DEVELOPMENT NO.:	22005412
APPLICANT:	Future Urban Pty Ltd
ADDRESS:	23 MORELLA GR BRIDGEWATER SA 5155
NATURE OF DEVELOPMENT:	Construction of a childcare centre with associated non-illuminated advertising displays (x2), retaining walls (3.3m maximum height), combined retaining wall and fencing (5.7 m maximum height), removal of native vegetation, associated car parking and landscaping.
ZONING INFORMATION:	**Zones:** • Rural Neighbourhood **Overlays:** • Hazards (Bushfire - High Risk) • Hazards (Flooding - Evidence Required) • Mount Lofty Ranges Water Supply Catchment (Area 2) • Native Vegetation • Prescribed Water Resources Area • Regulated and Significant Tree • Traffic Generating Development **Technical Numeric Variations (TNVs):** • Minimum Site Area
LODGEMENT DATE:	3 Mar 2022
RELEVANT AUTHORITY:	Assessment Panel at Adelaide Hills Council
PLANNING & DESIGN CODE VERSION:	Operative Version 2022.4 - (3 March – 16March 2022).
CATEGORY OF DEVELOPMENT:	Code Assessed - Performance Assessed
NOTIFICATION:	Yes
RECOMMENDING OFFICER:	Aaron Wilksch (Consultant Planner) for James Booker Team Leader Statutory Planning
REFERRALS STATUTORY:	Native Vegetation Council South Australian Country Fire Service
REFERRALS NON-STATUTORY:	Council Engineering Environmental Health

CONTENTS:

DETAILED DESCRIPTION OF PROPOSAL:

The proposed development involves the construction a new two-storey (split level) child-care centre with associated non-illuminated advertising displays (x2), retaining walls (3.3 metres maximum height), combined retaining wall and fencing (5.7 m maximum height), removal of native vegetation, associated car parking for 21 cars, and landscaping, which will be situated upon land containing an existing residence and outbuildings.

The proposal comprises the following:

- Lower ground level:
  - Three (3) activity spaces for 2 – 3+ age groups (total 211m²)
  - Children's toilet cubicles and storage rooms
  - Disabled / universal access toilet cubicle
  - Kitchen / food preparation area
  - Staff room
  - Laundry
  - Lift shaft / stairwell
  - Outdoor play space (total 228m²) with shade sails and supporting structures
- Upper Floor / Upper Ground level:
  - 21 vehicle car parking area (includes two (2) universal access provisions
  - Main entry / foyer / office & reception
  - Lift shaft / stairwell
  - Two (2) activity spaces for infant / toddler (total 59m²)
  - Four (4) sleeping areas
  - Children's toilet cubicles and storage rooms
  - Disabled / universal access toilet cubicle
  - Outdoor play area (total 114m²)
  - Outdoor equipment store
  - Refuse containment

The overall building is to be dimensioned approximately 35.5 metres length x 16.5 metres width (overall dimensions inclusive of entry canopy, verandahs and external stairways) with a 4.0 metres lower-level wall height (4.6 metres above natural ground line) and a 7.0 metres maximum upper-level wall height (7.4 metres above natural ground line) and a maximum roof ridge height of 10.4 metres (9.1 metres maximum height above natural ground line).

The proposed building will have a setback of 4.2 metres from Lezayre Avenue at its nearest point and 3.4 metres at its nearest point to the Morella Grove road frontage, from which access is gained. The proposed building will maintain separation distance of approximately 34 metres from the nearest part of the dwelling and 22 metres from the domestic

outbuilding on the same site. The applicant has stated that should this application be successful, an application for land division that places the existing dwelling and the childcare centre on separate allotments will be lodged.

External materials and finishes of the building are comprised of a composite of horizontally expressed 'linea' fibre-cement plank and smooth finish wall cladding in painted finishes, aluminium framed glazing and glass panel balustrades, masonry retaining and feature walling and Colorbond sheetmetal fencing and roof sheeting. The colour palette generally comprising light white / off-white and charcoal / black tones, with landscaping and timber accents to add further articulation and soften the external surfaces of the building.

The site of the proposed development is moderately sloping, exhibiting approximately 2 metres variation across the site (sloping from Morella Grove down to Lezayre Ave (1:15 gradient) and approximately 10 metres from the northern extent of the proposed development (carpark) sloping down to the southern point of the land at the intersection of Morella Grove and Lezayre Ave with Shannon Rd (1:8 gradient).

Retaining walls to a maximum elevation of 3.3 metres above natural ground are proposed in order to create level surfaces within the southern portion of the land and additional fencing / screening establishes combined fence / retaining wall heights of up to 5.7 metres

The proposal is accompanied by additional specialist assessments / documentation, including:

- Traffic and parking assessment
- Stormwater management
- Native vegetation assessment

The application documents are included as ***Attachment 1 – Application Documents.***

BACKGROUND:

The site has historically been established with a detached dwelling (pre-1949) and domestic outbuildings including carport and garage (in the period of 2013-2018) and has been utilised solely for residential purposes. The majority of the southern side of the property has remained un-developed and generally has supported a mixture of native trees and introduced landscaping.

SUBJECT LAND & LOCALITY:

Site Description:

Location reference: 23 MORELLA GR BRIDGEWATER SA 5155
Title ref.: CT 5473/109 **Plan Parcel:** F12021 AL2 **Council:** ADELAIDE HILLS COUNCIL

The site is a large landholding of approximately 3700m² of irregular shape, bounded by Morella Grove on its eastern aspect and crescent shaped, and Lezayre Avenue forming its western boundary. Lezayre Avenue is a one-way street permitting traffic from south-to-north only.

The land is moderately sloping with east-to-west variation of approximately two metres and north-to-south variation of around 10 to 12 metres, with the northern portion of the land being substantially flat and approximately half of the land slopes downhill to the south. The southern portion of the land supports a mixture of fragmented native trees (eucalypts) with other exotic vegetation interspersed throughout.

The land contains an existing dwelling which was established pre 1949 according to Council aerial imagery, with a domestic garage and carport added between 2013 and 2018.

The land accesses sewer infrastructure near the intersection of Morella Grove and Trenouth Street and obtains access to SA Water mains.

Locality

The locality forms part of a well-established neighbourhood type precinct within the Rural Neighbourhood Zone of Bridgewater. Land in the locality is typically comprised of allotments of 800m² to 2000m² in size supporting single detached dwellings and associated domestic ancillary structures such as carports and garages on spacious, landscaped allotments.

The locality also notably comprises a number of older dwellings (including the one on the subject land) established pre-1949, and the heritage listed Bridgewater Primary School which retains the original Bridgewater School House, School Room and Residence, also established pre-1949. A number of other heritage listed sites exist nearby adjacent to the subject land including, 6 Shannon Road 'House' identified as '*Alderwood*', Fielding Road '*World War II Memorial*', and 10 Rosewarne Crescent 'House' identified as '*St. Githa's*'.

The locality is situated immediately south of the South Eastern Freeway, however the residential land uses are substantially insulated from the freeway by the school and school grounds which lies between the freeway and off-ramp. After the construction of the South Eastern Freeway, access to the Bridgewater School necessarily utilised Morella Grove and Lezayre Avenue for vehicular access through the suburban streets. This access represents the only non-residential activity in the immediate locality other than the Bridgewater CFS adjacent to the south end of Morella Grove and Lezayre Avenue.

The locality is described as having an established neighbourhood characteristic, predominantly supporting residential land uses with reasonably low-intensity non-residential land uses of a community nature, such as the school and CFS facility, cohabitating the locality.

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

CONSENT TYPE REQUIRED:

Planning Consent

CATEGORY OF DEVELOPMENT:

- **PER ELEMENT:**
  Other - Community - Combined fence and retaining wall: Code Assessed - Performance Assessed
  Pre-school: Code Assessed - Performance Assessed
  Advertisement: Code Assessed - Performance Assessed
  Fence: Code Assessed - Performance Assessed
  Retaining wall: Code Assessed - Performance Assessed

- **OVERALL APPLICATION CATEGORY:**
  Code Assessed - Performance Assessed

- **REASON**
  P&D Code - None of the elements of development are listed as Accepted, DTS or Restricted development with the zone. As such the proposal is assessed under the prescribed Performance Assessment Provisions for the

proposed retaining walls and fencing, with the proposed development of the pre-school facility and its advertising being assessed against all relevant (non-prescribed) Assessment Provisions of the Code.

PUBLIC NOTIFICATION

- **REASON**
  This type of development is not excluded from notification by Table 5 of the Rural Neighbourhood Zone.

  Public notification was undertaken from 28 April 2022 to 18 May 2022.

- **LIST OF REPRESENTATIONS**
  Twenty nine (29) representations were received during the public notification period. Seven (7) of the representors wish to be heard in support of their written representation.

  The representors are detailed below:

Representor Name	**Representor's Property Address**	**Wishes to be heard**	**Nominated Speaker (if relevant)**
A Fowler & J Plummer	4 Trenouth Street Bridgewater	Yes	Anne Fowler & James Plummer
S & A Devereaux	3 Lezayre Avenue Bridgewater	No	
M Malseed	17 Rosewarne Crescent Bridgewater	No	
R Kelly	28 Ayr Street Bridgewater	No	
Bridgewater Primary School Governing Council	Morella Grove Bridgewater	Yes	Carly Young
K Gore	224 Liebelt Road Biggs Flat 5153	No	
S Kent	3/10 Bruce Close Mt Barker	No	
E Gustafson	11 Kaesler Road Hahndorf	No	
S Cook	103 Cave Avenue Bridgewater	No	
C Hewton	103 Cave Avenue Bridgewater	No	
C Obradovic	PO Box 333 Uraidla	No	
P Angas	23 Fern Hill Roadd Bridgewater	No	
T Yeing	1 Shannon Road Bridgewater	Yes	TBA

E Guthrie	9 Foxhill Road Bridgewater	No	
N Dahmke	76 Bluestone Drive Mt Barker	No	
K Khabbaz	PO Box 1523 Nairne	Yes	Katarina Khabbaz
A Khabbaz	PO Box 1523 Nairne	No	
S Redwood	Nairne LPO Nairne	No	
C Houlahan	6 Railway Avenue Bridgewater	No	
E Tilgals	45 Orontes Avenue Bridgewater	No	
L Riley	19 Fern Hill Road Bridgewater	No	
K Schiphorst	12 Oratava Avenue Bridgewater	No	
T Dodd	12 Oratava Avenue Bridgewater	No	
N Glover	76 Mountford Avenue Bridgewater	No	
L Hope	34 Morella Grove Bridgewater	Yes	TBA
B & K Rumsey	38 Morella Grove Bridgewater	No	
S & M Wakefield	40 Morella Grove Bridgewater	Yes	TBA
C & G Wakefield	36 Morella Grove Bridgewater	Yes	TBA
S Barter	42 Morella Grove Bridgewater	No	

- **SUMMARY**

The representations received, generally demonstrate opposition to the proposal in respect of the following summarised matters:

- Traffic impacts and safety
- Bushfire or other emergency evacuation risk
- Ecology, wildlife and native vegetation biodiversity of the area
- Materials, appearance and finish of the proposed development

The overwhelming concerns expressed in the representations are around the existing traffic circulation and safety matters appurtenant to children being picked-up and dropped-off at the Bridgewater Primary School

and the compounding impact of the proposed childcare centre development upon the existing local traffic conditions.

Interestingly, many of the concerns raised reflect the inadequacy of the existing school parking and pick-up / drop-off provisions, thus forcing traffic to be unorderly, and pressurised, impacting the connecting local road network.

In reflection of the matters raised in respect of traffic movement and safety, and consideration of the locality, it would appear that, subject to consideration of heritage and native vegetation impacts, the Bridgewater Primary School site has reasonable potential for the site to cater to its parking and traffic circulation requirements within its site, i.e. accessed alternatively from Onkaparinga Road / Fielding Court, complete thoroughfare between Onkaparinga Road or Fielding Court to Morella Grove or, simply increased designated hardstand for pick-up and drop-off, to allow this to occur in a more orderly configuration, and relieve the local road network substantially of the traffic congestion and safety issues.

It is important to recognise, that the impacts caused by the school, whilst representing very real concerns of the representors, is external to the assessment of the proposed development, and should not be considered in itself as a factor in the assessment of the proposed child care facility. Additionally, the proposed development has appropriate on-site parking and manoeuvring areas, which accord with the requirements of the *Code, Transport, Access and Parking*, Parking Rates *Table 1 - General Off-Street Car Parking Requirements.*

The traffic concerns raised also extend to the concept of an emergency *en-masse* evacuation from the school and childcare facility together with the occupants of the neighbourhood, i.e. emergency fire evacuation.

Matters of biodiversity and native vegetation have been raised also, and the Panel will recognise that the applicant has committed to the appropriate legislative processes under the PDI Act and Native Vegetation Act to establish the level of clearance required for the development and the necessary contribution under the Native Vegetation Act for such clearance.

Other concerns reflect the noise / nuisance impact of waste collection, which is not considered to be any more impacting that normal kerbside collection services. The waste management is proposed to be by private contract, and concerns have been raised over potential for air pollution in the form of vehicle exhaust fumes.

Only one representation raised any concern of the aesthetics of the proposed building, although stated in the representation 'we haven't seen details of the full plan', nevertheless, it is acknowledged that built form is an important aspect of blending non-residential development into neighbourhood type localities where a high degree of amenity is to be preserved.

Applicant Response:
The applicant has provided a response to the matters raised within the public notification representations, including:

- Native Vegetation removal *(which has been subject to referral and response from the Native Vegetation Council, with subsequent approval for the clearance of native vegetation)*,
- Air pollution,
- Traffic Management *(which has been subject of traffic impact assessment undertaken by an independent and qualified traffic engineer, including an additional traffic survey to reflect both current and future conditions, confirming that the traffic impact will be minimal),*
- Parking provisions,
- Waste Collection,

- Bushfire Evacuation, and
- Construction impacts.

The applicant response is considered to demonstrate regard to the matters raised, recognising and responding appropriately to matters raised which do not fall within the ambit of the relevant planning considerations assessed under the Code. It was noted some matters are of a speculative / unsupported nature and those which cannot be influenced by the proposal, such as the pre-existing traffic concerns of representors.

A copy of the representations are included as ***Attachment 5 – Representations*** and the applicant's response is provided in ***Attachment 6 – Response to Representations.***

AGENCY REFERRALS

- Native Vegetation Council

The South Australia Native Vegetation Council provided its response pursuant to Schedule 9 (3)(11), on 1 Apr 2022, identifying the proposal purports Level 3 native vegetation clearance for 19 Scattered trees of varying condition (poor – excellent), consisting of two species
Eucalyptus baxteri (stringybark) and Exocarpos cupressiformis (native cherry), and, subject to Significant Environmental Benefit (SEB) contribution, provided Native vegetation clearance consent, with advisory note as follows:

> *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 2022/3063/473*

The Native Vegetation Council's decision notification for clearance is subject to nine (9) conditions of consent.

- Country Fire Service (CFS)

The applicant has provided a Bushfire Management Plan accompanying the application, identifying management strategies for activities, educators, children, families and visitors in the following circumstances:

- On days of very high, severe, extreme fire ratings including Total Fire Bans
- When there is a fire in the local district
- When a bushfire is threatening or impacting the site
- During a period of recovery if a bushfire impacts the service.

The Plan includes monitoring of fire danger ratings and events during peak bush fire seasons, and if the Rating is Very High or above, educators will monitor the situation via the internet, radio or other form of local communication to stay aware of the current situation.

The centre will not accept children for care on days when there is a catastrophic danger rating applying in the district, and the centre will be closed, acknowledging that generally, such forecast will be issued up to 24 hours prior, allowing for the centre's administration to advise all parents and care givers about the closure.

The centres' staff will follow a "leave early" policy whenever a bushfire may impact a centre.

The response from the CFS stated "The SA Country Fire Service has no objection to the proposed development with inclusion of Conditions". The required Conditions and Advisory Notes are included in Recommended Conditions 9-12 and advisory notes 7 and 8.

The referral responses are contained in ***Attachment 7 - Referral Responses***.

INTERNAL REFERRALS

- CWMS Management

  The subject site is connected to SA Water Sewer, and that no waste application is required.

- Council Engineering

  Council Engineering has reviewed the documentation provided for this development specifically considering the following:
  1. Traffic management
  2. Stormwater management

  Following further information from the applicant, AHC Engineering raised no objections to the stormwater management plans and calculations *(dated 23/05/22)* noting:

  1. *All stormwater is to be directed to a 27005 L3 underground detention tank.*
  2. *Pervious area stormwater is to be directed to a GPT with a capacity accepting 20.6 L/sec prior to being directed to the detention tank.*
  3. *Controlled discharge of 8.59 L/sec via a 65mm orifice*
  4. *Discharge is directly into the existing side entry pit on Morella Grove.*

  <u>Traffic movements:</u>
  In respect of Item 1, a traffic engineering response has been provided by Cirqa traffic engineers, identifying that:

  > *"A traffic impact assessment was provided as part of the development application which detailed the forecast traffic generation and associated impact on the adjacent roads, and*
  > *for the purposes of the additional analysis, it has been assumed that the peak periods associated with the proposed child care centre and the nearby school directly align (which is a conservative assumption). The existing and forecast future traffic volumes at the intersections have been assessed using SIDRA intersection analysis software.*
  >
  > *The detailed survey data and subsequent intersection modelling confirm the original conclusions of the traffic report that the intersections will easily accommodate the additional volumes. The traffic impact of the proposal on the intersection (and associated roads) will be minimal as supported by the additional analysis provided."*

  Additionally, the Cirqa response has considered a query from Council Engineering which recommended a 'Right-turn in' and 'Right-turn out' requirement for the car park, providing:

The section of Morella Grove adjacent the site is two-way (while the northern section of Morella Grove is one-way only, this restriction applies north of Trenouth Street). As such, the intent behind Council's request is unclear.

If the requested restrictions were implemented, drivers entering the site (from Shannon Road) would be required to enter via a 'loop' around Lezayre Avenue and Morella Grove. Such a route is circuitous and, noting that two-way movement is permitted on Morella Grove adjacent the site, a proportion of drivers may choose to ignore the signs and enter via a left-turn in. Similarly, if left-out movements are restricted, drivers may still choose to illegally exit via Trenouth Street (albeit the number of such movements would be very low).

Should Council be concerned that a proportion of parents will exit directly north to Bridgewater Primary School, there would be potential for improved line marking and signage to more appropriately define the traffic flow arrangements on Morella Grove. Given the traffic analysis indicates no issues with the accommodation of the additional movements at the intersection of Morella Grove and Shannon Road and that there are low traffic volumes on Morella Grove, it is considered reasonable, safe and appropriate to retain left-turn movements into and out of the site.

It is considered that there is merit in the Cirqa response in respect of the latter item, being that the freedom of left-turn in from Morella Grove to the proposed childcare centre appears to have potential to lessen overall congestion and ease flow of traffic to Bridgewater Primary School via Lezayre Avenue rather than funnelling all traffic for the childcare centre through a 'loop-route' onto Morella Grove.

The traffic analysis identifies that the existing road rules permit two way movement on Morella Grove in any case and therefore specific directional traffic requirements for childcare centre users in the described loop-route would need to turn right from Lezayre Ave across vehicles lawfully travelling north on Morella Grove towards the school.

Following further discussion between Council Engineering and the Traffic Consultant, Engineering had provided further advice that they have no objections to the development, and require no restrictions or conditions around the car park ingress/ egress.

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 8 – Relevant P&D Code Policies***.

Rural Neighbourhood Zone

Desired Outcomes	
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.
Performance Outcomes & Designated Performance Feature (DPF) criteria	
PO/DPF 1.1(f)&(c), PO 1.2, PO 1.3, PO 1.4(b), PO/DPF 2.1, PO/DPF 3.1, PO/DPF 4.1, PO/DPF 10.1	

The proposed development is within the ambit of community service activities contemplated in DO 1 and within PO 1.1 as *a complementary ancillary non-residential use compatible with a spacious and peaceful lifestyle for individual households* envisaged in DPF 1.1(f) Pre-school.

Consistent with PO 1.1, PO 1.2 seeks that *commercial activities improve community access to services and are of a scale and type to maintain residential amenity.* It is contemplated that the nature of the land use is an acceptable form of development to support community services within the district. The scale of the development is physically compact and notably, contained upon a site which is challenging in terms of slope and shape.

The intensity of use, providing care for up to 80 children is of a reasonably high intensity, and on face value may not be considered to be appropriate within a residential type neighbourhood zone where residential amenity is a priority, however it is acknowledged within DO 1 and PO/DPF 1.1, PO 1.3 and PO 1.4(b) particularly, that the *Rural Neighbourhood Zone* is intended to support appropriate non-residential uses.

Other amenity influences in the locality include the existing (historic) Bridgewater Primary School which is consistent with the nature of the proposed development. The proposed development's proximity to the South Eastern Freeway and the main thoroughfare of Carey Gully Road make the proposed development highly accessible and does so without encouraging traffic deep into the neighbourhood precinct.

The relationship with the Bridgewater Primary School within the same locality provides an element of consistency, insofar that the traffic generated is of similar nature and also likely to be compatible potentially with some families seeking to utilise both services within the same locality.

In respect of assessment of the physical attributes of the proposed development against PO/DPF's 2.1, 3.1, and 4.1, the proposed development is considered to have many 'residential built form characteristics', which conform to the established built form of the locality. These similarities include the building's overall styling, roofline and articulation, albeit at a large scale, in excess of 500m² in a locality which supports residential development generally closer to 250m² to 350m² which can be observed on the eastern side of Morella Grove.

Building height is in excess of the prescribed 7.0 metres maximum upper-level wall height (7.4 metres above natural ground line) and exceeds the 9.0 metres overall height, with the maximum roof ridge height of 10.4 metres (9.1 metres maximum height above natural ground line). Much of the proposed building is however benched into the site and disguised by the topography of the land, particularly from the northern part of Morella Grove fronting the development site. Notwithstanding this, the contour of the land accentuates retaining walls and fence heights at the southern extent of the land adjacent to the intersection of Morella Grove and Lezayre Avenue and, along the western (secondary frontage) to Lezayre Avenue.

The height departures of 0.4 of a metre (upper-level walls) and 0.1 of a metre (roof ridge) above the natural ground level are considered to be relatively minor in effect. The maximum ridge height of 10.4 metres relative to the benched level of the site (rather than the natural ground line) is not easily discernible from outside of the site due to walls, screening and fencing. However it is acknowledged that the building is at the maximum height which could be considered appropriate without noticeably exceeding the quantitative provisions of DPF 2.1.

In respect of setbacks referenced in PO/DPF 3.1 and 4.1, as foreshadowed previously, the proposal occupies a 'challenging' site, which is both narrow (at 36 metres compared to adjacent residential allotments at up to 50 metres depth) and of an irregular shape. The setbacks of 4.2 metres from Lezayre Avenue at its nearest point and 3.4 metres at its nearest point to the Morella Grove road frontage are not substantively inconsistent with setbacks observed adjacent to the subject site on Morella Grove. These range from zero setback to approximately 6 metres with several outbuildings and dwelling facades situated from zero to 2.5 metres setback.

Development west of Lezayre Avenue are setback consistently greater distances (between 5.5 and 9 metres) situated down-slope from Lezayre Avenue with landscape screening towards the road frontage in most instances.

The layout of the development affords approximately 24.5 metres separation from the southern corner of the property and 22.0 metres from the garage associated with the dwelling and residential use to the north, maintaining an element of spatial separation to boundaries and buildings within the streetscape.

In consideration of the existing surrounding locality and its existing setbacks, the proposed development is considered to exhibit setbacks which are relatively consistent, particularly with regard to the Morella Grove frontage.

Advertisements PO/DPF 10.1 seek that advertisements *identify the associated business activity, and do not detract from the residential character of the locality,* and *do not exceed 0.3m² and are mounted flush with a wall or fence.* The proposed 'circular emblems' affixed to screening, and the wall of the building east and west of the main entrance, face north, towards the associated dwelling on the site and given their very subtle, almost decorative form, are considered appropriate.

The proposed advertisement at the southern extent of the site is subtle in appearance and this is somewhat mitigating of its scale, however exceeds the size parameter in DPF 10.1, with the circular emblem itself equalling 1.27m² (4 times the prescribed size) with lettering equating to approximately 1.1m². The emblem and lettering however are light-weight, subtle and are non-illuminated, with the primary purpose being daytime identification of the facility. The scale of the main signage is several times in excess of the maximum prescribed but despite this is not offensive to visual amenity.

Overlays

Hazards (Bushfire - High Risk)

Desired Outcomes	
DO1	Development, including land division is sited and designed to minimise the threat and impact of bushfires on life and property with regard to the following risks: (a) potential for uncontrolled bushfire events taking into account the increased frequency and intensity of bushfires as a result of climate change (b) high levels and exposure to ember attack (c) impact from burning debris (d) radiant heat (e) likelihood and direct exposure to flames from a fire front.
DO2	Activities that increase the number of people living and working in the area or where evacuation would be difficult is sited away from areas of unacceptable bushfire risk.
Performance Outcomes & Designated Performance Feature (DPF) criteria	
PO/DPF 1.2, 2.1, 3.1, 6.2	

In respect of POs 1.2 and 2.1, the proposed development, being of a commercial nature, is likely to be subject to a high degree of maintenance and up-keep, detail of which is contained in the supplied Bushfire Management Plan ***(Attachment 1)***, including the management of the outdoor recreation area and the grounds generally to reduce leaf litter and debris which would or could occasionally accumulate within the balcony deck area, or generally about the building's walls, fences and roof given the nature of surrounding vegetation.

The surrounding environment is generally not considered to present un-managed or hazardous vegetation and the sites surrounding road network provides it with a high degree of accessibility for fire appliances and physical separation from adjacent fire sources.

The design of the building is relatively simple in its form and open with much of the roof-deck spaces being reasonably accessible.

The building does not rely upon fire tracks for access of fire appliances or evacuation. The site affords a suitable large area for access and manoeuvring of fire appliances at the car park entry point and can accommodate appropriate firefighting water supplies.

Hazards (Flooding - Evidence Required)

Desired Outcomes	
DO1	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 & Designated Performance Feature (DPF) criteria	
PO/DPF 1.1	

The proposal is not considered to be at any risk of flooding or inundation, being substantially elevated, sloping and free-draining to the street water-table.

Mount Lofty Ranges Water Supply Catchment (Area 2)

Desired Outcomes	
DO1	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 & Designated Performance Feature (DPF) criteria	
PO/DPF 1.1, 1.2, 2.1, PO 3.1, PO 3.2,	

Wastewater management is via the existing SA Water Sewer and will not impact upon the health of the Mount Lofty Ranges Catchments, according with PO/DPF 2.1.

Stormwater is to be discharged to the local street water table. The proposal utilises an underground capture and detention system with controlled release to deliver detained water back to the street water table at the appropriate rate determined by Council Engineering. This system will detain pollutants and sediment captured or mobilised in the stormwater, so reducing the potential for pollutants to enter the municipal stormwater system according with DO 1 and PO 1.1, 3.1 & 3.2. The proposed development also has a moderate composition of permeable surfaces (approximately 450m²) which will assist in stormwater drainage.

Native Vegetation

Desired Outcomes	
DO1	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 & Designated Performance Feature (DPF) criteria	
PO/DPF 1.1, PO 1.2	

The proposal includes an assessment of the existing native vegetation on the site by EBS Ecology consultants. This assessment identified native vegetation comprised principally of nineteen scattered trees including thirteen (13) Brown Stringybark and six (6) Native Cherry trees, ranging from poor to excellent condition and, small clusters of native sedges, grasses and shrubs also scattered throughout the development site.

Some native revegetation has occurred along the southern fence line of the property with species such as Hakea and Acacia.

The EBS Ecology report however identifies that exotic species dominate the property with species such as English Ivy and non-native Pittosporum taking over native vegetation, and that the majority of the land is highly disturbed and contains a large amount of planted ornamental trees, shrubs and groundcovers.

The Native Vegetation assessment identifies the clearance required, as Level 3 under the Native Vegetation Act 1991 and Regulations 2017, and has identified the appropriate Significant Environmental Benefit (SEB) contribution for the required clearance within the formal application made to the Native Vegetation Council.

The Native Vegetation Council has subsequently assessed and issued consent for the proposed clearance.

Notwithstanding the clearance to be undertaken, the proposal is considered to observe appropriate requirements of the Code, insofar that the site has been assessed as substantially modified and compromised by establishing non-native and invasive species and is not in itself an intact stratum of native vegetation being isolated from other significant or intact areas of native vegetation.

Prescribed Water Resources Area

Desired Outcomes	
DO1	Sustainable water use in prescribed surface water resources areas maintains the health and natural flow paths of water courses
Performance Outcomes & Designated Performance Feature (DPF) criteria	
PO/DPF 1.1	

There are no pertinent provisions affecting the proposed development within the Prescribed Water Resources Area Overlay policies. The site has access to a reticulated mains water supply and does not include any aspects which give rise to concerns of water resources.

Regulated and Significant Tree

Desired Outcomes	
DO1	Conservation of regulated and significant trees to provide aesthetic and environmental benefits and mitigate tree loss.
Performance Outcomes & Designated Performance Feature (DPF) criteria	
PO/DPF 1.1	

There are no pertinent provisions affecting the proposed development within the Regulated and Significant Tree Overlay policies. The EBS Ecology report identifies that none of the native species on the site fall within the ambit of Regulated or Significant status. The only other substantial tree on the site (Radiata / Monterey Pine) is specifically excluded from Regulated or Significant status, being an exotic / weed species.

Traffic Generating Development

Desired Outcomes	
DO1	Safe and efficient operation of Urban Transport Routes and Major Urban Transport Routes for all road users.
DO2	Provision of safe and efficient access to and from urban transport routes and major urban transport routes.
Performance Outcomes & Designated Performance Feature (DPF) criteria	
PO 1.1, PO 1.2, PO 1.3	

The Traffic Generating Development Overlay provisions are not considered to be substantively relevant to the proposal as the PO/DPF criteria as they are generally relative to substantial land division or commercial development at interface with the State Maintained road network, notwithstanding that, the following points have been considered:

Access will be via a new access point from Morella Grove to the proposed car parking area. The car parking area is sufficient for 21 vehicles, including two (2) disabled access spaces. The access point and crossover are designed for simultaneous two-way vehicle movements and allows entry to, and exit from the site in a forward direction with clear and direct view, avoiding vehicle movement conflicts with pedestrian movements, noting the formed pedestrian path exists on the opposite side of Morella Grove.

The proposal, having no reliance on street car parking should relieve parking and traffic movement pressure (permitting turn-in and turn-out traffic interactions) and contains all of the anticipated traffic for arrival and departure to be contained upon the site. Therefore the proposal is considered to satisfactorily accord with DO 1, and DO 2 and PO/DPFs 1.1, 1.2 & 1.3.

It is specifically noted that the traffic interface matters raised through public notification have been responded to in the Cirqa Traffic Report and response, confirming adequacy with relevant standards. To a reasonable degree, it is considered that the operation of the proposed childcare facility in respect of vehicular movements to and from the site accords with the Overlay provisions.

General Development Policies

The following are considered to be the most relevant of the Assessment Provisions (AP) from the General Development Policies of the Code

Advertisements

Desired Outcomes	
DO1	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 & Designated Performance Feature (DPF) criteria	
PO/DPF1.1, 1.2, 1.5, 3.1	

The proposed development incorporates subtle signage exhibiting 'Eden Academy Bridgewater', with the circular emblem of the business, for the reasonable identification of the building. The signage is considered to reasonably accord with DO 1 and PO/DPF values, however noting that it does not explicitly accord with DPF 1.1 (a) – as it is within a *Neighbourhood Type Zone.*

The proposed advertising display is not considered prejudicial to PO 1.2 as they are not so pronounced or bold in style, colour or content that they could be considered to *disfigure the appearance of the land upon which they are situated or the character of the locality.* In respect to PO 1.5, although identified as exceeding the *Rural Neighbourhood Zone, Advertisements DTS 10.1* provision for size (no greater than 0.3m²) when considered against these General Advertisement provisions, the advertising display is deemed to be of a scale and size appropriate to the character of the locality, particularly citing their innocuous design and appearance.

The proposed advertisement display is considered to accord with PO/DPF 3.1, being limited to information relating to the proposed use of land, to assist in the ready identification of the activity being carried on and does not create *visual clutter* or *untidiness*.

The advertisements are considered to suitably avoid any risk of nuisance (non-illuminated) or distraction to road users or hazard to footpath users, with the two circular emblems on the northern face of the building not considered to be of concern either visually in respect of distraction to road users, or aesthetically in terms of appearance of the emblems on the building.

Clearance from Overhead Powerlines

Desired Outcomes	
DO1	Protection of human health and safety when undertaking development in the vicinity of overhead transmission powerlines.
Performance Outcomes & Designated Performance Feature (DPF) criteria	
PO/DPF1.1	

The applicant has signed the building safety near powerlines declaration, which complies with DTS/DPF1.1. The overhead powerlines which generally align with the Morella Grove frontage of the site traverse the south-eastern corner of the land and interface closely with the south-eastern corner of the proposed building with one stobie pole situated within the property's eastern boundary.

Single-wire overhead powerlines exist on the opposite side of Lezayre Avenue with no direct interface with the proposed development.

Design

Desired Outcomes	
DO1	Development is: 1. contextual – by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributes to the character of the immediate area 2. durable – fit for purpose, adaptable and long lasting 3. 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 4. 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 & Designated Performance Feature (DPF) criteria	
PO/DPF 1.1, PO 1.3, PO 2.1, PO 2.2, PO 2.3, PO 2.4, PO 3.1(a),(c) & (d), PO 3.2, PO 4.2, PO 7.2, PO 7.3, PO 7.4, PO 7.5, PO 7.6, PO/DPF 8.1, PO 9.1, PO/DPF 9.2, PO 10.1, 10.2, 31.2	

The proposed development presents a building design which is complimentary to 'residential built form' however, it exhibits scale, site features such as car parking and fences and walls, which collectively are unlikely to be mistaken for residential development. In this respect the development is considered to subtly and purposefully distinguish itself as a commercial building.

PO/DPF 10.1 and 10.2 relevant to privacy and overlooking are not considered to be of relevance due to the site being bounded by road reserves and having views from upper-level administration, office and recreation / activity spaces toward dwelling facades to the street.

The proposed building and site features are considered to present tasteful style and detailing and it does not for instance exhibit bold primary colours or geometric shapes which could be considered to be at odds with the pleasant neighbourhood environment in which it will exist. The building's appearance and finishes are considered to be non-prejudicial to the residential land uses in the zone satisfying PO 1.3.

The design and layout of the proposed building and the site generally provide an easily interpretable configuration of access, parking and entry to the building and the design affords a reasonable degree of passive surveillance from the upper storey entrance, foyer, reception and, office areas towards the carpark.

In respect of PO/ DPF 3.1, PO 9.1 and PO/DPF 9.2, the proposed development necessarily has parameters for landscaping which are 'friendly' to children, including at the arrival and departure areas and in this respect need not necessarily incorporate native species (PO 3.2). Landscaping along fences and walls, which are of substantial height, due to the contour of the site, would benefit from more extensive landscaping within the terraced retaining walls.

The proposed landscaping however is considered to appropriately satisfy PO 3.1, 4.2 and 4.3 in respect of its composition and particularly the linking of the activity areas directly to outdoor spaces. The design utilises large doorways and windows creating connectivity of the inside areas to the outside play and recreation spaces as well as providing a high degree of natural light and ventilation whilst necessarily being able to be closed off in the event of inclement weather or in colder / wetter months.

PO/DPF 7.2, 7.3, 7.4, 7.5 and 7.6 relative to car-parking appearance are considered reasonably well accorded, with the proposed parking design and layout affording a suitably configured and well concealed car parking area to the north side of the proposed building. This location has minimal impact upon sensitive receptors on the opposite side of Morella Grove, as the parking area faces north to the associated dwelling and its yard area.

The building design responds to the natural contours of the land however it incorporates a substantial degree of landform modification producing the difference in levels from the upper floor to the ground floor level. The

design does not specifically accord with PO/DPF 8.1, with cutting of the site and retaining between lower bench level and upper carpark level being approximately 4.0 metres. The landform modification and retaining is however somewhat concealed, and accounts for the relatively level transition from Morella Grove to the proposed carpark on this otherwise challenging site, according with PO/DPF 8.2.

It is noted that waste management is proposed by private contractor, and this will also occur wholly within the site (carpark area) with refuse storage provided and appropriate circulation space for waste pick-up and exchange / delivery of replacement receptacles. The applicant has stated that waste pickup will occur outside of operating hours and in accordance with the EPA noise guidelines.

PO 31.2 is appropriately addressed in the *Mount Lofty Ranges Water Supply Catchment (Area 2) Overlay* in respect of proposed the capture and underground tank detention system which will capture sediment and particulate / pollutants mobilised in the stormwater, reducing the potential for pollutants to enter the municipal stormwater system.

The proposal is considered to be generally consistent with the Design policies.

Infrastructure and Renewable Energy Facilities

Desired Outcomes	
DO1	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
Performance Outcomes & Designated Performance Feature (DPF) criteria	
PO 1.1, PO/DPF 11.1, 12.1,	

The subject land is connected to reticulated mains water, and sewer services which is compliant with, and satisfies PO/DPF 11.1 and 12.2.

Interface between Land Uses

Desired Outcomes	
DO1	Development is located and designed to mitigate adverse effects on or from neighbouring and proximate land uses
Performance Outcomes & Designated Performance Feature (DPF) criteria	
PO/DPF 1.2, PO 2.1, PO/DPF 3.1, 3.2, 3.3, 4.1, 4.2 (c) & (b), 4.6, 6.1, 6.2	

A number of the matters contained within the *Interface between Land Uses* are considered to be relevant to the operation of the proposed childcare centre.

PO/DPF 2.1 seeks for non-residential development to not unreasonably impact the amenity of sensitive receivers through its hours of operation. The likely effects of noise and vibration outfall from the proposed childcare centre are unlikely to be severe or sustained in duration, being contained largely to conventional work hours and substantively contained indoors in the earlier morning and later afternoon hours.

There is a likelihood that the intended children's activities will involve music and energetic activity such as singing, dancing and active play within the outdoor recreation areas at times, however it is unlikely to be at a level that would cause any severe or unreasonable noise nuisance and would be unlikely to approach the thresholds of the Noise EPP referred to in PO/DPF 4.1

In any event, hours of operation are not considered to be unreasonable or create impact on nearby residences beyond normal business hours. The proposed services are to operate for twelve hours per day from 6:30am to 6:30pm, Monday to Friday.

The proposal does not include installation of any substantial plant or equipment and given the surrounding road network providing a high degree of physical separation the use of air-conditioning units or kitchen rangehoods are considered unlikely to present any interface issues.

An Environmental Noise Assessment Report has been prepared for the proposed development by Sonus Acoustic Engineers, identifying that noise from children playing is specifically excluded from assessment under this EPA Noise Policy. The development has however proposed acoustic measures by way of fencing and balustrading to help attenuate noise outfall from the outdoor recreation areas.

Sonus have had regard to the recommendations of the Guidelines for Community Noise published by the *World Health Organisation (WHO)* in relation to annoyance during the day. The WHO guidelines provide:

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 LAeq for a steady continuous noise.
And,
To protect the majority of people from being moderately annoyed during the daytime, the outdoor sound pressure level should not exceed 50 dB LAeq."

Based on the above, the proposal has been designed with noise reduction measures such that the average (LAeq) sound levels during daytime hours are no greater than 50 dB(A) at the surrounding noise sensitive locations.

The applicant is willing to abide by a condition of consent to ensure the appropriate noise attention measure prescribed by the acoustic report are properly implemented. This has been included as Recommended Condition 5.

PO 6.1 & 6.2 seeks to control external lighting to ensure it does not cause unreasonable light spill or interface issues including to road user safety. The Applicant's planning statement identifies that there are no proposed external lighting fixtures, i.e. flood lighting of outdoor areas, and accordingly lighting will be limited to conventional external lighting under eaves and canopies, which are unlikely to present any off-site nuisance.

It would not be unreasonable to expect low-level, low illumination lighting such as bollard lighting within the car parking area for safety and ease of access *(Transport, Access and Parking PO 6.5)*, such lighting would not be necessary before 6:00am or after 7:00pm (assuming earlier and later staff movement outside of normal operating hours) and could otherwise be timed to remain off outside of those hours.

The proposal has carefully considered nuisance and interface conflict potentials, and is considered to be consistent with the *Interface between Land Uses* policies.

Transport, Access and Parking

Desired Outcomes	
DO1	A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.
Performance Outcomes & Designated Performance Feature (DPF) criteria	
PO/DPF 1.1, 2.1, 3.1, 3.3, 4.1, PO/DPF 5.1(a), PO 6.2,	

In respect of PO1.1, 4.1 and 5.1, the proposal appropriately caters for its intended nature and volume of traffic in accord with the Table 1 requirements. The proposed development is accessible from the Morella Grove frontage and is not expected to create an increase of volumes of traffic which would compromise the capacity of the local road network *(Cirqa Traffic Report and additional response documents) a*nd, are set out in accordance with relevant transport and access standards, which suitably satisfies PO/DPFs 2.1, 3.1 and 3.3.

PO/DPF5.1 relates to the on-site vehicle parking rates required in *Table 1 – General Off-Street Car Parking Requirements* and provides a parking ratio of 0.25 car parking spaces per child (1 car park per 4 children), which is accorded by the proposed 21 car parks intended. Turning bay provisions are provided within the car park for ease of use and assures forward-direction exit from the car park is available, even if the car park is fully occupied.

The applicant has also expressed within the application detail that child care centres do not generate the same peak periods of focussed traffic activity as occurs at schools, with all students arriving or departing within a short duration. Child care centres having a more even distribution of movements i.e. drop-off and pick-ups, over a two-hour morning and afternoon/evening period, which falls generally about, or prior to school drop-off time in the morning and substantially later in the afternoon / evening.

Child care centres also experience traffic movements throughout the day, where shorter than full day care is utilised. These periods also avoid generating compounding traffic with school traffic.

In light of the above elements assessed against the relevant provisions, as well at the Cirqa Traffic Report and additional information response, the proposal's access and parking arrangements are considered to suitably satisfy the assessment provisions and is proposed to function adequately for the operation of the facility without specific restrictions on turn-in or turn-out to the site.

As discussed previously, the car park is considered to be satisfactorily concealed and contained, to the northern side of the child care facility, attenuating adverse visual and operational impacts from sensitive receivers on nearby adjacent land and it has been designed according to the appropriate Australian Standards for safe operation and connectivity to the local road network (PO 6.2).

The proposal is considered to be consistent with the Transport, Access and Parking principles.

CONCLUSION

The proposal to develop the subject land with a new pre-school child care centre facility, comprising a two-storey (split level) building, dedicated parking area and associated retaining walls, fences and associated earthworks and landscaping, within the Rural Neighbourhood Zone, represents a form of commercial development which is envisaged within the Zone.

The proposal exhibits some small departures from the Code provisions in terms of height and setback, which are not considered to be excessive or fatal to the assessment of the application. It presents a built form which is not inconsistent within the locality, instead, it is considered to exhibit built form characteristics which are compatible with the residential built form in the locality.

Contextual matters raised in the public notification representations such as traffic impacts have been carefully considered in both technical aspects, and against the relevant Code Performance values. Subsequent traffic engineering advice has presented the suitability of the design and layout of the parking area and has addressed the appropriateness of access to the site from Morella Grove. This advice has provided sufficient analysis of traffic impacts, upon the local road network.

Stormwater and wastewater management arrangements are all considered to be adequate and appropriately attenuate any realistic prospect of environmental or water resource impacts within the Mount Lofty Ranges Catchment Area.

The existing traffic conditions are clearly expressed as a current concern as represented by nearby adjoining and adjacent landowners as well as more distant residents whom utilise Bridgewater Primary School and who have responded to the public notification. Whilst the compounding traffic situation between main (State administered) thoroughfares and the Morella Grove / Lezayre Avenue may require a strategic approach to resolve or improve existing circumstances, the proposed development has notably taken all reasonable steps to ensure that its own requirements for safe and convenient vehicular access, manoeuvring and parking have been included within the proposal.

Representors concerns have been given considerable regard in this assessment and although they are not, and can not necessarily be resolved by this application, the proposal is considered to appropriately address its own requirements.

After careful consideration of the relevant assessment matters, technical and specialist reports and regard for the representations received, the proposal is considered to be appropriately in accord with the Planning and Design Code and warrant Planning Consent being granted by the Panel.

RECOMMENDATION

It is recommended that the Council Assessment Panel/SCAP 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 22005412, by Future Urban Pty Ltd for construction of a childcare centre with associated non-illuminated advertising displays (x2), retaining walls (3.3m maximum height), combined retaining wall and fencing (5.7 m maximum height), removal of native vegetation, associated car parking and landscaping at 23 Morella Grove Bridgewater is granted Planning Consent subject to the following conditions:**

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) **External lighting shall be restricted to that necessary for safe access & egress and security purposes only and shall be directed and shielded in such a manner as to not cause nuisance to adjacent properties, consistent with the Applicants advice that:**
    - **The proposed lighting will be consistent with AS4289: - Obtrusive Effects of Outdoor Lighting**
    - **All lighting will be connected to a timer and will be switched off in the evening by no later than 20:00hrs.**
    - **The lighting layout will be designed to ensure that no external light fittings impact neighbouring properties through use of honeycomb diffusers to direct light and reduce glare while retaining adequate lighting levels**

3) **All car parking spaces, driveways and manoeuvring areas shall be constructed and line-marked in accordance with AS 2890.1:2004. Line marking and directional arrows shall be clearly visible and maintained in good condition at all times. Excluded parking areas such as the disabled access car parking and turn around bay shall be marked with diagonal yellow bars in accordance with Part 11 of *AS 1742 Manual of uniform traffic control devices*.**

4) **The opening hours of the facility shall be 6:30am to 18:30 Monday to Friday, and remain closed on Saturdays, Sundays and Public Holidays.**

5) **The proposed noise attenuation measures on both the ground floor and first floor detailed within the Sonus Noise Assessment Report "Bridgewater Childcare Centre Environmental Noise Assessment S7125C3 December 2021" shall be implemented prior to operation of the use.**

6) **Landscaping detailed on the approved landscaping plan shall be planted in the next available planting season following the completion of building work. Landscaping shall thereafter be maintained in good health and condition at all times. Any landscaping that dies or becomes seriously diseased shall be replaced in the next available planting season.**

7) **Stormwater Roof Runoff & Car-Park Runoff**
    a) **All roof runoff and runoff from the car-park shall be managed on-site in accordance with the approved stormwater / civil plan to the reasonable satisfaction of Council.**
    b) **All roof runoff generated by the development hereby approved shall be directed to the stormwater management system within one month of the roof cladding being installed.**

8) **All solid waste of any kind shall be stored in closed containers having a close-fitting lid with containers stored in a concealed location and in a manner which does mitigates the occurrence of offensive odours emanating from the site or attraction of animals or insects to the stored waste. Waste shall not be stored on the land in areas delineated for use as car parking. The collection of waste shall be undertaking in accordance with the EPA Noise Policy to ensure minimum disturbance to occupiers of adjoining land.**

Conditions imposed by the South Australian Country Fire Service under Section 122 of the Act

BUSHFIRE PROTECTION MEASURE AND SITING

9) **'The Planning and Design Code' Hazards (Bushfire – High Risk) Overlay (Performance Objective 2.1, 4.2, 4.3) details the mandatory requirements for buildings and structures to be located away from areas that pose an unacceptable bushfire risk in order to provide sufficient defendable space for occupants and fire fighters; ensure**

radiant heat levels at the buildings are minimised in line with the assessed bushfire attack level & construction level; whilst maintaining reduced fuel loads and ensuring it can be maintained in perpetuity by the occupants.

To address PO 2.1, SA CFS deems that all bushfire protection measures must be implemented in order for the SA CFS to support the proposed development. This includes:

- **The building will be constructed to the assessed Bushfire Attack Level (BAL) in accordance with AS3959, BAL 19 requirements.**
- **Ancillary structures and other combustibles are adequately separated from the building in accordance with AS3959; s 3.2.3 Adjacent structures on the subject allotment.**
- **A non-combustible pathway be installed directly adjacent the building and no less than 1.5 metres wide around the perimeter of the building, including access gate(s) to allow continuous travel around the building; and**
- **Provision of a static dedicated bushfire water supply of 10,000L with associated pipes, fittings, pump, and fire hose reel in accordance with MBS008; accessible to the fire authority via an unobstructed fire authority outlet (please refer to WATER SUPPLY & ACCESS (to dedicated water supply)).**

SITING

'The Planning and Design Code' Hazards (Bushfire – High Risk) Overlay (Performance Outcome 3.2) details the mandatory requirements for 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.

- **Outbuildings and other ancillary structures shall comply with AS3959 section 3.2.3 for adjacent structures.**

ACCESS TO HABITABLE BUILDING

10) 'The Planning and Design Code' Hazards (Bushfire – High Risk) Overlay (Performance Objective 6.2) details the mandatory requirements for 'Private' roads and driveways to facilitate safe and effective use, operation and evacuation for firefighting and emergency personnel and evacuation of residents, occupants and visitors where required. These requirements apply when the furthest point of the building is more than 60m from the nearest public road.

SA CFS notes the proposed development is sited less than 60 metres from the public road and has no objection to utilising the existing perimeter roads and proposed driveway to access the facility.

WATER SUPPLY & ACCESS (to dedicated water supply)

11) Ministerial Building Standard MBS008 "Designated bushfire prone areas - additional requirements" 2020, as published under the Planning, Development and Infrastructure Act 2016, provides the technical details of the dedicated water supply for bushfire fighting for the bushfire zone. The dedicated bushfire fighting water supply shall also incorporate the installation of a pumping system, pipe-work and fire-fighting hose(s) in accordance with MBS008.

'The Planning and Design Code' Hazards (Bushfire – High Risk) Overlay (Performance Objective 4.3) details the mandatory requirements for the site to provide a dedicated hardstand area in a location that allows fire fighting vehicles to safely access the dedicated water supply.

SA CFS has no objection to the proposed location for the dedicated water supply as detailed on drawings named Proposed Ground Floor Plan and Proposed First Floor Plan, dated at last revision 31/05/2022, providing the fire authority outlets (Taps for Fire Water) are positioned to comply with the following conditions and will not be obstructed by objects such as parked cars/landscaping/ fencing etc.:

- **The water supply outlet shall be easily accessible and clearly identifiable from the access way and is no greater than 60m path of travel to the furthermost point of the building, to enable fire services to reach all parts of the building with no more than two lengths of hose from the hardstand area.**
- **The dedicated water supply and its location should be identified with suitable signage (i.e. blue sign with white lettering "FIRE WATER").**
- **Access to the dedicated water supply shall be of all-weather construction, with a minimum formed road surface width of 3 metres.**
- **Provision shall be made adjacent the water supply for a nominally level hardstand area (capable of supporting fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes) that is a distance equal to or less than 6 metres from the water supply outlet**
- **SA CFS appliance's inlet is rear mounted; therefore the outlet/water storage shall be positioned so that the SA CFS appliance can easily connect to it rear facing.**
- **A gravity fed water supply outlet may be remotely located from the above ground tank to provide adequate access.**
- **All non-metal water supply pipes for bushfire fighting purposes (other than flexible connections and hoses for fire-fighting) shall be buried below ground to a minimum depth of 300mm with no non-metal parts above ground level.**
- **All water supply pipes for draughting purposes shall be capable of withstanding the required pressure for draughting.**

Please note that where the water supply is an above-ground water tank, the tank (including any support structure) must be constructed of non-combustible material, such as concrete or metal.

MAINTAIN AN ASSET PROTECTION ZONE (APZ) - VEGETATION MANAGEMENT

12) 'The Planning and Design Code' Hazards (Bushfire – High Risk) Overlay (Performance Objective 4.2) details the mandatory requirements to establish and maintain an asset protection zone. As such, landscaping shall include bushfire protection features that will prevent or inhibit the spread of bushfires and minimise the risk to life and/or damage to buildings and property and maintain a fuel reduced zone for safe movement of occupants and fire fighters.

- **Vegetation management shall be established and maintained within 20 metres of the habitable building (or to the property boundaries – whichever comes first) as follows:**
  - **i. The number of trees and understorey plants existing and to be established within the VMZ shall be reduced and maintained such that when considered overall a maximum coverage of 30% is attained, and so that the leaf area of shrubs is not continuous. Careful selection of the vegetation will permit the**

'clumping' of shrubs where desirable, for diversity, and privacy and yet achieve the 'overall maximum coverage of 30%'.

ii. **Reduction of vegetation shall be in accordance with SA Native Vegetation Act 1991 and SA Native Vegetation Regulations 2017.**
iii. **Trees and shrubs shall not be planted closer to the building(s) than the distance equivalent to their mature height.**
iv. **Trees and shrubs must not overhang the roofline of the building, touch walls, windows or other elements of the building.**
v. **Shrubs must not be planted under trees and must be separated by at least 1.5 times their mature height from the trees' lowest branches.**
vi. **Grasses within the zone shall be reduced to a maximum height of 10cm during the Fire Danger Season.**
vii. **No understorey vegetation shall be established within 2 metres of the habitable building (understorey is defined as plants and bushes up to 2 metres in height).**
viii. **Flammable objects such as plants, mulches and fences must not be located adjacent to vulnerable parts of the building such as windows, decks and eaves**
ix. **The VMZ shall be maintained to be free of accumulated dead vegetation.**

ADVISORY NOTES

General Notes

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 consent or approval will lapse at the expiration of 2 years from its operative date, subject to the below or subject to an extension having been granted by the relevant authority.**
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) **A decision of the Commission in respect of a development classified as restricted development in respect of which representations have been made under section 110 of the Act does not operate—**
    a. **until the time within which any person who made any such representation may appeal against a decision to grant the development authorisation has expired; or**
    b. **if an appeal is commenced—**
        i. **until the appeal is dismissed, struck out or withdrawn; or**
        ii. **until the questions raised by the appeal have been finally determined (other than any question as to costs).**

Advisory Notes imposed by Native Vegetation Council

6) **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 2022/3063/473**

Advisory Notes imposed by the South Australian Country Fire Service Under Section 122 of the Act

BUILDING CONSIDERATIONS

7) Ministerial Building Standard MBS008 "Designated bushfire prone areas - additional requirements" 2020, as published under the Planning, Development and Infrastructure Act 2016 applies to this site.

Please refer to the National Construction Code (NCC), relevant standards and state provisions for construction requirements and performance provisions.

A site Bushfire Attack Level (BAL) assessment was conducted in accordance with the NCC and Australian Standard™3959 (AS3959) "Construction of Buildings in Bushfire Prone Areas".

Category of Bushfire Attack Level:

***Childcare Centre:* BAL 19**

***Equipment Store located less than 6 metres from Childcare Centre:* Separation for adjacent structures in accordance with AS3959 (section 3.2.3) will need to be applied to satisfy PO 3.2**

SA CFS, as the referral agency, reserves the right to request additional information and provide further comment in regards to the 'Building Rules Consent' phase of the development approval process in relation to the fire and life safety provisions within the proposed building, under the *Planning Development and Infrastructure Act and Regulations,* in particular but not limited to Regulation 45 and 103.

This report is considered relevant at the date of assessment with respect to the elevations detailed on the Proposed Ground Floor Plan and Proposed First Floor Plan, dated 31/05/2022 and shall not be considered as SA CFS endorsement of any subsequent development.

BUSHFIRE SURVIVAL PLAN

8) SA CFS further recommends the following condition:

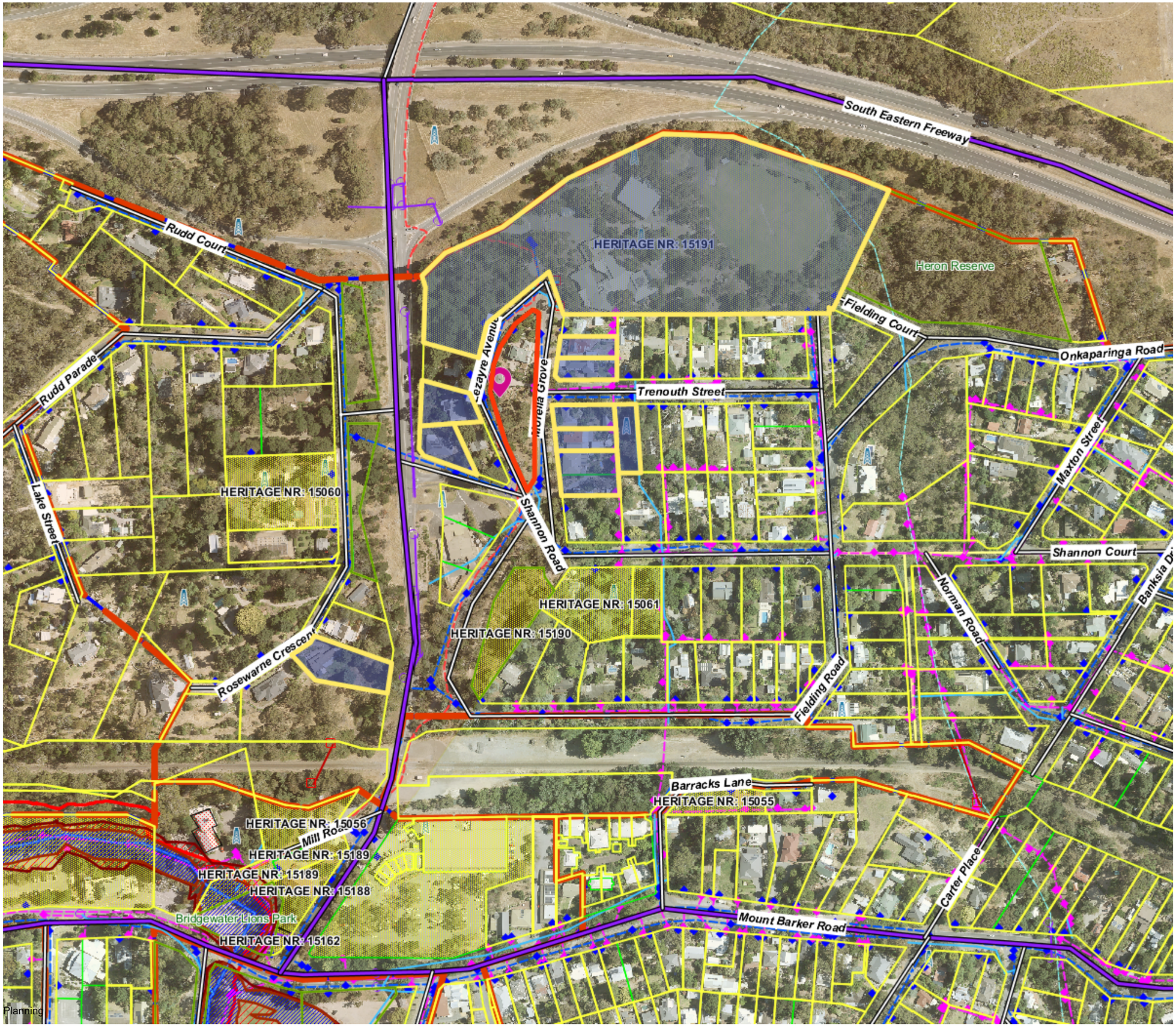
The applicant prepare and display a BUSHFIRE SURVIVAL PLAN (BSP) designed specifically for the purpose of any staff, children or visitors that may be present during a bushfire event, especially during the Fire Danger Season.

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

The applicant should consider reducing operating hours and 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.

