.40	2.0m
BH4	493.30	491.00	2.3m

LEGEND	
	K&WT CONCRETE KERB & WATERTABLE HEIGHT AS NOTED.
	K CONCRETE KERB HEIGHT AS NOTED.
	FK FLUSH KERB.
	NEW STORMWATER PIPE (UNSEALED SYSTEM).
	NEW STORMWATER PIPE (SEALED SYSTEM).
	GRAATED INLET PIT
	JUNCTION BOX
	STORMWATER INSPECTION POINT.
	MAINTENANCE VALVE. REFER DETAIL.
	DOWN PIPES. ALL DOWN PIPES TO HAVE A UPVC TAIL MATCHING THE SIZE OF THE DOWNPIPE. CONNECTING TO MAIN STORM WATER RUN U.N.O.
	SPEcoceptor IN-LINE GROSS POLLUTANT TRAP WITH 900 SQ .B.S.
	CONCRETE CULVERT WITH 6mm GALVANISED CHECKER PL.
	RETAINING WALL WITH NEW FILL BEHIND.
	RETAINING WALL CUT INTO EXISTING SURFACE.
	RETAINING WALL CUT INTO EXISTING SURFACE WITH NEW FILL BEHIND.
	DENOTES ARMO CRASH BARRIER
	DESIGN LEVEL P-PAVEMENT LEVEL TK-TOP OF KERB WT-WATER TABLE TP-TOP OF PIT IL-INVERT LEVEL EX-EXISTING LEVEL TB-TOP BATTER BB-BOTTOM BATTER TW-TOP OF WALL L-LANDSCAPE LEVEL
	EXISTING SPOT LEVELS FROM SURVEY.
	DENOTES APPROX. LINE OF TREE PROTECTION ZONE. REFER TO ARCHITECTS DOCUMENTATION.



Issue	Date	Details	M.A./A.C.	Eng./Df
B	12-08-23	RESPONSE TO COUNCIL RFI		
A	09-04-23	ISSUED FOR APPROVAL	M.A./A.C.	Eng./Df

**APPROVAL ONLY**  
09-06-23



Visit: 174 Fullarton Road Dulwich SA 5065  
P: 08 8332 1344 E: plans@cprengineers.com.au  
Combe Pearson Reynolds Pty. Ltd. is a trustee for the CPR Trust. © Copyright  
ADN1121731 508 ADN1121731 508

**PROPOSED CHILD CARE CENTRE**

35 PARATOO ROAD  
STIRLING SA 5152  
ACCORD PROPERTY LTD.  
BROWN FALCONER  
28 CHESSER STREET, ADELAIDE SA 5000  
Phone (08) 8203 5800

**STORMWATER MANAGEMENT PLAN**

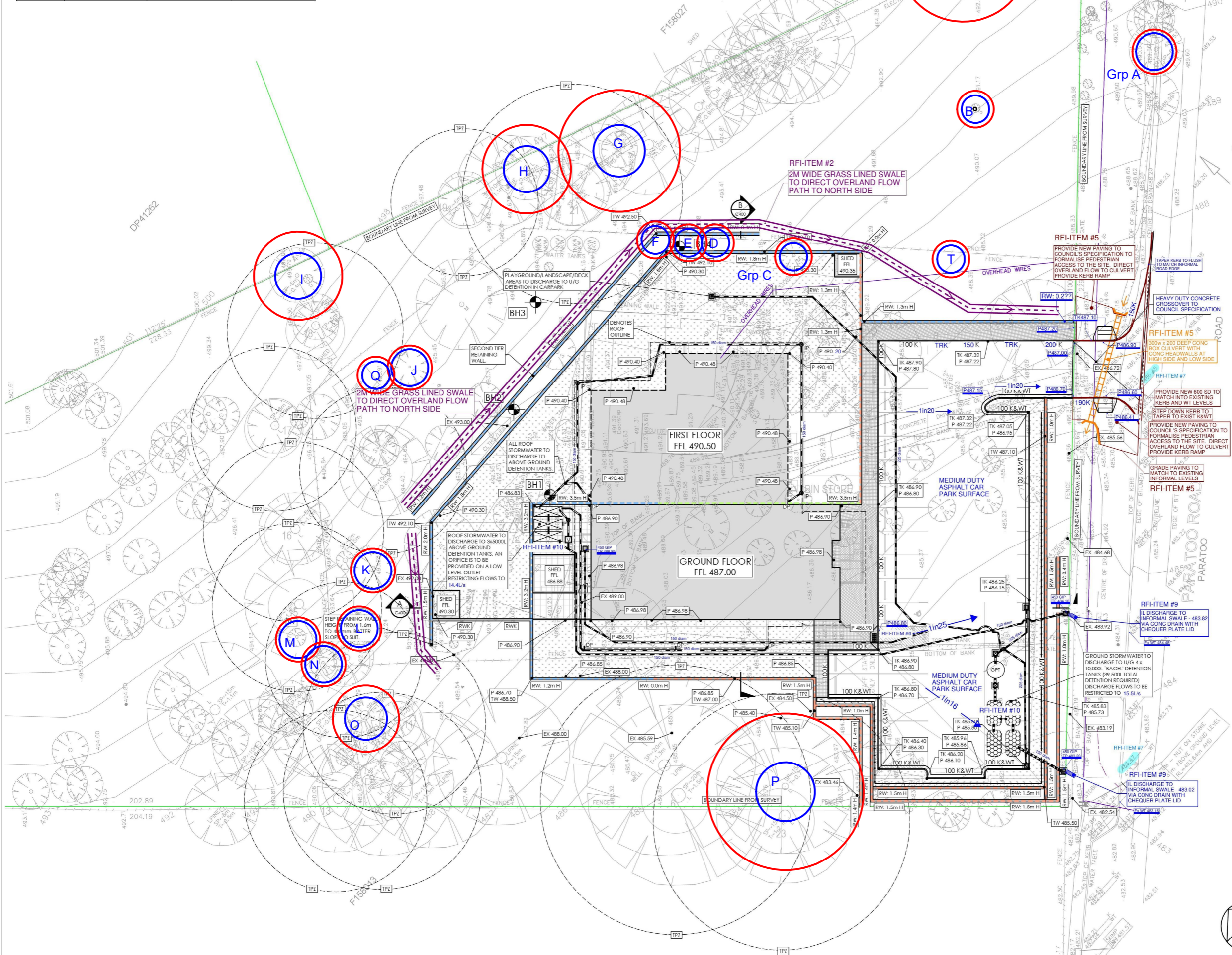
Designed	Drawn	Checked	Scale	Date
M.A.	T.A.C.	-	1:200	Jun-23
Drawing No.	220216-C201		Rev.	B

PRINTED ON: 9/06/2023 5:14:16 PM ORIGINAL SHEET SIZE A1



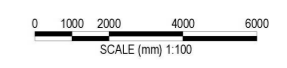
BOREHOLE SCHEDULE			
BORE #	SURFACE LEVEL	REFUSAL LEVEL	REFUSAL DEPTH
BH1	491.08	487.78	3.3m
BH2	493.25	491.25	2.0m
BH3	494.40	492.40	2.0m
BH4	493.30	491.00	2.3m

LEGEND	
	K&WT CONCRETE KERB & WATERTABLE HEIGHT AS NOTED.
	K CONCRETE KERB HEIGHT AS NOTED.
	FK FLUSH KERB.
	NEW STORMWATER PIPE (UNSEALED SYSTEM).
	NEW STORMWATER PIPE (SEALED SYSTEM).
	GRAATED INLET PIT
	JUNCTION BOX
	STORMWATER INSPECTION POINT.
	MAINTENANCE VALVE. REFER DETAIL.
	DOWN PIPES. ALL DOWN PIPES TO HAVE A UPVC TAIL MATCHING THE SIZE OF THE DOWNPIPE. CONNECTING TO MAIN STORM WATER RUN U.N.O.
	SPEEceptor IN-LINE GROSS POLLUTANT TRAP WITH 900 SQ .B.S.
	CONCRETE CULVERT WITH 6mm GALVANISED CHECKER PL.
	RETAINING WALL WITH NEW FILL BEHIND.
	RETAINING WALL CUT INTO EXISTING SURFACE.
	RETAINING WALL CUT INTO EXISTING SURFACE WITH NEW FILL BEHIND.
	DENOTES ARMCO CRASH BARRIER
	DESIGN LEVEL P-PAVEMENT LEVEL TK-TOP OF KERB WT-WATER TABLE TP-TOP OF PIT IL-INVERT LEVEL EX-EXISTING LEVEL TB-TOP BATTER BB-BOTTOM BATTER TW-TOP OF WALL L-LANDSCAPE LEVEL
	EXISTING SPOT LEVELS FROM SURVEY.
	DENOTES APPROX. LINE OF TREE PROTECTION ZONE. REFER TO ARCHITECTS DOCUMENTATION.



Issue	Date	Details	Author
B	12-08-23	RESPONSE TO COUNCIL RFI	M.A./T.A.C.
A	09-04-23	ISSUED FOR APPROVAL	Eng./Dr

**APPROVAL ONLY**  
09-06-23



Visit: 174 Fullarton Road Dulwich SA 5065  
P: 08 8332 1344 E: plans@cprengineers.com.au  
Combe Pearson Reynolds Pty. Ltd. is a trustee for the CPR Trust. © Copyright  
ADN121731 508 AdN121731 508

**PROPOSED CHILD CARE CENTRE**

35 PARATOO ROAD  
STIRLING SA 5152  
ACCORD PROPERTY LTD.  
BROWN FALCONER  
28 CHESSER STREET, ADELAIDE SA 5000  
Phone (08) 8203 5800

**STORMWATER MANAGEMENT PLAN**

Designed	Drawn	Checked	Scale	Date
M.A.	T.A.C.	-	1:200	Jun-23
Drawing No.	220216-C201		Rev.	B

PRINTED ON: 9/06/2023 5:14:16 PM ORIGINAL SHEET SIZE A1



**APPENDIX 8**  
**Arboricultural**  
**Letter**





## project GREEN

2 November 2023

Attn: Rob Gagetti  
ekistics  
Level 3, 431 King William Street  
Adelaide SA 5000

Site: Proposed Childcare Site  
35 Paratoo Road Stirling SA, 5152  
Project Green ref: S34711

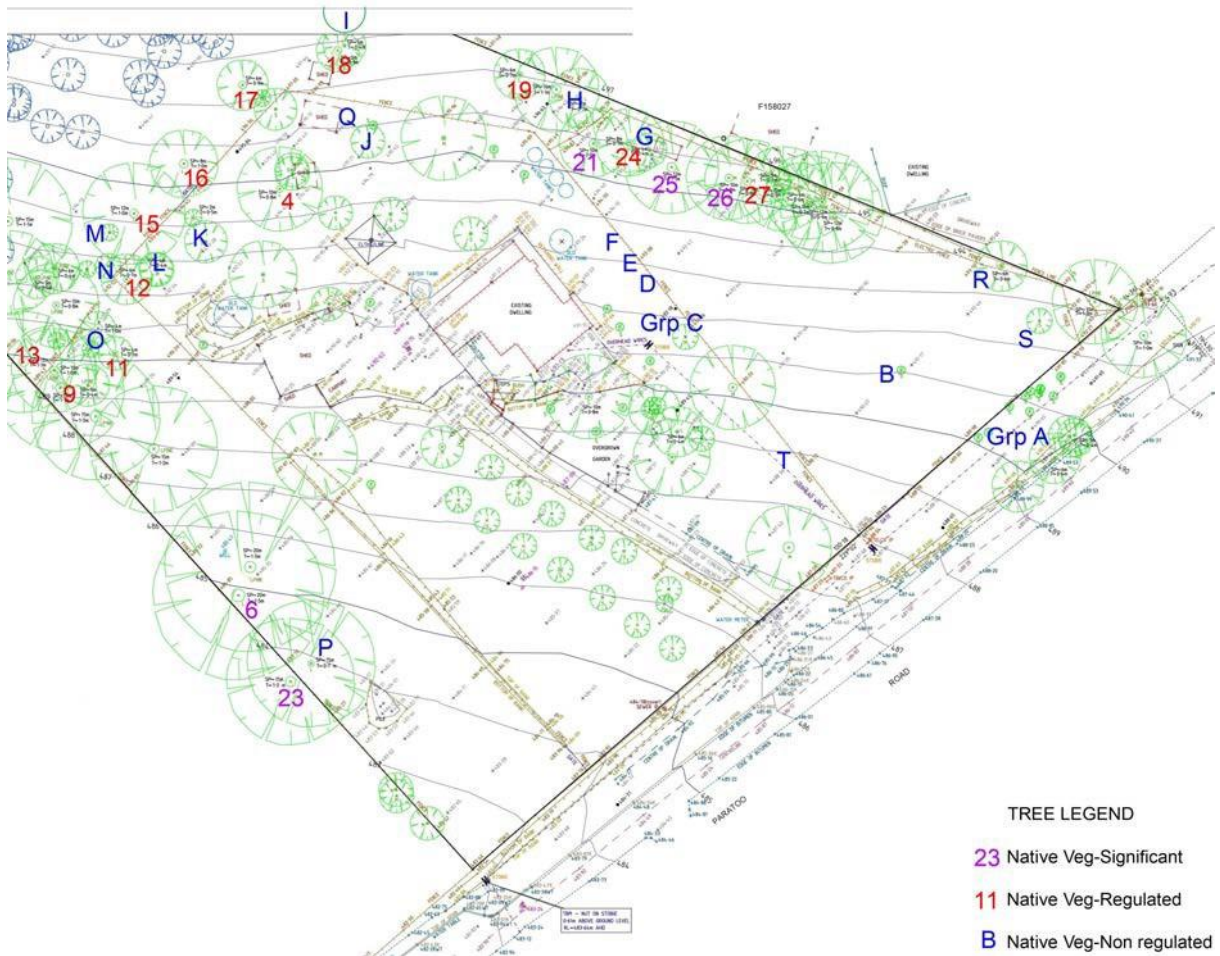
### 35 Paratoo Road Stirling Supplementary Advice V4

Project Green has been requested to provide additional information in relation to a proposed childcare centre at 35 Paratoo Road, Stirling. A tree survey was previously undertaken by Project Green in September 2022. The survey was targeted at documenting all 'Regulated' trees under the *Planning Development and Infrastructure Act 2016* (PDI Act). In addition to the PDI act vegetation growing at 35 Paratoo Road is further subject to protection under the *Native Vegetation Act 1991*

Project Green is not a NVC Accredited Consultant, however additional information on native vegetation has been included in this assessment, based on the report provided by the clients Native Vegetation consultant JS Ayre & Associates. The *Native Vegetation Data Report* prepared by JS Ayre & Associates confirms that all trees situated in proximity to the subject site are protected as Native Vegetation, pursuant to the provisions of the *Native Vegetation Act 1991*.

**Project Green Pty Ltd** ABN: 78 088 402 706  
25-27 Ceafield Road Para Hills West South Australia 5096  
**Telephone** 8283 1300 **Fax** 8258 1933  
**Email** [admin@projectgreen.net.au](mailto:admin@projectgreen.net.au) **Web** [www.projectgreen.net.au](http://www.projectgreen.net.au)





**Survey plan showing tree ID numbers**

**Table 1** below summarizes the findings for all surveyed native trees on the site. This information is an amalgam of information gathered by Project Green (for all Native Trees with a circumference of 2 metres or more) and that provided by JS Ayre and Associates (for the balance of smaller Native Trees).

We understand that Trees 4 and C-F have been identified for JS Ayre & Associates for clearance. As discussed below, Tree 4 has been included for clearance due to excessive tree damaging activities. Trees C-F require removal to accommodate the development footprint .

Table 1: Native Tree data summary

Tree No.	Species	Circ. @1m	TPZ (radius m)	SRZ (radius m)	Encroachment (%)
<b>Native &gt;2m circ.</b>					
4	<i>Eucalyptus obliqua</i>	2.4m	9.12	3.2	16.5
6	<i>Eucalyptus obliqua</i>	3.7m	14.76	3.7	2.2
9	<i>Eucalyptus obliqua</i>	2.8m	10.80	3.3	-
11	<i>Eucalyptus obliqua</i>	2.6m	9.96	3.1	3.0
12	<i>Eucalyptus obliqua</i>	2.1m	8.52	2.9	-
13	<i>Eucalyptus obliqua</i>	2.6m	9.96	3.1	-
15	<i>Eucalyptus obliqua</i>	2.4m	9.24	3.1	-
16	<i>Eucalyptus obliqua</i>	2.6m	9.84	3.2	-
17	<i>Eucalyptus obliqua</i>	2.4m	9.0	3.2	-
18	<i>Eucalyptus obliqua</i>	2.5m	9.60	3.2	-
19	<i>Eucalyptus obliqua</i>	2.1m	8.04	2.9	-
21	<i>Eucalyptus obliqua</i>	3.0m	10.8	3.3	5.2
23	<i>Eucalyptus obliqua</i>	>3m	14.0	3.6	6.5
24	<i>Eucalyptus obliqua</i>	2.2m	8.16	3.0	-
25	<i>Eucalyptus obliqua</i>	3.5m	13.20	3.6	7.8
26	<i>Eucalyptus obliqua</i>	3.1m	11.76	3.4	-
27	<i>Eucalyptus obliqua</i>	2.8m	10.68	3.3	-
<b>Native &lt;2m circ.</b>					
A	<i>Acacia melanoxylon</i>	<2m	2.4	2.0	-
B	<i>Acacia melanoxylon</i>	<2m	2.0	1.5	-
C	<i>Eucalyptus obliqua</i>	<2m	2.0	1.5	100
D	<i>Acacia melanoxylon</i>	<2m	2.0	1.5	100
E	<i>Acacia melanoxylon</i>	<2m	2.0	1.5	100
F	<i>Acacia melanoxylon</i>	<2m	2.0	1.5	100



Tree No.	Species	Circ. @1m	TPZ (radius m)	SRZ (radius m)	Encroachment (%)
G	<i>Eucalyptus obliqua</i>	<2m	6.6	2.76	-
H	<i>Eucalyptus obliqua</i>	<2m	4.8	2.5	-
I	<i>Eucalyptus obliqua</i>	<2m	4.8	2.5	-
J	<i>Eucalyptus obliqua</i>	<2m	2.4	2.0	-
K	<i>Eucalyptus obliqua</i>	<2m	2.4	2.0	-
L	<i>Eucalyptus obliqua</i>	<2m	2.4	2.0	-
M	<i>Eucalyptus obliqua</i>	<2m	2.4	2.0	-
N	<i>Eucalyptus obliqua</i>	<2m	2.4	2.0	-
O	<i>Eucalyptus obliqua</i>	<2m	3.6	2.25	-
P	<i>Eucalyptus obliqua</i>	<2m	8.5	3.2	-
Q	<i>Acacia melanoxylon x 2</i>	<2m	2.0	1.5	-
R	<i>Eucalyptus obliqua</i>	<2m	7.2	2.85	-
S	<i>Acacia Melanoxylon</i>	<2m	3.0	2.0	-
T	<i>Acacia melanoxylon x 3</i>	<2m	2.0	1.5	-

### Development impacts

AS4970-2009 allows for a level of encroachment into the TPZ. Encroachments can be by earthworks, paving and trenching for services, as well as building works.

- Development encroachment less than 10% of the TPZ area and not within the SRZ, is considered to be a 'minor encroachment' which is likely to be acceptable to council.
- Development encroachment greater than 10% of TPZ area or within the SRZ, is considered to be a 'major encroachment'. With a major encroachment the project arborist must show that the tree will remain viable. This includes consideration of a number of factors outlined in section 3.3.4 of AS 4970-2009 *Protection of trees on development sites*. This includes the tree species and tolerance to root disturbance, the presence of existing or past structures or obstacles affecting root growth, and the use of 'tree sensitive' construction methods such as permeable paving and pier and beam footings.

Given the relatively low tolerance of *Eucalyptus obliqua* to site disturbance, the proposed development should aim to minimize any encroachment into the TPZs of these trees, with a maximum 10% TPZ encroachment (this includes siteworks and services as well as any building footprints).

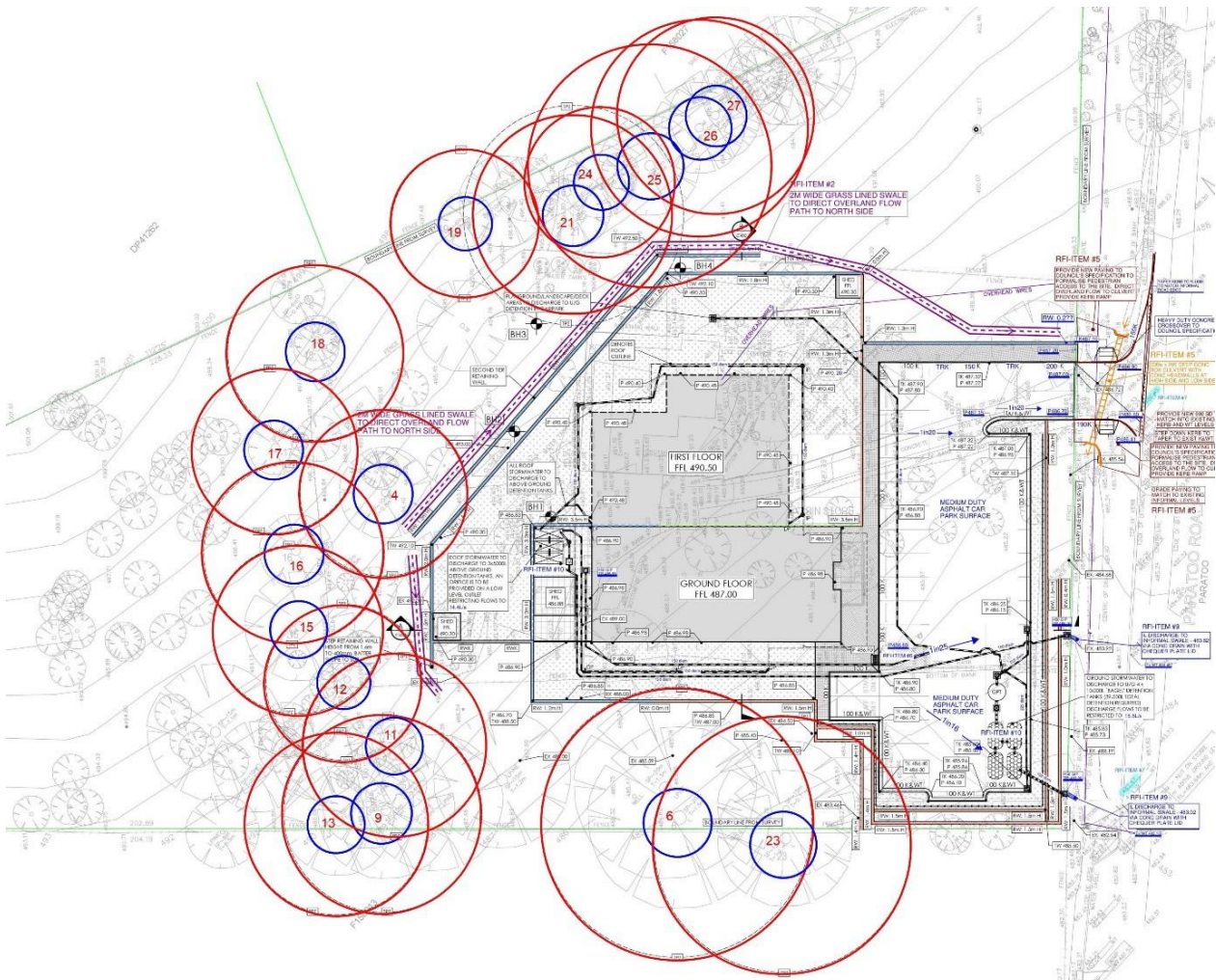


For most trees the proposed works comprise a minor encroachment under AS4970 (<10% of TPZ and outside SRZ). This encroachment can be offset by the open areas of the site contiguous with the TPZs and would be acceptable in relation to the trees.

For **tree 4** there is a major encroachment (>10% of TPZ and on edge of SRZ). The swale design in relation to this tree should be reviewed to reduce the total encroachment to approx. 10% of TPZ.

With respect to the other non-regulated native trees, trees in Group C, and trees D, E and F, appear to require removal to facilitate the proposed development. There are no known encroachments on any of the other native trees to be retained on the site.

Please note that Project Green is not an NVC Accredited Consultant authorized to prepare reports for applications for clearance consent under Section 28 of the *Native Vegetation Act 1991*. The clients Native Vegetation consultant has provided advice on these matters.



**Figure 1 - TPZ Plan-Civil works – Trees with circumference measurements of 2m or more**

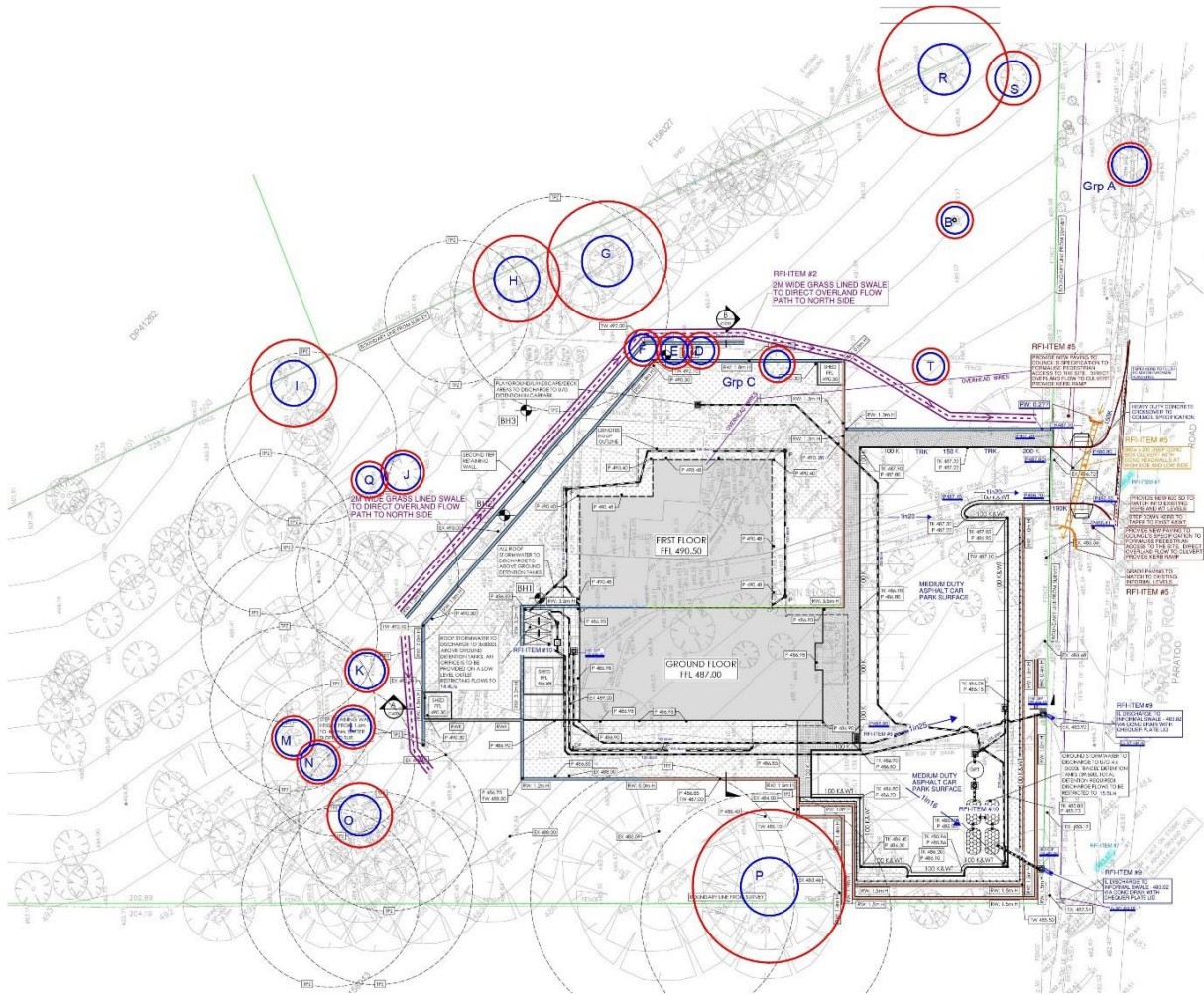


Figure 2 - TPZ Plan-Civil works- Trees with circumference measures <2m





**APPENDIX 9**  
**Native**  
**Vegetation**  
**Data Report**



**JS Ayre & Associates**

PO Box 123

EDWARDSTOWN SA 5039

M: 0416 151 234

E: ayrej@ihug.com.au

# Native Vegetation Clearance

35 Paratoo Road, Stirling

Childcare Centre

## Data Report

Clearance under the *Native Vegetation Regulations 2017*

26 September 2023

Prepared by JS Ayre & Associates

# Table of contents

1. Application information
2. Purpose of clearance
  - 2.1 Description
  - 2.2 Background
  - 2.3 Details of the proposal
  - 2.4 Approvals required or obtained
  - 2.5 Native Vegetation Regulation
  - 2.6 Development Application information
3. Method
  - 3.1 Flora assessment
  - 3.2 Fauna assessment
4. Assessment outcomes
  - 4.1 Vegetation assessment
  - 4.2 Threatened Species assessment
  - 4.3 Cumulative impacts
  - 4.4 Addressing the Mitigation hierarchy
  - 4.5 Principles of clearance
  - 4.6 Risk Assessment
5. Clearance summary
6. Significant environmental benefit
7. Appendices

# 1. Application information

## Application Details

Applicant:	Development Holding Pty Ltd		
Key contact:	Robert Gagetti, Senior Associate, Ekistics. E: <a href="mailto:rgagetti@ekistics.com.au">rgagetti@ekistics.com.au</a> M: 0426 246 297		
Landowner:	Mr Bruce Meaney		
Site Address:	35 Paratoo Road, Stirling		
Local Government Area:	Adelaide Hills Council	Hundred:	Noarlunga
Title ID:	CT/5767/919	Parcel ID	F210897 A111

## Summary of proposed clearance

Purpose of clearance	Clearance required for the construction of a childcare centre and ancillary structures
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 33, New Dwelling or Building
Description of the vegetation under application	<u>Size, type and general condition</u> - 17 Stringybark ( <i>Eucalyptus obliqua</i> ) trees in good condition, mostly saplings, and 3 young Blackwood ( <i>Acacia melanoxylon</i> ) trees.
Total proposed clearance - area (ha) and number of trees	20 scattered trees are proposed to be cleared.
Level of clearance	Level 3
Overlay (Planning and Design Code)	Native Vegetation Overlay

### Map of proposed clearance area



Mitigation hierarchy	The concept was developed to be greater than 10m from any native vegetation identified at the preliminary site visit. Subsequent design elements minimised impact by strategic placement of retention and drainage. There is no intention of removing vegetation not actually impacted.
SEB Offset proposal	Payment of <b>\$9,235.30</b>

# 2. Purpose of clearance

## 2.1 Description

The proponent, Development Holding Pty Ltd, proposes a new childcare centre on the southeastern portion of the block. The development will require impact to up to 20 scattered trees most of which are young, within the footprint of works. Advice was sought from Peter Farmer, Native Vegetation Officer with the Native Vegetation Branch regarding the need to include trees within 5m of the existing boundary (of which there are many). Peter's response advised that "in this instance ...the NV Branch has excluded native vegetation growing within 5 metres of existing boundary fence from consideration in application....." (See attached email).

## 2.2 Background

The site is a 1.0521ha urban block, with a derelict house and ancillary structures including sheds, outbuildings, rainwater tanks and retaining walls. The area immediately surrounding the house is planted to amenity garden species. The broader site retains many large, scattered messmate stringybark (*Eucalyptus obliqua*) trees, almost all mature, with no remnant understorey species present except a single large-leaf bush-pea (*Pultanaea daphnoides*), and one Native Geranium (*Geranium sp.*) noted in the area assessed. All other ground species were introduced, many weedy. The site also has large Pines which have left a dense carpet of needles, and has been grazed for some time, hence the lack of remnant understorey species.

The proposal includes demolition of the house and other structures in order to construct the childcare centre, car park, and outdoor play area in the vicinity of the existing house. The majority of the northwestern part of the block is messmate stringybark mid woodland over exotic understorey (scattered trees, essentially) which will be retained.

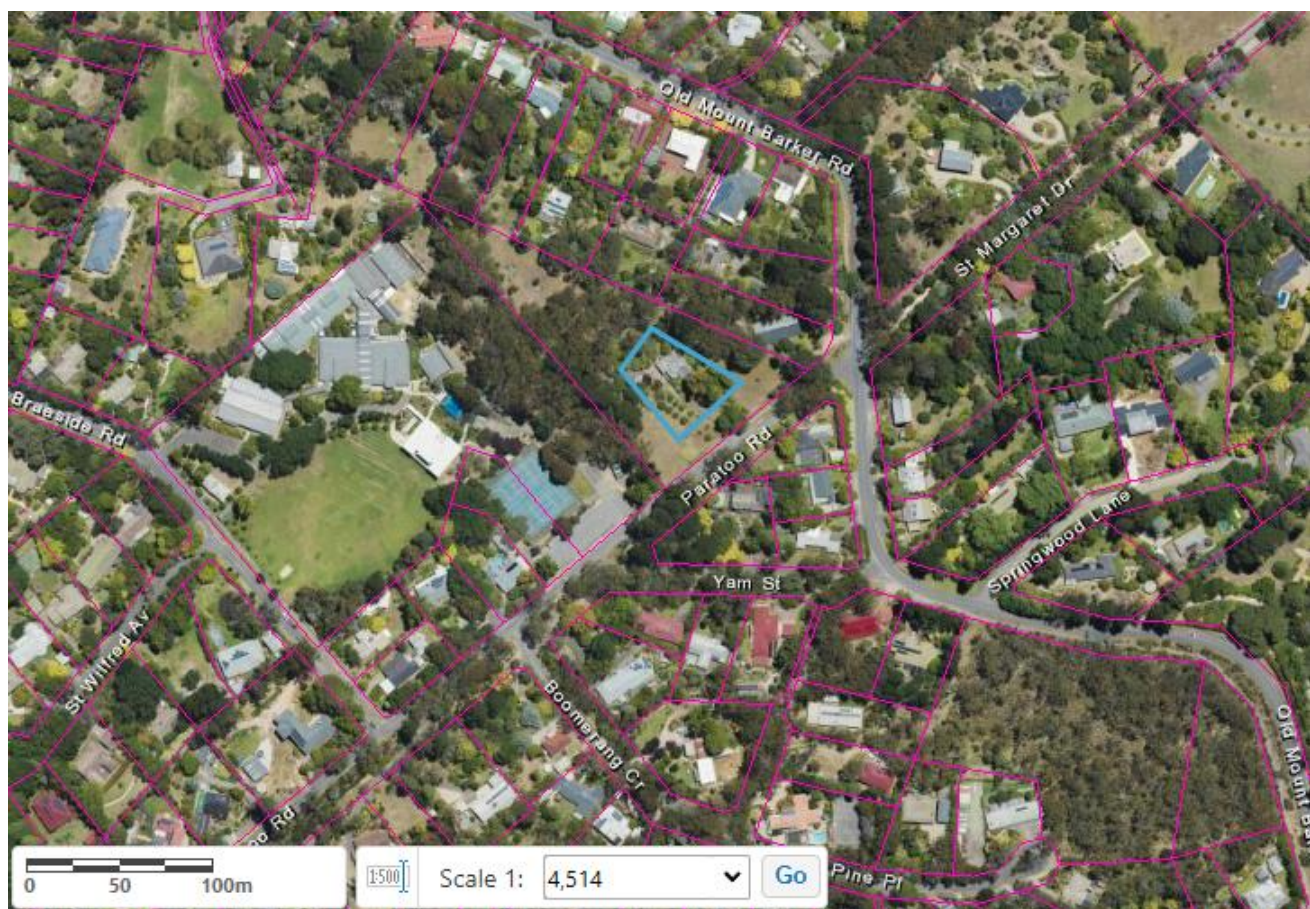
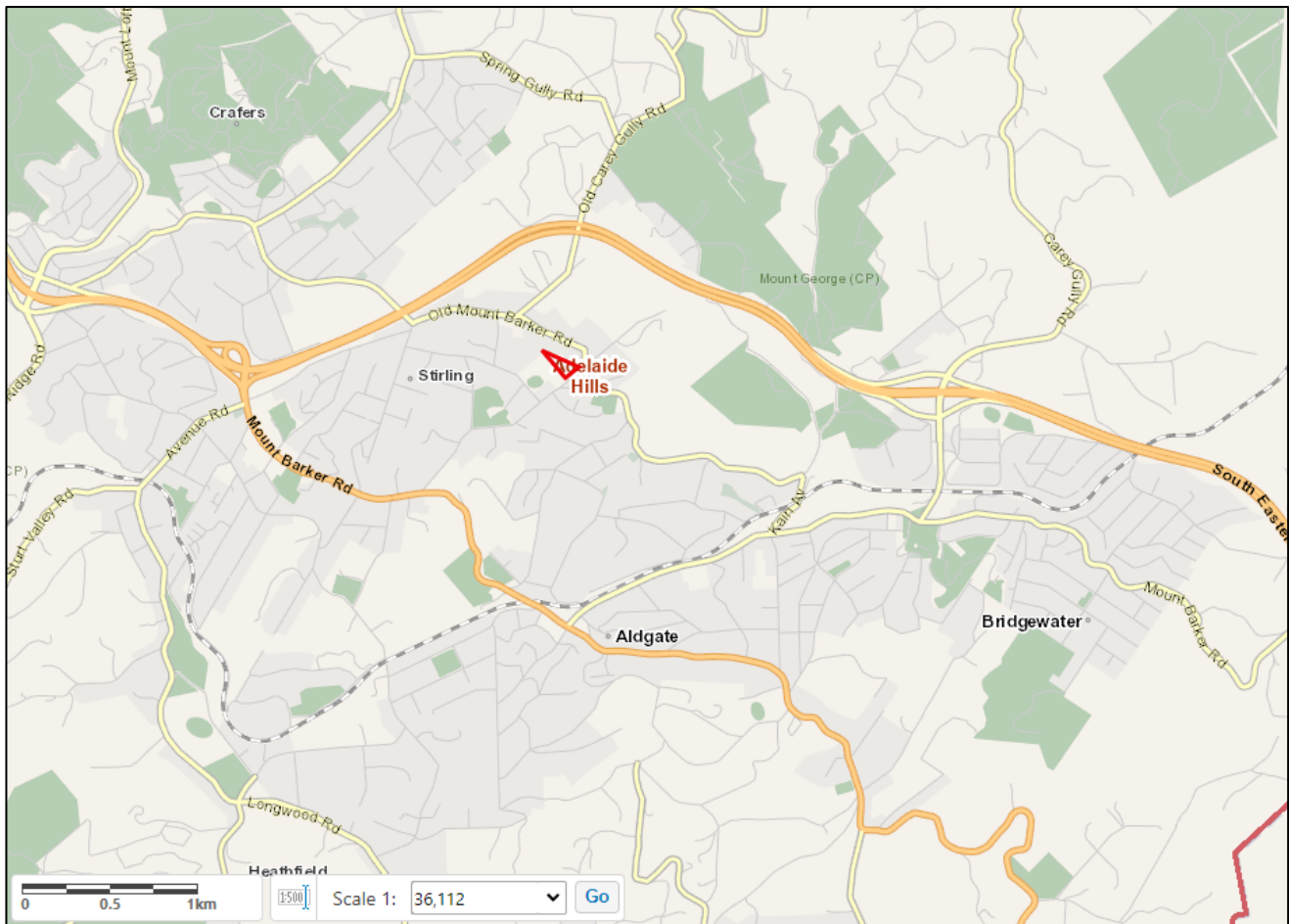


Figure 1. Site map, development area outlined in blue





**Figure 2.** Location map

### 2.3 Details of the proposal

The plans at Figure 3 show the proposed concept and notes ancillary structures such as carparking and retention. The southeastern portion of the site best meets the requirements of the development, as it is flatter, already highly disturbed, and has the lowest density of remnant vegetation. The concept aimed to be further than 10m from any remnant tree – this has been achieved except in the case of some small regrowth of stringybarks and blackwoods, which have regenerated amongst dense exotic amenity planted shrubs and trees, and one tree which will suffer root impacts equating to a Loss Factor of 0.4.

The original site survey assessed 41 mature to semi-mature trees with potential to be impacted (not including saplings). The current concept impacts 20 trees in total; one medium messmate stringybark, 16 small regenerating stringybarks and 3 young blackwood trees.

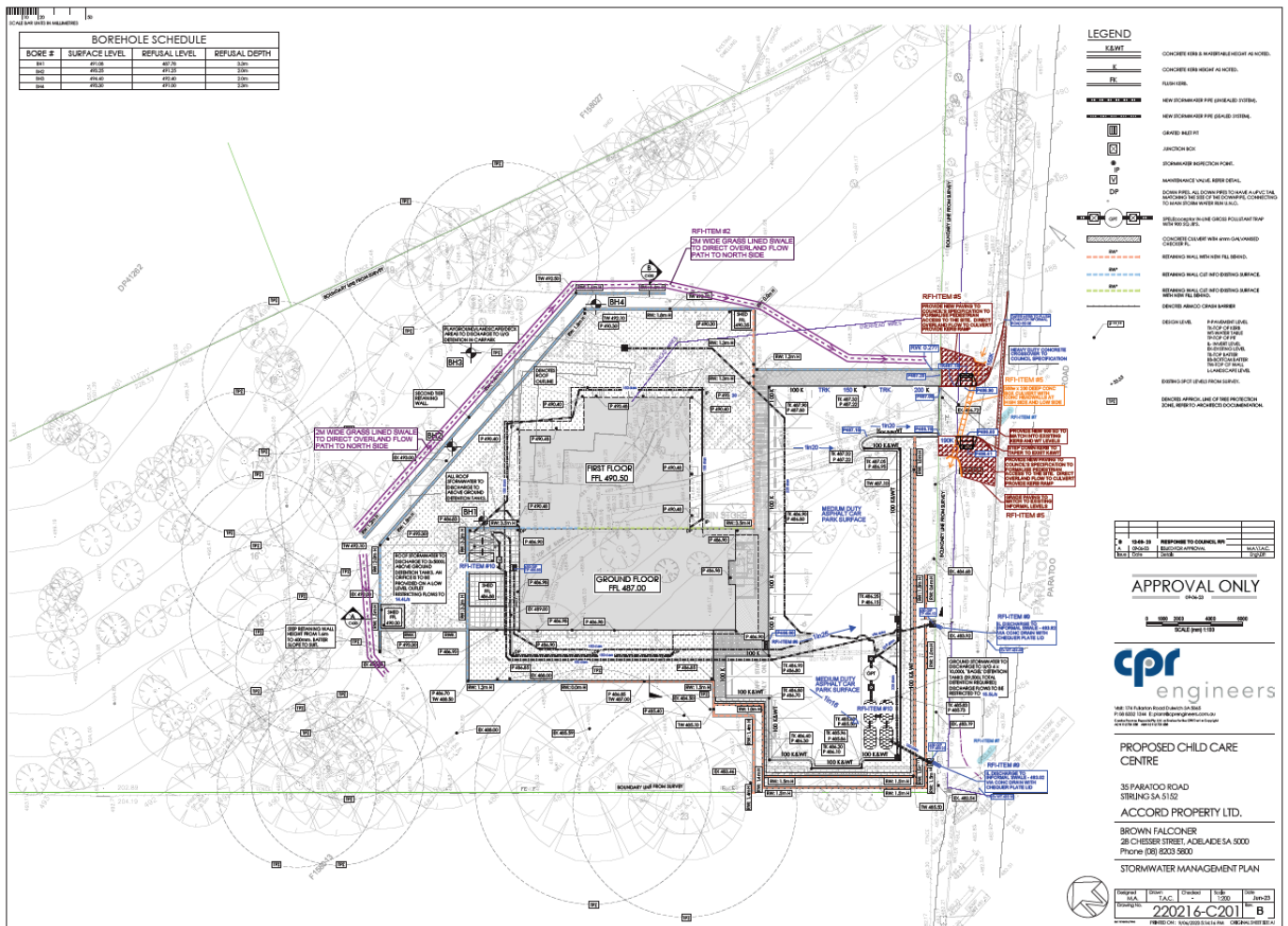


Figure 3. Concept design of the development.

## 2.4 Approvals required or obtained

Provide details of the following approvals or applications under the follow legislation, where relevant:

- Native Vegetation Act 1991 – this report is in part fulfillment of the requirements of this Act
- Planning, Development and Infrastructure Act 2016 – DA No. to be provided
- Environment Protection and Biodiversity Conservation Act 1999 – N/A
- National Parks and Wildlife Act 1972 – N/A
- Landscapes SA Act 2019 – N/A
- Aboriginal Heritage Act 1988 – N/A

## 2.5 Native Vegetation Regulation

Regulation 12, Schedule 1; clause 33, New Dwelling or Building.

## 2.6 Development Application information (if applicable)

Identify to Zone – *Rural Neighbourhood*; and Overlay – *Native Vegetation Overlay*.

# 3. Method

## 3.1 Flora assessment

Site assessments were undertaken on 25 August 2022, and 7 and 31 August 2023. The scope of works was outlined by the client prior and informed by site visits and research using NatureMaps and Google Earth street view. The survey involved a general assessment of vegetation on the site, and of possible habitat for threatened species.

An online search was undertaken for Environment Protection and Biodiversity Conservation (EPBC) Act "Matters of Environmental Significance" and interrogation of the Atlas of Living Australia (AoLA) and the BDBSA databases was completed as background to the site visit. Ninety-two threatened plant species were recorded within 5km since 1995. None were found on site nor are likely to be present.

## 3.2 Fauna assessment

A review of relevant databases was undertaken prior to the site visit to establish fauna species known, or considered likely, to occur at the site. All observations, calls and evidence of presence were recorded as field notes. Bird species were recorded when heard calling, or when observed within, adjacent to, or flying over the site. Evidence of fauna species presence was searched for and recorded when observed.

Thirty-seven listed species were recorded within the search criteria. None were observed on site.

See Part 4.2 and Appendix 1 for further details.

# 4. Assessment Outcomes

## 4.1 Vegetation Assessment

### General description of the vegetation, the site and matters of significance

- *Landform, geography and soils*  
Undulating to rolling rises with shallow to moderately deep sandy loam to loam with clay well structured subsoils. Soils on rocky or steeper slopes are shallow and stony.
- *Landform feature of significance (rivers, creeks, rocky outcrops, etc.)*  
The Piccadilly Valley is a feature in the area. Many stream order 1 and 2 tributaries flow in the vicinity.
- *General overview of the vegetation under application as a whole*  
The site contains mature messmate stringybark trees over exotic (grazed) understorey. The scattered trees are remnants of a *Eucalyptus obliqua* mid woodland over exotic grasses/herbs/forbs.
- *General description of the vegetation relating to type and condition*  
The vegetation comprises numerous scattered messmate stringybarks (*Eucalyptus obliqua*) in fair to good condition amidst amenity vegetation, or over exotic grazed grasses/herbs/forbs. The scattered trees on site no longer represent the original plant community. The site is devoid of remnant mid or ground storey.
- *Description of the landscape context for the vegetation*  
The scattered trees comprise closely spaced individuals amidst planted amenity vegetation in the town of Stirling. Adjacent land use is residential, and numerous patches of messmate stringybark in varying condition occur around the site and in the area generally. Mount George and Cleland Conservation Park (CP) are within 1km NE and 3km NW, respectively, and numerous Heritage Agreements occur within 2.5km of the site.

Tree ID – Tree 5
Tree spp: <i>Eucalyptus obliqua</i>
Number of trees: 1
Height (m): 14
Hollows: 1 small
Diameter (cm): 90
Canopy dieback (%): 20
Total Biodiversity Score: 3.87



**Photo 1.** Medium tree in fair condition providing potential habitat for threatened species with 1 small hollow. Root impacts from retention wall and drainage, LF 0.4.

Tree ID – Tree (group) 11
Tree spp: <i>Eucalyptus obliqua</i>
Number of trees: 16
Height (m): 1.5
Hollows: nil
Diameter (cm): 1
Canopy dieback (%): 0
Total Biodiversity Score: 2.39



**Photo 2.** Small patch of multiple saplings in fair to good condition, limited current habitat for threatened species, within footprint of works.

Tree ID – Tree (group) 18
Tree spp: <i>Acacia melanoxylon</i>
Number of trees: 3
Height (m): 8
Hollows: nil
Diameter (cm): 10
Canopy dieback (%): 5
Total Biodiversity Score: 1.55



**Photo 3.** Young trees in good condition, providing limited current habitat for threatened species. Impacted by new infrastructure, within footprint of works.



**Figure 3.** Scattered trees impacted as noted in the text

## 4.2 Threatened Species assessment

### Flora

The searches identified 92 flora species within the search criteria. This large number is considered to be influenced by the proximity of the site to Cleland and Mount George Conservation Parks. No listed species were found on site - the area is heavily grazed and only three remnant native species were observed at either of the site visits, none of which are threatened. Threatened species are considered unlikely to occur given the site history and presence of numerous weed species.

### Fauna

Database searches identified 36 threatened species recorded within 5km of the proposed impact site since 1995 (excluding pelagic, marine or aquatic dependent species). The total includes (EPBC Act) VU – 3; EN – 3; and (NPW Act) R – 16; V – 6 and E – 2. Ten threatened species were excluded from the assessment due to their habitat preferences not being found on or near the site; or because they are a subspecies not found in the region. See Appendix 1 for the full list of threatened species recorded.

The adjacent Cleland and Belair National Parks provide more optimum habitat for all listed threatened species, but the opportunistic use of the vegetation assessed has been considered.

The likelihood of the listed fauna finding habitat at the site is as follows:

*Occurrence highly likely* – (1) Common Brushtail Possum.

*Occurrence likely* – (6) Eastern Shrike-tit, Black-chinned Honeyeater, Scarlet Robin, Striped Honeyeater, Diamond Firetail, Yellow-tailed Black Cockatoo.

*Occurrence possible* – (9) Brown Toadlet, Southern Whiteface, White-browed Treecreeper, Little Eagle, White-throated Needle-tail, Square-tailed Kite, Jacky Winter, Elegant Parrot, Grey-headed Flying-fox.

*Occurrence unlikely* – (10) White-winged Chough, Peregrine Falcon, Chestnut-rumped Heathwren, Painted Buttonquail, SA Bassian Thrush, Agile Antechinus, Yellow-footed Antechinus, Southern Brown Bandicoot, Heath Goanna, Lace Monitor

**Species observed on site; recorded within 5km of the application area since 1995; or the vegetation is considered to provide suitable habitat**

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
<i>Pseudophryne bibronii</i> (Brown Toadlet)	R		3	2021	Wide variety of habitats, including dry forests, woodland, shrubland, grassland, coastal swamps under rocks and logs, breeding in grassy areas beside creeks	Possible – limited damp areas, rocks, logs or creek habitat available.
<i>Aphelecephala leucopsis</i> (Southern Whiteface)		VU		-	A wide range of open woodlands/shrublands with an understorey of grasses, shrubs, or both. Usually in habitats dominated by acacias or eucalypts on ranges, foothills, lowlands, and plains	Possible – no grassy understorey present (grazed exotic species only) but cannot be discounted
<i>Climacteris affinis</i> (White-browed Treecreeper)	R		3	2021	Found in semi-arid tall shrubland and woodlands, forage arboreally in shrubs and on tree trunks and branches, on the ground through litter and fallen branches and across bare ground	Possible – limited leaf litter or fallen branches, but stringy bark trees are plentiful.
<i>Corcorax melanorhamphos</i> (White-winged Chough)	R		3	2022	Found in open forests and woodlands. They tend to prefer the wetter areas, with lots of leaf-litter, for feeding, and available mud for nest building	Unlikely –, limited habitat on site for mud building, although nearby habitat may provide such
<i>Falco peregrinus macropus</i> (Peregrine Falcon)	R		3	2006	Requires abundant prey and secure nest sites, and prefers coastal and inland cliffs or open woodlands near water	Unlikely – limited suitable habitat available.
<i>Falcunculus frontatus frontatus</i> (Eastern Shrike-tit)	R		3	2022	Found in eucalypt forests, woodlands, forested gullies and along rivers in drier areas. Sometimes seen in parks and gardens, on farms with scattered trees, and pine plantations.	Likely – suitable habitat present on and around the site
<i>Hieraetus morphnoides</i> (Little Eagle)	V		3	2019	Seen over woodland and forests, open country, extending into the arid zone. Tends to avoid heavy forest.	Possible – suitable habitat available in the surrounding areas.



Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
<i>Hirundapus caudacutus</i> (White-throated Needletail)	V	VU	3	2023	Mainly aerial, using trees for roosting.	Possible – limited suitable habitat available.
<i>Hylacola pyrrhopygia parkeri</i> (Chestnut-rumped Heathwren)	E	EN	3	2020	Inhabits heathlands and woodlands with dense shrub and ground-layer vegetation, most commonly found in rocky areas. It is adapted to living on the ground and in low shrubs, foraging for food and building domed nests near, or on the ground	Unlikely – no suitable habitat available
<i>Lophoictinia isura</i> (Square-tailed Kite)	E		3	2019	Mainly inhabits open eucalypt forests and woodlands, also open habitats, often dominated by stringybarks, Manna Gum, Messmate, River Red Gums, as well as cypress-pines and casuarinas. Occurs along the edges of dense forest and along in road verges with remnant or planted trees.	Possible – suitable habitat available in the area.
<i>Melithreptus gularis</i> (Black-chinned Honeyeater)	V		3	2002	Inhabits upper levels of eucalypt forests/woodlands with box and ironbarks, sometimes gardens and street trees	Likely – suitable habitat available.
<i>Microeca fascinans fascinans</i> (Jacky Winter)	R		3	2017	Found in open woodland with open shrub layer and bare ground	Possible – limited suitable habitat available.
<i>Neophema elegans elegans</i> (Elegant Parrot)	R			2019	Can be found in a wide variety of habitats, including grasslands, shrublands, mallee, woodlands and thickets, bluebush plains, heathlands, saltmarsh and farmland.	Possible, though suitable habitat not present it may be nearby
<i>Petroica boodang boodang</i> (Scarlet Robin)	R		3	2023	Found in open forests and woodlands; open habitats such as grasslands, farmland and urban parks and gardens	Likely – suitable habitat available on the site and surrounding area
<i>Plectorhyncha lanceolata</i> (Striped Honeyeater)	R		3	2020	Found in forests and woodlands, often along rivers, as well as mangroves and in urban gardens	Likely – limited suitable habitat available
<i>Stagonopleura guttata</i> (Diamond Firetail)		VU		-	Open grassy woodland, heath and farmland or grassland with scattered trees.	Likely – suitable habitat available on the site and surrounding area

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
<i>Turnix varius varius</i> (Painted Buttonquail)	R		3	2018	Inhabits a range of Eucalypt associations wherever leaf litter is prominent	Unlikely – no leaf litter habitat available
<i>Zanda funerea whiteae</i> (Yellow-tailed Black Cockatoo)	V		3	2023	Inhabits a variety of habitat types, but favours eucalypt woodland and pine plantations.	Likely - habitat present, known to forage in pine trees in the area, and known to regularly fly over
<i>Zoothera lunulata halmaturina</i> (SA Bassian Thrush)	SP	EN	3	2023	Prefers damp, densely forested areas and gullies usually associated with a thick canopy and leaf litter below.	Unlikely – limited habitat available but may be present adjacent the site where more suitable habitat exists
<i>Antechinus agilis</i> (Agile Antechinus)	E		3	2021	Found in forest, heaths, woodlands and coastal plains with leaf litter and fallen logs	Unlikely - preferred habitat not present on and around the site
<i>Antechinus flavipes</i> (Yellow-footed Antechinus)	V		3	2022	Found in forest, heaths, woodlands and coastal plains with leaf litter and fallen logs	Unlikely - preferred habitat not present on and around the site
<i>Isodon obesulus obesulus</i> (Southern Brown Bandicoot)	V	EN	3	2023	Found in a variety of habitats including heathland, shrubland, sedgeland, heathy open forest and woodland.	Unlikely - preferred habitat not present on and around the site
<i>Pteropus poliocephalus</i> (Grey-headed Flying-fox)	R	VU	3	2020	Found in open forests, closed and open woodlands. Will feed in remnant native vegetation patches as well as urban areas.	Possible – limited preferred habitat present around the site
<i>Trichosurus vulpecula</i> (Common Brushtail Possum)	R		3	2022	Found in a wide range of forests and woodlands. Very common in urban parks and gardens.	Highly likely - species has a wide range of habitat requirements.
<i>Varanus rosenbergi</i> (Heath Goanna)	V		3	2007	Found in heath, wet and dry forest and temperate woodlands usually with sandy soils and termite mounds present	Unlikely - preferred habitat not present on and around the site
<i>Varanus varius</i> (Lace Monitor)	R		3	2013	Frequents both open and closed forests and forage over long distances, limited distribution in South Australia, occurring in the upper reaches of the SA Murray-Darling Basin and isolated populations in the southern Flinders Ranges	Unlikely – outside usual range, single sighting at ~2 km from site.

Source; 1- BDBSA, 2 - AoLA, 3 – NatureMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others  
NP&W Act; E= Endangered, V = Vulnerable, R= Rare  
EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable

Criteria for the likelihood of occurrence of species within the Study area.

Likelihood	Criteria
Highly Likely/Known	Recorded in the last 10 years, species does not have highly specific niche requirements, habitat is present and falls within the known range of the species distribution or; The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provide limited habitat or feeding resources for the species; Recorded within 20 -40 years, survey effort is considered adequate, habitat and feeding resources present, and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provides no habitat or feeding resources, including perching, roosting or nesting opportunities, corridor for movement or shelter. Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area. No records despite adequate survey effort.

### 4.3 Cumulative impact

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.