OFFICER MAKING RECOMMENDATION

Name: Aaron Wilksch (Consultant Planner)
Name: James Booker
Title: Team Leader Statutory Planning



Adelaide Hills COUNCIL

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Annotations

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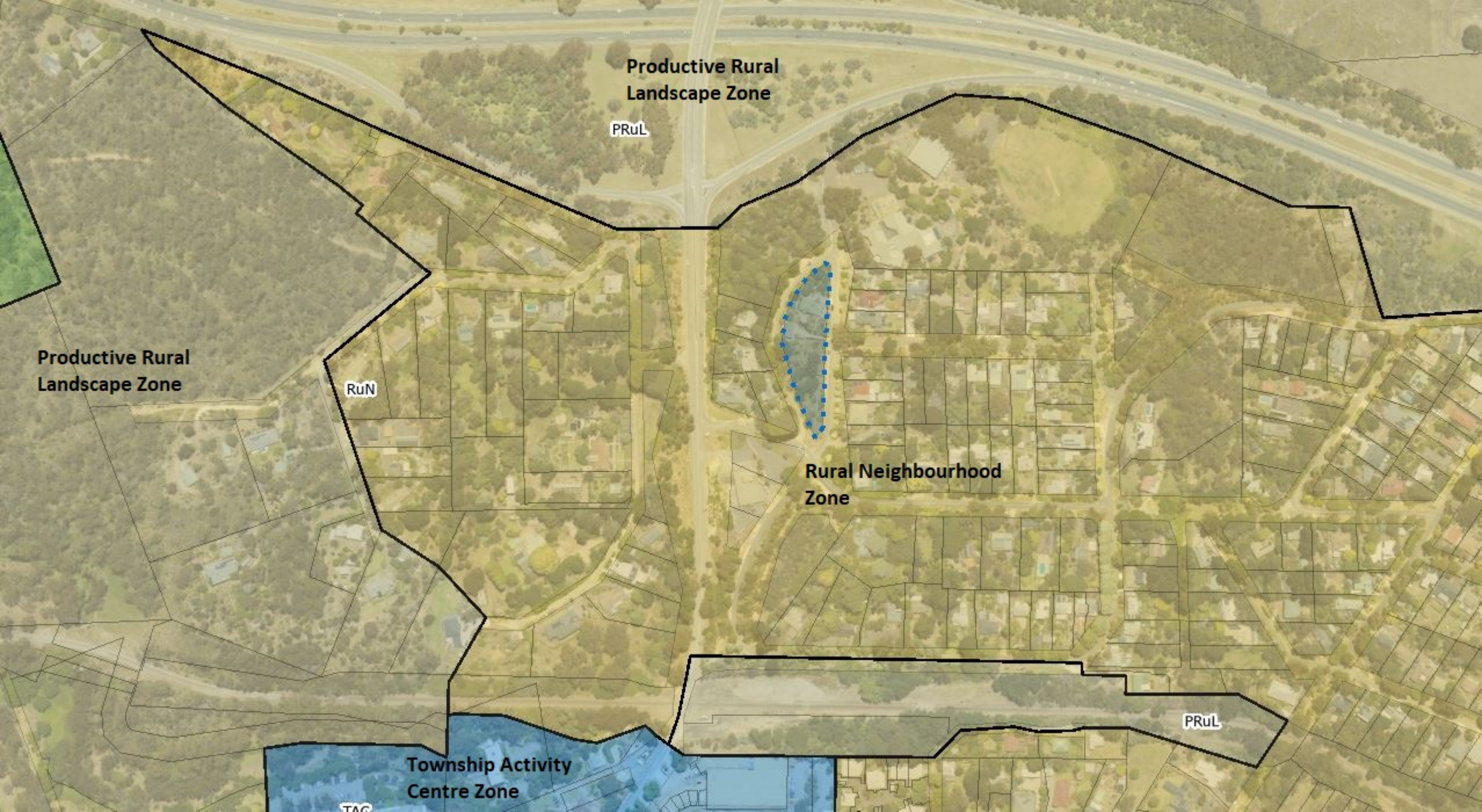
Productive Rural
Landscape Zone
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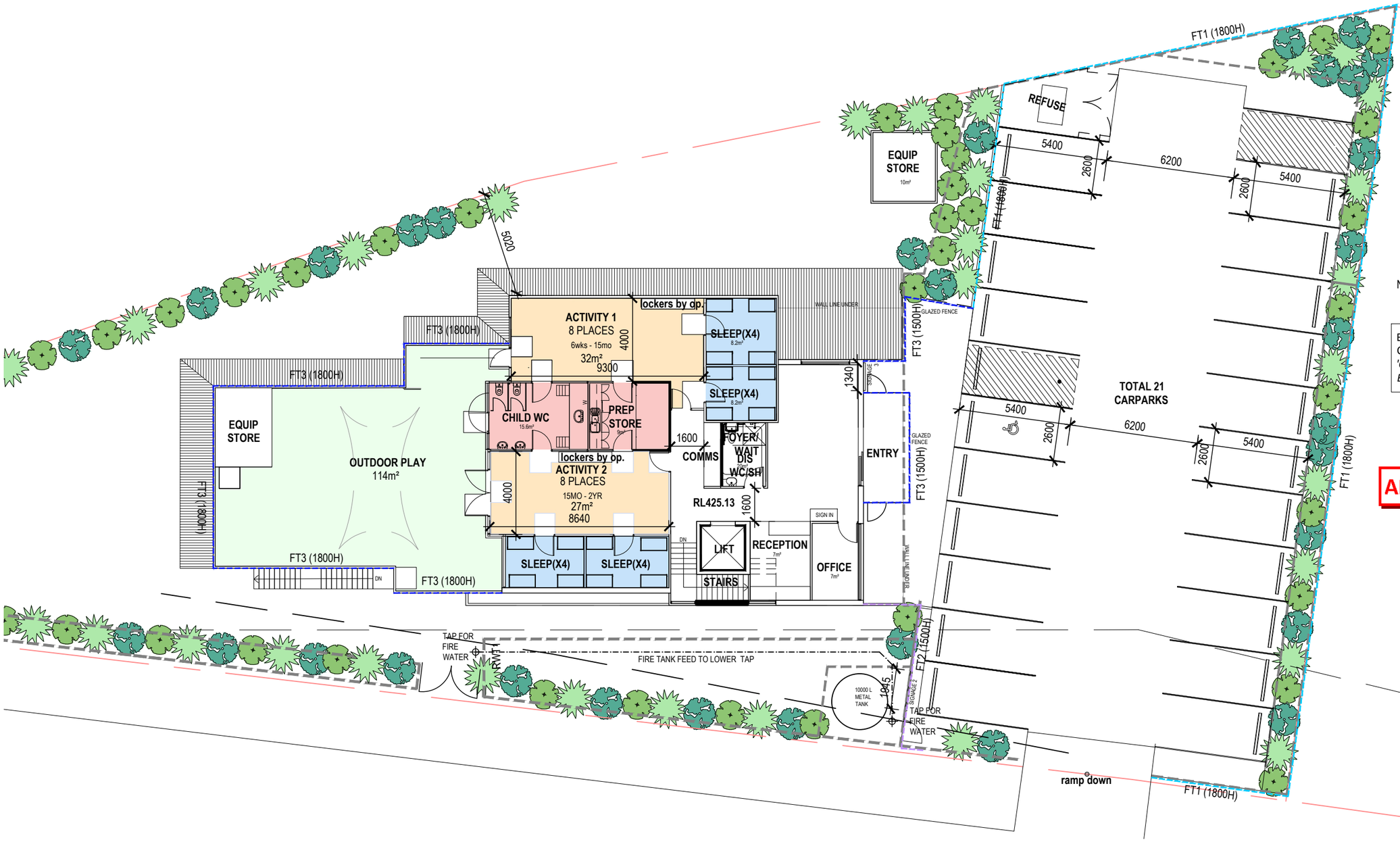
Rural Neighbourhood
Zone
PRuL
Township Activity
Centre Zone



PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022
A	FIRE TANK AND CFS ACCESS	31.05.2022

FENCE TYPE	DESCRIPTION
FT1	COLOURBOND FENCE
FT2	BATTEN FENCE
FT3	GLASS BALUSTRADE

RETAINING WALL TYPE	DESCRIPTION
RWT1	SLEEPER RETAINING WALL
RWT2	CONCRETE BLOCK RETAINING WALL

NOTE: REFERENCE ENGINEER'S CIVIL DRAWINGS FOR LEVEL

BUILDINGS AND OUTBUILDING (STORE) SHALL BE CONSTRUCTED IN ACCORDANCE WITH AS3959 *'CONSTRUCTION OF BUILDINGS IN BUSHFIRE-PRONE AREAS'* TO BAL 19

AMENDED 14/06/2022

PROPOSED FIRST FLOOR PLAN

1:200

ON ARCHITECTURE

ON Architecture Pty Ltd abn 71 627 522 043
242 Angas Street, Adelaide SA 5000

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Mark Nield
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e m.nield@onarchitecture.com.au

Project

80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

PROPOSED FIRST FLOOR PLAN

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	**DA05**	Rev: A	A3 SHEET

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PROPOSED GROUND FLOOR PLAN

1:200

AMENDED 14/06/2022

ON ARCHITECTURE

ON Architecture Pty Ltd abn 71 627 522 043
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Drawing
PROPOSED GROUND FLOOR PLAN

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	**DA06**	Rev: A	A3 SHEET

FUTURE URBAN

PLANNING REPORT
CHILD CARE CENTRE

23 MORELLA GROVE, BRIDGEWATER

Date:
18.02.2022

Proprietary Information Statement

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CONTENTS

APPENDICES

1. OVERVIEW

Subject Land and Location	23 Morella Grove, Bridgewater
Current Land Use	Residential
Certificate of Title Reference	Allotment 2 – Certificate of Title 5473/109
Zone	Rural Neighbourhood
Subzone	Nil
Overlays	Hazards (Bushfire – High Risk) Hazards (Flooding – Evidence Required) Mount Lofty Ranges Water Supply Catchment (Area 2) Native Vegetation Prescribed Water Resources Area Regulated and Significant Tree Traffic Generating Development
Technical Numeric Variations (TNVs)	Minimum site area – 1000 square metres
Development	Construction of a child care centre with associated advertising, and boundary retaining and fencing
Elements	Child care centre Fencing Retaining Advertisements
Referrals	CFS (within Hazards (Bushfire – High Risk)) Native Vegetation Council (level 3 clearance proposed)
Planning and Design Code Version and Date	V2022.2 – 3 February 2022
Relevant Authority	Council Assessment Panel at Adelaide Hills Council

2. INTRODUCTION

This report has been prepared to accompany an application by Future Urban Pty Ltd ('the Proponent') at 23 Morella Grove, Bridgewater ('the site') to construct a child care with associated advertising and boundary fencing and retaining.

In preparing this report, we have:

- inspected the site and its immediate surroundings;
- identified and subsequently reviewed the most pertinent provisions of the Planning and Design Code ('the Code');
- had regard to the *Planning, Infrastructure and Development Act 2016* ('the Act') and to the *Planning, Infrastructure and Development (General) Regulations 2017* ('the Regulations');
- also had regard to the certificate of title in **Appendix 1**;
- examined the architectural drawings in **Appendix 2**;
- reviewed the set of supporting documents, including:
    - » stormwater management plan prepared by PT Design in **Appendix 3**;
    - » traffic and parking assessment prepared by Cirqa in **Appendix 4**;
    - » acoustic report prepared by Sonus in **Appendix 5**;
    - » native vegetation report prepared by EBS Ecology in **Appendix 6**.

This report contains a description of the site, its surroundings and the proposal, and an assessment of the proposal against the most relevant provisions of the Code.

3. SUBJECT SITE

The development is proposed to be sited across a portion of the land at Allotment 2, Certificate of title 5473/109, or more commonly known as 23 Morella Grove, Bridgewater. It will be located on the southern-most portion.

The remaining area of the land to the north will continue to accommodate a detached dwelling with an associated outbuilding. Should planning consent be issued, a separate application for land division will later follow.

The development site is unusual in shape and approximately 1,890 square metres, with two frontages to Lezayre Avenue, and Morella Grove.

The site is vegetated with both native and non-native species. It has a gradient of 1:8.4 from north to south.

There are no registered land management agreements or encumbrances which could impede or avert the proposal altogether, and neither the land or existing structures are heritage listed.

An easement is located along the eastern side of the land for overhead powerlines and owned by the ETSA Corporation. The proposed building comprising the child care centre has been designed to comply with the powerline clearance requirements of the Office of the Technical Regulator.

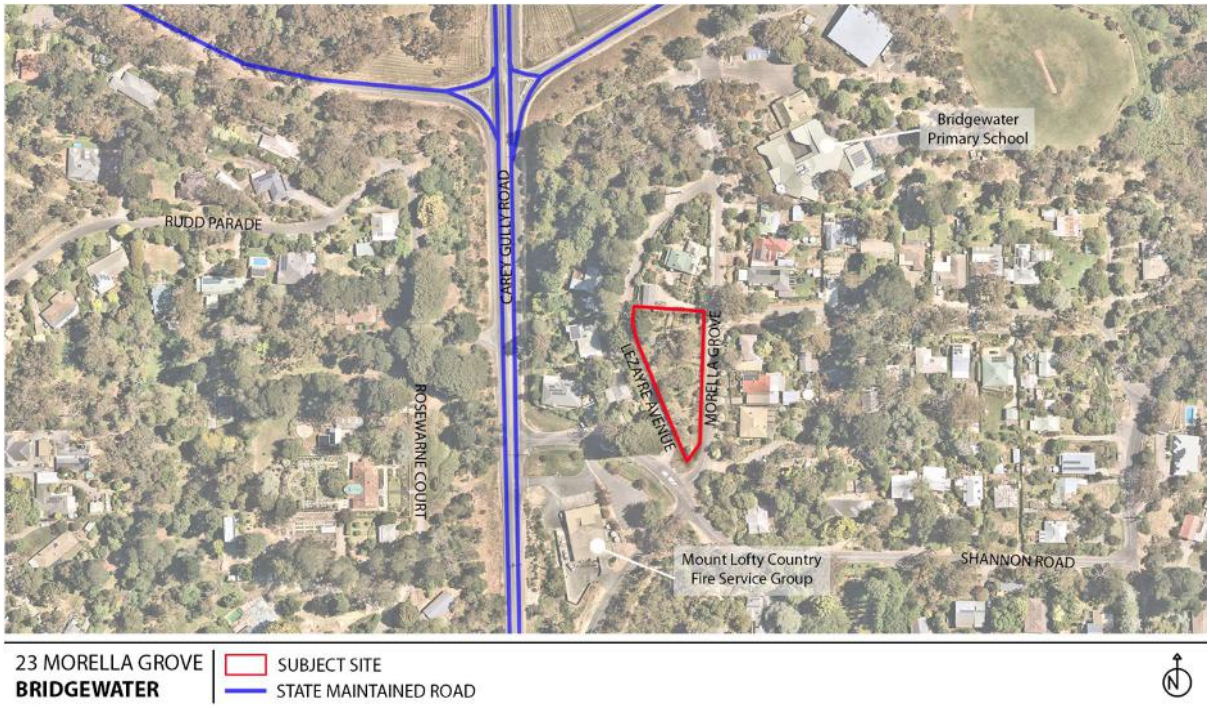
4. LOCALITY

Upon undertaking an inspection of the subject site and its surroundings, the following was observed:

- Bridgewater Primary School is located within 80 metres north-east of the subject site;
- the Mount Lofty CFS is located 30 metres south-west of the subject site;
- the on/off ramp to the South-Eastern Freeway is approximately 100 metres to the north west;
- the site is approximately 75 metres from a state maintained road (Carey Gully Road);
- the land slopes from north to south;
- bus stops are located within walking distance from the site along Carey Gully Road west of the subject site; and
- residential land uses surround the east and west of the subject site.

The site in relation to its immediate surroundings, is captured in Figure 4.1 below.

Figure 4.1 *Locality plan*



5. PROPOSED DEVELOPMENT

The Proponent seeks to obtain planning consent to construct a child care centre, with associated advertising and boundary fencing and retaining.

A child care centre fits within the definition of a 'pre-school', as defined in Part 7 – Land Use Definitions of the Code:

> *'**Pre-school** means a place primarily for the care or instruction of children of less than primary school age not resident on the site, including the following land uses:*
>
> *child care centre…"*

The child care centre will provide:

- Early education for 80 pre-school aged children.
- Operating hours from 6:30am until 6:30pm Monday to Friday (excluding public holidays).
- The centre expects to employ 12 staff members, noting that not all staff are present on site at the same time. Most staff are present on site between the hours of 10am and 3pm, times that do not coincide with child pickup.
- The building will be separated into five areas based on the ages of the children, with each area having access to outdoor play spaces, preparation rooms, and bathrooms.
- A range of internal spaces which support the functioning of the centre are incorporated within the building including an office, kitchen, laundry, staff room, equipment storage, reception, planning room, foyer and sleep rooms.
- Refuse collection to be managed via a private waste collection service with waste collected outside of the centre's operating hours. A dedicated refuse area will be located at the end of the carpark on the western boundary of the site, within an enclosure that will be screened from direct public view.

The proposal is summarised below and depicted across the architectural drawings in **Appendix 2**.

A total of 19 trees are proposed to be removed, with a payment of $45,716.68 to be paid into the Native Vegetation Fund. A Native Vegetation Clearance Data Report is attached in **Appendix 6**.

5.1 Footprint

5.1.1 Site Coverage

The roof coverage of the proposed building will occupy 522 square metres or 28 percent of the overall area of the site.

5.1.2 Siting

Due to the angled allotment boundaries, the proposed building will be setback a minimum of 4.7 metres from the primary street boundary (Morella Grove), 5.5 metres from the secondary street boundary (Lezayre Avenue) and 20 metres from the side (northern) boundary.

5.2 Building Composition

The ground floor of the proposed building will have an internal floor area of 418 square metres and comprise three activity rooms, all connected to a bathroom and preparation area, and spaces for staff utilities and planning.

The first floor will have an internal floor area of 245 square metres and will comprise only two activity rooms, together connected with a preparation space, toilet and sleeping rooms. The reception and foyer area are also located on this level.

5.3 Building Height

Due to the slope of the site, the building presents as 9.8 metres in height from the western elevation and 8 metres in height from the eastern elevation, measured from the top of the roof to natural ground level below.

5.4 External Materials

The proposed building will be assembled from a contemporary palette of materials in monochromatic tones using colorbond, weatherboard cladding and glass.

The building is designed to present in a similar way to a two-storey dwelling.

5.5 Hours of Operation

The child care centre will operate from 6:30am to 6:30pm Monday to Friday. It is the writer's experience that the hours are standard operating practice for child care centres in metropolitan Adelaide.

5.6 Staff

The centre expects to employ 12 staff members, noting that not all staff are present on site at the same time. Most staff are present on site between the hours of 10am and 3pm, times that do not coincide with child pickup or drop off.

5.7 Access and Parking

A simultaneous two-way vehicle access point is proposed via Morella Grove, and directed to the on site car parking area.

A total of 21 car parking spaces will be provided on site, including one disabled parking space.

5.8 Stormwater and Wastewater

A stormwater management plan and civil drawings prepared by PT Design is attached (**Appendix 3**).

It has been confirmed the following in relation to stormwater management for the site:

- The stormwater calculations accompanying the site and drainage plan confirm that the post-development flow rates will not exceed the pre-development flow rates. The proposal is not, therefore, expected to overload the Council's existing stormwater drainage network.
- An underground detention tank will be provided so that runoff from the carpark can be suitably detained and released in conformance with the requirements of Council.
- An additional 3000 litre rainwater tank is proposed in which the water collected can be reused on site.
- Stormwater will be treated through a waste filtration system prior to release to the Council's stormwater infrastructure network to remove suspended solids and hydrocarbons from the surface water collected, thereby improving the quality of stormwater and minimising pollutant transfer to receiving waters.

Wastewater for the site will connect to Councils existing on-street system. The proponent will connect to the existing system located at the end of Trenouth Street.

5.9 Landscaping

It is clear from the architectural plans that there is ample room around the car park and boundaries of the site for landscaping. In addition to this the outdoor play spaces will be heavily landscaped.

The plants selected by the applicant's landscape architects will:

- be aesthetically pleasing;
- be suited to the local environment;
- not generate an inordinate amount of leaf litter; and
- require little to no maintenance or supplementary irrigation.

A landscaping plan will be provided in due course.

5.10 Retaining and Fencing

Stepped retaining is located both along the site boundaries and internal to the site, ranging in height. Acoustic fencing is also proposed to be located on top and stepped with the lay of the land.

5.11 Advertisements

Simple corporate advertisements are proposed to be located on the building's northern elevation and on a retaining wall at the allotment boundary intersection of Lezayre Avenue and Morella Grove.

The signs are not proposed to move, flash or be illuminated.

6. PROCEDURAL MATTERS

At the time of preparing this report, the relevant version of the Planning and Design Code was gazetted and subsequently consolidated on V2022.2 (3 February 2022). Due to amendments, the version of the Code used to prepare this report may not be the relevant version at the time of lodgement of the application. To the extent of any inconsistency, the version of the Code at the time of lodgement will be relevant for the processing and assessment of the application.

The subject site is located within the Rural Neighbourhood Zone ('the Zone').

6.1 Assessment Pathway

Advertisement and child care centre are not specifically identified within tables 1, 2, 3 and 4 of the Zone, therefore resulting to "all code assessed" within *Table 3 – Applicable Policies for Performance Assessed Development*.

Fence and retaining is specifically listed within table 3, making it also performance assessed.

6.2 Public Notification

A child care centre and advertisement are not identified within table 5 of the Zone, and therefore will require public notification.

The fence and retaining wall are noted to be excluded from public notification by table 5(3) of the Zone.

6.3 Relevant Authority

As public notification is required, the Council Assessment Panel of Adelaide Hills Council are the relevant authority for the purposes of assessing this application.

6.4 Referrals

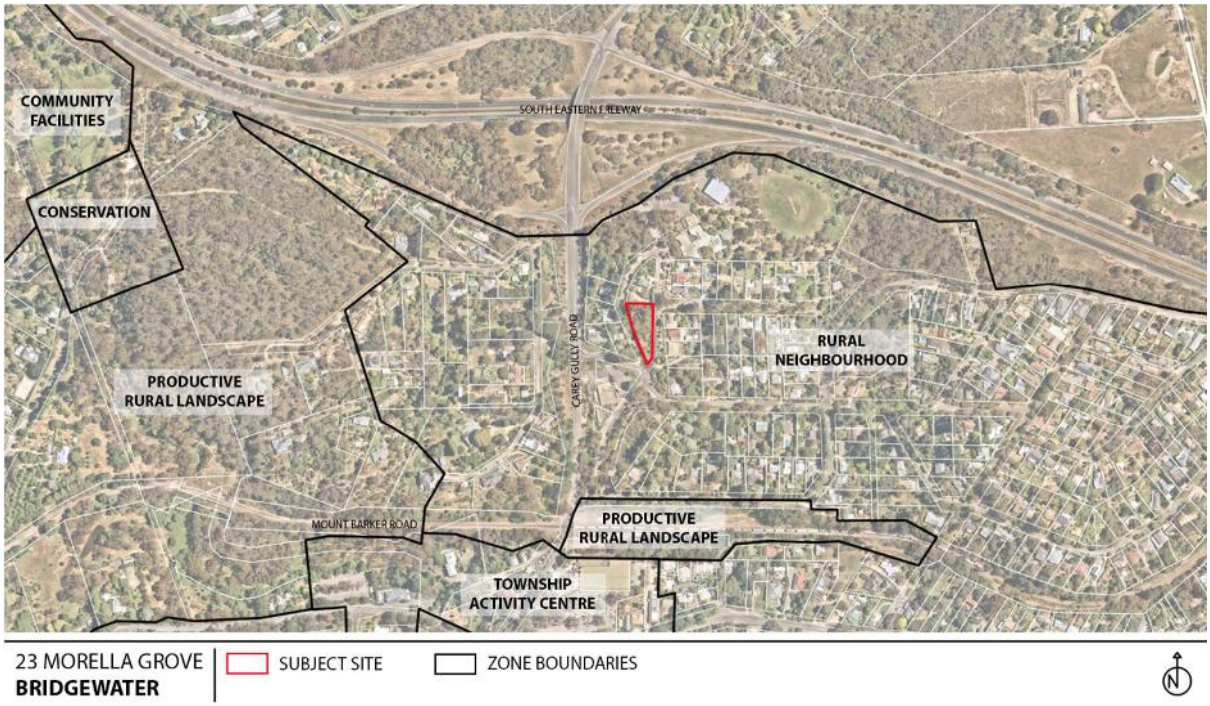
Pursuant to Schedule 9 of the Regulations, the following referrals are required:

- Country Fire Service as the site is located within the Hazards (Bushfire – High Risk) Overlay; and
- Native Vegetation Council as the removal of native vegetation on the site was deemed as "level three clearance".

7. ASSESSMENT AGAINST PLANNING AND DESIGN CODE

The subject site is situated within the Rural Neighbourhood Zone as shown in Figure 7.1 below.

Figure 7.1 *Subject Site Zoning*



The land is also within the following Overlays and Technical and Numeric Variations (TNVs):

- Hazards (Bushfire – High Risk);
- Hazards (Flooding – Evidence Required);
- Mount Lofty Ranges Water Supply Catchment (Area 2);
- Native Vegetation;
- Prescribed Water Resources Area;
- Regulated and Significant tree;
- Traffic Generating Development; and
- Minimum site area.

The applicable policies include Desired Outcomes (DOs) which *"automatically apply in relation to a performance assessed development"* and Performance Outcomes (POs). It is also worth noting that some POs have a standard outcome that is considered to satisfy the corresponding PO, referred to as Designated Performance Features (DPFs). The Rules of Interpretation within Part 1 of the Code state the following in relation to DPFs (underlining our emphasis):

> *"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."*

As a result of the above, the assessment below focusses on the applicable DOs and POs and may only refer to the DPF in instances where the PO has been satisfied by compliance with the DPF.

7.2 Land Use

The Zone envisages:

PO 1.1 *Predominantly residential development with complementary ancillary non-residential uses compatible with a spacious and peaceful lifestyle for individual households.*

PO 1.4 *Non-residential development located and designed to improve community accessibility to services, primarily in the form of:*

…(b) community services such as… pre-schools

To add to the above, in the decision of *ABC Developmental Learning Centres v Regional Council of Port Pirie [2005] SAERDC 104,* the full Court of the ERD Court considered an application for, and eventually approved a child care centre in a residential zone. Most pertinently the Court found:

> *"We also note that community facilities (including the proposed use) are envisaged and form part of the desired character and intent of the Residential Zone…*
>
> *There are also justifiable town planning as well as, we accept business reasons for dispersing the location of childcare centres (or schools) within an urban area or regional township. These include greater convenience and shorter trips (vehicles or on foot) for parents and their children; a separation or spread of like facilities (the only other existing childcare centre being located approximately 3kms to the north of the proposed site and to the west of the main central regional centre location); and within close proximity to schools with benefit for the children and families. Assimilation for children, convenience and shared travel arrangements for parents are all relevant factors. Sometimes a location may fall within a designed Centre or Public Purpose Zone. At other times it may not."*

Child care centres within residential areas will clearly serve the local population to which they are located as by their nature, users of such facilities will only use those centres that are convenient to their needs. It is most unlikely one will see users bypassing a nearby child care centre for another more distant one unless located at a work destination.

Furthermore, the designated performance feature ('DPF') 1.1 of the Zone specifies that a "pre-school" is an envisaged type of development within the Zone. It is noted, that Part 7 of the Code states that a child care centre is included within the definition of a pre-school. Notwithstanding, advertisement, fencing and retaining walls are not specifically listed, it is reasonable to assume that these are ancillary to the primary use of the land, and are therefore appropriate.

The Zone not only envisages child care centres but advises by PO 1.4 that they should be located to improve overall community accessibility to such services in the locality. It is reasonable that schools and pre-schools be located within neighbourhood settings, within walking distance of housing. Which given the proposed numbers of children to be accommodated and inner neighbourhood location in close proximity to a school campus, the establishment is conveniently located for local residents, as well as staff and families with children attending the nearby school.

Whilst commercial activities in the Zone are sought to be of a small scale, the provisions make no such distinction with regard to community services such as schools or pre-schools.

It is therefore of the view that the proposed child care and associated development is suitable for this site within the Zone, and provides a non-residential service to the local community to improve overall accessibility to child care.

7.2.1 Benefits of Child Care

According to the Best Practice Guideline for the Planning and Development of Child Care Facilities published by the University of Technology Sydney: Centre for Local Government:

- early childhood literature makes close connections between child care and education and 'the inseparable nature of development and learning' for children in the 0-5 age group;
- simulating out-of-home care environments contribute to children's optimal growth and development;
- there is overwhelming evidence for the importance of the early years in shaping longer term outcomes for children;
- Australian research provides strong evidence that family friendly employment practices and access to secure, high-quality child care are key to women's secure participation in the paid workforce;
- increases in the prices and costs of child care can lead to a reduction in labour supply, particularly in regards to lone parents; and
- child care facilities provide employment opportunities to people in a given locality.

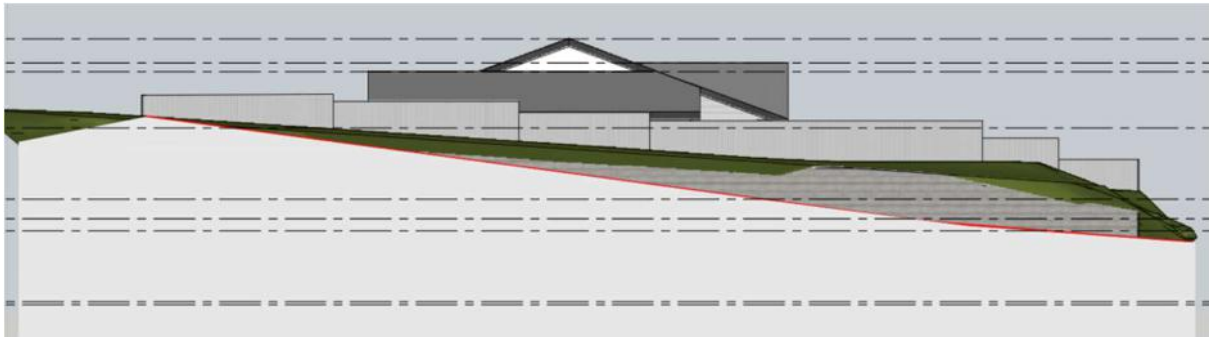
7.3 Building Height

DPF 2.1 of the Zone seeks for buildings no greater than 9 metres in height, the Performance Outcome then seeks buildings to contribute to the low-rise residential character and to complement the height of nearby buildings. Low-rise is defined in the Code as meaning *"up to and including 2 building levels"*. The proposal is only two building levels.

Due to the natural terrain of the site, when viewed from each boundary the building height is substantially different which in turn assists to minimise the overall bulk and scale of the built form. For example, from the south the built form shows at 10 metres in total height yet the lower level is hidden behind retaining and fencing, while from the north the building is only seen at 5 metres above ground level. See an excerpt from the architectural plans below:

Figure 7.2 *South elevation*

Figure 7.3 *North elevation*



7.4 Siting

The proposed building incorporates the following setbacks from boundaries:

- **primary street (Morella Grove):** 4.7 metres
- **secondary street (Lezayre Avenue):** 5.5 metres
- **side (north):** 20 metres

The existing dwelling to remain on the subject land (to the north) is setback approximately 5 metres from Morella Grove. The proposed setback of 4.7 metres, although slightly closer to the primary street boundary, is considered *"consistent with the existing streetscape"* (Zone PO 3.1) as dwellings in the locality are setback between 2.6 metres and 7 metres.

The setback to the secondary street boundary and side boundary is consistent with DPF 4.1 and 5.1 for the Zone.

7.5 Design and Built Form

The Zone (PO 1.3) advises:

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

The streetscape character primarily presents as buildings hidden behind a heavy layer of vegetation. The proposal incorporates the same with a line of vegetation along the boundaries of the site.

The design of the built form takes various cues from dwellings in the locality, such as roof design, materials and colours and the use of verandahs which are predominant features found.

7.6 Interface between Land Uses

PO 2.1 within the Interface between Land Uses module advises that:

> ***PO 2.1*** *Non-residential development does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) or an adjacent zone primarily for sensitive receivers through its hours of operation having regard to:*
>
> *(a) the nature of the development;*
>
> *(b) measures to mitigate off site impacts;*
>
> *(c) the extent to which the development is desired in the zone;*

(d) *measures that might be take in an adjacent zone primarily for sensitive receivers that mitigate adverse impacts without unreasonably compromising the intended use of the land.*

Largely due to its location, and having no directly abutting sites being used for residential purposes, the proposed development satisfies the above policy.

7.6.1 Overshadowing

Satisfying PO 3.1 and PO 3.2 from the Interface between Land Uses module, the subject site has no directly adjoining residential properties, particularly to the south, and as such, given the location will not cause adverse overshadowing.

7.6.2 Overlooking

The proposed development mitigates direct overlooking from the adjoining residential neighbours to the east and north by incorporating window sill heights greater than 1.5 metres and upper level balustrade to play spaces obscured to 1.8 metres in height.

7.6.3 Noise

DPF 4.1 of the Interface between Land Uses module advises:

DPF 4.1 *Noise that affects sensitive receivers achieves the relevant Environment Protection (Noise) Policy criteria.*

It has been noted from an environmental noise assessment report prepared by Sonus, that noise from children playing is specifically excluded from assessment under this policy. The development has however proposed acoustic measures by way of fencing and balustrade and the most appropriate location of mechanical equipment, all to help with noise impacts from children playing, car park activity and mechanical equipment.

Sonus have instead had regard to the recommendations of the Guidelines for Community Noise published by the World Health Organisation (WHO) with regard to annoyance during the day.

The WHO guidelines provide:

> *"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 LAeq 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 LAeq."*

Based on the above, the proposal has been designed with noise reduction measures such that the average (LAeq) sound levels during daytime hours are no greater than 50 dB(A) at the surrounding noise sensitive locations.

The applicant is willing to abide by a condition of consent, should it be forthcoming, to ensure the appropriate noise attention measure prescribed by the acoustic report are properly implemented.

7.6.4 Lighting

No lighting poles are proposed.

Lighting, in its own right, does not constitute development. Even so, the applicant is willing to abide by a condition of consent, should it be forthcoming, to adhere to the Australian Standards relating to the obtrusive impacts of light spill.

7.6.5 Retaining and Fencing

Retaining is proposed at various heights both along the boundaries of the site and internally.

Fencing is proposed atop the retaining to assist with the provision of acoustic treatment, while also providing privacy and security to the development site (Design module PO 9.1).

The stepped retaining and fencing in conjunction with the mix of materials and colours assists to minimise its visual impact and help blend into the natural landscape.

7.7 Traffic and Access

Cirqa Traffic Consultants have undertaken a traffic assessment to confirm that the proposed traffic and access arrangements are feasible, safe and achieve the relevant Australian Standards (refer to **Appendix 4**).

The proposed development satisfies the policies within the Transport, Access and Parking module in the following ways:

- the proposed access point has been designed to ensure vehicles can enter and exit in a forward direction as sought by PO 1.4 and PO 3.3;
- notwithstanding the crossover exceeds six metres wide as advised by DPF 3.6(b), the proposal has been designed to ensure sightlines and moveability in and out of the site are achieved;
- the parking area is designed to enable the safe and efficient movement of vehicles in and around the space (PO 3.8); and
- access for pedestrians, including people with a disability into the building is designed to be safe and convenient (PO 4.1).

7.8 Parking

The Code designates the following parking rates for a child care centre:

- **Vehicle Parking:** 0.25 spaces per child

Based on the child care centres' capacity of 80 children, the site has a theoretical demand of 20 spaces. A total of 21 spaces are provided in accordance with the Zone provision.

The Transport, Access and Parking module also advises the following for vehicle parking:

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.*

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 area attractively developed and landscaped, screened fenced and the like.*

PO 6.4 *Pedestrian linkages between parking areas and the development are provided and are safe and convenient.*

The proposed development satisfies the above policies in the following ways:

- although not directly connected with nearby parking areas, it can be assumed that some family drop offs will occur together for both the proposed child care centre and the school nearby; and
- the parking area has been designed to comply with the requirements of the Australian/New Zealand Standards.

7.9 Stormwater

The proposal is considered to satisfy PO 11.1 within the Infrastructure and Renewable Energy Facilities module and PO 31.2 of the Design module, which advise:

PO 11.1 *Development is connected to an appropriate water supply to meet the ongoing requirements of the intended use.*

PO 31.2 *Water discharged from the development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.*

Stormwater calculations and accompanying civil plans at **Appendix 3** confirm that the post-development flow rates will not exceed the pre-development flow rates. The proposal is not, therefore expected to overload Council's existing stormwater drainage networks.

Stormwater will be treated through a waste filtration system prior to release to Council's stormwater infrastructure network to remove suspended solids and hydrocarbons from the surface water collected, thereby improving the quality of stormwater and minimising pollutant transfer to receiving waters as sought by PO 31.2.

7.10 Landscaping

A landscaping plan is currently being prepared by DAS Studio and will be provided in due course.

There will be a wide selection of plants, assisting to provide additional shade and shelter to the outdoor spaces, minimise heat absorption in the car park area and maximise stormwater infiltration across the site, aligning with PO 3.1 of the Design module.

7.11 Native Vegetation

A total of 19 trees are proposed to be removed across the site.

The proponent has engaged an accredited consultant to prepare a report in accordance with Regulation 18(2)(a) of the Native Vegetation Regulations to undertake a flora and fauna assessment.

The Proponent will also make payment into the Native Vegetation Fund.

The application will also be required to be referred to the Native Vegetation Council due to the level of clearance proposed.

7.12 Waste Management

Waste will be stored in a dedicated area at the rear of the carparking area and screened with landscaping and fencing, as sought by PO 1.5 of the Design module.

Waste will be collected on site by a private contractor using a Medium Rigid Vehicle outside of the operating hours and in accordance with EPA noise guidelines. The operator of the site proposes to have waste collected twice a week to ensure minimisation of waste storage on site for a period greater than three days.

7.13 Advertisements

The proposed signage is located flat on the building and retaining wall, and is considered appropriate for the following reasons:

- it is used by way of identifying the associated business activity on the site, as intended by Zone PO 13.1;

- all are contained within the confines of the site's boundaries (PO 1.4 of the Advertisements module);
- none of the signage is illuminated, moves or flashes, avoiding potential distraction to drivers or impact the amenity of neighbouring dwellings, as sought by PO 4.1 and 5.2; and
- is small in overall scale and integrated with the built form, reducing the impact on the residential character of the locality (Advertisements module PO 1.5).

8. CONCLUSION

We have concluded from our assessment of the proposal that it is deserving of consent.

In support of our conclusion, we wish to highlight that:

- the land use is envisaged within the zone;
- the proposed use will provide a contemporary facility for both children and staff while also offering additional childcare places to serve an under provisioned area;
- the siting and overall height of the proposed building does not unreasonably impact adjoining residential properties and fits within the character of the area;
- all expected vehicles will be able to be driven into, and out of, the site in a safe and convenient manner;
- projected traffic generation and distribution will not adversely affect the intended function and capacity of the surrounding traffic network;
- provides an adequate amount of car parking spaces to service the proposed use;
- fencing is included to minimise noise impacts toward nearby residential properties;
- stormwater and waste will be dealt with in an environmentally sound manner;
- the proposed building will be energy efficient for years to come; and
- simple corporate advertising proposed will not distract nearby motorists but will act as a visual aid for persons seeking to utilise the proposed child care centre.

APPENDIX 1. CERTIFICATE OF TITLE

REAL PROPERTY ACT, 1886
South Australia

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

Certificate of Title - Volume 5473 Folio 109

Parent Title(s) CT 4217/507

Creating Dealing(s) CONVERTED TITLE

Title Issued 20/11/1997 **Edition** 2 **Edition Issued** 30/10/2009

Estate Type

FEE SIMPLE

Registered Proprietor

IAN GARY SMALL
OF 23 MORELLA GROVE BRIDGEWATER SA 5155

Description of Land

ALLOTMENT 2 FILED PLAN 12021
IN THE AREA NAMED BRIDGEWATER
HUNDRED OF NOARLUNGA

Easements

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED A TO THE ETSA CORPORATION (V 5132130)

Schedule of Dealings

Dealing Number	Description
11277042	MORTGAGE TO WESTPAC BANKING CORPORATION

Notations

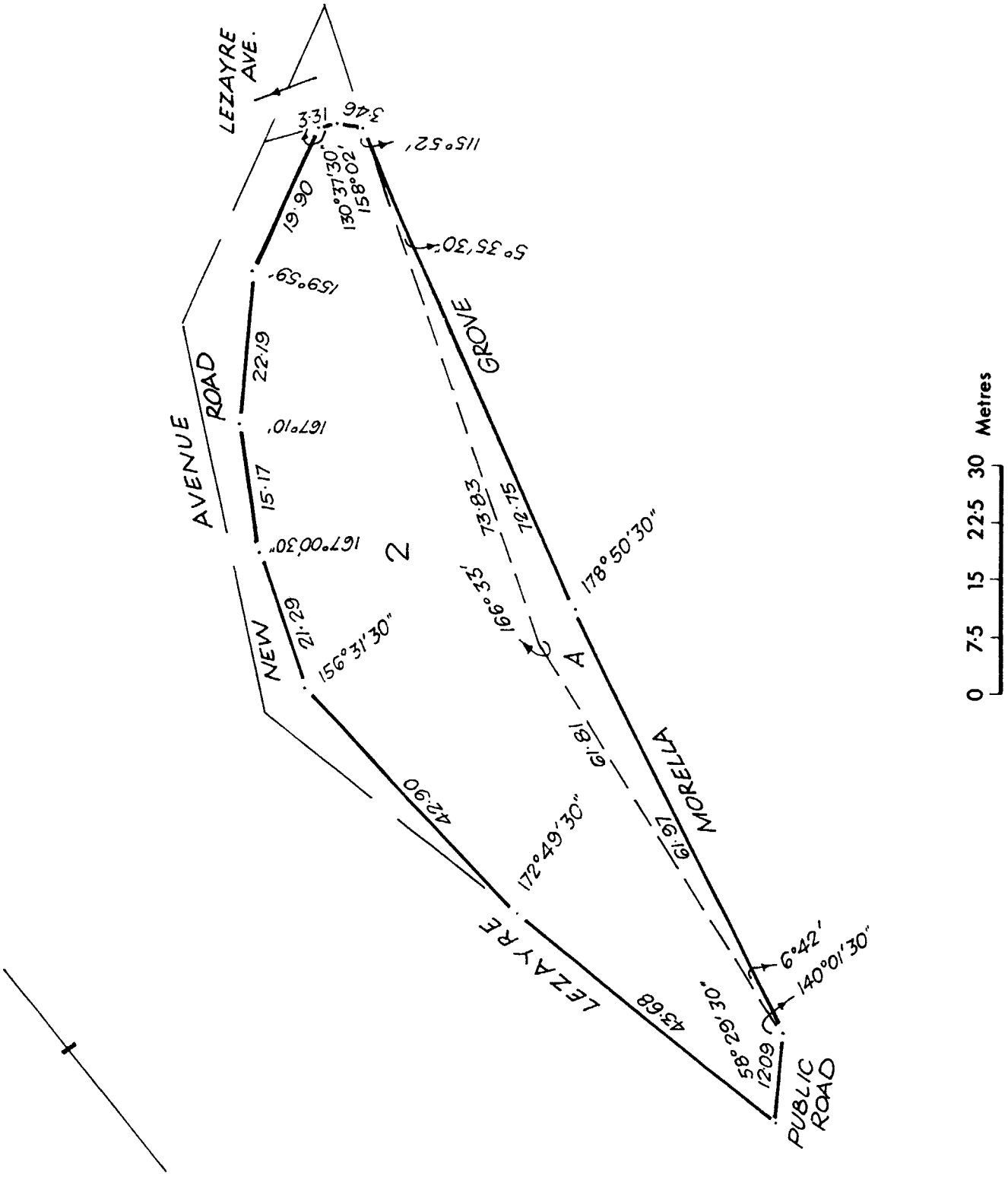
Dealings Affecting Title NIL

Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes NIL

Administrative Interests NIL



Product	Historical Search
Date/Time	29/06/2021 12:45PM
Customer Reference	Bridgewater
Order ID	20210629004914

Certificate of Title

Title Reference: CT 5473/109

Status: CURRENT

Parent Title(s): CT 4217/507

Dealing(s) Creating Title: CONVERTED TITLE

Title Issued: 20/11/1997

Edition: 2

Dealings

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
20/10/2009	30/10/2009	11277042	MORTGAGE	REGISTERED	WESTPAC BANKING CORPORATION
20/10/2009	30/10/2009	11277041	TRANSFER	REGISTERED	IAN GARY SMALL

LEGEND

——·——	STORMWATER PIPE TO FUTURE DETAILS
S1	STORMWATER SUMP TO FUTURE DETAILS. PROVIDE FILTER TO ENSURE NO DEBRIS IS CAPTURED IN STORMWATER SYSTEM
SIP	SITE INSPECTION POINT
SEP	SIDE ENTRY PIT TO FUTURE DETAILS
ECO	ECOSOL STORM PIT (CLASS 2) - 10L/sec INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUF'S REQUIREMENTS
DT	MIN. 27.1kL UNDERGROUND DETENTION TANK (i.e. 31.2kL ROCLA BOX CULVERT UNDERGROUND DETENTION SYSTEM. SINGLE LAYER 1800x1200x6 UNITS) STRICTLY IN ACCORDANCE WITH MANUF'S DETAILS. PROVIDE INSPECTION OPENINGS, BREATHER VALVES, ETC. STRICTLY IN ACCORDANCE WITH MANUF'S DETAILS
RWT	3.0kL RAINWATER TANK TO MANUF'S DETAILS PLUMBED BACK INTO BUILDING AS PER AS 3500
RW	RETAINING WALL
K	KERB
G	GUTTER
K&G	KERB & GUTTER
TR	THRESHOLD RAMP
KR	KERB RAMP
15.55	DESIGN LEVEL COV - COVER EX - EXISTING INV - INVERT P - PAVING/CONCRETE/BITUMEN TRW - TOP OF RETAINING WALL BRW - BOTTOM OF RETAINING WALL
15.55	CONTOUR LINE
– – – – –	GRADE LINE
←	DIRECTION OF SURFACE FALL
	DIRECTION OF OVERLAND FLOW PATH DURING MAJOR STORM EVENT
	BITUMEN PAVING TO FUTURE DETAILS
	PAVING TO FUTURE DETAILS

PAVING HATCH STYLE SHOWN INDICATIVELY

NOTE:
TREES NOT SHOWN ON PLANS FOR CLARITY

PROVIDE DRAINAGE HOLES IN RETAINING WALL TO ALLOW FOR STORMWATER OVERLAND FLOW PATH

TRW 424.50
BRW 424.25

TRW 421.90
BRW 420.85

TRW 420.48
BRW 419.96

TRW 421.00
BRW 420.48

TRW 419.83
BRW 418.62

TRW 421.03
BRW 419.83

TRW 420.98
BRW 420.44

TRW 420.44
BRW 419.90

TRW 421.87
BRW 421.03

TRW 421.87
BRW 421.60

TRW 425.10
BRW 421.07

TRW 422.53
BRW 421.03

TRW 424.02
BRW 422.53

TRW 425.33
BRW 424.88

TRW 425.50
BRW 424.80

TRW 426.62
BRW 425.60

STORE

LANDSCAPING

RAMP

ECO

SEP

SIP

424.50

424.60

424.70

424.80

424.90

425.00

425.10

425.20

425.30

425.40

425.50

425.60

424.90 P

424.84 P

425.00 P

425.10 P

425.44 P

425.66 P

425.33 P

425.76 EX

425.12 EX

425.98 EX

FIRST FLOOR
FFL 425.13

OVERGROWN VEGETATION

GRASS

PUMP

TANK

WATERLOO PARK

1:16 MAX

1:20 MAX

RE-GRADE COUNCIL VERGE TO ENSURE MIN 1:100 FALL FROM RETAINING WALL TOWARDS ROADWAY

TOP OF RETAINING WALL HEIGHTS BASED UPON MAX 1:40 FALL FROM PERIMETER PAVING TO FACE OF RETAINING WALL AND EXISTING SITE LEVELS. ALL HEIGHTS SUBJECT TO FINALISED LANDSCAPING LAYOUT

DRIVEWAY CROSSOVER TO COUNCIL'S STANDARD DETAILS

E: SPIKE IN BITUMEN
E: 295572.552
N: 6019088.953
EL: 10374775.19m

MORELLA GROVE

BDY PEG FD

0 2500 5000 10000

SCALE 1:100 @A1

PT Design
structural • civil • engineers

NOTE:
PIPE SIZES, INVERTS AND LOCATIONS SHOWN INDICATIVE.

RETAINING WALL NOTES:
RETAINING WALL HEIGHTS AND/OR LEVELS SHOWN ON THE DRAWING ARE INDICATIVE ONLY. ALL FINISHED RETAINING WALL LEVELS MUST BE CONFIRMED ON SITE BY THE CONTRACTOR.
IF RETAINING WALL HEIGHTS ENCOUNTERED ON SITE EXCEED THOSE HEIGHTS SPECIFIED IN THE DETAILS, PLEASE CONTACT THIS OFFICE IMMEDIATELY FOR FURTHER INSTRUCTION.

NOTE:
DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS DRAWINGS AS A PACKAGE. REFER TO ARCHITECTS DRAWINGS FOR ALL SETOUT DIMENSIONS.

ALL LEVELS SHALL BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION. SHOULD ANY DISCREPANCY OCCUR THE CONTRACTOR SHALL CONTACT THIS OFFICE IMMEDIATELY FOR FURTHER INSTRUCTION.

CONTRACTORS NOTES:
COVER LEVELS GIVEN FOR PITS ARE NOMINAL ONLY. COVER LEVELS SHALL MATCH FINISHED PAVING LEVELS.

THE CONTRACTOR IS RESPONSIBLE FOR CHECKING LOCATION OF ALL UNDERGROUND SERVICES PRIOR TO COMMENCING ANY EXCAVATION WORK. ANY DAMAGE CAUSED TO ANY SERVICES SHALL BE REPORTED IMMEDIATELY TO THE SUPERINTENDENT & SHALL BE REPAIRED BY THE APPROPRIATE AUTHORITIES. ALL COSTS ASSOCIATED WITH REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE. PHONE 'DIAL BEFORE YOU DIG' (1100) FOR ASSISTANCE.

Date	Revision	Issue
14.02.2022	ISSUED FOR PLANNING APPROVAL	D
10.02.2022	REVISED RETAINING WALL LAYOUT	C
01.02.2022	APPROVAL ISSUE	B
22.12.2021	PRELIMINARY ISSUE	A

FOR APPROVAL

PT Design
PT Design Pty Ltd 141-149 Ifould Street Adelaide SA 5000
T (08 8412 4300) E (ptdesign@ptdesign.net.au)

Designed	MB	Drawn	MB
Approved		Date	DEC '21
CIVIL		Sheet	1 of 2

Project
PROPOSED CHILD CARE FACILITY
23 MORELLA GROVE
BRIDGEWATER

Client
FUTURE URBAN PTY LTD

N

Drawing Title
STORMWATER MANAGEMENT PLAN

Scale
1:100

Drawing Number
22625-C01

Issue
D

Name: 22625-C01.dwg

LEGEND

——·——	STORMWATER PIPE TO FUTURE DETAILS
S1	STORMWATER SUMP TO FUTURE DETAILS. PROVIDE FILTER TO ENSURE NO DEBRIS IS CAPTURED IN STORMWATER SYSTEM
SIP	SITE INSPECTION POINT
SEP	SIDE ENTRY PIT TO FUTURE DETAILS
ECO	ECOSOL STORM PIT (CLASS 2) - 10L/sec INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUF'S REQUIREMENTS
DT	MIN. 27.1kL UNDERGROUND DETENTION TANK (i.e. 31.2kL ROCLA BOX CULVERT UNDERGROUND DETENTION SYSTEM. SINGLE LAYER 1800x1200x6 UNITS) STRICTLY IN ACCORDANCE WITH MANUF'S DETAILS. PROVIDE INSPECTION OPENINGS, BREATHER VALVES, ETC. STRICTLY IN ACCORDANCE WITH MANUF'S DETAILS
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	GRADE LINE
	DIRECTION OF SURFACE FALL
	DIRECTION OF OVERLAND FLOW PATH DURING MAJOR STORM EVENT
	BITUMEN PAVING TO FUTURE DETAILS
	PAVING TO FUTURE DETAILS

PAVING HATCH STYLE SHOWN INDICATIVELY

NOTE:
TREES NOT SHOWN ON PLANS FOR CLARITY

COVER LEVELS OF SIPs AND SUMPS LOCATED IN LANDSCAPED AREAS ARE SUBJECT TO FINALISED LANDSCAPING DESIGN. STORMWATER PIPES ARE TO HAVE MIN. 300mm COVER (typ.). ENSURE MIN. 1:100 FALL FOR ALL STORMWATER PIPES

OUTLET PIPE TO BE FITTED WITH FLOW RESTRICTING ORIFICE TO ENSURE MAX 8.59L/sec DISCHARGE RATE

PROVIDE DRAINAGE HOLES IN RETAINING WALL TO ALLOW FOR STORMWATER OVERLAND FLOW PATH

DISCHARGE STORMWATER TO EXISTING SIDE ENTRY PIT. AS ADVISED BY COUNCIL

ALL LANDSCAPING AND LANDSCAPING DRAINAGE BY OTHERS TO OTHERS' DETAILS

TOP OF RETAINING WALL HEIGHTS BASED UPON MAX 1:40 FALL FROM PERIMETER PAVING TO FACE OF RETAINING WALL AND EXISTING SITE LEVELS. ALL HEIGHTS SUBJECT TO FINALISED LANDSCAPING LAYOUT

CONFIGURATION OF DOWNPIPES CONNECTING TO RWT IS SUBJECT TO FINALISED DOWNPIPE LOCATIONS

EXISTING STOBIE 421.87 APPROX

RE-GRADE COUNCIL VERGE TO ENSURE MIN 1:100 FALL FROM RETAINING WALL TOWARDS ROADWAY

LEZAYRE AVENUE

MORELLA GROVE

DAMAGED PIT

GRASS

OVERGROWN VEGETATION

OUTDOOR PLAY

STORE

GROUND FLOOR
FFL 421.13

FFL 421.13

TRW 420.48 BRW 419.96
TRW 421.00 BRW 420.48
TRW 421.90 BRW 420.85
TRW 419.83 BRW 418.62
TRW 421.03 BRW 419.83
TRW 420.51 BRW 418.68
TRW 418.68 BRW 416.85
TRW 420.70 BRW 419.38
TRW 419.38 BRW 418.06
TRW 420.98 BRW 420.44
TRW 420.44 BRW 419.90
TRW 421.87 BRW 421.03
TRW 421.87 BRW 421.60
TRW 425.10 BRW 421.07
TRW 422.53 BRW 421.03
TRW 424.02 BRW 422.53

TR 421.10 P

S1 SIP RW DT K

0 2500 5000 10000

SCALE 1:100 @A1

NOTE:
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Date	Revision	Issue
13.04.2022	REVISED S/W DISCHARGE LOCATION	E
14.02.2022	ISSUED FOR PLANNING APPROVAL	D
10.02.2022	REVISED RETAINING WALL LAYOUT	C
01.02.2022	APPROVAL ISSUE	B
22.12.2021	PRELIMINARY ISSUE	A

FOR APPROVAL

PT Design
structural • civil • engineers

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Designed	MB	Drawn	MB
Approved		Date	DEC '21
CIVIL		Sheet	2 of 2

Project
PROPOSED CHILD CARE FACILITY
23 MORELLA GROVE
BRIDGEWATER

Client
FUTURE URBAN PTY LTD

N

Drawing Title
STORMWATER MANAGEMENT PLAN

Scale
1:100

Drawing Number
22625-C02

Issue
E

Name: 22625-C01.dwg

PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022

ARCH DRAWING SCHEDULE

No.	Sheet Name
DA01	FRONT COVER DRAWING SCHEDULE
DA02	EXISTING SITE/ DEMOLITION PLAN
DA03	PROPOSED SITE PLAN
DA04	PROPOSED FIRST FLOOR PLAN
DA05	PROPOSED GROUND FLOOR PLAN
DA06	PROPOSED ROOF PLAN
DA07	PROPOSED ELEVATIONS WITH FENCE 1
DA08	PROPOSED ELEVATIONS WITH FENCE 2
DA09	PROPOSED ELEVATION WITHOUT FENCE
DA10	CONCEPT IMAGES
DA11	SELECTED VIEW WITH POWER LINE
DA12	MATERIAL SELECTIONS

ON ARCHITECTURE

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Mark Nield
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e m.nield@onarchitecture.com.au

Project

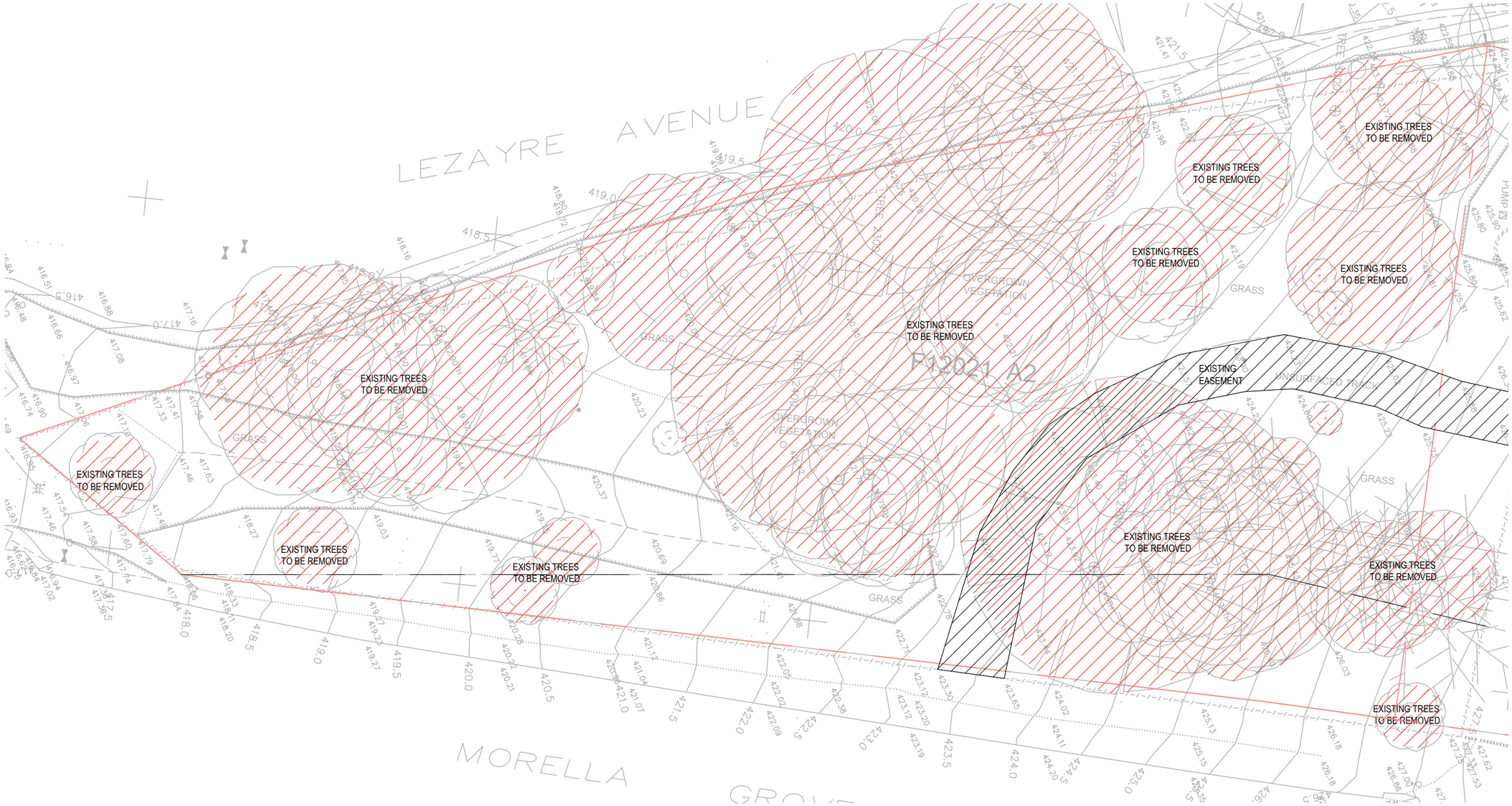
80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

DRAWING SHEDULE

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA01	Rev: -	A3 SHEET



EXISTING & DEMOLITION PLAN

1:250

PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022

ON ARCHITECTURE

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Project

80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

EXISTING SITE / DEMOLITION PLAN

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA02	Rev: -	A3 SHEET

PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022

PROPOSED SUBDIVISION PLAN

1:400

ON ARCHITECTURE

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Project

80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

PROPOSED SUBDIVISOIN PLAN

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA03	Rev: -	A3 SHEET

PROPOSED SITE PLAN

1:250

SITE DATA	
SITE AREA	1890sqm
BUILDING AREA GROUND FIRST TOTAL	 418sqm 245sqm 663sqm
PROPOSED CHILD CARE PLACES	80
REQUIRED CARPARKING	1 per 4 places = 20 Carparks
PROPOSED CARPARKING	21 Carparks

ACTIVITY AREA SCHEDULE

ROOM	PLACES	AGE	STAFF RATIO	STAFF No.	AREA REQ	UNENCUMBERED AREA	ENCUMBERED AREA	TOTAL AREA PROVIDED
ROOM 1	8	0-2	1:4	2	26	32sqm	6sqm	38sqm
ROOM 2	8	0-2	1:4	2	26	27sqm	6sqm	33sqm
ROOM 3	20	2-3	1:5	4	65	65sqm	5sqm	70sqm
ROOM 4	22	3-4	1:11	2	71.5	73sqm	4sqm	77sqm
ROOM 5	22	3-4	1:11	2	71.5	73sqm	4sqm	77sqm
TOTALS	80			12	260	270sqm	25sqm	295sqm

OUTDOOR PLAY AREA SCHEDULE

ROOMS	PLACES	AREA REQ	UNENCUMBERED AREA	ENCUMBERED AREA	TOTAL AREA PROVIDED
ROOM 1 ROOM 2	8 8	112	114sqm	5sqm	119sqm
ROOM 3 ROOM 4 ROOM 5	20 22 22	448	448sqm	7sqm	455sqm
TOTALS	80	560	562sqm	12sqm	574sqm

PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022

FENCE TYPE	DESCRIPTION
FT1	COLOURBOND FENCE
FT2	BATTEN FENCE
FT3	GLASS BALUSTRADE

RETAINING WALL TYPE	DESCRIPTION
RWT1	SLEEPER RETAINING WALL
RWT2	CONCRETE BLOCK RETAINING WALL

NOTE: REFERENCE ENGINEER'S CIVIL DRAWINGS FOR LEVEL

ON ARCHITECTURE

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Mark Nield
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Project

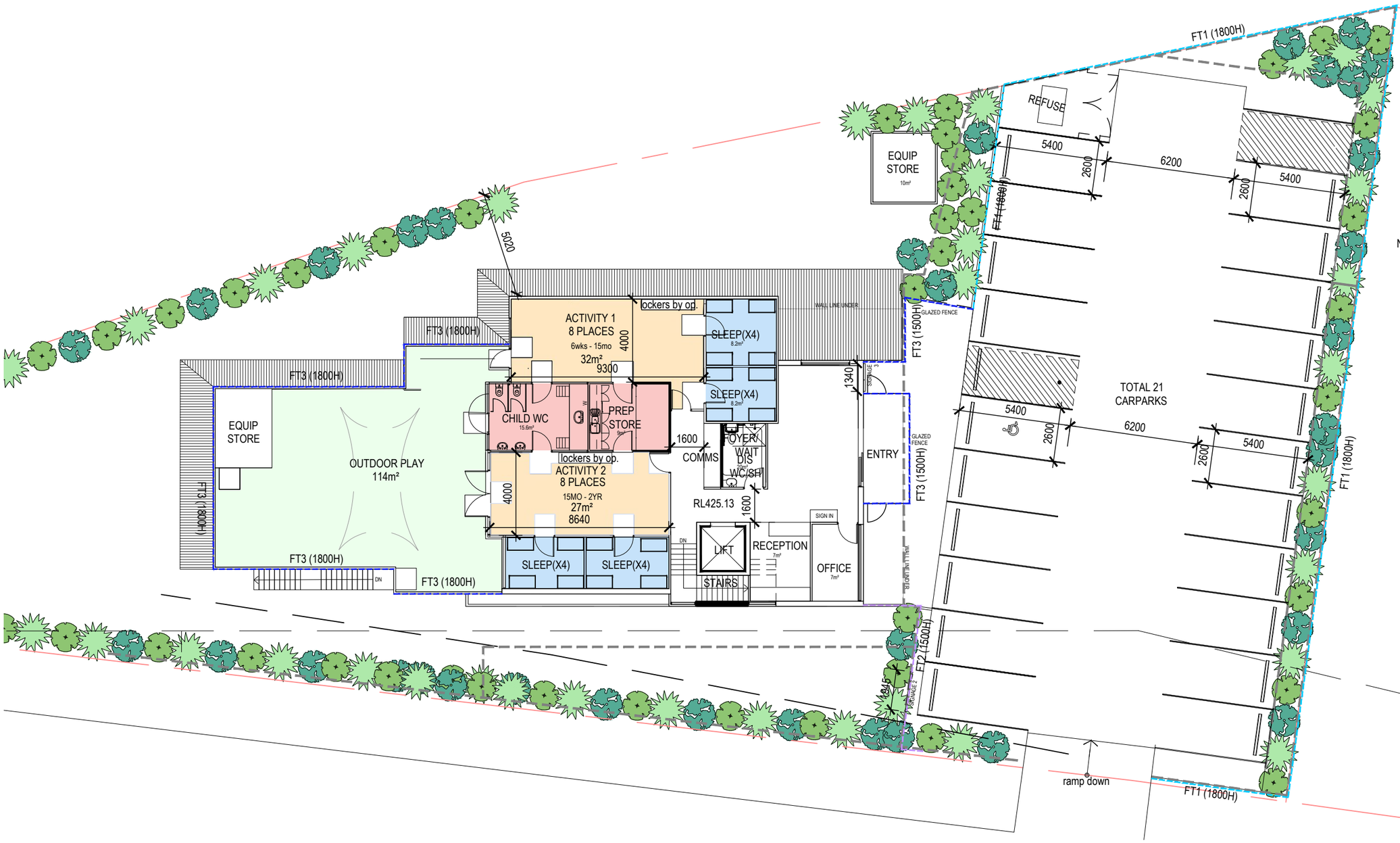
80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

PROPOSED SITE PLAN

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA04	Rev: -	A3 SHEET



PROPOSED FIRST FLOOR PLAN

1:200

PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022

FENCE TYPE	DESCRIPTION
FT1	COLOURBOND FENCE
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NOTE: REFERENCE ENGINEER'S CIVIL DRAWINGS FOR LEVEL

ON ARCHITECTURE

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Project

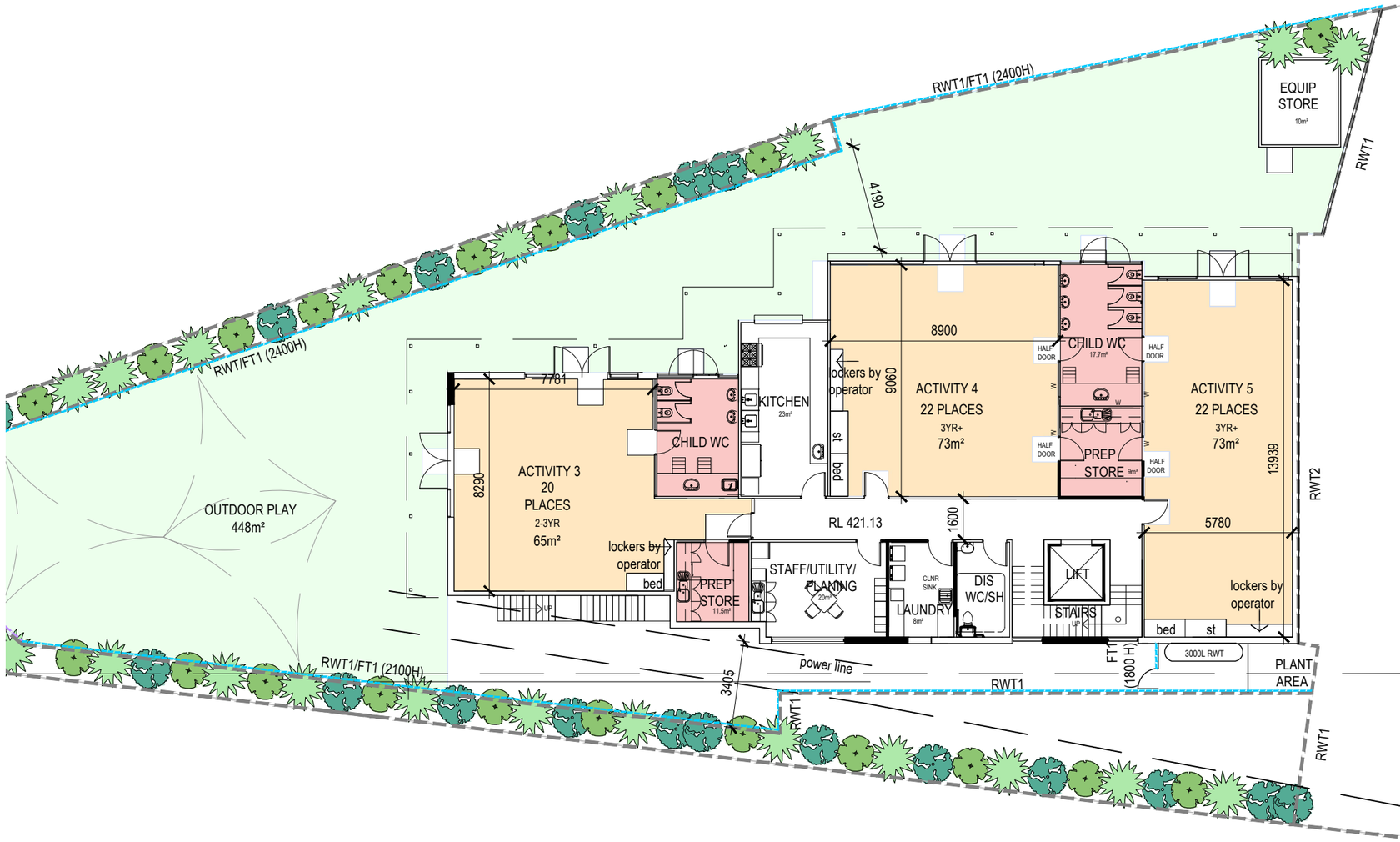
80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

PROPOSED FIRST FLOOR PLAN

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA05	Rev: -	A3 SHEET



PROPOSED GROUND FLOOR PLAN

1:200

PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022

FENCE TYPE	DESCRIPTION
FT1	COLOURBOND FENCE
FT2	BATTEN FENCE
FT3	GLASS BALUSTRADE

RETAINING WALL TYPE	DESCRIPTION
RWT1	SLEEPER RETAINING WALL
RWT2	CONCRETE BLOCK RETAINING WALL

NOTE: REFERENCE ENGINEER'S CIVIL DRAWINGS FOR LEVEL

ON ARCHITECTURE

ON Architecture Pty Ltd abn 71 627 522 043
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Project

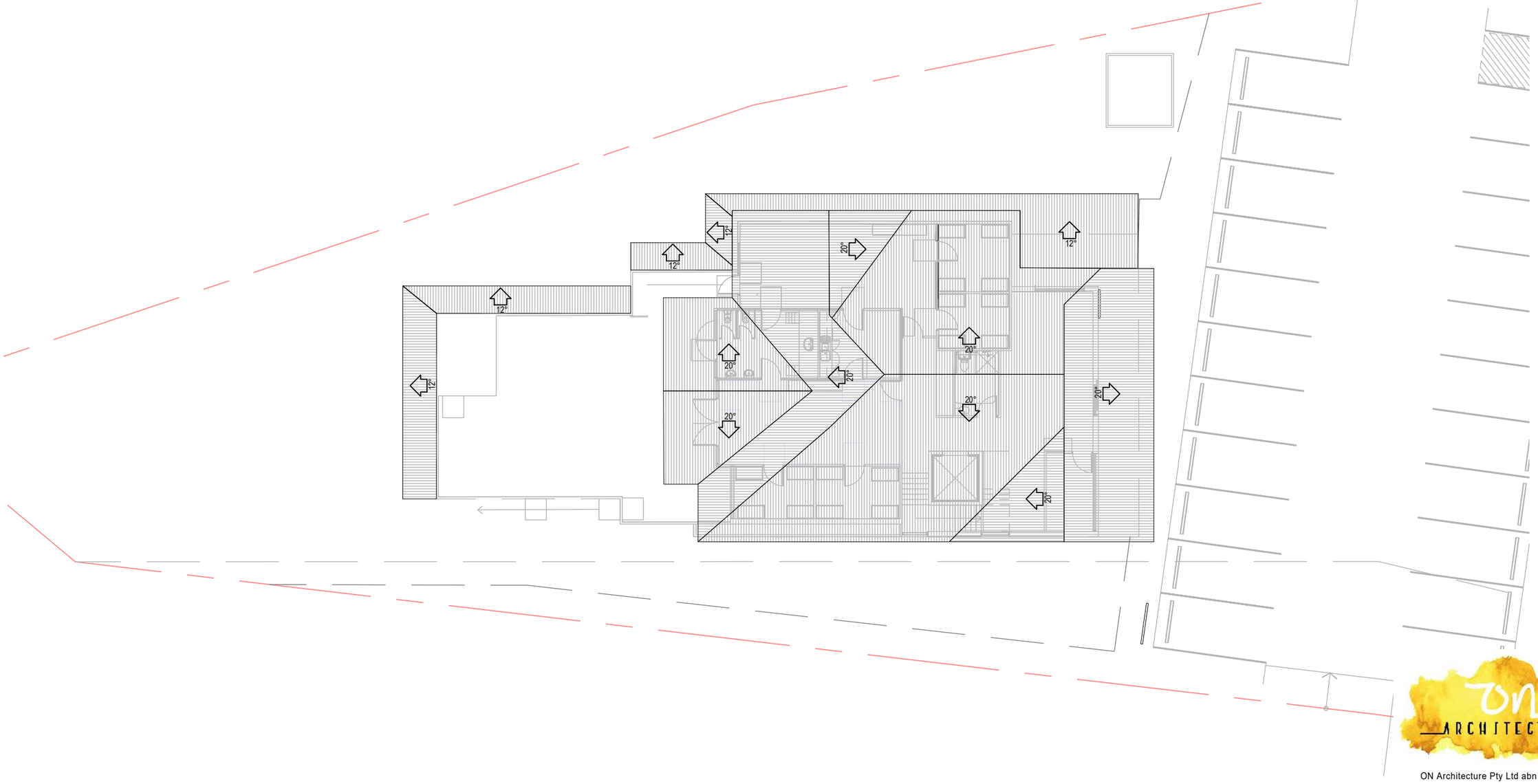
80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

PROPOSED GROUND FLOOR PLAN

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA06	Rev: -	A3 SHEET



PROPOSED ROOF PLAN

1:200

PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022

NOTE: REFERENCE ENGINEER'S CIVIL DRAWINGS FOR LEVEL

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Project

80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

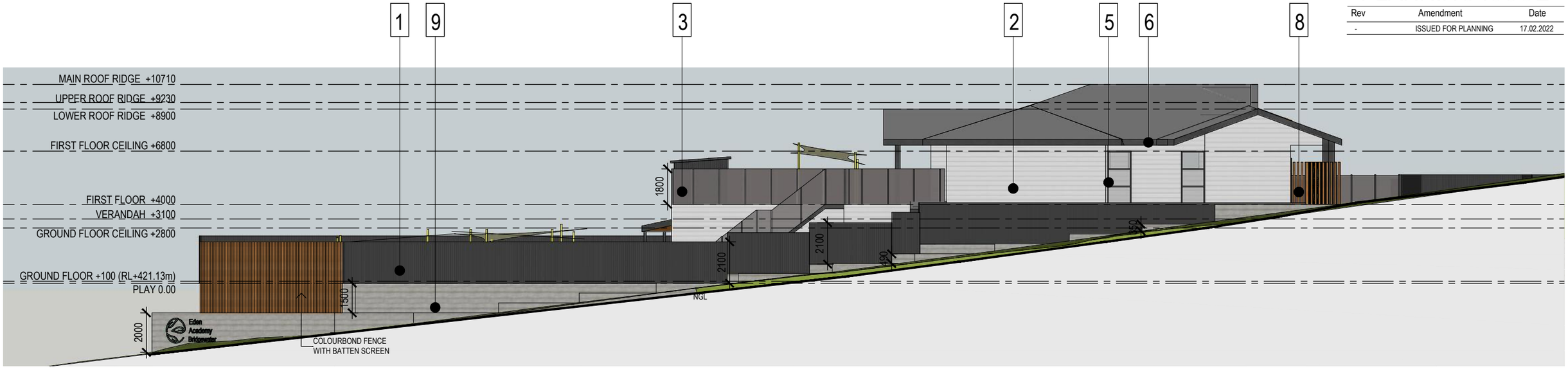
Drawing

PROPOSED ROOF PLAN

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA07	Rev: -	A3 SHEET

PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022



EAST ELEVATION

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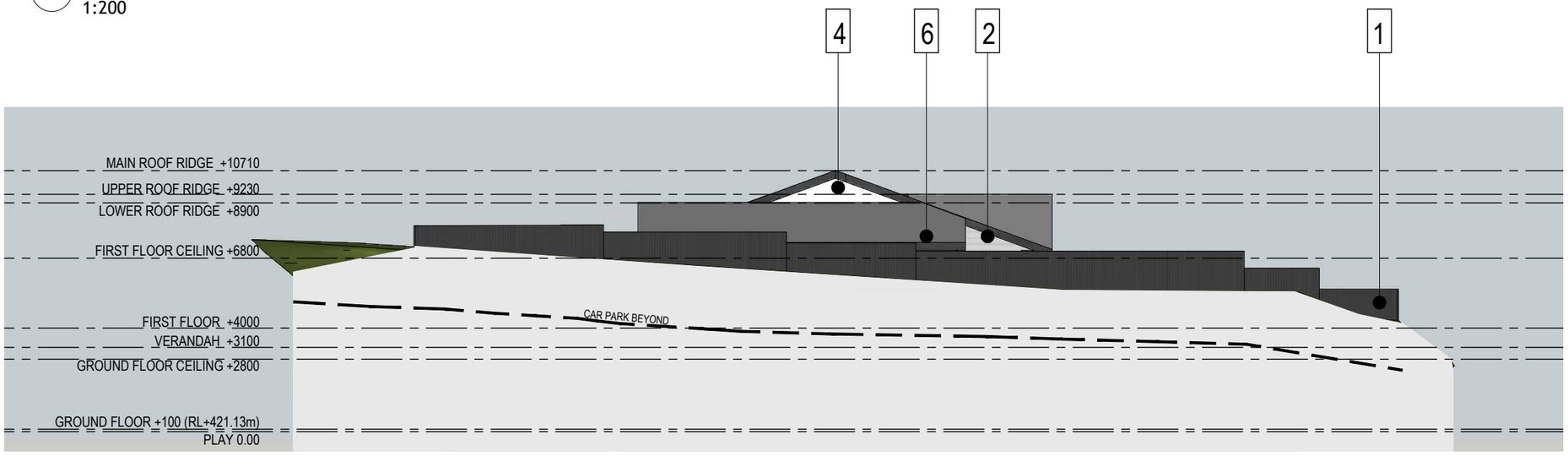

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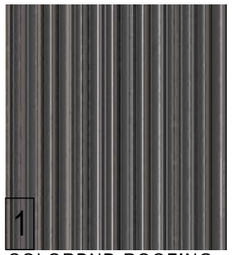
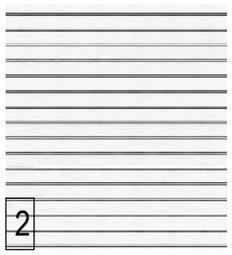
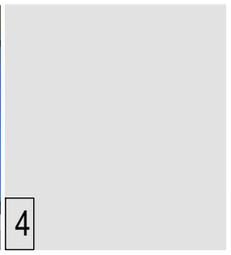


1 COLORBND ROOFING & GOOD NEIGHBOUR FENCING

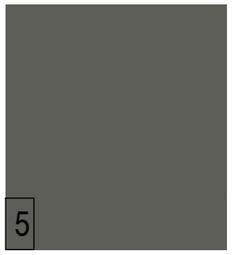


2 JAMES HARDIE LINEAR WEATHERBOARD CLADDING

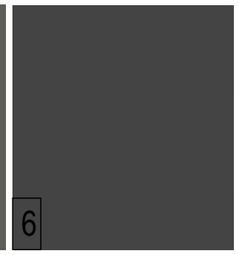
3 ALUMINUM FRAME GLASS INFILL BALUSTRADE



4 DULUX SURFMIST



5 DULUX POWDERCOAT BLACK WINDOW FRAME



6 DULUX BLACK PAINT FINISH

7 DULUX SNOWSEASON QUARTER

8 BATTEN FENCE

9 MC LAREN SLEEPER RETAINING WALL

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Project

80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

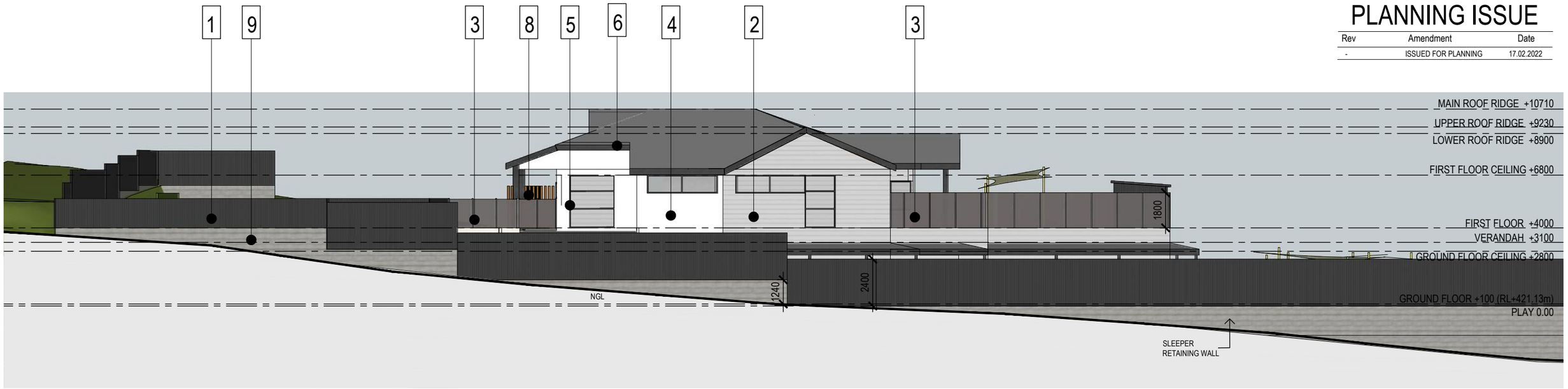
Drawing

PROPOSED ELEVATIONS WITH FENCE 1

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA08	Rev: -	A3 SHEET

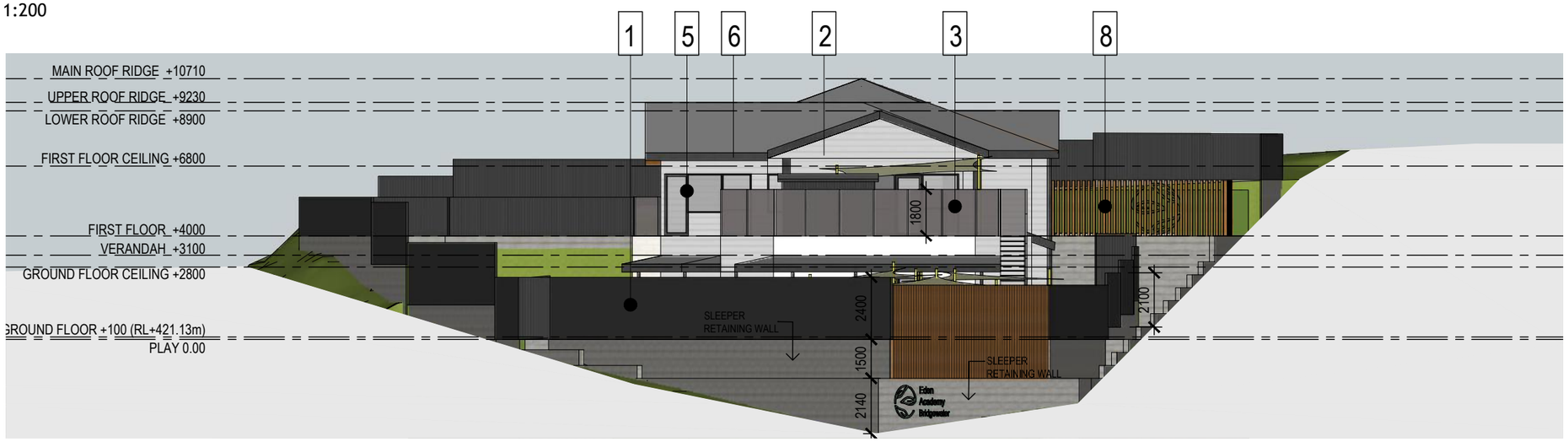
PLANNING ISSUE

Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022



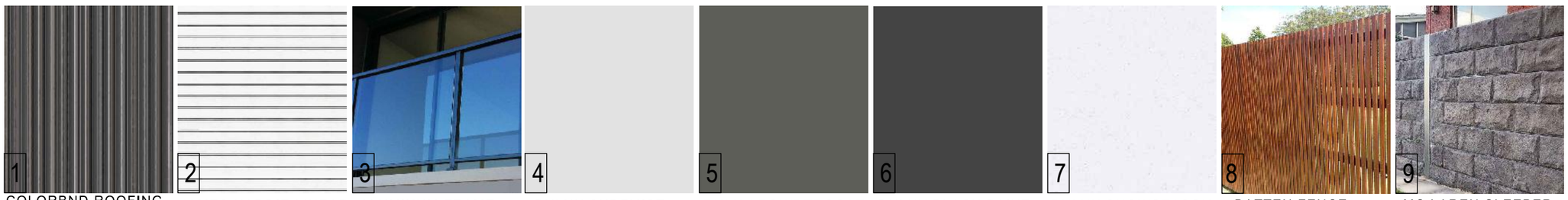
WEST ELEVATION

1:200



SOUTH ELEVATION

1:200



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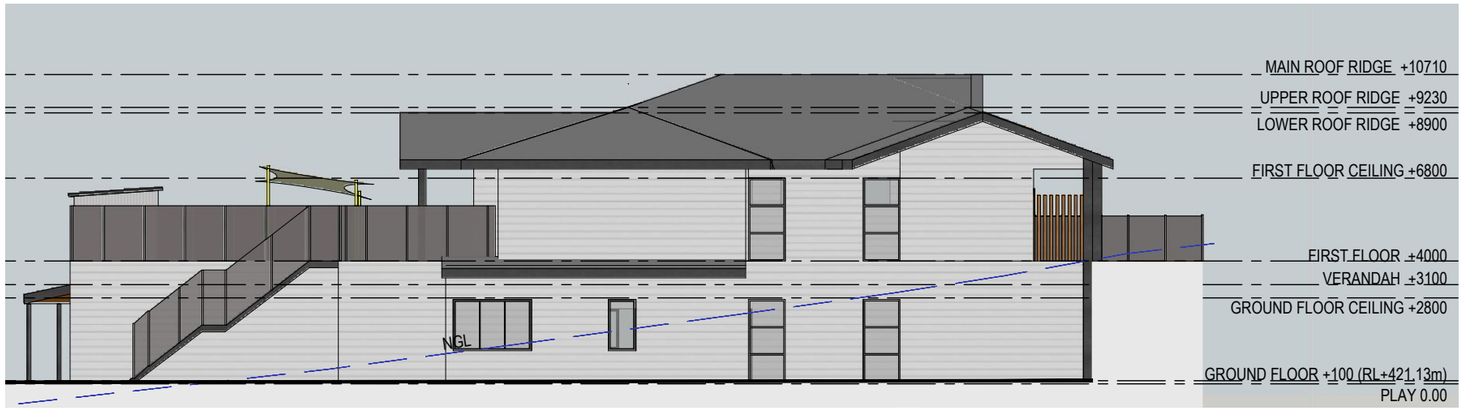
80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

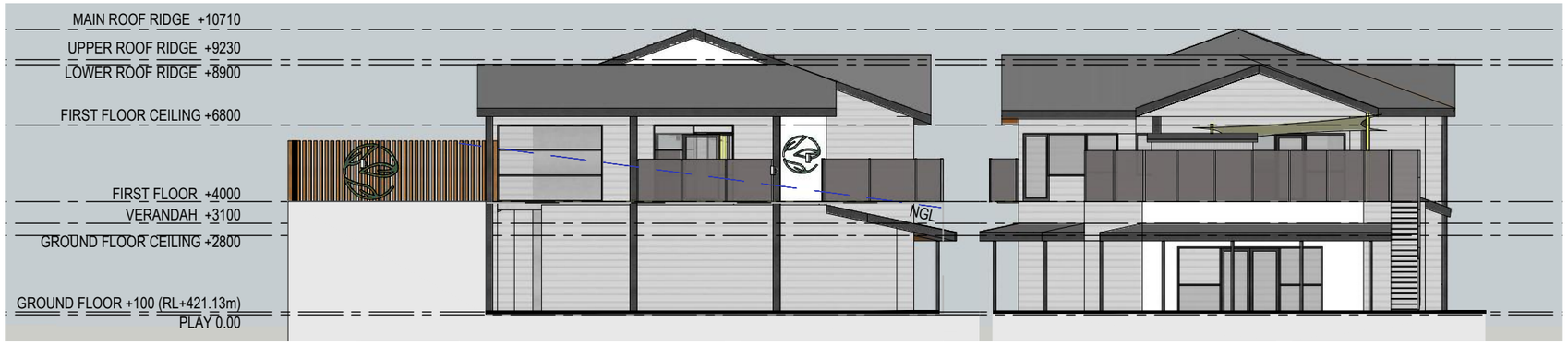
PROPOSED ELEVATIONS WITH FENCE 2

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA09	Rev: -	A3 SHEET



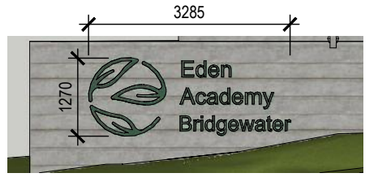
EAST ELEVATION
1:200

WEST ELEVATION
1:200

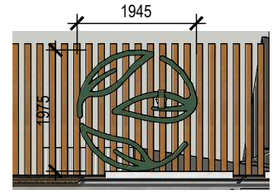


NORTH ELEVATION
1:200

SOUTH ELEVATION
1:200



SIGNAGE 1
1:100



SIGNAGE 2
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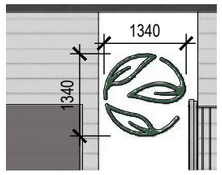

SIGNAGE 3
1:100

PLANNING ISSUE

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Project
80 PLACE CHILD CARE FACILITY
23 Morella Grove, Bridgewater SA

Drawing
PROPOSED ELEVATIONS WITHOUT FENCE

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA10	Rev: -	A3 SHEET

PLANNING ISSUE

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80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

CONCEPT IMAGES

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA11	Rev: -	A3 SHEET

PLANNING ISSUE

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SITE LAYOUT WITH POWER LINE

1:500

ON ARCHITECTURE

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80 PLACE CHILD CARE FACILITY

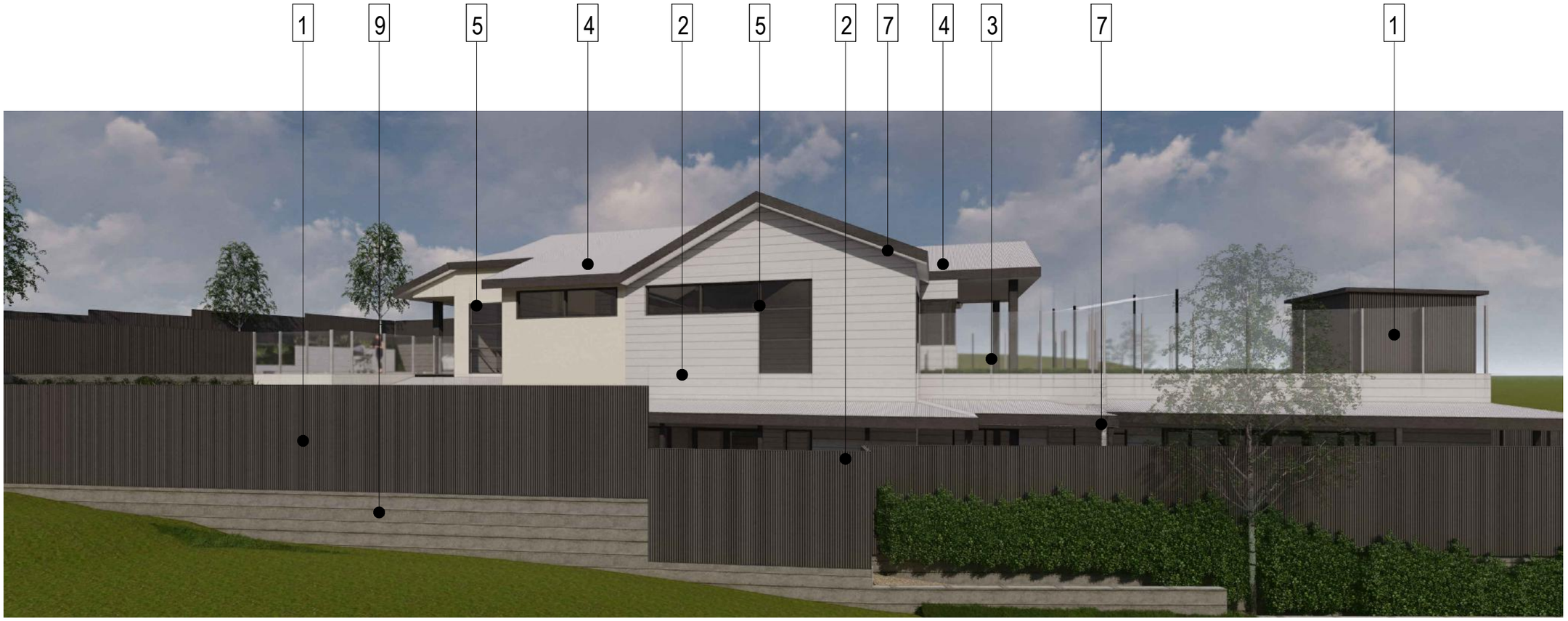
23 Morella Grove, Bridgewater SA

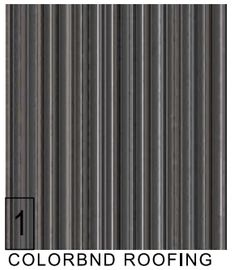
Drawing

SELECTED VIEW WITH POWER LINE

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA12	Rev: -	A3 SHEET

PLANNING ISSUE		
Rev	Amendment	Date
-	ISSUED FOR PLANNING	17.02.2022

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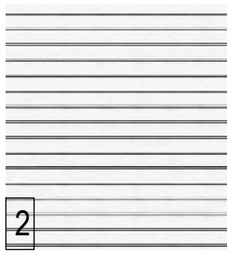
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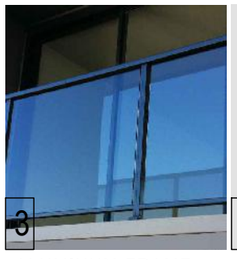
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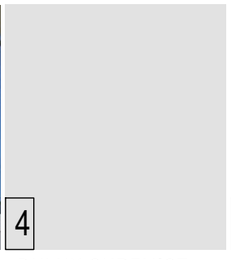
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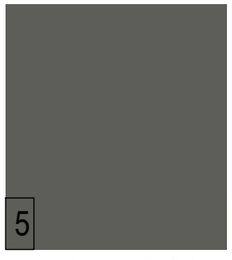
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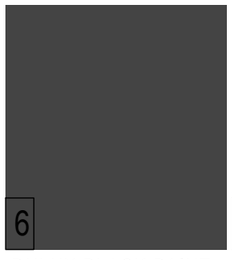
6 DULUX BLACK PAINT FINISH


7 DULUX SNOWSEASON QUARTER


8 BATTEN FENCE


9 MC LAREN SLEEPER RETAINING WALL

MATERIAL SELECTIONS

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Project
80 PLACE CHILD CARE FACILITY
23 Morella Grove, Bridgewater SA

Drawing
MATERIAL SELECTIONS

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA13	Rev: -	A3 SHEET

Bridgewater Childcare

Landscape Design

Submission:

24 February 2022_Bridgewater Landscape Design_Issue 01

Client:
Property Projects Australia

Project:
2206_Bridgewater ELC

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Contents Page

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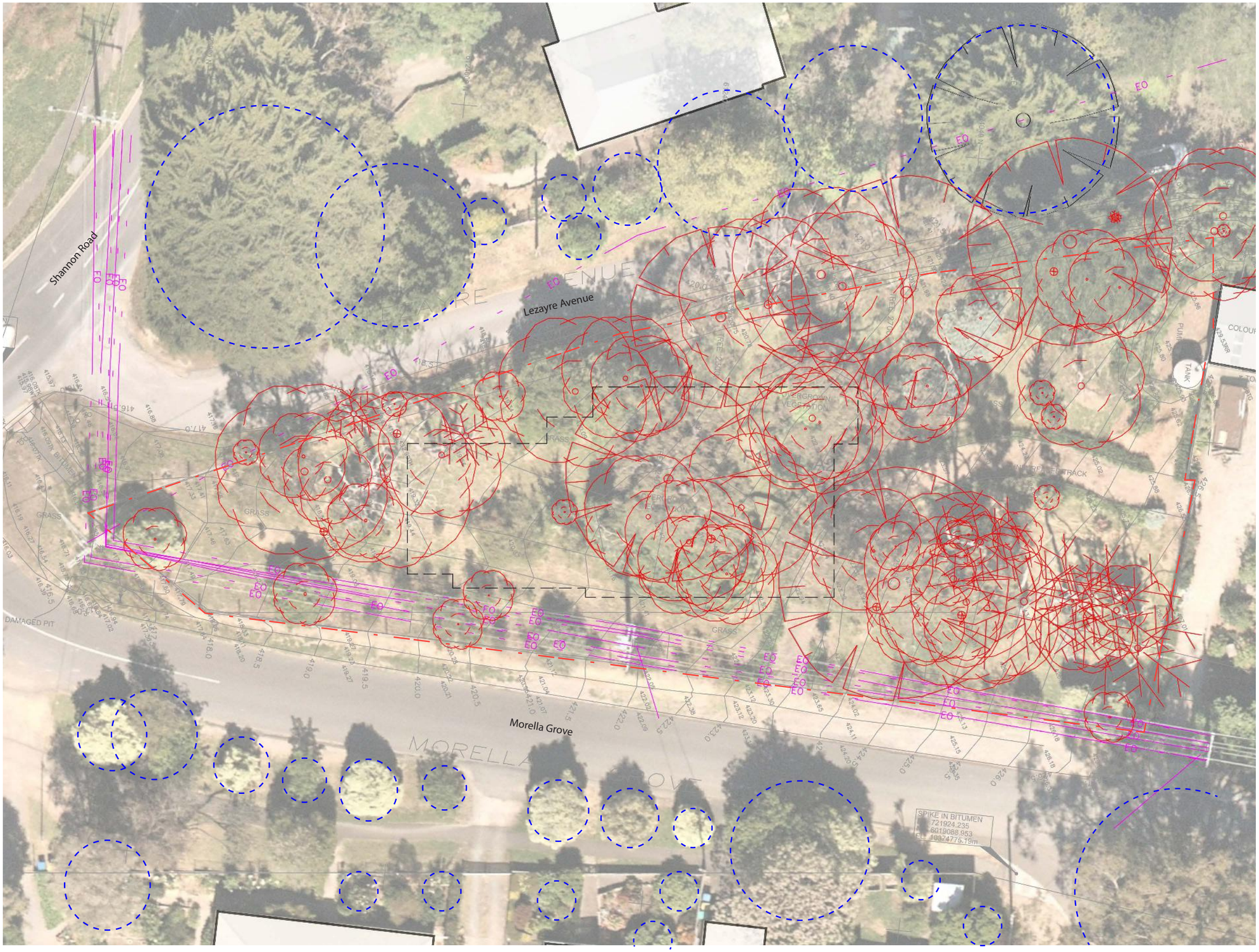
01_Existing Site + Trees

Legend

- Property Boundary
- Existing Overhead Powerlines
- Proposed ELC Building Location
- Trees to be Removed
- Existing Neighbouring Trees



Job 2206
Project Bridgewater Childcare
Address 23 Morella Grove
Bridgewater SA 5155

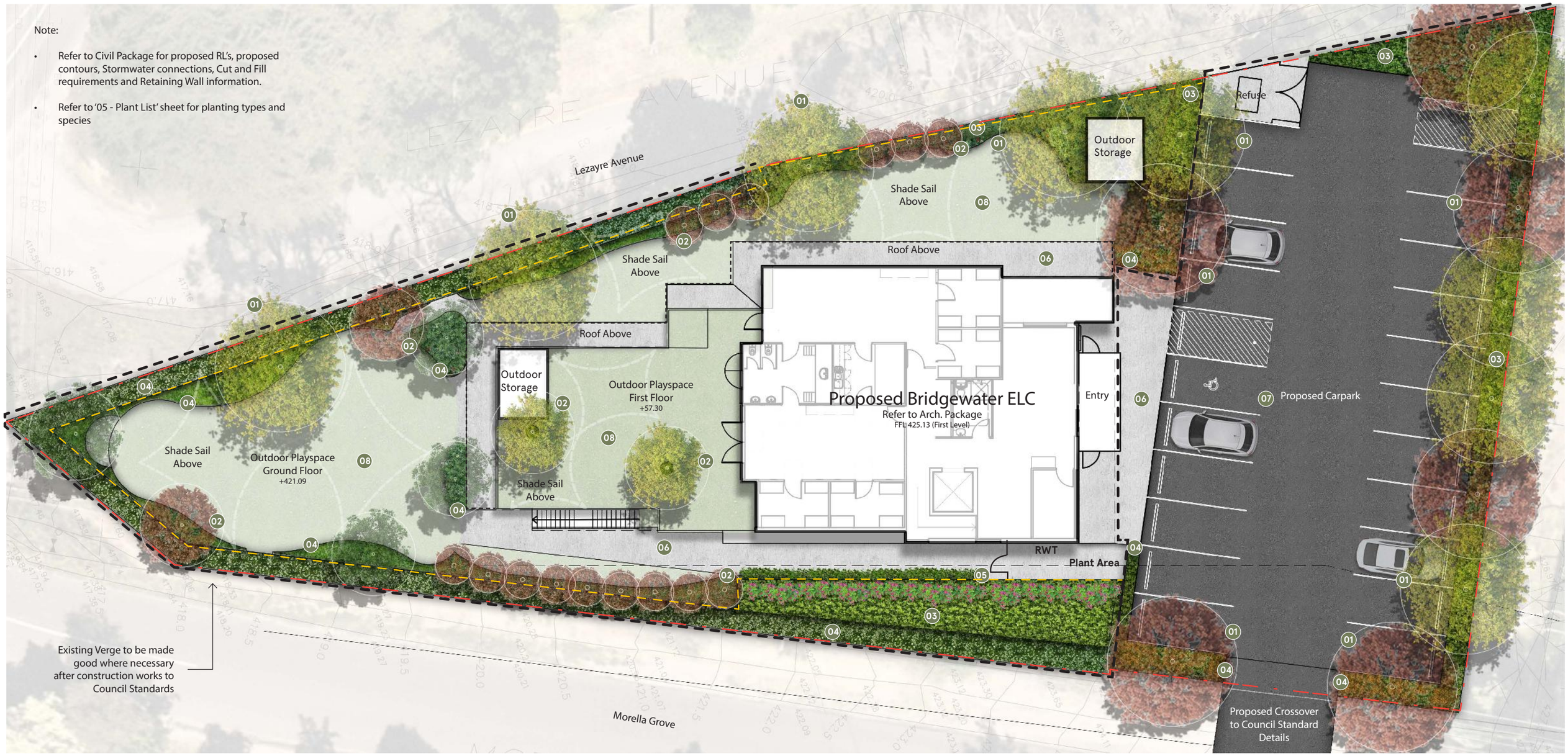
Date 24 February 2022
Scale 1:300
Sheet A3

dastudio

02_Ground – Site Planting Plan

Note:

- Refer to Civil Package for proposed RL's, proposed contours, Stormwater connections, Cut and Fill requirements and Retaining Wall information.
- Refer to '05 - Plant List' sheet for planting types and species



Legend

01 **Proposed Medium Feature Tree**
Medium canopied rounded tree species and to provide shade, visual amenity and landscape softening to the childcare centre.

02 **Proposed Small Screen Tree**
Smaller growing trees to provide visual amenity and also act as privacy screening to the adjacent properties.

03 **Proposed Screen Planting**
Dense planting to boundaries to provide visual amenity and privacy screening to neighbouring properties.

04 **Proposed Shrubs and Groundcovers**
Mass planting to assist in building presentation to the streetscape and to provide visual amenity to the carpark and play space.

05 **Proposed Climbing Plants**
Climbing plants on steel tension wire situated at the front of the car park to provide privacy and softening refer to Arch Elevations for more information.

06 Proposed Concrete (refer to Arch. package)

07 Proposed Asphalt (refer to Arch. package)

08 Proposed Outdoor Play - refer to '04 - Materials + Character' sheet

Property Boundary

RW + Fence - Retaining wall as per Arch. Package

RW - Retaining wall as per Civil Package

Job 2206
Project Bridgewater Childcare
Address 23 Morella Grove
Bridgewater SA 5155

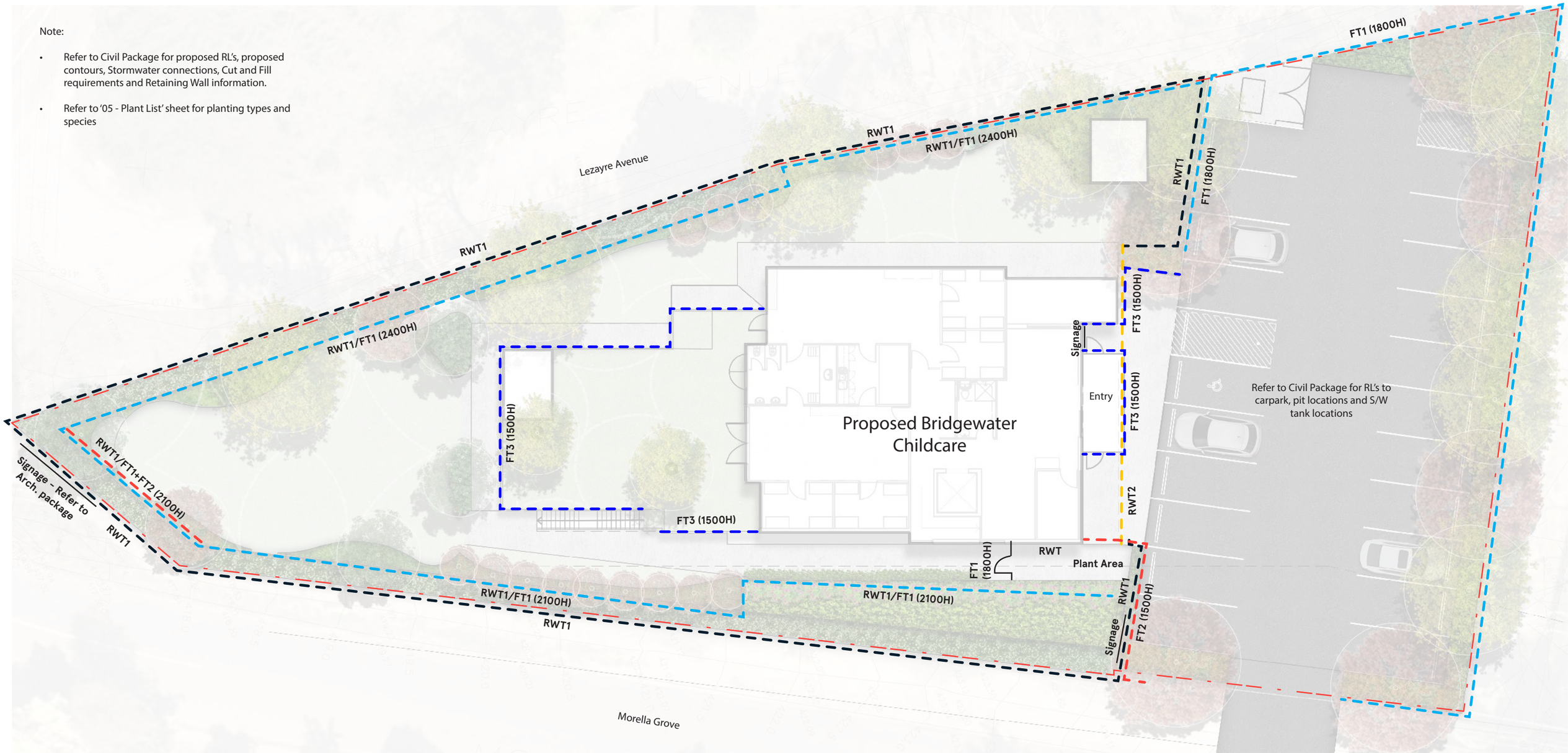
Date 24 February 2022
Scale 1:200
Sheet A3

dastudio

03_Fence and Retaining Design Intent

Note:

- Refer to Civil Package for proposed RL's, proposed contours, Stormwater connections, Cut and Fill requirements and Retaining Wall information.
- Refer to '05 - Plant List' sheet for planting types and species



Legend

	Property Boundary	**RWT1**	RWT1 concrete sleeper - Retaining wall as per Civil Package	**FT2**	FT2 Batten Fence - Fence as per Arch Package
RWT1/FT1	RWT1/FT1 RW1 concrete sleeper + Colourbond Fence - Retaining wall as per Civil Package	**RWT2**	RWT2 concrete block - Retaining wall as per Civil Package	**FT3**	FT3 Glass Balustrade - Fence as per Arch Package

Job 2206
Project Bridgewater Childcare
Address 23 Morella Grove
Bridgewater SA 5155

Date 24 February 2022
Scale 1:200
Sheet A3

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04_ Materials + Character


Broom Finished Concrete


Rubber Softfall


Certified Play Sand


Timber Decking


Irrigated Turf


Certified Play Dirt

05_Plant List


Ace


Lag


Pru


Pho


Mur


Syz


Cal


Acm


Lir


Jas


Dic


Har

SITE PLAN: PROPOSED PLANTING PALETTE

CODE	BOTANICAL NAME	COMMON NAME	SPACING	HEIGHT & WIDTH AT MATURITY (m)
1.	**MEDIUM FEATURE TREE**			
Pis	*Pistacia chinensis*	Chinese Pistachio	As shown	8 x 6 (H x W)
Ace	*Acer rubrum 'October Glory'*	October Glory	As shown	13 x 9 (H x W)
Lag	*Lagerstroemia indica x fauriei 'Natchez'*	Crepe Myrtle (White)	As shown	6 x 4 (H x W)
Cer	*Cercis canadensis*	Forest Pansy	As shown	5 x 5 (H x W)
Euc	*Eucalyptus leucoxylon*	'Euky Dwarf'	As shown	4-6 x 3-4 (H x W)
2.	**SMALL SCREEN TREE**			
Pyr	*Pyrus calleryana 'Capital'*	Ornamental Pear	As shown	12 x 1-3 (H x W)
Pru	*Prunus cerasifera*	Oakville Crimson Spire	As shown	6 x 2 (H x W)
Que	*Quercus palustris*	Pringreen' Green Pillar®	As shown	14 x 3 (H x W)
3.	**SCREEN PLANTING**			
Syz	*Syzygium australe Resilience*	Summerscent	1000 mm	5 x 2 (H x W)
Pho	*Photenia Red Robin*	Red Robin	1000 mm	1.5-2.5 x 1.5 (H x W)
Vib	*Viburnum odoratissimum*	Sweet Viburnum	1500 mm	2-4 x 3 (H x W)
Mur	*Murraya paniculata*	Mock Orange	1000 mm	4 x 3 (H x W)
Cvi	*Callistemon viminalis*	Slim	1000 mm	3 x 1.3 (H x W)
4.	**SHRUBS AND GROUNDCOVERS**			
Wes	*Westringia fruiticosa 'Jervis Gem'*	Coastal Rosemary	750mm	1 x 1.5 (H x W)
Acm	*Acmena smithii*	Allyn Magic	500mm	0.5 x 0.5 (H x W)
Dia	*Dianella revoluta*	Blue Flax-Lily	700mm	0.3-1 x 0.5-2 (H x W)
Har	*Hardenbergia violacea*	Native Sarsaparilla	1500mm	3 x 2 (H x W)
Fes	*Festuca glauca*	Elijah Blue	300mm	0.3 x 0.3 (H x W)
Sta	*Dichondra Repens*	Kidney Weed	500mm	0.15 x 2 (H x W)
Bra	*Brachyscome multifida*	Cut-Leaved Daisy	500mm	0.2 x 0.3 (H x W)
Lir	*Liriope Muscari 'Just Right'*	Just Right	500mm	0.5 x 0.5 (H x W)
Sca	*Scaevola Mauve Clusters*	Fan Flower	500mm	0.35-0.5 x 0.7-0.8 (H x W)
Myo	*Myoporum parvifolium 'Broad Leaf'*	Creeping Boobialla	1000mm	0.15-0.3 x 3 (H x W)
5.	**CLIMBERS**			
Tra	*Trachelospermum jasminoides*	Star Jasmine	1000mm	2 x 3 (H x W)

FIRST FLOOR: PROPOSED PLANTING PALETTE

CODE	BOTANICAL NAME	COMMON NAME	SPACING	HEIGHT & WIDTH AT MATURITY (m)
1.	**MEDIUM FEATURE TREE**			
Pis	*Pistacia chinensis*	Chinese Pistachio	As shown	8 x 6 (H x W)
Euc	*Eucalyptus leucoxylon*	'Euky Dwarf'	As shown	4-6 x 3-4 (H x W)
2.	**SHRUBS AND GROUNDCOVERS**			
Wes	*Westringia fruiticosa 'Mundi'*	Mundi	1000mm	0.4-0.5 x 1.5 (H x W)
Acm	*Acmena smithii*	Allyn Magic	500mm	0.5 x 0.5 (H x W)
Rap	*Raphiolepis indica 'Oriental Pearl'*	Oriental Pearl Indian Hawthorn	700mm	0.8-1 x 1 (H x W)
Sen	*Senecio serpens*	Senecio Blue Chalk Sticks	500mm	0.3 x 0.6-0.9 (H x W)
Gaz	*Acacia Cognata*	Limelight	1000mm	1 x 1 (H x W)
Bra	*Brachyscome multifida*	Cut-Leaved Daisy	500mm	0.2 x 0.3 (H x W)
Lir	*Liriope Muscari 'Just Right'*	Just Right	500mm	0.5 x 0.5 (H x W)
Sca	*Scaevola Mauve Clusters*	Fan Flower	500mm	0.35-0.5 x 0.7-0.8 (H x W)
Myo	*Myoporum parvifolium 'Broad Leaf'*	Creeping Boobialla	1000mm	0.15-0.3 x 3 (H x W)
Tra	*Trachelospermum jasminoides*	Star Jasmine	1000mm	2 x 3 (H x W)

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6123960 N
6123980 N
6124000 N
6124020 N
6124040 N
6124060 N
295660 E
295680 E
295700 E

SPIKE IN BITUMEN
E: 295685.029
N: 6123965.613
EL: 415.91m

LEZAYRE AVENUE

MORELLA GROVE

BDY PEG FD

TOP OF GUTTER

COLOURBOND SHED

PUMP

TANK

TOP OF GUTTER

TREE 3800

TREE 2700

TREE 2300

TREE 2400

GRASS

OVERGROWN VEGETATION

UNSURFACED TRACK

BITUMEN

DAMAGED PIT

SPIKE IN BITUMEN
E: 295714.695
N: 6124048.596
EL: 426.49m

F12021 A2

COORDINATE SYSTEM		
VERTICAL:	AHD	
HORIZONTAL:	GROUND PLANE ORIENTED TO: MGA 2020 ZONE 54	
SCALE: GROUND (CSF = 1.00004911)		

ADOPTED STATION & AUTHORITY		
PSM 6627/3874	RL:	412.142 SDB
PSM 6627/3874	E:	295605.795 SDB
	N:	6124008.009 SDB

SDB denotes SA Government survey data base values (Dated: / /2015)

LEGEND

- 47.51TK TOP KERB
- 47.36WT WATER TABLE
- 45.16FL FLOOR LEVEL
- 48.12IL INVERT LEVEL
- or TAP
- WATER METER
- SPRINKLR / IRRIG VALVE
- or HYDRANT
- DOMESTIC OUTLET
- DOWNPIPE
- DOMESTIC SUMP
- STORMWATER M'HOLE
- SEP / GRATING
- 47.51RR RIDGE LINE
- 47.36TG TOP OF GUTTER
- TEL. COMM. PILLAR / PIT
- TRAFFIC LIGHT
- SIGN / BUS SIGN
- LITTER BIN
- MAIL BOX / SIGNAL BOX
- TICKET MACHINE
- ROAD / ELEC. SERVICE
- WATER SV / FP
- ELEC. / GAS METER
- GAS SERVICE
- PSM / PEG / TBM
- SURVEY MARKS
- BOREHOLE
- POWER / LIGHT POLE
- CABLE MARKER
- STOBIE / WOODEN POLE
- POST / BOLLARD
- SEWER MH / IO / SIP
- UNKNOWN POINT / SERVICE
- 56.79TH TREE TOP HEIGHT
- EDGE OF VEGETN
- ROAD SIGN / HOARD,
- TREE / SHRUB
- Possible REGULATED / SIGNIFICANT TREE by measurement only (trunk greater than 2.0m circumference). Professional advice from council / arborist required.
- EDGE OF BITUMEN
- RIDGE LINE
- TOP OF GUTTER
- BOTTOM OF BANK
- TOP OF BANK
- CHANGE OF GRADE
- DRAIN
- SEWER PIPE UG
- TEL. COMM. UG
- WATER PIPE UG
- BUILDING
- WALL
- GI BUILDING
- CONCRETE
- FENCE
- XXXXXXXXXX GATE

0 2 4 8 12 16 20 m

1:200

ORIGINAL SHEET SIZE A2

Notes:

Property boundaries shown hereon have been compiled from the government records and have not been verified by field survey.

Aerial photography supplied by MetroMap, date 02/04/2021.

CONTOUR INTERVAL:	0.5m/2.0m	
SURVEY:	DAS	20.08.2021
DRAWN:	DAS	23.08.2021
CHECKED:	MRE	27.08.2021

Alexander & Symonds Pty Ltd
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+ Property + Land Development +
+ Construction + Mining +
+ Spatial Information Management +

Alexander Symonds Surveying Consultants

DETAIL AND LEVEL SURVEY
23 MORELLA GROVE
BRIDGEWATER

DRAWING No.	SHEET	REVISION
21A2884_Det20P(0)	1 OF 1	0

PROPOSED CHILDCARE CENTRE
23 MORELLA GROVE, BRIDGEWATER

TRAFFIC AND PARKING REPORT

CIRQA™

DISCLAIMER

DOCUMENT CONTROL

Report title:	Proposed Childcare Centre, 23 Morella Grove, Bridgewater Traffic and Parking Report
Project number:	21425
Client:	Marc Duncan
Client contact:	Future Urban Pty Ltd

Version	Date	Details/status	Prepared by	Approved by
Draft	27 Jan 22	For review	ABH	BNW
V1.0	16 Feb 22	For submission	ABH	BNW

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1. INTRODUCTION

CIRQA has been engaged to provide design and assessment advice for a proposed childcare centre at 23 Morella Grove Bridgewater. Specifically, CIRQA has been engaged to provide advice in respect to traffic and parking aspects of the proposal.

This report provides a review of the subject site, the proposed development, its access and parking provisions and the associated traffic impact on the adjacent road network. The traffic and parking assessments have been based upon plans prepared by ON architecture (drawings no. DA04 and DA05, dated 15 September 2021, refer Appendix A).

2. BACKGROUND

2.1 SUBJECT SITE

The subject site is located on the western side of Morella Grove in Bridgewater. The site is bound to the north by a residential property, Morella Grove to the east, the intersections of Morella Grove, Lezayre Avenue and Shannon Road to the south and Lezayre Avenue to the west.

The Planning and Design Code (P&D Code) indicates the site is located within a Rural Neighbourhood Zone, with the following overlays applicable:

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

The site is currently occupied by undeveloped land, with scattered vegetation and a private roadway which adjoins to the adjacent residential property.

2.2 ADJACENT ROAD NETWORK

2.2.1 ROADS & INTERSECTIONS

Morella Grove is a local road under the care and control of the Adelaide Hills Council. Adjacent the site, Morella Grove comprises an approximate 5.8 m

roadway. South of Trenouth Street, Morella Grove is two-way whereas a 'No Entry' sign has been installed on the section north of Trenouth Street restricting movements to southbound only. No footpaths are provided adjacent the site and cyclists are to use the road under a standard shared arrangement. Adjacent the site, the default urban speed limit of 50 km/h generally applies, albeit the a 25 km/h School Zone limits applies on the northern half of Morella Grove when children are present. Morella Grove continues north, terminating at the Bridgewater Primary School approximately 200 m north of the site.

Lezayre Avenue is a local road under the care and control of the Adelaide Hills Council. Adjacent the site, Lezayre Road comprises an approximate 4.0 m road way, providing one-way traffic in the northern direction. On-street parking is not accommodated on Lezayre Road. No footpaths are provided adjacent the site and cyclists are to use the road under a standard shared arrangement. Adjacent the site, the default urban speed limit of 50 km/h applies except for northern section of the road which has a 25 km/h School Zone applying when children are present. Lezayre Avenue provides access to a small number of residential properties and also provides the ingress route for the Bridgewater Primary School.

Shannon Road is a local road under the care and control of the Adelaide Hills Council. Adjacent the site, Shannon Road comprises an approximately 6.8 m wide roadway. On-street parking is not accommodated on Shannon Road. A footpath is provided on the southern side of Shannon Road, with kerb ramps provided at intersections. Cyclists can utilise the footpath and are also able to use the road under a standard shared arrangement. Adjacent the site, the default urban speed limit of 50 km/hr applies.