- *clearance directly required for the development (e.g. access, building footprints, associated infrastructure – power and water, etc.),*  
All associated clearance has been considered and included in this assessment.
- *subsequent clearance that will be permitted or required (e.g. 10m around a building, 20m around a dwelling, clearance for fire protection),*  
The concept avoids development within 10m of mature trees. Younger trees within the concept footprint and 10m have been included. The building is not a dwelling, therefore the 20m Regulation does not apply. The '5m from fencelines' requirement has been deemed by the Native Vegetation Branch not to apply in this instance.
- *indirect clearance that may occur as a result of the development (e.g. dust generation smoothing vegetation, altered hydrology inundating or drying vegetation, impacting on tree root zones (the application of fill) impacting on tree health),*  
Retaining walls are placed so as to reduce impact to root zones – one tree is likely to be impacted within the TPZ and has been included in the tally. Construction management will include dust suppressant activities, and there are no significant impacts on hydrology.
- *future stages or associated components of a development*  
No future stages are proposed or foreseen.

### 4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

**a) Avoidance – outline measures taken to avoid clearance of native vegetation**

The proposal intended from the outset to avoid impacting vegetation and was located greater than 10m from large remnant trees. Further site visits after clearance of amenity vegetation identified young regrowth which was initially obscured; this was not possible to avoid as it was within the concept footprint and avoidance would render the project unfeasible. Subsequent concept development ensured no works were proposed within 10m of any mature tree.

- b) Minimization – if clearance cannot be avoided, outline measures taken to minimize the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).**

Retaining walls and a drain were located where functionality was high, but impact could be minimised – one tree is likely to suffer impact to >10% of the root zone (within the Tree Protection Zone (TPZ), outside the Structural Root Zone) and has been included in the assessment with a 0.4 Loss Factor. A significant buffer of remnant vegetation is present, and will be retained along boundary fences and at the rear (NW) part of the block.

- c) Rehabilitation or restoration – outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimized, such as allowing for the re-establishment of the vegetation.**

Rehabilitation onsite could be considered – the NW portion of the property has no understorey, and this could be undertaken to complement the SEB offset payment.

- d) Offset – any adverse impact on native vegetation that cannot be avoided or further minimized should be offset by the achievement of a significant environmental benefit that outweighs that impact.**

The required SEB offset payment will be made.

## 4.5 Principles of Clearance (Schedule 1, Native Vegetation Act 1991)

The Native Vegetation Council will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The Native Vegetation Council will consider all the Principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*.

Principle of clearance	Considerations
<b>Principle 1a - it comprises a high level of diversity of plant species</b>	<u>Relevant information</u> The assessment was done as a Scattered Tree assessment. Three remnant and numerous introduced species was recorded. Patches; N/A
	<u>Assessment against the principles</u> <u>Seriously at Variance</u> – N/A <u>At Variance</u> – N/A
<b>Principle 1b - significance as a habitat for wildlife</b>	<u>Relevant information</u> See Appendix 1 for the list of threatened fauna species that were recorded historically. <i>Detail if the vegetation support a high diversity of animal species</i> – although 26 threatened species have been recorded in the general area, only 16 are considered to have an occurrence likelihood of greater than ‘possible’. The habitat present is of very low diversity, and presence of threatened species is probably opportunistic in most cases. The habitat is not likely to be critical for the survival of any listed species. <i>Detail if the vegetation provide a corridor for movements between other areas of native vegetation, or a habitat refuge, especially in heavily cleared areas.</i> The surrounding outskirts of Stirling is dotted with larger, more diverse remnants of similar plant community to the one assessed, and this small block does not provide a corridor, nor significant refuge. The impact is root pruning to one mature tree, and removal of saplings or seedlings with limited habitat value at this stage. Trees; Fauna Habitat Score – 1.8 Biodiversity Score (per tree) – 3.87 (tree 5), 0.15 (group 11) and 0.52 (group 18)

	<p><u>Assessment against the principles</u>  <u>Seriously at Variance</u>  All impacted scattered trees are SAV  <u>At Variance</u> –  N/A</p>
	<p><u>Moderating factors that may be considered by the NVC</u>  <i>Impact significance, non-essential habitat</i></p>
<p><b>Principle 1c - plants of a rare, vulnerable or endangered species</b></p>	<p><u>Relevant information</u>  See Appendix 1 for the list of threatened species that were recorded for the site or that may be present but undetectable at the time of assessment (e.g. orchids).  <i>Identify the distribution of species within the area of impact</i> – there were no threatened flora species observed on the site.  <i>What level of impact on the local population of the plant species?</i> N/A  <i>Number of plants likely to be impacted in the clearance area</i> - N/A  Threatened Flora Score(s) - 0</p>
	<p><u>Assessment against the principles</u>  <u>Seriously at Variance</u>  N/A  <u>At Variance</u> –  N/A</p>
	<p><u>Moderating factors that may be considered by the NVC</u>  N/A</p>
<p><b>Principle 1d - the vegetation comprises whole or part of a plant Rare, Vulnerable or Endangered community</b></p>	<p><u>Relevant information</u>  There were no threatened communities under the EPBC Act or threatened ecosystems under the DEW Provisional list of threatened ecosystems present on or near the site.  Threatened Community Score - 0</p>
	<p><u>Assessment against the principles</u>  <u>Seriously at Variance</u>  N/A</p>
	<p><u>Moderating factors that may be considered by the NVC</u>  N/A</p>
<p><b>Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.</b></p>	<p><u>Relevant information</u>  Provide remnancy figures for IBRA Association – Uraidla, 26% and IBRA Subregion - MLR, 15%  <i>Discuss the health and likely longevity of the remnant.</i> - the patch on the property assessed is relatively disjunct from surrounding remnants .Being within the township of Stirling, it will be continually subject to development pressures. A significant number of trees could have been lost under the current exemptions. The longevity of the scattered trees, regardless of this proposal, is uncertain given the pressures to consolidate and increase density within urban areas.</p>
	<p>Biodiversity Score – 7.81</p>
	<p><u>Assessment against the principles</u>  <u>Seriously at Variance</u>  N/A  <u>At Variance</u>  At both the Association and Subregional Level</p>
	<p><u>Moderating factors that may be considered by the NVC</u>  Impact significance; quality of remnant</p>

<b>Principle 1f - it is growing in, or in association with, a wetland environment.</b>	<u>Relevant information</u> The vegetation is not associated with a wetland
	<u>Assessment against the principles</u> <u>Seriously at Variance</u> N/A; <u>At Variance</u> – N/A
	<u>Moderating factors that may be considered by the NVC</u> N/A
<b>Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.</b>	<u>Relevant information</u> <i>Detail the location of trees or vegetation relative to sites frequented by the public (e.g. roads, towns, lookout, etc.)</i> – the vegetation is only visible from the street, or from adjacent properties. It is unlikely to be considered a significant contributor to local amenity. Changes to the site including removal of the mature amenity planted vegetation is likely to have had more impact than proposed removal of small regrowth plants which were not visible until recent amenity tree clearance. Larger trees near fencelines are not included in this application. <i>Provide details of cultural or historical values</i> – there is no evidence of historically important vegetation on the site, nor did a search of heritage sites within the Council area highlight any issues. <i>Discuss possible effect on landscape character</i> – given the main impact is to smaller trees not previously visible, the effect on landscape character is considered very low to negligible.
	N/A
	<u>Moderating factors that may be considered by the NVC</u> N/A

## 4.6 Risk Assessment

### ***Determine the level of risk associated with the application***

<b>Total clearance</b>	No. of trees	20
	Area (ha)	-
	Total biodiversity Score	7.81
<b>Seriously at variance with principle 1(b), 1(c) or 1 (d)</b>	1(b)	
<b>Risk assessment outcome</b>	Level 3	

# 5. Clearance summary

## Scattered trees Summary table

Tree or Cluster ID	Number of trees	Fauna Habitat score	Threatened flora score	Biodiversity score	Loss factor	SEB Points required	SEB Payment	Admin Fee
5	1	1.8	0	3.87	0.4	1.63	\$2,470.67	\$135.89
11	16	1.8	0	2.39	1	2.51	\$3,815.71	\$209.86
18	3	1.8	0	1.55	1	1.62	\$2,467.46	\$135.71
<b>Total</b>	<b>20</b>			<b>7.81</b>		<b>5.76</b>	<b>\$8,753.84</b>	<b>\$481.46</b>

## Totals summary table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
<b>Application</b>	7.81	5.76	\$8,753.84	\$481.46	<b>\$9,235.30</b>

<b>Economies of Scale Factor</b>	0.5
<b>Rainfall (mm)</b>	1018

# 6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the *Native Vegetation Regulations 2017*. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that an SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

## ACHIEVING AN SEB

Indicate how the SEB will be achieved by ticking the appropriate box and providing the associated information:

Pay into the Native Vegetation Fund.

## PAYMENT SEB

If a proponent proposes to achieve the SEB by paying into the Native Vegetation Fund, summary information must be provided on the amount required to be paid and the manner of payment:

- Payment amount required (including admin. fee) **\$9,235.30**

# 7. Appendices

## Appendix 1. Flora and Fauna Species List

FAMILY NAME	SPECIES	COMMON NAME	NATIONAL RATING	STATE RATING	DATE OF LAST RECORD
APIACEAE	<i>Xanthosia tasmanica</i>	Southern Xanthosia		R	30-Oct-2015
ASPARAGACEAE	<i>Thysanotus tenellus</i>	Grassy Fringe-lily		R	13-Nov-2015
ASPHODELACEAE	<i>Dianella longifolia</i> var. <i>grandis</i>	Pale Flax-lily		R	22-Jul-2022
ASTERACEAE	<i>Brachyscome diversifolia</i>	Tall Daisy		E	03-Nov-2010
ASTERACEAE	<i>Coronidium gunnianum</i>	Pale Everlasting		E	22-Oct-2009
ASTERACEAE	<i>Lagenophora sublyrata</i>	Slender Bottle-daisy		V*	16-Nov-2022
ASTERACEAE	<i>Senecio pinnatifolius</i> var. <i>pinnatifolius</i>			R	30-Oct-2015
BLECHNACEAE	<i>Blechnum nudum</i>	Fishbone Water-fern		R	18-Oct-2020
BLECHNACEAE	<i>Blechnum watsii</i>	Hard Water-fern		R	08-Jun-2010
BRASSICACEAE	<i>Cardamine paucijuga</i>	Annual Bitter-cress		R	24-Aug-2011
CUNONIACEAE	<i>Bauera rubioides</i>	Wiry Bauera		R	01-Oct-2011
CYPERACEAE	<i>Machaerina gunnii</i>	Slender Twig-rush		R*	25-Oct-2018
CYPERACEAE	<i>Schoenus latelaminatus</i>	Medusa Bog-rush		V	18-Dec-2012
CYPERACEAE	<i>Schoenus lepidosperma</i> ssp. <i>lepidosperma</i>	Slender Bog-rush		R	04-Aug-2018
DENNSTAEDTIACEAE	<i>Hypolepis rugosula</i> ssp. <i>rugosula</i>	Ruddy Ground-fern		R	18-Dec-2012
DICKSONIACEAE	<i>Dicksonia antarctica</i>	Soft Tree-fern		E	23-May-2012
DROSERACEAE	<i>Drosera binata</i>	Forked Sundew		R	13-Mar-2017
DROSERACEAE	<i>Drosera stricticaulis</i>	Erect Sundew		V	07-Nov-1998
ERICACEAE	<i>Sprengelia incarnata</i>	Pink Swamp-heath		R	13-Mar-2017
FABACEAE	<i>Acacia gunnii</i>	Ploughshare Wattle		R	16-Dec-2022
FABACEAE	<i>Acacia iteaphylla</i>	Flinders Ranges Wattle		R	16-Nov-2022
FABACEAE	<i>Acacia stricta</i>	Hop Wattle		R	16-Mar-2005
FABACEAE	<i>Glycine latrobeana</i>	Clover Glycine	VU	V	PMST
FABACEAE	<i>Pultenaea graveolens</i>	Scented Bush-pea		R	06-Jun-2023
FABACEAE	<i>Pultenaea kraehenbuehlii</i>	Tothill Bush-pea		R	08-May-2018
FABACEAE	<i>Swainsona behriana</i>	Behr's Swainson-pea		V	04-Oct-2013
GLEICHENIACEAE	<i>Gleichenia microphylla</i>	Coral Fern		R	02-Nov-2018
GOODENIACEAE	<i>Goodenia brunnea</i>			R	08-May-2018
HALORAGACEAE	<i>Gonocarpus micranthus</i> ssp. <i>micranthus</i>	Creeping Raspwort		R	02-Nov-2018
JUNCACEAE	<i>Juncus amabilis</i>			V	21-May-2009
JUNCACEAE	<i>Luzula flaccida</i>	Pale Wood-rush		V	18-Oct-2020
JUNCACEAE	<i>Luzula ovata</i>	Clustered Wood-rush		R	18-Nov-1996
LAMIACEAE	<i>Mentha diemenica</i>	Slender Mint		R	28-Apr-2011
LAMIACEAE	<i>Scutellaria humilis</i>	Dwarf Skullcap		R	14-Mar-2021
LOGANIACEAE	<i>Logania saxatilis</i>	Rock Logania		R	06-Nov-1996
LYCOPODIACEAE	<i>Lycopodiella lateralis</i>	Slender Clubmoss		R	23-Feb-2017
LYCOPODIACEAE	<i>Lycopodium deuterodensum</i>	Bushy Clubmoss		E	11-May-2009



MENYANTHACEAE	<i>Nymphoides crenata</i>	Wavy Marshwort		R	28-Jan-1995
MONTIACEAE	<i>Montia fontana</i> ssp. <i>chondrosperma</i>	Waterblinks		V	22-Nov-2022
MYRTACEAE	<i>Eucalyptus dalrympleana</i> ssp. <i>dalrympleana</i>	Candlebark Gum		R	23-Nov-2022
MYRTACEAE	<i>Eucalyptus fasciculosa</i>	Pink Gum		R	16-Nov-2022
MYRTACEAE	<i>Eucalyptus viminalis</i> ssp. <i>viminalis</i>	Manna Gum		R	30-Sep-2022
MYRTACEAE	<i>Melaleuca armillaris</i> ssp. <i>akineta</i>	Needle-leaf Honey- myrtle		R	24-May-2008
ORCHIDACEAE	<i>Caladenia argocalla</i>	White Beauty Spider- orchid	EN	E	
ORCHIDACEAE	<i>Caladenia behrii</i>	Pink-lip Spider-orchid	EN	E	25-Nov-2018
ORCHIDACEAE	<i>Caladenia leptochila</i> ssp. <i>leptochila</i>	Narrow-lip Spider-orchid		R	09-Nov-2020
ORCHIDACEAE	<i>Caladenia leptochila</i> ssp. <i>leptochila</i>	Narrow-lip Spider-orchid		R	19-Oct-2019
ORCHIDACEAE	<i>Caladenia necrophylla</i>	Late Spider-orchid		R	24-May-2008
ORCHIDACEAE	<i>Caladenia parva</i>	Small Green-comb Spider- orchid		R	09-Oct-1997
ORCHIDACEAE	<i>Caladenia reticulata</i>	Veined Spider-orchid		R	
ORCHIDACEAE	<i>Caladenia rigida</i>	Stiff White Spider-orchid	EN	E	01-Oct-2020
ORCHIDACEAE	<i>Caladenia valida</i>	Robust Spider-orchid		E	11-Sep-2009
ORCHIDACEAE	<i>Caleana major</i>	Large Duck-orchid		V	03-Nov-2017
ORCHIDACEAE	<i>Dipodium pardalinum</i>	Leopard Hyacinth-orchid		V	01-Jan-2014
ORCHIDACEAE	<i>Dipodium punctatum</i>			E	16-Mar-2015
ORCHIDACEAE	<i>Diuris behrii</i>	Behr's Cowslip Orchid		V	22-Sep-2022
ORCHIDACEAE	<i>Diuris brevifolia</i>	Short-leaf Donkey-orchid		E	27-Oct-2020
ORCHIDACEAE	<i>Diuris chryseopsis</i>	Cowslip Orchid		E	22-Sep-2003
ORCHIDACEAE	<i>Gastrodia sesamoides</i>	Potato Orchid		R	15-Nov-2010
ORCHIDACEAE	<i>Paracaleana minor</i>	Small Duck-orchid		V	13-Nov-2010
ORCHIDACEAE	<i>Prasophyllum pallidum</i>	Pale Leek-orchid	VU	R	04-Oct-2013
ORCHIDACEAE	<i>Prasophyllum pruinatum</i>	Plum Leek-orchid	EN	E	03-Nov-2022
ORCHIDACEAE	<i>Pterostylis cucullata</i> ssp. <i>sylvicola</i>	Leafy Greenhood	VU	E	28-Oct-2019
ORCHIDACEAE	<i>Pterostylis setifera</i>	Bristly Greenhood		E	08-May-2018
ORCHIDACEAE	<i>Pterostylis</i> sp. Rock ledges (pl. 185, Bates & Weber 1990)	Rock-ledge rufoushood		E	20-Sep-2016
ORCHIDACEAE	<i>Thelymitra aristata</i>	Great Sun-orchid		E*	24-May-2008
ORCHIDACEAE	<i>Thelymitra batesii</i>			R	31-Oct-2021
ORCHIDACEAE	<i>Thelymitra circumsepta</i>			E	23-Dec-2018
ORCHIDACEAE	<i>Thelymitra flexuosa</i>	Twisted Sun-orchid		R	
ORCHIDACEAE	<i>Thelymitra grandiflora</i>	Great Sun-orchid		R	07-Nov-2019
ORCHIDACEAE	<i>Thelymitra inflata</i>	Plum Sun-orchid		V	31-Oct-2001
ORCHIDACEAE	<i>Thelymitra ixioides</i>	Spotted Sun-orchid		E*	15-Oct-2013
ORCHIDACEAE	<i>Thelymitra latifolia</i>	Blue Star Sun-orchid		V	06-Nov-2004
OROBANCHACEAE	<i>Euphrasia collina</i> ssp. <i>osbornii</i>	Osborn's Eyebright	EN	E	01-Apr-2000
OSMUNDACEAE	<i>Todea barbara</i>	King Fern		E	06-Sep-2018

POACEAE	<i>Amphibromus archeri</i>	Pointed Swamp Wallaby-grass		R	28-Feb-2018
POACEAE	<i>Austrostipa tenuifolia</i>			R	05-Jul-2018
POACEAE	<i>Deyeuxia densa</i>	Heath Bent-grass		R	10-Dec-2021
POACEAE	<i>Deyeuxia minor</i>	Small Bent-grass		V	30-Mar-2020
POACEAE	<i>Poa umbricola</i>	Shade Tussock-grass		R	08-May-2018
POACEAE	<i>Rytidosperma laeve</i>	Smooth Wallaby-grass		R	30-Mar-2017
POACEAE	<i>Rytidosperma tenuius</i>	Short-awn Wallaby-grass		R	16-Dec-2022
PROTEACEAE	<i>Grevillea aquifolium</i>	Prickly Grevillea		R	06-Dec-1997
RANUNCULACEAE	<i>Ranunculus glabrifolius</i>	Shining Buttercup		V	20-Oct-2000
RESTIONACEAE	<i>Baloskion tetraphyllum</i> ssp. <i>tetraphyllum</i>	Tassel Cord-rush		V	26-Jul-2012
RHAMNACEAE	<i>Spyridium coactilifolium</i>	Butterfly Spyridium	VU	V	
RUTACEAE	<i>Boronia nana</i> var. <i>hyssopifolia</i>	Dwarf Boronia		R	07-Dec-2020
RUTACEAE	<i>Leionema hillebrandii</i>	Mount Lofty Phebalium		R	16-Dec-2022
SCHIZAEACEAE	<i>Schizaea fistulosa</i>	Narrow Comb-fern		V	08-Dec-2008
VIOLACEAE	<i>Viola betonicifolia</i> ssp. <i>betonicifolia</i>	Showy Violet		E	

CLASS			NATIONAL	STATE	DATE OF
NAME	SPECIES	COMMON NAME	RATING	RATING	LAST RECORD
AMPHIBIA	<i>Pseudophryne bibronii</i>	Brown Toadlet		R	25-May-2009
AVES	<i>Acanthiza lineata</i>	Striated Thornbill	ssp		06-Dec-2017
AVES	<i>Anhinga novaehollandiae novaehollandiae</i>	Australasian Darter		R	16-Oct-2018
	<i>Aphelocephala leucopsis</i>	Southern Whiteface	VU		PMST
AVES	<i>Biziura lobata menziesi</i>	Musk Duck		R	17-Sep-2015
AVES	<i>Climacteris affinis</i>	White-browed Treecreeper		R	16-Nov-2021
AVES	<i>Corcorax melanorhamphos</i>	White-winged Cough		R	04-Feb-2023
AVES	<i>Falco peregrinus macropus</i>	Peregrine Falcon		R	01-Oct-2006
AVES	<i>Falcunculus frontatus frontatus</i>	Eastern Shriketit		R	24-Jun-2022
AVES	<i>Hieraaetus morphnoides</i>	Little Eagle		V	17-Oct-2019
AVES	<i>Hirundapus caudacutus caudacutus</i>	White-throated Needletail	sp	V	24-Feb-2023
AVES	<i>Hylacola pyrrhopygia parkeri</i>	Chestnut-rumped Heathwren (Mount Lofty Ranges)	EN	E	24-Jan-2020
AVES	<i>Lewin pectoralis pectoralis</i>	Lewin's Rail		V	07-Sep-2010
AVES	<i>Lophoictinia isura</i>	Square-tailed Kite		E	04-Oct-2019
AVES	<i>Melithreptus brevirostris</i>	Brown-headed Honeyeater	ssp		20-Nov-2021
AVES	<i>Melithreptus gularis</i>	Black-chinned Honeyeater		ssp	03-Oct-2002
AVES	<i>Microeca fascinans fascinans</i>	Jacky Winter (MLR, SE)		R	02-Jul-2018
AVES	<i>Neophema elegans elegans</i>	Elegant Parrot		R	18-Apr-2019
AVES	<i>Petroica boodang boodang</i>	Scarlet Robin		R	20-Jul-2023
AVES	<i>Platycercus elegans</i>	Crimson Rosella	ssp		22-Dec-2021
AVES	<i>Plectorhyncha lanceolata</i>	Striped Honeyeater		R	26-Feb-2020
AVES	<i>Podiceps cristatus australis</i>	Great Crested Grebe		R	11-Apr-2023
AVES	<i>Strepera versicolor</i>	Grey Currawong		ssp	17-Jun-2023
	<i>Stagonopleura guttata</i>	Diamond Firetail	VU		PMST
AVES	<i>Turnix varius varius</i>	Painted Buttonquail		R	21-May-2018
AVES	<i>Zanda funerea whiteae</i>	Yellow-tailed Black Cockatoo		V	15-Apr-2023
AVES	<i>Zapornia tabuensis</i>	Spotless Crane		R	07-Sep-2010
AVES	<i>Zoothera lunulata halmaturina</i>	South Australian Bassian Thrush (southern FR, MLR, KI)	EN	SP	21-Aug-2023
MAMMAL	<i>Antechinus agilis</i>	Agile Antechinus		E	27-Mar-2021
MAMMAL	<i>Antechinus flavipes</i>	Yellow-footed Antechinus		V	07-Aug-2022
MAMMAL	<i>Isoodon obesulus obesulus</i>	Southern Brown Bandicoot (SA mainland and KI)	EN	V	07-May-2023
MAMMAL	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	VU	R	24-Mar-2020
MAMMAL	<i>Tachyglossus aculeatus</i>	Short-beaked Echidna	ssp	ssp	24-Oct-2021
MAMMAL	<i>Trichosurus vulpecula</i>	Common Brushtail Possum		R	04-May-2023
REPTILIA	<i>Varanus rosenbergi</i>	Heath Goanna		V	01-Jan-2014
REPTILIA	<i>Varanus varius</i>	Lace Monitor		R	31-Dec-2013

Appendix 2. Scattered Tree Vegetation Assessment Scoresheet

<b>SEB Required for Scattered Trees</b>				(Version - 28 July 2023)			
Landscapes Region	H&F			Total Biodiversity Score	7.81		
Mean Annual Rainfall (mm)	1018			Total SEB Points required	5.76		
Economies of Scale factor	0.5			Payment \$ (GST exclusive)	\$8,753.84		
				Admin fee (GST inclusive)	\$481.46		
IBRA Association	Uraidla			Total SEB \$ required	\$9,235.30		
Tree Species	Number of Trees (total)	Number of trees (proposed removed)	Number of trees (proposed pruning)	Total SEB Points required	Payment in NV Fund (GST Exclusive)	Administration fee (GST Inclusive)	Total
Eucalyptus obliqua	17	16	1	4.14	\$6,286.38	\$345.75	\$6,632.14
Acacia melanoxydon	3	3	0	1.62	\$2,467.46	\$135.71	\$2,603.17
	0	0	0	0.00	\$0.00	\$0.00	\$0.00

The page features several large, white, minimalist line-art shapes. On the left side, there are two concentric semi-circles. Below them is a larger, more complex shape that resembles a stylized 'S' or a curved bracket. On the right side, there is a large, white, stylized letter 'N' composed of simple lines.

**APPENDIX 10**  
**Lighting Plan**



Civil  
Environmental  
Mechanical  
Fire  
Lifts

Structural  
Geotechnical  
Electrical  
Hydraulics  
Green ESD

Level 6, 100 Pirie Street,  
Adelaide SA 5000  
Telephone 08 8238 4100  
Facsimile 08 8410 1405

 50W IP65 LED FLOODLIGHT

 20W LED IP66 WALL LIGHT

 16W LED BOLLARD (IP65)

 40W IP65 LED BATTEN


 16W IP65 LED DOWNLIGHT


NUMBER OF PLACES 128

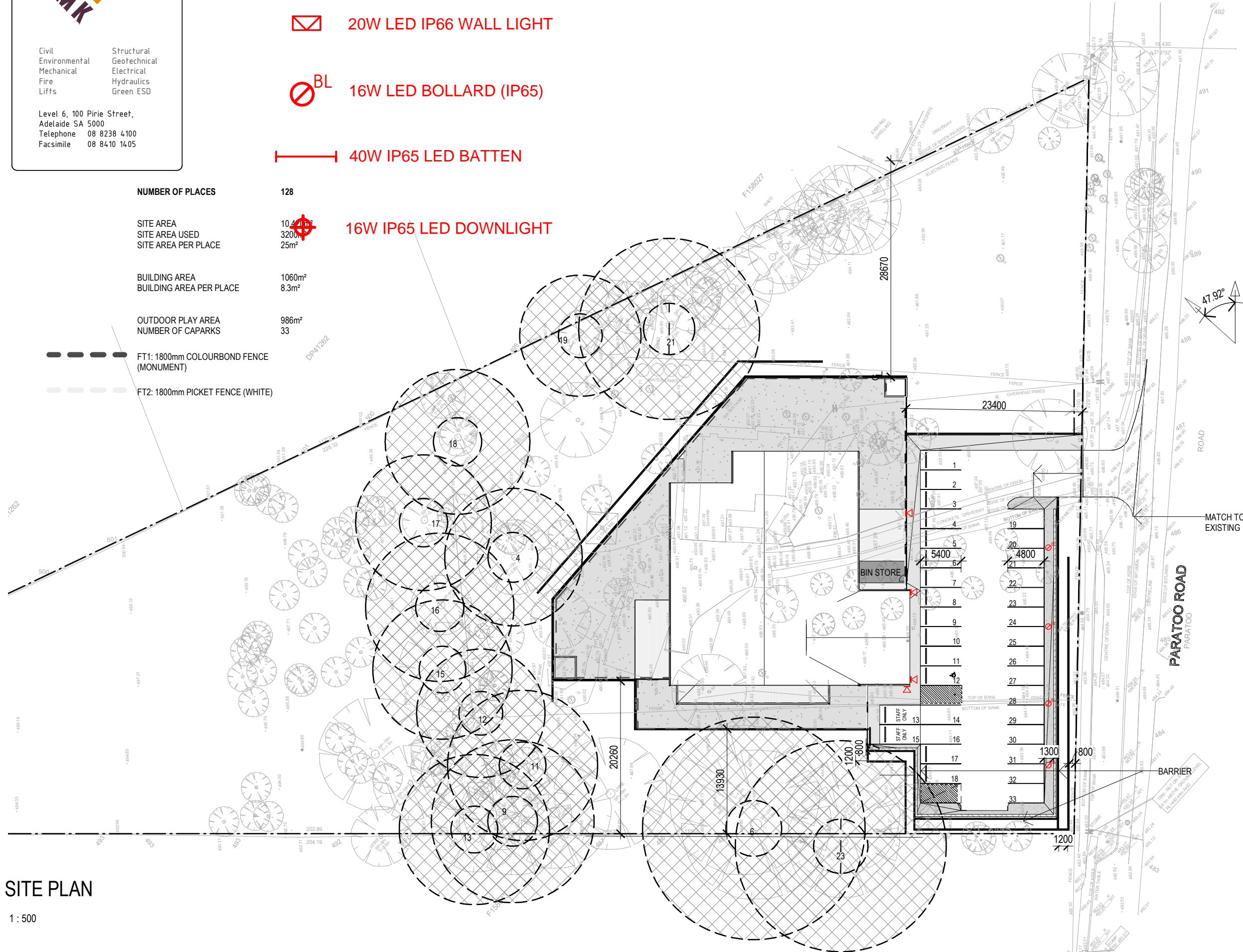
SITE AREA 104,402  
SITE AREA USED 32000  
SITE AREA PER PLACE 25m<sup>2</sup>

BUILDING AREA 1060m<sup>2</sup>  
BUILDING AREA PER PLACE 8.3m<sup>2</sup>

OUTDOOR PLAY AREA 986m<sup>2</sup>  
NUMBER OF CAPARKS 33

 FT1: 1800mm COLOURBOND FENCE (MONUMENT)

 FT2: 1800mm PICKET FENCE (WHITE)



# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23

0 5 10 15 20m

1:500

## BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

SITE PLAN

Scale 1 : 500  
Drawn TR  
Date 24/05/2023  
Job No. 2022107



Dwg No. **3567 DA04** Rev: 1 A3 SHEET

## SITE PLAN

1 : 500



Civil  
Environmental  
Mechanical  
Fire  
Lifts

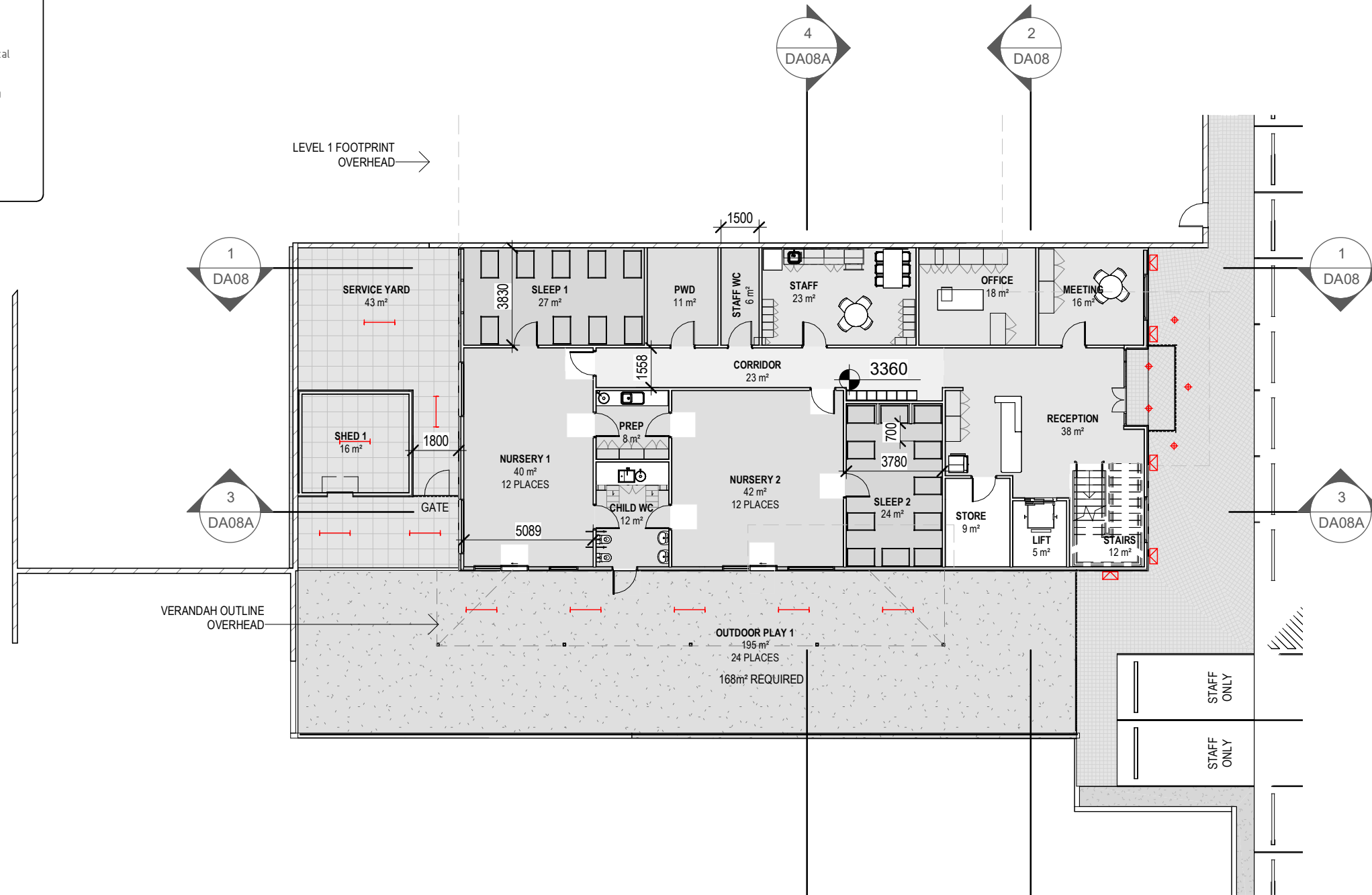
Structural  
Geotechnical  
Electrical  
Hydraulics  
Green ESD

Level 6, 100 Pirie Street,  
Adelaide SA 5000  
Telephone 08 8238 4100  
Facsimile 08 8410 1405

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23



## GROUND FLOOR PLAN

1 : 200

NUMBER OF PLACES	128
SITE AREA	10,250m <sup>2</sup>
SITE AREA USED	3200m <sup>2</sup>
SITE AREA PER PLACE	25m <sup>2</sup>
BUILDING AREA	1060m <sup>2</sup>
BUILDING AREA PER PLACE	8.3m <sup>2</sup>
OUTDOOR PLAY AREA	986m <sup>2</sup>
NUMBER OF CAPARKS	32

0 2 4 6 8 m

1:200

# BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

GROUND FLOOR PLAN

Scale 1 : 200  
Drawn TR  
Date MAY 2023  
Job No. 2022107



Dwg No. **3567 DA05** Rev: **1** A3 SHEET



Civil  
Environmental  
Mechanical  
Fire  
Lifts

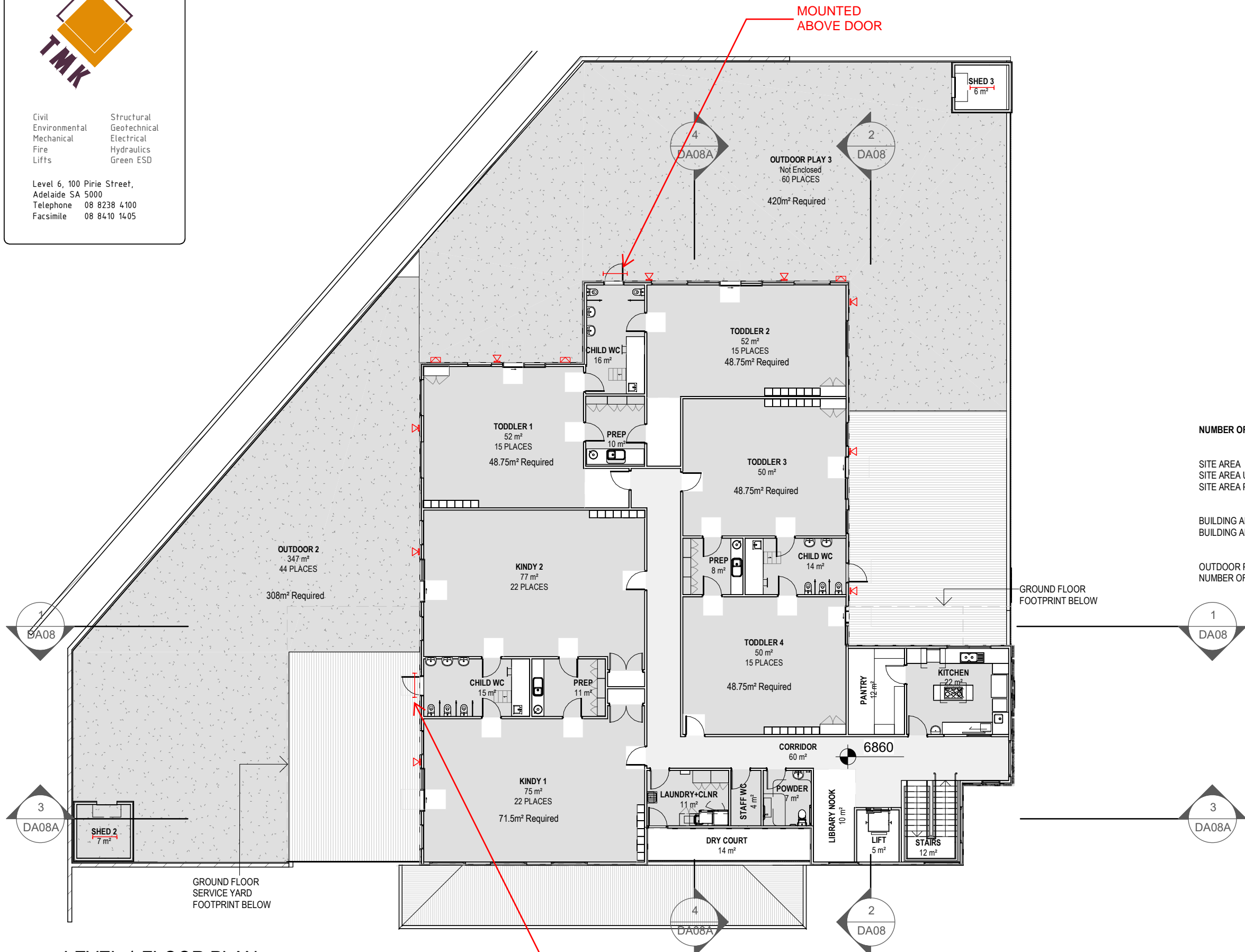
Structural  
Geotechnical  
Electrical  
Hydraulics  
Green ESD

Level 6, 100 Pirie Street,  
Adelaide SA 5000  
Telephone 08 8238 4100  
Facsimile 08 8410 1405

# DA ISSUE

ISSUED FOR DEVELOPMENT APPROVAL

Rev	Amendment	Date
1	DA ISSUE	08/06/23



NUMBER OF PLACES	128
SITE AREA	10,250m <sup>2</sup>
SITE AREA USED	3200m <sup>2</sup>
SITE AREA PER PLACE	25m <sup>2</sup>
BUILDING AREA	1060m <sup>2</sup>
BUILDING AREA PER PLACE	8.3m <sup>2</sup>
OUTDOOR PLAY AREA	986m <sup>2</sup>
NUMBER OF CAPARKS	32

## LEVEL 1 FLOOR PLAN

1 : 200



1:200

# BROWN FALCONER

28 Chesser Street, Adelaide, South Australia 5000  
Telephone : 08 8203 5800 Facsimile : 08 8223 2440  
ABN 65 007 846 586 brownfalconer.com.au

ACCORD PROPERTY LTD

35 PARATOO ROAD, STIRLING CCC

## LEVEL 1 FLOOR PLAN

Scale 1 : 200

Drawn TR

Date MAY 2023

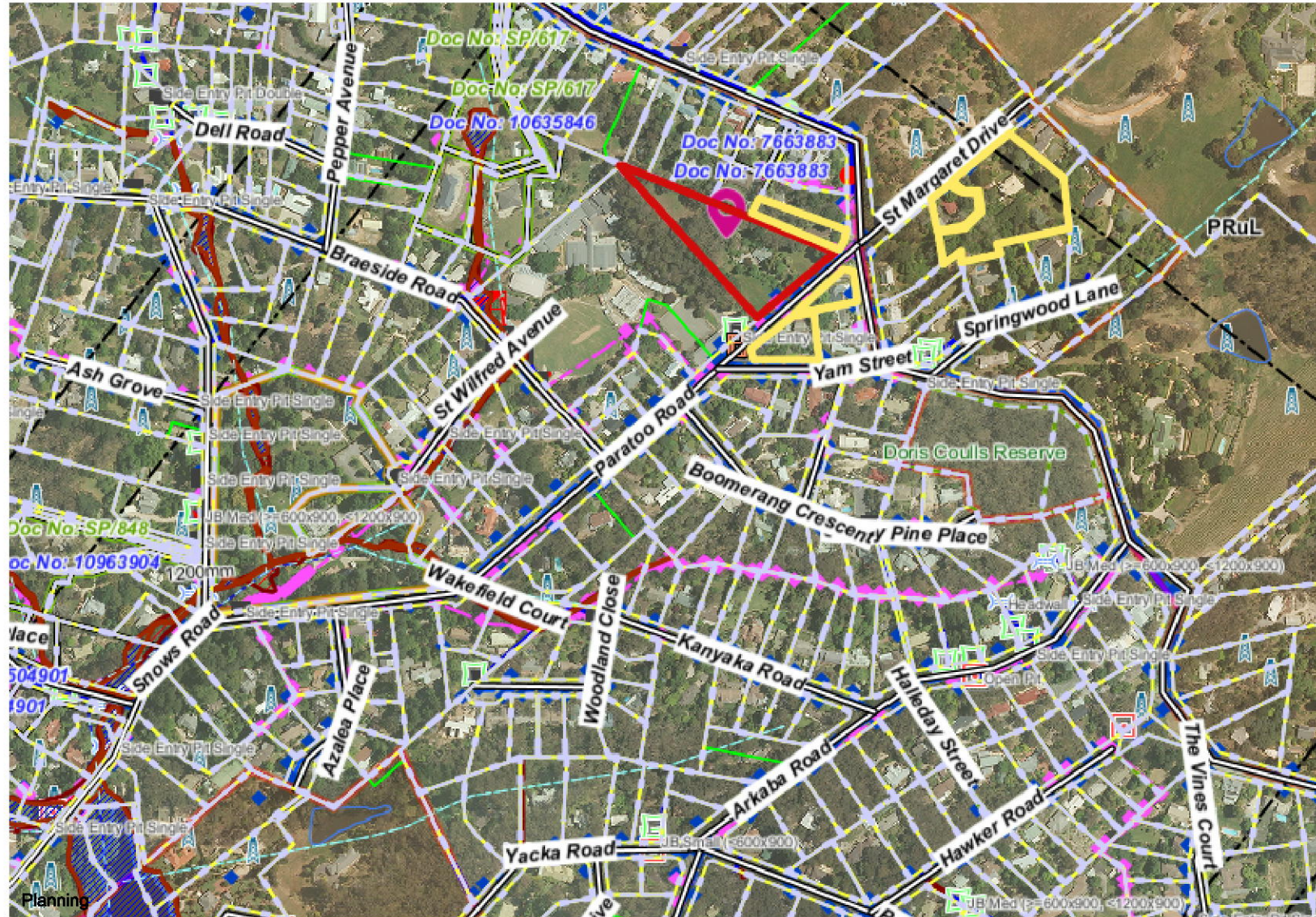
Job No. 2022107

Dwg No. **3567 DA5A** Rev: 1

A3 SHEET





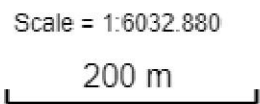


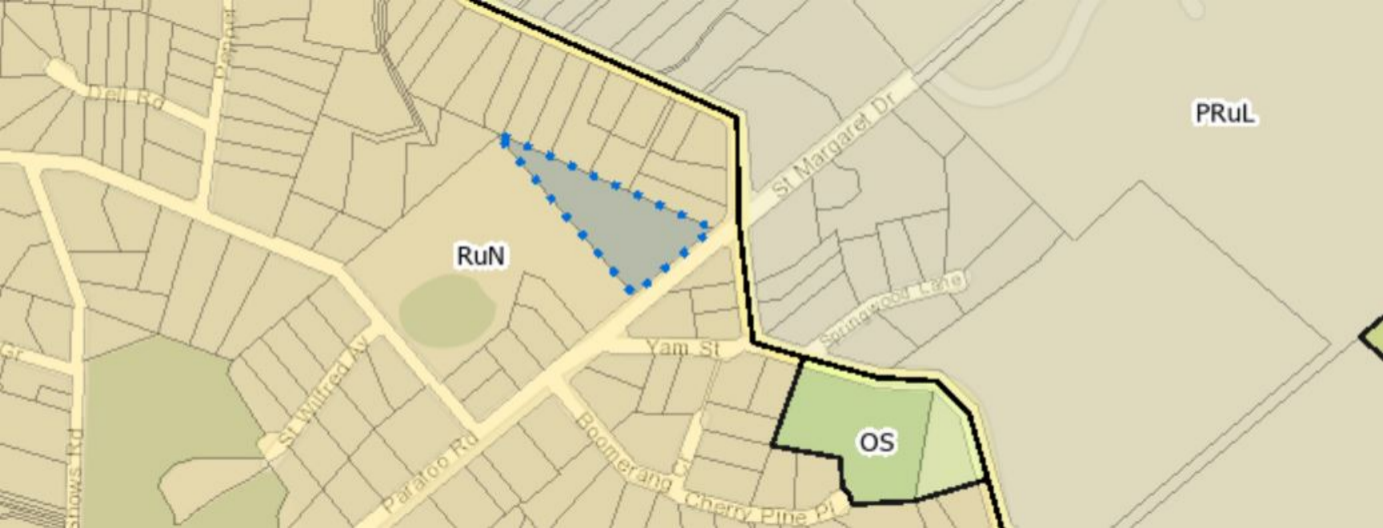
- Annotations**
-  Representor
  -  Representor
  -  Representor\_
  -  Representor 1
  -  Representor
  -  Subject Land

**DISCLAIMER**  
Apart from any use permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission obtained from the Adelaide Hills Council. Requests and enquiries concerning reproduction and rights should be directed to the Chief Executive Officer, The Adelaide Hills Council, PO Box 44, Woodside SA 5244. The Adelaide Hills Council, its employees and servants do not warrant or make any

representations regarding the use, or results of use of the information contained herein as to its correctness, accuracy, currency or otherwise. In particular, it should be noted that the accuracy of property boundaries when displayed over aerial photography cannot be considered to be accurate, and that the only certain method of determining boundary locations is to use the services of a licensed Surveyor. The Adelaide Hills Council, its

employees and servants expressly disclaim all liability or responsibility to any person using the information or advice contained herein. ©





# Details of Representations

## Application Summary

Application ID	23018174
Proposal	Two storey child care facility with attached signage, retaining walls (maximum height 3.5m), combined fence & retaining walls (maximum height 5.5m), decking, removal of 1x regulated tree (Eucalyptus obliqua) & associated car-parking
Location	35 PARATOO RD STIRLING SA 5152

## Representations

### Representor 1 - Simon Gamble

Name	Simon Gamble
Address	3 Sharon Ct ALDGATE SA, 5154 Australia
Submission Date	14/11/2023 03:16 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development

#### Reasons

There is already inadequate parking and access for Stirling East Primary. Adding the facility would add further strain to Paratoo Rd parking for drop off and pickup.

## Attached Documents

## Representations

### Representor 2 - Fenella Dermody

Name	Fenella Dermody
Address	27 ashenden road ALDGATE SA, 5154 Australia
Submission Date	14/11/2023 07:30 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development
<b>Reasons</b>	The traffic management and parking at Paratoo road is already terrible between 8.15-9am and 2.30pm and 3.30pm... I worry this would make it worst. School traffic grid locks the location and I doubt childcare parents could even get to the location to collect a child at that time. It would also result in loss of parking for school drop/pick up as many off-street parks are situated where the driveway access for the childcare is.

### Attached Documents

## Representations

### Representor 3 - Nicola Hastings

Name	Nicola Hastings
Address	140 Old Mount Barker Road STIRLING SA, 5052 Australia
Submission Date	29/11/2023 11:38 AM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	Yes
My position is	I support the development with some concerns
<b>Reasons</b> Please see attached supporting documents.	

### Attached Documents

Statement-of-Representation-Paratoo-Rd-Stirling-1308394.pdf

# SA URBAN AND REGIONAL PLANNING

ACN43 600 857 154  
PO Box 601  
HENLEY BEACH SA 5022  
Mobile 0411 096 597  
[nick@saurp.com.au](mailto:nick@saurp.com.au)



25 November 2023

Attention: Planning Department  
Adelaide Hills Council  
PO Box 44  
Woodside SA 5244

Dear Madam/Sir,

**RE: DEVELOPMENT APPLICATION ID: 23018174**  
**SA Urban and Regional Planning**  
**35 Paratoo Road, Stirling, SA, 5152**  
**Notified elements: Advertisement, Fence, Pre-school, Tree-damaging activity & Retaining wall.**

I write on behalf of my client, located adjacent the subject site at 140 Old Mount Barker Road, Stirling who identifies several concerns with the proposed development and likely impact on the existing amenity of the locality. The concerns for further consideration are as follows:

**1. Lighting and Light Spill**

Whilst it is appropriate that lighting be utilised to facilitate views for passive surveillance and to deter antisocial activity within the carpark whilst the childcare centre is not in operation, there is concern that the proposed external lighting will cause light spill and nuisance into surrounding properties, which is already experienced from the school. To ensure that proposed lighting and floodlighting does not disturb residents and impact on wildlife a light spill assessment should be provided with any recommendations incorporated.

**2. Mechanical plant equipment**

Confirmation by way of amended plans is sought that identifies the location of the plant equipment to ensure that it is located and screened appropriately to minimise any undue impacts on the adjacent residential properties. This should be located as far away from the sensitive uses on the northern side boundary.

**3. Acoustic report**

Having reviewed the acoustic report, I note that no acoustic treatments are required. This is on the basis that the World Health Organisation standards (Guidelines for Community Noise) prescribes a maximum 'sound pressure level' of 50 dB and the Sonus report identifies the highest predicted noise level within outdoor play spaces is 49 dB when measured at the closest residential properties. It is suggested that whilst 50dB may be the trigger to include noise mitigation measures that in the context of this being a new land use in a rural neighbourhood setting that the noises emitted from the new childcare centre will have an impact on the surrounding residential properties.

# SA URBAN AND REGIONAL PLANNING

ACN43 600 857 154  
PO Box 601  
HENLEY BEACH SA 5022  
Mobile 0411 096 597  
[nick@saurp.com.au](mailto:nick@saurp.com.au)



#### 4. Hours of operation

It is suggested that the childcare centre open from 7:00am to coincide with hours of the school's OSHC programme.

Confirmation is sought that the childcare centres hours will not increase beyond 6:30pm. My client has concerns that the centre may be able to extend its hours to provide 24 hour care.

#### 5. Bin storage and rubbish collection

Confirmation that all rubbish bins will be covered to contain waste smells associated with childcare centres, regular cleaning of bins and that the bins be located away from sensitive receivers is sought to reduce impact of smells on neighbours e.g., the northern boundary.

My client identifies that Sunday and public holiday collections would not be satisfactory irrespective of the recommendations that collection between 7:00am and 7:00pm on Sunday and public holidays would comply with noise policy.

#### 6. Exacerbation of existing traffic issues

My client identifies that the increased traffic generated from the childcare centre onto a one-way road is concerning. They advise that currently during peak drop off and pick up times for the Stirling East Primary School they have difficulty leaving their driveway.

#### 7. Fencing

Confirmation is sought as any proposed changes to the fencing between the subject site and 140 Old Mount Barker Road, Stirling.

#### 8. Future development

The site is a large site of which the proposed development utilises a small portion of the land. My client enquires as to any future planned development of the site.

### Conclusion

I wish to reiterate this is a Rural Neighbourhood zone in a spacious rural setting as opposed to the suburbs of metropolitan Adelaide and development in this zone should enhance rather than compromise the rural residential amenity. In my opinion:

- the siting of mechanical plant equipment and bin storage could be improved to reduce impacts on sensitive land uses.
- Noise attenuation measures in the context of the rural setting with this land use, associated car parking and mechanical equipment should be implemented.
- Light spill needs to be assessed and appropriately screened to ensure adjoining residences aren't impacted.

Lastly, confirmation of hours of operation are sought, with of process to extend hours identified and Council are asked to look at traffic improvements to ensure that traffic volumes do not negatively affect residents in close proximity to non-residential land uses.

# SA URBAN AND REGIONAL PLANNING

ACN43 600 857 154  
PO Box 601  
HENLEY BEACH SA 5022  
Mobile 0411 096 597  
[nick@saurp.com.au](mailto:nick@saurp.com.au)



My client and I look forward to a favourable outcome to this application and working with the Adelaide Hills Council to achieve a development outcome that provides great outcomes for the developer and existing residents. I wish to be heard in support of the representation, please keep me informed of when the CAP will be.

Kind Regards

A handwritten signature in black ink, appearing to read 'Nick Simos'.

**Nick Simos**

Principal Planner  
Accredited Professional Planning (APP 20190058)  
Bachelor of Urban & Regional Planning  
Honours, MPIA



## Representations

### Representor 4 - Jace Haggett-Carmody

Name	Jace Haggett-Carmody
Address	34 Paratoo Road ALDGATE SA, 5154 Australia
Submission Date	30/11/2023 05:23 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I support the development with some concerns

#### Reasons

Hello, I am a neighbour to the development and my concern is with section 7.2.3 Crime Prevention Through Environmental Design Paragraph 4 - Light affixed to the building and throughout the carpark (detailed within Appendix 10) will also facilitate views for passive surveillance, and deter antisocial activity within the carpark whilst the facility is not in operation. I would like clarification on which lights will be left on for security purposes, especially over night. A main concern is the flood lights, will these be operational all night long or installed on a sensor? Or will only the bollard lights be on during the night? Our property has a clear line of sight to the existing property/new development through our upstairs bedroom windows and we are concerned about light pollution, we also frequently have kookaburras in the gumtree and I believe they nest there. The view is only partially impaired at the moment by invasive ivy that is growing up the Gum Tree, which will be removed to save the tree, once removed the light from the floodlights would be clearly visible as there will be barely any foliage left. Some clarification would be appreciated Thank you

### Attached Documents

## Representations

### Representor 5 - peter rischbieth

Name	peter rischbieth
Address	10 St margarets drive, 10 St Margaret Drive ALDGATE SA, 5154 Australia
Submission Date	30/11/2023 10:24 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development

#### Reasons

The new proposal will create even more dangerous conditions along a one way Paratoo rd with high traffic volumes already and high foot traffic use . There is already overflow street parking at school times blocking access to St Margaret drive and a new building will create even more hazards. The access turning acutely right from a busy Old Mt barker road into Yam St is a very dangerous road access and will become even more dangerous with greater traffic use for school users ,child care users and residents. I do not believe a commercial business in this residential area is in keeping with the atmosphere,heritage and environment that residents of this part of Aldgate enjoy

## Attached Documents

## Representations

### Representor 6 - Helene Nielsen

Name	Helene Nielsen
Address	PO Box 1079 STIRLING SA, 5152 Australia
Submission Date	01/12/2023 03:07 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development
<b>Reasons</b>	
I am concerned about the traffic and parking challenges and hence risk to the safety of the children attending the school next door. This area is already over capacity with drop off and pick up traffic for children. Adding more traffic to this one way street poses an increased safety risk to the school children.	

### Attached Documents

# Representations

## Representor 7 - Tina Comely

Name	Tina Comely
Address	6 St Margaret Drive ALDGATE SA, 5154 Australia
Submission Date	01/12/2023 09:53 PM
Submission Source	Online
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	No
My position is	I oppose the development

### Reasons

I do not believe that a large scale, two storey, commercial development (up to 5.5m high) with parking for 32 vehicles is appropriate in what is essentially a peaceful, leafy, low rise residential area, including some heritage buildings and significant trees and serviced by narrow one way streets. Residents of the surrounding area which is a rural neighbourhood zone should be able to enjoy "a spacious and peaceful lifestyle". I am not in favour of the proposal for 3 reasons: the increased traffic on narrow, one way streets which link to the very winding Old Mount Barker Rd; the loss of amenity for neighbouring residents and the associated increase in noise levels. This proposal, which one assumes will operate 52 weeks per year, apart from public holidays, is predicted to generate nearly 300 additional peak hour vehicle movements on narrow, one way roads that are already heavily congested at school pick up and drop off times. The modelling asserts that the adjacent road network can "readily accommodate" these increases "with minimal impact. I would question whether the impact on the residents of Yam St and Paratoo Road is going to be "minimal". I am concerned that by adding significantly to the vehicular movements in this area, it is only a matter of time until there is a serious accident. It is my experience that during peak times, cars are parked on both sides of the road "verge" of Old Mount Barker Road, on both sides of Paratoo Road, on Yam St and on St Margaret Drive. At the same time, passengers in these vehicles are attempting to cross the roads, with sometimes limited visibility, especially given the winding nature of Old Mt Barker Road. In addition, cars turning right into Yam St from Old Mt Barker Rd have to run the gauntlet of cars travelling towards Stirling. The proposal will only add to the complexity of these issues, with cars queuing to enter and exit the proposed carpark having to navigate between cars parked on verges and children walking and riding bikes to school. I am also concerned about the noise levels generated by the cars and trucks using the proposed carpark. The nearly 300 peak hour car trips alone will result in at least 600 car doors being slammed, starting at 6.30 in the morning, which is hardly conducive to a peaceful lifestyle for those unfortunate enough to live in neighbouring houses. Neighbouring dogs will bark in response to that noise and to the sounds of voices which for some residents, will be just metres away from their boundaries. This development will result in a significant loss of amenity to the residents in the immediate vicinity on Paratoo Road and Yam St and possibly to other residents on Old Mount Barker Road whose properties back onto the land concerned. Finally, I note that the proposed development will cover only 10 per cent of the total land area. Is this child care centre just the beginning and what else does the developer have in store for the remainder of the block? I respectfully request that my concerns and those of other concerned residents are given due consideration.