The intersection of Shannon Road and Lezayre Road, and the intersection of Morella Grove and Shannon Road are located approximately 18 m apart (centreline to centreline), with both located towards the southern end of the site. A pedestrian refuge is located between these two intersections. As Lezayre is only one-way, only left-in and right-in movements are allowed from Shannon Road. All turning manoeuvres are accommodated at the intersection of Shannon Road and Morella Grove.

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

Figure 1 – Location of the subject site and existing access with respect to the adjacent road network

2.3 PUBLIC TRANSPORT

Public transport services operate within close vicinity of the subject site on Morella Grove. Specifically, bus services operate from stops 45A on Carey Gully Road located within 250 m walking distance of the subject site. Bus routes operating from these stops include:

- Route 860F – Mount Barker to City; and
- Route 873 – Glenunga International High School to Mount Barker.

3. PROPOSED DEVELOPMENT

3.1 LAND USE AND YIELD

The proposed development comprises the demolition of the existing infrastructure on the subject site and the construction of an 80-place childcare centre.

3.2 ACCESS AND PARKING DESIGN

The site will be serviced by a 21-space parking area (inclusive of one space reserved exclusively for use by people with disabilities). The parking area will comply with the requirements of Australian/New Zealand Standard, *Parking Facilities Part 1: Off-street car parking* (AS/NZS 2890.1:2004) and Australian/New Zealand Standard, *Parking Facilities Part 6: Off-street parking for people with disabilities* (AS/NZS 2890.6:2009) in that:

- regular parking spaces will be 2.6 m wide and 5.4 m long;
- disabled parking spaces will be a minimum of 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 5.8 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;
- pedestrian sightline requirements will be provided at the site's access point.

Vehicle access to the site will be provided via a 7.0 m wide crossover on Morella Grove. Simultaneous turning movements will be accommodated at the access. All vehicles will be able to enter and exit the site in a forward direction. The location of the access point will not strictly meet the requirements of the Australian Standard in respect to separation from an opposite intersection. However, this is due to the very wide verge on Trenouth Street (the access restriction of the Standard is based on the prolongation of the opposite road reserve boundary). The access would, however, be offset from the opposite intersection with a reasonable level of separation (13 m centreline to centreline) and it is considered that the intent of the Standard is met.

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 an 8.8 m long Medium Rigid Vehicle (MRV). It is anticipated that such movements would be undertaken outside of peak periods (or opening hours). Refuse collection vehicle movements would be infrequent and for relatively short periods and it is considered that the arrangement will have minimal impact on traffic conditions on the adjacent roads (and is similar to conditions associated with regular Council waste collection services for surrounding residential properties).

Figure 2 illustrates the turn path for an MRV to enter and exit the site in a forward direction.

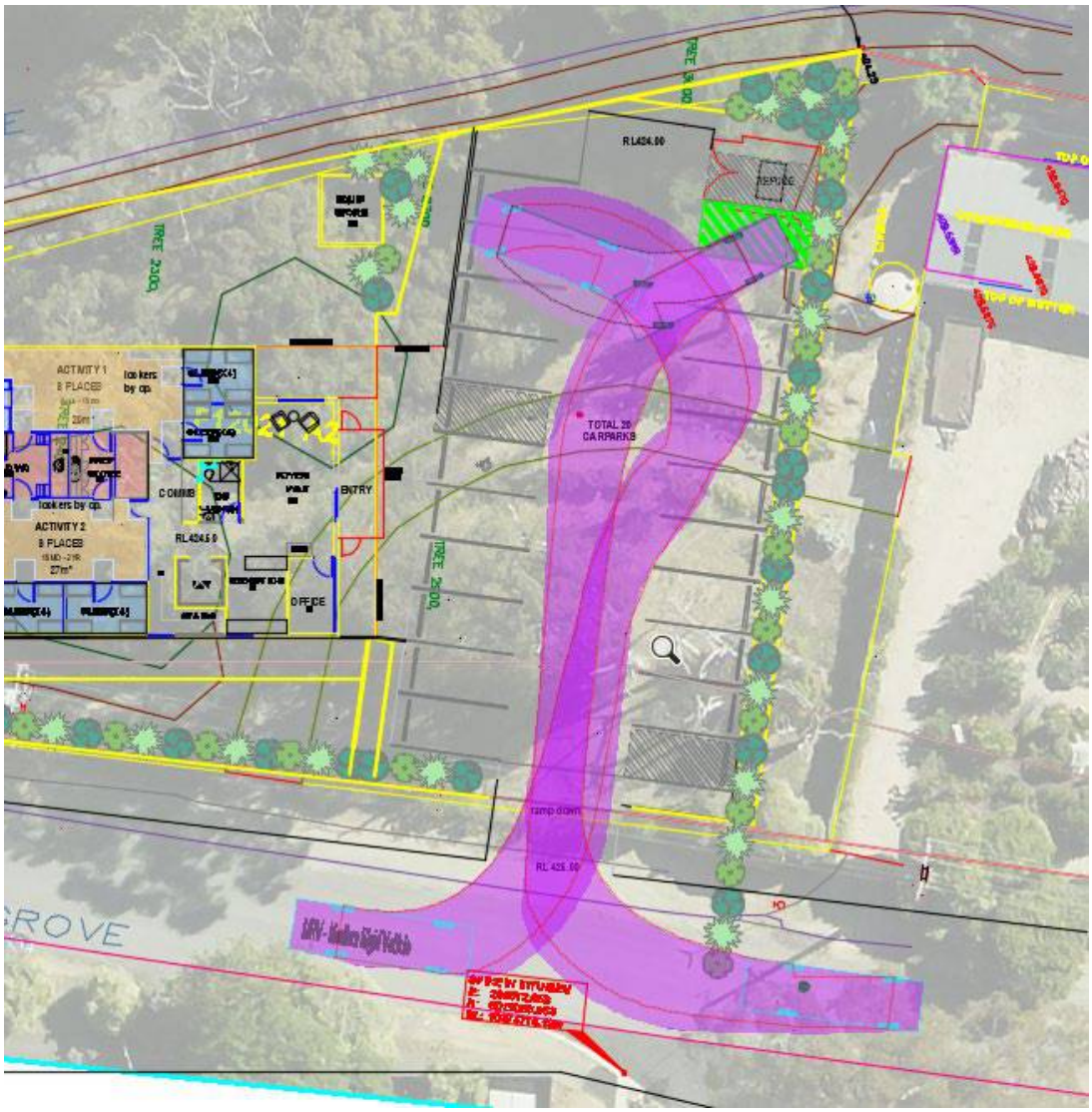

Figure 2 - MRV turning movements into and out of the site

4. PARKING ASSESSMENT

The Planning and Design Code (P&D Code) identifies a requirement of 0.25 spaces per child for land uses classified as child care centres.

Based upon a capacity of 80 children, the proposed child care centre would have a requirement for 20 spaces. Given that 21 spaces will be provided, the parking requirements of the Planning and Design Code are satisfied (and exceeded).

5. TRAFFIC ASSESSMENT

5.1 TRAFFIC GENERATION AND DISTRIBUTION

The RTA *"Guide to Traffic Generating Developments"* (the RTA Guide), and its subsequent updates, identifies peak (2-hour) period trip generation rates for childcare centre land uses. Specifically, the RTA Guide identifies rates of 0.8 trips per child in the am peak period (7:00 am to 9:00 am) and 0.7 trips per child in the pm peak period (4:00 pm to 6:00 pm).

It should be noted that the above traffic generation rates are based upon peak periods of two hours. In order to determine the peak hour traffic generation of the proposal, it has been assumed that 60% of the childcare peak period will occur during the peak hour (i.e. 0.48 am and 0.42 pm peak hour trips per child). Based upon these rates, the proposed development would generate in the order of 38 am and 34 pm peak hour trips.

Vehicle movements will be distributed to/from the site via the site's access on Morella Grove. For the purposes of this assessment, it has been assumed that:

- 50% of movements will enter the site and 50% will exit the site during both the am and pm peak hours.
- 70% of all movements will be via the Morella Grove/Shannon Road intersection, of those;
  - 25% will be to/from the east (via Shannon Road); and
  - 45% will be to/from the west (via Carey Gully Road);
- 30% of all movements will be to/from the north via Morella Grove (i.e. either associated with shared trips for the primary school or drivers accessing the site via Trenouth Street – noting that all egress movements to the north would be required to utilise Trenouth Street due to the one-way restriction in the northern section of Morella Grove).

On the basis of the above, additional vehicle movements have been forecast at the site's Morella Grove access and the adjacent Shannon Road intersection. Figure 3 illustrates the additional traffic volumes forecast during the am and (pm) peak hours.

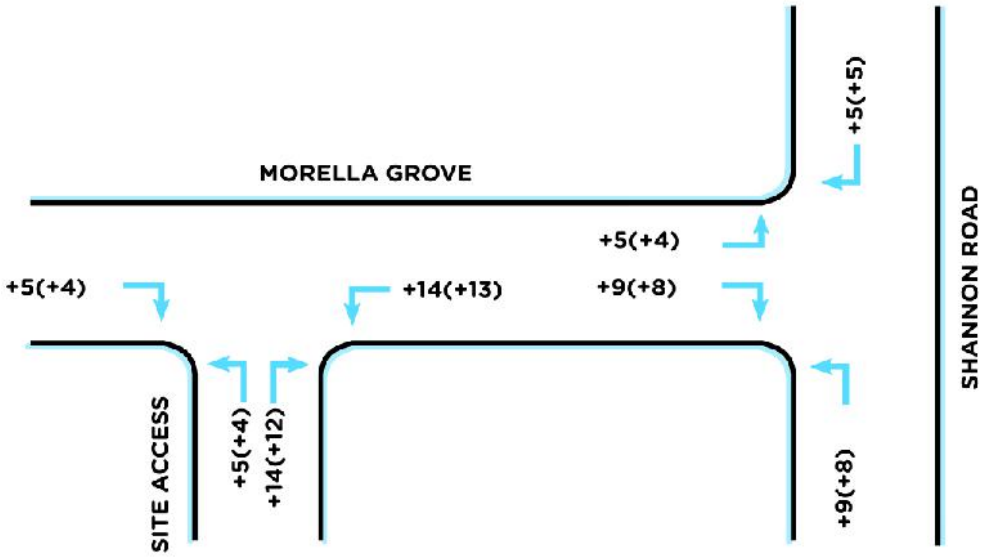

Figure 3 – Additional traffic volumes forecast at the Morella Grove/Shannon Road intersection during the am and (pm) peak hours

Given the nature of the surrounding area, Morella Grove and surrounding connecting roads are expected to experience relatively low traffic volumes. The most significant traffic period expected to occur on Morella Grove would be during the Bridgewater Primary School pickup and drop-off times. However, child care centres do not generate peak 10 to 15 minute periods of focussed traffic activity as occurs at schools. Child care centres have a more even distribution of movements over the two-hour morning and afternoon/evening periods. Furthermore, the pm peak period associated with child care centres typically does not overlap with and is later than the afternoon peak period associated with schools. There will also be a proportion of children of the child care centre with siblings at the adjacent primary school which will reduce the number of trips undertaken. The above factors limit the traffic impact associated with such a proposal.

Given the above factors and the low number of movements forecast, the trips generated by the proposed child care centre would be readily accommodated at the proposed access point and on the adjacent road network with minimal impact. The increase in traffic on any one section of Morella Grove or the adjacent roads will be relatively low and would not change the nature of function of these roads.

6. SUMMARY

The proposal comprises the construction of an 80-place childcare centre at 37 Morella Grove, Bridgewater. The development will be serviced by a 21-space parking area, inclusive of one space reserved exclusively for use by people with

disabilities. The site's parking area has been designed in accordance (and will comply) with the relevant requirements of the Australian Standards.

Vehicle access to the site will be provided via a crossover on Morella Grove, at which all turning movements will be accommodated. Pedestrian access will be provided via the site's frontage to Morella Grove.

Based upon Planning and Design Code parking requirement for 'child care centres', the proposal would have a requirement for 20 spaces to be provided on-site. Given that 21 spaces will be provided, the parking requirement of Planning and Design Code is satisfied (and exceeded).

With regard to traffic, the proposal is forecast to generate 38 am and 34 pm peak hour trips. Such vehicle movements will be distributed to the broader road network via Morella Grove and Shannon Road. Such volumes would be readily accommodated on the adjacent road network with minimal impact.

APPENDIX A

ON ARCHITECTURE PLANS

PROPOSED FIRST FLOOR PLAN

1:200

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Project

80 PLACE CHILD CARE FACILITY

23 Morella Grove, Bridgewater SA

Drawing

PROPOSED FIRST FLOOR PLAN

Scale	As indicated	Drawn	XL
Client			
Date	15/09/2021		
Job No.	202100082		
Dwg No.	DA04	Rev:	A3 SHEET

Ref: 21425|BNW

19 May 2022

Mr Marc Duncan
Future Urban Pty Ltd
Level 1, 74 Pirie Street
ADELAIDE SA 5000

Dear Marc,

PROPOSED CHILD CARE CENTRE
23 MORELLA GROVE, BRIDGEWATER

I refer to the proposed child care centre at 23 Morella Grove, Bridgewater (Application ID: 22005412). Specifically, this letter provides a response to the Request for Information provided by the Adelaide Hills Council dated 12 April 2022.

Key queries from Council relating to the traffic assessment have been identified in italics below, followed by my response.

> *"Traffic impact report be provided that demonstrates the development can be accommodated by the surrounding road network, with focus on traffic movement at the four way intersection and the increased volumes of potentially 80 vehicles extra at peak school times."*

A traffic impact assessment was provided as part of the development application which detailed the forecast traffic generation and associated impact on the adjacent roads. Nevertheless, to further respond to Council's comment, additional impact analysis has been prepared. The additional analysis has been based on a traffic survey undertaken by Austraffic Pty Ltd at the intersections of Shannon Road with Morella Grove/Fielding Road and Lezayre Avenue on Monday 2 May 2022. The existing am and pm peak hour volumes at the intersections have been identified from the surveys (which align with the set-down/pick-up periods associated with the nearby Bridgewater Primary School).

For the purposes of the additional analysis, it has been assumed that the peak periods associated with the proposed child care centre and the nearby school directly align (which is a conservative assumption). The existing and forecast future traffic volumes at the intersections have been assessed using SIDRA intersection analysis

software. Given the proximity of the intersections, they have been networked (linked) within the modelling scenarios. The SIDRA results are attached to this letter and summarised below.

In respect to existing conditions, modelling of the survey results (i.e. existing traffic volumes) confirm that the intersections operate with:

- very low overall Degrees of Saturation (0.108 or less) which indicates the intersections perform well below capacity and have significant remaining capacity to accommodate additional traffic volumes;
- average delays for movements at the intersections of 3 seconds or less which are very low (through bound delays on Shannon Road are negligible);
- low levels of queuing for turning movements with the 95th percentile queues for each movement being less than 1 vehicle; and
- every individual (turn or straight through) movement has an existing Level of Service of 'A' (the best level of service).

In respect to the future conditions (once the proposed development becomes operational), the additional volumes will result in:

- retention of very low overall Degrees of Saturation (0.114 or less) with significant additional capacity remaining even after the addition of the forecast volumes;
- very similar average delays at the intersections of 3 seconds or less (with negligible delay still associated with through movements);
- retention of low levels of queuing with the 95th percentile queues for each turning movement remaining at less than 1 vehicle; and
- retention of a Level of Service of 'A' for all movements at the intersection.

The detailed survey data and subsequent intersection modelling confirm the original conclusions of the traffic report that the intersections will easily accommodate the additional volumes. The traffic impact of the proposal on the intersection (and associated roads) will be minimal as supported by the additional analysis provided.

"Due to the road network configuration Council requires access to be Right In, Right Out only."

The section of Morella Grove adjacent the site is two-way (while the northern section of Morella Grove is one-way only, this restriction applies north of Trenouth Street). As such, the intent behind Council's request is unclear. If the requested restrictions were

implemented, drivers entering the site (from Shannon Road) would be required to enter via a 'loop' around Lezayre Avenue and Morella Grove. Such a route is circuitous and, noting that two-way movement is permitted on Morella Grove adjacent the site, a proportion of drivers may choose to ignore the signs and enter via a left-turn in. Similarly, if left-out movements are restricted, drivers may still choose to illegally exit via Trenouth Street (albeit the number of such movements would be very low). Should Council be concerned that a proportion of parents will exit directly north to Bridgewater Primary School, there would be potential for improved linemarking and signage to more appropriately define the traffic flow arrangements on Morella Grove.

Given the traffic analysis indicates no issues with the accommodation of the additional movements at the intersection of Morella Grove and Shannon Road and that there are low traffic volumes on Morella Grove, it is considered reasonable, safe and appropriate to retain left-turn movements into and out of the site.

I trust the above supplementary information is sufficient to address the comments provided by Council and the representors. However, please feel free to contact me on (08) 7078 1801 should you require any additional information.

Yours sincerely,

BEN WILSON
Director | CIRQA Pty Ltd

Encl. - SIDRA results

MOVEMENT SUMMARY

Site: 101 [EXAM - Lezayre Ave/Morella Grv (Site Folder: EXISTING)]

Network: N101 [AM - Morella Grove Network (Network Folder: EXISTING)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Shannon Road [E]														
5	T1	172	1.3	172	1.3	0.106	0.1	LOS A	0.1	0.5	0.07	0.08	0.07	59.3
6	R2	26	3.8	26	3.8	0.106	2.5	LOS A	0.1	0.5	0.07	0.08	0.07	54.4
Approach		198	1.6	198	1.6	0.106	0.4	NA	0.1	0.5	0.07	0.08	0.07	58.6
West: Shannon Road [W]														
10	L2	84	0.0	84	0.0	0.060	5.6	LOS A	0.0	0.0	0.00	0.43	0.00	54.8
11	T1	29	0.0	29	0.0	0.060	0.0	LOS A	0.0	0.0	0.00	0.43	0.00	52.9
Approach		114	0.0	114	0.0	0.060	4.1	NA	0.0	0.0	0.00	0.43	0.00	54.5
All Vehicles		312	1.0	312	1.0	0.106	1.8	NA	0.1	0.5	0.04	0.21	0.04	56.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network 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).
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 [EXAM - Morella Grv/Shannon Rd/Fielding Rd (Site Folder: EXISTING)]

Network: N101 [AM - Morella Grove Network (Network Folder: EXISTING)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Fielding Road [S]														
1	L2	3	0.0	3	0.0	0.004	5.8	LOS A	0.0	0.0	0.20	0.53	0.20	50.2
2	T1	1	0.0	1	0.0	0.004	4.6	LOS A	0.0	0.0	0.20	0.53	0.20	53.4
3	R2	1	0.0	1	0.0	0.004	6.0	LOS A	0.0	0.0	0.20	0.53	0.20	52.7
Approach		5	0.0	5	0.0	0.004	5.6	LOS A	0.0	0.0	0.20	0.53	0.20	51.8
East: Shannon Road [E]														
4	L2	1	0.0	1	0.0	0.054	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	58.2
5	T1	103	1.1	103	1.1	0.054	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
6	R2	1	0.0	1	0.0	0.054	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.6
Approach		105	1.1	105	1.1	0.054	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.7
North: Morella Grove [N]														
7	L2	9	0.0	9	0.0	0.100	5.6	LOS A	0.1	1.0	0.18	0.59	0.18	53.2
8	T1	1	0.0	1	0.0	0.100	4.7	LOS A	0.1	1.0	0.18	0.59	0.18	53.3
9	R2	92	0.0	92	0.0	0.100	6.1	LOS A	0.1	1.0	0.18	0.59	0.18	50.0
Approach		102	0.0	102	0.0	0.100	6.1	LOS A	0.1	1.0	0.18	0.59	0.18	50.6
West: Shannon Road [W]														
10	L2	4	0.0	4	0.0	0.015	2.3	LOS A	0.0	0.0	0.02	0.09	0.02	56.2
11	T1	24	0.0	24	0.0	0.015	0.0	LOS A	0.0	0.0	0.02	0.09	0.02	59.2
12	R2	1	0.0	1	0.0	0.015	2.2	LOS A	0.0	0.0	0.02	0.09	0.02	55.1
Approach		29	0.0	29	0.0	0.015	0.4	NA	0.0	0.0	0.02	0.09	0.02	58.6
All Vehicles		242	0.5	242	0.5	0.100	2.8	NA	0.1	1.0	0.08	0.28	0.08	55.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network 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).
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 - Lezayre Ave/Morella Grv (Site Folder: EXISTING)]

Network: N101 [PM - Morella Grove Network (Network Folder: EXISTING)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Shannon Road [E]														
5	T1	119	1.8	119	1.8	0.070	0.1	LOS A	0.0	0.3	0.06	0.06	0.06	59.4
6	R2	14	0.0	14	0.0	0.070	2.5	LOS A	0.0	0.3	0.06	0.06	0.06	54.9
Approach		133	1.6	133	1.6	0.070	0.3	NA	0.0	0.3	0.06	0.06	0.06	58.9
West: Shannon Road [W]														
10	L2	65	0.0	65	0.0	0.069	5.6	LOS A	0.0	0.0	0.00	0.30	0.00	55.8
11	T1	64	3.3	64	3.3	0.069	0.0	LOS A	0.0	0.0	0.00	0.30	0.00	54.9
Approach		129	1.6	129	1.6	0.069	2.8	NA	0.0	0.0	0.00	0.30	0.00	55.5
All Vehicles		262	1.6	262	1.6	0.070	1.5	NA	0.0	0.3	0.03	0.18	0.03	56.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network 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).
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 - Morella Grv/Shannon Rd/Fielding Rd (Site Folder: EXISTING)]

Network: N101 [PM - Morella Grove Network (Network Folder: EXISTING)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Fielding Road [S]														
1	L2	1	0.0	1	0.0	0.003	5.7	LOS A	0.0	0.0	0.18	0.53	0.18	50.6
2	T1	1	0.0	1	0.0	0.003	4.6	LOS A	0.0	0.0	0.18	0.53	0.18	53.6
3	R2	1	0.0	1	0.0	0.003	6.0	LOS A	0.0	0.0	0.18	0.53	0.18	52.9
Approach		3	0.0	3	0.0	0.003	5.4	LOS A	0.0	0.0	0.18	0.53	0.18	52.7
East: Shannon Road [E]														
4	L2	1	0.0	1	0.0	0.036	5.6	LOS A	0.0	0.0	0.01	0.02	0.01	58.2
5	T1	67	1.4	67	1.4	0.036	0.0	LOS A	0.0	0.0	0.01	0.02	0.01	59.6
6	R2	1	3.1	1	3.1	0.036	5.7	LOS A	0.0	0.0	0.01	0.02	0.01	57.4
Approach		69	1.4	69	1.4	0.036	0.2	NA	0.0	0.0	0.01	0.02	0.01	59.5
North: Morella Grove [N]														
7	L2	17	0.0	17	0.0	0.078	5.7	LOS A	0.1	0.8	0.19	0.58	0.19	53.1
8	T1	1	0.0	1	0.0	0.078	4.6	LOS A	0.1	0.8	0.19	0.58	0.19	53.3
9	R2	65	0.0	65	0.0	0.078	6.1	LOS A	0.1	0.8	0.19	0.58	0.19	50.0
Approach		83	0.0	83	0.0	0.078	6.0	LOS A	0.1	0.8	0.19	0.58	0.19	51.1
West: Shannon Road [W]														
10	L2	8	0.0	8	0.0	0.034	2.3	LOS A	0.0	0.1	0.04	0.11	0.04	56.0
11	T1	51	4.2	51	4.2	0.034	0.0	LOS A	0.0	0.1	0.04	0.11	0.04	59.0
12	R2	5	0.0	5	0.0	0.034	2.1	LOS A	0.0	0.1	0.04	0.11	0.04	54.9
Approach		64	3.3	64	3.3	0.034	0.5	NA	0.0	0.1	0.04	0.11	0.04	58.3
All Vehicles		220	1.4	220	1.4	0.078	2.5	NA	0.1	0.8	0.09	0.26	0.09	55.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network 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).
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 [FUAM - Lezayre Ave/Morella Grv (Site Folder: FUTURE)]

Network: N101 [AM - Morella Grove Network (Network Folder: FUTURE)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Shannon Road [E]														
5	T1	181	1.3	181	1.3	0.111	0.1	LOS A	0.1	0.5	0.07	0.07	0.07	59.3
6	R2	26	3.8	26	3.8	0.111	2.5	LOS A	0.1	0.5	0.07	0.07	0.07	54.4
Approach		207	1.6	207	1.6	0.111	0.4	NA	0.1	0.5	0.07	0.07	0.07	58.6
West: Shannon Road [W]														
10	L2	84	0.0	84	0.0	0.065	5.6	LOS A	0.0	0.0	0.00	0.40	0.00	55.0
11	T1	39	0.0	39	0.0	0.065	0.0	LOS A	0.0	0.0	0.00	0.40	0.00	53.4
Approach		123	0.0	123	0.0	0.065	3.8	NA	0.0	0.0	0.00	0.40	0.00	54.7
All Vehicles		331	1.0	331	1.0	0.111	1.7	NA	0.1	0.5	0.04	0.19	0.04	56.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network 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).
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 [FUAM - Morella Grv/Shannon Rd/Fielding Rd (Site Folder: FUTURE)]

Network: N101 [AM - Morella Grove Network (Network Folder: FUTURE)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Fielding Road [S]														
1	L2	3	0.0	3	0.0	0.004	5.8	LOS A	0.0	0.0	0.20	0.53	0.20	50.2
2	T1	1	0.0	1	0.0	0.004	4.6	LOS A	0.0	0.0	0.20	0.53	0.20	53.4
3	R2	1	0.0	1	0.0	0.004	6.1	LOS A	0.0	0.0	0.20	0.53	0.20	52.7
Approach		5	0.0	5	0.0	0.004	5.6	LOS A	0.0	0.0	0.20	0.53	0.20	51.8
East: Shannon Road [E]														
4	L2	1	0.0	1	0.0	0.058	5.6	LOS A	0.0	0.1	0.02	0.04	0.02	58.0
5	T1	103	1.1	103	1.1	0.058	0.0	LOS A	0.0	0.1	0.02	0.04	0.02	59.2
6	R2	6	0.0	6	0.0	0.058	5.6	LOS A	0.0	0.1	0.02	0.04	0.02	57.3
Approach		111	1.0	111	1.0	0.058	0.4	NA	0.0	0.1	0.02	0.04	0.02	58.9
North: Morella Grove [N]														
7	L2	15	0.0	15	0.0	0.114	5.6	LOS A	0.2	1.1	0.17	0.59	0.17	53.2
8	T1	1	0.0	1	0.0	0.114	4.7	LOS A	0.2	1.1	0.17	0.59	0.17	53.3
9	R2	101	0.0	101	0.0	0.114	6.2	LOS A	0.2	1.1	0.17	0.59	0.17	50.0
Approach		117	0.0	117	0.0	0.114	6.1	LOS A	0.2	1.1	0.17	0.59	0.17	50.7
West: Shannon Road [W]														
10	L2	14	0.0	14	0.0	0.020	2.3	LOS A	0.0	0.0	0.02	0.20	0.02	55.5
11	T1	24	0.0	24	0.0	0.020	0.0	LOS A	0.0	0.0	0.02	0.20	0.02	58.4
12	R2	1	0.0	1	0.0	0.020	2.2	LOS A	0.0	0.0	0.02	0.20	0.02	54.4
Approach		39	0.0	39	0.0	0.020	0.9	NA	0.0	0.0	0.02	0.20	0.02	57.2
All Vehicles		272	0.4	272	0.4	0.114	3.0	NA	0.2	1.1	0.09	0.31	0.09	54.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network 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).
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 [FUPM - Lezayre Ave/Morella Grv (Site Folder: FUTURE)]

Network: N101 [PM - Morella Grove Network (Network Folder: FUTURE)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Shannon Road [E]														
5	T1	127	1.8	127	1.8	0.075	0.1	LOS A	0.0	0.3	0.06	0.06	0.06	59.4
6	R2	14	0.0	14	0.0	0.075	2.5	LOS A	0.0	0.3	0.06	0.06	0.06	54.9
Approach		141	1.6	141	1.6	0.075	0.3	NA	0.0	0.3	0.06	0.06	0.06	59.0
West: Shannon Road [W]														
10	L2	65	0.0	65	0.0	0.073	5.6	LOS A	0.0	0.0	0.00	0.28	0.00	56.0
11	T1	73	3.3	73	3.3	0.073	0.0	LOS A	0.0	0.0	0.00	0.28	0.00	55.2
Approach		138	1.7	138	1.7	0.073	2.6	NA	0.0	0.0	0.00	0.28	0.00	55.7
All Vehicles		279	1.7	279	1.7	0.075	1.5	NA	0.0	0.3	0.03	0.17	0.03	57.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network 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).
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 [FUPM - Morella Grv/Shannon Rd/Fielding Rd (Site Folder: FUTURE)]

Network: N101 [PM - Morella Grove Network (Network Folder: FUTURE)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Fielding Road [S]														
1	L2	1	0.0	1	0.0	0.003	5.7	LOS A	0.0	0.0	0.18	0.53	0.18	50.6
2	T1	1	0.0	1	0.0	0.003	4.6	LOS A	0.0	0.0	0.18	0.53	0.18	53.6
3	R2	1	0.0	1	0.0	0.003	6.1	LOS A	0.0	0.0	0.18	0.53	0.18	52.9
Approach		3	0.0	3	0.0	0.003	5.5	LOS A	0.0	0.0	0.18	0.53	0.18	52.7
East: Shannon Road [E]														
4	L2	1	0.0	1	0.0	0.039	5.7	LOS A	0.0	0.1	0.03	0.06	0.03	57.7
5	T1	67	1.4	67	1.4	0.039	0.0	LOS A	0.0	0.1	0.03	0.06	0.03	58.7
6	R2	6	3.1	6	3.1	0.039	5.7	LOS A	0.0	0.1	0.03	0.06	0.03	57.0
Approach		75	1.5	75	1.5	0.039	0.6	NA	0.0	0.1	0.03	0.06	0.03	58.4
North: Morella Grove [N]														
7	L2	21	0.0	21	0.0	0.090	5.7	LOS A	0.1	0.9	0.19	0.58	0.19	53.1
8	T1	1	0.0	1	0.0	0.090	4.7	LOS A	0.1	0.9	0.19	0.58	0.19	53.3
9	R2	74	0.0	74	0.0	0.090	6.1	LOS A	0.1	0.9	0.19	0.58	0.19	50.0
Approach		96	0.0	96	0.0	0.090	6.0	LOS A	0.1	0.9	0.19	0.58	0.19	51.1
West: Shannon Road [W]														
10	L2	17	0.0	17	0.0	0.039	2.3	LOS A	0.0	0.1	0.03	0.16	0.03	55.7
11	T1	51	4.2	51	4.2	0.039	0.0	LOS A	0.0	0.1	0.03	0.16	0.03	58.6
12	R2	5	0.0	5	0.0	0.039	2.1	LOS A	0.0	0.1	0.03	0.16	0.03	54.6
Approach		73	2.9	73	2.9	0.039	0.7	NA	0.0	0.1	0.03	0.16	0.03	57.6
All Vehicles		246	1.3	246	1.3	0.090	2.8	NA	0.1	0.9	0.10	0.30	0.10	54.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network 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).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Bridgewater Child Care Centre

Environmental Noise Assessment

December 2021

S7125C3

sonus.

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Document Title	:	Bridgewater Child Care Centre Environmental Noise Assessment
Document Reference	:	S7125C3
Date	:	December 2021
Author	:	Chris Turnbull, MAAS

INTRODUCTION

An environmental noise assessment has been made of the proposed child care centre to be located at 23 Morella Grove, Bridgewater.

The proposed child care centre will comprise two outdoor play areas which will accommodate children of various ages, indoor areas, and a carpark which is accessed via Morella Grove. Residences are located adjacent to the subject site to the north, across Morella Grove to the east, north-east and south-east and across Lezayre Avenue to the west. Appendix A shows the location of the site and its surroundings.

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

The assessment has been based on the following:

- *On Architecture* drawing for the Proposed Child Care Centre with the *Job No: 202100082, Drawing No: DA02, DA03, DA04, DA05, DA07, DA08, DA09 and DA10, all dated 15/09/2021;*
- Previous noise measurements and procurement of data from similar sites for mechanical plant and car parking activity;
- The understanding that the total number and age of children at the centre will be:
    - 16 x 0–2-year-olds;
    - 20 x 2–3-year-olds; and
    - 44 x 3–5-year-olds.
- The understanding that the children will be outside for an average of 6 hours during the day.

CRITERIA

Planning and Design Code

The subject site is located within the Adelaide Hills Council and is subject to the provisions of the *Planning and Design Code* (the Code).

In accordance with the Code, the proposed facility and nearby noise sensitive locations are located within the "Rural Neighbourhood" zone.

The Code has been reviewed and particular regard has been given to the following provisions:

Part 2 – Zones and Sub Zones

Rural Neighbourhood Zone

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.

Part 4 – General Development Policies

Interface between Land Uses

DESIRED OUTCOME

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

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
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.	DTS/DPF 1.2 None are applicable

<table>
<tr><th>Performance Outcome</th><th>Deemed-to-Satisfy Criteria / Designated Performance Feature</th></tr>
<tr><td colspan="2">Hours of Operation</td></tr>
<tr><td>PO 2.1
Non-residential development does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) or an adjacent zone primarily for sensitive receivers through its hours of operation having regard to:
a) the nature of the development
b) measures to mitigate off-site impacts
c) the extent to which the development is desired in the zone
d) measures that might be taken in an adjacent zone primarily for sensitive receivers that mitigate adverse impacts without unreasonably compromising the intended use of that land.</td><td>DTS/DPF 2.1
Development operating within the following hours:
<table><tr><th>Class of Development</th><th>Hours of operation</th></tr><tr><td>Consulting room</td><td>7am to 9pm, Monday to Friday
8am to 5pm, Saturday</td></tr><tr><td>Office</td><td>7am to 9pm, Monday to Friday
8am to 5pm, Saturday</td></tr><tr><td>Shop, other than any one or combination of the following:
(a) restaurant
(b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone</td><td>7am to 9pm, Monday to Friday
8am to 5pm, Saturday and Sunday</td></tr></table></td></tr>
</table>

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Activities Generating Noise or Vibration	
PO 4.1 Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).	DTS/DPF 4.1 Noise that affects sensitive receivers achieves the relevant Environment Protection (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

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 of concern. However, in some situations, where adjacent residents 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 residents in the vicinity of the proposed development are sensitive to the sound of children's voices.

Criteria

Deemed-to-Satisfy Criteria / Designated Performance Feature 4.1 references the *Environment Protection (Noise) Policy.* The current version is the *Environment Protection (Noise) Policy 2007* (the Policy). However, the noise from children playing is specifically excluded from assessment under the Policy. In these circumstances, reference is made to the recommendations of the *Guidelines for Community Noise* (the **Guidelines**) published by the *World Health Organisation (*the **WHO***)* with regard to annoyance during the day.

The WHO guidelines include:

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

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

Assessment

The noise from children in outdoor areas has previously been measured at similar child care facilities. Based on these measurements, the noise from the proposed facility has been predicted for the centre operating at full capacity in all age groups, totalling 80 children.

The noise levels generated from children playing in outdoor areas, which have been used as the basis of this assessment, are provided in Appendix B (provided as *sound power levels* for children of various ages).

In order to achieve the assessment criterion, the following treatments are recommended:

GROUND-FLOOR:

- Ensure the fences marked-up in Figure 1 (**Ground-Floor**) are constructed as follows:
    - A minimum of 2.1m high and from a material such as 0.42BMT sheet steel (such as Colorbond) for the extent shown as **GREEN**;
    - A minimum of 2.4m high and from a material such as 0.42BMT sheet steel (such as Colorbond) for the extent shown as **RED**;
- Ensure fences are sealed airtight at all junctions, including between panels and at the ground.

FIRST-FLOOR:

- Ensure the fences marked-up in Figure 1 (**First-Floor**) are constructed to a minimum of 1.5m high and from a solid material such as glass or Perspex or a solid wall material for the extent shown in **BLUE**; and,
- Ensure the fences are sealed airtight at all junctions, including with upper deck and at vertical junctions;

Figure 1: *Site plan and recommended acoustic treatments.*

With the acoustic treatment described above incorporated into the site, the predicted noise level for the purposes of comparison with the WHO criterion is no more than:

- 50 dB(A) at the residences to the west;
- 46 dB(A) at the residences to the east;
- 42 dB(A) at the residences to the north; and,
- 36 dB(A) at the residences to the south;

Which is 50 dB(A) or less at all residences and therefore the WHO recommendation to protect against annoyance is achieved.

CAR PARK ACTIVITY & MECHANICAL PLANT

Criteria

Deemed-to-Satisfy Criteria / Designated Performance Feature 4.1 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 Planning and Design Code zones in which the noise source (child care centre) and the noise receivers (residences) are located. In this instance, the Policy provides the following goal noise levels:

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

When measuring or predicting noise levels for comparison with the Policy, penalties may be applied to the average goal noise levels for each characteristic of tone, impulse, low frequency and modulation of the noise source. To apply a penalty, the characteristic must be considered dominant in the existing acoustic environment. The application of penalties is discussed further in the Assessment section of this report.

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 vehicle doors, vehicles starting, vehicles idling, and vehicles moving into and accelerating away from their parked position;
- 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 predictions have been based on the fences in figure 1 being installed and the following assumed activity levels within any 15-minute period[1];

- Day Time (7am to 10pm)
    - 10 vehicle movements into and 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 space.
- Night Time (6am to 7am)
    - 5 vehicle movements into and 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 space.

[1] Default assessment period of the Policy

Based on the predictions, in order to achieve the assessment criteria, the following acoustic treatment measures are recommended:

- Locate the mechanical plant within the **YELLOW** area designated in Figure 2 (**Ground-Floor**); and,
- Ensure the fences marked-up in Figure 2 **(First-Floor)** are a minimum of 1.8m high and from a material such as 0.42BMT sheet steel (such as Colorbond) for the extent shown as **ORANGE**;

Figure 2: *Site plan and recommended acoustic treatments.*

It is debatable whether a penalty would be applicable at any residences as a result of the intermittent noise in the carpark, given the existing exposure to traffic noise from Carey Gully Road, Princes Highway, Morella Grove and Lezayre Avenue. Notwithstanding, a 5dB(A) penalty has been conservatively added to the predicted noise levels for all residences exposed to the character of noise from the onsite vehicles.

Based on the above, the predicted noise levels at residences in the vicinity due to car park activity and mechanical plant are not more than 46 dB(A) during the day, and no more than 39 dB(A) at night (including penalties). Therefore, the Policy goal noise levels will be achieved at all residences.

The instantaneous maximum noise levels have also been predicted for all the nearby residences. 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.

With the recommended treatments incorporated, the predicted maximum instantaneous noise levels are no more than 56dB(A), therefore achieving the maximum instantaneous (L_{max}) noise level criterion of the Policy at all the residences.

CONCLUSION

An environmental noise assessment has been made of the proposed child care centre to be located at 23 Morella Grove, Bridgewater. The assessment has considered noise at noise sensitive locations 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 *Planning and Design Code* (the Code), the *Environment Protection (Noise) Policy 2007* and the World Health Organisation recommendations to protect against annoyance. Specific fence constructions and mechanical plant location have been recommended in order to achieve the noise criteria.

Based on the above, it is considered that the development has been designed to mitigate adverse impacts on neighbouring and proximate land uses, thereby achieving all relevant provisions of the Planning and Design Code related to environmental noise.

APPENDIX A: *Site locality and its surroundings.*

APPENDIX B: Noise level data

Equipment/Activity		Sound Power Level
Children	0-2 year old (per child)	74 dB(A)
	2-3 year old (per child)	78 dB(A)
	3-5 year old (per child)	80 dB(A)
General Car Park Activity	General activity	83 dB(A)
	Moving vehicle	82 dB(A)
Mechanical Plant	AC condenser unit	73 dB(A)

Native Vegetation Clearance

Child Care Facility at Morella Grove, Bridgewater

Data Report

Clearance under the *Native Vegetation Regulations 2017*

28/09/2021

Prepared by C. Gibson EBS Ecology (NVC Accredited Consultant) and E. West

Native Vegetation Clearance for a Child Care Facility at Morella Grove, Bridgewater Data Report

28 September 2021

Final

Prepared by EBS Ecology for Future Urban Pty Ltd

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EBS Ecology Project Number: EX210710

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Cover photograph: The vegetation at Morella Grove

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Glossary and abbreviations

BAM	Bushland Assessment Method
BDBSA	Biological Database of South Australia (maintained by DEW)
DAWE	Department of Agriculture, Water and the Environment (Commonwealth)
DEW	Department for Environment and Water (South Australia)
EBS	Environment and Biodiversity Services Pty Ltd (trading as EBS Ecology)
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
ha	Hectare(s)
IBRA	Interim Biogeographical Regionalisation of Australia
km	Kilometre(s)
NatureMaps	Initiative of DEW that provides a common access point to maps and geographic information about South Australia's natural resources in an interactive online mapping format
NPW Act	*National Parks and Wildlife Act 1972*
NV Act	*Native Vegetation Act 1991*
NVC	Native Vegetation Council
PMST	Protected Matters Search Tool (under the EPBC Act; maintained by DAWE)
Project	The development of a child care facility
Project Area	23 Morella Grove, Bridgewater, 5155
RAM	Rangelands Assessment Method
SA	South Australia(n)
Search Area	5 km buffer of the Project Area considered in the desktop assessment database searches
SEB	Significant Environmental Benefit
sp.	Species
spp.	Species (plural)
ssp.	Sub-species
sqm	Square meters
STAM	Scattered Tree Assessment Method
TEC	Threatened Ecological Community
var.	Variety (a taxonomic rank below that of species and subspecies, but above that of form)

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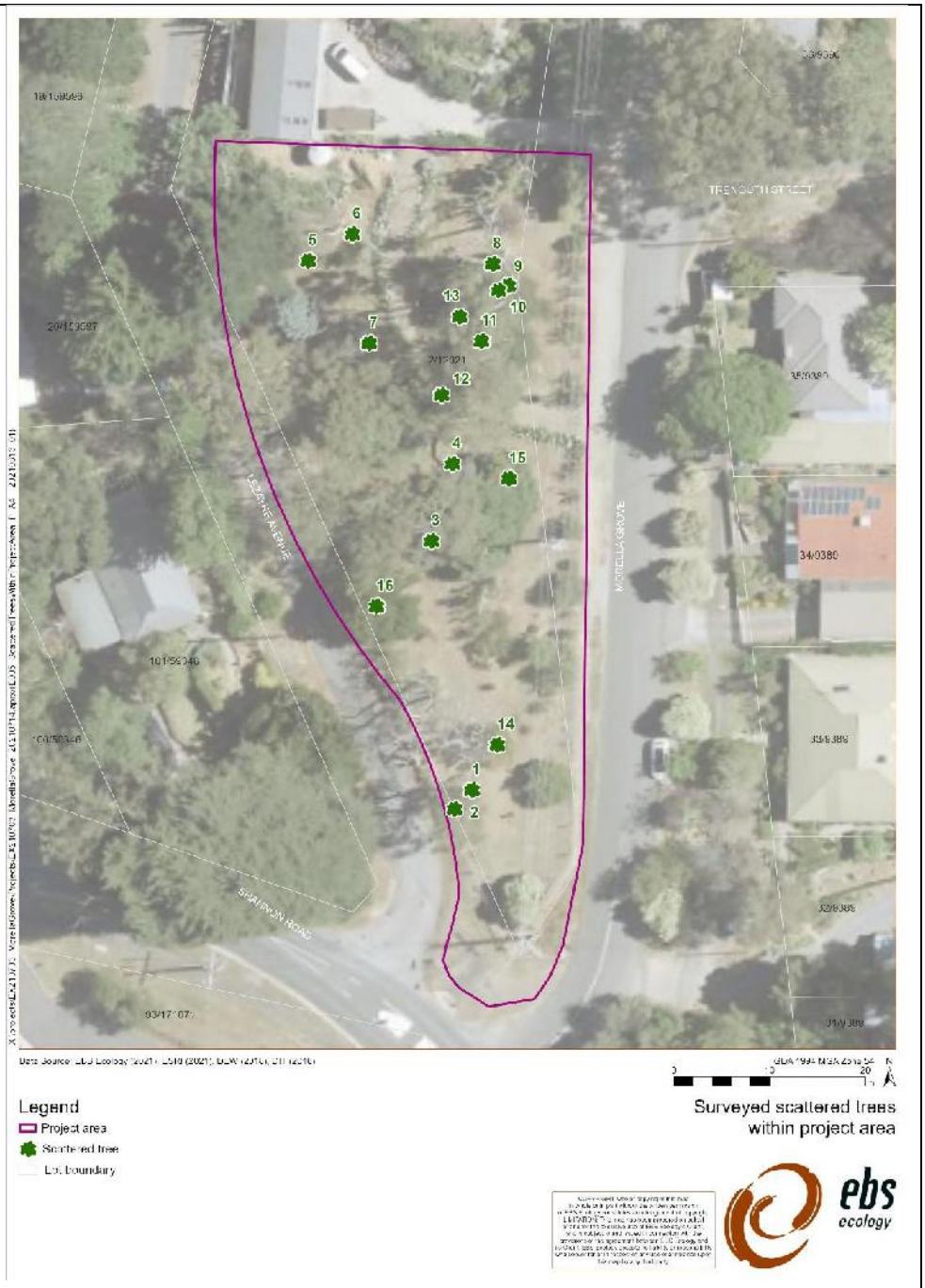
1. Application information

Table 1. Application details.

Applicant:	Future Urban Pty Ltd		
Key contact:	Marc Duncan, 04018 216 968		
Landowner:	Ian Gary Small (contract has been signed for client to purchase land)		
Site Address:	23 Morella Grove, Bridgewater, 5155		
Local Government Area:	Adelaide Hills	**Hundred:**	Noarlunga 105500
Title ID:	CT/5473/109	**Parcel ID**	F12021 A1

Table 2. Summary of the proposed clearance.

Purpose of clearance:	Clearance is required for the construction of a child care facility
Native Vegetation Regulation:	Regulation 12, Schedule 1; clause 35, Residential subdivision.
Description of the vegetation under application:	19 Scattered trees of varying condition (poor – excellent), consisting of two species (*Eucalyptus baxteri* and *Exocarpos cupressiformis*)
Total proposed clearance – area (ha) and/or number of trees:	19 Scattered trees
Level of clearance:	Level 3 (Escalated from Level 2)
Overlay (Planning and Design Code):	Native Vegetation Overlay.

Map of proposed clearance area:	
Mitigation Hierarchy:	***Avoidance*** **-** The scattered trees assessed within the Project Area are located on modified and degraded land. Most of the Project Area contains dead or scattered trees in poor to moderate condition. This Project Area also contains limited midstorey and understorey. Most of the midstorey had been planted and includes exotic and native species such as *Pinus radiata, Acacia pycnantha, Pittosporum undulatum, Bursaria spinosa and Acacia dealbata*. The understorey contains mainly exotic weeds and forbs such as *Freesia cultivar* and O*xalis pes-caprae* and *Watsonia sp.*

	Minimization – The impact to vegetation has been minimised by clearing areas where vegetation is sparse, more degraded and of lower quality (i.e., non-native plantation) than the surrounding areas. It is in close proximity to existing roads. ***Rehabilitation or restoration –*** The proposed Project infrastructure is permanent, and land clearance associated with the project is unlikely to be rehabilitated or restored. However, EBS recommends that Declared and Environmental weed species (e.g., Radiata Pine and Bridal Creeper) are controlled. ***Offset -*** Any adverse impact on native vegetation or ecosystems that cannot be avoided or minimised will be offset by implementing an SEB that outweighs that impact.
SEB Offset proposal	Payment of **$45,716.68** into the SEB fund which includes an administration fee of $2,383.33.

2. Purpose of clearance

2.1. Description

EBS has been engaged by Future Urban on behalf of the landowner to undertake a Native Vegetation Clearance for the development of a child care facility at 23 Morella Grove, Bridgewater.

Objectives

EBS Ecology were engaged by Future Urban to undertake a flora and fauna assessment for the proposed residential development including the following project components:

- Undertake a desktop assessment of the likelihood of occurrence and status of threatened flora and fauna protected under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and State *National Parks and Wildlife Act 1972* (NPW Act);
- Assess native vegetation within the Project Area for clearance using the Native Vegetation Council (NVC) endorsed Scattered Trees Assessment Method (STAM); and
- Calculate the Significant Environmental Benefit (SEB) offset requirements based on the impact footprint.

The report presents findings of the desktop assessment; in addition to results of the STAM required for assessing trees proposed for clearance under the Native Vegetation Regulations.

2.2. Background

The Project Area is located on private property, which contains one Certificate Title embracing a total of 0.3681 hectares (ha) of land. The area surveyed covered a total of 0.1956 ha of this private property, which consisted of a mixture of remnant native vegetation and exotic and native plantings. The property is approximately 240 meters from the South-eastern Freeway, surrounded by other residential land.

The Project Area is within the Adelaide Hills Council within the suburb of Bridgewater. It falls within the Hills and Fleurieu Management Region. The Project Area contains the following Certificate Title (CT) CT/5473/109 (within which the Project is proposed). The property is zoned as Hills Neighbourhood and receives mean annual rainfall of 877 millimetre (mm).

The Interim Biogeographical Regionalisation of Australia (IBRA) identifies geographically distinct bioregions based on common climate, geology, landform, native vegetation and species information. The bioregions are further refined into subregions and environmental associations. The Project Area is located in the Flinders Lofty Block IBRA Bioregion, Mount Lofty Ranges IBRA Subregion and Uraidla IBRA Environmental Association.

Approximately 15% (46,342 ha) of the Mount Lofty Ranges IBRA Subregion and approximately 26% (3674 ha) of the Uraidla IBRA Environmental Association is mapped as remnant vegetation. Of this, 27% (12,706 ha) and 20% (749 ha) is formerly conserved and protected, respectively (DEW 2019).

2.3. General location map

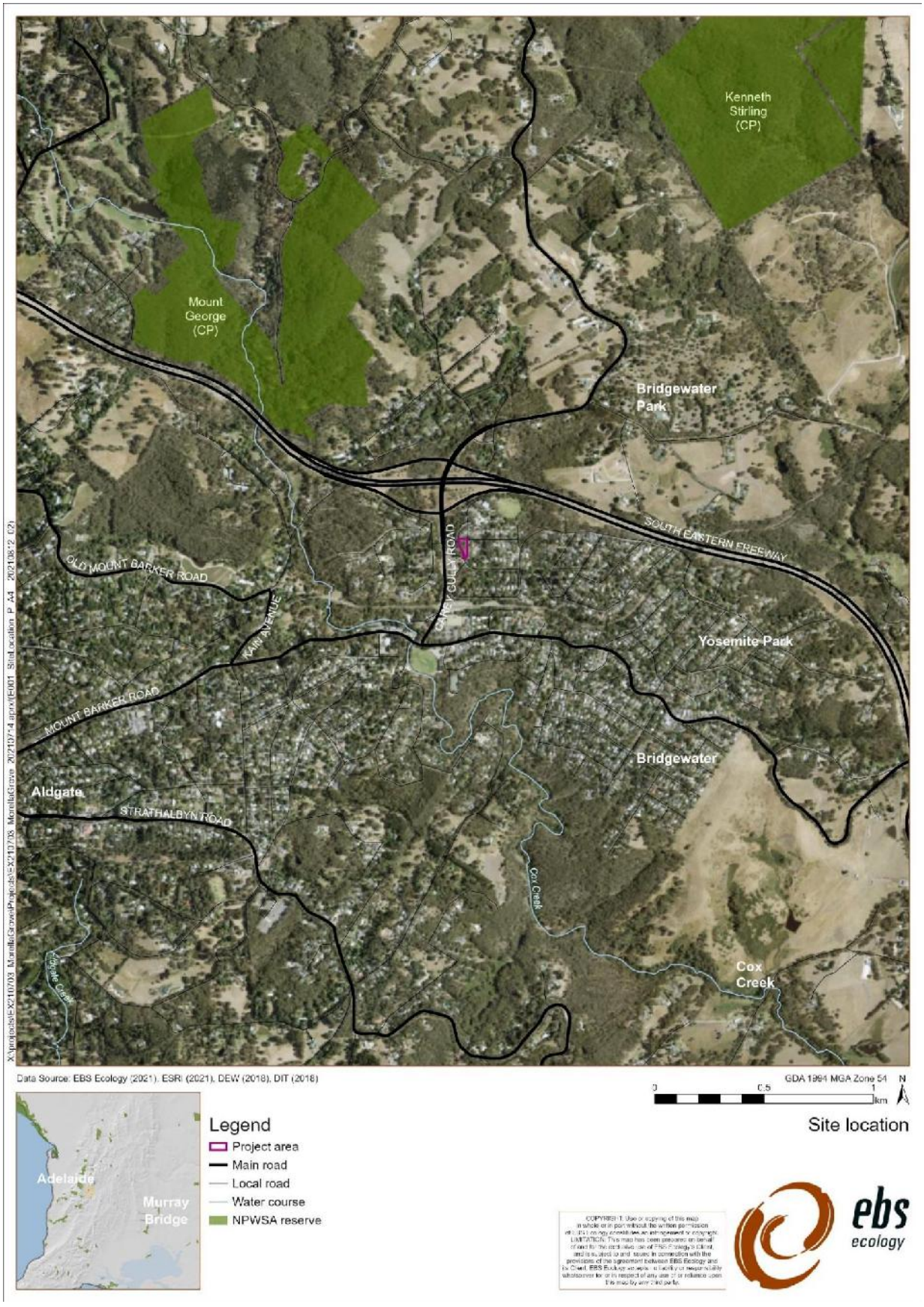


Figure 1. Map depicting the Project Area, surrounding NPWSA reserves and watercourses.

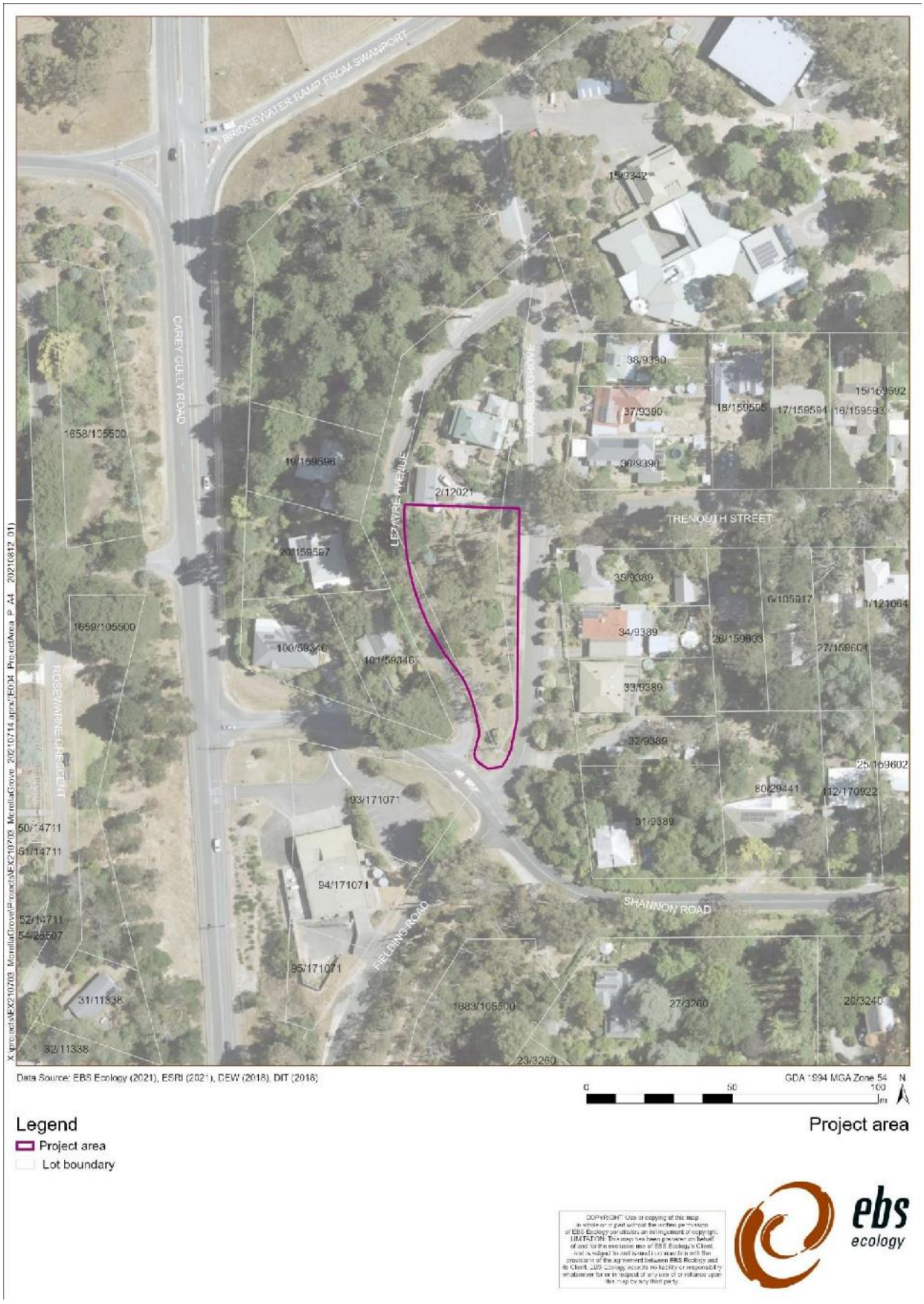


Figure 2. Location of the Project Area.

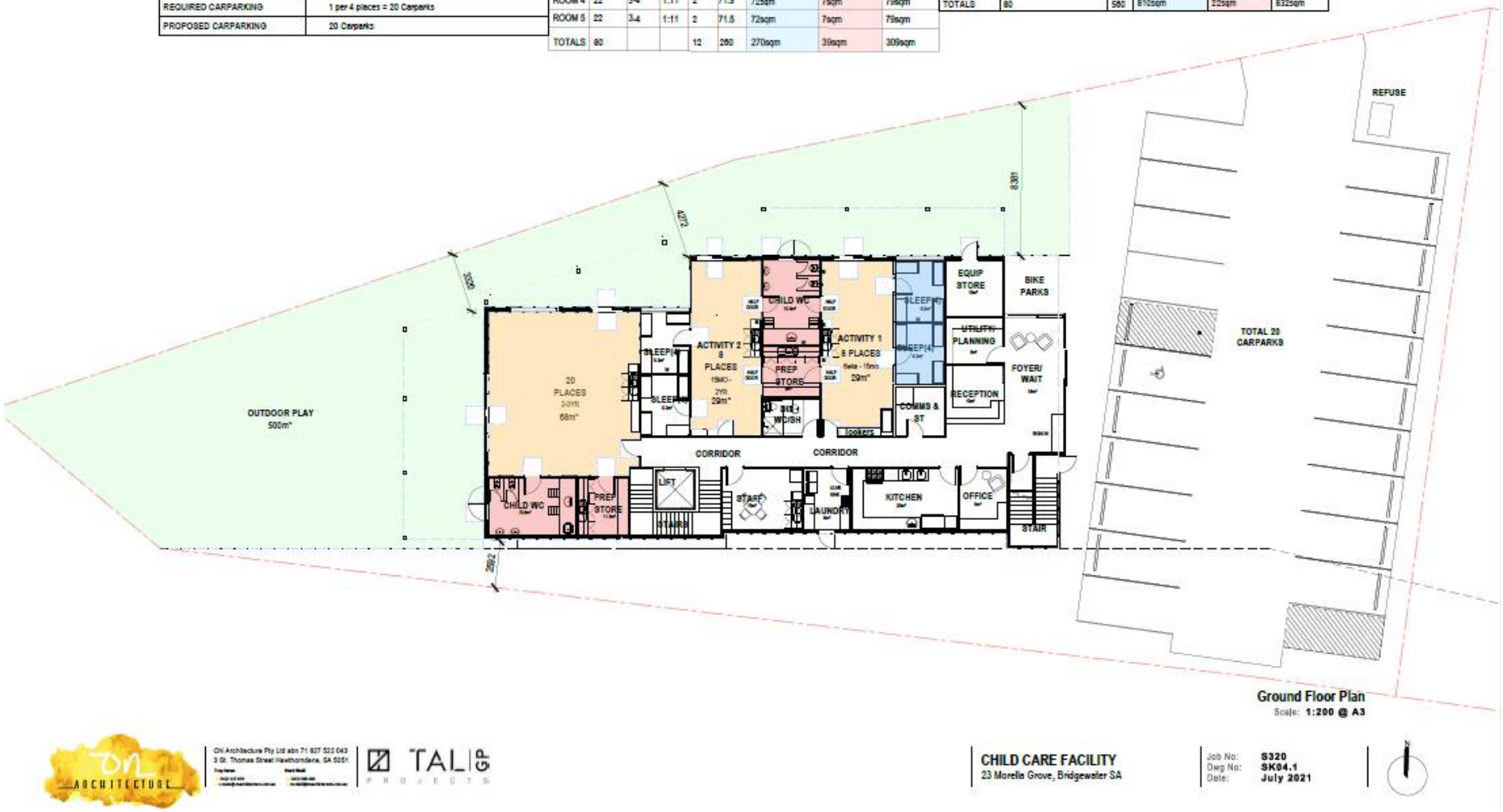
2.4. Details of the proposal

Figure 3 and Figure 4 outline the architectural drawings of the proposed child care facility (two stories). The site area incapsulates a total of 1890 sqm of land, this includes 474sqm at the ground level, 278 sqm of the first floor (total 752 sqm). The site area also includes space for 20 car parks, and outdoor play area (832 sqm).

SITE DATA	
SITE AREA	1890sqm
BUILDING AREA GROUND FIRST TOTAL	 474sqm 278sqm 752sqm
PROPOSED CHILD CARE PLACES	80
REQUIRED CARPARKING	1 per 4 places = 20 Carparks
PROPOSED CARPARKING	20 Carparks

ACTIVITY AREA SCHEDULE								
ROOM	PLACES	AGE	STAFF RATIO	STAFF No.	AREA REQ	UNENCUMBERED AREA	ENCUMBERED AREA	TOTAL AREA PROVIDED
ROOM 1	8	0-2	1:4	2	26	29sqm	9sqm	38sqm
ROOM 2	8	0-2	1:4	2	26	29sqm	9sqm	38sqm
ROOM 3	20	2-3	1:5	4	65	68sqm	7sqm	75sqm
ROOM 4	22	3-4	1:11	2	71.5	72sqm	7sqm	79sqm
ROOM 5	22	3-4	1:11	2	71.5	72sqm	7sqm	79sqm
TOTALS	80			12	260	270sqm	39sqm	309sqm

OUTDOOR PLAY AREA SCHEDULE					
ROOMS	PLACES	AREA REQ	UNENCUMBERED AREA	ENCUMBERED AREA	TOTAL AREA PROVIDED
ROOM 1 ROOM 2 ROOM 3	8 8 20	252	500sqm	10sqm	526sqm
ROOM 4 ROOM 5	22 22	308	310sqm	12sqm	322sqm
TOTALS	80	560	810sqm	22sqm	832sqm



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TALIS PROJECTS

CHILD CARE FACILITY
23 Morella Grove, Bridgewater SA

Job No: S320
Dwg No: SK04.1
Date: July 2021

Figure 3. Architectural drawings of the ground level of the child care facility.

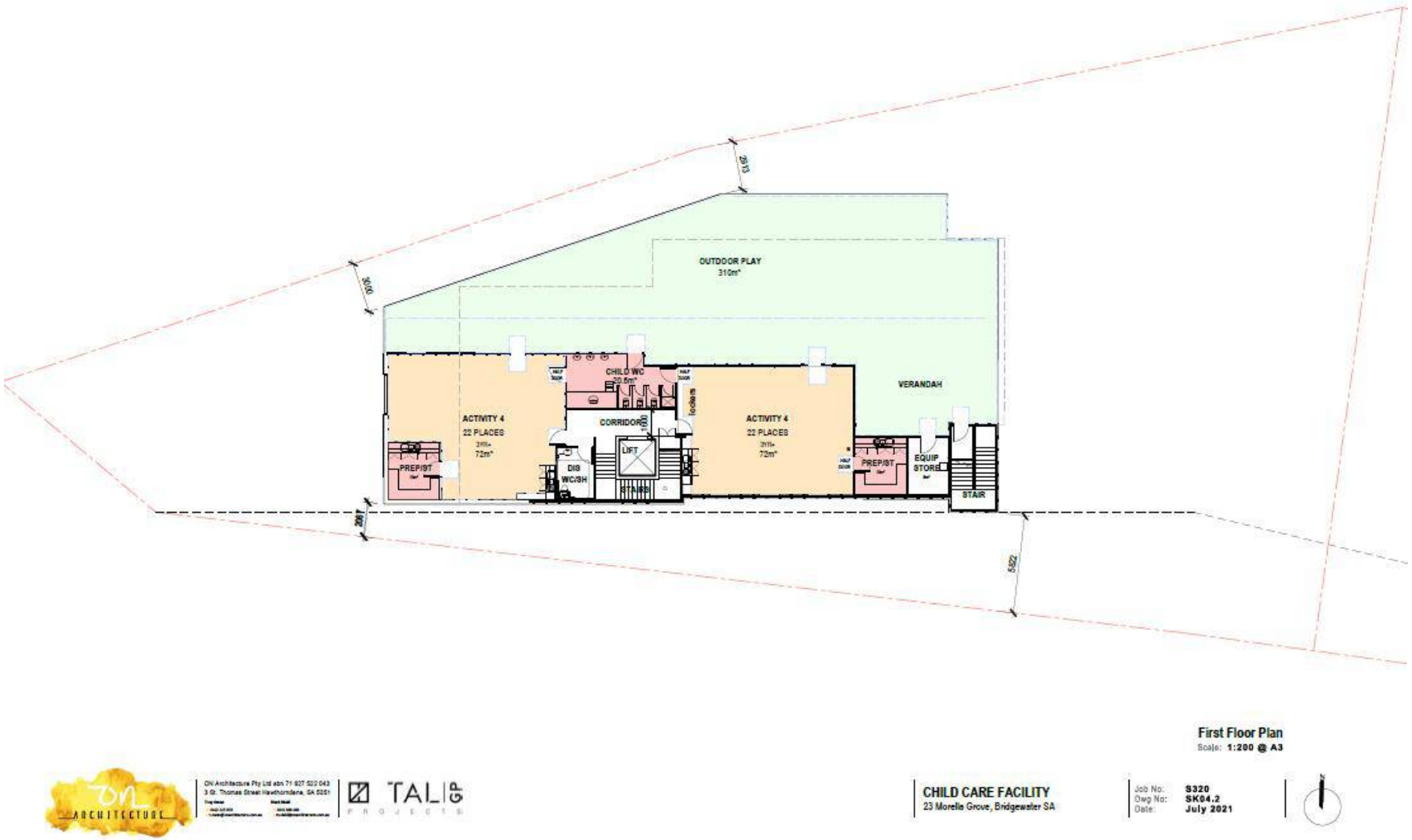


Figure 4. Architectural drawings of the first level of the child care facility.

2.5. Approvals <u>required</u> *or* <u>obtained</u>

Approvals or applications under the follow legislation are required:

- *Native Vegetation Act 1991* – this data report.
- *Planning, Development and Infrastructure Act 2016* – application not lodged yet
- EPBC Act – EPBC approval is not required for this Project.
- NPW Act – EBS has the required flora collection permit (K25613-20)
- Landscape SA Act – A Water Affecting Activity Permit is not required for this Project; a Permit to transport declared weeds on a public road is not (or may be) required for this Project.
- Aboriginal Heritage Act – Approval will be required if any sites, objects or remains are uncovered during the works.

2.6. Native Vegetation Regulation

An assessment against the Principles of Clearance under the *Native Vegetation Act 1991* is considered to not be required as the clearance associated with the Project is in accordance with Division 5 of the *Native Vegetation Regulations 2017*, which allows for the clearance of native vegetation in relation to specific activities as set out in Schedule 1, Parts 4, 5 or 6 of the Regulations. The Project is considered to be permitted under the following regulation:

Regulation 12 (33) - new dwelling or building

(1) Clearance of vegetation required in order to erect a building or structure or other facility that is ancillary to a building, provided that any development authorisation required by or under the *Planning, Development and Infrastructure Act 2017* has been obtained (Application ID 21016009**)**.

(2) Subclause (1) does not apply to

a. clearance of vegetation established in accordance with a condition of a consent for clearance of vegetation; or

b. clearance of vegetation undertaken in connection with subdivision of the land on which the vegetation is growing or is situated; or

c. clearance that would be contrary to—

i. a condition of a consent for clearance of vegetation; or

ii. a condition imposed in connection with clearance of vegetation permitted under these regulations; or

iii. a condition in respect of clearance permitted under the revoked regulations.

2.7. Development Application information (if applicable)

Table 3. Planning and Design Codes zones and overlays.

Zones	Hills Neighborhood
Overlays	Hazards (Bushfire – High Risk)
	Native Vegetation
	Regulated and Significant Tree

3. Method

3.1. Flora assessment

The flora assessment was undertaken by Ella West on 15th of July 2021 in accordance with the Scattered Tree Assessment Method (STAM) (NVC 2020a, 2020c).

3.1.1. Scattered Tree Assessment Method

The STAM is derived from the *Scattered Tree Clearance Assessment in South Australia: Streamlining, Guidelines for Assessment and Rural Industry Extension* report (Cutten and Hodder 2002). The STAM is suitable for assessing scattered trees in the following instances:

- Individual scattered trees (i.e. canopy does not overlap). The spatial distribution of trees may vary from approaching what would be considered their original distribution (pre-European) through to single isolated trees in the middle of a paddock; or
- Dead trees (when a dead tree is considered native vegetation); or
- Clumps of trees (contiguous overlapping canopies) if the clump is small (approximately <0.1 ha); and
- For both scattered trees and clumps:
    - The ground layer comprises wholly or largely of introduced species;
    - Some scattered colonising native species may be present, but represent <5% of the ground cover; and
    - The area around the trees consists of introduced pasture or crops.

Details of the scattered tree Point Scoring System are outlined in the *Scattered Tree Assessment Manual* (NVC 2020c).

The numbers of uncommon and threatened scattered tree using fauna species entered into the Scattered Tree Scoresheet were calculated by cross-referring the BDBSA data extract (see Section 3.2.2) and the lists of scattered trees using fauna in the *Scattered Tree Assessment Manual* (NVC 2020). The resource use of each species identified was considered when determining each tree's suitability for threatened fauna species (e.g. species that only use hollows in scattered trees were only assigned to scattered trees containing hollows).

3.2. Fauna assessment

A desktop assessment was undertaken to determine the potential for any threatened fauna species, and Threatened Ecological Communities (TECs) (both Commonwealth and State listed) to occur within the Project Area. This was achieved by undertaking database searches using a 5 km buffer of the Project Area (Search Area).

3.2.1. PMST report

A Protected Matters Search Tool (PMST) report was generated on 13th of July 2021 to identify nationally threatened flora and fauna, migratory fauna and TECs under the EPBC Act relevant to the Project Area (DAWE 2020). Only species and TECs identified in the PMST report that are likely or known to occur within the Search Area were assessed for their likelihood of occurrence within the Project Area.

3.2.2. BDBSA data extract

A data extract from the Biological Database of South Australia (BDBSA) was obtained from NatureMaps to identify flora and fauna species that have been recorded within 5 km of the Project Area (data extracted 4/8/2021; DEW 2021). The BDBSA is comprised of an integrated collection of species records from the South Australian Museum, conservation organisations, private consultancies, Birds SA, Birdlife Australia and the Australasian Wader Study Group, which meet the Department for Environment and Water's (DEW) standards for data quality, integrity and maintenance. Only species with records since 1995 and a spatial reliability of less than 1 km were assessed for their likelihood of occurrence.

3.2.3. Field survey

No targeted fauna assessments were undertaken within the Project Area, however all fauna observed during the course of the onsite Flora Assessment were recorded. Fauna surveys were conducted in conjunction with the flora assessments along the site. All native and exotic fauna species opportunistically encountered (directly observed, or tracks, scats, burrows, nests and other signs of presence) during the native vegetation assessment were recorded. Potential fauna refuge sites, such as hollows, were noted as an indication of availability of suitable habitat. Particular attention was paid to identifying habitat for threatened species. For each opportunistic fauna observation, the species, number of individuals, GPS location, detection methodology (sight, sound or sign) and habitat were recorded.

3.2.4. Likelihood of occurrence

The criteria for the likelihood of occurrence of threatened species within the Project Area are described in Table 4.

Table 4. Criteria for the likelihood of occurrence of threatened species within the Project Area.

Likelihood	Criteria
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the 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 provides 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 for the species, 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. Assessment outcomes

4.1. Vegetation assessment

4.1.1. General description of the vegetation, the site and matters of significance

The Project Area occurs on land that is on approximately 15-degree slope heading south west. No other landform features were identified (rocky outcrops, rivers, creeks etc) and the closest Conservation Park is Mount George Conservation Park, which is approximately 925 meters from the Project Area.

Nineteen scattered trees were assessed for the clearance of the Project Area. This included two species, thirteen (13) *Eucalyptus baxteri* (Brown Stringybark) and six (6) *Exocarpos cupressiformis* (Native Cherry) (Table 5 to Table 20). The native cherry trees were in excellent condition, with the Brown Stringybark trees ranging from poor to moderate condition. Exotic species dominate the property with species such as *Hedera helix* (English Ivy) and *Pittosporum sp*., taking over native vegetation (see Table 12 as an example). Small clusters of native sedges, grasses and shrubs such as *Dianella revoluta*., *Microlaena stipoides* and *Astroloma sp*., are scattered throughout the Project Area. A majority of the land is highly disturbed and contains a large amount of planted ornamental trees, shrubs and forbs. Revegetation has occurred along the southern fenceline of the property with species such as *Hakea sp., Acacia sp.,* and *Bursaria spinosa*, with smaller amounts of regeneration from these species were also present. Weeds and planted ornamental species dominate the Project Area (see 4.1.4 for more photos of the site) the presence of three weeds of national significance, six (6) Declared weeds (including WoNS) and eleven (11) Environmental weeds.

4.1.2. Details of the scattered trees proposed to be impacted

Table 5. Summary of Tree 1.

Tree ID –1	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 2	
Height (m) – 15	
Hollows – no hollows	
Diameter (cm) – 42	
Canopy dieback (%) – 20	
Total Biodiversity Score – 4.29	

Table 6. Summary of Tree 2.

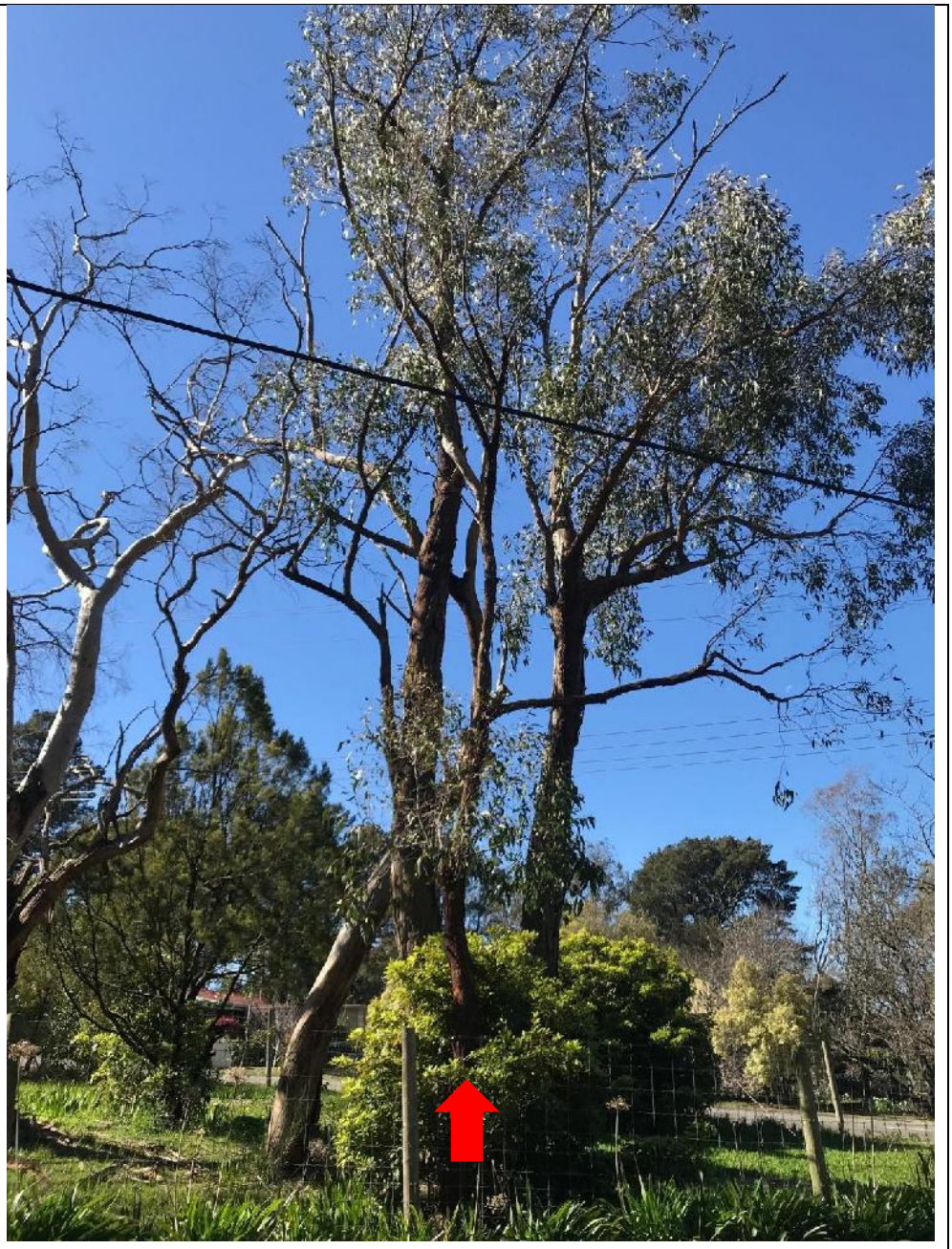
Tree ID – 2	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 1	
Height (m) – 8.5	
Hollows – no hollows	
Diameter (cm) – 22	
Canopy dieback (%) – 80	
Total Biodiversity Score – 0.23	

Table 7. Summary of Tree 3.

Tree ID – 3	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 1	
Height (m) – 15	
Hollows – 1 small	
Diameter (cm) – 76.5	
Canopy dieback (%) – 30	
Total Biodiversity Score – 3.94	

Table 8. Summary of Tree 4.

Tree ID – 4	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 1	
Height (m) – 10	
Hollows – no hollows	
Diameter (cm) – 44	
Canopy dieback (%) – 35	
Total Biodiversity Score – 1.05	

Table 9. Summary of Tree 5.

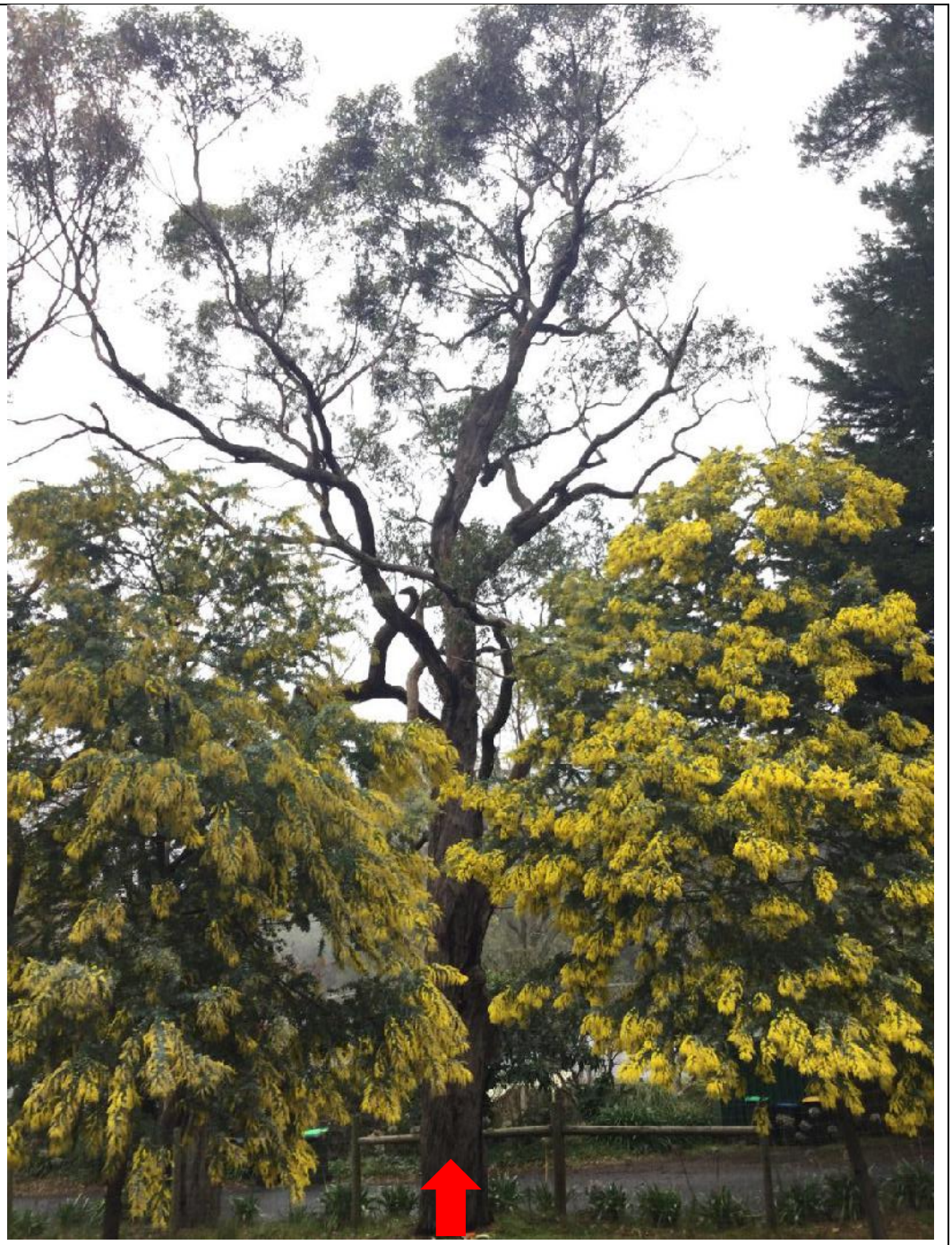
Tree ID – 5	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 1	
Height (m) – 19	
Hollows – no hollows	
Diameter (cm) – 82	
Canopy dieback (%) – 40	
Total Biodiversity Score – 4.18	

Table 10. Summary of Tree 6.

Tree ID – 6	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 1	
Height (m) – 15	
Hollows – no hollows	
Diameter (cm) – 43	
Canopy dieback (%) – 50	
Total Biodiversity Score – 1.30	

Table 11. Summary of Tree 7.

Tree ID – 7	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 1	
Height (m) – 6.5	
Hollows – no hollows	
Diameter (cm) – 16	
Canopy dieback (%) – 10	
Total Biodiversity Score – 0.31	

Table 12. Summary of Tree 8.

Tree ID – 8	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 1	
Height (m) – 6	
Hollows – no hollows	
Diameter (cm) – 11	
Canopy dieback (%) – 5	
Total Biodiversity Score – 0.31	

Table 13. Summary of Tree 9.

Tree ID – 9	
Tree spp. – *Eucalyptus baxteri*	
Number of trees –1	
Height (m) – 8.5	
Hollows – no hollows	
Diameter (cm) – 47	
Canopy dieback (%) – 0	
Total Biodiversity Score – 1.31	

Table 14. Summary of Tree 10.

Tree ID – 10	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 1	
Height (m) – 22	
Hollows – no hollows	
Diameter (cm) – 55	
Canopy dieback (%) – 5	
Total Biodiversity Score – 4.41	

Table 15. Summary of Tree 11.

Tree ID – 11	
Tree spp. – *Eucalyptus baxteri*	
Number of trees – 1	
Height (m) – 18	
Hollows – no hollows	
Diameter (cm) – 80	
Canopy dieback (%) – 0	
Total Biodiversity Score – 6.04	

Table 16. Summary of Tree 12.

Tree ID – 12	
Tree spp. – *Eucalyptus baxteri*	
Number of trees –1	
Height (m) – 16	
Hollows – no hollows	
Diameter (cm) – 53	
Canopy dieback (%) – 5	
Total Biodiversity Score – 3.50	

Table 17. Summary of Tree 13.

Tree ID – 13	
Tree spp. – *Exocarpos cupressiformis*	
Number of trees – 2	
Height (m) – 6	
Hollows – no hollows	
Diameter (cm) – 25	
Canopy dieback (%) – 0	
Total Biodiversity Score – 2.01	

Table 18. Summary of Tree 14.

Tree ID – 14	
Tree spp. – *Exocarpos cupressiformis*	
Number of trees – 1	
Height (m) – 6	
Hollows – no hollows	
Diameter (cm) – 27	
Canopy dieback (%) – 0	
Total Biodiversity Score – 2.09	

Table 19. Summary of Tree 15.

Tree ID – 15	
Tree spp. – *Exocarpos cupressiformis*	
Number of trees – 2	
Height (m) – 5	
Hollows – no hollows	
Diameter (cm) – 24	
Canopy dieback (%) – 0	
Total Biodiversity Score – 1.24	

Table 20. Summary of Tree 16.

Tree ID – 16	
Tree spp. – *Exocarpos cupressiformis*	
Number of trees – 1	
Height (m) – 5	
Hollows – no hollows	
Diameter (cm) – 24	
Canopy dieback (%) – 0	
Total Biodiversity Score – 1.03	

4.1.3. Site map showing areas of proposed impact

Figure 5. Scattered Trees located within the Project Area.

4.1.4. Photo log

Common Brushtail Possum (*Trichosurus vulpecula*) scats located within the Project Area.

Small patch of *Asparagus asparagoides* (Bridal Creeper) located within the Project Area.

Entrance into Morella Grove.

Garden plantings located on the fenceline of the property.

4.2. Threatened species assessment

A desktop assessment was undertaken for the proposed Project (EBS 2021). The sections below present a summary of the desktop results only.

Matters of National Environmental Significance (MNES)

The EPBC Act PMST report identified no World and National Heritage Properties, Threatened Ecological Communities (TECs) or Wetlands of International Importance.

4.2.1. Threatened fauna

The desktop assessment identified 17 fauna species are listed as threatened under the EPBC Act. This included, 13 birds, one (1) amphibian, one (1) reptile and two (2) mammals. The BDBSA search identified an additional twenty-six (26) species, this included twenty-one (21) bird species, one (1) amphibian, two (2) mammals and two (2) reptiles listed as threatened under the NPW Act as potentially occurring in the Project Area.

The results of the field survey indicate that the habitat in the Project Area provides potential feeding or foraging resources for some species recorded within 5 km. The assessment indicates a total of four (4) species are likely to occur and utilise vegetation within the Project Area, this includes:

- *Trichosurus vulpecula* (Common Brushtail Possum): **State Rare**; - **Known**
- *Zanda funerea* ssp. *whiteae* (Yellow-tailed Black Cockatoo): **State Vulnerable**;
- *Plectorhyncha lanceolata* (Striped Honeyeater): **State Rare**; and
- *Microeca fascinans ssp. fascinans* (Jacky Winter): **State Rare**

An additional five (5) threatened species was assessed as possibly occurring within the Project Area The likelihood of occurrence assessment for each fauna species identified in the desktop search is provided in (Table 21). Other fauna recorded during the survey is listed in Appendix 1. The State Rare Common Brushtail Possum (*Trichosurus vulpecula)* scats were located throughout the Project Area.

Table 21. Likelihood of occurrence of threatened fauna species identified in the desktop assessment. The data source and threat levels are described in the table footer.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
AMPHIBIANS						
Pseudophryne bibronii (Brown Toadlet)	R		2	2003	This species is found mostly amongst emergent vegetation, including *Typha* sp. (bullrush), *Phragmites* sp. (reeds) and *Eleocharis* sp. (sedges), in or at the edges of still or slow-flowing water bodies such as lagoons, swamps, lakes, ponds and farm dams.	Aquatic/wetland species not further assessed in this study.
BIRDS						
Actitis hypoleucos (Common Sandpiper)	R	MI	1,2	1995	Muddy margins or rocky shores of coastal and some inland wetlands.	Aquatic/wetland species not further assessed in this study.
Anhinga novaehollandiae ssp. Novaehollandiae (Australasian Darter)	R		2	2018	Habitat is lakes, rivers, swamps; rarely coastal.	Aquatic/wetland species not further assessed in this study.
Apus pacificus (Fork-tailed Swift)		MI	1		Widespread but almost exclusively aerial. Mostly occur over inland plains and dry or open habitats.	**Unlikely** This species is exclusively aerial therefore will not be impacted.
Biziura lobata ssp. *menziesi* (Musk Duck)	R		2	2015	Lakes, reservoirs and wetlands including well-vegetated swamps and fresh and brackish habitats.	Aquatic/wetland species not further assessed in this study.
Botaurus poiciloptilus (Australasian Bittern)		EN	1		Found mainly in freshwater wetlands and, rarely, in estuaries or tidal wetlands, favoring wetlands dominated by sedges, rushes and reeds growing over a muddy or peaty substrate.	Aquatic/wetland species not further assessed in this study.
Calamanthus pyrrhopygius ssp. pakeri (Chestnut-rumped Heathwren)	E	EN	1,2	2001	Occurs in dense heathland and undergrowth in Eucalyptus forests and woodlands, and is most commonly found in rocky areas (such as those that occur on hillsides).	**Unlikely** The Project Area is highly degraded and contains very sparse mid and understorey.
Calidris acuminata (Sharp-tailed Sandpiper)		MI	1		Birds appear to be dispersive, moving to temporary or flooded wetlands and leaving them when they dry. On migration, they forage and roost on rocky and sandy beaches, freshwater habitats and inland saltwater habitats.	Aquatic/wetland species not further assessed in this study.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Calidris ferruginea (Curlew Sandpiper)		CE, MI	1		Occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms.	Aquatic/wetland species not further assessed in this study.
Calidris melanotos (Pectoral Sandpiper)		MI	1		This species prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands.	Aquatic/wetland species not further assessed in this study.
Cereopsis novaehollandiae ssp. hollandiae (Cape Barren Goose)	R		2	2009	Mostly inhabits small, windswept and generally uninhabited offshore islands, but ventures to adjacent mainland farming areas in search of food in summer.	Aquatic/wetland species not further assessed in this study.
Cinclosoma punctatum anachoreta (Mt Lofty Ranges Spotted Quail-thrush)		CE	1		Confined to the Mount Lofty Ranges in South Australia. Occurs in sclerophyll woodlands that are dominated by Eucalyptus trees (especially E. fasciculosa and peppermints) and have sparse understorey vegetation, and in heathlands.	**Unlikely.** Project Area not suitable.
Corcorax melanorhamphos (White-winged Chough)	R		2	2020	Woodlands and tall Mallee. Favoring wetter areas with abundant litter for foraging.	**Possible.** Recent records located at nearby Mount George Conservation Park. However, the Project Area is degraded resulting in limited leaf litter for foraging for this species.
Falco hypoleucos (Grey Falcon)		VU	1		The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses. The species has been observed hunting in treeless areas and frequents tussock grassland and open woodland, especially in winter.	**Unlikely.** Project Area not suitable.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Falco peregrinus ssp. *macropus* (Peregrine Falcon)	R		2	2020	Cliffs, gorges, timbered watercourses, wetlands, open woodlands and urban areas. Nests on cliffs, buildings, large tree hollows and abandoned nests or other raptors.	**Possible.** Although habitat is limited within the Project Area, this area is highly urbanized.
Falcunculus frontatus ssp. *frontatus* (Eastern Shrike-tit)	R		2	2006	*Eucalyptus* woodlands and forest, within a wide range of woodland/forest communities.	**Possible.** Although habitat is limited within the Project Area, birds occurring in nearby habitat may occasionally forage in the area impacted. Unlikely to use scattered trees.
Gallinago hardwickii (Latham's Snipe)	R	MI	1	2017	Soft wet ground or shallow water with emergent vegetation such as tussocks and other green growth.	Aquatic/wetland species not further assessed in this study.
Grantiella picta (Painted Honeyeater)		VU	1		Forest, woodland, dry scrub, often with abundant mistletoe. Dependent on mistletoe berries.	**Unlikely** Project Area contains degraded woodland with high rainfall and no mistletoes were located in *E. baxteri* trees.
Haliaeetus leucogaster (White-bellied Sea-eagle)	E		2	2015	This species is distributed along the coastline (including offshore islands) of mainland Australia and Tasmania. Found in coastal habitats (especially those close to the sea-shore) and around terrestrial wetlands in tropical and temperate regions of mainland Australia and its offshore islands.	**Unlikely.** Project Area not suitable.
Hirundapus caudacutus (White-throated Needletail		VU MI	1		Almost exclusively aerial in Australia, recorded most commonly above wooded areas.	**Unlikely** This species may be observed aerially over the Project Area, however will not be directly impacted.
Leipoa ocellata (Malleefowl)		VU	1		Occupies shrublands and low woodlands that are dominated by mallee vegetation. It also occurs in other habitat types including eucalypt or native pine *Callitris* woodlands, acacia shrublands, *Melaleuca uncinata* vegetation or coastal heathlands.	**Unlikely** No Mallee/Callitris located within Project Area.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Lewin pectoralis ssp. pectoralis (Lewin's Rail)	V		2	2010	Inhabits mallee heathlands and less commonly in associated mallee with a more open understorey (such as Spinifex associations). Is also occasionally recorded in River Red Gums bordering waterways.	**Unlikely** No Mallee or River Red Gums located within Project Area.
Lichmera indistincta ssp. indistincta (Brown Honeyeater)	R		2	2012	This species inhabits a wide range of wooded habitats, usually near water. It is often found in mangroves and woodlands or dense forests along waterways. It can also be found in mallee, spinifex woodlands, low dense shrublands, heaths and saltmarshes, as well as in monsoon forests or rainforests.	**Unlikely** Project Area is highly degraded.
Melanodryas cucullata ssp. cucullata (Hooded Robin)	R		2	2005	Occurs across south-eastern Australia, most of NSW, VIC and south-eastern SA. South-eastern subspecies found in Eucalypt woodland and mallee and Acacia shrubland.	**Unlikely** Midstorey and understorey highly degraded.
Microeca fascinans ssp. fascinans (Jacky Winter)	R		2	2018	Prefers open woodland with an open shrub layer and a lot of bare ground. They are often seen in farmland and parks.	**Likely** Recent records located approximately 500-1km nearby. The Project Area is degraded projecting an open shrub layer and large amounts of bare ground.
Motacilla cinerea (Grey Wagtail)		MI	1		European and Asian species. Migrates south in winter, usually to Indonesia and NG. Rarely reaches Australia, but when it does, favors habitat near freshwater streams, also mown grass, ploughed land or near sewage ponds.	**Unlikely** Species rarely reaches Australia
Motacilla flava (Yellow Wagtail)		MI	1		Open country near swamps, salt marshes, sewage ponds, grassed surrounds to airfields, bare ground. Occasionally on drier inland plans.	**Unlikely** Project Area not suitable.
Myiagra cyanoleuca (Satin Flycatcher)		MI	1		Known inhabitant of forest, woodland, mangroves and coastal heath scrub. Prefers	**Unlikely.**

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
					dense, wet gullies of heavy eucalypt forest in breeding season.	Project Area contains eucalypt woodland; however, it is highly degraded and no suitable for this species.
Neophema elegans ssp. elegans (Elegant Parrot)	R		2	2020	Found in a wide variety of habitats, including grasslands, shrublands, mallee, woodlands and thickets, bluebush plains, heathlands, saltmarsh and farmland.	**Possible** Recent records located This species inhabit a wide range of habitats.
Numenius madagascariensis (Eastern Curlew)		CE	1		The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, and sometimes use the mangroves. The birds are also found in saltworks and sewage farms.	Aquatic/wetland species not further assessed in this study.
Oxyura australis (Blue-billed Duck)	R		2	2018	Large dams and lakes and well-vegetated freshwater swamps.	Aquatic/wetland species not further assessed in this study.
Pandion haliaetus (Osprey)		MI	1		Eastern Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands.	Aquatic/wetland species not further assessed in this study.
Petroica boodang boodang (Scarlet Robin)	R		2	2020	It occurs from the coast to the inland slopes. Lives in dry eucalypt forests and woodlands. The understorey is usually open and grassy with few scattered shrubs.	**Possible.** The Project Area is suitable, containing dry eucalypt woodlands with open grassy understorey with a few scattered shrubs
Petroica phoenicea (Flame Robin)	V		2	2003	Breeds in eucalypt forests and woodlands, with access to open areas, such as subalpine woodland, recently burnt forest, recently logged forest and pine plantations.	**Unlikely.** The Project Area is highly graded.
Plectorhyncha lanceolata (Striped Honeyeater)	R		2	2020	The Striped Honeyeater is found in forests and woodlands, often along rivers, as well as mangroves and in urban gardens.	**Likely.** The Project Area is suitable. A woodland with urban garden features and recent records approximately 4.5km away.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Polytelis anthopeplus ssp. monarchoides (Regent Parrot)	V		2	1996	Primarily inhabits riparian or littoral River Red Gum (*Eucalyptus camaldulensis*) forests or woodlands and adjacent Black Box (*E. largiflorens*) woodlands.	**Unlikely.** No River Red Gum or Black Box present within the Project Area.
Rhipidura rufifrons (Rufous Fantail)		MI	1		Usually wet sclerophyll forests, often in gullies dominated by eucalypts and with a dense shrubby understorey often including ferns. May also inhabit drier sclerophyll forests and woodlands often with a shrubby or heath understorey when on passage.	**Unlikely.** The Project Area mid and understorey is highly degraded.
Spatula rhynchotis (Australian Shoveler)	R		2	1999	Fresh and saline lakes and well-vegetated freshwater wetlands. Also occurs in coastal inlets, floodwaters and sewage ponds.	Aquatic/wetland species not further assessed in this study.
Stagonopleura bella (Beautiful Firetail)	R		2	2020	Habitat requirements not well known, but they are recorded in a range of habitats including dense heath and thick forests especially near sheoaks and tea-trees. Also occurs in coastal and sub-coastal heaths and heathy woodlands.	**Unlikely.** The Project Area mid and understorey is highly degraded.
Thinornis cucullatus ssp. cucullatus (Hooded Plover)		VU	1		The hooded plover (eastern) is a small Australian beach nesting bird. It mainly occurs on wide beaches backed by dunes with large amounts of seaweed and jetsam, creek mouths and inlet entrances.	Aquatic/coastal species not further assessed in this study.
Tringa nebularia (Common Greenshank)		MI	1		This species is found in a wide variety of inland wetlands and sheltered coastal habitats of varying salinity. It occurs in sheltered coastal habitats, typically with large mudflats and saltmarsh, mangroves or seagrass.	Aquatic/wetland species not further assessed in this study.
Zanda funerea ssp. *whiteae*	V		2	2020	*Eucalyptus* forests and woodlands and plantations of exotic *Pinus* sp.	**Likely.** Project Area degraded however suitable foraging

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
(Yellow-tailed Black Cockatoo)						species are suitable such as *Pinus radiata*. Multiple recent records located <1km away from Project Area.
Zapornia tabuensis (Spotless Crake)	R		2	2010	Found in well vegetated freshwater wetlands with rushes, reeds and cumbungi. Will also frequent muddy areas, reedbeds or wetlands.	Aquatic/wetland species not further assessed in this study.
Zoothera lunulata halmaturina (South Australian Bassian Thrush)	R	VU	1,2	2021	Damp, densely forested areas and gullies are favoured by the Bassian Thrush, usually with a thick canopy overhead and leaf-litter below.	**Unlikely** Although recent records located <1km away. Project Area not suitable for this species. Highly degraded, lack of leaf litter, midstorey and understorey.
MAMMALS						
Antechinus flavipes (Yellow-footed Antechinus)	V		2	2019	Inhabits dry forests on the inland side of the Great Dividing Range, Australia.	**Unlikely** Project Area not suitable for this species. Project Area is highly degraded.
Isoodon obesulus ssp. obesulus (Southern Brown Bandicoot)	V	EN	1,2	2021	Areas of dense ground cover in varied habitat: heathland, shrubland, sedgeland, heathy open forest and woodland. Can be found in a range of soil types, although usually associated with infertile, sandy and well drained soils.	**Unlikely** Project Area not suitable for this species. Does not contain damp and dense forests.
Pteropus poliocephalus (Grey-headed Flying-fox)	R	VU	1,2	2020	Forests and woodlands	**Possible.** This species may forage on the large Brown Stringybarks located in the Project Area.
Trichosurus vulpecula (Common Brushtail Possum)	R		2	2020	Anywhere where trees with suitable hollows occur, including open forests and woodlands but also urban areas and cities.	**Known** Scats of this species was identified during the field survey.
REPTILES						
Aprasia pseudopulchella (Flinders Ranges Worm-lizard)		VU	1		Occurs in open woodland, native tussock grassland, riparian habitats and rocky isolates.	**Unlikely** Project Area not suitable for this species. Does not contain damp and dense forests.
Varanus rosenbergi (Heath Goanna)	V		2	2014	Habitat across southern Australia includes coastal heaths, humid woodlands,	**Unlikely** Project Area highly degraded and unsuitable for this species.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
					and wet and dry sclerophyll forests.	
Varanus varius (Lace Monitor)	R		2	2013	Lace Monitors occur in well-timbered areas from dry woodlands to cool temperate forests in southern Australia.	**Unlikely** Project Area highly degraded. High rainfall area.

Source: 1= PMST, 2 = BDBSA
NPW Act: E= Endangered, V = Vulnerable, R= Rare.
EPBC Act: Ex = Extinct, CR = Critically Endangered, EN = Endangered, VU = Vulnerable, MI = Migratory

4.2.2. Threatened flora

The PMST identified a total of 16 EPBC threatened species, and the BDBSA identified an additional forty (47) species as possibly occurring within 5 km from the Project Area.

Considering the habitat preferences of the species identified and the nature of habitat present in the Project Area, a total of have been assessed as possibly occurring within the Project Area, based on habitat suitability and recent records, this includes:

- *Acacia gunnii* (Ploughshare Wattle);
- *Dianella longifolia var. grandis* (Pale Flax-lily); and
- *Leionema hillebrandii* (Mount Lofty Phebalium)

The likelihood of occurrence assessment for each species is shown in

Table 22.

Forty-six plant species were recorded during the survey, including 26 introduced species. This included also included planted species (Appendix 2).

No threatened flora species were recorded in the Project Area.

Table 22. Likelihood of occurrence of threatened flora species identified in the desktop assessment. The data source and threat levels are described in the table footer.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Acacia gunnii (Ploughshare Wattle)	R		2	2020	Usually on rocky hillsides and amongst rocky outcrops in open forest, associated with *Eucalyptus obliqua* and *Eucalyptus baxteri*. Soils: hard, acidic, yellow-duplex.	**Possible.** Recent records around 1.5km nearby. Project Area contains *E. baxteri*, however no rocky outcrops present within site.
Acacia iteaphylla (Flinders Ranges Wattle)	R		2	2020	Grows mainly among rocky outcrops on hillsides or along rocky creeks in valleys.	**Unlikely.** No rocky outcrops present within Project Area.
Acacia stricta (Hop Wattle)	R		2	2005	Associated with *Eucalyptus baxteri* in open scrub vegetation with heath understorey, often in damp situations. Soils: mainly shallow red-brown sandy, shallow dark cracking clays.	**Unlikely.** *E.baxteri* within Project Area. However, the Project Area is highly degraded and contain no heathy understorey.
Austrostipa tenuifolia	R		2	2018	Growing sandy soils in grassland or grassy woodland associated with *Callitris* or *Allocasuarina*.	**Unlikely.** Habitat not suitable, no *Callitris* or *Allocasuarina* located within Project Area.
Baloskion tetraphyllum ssp. tetraphyllum (Tassel Cord-rush)	V		2	2012	SA: SE. Grows in swampy areas and on river banks.	**Unlikely.** The Project Area is not a swamp or contain a river.
Bauera rubioides (Wiry Bauera)	R		2	2011	Widespread throughout coastal regions and in mountains in moist places.	**Unlikely.** Not coastal habitat.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Blechnum nudum (Fishbone Water-fern)	R		2	1998	Occasional along stream banks in valleys.	**Unlikely.** No steams located within Project Area.
Blechnum wattsii (Hard Water-fern)	R		2	2010	Grows in wet forest types such as rainforest, wet eucalypt forest and riparian vegetation where it can form the dominant groundcover. Grows in great profusion in permanently damp areas and is most abundant on-stream banks and near waterfalls.	**Unlikely.** Project Area does not contain any habitat suitable for this species.
Caladenia argocalla (White-Beauty Spider-orchid)		EN	1		Occurs in intact grassy woodlands often with *E. leucoxylon* (South Australian Blue Gum) and *Allocasuarina verticillata* (Drooping Sheoak). Flowering in winter.	**Unlikely.** No Blue Gum or Drooping Sheoak located in the Project Area.
Caladenia behrii (Pink-lipped Spider-orchid)		EN	1		Grows in fertile, shallow loams, amongst *Eucalyptus goniocalyx* / *E. fasciculosa* woodland and amongst *E. obliqua/E. microcarpa/E. leucoxylon* woodland. The understorey is usually open and shrubby. Also recorded amongst *E. fasciculosa* & *Xanthorrhoea semiplana*.	**Unlikely.** No suitable woodland located within the Project Area.
Caladenia gladiolata (Bayonet Spider-orchid)		EN	1		Grows in woodland dominated by South Australian Blue Gum (*Eucalyptus leucoxylon*), Sugar Gum (*E. cladocalyx*) or Pink Gum (*E. fasciculosa*). Grows on moderate to steep slopes in sandy loam soils with scattered shale and quartzite.	**Unlikely.** Project Area does not contain suitable *Eucalyptus sp.*
Caladenia leptochila ssp. leptochila (Narrow-lip Spider-orchid	R		2	2019	Small groups in clay or gravelly soils in open to dense forests. Not uncommon in Adelaide Hills	**Unlikely.** Soil profile not suitable for this species.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Caladenia necrophylla (Late Spider-orchid)	E		2	2008	Grows in heathy open forest, coastal shrub, heathland, tea-tree scrub.	**Unlikely.** The Project Area is highly degraded.
Caladenia pusilla (Pigmy Caladenia)	R		2	1998	grows in Koppio Hills and Blue gum woodland.	**Unlikely.** Project Area does not contain Blue Gums.
Caladenia rigida (Stiff White Spider-orchid)	E	EN	1,2	1995	*Eucalyptus obliqua, E. fasciculosa, E. leucoxylon, E. goniocalyx, E. microcarpa* open forests with a relatively open shrub layer.	**Unlikely.** Understorey vegetation throughout the Project Area is dense and weedy, without the openness required by this species. Habitat is unsuitable.
Caladenia tensa (Greencomb Spider-orchid)		EN	1		Various habitats have been described including Cypress Pine (Family: Cupressaceae) / Yellow Gum Woodland, Pine / Box woodland, mallee-heath sites, healthy woodland and mallee woodland, generally with rock outcrops.	**Unlikely.** Possibly recorded within 20 years, however Project Area does not contain Yellow Gum are species from the Cypress Pine family.
Caleana major (Large Duck-orchid)	R		2	2000	Forms small colonies in white sands in open *Eucalyptus baxteri* forest and often associated with *Banksia ornata*.	**Unlikely.** *E. baxteri* present within Project Area and soils were clay loam, rather than white sands which this species prefers.
Cardamine paucijuga (Annual Bitter-cress)	R		2	2011	Grows in rich soils in moist to dry habitats.	**Unlikely.** Project Area highly degraded.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Deyeuxia densa (Heath Bent-grass)	R		2	2015	Occurs mostly in damp lowland heathland and woodland.	**Unlikely.** Project Area does not remain damp enough for this species due to slope.
Deyeuxia minor (Small Bent-grass)	V		2	2020	Grows in wet environments.	**Unlikely.** Project Area does not get wet enough for this species.
Dianella longifolia var. grandis (Pale Flax-lily)	R		2	2019	Grassy woodland specialist, e.g., Blue Gum, Candlebark, Manna Gum, Stringybark and Grey Box.	**Possible.** Stringybarks present within Project Area, however understorey is in poor quality and dominated mainly by exotic forbs and grasses.
Dicksonia antarctica (Soft Tree-fern)	E		2	2020	Abundant in wet forest communities. It occurs in forest types ranging from rainforest to sheltered gullies within dry sclerophyll forest and subalpine forest.	**Unlikely.** Woodland community not a wet forest or rainforest.
Dipodium pardalinum (Leopard Hyacinth-orchid)	V		2	2012	Grows in wet forests with an open understorey; heathy forest on well-drained soil	**Unlikely.** Project Area is highly degraded.
Diuris brevifolia (Short-leaf Donkey-orchid)	E		2	2020	Most frequently occurs at the edges of ephemeral swamps, or river flats, and on river valley and ridge slopes which are prone to waterlogging. Grows among shrubs in dense stunted forest and low heath in moist to wet soils; sometimes on swamp margins.	**Unlikely.** Project Area contains no swamps and understorey is sparse.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Diuris chryseopsis (Cowslip Orchid)	E		2	1998	Recorded in Blue gum flats, and *Eucalyptus camaldulensis* swamps and wetlands - moist and recently wet with moss, sedges and some *Melaleuca sp.* and *Bulbine bulbosa.*	**Unlikely.** No swamps or wetlands present within the Project Area.
Drosera stricticaulis (Erect Sundew)	V		2	1998	*Eucalyptus cretata* (Darke Peak Mallee), *Eucalyptus odorata* (Peppermint Box) Mallee, Granite rock run-off area, In damp clay/sand in water retentive soils, drainage lines in *Eucalyptus camaldulensis* woodlands.	**Unlikely.** The Project Area contains only Stringybarks.
Eucalyptus dalrympleana ssp. dalrympleana (Candlebark Gum)	R		2	2021	Grows in deep well-watered, but well-drained soils and commonly associated with *Eucalyptus obliqua.*	**Unlikely.** Although it would occur nearby, Candlebark Gum was not recorded in the area to be impacted in the Project Area.
Eucalyptus fasciculosa (Pink Gum)	R		2	2020	Sandy and rocky areas in soils of low fertility. In the Mount Lofty Ranges, it is often associated with *E. leucoxylon* and *E. odorata*.	**Unlikely.** Although it would occur nearby, Pink Gum was not recorded in the area to be impacted in the Project Area.
Eucalyptus viminalis ssp. *viminalis* (Manna Gum)	R		2	2019	Higher parts of the Mount Lofty Ranges on moist slopes.	**Unlikely.** Although it would occur nearby, Manna Gum was not recorded in the area to be impacted in the Project Area, despite surveying all scattered trees to be impacted.
Euphrasia collina ssp. osbornii	E	EN	1,2	2000	Generally recorded as growing in Mallee scrubland	**Unlikely.** No Mallee within Project Area.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Gastrodia sesamoides (Potato Orchid)	R		2	2010	Solitary or forming small groups in humus rich soil under heavy forest in high rainfall areas, often in deep leaf litter along creeks.	**Unlikely.** Project Area is not a heavy forest.
Gleichenia microphylla (Coral Fern)	R		2	1998	It can form dense thickets to 1.5 m tall in sclerophyll forest but occurs as dense low mounds in open swamps.	**Unlikely.** No open swamps present within Project Area.
Glycine latrobeana (Clover Glycine)		VU	1		In the MLR it is found in *E. viminalis* woodland and open woodland sometimes with *E. leucoxylon.*	**Unlikely.** Project Area does not contain any Blue or Manna Gum.
Gonocarpus micranthus ssp. micranthus (Creeping Raspwort)	R		2	2006	Confined to damp or boggy situations. Occurs in KI, SE and SL regions	**Unlikely.** Project area is slightly sloped, therefore may not be damp or boggy enough for this species.
Grevillea aquifolium (Prickly Grevillea)	R		2	1997	On calcareous sand in sclerophyllous woodland, and in heath on sands, limestone pavements and sandstone outcrops.	**Unlikely.** Clay-loam soils in Project Area, this species prefers sand, sandstone and limestone outcrops.
Hypolepis rugosula (Ruddy Ground-fern)	R		2	2018	Moist environments.	**Unlikely.** Environment not moist enough for this species.
Juncus amabilis	V		2	2009	Damp places.	**Unlikely.** Environment not moist enough for this species.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Leionema hillebrandii (Mount Lofty Phebalium)	R		2	2003	Prefers slopy and rocky outcrops in open woodland of *E. baxteri*.	**Possible.** Project Area does not have any rocky outcrops. However, the site does contain an open *E. baxteri* woodland
Logania saxatilis (Rock Logania)	R		2	1996	In open woodland communities on steep-sided sandstone gorges in crevices of rocky outcrops	**Unlikely.** No rocky outcrops present within Project Area.
Luzula flaccida (Pale Woodrush)	V		2	2020	Frequents in damp environments	**Unlikely.** Project Area is a dry woodland.
Melaleuca armillaris ssp. akineta (Needle-leaf Honey-myrtle)	R		2	2008	Habitat information not available.	**Unlikely.** This species was not identified during the field survey**.**
Microlepidium pilosulum (Hairy Shepherd's Purse)	R		2	2016	Found in mainly sandy and loamy soils on plains and consolidated dunefield systems. *Eucalyptus yalatensis* (Yalata Mallee), *Callitris verrucosa* (Scrubby Pine), *Eucalyptus phenax* ssp. *phenax* (White Mallee) Low Mallee.	**Unlikely.** Soil profile in Project Area not suitable for this species.
Montia fontana ssp. chondrosperma (Waterblinks)	V		2	2018	Grows in moist areas along stream margins and wetland	**Unlikely.** Project Area does not contain any wetlands or water bodies.
Nymphoides crenata (Wavy Marshwort)	R		2	1995	Fresh water to 1.5 m deep in swamps, lagoons, channels and streams; also frequent in temporarily inundated depressions.	**Unlikely.** Project Area does not contain any swamps or water bodies.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Olearia pannosa ssp. pannosa (Silver Daisy-bush)		VU	1		Is generally found in sandy, flat areas and in hilly, rocky areas in woodland or mallee communities dominated by a wide range of eucalypt, Melaleuca and Callitris species.	**Unlikely.** Project Area does not contain flat sandy areas.
Poa umbricola (Shade Tussock-grass)	R		2	2000	Associated with woodland communities.	**Unlikely.** Project Area is a woodland community however it is highly weedy and lacking recent records.
Prasophyllum goldsackii (Goldsack's Leek-orchid)		EN	1		Found in *Eucalyptus cladocalyx* (Sugar Gum) forests, as well as *Allocasuarina verticillata* (Drooping Sheoak) low woodlands and *Melaleuca uncinata* (Broombush) tall open shrublands.	**Unlikely.** No species listed in the previous column were identified during the field survey.
Prasophyllum pallidum (Pale Leek-orchid)		VU	1		Recorded in woodlands and forests dominated by *Eucalyptus leucoxylon*, *E. goniocalyx, E. fasciculosa, E. microcarpa, Callitris gracilis/Eucalyptus fasciculosa, and Allocasuarina verticillata* over *Lissanthe strigosa, Amphipogon strictus and Tricoryne elatior*.	**Unlikely.** Project Area does not contain any of these species.
Prasophyllum pruinosum (Plum Leek-orchid)		EN	1		Preferred habitat includes open woodland and grassy forest, in the open or in the shelter of broom-like shrub growing in fertile loams, usually with other leek-orchids.	**Unlikely.** Although Project Area contains a woodland community woodlands. The midstorey and understorey lack the preferred species.
Pterostylis cucullata (Leafy Greenhood)		VU	1		Occurs in Coast Tea-tree (*Leptospermum laevigatum*) or Moonah (*Melaleuca lanceolata*) coastal scrubs on stabilized sand dunes, with an open understorey and grassy and herbaceous groundcover on seasonally damp but well drained humus rich sandy loams.	**Unlikely.** No suitable vegetation exist for this species and Project Area is not coastal.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Pultenaea graveolens (Scented Bush-pea)	R		2	2021	Prefer dry stringybark and Ironbark forests.	**Unlikely.** Although Stringybarks dominant the Project Area. The site receives 877mls of rain, which is not preferred for this species.
Ranunculus glabrifolius (Shining Buttercup)	V		2	2000	Damp environments.	**Unlikely.** Environment not moist enough for this species.
Rytidosperma laeve (Smooth Wallaby-grass)	R		2	2017	Seasonally damp habitats in open grassland or very open grassy woodland.	**Unlikely.** Habitat unsuitable. There is no suitable damp grassy woodland habitat in the Project Area. Any native vegetation patches are weedy in the understorey and situated in dry areas.
Rytidosperma tenuius (Short-awn Wallaby-Grass)	R		2	2021	Tablelands usually in somewhat damp habitats, rarely dominant; along the coastal shelf a very common constituent of disturbed road verges.	**Unlikely.** Habitat unsuitable. There is no suitable damp grassy woodland habitat in the Project Area. Any native vegetation patches are weedy in the understorey and situated in dry areas.
Schizaea fistulosa (Narrow Comb-fern)	V		2	1996	Usually found on raised soil mounds in swamps or under scrub in moist situations.	**Unlikely.** Habitat does not contain any swamps or moist environments.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Schoenus latelaminatus (Medusa Bog-rush)	V		2	2012	Grows in temporarily wet places.	**Unlikely.** Habitat does not contain moist environments.
Senecio macrocarpus (Large-fruit Fireweed)		VU	1		Occurs most commonly in depressions in low lying closed sedgeland but may occur in sedgeland, herbland, low shrubland to low open woodland where competition from understorey plants is low. The soils range from clay to loamy sand.	**Unlikely.** The understorey of this Project Area contains mostly invasive species.
Thelymitra batesii	R		2	2014	Grows in fertile soils and grassy well drained woodland sites, often on ridges in shallow red earths.	**Unlikely.** The understorey of this Project Area contains mostly invasive species.
Thelymitra epipactoides (Metallic Sun-orchid)		EN	1		Habitat is mainly confined to *Allocasuarina verticillata* (Drooping Sheoak) low woodland, *Eucalyptus cladocalyx* (Sugar Gum) mid woodland, *Eucalyptus angulosa* (Coast Ridge-fruited Mallee), *E. diversifolia* ssp. *diversifolia* (Coastal White Mallee) mid mallee woodland, +/- *Melaleuca lanceolata* (Dryland Tea-tree).	**Unlikely.** None of the associated species were identified during the field survey. Therefore, this species is unlikely to exist.
Thelymitra grandiflora (Great Sun-orchid)	R		2	2019	Occurs in forest clearings, woodland and scrub in well drained gravelly clay soils which may be laterite or podsols, or mixed with sand, extending to dry rocky ridges in better soils.	**Unlikely.** Soil profile in Project Area not preferred for this species.
Thelymitra matthewsii (Spiral Sun-orchid)		VU	1		Open forests and woodlands in well-drained sand and clay loams. It is a post-disturbance coloniser,	**Unlikely.** This species prefers the lack of competition with other species. The Project Area is too weedy for them to establish.

Species (common name)	NPW Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Todea barbara (King Fern)	E		2	2006	All extant populations occur adjacent to permanent water, springs or soaks.	**Unlikely.** No permanent water sites in the Project Area.
Veronica derwentiana ssp. homalodonta (Mount Lofty Speedwell)		CE	1		This species requires high moisture areas with excellent drainage. Commonly found in moist gullies and near creeklines.	**Unlikely.** The Project Area does receive a high amount of rainfall; however, drainage is not adequate enough and Project Area is not along a creekline or within a gully.

Source: 1= PMST, 2 = BDBSA
NPW Act: E= Endangered, V = Vulnerable, R= Rare.
EPBC Act: Ex = Extinct, CR = Critically Endangered, EN = Endangered, VU = Vulnerable, MI = Migratory

4.3. Cumulative impacts

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.

Direct impact: The direct impact of the Project is the removal of 19 scattered trees, consisting of two species do provide good resource and habitat for fauna species. However, it is unlikely that these the scattered trees are habitat for threatened fauna species.

Impact to native vegetation from all construction associated with the development will be limited to the removal of native vegetation identified in this report, including clearance directly related to infrastructure.

Potential indirect impacts of the Project include:

- Dust generation, which may impact surrounding vegetation; and
- Noise generation, which may impact fauna species in the area.
- Due to the slight slope (15 degrees south -west) in the area clearance of the vegetation within the Project Area may increase the chance of water runoff into properties below.

4.4. Addressing 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 scattered trees assessed within the Project Area are located on modified and degraded land. Most of the Project Area contains dead or scattered trees in poor to moderate condition. This Project Area also contains limited midstorey and understorey. Most of the midstorey had been planted and includes exotic and native species such as *Pinus radiata, Acacia pycnantha, Pittosporum undulatum, Bursaria spinosa and Acacia dealbata*. The understorey contains mainly exotic weeds and forbs such as *Freesia cultivar* and O*xalis pes-caprae* and *Watsonia sp.*

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).

The impact to vegetation has been minimised by clearing areas where vegetation is sparse, more degraded and of lower quality (i.e., non-native plantation) than the surrounding areas. It is in close proximity to existing roads.

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.

The proposed Project infrastructure is permanent, and land clearance associated with the project is unlikely to be rehabilitated or restored. However, EBS recommends that Declared and Environmental weed species (e.g., Radiata Pine and Bridal Creeper) are controlled.

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.

Any adverse impact on native vegetation or ecosystems that cannot be avoided or minimised will be offset by implementing an SEB that outweighs that impact.