## Attached Documents

## Representations

### Representor 8 - Tony Lockwood

Name	Tony Lockwood
Address	142 OLD MOUNT BARKER ROAD ALDGATE SA, 5154 Australia
Submission Date	04/12/2023 01:32 PM
Submission Source	Email
Late Submission	No
Would you like to talk to your representation at the decision-making hearing for this development?	Yes
My position is	I oppose the development
<b>Reasons</b>	
As per attached documents	

### Attached Documents

23018174Representationtlockwoodemailcoverletter-7081874.pdf
Ccf_0002991-7081875.pdf
Ccf_000300-7081876.pdf
Ccf_0003011-7081877.pdf
Ccf_0003021-7081878.pdf
Ccf_000303-7081879.pdf
23018174RepresentationTLockwood-7081880.pdf

## Jessica Tonkin

---

**From:** simon.grose@advantageplanning.com.au  
**Sent:** Wednesday, 29 November 2023 3:41 PM  
**To:** Development Admin  
**Cc:** mmolonaro@ahc.sa.gov.au  
**Subject:** Representation 35 Paratoo Road Stirling ID 23018174  
**Attachments:** CCF\_000299(1).pdf; CCF\_000300.pdf; CCF\_000301(1).pdf; CCF\_000302(1).pdf; CCF\_000303.pdf; CCF\_000304(1).pdf

**Categories:** Jess

You don't often get email from simon.grose@advantageplanning.com.au. [Learn why this is important](#)

[EXTERNAL]

To Admin and Marie

Please find representation from Tony Lockwood 142 Old Mt Barker Road, Aldgate.  
If you could please forward to PlanSA if required that would be helpful.  
We wish to be heard by Council CAP.

Regards  
Simon



Advantage Planning Services  
Mobile:

All rights in this e-mail and any attached documents or files are reserved. This e-mail and any other files transmitted with it are confidential to the intended recipient. If you are not the intended recipient of this e-mail you are advised that any use, reproduction, disclosure or distribution of the information contained in the e-mail is prohibited. If you have received this e-mail in error please notify the sender and delete the e-mail together with any attachments and any copies thereof. No warranty is made that this e-mail and any files transmitted with it are free from viruses or other defects. Any loss/ damage incurred by using this e-mail is not the sender responsibility.



## Proposed Development

Under the Planning, Development and Infrastructure Act 2016

Public notification commencement on 13/11/2023

A J Lockwood  
142 Old Mt Barker Rd  
Aldgate SA 5154

Dear A J Lockwood

### Notice of Development Application

**Application ID:** 23018174

**Proposed Development:** Two storey child care facility with attached signage, retaining walls (maximum height 3.5m), combined fence & retaining walls (maximum height 5.5m), decking, removal of 1x regulated tree (*Eucalyptus obliqua*) & associated car-parking

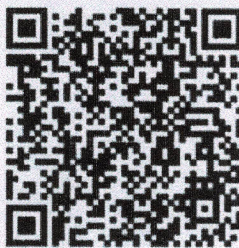
**Notified Elements:** Pre-school, Tree-damaging activity, Fence, Child Care Facility, Retaining wall, Deck, Advertisement

**Subject Land:** 35 PARATOO RD STIRLING SA 5152

As an adjoining owner/occupier or person potentially affected by the above development application, you are invited to view details of the application and make a representation.

The application documentation may be examined:

- online on the PlanSA Portal: <https://plan.sa.gov.au/en/pn?aid=7581>



*Use your smart phone to scan this code*

- in person at the principal office of the Adelaide Hills Council at 63 Mount Barker Road STIRLING, 28 Onkaparinga Valley Road WOODSIDE and 47 Albert Street, GUMERACHA, SA, 5152

If you wish to comment on the application, please complete an:

- online representation form at <https://plan.sa.gov.au/en/pn?aid=7581>, or
- hard copy form at <https://plan.sa.gov.au/en/pn-form> and submit to Assessment Panel at Adelaide Hills Council at 63 Mount Barker Road, STIRLING, SA, 5152 or [developmentadmin@ahc.sa.gov.au](mailto:developmentadmin@ahc.sa.gov.au).

All representations must be received by no later than **11:59pm on 01/12/2023**.

OFFICIAL

Please note that, in order for representations to be valid, they must:

- be in writing; and
- include the name and address of the person (or persons) who are making the representation; and
- set out the particular reasons why planning consent should be granted or refused; and
- comment only on the performance-based elements of the proposal, which does not include the accepted or deemed-to-satisfy elements: None

You may be given an opportunity to appear before the relevant authority to further explain your views. You will be contacted should a hearing be arranged.

If you have any questions relating to this matter, please contact the Adelaide Hills Council by telephone on 08 8408 0400 or email [development@ahc.sa.gov.au](mailto:development@ahc.sa.gov.au).



# PlanSA

## Adelaide Hills Council

Notification concerning: ID 23018174 - 35 Paratoo Road, Stirling

Two storey child care facility with attached signage, retaining walls, fencing, decking, removal of regulated tree & associated car parking.

Representation from Mr. A.J. Lockwood 142 Old Mt Barker Road, Aldgate

---

*The subject land is located in the Hills Neighbourhood Zone where non-residential development is assessed on Performance Outcomes (PO 1.1 – PO 2.1).*

A child care centre is listed with other non-residential uses DTS/DPF 1.1 Deemed to Satisfy Criteria / Designated Performance Feature in the Hills Neighbourhood Zone. A child care facility does provide a community service but is also a non-residential, commercial activity as such it needs to comply with the following:

***PO 1.2 commercial activities improve community access to services and are of a scale and type to maintain residential amenity***

***PO1.3 non-residential development sited and designed to complement residential character and amenity of the neighbourhood***

***PO2.1 buildings contribute to a low -rise residential character and complement the height of nearby buildings***

The impact of a child care facility for 128 children open from 6.30 am to 6.30 pm Monday to Friday with vehicle drop off and collections of up to 40 vehicle per hour and after-hours service vehicle and rubbish collection is much more akin to a commercial use even though it may be providing a community service. The proposal is for 1060 sq. metres of gross leasable floor space and 986 sq. metres of outdoor play area far in excess of what would be considered of a scale that would maintain residential amenity.

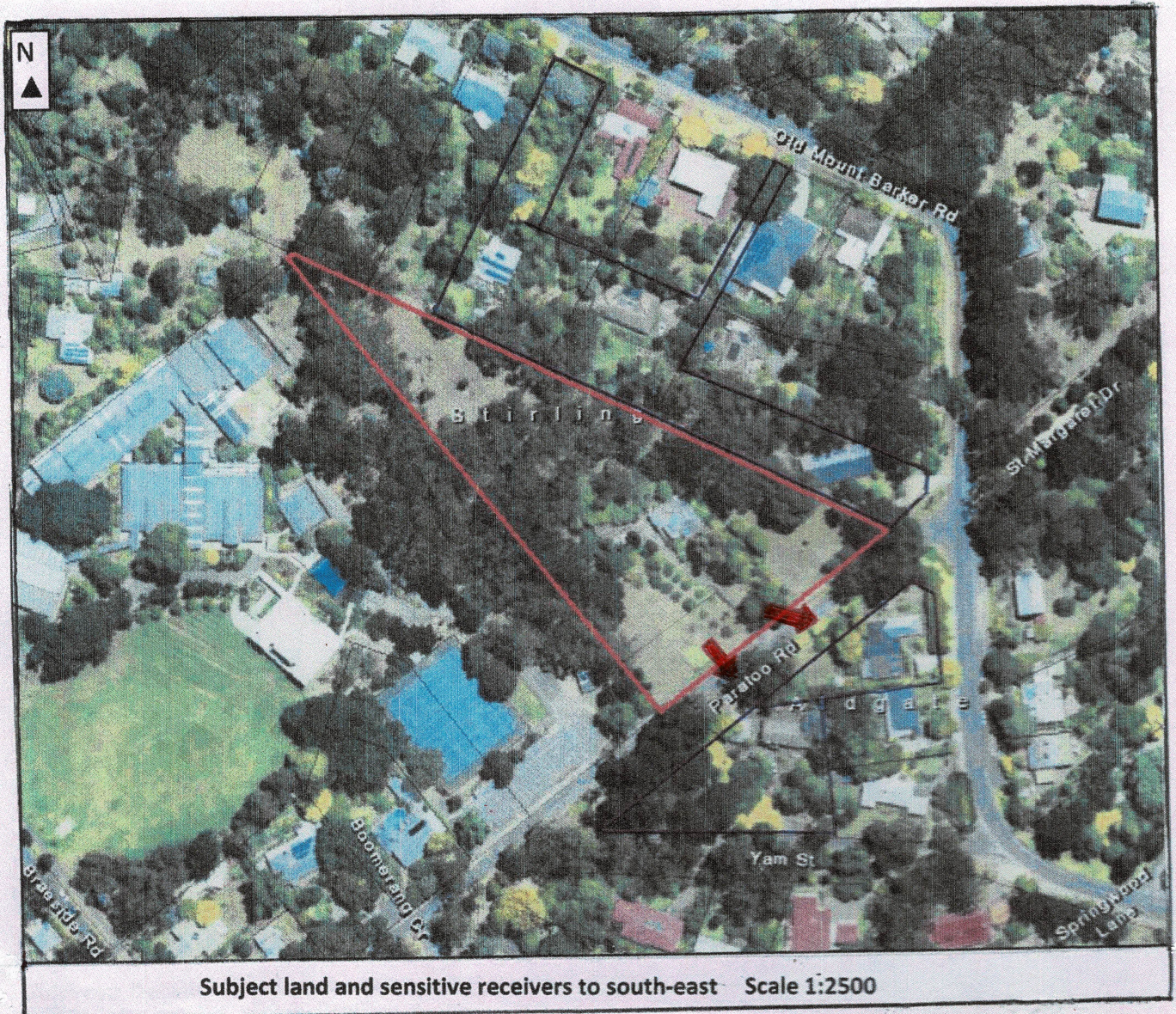
The proposed building is much larger than surrounding dwellings and will dominate rather than complement the residential character of the area. The frontage of the building to Paratoo Road is 45 metres wide, two storeys high (8.8 metres high) and 50 metres deep far larger and more obtrusive than the surrounding houses. The building has a total floor space of 1060 sq. metres and is of a contemporary design with lots of white cladding and roofing out of keeping with the design, scale and character of surrounding dwellings. The width, bulk, height, scale and appearance of the building will dominate the surrounding low rise single storey residential dwellings

***Design – Assessment Provisions***

***General Land Use Compatibility***

**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**

The largest outside play area is located at the front of the proposed building facing Paratoo Road and elevated as much as 3 metres above ground level and only screened from the street by a picket fence. The residences located directly over the road at 34 Paratoo Road and 142 Old Mount Barker are located approx. 40 and 45 metres from the picket fence. The noise of a lot of children playing can be loud with high pitched squealing, laughing and crying and this noise will undoubtedly reach the housing located along Paratoo Road. Some measures should be added to the picket fence to mitigate some of the noise levels reaching these sensitive receivers. If the picket fence is required for light and ventilation rather than a solid wall or fence, then a glass balustrade (pool fencing) could be erected inside the picket fence up to 1.2 metres high should be constructed of sufficiently thick glass, fixed firmly to the floor surface and sealed airtight to ensure noise is mitigated from this large elevated upper-level play area.



***PO 1.4 Plant, exhaust and intake vents and other technical equipment is integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity.***

The noise assessment report prepared by Sonus recommends that plant and mechanical equipment be relocated into the service yard at the rear of the proposed building. This redesign is necessary to locate plant and equipment as far away from adjacent sensitive land uses as practicable.

***7.2 Vehicle Parking areas are appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like***

The car park for 33 vehicles will be located at the front of the sited on the narrow one-way Paratoo Road frontage, directly opposite existing housing. Because of the slope of the subject site down to the south west corner much of the car park will be elevated up on bluestone retaining walls as high as 3 metres. The sensitive receivers located at 34 Paratoo Road and 142 Old Mount Barker Road are only located 30 and 40 metres from this car park respectively.

A 1200 mm crash barrier is proposed in the bottom corner of the car park for vehicle safety because it is elevated about 3 metres above the existing ground. Because the car park is for 33 vehicles entering as early as 6.30am and exiting as late as 6.30 pm with glare from car headlights in Winter time, noise from car doors, and people greeting and communicating with each other it is suggested this crash barrier or something similar be erected all along the Paratoo frontage of the car park. For noise attenuation to be effective a fence could be constructed along part of the frontage 1.2 metres high from a solid material such as 0.42 BMT sheet steel (colorbond or similar) a material with the same or greater density. The fence construction should be sealed at all junctions to contain noise.

### ***Interface between Land Uses***

#### ***Transport Access and Parking***

##### ***1.2 Development designed to discourage commercial, industrial and vehicle movement through residential streets***

With reference to the applicant's submission rubbish collection and deliveries will be through the proposed car park exit /egress outside the child care centres operating hours. These noisy and potentially disruptive activities are other reasons that screen fencing should be erected across the front of the car park and then screened from public view by landscape plantings.

### **Summary**

The proposed child care centre will provide a community service but also a large scale, non-residential and commercial building. As such its scale and operation should respect the residential amenity and character of the Hills Neighbourhood zone and the sensitive receivers that are located in close proximity to the proposal.

The large elevated play area facing Paratoo Road will impact the sensitive receivers located in close proximity on the opposite side of Paratoo Road. These same dwellings will be impacted by vehicle noise, car doors banging, greetings, conversations and glare from vehicle headlights in Winter months accessing and egressing the proposed carpark.

The design code states vehicle parking areas should be appropriately located to minimise impact on sensitive receivers by screen fencing and planting. It is considered reasonable that greater attention be paid to screen fencing of the car park as landscaping alone does not attenuate vehicle noise and nuisance. The same consideration should be given to some screening of the elevated play area because a picket fence alone will not attenuate the noise level of a large number of children playing.

The proposed child care facility is large and combined with the existing Stirling East Primary School will further impact the residential amenity of what is supposed to be a quiet Hills Neighbourhood zone. The impact of school traffic is already onerous at peak drop off and collection times. This makes it all the more important some consideration be given to the extra traffic and noise the child care facility will generate starting earlier and finishing later than the school presently does.

**The author and/or representor wish to be heard by Council Assessment Panel in support of this representation.**

Simon Grose  
Director  
Advantage Planning Services  
Mobile

29 November 2023

12 December 2023  
Attention: Marie Molinaro  
Adelaide Hills Council  
63 Mount Barker Road  
STIRLING SA 5152

*Uploaded on to the PlanSA Portal*

Dear Marie,

**RESPONSE TO REPRESENTATIONS: CHILDCARE CENTRE PROPOSED AT 32 PARATOO ROAD WOODCROFT (DA 23018174)**

We act for Development Holdings Pty Ltd and refer to the application to establish a childcare centre (pre-school), together with associated retaining walls, fencing, carparking and landscaping, over land located at 32 Paratoo Road, Stirling (the 'site').

The application was subject to public notification and eight representations were received. Pursuant to Section 107(3)(c) of the *Planning Development and Infrastructure Act 2016*, this letter provides our formal response to those matters raised within the representations.

Having reviewed the nature of the concerns raised, we wish to advise that no changes to the design of the development are proposed. However, our response has been informed by the traffic advice and response prepared by CIRQA, provided within **Appendix 1**.

# 1. LOCATION OF REPRESENTOR PROPERTIES

A total of eight representations were received, including two representors in support of the proposed development (with some concerns expressed) and six representors opposing the development.

Figure 1-1 identifies the subject site, relative to the location of each representor's property:

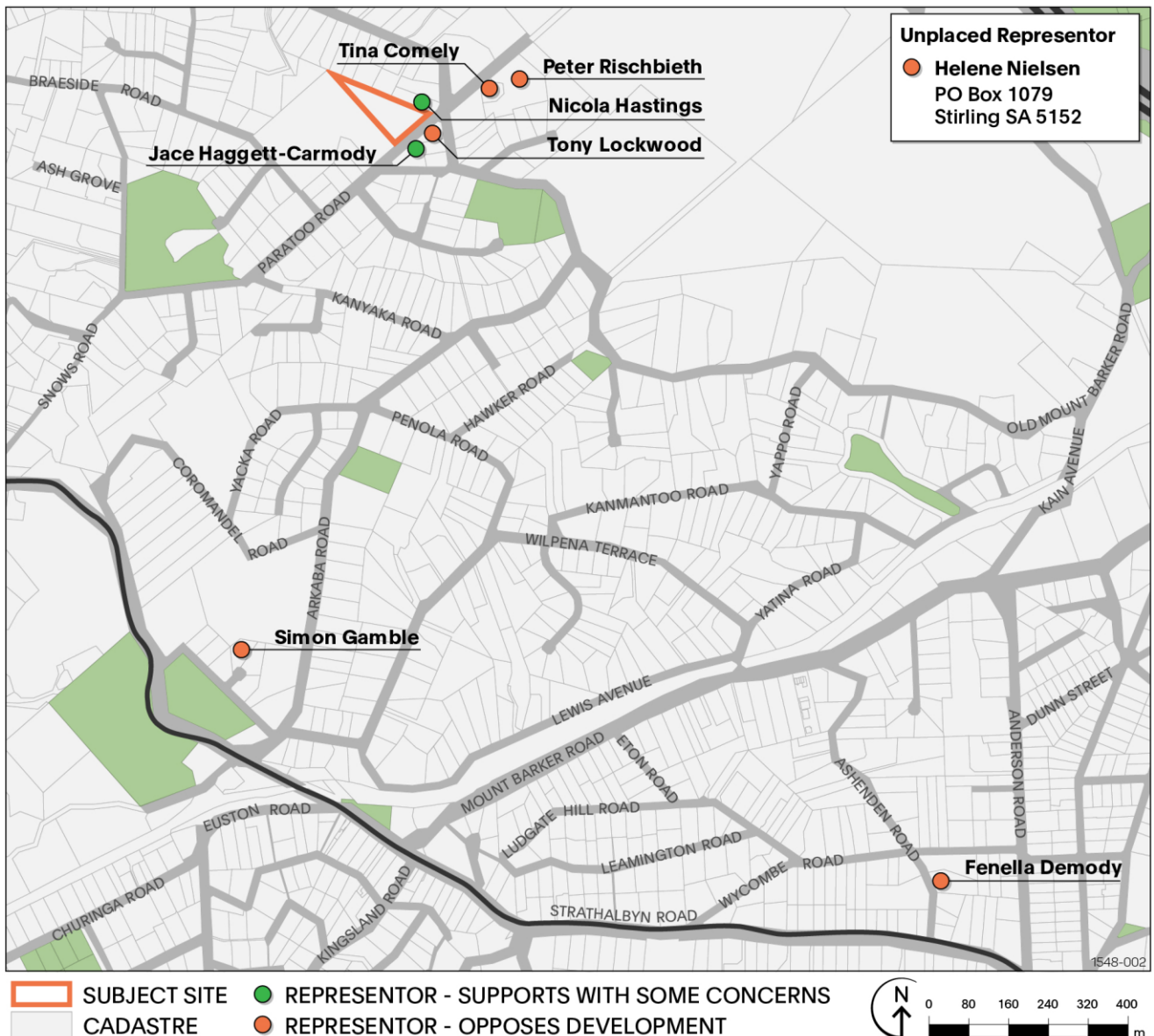


Figure 1-1 – Subject site relative to each representor's property

## 2. SUMMARY OF MATTERS RAISED

An overview of the concerns expressed by each representor is provided **Appendix 2**, with a summary of those concerns provided below:

### ***Hours of Operation***

- Opening hours for the childcare centre should be changed from 6:30am to 7:00am to coincide with the OHSC service offered by the adjoining primary school.
- Confirmation that the hours of operation of will not extend beyond the proposed closure time of 6:30pm.

### ***Traffic and Parking***

- There is already a shortfall in on-street parking for the adjoining primary school which is to be exacerbated by the proposed development.
- Paratoo Road (as a one-way road) already experiences congestion during peak school drop-off/pick-up period which is to be exacerbated by additional traffic generated by the childcare centre.
- Congestion associated with the school already creates issues for residents attempting to leave their driveways.
- Impact of additional traffic volumes on the safety of school children travelling by foot or bicycle.
- Impacts of additional traffic volumes on the local road network and key intersections.

### ***Light Spill***

- Concerns with the impacts of light spill on adjacent properties.
- Clarification requested about which lights are to be left on after hours for security purposes.
- Light spill diagram should be provided to demonstrate that lighting will not unreasonably impact residential amenity.
- Impact of headlight glare on adjacent residences to the south given the elevated nature of the carpark.
- Low height fencing to carpark recommended to prevent light spill glare and noise.

### ***Amenity Considerations***

- Location of mechanical plant should be confirmed and should be in accordance with the acoustic recommendations outlined within the Sonus report.
- Additional acoustic attenuation required to Outdoor Play Area 3 (southern boundary), as picket style fencing will provide inadequate acoustic attenuation.
- Additional acoustic treatments are required given the rural neighbourhood setting of the locality.
- Noise generated by carpark activity will negatively impact residential amenity.

### ***Waste Management***

- Waste collection on Sunday's and public holidays is not supported.

- Confirmation as to the location of the bin collection area, which should be screened and generously separated from adjacent sensitive receivers.

***Design***

- Size, scale and appearance of the proposed childcare centre is inappropriate for the Rural Neighbourhood Zone, is inconsistent with the rural residential setting and is akin to a commercial use rather than a community service use.

***Use of the balance of the land***

- Clarification on how the balance of the land will be used.

***Boundary Fencing***

- Confirmation of any change to boundary fencing.



## 3. RESPONSE TO SUBMISSIONS

### 3.1. Hours of Operation

The proposed hours of operation are between 6:30am and 6:30pm Monday to Friday.

The operating hours have been informed by the acoustic assessment performed by Sonus, with due regard to amenity related impacts on adjacent residential properties. The applicant does not propose to change (reduce) the proposed hours of operation as there is no basis or justification to do so. In our experience, the proposed hours are common for contemporary childcare centres, including those which operate within residential areas.

The representor who resides at 140 Mount Barker Road has also requested confirmation that the proposed hours of operation will not be extended beyond 6:30pm. Any change to the approved hours of operation would be the subject of a separate application and is therefore irrelevant to the assessment of this proposal. Notwithstanding, there is no current intention to extend the proposed hours of operation.

### 3.2. Traffic and Parking

Our response to traffic and parking matters has been informed by the letter prepared by CIRQA which is provided in **Appendix 1**.

#### 3.2.1. Impact on On-street Parking Along Paratoo Road

The onsite provision of parking achieves the 'Deemed to Satisfy' parking rate of 0.25 spaces per child, as prescribed by Table 1 – General Off-Street Car Parking Requirements. Accordingly, the development the parking demands for the facility can be wholly accommodated onsite, without any reliance on on-street parking.

The submission by Fenella Dermody suggests that the proposed driveway access will interfere with existing on-street parking, thereby reducing the total amount of on-street parking available for school drop off/pick up. As stated within the CIRQA response, the proposed access will replace the existing access point, thereby limiting impacts to on-street parking. Irrespective, CIRQA notes that there is *"no formal (legal) on-street parking located immediately in front of the subject site"* and accordingly, the development would have *"no impact on the availability of on-street parking"*.

#### 3.2.2. Congestion and Impacts on the Surrounding Road Network

Many of the representors have expressed concern with existing congestion on the adjacent road network and the potential for this to be exacerbated by additional traffic movements generated by the childcare centre. Representors have also expressed concern with additional adverse impacts on the operation and safety of the local road network (including key intersections) for motorists, pedestrians and cyclists.

These matters are addressed in the CIRQA response provided in **Appendix 1**, as summarised below:

- The findings of the CIRQA analysis confirms that the adjacent road network is neither congested or 'over capacity'.
- Detailed traffic modelling conducted by CIRQA confirms that whilst there are periods of higher queuing and delays associated with the operation the adjoining primary school, there remains sufficient capacity within the road network to adequately accommodate additional movements associated with the proposal.

- Childcare centres do not generate intense short periods of activity in the way that primary schools do. Rather childcare centres generate a relatively even distribution of movements over a two-hour period in the morning and afternoon/evening. Accordingly, peak periods for childcare centres do not directly align with school peak periods.
- Sight distance provision at both the Paratoo Road/St Margaret Drive and Yam Street/Old Mount Barker Road intersections are in accordance with the recommendations outlined within the relevant Austroads' Standards.
- Additionally, CIRQA notes that only one crash has occurred at the Paratoo Road/St Margaret Drive/Old Mount Barker Road intersection (which was limited to 'property damage only'), with no recorded crashes for the Yam Street/Old Mount Barker Road intersections, nor the Paratoo Road/Yam Street or Paratoo Road/Braeside Road intersections.

In relation to traffic and parking matters more generally, CIRQA makes the following conclusions:

*"A detailed traffic and parking report was prepared by CIRQA in respect to the proposed child care at 35 Paratoo Road, Stirling. This has included comprehensive modelling of conditions during the am and pm peak hours of the adjacent road network (including the 'build-up' and 'release' of traffic related with the adjacent school). Additionally, sufficient parking will be accommodated on-site to not only meet the DTS/DPF requirements of the Planning and Design Code but also ensure that there would be no reliance on on-street parking associated with the proposal."*

### 3.3. Light Spill

Several representors has expressed concern with the impact of light spill on residential amenity.

The preliminary lighting design prepared by TMK engineers proposes LED floodlights affixed to the building façade together with low level bollard lighting along the perimeter of the carpark. Whilst lighting is also proposed to the rear of the building, the excavated nature of the northern end of the site means that lighting to the rear (north) of the building will not be visible from any adjoining residential property.

Previous correspondence prepared by Ekistics implied the operation of afterhours lighting for security and passive surveillance purposes. In response to concerns and comments made by representors, we confirm that external lighting will only operate during business hours, and the applicant is prepared to accept a condition of consent to that effect. With such a condition/restriction in place, it is expected that the need for carpark lighting will be limited to early morning and early evening periods for no more than several hours per day (Monday to Friday). These limited operating hours, combined with generous setbacks from adjacent sensitive receivers and dense vegetation along Paratoo Road and surrounding the childcare centre to the north provides a high degree of confidence that light spill and glare can be managed with minimal impact on residential amenity. Accordingly we believe concerns relating to light spill could be addressed via an appropriately worded condition attached to the planning consent which requires all lighting to be designed in accordance with the relevant Australian Standards. Alternatively, and if deemed necessary by the Council, the provision of a light spill diagram designed in accordance with the relevant Australian Standards could be addressed via a Reserve Matter.

My Lockwood of 142 Old Mount Barker Road has expressed concern with potential impacts to residential amenity caused by headlight glare and spill on adjacent residences to the south. This concern is raised in the context of the elevated nature of the site. To overcome this issue, Mr Lockwood has recommended the installation of a low level (1.2 metre high) fence to the southern perimeter of the carpark to prevent headlight glare.

Planting selected for terraced walls to the south of the carpark comprises an assortment of large shrubs capable of growing to heights that will obscure headlight glare and light spill. Selected plantings extracted from the landscape plan are listed below:

LARGE SHRUBS			
Ag	<i>Abelia grandiflora</i> *	Glossy Abelia	2000mm 1-2 x 1-2 (H x W)
Nd	<i>Nandina domestica</i> *	Sacred Bamboo	1500mm 1.5-2 x 1-1.5 (H x W)
PJ	<i>Pittosporum 'James Stirling'</i> *	'James Stirling' Pittosporum	1000mm 2-3 x 1 (H x W)
Pe	<i>Pittosporum eugenoides 'Tarata'</i> *	Green Tarata	4000mm 6 x 4 (H x W)
Vo	<i>Viburnum odoratissimum 'Green Emerald'</i> *	Sweet Viburnum	2000mm 3.5-4 x 1.5-2 (H x W)

From an urban design perspective, planting in lieu of solid fencing is the preferred approach to managing headlight glare and light spill, particularly in the context of the Desired Outcomes expressed for the Rural Neighbourhood Zone.

Additionally, we also expect headlight glare and spill will be obstructed by the tall hedge which lines Mr Lockwood's secondary frontage to Paratoo Road (**Figure 3-1**). In the context of the single storey design of Mr Lockwood's dwelling, any light spill / head light glare visible above the hedge to Paratoo Road would not be visible from private open space or internal living areas of Mr Lockwood's dwelling.



Figure 3-1 - Vegetation to Paratoo Road (adjacent 142 Old Mount Barker Road)

### 3.4. Amenity Considerations

Several representors have expressed concern with the potential acoustic related impacts associated with the operation of the childcare centre, including noise generated by children utilising outdoor play spaces, noise generated by carpark activity and noise generated by mechanical plant, with several representors seeking confirmation that mechanical plant will be sited in accordance with the recommendations outlined within the Sonus report.

### 3.4.1. Noise from Outdoor Play Spaces

The submission by SA Urban and Regional Planning (SAURP) on behalf of the owner(s) of 140 Mount Barker Road suggests that the proposed development will have an impact on residential amenity, notwithstanding the findings of the Sonus report which suggests that the design complies with the recommendations set out within the Guidelines for Community Noise (the Guidelines) published by the World Health Organisations (WHO) with regard activities occurring within outdoor play spaces. We understand that this statement is made in the context of the site's location within a Rural Neighbourhood Zone, noting also that the proposed development is *"a new land use in a rural neighbourhood setting"*.

The Guidelines published by the WHO are the recognised standard for the management of noise generated by children utilising outdoor play spaces. In this regard, we note that the Guidelines do not distinguish between residential zones and accordingly, compliance with the Guidelines is a generally accepted method for demonstrating that noise generated by the use of outdoor play spaces will not unreasonably impact on residential amenity, in accordance with Interface between Land Uses PO 4.1:

**PO 4.1:** *Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).*

The locality is also characterised by the adjoining Stirling East Primary School which is also a community service use of a substantially larger scale. Thus, whilst the site is located within a 'rural neighbourhood setting', the locality is clearly not just residential in nature and the existing primary school is a relevant consideration in the assessment of this application, including acceptable levels of residential amenity.

The submission by Mr Lockwood of 142 Old Mount Barker Road expresses concern with the unattenuated design of the picket style fencing to the southern end of Outdoor Play Space 3. However, the findings of the acoustic assessment conducted by Sonus does not require the attenuation of fencing to any outdoor play space. Accordingly, no further changes to the design of fencing to outdoor play areas is proposed.

### 3.4.2. Mechanical Plant Noise and Location

Several representors have requested confirmation that mechanical plant will be sited in accordance with the recommendations contained within the acoustic report.

All mechanical plant will be located within the service yard, positioned to the rear of the building, and completely screened from the public realm and adjoining residences. The proposed location of mechanical plant is consistent with the recommendations contained within the Sonus report.

### 3.4.3. Carpark Noise

Several representors have expressed concern with noise to be generated by carpark activity. In relation to the submission by Mr Lockwood of 142 Old Mount Barker Road, such concerns have also been expressed in the context of the elevated nature of the carpark.

The Sonus assessment considers specifically noise to be generated by carpark activity:

*"The noise levels at residences from the proposed site activity have been predicted based on a range of previous noise measurements and observations 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 positioned.*
- *Vehicle movements on site; and,*
- *Mechanical plant servicing the building”*

Carpark noise is managed by the Goal Noise levels set out within the Noise Policy, and the assessment conducted by Sonus also applies a 5dB(A) penalty to account of the character of carpark noise. Sonus concludes that without any acoustic attenuation within the carpark, noise generated by carpark activity would not exceed the Goal Noise levels prescribed by the Policy throughout the day and evening. We also confirm that the assessment performed by Sonus accounts for raised level of the carpark.

To address noise-related impacts, Mr Lockwood of 142 Old Mount Barker Road has suggested the installation of a 1.2-metre-high acoustic barrier to the carpark. We suspect that a 1.2-metre-high barrier would do little to address/minimise carpark noise, and if anything would have a negative visual impact on the streetscape. Notwithstanding, the findings of the Sonus assessment confirms that attenuation to the carpark is unnecessary.

### 3.5. Waste Management

The representation prepared for Ms Hastings of 140 Old Mount Barker Road has requested confirmation that waste bins will be sited away from adjoining residences. Concern has also been raised in relation rubbish collection on Sundays and public holidays.

Bins will be stored within an enclosed room sited beneath Outdoor Play Area 3 and will not be visible from the public realm.

Noise generated by waste collection activities are managed under the *Local Nuisance and Litter Control Act 2016*, with prescribed waste collections times under Schedule 1, Clause 4 of this Act intended to prevent 'local nuisance'. The prescribed collection times are:

- Between 9am and 7pm on any Sunday or public holiday; and
- Between 7am and 7pm on any other day.

To avoid 'local nuisance', waste will be collected in accordance with the timeframes specified above.

### 3.6. Building Design, Scale and Land Use Intensity

The submission by Mr Lockwood of 142 Old Mount Barker Road has expressed concern with the design and scale of the childcare centre, suggesting that:

1. The scale and size of the development, together with associated traffic generation and waste collection arrangements are akin to a commercial land use;
2. The scale/size of the development will not be complementary or compatible with the established residential character; and

3. The external colour scheme is incompatible with the character of surrounding dwellings.

The Rural Neighbourhood Zone distinguishes between a 'commercial use' and 'community service' use. This is clearly apparent in the wording of PO 1.4:

*“Non-residential development located and designed to improve community accessibility to services, primarily in the form of:*

- (a) small-scale commercial uses such as offices, shops and consulting rooms*
- (b) community services such as educational facilities, community centres, places of worship, child care facilities and other health and welfare services*
- (c) services and facilities ancillary to the function or operation of supported accommodation or retirement facilities*
- (d) open space and recreation facilities.”*

*(underlined for emphasis)*

Whereas PO 1.4(a) seeks to restrict the scale of commercial uses (such as offices, shops and consulting rooms), PO 1.4(b) does not impose such restrictions on the scale of community service uses.

In his submission, Mr Lockwood of 142 Old Mount Barker Road refers to PO 1.2 of the Rural Neighbourhood Zone, which seeks to restrict the scale and type of 'commercial activities' to maintain residential amenity. However, as the childcare centre is for a 'community service use' (as opposed to a 'commercial use'), it is our opinion that PO 1.2 does not apply to the assessment of the application.

Despite concerns raised in relation to the scale of the childcare centre, the Rural Neighbourhood Zone does not specifically seek to limit the scale or intensity of a childcare centre. Conversely, community service uses are often characterised by larger buildings with associated carparking and additional traffic generation. One such example is the Stirling East Primary School which adjoins the site to the west which accommodates some 507 students. Similarly, within the Adelaide Hills Subzone, 'Supported Accommodation' and 'Tourist Accommodation' are also listed as envisaged uses. Again, such uses are (by their very nature) generally much larger than a typical detached dwelling.

Further to the above discussion, and in the context of the site's proximity to the adjoining primary school, it is our opinion that neither the Zone nor Subzone seeks to restrict the scale of community service uses on the subject site.

Notwithstanding the above, it is our opinion that the proposed scale of the childcare centre is appropriate particularly in the context of the size of the site. That is, the proposed building footprint occupies approximately 10% of the overall site which is extremely low and entirely consistent with the established low-density character of the locality. When combined with the carpark, the approximate coverage of 16% is still low and consistent with existing residential site coverage rates evident within the locality. In this context, it is our opinion that the size of the site is highly conducive to an appropriately designed non-residential development.

Whilst the Code does not specifically seek to limit the scale of community service uses, PO 1.3 does seek to ensure non-residential uses are *“sited and designed to complement the residential character and amenity of the neighbourhood”*. A streetscape render of proposed development, as viewed from Paratoo Road is illustrated below:



Figure 3-2 - Streetscape Perspective

Primary school aside, the locality is predominantly characterised by single and double storey dwellings, with a notable variation in dwelling style, materiality, colour and appearance. Dwellings contain generous setbacks and spacious front yards accommodating notable amounts of vegetation.

The external material palette (including hebel panelling, weatherboard, vertical timber battens and Colorbond® roofing) and neutral colour tones comprising off whites, browns and greys are in our opinion compatible with and complementary with the established residential setting. They are common materials and colours applied to dwellings within a residential setting, and thus are also appropriate in this setting, particularly in the absence of any other guiding provisions within the zone and sub-zone with respect to the materiality and colour of buildings.

Similarly, the architectural features of the building, including modest gable ended roof forms, projecting verandahs, window design, size and placement will create visual interest and are reflective of architectural elements typically applied to residential development.

Careful consideration has also been given to the landscape design for the development, with notable plantings proposed along the outer perimeter of the carpark to screen terraced walling and soften the development, as well as to maintain and complement the natural character of the locality. In response to feedback received from Council, the landscape design was revised to include locally indigenous plantings, selected from Council's preferred list of planting species.

Consistent with the PO 1.3, the building has been sensitively sited to retain the majority of established mature native vegetation which occupies the site, which in addition to its screening properties, also forms a notable positive feature of the locality. Consistent with the established character of the locality, the building also incorporates generous front, side and rear setbacks which also serve to minimise both visual and amenity relating impacts associated with onsite activities. Such setbacks comply with the minimum front side and rear setbacks prescribed by DPF 3.1, 5.1 and 6.1.

The submission by Mr Lockwood also expresses concern with the height of the building, suggesting that when combined with the proposed building footprint, the development is akin to a commercial development. As previously advised, the Code does not seek to limit the scale of community service uses. Further, the proposed building height is aligned with DPF 2.1 which contemplates buildings not exceeding 2 levels and 9 metres, and wall heights not exceeding 7 metres (excluding to gable ends). Accordingly, the proposed development aligns with Zone 2.1:

**PO 2.1:** *Buildings contribute to a low-rise residential character and complement the height of nearby buildings.*

In the context of the size of the site, the non-residential nature of the development, the established character of the locality (comprising by residential and non-residential uses) and the relevant performance outcomes set out within the Zone and Subzone, it is our opinion that the scale and design of the development is aligned with the relevant provision of the Code.

### 3.7. Use of Balance of Land

Several representors have requested clarification on how the balance of unoccupied land will be used. The future use of the balance of the land is yet to be determined and will remain in the responsibility of the land owner to maintain, as is currently the case. Any future intention to develop the balance of the land will be subject of a separate development application and assessment process

### 3.8. Boundary Fencing

Ms Hastings of 140 Old Mount Barker Road has requested confirmation of any proposed changes to the northern boundary fencing which separates the allotment from the 140 Old Mount Barker Road. We confirm that there is no intended changes proposed to any allotment boundary fencing.

## 4. SUMMARY

This letter provides a detailed response to those matters raised within the eight submissions received in relation to a development proposed by Development Holdings Pty Ltd for a childcare centre, together with associated carparking, retaining walls and landscaping at 32 Paratoo Road, Stirling.

Having reviewed the matters raised, it is our opinion that no further changes to the design of the development are required as the proposal in its current form adequately and appropriately addresses the relevant provisions of the Planning and Design Code. In particular, and in the context of the concerns expressed by representors we note that:

- The proposal will provide sufficient onsite parking and will not rely at all on existing on-street parking.
- The comprehensive traffic analysis conducted by CIRQA confirms that the adjacent road network is not operating at capacity and can accommodate the additional volume of traffic to be generated by the childcare centre.
- The proposed scale and design of the development is aligned with the relevant provisions of the Rural Neighbourhood Zone and Adelaide Hills Subzone particularly in relation building height/scale, setbacks and external appearance.
- The scale and intensity of the use is appropriate taking into consideration:



- the provisions of the Rural Neighbourhood Zone which clearly contemplate community service uses and which do not specifically seek to restrict the scale of such uses;
  - the size of the site within the context of the larger allotment which results in low site coverage and generous front side and rear setbacks to maintain the established residential amenity; and
  - the site's proximity to the Stirling East Primary School, which is a complementary community service use of a substantially larger scale.
- Lighting associated with the development will be turned off whilst the childcare centre is not in operation. Taking into consideration the proposed hours of the childcare centre (i.e. 6:30am to 6:30pm) lighting will be used for limited periods and will thus have limited impact on adjacent residences. Notwithstanding and taking into consideration the generous setbacks of the site from adjacent sensitive receivers, there is a high degree of confidence that light spill and glare can be managed in accordance with the Australian Standards, and it is reasonable for this matter to be managed preferably via a condition of consent or if necessary, a Reserve Matter.
  - Proposed landscaping the southern perimeter of the carpark, combined with established vegetation along Paratoo Road will substantially obscure views of vehicle headlights from adjacent residences to the south.
  - The design has been informed by the acoustic assessment performed by Sonus which demonstrates that acoustic impacts are capable of been managed in accordance with recognised standards to preserve residential amenity.

Subject to Council's review of this letter, our client's preference is to have the matter considered at the Council Assessment Panel meeting scheduled for January of 2024.

We would also welcome the opportunity to appear personally before the Council Assessment Panel to respond to matters raised by representors, and to answer any questions raised by Panel members.

Should additional information or clarification be required on any matter raised above, please do not hesitate to contact the undersigned on 0426 246 297.

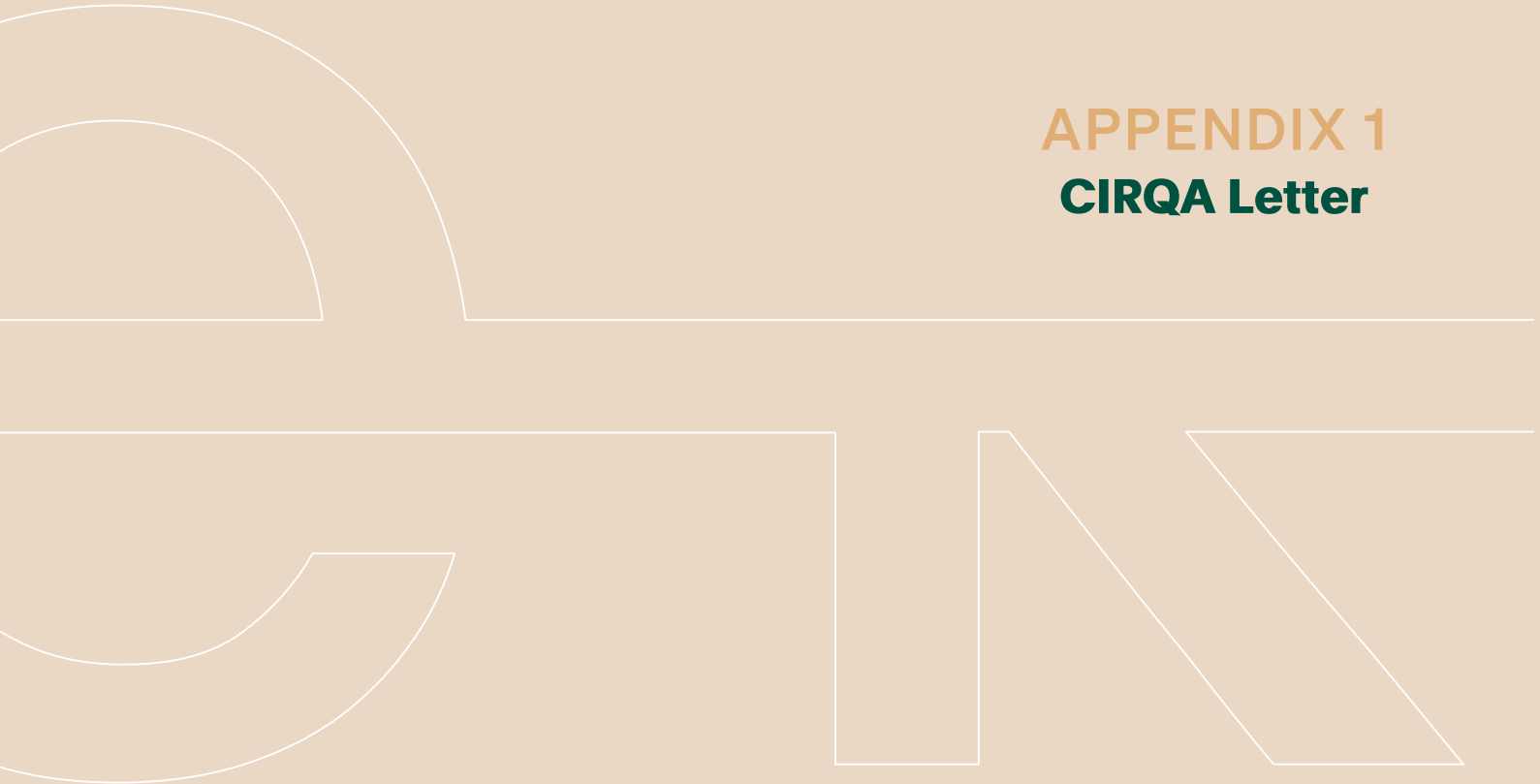
Kind Regards,



Rob Gagetti  
**Senior Associate**



APPENDIX 1  
**CIRQA Letter**



**Ref: 22362|BNW**

12 December 2023

Mr Rob Gagetti  
Ekistics  
Level 3, 431 King William Street  
ADELAIDE SA 5000

Dear Rob,

**PROPOSED CHILD CARE CENTRE (APP ID: 23011874)  
35 PARATOO ROAD, STIRLING**

I refer to the proposed child care centre at 35 Paratoo Road, Stirling. As requested, I have prepared the following responses to the Request for Information (RFI) provided by the Adelaide Hills Council and the representations received during the public notification period.

**COUNCIL RFI**

The traffic related comments provided by Council in its RFI are noted in italics below, followed by my response.

*“The CIRQA information indicates that the high parking demand dissipates approximately 15 minutes after school finishes, but there appears to be no account or commentary on traffic congestion leading up to school finishing time.”*

The traffic impact assessment prepared by CIRQA analysed conditions during the am and pm peak hours on the adjacent road network. While the discussion focussed on the 10 to 15 minutes of highest traffic activity associated with the school, the assessment of the full pm peak hour also covers the ‘build-up’ of traffic prior to the end of the school day. Similarly, the am peak hour assessment considers conditions prior to and following the start of the school day in the am period. Traffic volumes outside of these two peak hours are lower and any associated traffic impacts/conditions also lower.

In addition, while there are periods of higher traffic activity associated with the school, it is important to note that conditions would not typically be referred to as ‘congested’. Such a term is related to traffic demands exceeding the road network’s

capacity and/or excessive travel times being experienced. As clearly demonstrated by the SIDRA analysis, while there are increased queues and delays during the school related peak periods, traffic volumes are still well within the capacity of the road network and would not be technically classed as 'excessive'.

*"Statistically the modelling indicates movements will be readily accommodated at the proposed site access and on the adjacent road network with minimal impact, the road network congestion in the immediate area generated by the forecast 171am and 125pm peak hour trips has not been taken into consideration."*

As above, the road network is not (and will not as a result of the proposal) be congested. Additionally, contrary to Council's statement, analyses have been undertaken for the immediate area (including the intersections of Paratoo Road/Braeside Road, Paratoo Road/Yam Street, Paratoo Road/St Margaret Drive/Old Mount Barker Road and Yam Street/Old Mount Barker Road). The analyses confirmed that the intersections would not be 'congested' and that the volumes would be adequately accommodated.

In addition, CIRQA has also recently had traffic data collected by Austraffic (independent traffic survey company) for other surrounding intersections such as Old Mount Barker Road/Carey Gully Road, Old Mount Barker Road/Gould Road and Gould Road/Pomona Road (as part of a separate project). The modelling undertaken (as part of the separate project) for these intersections indicates ample capacity to accommodate additional movements associated with the proposal distributed via these road. Other intersections within the vicinity of the site would generally accommodate lower volumes than associated with the various intersections modelled and I remain of the opinion that the additional movements will be adequately accommodated with minimal impact.

## **PUBLIC REPRESENTATIONS**

A number of the representations received during the public notification period raised concern in respect to traffic and parking impacts associated with the proposal (most of which are common between multiple representations). The key traffic and parking related issues raised by representors are noted in italics below, followed by my response.

### *Impact on on-street parking on Paratoo Road*

A number of representors raised concern that on-street parking conditions would be worsened on Paratoo Road due to the proposal. It is important to note (as detailed in the original traffic report) that the proposal will provide sufficient parking on-site such that the Deeded-to-Satisfy requirements of the Planning and Design Code are met. Specifically, peak parking demands associated with the proposal can be wholly accommodated on-site with no reliance on on-street parking.

One representor noted that the proposal would result in the “...loss of parking for school drop[off]/pick up as many off-street parks are situated where the driveway access for the childcare is”. This statement is nonsensical given that the site’s existing access is already located in a similar position (while it will be widened, it would not impact ‘many’ on-street spaces). Furthermore, it is important to note that parking within the verge is illegal and there is no formal (legal) on-street parking located immediately in front of the subject site. The proposed child care centre would therefore have no impact on the availability of on-street parking.

*Traffic ‘congestion’ on the adjacent road network and additional impact of the proposal*

As detailed above in response to Council’s comments, the road network is not congested or ‘over capacity’. The detailed traffic modelling prepared in respect to the application (including analyses of existing and future conditions) identifies that, while there are periods of higher queuing and delays associated with the nearby school, there is sufficient capacity within the road network to adequately accommodate the additional movements associated with the proposal.

It is also important to note that child care centres do not generate intense or focussed peak periods of activity in the same manner as schools but rather result in a relatively even distribution of movements over two-hour periods in the morning and afternoon/evening. This limits the traffic impacts of a child care centre (particularly when considered against the conditions associated with the nearby school). Furthermore, as detailed in the original traffic and parking report, the peak periods of child care centres typically do not directly align with school related peak periods.

In respect to safety concerns regarding the operation of the intersections of both Paratoo Road/St Margaret Drive and Yam Street with Old Mount Barker Road, the sight distance provisions at both intersections are in accordance with the recommendations of the Austroads’ “*Guide to Road Design – Part 4A: Signalised and Unsignalised Intersections*”. It is also noted that, from the available crash data from the Department for Infrastructure and Transport (DIT) only one crash has occurred at the Paratoo Road/St Margaret Drive/Old Mount Barker Road intersection (which result in ‘property damage only’). There are no reported crashes within the available data for the Yam Street/Old Mount Barker Road intersection, nor Paratoo Road/Yam Street or Paratoo Road/Braeside Road intersections. Such data does not suggest there is a notable conflict risk or issue. Notwithstanding the above, it is reiterated that the traffic report did note that some minor signage and linemarking improvements could be undertaken to improve safety at the Paratoo Road/ St Margaret Drive/Old Mount Barker Road (such recommendations should be considered by Council regardless of the proposal).

## SUMMARY

A detailed traffic and parking report was prepared by CIRQA in respect to the proposed child care at 35 Paratoo Road, Stirling. This has included comprehensive modelling of conditions during the am and pm peak hours of the adjacent road network (including the 'build-up' and 'release' of traffic related with the adjacent school). Additionally, sufficient parking will be accommodated on-site to not only meet the DTS/DPF requirements of the Planning and Design Code but also ensure that there would be no reliance on on-street parking associated with the proposal.

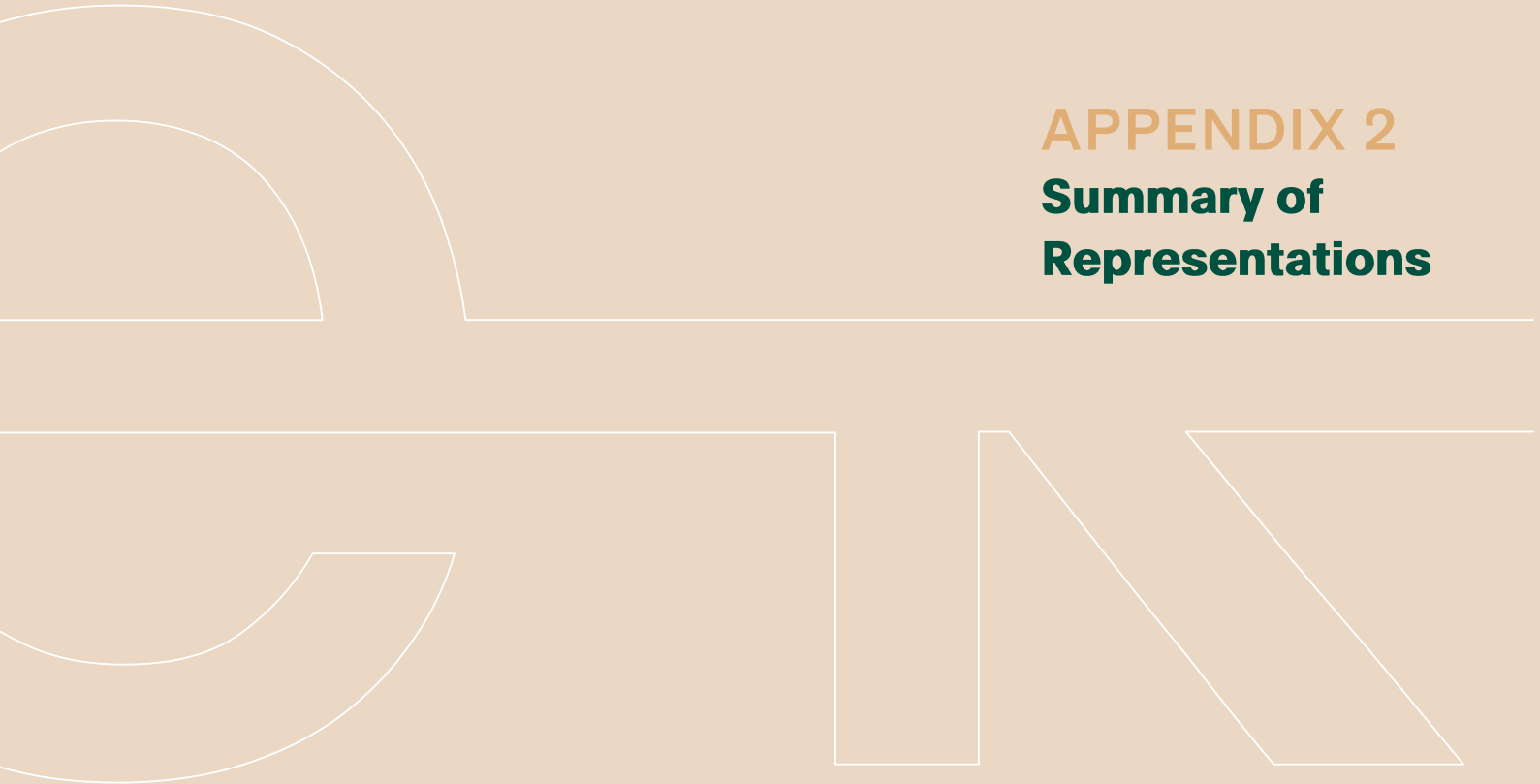
I trust the above sufficiently responds to the Council and representor comments, however, please feel free to contact me on (08) 7078 1801 should you require any additional information.

Yours sincerely,



**BEN WILSON**

Managing Director | CIRQA Pty Ltd

A large, decorative white line graphic is positioned on the left side of the page. It starts with a semi-circle at the top, followed by a horizontal line, then a vertical line, and finally a series of geometric shapes including a semi-circle, a vertical line, and a trapezoid-like shape at the bottom.

## APPENDIX 2

### **Summary of Representations**

Representor No.	Representor	Address	Supports/Opposes	Summary of Comments
1	Simon Gamble	3 Sharon Court, Aldgate	Opposes Development	<ul style="list-style-type: none"> <li>• Already insufficient parking for the Stirling East Primary School which will be exacerbated by the proposed development.</li> </ul>
2	Fenella Demody	27 Ashenden Road, Aldgate	Opposes Development	<ul style="list-style-type: none"> <li>• Paratoo Road is already congested by school traffic between 8:15am and 9am, and between 2:30pm and 3:30pm, to be exacerbated by the childcare centre.</li> <li>• Potential loss of parking for school drop off/pick up as many off-street parks are situated where the driveway is.</li> </ul>
3	Nicola Hastings	140 Old Mount Barker Road, Stirling	Support with some concerns	<ul style="list-style-type: none"> <li>• Impact of light spill on residents and wildlife. Recommends preparation of a light spill diagram.</li> <li>• Confirmation required as to the location of the proposed mechanical plant ' should be located as far away from residences to the north.</li> <li>• Noise impacts ' whilst the proposal is predicted to comply with the requirements of WHO and Noise Policy, it is suggested that the proposed development will have an impact on surrounding residential properties given the rural neighbourhood setting.</li> <li>• Suggests that hours of operation should coincide with the primary school's OSHC program.</li> <li>• Seeks confirmation that hours will not extend beyond 6:30pm.</li> <li>• Confirmation that bins will be covered and sited away from sensitive receivers.</li> <li>• Does not support rubbish collection on Sunday and public holidays.</li> <li>• Increased traffic and congestion along a one-way road and during peak drop off and pick up times for the Stirling East Primary School ' creates issues for representor attempting to leave their driveway.</li> <li>• Confirmation regarding any change to fencing between subject site and 140 Old Mount Barker Road.</li> <li>• Intentions for the future development of the balance of the land.</li> </ul>
4	Jace Haggett-Carmody	34 Paratoo Road, Aldgate	Supports development with some concerns	<ul style="list-style-type: none"> <li>• Light spill impacts and clarification as to which of the external lights will be kept on and which will be switched off after hours.</li> </ul>
5	Peter Rischbieth	10 St Margarets Drive, Aldgate	Opposes development	<ul style="list-style-type: none"> <li>• Additional traffic and congestion on Paratoo Road which already experiences high volumes of foot and vehicle traffic.</li> <li>• Congestion and safety issues at the Old Mt Barker Road/Yam Street intersection.</li> <li>• Commercial business in a residential area is not in keeping with the atmosphere, heritage and environment of Aldgate / Stirling.</li> </ul>



Representor No.	Representor	Address	Supports/Opposes	Summary of Comments
6	Helene Nielsen	PO Box 1079 Stirling SA, 5152	Opposes Development	<ul style="list-style-type: none"> <li>• Additional traffic and risks to safety of children attending the school.</li> <li>• Road network already over capacity.</li> </ul>
7	Tina Comely	6 St Margaret Drive, Aldgate	Opposes Development	<ul style="list-style-type: none"> <li>• Scale, proposed use, and parking for 32 vehicles not appropriate and inconsistent with the character of the Rural Neighbourhood Zone.</li> <li>• Increased traffic and congestion within the adjacent road network, including intersections.</li> <li>• On-street parking in adjacent road network in high demand during peak school periods, creating safety issues for pedestrians. Additional traffic generated by the childcare centre has the potential to create a safety hazard for pedestrians and cyclists walking/riding to/from school.</li> <li>• Loss of amenity for neighbouring residents due to additional noise and traffic.</li> <li>• How will the remainder of the block be developed.</li> </ul>
8	Tony Lockwood	142 Old Mount Barker Road Aldgate	Opposes Development	<ul style="list-style-type: none"> <li>• Scale and floor area of development akin to a commercial use, notwithstanding its function as a community service use.</li> <li>• In excess of what would be considered to be of a scale to maintain residential amenity.</li> <li>• Building larger than surrounding dwellings and will dominate rather than complement the residential character of the area.</li> <li>• External cladding/colours not in keeping with the design, scale and character of surrounding dwellings.</li> <li>• Building frontage, bulk and scale to dominate surrounding low rise, single-storey residential dwellings.</li> <li>• Noise generated by use of outdoor play spaces will impact residential amenity.</li> <li>• Picket fence to Outdoor Play Area 3 will not mitigate noise impacts and should be acoustically attenuated.</li> <li>• Mechanical plant should be positioned in accordance with the recommendations outlined within the Sonus report.</li> <li>• Impact on adjacent properties from headlight glare and noise given the elevated nature of carpark.</li> <li>• Recommends a 1.2-metre-high solid barrier for acoustic attenuation and to prevent headlight glare.</li> <li>• Noise impacts generated by bin collection activities.</li> </ul>

# Referral Snapshot

**Development Application number:**

23018174

**Consent:**

Planning Consent

**Relevant authority:**

Adelaide Hills Council

**Consent type for distribution:**

Planning

**Referral body:**

Native Vegetation Council

**Response type:**

Schedule 9 (3)(11) Native Vegetation Overlay

**Referral type:**

Direction

**Response date:**

27 Nov 2023

**Advice:**

With comments, conditions and/or notes

**Condition 1**

Prior to any clearance of native vegetation, the Native Vegetation Council must provide written confirmation that the Significant Environmental Benefit requirements under the *Native Vegetation Act 1991* have been satisfied.