The NVC will only consider an offset once avoidance, minimization and restoration have been documented and fulfilled. The SEB Policy explains the biodiversity offsetting principles that must be met.

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*.

Table 23. Assessment against the Principles of Clearance.

Principle of clearance	Considerations
Principle 1(a) – it comprises a high level of diversity of plant species	Relevant information A total of 46 plant species were recorded during the survey, including 26 introduced species. This included also included native planted species (Appendix 2). The area was highly degraded and no vegetation associations could be established.
	Assessment against the principles **Not at Variance**
	Moderating factors that may be considered by the NVC N/A
Principle 1(b) – significance as a habitat for wildlife	Relevant information A total of 11 bird species were observed flying and foraging, this included one introduced species. The Scats of the State Rare Common Brushtail Possum were observed within the Project Area (Appendix 2). Three other State Rare species were listed as likely to occur within the Project Area based on recent records, proximity to the Project Area and their habitat preference, this included: • *Zanda funerea* ssp. *whiteae* (Yellow-tailed Black Cockatoo): **State Vulnerable**;

	• *Plectorhyncha lanceolata* (Striped Honeyeater): **State Rare**; and • *Microeca fascinans ssp. fascinans* (Jacky Winter): **State Rare** No EPBC listed threatened fauna species were identified as likely occurring in the Project Area since 1995 within 5 km of the Project Area. Fauna Habitat Score – 1.4 (all scattered trees) Biodiversity Score – various (ranging from 0.2 – 4.76)
	Assessment against the principles **Seriously At Variance** • All scattered trees
	Moderating factors that may be considered by the NVC Is the clearance likely to: • Lead to a long-term decrease in the size of a population; • Reduce the area of occupancy of the species; • Fragment an existing population into two or more populations; • Adversely affect habitat critical to the survival of a species; • Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline; • Result in invasive species that are harmful to a threatened species becoming established in the threatened species habitat; and Interfere with the recovery of the species.
Principle 1(c) – plants of a rare, vulnerable or endangered species	Relevant information No Nationally or State threatened flora species were recorded during the assessment. Threatened species may have been present within the site, but undetectable at the time of assessment, due season and conditions. Threatened Flora Score – 0 (A1)
	Assessment against the principles **Not at Variance**
	Moderating factors that may be considered by the NVC N/A
Principle 1(d) – the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered	Relevant information No TECs under the EPBC Act or threatened ecosystems under the DEW Provisional list of threatened ecosystems are present within the Project Area. Threatened Community Score - 1
	Assessment against the principles **Not at Variance**
	Moderating factors that may be considered by the NVC N/A
Principle 1(e) – it is significant as a remnant of vegetation in	Relevant information Uraidla IBRA Association remnancy – 26% Mount Lofty Ranges IBRA Subregion remnancy – 15% The vegetation is in a poor to fair condition with a high proportion of weed species present in the vegetation.

an area which has been extensively cleared	Total Biodiversity Score – 35.68
	Assessment against the principles **At variance**
	Moderating factors that may be considered by the NVC The region has been largely cleared leaving only small areas of native vegetation.
Principle 1(f) – it is growing in, or in association with, a wetland environment	Relevant information The vegetation is not associated with a wetland environment.
	Assessment against the principles **Not at Variance**
	Moderating factors that may be considered by the NVC N/A
Principle 1(g) – it contributes significantly to the amenity of the area in which it is growing or is situated	Relevant information Due to the urbanisation of the Area these trees to provide amenity value to the area.
	N/A
	Moderating factors that may be considered by the NVC NA

Principles of Clearance (h-m) will be considered by comments provided by the local NRM Board or relevant Minister. The Data Report should contain information on these principles where relevant and where sufficient information or expertise is available.

4.6. Risk assessment

The level of risk associated with the application

Table 24. Summary of the level of risk associated with the application.

Total clearance	No. of trees	**19**
	Area (ha)	
	Total biodiversity Score	**35.68**
Seriously at variance with principle 1(b), 1(c) or 1 (d)		**1 (b)**
Risk assessment outcome		**Level 3 (Escalated from Level 2)**

5. Clearance summary

Scattered trees Summary table

Table 25. Scattered Tree 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
1	1	1.4	0	4.00	1	4.20	$5,100.38	
2	2	1.4	0	0.20	1	0.21	$259.75	
3	1	1.4	0	3.70	1	3.89	$4,720.75	
4	1	1.4	0	0.97	1	1.02	$1,238.57	
5	1	1.4	0	3.93	1	4.13	$5,016.29	
6	1	1.4	0	1.20	1	1.26	$1,530.61	
7	1	1.4	0	0.32	1	0.33	$403.81	
8	1	1.4	0	0.28	1	0.29	$350.83	
9	1	1.4	0	1.21	1	1.27	$1,545.06	
10	1	1.4	0	4.16	1	4.36	$5,301.53	
11	1	1.4	0	4.75	1	4.99	$6,061.48	
12	1	1.4	0	3.28	1	3.44	$4,184.02	
13	2	1.4	0	2.81	1	2.95	$3,579.22	
14	1	1.4	0	1.95	1	2.05	$2,484.95	
15	2	1.4	0	2.29	1	2.40	$2,917.16	
16	1	1.4	0	0.63	1	0.66	$805.62	
Total	**19**			**35.68**		**37.46**	**$43,333.35**	**$2,383.33**

Totals summary table

Table 26. Summary table.

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	35.68	37.46	$43,333.35	$2,383.33	**$45,716.68**

Economies of Scale Factor	0.5
Rainfall (mm)	877

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:

☐ Establish a new SEB Area on land owned by the proponent.

☐ Use SEB Credit that the proponent has established.

☐ Apply to have SEB Credit assigned from another person or body.

☐ Apply to have an SEB to be delivered by a Third Party.

☒ 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:

Future Urban Pty Ltd proposes to achieve the SEB by paying into the Native Vegetation Fund.

The total SEB payment required for the clearance of **19 scattered trees** with a Total Biodiversity Score of 35.68 is **$45,716.68,** which includes an administration fee of $2,383.33 (Table 26).

7. References

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8. Appendices

Appendix 1. List of fauna species observed during the field survey.

	Species Name	Common name	Comments
	Birds		
1	*Pachycephala rufiventris*	Rufous Whistler	
2	*Anthochaera carunculata*	Red Wattlebird	
3	*Anthochaera carunculata*	Little Wattlebird	
4	*Eolophus roseicapilla*	Galah	
5	*Gymnorhina tibicen*	Australian Magpie	
6	*Malurus cyaneus*	Superb Fairywren	
7	*Phaps chalcoptera*	Common Bronzewing	
8	*Phylidonyris novaehollandiae*	New Holland Honeyeater	
9	*Platycercus elegans*	Crimson Rosella	
10	*Turdus merula*	Common Blackbird	
11	*Vanellus miles*	Masked Lapwing	
	Mammals		
12	*Trichosurus vulpecula*	Common Brushtail Possum	Scats found within Project Area.

Appendix 2. List of flora species observed during the field survey.

	Species Name	Common name	Comments
1	*Acacia baileyana**	Cootamundra Wattle	Environmental Weed
2	*Acacia dealbata ssp. dealbata**	Silver Wattle	
3	*Acacia longifolia ssp. longifolia**	Sallow Wattle	
4	*Acacia pycnantha*	Golden Wattle	
5	*Allium triquetrum**	Three-cornered Garlic	Declared weed
6	*Anthoxanthum odoratum**	Sweet Vernal Grass	
7	*Asparagus asparagoides f. asparagoides**	Bridal Creeper	WoNS
8	*Astroloma humifusum*	Cranberry Heath	
9	*Briza maxima**	Large Quaking-grass	
10	*Bursaria spinosa ssp. spinosa*	Sweet Bursaria	
11	*Cassytha sp.*	Dodder-laurel	
12	*Cynodon dactylon var. dactylon**	Couch	Environmental Weed
13	*Dactylis glomerata**	Cocksfoot	Environmental Weed
14	*Dianella revoluta var. revoluta*	Black-anther Flax-lily	
15	*Ehrharta erecta**	Panic Veldt Grass	Environmental Weed
16	*Eucalyptus baxteri*	Brown Stringybark	
17	*Euphorbia sp.**	Spurge	
18	*Exocarpos cupressiformis*	Native Cherry	
19	*Freesia cultivar**	Freesia	Environmental Weed
20	*Fumaria capreolata**	White-flower Fumitory	
21	*Galium aparine**	Cleavers	Environmental Weed
22	*Genista monspessulana**	Montpellier Broom	WoNS
23	*Hakea rostrata*	Beaked Hakea	
24	*Hedera helix**	English Ivy	
25	*Hibbertia sp.*	Guinea-flower	
26	*Hypochaeris radicata**	Rough Cat's Ear	Environmental Weed
27	*Lepidosperma sp.*	Sword-sedge/Rapier-sedge	
28	*Leptospermum sp.*	Tea-tree	
29	*Lomandra fibrata*	Mount Lofty Mat-rush	
30	*Lomandra multiflora ssp.*	Many-flower Mat-rush	
31	*Microlaena stipoides var. stipoides*	Weeping Rice-grass	
32	*Oxalis pes-caprae**	Soursob	
33	*Oxalis purpurea**	One-o'clock	
34	*Pimelea sp.*	Riceflower	
35	*Pinus radiata**	Radiata Pine	Environmental Weed
36	*Pittosporum undulatum**	Sweet Pittosporum	Declared weed
37	*Plantago lanceolata var.**	Ribwort	Environmental Weed
38	*Platylobium obtusangulum*	Holly Flat-pea	
39	*Rhamnus alaternus**	Blowfly Bush	Declared weed
40	*Romulea rosea var. australis**	Common Onion-grass	Environmental Weed
41	*Rubus fruticosus aggregate**	Blackberry	WoNS
42	*Scaevola albida*	Pale Fanflower	
43	*Senecio sp.**	Groundsel	
44	*Solanum nigrum**	Black Nightshade	Environmental Weed

45	*Thysanotus patersonii*	Twining Fringe-lily	
46	*Watsonia sp.**	Watsonia	

WoNS = Weed of National Significance

*** Introduced species**

Appendix 3. Copies of associated approvals – N/A

EBS Ecology
112 Hayward Avenue
Torrensville, SA 5031
www.ebsecology.com.au
t. 08 7127 5607

Details of Representations

Application Summary

Application ID	22005412
Proposal	Construction of a childcare centre with associated non-illuminated advertising displays (x2), retaining walls (4.03m maximum height), combined retaining wall and fencing (4.23 m maximum height), removal of native vegetation, associated car parking and landscaping.
Location	23 MORELLA GR BRIDGEWATER SA 5155

Representations

Representor 1 - Paul Angas

Name	Paul Angas
Address	23 Fern Hill Road BRIDGEWATER SA, 5155 Australia
Phone Number	0418854149
Email Address	paulangas@optusnet.com.au
Submission Date	28/04/2022 04:05 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
As a parent of a Bridgewater PS student I know that the affected roads (Lezayre Avenue and Morella Grove) will be insufficient for the extra traffic generated by morning and afternoon drop-offs, in addition to Bridgewater Primary School traffic. The narrow streets are already overcrowded at busy times and dangerous for children crossing the roads. On-street parking is already haphazard. I also object to the continued clearing of native vegetation in favour of infill development.

Attached Documents

Representations

Representor 2 - Teresa Yeing

Name	Teresa Yeing
Address	1 Shannon Road BRIDGEWATER SA, 5155 Australia
Phone Number	0431743901
Email Address	teresa.yeing@gmail.com
Submission Date	03/05/2022 09:15 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 oppose the development

Reasons

Whilst I think that the addition of a childcare centre in Bridgewater would be of benefit to the community, I have serious concerns with regard to the impact the proposed development will have on traffic flow at school drop off and pick up times. As a local resident (less than 100m from the proposed development) and also a patron of Bridgewater Primary School, I have a first hand understanding of how traffic flows at school drop off and pick up times. I am also aware that the crossing of goods trains through Bridgewater can often cause traffic to bank up along Shannon Road, which is adjacent to the proposed development. Both Morella Grove and Lezayre Ave are one way streets in whole or in part and with no designated parking bays available. Parking on Morella Grove and Lezayre Ave relies on patrons mounting the verge, and it is sometimes not possible to do this without leaving part of your vehicle on the roadway, due to the presence of vegetation. This limited and inadequate parking will be limited even further with the addition of the proposed development. Furthermore, there is very little parking available on adjacent streets (e.g. Trenouth Street, Shannon Road and Fielding Road) to allow for overflow. By adding additional traffic to the area I am confident that gridlock at peak times is highly likely, particularly in the section of Morella Grove between Lezayre Ave and Trenouth Street. I urge the Adelaide Hills Council to undertake a traffic flow study before approving this development and also recommend that the Council invests in the creation of a designated off street drop off and pick up area along Morella Grove, between it's intersections with Lezayre Ave and Trenouth Street. This will enable better traffic flow for the benefit of the proposed development, Bridgewater Primary School, road users, and the residents of Lezayre Ave and Morella Grove. I would fully support the proposal if these two actions were taken by Council.

Attached Documents

Representations

Representor 3 - Elizabeth Guthrie

Name	Elizabeth Guthrie
Address	9 Foxhill Road MT GEORGE SA, 5155 Australia
Phone Number	0414286132
Email Address	eguthrie@me.com
Submission Date	17/05/2022 12:52 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 planning submission for this site shows a lack of consideration for the interdependency between the existing Bridgewater Primary School located on Morella Grove and the proposed childcare facilities. Traffic management infrastructure is already grossly inadequate for the existing primary school and the substantial increase in traffic will add considerably to the existing congestion and associated safety issues that have been raised extensively by the school community. In addition to increased traffic flows and parking issues, the planning submission shows no suggestion of how the developer plans to manage extended construction traffic to ensure the safety of children being dropped and collected from school during peak periods.

Attached Documents

Representations

Representor 4 - Nicole Dahmke

Name	Nicole Dahmke
Address	76 Bluestone Drive MOUNT BARKER SA, 5251 Australia
Phone Number	0401864430
Email Address	nicoledahmke@icloud.com
Submission Date	17/05/2022 04:07 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

Reasons

I object to this development due to the huge impact this will have on the primary school children arriving and departing the school. This road already has serious issues that I as a parent, can not understand hasn't been rectified to date. The existing road infrastructure on and around Morella Grove provides limited parking and difficult access which would be further pressured by additional traffic. If we just consider the impact during the construction of the potential daycare, that will have a massive effect on this problem area for what would take maybe 6 months to build. Then afterwards, the additional traffic added to this area has the potential for a child to be hit. There have already been many near misses in the 8 years I have had children at the school. Council needs to provide suitable evidence that a full traffic report and survey have been provided by the applicant taking into consideration increased traffic pressure on and around the site on a daily basis, the lack of adequate parking for both the proposed childcare centre and existing school facilities, opportunities for children to cross roads safely, and consideration of road use during high risk bushfire/emergency situations. Out of everywhere in Bridgewater that could possibly be used for this development, I am very surprised this weird parcel of land with TERRIBLE roads surrounding it is where it has been decided to build this centre. I can't believe council didn't turn this down before it got to this stage. I have been advocating the school already to have this road fixed so it is suitable for people with disabilities and knowing that 3 different government departments just continue to ignore this issue as well is appalling.

Attached Documents

Representations

Representor 5 - Katarina Khabbaz

Name	Katarina Khabbaz
Address	PO Box 1523 NAIRNE SA, 5252 Australia
Phone Number	0450007447
Email Address	Ina_1001@hotmail.com
Submission Date	17/05/2022 04:07 PM
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

Reasons

I object to/have concerns around this development due to the impact it will have on the safety of children travelling to and from Bridgewater Primary school on the existing road network. The existing road infrastructure on and around Morella Grove provides limited parking and difficult access which would be further pressured by additional traffic. Council needs to provide suitable evidence that a full traffic report and survey have been provided by the applicant taking into consideration increased traffic pressure on and around the site on a daily basis, the lack of adequate parking for both the proposed childcare centre and existing school facilities, opportunities for children to cross roads safely, and consideration of road use during high risk bushfire/emergency situations. Crossing the road is increasing in hazard, and school is not at capacity as it was last year, and the year before. If our school reaches capacity that's more cars then your traffic studies will show. I want this noted. Our school has no drop and go. No safe crossing to get home. This day in age children walking to school is a major part. It's chicken and egg situation with our school. Both parking and crossing needs urgent addressing BEFORE this proposal goes ahead.

Attached Documents

Representations

Representor 6 - Antoun Khabbaz

Name	Antoun Khabbaz
Address	PO Box 1523 NAIRNE SA, 5252 Australia
Phone Number	0422857394
Email Address	Tkhabbaz@hotmail.com
Submission Date	17/05/2022 04:11 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

I object to/have concerns around this development due to the impact it will have on the safety of children travelling to and from Bridgewater Primary school on the existing road network. The existing road infrastructure on and around Morella Grove provides limited parking and difficult access which would be further pressured by additional traffic. Council needs to provide suitable evidence that a full traffic report and survey have been provided by the applicant taking into consideration increased traffic pressure on and around the site on a daily basis, the lack of adequate parking for both the proposed childcare centre and existing school facilities, opportunities for children to cross roads safely, and consideration of road use during high risk bushfire/emergency situations. Crossing the road is increasing in hazard, and school is not at capacity as it was last year, and the year before. If our school reaches capacity that's more cars then your traffic studies will show. I want this noted. Our school has no drop and go. No safe crossing to get home. This day in age children walking to school is a major part. It's chicken and egg situation with our school. Both parking and crossing needs urgent addressing BEFORE this proposal goes ahead. Student safety MUST be priority here. I will be going to channel 7 and Nine and ABC!

Attached Documents

Representations

Representor 7 - Spencer Redwood

Name	Spencer Redwood
Address	Nairne LPO NAIRNE SA, 5252 Australia
Phone Number	0414 179 044
Email Address	Spencer57@tpg.com.au
Submission Date	17/05/2022 04:17 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
Action must be taken in regards to student safety. It's worsening over the years but planning and action must be taken BEFORE this proposal is approved. Daily close calls will go up. No safe crossing. Inadequate parking. School is not at capacity, so traffic surveys if done last year would have been worse!!! And have possibility to return to even more dangerous levels we saw last year, You must address this please. Or let blood be on your hands.

Attached Documents

Representations

Representor 8 - Catherine Houlahan

Name	Catherine Houlahan
Address	6 Railway Avenue BRIDGEWATER SA, 5155 Australia
Phone Number	
Email Address	Houlies@internode.on.net
Submission Date	17/05/2022 05:42 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 have concerns around this development due to the impact it will have on the safety of children travelling to and from Bridgewater PS on the existing road network. There is already limited parking and there is difficult access which would be further pressured by additional traffic. Suitable evidence that a full traffic report and survey have been provided by the applicant to the Council taking into consideration, increased traffic pressure on and around the site on a daily basis, the lack of adequate parking for the existing school and child care facilities, opportunities for children to cross roads safely and consideration of road use during high risk bushfire events.

Attached Documents

Representations

Representor 9 - Emma tilgals

Name	Emma tilgals
Address	45, Orontes Avenue BRIDGEWATER SA, 5155 Australia
Phone Number	0412942779
Email Address	shane4emma@live.com.au
Submission Date	17/05/2022 06:39 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

I support the need for more childcare spaces in the hills, in particular in Bridgewater, however as a mother of a child at Bridgewater Primary School I am concerned about the traffic impact and lack of parking associated with the development. I don't believe 21 extra spaces is adequate when you have staff using the spaces and parents dropping off and picking up at similar times. To say that this will not occur is unrealistic. Parks will quickly be used by school parents, because as it is we need to park on the side of the road, and driveways for local residents are often obstructed. I have already see children run out onto the road in front of cars, as vision is impaired by the cars parked along the verge. The road/parking/footpath infrastructure around the proposed site needs to be improved 1st to ensure safety for all children using the area.

Attached Documents

Representations

Representor 10 - Liesel Riley

Name	Liesel Riley
Address	19 Fern Hill Road BRIDGEWATER SA, 5155 Australia
Phone Number	0419722445
Email Address	esmerelda.dungarees@gmail.com
Submission Date	17/05/2022 08:50 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 am a Bridgewater resident and parent of a Bridgewater Primary School (BPS) student and regularly use Morella Grove. I have concerns around this development due to the impact it will have on the safety of children travelling to and from Bridgewater Primary school on the existing road network. The existing road infrastructure on and around Morella Grove provides limited parking and difficult access which would be further pressured by additional traffic. Council needs to provide suitable evidence that a full traffic report and survey have been provided by the applicant taking into consideration increased traffic pressure on and around the site on a daily basis, the lack of adequate parking for both the proposed childcare centre and existing school facilities, opportunities for children to cross roads safely, and consideration of road use during high risk bushfire/emergency situations.

Attached Documents

Representations

Representor 11 - Kerry Schiphorst

Name	Kerry Schiphorst
Address	12 Oratava Avenue BRIDGEWATER SA, 5155 Australia
Phone Number	0406396774
Email Address	Kerry.Schiphorst@gmail.com
Submission Date	17/05/2022 10:43 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 object to this development due to the impact it will have on the safety of children travelling to and from Bridgewater Primary school on the existing road network. The existing road infrastructure on and around Morella Grove provides limited parking and difficult access which would be further pressured by additional traffic. Council needs to provide suitable evidence that a full traffic report and survey have been provided by the applicant taking into consideration increased traffic pressure on and around the site on a daily basis, the lack of adequate parking for both the proposed childcare centre and existing school facilities, opportunities for children to cross roads safely, and consideration of road use during high risk bushfire/emergency situations. This is not an ideal location for a childcare centre in Bridgewater, however I acknowledge a childcare centre is required somewhere else in Bridgewater.

Attached Documents

Representations

Representor 12 - Tim Dodd

Name	Tim Dodd
Address	12 oratava avenue BRIDGEWATER SA, 5155 Australia
Phone Number	
Email Address	timothyldodd@gmail.com
Submission Date	17/05/2022 10:50 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

Primary school parking and drop off is already inadequate. Both sides of the road surrounding the proposed site are used for drop off and pickup of school children. Bridgewater primary school does not have sufficient side of street parking/drop off parks. This facility will severely add to congestion. It will be plausible that 20 car lengths off drop off area will be removed from the streets surrounding the proposed daycare facility to allow access to the new staff parking onsite. I do not support the proposal unless there will be no change to the verge along the roadside both sides as it is now. I also do not support the removal of native vegetation and habitat trees especially the old stringy bark trees on site. Finally, the current drop off situation is challenging and I already am concerned about my children's safety at pickup and drop off each day. The tragic is already heavily congested and one way, a single car pulling out or parking stops all traffic flowing around the street loop each time.

Attached Documents

Representations

Representor 13 - Nick Glover

Name	Nick Glover
Address	76 Mountford Ave BRIDGEWATER SA, 5155 Australia
Phone Number	
Email Address	nicholas.glover@unisa.edu.au
Submission Date	18/05/2022 09:33 AM
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
I have concerns around this development due to the impact it will have on the safety of children traveling to and from Bridgewater Primary school on the existing road network. The existing road infrastructure on and around Morella Grove provides limited parking and difficult access which would be further pressured by additional traffic. Council needs to provide suitable evidence that a full traffic report and survey have been provided by the applicant taking into consideration increased traffic pressure on and around the site on a daily basis, the lack of adequate parking for both the proposed childcare centre and existing school facilities, opportunities for children to cross roads safely, and consideration of road use during high risk bushfire/emergency situations.

Attached Documents

Representations

Representor 14 - Shane and Annette Devereaux

Name	Shane and Annette Devereaux
Address	3 Lezayre Avenue BRIDGEWATER SA, 5155 Australia
Phone Number	0449922588
Email Address	shane.f.devereaux@gmail.com
Submission Date	18/05/2022 11:22 AM
Submission Source	Email
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 See attached	

Attached Documents

RepresentationAttachment22005412Devereaux-2878954.pdf
EmailRepresentation22005412-Devereaux-2878955.pdf

REPRESENTATION ON APPLICATION – PERFORMANCE ASSESSED DEVELOPMENT

Planning, Development and Infrastructure Act 2016

Applicant:	Future Urban *[applicant name]*
Development Number:	22005412 *[development application number]*
Nature of Development:	Child Care Centre *[development description of performance assessed elements]*
Zone/Sub-zone/Overlay:	Not provided on notification *[zone/sub-zone/overlay of subject land]*
Subject Land:	23 Morella Gr Bridgewater *[street number, street name, suburb, postcode] [lot number, plan number, certificate of title number, volume & folio]*
Contact Officer:	Adelaide Hills Council *[relevant authority name]*
Phone Number:	08 8408 0400 *[authority phone]*
Close Date:	18/05/2022 *[closing date for submissions]*

My name*: Shane and Annette Devereaux	My phone number: 0449922588
My postal address*: 3 Lezayre Ave, Bridgewater, 5155	My email: shane.f.devereaux@gmail.com

* *Indicates mandatory information*

My position is:

- ☐ I support the development
- ☒ I support the development with some concerns (detail below)
- ☐ I oppose the development

The specific reasons I believe that planning consent should be granted/refused are:

- *We oppose the removal of all native vegetation. Having lived in Lezayre Ave we know the native vegetation supports a significant set of wildlife including koala's and native birds in the region. I have a video of the last Koala that visited and can obtain additional residents and former residents to this fact; While we don't oppose the development of the centre would like to ensure there is some caveat around removal of some trees – perhaps on the border line. We would like to understand if there was any consideration to existing native wildlife?*
- *We chose as many do in the region because of the native outlooks that Bridgewater and the Adelaide Hills provide. Facing a set of retaining walls is something that changes the whole aspect of our street and our neighbourhood. We would like to ensure the type of materials used was suitable for the Hills area – and not some form of barren industrial wall*
- *We are very concerned about the additional traffic condition and what seems to be no traffic planning that wea are aware of with this application. Anyone that lives in the area would know that during school hours the entry and exit from Shannon Rd to Cary Gully Rd is poor and getting worse as Hills traffic grows – additionally the intersection of Cary Gully Rd and Old Mt Barker Rd is becoming abysmal and dangerous that those times. We expect that this development will only increase this congestion and create danger on those intersections. I suspect all local residents would be concerned about this issue and as such we would like to understand what sort of modelling was done and the effect and what plans are in place for mitigation*

- *We haven't seen full details of the plan however Lezayre Ave is only a small one way street; we assume the entry and parking is from Morella – so we struggle to see how it is going to cope in the early and late morning hours. Currently the drop of zone sees parents parking from the school down past our place. Similar to the previous statements – although we don't oppose the development we would like some know that some modelling has taken place and mitigation strategies are in place*

- *Having worked in Local Government, currently working on AusAid projects supporting Local Government in Nepal (where the emphasis is on Governance and Service Delivery) I found it a bit hard to come by that because we happened to be away on holidays that we come back to a letter and notification about this assessment that only gives us a week to consider. I would have thought this Development was known some time back and there might have been some consideration to discuss the matter in a wider sense to those being most affected*

- *I would also like to know and understand the zoning of the area. I would have thought that area was residential and any zoning change would have also had to have some community consulation.*

[attach additional pages as needed]

Note: In order for this submission to be valid, it 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:
  - Click here to enter text. [*list any accepted or deemed-to-satisfy elements of the development]*.

I: ☐ wish to be heard in support of my submission*

☒ do not wish to be heard in support of my submission

By: ☐ appearing personally

☐ being represented by the following person: Click here to enter text.

**You may be contacted if you indicate that you wish to be heard by the relevant authority in support of your submission*

Signature:  Date: 18/05/2022

Return Address: 3 Lezayre Ave, Bridgewater, SA, 5155 *[relevant authority postal address]* or

Email: Click here to enter text. *[relevant authority email address]* or

Complete online submission:
plan.sa.gov.au/have_your_say/notified_developments/current_notified_developments

Vanessa Inkster

From: Shane Devereaux <shane.f.devereaux@gmail.com>
Sent: Wednesday, 18 May 2022 10:43 AM
To: Development Admin
Subject: Representation on Application - Performance Assessed Development - 22005412
Attachments: CamScanner 05-18-2022 09.56.pdf

Categories: Vanessa

[EXTERNAL]

Attention Development Officer, Adelaide Hills Council

Please find attached our completed form in respect Development of the Child Care Centre on Morella Grove, Bridgewater.

Kind Regards,

Shane Devereaux

Representations

Representor 15 - Michelle Malseed

Name	Michelle Malseed
Address	17 Rosewarne Crescent BRIDGEWATER SA, 5155 Australia
Phone Number	0439069980
Email Address	rms.malseed@gmail.com
Submission Date	18/05/2022 11:26 AM
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

The area around Bridgewater Primary School is already a disaster just waiting to happen. As a working parent who needs to drop off and collect my child from the school, I routinely experience delays due to the absence of a proper “kiss and drop” zone. I have observed congestion, lack of parking, lack of safe crossings and truly dangerous conditions for children coming and going from the school. Just this morning I witnessed a mother lose grip of a pre-school child as she tried to usher a few older kids across Morella Grove. It’s a wonder her youngster wasn’t run over, it was a truly chaotic scene. I am totally in favour of an early learning centre in Bridgewater and will likely enrol my little one there, but there needs to be a comprehensive assessment of the road conditions and lack of parking around the proposed site before this plan goes any further.

Attached Documents

Representations

Representor 16 - Rachel Kelly

Name	Rachel Kelly
Address	28 Ayr st BRIDGEWATER SA, 5155 Australia
Phone Number	0401135447
Email Address	rachmkelly@gmail.com
Submission Date	18/05/2022 11:39 AM
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
As a parent of children at neighbouring Bridgewater primary school I am concerned that there is simply not enough space in this area for such a large child care center. There are already serious traffic and related safety concerns posed by the nature of the area, the roads and high use at peak times. Adding another 70 vehicles morning and afternoon to this location will be a disaster. The application as proposed does not provide sufficient parking or drop off areas and does not take account of existing usage of the whole boundary to the proposed site by parents of Bridgewater school. It she's not address safety issues of children on foot, bikes, getting in and out of vehicles. A proper traffic study needs to be done and please go and view the site at 845am and 315pm on school days! Thank you Rachel

Attached Documents

Representations

Representor 17 - Bridgewater Primary School Governing Council

Name	Bridgewater Primary School Governing Council
Address	Morella Grove BRIDGEWATER SA, 5155 Australia
Phone Number	0414286132
Email Address	bridgegc@gmail.com
Submission Date	18/05/2022 12:04 PM
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

Reasons

The Bridgewater Primary School Governing Council as representatives of the school leadership and parent body have a number of significant concerns with the proposed development of a childcare centre on Morella Grove, Bridgewater. Our attached supporting document outlines in detail our four key areas of concern relating to the Traffic Management Assessment submitted with the development application. In summary, we believe as it stands this document fails to adequately take into consideration: 1. The inter-relationship between the existing primary school and the proposed development and the well documented existing traffic management issues relating to this site. 2. A forward prediction of increased school enrolments and the impact of this and additional traffic generated from the proposed development on the site. 3. Failure to consider traffic congestion and traffic management in the event of a bush fire evacuation or catastrophic event. 4. Failure to adequately communicate the proposed management of construction vehicles and the impact building works will have on the single lane, one-way, single road entry point to the school grounds for staff, families and service providers. We look forward to presenting our concerns to council.

Attached Documents

SUBMISSION_OF_REPRESENTATION-1043883.pdf

SUBMISSION OF REPRESENTATION

APPLICATION ID: 22005412

On behalf of the Bridgewater Primary School Governing Council we wish to communicate a number of concerns we have with the proposed development of a childcare centre on Morella Grove, Bridgewater.

We start our submission by advising that written notification of the proposed development was not submitted by the developer directly to the Governing Council of Bridgewater Primary School but sent instead to the Education Department to be forwarded at their discretion to our site leadership.

This notification was received on Friday 13th May, leaving only 3 days for council to review the application, prepare a submission and consult relevant stakeholders before submissions close on 18th May.

Furthermore, the planning notification posters placed on the fence of the development site were in locations that were virtually unreadable during the times of day school traffic entered and exited the area.

It is our view a development of this size and nature, which will significantly impact on our local area is deserving of a more appropriate and well-executed community consultation process.

…….

Our primary concern is the lack of adequate traffic assessment, reporting and planning submitted with the planning application.

We believe as it stands this document fails to adequately take into consideration four key issues:

1. The inter-relationship between the existing primary school and the proposed development and the well documented existing traffic management issues relating to this site.

2. A forward prediction of increased school enrolments and the impact of this and additional traffic generated from the proposed development on the site.

3. Failure to consider traffic congestion and traffic management in the event of a bush fire evacuation or catastrophic event.

4. Failure to adequately communicate the proposed management of construction vehicles and the impact building works will have on the single lane, one-way, single road entry point to the school grounds for staff, families and service providers.

ISSUE #1

Failure to recognise existing traffic management issues

Parking and congestion, as well as pedestrian and driver safety, are well-known issues at this site with regular consultations taking place between the school and Council, State Government and Federal Government representatives and the wider community. All three governments jurisdictions are stakeholders on this school site and dictate different traffic management decisions.

For many years we have attempted to find solutions to these ongoing problems and provide a safer environment for our students, staff and parents. We believe even small increases to the number of vehicles accessing road infrastructure, the lack of on-street parking and the safety of children moving around the area all need to be considered for both sites with a focus on interdependency.

The traffic management report submitted does nothing to address these ongoing, long term issues and demonstrates little to no understanding of the impact even a small increase in the number of vehicles accessing the overall site are likely to have.

Our current traffic management systems are increasingly dangerous and inappropriate for the existing traffic, without increased activity.

ISSUE #2

Failure to consider school capacity numbers and increases

The traffic impact statement fails to take into consideration school enrolment numbers are currently below capacity with new enrolments predicted to increase substantially over the next 2-3 years.

It is our opinion any traffic surveys or infrastructure reports should clearly account for this increase and appropriate considerations should be made to these predicted increases when making recommendations around road infrastructure, congestion, access to street parking and pedestrian safety.

ISSUE #3
Inadequate provision for bushfire traffic management planning

The traffic impact statement fails to address the issue of emergency bush fire collection and how existing road infrastructure would handle the influx of traffic generated by such an event.

In our experience, a catastrophic event or bush fire close to the school generates a significant influx in traffic at a single point in time. The school's response to this is currently managed under our own bush fire management policies and procedures.

No consideration seems to have been made for this within the traffic report submitted.

ISSUE #4
Inadequate provision for construction and building vehicles

The traffic impact statement fails to address the impact of construction vehicles accessing the site during ground works and/or construction.

Access to the school site is via one entry point; a single-lane, one-way roadway system around the site. We predict construction vehicles will have significant impact on movement into and out of the school by both vehicles and pedestrians (including emergency access if required) as well as an increase in safety risks.

It is our opinion the traffic report should communicate how these increased traffic and safety risks from construction vehicles and site worker's vehicles will be managed by the developer to ensure impact on our school community.

This is relevant for both peak drop-off and pick-up times, as well as other times during the day when groups of students use the roads and walkways to access other areas of our community.

…..

In closing it is our opinion the traffic impact statement as it stands does not adequately address the inter-relationship between the school and the proposed development or take into consideration how increased traffic across any period of the day will impact both sites.

We welcome further discussion with both council and the developer in regard to these matters and look forward to presenting our position to council in due course.

Carly Young
Chair, Bridgewater Primary School Governing Council

Representations

Representor 18 - Kama Gore

Name	Kama Gore
Address	Po Box 267 BRIDGEWATER SA, 5155 Australia
Phone Number	0419832288
Email Address	Kamagore1@gmail.com
Submission Date	18/05/2022 01:35 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 As members of the Bridgewater primary School Community I have serous concerns around: A) the increase in traffic, as this is already a problem around the streets close to the school B) the removal of native vegetation	

Attached Documents

Representations

Representor 19 - Stacey Kent

Name	Stacey Kent
Address	3/10 Bruce CL MOUNT BARKER SA, 5251 Australia
Phone Number	0404322631
Email Address	staceykent@ymail.com
Submission Date	18/05/2022 01:37 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
Parking is tight already. As a child care worker myself I know how busy drop off and pick up times are in the child care car parks and surrounding areas. For the safety of the children and parents this is not explicable especially for the children whom walk to school or ride there bikes. NOT ENOUGH ROOM

Attached Documents

Representations

Representor 20 - Elissa Gustafson

Name	Elissa Gustafson
Address	11 Kaesler Rd HAHNDORF SA, 5245 Australia
Phone Number	0413223078
Email Address	elissagus@me.com
Submission Date	18/05/2022 01:40 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 object to this development! Have you been to Bridgewater Primary school at drop off and pick up times? There are so many children, families and cars. The impact this development will have on the safety of this community could be devastating! The infrastructure does not exist, as there's nothing happening between Federal, state and local government to look into the roads and car parks for the current demands. And what about bushfire risks? With additional traffic, such a danger to anyone trying to get in and out of the area. I don't believe council has completed a duty of care to the community. I believe nothing can go forward without a substantial review of the current road demands at peak times.

Attached Documents

Representations

Representor 21 - Anne and James Fowler and Plummer

Name	Anne and James Fowler and Plummer
Address	4 Trenouth Street BRIDGEWATER SA, 5155 Australia
Phone Number	0417776219
Email Address	blueplanet@internode.on.net
Submission Date	18/05/2022 03:24 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
Reasons See attached	

Attached Documents

Representation22005412AnneFowlerAndJamesPlummer-2883996.pdf
EmailRepresentation22005412-FowlerAndPlummer-2883997.pdf

REPRESENTATION ON APPLICATION – PERFORMANCE ASSESSED DEVELOPMENT

Planning, Development and Infrastructure Act 2016

Applicant:	Future Urban Pty Ltd
Development Number:	22005412
Nature of Development:	Child Care Centre, Fencing, Retaining, Advertisements, Vegetation Clearance
Zone/Sub-zone/Overlay:	Rural Neighbourhood
Subject Land:	23 Morella Grove Bridgewater CT5473/109 F12021AL2
Contact Officer:	Adelaide Hills Council
Phone Number:	8408 0400
Close Date:	Wednesday 18 May 2022, 11:59pm

My name*: Anne Fowler & James Plummer	My phone number: 0417 776 219
My postal address*: 4 Trenouth Street Bridgewater	My email: blueplanet@internode.on.net

** Indicates mandatory information*

My position is:

- ☐ I support the development
- ☐ I support the development with some concerns (detail below)
- ☒ I oppose the development

The specific reasons I believe that planning consent should be granted/refused are:

As identified by EBS Ecology's Data Report, the proposed development is seriously at variance with principle 1 (b) for the clearance of native vegetation under the Native Vegetation Act 1991 (SA) due to its significance as a habitat for wildlife. As stated by schedule 1 of the Act, native vegetation should not be cleared if, in the opinion of the Council, it has significance as a habitat for wildlife.

Specifically, the proposed project area is inhabited by the Common Brushtail Possum (*Trichosurus vulpecula)* which under the National Parks and Wildlife Act 1972 (SA) is listed as a rare species under Schedule 9. At least one Brushtail Possum (from our observations - suspected to be a female with pouch young) is known to be a permanent resident in a hollow of a dead tree on the western side of the project area, approximately 7 metres northwest of Tree 6 in the Data Report prepared by EBS Ecology. I note that dead trees have not been profiled in this report although they clearly continue to provide functional habitat for a threatened species yet are slated for removal. As a local resident and wildlife carer of possums, I have observed other possums utilising native trees in the project area as food sources.

In addressing the mitigation hierarchy requiring consideration under the Native Vegetation Regulations 2017, it is disappointing that the consultant report by EBS Ecology has provided few strategies to mitigate the loss of native vegetation, other than SEB offset. Whilst this may have environmental benefit somewhere in the longer term, it provides little prospect of enhancement to the native vegetation of the local area that will be impacted by this project.

The Adelaide Hills Council has already recognised the habitat value of this local area by installing nesting boxes in a significant tree located adjacent to the development site following the recent felling of a large eucalypt in adjacent Trenouth Street. Disappointingly the boxes seem not to be actively maintained, as one of the boxes has been open for several months. Over the years it is our observation that native trees are gradually being cleared causing non-natives (particularly large pine trees of little environmental value) to become even more dominant within the landscape.

Furthermore, the presence of many native species in the local area, especially birds, has been observed to be highly seasonal, and simply structured bird surveys (as it appears in this case) may fail to observe all of the species reliant upon on the project site. At my nearby property, many more species have been sighted than those recorded by the survey by EBS Ecology. Whilst some may not be under threat just now, they form a critical part of the local system and need nearby areas of appropriate vegetation diversity and structure during the appropriate seasons to survive; examples often seen include the blue wren, grey fantail, red-browed finch, eastern spinebill, new holland honeyeater. These birds were once commonly found in peri-urban areas, but due to vegetation losses associated with urbanisation, are now reliant upon small patches of highly fragmented native vegetation such as found on the site in question (numbers have dropped by over 42% in recent years).

Should the development proceed then we urge Council to enact a suite of proactive strategies to mitigate the impacts upon local wildlife, not limited to but including:

- Animals to be sensitively relocated before trees are removed
- Alternative nesting sites to be provided such as artificial nesting boxes
- Aerial bridges to be provided for animals to cross Lezayre Road and Morella Grove
- Landscaping of the built site with native vegetation species to provide food sources and functional nesting sites in the future (the consultant Design Brief proposes a combination of native and non-native plant species including few larger trees; mainly non-natives of little habitat value).

Of the natural character of the council area, the Adelaide Hills Council website states:

"The environmental, aesthetic, residential, primary production and natural qualities of the district are renowned for their excellence and contribute to the Adelaide Hills earning the signature of being 'a special place' and one of Australia's most loved areas."

As ratepayers we expect the Adelaide Hills Council to protect the natural character of this "Rural Neighbourhood" pocket by declining development approval. However, should approval be granted, Council must demonstrate its custodial commitment to the natural environment, and respect for the values of local residents, through application of appropriate environmental conditions.

[attach additional pages as needed]

Note: In order for this submission to be valid, it 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:
  - Click here to enter text. [*list any accepted or deemed-to-satisfy elements of the development*].

I:

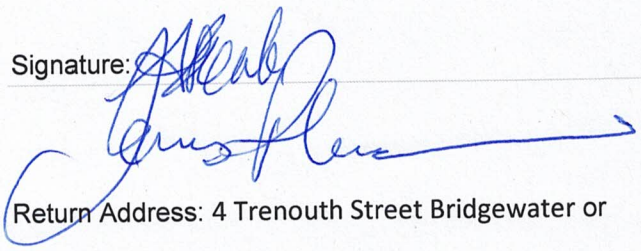
☒ wish to be heard in support of my submission*

☐ do not wish to be heard in support of my submission

By: ☒ appearing personally

☐ being represented by the following person: Click here to enter text.

**You may be contacted if you indicate that you wish to be heard by the relevant authority in support of your submission*

Signature: 

Date: 17/5/22 ~~Click here to enter text.~~

Return Address: 4 Trenouth Street Bridgewater or

Email: blueplanet@internode.on.net

Complete online submission:
plan.sa.gov.au/have_your_say/notified_developments/current_notified_developments

Vanessa Inkster

From: blueplanet@internode.on.net
Sent: Wednesday, 18 May 2022 3:11 PM
To: Development Admin
Subject: Representation regarding Proposed Childcare Centre 22005412
Attachments: Response_to_22005412.pdf

[EXTERNAL]

Good afternoon,

Please find attached a representation opposing development application 22005412.

Kind regards,
Anne Fowler & James Plummer

Representations

Representor 22 - Sandra Cook

Name	Sandra Cook
Address	103 Cave Av BRIDGEWATER SA, 5155 Australia
Phone Number	0413146013
Email Address	Sandracook@live.com.au
Submission Date	18/05/2022 09:16 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
Car parking and traffic flow around Bridgewater primary school is notoriously difficult. The addition of a childcare centre would amplify this problem. In the event of a bushfire the impact could be catastrophic as hundreds of people descend on the area to pick up children. The risk of this with a one way street, no parking and no quick pick up station would be amplified with the additional traffic of the childcare centre.

Attached Documents

Representations

Representor 23 - Christopher Hewton

Name	Christopher Hewton
Address	103 Cave Avenue BRIDGEWATER SA, 5155 Australia
Phone Number	0405988052
Email Address	cdhewton@gmail.com
Submission Date	18/05/2022 09:27 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 area around the school already has traffic and parking issues due to the limited space. This would be further exacerbated with the addition of a childcare centre. Furthermore, there would be increased danger risk in the event of a bushfire that required the evacuation of children by parents.

Attached Documents

Representations

Representor 24 - Claire Obradovic

Name	Claire Obradovic
Address	P.O. Box 333 URAIDLA SA, 5142 Australia
Phone Number	0432048073
Email Address	claire.obradovic544@schools.sa.edu.au
Submission Date	18/05/2022 09:51 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
Morella Grove Bridgewater is a narrow street with the proposed development directly opposite the Bridgewater primary school. I am a teacher at the school and have regular yard duties to ensure student safety on the road and roadside. It is a dangerous area for children as they cross the road to get in or out of their parent's cars and walk or ride to and from school. Increased traffic on this road, without better parking/drop off facilities for school families will further endanger children.

Attached Documents

Representations

Representor 25 - Lindsay Hope

Name	Lindsay Hope
Address	34 MORELLA GROVE BRIDGEWATER SA, 5155 Australia
Phone Number	0408688785
Email Address	enpolmon@chariot.net.au
Submission Date	19/05/2022 11:59 AM
Submission Source	Over Counter
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
Reasons Refer to the attached	

Attached Documents

HopeRepresentation-21038026-2891230.pdf
HopeRepresentation-21038026-2893751.pdf

COLLECTIVE RESPONSE TO DEVELOPMENT APPLICATION ID 22005412 FOR THE PROPOSED CONSTRUCTION OF A CHILDCARE CENTRE AND ASSOCIATED STRUCTURES AT 23 MORELLA GROVE BRIDGEWATER

The undersigned are residents of Morella Grove adjacent to the proposed construction.

It is our collective opinion that the proponents of the Child Care centre to be built on Morella Grove have seriously underestimated the impact of traffic flow in adjacent roads and the car park.

No assessment has been made for a worst case situation such a declaration of emergency requesting parents or guardians to collect children from both the Bridgewater Primary School and the Child Care Centre. This will generate intense traffic flow having a high potential to cause severe congestion at the school, child care centre carpark as currently configured, entrance/egress to said car park, the intersection of Morella grove and Shannon Road, the intersection of Shannon Road and Carey Gully Road as well as interfering with emergency vehicles using the CFS facilities at the corner of Shannon Road and Carey Gully Road.

Congestion on the Freeway resulting in traffic being diverted into Bridgewater via Carey Gully road has not been considered. Such a diversion will cause unacceptable congestion in the area exasperated by rail movements across Carey Gully Road.

The delivery and collection of children to the child Care Centre appears to be predicated on an orderly routine occurring. Human nature can guarantee that this will not happen resulting in probable congestion in the car park with cars attempting 3 point turns and blockages at the access point from Morella Grove.

Traffic attempting to enter Shannon Road from Morella Grove is faced with a blind corner in respect to vehicles travelling west from Onkaparinga road particularly as said traffic has to negotiate a short steep hill in front of the Morella Road/Fielding Crescent intersection. This can be particularly dangerous in times of poor visibility due to rain and fog. In addition during winter the opening and closing times are in darkness. A similar situation also occurs at the intersection of Trenouth Road and Onkaparinga Road.

Additional traffic will also be generated from out of hour's activities occurring at the Bridgewater Primary School. This has not been factored into the assessments.

In section 3.2 of the traffic/parking document it is stated that the access to the carpark is noncompliant with the relevant Australian Standard. This is unacceptable as it is mandatory that all design and construction complies with all appropriate standards. Unencumbered access to all relevant documents is essential for respondents to make meaningful submissions to the proposal. This should include any documents referenced in the proposal. We have attempted to reference AS 2890.1:2004 and AS 2890.6:2009, which we understand Adelaide Hills Council has hard copies of. Enquiries to said council have resulted in a refusal to make these available for perusal. **We therefore reserve the right to amend this submission after the receival date if and when the standards can be viewed.**

It may be possible achieve compliancy by converting the carpark to a drive through with the entrance from Lezaire Avenue and the egress onto Morella Grove. This would have the added benefit of reducing the potential for congestion to occur in the carpark itself.

Inadequate consideration has been given to what happens to vehicle movements where dual child drop-offs will occur at the Child Care Centre and the School.

While it has been stated in the proposal that rubbish collection will occur out of hours, this raises the probability of undue noise being generated as the bin(s) are handled. The car park does not appear to be wide

enough to allow the rubbish collection vehicle to perform a 3 point turn to drive forwards out of the car park. This will most likely result in the vehicle reversing out onto Morella Grove with the reversing alarm disturbing the peace. Vehicles of this size cannot perform a safe right hand turn from Morella Grove into Shannon Road because of the proximity of the pedestrian crossing recently installed on Shannon Road. Such a movement requires multiple movements to be done. It has been observed that busses collecting children from the school overcome this by crossing into Fielding Crescent to use the CFS car park to access Shannon road and eventually Carey Gully Road. This is not an acceptable situation as problems will occur if the CFS carpark is either in use or needed for CFS activities.

Clarification is needed on the meaning of numbers appearing in figure 3 relating to forecast traffic volumeson Morella Grove and Shannon road. What do these numbers mean?

There is no mention of the minimum age for accepting children into the Childcare Centre. Because of this and the unpredictable nature of age mix of children that are expected to use the facility the staffing numbers quoted is pure guesswork at best. Thus there is a high probability that the number is an underestimation of the quoted figure. This has a flow on effect on the number of parking spaces that need to be reserved for staff use and correspondingly the space needed for drop-off and collection of children.

As part of the currents Queen's coronation in 1953 school children from the Bridgewater Primary School planted trees on both sides of what is now known as Morella Grove. Most of these trees still exist on the eastern side of Morella Grove. This was apparently named "Queen Elizabeth Walk" at the time. Two of these trees still exist on the western side of Morella Grove. All of these trees should be considered to have heritage value and be retained.

The research that went into preparing the list of birds is an absolute sham. Of the 46 birds listed only 10 are indicated as being either resident or possibly resident. At least 5 birds that are known to be in the area, namely the Spur Winged Plover, Kookaburra, Ravens and Magpie has been omitted from the list. Other bird's native to the area may also have been omitted from the list. A full list of migratory birds needs to be included.

Similarly the list of reptiles fails to list the Blue Tonged Lizard, Sleepy (Shingleback) Lizard, Adelaide Hills Skinks, Brown Snake and Red Bellied Black Snake that are known to be in the area. There may be other reptiles that have not been accounted for. The list of reptiles in the proposal is a **whitewash** as it names only 3, all of which are not native to the area.

No mention has been made of frogs and toads that are known to be in the area of which at least 5 species are common.

No survey of biodiversity should be complete without an assessment of the insect population and fungi in the area.

The list also fails to note the occurrence of Koala Bears that are in the area.

In fact the whole bio-diversity survey, as presented, is nothing but an insult to the reader and needs to be redone using researchers who know their subjects.

A proper Environmental Impact Statement does not appear to have been conducted, or if aspects have been done they have not been included in the document. We refer, in particular the Acoustic report. There is also no reference to air pollution potential from activities specifically from motor vehicles.

L A & S N Hope, 34 Morella Grove

COLLECTIVE RESPONSE TO DEVELOPMENT APPLICATION ID 22005412 FOR THE PROPOSED CONSTRUCTION OF A CHILDCARE CENTRE AND ASSOCIATED STRUCTURES AT 23 MORELLA GROVE BRIDGEWATER

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Additional traffic will also be generated from out of hour's activities occurring at the Bridgewater Primary School. This has not been factored into the assessments.

In section 3.2 of the traffic/parking document it is stated that the access to the carpark is noncompliant with the relevant Australian Standard. This is unacceptable as it is mandatory that all design and construction complies with all appropriate standards. Unencumbered access to all relevant documents is essential for respondents to make meaningful submissions to the proposal. This should include any documents referenced in the proposal. We have attempted to reference AS 2890.1:2004 and AS 2890.6:2009, which we understand Adelaide Hills Council has hard copies of. Enquiries to said council have resulted in a refusal to make these available for perusal. **We therefore reserve the right to amend this submission after the receival date if and when the standards can be viewed.**

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enough to allow the rubbish collection vehicle to perform a 3 point turn to drive forwards out of the car park. This will most likely result in the vehicle reversing out onto Morella Grove with the reversing alarm disturbing the peace. Vehicles of this size cannot perform a safe right hand turn from Morella Grove into Shannon Road because of the proximity of the pedestrian crossing recently installed on Shannon Road. Such a movement requires multiple movements to be done. It has been observed that busses collecting children from the school overcome this by crossing into Fielding Crescent to use the CFS car park to access Shannon road and eventually Carey Gully Road. This is not an acceptable situation as problems will occur if the CFS carpark is either in use or needed for CFS activities.

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Similarly the list of reptiles fails to list the Blue Tonged Lizard, Sleepy (Shingleback) Lizard, Adelaide Hills Skinks, Brown Snake and Red Bellied Black Snake that are known to be in the area. There may be other reptiles that have not been accounted for. The list of reptiles in the proposal is a **whitewash** as it names only 3, all of which are not native to the area.

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L A & S N Hope, 34 Morella Grove

Representations

Representor 26 - Ben and Kylie Rumsey

Name	Ben and Kylie Rumsey
Address	38 MORELLA GROVE BRIDGEWATER SA, 5155 Australia
Phone Number	0413522979
Email Address	benkylie.rumsey29@gmail.com
Submission Date	19/05/2022 12:10 PM
Submission Source	Over Counter
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 Refer to the attached	

Attached Documents

RumseyRepresentation-21038026-2891398.pdf

COLLECTIVE RESPONSE TO DEVELOPMENT APPLICATION ID 22005412 FOR THE PROPOSED CONSTRUCTION OF A CHILDCARE CENTRE AND ASSOCIATED STRUCTURES AT 23 MORELLA GROVE BRIDGEWATER

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In the zeal to pad out the list of birds with totally inappropriate specimens, at least one local bird, namely the Spur Winged Plover has been omitted from the list. Other bird's native to the area may also have been omitted from the list.

Similarly the list of reptiles fails to list the Blue Tonged Lizard, Sleepy (Shingleback) Lizard, Adelaide Hills Skinks, Brown Snake and Red Bellied Black Snake that are known to be in the area. There may be other reptiles that have not been accounted for.

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The list also fails to note the occurrence of Koala Bears that are in the area.

L A & S N Hope, 34 Morella Grove

C & G Wakefield, 36 Morella Grove

B & K Rumsey, 38 Morella Grove

S & M Wakefield, 40 Morella Grove

Representations

Representor 27 - Sam Wakefield

Name	Sam Wakefield
Address	40 MORELLA GROVE BRIDGEWATER SA, 5155 Australia
Phone Number	0413011346
Email Address	samw@westnet.com.au
Submission Date	19/05/2022 12:26 PM
Submission Source	Over Counter
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
Reasons Refer to the attached	

Attached Documents

WakefieldRepresentation-21038026-2891683.pdf

COLLECTIVE RESPONSE TO DEVELOPMENT APPLICATION ID 22005412 FOR THE PROPOSED CONSTRUCTION OF A CHILDCARE CENTRE AND ASSOCIATED STRUCTURES AT 23 MORELLA GROVE BRIDGEWATER

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In section 3.2 of the traffic/parking document it is stated that the access to the carpark is noncompliant with the relevant Australian Standard. This is unacceptable as it is mandatory that all design and construction complies with all appropriate standards. Unencumbered access to all relevant documents is essential for respondents to make meaningful submissions to the proposal. This should include any documents referenced in the proposal. We have attempted to reference AS 2890.1:2004 and AS 2890.6:2009, which we understand Adelaide Hills Council has hard copies of. Enquiries to said council have resulted in a refusal to make these available for perusal. **We therefore reserve the right to amend this submission after the receival date if and when the standards can be viewed.**

It may be possible achieve compliancy by converting the carpark to a drive through with the entrance from LeZaire Avenue and the egress onto Morella Grove. This would have the added benefit of reducing the potential for congestion to occur in the carpark itself.

Inadequate consideration has been given to what happens to vehicle movements where dual child drop-offs will occur at the Child Care Centre and the School.

While it has been stated in the proposal that rubbish collection will occur out of hours, this raises the probability of undue noise being generated as the bin(s) are handled. The car park does not appear to be wide enough to allow the rubbish collection vehicle to perform a 3 point turn to drive forwards out of the car park.

This will most likely result in the vehicle reversing out onto Morella Grove with the reversing alarm disturbing the peace. Vehicles of this size cannot perform a safe right hand turn from Morella Grove into Shannon Road because of the proximity of the pedestrian crossing recently installed on Shannon Road. Such a movement requires multiple movements to be done. It has been observed that busses collecting children from the school overcome this by crossing into Fielding Crescent to use the CFS car park to access Shannon road and eventually Carey Gully Road. This is not an acceptable situation as problems will occur if the CFS carpark is either in use or needed for CFS activities.

As part of the currents Queen's coronation in 1953 school children from the Bridgewater Primary School planted trees on both sides of what is now known as Morella Grove. Most of these trees still exist on the eastern side of Morella Grove. This was apparently named "Queen Elizabeth Walk" at the time. Two of these trees still exist on the western side of Morella Grove. All of these trees should be considered to have heritage value and be retained.

In the zeal to pad out the list of birds with totally inappropriate specimens, at least one local bird, namely the Spur Winged Plover has been omitted from the list. Other bird's native to the area may also have been omitted from the list.

Similarly the list of reptiles fails to list the Blue Tonged Lizard, Sleepy (Shingleback) Lizard, Adelaide Hills Skinks, Brown Snake and Red Bellied Black Snake that are known to be in the area. There may be other reptiles that have not been accounted for.

No mention has been made of frogs and toads that are known to be in the area of which at least 5 species are common.

No survey of biodiversity should be complete without an assessment of the insect population and fungi in the area.

The list also fails to note the occurrence of Koala Bears that are in the area.

L A & S N Hope, 34 Morella Grove

C & G Wakefield, 36 Morella Grove

B & K Rumsey, 38 Morella Grove

S & ? Wakefield, ?? Morella Grove

S & M WAKEFIELD
40 MORELLA GROVE
BRIDGEWATER SA.

Representations

Representor 28 - Chris and Gail Wakefield

Name	Chris and Gail Wakefield
Address	36 MORELLA GROVE BRIDGEWATER SA, 5155 Australia
Phone Number	0412748311
Email Address	gailwak13@gmail.com
Submission Date	19/05/2022 12:34 PM
Submission Source	Over Counter
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
Reasons Refer to the attached	

Attached Documents

CAndGWakefieldRepresentation-21038026-2891779.pdf

COLLECTIVE RESPONSE TO DEVELOPMENT APPLICATION ID 22005412 FOR THE PROPOSED CONSTRUCTION OF A CHILDCARE CENTRE AND ASSOCIATED STRUCTURES AT 23 MORELLA GROVE BRIDGEWATER

The undersigned are residents of Morella Grove adjacent to the proposed construction.

It is our collective opinion that the proponents of the Child Care centre to be built on Morella Grove have seriously underestimated the impact of traffic flow in adjacent roads and the car park.

No assessment has been made for a worst case situation such a declaration of emergency requesting parents or guardians to collect children from both the Bridgewater Primary School and the Child Care Centre. This will generate intense traffic flow having a high potential to cause severe congestion at the school, child care centre carpark as currently configured, entrance/egress to said car park, the intersection of Morella grove and Shannon Road, the intersection of Shannon Road and Carey Gully Road as well as interfering with emergency vehicles using the CFS facilities at the corner of Shannon Road and Carey Gully Road.

Congestion on the Freeway resulting in traffic being diverted into Bridgewater via Carey Gully road has not been considered. Such a diversion will cause unacceptable congestion in the area exasperated by rail movements across Carey Gully Road.

The delivery and collection of children to the child Care Centre appears to be predicated on an orderly routine occurring. Human nature can guarantee that this will not happen resulting in probable congestion in the car park with cars attempting 3 point turns and blockages at the access point from Morella Grove.

Traffic attempting to enter Shannon Road from Morella Grove is faced with a blind corner in respect to vehicles travelling west from Onkaparinga road particularly as said traffic has to negotiate a short steep hill in front of the Morella Road/Fielding Crescent intersection. This can be particularly dangerous in times of poor visibility due to rain and fog. In addition during winter the opening and closing times are in darkness. A similar situation also occurs at the intersection of Trenouth Road and Onkaparinga Road.

Additional traffic will also be generated from out of hour's activities occurring at the Bridgewater Primary School. This has not been factored into the assessments.