**Advisory Note 1**

The clearance of native vegetation must be undertaken in accordance with the approval of the Native Vegetation Council under the *Native Vegetation Act 1991* as set out in Decision Notification 2023/3272/473.

**35 PARATOO RD STIRLING SA 5152**

**Address:**

Click to view a detailed interactive [SAILIS](#) in SAILIS

To view a detailed interactive property map in SAPPA click on the map below



**Property Zoning Details**

<b>Zone</b>	Rural Neighbourhood
<b>Sub Zone</b>	Adelaide Hills
<b>Overlay</b>	<ul style="list-style-type: none"> <li>Hazards (Bushfire - Medium Risk)</li> <li>Hazards (Flooding - Evidence Required)</li> <li>Mount Lofty Ranges Water Supply Catchment (Area 2)</li> <li>Native Vegetation</li> <li>Prescribed Water Resources Area</li> <li>Regulated and Significant Tree</li> </ul>
<b>Local Variation (TNV)</b>	Minimum Site Area ( <i>Minimum site area is 2,000 sqm</i> )

**Development Pathways**

■ Rural Neighbourhood

1. Accepted Development

Means that the development type does not require planning consent (planning approval). Please ensure compliance with relevant land use and development controls in the Code.

- Air handling unit, air conditioning system or exhaust fan
- Brush fence
- Building alterations
- Building work on railway land
- Carport
- Outbuilding
- Partial demolition of a building or structure
- Private bushfire shelter
- Shade sail
- Solar photovoltaic panels (roof mounted)
- Swimming pool or spa pool and associated swimming pool safety features
- Verandah
- Water tank (above ground)
- Water tank (underground)

2. Code Assessed - Deemed to Satisfy

Means that the development type requires consent (planning approval). Please ensure compliance with relevant land use and development controls in the Code.

- Carport
- Deck
- Land division
- Outbuilding
- Temporary accommodation in an area affected by bushfire
- Verandah

3. Code Assessed - Performance Assessed

Performance Assessed development types listed below are those for which the Code identifies relevant policies.

Additional development types that are not listed as Accepted, Deemed to Satisfy or Restricted default to a Performance assessed Pathway. Please contact your local council for more information.

- Ancillary accommodation
- Carport
- Deck
- Demolition
- Detached dwelling
- Dwelling addition
- Dwelling or residential flat building undertaken by:
  - (a) the South Australian Housing Trust either individually or jointly with other persons or bodies
  - or
  - (b) a provider registered under the Community Housing National Law participating in a program relating to the renewal of housing endorsed by the South Australian Housing Trust.
- Fence
- Land division
- Outbuilding
- Retaining wall
- Verandah

4. Impact Assessed - Restricted

Means that the development type requires approval. Classes of development that are classified as Restricted are listed in Table 4 of the relevant Zones.

Property Policy Information for above selection

## Part 2 - Zones and Sub Zones

### Rural Neighbourhood Zone

#### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Housing on large allotments in a spacious rural setting, often together with large outbuildings. Easy access and parking for cars. Considerable space for trees and other vegetation around buildings, as well as on-site wastewater treatment where necessary. Limited goods, services and facilities that enhance rather than compromise rural residential amenity.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 Predominantly residential development with complementary ancillary non-residential uses compatible with a spacious and peaceful lifestyle for individual households.	DTS/DPF 1.1 Development comprises one or more of the following: <ul style="list-style-type: none"> <li>(a) Ancillary accommodation</li> <li>(b) Child care facility</li> <li>(c) Consulting room</li> <li>(d) Detached dwelling</li> <li>(e) Office</li> <li>(f) Outbuilding</li> <li>(g) Recreation area</li> <li>(h) Shop</li> </ul>

<p>PO 1.2</p> <p>Commercial activities improve community access to services are of a scale and type to maintain residential amenity.</p>	<p>DTS/DPF 1.2</p> <p>A shop, consulting room or office (or any combination thereof) satisfies any one of the following:</p> <ul style="list-style-type: none"> <li>(a) it is located on the same allotment and in conjunction with a dwelling where all the following are satisfied:                             <ul style="list-style-type: none"> <li>(i) does not exceed 50m<sup>2</sup> gross leasable floor area</li> <li>(ii) does not involve the display of goods in a window or about the dwelling or its curtilage</li> </ul> </li> <li>(b) it reinstates a former shop, consulting room or office in an existing building (or portion of a building) and satisfies one of the following:                             <ul style="list-style-type: none"> <li>(i) the building is a State or Local Heritage Place</li> <li>(ii) is in conjunction with a dwelling and there is no increase in the gross leasable floor area previously used for non-residential purposes.</li> </ul> </li> </ul>								
<p>PO 1.3</p> <p>Non-residential development sited and designed to complement the residential character and amenity of the neighbourhood.</p>	<p>DTS/DPF 1.3</p> <p>None are applicable.</p>								
<p>PO 1.4</p> <p>Non-residential development located and designed to improve community accessibility to services, primarily in the form of:</p> <ul style="list-style-type: none"> <li>(a) small-scale commercial uses such as offices, shops and consulting rooms</li> <li>(b) community services such as educational facilities, community centres, places of worship, child care facilities and other health and welfare services</li> <li>(c) services and facilities ancillary to the function or operation of supported accommodation or retirement facilities</li> <li>(d) open space and recreation facilities.</li> </ul>	<p>DTS/DPF 1.4</p> <p>None are applicable.</p>								
<p>Building Height</p>									
<p>PO 2.1</p> <p>Buildings contribute to a low-rise residential character and complement the height of nearby buildings.</p>	<p>DTS/DPF 2.1</p> <p>Building height (excluding garages, carports and outbuildings) is no greater than 2 building levels and 9m and wall height no greater than 7m (not including a gable end).</p>								
<p>Primary Street Setback</p>									
<p>PO 3.1</p> <p>Buildings are set back from primary street boundaries consistent with the existing streetscape.</p>	<p>DTS/DPF 3.1</p> <p>Buildings setback from the primary street boundary in accordance with the following table:</p> <table border="1"> <thead> <tr> <th>Development Context</th> <th>Minimum setback</th> </tr> </thead> <tbody> <tr> <td>There is an existing building on both abutting sites sharing the same street frontage as the site of the proposed building.</td> <td>The average setback of the existing buildings.</td> </tr> <tr> <td>There is an existing building on only one abutting site sharing the same street frontage as the site of the proposed building and the existing building is not on a corner site.</td> <td>The setback of the existing building.</td> </tr> <tr> <td>There is an existing building on only one abutting site sharing the same street frontage as the site of the proposed building and the existing building is on a corner site.</td> <td> <ul style="list-style-type: none"> <li>(a) Where the existing building shares the same primary street frontage – the setback of the existing building</li> <li>(b) Where the existing building has a different primary street frontage - 8m</li> </ul> </td> </tr> </tbody> </table>	Development Context	Minimum setback	There is an existing building on both abutting sites sharing the same street frontage as the site of the proposed building.	The average setback of the existing buildings.	There is an existing building on only one abutting site sharing the same street frontage as the site of the proposed building and the existing building is not on a corner site.	The setback of the existing building.	There is an existing building on only one abutting site sharing the same street frontage as the site of the proposed building and the existing building is on a corner site.	<ul style="list-style-type: none"> <li>(a) Where the existing building shares the same primary street frontage – the setback of the existing building</li> <li>(b) Where the existing building has a different primary street frontage - 8m</li> </ul>
Development Context	Minimum setback								
There is an existing building on both abutting sites sharing the same street frontage as the site of the proposed building.	The average setback of the existing buildings.								
There is an existing building on only one abutting site sharing the same street frontage as the site of the proposed building and the existing building is not on a corner site.	The setback of the existing building.								
There is an existing building on only one abutting site sharing the same street frontage as the site of the proposed building and the existing building is on a corner site.	<ul style="list-style-type: none"> <li>(a) Where the existing building shares the same primary street frontage – the setback of the existing building</li> <li>(b) Where the existing building has a different primary street frontage - 8m</li> </ul>								

	<table border="1"> <tr> <td>There is no existing building on either of the abutting sites sharing the same street frontage as the site of the proposed building.</td> <td>8m</td> </tr> </table> <p>For the purposes of <b>DTS/DPF 3.1</b>:</p> <ul style="list-style-type: none"> <li>(a) the setback of an existing building on an abutting site to the street boundary that it shares with the site of the proposed building is to be measured from the closest building wall to that street boundary at its closest point to the building wall and any existing projection from the building such as a verandah, porch, balcony, awning or bay window is not taken to form part of the building for the purposes of determining its setback</li> <li>(b) any proposed projections such as a verandah, porch, balcony, awning or bay window may encroach not more than 1.5 metres into the minimum setback prescribed in the table</li> </ul>	There is no existing building on either of the abutting sites sharing the same street frontage as the site of the proposed building.	8m
There is no existing building on either of the abutting sites sharing the same street frontage as the site of the proposed building.	8m		
Secondary Street Setback			
<p>PO 4.1</p> <p>Buildings are set back from secondary street boundaries to maintain a pattern of separation between building walls and public thoroughfares and reinforce a streetscape character.</p>	<p>DTS/DPF 4.1</p> <p>Buildings walls are set back at least 2m from the boundary of the allotment with the secondary street frontage.</p>		
Side Boundary Setback			
<p>PO 5.1</p> <p>Buildings are set back from side boundaries to allow maintenance and access around buildings and minimise impacts on adjoining properties.</p>	<p>DTS/DPF 5.1</p> <p>Building walls are set back from the side boundaries at least 2m.</p>		
Rear Boundary Setback			
<p>PO 6.1</p> <p>Buildings are set back from rear boundaries to provide:</p> <ul style="list-style-type: none"> <li>(a) separation between buildings in a way that complements the established character of the locality</li> <li>(b) access to natural light and ventilation for neighbours</li> <li>(c) open space recreational opportunities</li> <li>(d) space for landscaping and vegetation.</li> </ul>	<p>DTS/DPF 6.1</p> <p>Building walls are set back from the rear boundary at least 6m.</p>		
Ancillary Buildings and Structures			
<p>PO 7.1</p> <p>Residential ancillary buildings and structures are sited and designed to not detract from the streetscape or appearance of buildings on the site or neighbouring properties.</p>	<p>DTS/DPF 7.1</p> <p>Ancillary buildings and structures:</p> <ul style="list-style-type: none"> <li>(a) are ancillary to a dwelling erected on the site</li> <li>(b) have a floor area not exceeding             <ul style="list-style-type: none"> <li>(i) 100m<sup>2</sup> on sites less than 2000m<sup>2</sup></li> <li>(ii) 120m<sup>2</sup> on sites 2000m<sup>2</sup> or more</li> </ul> </li> <li>(c) are not constructed, added to or altered so that any part is situated:             <ul style="list-style-type: none"> <li>(i) in front of any part of the building line of the dwelling to which it is ancillary</li> <li>(ii) within 2m of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)</li> <li>(iii) within 2m of a side boundary</li> </ul> </li> <li>(d) in the case of a garage or carport, have a primary street setback that is at least as far back as the dwelling</li> <li>(e) in the case of a garage or carport, do not exceed 10m or 50% of the site frontage (whichever is the lesser) when facing a primary street or secondary street</li> <li>(f) have a wall height or post height not exceeding 4m above natural ground level (and not including a gable end)</li> <li>(g) have a roof height where no part of the roof is more than 5m above the natural ground level</li> <li>(h) if clad in sheet metal, are pre-colour treated or painted in a non-reflective colour</li> </ul>		

	<p>(i) retains a total area of soft landscaping in accordance with (i) or (ii), whichever is less:</p> <p>(i) a total area as determined by the following table:</p> <table border="1"> <thead> <tr> <th>Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m<sup>2</sup>)</th> <th>Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td>&lt;150</td> <td>10%</td> </tr> <tr> <td>150-200</td> <td>15%</td> </tr> <tr> <td>201-450</td> <td>20%</td> </tr> <tr> <td>&gt;450</td> <td>25%</td> </tr> </tbody> </table> <p>(ii) the amount of existing soft landscaping prior to the development occurring.</p>	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site	<150	10%	150-200	15%	201-450	20%	>450	25%
Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site										
<150	10%										
150-200	15%										
201-450	20%										
>450	25%										
<p>PO 7.2</p> <p>Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision, car parking requirements and do not result in over-development of the site.</p>	<p>DTS/DPF 7.2</p> <p>Ancillary buildings and structures do not result in:</p> <p>(a) less private open space than specified in Design Table 1 - Private Open Space</p> <p>(b) less on-site car parking than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas to the nearest whole number.</p>										
<p>PO 7.3</p> <p>Buildings and structures that are ancillary to an existing non-residential use do not detract from the streetscape character, appearance of buildings on the site of the development, or the amenity of neighbouring properties.</p>	<p>DTS/DPF 7.3</p> <p>Non-residential ancillary buildings and structures:</p> <p>(a) are ancillary and subordinate to an existing non-residential use on the same site</p> <p>(b) have a floor area not exceeding the following:</p> <table border="1"> <thead> <tr> <th>Allotment size</th> <th>Floor area</th> </tr> </thead> <tbody> <tr> <td>≤500m<sup>2</sup></td> <td>60m<sup>2</sup></td> </tr> <tr> <td>&gt;500m<sup>2</sup></td> <td>80m<sup>2</sup></td> </tr> </tbody> </table> <p>(c) are not constructed, added to or altered so that any part is situated:</p> <p>(i) in front of any part of the building line of the main building to which it is ancillary</p> <p>or</p> <p>(ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)</p> <p>(d) in the case of a garage or carport, the garage or carport:</p> <p>(i) is set back at least 5.5m from the boundary of the primary street</p> <p>(e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m unless:</p> <p>(i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary</p> <p>(ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent</p> <p>(f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary</p> <p>(g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure</p> <p>(h) have a wall height (or post height) not exceeding 3m (and not including a gable end)</p> <p>(i) have a roof height where no part of the roof is more than 5m above</p>	Allotment size	Floor area	≤500m <sup>2</sup>	60m <sup>2</sup>	>500m <sup>2</sup>	80m <sup>2</sup>				
Allotment size	Floor area										
≤500m <sup>2</sup>	60m <sup>2</sup>										
>500m <sup>2</sup>	80m <sup>2</sup>										

	<p>the natural ground level</p> <p>(j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour.</p>				
Site Dimensions and Land Division					
<p>PO 8.1</p> <p>Allotments/sites created for residential purposes are consistent with the density and dimensions expressed in any relevant <i>Minimum Allotment Size Technical and Numeric Variation</i> or are of suitable size and dimension to contribute to a pattern of development consistent to the locality and suitable for their intended use.</p>	<p>DTS/DPF 8.1</p> <p>Development will not result in more than 1 dwelling on an existing allotment</p> <p>or</p> <p>Allotments/sites for residential purposes accord with the following:</p> <p>(a) where allotments/sites are connected to mains sewer or a Community Wastewater Management System site areas (or allotment areas in the case of land division) are not less than:</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td><b>Minimum Site Area</b></td> </tr> <tr> <td>Minimum site area is 2,000 sqm</td> </tr> </table> <p>(b) where allotments/sites are not connected to mains sewer or an approved common waste water disposal service site areas are not less than the greater of:</p> <p>(i) 1200m<sup>2</sup></p> <p>(ii) the following:</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td><b>Minimum Site Area</b></td> </tr> <tr> <td>Minimum site area is 2,000 sqm</td> </tr> </table> <p>(c) site frontages are not less than 20m.</p> <p>In relation to DTS/DPF 8.1, in instances where:</p> <p>(d) more than one value is returned in the same field, refer to the <i>Minimum Site Area Technical and Numeric Variation layer</i> in the SA planning database to determine the applicable value relevant to the site of the proposed development</p> <p>(e) no value is returned for DTS/DPF 8.1(a) (i.e. there is a blank field), then none are applicable and the relevant development cannot be classified as deemed-to-satisfy</p> <p>(f) no value is returned for DTS/DPF 8.1(b)(ii) then the value for DTS/DPF 8.1(b)(ii) is zero.</p>	<b>Minimum Site Area</b>	Minimum site area is 2,000 sqm	<b>Minimum Site Area</b>	Minimum site area is 2,000 sqm
<b>Minimum Site Area</b>					
Minimum site area is 2,000 sqm					
<b>Minimum Site Area</b>					
Minimum site area is 2,000 sqm					
Concept Plans					
<p>PO 9.1</p> <p>Development is compatible with the outcomes sought by any relevant Concept Plan contained within Part 12 - Concept Plans of the Planning and Design Code to support the orderly development of land through staging of development and provision of infrastructure.</p>	<p>DTS/DPF 9.1</p> <p>The site of the development is wholly located outside any relevant Concept Plan boundary. The following Concept Plans are relevant:</p> <p>In relation to DTS/DPF 9.1, in instances where:</p> <p>(a) one or more Concept Plan is returned, refer to Part 12 - Concept Plans in the Planning and Design Code to determine if a Concept Plan is relevant to the site of the proposed development. Note: multiple concept plans may be relevant.</p> <p>(b) in instances where 'no value' is returned, there is no relevant concept plan and DTS/DPF 9.1 is met.</p>				
Advertisements					
<p>PO 10.1</p> <p>Advertisements identify the associated business activity, and do not detract from the residential character of the locality.</p>	<p>DTS/DPF 10.1</p> <p>Advertisements relating to a lawful business activity associated with a residential use do not exceed 0.3m2 and mounted flush with a wall or fence.</p>				

**Table 5 - Procedural Matters (PM) - Notification**

The following table identifies, pursuant to section 107(6) of the *Planning, Development and Infrastructure Act 2016*, classes of performance assessed development that are excluded from notification. The table also identifies any exemptions to the placement of notices when notification is required.

**Interpretation**



Notification tables exclude the classes of development listed in Column A from notification provided that they do not fall within a corresponding exclusion prescribed in Column B.

Where a development or an element of a development falls within more than one class of development listed in Column A, it will be excluded from notification if it is excluded (in its entirety) under any of those classes of development. It need not be excluded under all applicable classes of development.

Where a development involves multiple performance assessed elements, all performance assessed elements will require notification (regardless of whether one or more elements are excluded in the applicable notification table) unless every performance assessed element of the application is excluded in the applicable notification table, in which case the application will not require notification.

A relevant authority may determine that a variation to 1 or more corresponding exclusions prescribed in Column B is minor in nature and does not require notification.

Class of Development (Column A)	Exceptions (Column B)
1. Development which, in the opinion of the relevant authority, is of a minor nature only and will not unreasonably impact on the owners or occupiers of land in the locality of the site of the development.	None specified.
2. All development undertaken by: <ul style="list-style-type: none"> <li>(a) the South Australian Housing Trust either individually or jointly with other persons or bodies or</li> <li>(b) a provider registered under the Community Housing National Law participating in a program relating to the renewal of housing endorsed by the South Australian Housing Trust.</li> </ul>	Except development involving any of the following: <ul style="list-style-type: none"> <li>1. residential flat building(s) of 3 or more building levels</li> <li>2. the demolition (or partial demolition) of a State or Local Heritage Place (other than an excluded building)</li> <li>3. the demolition (or partial demolition) of a building in a Historic Area Overlay (other than an excluded building).</li> </ul>
3. Any development involving any of the following (or of any combination of any of the following): <ul style="list-style-type: none"> <li>(a) ancillary accommodation</li> <li>(b) detached dwelling</li> <li>(c) dwelling addition.</li> </ul>	Except development that does not satisfy Rural Neighbourhood Zone DTS/DPF 2.1.
4. Any development involving any of the following (or of any combination of any of the following): <ul style="list-style-type: none"> <li>(a) consulting room</li> <li>(b) office</li> <li>(c) shop.</li> </ul>	Except development that does not satisfy any of the following: <ul style="list-style-type: none"> <li>1. Rural Neighbourhood Zone DTS/DPF 1.2</li> <li>2. Rural Neighbourhood Zone DTS/DPF 2.1.</li> </ul>
5. Any development involving any of the following (or of any combination of any of the following): <ul style="list-style-type: none"> <li>(a) air handling unit, air conditioning system or exhaust fan</li> <li>(b) carport</li> <li>(c) deck</li> <li>(d) fence</li> <li>(e) internal building works</li> <li>(f) land division</li> <li>(g) outbuilding</li> <li>(h) pergola</li> <li>(i) private bushfire shelter</li> <li>(j) recreation area</li> <li>(k) replacement building</li> <li>(l) retaining wall</li> <li>(m) shade sail</li> <li>(n) solar photovoltaic panels (roof mounted)</li> <li>(o) swimming pool or spa pool and associated swimming pool safety features</li> <li>(p) temporary accommodation in an area affected by bushfire</li> <li>(q) tree damaging activity</li> <li>(r) verandah</li> <li>(s) water tank.</li> </ul>	None specified.

6. Demolition.	Except any of the following: <ul style="list-style-type: none"> <li>1. the demolition (or partial demolition) of a State or Local Heritage Place (other than an excluded building)</li> <li>2. the demolition (or partial demolition) of a building in a Historic Area Overlay (other than an excluded building).</li> </ul>
7. Railway line.	Except where located outside of a rail corridor or rail reserve.

#### Placement of Notices - Exemptions for Performance Assessed Development

None specified.

#### Placement of Notices - Exemptions for Restricted Development

None specified.

### Adelaide Hills Subzone

Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Additional residential and tourist accommodation that retains and embraces the values of the established mature vegetation as a defining characteristic of the area.
DO 2	Land division is sympathetic to the allotment pattern and characteristics within the locality.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 A limited additional range of accommodation options that complement the prevailing residential character.	DTS/DPF 1.1 Development comprises one or more of the land uses listed, in addition to those listed in Rural Neighbourhood Zone DTS 1.1:  (a) Supported accommodation (b) Tourist accommodation.
Site Dimensions and Land Division	
PO 2.1 Allotments/sites created for residential purposes are consistent with the established pattern of division surrounding the development site to maintain local character and amenity.	DTS/DPF 2.1 Development satisfies (a) or (b):  (a) it will not result in more than 1 dwelling on an existing allotment (b) allotments/sites have an area the greater of the following (excluding the area within the access 'handle' if in the form of a battle-axe development): (i) 2000m <sup>2</sup> (ii) the median allotment size of all residential allotments in the Adelaide Hills Subzone either wholly or partly within a radius of 200m measured from the centre of the main allotment frontage.

PO 2.2	DTS/DPF 2.2
Allotments/sites are sized and configured to maximise the retention of mature vegetation to maintain landscape amenity.	None are applicable.

## Part 3 - Overlays

### Hazards (Bushfire - Medium Risk) Overlay

#### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Development, including land division responds to the medium level of bushfire risk and potential for ember attack and radiant heat by siting and designing buildings in a manner that mitigates the threat and impact of bushfires on life and property taking into account the increased frequency and intensity of bushfires as a result of climate change.
DO 2	To facilitate access for emergency service vehicles to aid the protection of lives and assets from bushfire danger.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting	
PO 1.1 Buildings and structures are located away from areas that pose an unacceptable bushfire risk as a result of vegetation cover and type, and terrain.	DTS/DPF 1.1 None are applicable.
Built Form	
PO 2.1 Buildings and structures are designed and configured to reduce the impact of bushfire through using designs that reduce the potential for trapping burning debris against or underneath the building or structure, or between the ground and building floor level in the case of transportable buildings and buildings on stilts.	DTS/DPF 2.1 None are applicable.
PO 2.2 Extensions to buildings, outbuildings and other ancillary structures are sited and constructed using materials to minimise the threat of fire spread to residential and tourist accommodation (including boarding houses, hostels, dormitory style accommodation, student accommodation and Workers' accommodation) in the event of bushfire.	DTS/DPF 2.2 Outbuildings and other ancillary structures are sited no closer than 6m from the habitable building.
Habitable Buildings	
PO 3.1 To minimise the threat, impact and potential exposure to bushfires on life and property, residential and tourist accommodation and habitable buildings for vulnerable communities (including boarding houses, hostels, dormitory style	DTS/DPF 3.1 None are applicable.

accommodation, student accommodation and workers' accommodation) is sited on the flatter portion of allotments away from steep slopes.	
<p>PO 3.2</p> <p>Residential, tourist accommodation and habitable buildings for vulnerable communities (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation) is sited away from vegetated areas that pose an unacceptable bushfire risk.</p>	<p>DTS/DPF 3.2</p> <p>Residential, tourist accommodation and habitable buildings for vulnerable communities are provided with asset protection zone(s) in accordance with (a) and (b):</p> <p>(a) the asset protection zone has a minimum width of at least:</p> <p>(i) 50 metres to unmanaged grasslands</p> <p>(ii) 100 metres to hazardous bushland vegetation</p> <p>(b) the asset protection zone is contained wholly within the allotment of the development.</p>
<p>PO 3.3</p> <p>Residential, tourist accommodation and habitable buildings for vulnerable communities, (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation), has a dedicated area available that is capable of accommodating a bushfire protection system comprising firefighting equipment and water supply in accordance with <i>Ministerial Building Standard MBS 008 - Designated bushfire prone areas - additional requirements</i>.</p>	<p>DTS/DPF 3.3</p> <p>None are applicable.</p>
Land Division	
<p>PO 4.1</p> <p>Land division is designed and incorporates measures to minimise the danger of fire hazard to residents and occupants of buildings, and to protect buildings and property from physical damage in the event of a bushfire.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
<p>PO 4.2</p> <p>Land division is designed to provide a continuous street pattern to facilitate the safe movement and evacuation of emergency vehicles, residents, occupants and visitors.</p>	<p>DTS/DPF 4.2</p> <p>None are applicable.</p>
<p>PO 4.3</p> <p>Where 10 or more new allotments are proposed, land division includes at least two separate and safe exit points to enable multiple avenues of evacuation in the event of a bushfire.</p>	<p>DTS/DPF 4.3</p> <p>None are applicable.</p>
<p>PO 4.4</p> <p>Land division incorporates perimeter roads of adequate design in conjunction with bushfire buffer zones to achieve adequate separation between residential allotments and areas of unacceptable bushfire risk and to support safe access for the purposes of fire-fighting.</p>	<p>DTS/DPF 4.4</p> <p>None are applicable.</p>
Vehicle Access - Roads, Driveways and Fire Tracks	
<p>PO 5.1</p> <p>Roads are designed and constructed to facilitate the safe and effective:</p> <p>(a) access, operation and evacuation of fire-fighting vehicles and emergency personnel</p> <p>(b) evacuation of residents, occupants and visitors.</p>	<p>DTS/DPF 5.1</p> <p>Roads:</p> <p>(a) are constructed with a formed, all-weather surface</p> <p>(b) have a gradient of not more than 16 degrees (1-in-3.5) at any point along the road</p> <p>(c) have a cross fall of not more than 6 degrees (1-in-9.5) at any point along the road</p> <p>(d) have a minimum formed road width of 6m</p> <p>(e) provide overhead clearance of not less than 4.0m between the road surface and overhanging branches or other obstructions including buildings and/or structures (Figure 1)</p> <p>(f) allow fire-fighting services (personnel and vehicles) to travel in a continuous forward movement around road curves by constructing the curves with a minimum external radius of 12.5m (Figure 2)</p> <p>(g) incorporating cul-de-sac endings or dead end roads do not exceed 200m in length and the end of the road has either:</p> <p>(i) a turning area with a minimum formed surface radius of 12.5m (Figure 3)</p> <p>or</p>

	<ul style="list-style-type: none"> <li>(ii) a 'T' or 'Y' shaped turning area with a minimum formed surface length of 11m and minimum internal radii of 9.5m (Figure 4)</li> <li>(h) incorporate solid, all-weather crossings over any watercourse that support fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.</li> </ul>
<p>PO 5.2</p> <p>Access to habitable buildings is designed and constructed to facilitate the safe and effective:</p> <ul style="list-style-type: none"> <li>(a) access, operation and evacuation of fire-fighting vehicles and emergency personnel</li> <li>(b) evacuation of residents, occupants and visitors.</li> </ul>	<p>DTS/DPF 5.2</p> <p>Access is in accordance with (a) or (b):</p> <ul style="list-style-type: none"> <li>(a) a clear and unobstructed vehicle or pedestrian pathway of not greater than 60 metres in length is available between the most distant part of the habitable building and the nearest part of a formed public access road</li> <li>(b) driveways:             <ul style="list-style-type: none"> <li>(i) do not exceed 600m in length</li> <li>(ii) are constructed with a formed, all-weather surface</li> <li>(iii) are connected to a formed, all-weather public road with the transition area between the road and driveway having a gradient of not more than 7 degrees (1-in-8)</li> <li>(iv) have a gradient of not more than 16 degrees (1-in-3.5) at any point along the driveway</li> <li>(v) have a crossfall of not more than 6 degrees (1-in-9.5) at any point along the driveway</li> <li>(vi) have a minimum formed width of 3m (4m where the gradient of the driveway is steeper than 12 degrees (1-in-4.5)) plus 0.5 metres clearance either side of the driveway from overhanging branches or other obstructions, including buildings and/or structures (Figure 1)</li> <li>(vii) incorporate passing bays with a minimum width of 6m and length of 17m every 200m (Figure 5)</li> <li>(viii) provide overhead clearance of not less than 4.0m between the driveway surface and overhanging branches or other obstructions, including buildings and/or structures (Figure 1)</li> <li>(ix) allow fire-fighting services (personnel and vehicles) to travel in a continuous forward movement around driveway curves by constructing the curves with a minimum external radius of 12.5m (Figure 2)</li> <li>(x) allow fire-fighting vehicles to safely enter and exit an allotment in a forward direction by using a 'U' shaped drive through design or by incorporating at the end of the driveway either:                 <ul style="list-style-type: none"> <li>A. a loop road around the building or</li> <li>B. a turning area with a minimum radius of 12.5m (Figure 3) or</li> <li>C. a 'T' or 'Y' shaped turning area with a minimum formed length of 11m and minimum internal radii of 9.5m (Figure 4)</li> </ul> </li> <li>(xi) incorporate solid, all-weather crossings over any watercourse that support fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.</li> </ul> </li> </ul>
<p>PO 5.3</p> <p>Development does not rely on fire tracks as means of evacuation or access for fire-fighting purposes unless there are no safe alternatives available.</p>	<p>DTS/DPF 5.3</p> <p>None are applicable.</p>

**Procedural Matters (PM) - Referrals**

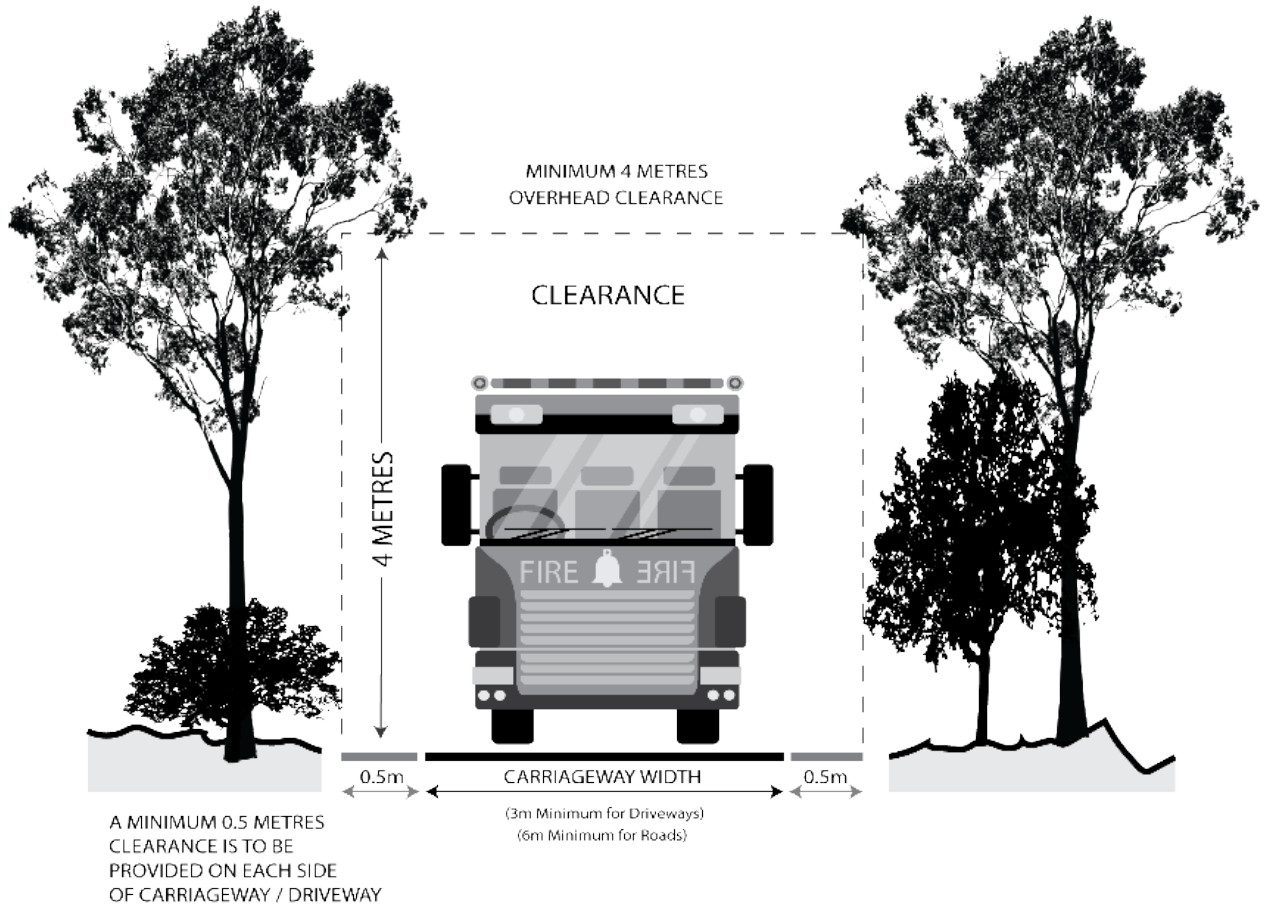
The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
None	None	None	None

Figures and Diagrams

Fire Engine and Appliance Clearances

Figure 1 - Overhead and Side Clearances



Roads and Driveway Design

Figure 2 - Road and Driveway Curves

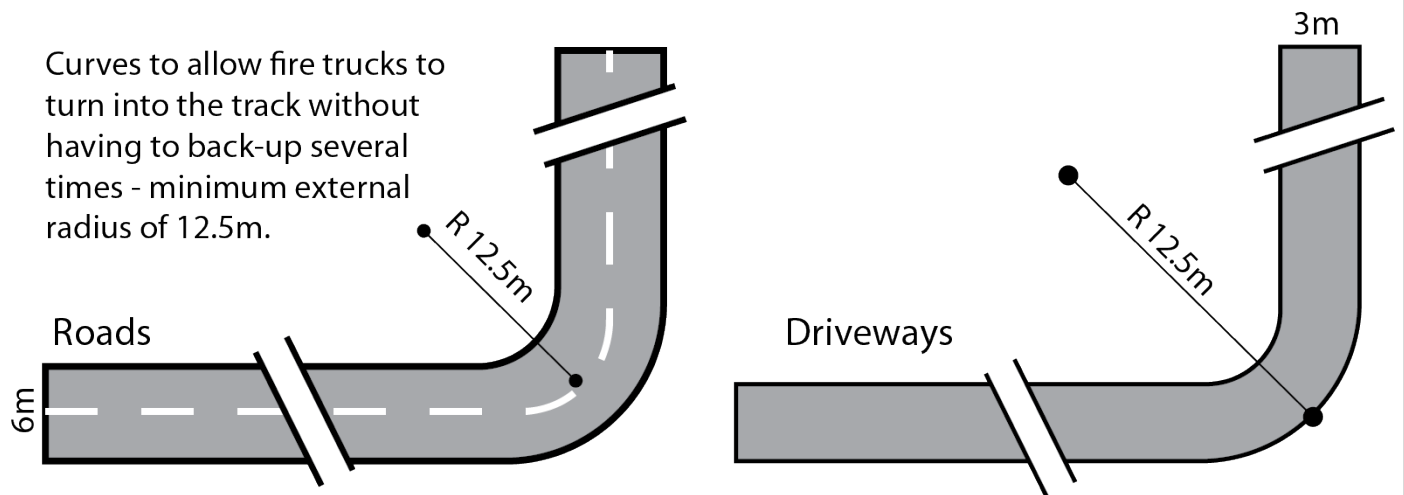


Figure 3 - Full Circle Turning Area

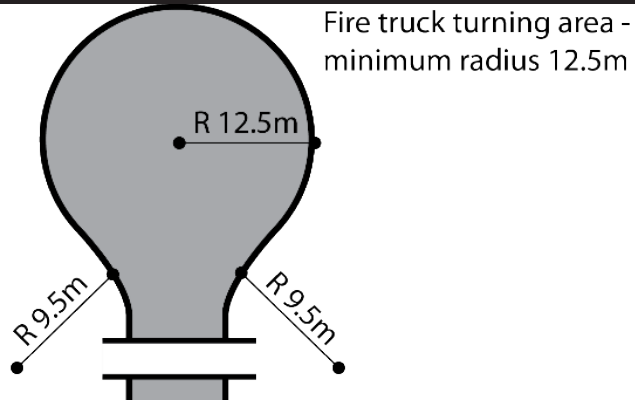
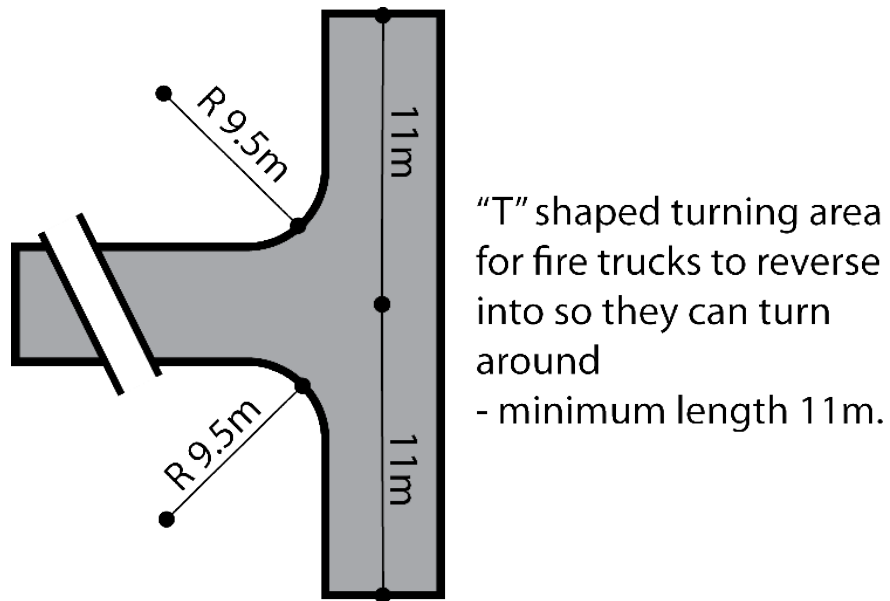


Figure 4 - 'T' or 'Y' Shaped Turning Head



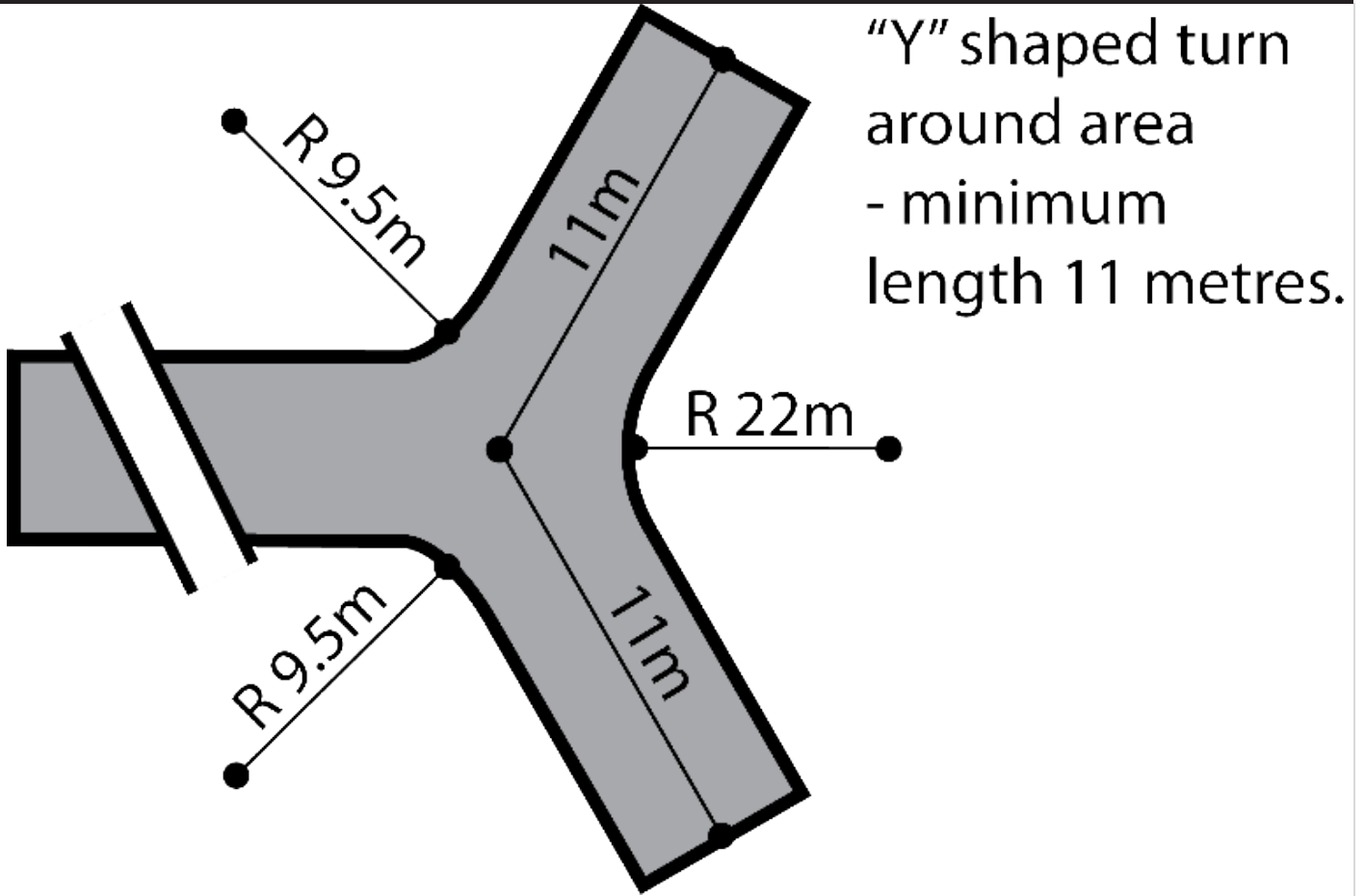
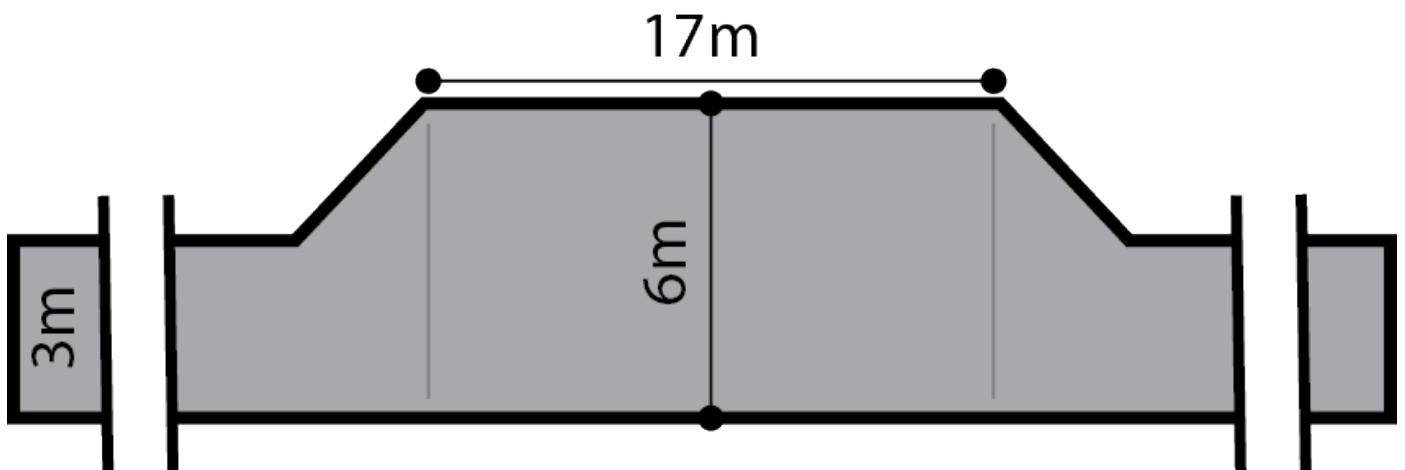


Figure 5 - Driveway Passing Bays

Passing bay for fire trucks - minimum width 6 metres, minimum length 17 metres.



**Hazards (Flooding - Evidence Required) Overlay**

**Assessment Provisions (AP)**

Desired Outcome (DO)



## Desired Outcome

DO 1	Development adopts a precautionary approach to mitigate potential impacts on people, property, infrastructure and the environment from potential flood risk through the appropriate siting and design of development.
------	---

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Flood Resilience	
PO 1.1 Development is sited, designed and constructed to minimise the risk of entry of potential floodwaters where the entry of flood waters is likely to result in undue damage to or compromise ongoing activities within buildings.	DTS/DPF 1.1 Habitable buildings, commercial and industrial buildings, and buildings used for animal keeping incorporate a finished floor level at least 300mm above: <ul style="list-style-type: none"> <li>(a) the highest point of top of kerb of the primary street</li> <li>or</li> <li>(b) the highest point of natural ground level at the primary street boundary where there is no kerb</li> </ul>
Environmental Protection	
PO 2.1 Buildings and structures used either partly or wholly to contain or store hazardous materials are designed to prevent spills or leaks leaving the confines of the building.	DTS/DPF 2.1 Development does not involve the storage of hazardous materials.

### Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
None	None	None	None

## Mount Lofty Ranges Water Supply Catchment (Area 1) Overlay

### Assessment Provisions (AP)

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Stormwater	
DTS/DPF 3.4 Development includes: <ul style="list-style-type: none"> <li>(a) rainwater tanks with a minimum capacity of 1,000L connected to carports, verandahs and outbuildings or</li> <li>(b) rainwater tanks with a minimum capacity of 4,500L connected to agricultural buildings exceeding 100m<sup>2</sup>.</li> </ul>	DTS/DPF 3.5 Dwelling additions are connected to a rainwater tank with a minimum capacity of 1,000L.
DTS/DPF 3.9 Excavation and/or filling satisfy all the following: <ul style="list-style-type: none"> <li>(a) is located 50m or more from watercourses</li> <li>(b) is located 100m or more from public water supply reservoirs and</li> </ul>	

diversion weirs (c) does not involve excavation exceeding a vertical height of 0.75m (d) does not involve filling exceeding a vertical height of 0.75m (e) does not involve a total combined excavation and filling vertical height of 1.5m.
---

**Mount Lofty Ranges Water Supply Catchment (Area 2) Overlay**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Safeguard Greater Adelaide's public water supply by ensuring development has a neutral or beneficial effect on the quality of water harvested from secondary reservoirs or diversion weir catchments from the Mount Lofty Ranges.

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Water Quality	
PO 1.1 Development results in a neutral or beneficial effect on the quality of water draining from the site to maintain and enhance the role of the catchment as a water supply.	DTS/DPF 1.1 None are applicable.
PO 1.2 Development does not include land uses that have the potential to cause adverse impacts on the quality of water draining into secondary public water supply reservoirs and weirs.	DTS/DPF 1.2 Development does not involve any one or combination of the following: (a) landfill (b) special industry.
Wastewater	
PO 2.1 Development that generates human wastewater, including alterations and additions, are established at an intensity and in a manner to minimise potential adverse impact on water quality within secondary reservoir and weir catchment areas.	DTS/DPF 2.1 Development including alterations and additions, in combination with existing built form and activities within an allotment: (a) do not generate a combined total of more than 1500 litres of wastewater per day and (b) will be connected to the same on-site wastewater system that is compliant with relevant South Australian standards  or is otherwise connected to a sewer or community wastewater management system.
PO 2.2 Dairy development is of a scale and design that will avoid adverse water quality impacts.	DTS/DPF 2.2 Dairy development satisfies all of the following: (a) is located at least 100 metres from any watercourse, dam, bore or well (b) is connected to a wastewater management system that is located 200 metres from any watercourse, dam, bore or well and is designed

	<p>and constructed to avoid leakage to groundwater or overflow under extreme rainfall conditions</p> <p>(c) treated wastewater irrigation areas:</p> <ul style="list-style-type: none"> <li>(i) have a slope of less than 1-in-5 (20 percent)</li> <li>(ii) are greater than 100 metres from any watercourse, dam, bore or well</li> </ul> <p>are suitable to provide for seasonal wastewater irrigation without causing pollution of surface or groundwater.</p>
<p>PO 2.3</p> <p>Development that generates trade or industrial wastewater is designed to ensure wastewater disposal avoids adverse impacts on the quality of water draining into secondary public water supply reservoirs and weirs.</p>	<p>DTS/DPF 2.3</p> <p>Development that generates trade or industrial wastewater is connected to:</p> <ul style="list-style-type: none"> <li>(a) a sewer or community wastewater management system with sufficient hydraulic and treatment capacity to accept the inflow or</li> <li>(b) an on-site wastewater holding tank which has storage capacity of more than four days total flow during peak operations and is contained within an impervious, bunded area with a total liquid holding capacity of more than 120 percent of the total holding tank capacity, prior to transporting for off-site disposal.</li> </ul>
<p>PO 2.4</p> <p>Wastewater management systems result in a neutral or beneficial effect on the quality of water draining from the site.</p>	<p>DTS/DPF 2.4</p> <p>Development results in:</p> <ul style="list-style-type: none"> <li>(a) a building or land use that is currently connected to an existing on-site wastewater system that is non-compliant with relevant South Australian standards being connected to a new or upgraded system that complies with such standards or</li> <li>(b) an existing on-site wastewater system being decommissioned and wastewater being disposed of to a sewer or community wastewater management system that complies with relevant South Australian standards.</li> </ul>
<p>PO 2.5</p> <p>Surface and groundwater protected from wastewater discharge pollution.</p>	<p>DTS/DPF 2.5</p> <p>All components of an effluent disposal area are:</p> <ul style="list-style-type: none"> <li>(a) setback 50 metres or more from a watercourse</li> <li>(b) setback 100 metres or more from a public water supply reservoir</li> <li>(c) located on land with a slope no greater than 1-in-5 (20%)</li> <li>(d) located on land with 1.2m or more depth to bedrock or a seasonal or permanent water table</li> <li>(e) above the 10% AEP flood level.</li> </ul>
Stormwater	
<p>PO 3.1</p> <p>Post-development peak stormwater discharge quantities and rates do not exceed pre-development quantities and rates to maintain water quality leaving the site.</p>	<p>DTS/DPF 3.1</p> <p>None are applicable.</p>
<p>PO 3.2</p> <p>Stormwater run-off from areas not likely to be subject to pollution diverted away from areas that could cause pollution.</p>	<p>DTS/DPF 3.2</p> <p>None are applicable.</p>
<p>PO 3.3</p> <p>Polluted stormwater is treated prior to discharge from the site.</p>	<p>DTS/DPF 3.3</p> <p>None are applicable.</p>
<p>PO 3.4</p> <p>Stormwater from carports, verandahs, outbuildings and agricultural buildings captured to protect water quality.</p>	<p>DTS/DPF 3.4</p> <p>Development includes:</p> <ul style="list-style-type: none"> <li>(a) rainwater tanks with a minimum capacity of 1,000L connected to carports, verandahs and outbuildings or</li> <li>(b) rainwater tanks with a minimum capacity of 4,500L connected to agricultural buildings exceeding 100m<sup>2</sup>.</li> </ul>

<p>PO 3.5</p> <p>Stormwater from dwelling additions captured to protect water quality.</p>	<p>DTS/DPF 3.5</p> <p>Dwelling additions are connected to a rainwater tank with a minimum capacity of 1,000L.</p>
<p>PO 3.6</p> <p>Stormwater from shops and tourist accommodation is managed to protect water quality.</p>	<p>DTS/DPF 3.6</p> <p>Shops and tourist accommodation satisfy all the following:</p> <ul style="list-style-type: none"> <li>(a) are located 50m or more from watercourses, wetlands, land prone to waterlogging and bores</li> <li>(b) are located 100m or more from public water supply reservoirs and diversion weirs</li> <li>(c) are located on land with a slope not exceeding 20%</li> <li>(d) includes buildings connected to rainwater tanks with a minimum capacity of 1,000L</li> <li>(e) includes swales that divert clean stormwater away from areas where it could be polluted.</li> </ul>
<p>PO 3.7</p> <p>Stormwater from horse keeping and low intensity animal husbandry is managed to protect water quality.</p>	<p>DTS/DPF 3.7</p> <p>Horse keeping and low intensity animal husbandry satisfy all the following:</p> <ul style="list-style-type: none"> <li>(a) is located 50m or more from watercourses, wetlands, land prone to waterlogging and bores</li> <li>(b) is located on land with a slope not exceeding 10%</li> <li>(c) includes stables, shelters or other roofed structures connected to rainwater tanks with a minimum capacity of 1,000L</li> <li>(d) includes swales that divert clean stormwater away from areas (including yards, manure storage areas, and watering points) within which it could be polluted.</li> </ul>
<p>PO 3.8</p> <p>Stormwater from horticulture is managed to protect water quality.</p>	<p>DTS/DPF 3.8</p> <p>Horticulture satisfies all the following:</p> <ul style="list-style-type: none"> <li>(a) is located 50m or more from watercourses, wetlands, land prone to waterlogging and bores</li> <li>(b) is located 100m or more from public water supply reservoirs and diversion weirs</li> <li>(c) is located on land with a slope not exceeding 10%</li> <li>(d) includes swales or other structures that divert clean stormwater away from areas (including plant growing areas, chemical storage areas and plant waste storage areas) within which it could be polluted.</li> </ul>
<p>PO 3.9</p> <p>Stormwater from excavated and filled areas is managed to protect water quality.</p>	<p>DTS/DPF 3.9</p> <p>Excavation and/or filling satisfy all the following:</p> <ul style="list-style-type: none"> <li>(a) is located 50m or more from watercourses</li> <li>(b) is located 100m or more from public water supply reservoirs and diversion weirs</li> <li>(c) does not involve excavation exceeding a vertical height of 0.75m</li> <li>(d) does not involve filling exceeding a vertical height of 0.75m</li> <li>(e) does not involve a total combined excavation and filling vertical height of 1.5m.</li> </ul>
Landscapes and Natural Features	
<p>PO 4.1</p> <p>Development minimises the need to modify landscapes and natural features.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
Land Division	
<p>PO 5.1</p> <p>Land division does not result in an increased risk of pollution to surface or underground water.</p>	<p>DTS/DPF 5.1</p> <p>Land division does not create additional allotments and satisfies (a) and/or (b):</p> <ul style="list-style-type: none"> <li>(a) is for realignment of allotment boundaries to correct an anomaly in the placement of those boundaries with respect to the location of existing buildings or structures</li> </ul>

	<p>or (b) is for realignment of allotment boundaries in order to improve management of the land for primary production and/or conservation of natural features.</p>
<p>PO 5.2 Realignment of allotment boundaries does not create development potential for a dwelling and associated onsite wastewater management system where no such potential currently exists.</p>	<p>DTS/DPF 5.2 None are applicable.</p>

**Procedural Matters (PM)**

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
<p>Any of the following classes of development that are not connected (or not proposed to be connected) to a community wastewater management system or sewerage infrastructure:</p> <ul style="list-style-type: none"> <li>(a) land division creating one or more additional allotments, either partly or wholly within the area of the overlay</li> <li>(b) function venue with more than 75 seats for customer dining purposes</li> <li>(c) restaurant with more than 40 seats for customer dining purposes</li> <li>(d) restaurant with more than 30 seats for customer dining purposes in association with a cellar door</li> <li>(e) dwelling where a habitable dwelling or tourist accommodation or workers' accommodation already exists on the same allotment (including where a valid planning authorisation exists to erect a dwelling or tourist accommodation or workers' accommodation on the same allotment), except where the existing habitable dwelling or tourist accommodation or workers' accommodation on the same allotment is proposed to be demolished and the existing on-site wastewater system is proposed to be decommissioned</li> <li>(f) tourist accommodation where a habitable dwelling or tourist accommodation or workers' accommodation already exists on the same allotment (including where a valid planning authorisation exists to erect a habitable dwelling or tourist accommodation or workers' accommodation on the same allotment), except where the existing habitable dwelling or tourist accommodation or workers' accommodation on the same allotment is proposed to be demolished and the existing on-site wastewater system is proposed to be decommissioned</li> <li>(g) workers' accommodation where a habitable dwelling or tourist accommodation or workers' accommodation already exists on the same allotment (including where a valid planning authorisation exists to erect a habitable dwelling or tourist accommodation or workers' accommodation on the same allotment), except where the existing habitable dwelling or tourist accommodation or workers' accommodation on the same allotment is proposed to be demolished and the existing on-site wastewater system is proposed to be decommissioned</li> <li>(h) any other development that generates human wastewater from a peak loading capacity of more than 40 persons (or more than 6,000 litres/day)</li> </ul>	<p>Environment Protection Authority.</p>	<p>To provide expert technical assessment and direction to the relevant authority on whether a proposed development will have a neutral or beneficial impact on water quality.</p>	<p>Development of a class to which Schedule 9 clause 3 item 9 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.</p>
<p>Composting works (excluding a prescribed approved activity)</p>			

- being a depot, facility or works with the capacity to treat, during a 12 month period more than 200 tonnes of organic waste or matter (EPA Licence)			
Wastewater treatment works - being sewage treatment works, a community wastewater management system, winery wastewater treatment works or any other wastewater treatment works with the capacity to treat, during a 12 month period more than 2.5 ML of wastewater (EPA Licence required at more than 5ML)			
Feedlots - being carrying on an operation for holding in confined yard or area and feeding principally by mechanical means or by hand not less than an average of 200 cattle (EPA Licence) or 1,600 sheep or goats per day over any period of 12 months, but excluding any such operation carried on at an abattoir, slaughterhouse or saleyard or for the purpose only of drought or other emergency feeding			
Piggeries - being the conduct of a piggery (being premises having confined or roofed structures for keeping pigs) with a capacity of 130 or more standard pig units (EPA Licence required at 650 or more standard pig units)			
Dairies - carrying on of a dairy with a total processing capacity exceeding 100 milking animals at any one time.			