In section 3.2 of the traffic/parking document it is stated that the access to the carpark is noncompliant with the relevant Australian Standard. This is unacceptable as it is mandatory that all design and construction complies with all appropriate standards. Unencumbered access to all relevant documents is essential for respondents to make meaningful submissions to the proposal. This should include any documents referenced in the proposal. We have attempted to reference AS 2890.1:2004 and AS 2890.6:2009, which we understand Adelaide Hills Council has hard copies of. Enquiries to said council have resulted in a refusal to make these available for perusal. **We therefore reserve the right to amend this submission after the receival date if and when the standards can be viewed.**

It may be possible achieve compliancy by converting the carpark to a drive through with the entrance from Lezaire Avenue and the egress onto Morella Grove. This would have the added benefit of reducing the potential for congestion to occur in the carpark itself.

Inadequate consideration has been given to what happens to vehicle movements where dual child drop-offs will occur at the Child Care Centre and the School.

While it has been stated in the proposal that rubbish collection will occur out of hours, this raises the probability of undue noise being generated as the bin(s) are handled. The car park does not appear to be wide

enough to allow the rubbish collection vehicle to perform a 3 point turn to drive forwards out of the car park. This will most likely result in the vehicle reversing out onto Morella Grove with the reversing alarm disturbing the peace. Vehicles of this size cannot perform a safe right hand turn from Morella Grove into Shannon Road because of the proximity of the pedestrian crossing recently installed on Shannon Road. Such a movement requires multiple movements to be done. It has been observed that busses collecting children from the school overcome this by crossing into Fielding Crescent to use the CFS car park to access Shannon road and eventually Carey Gully Road. This is not an acceptable situation as problems will occur if the CFS carpark is either in use or needed for CFS activities.

Clarification is needed on the meaning of numbers appearing in figure 3 relating to forecast traffic volumeson Morella Grove and Shannon road. What do these numbers mean?

There is no mention of the minimum age for accepting children into the Childcare Centre. Because of this and the unpredictable nature of age mix of children that are expected to use the facility the staffing numbers quoted is pure guesswork at best. Thus there is a high probability that the number is an underestimation of the quoted figure. This has a flow on effect on the number of parking spaces that need to be reserved for staff use and correspondingly the space needed for drop-off and collection of children.

As part of the currents Queen's coronation in 1953 school children from the Bridgewater Primary School planted trees on both sides of what is now known as Morella Grove. Most of these trees still exist on the eastern side of Morella Grove. This was apparently named "Queen Elizabeth Walk" at the time. Two of these trees still exist on the western side of Morella Grove. All of these trees should be considered to have heritage value and be retained.

The research that went into preparing the list of birds is an absolute sham. Of the 46 birds listed only 10 are indicated as being either resident or possibly resident. At least 5 birds that are known to be in the area, namely the Spur Winged Plover, Kookaburra, Ravens and Magpie has been omitted from the list. Other bird's native to the area may also have been omitted from the list. A full list of migratory birds needs to be included.

Similarly the list of reptiles fails to list the Blue Tonged Lizard, Sleepy (Shingleback) Lizard, Adelaide Hills Skinks, Brown Snake and Red Bellied Black Snake that are known to be in the area. There may be other reptiles that have not been accounted for. The list of reptiles in the proposal is a **whitewash** as it names only 3, all of which are not native to the area.

No mention has been made of frogs and toads that are known to be in the area of which at least 5 species are common.

No survey of biodiversity should be complete without an assessment of the insect population and fungi in the area.

The list also fails to note the occurrence of Koala Bears that are in the area.

In fact the whole bio-diversity survey, as presented, is nothing but an insult to the reader and needs to be redone using researchers who know their subjects.

A proper Environmental Impact Statement does not appear to have been conducted, or if aspects have been done they have not been included in the document. We refer, in particular the Acoustic report. There is also no reference to air pollution potential from activities specifically from motor vehicles.

L A & S N Hope, 34 Morella Grove

Representations

Representor 29 - Sheridan Barter

Name	Sheridan Barter
Address	42 MORELLA GROVE BRIDGEWATER SA, 5155 Australia
Phone Number	0401217352
Email Address	sheridan.barter@awri.com.au
Submission Date	19/05/2022 12:40 PM
Submission Source	Over Counter
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 Refer to the attached	

Attached Documents

BarterRepresentation-21038026-2891859.pdf

COLLECTIVE RESPONSE TO DEVELOPMENT APPLICATION ID 22005412 FOR THE PROPOSED CONSTRUCTION OF A CHILDCARE CENTRE AND ASSOCIATED STRUCTURES AT 23 MORELLA GROVE BRIDGEWATER

The undersigned are residents of Morella Grove adjacent to the proposed construction.

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Similarly the list of reptiles fails to list the Blue Tonged Lizard, Sleepy (Shingleback) Lizard, Adelaide Hills Skinks, Brown Snake and Red Bellied Black Snake that are known to be in the area. There may be other reptiles that have not been accounted for.

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L A & S N Hope, 34 Morella Grove

C & G Wakefield, 36 Morella Grove

B & K Rumsey, 38 Morella Grove

S & M Wakefield, ~~22~~ 40 Morella Grove

S. Barter & S. Akkerman
42 Morella Grove
SB

FUTURE URBAN

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June 17, 2022

James Booker
Adelaide Hills Council
via the PlanSA Portal

Dear James,

RE: DA 22005412 (23 MORELLA GROVE, BRIDGEWATER) – RESPONSE TO REPRESENTATIONS

I refer to the proposed development application for a child care centre at 23 Morella Grove, Bridgewater.

Public notification has been undertaken and completed. The comments received from the representors during the public notification of the development application primarily relate to native vegetation removal, traffic impact and parking, waste collection, air pollution, construction impacts and bushfire evacuation.

It is first worth acknowledging the majority of representations received appear to predominantly show their frustration at the current situation which occurs in relation to traffic congestion, parking and access, in the area, rather than aimed specifically at the proposed development.

Therefore, our response to each is set out below.

Native Vegetation Removal

Comments were raised by representors in relation to the removal of native vegetation over the subject site. The application was referred to the Native Vegetation Council for assessment whom have since issued approval for the clearance of native vegetation, as such no further comment is required. A substantial financial contribution to the Native Vegetation Fund will be provided by the applicant to support native vegetation outcomes across the State.

Air pollution

Concerns were raised over the exhaust and fumes generated from vehicles using the facility.

No evidence was provided to support these claims. It is noted that the ERD Court has provided guidance on many occasions to third party representors who wish to challenge a decision of local planning authorities to approve a development, with the decision of *Carey and Bourdon v DAC [1994] EDLR 233* being most instructive:

> "..... an appellant should present a case of substance; ..... assertions should be supported by evidence amounting to more than a collection of presumptions by an unqualified observer..... Generally, it would not be enough to merely raise an issue without producing supporting evidence, particularly when the issue had been addressed by the developer as part of the development application."

No evidence has been put forward to support the assertions in relation to fumes or other odours.

Traffic Management

The vast majority of representations assert the proposal will have deleterious impacts upon traffic volume increase, movement and congestion.

It is noted that the representors have not provided any evidence to support these assertions. As noted above, if one is to make assertions about adverse impacts about a particular development proposal, independent evidence should be provided to support that view. It has not.

Firstly, the differences between 'child care' and 'pre-school/school' in relation to traffic demand, are highlighted below:

- A child care centre provides long day care facilities for pre-school aged children (typically 0-5 years of age). There is no specific delivery or collection periods for the centre, with children delivered and collected at times convenient to parents or carers, generally resulting in pick up/set down times being spread across the day.
- A pre-school/kindergarten has a set class period, with all children being delivered at the start of the session and being collected on completion of the session (much akin to a school), resulting in higher peak times.
- A child care centre typically operates for long hours, with staff working in shifts across the day. Peak staff periods occur during the middle of the day, when staff lunch breaks occur and additional staff (such as chefs) are on-site.
- A pre-school/kindergarten operates for shorter periods, similar to the hours of a typical school day.

A traffic impact assessment undertaken by an independent and qualified traffic engineer, including a traffic survey was provided as part of the development application which detailed the forecast traffic generation. An additional traffic survey was later undertaken, taking into account both current and future conditions. There will also be a proportion of children attending the child care centre with siblings at the adjacent primary school, which will further reduce the number of trips undertaken. It is therefore confirmed that the intersections and surrounding roads will easily accommodate the traffic volumes and the traffic impact will be minimal.

Parking

The proposed development has been designed to allow for children to be dropped off and picked up from within the subject site, which is generally most convenient and safest for parents. A drop off lane or zone is not necessary for a child care centre as parents will always get out of the car to take their child inside. It is not mandatory for children to be dropped off, or collected in the carpark area, however in all practicality, one would wonder why a parent/guardian would seek to drop off or pick up a child from a more distant location when there is more than ample space to do so on site.

The only car parking rate specified within the Code is 0.25 spaces per child. Based on the centre's capacity of 80 children, the site has a theoretical demand of 20 parking spaces. 21 spaces are provided, thereby satisfying the Code. There will be no reliance for on-street parking as a result of the proposal.

Again, the assertions raised by representors are not founded by any empirical evidence.

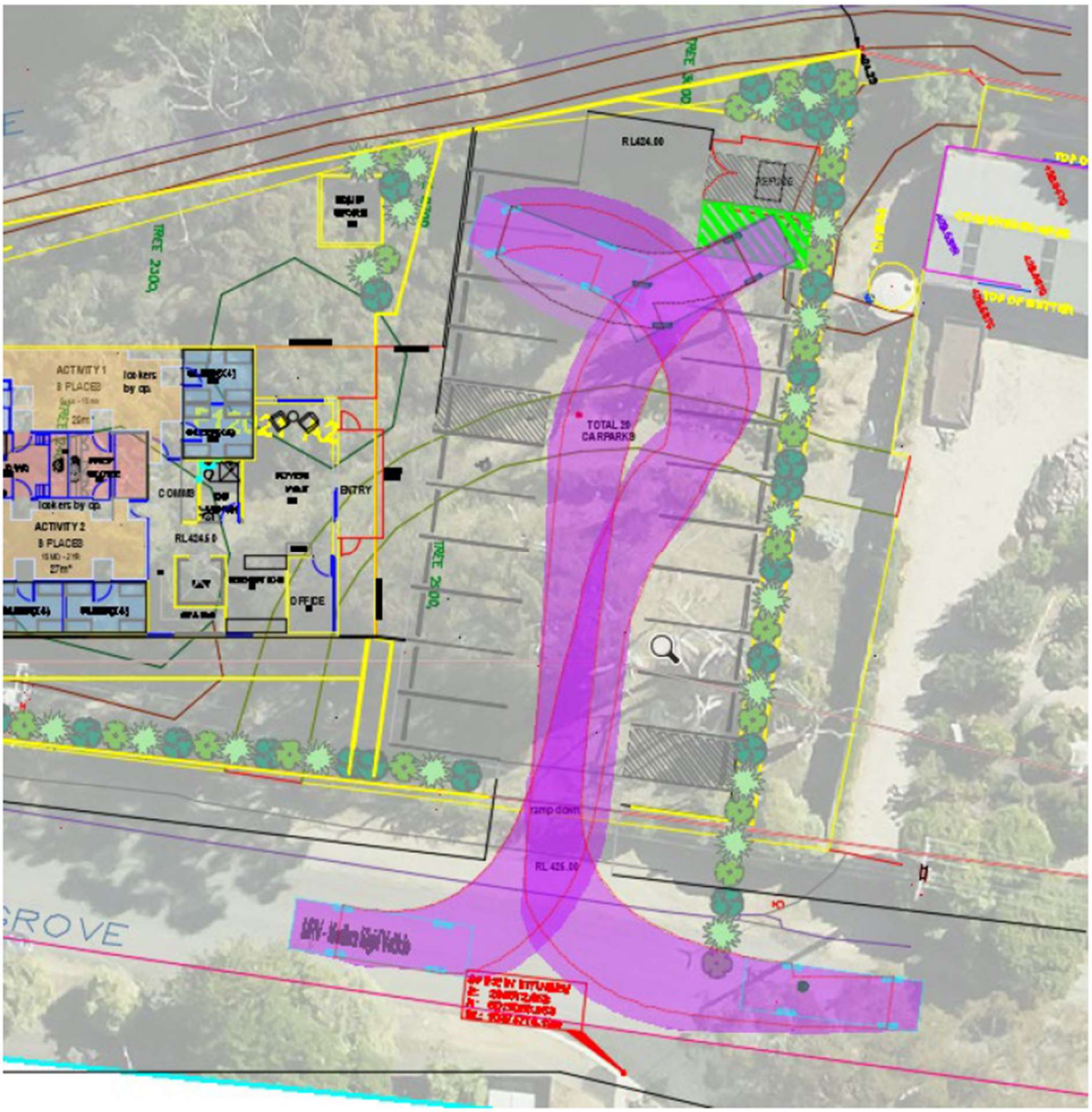
Waste Collection

One of the representors raised concern about the noise generated for the collection of waste and that the waste vehicle will not safely manoeuvre within the parking area.

Firstly, waste is proposed to be collected on site by a private contractor and will adhere to the Environment Protection (Noise) Policy which deals with rubbish collection by effectively limiting the hours to the least sensitive period of the day. Division 3 of the Policy requires rubbish collection to only occur between the hours of 9am and 7pm on Sundays or public holidays, and between 7am and 7pm on any other day. The proponent is willing to abide a condition of consent to this effect.

As per the traffic report prepared by Cirqa, the waste vehicle is capable of entering and exiting the site in a forward direction. See vehicle turn path below:

Figure 1 *Waste vehicle turn path*



Bushfire Evacuation

The tenant will have a bushfire survival plan which details the directions and management in the event of a bushfire and during the fire danger season.

It is also noted that the development application has been referred to the Country Fire Service (CFS) who have indicated their support for the proposal.

Construction

Construction impacts are not a planning matter and can all be adequately dealt with by the requirement to submit a construction management plan via an appropriately worded condition of planning consent.

I trust this adequately responds to the written representations received by Council.

I look forward to this matter being presented to the next available Council Assessment Panel meeting.

Yours sincerely,

Marc Duncan
Director

South Australian
Country
Fire Service

cfs.sa.gov.au

DEVELOPMENT ASSESSMENT SERVICE

Date:	12/07/2022
Your reference:	22005412
Our reference:	Adelaide Hills DA 20220712-01jp

BUILDING ADVISORY & BUSHFIRE ATTACK LEVEL (BAL) ASSESSMENT

Application	Development Application Schedule 9 Referral Body Response
Development	Childcare Centre
Location	23 Morella Grove, Bridgewater
Applicant	Future Urban Pty Ltd
Owner	Small

LEGISLATIVE FRAMEWORK

Instrument	Ministerial Building Standard MBS 008, Designated Bushfire prone areas – additional requirements July 2020 as published under the *Planning, Development and Infrastructure Act 2016*
Relevance	The Hazards (Bushfire – High Risk) Overlay

DECISION

Asset:	**Category of Bushfire Attack Level (BAL)**
Childcare Centre	**BAL 19** This BAL rating is conditional upon the establishment and maintenance of a 20 metre Asset Protection Zone (or to the property boundaries whichever comes first), in accordance with the Asset Protection Zone – Vegetation Management condition of consent placed on the planning consent with the same application reference.
Equipment Store located less than 6 metres from Childcare Centre	**Separation for adjacent structures in accordance with AS3959 (section 3.2.3) will need to be applied to satisfy PO 3.2**

SA CFS, as the referral agency, reserves the right to request additional information and provide further comment in regards to the 'Building Rules Consent' phase of the development approval process in relation to the fire and life safety provisions within the proposed building, under the *Planning Development and Infrastructure Act and Regulations,* in particular but not limited to Regulation 45 and 103.

This report is considered relevant at the date of assessment with respect to the elevations detailed on Proposed Ground Floor Plan and Proposed First Floor Plan, dated at last revision 31/05/2022 and shall not be considered as SA CFS endorsement of any subsequent development.

This report is prepared in accordance with National Construction Code of Australia (NCC) and Australian Standard™ 3959:2018 (AS3959) "Construction of Buildings in Bushfire Prone Areas".

Please refer to the NCC, relevant standards and state provisions for construction requirements and performance provisions.

Compliance with the fire protection requirements is not a guarantee the dwelling will not burn, but its intent is to provide a *'measure of protection'* from the approach, impact and passing of a bushfire.

Assessing Officer:	Signature:	Date:
JESSICA PAGE *BUSHFIRE SAFETY OFFICER* DEVELOPMENT ASSESSMENT SERVICE		12/07/2022

South Australian
Country
Fire Service

cfs.sa.gov.au

DEVELOPMENT ASSESSMENT SERVICE

Date:	12/07/2022
Your reference:	22005412
Our reference:	Adelaide Hills DA 20220712-01jp

BUSHFIRE HAZARD PROTECTION RESPONSE

Application	Development Application Schedule 9 Referral Body Response
Development	Childcare Centre
Location	23 Morella Grove, Bridgewater
Applicant	Future Urban Pty Ltd
Owner	Small

LEGISLATIVE FRAMEWORK

Instrument	The 'Planning and Design Code' under the *Planning, Development and Infrastructure Act 2016*
Relevance	The Hazards (Bushfire – High Risk) Overlay

DECISION

The SA Country Fire Service has no objection to the proposed development with conditions.
'The Planning and Design Code' details various requirements as part of the assessment of each development application, and where applicable, these are reinforced through conditions of consent, which are hereby directed to apply to any consent issued in respect of this development application, as detailed below:

CONDITIONS OF CONSENT

BUSHFIRE PROTECTION MEASURES AND SITING

'The Planning and Design Code' Hazards (Bushfire – High Risk) Overlay (Performance Outcome 2.1, 4.2, 4.3) details the mandatory requirements for buildings and structures to be located away from areas that pose an unacceptable bushfire risk in order to provide sufficient defendable space for occupants and fire fighters; ensure radiant heat levels at the buildings are minimised in line with the assessed bushfire attack level & construction level; whilst maintaining reduced fuel loads and ensuring it can be maintained in perpetuity by the occupants.

To address PO 2.1, SA CFS deems that all bushfire protection measures must be implemented in order for the SA CFS to support the proposed development. This includes:

- The building will be constructed to the assessed Bushfire Attack Level (BAL) in accordance with AS3959, **BAL 19** requirements.
- Ancillary structures and other combustibles are adequately separated from the building in accordance with AS3959; s 3.2.3 Adjacent structures on the subject allotment.
- A non-combustible pathway be installed directly adjacent the building and no less than 1.5 metres wide around the perimeter of the building, including access gate(s) to allow continuous travel around the building; and
- Provision of a static dedicated bushfire water supply of 10,000L with associated pipes, fittings, pump, and fire hose reel in accordance with MBS008; accessible to the fire authority via an unobstructed fire authority outlet (please refer to WATER SUPPLY & ACCESS (to dedicated water supply)).

'The Planning and Design Code' Hazards (Bushfire – High Risk) Overlay (Performance Outcome 3.2) details the mandatory requirements for 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.

- Outbuildings and other ancillary structures shall comply with AS3959 section 3.2.3 for adjacent structures.

ACCESS TO HABITABLE BUILDING

'The Planning and Design Code' Hazards (Bushfire – High Risk) Overlay (Performance Outcome 6.2) details the mandatory requirements for 'Private' roads and driveways to facilitate safe and effective use, operation and evacuation for firefighting and emergency personnel and evacuation of residents, occupants and visitors where required. These requirements apply when the furthest point of the building is more than 60m from the nearest public road.

SA CFS notes the proposed development is sited less than 60 metres from the public road and has no objection to utilising the existing perimeter roads and proposed driveway to access the facility.

WATER SUPPLY & ACCESS (to dedicated water supply)

Ministerial Building Standard MBS008 "Designated bushfire prone areas – additional requirements" July 2020, as published under the *Planning, Development and Infrastructure Act 2016,* provides the technical details of the dedicated water supply for bushfire fighting for the bushfire zone. The dedicated bushfire fighting water supply shall also incorporate the installation of a pumping system, pipe-work and fire-fighting hose(s) in accordance with MBS008.

'The Planning and Design Code' Hazards (Bushfire – High Risk) Overlay (Performance Outcome 4.3) details the mandatory requirements for the site to provide a dedicated hardstand area in a location that allows fire fighting vehicles to safely access the dedicated water supply.

SA CFS has no objection to the proposed location for the dedicated water supply as detailed on drawings named Proposed Ground Floor Plan and Proposed First Floor Plan, dated at last revision 31/05/2022, providing the fire authority outlets (Taps for Fire Water) are positioned to comply with the following conditions and will not be obstructed by objects such as parked cars/landscaping/fencing etc:

- The water supply outlet shall be easily accessible and clearly identifiable from the access way and is no greater than 60m path of travel to the furthermost point of the building, to

enable fire services to reach all parts of the building with no more than two lengths of hose from the hardstand area.

- The dedicated water supply and its location should be identified with suitable signage (i.e. blue sign with white lettering “FIRE WATER”).
- Access to the dedicated water supply shall be of all-weather construction, with a minimum formed road surface width of 3 metres.
- Provision shall be made adjacent the water supply for a nominally level hardstand area (capable of supporting fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes) that is a distance equal to or less than 6 metres from the water supply outlet
- SA CFS appliance’s inlet is rear mounted; therefore the outlet/water storage shall be positioned so that the SA CFS appliance can easily connect to it rear facing.
- A gravity fed water supply outlet may be remotely located from the above ground tank to provide adequate access.
- All non-metal water supply pipes for bushfire fighting purposes (other than flexible connections and hoses for fire-fighting) shall be buried below ground to a minimum depth of 300mm with no non-metal parts above ground level.
- All water supply pipes for draughting purposes shall be capable of withstanding the required pressure for draughting.

Please note that where the water supply is an above-ground water tank, the tank (including any support structure) must be constructed of non-combustible material, such as concrete or metal.

MAINTAIN AN ASSET PROTECTION ZONE (APZ) - VEGETATION MANAGEMENT

‘The Planning and Design Code’ Hazards (Bushfire – High Risk) Overlay (Performance Outcome 4.2) details the mandatory requirements to establish and maintain an asset protection zone. As such, landscaping shall include bushfire protection features that will prevent or inhibit the spread of bushfires and minimise the risk to life and/or damage to buildings and property and maintain a fuel reduced zone for safe movement of occupants and fire fighters.

- Vegetation management shall be established and maintained within 20 metres of the habitable building (or to the property boundaries – whichever comes first) as follows:

1. The number of trees and understorey plants existing and to be established within the VMZ shall be reduced and maintained such that when considered overall a maximum coverage of 30% is attained, and so that the leaf area of shrubs is not continuous. Careful selection of the vegetation will permit the ‘clumping’ of shrubs where desirable, for diversity, and privacy and yet achieve the ‘overall maximum coverage of 30%’.
2. Reduction of vegetation shall be in accordance with SA Native Vegetation Act 1991 and SA Native Vegetation Regulations 2017.
3. Trees and shrubs shall not be planted closer to the building(s) than the distance equivalent to their mature height.
4. Trees and shrubs must not overhang the roofline of the building, touch walls, windows or other elements of the building.
5. Shrubs must not be planted under trees and must be separated by at least 1.5 times their mature height from the trees’ lowest branches.
6. Grasses within the zone shall be reduced to a maximum height of 10cm during the Fire Danger Season.
7. No understorey vegetation shall be established within 2 metres of the habitable building (understorey is defined as plants and bushes up to 2 metres in height).

8. Flammable objects such as plants, mulches and fences must not be located adjacent to vulnerable parts of the building such as windows, decks and eaves
9. The VMZ shall be maintained to be free of accumulated dead vegetation.

BUSHFIRE SURVIVAL PLAN

SA CFS further recommends the following condition:

- The applicant prepare and display a BUSHFIRE SURVIVAL PLAN (BSP) designed specifically for the purpose of any 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 (refer to SA CFS website) should be utilised as a basis for information and the drafting of the BSP along with industry body guidelines and recommendations.

The applicant should consider reducing operating hours and 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.

An officer of the SA CFS has also undertaken a review of the Bushfire Management Plan, author (unknown), dated 30 March 2022. It should be noted that SA CFS does not and will not formerly endorse or approve emergency management & other associated plans but provide the attached additional information in review of this document, that may benefit the applicant in amending their application for planning consent.

General Comments	
	• Evacuation is impractical during a bushfire event due to the nature of the occupants (proposed use of this building), therefore a site closure for predicted bad weather and a shelter in place strategy is supported. • The building will be designed to withstand BAL 19 for construction detail purposes. It should be acknowledged that the methodology is based on pre identified fire conditions that might be exceeded. • The plan needs to address what to do if taking shelter and actions after the fire front. • The plan also needs to address what to do if the buildings become compromised? I.e., try to find clear ground, away from residual radiant heat etc. • SA CFS has not referred to industry specific requirements and recommends that the Applicant refers to the industry body standards and requirements. • The advice contained within this report is limited due to lack of full oversight and the day to day operation and capabilities of the personnel enacting the plan.
Procedures	
3	Bushfires can threaten suddenly and without warning, regardless of the Fire Danger Rating (FDR). Please also note that bushfire events and Total Fire Bans (TFBs) can occur at any time of the year and may fall outside of the Fire Danger Season CODE RED – not the correct terminology. An Emergency Warning is the highest level of Bushfire Alert – see here for further information: https://safecom-files-v8.s3.amazonaws.com/current/docs/australian-warning-system-fact-sheet.pdf

3.1	The Fire Danger Season dates are not predetermined and generally run from November through to April, although these dates may fluctuate due to seasonal conditions. Please also note that bushfire events and Total Fire Bans (TFBs) can occur at any time of the year and may fall outside of the Fire Danger Season
3.2	Advising parents and/or caregivers to collect their children from the centre may unnecessarily congest roads during an emergency, and roads may be blocked and unsafe for travel. The safety of emergency services and the public is the highest priority in traffic management during an emergency. As previously discussed, evacuation of the centre may not be an achievable strategy: • Location of the Evacuation Centre may be unsafe to get to • Evacuation Centre may not be available • Community Evacuation Centre may be congested and unsuitable for educators to supervise a large number of children • Community Evacuation Centre may not be established A predetermined last resort evacuation point should the building be compromised should be included in the plan
3.3	Clearly defined triggers for enacting a take shelter strategy or evacuation procedures should be included in the plan Locking the doors and windows are not recommended – consider revising to closing the doors and windows instead.

BUILDING CLASS 2-9 CONSIDERATIONS

SA CFS, as the referral agency, reserves the right to request additional information and provide further comment in regards to the 'Building Rules Consent' phase of the development approval process in relation to the fire and life safety provisions within the proposed building, under the *Planning Development and Infrastructure Act and Regulations,* in particular but not limited to Regulation 45 and 103.

Assessing Officer: ***JESSICA PAGE*** *BUSHFIRE SAFETY OFFICER* DEVELOPMENT ASSESSMENT SERVICE	Signature:	Date: 12/07/2022

Referral under the Planning, Development and infrastructure Act - Assessment Report

APPLICATION DETAILS

DA NO.	22005412
NV APP NO.	2022/3063/473
APPLICANT	Future Urban Pty Ltd
PURPOSE OF CLEARANCE	Clearance is required for the construction of a child care facility
SUMMARY OF PROPOSED CLEARANCE	19 Scattered trees of varying condition (poor – excellent), consisting of two species (*Eucalyptus baxteri* and *Exocarpos cupressiformis*)
SUMMARY OF PROPOSED SEB	Payment of $45,716.68 into the Native Vegetation Fund
OVERLAY	Native Vegetation
RELATED NATIVE VEGETATION APPLICATION TYPE	Section 28 of the Native Vegetation Act Regulation 12, Schedule 1; Clause 33
RISK LEVEL	3

Part 1. ASSESSMENT AGAINST REQUIREMENTS OF SECTION 29 OF THE ACT

In accordance with Section 29(17) of the Act, the provisions of Section 29 of the Act also apply to circumstances where the Council is considering an application referred to the Council under the *Development Act 1993* as if the Council were considering an application for consent under this Act, subject to such modifications, additions or exclusions as may be necessary for the purpose.

Principles of native vegetation clearance

Section 29(1) of the Act *In accordance with Section 29(1) of the Native Vegetation Act, the Native Vegetation Council must not made a decision that is Seriously at variance with the Principles of native vegetation clearance (except where it is permitted in accordance with section 29(4) and 29(4a) of the Act)*	
Note; The Native Vegetation Council will have regard to the matters set out in the 'Guide for application to clear native vegetation' to guide an assessment an application against the Principles of native vegetation clearance. However, all decisions are made on merit against the requirements of the Act.	
Plant Species Diversity - Principle 1(a)	
ASSESSING OFFICER ADVICE	*The information presented in the Data Report and the assessment against this Principle is accepted.*
RECOMMENDATION	Clearance of the 19 Trees considered **Not at variance** with the Principle 1(a)
Wildlife Habitat - Principle 1(b)	
ASSESSING OFFICER ADVICE	Upon further requesting further information from the consultant on this principle, they provided the following: *'Of the 19 trees proposed to be removed, only one contains a small hollow, all other trees have no hollows. Therefore, none of the 19 trees contain suitable breeding or roosting habitat for Yellow-tailed Black Cockatoos or suitable breeding and resting habitat for*

	Common Brushtail Possums. Additionally, the vegetation proposed to be removed is not critical habitat for the Striped Honeyeater or Jacky Winter as Striped Honeyeaters are vagrants to South Australia and the degraded vegetation is not ideal habitat for Jacky Winter. No existing populations of threatened species critical to the survival of a species occur within or nearby the Project Area. Therefore, the proposed clearance is unlikely to lead to a long-term decrease in the size of populations or area of occupancy of threatened species. Additionally, the proposed clearance is unlikely to fragment existing populations or modify or destroy critical habitat for these species. Therefore, it is considered that the moderating factors could be applied.' Considering these factors, it is considered that a reduction from 'Seriously at Variance' to 'At Variance', is accepted.
RECOMMENDATION	Clearance of the Trees considered **at variance** with the Principle 1(b)
Rare or threatened plant species - Principle 1(c)	
ASSESSING OFFICER ADVICE	*The information presented in the Data Report and the assessment against this Principle is accepted.*
RECOMMENDATION	Clearance of all 19 trees are considered **Not at variance** with the Principles 1(c)
Rare or threatened vegetation types - Principle 1(d)	
ASSESSING OFFICER ADVICE	*The information presented in the Data Report and the assessment against this Principle is accepted.*
RECOMMENDATION	Clearance of all 19 trees are considered **Not at variance** with the Principles 1 (d)
Remnancy - Principle 1(e)	
ASSESSING OFFICER ADVICE	*The information presented in the Data Report and the assessment against this Principle is accepted.*
RECOMMENDATION	Clearance of all 19 trees are considered **at variance** with the Principles 1 (e)
Wetlands - Principle 1(f)	
ASSESSING OFFICER ADVICE	*The information presented in the Data Report and the assessment against this Principle is accepted.*
RECOMMENDATION	Clearance of all 19 Trees are considered **Not at variance** with the Principles 1(f)

Summary of the assessment against the Principles of native vegetation clearance
Clearance of all 19 trees is considered to be 'at variance' with Principles of Clearance 1(b) under the Native Vegetation Act.

Matters considered by the Council

Consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.	
ASSESSING OFFICER ADVICE	*The assessment of the cumulative impacts is accepted.*
RECOMMENDATION	All likely impacts on native vegetation have been adequately accounted for.
Apply Mitigation Hierarchy (avoid, minimise, restore and offset impacts on native vegetation)	
ASSESSING OFFICER ADVICE	*The information presented in the Data Report and the assessment against this Mitigation Hierarchy is accepted.*
RECOMMENDATION	The impacts of the clearance have been minimised

Part 3: WHERE INFORMATION HAS BEEN PROVIDED IN RELATION TO THE PROVISION OF A SIGNIFICANT ENVIRONMENTAL BENEFIT, THE NATIVE VEGETATION COUNCIL WILL CONSIDER THIS INFORMATION TO INFORM THE ASSESSMENT OF THE DEVELOPMENT APPLICATION.
Noting; the SEB only needs to be finalised and approved as part of the application to the NVC.

Significant Environmental Benefit

Section 28(3)(b) or Regulation 16 and 20 *Any adverse impact on native vegetation or ecosystems must be offset by the achievement of a significant environmental benefit that outweighs that impact.* *The SEB may be achieved through the use of credit established or assigned in accordance with Section 25A or 25B of the Act, by an accredited third party provider in accordance with section 25C, or through the establishment, regeneration or maintenance of native vegetation. Alternatively (as an option of last resort for Section 28 applications), a payment into the Native Vegetation Fund of a sufficient amount to provide a Significant Environmental Benefit.*	
Note; The Native Vegetation Council will have regard to the matters set out in the '*Policy for a Significant Environmental Benefit*' ant the '*Guide to calculation a Significant Environmental Benefit*' to guide the assessment of the adequacy and appropriateness of a proposed SEB. However, all decisions are made on merit against the requirements of the Act	
ASSESSING OFFICER ADVICE	<u>Payment SEB</u> The calculation of the SEB payment as been determined correctly.
RECOMMENDATION	The proposed SEB, to be achieved by payment into the Native Vegetation Fund, provides 37.46 SEB points which meets the SEB points required in association with the proposed clearance. The proposed SEB is considered to provide a significant environmental benefit that outweigh the value of the vegetation to be removed.

Part 4. THE NVC WILL HAVE REGARD TO POLICIES IN THE RELEVANT OVERLAY TO WHICH THE APPLICATION WAS REFERRED

Overlays

Section	
ASSESSING OFFICER ADVICE	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. *The development has adequately met the mitigation hierarchy and satisfies the policy.* PO 1.2

	Native vegetation clearance in association with development avoids the following: - significant wildlife habitat and movement corridors - rare, vulnerable or endangered plants species - native vegetation that is significant because it is located in an area which has been extensively cleared - native vegetation that is growing in, or in association with, a wetland environment. *The assessment has indicated that the development avoids the matters above.*
RECOMMENDATION	The development meets the relevant policies.

Decision

Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017 *The Native Vegetation Council, as a prescribed body under Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017, may, where an application is referred for consideration, direct the relevant authority to refuse an application or to impose such conditions as the NVC thinks fit*	
RECOMMENDED DECISION	That the Native Vegetation Council; 1. Direct the planning authority to **impose the following conditions** on development application 22005412 2. Subject to an application being received by the NVC that is for the same proposed clearance as presented in this development application, approval for the clearance of the native vegetation subject to the draft conditions identified below. 3. Consents to the clearance of 19 trees in the area shown on the attached Decision Plan(s) 2022/3063/473 for the purpose specified in this decision.
REASON FOR DECISION	Consent The clearance of the vegetation under application is not Seriously at variance with the Principles of native vegetation clearance.
Conditions	
RECOMMENDED CONDITIONS FOR THE DEVELOPMENT APPLICATION	1. No clearance to occur until a Construction Environmental Management Plan (CEMP) has been prepared and provided to the Native Vegetation Branch for approval. 2. Clearance areas are to be defined with barriers, pegs, flags or temporary fencing to ensure that native vegetation outside the approved area is not damaged. 3. Native Vegetation and trees retained in close proximity to the construction activity zone are to be protected with barriers (i.e. fencing or flagging) in accordance with the Australian Standard for Protection of Trees on Development Sites AS 4970-2009; 4. Stockpiled materials, including cleared vegetation and excavated soil is not to be placed under native trees or on top of native understorey outside the approved area; 5. Construction vehicles, equipment or materials are not to be stored or placed on top of native vegetation outside the approved clearance area; 6. Construction vehicles, equipment or materials are not to be stored or placed within the Tree Protection Zone of retained trees; 7. Pruning is to be conducted in accordance with the Australian Standard for Pruning Amenity Trees (AS4373-2007). Branches or limbs are to be cut cleanly back to the nearest fork; 8. To offset the loss of large, hollow bearing trees the landholder is to arrange for appropriate hollows from cleared trees to be carefully removed and relocated to a nearby suitable area.
DRAFT CONDITIONS FOR THE NATIVE VEGETATION	1. The applicant must ensure that only native vegetation approved for removal in accordance with this decision is removed. Prior to clearance commencing, the applicant must advise all persons undertaking the vegetation removal or working on

APPLICATION	site, of all relevant conditions of approval and associated statutory requirements. 2. No clearance to occur until Development Approval has been obtained under the *Planning, Development and Infrastructure Act 2016* (including Building Rules Consent where required). 3. Prior to clearance commencing, the applicant must define the area or trees approved for clearance with markings, barriers, pegs, flags or temporary fencing. The markings, barriers, pegs, flags or temporary fencing must remain in place, in good condition and clearly visible, for the period in which clearance is occurring. 4. The Significant Environmental Benefit requirement (equivalent to 37.46 SEB points) is to be achieved by making a payment into the Native Vegetation Fund of $45,716.68 ($43,333.35 for clearance GST exclusive and $2383.33 for the administration fee GST inclusive) prior to any clearance occurring (Note an invoice will be sent once the attached form 'Decision Notification acknowledgement' form is signed and returned.); 5. Members of the NVC or a person who is an authorised officer under the Act may at a reasonable time enter the property of the landowner for the purpose of assessing and recording any matter relevant to this consent. A person undertaking such an assessment may be assisted by other suitable persons. Any such inspection will only be taken after there has been an attempt to contact the landowner. 6. Non-compliance with any of the conditions of this approval must be reported to the Native Vegetation Council as soon as practical after the non-compliance being detected, but must be within a maximum of seven days. The report must include details of the nature of the breach, the location and extent of the breach and the actions taken and associated timing for completion of those actions, to address the breach. 7. No clearance is to occur until the attached form, "Decision Notification Acknowledgement", is signed and returned to confirm that the applicant and anyone else who is a party to the agreement, understand and will comply with the decision, including all the associated conditions. 8. The applicant must adequately inform any prospective purchaser, lessee or occupier of the land affected by conditions in this consent, of the relevant conditions.

ASSESSING OFFICER	Andrew Groom – 31/03/2022
DELEGATE	 Adam Schutz 31/03/2022

Attachments

1. **Decision Plan 2022/3063/473**

Native Vegetation Clearance Application

Government of South Australia
Department for Environment and Water

DECISION PLAN (1 of 1)

TO FORM PART OF THE DECISION OF THE NATIVE VEGETATION COUNCIL

APPLICATION NO. 2022/3063/473

HUNDRED of Noarlunga

File Plan 12021 Allotment 2

Certificate of Title 5473/109

Clearance consent - scattered trees

Road

Property/Section Boundary

Produced for: Native Vegetation Council
By: Native Vegetation Branch
Department for Environment and Water

Imagery: Adelaide Metro (2021)

Date: 31/03/2022
Version: 01
Datum: GDA94

Native Vegetation Council

Delegate, Native Vegetation Council

Decision Date: 31/3/2022

Meters
0 10 20 30 40 50
Scale: 1:639

Native Vegetation Council

81-95 Waymouth St, ADELAIDE SA 5000 | GPO Box 1047, ADELAIDE SA 5001
Ph| 08 8303 9777; email| nvc@sa.gov.au

DECISION NOTIFICATION

Native Vegetation Regulations 2017

Application Number: 2022/3063/473

To: Future Urban - Mark Duncan
74 PIRIE STREET
ADELAIDE SA 5000
info@futureurban.com.au

Date Received: 3/3/2022
Date Registered: 3/3/2022

Applicant	Future Urban Pty Ltd
Landholder	Ian Gary Small
Purpose of application	Clearance is required for the construction of a child care facility
Description of native vegetation under application	19 Scattered trees of varying condition (poor – excellent), consisting of two species (*Eucalyptus baxteri* and *Exocarpos cupressiformis*)
Location of the application	23 Morella Grove, Bridgewater, 5155 - F12021 A1 – Hundred of Noarlunga - CT/5473/109

Decision

The Native Vegetation Council has consider your application in accordance with the requirements of Regulation 12, Schedule 1; Clause 33 of the *Native Vegetation Regulations 2017*

In respect of the application, you are informed that the Native Vegetation Council:

- **Grants consent** to the clearance of 19 trees in the area shown on the attached Decision Plan(s) 2022/3063/473 for the construction of a childcare facility and associated infrastructure.

Reason for Decision:

The clearance of native vegetation meets the requirements of Native Vegetation Regulation 12, Schedule 1; Clause 33.

Conditions of approval

This approval is subject to the conditions specified below. These conditions have been imposed to ensure that the impacts on native vegetation and biodiversity from approved clearance is adequately minimised and mitigated;

1. The applicant must ensure that only native vegetation approved for removal in accordance with this decision is removed. Prior to clearance commencing, the applicant must advise all persons undertaking the vegetation removal or working on site, of all relevant conditions of approval and associated statutory requirements.

Government of South Australia

2. No clearance to occur until Development Approval has been obtained under the *Planning, Development and Infrastructure Act 2016* (including Building Rules Consent where required).
3. Prior to clearance commencing, the applicant must define the area or trees approved for clearance with markings, barriers, pegs, flags or temporary fencing. The markings, barriers, pegs, flags or temporary fencing must remain in place, in good condition and clearly visible, for the period in which clearance is occurring.
4. The Significant Environmental Benefit requirement (equivalent to 37.46 SEB points) is to be achieved by making a payment into the Native Vegetation Fund of $45,716.68 ($43,333.35 for clearance GST exclusive and $2383.33 for the administration fee GST inclusive) prior to any clearance occurring (Note an invoice will be sent once the attached form 'Decision Notification acknowledgement' form is signed and returned.);
5. Members of the NVC or a person who is an authorised officer under the Act may at a reasonable time enter the property of the landowner for the purpose of assessing and recording any matter relevant to this consent. A person undertaking such an assessment may be assisted by other suitable persons. Any such inspection will only be taken after there has been an attempt to contact the landowner.
6. Non-compliance with any of the conditions of this approval must be reported to the Native Vegetation Council as soon as practical after the non-compliance being detected, but must be within a maximum of seven days. The report must include details of the nature of the breach, the location and extent of the breach and the actions taken and associated timing for completion of those actions, to address the breach.
7. No clearance is to occur until the attached form, "Decision Notification Acknowledgement", is signed and returned to confirm that the applicant and anyone else who is a party to the agreement, understand and will comply with the decision, including all the associated conditions.
8. The applicant must adequately inform any prospective purchaser, lessee or occupier of the land affected by conditions in this consent, of the relevant conditions.

Expiry date of approval

The approval to clear native vegetation in accordance with this decision ceases after 2 years from the decision date.

Signature	
Name	Adam Schutz
Position	**DELEGATE TO NATIVE VEGETATION COUNCIL**
Date	31/3/2022 (Decision Date)

Notes

1. **Effect of Consent**
   This Decision Notification grants consent under the *Native Vegetation Act 1991* only and does not imply approval under any other legislation. It is the responsibility of the landowner to obtain all relevant approvals for any proposed development. This includes any approval that might be required in relation to the Commonwealth *Environment Protection & Biodiversity Conservation Act 1999*.

2. **Conditions**
   Please note that these conditions are an integral part of the consent and are legally binding under the *Native Vegetation Act 1991* and *Native Vegetation Regulations 2017*. Should **any** clearance occur in accordance with this decision, the conditions are enforceable in full.

   Any conditions of consent are binding on and enforceable against the person granted the approval, any current and future owners of the land, any occupier of the land and any person who acquires the benefit of the clearance.

3. **Amended decisions**

   Where a decision is amended, all previous versions of the decision are null and void.

   If an application to amend a decision will substantially alter the nature of the original application or conditions of approval, the Native Vegetation Council may require a new application be submitted.

4. **SEB Areas**
   All areas established as a condition of consent to provide a significant environmental benefit, whether through revegetation, management or protection of an area of native vegetation, are protected in perpetuity under the *Native Vegetation Act 1991*. No clearance of native vegetation within these areas can occur without the consent of the Native Vegetation Council.

5. **Monitoring**
   The Native Vegetation Council undertakes a program of monitoring of conditions attached to any clearance consent. As part of this program, the landowner may be contacted by an officer of Department to arrange inspections. Should it be evident that the conditions have not be applied with in full, the landholder will be informed in writing of the nature of breach of the conditions and given an opportunity to comply with the conditions. However, if the breach of the conditions is substantial, ongoing or irreversibly, then the Council may take compliance actions under Section 31 of the *Native Vegetation Act 1991*.

6. **Use of cleared vegetation**
   Native vegetation authorised for clearance under a Decision Notification may be a useful resource, as a source of seed for local revegetation projects, for woodcraft purposes or providing hollows for relocation. Please consider notifying any local seed collection groups to offer them the opportunity of collecting seed at the time of clearance, and making any timber from the cleared trees available for woodcraft or hollow relocation.

DECISION NOTIFICATION ACKNOWLEDGEMENT

Application Number: **2022/3063/473**

The applicant, and all parties to the decision, have received a copy of the Decision Notification (decision date 31/3/2022) are fully aware and will comply with the decision and all the attached conditions.

Name of applicant: .....

Signature of applicant or seal of Company and authorised signatory, including the signature of any other parties to the decision:

.....

.....

.....

.....

Date : .....

Note: *Sign and return this form by post or email to:*

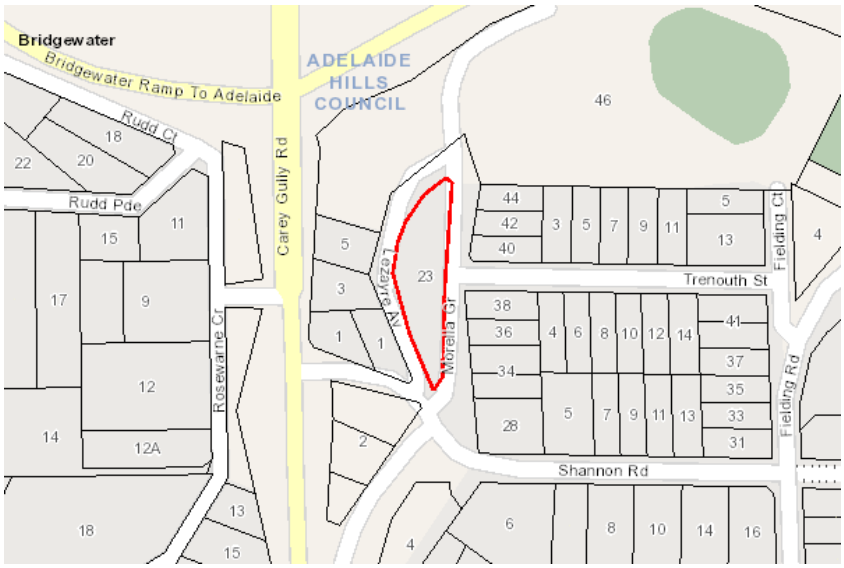
Send to: **Native Vegetation Branch**
C/o
Department for Environment and Water
GPO Box 1047 Adelaide SA 5001

Email: **Andrew.groom@sa.gov.au**

Address: **23 MORELLA GR BRIDGEWATER SA 5155**

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

Local Variation (TNV)
Minimum Site Area *(Minimum site area is 1,000 sqm)*
Overlay
Hazards (Bushfire - High Risk)
Hazards (Flooding - Evidence Required)
Mount Lofty Ranges Water Supply Catchment (Area 2)
Native Vegetation
Prescribed Water Resources Area
Regulated and Significant Tree
Traffic Generating Development
Zone
Rural Neighbourhood

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 work on railway land
   - Carport
   - Internal building work
   - Outbuilding
   - Partial demolition of a building or structure
   - Private bushfire shelter
   - Shade sail
   - Solar photovoltaic panels (roof mounted)
   - Swimming pool or spa pool
   - 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
   - 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
   - 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 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: (a) Ancillary accommodation (b) Consulting room (c) Detached dwelling (d) Office (e) Outbuilding (f) Pre-school (g) Recreation area (h) Shop
PO 1.2 Commercial activities improve community access to services are of a scale and type to maintain residential amenity.	DTS/DPF 1.2 A shop, consulting room or office (or any combination thereof) satisfies any one of the following: (a) it is located on the same allotment and in conjunction with a dwelling where all the following are satisfied: (i) does not exceed 50m^2 gross leasable floor area (ii) does not involve the display of goods in a window or about the dwelling or its curtilage (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: (i) the building is a State or Local Heritage Place (ii) is in conjunction with a dwelling and there is no increase in the gross leasable floor area previously used for non-residential purposes.
PO 1.3 Non-residential development sited and designed to complement the residential character and amenity of the neighbourhood.	DTS/DPF 1.3 None are applicable.
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.	DTS/DPF 1.4 None are applicable.

Building Height	
PO 2.1 Buildings contribute to a low-rise residential character and complement the height of nearby buildings.	DTS/DPF 2.1 Building height (excluding garages, carports and outbuildings) is no greater than 2 building levels and 9m and wall height no greater than 7m except in the case of a gable end.
Primary Street Setback	
PO 3.1 Buildings are set back from primary street boundaries consistent with the existing streetscape.	DTS/DPF 3.1 The building line of a building set back from the primary street boundary: (a) no more than 1m in front of the average setback to the building line of existing buildings on adjoining sites which face the same primary street (including those buildings that would adjoin the site if not separated by a public road or a vacant allotment) (b) where there is only one existing building on adjoining sites which face the same primary street (including those that would adjoin if not separated by a public road or a vacant allotment), not less than the setback to the building line of that building or (c) not less than 8m where no building exists on an adjoining site with the same primary street frontage.
Secondary Street Setback	
PO 4.1 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.	DTS/DPF 4.1 Buildings walls are set back at least 2m from the boundary of the allotment with the secondary street frontage.
Side Boundary Setback	
PO 5.1 Buildings are set back from side boundaries to allow maintenance and access around buildings and minimise impacts on adjoining properties.	DTS/DPF 5.1 Building walls are set back from the side boundaries at least 2m.
Rear Boundary Setback	
PO 6.1 Buildings are set back from rear boundaries to provide: (a) separation between dwellings in a way that complements the established character of the locality (b) access to natural light and ventilation for neighbours (c) open space recreational opportunities (d) space for landscaping and vegetation.	DTS/DPF 6.1 Building walls are set back from the rear boundary at least 6m.
Ancillary Buildings and Structures	
PO 7.1 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.	DTS/DPF 7.1 Ancillary buildings and structures: (a) are ancillary to a dwelling erected on the site (b) have a floor area not exceeding

	(i) 100m^2 on sites less than 2000m^2 (ii) 120m^2 on sites 2000m^2 or more (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 (ii) within 2m of a boundary of the allotment with a secondary street (if the land has boundaries on two or more roads) (iii) within 2m of a side boundary (d) in the case of a garage or carport, have a primary street setback that is at least as far back as the dwelling (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 (f) have a wall height or post height not exceeding 4m above natural ground level (g) have a roof height where no part of the roof is more than 5m above the natural ground level (h) if clad in sheet metal, are pre-colour treated or painted in a non-reflective colour (i) 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^2)** / **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 7.2 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.	DTS/DPF 7.2 Ancillary buildings and structures do not result in: (a) less private open space than specified in Design 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 to the nearest whole number.
Site Dimensions and Land Division	
PO 8.1 Allotments/sites created for residential purposes are consistent	DTS/DPF 8.1 Development will not result in more than 1 dwelling on an existing

with the density and dimensions expressed in any relevant *Minimum Allotment Size Technical and Numeric Variation* or are of suitable size and dimension to contribute to a pattern of development consistent to the locality and suitable for their intended use.	allotment or Allotments/sites for residential purposes accord with the following: (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: **Minimum Site Area** Minimum site area is 1,000 sqm (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: (i) 1200m^2 (ii) the following: **Minimum Site Area** Minimum site area is 1,000 sqm (c) site frontages are not less than 20m. In relation to DTS/DPF 8.1, in instances where: (d) more than one value is returned in the same field, refer to the *Minimum Site Area Technical and Numeric Variation layer* in the SA planning database to determine the applicable value relevant to the site of the proposed development (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 (f) no value is returned for DTS/DPF 8.1(b)(ii) then the value for DTS/DPF 8.1(b)(ii) is zero.
Concept Plans	
PO 9.1 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.	DTS/DPF 9.1 The site of the development is wholly located outside any relevant Concept Plan boundary. The following Concept Plans are relevant: In relation to DTS/DPF 9.1, in instances where: (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. (b) in instances where 'no value' is returned, there is no relevant concept plan and DTS/DPF 9.1 is met.
Advertisements	
PO 10.1 Advertisements identify the associated business activity, and do	DTS/DPF 10.1 Advertisements relating to a lawful business activity associated

not detract from the residential character of the locality.	with a residential use do not exceed 0.3m2 and mounted flush with a wall or fence.

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.

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: (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.	Except development involving any of the following: 1. residential flat building(s) of 3 storeys or greater 2. the demolition of a State or Local Heritage Place 3. the demolition of a building (except an ancillary building) in a Historic Area Overlay.
3. Any development involving any of the following (or of any combination of any of the following): (a) air handling unit, air conditioning system or exhaust fan (b) ancillary accommodation (c) building work on railway land (d) carport (e) deck (f) detached dwelling (g) dwelling addition (h) fence (i) outbuilding (j) pergola (k) private bushfire shelter (l) retaining wall (m) shade sail (n) solar photovoltaic panels (roof mounted)	Except development that does not satisfy Rural Neighbourhood Zone DTS/DPF 2.1.

(o) swimming pool or spa pool (p) verandah (q) water tank.	
4. Any development involving any of the following (or of any combination of any of the following): (a) consulting room (b) office (c) shop.	Except development that does not satisfy any of the following: 1. Rural Neighbourhood Zone DTS/DPF 1.2 2. Rural Neighbourhood Zone DTS/DPF 2.1.
5. Any development involving any of the following (or of any combination of any of the following): (a) internal building works (b) land division (c) recreation area (d) replacement building (e) temporary accommodation in an area affected by bushfire (f) tree damaging activity.	None specified.
6. Demolition.	Except any of the following: 1. the demolition of a State or Local Heritage Place 2. the demolition of a building (except an ancillary building) in a Historic Area Overlay.

Placement of Notices - Exemptions for Performance Assessed Development
None specified.
Placement of Notices - Exemptions for Restricted Development
None specified.

Part 3 - Overlays

Hazards (Bushfire - High Risk) Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Development, including land division is sited and designed to minimise the threat and impact of bushfires on life and property with regard to the following risks:

	(a) potential for uncontrolled bushfire events taking into account the increased frequency and intensity of bushfires as a result of climate change (b) high levels and exposure to ember attack (c) impact from burning debris (d) radiant heat (e) likelihood and direct exposure to flames from a fire front.
DO 2	Activities that increase the number of people living and working in the area or where evacuation would be difficult is sited away from areas of unacceptable bushfire risk.
DO 3	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
Land Use	
PO 1.1 Development that significantly increases the potential for fire outbreak as a result of the spontaneous combustion of materials, spark generation or through the magnification and reflection of light is not located in areas of unacceptable bushfire risk.	DTS/DPF 1.1 None are applicable.
PO 1.2 Pre-schools, educational establishments, hospitals, retirement and supported accommodation are sited away from areas of unacceptable bushfire risk and locations that: (a) are remote from or require extended periods of travel to reach safer locations (b) don't have a safe path of travel to safer locations.	DTS/DPF 1.2 None are applicable.
Siting	
PO 2.1 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 2.1 None are applicable.
Built Form	
PO 3.1 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 3.1 None are applicable.
PO 3.2	DTS/DPF 3.2

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.	Outbuildings and other ancillary structures are sited no closer than 6m from the habitable building.
Habitable Buildings	
PO 4.1 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 accommodation, student accommodation and workers' accommodation) is sited on the flatter portion of allotments away from steep slopes.	DTS/DPF 4.1 None are applicable.
PO 4.2 Residential and 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.	DTS/DPF 4.2 Residential and tourist accommodation and habitable buildings for vulnerable communities are provided with asset protection zone(s) in accordance with (a) and (b): (a) the asset protection zone has a minimum width of at least: (i) 50 metres to unmanaged grasslands (ii) 100 metres to hazardous bushland vegetation (b) the asset protection zone is contained wholly within the allotment of the development.
PO 4.3 Residential and 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: (a) is capable of accommodating a bushfire protection system comprising firefighting equipment and water supply in accordance with *Ministerial Building Standard MBS 008 - Designated bushfire prone areas - additional requirements* (b) includes the provision of an all-weather hardstand area in a location that: (i) allows fire-fighting vehicles to safely access the dedicated water supply and exit the site in a forward direction (ii) is no further than 6 metres from the dedicated water supply outlet(s) where required.	DTS/DPF 4.3 None are applicable.
Land Division	
PO 5.1 Land division for residential and tourist accommodation and habitable buildings for vulnerable communities (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation) is	DTS/DPF 5.1 None are applicable.

limited to those areas specifically set aside for these uses.	
PO 5.2 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.	DTS/DPF 5.2 None are applicable.
PO 5.3 Land division is designed to provide a continuous street pattern (avoiding the use of dead end roads/cul-de-sac road design) to facilitate the safe movement and evacuation of emergency vehicles, residents, occupants and visitors. Where cul-de-sac / dead end roads are proposed, an alternative emergency evacuation route is provided.	DTS/DPF 5.3 None are applicable.
PO 5.4 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.	DTS/DPF 5.4 None are applicable.
PO 5.5 Land division provides sufficient space for future asset protection zones and 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.	DTS/DPF 5.5 None are applicable.
Vehicle Access –Roads, Driveways and Fire Tracks	
PO 6.1 Roads are designed and constructed to facilitate the safe and effective: (a) access, operation and evacuation of fire-fighting vehicles and emergency personnel (b) evacuation of residents, occupants and visitors.	DTS/DPF 6.1 Roads: (a) are constructed with a formed, all-weather surface (b) have a gradient of not more than 16 degrees (1-in-3.5) at any point along the road (c) have a cross fall of not more than 6 degrees (1-in-9.5) at any point along the road (d) have a minimum formed road width of 6m (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) (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) (g) incorporating cul-de-sac endings or dead end roads are provided within an alternative evacuation route and do not exceed 200m in length and the end of the road has either: (i) a turning area with a minimum formed surface radius of 12.5m (Figure 3) or (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) (h) incorporate solid, all-weather crossings over any watercourse that support fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.
PO 6.2 Access to habitable buildings is designed and constructed to facilitate the safe and effective: (a) use, operation and evacuation of fire-fighting and emergency personnel (b) evacuation of residents, occupants and visitors.	DTS/DPF 6.2 Access is in accordance with (a) or (b): (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 (b) driveways: (i) do not exceed 600m in length (ii) are constructed with a formed, all-weather surface (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) (iv) have a gradient of not more than 16 degrees (1-in-3.5) at any point along the driveway (v) have a crossfall of not more than 6 degrees (1-in-9.5) at any point along the driveway (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) (vii) incorporate passing bays with a minimum width of 6m and length of 17m every 200m (Figure 5) (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) (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) (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: A. a loop road around the building or B. a turning area with a minimum radius of 12.5m (Figure 3) or C. a 'T' or 'Y' shaped turning area with a minimum formed length of 11m and minimum internal radii of 9.5m (Figure 4) (xi) incorporate solid, all-weather crossings over any watercourse that support fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.

PO 6.3 Development does not rely on fire tracks as means of evacuation or access for fire-fighting purposes unless there are no safe alternatives available.	DTS/DPF 6.3 None are applicable.