**Native Vegetation Overlay**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Areas of native vegetation are protected, retained and restored in order to sustain biodiversity, threatened species and vegetation communities, fauna habitat, ecosystem services, carbon storage and amenity values.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Environmental Protection	
PO 1.1 Development avoids, or where it cannot be practically avoided, minimises the clearance of native vegetation taking into account the siting of buildings, access points, bushfire protection measures and building maintenance.	DTS/DPF 1.1 An application is accompanied by: <ul style="list-style-type: none"> <li>(a) a declaration stating that the proposal will not, or would not, involve clearance of native vegetation under the Native Vegetation Act 1991, including any clearance that may occur:                             <ul style="list-style-type: none"> <li>(i) in connection with a relevant access point and / or driveway</li> <li>(ii) within 10m of a building (other than a residential building or tourist accommodation)</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>(iii) within 20m of a dwelling or addition to an existing dwelling for fire prevention and control</li> <li>(iv) within 50m of residential or tourist accommodation in connection with a requirement under a relevant overlay to establish an asset protection zone in a bushfire prone area</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>(b) a report prepared in accordance with Regulation 18(2)(a) of the Native Vegetation Regulations 2017 that establishes that the clearance is categorised as 'Level 1 clearance'.</li> </ul>
<p>PO 1.2</p> <p>Native vegetation clearance in association with development avoids the following:</p> <ul style="list-style-type: none"> <li>(a) significant wildlife habitat and movement corridors</li> <li>(b) rare, vulnerable or endangered plants species</li> <li>(c) native vegetation that is significant because it is located in an area which has been extensively cleared</li> <li>(d) native vegetation that is growing in, or in association with, a wetland environment.</li> </ul>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>Intensive animal husbandry, commercial forestry and agricultural activities are sited, set back and designed to minimise impacts on native vegetation, including impacts on native vegetation in an adjacent State Significant Native Vegetation Area, from:</p> <ul style="list-style-type: none"> <li>(a) in the case of commercial forestry, the spread of fires from a plantation</li> <li>(b) the spread of pest plants and phytophthora</li> <li>(c) the spread of non-indigenous plants species</li> <li>(d) excessive nutrient loading of the soil or loading arising from surface water runoff</li> <li>(e) soil compaction</li> <li>(f) chemical spray drift.</li> </ul>	<p>DTS/DPF 1.3</p> <p>Development within 500 metres of a boundary of a State Significant Native Vegetation Area does not involve any of the following:</p> <ul style="list-style-type: none"> <li>(a) horticulture</li> <li>(b) intensive animal husbandry</li> <li>(c) dairy</li> <li>(d) commercial forestry</li> <li>(e) aquaculture.</li> </ul>
<p>PO 1.4</p> <p>Development restores and enhances biodiversity and habitat values through revegetation using locally indigenous plant species.</p>	<p>DTS/DPF 1.4</p> <p>None are applicable.</p>
<p>Land division</p>	
<p>PO 2.1</p> <p>Land division does not result in the fragmentation of land containing native vegetation, or necessitate the clearance of native vegetation, unless such clearance is considered minor, taking into account the location of allotment boundaries, access ways, fire breaks, boundary fencing and potential building siting or the like.</p>	<p>DTS/DPF 2.1</p> <p>Land division where:</p> <ul style="list-style-type: none"> <li>(a) an application is accompanied by one of the following:             <ul style="list-style-type: none"> <li>(i) a declaration stating that none of the allotments in the proposed plan of division contain native vegetation under the <i>Native Vegetation Act 1991</i></li> <li>(ii) a declaration stating that no native vegetation clearance under the <i>Native Vegetation Act 1991</i> will be required as a result of the division of land</li> <li>(iii) a report prepared in accordance with Regulation 18(2)(a) of the Native Vegetation Regulations 2017 that establishes that the vegetation to be cleared is categorised as 'Level 1 clearance'</li> </ul> </li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>(b) an application for land division which is being considered concurrently with a proposal to develop each allotment which will satisfy, or would satisfy, the requirements of DTS/DPF 1.1, including any clearance that may occur</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>(c) the division is to support a Heritage Agreement under the Native Vegetation Act 1991 or the <i>Heritage Places Act 1993</i>.</li> </ul>

### Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Development that is the subject of a report prepared in accordance with Regulation 18(2)(a) of the <i>Native Vegetation Regulations 2017</i> that categorises the clearance, or potential clearance, as 'Level 3 clearance' or 'Level 4 clearance'.	Native Vegetation Council	To provide expert assessment and direction to the relevant authority on the potential impacts of development on native vegetation.	Development of a class to which Schedule 9 clause 3 item 11 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

### Prescribed Water Resources Area Overlay

#### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Sustainable water use in prescribed water resources areas maintains the health and natural flow paths of surface water, watercourses and wells.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
<p>PO 1.1</p> <p>All development, but in particular development involving any of the following:</p> <ul style="list-style-type: none"> <li>(a) horticulture</li> <li>(b) activities requiring irrigation</li> <li>(c) aquaculture</li> <li>(d) industry</li> <li>(e) intensive animal husbandry</li> <li>(f) commercial forestry</li> </ul> <p>has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in prescribed water resource areas.</p>	<p>DTS/DPF 1.1</p> <p>Development satisfies either of the following:</p> <ul style="list-style-type: none"> <li>(a) the applicant has a current water licence in which sufficient spare capacity exists to accommodate the water needs of the proposed use or</li> <li>(b) the proposal does not involve the taking of water for which a licence would be required under the <i>Landscape South Australia Act 2019</i>.</li> </ul>
<p>PO 1.2</p> <p>Development comprising the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert surface water flowing over land is undertaken in a manner that maintains the quality and quantity of flows required to meet the needs of the environment as well as downstream users.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>



**Procedural Matters (PM) - Referrals**

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Development that comprises the erection, construction, modification, enlargement or removal of a dam, wall or other structure that will collect or divert, or collects or diverts surface water flowing over land.	Relevant authority under the <i>Landscape South Australia Act 2019</i> that would, if it were not for the operation of section 106(1)(e) of that Act, have the authority under that Act to grant or refuse a permit to undertake the subject development.	To provide expert assessment and direction to the relevant authority on potential impacts from development on the health, sustainability and/or natural flow paths of water resources in accordance with the provisions of the relevant water allocation plan or regional landscape plan or equivalent.	Development of a class to which Schedule 9 clause 3 item 12 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.
Any of the following classes of development that require or may require water to be taken in addition to any allocation that has already been granted under the <i>Landscape South Australia Act 2019</i> :  (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry	The Chief Executive of the Department of the Minister responsible for the administration of the <i>Landscape South Australia Act 2019</i> .	To provide expert technical assessment and direction to the relevant authority on the taking of water to ensure development is undertaken sustainably and maintains the health and natural flow paths of water resources.	Development of a class to which Schedule 9 clause 3 item 13 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.
Commercial forestry that requires a forest water licence under Part 8 Division 6 of the <i>Landscape South Australia Act 2019</i> .			

**Regulated and Significant Tree Overlay**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Conservation of regulated and significant trees to provide aesthetic and environmental benefits and mitigate tree loss.

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Tree Retention and Health	

<p>PO 1.1</p> <p>Regulated trees are retained where they:</p> <ul style="list-style-type: none"> <li>(a) make an important visual contribution to local character and amenity</li> <li>(b) are indigenous to the local area and listed under the <i>National Parks and Wildlife Act 1972</i> as a rare or endangered native species and / or</li> <li>(c) provide an important habitat for native fauna.</li> </ul>	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Significant trees are retained where they:</p> <ul style="list-style-type: none"> <li>(a) make an important contribution to the character or amenity of the local area</li> <li>(b) are indigenous to the local area and are listed under the <i>National Parks and Wildlife Act 1972</i> as a rare or endangered native species</li> <li>(c) represent an important habitat for native fauna</li> <li>(d) are part of a wildlife corridor of a remnant area of native vegetation</li> <li>(e) are important to the maintenance of biodiversity in the local environment and / or</li> <li>(f) form a notable visual element to the landscape of the local area.</li> </ul>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>A tree damaging activity not in connection with other development satisfies (a) and (b):</p> <ul style="list-style-type: none"> <li>(a) tree damaging activity is only undertaken to: <ul style="list-style-type: none"> <li>(i) remove a diseased tree where its life expectancy is short</li> <li>(ii) mitigate an unacceptable risk to public or private safety due to limb drop or the like</li> <li>(iii) rectify or prevent extensive damage to a building of value as comprising any of the following: <ul style="list-style-type: none"> <li>A. a Local Heritage Place</li> <li>B. a State Heritage Place</li> <li>C. a substantial building of value</li> </ul> </li> </ul> <p>and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity</p> <ul style="list-style-type: none"> <li>(iv) reduce an unacceptable hazard associated with a tree within 20m of an existing residential, tourist accommodation or other habitable building from bushfire</li> <li>(v) treat disease or otherwise in the general interests of the health of the tree and / or</li> <li>(vi) maintain the aesthetic appearance and structural integrity of the tree</li> </ul> </li> <li>(b) in relation to a significant tree, tree-damaging activity is avoided unless all reasonable remedial treatments and measures have been determined to be ineffective.</li> </ul>	<p>DTS/DPF 1.3</p> <p>None are applicable.</p>
<p>PO 1.4</p> <p>A tree-damaging activity in connection with other development satisfies all the following:</p> <ul style="list-style-type: none"> <li>(a) it accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible</li> <li>(b) in the case of a significant tree, all reasonable development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.</li> </ul>	<p>DTS/DPF 1.4</p> <p>None are applicable.</p>
<p>Ground work affecting trees</p>	
<p>PO 2.1</p> <p>Regulated and significant trees, including their root systems, are not unduly compromised by excavation and / or filling of land, or the sealing of surfaces</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>

within the vicinity of the tree to support their retention and health.	
Land Division	
PO 3.1 Land division results in an allotment configuration that enables its subsequent development and the retention of regulated and significant trees as far as is reasonably practicable.	DTS/DPF 3.1 Land division where:  (a) there are no regulated or significant trees located within or adjacent to the plan of division or (b) the application demonstrates that an area exists to accommodate subsequent development of proposed allotments after an allowance has been made for a tree protection zone around any regulated tree within and adjacent to the plan of division.

### Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
None	None	None	None

## Part 4 - General Development Policies

### Advertisements

#### Assessment Provisions (AP)


Desired Outcome (DO)

Desired Outcome	
DO 1	Advertisements and advertising hoardings are appropriate to context, efficient and effective in communicating with the public, limited in number to avoid clutter, and do not create hazard.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Appearance	
PO 1.1 Advertisements are compatible and integrated with the design of the building and/or land they are located on.	DTS/DPF 1.1 Advertisements attached to a building satisfy all of the following:  (a) are not located in a Neighbourhood-type zone (b) where they are flush with a wall: (i) if located at canopy level, are in the form of a fascia sign (ii) if located above canopy level:

	<ul style="list-style-type: none"> <li>A. do not have any part rising above parapet height</li> <li>B. are not attached to the roof of the building</li> </ul> <p>(c) where they are not flush with a wall:</p> <ul style="list-style-type: none"> <li>(i) if attached to a verandah, no part of the advertisement protrudes beyond the outer limits of the verandah structure</li> <li>(ii) if attached to a two-storey building:             <ul style="list-style-type: none"> <li>A. has no part located above the finished floor level of the second storey of the building</li> <li>B. does not protrude beyond the outer limits of any verandah structure below</li> <li>C. does not have a sign face that exceeds 1m2 per side.</li> </ul> </li> </ul> <p>(d) if located below canopy level, are flush with a wall</p> <p>(e) if located at canopy level, are in the form of a fascia sign</p> <p>(f) if located above a canopy:</p> <ul style="list-style-type: none"> <li>(i) are flush with a wall</li> <li>(ii) do not have any part rising above parapet height</li> <li>(iii) are not attached to the roof of the building.</li> </ul> <p>(g) if attached to a verandah, no part of the advertisement protrudes beyond the outer limits of the verandah structure</p> <p>(h) if attached to a two-storey building, have no part located above the finished floor level of the second storey of the building</p> <p>(i) where they are flush with a wall, do not, in combination with any other existing sign, cover more than 15% of the building facade to which they are attached.</p>
<p>PO 1.2</p> <p>Advertising hoardings do not disfigure the appearance of the land upon which they are situated or the character of the locality.</p>	<p>DTS/DPF 1.2</p> <p>Where development comprises an advertising hoarding, the supporting structure is:</p> <ul style="list-style-type: none"> <li>(a) concealed by the associated advertisement and decorative detailing or</li> <li>(b) not visible from an adjacent public street or thoroughfare, other than a support structure in the form of a single or dual post design.</li> </ul>
<p>PO 1.3</p> <p>Advertising does not encroach on public land or the land of an adjacent allotment.</p>	<p>DTS/DPF 1.3</p> <p>Advertisements and/or advertising hoardings are contained within the boundaries of the site.</p>
<p>PO 1.4</p> <p>Where possible, advertisements on public land are integrated with existing structures and infrastructure.</p>	<p>DTS/DPF 1.4</p> <p>Advertisements on public land that meet at least one of the following:</p> <ul style="list-style-type: none"> <li>(a) achieves Advertisements DTS/DPF 1.1</li> <li>(b) are integrated with a bus shelter.</li> </ul>
<p>PO 1.5</p> <p>Advertisements and/or advertising hoardings are of a scale and size appropriate to the character of the locality.</p>	<p>DTS/DPF 1.5</p> <p>None are applicable.</p>
<p>Proliferation of Advertisements</p>	
<p>PO 2.1</p> <p>Proliferation of advertisements is minimised to avoid visual clutter and untidiness.</p>	<p>DTS/DPF 2.1</p> <p>No more than one freestanding advertisement is displayed per occupancy.</p>
<p>PO 2.2</p> <p>Multiple business or activity advertisements are co-located and coordinated to avoid visual clutter and untidiness.</p>	<p>DTS/DPF 2.2</p> <p>Advertising of a multiple business or activity complex is located on a single advertisement fixture or structure.</p>
<p>PO 2.3</p> <p>Proliferation of advertisements attached to buildings is minimised to avoid visual clutter and untidiness.</p>	<p>DTS/DPF 2.3</p> <p>Advertisements satisfy all of the following:</p>

	<ul style="list-style-type: none"> <li>(a) are attached to a building</li> <li>(b) other than in a Neighbourhood-type zone, where they are flush with a wall, cover no more than 15% of the building facade to which they are attached</li> <li>(c) do not result in more than one sign per occupancy that is not flush with a wall.</li> </ul>
Advertising Content	
<p>PO 3.1</p> <p>Advertisements are limited to information relating to the lawful use of land they are located on to assist in the ready identification of the activity or activities on the land and avoid unrelated content that contributes to visual clutter and untidiness.</p>	<p>DTS/DPF 3.1</p> <p>Advertisements contain information limited to a lawful existing or proposed activity or activities on the same site as the advertisement.</p>
Amenity Impacts	
<p>PO 4.1</p> <p>Light spill from advertisement illumination does not unreasonably compromise the amenity of sensitive receivers.</p>	<p>DTS/DPF 4.1</p> <p>Advertisements do not incorporate any illumination.</p>
Safety	
<p>PO 5.1</p> <p>Advertisements and/or advertising hoardings erected on a verandah or projecting from a building wall are designed and located to allow for safe and convenient pedestrian access.</p>	<p>DTS/DPF 5.1</p> <p>Advertisements have a minimum clearance of 2.5m between the top of the footpath and base of the underside of the sign.</p>
<p>PO 5.2</p> <p>Advertisements and/or advertising hoardings do not distract or create a hazard to drivers through excessive illumination.</p>	<p>DTS/DPF 5.2</p> <p>No advertisement illumination is proposed.</p>
<p>PO 5.3</p> <p>Advertisements and/or advertising hoardings do not create a hazard to drivers by:</p> <ul style="list-style-type: none"> <li>(a) being liable to interpretation by drivers as an official traffic sign or signal</li> <li>(b) obscuring or impairing drivers' view of official traffic signs or signals</li> <li>(c) obscuring or impairing drivers' view of features of a road that are potentially hazardous (such as junctions, bends, changes in width and traffic control devices) or other road or rail vehicles at/or approaching level crossings.</li> </ul>	<p>DTS/DPF 5.3</p> <p>Advertisements satisfy all of the following:</p> <ul style="list-style-type: none"> <li>(a) are not located in a public road or rail reserve</li> <li>(b) are located wholly outside the land shown as 'Corner Cut-Off Area' in the following diagram</li> </ul>  <p>The diagram illustrates a corner cut-off area at a road junction. A red hatched triangular area is shown in the corner, with a 4.5M dimension along both the road edges. A dashed line represents the 'Allotment Boundary' which is set back from the road reserve. The 'Road Reserve' is also indicated by a dashed line.</p>
<p>PO 5.4</p> <p>Advertisements and/or advertising hoardings do not create a hazard by distracting drivers from the primary driving task at a location where the demands on driver concentration are high.</p>	<p>DTS/DPF 5.4</p> <p>Advertisements and/or advertising hoardings are not located along or adjacent to a road having a speed limit of 80km/h or more.</p>
<p>PO 5.5</p> <p>Advertisements and/or advertising hoardings provide sufficient clearance from the road carriageway to allow for safe and convenient movement by all road users.</p>	<p>DTS/DPF 5.5</p> <p>Where the advertisement or advertising hoarding is:</p> <ul style="list-style-type: none"> <li>(a) on a kerbed road with a speed zone of 60km/h or less, the advertisement or advertising hoarding is located at least 0.6m from the roadside edge of the kerb</li> <li>(b) on an unkerbed road with a speed zone of 60km/h or less, the advertisement or advertising hoarding is located at least 5.5m from the edge of the seal</li> <li>(c) on any other kerbed or unkerbed road, the advertisement or advertising hoarding is located a minimum of the following distance from the roadside edge of the kerb or the seal:             <ul style="list-style-type: none"> <li>(a) 110 km/h road - 14m</li> <li>(b) 100 km/h road - 13m</li> <li>(c) 90 km/h road - 10m</li> </ul> </li> </ul>

	(d) 70 or 80 km/h road - 8.5m.
PO 5.6 Advertising near signalised intersections does not cause unreasonable distraction to road users through illumination, flashing lights, or moving or changing displays or messages.	DTS/DPF 5.6 Advertising: (a) is not illuminated (b) does not incorporate a moving or changing display or message (c) does not incorporate a flashing light(s).

## Animal Keeping and Horse Keeping

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Animals are kept at a density that is not beyond the carrying capacity of the land and in a manner that minimises their adverse effects on the environment, local amenity and surrounding development.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting and Design	
PO 1.1 Animal keeping, horse keeping and associated activities do not create adverse impacts on the environment or the amenity of the locality.	DTS/DPF 1.1 None are applicable.
PO 1.2 Animal keeping and horse keeping is located and managed to minimise the potential transmission of disease to other operations where animals are kept.	DTS/DPF 1.2 None are applicable.
Horse Keeping	
PO 2.1 Water from stable wash-down areas is directed to appropriate absorption areas and/or drainage pits to minimise pollution of land and water.	DTS/DPF 2.1 None are applicable.
PO 2.2 Stables, horse shelters or associated yards are sited appropriate distances away from sensitive receivers and/or allotments in other ownership to avoid adverse impacts from dust, erosion and odour.	DTS/DPF 2.2 Stables, horse shelters and associated yards are sited in accordance with all of the following:  (a) 30m or more from any sensitive receivers (existing or approved) on land in other ownership (b) where an adjacent allotment is vacant and in other ownership, 30m or more from the boundary of that allotment.
PO 2.3 All areas accessible to horses are separated from septic tank effluent disposal areas to protect the integrity of that system. Stable flooring is constructed with an impervious material to facilitate regular cleaning.	DTS/DPF 2.3 Septic tank effluent disposal areas are enclosed with a horse-proof barrier such as a fence to exclude horses from this area.
PO 2.4	DTS/DPF 2.4

To minimise environmental harm and adverse impacts on water resources, stables, horse shelters and associated yards are appropriately set back from a watercourse.	Stables, horse shelters and associated yards are set back 50m or more from a watercourse.
PO 2.5 Stables, horse shelters and associated yards are located on slopes that are stable to minimise the risk of soil erosion and water runoff.	DTS/DPF 2.5 Stables, horse shelters and associated yards are not located on land with a slope greater than 10% (1-in-10).
Kennels	
PO 3.1 Kennel flooring is constructed with an impervious material to facilitate regular cleaning.	DTS/DPF 3.1 The floors of kennels satisfy all of the following:  (a) are constructed of impervious concrete (b) are designed to be self-draining when washed down.
PO 3.2 Kennels and exercise yards are designed and sited to minimise noise nuisance to neighbours through measures such as:  (a) adopting appropriate separation distances (b) orientating openings away from sensitive receivers.	DTS/DPF 3.2 Kennels are sited 500m or more from the nearest sensitive receiver on land in other ownership.
PO 3.3 Dogs are regularly observed and managed to minimise nuisance impact on adjoining sensitive receivers from animal behaviour.	DTS/DPF 3.3 Kennels are sited in association with a permanent dwelling on the land.
Wastes	
PO 4.1 Storage of manure, used litter and other wastes (other than wastewater lagoons) is designed, constructed and managed to minimise attracting and harbouring vermin.	DTS/DPF 4.1 None are applicable.
PO 4.2 Facilities for the storage of manure, used litter and other wastes (other than wastewater lagoons) are located to minimise the potential for polluting water resources.	DTS/DPF 4.2 Waste storage facilities (other than wastewater lagoons) are located outside the 1% AEP flood event areas.

**Aquaculture**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Aquaculture facilities are developed in an ecologically, economically and socially sustainable manner to support an equitable sharing of marine, coastal and inland resources and mitigate conflict with other water-based and land-based uses.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land-based Aquaculture	

<p>PO 1.1</p> <p>Land-based aquaculture and associated components are sited and designed to mitigate adverse impacts on nearby sensitive receivers.</p>	<p>DTS/DPF 1.1</p> <p>Land-based aquaculture and associated components are located to satisfy all of the following:</p> <ul style="list-style-type: none"> <li>(a) 200m or more from a sensitive receiver in other ownership</li> <li>(b) 500m or more from the boundary of a zone primarily intended to accommodate sensitive receivers</li> </ul> <p>or</p> <p>The development is the subject of an aquaculture lease and/or licence (as applicable) granted under the <i>Aquaculture Act 2001</i>.</p>
<p>PO 1.2</p> <p>Land-based aquaculture and associated components are sited and designed to prevent surface flows from entering ponds in a 1% AEP sea flood level event.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>Land-based aquaculture and associated components are sited and designed to prevent pond leakage that would pollute groundwater.</p>	<p>DTS/DPF 1.3</p> <p>The development is the subject of an aquaculture lease and/or licence (as applicable) granted under the <i>Aquaculture Act 2001</i>.</p>
<p>PO 1.4</p> <p>Land-based aquaculture and associated components are sited and designed to prevent farmed species escaping and entering into any waters.</p>	<p>DTS/DPF 1.4</p> <p>The development is the subject of an aquaculture lease and/or licence (as applicable) granted under the <i>Aquaculture Act 2001</i>.</p>
<p>PO 1.5</p> <p>Land-based aquaculture and associated components, including intake and discharge pipes, are designed to minimise the need to traverse sensitive areas to minimise impact on the natural environment.</p>	<p>DTS/DPF 1.5</p> <p>None are applicable.</p>
<p>PO 1.6</p> <p>Pipe inlets and outlets associated with land-based aquaculture are sited and designed to minimise the risk of disease transmission.</p>	<p>DTS/DPF 1.6</p> <p>The development is the subject of an aquaculture lease and/or licence (as applicable) granted under the <i>Aquaculture Act 2001</i>.</p>
<p>PO 1.7</p> <p>Storage areas associated with aquaculture activity are integrated with the use of the land and sited and designed to minimise their visual impact on the surrounding environment.</p>	<p>DTS/DPF 1.7</p> <p>None are applicable.</p>
Marine Based Aquaculture	
<p>PO 2.1</p> <p>Marine aquaculture is sited and designed to minimise its adverse impacts on sensitive ecological areas including:</p> <ul style="list-style-type: none"> <li>(a) creeks and estuaries</li> <li>(b) wetlands</li> <li>(c) significant seagrass and mangrove communities</li> <li>(d) marine habitats and ecosystems.</li> </ul>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
<p>PO 2.2</p> <p>Marine aquaculture is sited in areas with adequate water current to disperse sediments and dissolve particulate wastes to prevent the build-up of waste that may cause environmental harm.</p>	<p>DTS/DPF 2.2</p> <p>The development is the subject of an aquaculture lease and/or licence (as applicable) granted under the <i>Aquaculture Act 2001</i>.</p>
<p>PO 2.3</p> <p>Marine aquaculture is designed to not involve discharge of human waste on the site, on any adjacent land or into nearby waters.</p>	<p>DTS/DPF 2.3</p> <p>The development does not include toilet facilities located over water.</p>
<p>PO 2.4</p> <p>Marine aquaculture (other than inter-tidal aquaculture) is located an appropriate distance seaward of the high water mark.</p>	<p>DTS/DPF 2.4</p> <p>Marine aquaculture development is located 100m or more seaward of the high water mark</p> <p>or</p>



	The development is the subject of an aquaculture lease and/or licence (as applicable) granted under the <i>Aquaculture Act 2001</i> .
PO 2.5 Marine aquaculture is sited and designed to not obstruct or interfere with:  (a) areas of high public use (b) areas, including beaches, used for recreational activities such as swimming, fishing, skiing, sailing and other water sports (c) areas of outstanding visual or environmental value (d) areas of high tourism value (e) areas of important regional or state economic activity, including commercial ports, wharfs and jetties (f) the operation of infrastructure facilities including inlet and outlet pipes associated with the desalination of sea water.	DTS/DPF 2.5  None are applicable.
PO 2.6 Marine aquaculture is sited and designed to minimise interference and obstruction to the natural processes of the coastal and marine environment.	DTS/DPF 2.6  None are applicable.
PO 2.7 Marine aquaculture is designed to be as unobtrusive as practicable by incorporating measures such as:  (a) using feed hoppers painted in subdued colours and suspending them as close as possible to the surface of the water (b) positioning structures to protrude the minimum distance practicable above the surface of the water (c) avoiding the use of shelters and structures above cages and platforms unless necessary to exclude predators and protected species from interacting with the farming structures and/or stock inside the cages, or for safety reasons (d) positioning racks, floats and other farm structures in unobtrusive locations landward from the shoreline.	DTS/DPF 2.7  None are applicable.
PO 2.8 Access, launching and maintenance facilities utilise existing established roads, tracks, ramps and paths to or from the sea where possible to minimise environmental and amenity impacts.	DTS/DPF 2.8  The development utilises existing established roads, tracks, ramps and/or paths (as applicable) to access the sea.
PO 2.9 Access, launching and maintenance facilities are developed as common user facilities and are co-located where practicable to mitigate adverse impacts on coastal areas.	DTS/DPF 2.9  The development utilises existing established roads, tracks, ramps and/or paths (as applicable) to access the sea.
PO 2.10 Marine aquaculture is sited to minimise potential impacts on, and to protect the integrity of, reserves under the <i>National Parks and Wildlife Act 1972</i> .	DTS/DPF 2.10  Marine aquaculture is located 1000m or more seaward of the boundary of any reserve under the <i>National Parks and Wildlife Act 1972</i> .
PO 2.11 Onshore storage, cooling and processing facilities do not impair the coastline and its visual amenity by:  (a) being sited, designed, landscaped and of a scale to reduce the overall bulk and appearance of buildings and complement the coastal landscape (b) making provision for appropriately sited and designed vehicular access arrangements, including using existing vehicular access arrangements as far as practicable (c) incorporating appropriate waste treatment and disposal.	DTS/DPF 2.11  The development does not include any onshore facilities in conjunction with a proposal for marine aquaculture.
Navigation and Safety	
PO 3.1 Marine aquaculture sites are suitably marked to maintain navigational safety.	DTS/DPF 3.1  The development is the subject of an aquaculture lease and/or licence (as applicable) granted under the <i>Aquaculture Act 2001</i> .

PO 3.2 Marine aquaculture is sited to provide adequate separation between farms for safe navigation.	DTS/DPF 3.2 The development is the subject of an aquaculture lease and/or licence (as applicable) granted under the <i>Aquaculture Act 2001</i> .
Environmental Management	
PO 4.1 Marine aquaculture is maintained to prevent hazards to people and wildlife, including breeding grounds and habitats of native marine mammals and terrestrial fauna, especially migratory species.	DTS/DPF 4.1 None are applicable.
PO 4.2 Marine aquaculture is designed to facilitate the relocation or removal of structures in the case of emergency such as oil spills, algal blooms and altered water flows.	DTS/DPF 4.2 None are applicable.
PO 4.3 Marine aquaculture provides for progressive or future reclamation of disturbed areas ahead of, or upon, decommissioning.	DTS/DPF 4.3 None are applicable.
PO 4.4 Aquaculture operations incorporate measures for the removal and disposal of litter, disused material, shells, debris, detritus, dead animals and animal waste to prevent pollution of waters, wetlands, or the nearby coastline.	DTS/DPF 4.4 The development is the subject of an aquaculture lease and/or licence (as applicable) granted under the <i>Aquaculture Act 2001</i> .

## Beverage Production in Rural Areas

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Mitigation of potential amenity and environmental impacts of value-adding beverage production facilities such as wineries, distilleries, cideries and breweries.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Odour and Noise	
PO 1.1 Beverage production activities are designed and sited to minimise odour impacts on rural amenity.	DTS/DPF 1.1 None are applicable.
PO 1.2 Beverage production activities are designed and sited to minimise noise impacts on sensitive receivers.	DTS/DPF 1.2 None are applicable.
PO 1.3 Fermentation, distillation, manufacturing, storage, packaging and bottling	DTS/DPF 1.3 None are applicable.

activities occur within enclosed buildings to improve the visual appearance within a locality and manage noise associated with these activities.	
PO 1.4 Breweries are designed to minimise odours emitted during boiling and fermentation stages of production.	DTS/DPF 1.4 Brew kettles are fitted with a vapour condenser.
PO 1.5 Beverage production solid wastes are stored in a manner that minimises odour impacts on sensitive receivers in other ownership.	DTS/DPF 1.5 Solid waste from beverage production is collected and stored in sealed containers and removed from the site within 48 hours.
Water Quality	
PO 2.1 Beverage production wastewater management systems (including wastewater irrigation) are set back from watercourses to minimise adverse impacts on water resources.	DTS/DPF 2.1 Wastewater management systems are set back 50m or more from the banks of watercourses and bores.
PO 2.2 The storage or disposal of chemicals or hazardous substances is undertaken in a manner to prevent pollution of water resources.	DTS/DPF 2.2 None are applicable.
PO 2.3 Stormwater runoff from areas that may cause contamination due to beverage production activities (including vehicle movements and machinery operations) is drained to an onsite stormwater treatment system to manage potential environmental impacts.	DTS/DPF 2.3 None are applicable.
PO 2.4 Stormwater runoff from areas unlikely to cause contamination by beverage production and associated activities (such as roof catchments and clean hard-paved surfaces) is diverted away from beverage production areas and wastewater management systems.	DTS/DPF 2.4 None are applicable.
Wastewater Irrigation	
PO 3.1 Beverage production wastewater irrigation systems are designed and located to not contaminate soil and surface and ground water resources or damage crops.	DTS/DPF 3.1 None are applicable.
PO 3.2 Beverage production wastewater irrigation systems are designed and located to minimise impact on amenity and avoid spray drift onto adjoining land.	DTS/DPF 3.2 Beverage production wastewater is not irrigated within 50m of any dwelling in other ownership.
PO 3.3 Beverage production wastewater is not irrigated onto areas that pose an undue risk to the environment or amenity such as:  (a) waterlogged areas (b) land within 50m of a creek, swamp or domestic or stock water bore (c) land subject to flooding (d) steeply sloping land (e) rocky or highly permeable soil overlaying an unconfined aquifer.	DTS/DPF 3.3 None are applicable.

## Bulk Handling and Storage Facilities

### Assessment Provisions (AP)

Desired Outcome (DO)

## Desired Outcome

DO 1	Facilities for the bulk handling and storage of agricultural, mineral, petroleum, rock, ore or other similar commodities are designed to minimise adverse impacts on transport networks, the landscape and surrounding land uses.
------	---

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting and Design	
PO 1.1 Bulk handling and storage facilities are sited and designed to minimise risks of adverse air quality and noise impacts on sensitive receivers.	DTS/DPF 1.1 Facilities for the handling, storage and dispatch of commodities in bulk (excluding processing) meet the following minimum separation distances from sensitive receivers: <ul style="list-style-type: none"> <li>(a) bulk handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals at a wharf or wharf side facility (including sea-port grain terminals), where the handling of these materials into or from vessels does not exceed 100 tonnes per day: 300m or more from residential premises not associated with the facility</li> <li>(b) bulk handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals to or from any commercial storage facility: 300m or more from residential premises not associated with the facility</li> <li>(c) bulk petroleum storage involving individual containers with a capacity up to 200 litres and a total on-site storage capacity not exceeding 1,000 cubic metres: 500m or more</li> <li>(d) coal handling with:               <ul style="list-style-type: none"> <li>a. capacity up to 1 tonne per day or a storage capacity up to 50 tonnes: 500m or more</li> <li>b. capacity exceeding 1 tonne per day but not exceeding 100 tonnes per day or a storage capacity exceeding 50 tonnes but not exceeding 5000 tonnes: 1000m or more.</li> </ul> </li> </ul>
Buffers and Landscaping	
PO 2.1 Bulk handling and storage facilities incorporate a buffer area for the establishment of dense landscaping adjacent road frontages to enhance the appearance of land and buildings from public thoroughfares.	DTS/DPF 2.1 None are applicable.
PO 2.2 Bulk handling and storage facilities incorporate landscaping to assist with screening and dust filtration.	DTS/DPF 2.2 None are applicable.
Access and Parking	
PO 3.1 Roadways and vehicle parking areas associated with bulk handling and storage facilities are designed and surfaced to control dust emissions and prevent drag out of material from the site.	DTS/DPF 3.1 Roadways and vehicle parking areas are sealed with an all-weather surface.
Slipways, Wharves and Pontoons	
PO 4.1 Slipways, wharves and pontoons used for the handling of bulk materials (such as fuel, oil, catch, bait and the like) incorporate catchment devices to avoid the release of materials into adjacent waters.	DTS/DPF 4.1 None are applicable.

**Clearance from Overhead Powerlines**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Protection of human health and safety when undertaking development in the vicinity of overhead transmission powerlines.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Buildings are adequately separated from aboveground powerlines to minimise potential hazard to people and property.	DTS/DPF 1.1 One of the following is satisfied: (a) a declaration is provided by or on behalf of the applicant to the effect that the proposal would not be contrary to the regulations prescribed for the purposes of section 86 of the <i>Electricity Act 1996</i> (b) there are no aboveground powerlines adjoining the site that are the subject of the proposed development.

**Design**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Development is: (a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributes to the character of the immediate area (b) durable - fit for purpose, adaptable and long lasting (c) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access, and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors (d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All development	

External Appearance	
PO 1.1 Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).	DTS/DPF 1.1 None are applicable.
PO 1.2 Where zero or minor setbacks are desirable, development provides shelter over footpaths (in the form of verandahs, awnings, canopies and the like, with adequate lighting) to positively contribute to the walkability, comfort and safety of the public realm.	DTS/DPF 1.2 None are applicable.
PO 1.3 Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points and complement the streetscape.	DTS/DPF 1.3 None are applicable.
PO 1.4 Plant, exhaust and intake vents and other technical equipment is integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity by:  (a) positioning plant and equipment in unobtrusive locations viewed from public roads and spaces (b) screening rooftop plant and equipment from view (c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses.	DTS/DPF 1.4 Development does not incorporate any structures that protrude beyond the roofline.
PO 1.5 The negative visual impact of outdoor storage, waste management, loading and service areas is minimised by integrating them into the building design and screening them from public view (such as fencing, landscaping and built form) taking into account the form of development contemplated in the relevant zone.	DTS/DPF 1.5 None are applicable.
Safety	
PO 2.1 Development maximises opportunities for passive surveillance of the public realm by providing clear lines of sight, appropriate lighting and the use of visually permeable screening wherever practicable.	DTS/DPF 2.1 None are applicable.
PO 2.2 Development is designed to differentiate public, communal and private areas.	DTS/DPF 2.2 None are applicable.
PO 2.3 Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.	DTS/DPF 2.3 None are applicable.
PO 2.4 Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.	DTS/DPF 2.4 None are applicable.
PO 2.5 Common areas and entry points of buildings (such as the foyer areas of residential buildings), and non-residential land uses at street level, maximise passive surveillance from the public realm to the inside of the building at night.	DTS/DPF 2.5 None are applicable.
Landscaping	
PO 3.1 Soft landscaping and tree planting is incorporated to:  (a) minimise heat absorption and reflection (b) maximise shade and shelter	DTS/DPF 3.1 None are applicable.

<ul style="list-style-type: none"> <li>(c) maximise stormwater infiltration</li> <li>(d) enhance the appearance of land and streetscapes</li> <li>(e) contribute to biodiversity.</li> </ul>	
<p>PO 3.2</p> <p>Soft landscaping and tree planting maximises the use of locally indigenous plant species, incorporates plant species best suited to current and future climate conditions and avoids pest plant and weed species.</p>	<p>DTS/DPF 3.2</p> <p>None are applicable.</p>
<p>Environmental Performance</p>	
<p>PO 4.1</p> <p>Buildings are sited, oriented and designed to maximise natural sunlight access and ventilation to main activity areas, habitable rooms, common areas and open spaces.</p>	<p>DTS/DPF 4.1</p> <p>None are applicable.</p>
<p>PO 4.2</p> <p>Buildings are sited and designed to maximise passive environmental performance and minimise energy consumption and reliance on mechanical systems, such as heating and cooling.</p>	<p>DTS/DPF 4.2</p> <p>None are applicable.</p>
<p>PO 4.3</p> <p>Buildings incorporate climate-responsive techniques and features such as building and window orientation, use of eaves, verandahs and shading structures, water harvesting, at ground landscaping, green walls, green roofs and photovoltaic cells.</p>	<p>DTS/DPF 4.3</p> <p>None are applicable.</p>
<p>Water Sensitive Design</p>	
<p>PO 5.1</p> <p>Development is sited and designed to maintain natural hydrological systems without negatively impacting:</p> <ul style="list-style-type: none"> <li>(a) the quantity and quality of surface water and groundwater</li> <li>(b) the depth and directional flow of surface water and groundwater</li> <li>(c) the quality and function of natural springs.</li> </ul>	<p>DTS/DPF 5.1</p> <p>None are applicable.</p>
<p>On-site Waste Treatment Systems</p>	
<p>PO 6.1</p> <p>Dedicated on-site effluent disposal areas do not include any areas to be used for, or could be reasonably foreseen to be used for, private open space, driveways or car parking.</p>	<p>DTS/DPF 6.1</p> <p>Effluent disposal drainage areas do not:</p> <ul style="list-style-type: none"> <li>(a) encroach within an area used as private open space or result in less private open space than that specified in Design Table 1 - Private Open Space</li> <li>(b) use an area also used as a driveway</li> <li>(c) encroach within an area used for on-site car parking or result in less on-site car parking than that specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.</li> </ul>
<p>Carparking Appearance</p>	
<p>PO 7.1</p> <p>Development facing the street is designed to minimise the negative impacts of any semi-basement and undercroft car parking on the streetscapes through techniques such as:</p> <ul style="list-style-type: none"> <li>(a) limiting protrusion above finished ground level</li> <li>(b) screening through appropriate planting, fencing and mounding</li> <li>(c) limiting the width of openings and integrating them into the building structure.</li> </ul>	<p>DTS/DPF 7.1</p> <p>None are applicable.</p>
<p>PO 7.2</p> <p>Vehicle parking areas are appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like.</p>	<p>DTS/DPF 7.2</p> <p>None are applicable.</p>

PO 7.3 Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.	DTS/DPF 7.3 None are applicable.
PO 7.4 Street level vehicle parking areas incorporate tree planting to provide shade and reduce solar heat absorption and reflection.	DTS/DPF 7.4 None are applicable.
PO 7.5 Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.	DTS/DPF 7.5 None are applicable.
PO 7.6 Vehicle parking areas and associated driveways are landscaped to provide shade and positively contribute to amenity.	DTS/DPF 7.6 None are applicable.
PO 7.7 Vehicle parking areas and access ways incorporate integrated stormwater management techniques such as permeable or porous surfaces, infiltration systems, drainage swales or rain gardens that integrate with soft landscaping.	DTS/DPF 7.7 None are applicable.
<b>Earthworks and sloping land</b>	
PO 8.1 Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	DTS/DPF 8.1 Development does not involve any of the following:  (a) excavation exceeding a vertical height of 1m  (b) filling exceeding a vertical height of 1m  (c) a total combined excavation and filling vertical height of 2m or more.
PO 8.2 Driveways and access tracks are designed and constructed to allow safe and convenient access on sloping land (with a gradient exceeding 1 in 8).	DTS/DPF 8.2 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8) satisfy (a) and (b):  (a) do not have a gradient exceeding 25% (1-in-4) at any point along the driveway  (b) are constructed with an all-weather trafficable surface.
PO 8.3 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8):  (a) do not contribute to the instability of embankments and cuttings (b) provide level transition areas for the safe movement of people and goods to and from the development (c) are designed to integrate with the natural topography of the land.	DTS/DPF 8.3 None are applicable.
PO 8.4 Development on sloping land (with a gradient exceeding 1 in 8) avoids the alteration of natural drainage lines and includes on-site drainage systems to minimise erosion.	DTS/DPF 8.4 None are applicable.
PO 8.5 Development does not occur on land at risk of landslip nor increases the potential for landslip or land surface instability.	DTS/DPF 8.5 None are applicable.
<b>Fences and Walls</b>	
PO 9.1 Fences, walls and retaining walls are of sufficient height to maintain privacy and security without unreasonably impacting the visual amenity and adjoining land's access to sunlight or the amenity of public places.	DTS/DPF 9.1 None are applicable.



PO 9.2	DTS/DPF 9.2
Landscaping incorporated on the low side of retaining walls is visible from public roads and public open space to minimise visual impacts.	A vegetated landscaped strip 1m wide or more is provided against the low side of a retaining wall.
Overlooking / Visual Privacy (in building 3 storeys or less)	
PO 10.1	DTS/DPF 10.1
Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.	Upper level windows facing side or rear boundaries shared with a residential allotment/site satisfy one of the following: <ul style="list-style-type: none"> <li>(a) are permanently obscured to a height of 1.5m above finished floor level and are fixed or not capable of being opened more than 200mm</li> <li>(b) have sill heights greater than or equal to 1.5m above finished floor level</li> <li>(c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5 m above the finished floor level.</li> </ul>
PO 10.2	DTS/DPF 10.2
Development mitigates direct overlooking from balconies, terraces and decks to habitable rooms and private open space of adjoining residential uses.	One of the following is satisfied: <ul style="list-style-type: none"> <li>(a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace</li> <li>or</li> <li>(b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of: <ul style="list-style-type: none"> <li>(i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land</li> <li>or</li> <li>(ii) 1.7m above finished floor level in all other cases</li> </ul> </li> </ul>
All Residential development	
Front elevations and passive surveillance	
PO 11.1	DTS/DPF 11.1
Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	Each dwelling with a frontage to a public street: <ul style="list-style-type: none"> <li>(a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m</li> <li>(b) has an aggregate window area of at least 2m<sup>2</sup> facing the primary street.</li> </ul>
PO 11.2	DTS/DPF 11.2
Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.	Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.
Outlook and amenity	
PO 12.1	DTS/DPF 12.1
Living rooms have an external outlook to provide a high standard of amenity for occupants.	A living room of a dwelling incorporates a window with an outlook towards the street frontage or private open space, public open space, or waterfront areas.
PO 12.2	DTS/DPF 12.2
Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.	None are applicable.
Ancillary Development	
PO 13.1	DTS/DPF 13.1

Residential ancillary buildings and structures are sited and designed to not detract from the streetscape or appearance of buildings on the site or neighbouring properties.

Ancillary buildings:

- (a) are ancillary to a dwelling erected on the same site
- (b) have a floor area not exceeding 60m<sup>2</sup>
- (c) are not constructed, added to or altered so that any part is situated:
  - (i) in front of any part of the building line of the dwelling to which it is ancillary
  - or
  - (ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)
- (d) in the case of a garage or carport, the garage or carport:
  - (i) is set back at least 5.5m from the boundary of the primary street
  - (ii) when facing a primary street or secondary street, has a total door / opening not exceeding:
    - A. for dwellings of single building level - 7m in width or 50% of the site frontage, whichever is the lesser
    - B. for dwellings comprising two or more building levels at the building line fronting the same public street - 7m in width
- (e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m unless:
  - (i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary and
  - (ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent
- (f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary
- (g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure
- (h) have a wall height or post height not exceeding 3m above natural ground level (and not including a gable end)
- (i) have a roof height where no part of the roof is more than 5m above the natural ground level
- (j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour
- (k) retains a total area of soft landscaping in accordance with (i) or (ii), whichever is less:
  - (i) a total area as determined by the following table:

Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site
<150	10%
150-200	15%
201-450	20%
>450	25%

- (ii) the amount of existing soft landscaping prior to the development occurring.

PO 13.2

Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision or car parking requirements and do not result in over-development of the site.

DTS/DPF 13.2

Ancillary buildings and structures do not result in:

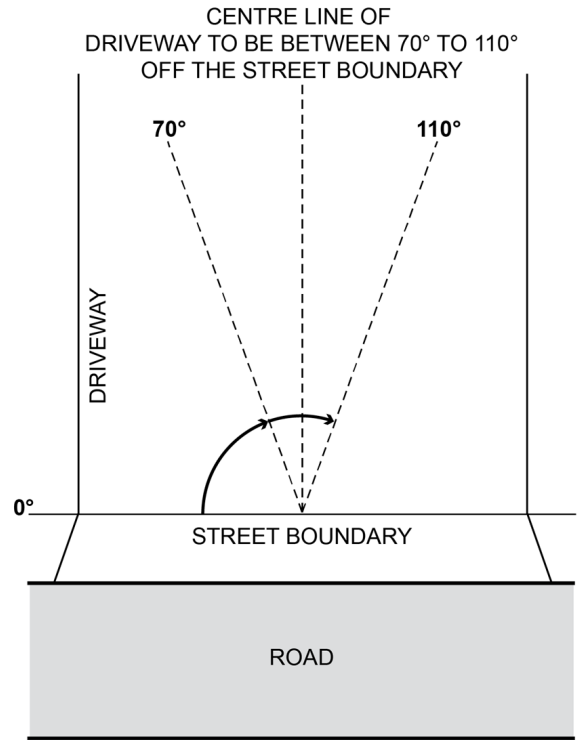
- (a) less private open space than specified in Design in Urban Areas Table 1 - Private Open Space
- (b) less on-site car parking than specified in Transport, Access and

	Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.						
<p>PO 13.3</p> <p>Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa is positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers.</p>	<p>DTS/DPF 13.3</p> <p>The pump and/or filtration system is ancillary to a dwelling erected on the same site and is:</p> <ul style="list-style-type: none"> <li>(a) enclosed in a solid acoustic structure that is located at least 5m from the nearest habitable room located on an adjoining allotment or</li> <li>(b) located at least 12m from the nearest habitable room located on an adjoining allotment.</li> </ul>						
<p>PO 13.4</p> <p>Buildings and structures that are ancillary to an existing non-residential use do not detract from the streetscape character, appearance of buildings on the site of the development, or the amenity of neighbouring properties.</p>	<p>DTS/DPF 13.4</p> <p>Non-residential ancillary buildings and structures:</p> <ul style="list-style-type: none"> <li>(a) are ancillary and subordinate to an existing non-residential use on the same site</li> <li>(b) have a floor area not exceeding the following:                             <table border="1"> <thead> <tr> <th>Allotment size</th> <th>Floor area</th> </tr> </thead> <tbody> <tr> <td>≤500m<sup>2</sup></td> <td>60m<sup>2</sup></td> </tr> <tr> <td>&gt;500m<sup>2</sup></td> <td>80m<sup>2</sup></td> </tr> </tbody> </table> </li> <li>(c) are not constructed, added to or altered so that any part is situated:                             <ul style="list-style-type: none"> <li>(i) in front of any part of the building line of the main building to which it is ancillary or</li> <li>(ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)</li> </ul> </li> <li>(d) in the case of a garage or carport, the garage or carport:                             <ul style="list-style-type: none"> <li>(i) is set back at least 5.5m from the boundary of the primary street</li> </ul> </li> <li>(e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m unless:                             <ul style="list-style-type: none"> <li>(i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary</li> <li>(ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent</li> </ul> </li> <li>(f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary</li> <li>(g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure</li> <li>(h) have a wall height (or post height) not exceeding 3m (and not including a gable end)</li> <li>(i) have a roof height where no part of the roof is more than 5m above the natural ground level</li> <li>(j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour.</li> </ul>	Allotment size	Floor area	≤500m <sup>2</sup>	60m <sup>2</sup>	>500m <sup>2</sup>	80m <sup>2</sup>
Allotment size	Floor area						
≤500m <sup>2</sup>	60m <sup>2</sup>						
>500m <sup>2</sup>	80m <sup>2</sup>						
Garage appearance							
<p>PO 14.1</p> <p>Garaging is designed to not detract from the streetscape or appearance of a dwelling.</p>	<p>DTS/DPF 14.1</p> <p>Garages and carports facing a street:</p> <ul style="list-style-type: none"> <li>(a) are situated so that no part of the garage or carport is in front of any part of the building line of the dwelling</li> <li>(b) are set back at least 5.5m from the boundary of the primary street</li> <li>(c) have a garage door / opening not exceeding 7m in width</li> <li>(d) have a garage door /opening width not exceeding 50% of the site frontage unless the dwelling has two or more building levels at the building line fronting the same public street.</li> </ul>						
Massing							

<p>PO 15.1</p> <p>The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.</p>	<p>DTS/DPF 15.1</p> <p>None are applicable</p>
<p>Dwelling additions</p>	
<p>PO 16.1</p> <p>Dwelling additions are sited and designed to not detract from the streetscape or amenity of adjoining properties and do not impede on-site functional requirements.</p>	<p>DTS / DPF 16.1</p> <p>Dwelling additions:</p> <ul style="list-style-type: none"> <li>(a) are not constructed, added to or altered so that any part is situated closer to a public street</li> <li>(b) do not result in:                             <ul style="list-style-type: none"> <li>(i) excavation exceeding a vertical height of 1m</li> <li>(ii) filling exceeding a vertical height of 1m</li> <li>(iii) a total combined excavation and filling vertical height of 2m or more</li> <li>(iv) less Private Open Space than specified in Design Table 1 - Private Open Space</li> <li>(v) less on-site parking than specified in Transport Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas</li> <li>(vi) upper level windows facing side or rear boundaries unless:                                     <ul style="list-style-type: none"> <li>A. they are permanently obscured to a height of 1.5m above finished floor level that is fixed or not capable of being opened more than 200mm</li> <li>or</li> <li>B. have sill heights greater than or equal to 1.5m above finished floor level</li> <li>or</li> <li>C. incorporate screening to a height of 1.5m above finished floor level</li> </ul> </li> <li>(vii) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of:                                     <ul style="list-style-type: none"> <li>A. 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land</li> <li>B. 1.7m above finished floor level in all other cases.</li> </ul> </li> </ul> </li> </ul>
<p>Private Open Space</p>	
<p>PO 17.1</p> <p>Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.</p>	<p>DTS/DPF 17.1</p> <p>Private open space is provided in accordance with Design Table 1 - Private Open Space.</p>
<p>Water Sensitive Design</p>	
<p>PO 18.1</p> <p>Residential development creating a common driveway / access includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.</p>	<p>DTS/DPF 18.1</p> <p>Residential development creating a common driveway / access that services 5 or more dwellings achieves the following stormwater runoff outcomes:</p> <ul style="list-style-type: none"> <li>(a) 80 per cent reduction in average annual total suspended solids</li> <li>(b) 60 per cent reduction in average annual total phosphorus</li> <li>(c) 45 per cent reduction in average annual total nitrogen.</li> </ul>
<p>PO 18.2</p> <p>Residential development creating a common driveway / access includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.</p>	<p>DTS/DPF 18.2</p> <p>Development creating a common driveway / access that services 5 or more dwellings:</p> <ul style="list-style-type: none"> <li>(a) maintains the pre-development peak flow rate from the site based upon a 0.35 runoff coefficient for the 18.1% AEP 30-minute storm and the stormwater runoff time to peak is not increased</li> <li>or</li> <li>captures and retains the difference in pre-development runoff volume (based upon a 0.35 runoff coefficient) vs post development runoff volume from the site for an 18.1% AEP 30-minute storm; and</li> <li>(b) manages site generated stormwater runoff up to and including the</li> </ul>

1% AEP flood event to avoid flooding of buildings.	
Car parking, access and manoeuvrability	
<p>PO 19.1</p> <p>Enclosed parking spaces are of a size and dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 19.1</p> <p>Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area):</p> <ul style="list-style-type: none"> <li>(a) single width car parking spaces: <ul style="list-style-type: none"> <li>(i) a minimum length of 5.4m per space</li> <li>(ii) a minimum width of 3.0m</li> <li>(iii) a minimum garage door width of 2.4m</li> </ul> </li> <li>(b) double width car parking spaces (side by side): <ul style="list-style-type: none"> <li>(i) a minimum length of 5.4m</li> <li>(ii) a minimum width of 5.4m</li> <li>(iii) minimum garage door width of 2.4m per space.</li> </ul> </li> </ul>
<p>PO 19.2</p> <p>Uncovered parking spaces are of a size and dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 19.2</p> <p>Uncovered car parking spaces have:</p> <ul style="list-style-type: none"> <li>(a) a minimum length of 5.4m</li> <li>(b) a minimum width of 2.4m</li> <li>(c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m</li> </ul>
<p>PO 19.3</p> <p>Driveways and access points are located and designed to facilitate safe access and egress while maximising land available for street tree planting, pedestrian movement, domestic waste collection, landscaped street frontages and on-street parking.</p>	<p>DTS/DPF 19.3</p> <p>Driveways and access points on sites with a frontage to a public road of 10m or less have a width between 3.0 and 3.2 metres measured at the property boundary and are the only access point provided on the site.</p>
<p>PO 19.4</p> <p>Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.</p>	<p>DTS/DPF 19.4</p> <p>Vehicle access to designated car parking spaces satisfy (a) or (b):</p> <ul style="list-style-type: none"> <li>(a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land</li> <li>(b) where newly proposed: <ul style="list-style-type: none"> <li>(i) is set back 6m or more from the tangent point of an intersection of 2 or more roads</li> <li>(ii) is set back outside of the marked lines or infrastructure dedicating a pedestrian crossing</li> <li>(iii) does not involve the removal, relocation or damage to of mature street trees, street furniture or utility infrastructure services.</li> </ul> </li> </ul>
<p>PO 19.5</p> <p>Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.</p>	<p>DTS/DPF 19.5</p> <p>Driveways are designed and sited so that:</p> <ul style="list-style-type: none"> <li>(a) the gradient of the driveway does not exceed a grade of 1 in 4 and includes transitions to ensure a maximum grade change of 12.5% (1 in 8) for summit changes, and 15% (1 in 6.7) for sag changes, in accordance with AS 2890.1:2004 to prevent vehicles bottoming or scraping</li> <li>(b) the centreline of the driveway has an angle of no less than 70 degrees and no more than 110 degrees from the street boundary to which it takes its access as shown in the following diagram:</li> </ul>

--	--



(c) if located to provide access from an alley, lane or right of way - the alley, land or right of way is at least 6.2m wide along the boundary of the allotment / site

<p>PO 19.6</p> <p>Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.</p>	<p>DTS/DPF 19.6</p> <p>Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:</p> <ul style="list-style-type: none"> <li>(a) minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number)</li> <li>(b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly</li> <li>(c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.</li> </ul>
--	--

Waste storage

<p>PO 20.1</p> <p>Provision is made for the adequate and convenient storage of waste bins in a location screened from public view.</p>	<p>DTS/DPF 20.1</p> <p>None are applicable.</p>
--	---

Design of Transportable Dwellings

<p>PO 21.1</p> <p>The sub-floor space beneath transportable buildings is enclosed to give the appearance of a permanent structure.</p>	<p>DTS/DPF 21.1</p> <p>Buildings satisfy (a) or (b):</p> <ul style="list-style-type: none"> <li>(a) are not transportable or</li> <li>(b) the sub-floor space between the building and ground level is clad in a material and finish consistent with the building.</li> </ul>
--	---

Group dwelling, residential flat buildings and battle-axe development

Amenity

<p>PO 22.1</p> <p>Dwellings are of a suitable size to accommodate a layout that is well organised and provides a high standard of amenity for occupants.</p>	<p>DTS/DPF 22.1</p> <p>Dwellings have a minimum internal floor area in accordance with the following table:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Number of bedrooms</th> <th style="width: 50%;">Minimum internal floor area</th> </tr> </thead> <tbody> <tr> <td style="height: 20px;"> </td> <td> </td> </tr> </tbody> </table>	Number of bedrooms	Minimum internal floor area		
Number of bedrooms	Minimum internal floor area				

	Studio	35m <sup>2</sup>
	1 bedroom	50m <sup>2</sup>
	2 bedroom	65m <sup>2</sup>
	3+ bedrooms	80m <sup>2</sup> and any dwelling over 3 bedrooms provides an additional 15m <sup>2</sup> for every additional bedroom
PO 22.2 The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.	DTS/DPF 22.2 None are applicable.	
PO 22.3 Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.	DTS/DPF 22.3 None are applicable.	
PO 22.4 Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.	DTS/DPF 22.4 Dwelling sites/allotments are not in the form of a battle-axe arrangement.	
<b>Communal Open Space</b>		
PO 23.1 Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	DTS/DPF 23.1 None are applicable.	
PO 23.2 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 23.2 Communal open space incorporates a minimum dimension of 5 metres.	
PO 23.3 Communal open space is designed and sited to:  (a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	DTS/DPF 23.3 None are applicable.	
PO 23.4 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 23.4 None are applicable.	
PO 23.5 Communal open space is designed and sited to:  (a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings (b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	DTS/DPF 23.5 None are applicable.	
<b>Carparking, access and manoeuvrability</b>		
PO 24.1 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	DTS/DPF 24.1 Where on-street parking is available directly adjacent the site, on-street parking is retained adjacent the subject site in accordance with the following requirements:  (a) minimum 0.33 on-street car parks per proposed dwellings (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly	

	(c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
PO 24.2 The number of vehicular access points onto public roads is minimised to reduce interruption of the footpath and positively contribute to public safety and walkability.	DTS/DPF 24.2 Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.
PO 24.3 Residential driveways that service more than one dwelling are designed to allow safe and convenient movement.	DTS/DPF 24.3 Driveways that service more than 1 dwelling or a dwelling on a battle-axe site:  (a) have a minimum width of 3m (b) for driveways servicing more than 3 dwellings: (i) have a width of 5.5m or more and a length of 6m or more at the kerb of the primary street (ii) where the driveway length exceeds 30m, incorporate a passing point at least every 30 metres with a minimum width of 5.5m and a minimum length of 6m.
PO 24.4 Residential driveways in a battle-axe configuration are designed to allow safe and convenient movement.	DTS/DPF 24.4 Where in a battle-axe configuration, a driveway servicing one dwelling has a minimum width of 3m.
PO 24.5 Residential driveways that service more than one dwelling are designed to allow passenger vehicles to enter and exit the site and manoeuvre within the site in a safe and convenient manner.	DTS/DPF 24.5 Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and exit the garages or parking spaces in no more than a three-point turn manoeuvre.
PO 24.6 Dwellings are adequately separated from common driveways and manoeuvring areas.	DTS/DPF 24.6 Dwelling walls with entry doors or ground level habitable room windows are set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.
Soft Landscaping	
PO 25.1 Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.	DTS/DPF 25.1 Other than where located directly in front of a garage or a building entry, soft landscaping with a minimum dimension of 1m is provided between a dwelling and common driveway.
PO 25.2 Soft landscaping is provided that improves the appearance of common driveways.	DTS/DPF 25.2 Where a common driveway is located directly adjacent the side or rear boundary of the site, soft landscaping with a minimum dimension of 1m is provided between the driveway and site boundary (excluding along the perimeter of a passing point).
Site Facilities / Waste Storage	
PO 26.1 Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.	DTS/DPF 26.1 None are applicable.
PO 26.2 Provision is made for suitable external clothes drying facilities.	DTS/DPF 26.2 None are applicable.
PO 26.3 Provision is made for suitable household waste and recyclable material storage facilities which are:  (a) located away, or screened, from public view, and (b) conveniently located in proximity to dwellings and the waste collection point.	DTS/DPF 26.3 None are applicable.



PO 26.4	DTS/DPF 26.4
Waste and recyclable material storage areas are located away from dwellings.	Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 26.5	DTS/DPF 26.5
Where waste bins cannot be conveniently collected from the street, provision is made for on-site waste collection, designed to accommodate the safe and convenient access, egress and movement of waste collection vehicles.	None are applicable.
PO 26.6	DTS/DPF 26.6
Services including gas and water meters are conveniently located and screened from public view.	None are applicable.
Supported accommodation and retirement facilities	
Siting and Configuration	
PO 27.1	DTS/DPF 27.1
Supported accommodation and housing for aged persons and people with disabilities is located where on-site movement of residents is not unduly restricted by the slope of the land.	None are applicable.
Movement and Access	
PO 28.1	DTS/DPF 28.1
Development is designed to support safe and convenient access and movement for residents by providing: <ul style="list-style-type: none"> <li>(a) ground-level access or lifted access to all units</li> <li>(b) level entry porches, ramps, paths, driveways, passenger loading areas and areas adjacent to footpaths that allow for the passing of wheelchairs and resting places</li> <li>(c) car parks with gradients no steeper than 1-in-40 and of sufficient area to provide for wheelchair manoeuvrability</li> <li>(d) kerb ramps at pedestrian crossing points.</li> </ul>	None are applicable.
Communal Open Space	
PO 29.1	DTS/DPF 29.1
Development is designed to provide attractive, convenient and comfortable indoor and outdoor communal areas to be used by residents and visitors.	None are applicable.
PO 29.2	DTS/DPF 29.2
Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	None are applicable.
PO 29.3	DTS/DPF 29.3
Communal open space is of sufficient size and dimensions to cater for group recreation.	Communal open space incorporates a minimum dimension of 5 metres.
PO 29.4	DTS/DPF 29.4
Communal open space is designed and sited to: <ul style="list-style-type: none"> <li>(a) be conveniently accessed by the dwellings which it services</li> <li>(b) have regard to acoustic, safety, security and wind effects.</li> </ul>	None are applicable.
PO 29.5	DTS/DPF 29.5
Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	None are applicable.
PO 29.6	DTS/DPF 29.6
Communal open space is designed and sited to: <ul style="list-style-type: none"> <li>(a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of</li> </ul>	None are applicable.

<p>other dwellings</p> <p>(b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.</p>	
Site Facilities / Waste Storage	
<p>PO 30.1</p> <p>Development is designed to provide storage areas for personal items and specialised equipment such as small electric powered vehicles, including facilities for the recharging of small electric powered vehicles.</p>	<p>DTS/DPF 30.1</p> <p>None are applicable.</p>
<p>PO 30.2</p> <p>Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.</p>	<p>DTS/DPF 30.2</p> <p>None are applicable.</p>
<p>PO 30.3</p> <p>Provision is made for suitable external clothes drying facilities.</p>	<p>DTS/DPF 30.3</p> <p>None are applicable.</p>
<p>PO 30.4</p> <p>Provision is made for suitable household waste and recyclable material storage facilities conveniently located and screened from public view.</p>	<p>DTS/DPF 30.4</p> <p>None are applicable.</p>
<p>PO 30.5</p> <p>Waste and recyclable material storage areas are located away from dwellings.</p>	<p>DTS/DPF 30.5</p> <p>Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.</p>
<p>PO 30.6</p> <p>Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.</p>	<p>DTS/DPF 30.6</p> <p>None are applicable.</p>
<p>PO 30.7</p> <p>Services including gas and water meters are conveniently located and screened from public view.</p>	<p>DTS/DPF 30.7</p> <p>None are applicable.</p>
All non-residential development	
Water Sensitive Design	
<p>PO 31.1</p> <p>Development likely to result in significant risk of export of litter, oil or grease includes stormwater management systems designed to minimise pollutants entering stormwater.</p>	<p>DTS/DPF 31.1</p> <p>None are applicable.</p>
<p>PO 31.2</p> <p>Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.</p>	<p>DTS/DPF 31.2</p> <p>None are applicable.</p>
Wash-down and Waste Loading and Unloading	
<p>PO 32.1</p> <p>Areas for activities including loading and unloading, storage of waste refuse bins in commercial and industrial development or wash-down areas used for the cleaning of vehicles, vessels, plant or equipment are:</p> <p>(a) designed to contain all wastewater likely to pollute stormwater within a bunded and roofed area to exclude the entry of external surface stormwater run-off</p> <p>(b) paved with an impervious material to facilitate wastewater collection</p> <p>(c) of sufficient size to prevent 'splash-out' or 'over-spray' of wastewater from the wash-down area</p> <p>(d) designed to drain wastewater to either:</p> <p>(i) a treatment device such as a sediment trap and coalescing plate oil separator with subsequent disposal to a sewer, private or Community Wastewater Management Scheme or</p> <p>(ii) a holding tank and its subsequent removal off-site on a</p>	<p>DTS/DPF 32.1</p> <p>None are applicable.</p>

<p>regular basis.</p>											
Decks											
Design and Siting											
<p>PO 33.1</p> <p>Decks are designed and sited to:</p> <ul style="list-style-type: none"> <li>(a) complement the associated building form</li> <li>(b) minimise impacts on the streetscape through siting behind the building line of the principal building (unless on a significant allotment or open space)</li> <li>(c) minimise cut and fill and overall massing when viewed from adjacent land.</li> </ul>	<p>DTS/DPF 33.1</p> <p>Decks:</p> <ul style="list-style-type: none"> <li>(a) where ancillary to a dwelling:                             <ul style="list-style-type: none"> <li>(i) are not constructed, added to or altered so that any part is situated:                                     <ul style="list-style-type: none"> <li>A. in front of any part of the building line of the dwelling to which it is ancillary</li> <li>or</li> <li>B. within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)</li> </ul> </li> <li>(ii) are set back at least 900mm from side or rear allotment boundaries</li> <li>(iii) when attached to the dwelling, has a finished floor level consistent with the finished ground floor level of the dwelling</li> <li>(iv) where associated with a residential use, retains a total area of soft landscaping for the entire development site, including any common property, with a minimum dimension of 700mm in accordance with (A) or (B), whichever is less:                                     <ul style="list-style-type: none"> <li>A. a total area is determined by the following table:   <table border="1"> <thead> <tr> <th>Site area (or in the case of residential flat building or group dwelling(s), average site area) (m<sup>2</sup>)</th> <th>Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td>&lt;150</td> <td>10%</td> </tr> <tr> <td>150-200</td> <td>15%</td> </tr> <tr> <td>&gt;200-450</td> <td>20%</td> </tr> <tr> <td>&gt;450</td> <td>25%</td> </tr> </tbody> </table> </li> <li>B. the amount of existing soft landscaping prior to the development occurring.</li> </ul> </li> </ul> </li> <li>(b) where in association with a non-residential use:                             <ul style="list-style-type: none"> <li>(i) are set back at least 2 metres from the boundary of an allotment used for residential purposes.</li> <li>(ii) are set back at least 2 metres from a public road.</li> <li>(iii) have a floor area not exceeding 25m<sup>2</sup></li> </ul> </li> <li>(c) in all cases, has a finished floor level not exceeding 1 metre above natural ground level at any point.</li> </ul>	Site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site	<150	10%	150-200	15%	>200-450	20%	>450	25%
Site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site										
<150	10%										
150-200	15%										
>200-450	20%										
>450	25%										
<p>PO 33.2</p> <p>Decks are designed and sited to minimise direct overlooking of habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones through suitable floor levels, screening and siting taking into account the slope of the subject land, existing vegetation on the subject land, and fencing.</p>	<p>DTS/DPF 33.2</p> <p>Decks with a finished floor level/s 500mm or more above natural ground level facing side or rear boundaries shared with a residential use in a neighbourhood-type zone incorporate screening with a maximum of 25% transparency/openings, permanently fixed to the outer edge of the deck not less than 1.5 m above the finished floor level/s.</p>										
<p>PO 33.3</p> <p>Decks used for outdoor dining, entertainment or other commercial uses provide carparking in accordance with the primary use of the deck.</p>	<p>DTS/DPF 33.3</p> <p>Decks used for commercial purposes do not result in less on-site car parking for the primary use of the subject land than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.</p>										

**Table 1 - Private Open Space**

Dwelling Type	Minimum Rate
Dwelling (at ground level)	Total private open space area: (a) Site area <301m <sup>2</sup> : 24m <sup>2</sup> located behind the building line. (b) Site area ≥ 301m <sup>2</sup> : 60m <sup>2</sup> located behind the building line.  Minimum directly accessible from a living room: 16m <sup>2</sup> / with a minimum dimension 3m.
Dwelling (above ground level)	Studio (no separate bedroom): 4m <sup>2</sup> with a minimum dimension 1.8m  One bedroom: 8m <sup>2</sup> with a minimum dimension 2.1m  Two bedroom dwelling: 11m <sup>2</sup> with a minimum dimension 2.4m  Three + bedroom dwelling: 15m <sup>2</sup> with a minimum dimension 2.6m
Cabin or caravan (permanently fixed to the ground) in a residential park or a caravan and tourist park	Total area: 16m <sup>2</sup> , which may be used as second car parking space, provided on each site intended for residential occupation.

**Design in Urban Areas**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Development is: (a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributing to the character of the locality (b) durable - fit for purpose, adaptable and long lasting (c) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors (d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All Development	
External Appearance	
PO 1.1 Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).	DTS/DPF 1.1 None are applicable.
PO 1.2	DTS/DPF 1.2

Where zero or minor setbacks are desirable, development provides shelter over footpaths (in the form of verandahs, awnings, canopies and the like, with adequate lighting) to positively contribute to the walkability, comfort and safety of the public realm.	None are applicable.
PO 1.3 Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points and complement the streetscape.	DTS/DPF 1.3 None are applicable.
PO 1.4 Plant, exhaust and intake vents and other technical equipment are integrated into the building design to minimise visibility from the public realm and negative impacts on residential amenity by:  (a) positioning plant and equipment discretely, in unobtrusive locations as viewed from public roads and spaces (b) screening rooftop plant and equipment from view (c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses.	DTS/DPF 1.4 Development does not incorporate any structures that protrude beyond the roofline.
PO 1.5 The negative visual impact of outdoor storage, waste management, loading and service areas is minimised by integrating them into the building design and screening them from public view (such as fencing, landscaping and built form), taking into account the form of development contemplated in the relevant zone.	DTS/DPF 1.5 None are applicable.
Safety	
PO 2.1 Development maximises opportunities for passive surveillance of the public realm by providing clear lines of sight, appropriate lighting and the use of visually permeable screening wherever practicable.	DTS/DPF 2.1 None are applicable.
PO 2.2 Development is designed to differentiate public, communal and private areas.	DTS/DPF 2.2 None are applicable.
PO 2.3 Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.	DTS/DPF 2.3 None are applicable.
PO 2.4 Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.	DTS/DPF 2.4 None are applicable.
PO 2.5 Common areas and entry points of buildings (such as the foyer areas of residential buildings) and non-residential land uses at street level, maximise passive surveillance from the public realm to the inside of the building at night.	DTS/DPF 2.5 None are applicable.
Landscaping	
PO 3.1 Soft landscaping and tree planting are incorporated to:  (a) minimise heat absorption and reflection (b) maximise shade and shelter (c) maximise stormwater infiltration (d) enhance the appearance of land and streetscapes.	DTS/DPF 3.1 None are applicable.
Environmental Performance	
PO 4.1 Buildings are sited, oriented and designed to maximise natural sunlight access	DTS/DPF 4.1 None are applicable.

and ventilation to main activity areas, habitable rooms, common areas and open spaces.	
PO 4.2 Buildings are sited and designed to maximise passive environmental performance and minimise energy consumption and reliance on mechanical systems, such as heating and cooling.	DTS/DPF 4.2 None are applicable.
PO 4.3 Buildings incorporate climate responsive techniques and features such as building and window orientation, use of eaves, verandahs and shading structures, water harvesting, at ground landscaping, green walls, green roofs and photovoltaic cells.	DTS/DPF 4.3 None are applicable.
Water Sensitive Design	
PO 5.1 Development is sited and designed to maintain natural hydrological systems without negatively impacting:  (a) the quantity and quality of surface water and groundwater (b) the depth and directional flow of surface water and groundwater (c) the quality and function of natural springs.	DTS/DPF 5.1 None are applicable.
On-site Waste Treatment Systems	
PO 6.1 Dedicated on-site effluent disposal areas do not include any areas to be used for, or could be reasonably foreseen to be used for, private open space, driveways or car parking.	DTS/DPF 6.1 Effluent disposal drainage areas do not:  (a) encroach within an area used as private open space or result in less private open space than that specified in Design in Urban Areas Table 1 - Private Open Space (b) use an area also used as a driveway (c) encroach within an area used for on-site car parking or result in less on-site car parking than that specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.
Car parking appearance	
PO 7.1 Development facing the street is designed to minimise the negative impacts of any semi-basement and undercroft car parking on streetscapes through techniques such as:  (a) limiting protrusion above finished ground level (b) screening through appropriate planting, fencing and mounding (c) limiting the width of openings and integrating them into the building structure.	DTS/DPF 7.1 None are applicable.
PO 7.2 Vehicle parking areas appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like.	DTS/DPF 7.2 None are applicable.
PO 7.3 Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.	DTS/DPF 7.3 None are applicable.
PO 7.4 Street-level vehicle parking areas incorporate tree planting to provide shade, reduce solar heat absorption and reflection.	DTS/DPF 7.4 Vehicle parking areas that are open to the sky and comprise 10 or more car parking spaces include a shade tree with a mature canopy of 4m diameter spaced for each 10 car parking spaces provided and a landscaped strip on any road frontage of a minimum dimension of 1m.
PO 7.5 Street level parking areas incorporate soft landscaping to improve visual	DTS/DPF 7.5 Vehicle parking areas comprising 10 or more car parking spaces include soft

appearance when viewed from within the site and from public places.	landscaping with a minimum dimension of: <ul style="list-style-type: none"> <li>(a) 1m along all public road frontages and allotment boundaries</li> <li>(b) 1m between double rows of car parking spaces.</li> </ul>
PO 7.6 Vehicle parking areas and associated driveways are landscaped to provide shade and positively contribute to amenity.	DTS/DPF 7.6 None are applicable.
PO 7.7 Vehicle parking areas and access ways incorporate integrated stormwater management techniques such as permeable or porous surfaces, infiltration systems, drainage swales or rain gardens that integrate with soft landscaping.	DTS/DPF 7.7 None are applicable.
<b>Earthworks and sloping land</b>	
PO 8.1 Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	DTS/DPF 8.1 Development does not involve any of the following: <ul style="list-style-type: none"> <li>(a) excavation exceeding a vertical height of 1m</li> <li>(b) filling exceeding a vertical height of 1m</li> <li>(c) a total combined excavation and filling vertical height of 2m or more.</li> </ul>
PO 8.2 Driveways and access tracks designed and constructed to allow safe and convenient access on sloping land.	DTS/DPF 8.2 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8) satisfy (a) and (b): <ul style="list-style-type: none"> <li>(a) do not have a gradient exceeding 25% (1-in-4) at any point along the driveway</li> <li>(b) are constructed with an all-weather trafficable surface.</li> </ul>
PO 8.3 Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8): <ul style="list-style-type: none"> <li>(a) do not contribute to the instability of embankments and cuttings</li> <li>(b) provide level transition areas for the safe movement of people and goods to and from the development</li> <li>(c) are designed to integrate with the natural topography of the land.</li> </ul>	DTS/DPF 8.3 None are applicable.
PO 8.4 Development on sloping land (with a gradient exceeding 1 in 8) avoids the alteration of natural drainage lines and includes on site drainage systems to minimise erosion.	DTS/DPF 8.4 None are applicable.
PO 8.5 Development does not occur on land at risk of landslip or increase the potential for landslip or land surface instability.	DTS/DPF 8.5 None are applicable.
<b>Fences and walls</b>	
PO 9.1 Fences, walls and retaining walls of sufficient height maintain privacy and security without unreasonably impacting visual amenity and adjoining land's access to sunlight or the amenity of public places.	DTS/DPF 9.1 None are applicable.
PO 9.2 Landscaping is incorporated on the low side of retaining walls that are visible from public roads and public open space to minimise visual impacts.	DTS/DPF 9.2 A vegetated landscaped strip 1m wide or more is provided against the low side of a retaining wall.
<b>Overlooking / Visual Privacy (low rise buildings)</b>	
PO 10.1 Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones.	DTS/DPF 10.1 Upper level windows facing side or rear boundaries shared with a residential use in a neighbourhood-type zone: <ul style="list-style-type: none"> <li>(a) are permanently obscured to a height of 1.5m above finished floor</li> </ul>

	<p>level and are fixed or not capable of being opened more than 125mm</p> <p>(b) have sill heights greater than or equal to 1.5m above finished floor level</p> <p>(c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5 m above the finished floor level.</p>
<p>PO 10.2</p> <p>Development mitigates direct overlooking from balconies to habitable rooms and private open space of adjoining residential uses in neighbourhood type zones.</p>	<p>DTS/DPF 10.2</p> <p>One of the following is satisfied:</p> <p>(a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace</p> <p>or</p> <p>(b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of:</p> <p>(i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land</p> <p>or</p> <p>(ii) 1.7m above finished floor level in all other cases</p>
Site Facilities / Waste Storage (excluding low rise residential development)	
<p>PO 11.1</p> <p>Development provides a dedicated area for on-site collection and sorting of recyclable materials and refuse, green organic waste and wash bay facilities for the ongoing maintenance of bins that is adequate in size considering the number and nature of the activities they will serve and the frequency of collection.</p>	<p>DTS/DPF 11.1</p> <p>None are applicable.</p>
<p>PO 11.2</p> <p>Communal waste storage and collection areas are located, enclosed and designed to be screened from view from the public domain, open space and dwellings.</p>	<p>DTS/DPF 11.2</p> <p>None are applicable.</p>
<p>PO 11.3</p> <p>Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.</p>	<p>DTS/DPF 11.3</p> <p>None are applicable.</p>
<p>PO 11.4</p> <p>Communal waste storage and collection areas are designed to allow waste and recycling collection vehicles to enter and leave the site without reversing.</p>	<p>DTS/DPF 11.4</p> <p>None are applicable.</p>
<p>PO 11.5</p> <p>For mixed use developments, non-residential waste and recycling storage areas and access provide opportunities for on-site management of food waste through composting or other waste recovery as appropriate.</p>	<p>DTS/DPF 11.5</p> <p>None are applicable.</p>
All Development - Medium and High Rise	
External Appearance	
<p>PO 12.1</p> <p>Buildings positively contribute to the character of the local area by responding to local context.</p>	<p>DTS/DPF 12.1</p> <p>None are applicable.</p>
<p>PO 12.2</p> <p>Architectural detail at street level and a mixture of materials at lower building levels near the public interface are provided to reinforce a human scale.</p>	<p>DTS/DPF 12.2</p> <p>None are applicable.</p>
<p>PO 12.3</p> <p>Buildings are designed to reduce visual mass by breaking up building elevations into distinct elements.</p>	<p>DTS/DPF 12.3</p> <p>None are applicable.</p>
<p>PO 12.4</p> <p>Boundary walls visible from public land include visually interesting treatments to break up large blank elevations.</p>	<p>DTS/DPF 12.4</p> <p>None are applicable.</p>
<p>PO 12.5</p> <p>External materials and finishes are durable and age well to minimise ongoing</p>	<p>DTS/DPF 12.5</p> <p>Buildings utilise a combination of the following external materials and finishes:</p>



<p>maintenance requirements.</p>	<ul style="list-style-type: none"> <li>(a) masonry</li> <li>(b) natural stone</li> <li>(c) pre-finished materials that minimise staining, discolouring or deterioration.</li> </ul>
<p>PO 12.6 Street-facing building elevations are designed to provide attractive, high quality and pedestrian-friendly street frontages.</p>	<p>DTS/DPF 12.6 Building street frontages incorporate:</p> <ul style="list-style-type: none"> <li>(a) active uses such as shops or offices</li> <li>(b) prominent entry areas for multi-storey buildings (where it is a common entry)</li> <li>(c) habitable rooms of dwellings</li> <li>(d) areas of communal public realm with public art or the like, where consistent with the zone and/or subzone provisions.</li> </ul>
<p>PO 12.7 Entrances to multi-storey buildings are safe, attractive, welcoming, functional and contribute to streetscape character.</p>	<p>DTS/DPF 12.7 Entrances to multi-storey buildings are:</p> <ul style="list-style-type: none"> <li>(a) oriented towards the street</li> <li>(b) clearly visible and easily identifiable from the street and vehicle parking areas</li> <li>(c) designed to be prominent, accentuated and a welcoming feature if there are no active or occupied ground floor uses</li> <li>(d) designed to provide shelter, a sense of personal address and transitional space around the entry</li> <li>(e) located as close as practicable to the lift and / or lobby access to minimise the need for long access corridors</li> <li>(f) designed to avoid the creation of potential areas of entrapment.</li> </ul>
<p>PO 12.8 Building services, plant and mechanical equipment are screened from the public realm.</p>	<p>DTS/DPF 12.8 None are applicable.</p>

**Landscaping**

<p>PO 13.1 Development facing a street provides a well landscaped area that contains a deep soil space to accommodate a tree of a species and size adequate to provide shade, contribute to tree canopy targets and soften the appearance of buildings.</p>	<p>DTS/DPF 13.1 Buildings provide a 4m by 4m deep soil space in front of the building that accommodates a medium to large tree, except where no building setback from front property boundaries is desired.</p>																				
<p>PO 13.2 Deep soil zones are provided to retain existing vegetation or provide areas that can accommodate new deep root vegetation, including tall trees with large canopies to provide shade and soften the appearance of multi-storey buildings.</p>	<p>DTS/DPF 13.2 Multi-storey development provides deep soil zones and incorporates trees at not less than the following rates, except in a location or zone where full site coverage is desired.</p> <table border="1"> <thead> <tr> <th>Site area</th> <th>Minimum deep soil area</th> <th>Minimum dimension</th> <th>Tree / deep soil zones</th> </tr> </thead> <tbody> <tr> <td>&lt;300 m<sup>2</sup></td> <td>10 m<sup>2</sup></td> <td>1.5m</td> <td>1 small tree / 10 m<sup>2</sup></td> </tr> <tr> <td>300-1500 m<sup>2</sup></td> <td>7% site area</td> <td>3m</td> <td>1 medium tree / 30 m<sup>2</sup></td> </tr> <tr> <td>&gt;1500 m<sup>2</sup></td> <td>7% site area</td> <td>6m</td> <td>1 large or medium tree / 60 m<sup>2</sup></td> </tr> </tbody> </table> <p><b>Tree size and site area definitions</b></p> <table border="1"> <tr> <td>Small tree</td> <td>4-6m mature height and 2-4m canopy spread</td> </tr> <tr> <td>Medium tree</td> <td>6-12m mature height and 4-8m canopy spread</td> </tr> </table>	Site area	Minimum deep soil area	Minimum dimension	Tree / deep soil zones	<300 m <sup>2</sup>	10 m <sup>2</sup>	1.5m	1 small tree / 10 m <sup>2</sup>	300-1500 m <sup>2</sup>	7% site area	3m	1 medium tree / 30 m <sup>2</sup>	>1500 m <sup>2</sup>	7% site area	6m	1 large or medium tree / 60 m <sup>2</sup>	Small tree	4-6m mature height and 2-4m canopy spread	Medium tree	6-12m mature height and 4-8m canopy spread
Site area	Minimum deep soil area	Minimum dimension	Tree / deep soil zones																		
<300 m <sup>2</sup>	10 m <sup>2</sup>	1.5m	1 small tree / 10 m <sup>2</sup>																		
300-1500 m <sup>2</sup>	7% site area	3m	1 medium tree / 30 m <sup>2</sup>																		
>1500 m <sup>2</sup>	7% site area	6m	1 large or medium tree / 60 m <sup>2</sup>																		
Small tree	4-6m mature height and 2-4m canopy spread																				
Medium tree	6-12m mature height and 4-8m canopy spread																				

	Large tree	12m mature height and >8m canopy spread
	Site area	The total area for development site, not average area per dwelling
PO 13.3 Deep soil zones with access to natural light are provided to assist in maintaining vegetation health.	DTS/DPF 13.3 None are applicable.	
PO 13.4 Unless separated by a public road or reserve, development sites adjacent to any zone that has a primary purpose of accommodating low-rise residential development incorporate a deep soil zone along the common boundary to enable medium to large trees to be retained or established to assist in screening new buildings of 3 or more building levels in height.	DTS/DPF 13.4 Building elements of 3 or more building levels in height are set back at least 6m from a zone boundary in which a deep soil zone area is incorporated.	
<b>Environmental</b>		
PO 14.1 Development minimises detrimental micro-climatic impacts on adjacent land and buildings.	DTS/DPF 14.1 None are applicable.	
PO 14.2 Development incorporates sustainable design techniques and features such as window orientation, eaves and shading structures, water harvesting and use, green walls and roof designs that enable the provision of rain water tanks (where they are not provided elsewhere on site), green roofs and photovoltaic cells.	DTS/DPF 14.2 None are applicable.	
PO 14.3 Development of 5 or more building levels, or 21m or more in height (as measured from natural ground level and excluding roof-mounted mechanical plant and equipment) is designed to minimise the impacts of wind through measures such as:  (a) a podium at the base of a tall tower and aligned with the street to deflect wind away from the street (b) substantial verandahs around a building to deflect downward travelling wind flows over pedestrian areas (c) the placement of buildings and use of setbacks to deflect the wind at ground level (d) avoiding tall shear elevations that create windy conditions at street level.	DTS/DPF 14.3 None are applicable.	
<b>Car Parking</b>		
PO 15.1 Multi-level vehicle parking structures are designed to contribute to active street frontages and complement neighbouring buildings.	DTS/DPF 15.1 Multi-level vehicle parking structures within buildings:  (a) provide land uses such as commercial, retail or other non-car parking uses along ground floor street frontages (b) incorporate facade treatments in building elevations facing along major street frontages that are sufficiently enclosed and detailed to complement adjacent buildings.	
PO 15.2 Multi-level vehicle parking structures within buildings complement the surrounding built form in terms of height, massing and scale.	DTS/DPF 15.2 None are applicable.	
<b>Overlooking/Visual Privacy</b>		
PO 16.1 Development mitigates direct overlooking of habitable rooms and private open spaces of adjacent residential uses in neighbourhood-type zones	DTS/DPF 16.1 None are applicable.	

<p>through measures such as:</p> <ul style="list-style-type: none"> <li>(a) appropriate site layout and building orientation</li> <li>(b) off-setting the location of balconies and windows of habitable rooms or areas with those of other buildings so that views are oblique rather than direct to avoid direct line of sight</li> <li>(c) building setbacks from boundaries (including building boundary to boundary where appropriate) that interrupt views or that provide a spatial separation between balconies or windows of habitable rooms</li> <li>(d) screening devices that are integrated into the building design and have minimal negative effect on residents' or neighbours' amenity.</li> </ul>	
---	--

All residential development

Front elevations and passive surveillance

<p>PO 17.1</p> <p>Dwellings incorporate windows facing primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.</p>	<p>DTS/DPF 17.1</p> <p>Each dwelling with a frontage to a public street:</p> <ul style="list-style-type: none"> <li>(a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m</li> <li>(b) has an aggregate window area of at least 2m<sup>2</sup> facing the primary street.</li> </ul>
--	--

<p>PO 17.2</p> <p>Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.</p>	<p>DTS/DPF 17.2</p> <p>Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.</p>
---	--

Outlook and Amenity

<p>PO 18.1</p> <p>Living rooms have an external outlook to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 18.1</p> <p>A living room of a dwelling incorporates a window with an external outlook of the street frontage, private open space, public open space, or waterfront areas.</p>
--	---

<p>PO 18.2</p> <p>Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.</p>	<p>DTS/DPF 18.2</p> <p>None are applicable.</p>
---	---

Ancillary Development

<p>PO 19.1</p> <p>Residential ancillary buildings are sited and designed to not detract from the streetscape or appearance of primary residential buildings on the site or neighbouring properties.</p>	<p>DTS/DPF 19.1</p> <p>Ancillary buildings:</p> <ul style="list-style-type: none"> <li>(a) are ancillary to a dwelling erected on the same site</li> <li>(b) have a floor area not exceeding 60m<sup>2</sup></li> <li>(c) are not constructed, added to or altered so that any part is situated:             <ul style="list-style-type: none"> <li>(i) in front of any part of the building line of the dwelling to which it is ancillary</li> <li>or</li> <li>(ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)</li> </ul> </li> <li>(d) in the case of a garage or carport, the garage or carport:             <ul style="list-style-type: none"> <li>(i) is set back at least 5.5m from the boundary of the primary street</li> <li>(ii) when facing a primary street or secondary street, has a total door / opening not exceeding:                 <ul style="list-style-type: none"> <li>A. for dwellings of single building level - 7m in width or 50% of the site frontage, whichever is the lesser</li> <li>B. for dwellings comprising two or more building levels at the building line fronting the same public street - 7m in width</li> </ul> </li> </ul> </li> <li>(e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m unless:             <ul style="list-style-type: none"> <li>(i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary</li> </ul> <p>and</p> </li> </ul>
---	---

	<ul style="list-style-type: none"> <li>(ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent</li> <li>(f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary</li> <li>(g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure</li> <li>(h) have a wall height or post height not exceeding 3m above natural ground level (and not including a gable end)</li> <li>(i) have a roof height where no part of the roof is more than 5m above the natural ground level</li> <li>(j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour</li> <li>(k) retains a total area of soft landscaping for the entire development site, including any common property, with a minimum dimension of 700mm in accordance with (i) or (ii), whichever is less:             <ul style="list-style-type: none"> <li>(i) a total area as determined by the following table:                 <table border="1"> <thead> <tr> <th>Site area (or in the case of residential flat building or group dwelling(s), average site area) (m<sup>2</sup>)</th> <th>Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td>&lt;150</td> <td>10%</td> </tr> <tr> <td>150-200</td> <td>15%</td> </tr> <tr> <td>&gt;200-450</td> <td>20%</td> </tr> <tr> <td>&gt;450</td> <td>25%</td> </tr> </tbody> </table> </li> <li>(ii) the amount of existing soft landscaping prior to the development occurring.</li> </ul> </li> </ul>	Site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site	<150	10%	150-200	15%	>200-450	20%	>450	25%
Site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site										
<150	10%										
150-200	15%										
>200-450	20%										
>450	25%										

<p>PO 19.2</p> <p>Ancillary buildings and structures do not impede on-site functional requirements such as private open space provision, car parking requirements or result in over-development of the site.</p>
--

<p>DTS/DPF 19.2</p> <p>Ancillary buildings and structures do not result in:</p> <ul style="list-style-type: none"> <li>(a) less private open space than specified in Design in Urban Areas Table 1 - Private Open Space</li> <li>(b) less on-site car parking than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.</li> </ul>
--

<p>PO 19.3</p> <p>Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers.</p>
--

<p>DTS/DPF 19.3</p> <p>The pump and/or filtration system is ancillary to a dwelling erected on the same site and is:</p> <ul style="list-style-type: none"> <li>(a) enclosed in a solid acoustic structure that is located at least 5m from the nearest habitable room located on an adjoining allotment or</li> <li>(b) located at least 12m from the nearest habitable room located on an adjoining allotment.</li> </ul>
---

<p>PO 19.4</p> <p>Buildings and structures that are ancillary to an existing non-residential use do not detract from the streetscape character, appearance of buildings on the site of the development, or the amenity of neighbouring properties.</p>
--

<p>DTS/DPF 19.4</p> <p>Non-residential ancillary buildings and structures:</p> <ul style="list-style-type: none"> <li>(a) are ancillary and subordinate to an existing non-residential use on the same site</li> <li>(b) have a floor area not exceeding the following:             <table border="1"> <thead> <tr> <th>Allotment size</th> <th>Floor area</th> </tr> </thead> <tbody> <tr> <td>≤500m<sup>2</sup></td> <td>60m<sup>2</sup></td> </tr> <tr> <td>&gt;500m<sup>2</sup></td> <td>80m<sup>2</sup></td> </tr> </tbody> </table> </li> <li>(c) are not constructed, added to or altered so that any part is situated:             <ul style="list-style-type: none"> <li>(i) in front of any part of the building line of the main building to which it is ancillary</li> </ul> </li> </ul>	Allotment size	Floor area	≤500m <sup>2</sup>	60m <sup>2</sup>	>500m <sup>2</sup>	80m <sup>2</sup>
Allotment size	Floor area					
≤500m <sup>2</sup>	60m <sup>2</sup>					
>500m <sup>2</sup>	80m <sup>2</sup>					

	<p>or</p> <ul style="list-style-type: none"> <li>(ii) within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)</li> </ul> <ul style="list-style-type: none"> <li>(d) in the case of a garage or carport, the garage or carport:             <ul style="list-style-type: none"> <li>(i) is set back at least 5.5m from the boundary of the primary street</li> </ul> </li> <li>(e) if situated on a boundary (not being a boundary with a primary street or secondary street), do not exceed a length of 11.5m unless:             <ul style="list-style-type: none"> <li>(i) a longer wall or structure exists on the adjacent site and is situated on the same allotment boundary</li> <li>(ii) the proposed wall or structure will be built along the same length of boundary as the existing adjacent wall or structure to the same or lesser extent</li> </ul> </li> <li>(f) if situated on a boundary of the allotment (not being a boundary with a primary street or secondary street), all walls or structures on the boundary will not exceed 45% of the length of that boundary</li> <li>(g) will not be located within 3m of any other wall along the same boundary unless on an adjacent site on that boundary there is an existing wall of a building that would be adjacent to or about the proposed wall or structure</li> <li>(h) have a wall height (or post height) not exceeding 3m (and not including a gable end)</li> <li>(i) have a roof height where no part of the roof is more than 5m above the natural ground level</li> <li>(j) if clad in sheet metal, is pre-colour treated or painted in a non-reflective colour.</li> </ul>
--	--

Residential Development - Low Rise

External appearance

<p>PO 20.1</p> <p>Garaging is designed to not detract from the streetscape or appearance of a dwelling.</p>	<p>DTS/DPF 20.1</p> <p>Garages and carports facing a street:</p> <ul style="list-style-type: none"> <li>(a) are situated so that no part of the garage or carport will be in front of any part of the building line of the dwelling</li> <li>(b) are set back at least 5.5m from the boundary of the primary street</li> <li>(c) have a garage door / opening width not exceeding 7m</li> <li>(d) have a garage door / opening width not exceeding 50% of the site frontage unless the dwelling has two or more building levels at the building line fronting the same public street.</li> </ul>
---	--

<p>PO 20.2</p> <p>Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and the appearance of common driveway areas.</p>	<p>DTS/DPF 20.2</p> <p>Each dwelling includes at least 3 of the following design features within the building elevation facing a primary street, and at least 2 of the following design features within the building elevation facing any other public road (other than a laneway) or a common driveway:</p> <ul style="list-style-type: none"> <li>(a) a minimum of 30% of the building wall is set back an additional 300mm from the building line</li> <li>(b) a porch or portico projects at least 1m from the building wall</li> <li>(c) a balcony projects from the building wall</li> <li>(d) a verandah projects at least 1m from the building wall</li> <li>(e) eaves of a minimum 400mm width extend along the width of the front elevation</li> <li>(f) a minimum 30% of the width of the upper level projects forward from the lower level primary building line by at least 300mm</li> <li>(g) a minimum of two different materials or finishes are incorporated on the walls of the front building elevation, with a maximum of 80% of the building elevation in a single material or finish.</li> </ul>
---	--

<p>PO 20.3</p> <p>The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.</p>	<p>DTS/DPF 20.3</p> <p>None are applicable</p>
---	--

**Private Open Space**

<p>PO 21.1</p> <p>Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.</p>	<p>DTS/DPF 21.1</p> <p>Private open space is provided in accordance with Design in Urban Areas Table 1 - Private Open Space.</p>
---	--

<p>PO 21.2</p> <p>Private open space is positioned to provide convenient access from internal living areas.</p>	<p>DTS/DPF 21.2</p> <p>Private open space is directly accessible from a habitable room.</p>
---	---

**Landscaping**

<p>PO 22.1</p> <p>Soft landscaping is incorporated into development to:</p> <ul style="list-style-type: none"> <li>(a) minimise heat absorption and reflection</li> <li>(b) contribute shade and shelter</li> <li>(c) provide for stormwater infiltration and biodiversity</li> <li>(d) enhance the appearance of land and streetscapes.</li> </ul>	<p>DTS/DPF 22.1</p> <p>Residential development incorporates soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b):</p> <ul style="list-style-type: none"> <li>(a) a total area for the entire development site, including any common property, as determined by the following table:</li> </ul> <table border="1"> <thead> <tr> <th style="background-color: #2c5e8c; color: white;">Site area (or in the case of residential flat building or group dwelling(s), average site area) (m<sup>2</sup>)</th> <th style="background-color: #2c5e8c; color: white;">Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td>&lt;150</td> <td>10%</td> </tr> <tr> <td>150-200</td> <td>15%</td> </tr> <tr> <td>&gt;200-450</td> <td>20%</td> </tr> <tr> <td>&gt;450</td> <td>25%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>(b) at least 30% of any land between the primary street boundary and the primary building line.</li> </ul>	Site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site	<150	10%	150-200	15%	>200-450	20%	>450	25%
Site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site										
<150	10%										
150-200	15%										
>200-450	20%										
>450	25%										

**Car parking, access and manoeuvrability**

<p>PO 23.1</p> <p>Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 23.1</p> <p>Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area):</p> <ul style="list-style-type: none"> <li>(a) single width car parking spaces:                         <ul style="list-style-type: none"> <li>(i) a minimum length of 5.4m per space</li> <li>(ii) a minimum width of 3.0m</li> <li>(iii) a minimum garage door width of 2.4m</li> </ul> </li> <li>(b) double width car parking spaces (side by side):                         <ul style="list-style-type: none"> <li>(i) a minimum length of 5.4m</li> <li>(ii) a minimum width of 5.4m</li> <li>(iii) minimum garage door width of 2.4m per space.</li> </ul> </li> </ul>
--	--

<p>PO 23.2</p> <p>Uncovered car parking space are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 23.2</p> <p>Uncovered car parking spaces have:</p> <ul style="list-style-type: none"> <li>(a) a minimum length of 5.4m</li> <li>(b) a minimum width of 2.4m</li> <li>(c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m.</li> </ul>
--	---

<p>PO 23.3</p> <p>Driveways and access points are located and designed to facilitate safe</p>	<p>DTS/DPF 23.3</p> <p>Driveways and access points satisfy (a) or (b):</p>
---	--

access and egress while maximising land available for street tree planting, pedestrian movement, domestic waste collection, landscaped street frontages and on-street parking.

- (a) sites with a frontage to a public road of 10m or less, have a width between 3.0 and 3.2 metres measured at the property boundary and are the only access point provided on the site
- (b) sites with a frontage to a public road greater than 10m:
  - (i) have a maximum width of 5m measured at the property boundary and are the only access point provided on the site;
  - (ii) have a width between 3.0 metres and 3.2 metres measured at the property boundary and no more than two access points are provided on site, separated by no less than 1m.

PO 23.4  
 Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.

- DTS/DPF 23.4  
 Vehicle access to designated car parking spaces satisfy (a) or (b):
- (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land
  - (b) where newly proposed, is set back:
    - (i) 0.5m or more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure unless consent is provided from the asset owner
    - (ii) 2m or more from the base of the trunk of a street tree unless consent is provided from the tree owner for a lesser distance
    - (iii) 6m or more from the tangent point of an intersection of 2 or more roads
    - (iv) outside of the marked lines or infrastructure dedicating a pedestrian crossing.

PO 23.5  
 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.

- DTS/DPF 23.5  
 Driveways are designed and sited so that:
- (a) the gradient of the driveway does not exceed a grade of 1 in 4 and includes transitions to ensure a maximum grade change of 12.5% (1 in 8) for summit changes, and 15% (1 in 6.7) for sag changes, in accordance with AS 2890.1:2004 to prevent vehicles bottoming or scraping
  - (b) the centreline of the driveway has an angle of no less than 70 degrees and no more than 110 degrees from the street boundary to which it takes its access as shown in the following diagram:
- 
- (c) if located to provide access from an alley, lane or right of way - the

	alley, land or right or way is at least 6.2m wide along the boundary of the allotment / site.
PO 23.6 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	DTS/DPF 23.6 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:  (a) minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) (b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly (c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.
Waste storage	
PO 24.1 Provision is made for the convenient storage of waste bins in a location screened from public view.	DTS/DPF 24.1 Where dwellings abut both side boundaries a waste bin storage area is provided behind the building line of each dwelling that:  (a) has a minimum area of 2m <sup>2</sup> with a minimum dimension of 900mm (separate from any designated car parking spaces or private open space); and (b) has a continuous unobstructed path of travel (excluding moveable objects like gates, vehicles and roller doors) with a minimum width of 800mm between the waste bin storage area and the street.
Design of Transportable Buildings	
PO 25.1 The sub-floor space beneath transportable buildings is enclosed to give the appearance of a permanent structure.	DTS/DPF 25.1 Buildings satisfy (a) or (b):  (a) are not transportable (b) the sub-floor space between the building and ground level is clad in a material and finish consistent with the building.
Residential Development - Medium and High Rise (including serviced apartments)	
Outlook and Visual Privacy	
PO 26.1 Ground level dwellings have a satisfactory short range visual outlook to public, communal or private open space.	DTS/DPF 26.1 Buildings:  (a) provide a habitable room at ground or first level with a window facing toward the street (b) limit the height / extent of solid walls or fences facing the street to 1.2m high above the footpath level or, where higher, to 50% of the site frontage.
PO 26.2 The visual privacy of ground level dwellings within multi-level buildings is protected.	DTS/DPF 26.2 The finished floor level of ground level dwellings in multi-storey developments is raised by up to 1.2m.
Private Open Space	
PO 27.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 27.1 Private open space provided in accordance with Design in Urban Areas Table 1 - Private Open Space.
Residential amenity in multi-level buildings	
PO 28.1 Residential accommodation within multi-level buildings have habitable rooms, windows and balconies designed and positioned to be separated from those of other dwellings and accommodation to provide visual and acoustic privacy and allow for natural ventilation and the infiltration of daylight into interior and outdoor spaces.	DTS/DPF 28.1 Habitable rooms and balconies of independent dwellings and accommodation are separated by at least 6m from one another where there is a direct line of sight between them and 3m or more from a side or rear property boundary.
PO 28.2	DTS/DPF 28.2



<p>Balconies are designed, positioned and integrated into the overall architectural form and detail of the development to:</p> <ul style="list-style-type: none"> <li>(a) respond to daylight, wind, and acoustic conditions to maximise comfort and provide visual privacy</li> <li>(b) allow views and casual surveillance of the street while providing for safety and visual privacy of nearby living spaces and private outdoor areas.</li> </ul>	<p>Balconies utilise one or a combination of the following design elements:</p> <ul style="list-style-type: none"> <li>(a) sun screens</li> <li>(b) pergolas</li> <li>(c) louvres</li> <li>(d) green facades</li> <li>(e) openable walls.</li> </ul>
<p>PO 28.3</p> <p>Balconies are of sufficient size and depth to accommodate outdoor seating and promote indoor / outdoor living.</p>	<p>DTS/DPF 28.3</p> <p>Balconies open directly from a habitable room and incorporate a minimum dimension of 2m.</p>
<p>PO 28.4</p> <p>Dwellings are provided with sufficient space for storage to meet likely occupant needs.</p>	<p>DTS/DPF 28.4</p> <p>Dwellings (not including student accommodation or serviced apartments) are provided with storage at the following rates with at least 50% or more of the storage volume to be provided within the dwelling:</p> <ul style="list-style-type: none"> <li>(a) studio: not less than 6m<sup>3</sup></li> <li>(b) 1 bedroom dwelling / apartment: not less than 8m<sup>3</sup></li> <li>(c) 2 bedroom dwelling / apartment: not less than 10m<sup>3</sup></li> <li>(d) 3+ bedroom dwelling / apartment: not less than 12m<sup>3</sup>.</li> </ul>
<p>PO 28.5</p> <p>Dwellings that use light wells for access to daylight, outlook and ventilation for habitable rooms, are designed to ensure a reasonable living amenity is provided.</p>	<p>DTS/DPF 28.5</p> <p>Light wells:</p> <ul style="list-style-type: none"> <li>(a) are not used as the primary source of outlook for living rooms</li> <li>(b) up to 18m in height have a minimum horizontal dimension of 3m, or 6m if overlooked by bedrooms</li> <li>(c) above 18m in height have a minimum horizontal dimension of 6m, or 9m if overlooked by bedrooms.</li> </ul>
<p>PO 28.6</p> <p>Attached or abutting dwellings are designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusions.</p>	<p>DTS/DPF 28.6</p> <p>None are applicable.</p>
<p>PO 28.7</p> <p>Dwellings are designed so that internal structural columns correspond with the position of internal walls to ensure that the space within the dwelling/apartment is useable.</p>	<p>DTS/DPF 28.7</p> <p>None are applicable.</p>
Dwelling Configuration	
<p>PO 29.1</p> <p>Buildings containing in excess of 10 dwellings provide a variety of dwelling sizes and a range in the number of bedrooms per dwelling to contribute to housing diversity.</p>	<p>DTS/DPF 29.1</p> <p>Buildings containing in excess of 10 dwellings provide at least one of each of the following:</p> <ul style="list-style-type: none"> <li>(a) studio (where there is no separate bedroom)</li> <li>(b) 1 bedroom dwelling / apartment with a floor area of at least 50m<sup>2</sup></li> <li>(c) 2 bedroom dwelling / apartment with a floor area of at least 65m<sup>2</sup></li> <li>(d) 3+ bedroom dwelling / apartment with a floor area of at least 80m<sup>2</sup>, and any dwelling over 3 bedrooms provides an additional 15m<sup>2</sup> for every additional bedroom.</li> </ul>
<p>PO 29.2</p> <p>Dwellings located on the ground floor of multi-level buildings with 3 or more bedrooms have the windows of their habitable rooms overlooking internal courtyard space or other public space, where possible.</p>	<p>DTS/DPF 29.2</p> <p>None are applicable.</p>
Common Areas	
<p>PO 30.1</p> <p>The size of lifts, lobbies and corridors is sufficient to accommodate movement of bicycles, strollers, mobility aids and visitor waiting areas.</p>	<p>DTS/DPF 30.1</p> <p>Common corridor or circulation areas:</p> <ul style="list-style-type: none"> <li>(a) have a minimum ceiling height of 2.7m</li> <li>(b) provide access to no more than 8 dwellings</li> </ul>

	(c) incorporate a wider section at apartment entries where the corridors exceed 12m in length from a core.
--	--

Group Dwellings, Residential Flat Buildings and Battle axe Development

Amenity

PO 31.1 Dwellings are of a suitable size to provide a high standard of amenity for occupants.	DTS/DPF 31.1 Dwellings have a minimum internal floor area in accordance with the following table: <table border="1"> <thead> <tr> <th>Number of bedrooms</th> <th>Minimum internal floor area</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>35m<sup>2</sup></td> </tr> <tr> <td>1 bedroom</td> <td>50m<sup>2</sup></td> </tr> <tr> <td>2 bedroom</td> <td>65m<sup>2</sup></td> </tr> <tr> <td>3+ bedrooms</td> <td>80m<sup>2</sup> and any dwelling over 3 bedrooms provides an additional 15m<sup>2</sup> for every additional bedroom</td> </tr> </tbody> </table>	Number of bedrooms	Minimum internal floor area	Studio	35m <sup>2</sup>	1 bedroom	50m <sup>2</sup>	2 bedroom	65m <sup>2</sup>	3+ bedrooms	80m <sup>2</sup> and any dwelling over 3 bedrooms provides an additional 15m <sup>2</sup> for every additional bedroom
Number of bedrooms	Minimum internal floor area										
Studio	35m <sup>2</sup>										
1 bedroom	50m <sup>2</sup>										
2 bedroom	65m <sup>2</sup>										
3+ bedrooms	80m <sup>2</sup> and any dwelling over 3 bedrooms provides an additional 15m <sup>2</sup> for every additional bedroom										

PO 31.2 The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.	DTS/DPF 31.2 None are applicable.
---	--------------------------------------

PO 31.3 Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.	DTS/DPF 31.3 None are applicable.
---	--------------------------------------

PO 31.4 Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.	DTS/DPF 31.4 Dwelling sites/allotments are not in the form of a battle-axe arrangement.
---	--

Communal Open Space

PO 32.1 Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	DTS/DPF 32.1 None are applicable.
---	--------------------------------------

PO 32.2 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 32.2 Communal open space incorporates a minimum dimension of 5 metres.
--	---

PO 32.3 Communal open space is designed and sited to:  (a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	DTS/DPF 32.3 None are applicable.
--	--------------------------------------

PO 32.4 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 32.4 None are applicable.
--	--------------------------------------

PO 32.5 Communal open space is designed and sited to:  (a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings (b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	DTS/DPF 32.5 None are applicable.
--	--------------------------------------

Car parking, access and manoeuvrability

PO 33.1	DTS/DPF 33.1
---------	--------------

<p>Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.</p>	<p>Where on-street parking is available directly adjacent the site, on-street parking is retained adjacent the subject site in accordance with the following requirements:</p> <ul style="list-style-type: none"> <li>(a) minimum 0.33 on-street car parks per proposed dwelling (rounded up to the nearest whole number)</li> <li>(b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly</li> <li>(c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.</li> </ul>
<p>PO 33.2</p> <p>The number of vehicular access points onto public roads is minimised to reduce interruption of the footpath and positively contribute to public safety and walkability.</p>	<p>DTS/DPF 33.2</p> <p>Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.</p>
<p>PO 33.3</p> <p>Residential driveways that service more than one dwelling are designed to allow safe and convenient movement.</p>	<p>DTS/DPF 33.3</p> <p>Driveways that service more than 1 dwelling or a dwelling on a battle-axe site:</p> <ul style="list-style-type: none"> <li>(a) have a minimum width of 3m</li> <li>(b) for driveways servicing more than 3 dwellings: <ul style="list-style-type: none"> <li>(i) have a width of 5.5m or more and a length of 6m or more at the kerb of the primary street</li> <li>(ii) where the driveway length exceeds 30m, incorporate a passing point at least every 30 metres with a minimum width of 5.5m and a minimum length of 6m.</li> </ul> </li> </ul>
<p>PO 33.4</p> <p>Residential driveways that service more than one dwelling or a dwelling on a battle-axe site are designed to allow passenger vehicles to enter and exit and manoeuvre within the site in a safe and convenient manner.</p>	<p>DTS/DPF 33.4</p> <p>Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and exit the garages or parking spaces in no more than a three-point turn manoeuvre.</p>
<p>PO 33.5</p> <p>Dwellings are adequately separated from common driveways and manoeuvring areas.</p>	<p>DTS/DPF 33.5</p> <p>Dwelling walls with entry doors or ground level habitable room windows are set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.</p>
Soft landscaping	
<p>PO 34.1</p> <p>Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.</p>	<p>DTS/DPF 34.1</p> <p>Other than where located directly in front of a garage or building entry, soft landscaping with a minimum dimension of 1m is provided between a dwelling and common driveway.</p>
<p>PO 34.2</p> <p>Battle-axe or common driveways incorporate landscaping and permeability to improve appearance and assist in stormwater management.</p>	<p>DTS/DPF 34.2</p> <p>Battle-axe or common driveways satisfy (a) and (b):</p> <ul style="list-style-type: none"> <li>(a) are constructed of a minimum of 50% permeable or porous material</li> <li>(b) where the driveway is located directly adjacent the side or rear boundary of the site, soft landscaping with a minimum dimension of 1m is provided between the driveway and site boundary (excluding along the perimeter of a passing point).</li> </ul>
Site Facilities / Waste Storage	
<p>PO 35.1</p> <p>Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.</p>	<p>DTS/DPF 35.1</p> <p>None are applicable.</p>
<p>PO 35.2</p> <p>Provision is made for suitable external clothes drying facilities.</p>	<p>DTS/DPF 35.2</p> <p>None are applicable.</p>
<p>PO 35.3</p> <p>Provision is made for suitable household waste and recyclable material</p>	<p>DTS/DPF 35.3</p> <p>None are applicable.</p>

storage facilities which are:	
(a) located away, or screened, from public view, and (b) conveniently located in proximity to dwellings and the waste collection point.	
PO 35.4 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 35.4 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 35.5 Where waste bins cannot be conveniently collected from the street, provision is made for on-site waste collection, designed to accommodate the safe and convenient access, egress and movement of waste collection vehicles.	DTS/DPF 35.5 None are applicable.
PO 35.6 Services including gas and water meters are conveniently located and screened from public view.	DTS/DPF 35.6 None are applicable.
<b>Water sensitive urban design</b>	
PO 36.1 Residential development creating a common driveway / access includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 36.1 None are applicable.
PO 36.2 Residential development creating a common driveway / access includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 36.2 None are applicable.
Supported Accommodation and retirement facilities	
<b>Siting, Configuration and Design</b>	
PO 37.1 Supported accommodation and housing for aged persons and people with disabilities is located where on-site movement of residents is not unduly restricted by the slope of the land.	DTS/DPF 37.1 None are applicable.
PO 37.2 Universal design features are incorporated to provide options for people living with disabilities or limited mobility and / or to facilitate ageing in place.	DTS/DPF 37.2 None are applicable.
<b>Movement and Access</b>	
PO 38.1 Development is designed to support safe and convenient access and movement for residents by providing:	DTS/DPF 38.1 None are applicable.
(a) ground-level access or lifted access to all units (b) level entry porches, ramps, paths, driveways, passenger loading areas and areas adjacent to footpaths that allow for the passing of wheelchairs and resting places (c) car parks with gradients no steeper than 1-in-40, and of sufficient area to provide for wheelchair manoeuvrability (d) kerb ramps at pedestrian crossing points.	
<b>Communal Open Space</b>	
PO 39.1 Development is designed to provide attractive, convenient and comfortable indoor and outdoor communal areas to be used by residents and visitors.	DTS/DPF 39.1 None are applicable.
PO 39.2	DTS/DPF 39.2

Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	None are applicable.
PO 39.3 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 39.3 Communal open space incorporates a minimum dimension of 5 metres.
PO 39.4 Communal open space is designed and sited to:  (a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	DTS/DPF 39.4 None are applicable.
PO 39.5 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 39.5 None are applicable.
PO 39.6 Communal open space is designed and sited to:  (a) in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings (b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	DTS/DPF 39.6 None are applicable.
<b>Site Facilities / Waste Storage</b>	
PO 40.1 Development is designed to provide storage areas for personal items and specialised equipment such as small electric powered vehicles, including facilities for the recharging of small electric-powered vehicles.	DTS/DPF 40.1 None are applicable.
PO 40.2 Provision is made for suitable mailbox facilities close to the major pedestrian entry to the site or conveniently located considering the nature of accommodation and mobility of occupants.	DTS/DPF 40.2 None are applicable.
PO 40.3 Provision is made for suitable external clothes drying facilities.	DTS/DPF 40.3 None are applicable.
PO 40.4 Provision is made for suitable household waste and recyclable material storage facilities conveniently located away, or screened, from view.	DTS/DPF 40.4 None are applicable.
PO 40.5 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 40.5 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 40.6 Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.	DTS/DPF 40.6 None are applicable.
PO 40.7 Services, including gas and water meters, are conveniently located and screened from public view.	DTS/DPF 40.7 None are applicable.
<b>Student Accommodation</b>	
PO 41.1 Student accommodation is designed to provide safe, secure, attractive, convenient and comfortable living conditions for residents, including an internal layout and facilities that are designed to provide sufficient space and amenity for the requirements of student life and promote social interaction.	DTS/DPF 41.1 Student accommodation provides:  (a) a range of living options to meet a variety of accommodation needs, such as one-bedroom, two-bedroom and disability access units

	<p>(b) common or shared facilities to enable a more efficient use of space, including:</p> <ul style="list-style-type: none"> <li>(i) shared cooking, laundry and external drying facilities</li> <li>(ii) internal and external communal and private open space provided in accordance with Design in Urban Areas Table 1 - Private Open Space</li> <li>(iii) common storage facilities at the rate of 8m<sup>3</sup> for every 2 dwellings or students</li> <li>(iv) common on-site parking in accordance with Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas</li> <li>(v) bicycle parking at the rate of one space for every 2 students.</li> </ul>
<p>PO 41.2</p> <p>Student accommodation is designed to provide easy adaptation of the building to accommodate an alternative use of the building in the event it is no longer required for student housing.</p>	<p>DTS/DPF 41.2</p> <p>None are applicable.</p>
<p>All non-residential development</p>	
<p>Water Sensitive Design</p>	
<p>PO 42.1</p> <p>Development likely to result in risk of export of sediment, suspended solids, organic matter, nutrients, oil and grease include stormwater management systems designed to minimise pollutants entering stormwater.</p>	<p>DTS/DPF 42.1</p> <p>None are applicable.</p>
<p>PO 42.2</p> <p>Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.</p>	<p>DTS/DPF 42.2</p> <p>None are applicable.</p>
<p>PO 42.3</p> <p>Development includes stormwater management systems to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that development does not increase peak flows in downstream systems.</p>	<p>DTS/DPF 42.3</p> <p>None are applicable.</p>
<p>Wash-down and Waste Loading and Unloading</p>	
<p>PO 43.1</p> <p>Areas for activities including loading and unloading, storage of waste refuse bins in commercial and industrial development or wash-down areas used for the cleaning of vehicles, plant or equipment are:</p> <ul style="list-style-type: none"> <li>(a) designed to contain all wastewater likely to pollute stormwater within a bunded and roofed area to exclude the entry of external surface stormwater run-off</li> <li>(b) paved with an impervious material to facilitate wastewater collection</li> <li>(c) of sufficient size to prevent 'splash-out' or 'over-spray' of wastewater from the wash-down area</li> <li>(d) are designed to drain wastewater to either:             <ul style="list-style-type: none"> <li>(i) a treatment device such as a sediment trap and coalescing plate oil separator with subsequent disposal to a sewer, private or Community Wastewater Management Scheme or</li> <li>(ii) a holding tank and its subsequent removal off-site on a regular basis.</li> </ul> </li> </ul>	<p>DTS/DPF 43.1</p> <p>None are applicable.</p>
<p>Laneway Development</p>	
<p>Infrastructure and Access</p>	
<p>PO 44.1</p> <p>Development with a primary street comprising a laneway, alley, lane, right of way or similar minor thoroughfare only occurs where:</p> <ul style="list-style-type: none"> <li>(a) existing utility infrastructure and services are capable of</li> </ul>	<p>DTS/DPF 44.1</p> <p>Development with a primary street frontage that is not an alley, lane, right of way or similar public thoroughfare.</p>

<p>accommodating the development</p> <ul style="list-style-type: none"> <li>(b) the primary street can support access by emergency and regular service vehicles (such as waste collection)</li> <li>(c) it does not require the provision or upgrading of infrastructure on public land (such as footpaths and stormwater management systems)</li> <li>(d) safety of pedestrians or vehicle movement is maintained</li> <li>(e) any necessary grade transition is accommodated within the site of the development to support an appropriate development intensity and orderly development of land fronting minor thoroughfares.</li> </ul>	
--	--

Decks

Design and Siting

<p>PO 45.1</p> <p>Decks are designed and sited to:</p> <ul style="list-style-type: none"> <li>(a) complement the associated building form</li> <li>(b) minimise impacts on the streetscape through siting behind the building line of the principal building (unless on a significant allotment or open space)</li> <li>(c) minimise cut and fill and overall massing when viewed from adjacent land.</li> </ul>	<p>DTS/DPF 45.1</p> <p>Decks:</p> <ul style="list-style-type: none"> <li>(a) where ancillary to a dwelling:                     <ul style="list-style-type: none"> <li>(i) are not constructed, added to or altered so that any part is situated:                             <ul style="list-style-type: none"> <li>A. in front of any part of the building line of the dwelling to which it is ancillary or</li> <li>B. within 900mm of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads)</li> </ul> </li> <li>(ii) are set back at least 900mm from side or rear allotment boundaries</li> <li>(iii) when attached to the dwelling, has a finished floor level consistent with the finished ground floor level of the dwelling</li> <li>(iv) where associated with a residential use, retains a total area of soft landscaping for the entire development site, including any common property, with a minimum dimension of 700mm in accordance with (A) or (B), whichever is less:                             <ul style="list-style-type: none"> <li>A. a total area is determined by the following table:                                     <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #4F81BD; color: white;">Site area (or in the case of residential flat building or group dwelling(s), average site area) (m<sup>2</sup>)</th> <th style="background-color: #4F81BD; color: white;">Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">&lt;150</td> <td style="text-align: center;">10%</td> </tr> <tr> <td style="text-align: center;">150-200</td> <td style="text-align: center;">15%</td> </tr> <tr> <td style="text-align: center;">&gt;200-450</td> <td style="text-align: center;">20%</td> </tr> <tr> <td style="text-align: center;">&gt;450</td> <td style="text-align: center;">25%</td> </tr> </tbody> </table> </li> <li>B. the amount of existing soft landscaping prior to the development occurring.</li> </ul> </li> </ul> </li> <li>(b) where in association with a non-residential use:                     <ul style="list-style-type: none"> <li>(i) are set back at least 2 metres from the boundary of an allotment used for residential purposes.</li> <li>(ii) are set back at least 2 metres from a public road.</li> <li>(iii) have a floor area not exceeding 25m<sup>2</sup></li> </ul> </li> <li>(c) in all cases, has a finished floor level not exceeding 1 metre above natural ground level at any point.</li> </ul>	Site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site	<150	10%	150-200	15%	>200-450	20%	>450	25%
Site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site										
<150	10%										
150-200	15%										
>200-450	20%										
>450	25%										

<p>PO 45.2</p> <p>Decks are designed and sited to minimise direct overlooking of habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones through suitable floor levels, screening and siting taking into account the slope of the subject land, existing vegetation on the subject land, and fencing.</p>	<p>DTS/DPF 45.2</p> <p>Decks with a finished floor level/s 500mm or more above natural ground level facing side or rear boundaries shared with a residential use in a neighbourhood-type zone incorporate screening with a maximum of 25% transparency/openings, permanently fixed to the outer edge of the deck not less than 1.5 m above the finished floor level/s.</p>
---	--

<p>PO 45.3</p> <p>Decks used for outdoor dining, entertainment or other commercial uses provide carparking in accordance with the primary use of the deck.</p>	<p>DTS/DPF 45.3</p> <p>Decks used for commercial purposes do not result in less on-site car parking for the primary use of the subject land than specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.</p>
--	---

**Table 1 - Private Open Space**

Dwelling Type	Dwelling / Site Configuration	Minimum Rate
Dwelling (at ground level, other than a residential flat building that includes above ground dwellings)		Total private open space area: (a) Site area <301m <sup>2</sup> : 24m <sup>2</sup> located behind the building line. (b) Site area ≥ 301m <sup>2</sup> : 60m <sup>2</sup> located behind the building line.  Minimum directly accessible from a living room: 16m <sup>2</sup> / with a minimum dimension 3m.
Cabin or caravan (permanently fixed to the ground) in a residential park or caravan and tourist park		Total area: 16m <sup>2</sup> , which may be uses as second car parking space, provided on each site intended for residential occupation.
Dwelling in a residential flat building or mixed use building which incorporate above ground level dwellings	Dwellings at ground level:	15m <sup>2</sup> / minimum dimension 3m
	Dwellings above ground level:	
	Studio (no separate bedroom)	4m <sup>2</sup> / minimum dimension 1.8m
	One bedroom dwelling	8m <sup>2</sup> / minimum dimension 2.1m
	Two bedroom dwelling	11m <sup>2</sup> / minimum dimension 2.4m
	Three + bedroom dwelling	15 m <sup>2</sup> / minimum dimension 2.6m

**Forestry**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Commercial forestry is designed and sited to maximise economic benefits whilst managing potential negative impacts on the environment, transport networks, surrounding land uses and landscapes.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)



Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting	
PO 1.1 Commercial forestry plantations are established where there is no detrimental effect on the physical environment or scenic quality of the rural landscape.	DTS/DPF 1.1 None are applicable.
PO 1.2 Commercial forestry plantations are established on slopes that are stable to minimise the risk of soil erosion.	DTS/DPF 1.2 Commercial forestry plantations are not located on land with a slope exceeding 20% (1-in-5).
PO 1.3 Commercial forestry plantations and operations associated with their establishment, management and harvesting are appropriately set back from any sensitive receiver to minimise fire risk and noise disturbance.	DTS/DPF 1.3 Commercial forestry plantations and operations associated with their establishment, management and harvesting are set back 50m or more from any sensitive receiver.
Water Protection	
PO 2.1 Commercial forestry plantations incorporate artificial drainage lines (i.e. culverts, runoffs and constructed drains) integrated with natural drainage lines to minimise concentrated water flows onto or from plantation areas.	DTS/DPF 2.1 None are applicable.
PO 2.2 Appropriate siting, layout and design measures are adopted to minimise the impact of commercial forestry plantations on surface water resources.	DTS/DPF 2.2 Commercial forestry plantations: <ul style="list-style-type: none"> <li>(a) do not involve cultivation (excluding spot cultivation) in drainage lines</li> <li>(b) are set back 20m or more from the banks of any major watercourse (a third order or higher watercourse), lake, reservoir, wetland or sinkhole (with direct connection to an aquifer)</li> <li>(c) are set back 10m or more from the banks of any first or second order watercourse or sinkhole (with no direct connection to an aquifer).</li> </ul>
Fire Management	
PO 3.1 Commercial forestry plantations incorporate appropriate firebreaks and fire management design elements.	DTS/DPF 3.1 Commercial forestry plantations provide: <ul style="list-style-type: none"> <li>(a) 7m or more wide external boundary firebreaks for plantations of 40ha or less</li> <li>(b) 10m or more wide external boundary firebreaks for plantations of between 40ha and 100ha</li> <li>(c) 20m or more wide external boundary firebreaks, or 10m with an additional 10m or more of fuel-reduced plantation, for plantations of 100ha or greater.</li> </ul> Note: Firebreaks prescribed above (as well as access tracks) may be included within the setback buffer distances prescribed by other policies of the Code.
PO 3.2 Commercial forestry plantations incorporate appropriate fire management access tracks.	DTS/DPF 3.2 Commercial forestry plantation fire management access tracks: <ul style="list-style-type: none"> <li>(a) are incorporated within all firebreaks</li> <li>(b) are 7m or more wide with a vertical clearance of 4m or more</li> <li>(c) are aligned to provide straight through access at junctions, or if they are a no through access track are appropriately signposted and provide suitable turnaround areas for fire-fighting vehicles</li> <li>(d) partition the plantation into units of 40ha or less in area.</li> </ul>
Power-line Clearances	
PO 4.1 Commercial forestry plantations achieve and maintain appropriate clearances from aboveground powerlines.	DTS/DPF 4.1 Commercial forestry plantations incorporating trees with an expected mature height of greater than 6m meet the clearance requirements listed in the following table:

	Voltage of transmission line	Tower or Pole	Minimum horizontal clearance distance between plantings and transmission lines
	500 kV	Tower	38m
	275 kV	Tower	25m
	132 kV	Tower	30m
	132 kV	Pole	20m
	66 kV	Pole	20m
	Less than 66 kV	Pole	20m

**Housing Renewal**

**Assessment Provisions (AP)**

The Housing Renewal General Development Policies are only applicable to dwellings or residential flat building undertaken by:

- (a) the South Australian Housing Trust either individually or jointly with other persons or bodies or
- (b) a provider registered under the Community Housing National Law participating in a program relating to the renewal of housing endorsed by the South Australian Housing Trust.

Desired Outcome (DO)

Desired Outcome	
DO 1	Renewed residential environments replace older social housing and provide new social housing infrastructure and other housing options and tenures to enhance the residential amenity of the local area.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 Residential development provides a range of housing choices.	DTS/DPF 1.1 Development comprises one or more of the following:  (a) detached dwellings (b) semi-detached dwellings (c) row dwellings (d) group dwellings (e) residential flat buildings.
PO 1.2 Medium-density housing options or higher are located in close proximity to public transit, open space and/or activity centres.	DTS/DPF 1.2 None are applicable.
Building Height	

<p>PO 2.1</p> <p>Buildings generally do not exceed 3 building levels unless in locations close to public transport, centres and/or open space.</p>	<p>DTS/DPF 2.1</p> <p>Building height (excluding garages, carports and outbuildings) does not exceed 3 building levels and 12m and wall height does not exceed 9m (not including a gable end).</p>
<p>PO 2.2</p> <p>Medium or high rise residential flat buildings located within or at the interface with zones which restrict heights to a maximum of 2 building levels transition down in scale and height towards the boundary of that zone, other than where it is a street boundary.</p>	<p>DTS/DPF 2.2</p> <p>None are applicable.</p>
Primary Street Setback	
<p>PO 3.1</p> <p>Buildings are set back from the primary street boundary to contribute to an attractive streetscape character.</p>	<p>DTS/DPF 3.1</p> <p>Buildings are no closer to the primary street (excluding any balcony, verandah, porch, awning or similar structure) than 3m.</p>
Secondary Street Setback	
<p>PO 4.1</p> <p>Buildings are set back from secondary street boundaries to maintain separation between building walls and public streets and contribute to a suburban streetscape character.</p>	<p>DTS/DPF 4.1</p> <p>Buildings are set back at least 900mm from the boundary of the allotment with a secondary street frontage.</p>
Boundary Walls	
<p>PO 5.1</p> <p>Boundary walls are limited in height and length to manage visual impacts and access to natural light and ventilation.</p>	<p>DTS/DPF 5.1</p> <p>Except where the dwelling is located on a central site within a row dwelling or terrace arrangement, dwellings with side boundary walls are sited on only one side boundary and satisfy (a) or (b):</p> <ul style="list-style-type: none"> <li>(a) adjoin or abut a boundary wall of a building on adjoining land for the same length and height</li> <li>(b) do not: <ul style="list-style-type: none"> <li>(i) exceed 3.2m in height from the lower of the natural or finished ground level</li> <li>(ii) exceed 11.5m in length</li> <li>(iii) when combined with other walls on the boundary of the subject development site, a maximum 45% of the length of the boundary</li> <li>(iv) encroach within 3 metres of any other existing or proposed boundary walls on the subject land.</li> </ul> </li> </ul>
<p>PO 5.2</p> <p>Dwellings in a semi-detached, row or terrace arrangement maintain space between buildings consistent with a suburban streetscape character.</p>	<p>DTS/DPF 5.2</p> <p>Dwellings in a semi-detached or row arrangement are set back 900mm or more from side boundaries shared with allotments outside the development site, except for a carport or garage.</p>
Side Boundary Setback	
<p>PO 6.1</p> <p>Buildings are set back from side boundaries to provide:</p> <ul style="list-style-type: none"> <li>(a) separation between dwellings in a way that contributes to a suburban character</li> <li>(b) access to natural light and ventilation for neighbours.</li> </ul>	<p>DTS/DPF 6.1</p> <p>Other than walls located on a side boundary, buildings are set back from side boundaries in accordance with the following:</p> <ul style="list-style-type: none"> <li>(a) where the wall height does not exceed 3m - at least 900mm</li> <li>(b) for a wall that is not south facing and the wall height exceeds 3m - at least 900mm from the boundary of the site plus a distance of 1/3 of the extent to which the height of the wall exceeds 3m from the top of the footings</li> <li>(c) for a wall that is south facing and the wall height exceeds 3m - at least 1.9m from the boundary of the site plus a distance of 1/3 of the extent to which the height of the wall exceeds 3m from the top of the footings.</li> </ul>
Rear Boundary Setback	
<p>PO 7.1</p>	<p>DTS/DPF 7.1</p>

<p>Buildings are set back from rear boundaries to provide:</p> <ul style="list-style-type: none"> <li>(a) separation between dwellings in a way that contributes to a suburban character</li> <li>(b) access to natural light and ventilation for neighbours</li> <li>(c) private open space</li> <li>(d) space for landscaping and vegetation.</li> </ul>	<p>Dwellings are set back from the rear boundary:</p> <ul style="list-style-type: none"> <li>(a) 3m or more for the first building level</li> <li>(b) 5m or more for any subsequent building level.</li> </ul>
Buildings elevation design	
<p>PO 8.1</p> <p>Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and common driveway areas.</p>	<p>DTS/DPF 8.1</p> <p>Each dwelling includes at least 3 of the following design features within the building elevation facing a primary street, and at least 2 of the following design features within the building elevation facing any other public road (other than a laneway) or a common driveway:</p> <ul style="list-style-type: none"> <li>(a) a minimum of 30% of the building elevation is set back an additional 300mm from the building line</li> <li>(b) a porch or portico projects at least 1m from the building elevation</li> <li>(c) a balcony projects from the building elevation</li> <li>(d) a verandah projects at least 1m from the building elevation</li> <li>(e) eaves of a minimum 400mm width extend along the width of the front elevation</li> <li>(f) a minimum 30% of the width of the upper level projects forward from the lower level primary building line by at least 300mm.</li> <li>(g) a minimum of two different materials or finishes are incorporated on the walls of the building elevation, with a maximum of 80% of the building elevation in a single material or finish.</li> </ul>
<p>PO 8.2</p> <p>Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.</p>	<p>DTS/DPF 8.2</p> <p>Each dwelling with a frontage to a public street:</p> <ul style="list-style-type: none"> <li>(a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m</li> <li>(b) has an aggregate window area of at least 2m<sup>2</sup> facing the primary street</li> </ul>
<p>PO 8.3</p> <p>The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.</p>	<p>DTS/DPF 8.3</p> <p>None are applicable.</p>
<p>PO 8.4</p> <p>Built form considers local context and provides a quality design response through scale, massing, materials, colours and architectural expression.</p>	<p>DTS/DPF 8.4</p> <p>None are applicable.</p>
<p>PO 8.5</p> <p>Entrances to multi-storey buildings are:</p> <ul style="list-style-type: none"> <li>(a) oriented towards the street</li> <li>(b) visible and easily identifiable from the street</li> <li>(c) designed to include a common mail box structure.</li> </ul>	<p>DTS/DPF 8.5</p> <p>None are applicable.</p>
Outlook and amenity	
<p>PO 9.1</p> <p>Living rooms have an external outlook to provide a high standard of amenity for occupants.</p>	<p>DTS/DPF 9.1</p> <p>A living room of a dwelling incorporates a window with an external outlook towards the street frontage or private open space.</p>
<p>PO 9.2</p> <p>Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.</p>	<p>DTS/DPF 9.2</p> <p>None are applicable.</p>
Private Open Space	
<p>PO 10.1</p> <p>Dwellings are provided with suitable sized areas of usable private open space</p>	<p>DTS/DPF 10.1</p> <p>Private open space is provided in accordance with the following table:</p>

to meet the needs of occupants.	<table border="1"> <thead> <tr> <th>Dwelling Type</th> <th>Dwelling / Site Configuration</th> <th>Minimum Rate</th> </tr> </thead> <tbody> <tr> <td>Dwelling (at ground level)</td> <td></td> <td>                     Total area: 24m<sup>2</sup> located behind the building line                       Minimum adjacent to a living room: 16m<sup>2</sup> with a minimum dimension 3m                 </td> </tr> <tr> <td rowspan="4">Dwelling (above ground level)</td> <td>Studio</td> <td>4m<sup>2</sup> / minimum dimension 1.8m</td> </tr> <tr> <td>One bedroom dwelling</td> <td>8m<sup>2</sup> / minimum dimension 2.1m</td> </tr> <tr> <td>Two bedroom dwelling</td> <td>11m<sup>2</sup> / minimum dimension 2.4m</td> </tr> <tr> <td>Three + bedroom dwelling</td> <td>15 m<sup>2</sup> / minimum dimension 2.6m</td> </tr> </tbody> </table>	Dwelling Type	Dwelling / Site Configuration	Minimum Rate	Dwelling (at ground level)		Total area: 24m <sup>2</sup> located behind the building line  Minimum adjacent to a living room: 16m <sup>2</sup> with a minimum dimension 3m	Dwelling (above ground level)	Studio	4m <sup>2</sup> / minimum dimension 1.8m	One bedroom dwelling	8m <sup>2</sup> / minimum dimension 2.1m	Two bedroom dwelling	11m <sup>2</sup> / minimum dimension 2.4m	Three + bedroom dwelling	15 m <sup>2</sup> / minimum dimension 2.6m
	Dwelling Type	Dwelling / Site Configuration	Minimum Rate													
	Dwelling (at ground level)		Total area: 24m <sup>2</sup> located behind the building line  Minimum adjacent to a living room: 16m <sup>2</sup> with a minimum dimension 3m													
	Dwelling (above ground level)	Studio	4m <sup>2</sup> / minimum dimension 1.8m													
		One bedroom dwelling	8m <sup>2</sup> / minimum dimension 2.1m													
Two bedroom dwelling		11m <sup>2</sup> / minimum dimension 2.4m														
Three + bedroom dwelling		15 m <sup>2</sup> / minimum dimension 2.6m														
PO 10.2 Private open space positioned to provide convenient access from internal living areas.	DTS/DPF 10.2 At least 50% of the required area of private open space is accessible from a habitable room.															
PO 10.3 Private open space is positioned and designed to: <ul style="list-style-type: none"> <li>(a) provide useable outdoor space that suits the needs of occupants;</li> <li>(b) take advantage of desirable orientation and vistas; and</li> <li>(c) adequately define public and private space.</li> </ul>	DTS/DPF 10.3 None are applicable.															
Visual privacy																
PO 11.1 Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.	DTS/DPF 11.1 Upper level windows facing side or rear boundaries shared with another residential allotment/site satisfy one of the following: <ul style="list-style-type: none"> <li>(a) are permanently obscured to a height of 1.5m above finished floor level and are fixed or not capable of being opened more than 200mm</li> <li>(b) have sill heights greater than or equal to 1.5m above finished floor level</li> <li>(c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5m above the finished floor.</li> </ul>															
PO 11.2 Development mitigates direct overlooking from upper level balconies and terraces to habitable rooms and private open space of adjoining residential uses.	DTS/DPF 11.2 One of the following is satisfied: <ul style="list-style-type: none"> <li>(a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace</li> <li>or</li> <li>(b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of:                         <ul style="list-style-type: none"> <li>(i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land</li> <li>or</li> <li>(ii) 1.7m above finished floor level in all other cases</li> </ul> </li> </ul>															

Landscaping											
<p>PO 12.1</p> <p>Soft landscaping is incorporated into development to:</p> <ul style="list-style-type: none"> <li>(a) minimise heat absorption and reflection</li> <li>(b) maximise shade and shelter</li> <li>(c) maximise stormwater infiltration and biodiversity</li> <li>(d) enhance the appearance of land and streetscapes.</li> </ul>	<p>DTS/DPF 12.1</p> <p>Residential development incorporates pervious areas for soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b):</p> <ul style="list-style-type: none"> <li>(a) a total area as determined by the following table:</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m<sup>2</sup>)</th> <th style="text-align: left;">Minimum percentage of site</th> </tr> </thead> <tbody> <tr> <td>&lt;150</td> <td>10%</td> </tr> <tr> <td>&lt;200</td> <td>15%</td> </tr> <tr> <td>200-450</td> <td>20%</td> </tr> <tr> <td>&gt;450</td> <td>25%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>(b) at least 30% of land between the road boundary and the building line.</li> </ul>	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site	<150	10%	<200	15%	200-450	20%	>450	25%
Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site										
<150	10%										
<200	15%										
200-450	20%										
>450	25%										
Water Sensitive Design											
<p>PO 13.1</p> <p>Residential development is designed to capture and use stormwater to:</p> <ul style="list-style-type: none"> <li>(a) maximise efficient use of water resources</li> <li>(b) manage peak stormwater runoff flows and volume to ensure the carrying capacities of downstream systems are not overloaded</li> <li>(c) manage runoff quality to maintain, as close as practical, pre-development conditions.</li> </ul>	<p>DTS/DPF 13.1</p> <p>None are applicable.</p>										
Car Parking											
<p>PO 14.1</p> <p>On-site car parking is provided to meet the anticipated demand of residents, with less on-site parking in areas in close proximity to public transport.</p>	<p>DTS/DPF 14.1</p> <p>On-site car parking is provided at the following rates per dwelling:</p> <ul style="list-style-type: none"> <li>(a) 2 or fewer bedrooms - 1 car parking space</li> <li>(b) 3 or more bedrooms - 2 car parking spaces.</li> </ul>										
<p>PO 14.2</p> <p>Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 14.2</p> <p>Residential parking spaces enclosed by fencing, walls or other obstructions with the following internal dimensions (separate from any waste storage area):</p> <ul style="list-style-type: none"> <li>(a) single parking spaces:                             <ul style="list-style-type: none"> <li>(i) a minimum length of 5.4m</li> <li>(ii) a minimum width of 3.0m</li> <li>(iii) a minimum garage door width of 2.4m</li> </ul> </li> <li>(b) double parking spaces (side by side):                             <ul style="list-style-type: none"> <li>(i) a minimum length of 5.4m</li> <li>(ii) a minimum width of 5.5m</li> <li>(iii) minimum garage door width of 2.4m per space.</li> </ul> </li> </ul>										
<p>PO 14.3</p> <p>Uncovered car parking spaces are of dimensions to be functional, accessible and convenient.</p>	<p>DTS/DPF 14.3</p> <p>Uncovered car parking spaces have:</p> <ul style="list-style-type: none"> <li>(a) a minimum length of 5.4m</li> <li>(b) a minimum width of 2.4m</li> <li>(c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m.</li> </ul>										
<p>PO 14.4</p> <p>Residential flat buildings and group dwelling developments provide sufficient on-site visitor car parking to cater for anticipated demand.</p>	<p>DTS/DPF 14.4</p> <p>Visitor car parking for group and residential flat buildings incorporating 4 or more dwellings is provided on-site at a minimum ratio of 0.25 car parking spaces per dwelling.</p>										
<p>PO 14.5</p>	<p>DTS/DPF 14.5</p>										

Residential flat buildings provide dedicated areas for bicycle parking.	Residential flat buildings provide one bicycle parking space per dwelling.
Overshadowing	
PO 15.1 Development minimises overshadowing of the private open spaces of adjoining land by ensuring that ground level open space associated with residential buildings receive direct sunlight for a minimum of 2 hours between 9am and 3pm on 21 June.	DTS/DPF 15.1 None are applicable.
Waste	
PO 16.1 Provision is made for the convenient storage of waste bins in a location screened from public view.	DTS/DPF 16.1 A waste bin storage area is provided behind the primary building line that:  (a) has a minimum area of 2m <sup>2</sup> with a minimum dimension of 900mm (separate from any designated car parking spaces or private open space); and  (b) has a continuous unobstructed path of travel (excluding moveable objects like gates, vehicles and roller doors) with a minimum width of 800mm between the waste bin storage area and the street.
PO 16.2 Residential flat buildings provide a dedicated area for the on-site storage of waste which is:  (a) easily and safely accessible for residents and for collection vehicles (b) screened from adjoining land and public roads (c) of sufficient dimensions to be able to accommodate the waste storage needs of the development considering the intensity and nature of the development and the frequency of collection.	DTS/DPF 16.2 None are applicable.
Vehicle Access	
PO 17.1 Driveways are located and designed to facilitate safe access and egress while maximising land available for street tree planting, landscaped street frontages and on-street parking.	DTS/DPF 17.1 None are applicable.
PO 17.2 Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.	DTS/DPF 17.2 Vehicle access to designated car parking spaces satisfy (a) or (b):  (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land  (b) where newly proposed, is set back:  (i) 0.5m or more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure unless consent is provided from the asset owner  (ii) 2m or more from the base of the trunk of a street tree unless consent is provided from the tree owner for a lesser distance  (iii) 6m or more from the tangent point of an intersection of 2 or more roads  (iv) outside of the marked lines or infrastructure dedicating a pedestrian crossing.
PO 17.3 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.	DTS/DPF 17.3 Driveways are designed and sited so that:  (a) the gradient from the place of access on the boundary of the allotment to the finished floor level at the front of the garage or carport is not more than 1-in-4 on average  (b) they are aligned relative to the street so that there is no more than a 20 degree deviation from 90 degrees between the centreline of any dedicated car parking space to which it provides access (measured from the front of that space) and the road boundary.  (c) if located so as to provide access from an alley, lane or right of way - the alley, lane or right of way is at least 6.2m wide along the boundary

	of the allotment / site.
PO 17.4 Driveways and access points are designed and distributed to optimise the provision of on-street parking.	DTS/DPF 17.4 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements: <ol style="list-style-type: none"> <li>1. minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number)</li> <li>2. Minimum car park length of 5.4m where a vehicle can enter or exit a space directly</li> <li>3. minimum car park length of 6m for an intermediate space located between two other parking spaces.</li> </ol>
PO 17.5 Residential driveways that service more than one dwelling of a dimension to allow safe and convenient movement.	DTS/DPF 17.5 Where on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements: <ol style="list-style-type: none"> <li>(a) minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number)</li> <li>(b) minimum car park length of 5.4m where a vehicle can enter or exit a space directly</li> <li>(c) minimum carpark length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.</li> </ol>
PO 17.6 Residential driveways that service more than one dwelling are designed to allow passenger vehicles to enter and exit the site and manoeuvre within the site in a safe and convenient manner.	DTS/DPF 17.6 Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and exit the garages or parking spaces in no more than a three-point turn manoeuvre
PO 17.7 Dwellings are adequately separated from common driveways and manoeuvring areas.	DTS/DPF 17.7 Dwelling walls with entry doors or ground level habitable room windows are set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.
Storage	
PO 18.1 Dwellings are provided with sufficient and accessible space for storage to meet likely occupant needs.	DTS/DPF 18.1 Dwellings are provided with storage at the following rates and 50% or more of the storage volume is provided within the dwelling: <ol style="list-style-type: none"> <li>(a) studio: not less than 6m<sup>3</sup></li> <li>(b) 1 bedroom dwelling / apartment: not less than 8m<sup>3</sup></li> <li>(c) 2 bedroom dwelling / apartment: not less than 10m<sup>3</sup></li> <li>(d) 3+ bedroom dwelling / apartment: not less than 12m<sup>3</sup>.</li> </ol>
Earthworks	
PO 19.1 Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	DTS/DPF 19.1 The development does not involve: <ol style="list-style-type: none"> <li>(a) excavation exceeding a vertical height of 1m or</li> <li>(b) filling exceeding a vertical height of 1m or</li> <li>(c) a total combined excavation and filling vertical height exceeding 2m.</li> </ol>
Service connections and infrastructure	
PO 20.1 Dwellings are provided with appropriate service connections and infrastructure.	DTS/DPF 20.1 The site and building: <ol style="list-style-type: none"> <li>(a) have the ability to be connected to a permanent potable water supply</li> <li>(b) have the ability to be connected to a sewerage system, or a wastewater system approved under the <i>South Australian Public Health Act 2011</i></li> <li>(c) have the ability to be connected to electricity supply</li> <li>(d) have the ability to be connected to an adequate water supply (and</li> </ol>



	pressure) for fire-fighting purposes (e) would not be contrary to the Regulations prescribed for the purposes of Section 86 of the <i>Electricity Act 1996</i> .
Site contamination	
PO 21.1  Land that is suitable for sensitive land uses to provide a safe environment.	DTS/DPF 21.1  Development satisfies (a), (b), (c) or (d):  (a) does not involve a change in the use of land (b) involves a change in the use of land that does not constitute a change to a <u>more sensitive use</u> (c) involves a change in the use of land to a <u>more sensitive use</u> on land at which <u>site contamination</u> does not exist (as demonstrated in a <u>site contamination declaration form</u> ) (d) involves a change in the use of land to a <u>more sensitive use</u> on land at which <u>site contamination</u> exists, or may exist (as demonstrated in a site contamination declaration form), and satisfies both of the following: (i) <u>a site contamination audit report</u> has been prepared under Part 10A of the <i>Environment Protection Act 1993</i> in relation to the land within the previous 5 years which states that A. <u>site contamination</u> does not exist (or no longer exists) at the land or B. the land is suitable for the proposed use or range of uses (without the need for any further <u>remediation</u> ) or C. where <u>remediation</u> is, or remains, necessary for the proposed use (or range of uses), <u>remediation work</u> has been carried out or will be carried out (and the applicant has provided a written undertaking that the remediation works will be implemented in association with the development)  and (ii) no other <u>class 1 activity</u> or <u>class 2 activity</u> has taken place at the land since the preparation of the site contamination audit report (as demonstrated in a <u>site contamination declaration form</u> ).

**Infrastructure and Renewable Energy Facilities**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and manages adverse visual impacts on natural and rural landscapes and residential amenity.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
---------------------	---

General	
PO 1.1 Development is located and designed to minimise hazard or nuisance to adjacent development and land uses.	DTS/DPF 1.1 None are applicable.
Visual Amenity	
PO 2.1 The visual impact of above-ground infrastructure networks and services (excluding high voltage transmission lines), renewable energy facilities (excluding wind farms), energy storage facilities and ancillary development is minimised from townships, scenic routes and public roads by:  (a) utilising features of the natural landscape to obscure views where practicable (b) siting development below ridgelines where practicable (c) avoiding visually sensitive and significant landscapes (d) using materials and finishes with low-reflectivity and colours that complement the surroundings (e) using existing vegetation to screen buildings (f) incorporating landscaping or landscaped mounding around the perimeter of a site and between adjacent allotments accommodating or zoned to primarily accommodate sensitive receivers.	DTS/DPF 2.1 None are applicable.
PO 2.2 Pumping stations, battery storage facilities, maintenance sheds and other ancillary structures incorporate vegetation buffers to reduce adverse visual impacts on adjacent land.	DTS/DPF 2.2 None are applicable.
PO 2.3 Surfaces exposed by earthworks associated with the installation of storage facilities, pipework, penstock, substations and other ancillary plant are reinstated and revegetated to reduce adverse visual impacts on adjacent land.	DTS/DPF 2.3 None are applicable.
Rehabilitation	
PO 3.1 Progressive rehabilitation (incorporating revegetation) of disturbed areas, ahead of or upon decommissioning of areas used for renewable energy facilities and transmission corridors.	DTS/DPF 3.1 None are applicable.
Hazard Management	
PO 4.1 Infrastructure and renewable energy facilities and ancillary development located and operated to not adversely impact maritime or air transport safety, including the operation of ports, airfields and landing strips.	DTS/DPF 4.1 None are applicable.
PO 4.2 Facilities for energy generation, power storage and transmission are separated as far as practicable from dwellings, tourist accommodation and frequently visited public places (such as viewing platforms / lookouts) to reduce risks to public safety from fire or equipment malfunction.	DTS/DPF 4.2 None are applicable.
PO 4.3 Bushfire hazard risk is minimised for renewable energy facilities by providing appropriate access tracks, safety equipment and water tanks and establishing cleared areas around substations, battery storage and operations compounds.	DTS/DPF 4.3 None are applicable.
Electricity Infrastructure and Battery Storage Facilities	
PO 5.1 Electricity infrastructure is located to minimise visual impacts through techniques including:  (a) siting utilities and services:	DTS/DPF 5.1 None are applicable.

<ul style="list-style-type: none"> <li>(i) on areas already cleared of native vegetation</li> <li>(ii) where there is minimal interference or disturbance to existing native vegetation or biodiversity</li> </ul> <p>(b) grouping utility buildings and structures with non-residential development, where practicable.</p>	
<p>PO 5.2</p> <p>Electricity supply (excluding transmission lines) serving new development in urban areas and townships installed underground, excluding lines having a capacity exceeding or equal to 33kV.</p>	<p>DTS/DPF 5.2</p> <p>None are applicable.</p>
<p>PO 5.3</p> <p>Battery storage facilities are co-located with substation infrastructure where practicable to minimise the development footprint and reduce environmental impacts.</p>	<p>DTS/DPF 5.3</p> <p>None are applicable.</p>
Telecommunication Facilities	
<p>PO 6.1</p> <p>The proliferation of telecommunications facilities in the form of towers/monopoles in any one locality is managed, where technically feasible, by co-locating a facility with other communications facilities to mitigate impacts from clutter on visual amenity.</p>	<p>DTS/DPF 6.1</p> <p>None are applicable.</p>
<p>PO 6.2</p> <p>Telecommunications antennae are located as close as practicable to support structures to manage overall bulk and mitigate impacts on visual amenity.</p>	<p>DTS/DPF 6.2</p> <p>None are applicable.</p>
<p>PO 6.3</p> <p>Telecommunications facilities, particularly towers/monopoles, are located and sized to mitigate visual impacts by the following methods:</p> <ul style="list-style-type: none"> <li>(a) where technically feasible, incorporating the facility within an existing structure that may serve another purpose</li> </ul> <p>or all of the following:</p> <ul style="list-style-type: none"> <li>(b) using existing buildings and landscape features to obscure or interrupt views of a facility from nearby public roads, residential areas and places of high public amenity to the extent practical without unduly hindering the effective provision of telecommunications services</li> <li>(c) using materials and finishes that complement the environment</li> <li>(d) screening using landscaping and vegetation, particularly for equipment shelters and huts.</li> </ul>	<p>DTS/DPF 6.3</p> <p>None are applicable.</p>
Renewable Energy Facilities	
<p>PO 7.1</p> <p>Renewable energy facilities are located as close as practicable to existing transmission infrastructure to facilitate connections and minimise environmental impacts as a result of extending transmission infrastructure.</p>	<p>DTS/DPF 7.1</p> <p>None are applicable.</p>
Renewable Energy Facilities (Wind Farm)	
<p>PO 8.1</p> <p>Visual impact of wind turbine generators on the amenity of residential and tourist development is reduced through appropriate separation.</p>	<p>DTS/DPF 8.1</p> <p>Wind turbine generators are:</p> <ul style="list-style-type: none"> <li>(a) set back at least 2000m from the base of a turbine to any of the following zones: <ul style="list-style-type: none"> <li>(i) Rural Settlement Zone</li> <li>(ii) Township Zone</li> <li>(iii) Rural Living Zone</li> <li>(iv) Rural Neighbourhood Zone</li> </ul> </li> </ul> <p>with an additional 10m setback per additional metre over 150m overall turbine height (measured from the base of the turbine).</p>

	(b) set back at least 1500m from the base of the turbine to non-associated (non-stakeholder) dwellings and tourist accommodation																														
<p>PO 8.2</p> <p>The visual impact of wind turbine generators on natural landscapes is managed by:</p> <ul style="list-style-type: none"> <li>(a) designing wind turbine generators to be uniform in colour, size and shape</li> <li>(b) coordinating blade rotation and direction</li> <li>(c) mounting wind turbine generators on tubular towers as opposed to lattice towers.</li> </ul>	<p>DTS/DPF 8.2</p> <p>None are applicable.</p>																														
<p>PO 8.3</p> <p>Wind turbine generators and ancillary development minimise potential for bird and bat strike.</p>	<p>DTS/DPF 8.3</p> <p>None are applicable.</p>																														
<p>PO 8.4</p> <p>Wind turbine generators incorporate recognition systems or physical markers to minimise the risk to aircraft operations.</p>	<p>DTS/DPF 8.4</p> <p>No Commonwealth air safety (CASA / ASA) or Defence requirement is applicable.</p>																														
<p>PO 8.5</p> <p>Meteorological masts and guidewires are identifiable to aircraft through the use of colour bands, marker balls, high visibility sleeves or flashing strobes.</p>	<p>DTS/DPF 8.5</p> <p>None are applicable.</p>																														
Renewable Energy Facilities (Solar Power)																															
<p>PO 9.1</p> <p>Ground mounted solar power facilities generating 5MW or more are not located on land requiring the clearance of areas of intact native vegetation or on land of high environmental, scenic or cultural value.</p>	<p>DTS/DPF 9.1</p> <p>None are applicable.</p>																														
<p>PO 9.2</p> <p>Ground mounted solar power facilities allow for movement of wildlife by:</p> <ul style="list-style-type: none"> <li>(a) incorporating wildlife corridors and habitat refuges</li> <li>(b) avoiding the use of extensive security or perimeter fencing or incorporating fencing that enables the passage of small animals without unreasonably compromising the security of the facility.</li> </ul>	<p>DTS/DPF 9.2</p> <p>None are applicable.</p>																														
<p>PO 9.3</p> <p>Amenity impacts of solar power facilities are minimised through separation from conservation areas and sensitive receivers in other ownership.</p>	<p>DTS/DPF 9.3</p> <p>Ground mounted solar power facilities are set back from land boundaries, conservation areas and relevant zones in accordance with the following criteria:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Generation Capacity</th> <th>Approximate size of array</th> <th>Setback from adjoining land boundary</th> <th>Setback from conservation areas</th> <th>Setback from Township, Rural Settlement, Rural Neighbourhood and Rural Living Zones<sup>1</sup></th> </tr> </thead> <tbody> <tr> <td>50MW&gt;</td> <td>80ha+</td> <td>30m</td> <td>500m</td> <td>2km</td> </tr> <tr> <td>10MW&lt;50MW</td> <td>16ha~&lt;80ha</td> <td>25m</td> <td>500m</td> <td>1.5km</td> </tr> <tr> <td>5MW&lt;10MW</td> <td>8ha to &lt;16ha</td> <td>20m</td> <td>500m</td> <td>1km</td> </tr> <tr> <td>1MW&lt;5MW</td> <td>1.6ha to &lt;8ha</td> <td>15m</td> <td>500m</td> <td>500m</td> </tr> <tr> <td>100kW&lt;1MW</td> <td>0.5ha&lt;1.6ha</td> <td>10m</td> <td>500m</td> <td>100m</td> </tr> </tbody> </table>	Generation Capacity	Approximate size of array	Setback from adjoining land boundary	Setback from conservation areas	Setback from Township, Rural Settlement, Rural Neighbourhood and Rural Living Zones <sup>1</sup>	50MW>	80ha+	30m	500m	2km	10MW<50MW	16ha~<80ha	25m	500m	1.5km	5MW<10MW	8ha to <16ha	20m	500m	1km	1MW<5MW	1.6ha to <8ha	15m	500m	500m	100kW<1MW	0.5ha<1.6ha	10m	500m	100m
Generation Capacity	Approximate size of array	Setback from adjoining land boundary	Setback from conservation areas	Setback from Township, Rural Settlement, Rural Neighbourhood and Rural Living Zones <sup>1</sup>																											
50MW>	80ha+	30m	500m	2km																											
10MW<50MW	16ha~<80ha	25m	500m	1.5km																											
5MW<10MW	8ha to <16ha	20m	500m	1km																											
1MW<5MW	1.6ha to <8ha	15m	500m	500m																											
100kW<1MW	0.5ha<1.6ha	10m	500m	100m																											

	<100kW	<0.5ha	5m	500m	25m
	<p>Notes:</p> <p>1. Does not apply when the site of the proposed ground mounted solar power facility is located within one of these zones.</p>				
<p>PO 9.4</p> <p>Ground mounted solar power facilities incorporate landscaping within setbacks from adjacent road frontages and boundaries of adjacent allotments accommodating non-host dwellings, where balanced with infrastructure access and bushfire safety considerations.</p>	<p>DTS/DPF 9.4</p> <p>None are applicable.</p>				
Hydropower / Pumped Hydropower Facilities					
<p>PO 10.1</p> <p>Hydropower / pumped hydropower facility storage is designed and operated to minimise the risk of storage dam failure.</p>	<p>DTS/DPF 10.1</p> <p>None are applicable.</p>				
<p>PO 10.2</p> <p>Hydropower / pumped hydropower facility storage is designed and operated to minimise water loss through increased evaporation or system leakage, with the incorporation of appropriate liners, dam covers, operational measures or detection systems.</p>	<p>DTS/DPF 10.2</p> <p>None are applicable.</p>				
<p>PO 10.3</p> <p>Hydropower / pumped hydropower facilities on existing or former mine sites minimise environmental impacts from site contamination, including from mine operations or water sources subject to such processes, now or in the future.</p>	<p>DTS/DPF 10.3</p> <p>None are applicable.</p>				
Water Supply					
<p>PO 11.1</p> <p>Development is connected to an appropriate water supply to meet the ongoing requirements of the intended use.</p>	<p>DTS/DPF 11.1</p> <p>Development is connected, or will be connected, to a reticulated water scheme or mains water supply with the capacity to meet the on-going requirements of the development.</p>				
<p>PO 11.2</p> <p>Dwellings are connected to a reticulated water scheme or mains water supply with the capacity to meet the requirements of the intended use. Where this is not available an appropriate rainwater tank or storage system for domestic use is provided.</p>	<p>DTS/DPF 11.2</p> <p>A dwelling is connected, or will be connected, to a reticulated water scheme or mains water supply with the capacity to meet the requirements of the development. Where this is not available it is serviced by a rainwater tank or tanks capable of holding at least 50,000 litres of water which is:</p> <ul style="list-style-type: none"> <li>(a) exclusively for domestic use</li> <li>(b) connected to the roof drainage system of the dwelling.</li> </ul>				
Wastewater Services					
<p>PO 12.1</p> <p>Development is connected to an approved common wastewater disposal service with the capacity to meet the requirements of the intended use. Where this is not available an appropriate on-site service is provided to meet the ongoing requirements of the intended use in accordance with the following:</p> <ul style="list-style-type: none"> <li>(a) it is wholly located and contained within the allotment of the development it will service</li> <li>(b) in areas where there is a high risk of contamination of surface, ground, or marine water resources from on-site disposal of liquid wastes, disposal systems are included to minimise the risk of pollution to those water resources</li> <li>(c) septic tank effluent drainage fields and other wastewater disposal areas are located away from watercourses and flood prone, sloping, saline or poorly drained land to minimise environmental harm.</li> </ul>	<p>DTS/DPF 12.1</p> <p>Development is connected, or will be connected, to an approved common wastewater disposal service with the capacity to meet the requirements of the development. Where this is not available it is instead capable of being serviced by an on-site waste water treatment system in accordance with the following:</p> <ul style="list-style-type: none"> <li>(a) the system is wholly located and contained within the allotment of development it will service; and</li> <li>(b) the system will comply with the requirements of the South Australian Public Health Act 2011.</li> </ul>				
<p>PO 12.2</p> <p>Effluent drainage fields and other wastewater disposal areas are maintained to ensure the effective operation of waste systems and minimise risks to</p>	<p>DTS/DPF 12.2</p> <p>Development is not built on, or encroaches within, an area that is, or will be, required for a sewerage system or waste control system.</p>				

human health and the environment.	
Temporary Facilities	
PO 13.1 In rural and remote locations, development that is likely to generate significant waste material during construction, including packaging waste, makes provision for a temporary on-site waste storage enclosure to minimise the incidence of wind-blown litter.	DTS/DPF 13.1 A waste collection and disposal service is used to dispose of the volume of waste at the rate it is generated.
PO 13.2 Temporary facilities to support the establishment of renewable energy facilities (including borrow pits, concrete batching plants, laydown, storage, access roads and worker amenity areas) are sited and operated to minimise environmental impact.	DTS/DPF 13.2 None are applicable.

## Intensive Animal Husbandry and Dairies

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Development of intensive animal husbandry and dairies in locations that are protected from encroachment by sensitive receivers and in a manner that minimises their adverse effects on amenity and the environment.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting and Design	
PO 1.1 Intensive animal husbandry, dairies and associated activities are sited, designed, constructed and managed to not unreasonably impact on the environment or amenity of the locality.	DTS/DPF 1.1 None are applicable.
PO 1.2 Intensive animal husbandry, dairies and associated activities are sited, designed, constructed and managed to prevent the potential transmission of disease to other operations where animals are kept.	DTS/DPF 1.2 None are applicable.
PO 1.3 Intensive animal husbandry and associated activities such as wastewater lagoons and liquid/solid waste disposal areas are sited, designed, constructed and managed to not unreasonably impact on sensitive receivers in other ownership in terms of noise and air emissions.	DTS/DPF 1.3 None are applicable.
PO 1.4 Dairies and associated activities such as wastewater lagoons and liquid/solid waste disposal areas are sited, designed, constructed and managed to not unreasonably impact on sensitive receivers in other ownership in terms of noise and air emissions.	DTS/DPF 1.4 Dairies, associated wastewater lagoon(s) and liquid/solid waste storage and disposal facilities are located 500m or more from the nearest sensitive receiver in other ownership.

PO 1.5 Lagoons for the storage or treatment of milking shed effluent is adequately separated from roads to minimise impacts from odour on the general public.	DTS/DPF 1.5 Lagoons for the storage or treatment of milking shed effluent are set back 20m or more from public roads.
Waste	
PO 2.1 Storage of manure, used litter and other wastes (other than waste water lagoons) is sited, designed, constructed and managed to:  (a) avoid attracting and harbouring vermin (b) avoid polluting water resources (c) be located outside 1% AEP flood event areas.	DTS/DPF 2.1 None are applicable.
Soil and Water Protection	
PO 3.1 To avoid environmental harm and adverse effects on water resources, intensive animal husbandry operations are appropriately set back from:  (a) public water supply reservoirs (b) major watercourses (third order or higher stream) (c) any other watercourse, bore or well used for domestic or stock water supplies.	DTS/DPF 3.1 Intensive animal husbandry operations are set back:  (a) 800m or more from a public water supply reservoir (b) 200m or more from a major watercourse (third order or higher stream) (c) 100m or more from any other watercourse, bore or well used for domestic or stock water supplies.
PO 3.2 Intensive animal husbandry operations and dairies incorporate appropriately designed effluent and run-off facilities that:  (a) have sufficient capacity to hold effluent and runoff from the operations on site (b) ensure effluent does not infiltrate and pollute groundwater, soil or other water resources.	DTS/DPF 3.2 None are applicable.

**Interface between Land Uses**

**Assessment Provisions (AP)**

Desired Outcome (DO)

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

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
General Land Use Compatibility	
PO 1.1 Sensitive receivers are designed and sited to protect residents and occupants from adverse impacts generated by lawfully existing land uses (or lawfully approved land uses) and land uses desired in the zone.	DTS/DPF 1.1 None are applicable.

<p>PO 1.2</p> <p>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.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>								
<p>Hours of Operation</p>									
<p>PO 2.1</p> <p>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:</p> <ul style="list-style-type: none"> <li>(a) the nature of the development</li> <li>(b) measures to mitigate off-site impacts</li> <li>(c) the extent to which the development is desired in the zone</li> <li>(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.</li> </ul>	<p>DTS/DPF 2.1</p> <p>Development operating within the following hours:</p> <table border="1"> <thead> <tr> <th>Class of Development</th> <th>Hours of operation</th> </tr> </thead> <tbody> <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: <ul style="list-style-type: none"> <li>(a) restaurant</li> <li>(b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone</li> </ul></td> <td>7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday</td> </tr> </tbody> </table>	Class of Development	Hours of operation	Consulting room	7am to 9pm, Monday to Friday 8am to 5pm, Saturday	Office	7am to 9pm, Monday to Friday 8am to 5pm, Saturday	Shop, other than any one or combination of the following: <ul style="list-style-type: none"> <li>(a) restaurant</li> <li>(b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone</li> </ul>	7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday
Class of Development	Hours of operation								
Consulting room	7am to 9pm, Monday to Friday 8am to 5pm, Saturday								
Office	7am to 9pm, Monday to Friday 8am to 5pm, Saturday								
Shop, other than any one or combination of the following: <ul style="list-style-type: none"> <li>(a) restaurant</li> <li>(b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone</li> </ul>	7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday								
<p>Overshadowing</p>									
<p>PO 3.1</p> <p>Overshadowing of habitable room windows of adjacent residential land uses in:</p> <ul style="list-style-type: none"> <li>a. a neighbourhood-type zone is minimised to maintain access to direct winter sunlight</li> <li>b. other zones is managed to enable access to direct winter sunlight.</li> </ul>	<p>DTS/DPF 3.1</p> <p>North-facing windows of habitable rooms of adjacent residential land uses in a neighbourhood-type zone receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.</p>								
<p>PO 3.2</p> <p>Overshadowing of the primary area of private open space or communal open space of adjacent residential land uses in:</p> <ul style="list-style-type: none"> <li>a. a neighbourhood type zone is minimised to maintain access to direct winter sunlight</li> <li>b. other zones is managed to enable access to direct winter sunlight.</li> </ul>	<p>DTS/DPF 3.2</p> <p>Development maintains 2 hours of direct sunlight between 9.00 am and 3.00 pm on 21 June to adjacent residential land uses in a neighbourhood-type zone in accordance with the following:</p> <ul style="list-style-type: none"> <li>a. for ground level private open space, the smaller of the following:             <ul style="list-style-type: none"> <li>i. half the existing ground level open space</li> <li>or</li> <li>ii. 35m<sup>2</sup> of the existing ground level open space (with at least one of the area's dimensions measuring 2.5m)</li> </ul> </li> <li>b. for ground level communal open space, at least half of the existing ground level open space.</li> </ul>								
<p>PO 3.3</p> <p>Development does not unduly reduce the generating capacity of adjacent rooftop solar energy facilities taking into account:</p> <ul style="list-style-type: none"> <li>(a) the form of development contemplated in the zone</li> <li>(b) the orientation of the solar energy facilities</li> <li>(c) the extent to which the solar energy facilities are already overshadowed.</li> </ul>	<p>DTS/DPF 3.3</p> <p>None are applicable.</p>								
<p>PO 3.4</p> <p>Development that incorporates moving parts, including windmills and wind</p>	<p>DTS/DPF 3.4</p> <p>None are applicable.</p>								



farms, are located and operated to not cause unreasonable nuisance to nearby dwellings and tourist accommodation caused by shadow flicker.					
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 (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.				
PO 4.3 Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa are positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers (or lawfully approved sensitive receivers).	DTS/DPF 4.3 The pump and/or filtration system ancillary to a dwelling erected on the same site is:  (a) enclosed in a solid acoustic structure located at least 5m from the nearest habitable room located on an adjoining allotment or (b) located at least 12m from the nearest habitable room located on an adjoining allotment.				
PO 4.4 External noise into bedrooms is minimised by separating or shielding these rooms from service equipment areas and fixed noise sources located on the same or an adjoining allotment.	DTS/DPF 4.4 Adjacent land is used for residential purposes.				
PO 4.5 Outdoor areas associated with licensed premises (such as beer gardens or dining areas) are designed and/or sited to not cause unreasonable noise impact on existing adjacent sensitive receivers (or lawfully approved sensitive receivers).	DTS/DPF 4.5 None are applicable.				
PO 4.6 Development incorporating music achieves suitable acoustic amenity when measured at the boundary of an adjacent sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers.	DTS/DPF 4.6 Development incorporating music includes noise attenuation measures that will achieve the following noise levels: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Assessment location</th> <th style="text-align: center;">Music noise level</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Externally at the nearest existing or envisaged noise sensitive location</td> <td style="text-align: center;">Less than 8dB above the level of background noise (L<sub>90,15min</sub>) in any octave band of the sound spectrum (LOCT10,15 &lt; LOCT90,15 + 8dB)</td> </tr> </tbody> </table>	Assessment location	Music noise level	Externally at the nearest existing or envisaged noise sensitive location	Less than 8dB above the level of background noise (L <sub>90,15min</sub> ) in any octave band of the sound spectrum (LOCT10,15 < LOCT90,15 + 8dB)
Assessment location	Music noise level				
Externally at the nearest existing or envisaged noise sensitive location	Less than 8dB above the level of background noise (L <sub>90,15min</sub> ) in any octave band of the sound spectrum (LOCT10,15 < LOCT90,15 + 8dB)				
Air Quality					
PO 5.1 Development with the potential to emit harmful or nuisance-generating air pollution incorporates air pollution control measures to prevent harm to	DTS/DPF 5.1 None are applicable.				

human health or unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) within the locality and zones primarily intended to accommodate sensitive receivers.	
PO 5.2 Development that includes chimneys or exhaust flues (including cafes, restaurants and fast food outlets) is designed to minimise nuisance or adverse health impacts to sensitive receivers (or lawfully approved sensitive receivers) by:  (a) incorporating appropriate treatment technology before exhaust emissions are released (b) locating and designing chimneys or exhaust flues to maximise the dispersion of exhaust emissions, taking into account the location of sensitive receivers.	DTS/DPF 5.2  None are applicable.
Light Spill	
PO 6.1 External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved sensitive receivers).	DTS/DPF 6.1  None are applicable.
PO 6.2 External lighting is not hazardous to motorists and cyclists.	DTS/DPF 6.2  None are applicable.
Solar Reflectivity / Glare	
PO 7.1 Development is designed and comprised of materials and finishes that do not unreasonably cause a distraction to adjacent road users and pedestrian areas or unreasonably cause heat loading and micro-climatic impacts on adjacent buildings and land uses as a result of reflective solar glare.	DTS/DPF 7.1  None are applicable.
Electrical Interference	
PO 8.1 Development in rural and remote areas does not unreasonably diminish or result in the loss of existing communication services due to electrical interference.	DTS/DPF 8.1  The building or structure:  (a) is no greater than 10m in height, measured from existing ground level or (b) is not within a line of sight between a fixed transmitter and fixed receiver (antenna) other than where an alternative service is available via a different fixed transmitter or cable.
Interface with Rural Activities	
PO 9.1 Sensitive receivers are located and designed to mitigate impacts from lawfully existing horticultural and farming activities (or lawfully approved horticultural and farming activities), including spray drift and noise and do not prejudice the continued operation of these activities.	DTS/DPF 9.1  None are applicable.
PO 9.2 Sensitive receivers are located and designed to mitigate potential impacts from lawfully existing intensive animal husbandry activities and do not prejudice the continued operation of these activities.	DTS/DPF 9.2  None are applicable.
PO 9.3 Sensitive receivers are located and designed to mitigate potential impacts from lawfully existing land-based aquaculture activities and do not prejudice the continued operation of these activities.	DTS/DPF 9.3  Sensitive receivers are located at least 200m from the boundary of a site used for land-based aquaculture and associated components in other ownership.
PO 9.4 Sensitive receivers are located and designed to mitigate potential impacts from lawfully existing dairies including associated wastewater lagoons and liquid/solid waste storage and disposal facilities and do not prejudice the continued operation of these activities.	DTS/DPF 9.4  Sensitive receivers are sited at least 500m from the boundary of a site used for a dairy and associated wastewater lagoon(s) and liquid/solid waste storage and disposal facilities in other ownership.

PO 9.5	DTS/DPF 9.5
Sensitive receivers are located and designed to mitigate the potential impacts from lawfully existing facilities used for the handling, transportation and storage of bulk commodities (recognising the potential for extended hours of operation) and do not prejudice the continued operation of these activities.	Sensitive receivers are located away from the boundary of a site used for the handling, transportation and/or storage of bulk commodities in other ownership in accordance with the following: <ul style="list-style-type: none"> <li>(a) 300m or more, where it involves the handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals to or from any commercial storage facility</li> <li>(b) 300m or more, where it involves the handling of agricultural crop products, rock, ores, minerals, petroleum products or chemicals at a wharf or wharf side facility (including sea-port grain terminals) where the handling of these materials into or from vessels does not exceed 100 tonnes per day</li> <li>(c) 500m or more, where it involves the storage of bulk petroleum in individual containers with a capacity up to 200 litres and a total on-site storage capacity not exceeding 1000 cubic metres</li> <li>(d) 500m or more, where it involves the handling of coal with a capacity up to 1 tonne per day or a storage capacity up to 50 tonnes</li> <li>(e) 1000m or more, where it involves the handling of coal with a capacity exceeding 1 tonne per day but not exceeding 100 tonnes per day or a storage capacity exceeding 50 tonnes but not exceeding 5000 tonnes.</li> </ul>
PO 9.6	DTS/DPF 9.6
Setbacks and vegetation plantings along allotment boundaries should be incorporated to mitigate the potential impacts of spray drift and other impacts associated with agricultural and horticultural activities.	None are applicable.
PO 9.7	DTS/DPF 9.7
Urban development does not prejudice existing agricultural and horticultural activities through appropriate separation and design techniques.	None are applicable.
Interface with Mines and Quarries (Rural and Remote Areas)	
PO 10.1	DTS/DPF 10.1
Sensitive receivers are separated from existing mines to minimise the adverse impacts from noise, dust and vibration.	Sensitive receivers are located no closer than 500m from the boundary of a Mining Production Tenement under the <i>Mining Act 1971</i> .

## Land Division

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	<p>Land division:</p> <ul style="list-style-type: none"> <li>(a) creates allotments with the appropriate dimensions and shape for their intended use</li> <li>(b) allows efficient provision of new infrastructure and the optimum use of underutilised infrastructure</li> <li>(c) integrates and allocates adequate and suitable land for the preservation of site features of value, including significant vegetation, watercourses, water bodies and other environmental features</li> <li>(d) facilitates solar access through allotment orientation</li> <li>(e) creates a compact urban form that supports active travel, walkability and the use of public transport</li> <li>(f) avoids areas of high natural hazard risk.</li> </ul>

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All land division	
Allotment configuration	
PO 1.1 Land division creates allotments suitable for their intended use.	DTS/DPF 1.1 Division of land satisfies (a) or (b):  (a) reflects the site boundaries illustrated and approved in an operative or existing development authorisation for residential development under the <i>Development Act 1993</i> or <i>Planning, Development and Infrastructure Act 2016</i> where the allotments are used or are proposed to be used solely for residential purposes (b) is proposed as part of a combined land division application with deemed-to-satisfy dwellings on the proposed allotments.
PO 1.2 Land division considers the physical characteristics of the land, preservation of environmental and cultural features of value and the prevailing context of the locality.	DTS/DPF 1.2 None are applicable.
Design and Layout	
PO 2.1 Land division results in a pattern of development that minimises the likelihood of future earthworks and retaining walls.	DTS/DPF 2.1 None are applicable.
PO 2.2 Land division enables the appropriate management of interface impacts between potentially conflicting land uses and/or zones.	DTS/DPF 2.2 None are applicable.
PO 2.3 Land division maximises the number of allotments that face public open space and public streets.	DTS/DPF 2.3 None are applicable.
PO 2.4 Land division is integrated with site features, adjacent land uses, the existing transport network and available infrastructure.	DTS/DPF 2.4 None are applicable.
PO 2.5 Development and infrastructure is provided and staged in a manner that supports an orderly and economic provision of land, infrastructure and services.	DTS/DPF 2.5 None are applicable.
PO 2.6 Land division results in watercourses being retained within open space and development taking place on land not subject to flooding.	DTS/DPF 2.6 None are applicable.
PO 2.7 Land division results in legible street patterns connected to the surrounding street network.	DTS/DPF 2.7 None are applicable.
PO 2.8 Land division is designed to preserve existing vegetation of value including native vegetation and regulated and significant trees.	DTS/DPF 2.8 None are applicable.
Roads and Access	
PO 3.1 Land division provides allotments with access to an all-weather public road.	DTS/DPF 3.1 None are applicable.
PO 3.2 Street patterns and intersections are designed to enable the safe and efficient	DTS/DPF 3.2 None are applicable.

movement of pedestrian, cycle and vehicular traffic.	
PO 3.3 Land division does not impede access to publicly owned open space and/or recreation facilities.	DTS/DPF 3.3 None are applicable.
PO 3.4 Road reserves provide for safe and convenient movement and parking of projected volumes of vehicles and allow for the efficient movement of service and emergency vehicles.	DTS/DPF 3.4 None are applicable.
PO 3.5 Road reserves are designed to accommodate pedestrian and cycling infrastructure, street tree planting, landscaping and street furniture.	DTS/DPF 3.5 None are applicable.
PO 3.6 Road reserves accommodate stormwater drainage and public utilities.	DTS/DPF 3.6 None are applicable.
PO 3.7 Road reserves provide unobstructed vehicular access and egress to and from individual allotments and sites.	DTS/DPF 3.7 None are applicable.
PO 3.8 Roads, open space and thoroughfares provide safe and convenient linkages to the surrounding open space and transport network.	DTS/DPF 3.8 None are applicable.
PO 3.9 Public streets are designed to enable tree planting to provide shade and enhance the amenity of streetscapes.	DTS/DPF 3.9 None are applicable.
PO 3.10 Local streets are designed to create low-speed environments that are safe for cyclists and pedestrians.	DTS/DPF 3.10 None are applicable.
<b>Infrastructure</b>	
PO 4.1 Land division incorporates public utility services within road reserves or dedicated easements.	DTS/DPF 4.1 None are applicable.
PO 4.2 Waste water, sewage and other effluent is capable of being disposed of from each allotment without risk to public health or the environment.	DTS/DPF 4.2 Each allotment can be connected to:  (a) a waste water treatment plant that has the hydraulic volume and pollutant load treatment and disposal capacity for the maximum predicted wastewater volume generated by subsequent development of the proposed allotment or (b) a form of on-site waste water treatment and disposal that meets relevant public health and environmental standards.
PO 4.3 Septic tank effluent drainage fields and other waste water disposal areas are maintained to ensure the effective operation of waste systems and minimise risks to human health and the environment.	DTS/DPF 4.3 Development is not built on, or encroaches within, an area that is or will be, required for a sewerage system or waste control system.
PO 4.4 Constructed wetland systems, including associated detention and retention basins, are sited and designed to ensure public health and safety is protected, including by minimising potential public health risks arising from the breeding of mosquitoes.	DTS/DPF 4.4 None are applicable.
PO 4.5 Constructed wetland systems, including associated detention and retention	DTS/DPF 4.5 None are applicable.

basins, are sited and designed to allow sediments to settle prior to discharge into watercourses or the marine environment.	
PO 4.6 Constructed wetland systems, including associated detention and retention basins, are sited and designed to function as a landscape feature.	DTS/DPF 4.6 None are applicable.
Minor Land Division (Under 20 Allotments)	
Open Space	
PO 5.1 Land division proposing an additional allotment under 1 hectare provides or supports the provision of open space.	DTS/DPF 5.1 None are applicable.
Solar Orientation	
PO 6.1 Land division for residential purposes facilitates solar access through allotment orientation.	DTS/DPF 6.1 None are applicable.
Water Sensitive Design	
PO 7.1 Land division creating a new road or common driveway includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 7.1 None are applicable.
PO 7.2 Land division designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 7.2 None are applicable.
Battle-Axe Development	
PO 8.1 Battle-axe development appropriately responds to the existing neighbourhood context.	DTS/DPF 8.1 Allotments are not in the form of a battle-axe arrangement.
PO 8.2 Battle-axe development designed to allow safe and convenient movement.	DTS/DPF 8.2 The handle of a battle-axe development:  (a) has a minimum width of 4m or (b) where more than 3 allotments are proposed, a minimum width of 5.5m.
PO 8.3 Battle-axe allotments and/or common land are of a suitable size and dimension to allow passenger vehicles to enter and exit and manoeuvre within the site in a safe and convenient manner.	DTS/DPF 8.3 Battle-axe development allows a B85 passenger vehicle to enter and exit parking spaces in no more than a three-point turn manoeuvre.
PO 8.4 Battle-axe or common driveways incorporate landscaping and permeability to improve appearance and assist in stormwater management.	DTS/DPF 8.4 Battle-axe or common driveways satisfy (a) and (b):  (a) are constructed of a minimum of 50% permeable or porous material (b) where the driveway is located directly adjacent the side or rear boundary of the site, soft landscaping with a minimum dimension of 1m is provided between the driveway and site boundary (excluding along the perimeter of a passing point).
Major Land Division (20+ Allotments)	
Open Space	
PO 9.1 Land division allocates or retains evenly distributed, high quality areas of open space to improve residential amenity and provide urban heat amelioration.	DTS/DPF 9.1 None are applicable.
PO 9.2	DTS/DPF 9.2

Land allocated for open space is suitable for its intended active and passive recreational use considering gradient and potential for inundation.	None are applicable.
PO 9.3 Land allocated for active recreation has dimensions capable of accommodating a range of active recreational activities.	DTS/DPF 9.3 None are applicable.
<b>Water Sensitive Design</b>	
PO 10.1 Land division creating 20 or more allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 10.1 None are applicable.
PO 10.2 Land division creating 20 or more allotments includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 10.2 None are applicable.
<b>Solar Orientation</b>	
PO 11.1 Land division creating 20 or more allotments for residential purposes facilitates solar access through allotment orientation and allotment dimensions.	DTS/DPF 11.1 None are applicable.

**Marinas and On-Water Structures**

**Assessment Provisions (AP)**

Desired Outcome (DO)

<b>Desired Outcome</b>	
DO 1	Marinas and on-water structures are located and designed to minimise the impairment of commercial, recreational and navigational activities and adverse impacts on the environment.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

<b>Performance Outcome</b>	<b>Deemed-to-Satisfy Criteria / Designated Performance Feature</b>
<b>Navigation and Safety</b>	
PO 1.1 Safe public access is provided or maintained to the waterfront, public infrastructure and recreation areas.	DTS/DPF 1.1 None are applicable.
PO 1.2 The operation of wharves is not impaired by marinas and on-water structures.	DTS/DPF 1.2 None are applicable.
PO 1.3 Navigation and access channels are not impaired by marinas and on-water	DTS/DPF 1.3 None are applicable.

structures.	
PO 1.4 Commercial shipping lanes are not impaired by marinas and on-water structures.	DTS/DPF 1.4 Marinas and on-water structures are set back 250m or more from commercial shipping lanes.
PO 1.5 Marinas and on-water structures are located to avoid interfering with the operation or function of a water supply pumping station.	DTS/DPF 1.5 On-water structures are set back:  (a) 3km or more from upstream water supply pumping station take-off points (b) 500m or more from downstream water supply pumping station take-off points.
PO 1.6 Maintenance of on-water infrastructure, including revetment walls, is not impaired by marinas and on-water structures.	DTS/DPF 1.6 None are applicable.
Environmental Protection	
PO 2.1 Development is sited and designed to facilitate water circulation and exchange.	DTS/DPF 2.1 None are applicable.

## Open Space and Recreation

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Pleasant, functional and accessible open space and recreation facilities are provided at State, regional, district, neighbourhood and local levels for active and passive recreation, biodiversity, community health, urban cooling, tree canopy cover, visual amenity, gathering spaces, wildlife and waterway corridors, and a range of other functions and at a range of sizes that reflect the purpose of that open space.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
PO 1.1 Recreation facilities are compatible with surrounding land uses and activities.	DTS/DPF 1.1 None are applicable.
PO 1.2 Open space areas include natural or landscaped areas using locally indigenous plant species and large trees.	DTS/DPF 1.2 None are applicable.
Design and Siting	
PO 2.1 Open space and recreation facilities address adjacent public roads to optimise pedestrian access and visibility.	DTS/DPF 2.1 None are applicable.



PO 2.2 Open space and recreation facilities incorporate park furniture, shaded areas and resting places.	DTS/DPF 2.2 None are applicable.
PO 2.3 Open space and recreation facilities link habitats, wildlife corridors and existing open spaces and recreation facilities.	DTS/DPF 2.3 None are applicable.
Pedestrians and Cyclists	
PO 3.1 Open space incorporates:  (a) pedestrian and cycle linkages to other open spaces, centres, schools and public transport nodes; (b) safe crossing points where pedestrian routes intersect the road network; (c) easily identified access points.	DTS/DPF 3.1 None are applicable.
Usability	
PO 4.1 Land allocated for open space is suitable for its intended active and passive recreational use taking into consideration its gradient and potential for inundation.	DTS/DPF 4.1 None are applicable.
Safety and Security	
PO 5.1 Open space is overlooked by housing, commercial or other development to provide casual surveillance where possible.	DTS/DPF 5.1 None are applicable.
PO 5.2 Play equipment is located to maximise opportunities for passive surveillance.	DTS/DPF 5.2 None are applicable.
PO 5.3 Landscaping provided in open space and recreation facilities maximises opportunities for casual surveillance throughout the park.	DTS/DPF 5.3 None are applicable.
PO 5.4 Fenced parks and playgrounds have more than one entrance or exit to minimise potential entrapment.	DTS/DPF 5.4 None are applicable.
PO 5.5 Adequate lighting is provided around toilets, telephones, seating, litter bins, bicycle storage, car parks and other such facilities.	DTS/DPF 5.5 None are applicable.
PO 5.6 Pedestrian and bicycle movement after dark is focused along clearly defined, adequately lit routes with observable entries and exits.	DTS/DPF 5.6 None are applicable.
Signage	
PO 6.1 Signage is provided at entrances to and within the open space and recreation facilities to provide clear orientation to major points of interest such as the location of public toilets, telephones, safe routes, park activities and the like.	DTS/DPF 6.1 None are applicable.
Buildings and Structures	
PO 7.1 Buildings and car parking areas in open space areas are designed, located and of a scale to be unobtrusive.	DTS/DPF 7.1 None are applicable.
PO 7.2 Buildings and structures in open space areas are clustered where practical to ensure that the majority of the site remains open.	DTS/DPF 7.2 None are applicable.

PO 7.3 Development in open space is constructed to minimise the extent of impervious surfaces.	DTS/DPF 7.3 None are applicable.
PO 7.4 Development that abuts or includes a coastal reserve or Crown land used for scenic, conservation or recreational purposes is located and designed to have regard to the purpose, management and amenity of the reserve.	DTS/DPF 7.4 None are applicable.
Landscaping	
PO 8.1 Open space and recreation facilities provide for the planting and retention of large trees and vegetation.	DTS/DPF 8.1 None are applicable.
PO 8.2 Landscaping in open space and recreation facilities provides shade and windbreaks:  (a) along cyclist and pedestrian routes; (b) around picnic and barbecue areas; (c) in car parking areas.	DTS/DPF 8.2 None are applicable.
PO 8.3 Landscaping in open space facilitates habitat for local fauna and facilitates biodiversity.	DTS/DPF 8.3 None are applicable.
PO 8.4 Landscaping including trees and other vegetation passively watered with local rainfall run-off, where practicable.	DTS/DPF 8.4 None are applicable.

## Out of Activity Centre Development

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO1	The role of Activity Centres in contributing to the form and pattern of development and enabling equitable and convenient access to a range of shopping, administrative, cultural, entertainment and other facilities in a single trip is maintained and reinforced.

Performance Outcomes and Deemed to Satisfy / Designated Performance Outcome Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Non-residential development outside Activity Centres of a scale and type that does not diminish the role of Activity Centres:  (a) as primary locations for shopping, administrative, cultural, entertainment and community services (b) as a focus for regular social and business gatherings (c) in contributing to or maintaining a pattern of development that supports equitable community access to services and facilities.	DTS/DPF 1.1 None are applicable.
PO 1.2 Out-of-activity centre non-residential development complements Activity Centres through the provision of services and facilities:	DTS/DPF 1.2 None are applicable.

<p>(a) that support the needs of local residents and workers, particularly in underserved locations</p> <p>(b) at the edge of Activities Centres where they cannot readily be accommodated within an existing Activity Centre to expand the range of services on offer and support the role of the Activity Centre.</p>	
---	--

**Resource Extraction**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Resource extraction activities are developed in a manner that minimises human and environmental impacts.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land Use and Intensity	
<p>PO 1.1</p> <p>Resource extraction activities minimise landscape damage outside of those areas unavoidably disturbed to access and exploit a resource and provide for the progressive reclamation and betterment of disturbed areas.</p>	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Resource extraction activities avoid damage to cultural sites or artefacts.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
Water Quality	
<p>PO 2.1</p> <p>Stormwater and/or wastewater from resource extraction activities is diverted into appropriately sized treatment and retention systems to enable reuse on site.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
Separation Treatments, Buffers and Landscaping	
<p>PO 3.1</p> <p>Resource extraction activities minimise adverse impacts upon sensitive receivers through incorporation of separation distances and/or mounding/vegetation.</p>	<p>DTS/DPF 3.1</p> <p>None are applicable.</p>
<p>PO 3.2</p> <p>Resource extraction activities are screened from view from adjacent land by perimeter landscaping and/or mounding.</p>	<p>DTS/DPF 3.2</p> <p>None are applicable.</p>

**Site Contamination**

**Assessment Provisions (AP)**

Desired Outcome (DO)

<b>Desired Outcome</b>	
DO 1	Ensure land is suitable for the proposed use in circumstances where it is, or may have been, subject to site contamination.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

<b>Performance Outcome</b>	<b>Deemed-to-Satisfy Criteria / Designated Performance Feature</b>
PO 1.1 Ensure land is suitable for use when land use changes to a more sensitive use.	DTS/DPF 1.1 Development satisfies (a), (b), (c) or (d): <ul style="list-style-type: none"> <li>(a) does not involve a change in the use of land</li> <li>(b) involves a change in the use of land that does not constitute a change to a more sensitive use</li> <li>(c) involves a change in the use of land to a more sensitive use on land at which site contamination is unlikely to exist (as demonstrated in a site contamination declaration form)</li> <li>(d) involves a change in the use of land to a more sensitive use on land at which site contamination exists, or may exist (as demonstrated in a site contamination declaration form), and satisfies both of the following:                             <ul style="list-style-type: none"> <li>(i) a site contamination audit report has been prepared under Part 10A of the <i>Environment Protection Act 1993</i> in relation to the land within the previous 5 years which states that-                                     <ul style="list-style-type: none"> <li>A. site contamination does not exist (or no longer exists) at the land</li> <li>or</li> <li>B. the land is suitable for the proposed use or range of uses (without the need for any further remediation)</li> <li>or</li> <li>C. where remediation is, or remains, necessary for the proposed use (or range of uses), remediation work has been carried out or will be carried out (and the applicant has provided a written undertaking that the remediation works will be implemented in association with the development)</li> </ul> </li> <li>and</li> <li>(ii) no other class 1 activity or class 2 activity has taken place at the land since the preparation of the site contamination audit report (as demonstrated in a site contamination declaration form).</li> </ul> </li> </ul>

**Tourism Development**

**Assessment Provisions (AP)**

Desired Outcome (DO)

<b>Desired Outcome</b>	
DO 1	Tourism development is built in locations that cater to the needs of visitors and positively contributes to South Australia's visitor economy.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
General	
PO 1.1 Tourism development complements and contributes to local, natural, cultural or historical context where: <ul style="list-style-type: none"> <li>(a) it supports immersive natural experiences</li> <li>(b) it showcases South Australia's landscapes and produce</li> <li>(c) its events and functions are connected to local food, wine and nature.</li> </ul>	DTS/DPF 1.1 None are applicable.
PO 1.2 Tourism development comprising multiple accommodation units (including any facilities and activities for use by guests and visitors) is clustered to minimise environmental and contextual impact.	DTS/DPF 1.2 None are applicable.
Caravan and Tourist Parks	
PO 2.1 Potential conflicts between long-term residents and short-term tourists are minimised through suitable siting and design measures.	DTS/DPF 2.1 None are applicable.
PO 2.2 Occupants are provided privacy and amenity through landscaping and fencing.	DTS/DPF 2.2 None are applicable.
PO 2.3 Communal open space and centrally located recreation facilities are provided for guests and visitors.	DTS/DPF 2.3 12.5% or more of a caravan park comprises clearly defined communal open space, landscaped areas and areas for recreation.
PO 2.4 Perimeter landscaping is used to enhance the amenity of the locality.	DTS/DPF 2.4 None are applicable.
PO 2.5 Amenity blocks (showers, toilets, laundry and kitchen facilities) are sufficient to serve the full occupancy of the development.	DTS/DPF 2.5 None are applicable.
PO 2.6 Long-term occupation does not displace tourist accommodation, particularly in important tourist destinations such as coastal and riverine locations.	DTS/DPF 2.6 None are applicable.
Tourist accommodation in areas constituted under the National Parks and Wildlife Act 1972	
PO 3.1 Tourist accommodation avoids delicate or environmentally sensitive areas such as sand dunes, cliff tops, estuaries, wetlands or substantially intact strata of native vegetation (including regenerated areas of native vegetation lost through bushfire).	DTS/DPF 3.1 None are applicable.
PO 3.2 Tourist accommodation is sited and designed in a manner that is subservient to the natural environment and where adverse impacts on natural features, landscapes, habitats and cultural assets are avoided.	DTS/DPF 3.2 None are applicable.
PO 3.3 Tourist accommodation and recreational facilities, including associated access ways and ancillary structures, are located on cleared (other than where	DTS/DPF 3.3 None are applicable.

cleared as a result of bushfire) or degraded areas or where environmental improvements can be achieved.	
<p>PO 3.4</p> <p>Tourist accommodation is designed to prevent conversion to private dwellings through:</p> <ul style="list-style-type: none"> <li>(a) comprising a minimum of 10 accommodation units</li> <li>(b) clustering separated individual accommodation units</li> <li>(c) being of a size unsuitable for a private dwelling</li> <li>(d) ensuring functional areas that are generally associated with a private dwelling such as kitchens and laundries are excluded from, or physically separated from individual accommodation units, or are of a size unsuitable for a private dwelling.</li> </ul>	<p>DTS/DPF 3.4</p> <p>None are applicable.</p>

## Transport, Access and Parking

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.

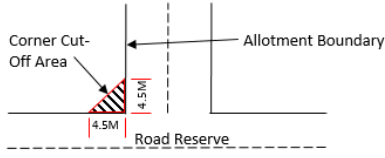
Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Movement Systems	
<p>PO 1.1</p> <p>Development is integrated with the existing transport system and designed to minimise its potential impact on the functional performance of the transport system.</p>	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Development is designed to discourage commercial and industrial vehicle movements through residential streets and adjacent other sensitive receivers.</p>	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>Industrial, commercial and service vehicle movements, loading areas and designated parking spaces are separated from passenger vehicle car parking areas to ensure efficient and safe movement and minimise potential conflict.</p>	<p>DTS/DPF 1.3</p> <p>None are applicable.</p>
<p>PO 1.4</p> <p>Development is sited and designed so that loading, unloading and turning of all traffic avoids interrupting the operation of and queuing on public roads and pedestrian paths.</p>	<p>DTS/DPF 1.4</p> <p>All vehicle manoeuvring occurs onsite.</p>
Sightlines	
<p>PO 2.1</p> <p>Sightlines at intersections, pedestrian and cycle crossings, and crossovers to</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>

allotments for motorists, cyclists and pedestrians are maintained or enhanced to ensure safety for all road users and pedestrians.	
PO 2.2 Walls, fencing and landscaping adjacent to driveways and corner sites are designed to provide adequate sightlines between vehicles and pedestrians.	DTS/DPF 2.2 None are applicable.
Vehicle Access	
PO 3.1 Safe and convenient access minimises impact or interruption on the operation of public roads.	DTS/DPF 3.1 The access is:  (a) provided via a lawfully existing or authorised driveway or access point or an access point for which consent has been granted as part of an application for the division of land or (b) not located within 6m of an intersection of 2 or more roads or a pedestrian activated crossing.
PO 3.2 Development incorporating vehicular access ramps ensures vehicles can enter and exit a site safely and without creating a hazard to pedestrians and other vehicular traffic.	DTS/DPF 3.2 None are applicable.
PO 3.3 Access points are sited and designed to accommodate the type and volume of traffic likely to be generated by the development or land use.	DTS/DPF 3.3 None are applicable.
PO 3.4 Access points are sited and designed to minimise any adverse impacts on neighbouring properties.	DTS/DPF 3.4 None are applicable.
PO 3.5 Access points are located so as not to interfere with street trees, existing street furniture (including directional signs, lighting, seating and weather shelters) or infrastructure services to maintain the appearance of the streetscape, preserve local amenity and minimise disruption to utility infrastructure assets.	DTS/DPF 3.5 Vehicle access to designated car parking spaces satisfy (a) or (b): (a) is provided via a lawfully existing or authorised access point or an access point for which consent has been granted as part of an application for the division of land (b) where newly proposed, is set back: (i) 0.5m or more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure unless consent is provided from the asset owner (ii) 2m or more from the base of the trunk of a street tree unless consent is provided from the tree owner for a lesser distance (iii) 6m or more from the tangent point of an intersection of 2 or more roads (iv) outside of the marked lines or infrastructure dedicating a pedestrian crossing.
PO 3.6 Driveways and access points are separated and minimised in number to optimise the provision of on-street visitor parking (where on-street parking is appropriate).	DTS/DPF 3.6 Driveways and access points:  (a) for sites with a frontage to a public road of 20m or less, one access point no greater than 3.5m in width is provided (b) for sites with a frontage to a public road greater than 20m: (i) a single access point no greater than 6m in width is provided or (ii) not more than two access points with a width of 3.5m each are provided.
PO 3.7 Access points are appropriately separated from level crossings to avoid interference and ensure their safe ongoing operation.	DTS/DPF 3.7 Development does not involve a new or modified access or cause an increase in traffic through an existing access that is located within the following distance from a railway crossing:  (a) 80 km/h road - 110m

	(b) 70 km/h road - 90m (c) 60 km/h road - 70m (d) 50km/h or less road - 50m.
PO 3.8 Driveways, access points, access tracks and parking areas are designed and constructed to allow adequate movement and manoeuvrability having regard to the types of vehicles that are reasonably anticipated.	DTS/DPF 3.8 None are applicable.
PO 3.9 Development is designed to ensure vehicle circulation between activity areas occurs within the site without the need to use public roads.	DTS/DPF 3.9 None are applicable.
Access for People with Disabilities	
PO 4.1 Development is sited and designed to provide safe, dignified and convenient access for people with a disability.	DTS/DPF 4.1 None are applicable.
Vehicle Parking Rates	
PO 5.1 Sufficient on-site vehicle parking and specifically marked accessible car parking places are provided to meet the needs of the development or land use having regard to factors that may support a reduced on-site rate such as:  (a) availability of on-street car parking (b) shared use of other parking areas (c) in relation to a mixed-use development, where the hours of operation of commercial activities complement the residential use of the site, the provision of vehicle parking may be shared (d) the adaptive reuse of a State or Local Heritage Place.	DTS/DPF 5.1 Development provides a number of car parking spaces on-site at a rate no less than the amount calculated using one of the following, whichever is relevant:  (a) Transport, Access and Parking Table 2 - Off-Street Vehicle Parking Requirements in Designated Areas if the development is a class of development listed in Table 2 and the site is in a Designated Area (b) Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements where (a) does not apply (c) if located in an area where a lawfully established carparking fund operates, the number of spaces calculated under (a) or (b) less the number of spaces offset by contribution to the fund.
Vehicle Parking Areas	
PO 6.1 Vehicle parking areas are sited and designed to minimise impact on the operation of public roads by avoiding the use of public roads when moving from one part of a parking area to another.	DTS/DPF 6.1 Movement between vehicle parking areas within the site can occur without the need to use a public road.
PO 6.2 Vehicle parking areas are appropriately located, designed and constructed to minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced, and the like.	DTS/DPF 6.2 None are applicable.
PO 6.3 Vehicle parking areas are designed to provide opportunity for integration and shared-use of adjacent car parking areas to reduce the total extent of vehicle parking areas and access points.	DTS/DPF 6.3 None are applicable.
PO 6.4 Pedestrian linkages between parking areas and the development are provided and are safe and convenient.	DTS/DPF 6.4 None are applicable.
PO 6.5 Vehicle parking areas that are likely to be used during non-daylight hours are provided with sufficient lighting to entry and exit points to ensure clear visibility to users.	DTS/DPF 6.5 None are applicable.
PO 6.6 Loading areas and designated parking spaces for service vehicles are provided within the boundary of the site.	DTS/DPF 6.6 Loading areas and designated parking spaces are wholly located within the site.



<p>PO 6.7</p> <p>On-site visitor parking spaces are sited and designed to be accessible to all visitors at all times.</p>	<p>DTS/DPF 6.7</p> <p>None are applicable.</p>
<p>Undercroft and Below Ground Garaging and Parking of Vehicles</p>	
<p>PO 7.1</p> <p>Undercroft and below ground garaging of vehicles is designed to enable safe entry and exit from the site without compromising pedestrian or cyclist safety or causing conflict with other vehicles.</p>	<p>DTS/DPF 7.1</p> <p>None are applicable.</p>
<p>Internal Roads and Parking Areas in Residential Parks and Caravan and Tourist Parks</p>	
<p>PO 8.1</p> <p>Internal road and vehicle parking areas are surfaced to prevent dust becoming a nuisance to park residents and occupants.</p>	<p>DTS/DPF 8.1</p> <p>None are applicable.</p>
<p>PO 8.2</p> <p>Traffic circulation and movement within the park is pedestrian friendly and promotes low speed vehicle movement.</p>	<p>DTS/DPF 8.2</p> <p>None are applicable.</p>
<p>Bicycle Parking in Designated Areas</p>	
<p>PO 9.1</p> <p>The provision of adequately sized on-site bicycle parking facilities encourages cycling as an active transport mode.</p>	<p>DTS/DPF 9.1</p> <p>Areas and / or fixtures are provided for the parking and storage of bicycles at a rate not less than the amount calculated using Transport, Access and Parking Table 3 - Off Street Bicycle Parking Requirements.</p>
<p>PO 9.2</p> <p>Bicycle parking facilities provide for the secure storage and tethering of bicycles in a place where casual surveillance is possible, is well lit and signed for the safety and convenience of cyclists and deters property theft.</p>	<p>DTS/DPF 9.2</p> <p>None are applicable.</p>
<p>PO 9.3</p> <p>Non-residential development incorporates end-of-journey facilities for employees such as showers, changing facilities and secure lockers, and signage indicating the location of the facilities to encourage cycling as a mode of journey-to-work transport.</p>	<p>DTS/DPF 9.3</p> <p>None are applicable.</p>
<p>Corner Cut-Offs</p>	
<p>PO 10.1</p> <p>Development is located and designed to ensure drivers can safely turn into and out of public road junctions.</p>	<p>DTS/DPF 10.1</p> <p>Development does not involve building work, or building work is located wholly outside the land shown as Corner Cut-Off Area in the following diagram:</p> 
<p>Heavy Vehicle Parking</p>	
<p>PO 11.1</p> <p>Heavy vehicle parking and access is designed and sited so that the activity does not result in nuisance to adjoining neighbours as a result of dust, fumes, vibration, odour or potentially hazardous loads.</p>	<p>DTS/DPF 11.1</p> <p>Heavy vehicle parking occurs in accordance with the following:</p> <ul style="list-style-type: none"> <li>(a) the site is not located within a Neighbourhood-type zone (except a Rural Living Zone)</li> <li>(b) the site is a minimum of 0.4 ha</li> <li>(c) where the site is 2 ha or more, no more than 2 vehicles exceeding 3,000 kilograms each (and trailers) are to be parked on the allotment at any time</li> <li>(d) where the site is between 0.4 ha and 2 ha, only one vehicle exceeding 3,000 kilograms (and one trailer) are to be parking on the allotment at</li> </ul>

	<p>any time</p> <ul style="list-style-type: none"> <li>(e) the vehicle parking area achieves the following setbacks:             <ul style="list-style-type: none"> <li>(i) behind the building line or 30m, whichever is greater</li> <li>(ii) 20m from the secondary street if it is a State Maintained Road</li> <li>(iii) 10m from the secondary street if it is a local road</li> <li>(iv) 10m from side and rear boundaries</li> </ul> </li> <li>(f) parking and access areas (including internal driveways) should be sealed or have a surface that can be treated and maintained to minimise dust and mud nuisance</li> <li>(g) does not include refrigerated trailers or vehicles</li> <li>(h) vehicles only enter and exit the property in accordance with the following hours:             <ul style="list-style-type: none"> <li>(i) Monday to Saturday 6:00am and 9:30pm</li> <li>(ii) Sunday and public holidays between 9:30 am and 7:00 pm</li> </ul> </li> <li>(i) the handling or trans-shipment of freight is not carried out on the property.</li> </ul>
<p>PO 11.2 Heavy vehicle parking ensures that vehicles can enter and exit a site safely and without creating a hazard to pedestrians and other vehicular traffic.</p>	<p>DTS/DPF 11.2 Heavy vehicles:</p> <ul style="list-style-type: none"> <li>(a) can enter and exit the site in a forward direction; and</li> <li>(b) operate within the statutory mass and dimension limited for General Access Vehicles (as prescribed by the National Heavy Vehicle Regulator).</li> </ul>
<p>PO 11.3 Heavy vehicle parking is screened through siting behind buildings, screening, landscaping or the like to obscure views from adjoining properties and public roads.</p>	<p>DTS/DPF 11.3 None are applicable.</p>

**Table 1 - General Off-Street Car Parking Requirements**

The following parking rates apply and if located in an area where a lawfully established carparking fund operates, the number of spaces is reduced by an amount equal to the number of spaces offset by contribution to the fund.

<p><b>Class of Development</b></p>	<p><b>Car Parking Rate (unless varied by Table 2 onwards)</b></p> <p><b>Where a development comprises more than one development type, then the overall car parking rate will be taken to be the sum of the car parking rates for each development type.</b></p>
Residential Development	
<p>Detached Dwelling</p>	<p>Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p> <p>Dwelling with 2 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.</p>
<p>Group Dwelling</p>	<p>Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p> <p>Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.</p> <p>0.33 spaces per dwelling for visitor parking where development involves 3 or more dwellings.</p>
<p>Residential Flat Building</p>	<p>Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p>

	<p>Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.</p> <p>0.33 spaces per dwelling for visitor parking where development involves 3 or more dwellings.</p>
Row Dwelling where vehicle access is from the primary street	<p>Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p> <p>Dwelling with 2 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.</p>
Row Dwelling where vehicle access is not from the primary street (i.e. rear-loaded)	<p>Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p> <p>Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.</p>
Semi-Detached Dwelling	<p>Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p> <p>Dwelling with 2 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling, 1 of which is to be covered.</p>
Aged / Supported Accommodation	
Retirement facility	<p>Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p> <p>Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling.</p> <p>0.2 spaces per dwelling for visitor parking.</p>
Supported accommodation	0.3 spaces per bed.
Residential Development (Other)	
Ancillary accommodation	No additional requirements beyond those associated with the main dwelling.
Residential park	<p>Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling.</p> <p>Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling.</p> <p>0.2 spaces per dwelling for visitor parking.</p>
Student accommodation	0.3 spaces per bed.
Workers' accommodation	0.5 spaces per bed plus 0.2 spaces per bed for visitor parking.
Tourist	
Caravan and tourist park	<p>Parks with 100 sites or less - a minimum of 1 space per 10 sites to be used for accommodation.</p> <p>Parks with more than 100 sites - a minimum of 1 space per 15 sites used for accommodation.</p> <p>A minimum of 1 space for every caravan (permanently fixed to the ground) or cabin.</p>
Tourist accommodation other than a caravan and tourist park	1 car parking space per accommodation unit / guest room.
Commercial Uses	
Auction room/ depot	1 space per 100m <sup>2</sup> of building floor area plus an additional 2 spaces.
Automotive collision repair	3 spaces per service bay.
Motor repair station	3 spaces per service bay.
Office	<p>For a call centre, 8 spaces per 100m<sup>2</sup> of gross leasable floor area</p> <p>In all other cases, 4 spaces per 100m<sup>2</sup> of gross leasable floor area.</p>
Retail fuel outlet	3 spaces per 100m <sup>2</sup> gross leasable floor area.
Service trade premises	<p>2.5 spaces per 100m<sup>2</sup> of gross leasable floor area</p> <p>1 space per 100m<sup>2</sup> of outdoor area used for display purposes.</p>
Shop (no commercial kitchen)	<p>5.5 spaces per 100m<sup>2</sup> of gross leasable floor area where not located in an integrated complex containing two or more tenancies (and which may comprise more than one building) where facilities for off-street vehicle parking, vehicle loading and unloading, and the storage and collection of refuse are shared.</p> <p>5 spaces per 100m<sup>2</sup> of gross leasable floor area where located in an integrated complex containing two or more tenancies (and which may comprise more than one building) where facilities for off-street vehicle parking, vehicle loading and unloading, and the storage and collection of</p>

	refuse are shared.
Shop (in the form of a bulky goods outlet)	2.5 spaces per 100m2 of gross leasable floor area.
Shop (in the form of a restaurant or involving a commercial kitchen)	Premises with a dine-in service only (which may include a take-away component with no drive-through) - 0.4 spaces per seat.  Premises with take-away service but with no seats - 12 spaces per 100m2 of total floor area plus a drive-through queue capacity of ten vehicles measured from the pick-up point.  Premises with a dine-in and drive-through take-away service - 0.3 spaces per seat plus a drive through queue capacity of 10 vehicles measured from the pick-up point.
Community and Civic Uses	
Community facility	For a library, 4 spaces per 100m2 of total floor area.  For a hall/meeting hall, 0.2 spaces per seat.  In all other cases, 10 spaces per 100m2 of total floor area.
Educational facility	For a 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 300m of the site.  For a secondary school - 1.1 per full time equivalent employee plus 0.1 spaces per student for a pickup/set down area either on-site or on the public realm within 300m of the site.  For a tertiary institution - 0.4 per student based on the maximum number of students on the site at any time.
Place of worship	1 space for every 3 visitor seats.
Child care facility	For a child care centre, 0.25 spaces per child  In all other cases, 1 per employee plus 0.25 per child (drop off/pick up bays).
Health Related Uses	
Consulting room	4 spaces per consulting room excluding ancillary facilities.
Hospital	4.5 spaces per bed for a public hospital.  1.5 spaces per bed for a private hospital.
Recreational and Entertainment Uses	
Cinema complex	0.2 spaces per seat.
Concert hall / theatre	0.2 spaces per seat.
Hotel	1 space for every 2m2 of total floor area in a public bar plus 1 space for every 6m2 of total floor area available to the public in a lounge, beer garden plus 1 space per 2 gaming machines, plus 1 space per 3 seats in a restaurant.
Indoor recreation facility	6.5 spaces per 100m2 of total floor area for a Fitness Centre  4.5 spaces per 100m2 of total floor area for all other Indoor recreation facilities.
Industry/Employment Uses	
Fuel depot	1.5 spaces per 100m2 total floor area  1 spaces per 100m2 of outdoor area used for fuel depot activity purposes.
Industry	1.5 spaces per 100m2 of total floor area.
Store	0.5 spaces per 100m2 of total floor area.
Timber yard	1.5 spaces per 100m2 of total floor area  1 space per 100m2 of outdoor area used for display purposes.
Warehouse	0.5 spaces per 100m2 total floor area.
Other Uses	
Funeral Parlour	1 space per 5 seats in the chapel plus 1 space for each vehicle operated by the parlour.
Radio or Television Station	5 spaces per 100m2 of total building floor area.

**Table 2 - Off-Street Car Parking Requirements in Designated Areas**

The following parking rates apply in any zone, subzone or other area described in the 'Designated Areas' column.

Class of Development	Car Parking Rate		Designated Areas
	Where a development comprises more than one development type, then the overall car parking rate will be taken to be the sum of the car parking rates for each development type.		
		Minimum number of spaces	Maximum number of spaces
Development generally			
All classes of development	No minimum.	No maximum except in the Primary Pedestrian Area identified in the Primary Pedestrian Area Concept Plan, where the maximum is:  1 space for each dwelling with a total floor area less than 75 square metres  2 spaces for each dwelling with a total floor area between 75 square metres and 150 square metres  3 spaces for each dwelling with a total floor area greater than 150 square metres.  Residential flat building or Residential component of a multi-storey building: 1 visitor space for each 6 dwellings.	Capital City Zone  City Main Street Zone  City Riverbank Zone  Adelaide Park Lands Zone  Business Neighbourhood Zone (within the City of Adelaide)  The St Andrews Hospital Precinct Subzone and Women's and Children's Hospital Precinct Subzone of the Community Facilities Zone
Non-residential development			
Non-residential development excluding tourist accommodation	3 spaces per 100m2 of gross leasable floor area.	5 spaces per 100m2 of gross leasable floor area.	City Living Zone  Urban Corridor (Boulevard) Zone  Urban Corridor (Business) Zone  Urban Corridor (Living) Zone  Urban Corridor (Main Street ) Zone  Urban Neighbourhood Zone (except for Bowden)
Non-residential development excluding tourist accommodation	3 spaces per 100m2 of gross leasable floor area.	6 spaces per 100m2 of gross leasable floor area.	Strategic Innovation Zone in the City of Burnside, City of Marion or City of Mitcham  Strategic Innovation Zone outside the City of Burnside, City of Marion or City of Mitcham when the site is also in a high frequency public transit area  Suburban Activity Centre Zone when the site is also in a high frequency public transit area  Suburban Business Zone when the site is also in a high frequency public transit area  Business Neighbourhood Zone in the City of Adelaide  Business Neighbourhood Zone

			<p>outside of the City of Adelaide when the site is also in a high frequency public transit area</p> <p>Suburban Main Street Zone when the site is also in a high frequency public transit area</p> <p>Urban Activity Centre Zone</p>
Non-residential development excluding tourist accommodation	<p>3 spaces per 100 square metres of gross leasable floor area</p> <p>1.5 spaces per 100 square metres of gross leasable floor area above ground floor level other than for a shop</p>	3 spaces per 100 square metres of gross leasable floor area	Urban Neighbourhood Zone in Bowden
Tourist accommodation	1 space for every 4 bedrooms up to 100 bedrooms plus 1 space for every 5 bedrooms over 100 bedrooms	1 space per 2 bedrooms up to 100 bedrooms and 1 space per 4 bedrooms over 100 bedrooms	<p>City Living Zone</p> <p>Urban Activity Centre Zone when the site is also in a high frequency public transit area</p> <p>Urban Corridor (Boulevard) Zone</p> <p>Urban Corridor (Business) Zone</p> <p>Urban Corridor (Living) Zone</p> <p>Urban Corridor (Main Street) Zone</p> <p>Urban Neighbourhood Zone (except for Bowden)</p>
Residential development			
Residential component of a multi-storey building	<p>Dwelling with no separate bedroom - 0.25 spaces per dwelling</p> <p>1 bedroom dwelling - 0.75 spaces per dwelling</p> <p>2 bedroom dwelling - 1 space per dwelling</p> <p>3 or more bedroom dwelling - 1.25 spaces per dwelling</p> <p>0.25 spaces per dwelling for visitor parking.</p>	None specified.	<p>City Living Zone</p> <p>Strategic Innovation Zone in the City of Burnside, City of Marion or City of Mitcham</p> <p>Strategic Innovation Zone outside the City of Burnside, City of Marion or City of Mitcham when the site is also in a high frequency public transit area</p> <p>Urban Activity Centre Zone when the site is also in a high frequency public transit area</p> <p>Urban Corridor (Boulevard) Zone</p> <p>Urban Corridor (Business) Zone</p> <p>Urban Corridor (Living) Zone</p> <p>Urban Corridor (Main Street) Zone</p> <p>Urban Neighbourhood Zone (except for Bowden)</p>
Residential component of a multi-storey building	0.75 per dwelling	None specified	Urban Neighbourhood Zone in Bowden
Residential flat building	<p>Dwelling with no separate bedroom - 0.25 spaces per dwelling</p> <p>1 bedroom dwelling - 0.75 spaces per dwelling</p>	None specified.	<p>City Living Zone</p> <p>Urban Activity Centre Zone when the site is also in a high frequency public</p>

	2 bedroom dwelling - 1 space per dwelling  3 or more bedroom dwelling - 1.25 spaces per dwelling  0.25 spaces per dwelling for visitor parking.		transit area  Urban Corridor (Boulevard) Zone  Urban Corridor (Business) Zone  Urban Corridor (Living) Zone  Urban Corridor (Main Street) Zone  Urban Neighbourhood Zone (except for Bowden)
Residential flat building	0.75 per dwelling	None specified	Urban Neighbourhood Zone in Bowden
Detached dwelling	0.75 per dwelling	None specified	Urban Neighbourhood Zone in Bowden
Row dwelling	0.75 per dwelling	None specified	Urban Neighbourhood Zone in Bowden
Semi-detached dwelling	0.75 per dwelling	None specified	Urban Neighbourhood Zone in Bowden

**Table 3 - Off-Street Bicycle Parking Requirements**

The bicycle parking rates apply within designated areas located within parts of the State identified in the Schedule to Table 3.

Class of Development	Bicycle Parking Rate	
	Where a development comprises more than one development type, then the overall bicycle parking rate will be taken to be the sum of the bicycle parking rates for each development type.	
Consulting room	1 space per 20 employees plus 1 space per 20 consulting rooms for customers.	
Educational facility	For a secondary school - 1 space per 20 full-time time employees plus 10 percent of the total number of employee spaces for visitors.  For tertiary education - 1 space per 20 employees plus 1 space per 10 full time students.	
Hospital	1 space per 15 beds plus 1 space per 30 beds for visitors.	
Indoor recreation facility	1 space per 4 employees plus 1 space per 200m <sup>2</sup> of gross leasable floor area for visitors.	
Licensed Premises	1 per 20 employees, plus 1 per 60 square metres total floor area, plus 1 per 40 square metres of bar floor area, plus 1 per 120 square metres lounge and beer garden floor area, plus 1 per 60 square metres dining floor area, plus 1 per 40 square metres gaming room floor area.	
Office	1 space for every 200m <sup>2</sup> of gross leasable floor area plus 2 spaces plus 1 space per 1000m <sup>2</sup> of gross leasable floor area for visitors.	
Child care facility	1 space per 20 full time employees plus 1 space per 40 full time children.	
Recreation area	1 per 1500 spectator seats for employees plus 1 per 250 visitor and customers.	
Residential flat building	Within the City of Adelaide 1 for every dwelling for residents with a total floor area less than 150 square metres, 2 for every dwelling for residents with a total floor area greater than 150 square metres, plus 1 for every 10 dwellings for visitors, and in all other cases 1 space for every 4 dwellings for residents plus 1 for every 10 dwellings for visitors.	
Residential component of a multi-storey building	Within the City of Adelaide 1 for every dwelling for residents with a total floor area less than 150 square metres, 2 for every dwelling for residents with a total floor area greater than 150 square metres, plus 1 for every 10 dwellings for visitors, and in all other cases 1 space for every 4 dwellings for residents plus 1 space for every 10 dwellings for visitors.	
Shop	1 space for every 300m <sup>2</sup> of gross leasable floor area plus 1 space for every 600m <sup>2</sup> of gross leasable floor area for customers.	
Tourist accommodation	1 space for every 20 employees plus 2 for the first 40 rooms and 1 for every additional 40 rooms for visitors.	
Schedule to Table 3	<b>Designated Area</b>	<b>Relevant part of the State</b>
		The bicycle parking rate applies to a designated area located in a relevant part of the State described below.
	All zones	City of Adelaide
Business Neighbourhood Zone	Metropolitan Adelaide	
Strategic Innovation Zone		

	Suburban Activity Centre Zone Suburban Business Zone Suburban Main Street Zone Urban Activity Centre Zone Urban Corridor (Boulevard) Zone Urban Corridor (Business) Zone Urban Corridor (Living) Zone Urban Corridor (Main Street ) Zone Urban Neighbourhood Zone	
--	---	--

**Waste Treatment and Management Facilities**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Mitigation of the potential environmental and amenity impacts of waste treatment and management facilities.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Siting	
PO 1.1 Waste treatment and management facilities incorporate separation distances and attenuation measures within the site between waste operations areas (including all closed, operating and future cells) and sensitive receivers and sensitive environmental features to mitigate off-site impacts from noise, air and dust emissions.	DTS/DPF 1.1 None are applicable.
Soil and Water Protection	
PO 2.1 Soil, groundwater and surface water are protected from contamination from waste treatment and management facilities through measures such as: <ul style="list-style-type: none"> <li>(a) containing potential groundwater and surface water contaminants within waste operations areas</li> <li>(b) diverting clean stormwater away from waste operations areas and potentially contaminated areas</li> <li>(c) providing a leachate barrier between waste operations areas and underlying soil and groundwater.</li> </ul>	DTS/DPF 2.1 None are applicable.
PO 2.2 Wastewater lagoons are set back from watercourses to minimise	DTS/DPF 2.2 Wastewater lagoons are set back 50m or more from watercourse banks.



environmental harm and adverse effects on water resources.	
PO 2.3 Wastewater lagoons are designed and sited to:  (a) avoid intersecting underground waters; (b) avoid inundation by flood waters; (c) ensure lagoon contents do not overflow; (d) include a liner designed to prevent leakage.	DTS/DPF 2.3  None are applicable.
PO 2.4 Waste operations areas of landfills and organic waste processing facilities are set back from watercourses to minimise adverse impacts on water resources.	DTS/DPF 2.4 Waste operations areas are set back 100m or more from watercourse banks.
Amenity	
PO 3.1 Waste treatment and management facilities are screened, located and designed to minimise adverse visual impacts on amenity.	DTS/DPF 3.1 None are applicable.
PO 3.2 Access routes to waste treatment and management facilities via residential streets is avoided.	DTS/DPF 3.2 None are applicable.
PO 3.3 Litter control measures minimise the incidence of windblown litter.	DTS/DPF 3.3 None are applicable.
PO 3.4 Waste treatment and management facilities are designed to minimise adverse impacts on both the site and surrounding areas from weed and vermin infestation.	DTS/DPF 3.4 None are applicable.
Access	
PO 4.1 Traffic circulation movements within any waste treatment or management site are designed to enable vehicles to enter and exit the site in a forward direction.	DTS/DPF 4.1 None are applicable.
PO 4.2 Suitable access for emergency vehicles is provided to and within waste treatment or management sites.	DTS/DPF 4.2 None are applicable.
Fencing and Security	
PO 5.1 Security fencing provided around waste treatment and management facilities prevents unauthorised access to operations and potential hazard to the public.	DTS/DPF 5.1 Chain wire mesh or pre-coated painted metal fencing 2m or more in height is erected along the perimeter of the waste treatment or waste management facility site.
Landfill	
PO 6.1 Landfill gas emissions are managed in an environmentally acceptable manner.	DTS/DPF 6.1 None are applicable.
PO 6.2 Landfill facilities are separated from areas of environmental significance and land used for public recreation and enjoyment.	DTS/DPF 6.2 Landfill facilities are set back 250m or more from a public open space reserve, forest reserve, national park or Conservation Zone.
PO 6.3 Landfill facilities are located on land that is not subject to land slip.	DTS/DPF 6.3 None are applicable.
PO 6.4 Landfill facilities are separated from areas subject to flooding.	DTS/DPF 6.4 Landfill facilities are set back 500m or more from land inundated in a 1% AEP flood event.

Organic Waste Processing Facilities	
PO 7.1 Organic waste processing facilities are separated from the coast to avoid potential environment harm.	DTS/DPF 7.1 Organic waste processing facilities are set back 500m or more from the coastal high water mark.
PO 7.2 Organic waste processing facilities are located on land where the engineered liner and underlying seasonal water table cannot intersect.	DTS/DPF 7.2 None are applicable.
PO 7.3 Organic waste processing facilities are sited away from areas of environmental significance and land used for public recreation and enjoyment.	DTS/DPF 7.3 Organic waste processing facilities are set back 250m or more from a public open space reserve, forest reserve, national park or a Conservation Zone.
PO 7.4 Organic waste processing facilities are located on land that is not subject to land slip.	DTS/DPF 7.4 None are applicable.
PO 7.5 Organic waste processing facilities separated from areas subject to flooding.	DTS/DPF 7.5 Organic waste processing facilities are set back 500m or more from land inundated in a 1% AEP flood event.
Major Wastewater Treatment Facilities	
PO 8.1 Major wastewater treatment and disposal systems, including lagoons, are designed to minimise potential adverse odour impacts on sensitive receivers, minimise public and environmental health risks and protect water quality.	DTS/DPF 8.1 None are applicable.
PO 8.2 Artificial wetland systems for the storage of treated wastewater are designed and sited to minimise potential public health risks arising from the breeding of mosquitoes.	DTS/DPF 8.2 None are applicable.

**Workers' accommodation and Settlements**

**Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Appropriately designed and located accommodation for seasonal and short-term workers in rural areas that minimises environmental and social impacts.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Workers' accommodation and settlements are obscured from scenic routes, tourist destinations and areas of conservation significance or otherwise designed to complement the surrounding landscape.	DTS/DPF 1.1 None are applicable.
PO 1.2	DTS/DPF 1.2

Workers' accommodation and settlements are sited and designed to minimise nuisance impacts on the amenity of adjacent users of land.	None are applicable.
PO 1.3 Workers' accommodation and settlements are built with materials and colours that blend with the landscape.	DTS/DPF 1.3 None are applicable.
PO 1.4 Workers' accommodation and settlements are supplied with service infrastructure such as power, water and effluent disposal sufficient to satisfy the living requirements of workers.	DTS/DPF 1.4 None are applicable.

No criteria applies to this land use. Please check the definition of the land use for further detail.