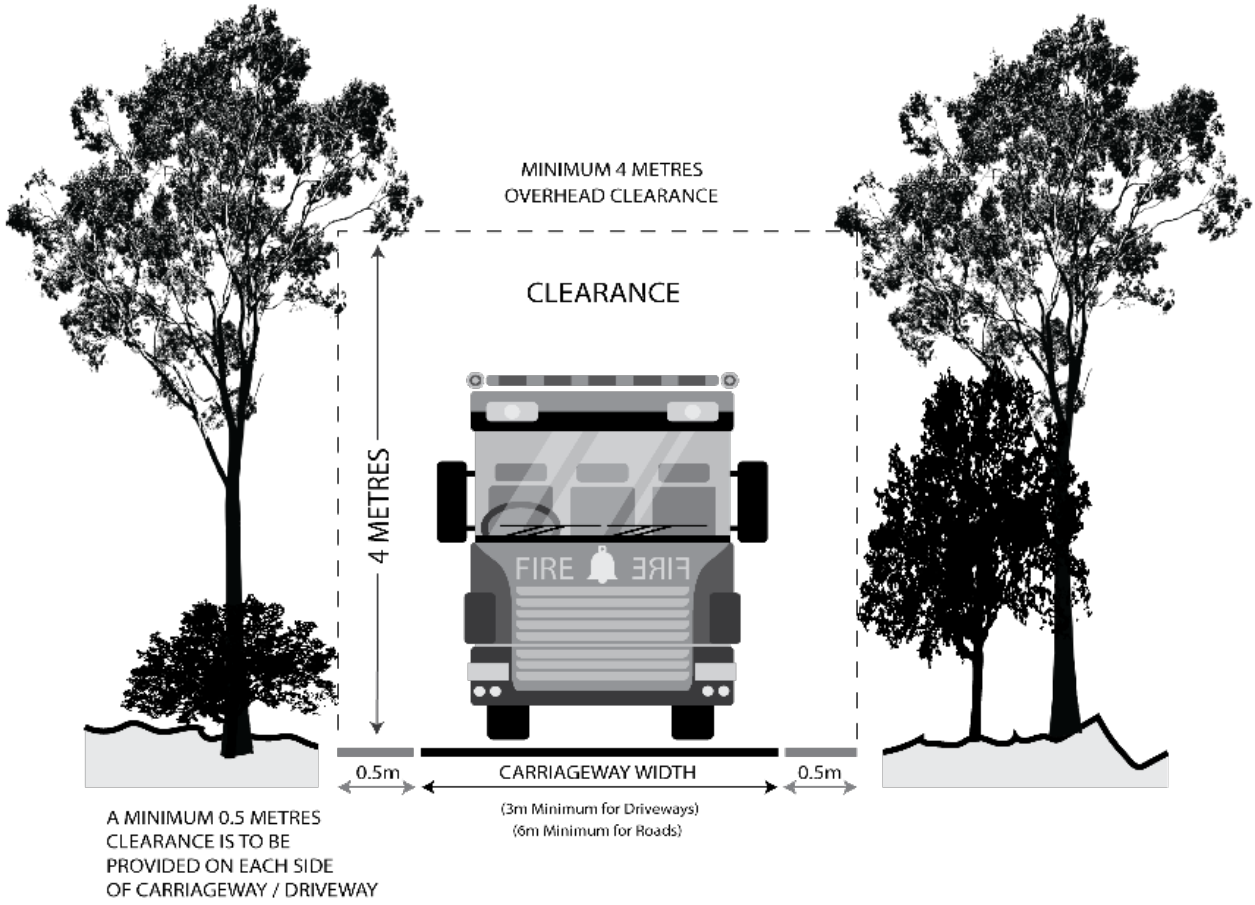
Procedural Matters (PM) - Referrals

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
Except if a ***relevant certificate*** accompanies the application for planning consent in respect of the development, any of the following classes of development (including alterations and additions which increase the floor area of such buildings by 10% or more): (a) land division creating one or more additional allotments (b) dwelling (c) ancillary accommodation (d) residential flat building (e) tourist accommodation (f) boarding home (g) dormitory style accommodation (h) workers' accommodation (i) student accommodation (j) pre-school (k) educational establishment (l) retirement village (m) supported accommodation (n) residential park (o) hospital (p) camp ground.	South Australian Country Fire Service.	To provide expert assessment and direction to the relevant authority on the potential impacts of bushfire on the development.	Development of a class to which Schedule 9 clause 3 item 2 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Figures and Diagrams

Fire Appliance Clearances
Figure 1 - Overhead and Side Clearances



Roads and Driveway Design

Figure 2 - Road and Driveway Curves

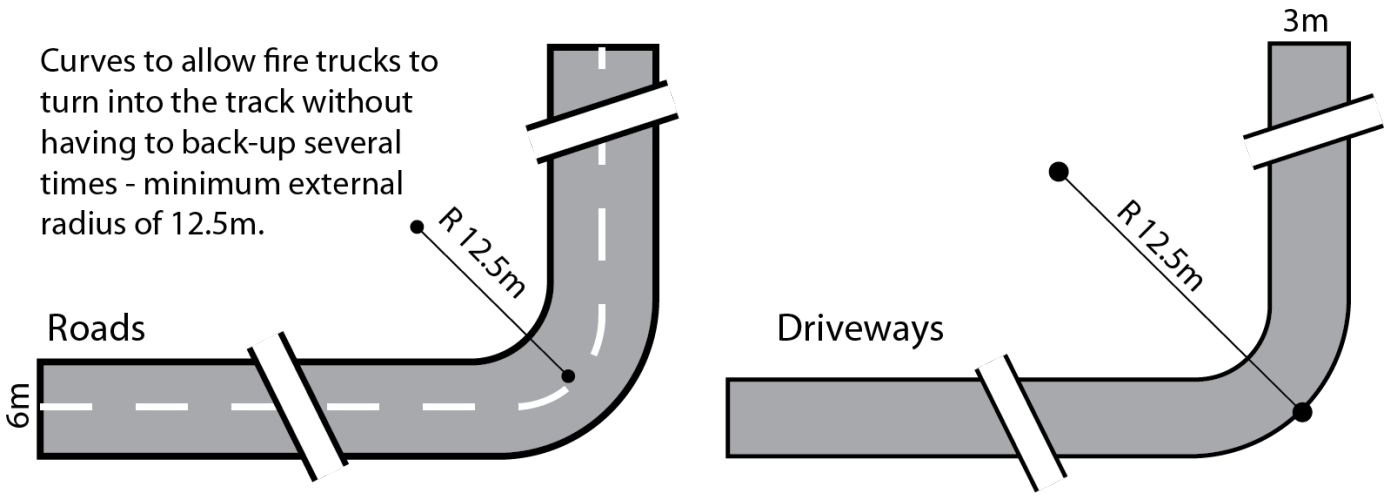


Figure 3 - Full Circle Turning Area

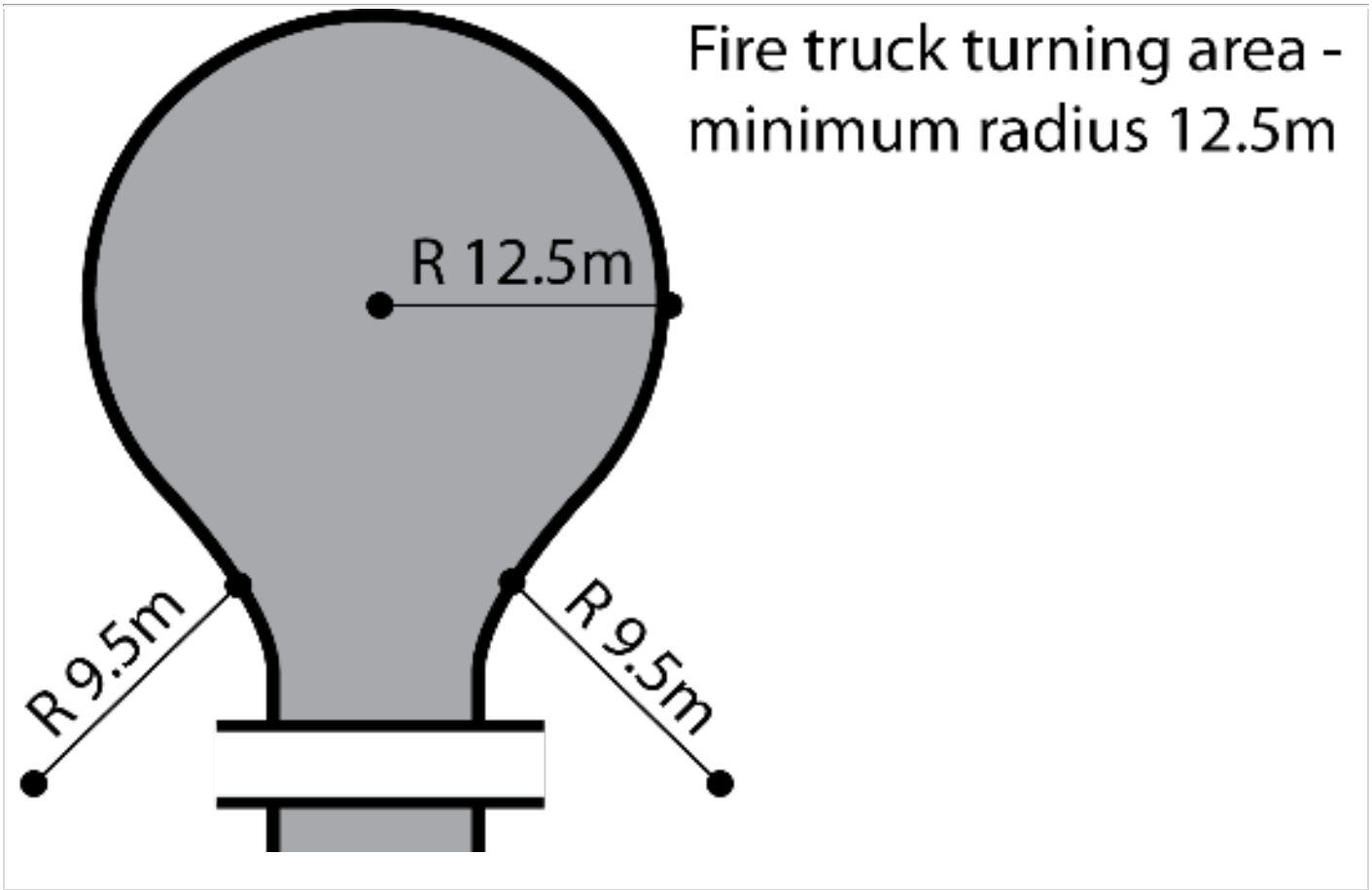
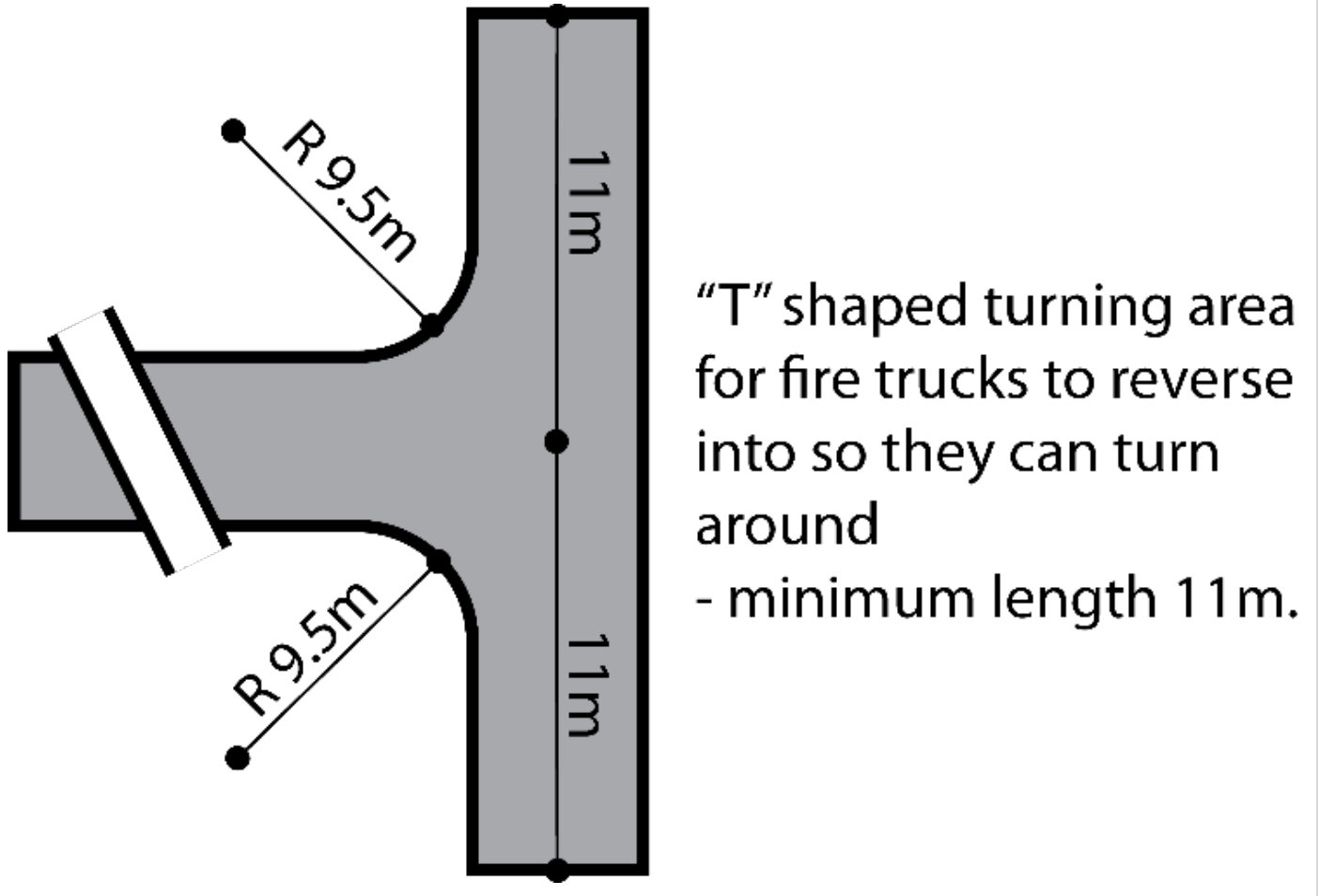


Figure 4 - 'T' or 'Y' Shaped Turning Head



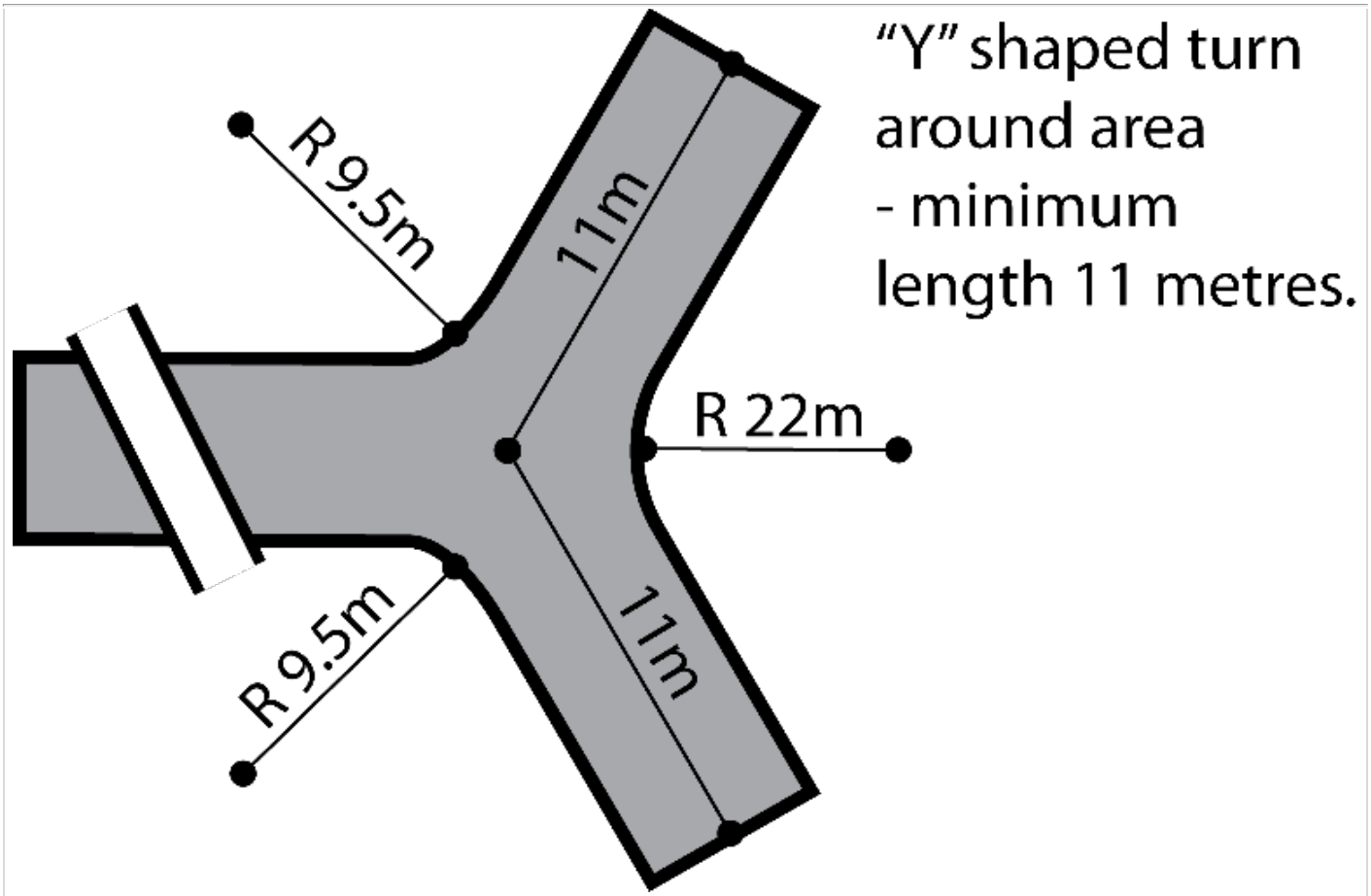
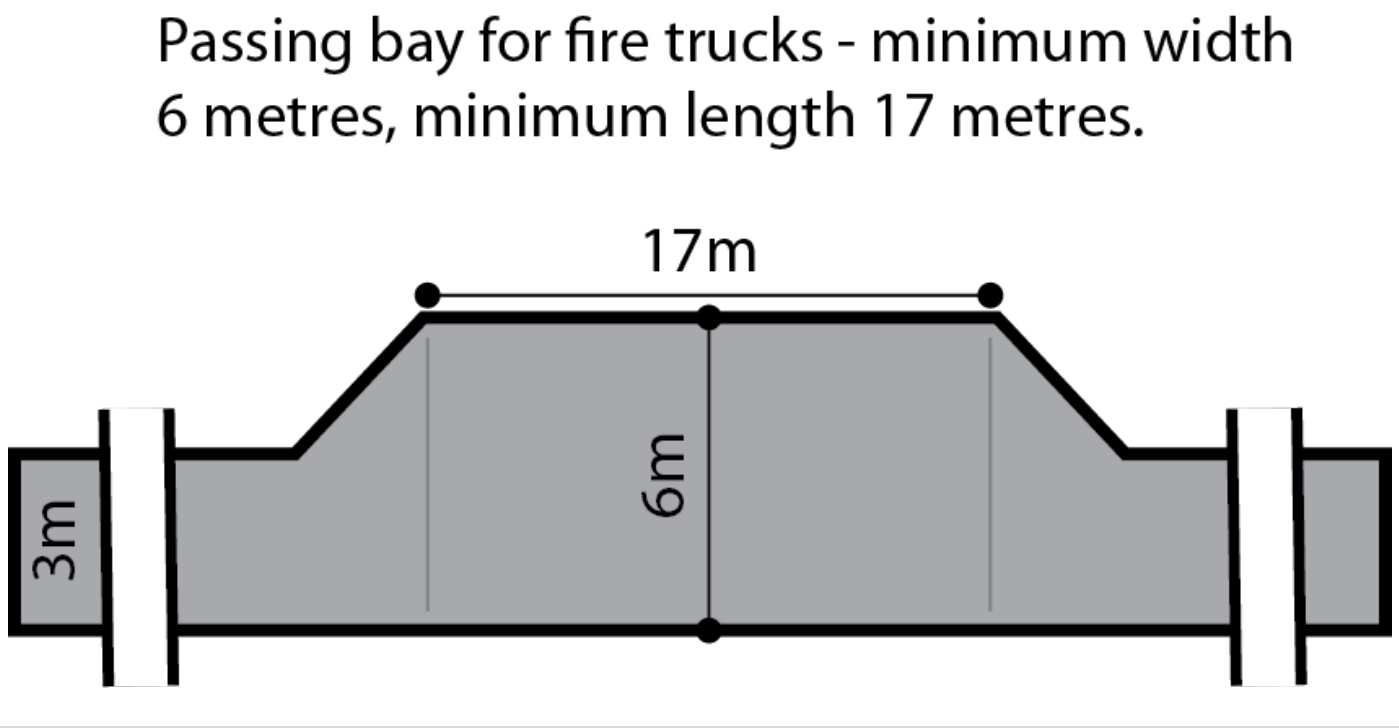


Figure 5 - Driveway Passing Bays



Hazards (Flooding - Evidence Required) Overlay

Assessment Provisions (AP)

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: (a) the highest point of top of kerb of the primary street or (b) the highest point of natural ground level at the primary street boundary where there is no kerb
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: (a) rainwater tanks with a minimum capacity of 1,000L connected to carports, verandahs and	DTS/DPF 3.5 Dwelling additions are connected to a rainwater tank with a minimum capacity of 1,000L.

outbuildings or (b) rainwater tanks with a minimum capacity of 4,500L connected to agricultural buildings exceeding 100m^2.	
DTS/DPF 3.9 Excavation and/or filling satisfy all the following: (a) is located 50m or more from watercourses (b) is located 100m or more from public water supply reservoirs and 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 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	DTS/DPF 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.	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 and constructed to avoid leakage to groundwater or overflow under extreme rainfall conditions (c) treated wastewater irrigation areas: (i) have a slope of less than 1-in-5 (20 percent) (ii) are greater than 100 metres from any watercourse, dam, bore or well are suitable to provide for seasonal wastewater irrigation without causing pollution of surface or groundwater.
PO 2.3 Development that generates trade or industrial wastewater is of a scale and design to ensure wastewater is managed to avoid adverse water quality impacts is of a scale and design that will avoid adverse water quality impacts.	DTS/DPF 2.3 Development that generates trade or industrial wastewater with a peak biological oxygen demand (BOD) of greater than 100 milligrams per litre satisfies the following: (a) disposes of all wastewater to a sewerage or community wastewater management system, or (b) operates at a scale that generates less than 5 million litres of wastewater per year, and (i) is located greater than 300 metres from a watercourse, dam, bore or well, except where a spill retention basin is constructed, in which case, the minimum setback to a watercourse, dam, bore or well is 50 metres, and (ii) a development that incorporates a spill retention basin(s) for the purpose of reducing the setback to a watercourse, dam, bore or well, has basins designed and located: A. to minimise the risk of spills entering a downgradient watercourse, dam, bore of well B. in close proximity to wine making, wine storage and wastewater treatment facilities C. to capture 120% of the maximum aggregate volume of liquid raw materials, product and untreated wastewater which can be contained or

	produced at any one time during the peak of operation D. to be impervious; and E. to minimise the interception of any natural or artificial stormwater flow.
PO 2.4 Wastewater management systems result in a neutral or beneficial effect on the quality of water draining from the site.	DTS/DPF 2.4 Development results in: (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 (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.
PO 2.5 Surface and groundwater protected from wastewater discharge pollution.	DTS/DPF 2.5 All components of an effluent disposal area are: (a) setback 50 metres or more from a watercourse (b) setback 100 metres of more from a public water supply reservoir (c) located on land with a slope no greater than 1-in-5 (20%) (d) located on land with 1.2m or more depth to bedrock or a seasonal or permanent water table (e) above the 10% AEP flood level.
Stormwater	
PO 3.1 Post-development peak stormwater discharge quantities and rates do not exceed pre-development quantities and rates to maintain water quality leaving the site.	DTS/DPF 3.1 None are applicable.
PO 3.2 Stormwater run-off from areas not likely to be subject to pollution diverted away from areas that could cause pollution.	DTS/DPF 3.2 None are applicable.
PO 3.3 Polluted stormwater is treated prior to discharge from the site.	DTS/DPF 3.3 None are applicable.
PO 3.4 Stormwater from carports, verandahs, outbuildings and agricultural buildings captured to protect water quality.	DTS/DPF 3.4 Development includes: (a) rainwater tanks with a minimum capacity of 1,000L connected to carports, verandahs and outbuildings or (b) rainwater tanks with a minimum capacity of 4,500L connected to agricultural buildings exceeding 100m^2.
PO 3.5	DTS/DPF 3.5

Stormwater from dwelling additions captured to protect water quality.	Dwelling additions are connected to a rainwater tank with a minimum capacity of 1,000L.
PO 3.6 Stormwater from shops and tourist accommodation is managed to protect water quality.	DTS/DPF 3.6 Shops and tourist accommodation satisfy all the following: (a) are located 50m or more from watercourses, wetlands, land prone to waterlogging and bores (b) are located 100m or more from public water supply reservoirs and diversion weirs (c) are located on land with a slope not exceeding 20% (d) includes buildings connected to rainwater tanks with a minimum capacity of 1,000L (e) includes swales that divert clean stormwater away from areas where it could be polluted.
PO 3.7 Stormwater from horse keeping and low intensity animal husbandry is managed to protect water quality.	DTS/DPF 3.7 Horse keeping and low intensity animal husbandry satisfy all the following: (a) is located 50m or more from watercourses, wetlands, land prone to waterlogging and bores (b) is located on land with a slope not exceeding 10% (c) includes stables, shelters or other roofed structures connected to rainwater tanks with a minimum capacity of 1,000L (d) includes swales that divert clean stormwater away from areas (including yards, manure storage areas, and watering points) within which it could be polluted.
PO 3.8 Stormwater from horticulture is managed to protect water quality.	DTS/DPF 3.8 Horticulture satisfies all the following: (a) is located 50m or more from watercourses, wetlands, land prone to waterlogging and bores (b) is located 100m or more from public water supply reservoirs and diversion weirs (c) is located on land with a slope not exceeding 10% (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.
PO 3.9 Stormwater from excavated and filled areas is managed to protect water quality.	DTS/DPF 3.9 Excavation and/or filling satisfy all the following: (a) is located 50m or more from watercourses (b) is located 100m or more from public water supply reservoirs and 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.

Landscapes and Natural Features	
PO 4.1 Development minimises the need to modify landscapes and natural features.	DTS/DPF 4.1 None are applicable.
Land Division	
PO 5.1 Land division does not result in an increased risk of pollution to surface or underground water.	DTS/DPF 5.1 Land division does not create additional allotments and satisfies (a) and/or (b): (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 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.
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.	DTS/DPF 5.2 None are applicable.

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
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: (a) land division creating one or more additional allotments, either partly or wholly within the area of the overlay (b) function centre with more than 75 seats for customer dining purposes (c) restaurant with more than 40 seats for customer dining purposes (d) restaurant with more than 30 seats for customer dining purposes in association with a cellar door (e) dwelling where a habitable dwelling or tourist accommodation already exists on the same allotment (including where a valid planning authorisation exists to erect a dwelling or tourist accommodation on the same allotment) (f) tourist accommodation where a habitable	Environment Protection Authority.	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.	Development of a class to which Schedule 9 clause 3 item 9 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

dwelling or tourist accommodation already exists on the same allotment (including where a valid planning authorisation exists to erect a habitable dwelling or tourist accommodation on the same allotment) (g) workers' accommodation where a habitable dwelling or tourist accommodation already exists on the same allotment (including where a valid planning authorisation exists to erect a habitable dwelling or tourist accommodation on the same allotment) (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)	
Composting works (excluding a prescribed approved activity) - 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 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: (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: (i) in connection with a relevant access point and / or driveway (ii) within 10m of a building (other than a residential building or tourist accommodation) (iii) within 20m of a dwelling or addition to an existing dwelling for fire prevention and control (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 or (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'.
PO 1.2 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.	DTS/DPF 1.2 None are applicable.

PO 1.3 Intensive animal husbandry 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: (a) the spread of pest plants and phytophthora (b) the spread of non-indigenous plants species (c) excessive nutrient loading of the soil or loading arising from surface water runoff (d) soil compaction (e) chemical spray drift.	DTS/DPF 1.3 Development within 500 metres of a boundary of a State Significant Native Vegetation Area does not involve any of the following: (a) horticulture (b) intensive animal husbandry (c) dairy (d) commercial forestry (e) aquaculture.
PO 1.4 Development restores and enhances biodiversity and habitat values through revegetation using locally indigenous plant species.	DTS/DPF 1.4 None are applicable.
Land division	
PO 2.1 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.	DTS/DPF 2.1 Land division where: (a) an application is accompanied by one of the following: (i) a declaration stating that none of the allotments in the proposed plan of division contain native vegetation under the *Native Vegetation Act 1991* (ii) a declaration stating that no native vegetation clearance under the *Native Vegetation Act 1991* will be required as a result of the division of land (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' or (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 or (c) the division is to support a Heritage Agreement under the Native Vegetation Act 1991 or the *Heritage Places Act 1993*.

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	Native Vegetation Council	To provide expert assessment	Development

prepared in accordance with Regulation 18(2)(a) of the *Native Vegetation Regulations 2017* that categorises the clearance, or potential clearance, as 'Level 3 clearance' or 'Level 4 clearance'.		and direction to the relevant authority on the potential impacts of development on native vegetation.	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 1	Sustainable water use in prescribed surface water resources areas maintains the health and natural flow paths of water courses.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 All development, but in particular development involving any of the following: (a) horticulture (b) activities requiring irrigation (c) aquaculture (d) industry (e) intensive animal husbandry (f) commercial forestry has a lawful, sustainable and reliable water supply that does not place undue strain on water resources in prescribed surface water areas.	DTS/DPF 1.1 Development satisfies either of the following: (a) the applicant has a current water licence in which sufficient spare capacity exists to accommodate the water needs of the proposed use or (b) the proposal does not involve the taking of water for which a licence would be required under the *Landscape South Australia Act 2019*.
PO 1.2 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.	DTS/DPF 1.2 None are applicable.

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 *Landscape South Australia Act 2019* 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: (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 *Landscape South Australia Act 2019*.	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 *Landscape South Australia Act 2019*.			

Regulated and Significant Tree Overlay

Assessment Provisions (AP)

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	
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.	DTS/DPF 1.1 None are applicable.
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.	DTS/DPF 1.2 None are applicable.
PO 1.3 A tree damaging activity not in connection with other development satisfies (a) and (b): (a) tree damaging activity is only undertaken to: (i) remove a diseased tree where its life expectancy is short (ii) mitigate an unacceptable risk to public or private safety due to limb drop or the like (iii) rectify or prevent extensive damage to a building of value as comprising any of the following: A. a Local Heritage Place B. a State Heritage Place C. a substantial building of value and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity (iv) reduce an unacceptable hazard associated with a tree within 20m of an existing residential, tourist accommodation or other habitable building from bushfire (v) treat disease or otherwise in the general interests of the health of the tree and / or (vi) maintain the aesthetic appearance and	DTS/DPF 1.3 None are applicable.

structural integrity of the tree (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.	
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.	DTS/DPF 1.4 None are applicable.
Ground work affecting trees	
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.	DTS/DPF 2.1 None are applicable.
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

Traffic Generating Development Overlay

Assessment Provisions (AP)

Desired Outcome	
DO 1	Safe and efficient operation of Urban Transport Routes and Major Urban Transport Routes for all road users.
DO 2	Provision of safe and efficient access to and from urban transport routes and major urban transport routes.

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Traffic Generating Development	
PO 1.1 Development designed to minimise its potential impact on the safety, efficiency and functional performance of the State Maintained Road network.	DTS/DPF 1.1 Access is obtained directly from a State Maintained Road where it involves any of the following types of development: (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m2 or more (c) retail development with a gross floor area of 2,000m2 or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m2 or more (e) industry with a gross floor area of 20,000m2 or more (f) educational facilities with a capacity of 250 students or more.
PO 1.2 Access points sited and designed to accommodate the type and volume of traffic likely to be generated by development.	DTS/DPF 1.2 Access is obtained directly from a State Maintained Road where it involves any of the following types of development: (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m2 or more (c) retail development with a gross floor area of 2,000m2 or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m2 or more (e) industry with a gross floor area of 20,000m2 or more (f) educational facilities with a capacity of 250 students or more.
PO 1.3 Sufficient accessible on-site queuing provided to meet the needs of the development so that queues do not impact on the State Maintained Road network.	DTS/DPF 1.3 Access is obtained directly from a State Maintained Road where it involves any of the following types of development: (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m2 or more (c) retail development with a gross floor area of 2,000m2 or

	more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m2 or more (e) industry with a gross floor area of 20,000m2 or more (f) educational facilities with a capacity of 250 students or more.

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
Except where all of the relevant deemed-to-satisfy criteria are met, any of the following classes of development that are proposed within 250m of a State Maintained Road: (a) land division creating 50 or more additional allotments (b) commercial development with a gross floor area of 10,000m^2 or more (c) retail development with a gross floor area of 2,000m^2 or more (d) a warehouse or transport depot with a gross leasable floor area of 8,000m^2 or more (e) industry with a gross floor area of 20,000m^2 or more (f) educational facilities with a capacity of 250 students or more.	Commissioner of Highways.	To provide expert technical assessment and direction to the Relevant Authority on the safe and efficient operation and management of all roads relevant to the Commissioner of Highways as described in the Planning and Design Code.	Development of a class to which Schedule 9 clause 3 item 7 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

Part 4 - General Development Policies

Advertisements

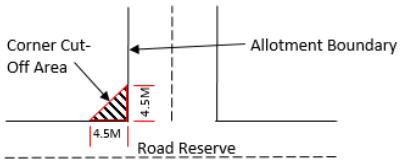
Assessment Provisions (AP)

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: A. do not have any part rising above parapet height B. are not attached to the roof of the building (c) where they are not flush with a wall: (i) if attached to a verandah, no part of the advertisement protrudes beyond the outer limits of the verandah structure (ii) if attached to a two-storey building: A. has no part located above the finished floor level of the second storey of the building B. does not protrude beyond the outer limits of any verandah structure below C. does not have a sign face that exceeds 1m2 per side. (d) if located below canopy level, are flush with a wall (e) if located at canopy level, are in the form of a fascia sign (f) if located above a canopy: (i) are flush with a wall (ii) do not have any part rising above parapet height (iii) are not attached to the roof of the building. (g) if attached to a verandah, no part of the advertisement protrudes beyond the outer limits of the verandah structure (h) if attached to a two-storey building, have no part located above the finished floor level of the second storey of the building (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.
PO 1.2 Advertising hoardings do not disfigure the appearance of the land upon which they are situated or the character of the locality.	DTS/DPF 1.2 Where development comprises an advertising hoarding, the supporting structure is: (a) concealed by the associated advertisement and decorative detailing

	or (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.
PO 1.3 Advertising does not encroach on public land or the land of an adjacent allotment.	DTS/DPF 1.3 Advertisements and/or advertising hoardings are contained within the boundaries of the site.
PO 1.4 Where possible, advertisements on public land are integrated with existing structures and infrastructure.	DTS/DPF 1.4 Advertisements on public land that meet at least one of the following: (a) achieves Advertisements DTS/DPF 1.1 (b) are integrated with a bus shelter.
PO 1.5 Advertisements and/or advertising hoardings are of a scale and size appropriate to the character of the locality.	DTS/DPF 1.5 None are applicable.
Proliferation of Advertisements	
PO 2.1 Proliferation of advertisements is minimised to avoid visual clutter and untidiness.	DTS/DPF 2.1 No more than one freestanding advertisement is displayed per occupancy.
PO 2.2 Multiple business or activity advertisements are co-located and coordinated to avoid visual clutter and untidiness.	DTS/DPF 2.2 Advertising of a multiple business or activity complex is located on a single advertisement fixture or structure.
PO 2.3 Proliferation of advertisements attached to buildings is minimised to avoid visual clutter and untidiness.	DTS/DPF 2.3 Advertisements satisfy all of the following: (a) are attached to a building (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 (c) do not result in more than one sign per occupancy that is not flush with a wall.
Advertising Content	
PO 3.1 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.	DTS/DPF 3.1 Advertisements contain information limited to a lawful existing or proposed activity or activities on the same site as the advertisement.
Amenity Impacts	
PO 4.1 Light spill from advertisement illumination does not unreasonably compromise the amenity of sensitive receivers.	DTS/DPF 4.1 Advertisements do not incorporate any illumination.
Safety	

PO 5.1 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.	DTS/DPF 5.1 Advertisements have a minimum clearance of 2.5m between the top of the footpath and base of the underside of the sign.
PO 5.2 Advertisements and/or advertising hoardings do not distract or create a hazard to drivers through excessive illumination.	DTS/DPF 5.2 No advertisement illumination is proposed.
PO 5.3 Advertisements and/or advertising hoardings do not create a hazard to drivers by: (a) being liable to interpretation by drivers as an official traffic sign or signal (b) obscuring or impairing drivers' view of official traffic signs or signals (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.	DTS/DPF 5.3 Advertisements satisfy all of the following: (a) are not located in a public road or rail reserve (b) are located wholly outside the land shown as 'Corner Cut-Off Area' in the following diagram 
PO 5.4 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.	DTS/DPF 5.4 Advertisements and/or advertising hoardings are not located along or adjacent to a road having a speed limit of 80km/h or more.
PO 5.5 Advertisements and/or advertising hoardings provide sufficient clearance from the road carriageway to allow for safe and convenient movement by all road users.	DTS/DPF 5.5 Where the advertisement or advertising hoarding is: (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 (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 (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: (a) 110 km/h road - 14m (b) 100 km/h road - 13m (c) 90 km/h road - 10m (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 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 To minimise environmental harm and adverse impacts on water resources, stables, horse shelters and associated yards are appropriately set back from a watercourse.	DTS/DPF 2.4 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 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 Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land-based Aquaculture	
PO 1.1 Land-based aquaculture and associated components are sited and designed to mitigate adverse impacts on nearby sensitive receivers.	DTS/DPF 1.1 Land-based aquaculture and associated components are located to satisfy all of the following: (a) 200m or more from a sensitive receiver in other ownership (b) 500m or more from the boundary of a zone primarily intended to accommodate sensitive receivers.
PO 1.2 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.	DTS/DPF 1.2 None are applicable.
PO 1.3 Land-based aquaculture and associated components are sited and designed to prevent pond leakage that would pollute groundwater.	DTS/DPF 1.3 None are applicable.
PO 1.4 Land-based aquaculture and associated components are sited and designed to prevent farmed species escaping and entering into any waters.	DTS/DPF 1.4 None are applicable.
PO 1.5 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.	DTS/DPF 1.5 None are applicable.
PO 1.6 Pipe inlets and outlets associated with land-based aquaculture are sited and designed to minimise the risk of disease transmission.	DTS/DPF 1.6 None are applicable.
PO 1.7 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.	DTS/DPF 1.7 None are applicable.
Marine Based Aquaculture	
PO 2.1 Marine aquaculture is sited and designed to minimise its adverse impacts on sensitive ecological areas including:	DTS/DPF 2.1 None are applicable.

(a) creeks and estuaries (b) wetlands (c) significant seagrass and mangrove communities (d) marine habitats and ecosystems.	
PO 2.2 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.	DTS/DPF 2.2 None are applicable.
PO 2.3 Marine aquaculture is designed to not involve discharge of human waste on the site, on any adjacent land or into nearby waters.	DTS/DPF 2.3 None are applicable.
PO 2.4 Marine aquaculture (other than inter-tidal aquaculture) is located an appropriate distance seaward of the high water mark.	DTS/DPF 2.4 Marine aquaculture development is located 100m or more seaward of the high water mark.
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	DTS/DPF 2.7 None are applicable.

(d) positioning racks, floats and other farm structures in unobtrusive locations landward from the shoreline.	
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 None are applicable.
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 None are applicable.
PO 2.10 Marine aquaculture is sited to minimise potential impacts on, and to protect the integrity of, reserves under the *National Parks and Wildlife Act 1972*.	DTS/DPF 2.10 Marine aquaculture is located 1000m or more seaward of the boundary of any reserve under the *National Parks and Wildlife Act 1972*.
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 None are applicable.
Navigation and Safety	
PO 3.1 Marine aquaculture sites are suitably marked to maintain navigational safety.	DTS/DPF 3.1 None are applicable.
PO 3.2 Marine aquaculture is sited to provide adequate separation between farms for safe navigation.	DTS/DPF 3.2 None are applicable.
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	DTS/DPF 4.3

Marine aquaculture provides for progressive or future reclamation of disturbed areas ahead of, or upon, decommissioning.	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 None are applicable.

Beverage Production in Rural Areas

Assessment Provisions (AP)

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 activities occur within enclosed buildings to improve the visual appearance within a locality and manage noise associated with these activities.	DTS/DPF 1.3 None are applicable.
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	DTS/DPF 1.5

Beverage production solid wastes are stored in a manner that minimises odour impacts on sensitive receivers in other ownership.	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 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: (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 (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 (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 (d) coal handling with: a. capacity up to 1 tonne per day or a storage capacity up to 50 tonnes: 500m or more 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.
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	DTS/DPF 2.2 None are applicable.

assist with screening and dust filtration.	
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 1	Protection of human health and safety when undertaking development in the vicinity of overhead transmission powerlines.

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 *Electricity Act 1996* (b) there are no aboveground powerlines adjoining the site that are the subject of the proposed development.

Design

Assessment Provisions (AP)

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 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	DTS/DPF 1.5 None are applicable.

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.	
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 (c) maximise stormwater infiltration (d) enhance the appearance of land and streetscapes (e) contribute to biodiversity.	DTS/DPF 3.1 None are applicable.
PO 3.2 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.	DTS/DPF 3.2 None are applicable.
Environmental Performance	
PO 4.1 Buildings are sited, oriented and designed to maximise natural sunlight access and ventilation to main activity areas, habitable rooms, common areas and open spaces.	DTS/DPF 4.1 None are applicable.

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 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.
Carparking Appearance	
PO 7.1 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: (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 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 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 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.
Earthworks and sloping land	
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	DTS/DPF 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.	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.
Fences and Walls	
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 Landscaping incorporated on the low side of retaining walls is 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.
Overlooking / Visual Privacy (in building 3 storeys or less)	
PO 10.1 Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.	DTS/DPF 10.1 Upper level windows facing side or rear boundaries shared with a residential allotment/site satisfy one of the following: (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 (b) have sill heights greater than or equal to 1.5m above finished floor level (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.
PO 10.2 Development mitigates direct overlooking from balconies, terraces and decks to habitable rooms and private open space of adjoining residential uses.	DTS/DPF 10.2 One of the following is satisfied: (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 or (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: (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 or (ii) 1.7m above finished floor level in all other cases

All Residential development	
Front elevations and passive surveillance	
PO 11.1 Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	DTS/DPF 11.1 Each dwelling with a frontage to a public street: (a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m (b) has an aggregate window area of at least $2m^2$ facing the primary street.
PO 11.2 Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.	DTS/DPF 11.2 Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.
Outlook and amenity	
PO 12.1 Living rooms have an external outlook to provide a high standard of amenity for occupants.	DTS/DPF 12.1 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 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.	DTS/DPF 12.2 None are applicable.
Ancillary Development	
PO 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.	DTS/DPF 13.1 Ancillary buildings: (a) are ancillary to a dwelling erected on the same site (b) have a floor area not exceeding 60m2 (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 (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^2)** / **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.

PO 13.3	DTS/DPF 13.3
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.	The pump and/or filtration system is ancillary to a dwelling erected on the same site and is: (a) enclosed in a solid acoustic structure that is 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.
Garage appearance	
PO 14.1	DTS/DPF 14.1
Garaging is designed to not detract from the streetscape or appearance of a dwelling.	Garages and carports facing a street: (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 (b) are set back at least 5.5m from the boundary of the primary street (c) have a garage door / opening not exceeding 7m in width (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.
Massing	
PO 15.1	DTS/DPF 15.1
The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	None are applicable
Dwelling additions	
PO 16.1	DTS / DPF 16.1
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.	Dwelling additions: (a) are not constructed, added to or altered so that any part is situated closer to a public street (b) do not result in: (i) excavation exceeding a vertical height of 1m (ii) filling exceeding a vertical height of 1m (iii) a total combined excavation and filling vertical height of 2m or more (iv) less Private Open Space than specified in Design Table 1 - Private Open Space (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 (vi) upper level windows facing side or rear boundaries unless: 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 or B. have sill heights greater than or equal to 1.5m above finished floor level

	or C. incorporate screening to a height of 1.5m above finished floor level (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: 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 B. 1.7m above finished floor level in all other cases.
Private Open Space	
PO 17.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 17.1 Private open space is provided in accordance with Design Table 1 - Private Open Space.
Water Sensitive Design	
PO 18.1 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 18.1 Residential development creating a common driveway / access that services 5 or more dwellings achieves the following stormwater runoff outcomes: (a) 80 per cent reduction in average annual total suspended solids (b) 60 per cent reduction in average annual total phosphorus (c) 45 per cent reduction in average annual total nitrogen.
PO 18.2 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 18.2 Development creating a common driveway / access that services 5 or more dwellings: (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 or 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 (b) manages site generated stormwater runoff up to and including the 1% AEP flood event to avoid flooding of buildings.
Car parking, access and manoeuvrability	
PO 19.1 Enclosed parking spaces are of a size and dimensions to be functional, accessible and convenient.	DTS/DPF 19.1 Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area):

	(a) single width car parking spaces: (i) a minimum length of 5.4m per space (ii) a minimum width of 3.0m (iii) a minimum garage door width of 2.4m (b) double width car parking spaces (side by side): (i) a minimum length of 5.4m (ii) a minimum width of 5.4m (iii) minimum garage door width of 2.4m per space.
PO 19.2 Uncovered parking spaces are of a size and dimensions to be functional, accessible and convenient.	DTS/DPF 19.2 Uncovered car parking spaces have: (a) a minimum length of 5.4m (b) a minimum width of 2.4m (c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m
PO 19.3 Driveways are located and designed to facilitate safe access and egress while maximising land available for street tree planting, landscaped street frontages, domestic waste collection and on-street parking.	DTS/DPF 19.3 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.
PO 19.4 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 19.4 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: (i) is set back 6m or more from the tangent point of an intersection of 2 or more roads (ii) is set back outside of the marked lines or infrastructure dedicating a pedestrian crossing (iii) does not involve the removal, relocation or damage to of mature street trees, street furniture or utility infrastructure services.
PO 19.5 Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.	DTS/DPF 19.5 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 steeper than 1:4 on average (b) they are aligned relative to the street boundary 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 street boundary (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 19.6 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	DTS/DPF 19.6 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 20.1 Provision is made for the adequate and convenient storage of waste bins in a location screened from public view.	DTS/DPF 20.1 None are applicable.
Design of Transportable Dwellings	
PO 21.1 The sub-floor space beneath transportable buildings is enclosed to give the appearance of a permanent structure.	DTS/DPF 21.1 Buildings satisfy (a) or (b): (a) are not transportable or (b) the sub-floor space between the building and ground level is clad in a material and finish consistent with the building.
Group dwelling, residential flat buildings and battle-axe development	
Amenity	
PO 22.1 Dwellings are of a suitable size to accommodate a layout that is well organised and provides a high standard of amenity for occupants.	DTS/DPF 22.1 Dwellings have a minimum internal floor area in accordance with the following table:

Number of bedrooms	**Minimum internal floor area**
Studio	$35m^2$
1 bedroom	$50m^2$
2 bedroom	$65m^2$
3+ bedrooms	$80m^2$ and any dwelling over 3 bedrooms provides an additional $15m^2$ 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.
Communal Open Space	
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.
Carparking, access and manoeuvrability	
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 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 26.4 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.
PO 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.	DTS/DPF 26.5 None are applicable.
PO 26.6 Services including gas and water meters are conveniently located and screened from public view.	DTS/DPF 26.6 None are applicable.
Supported accommodation and retirement facilities	
Siting and Configuration	
PO 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.	DTS/DPF 27.1 None are applicable.
Movement and Access	
PO 28.1 Development is designed to support safe and convenient access and movement for residents by providing: (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.	DTS/DPF 28.1 None are applicable.
Communal Open Space	
PO 29.1 Development is designed to provide attractive, convenient and comfortable indoor and outdoor communal areas to be used by residents and visitors.	DTS/DPF 29.1 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 Communal open space is of sufficient size and dimensions to cater for group recreation.	DTS/DPF 29.3 Communal open space incorporates a minimum dimension of 5 metres.
PO 29.4 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 29.4 None are applicable.
PO 29.5 Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	DTS/DPF 29.5 None are applicable.
PO 29.6 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 29.6 None are applicable.
Site Facilities / Waste Storage	
PO 30.1 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 30.1 None are applicable.
PO 30.2 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 30.2 None are applicable.
PO 30.3 Provision is made for suitable external clothes drying facilities.	DTS/DPF 28.3 None are applicable.
PO 30.4 Provision is made for suitable household waste and recyclable material storage facilities conveniently located and screened from public view.	DTS/DPF 30.4 None are applicable.
PO 30.5 Waste and recyclable material storage areas are located away from dwellings.	DTS/DPF 30.5 Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.

PO 30.6 Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.	DTS/DPF 30.6 None are applicable.
PO 30.7 Services including gas and water meters are conveniently located and screened from public view.	DTS/DPF 30.7 None are applicable.
All non-residential development	
Water Sensitive Design	
PO 31.1 Development likely to result in significant risk of export of litter, oil or grease includes stormwater management systems designed to minimise pollutants entering stormwater.	DTS/DPF 31.1 None are applicable.
PO 31.2 Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.	DTS/DPF 31.2 None are applicable.
Wash-down and Waste Loading and Unloading	
PO 32.1 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: (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 (b) paved with an impervious material to facilitate wastewater collection (c) of sufficient size to prevent 'splash-out' or 'over-spray' of wastewater from the wash-down area (d) designed to drain wastewater to either: (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 (ii) a holding tank and its subsequent removal off-site on a regular basis.	DTS/DPF 32.1 None are applicable.

Table 1 - Private Open Space

Dwelling Type	Minimum Rate
Dwelling (at ground level)	Total private open space area: (a) Site area <301m2: 24m2 located behind the building line. (b) Site area ≥ 301m2: 60m2 located behind the building line.

	Minimum directly accessible from a living room: 16m2 / with a minimum dimension 3m.
Dwelling (above ground level)	Studio (no separate bedroom): 4m^2 with a minimum dimension 1.8m One bedroom: 8m^2 with a minimum dimension 2.1m Two bedroom dwelling: 11m^2 with a minimum dimension 2.4m Three + bedroom dwelling: 15m^2 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^2, 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 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 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,	DTS/DPF 1.2 None are applicable.

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.	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	DTS/DPF 2.5 None are applicable.

to the inside of the building at night.	
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 and ventilation to main activity areas, habitable rooms, common areas and open spaces.	DTS/DPF 4.1 None are applicable.
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 appearance when viewed from within the site and from public places.	DTS/DPF 7.5 Vehicle parking areas comprising 10 or more car parking spaces include soft landscaping with a minimum dimension of: (a) 1m along all public road frontages and allotment boundaries (b) 1m between double rows of car parking spaces.
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.
Earthworks and sloping land	
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 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): (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 or increase the potential for landslip or land surface instability.	DTS/DPF 8.5 None are applicable.
Fences and walls	
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.
Overlooking / Visual Privacy (low rise buildings)	
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: (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 125mm (b) have sill heights greater than or equal to 1.5m above finished floor level (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.

PO 10.2 Development mitigates direct overlooking from balconies to habitable rooms and private open space of adjoining residential uses in neighbourhood type zones.	DTS/DPF 10.2 One of the following is satisfied: (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 or (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: (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 or (ii) 1.7m above finished floor level in all other cases
Site Facilities / Waste Storage (excluding low rise residential development)	
PO 11.1 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.	DTS/DPF 11.1 None are applicable.
PO 11.2 Communal waste storage and collection areas are located, enclosed and designed to be screened from view from the public domain, open space and dwellings.	DTS/DPF 11.2 None are applicable.
PO 11.3 Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.	DTS/DPF 11.3 None are applicable.
PO 11.4 Communal waste storage and collection areas are designed to allow waste and recycling collection vehicles to enter and leave the site without reversing.	DTS/DPF 11.4 None are applicable.
PO 11.5 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.	DTS/DPF 11.5 None are applicable.
All Development - Medium and High Rise	
External Appearance	
PO 12.1 Buildings positively contribute to the character of the local area by responding to local context.	DTS/DPF 12.1 None are applicable.
PO 12.2 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.	DTS/DPF 12.2 None are applicable.
PO 12.3 Buildings are designed to reduce visual mass by breaking up	DTS/DPF 12.3 None are applicable.

building elevations into distinct elements.	
PO 12.4 Boundary walls visible from public land include visually interesting treatments to break up large blank elevations.	DTS/DPF 12.4 None are applicable.
PO 12.5 External materials and finishes are durable and age well to minimise ongoing maintenance requirements.	DTS/DPF 12.5 Buildings utilise a combination of the following external materials and finishes: (a) masonry (b) natural stone (c) pre-finished materials that minimise staining, discolouring or deterioration.
PO 12.6 Street-facing building elevations are designed to provide attractive, high quality and pedestrian-friendly street frontages.	DTS/DPF 12.6 Building street frontages incorporate: (a) active uses such as shops or offices (b) prominent entry areas for multi-storey buildings (where it is a common entry) (c) habitable rooms of dwellings (d) areas of communal public realm with public art or the like, where consistent with the zone and/or subzone provisions.
PO 12.7 Entrances to multi-storey buildings are safe, attractive, welcoming, functional and contribute to streetscape character.	DTS/DPF 12.7 Entrances to multi-storey buildings are: (a) oriented towards the street (b) clearly visible and easily identifiable from the street and vehicle parking areas (c) designed to be prominent, accentuated and a welcoming feature if there are no active or occupied ground floor uses (d) designed to provide shelter, a sense of personal address and transitional space around the entry (e) located as close as practicable to the lift and / or lobby access to minimise the need for long access corridors (f) designed to avoid the creation of potential areas of entrapment.
PO 12.8 Building services, plant and mechanical equipment are screened from the public realm.	DTS/DPF 12.8 None are applicable.
Landscaping	
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.	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.
PO 13.2 Deep soil zones are provided to retain existing vegetation or	DTS/DPF 13.2 Multi-storey development provides deep soil zones and

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.

incorporates trees at not less than the following rates, except in a location or zone where full site coverage is desired.

Site area	Minimum deep soil area	Minimum dimension	Tree / deep soil zones
<300 m^2	10 m^2	1.5m	1 small tree / 10 m^2
300-1500 m^2	7% site area	3m	1 medium tree / 30 m^2
>1500 m^2	7% site area	6m	1 large or medium tree / 60 m^2

Tree size and site area definitions	
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.

Environmental

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.

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.
Car Parking	
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.
Overlooking/Visual Privacy	
PO 16.1 Development mitigates direct overlooking of habitable rooms and private open spaces of adjacent residential uses in neighbourhood-type zones through measures such as: (a) appropriate site layout and building orientation (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 (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 (d) screening devices that are integrated into the building design and have minimal negative effect on residents' or neighbours' amenity.	DTS/DPF 16.1 None are applicable.
All residential development	
Front elevations and passive surveillance	
PO 17.1	DTS/DPF 17.1

Dwellings incorporate windows facing primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	Each dwelling with a frontage to a public street: (a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m (b) has an aggregate window area of at least $2m^2$ facing the primary street.
PO 17.2 Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.	DTS/DPF 17.2 Dwellings with a frontage to a public street have an entry door visible from the primary street boundary.
Outlook and Amenity	
PO 18.1 Living rooms have an external outlook to provide a high standard of amenity for occupants.	DTS/DPF 18.1 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.
PO 18.2 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.	DTS/DPF 18.2 None are applicable.
Ancillary Development	
PO 19.1 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.	DTS/DPF 19.1 Ancillary buildings: (a) are ancillary to a dwelling erected on the same site (b) have a floor area not exceeding 60m2 (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 (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^2)** / **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 19.2 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.	DTS/DPF 19.2 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.
PO 19.3 Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa positioned and/or housed	DTS/DPF 19.3 The pump and/or filtration system is ancillary to a dwelling erected on the same site and is:

to not cause unreasonable noise nuisance to adjacent sensitive receivers.	(a) enclosed in a solid acoustic structure that is 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.
Residential Development - Low Rise	
External appearance	
PO 20.1 Garaging is designed to not detract from the streetscape or appearance of a dwelling.	DTS/DPF 20.1 Garages and carports facing a street: (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 (b) are set back at least 5.5m from the boundary of the primary street (c) have a garage door / opening width not exceeding 7m (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.
PO 20.2 Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and the appearance of common driveway areas.	DTS/DPF 20.2 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: (a) a minimum of 30% of the building wall is set back an additional 300mm from the building line (b) a porch or portico projects at least 1m from the building wall (c) a balcony projects from the building wall (d) a verandah projects at least 1m from the building wall (e) eaves of a minimum 400mm width extend along the width of the front elevation (f) a minimum 30% of the width of the upper level projects forward from the lower level primary building line by at least 300mm (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.
PO 20.3 The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	DTS/DPF 20.3 None are applicable

Private Open Space	
PO 21.1 Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	DTS/DPF 21.1 Private open space is provided in accordance with Design in Urban Areas Table 1 - Private Open Space.
PO 21.2 Private open space is positioned to provide convenient access from internal living areas.	DTS/DPF 21.2 Private open space is directly accessible from a habitable room.
Landscaping	
PO 22.1 Soft landscaping is incorporated into development to: (a) minimise heat absorption and reflection (b) contribute shade and shelter (c) provide for stormwater infiltration and biodiversity (d) enhance the appearance of land and streetscapes.	DTS/DPF 22.1 Residential development incorporates soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b): (a) 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^2)** / **Minimum percentage of site** <150 / 10% 150-200 / 15% >200-450 / 20% >450 / 25% (b) at least 30% of any land between the primary street boundary and the primary building line.
Car parking, access and manoeuvrability	
PO 23.1 Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.	DTS/DPF 23.1 Residential car parking spaces enclosed by fencing, walls or other structures have the following internal dimensions (separate from any waste storage area): (a) single width car parking spaces: (i) a minimum length of 5.4m per space (ii) a minimum width of 3.0m (iii) a minimum garage door width of 2.4m (b) double width car parking spaces (side by side): (i) a minimum length of 5.4m (ii) a minimum width of 5.4m (iii) minimum garage door width of 2.4m per space.
PO 23.2 Uncovered car parking space are of dimensions to be functional, accessible and convenient.	DTS/DPF 23.2 Uncovered car parking spaces have: (a) a minimum length of 5.4m

	(b) a minimum width of 2.4m (c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m.
PO 23.3 Driveways and access points are located and designed to facilitate safe access and egress while maximising land available for street tree planting, domestic waste collection, landscaped street frontages and on-street parking.	DTS/DPF 23.3 Driveways and access points satisfy (a) or (b): (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 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 steeper 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 or way is at least 6.2m wide along the boundary of the allotment / site
PO 23.6	DTS/DPF 23.6

Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	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 $2m^2$ 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 Balconies are designed, positioned and integrated into the overall architectural form and detail of the development to: (a) respond to daylight, wind, and acoustic conditions to maximise comfort and provide visual privacy (b) allow views and casual surveillance of the street while providing for safety and visual privacy of nearby living spaces and private outdoor areas.	DTS/DPF 28.2 Balconies utilise one or a combination of the following design elements: (a) sun screens (b) pergolas (c) louvres (d) green facades (e) openable walls.
PO 28.3 Balconies are of sufficient size and depth to accommodate outdoor seating and promote indoor / outdoor living.	DTS/DPF 28.3 Balconies open directly from a habitable room and incorporate a minimum dimension of 2m.
PO 28.4 Dwellings are provided with sufficient space for storage to meet likely occupant needs.	DTS/DPF 28.4 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: (a) studio: not less than $6m^3$ (b) 1 bedroom dwelling / apartment: not less than $8m^3$ (c) 2 bedroom dwelling / apartment: not less than $10m^3$ (d) 3+ bedroom dwelling / apartment: not less than $12m^3$.
PO 28.5 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.	DTS/DPF 28.5 Light wells: (a) are not used as the primary source of outlook for living rooms (b) up to 18m in height have a minimum horizontal dimension of 3m, or 6m if overlooked by bedrooms (c) above 18m in height have a minimum horizontal dimension of 6m, or 9m if overlooked by bedrooms.
PO 28.6 Attached or abutting dwellings are designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusions.	DTS/DPF 28.6 None are applicable.
PO 28.7 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.	DTS/DPF 28.7 None are applicable.
Dwelling Configuration	

PO 29.1 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.	DTS/DPF 29.1 Buildings containing in excess of 10 dwellings provide at least one of each of the following: (a) studio (where there is no separate bedroom) (b) 1 bedroom dwelling / apartment with a floor area of at least $50m^2$ (c) 2 bedroom dwelling / apartment with a floor area of at least $65m^2$ (d) 3+ bedroom dwelling / apartment with a floor area of at least $80m^2$, and any dwelling over 3 bedrooms provides an additional $15m^2$ for every additional bedroom.
PO 29.2 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.	DTS/DPF 29.2 None are applicable.
Common Areas	
PO 30.1 The size of lifts, lobbies and corridors is sufficient to accommodate movement of bicycles, strollers, mobility aids and visitor waiting areas.	DTS/DPF 30.1 Common corridor or circulation areas: (a) have a minimum ceiling height of 2.7m (b) provide access to no more than 8 dwellings (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:

Number of bedrooms	**Minimum internal floor area**
Studio	$35m^2$
1 bedroom	$50m^2$
2 bedroom	$65m^2$
3+ bedrooms	$80m^2$ and any dwelling over 3 bedrooms provides an additional $15m^2$ 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 Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	DTS/DPF 33.1 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 dwelling (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 33.2 The number of vehicular access points onto public roads is minimised to reduce interruption of the footpath and positively	DTS/DPF 33.2 Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.

contribute to public safety and walkability.	
PO 33.3 Residential driveways that service more than one dwelling are designed to allow safe and convenient movement.	DTS/DPF 33.3 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 33.4 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.	DTS/DPF 33.4 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 33.5 Dwellings are adequately separated from common driveways and manoeuvring areas.	DTS/DPF 33.5 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 34.1 Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.	DTS/DPF 34.1 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.
PO 34.2 Battle-axe or common driveways incorporate landscaping and permeability to improve appearance and assist in stormwater management.	DTS/DPF 34.2 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).
Site Facilities / Waste Storage	
PO 35.1 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 35.1 None are applicable.
PO 35.2 Provision is made for suitable external clothes drying facilities.	DTS/DPF 35.2 None are applicable.
PO 35.3	DTS/DPF 35.3

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.	None are applicable.
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.
Water sensitive urban design	
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	
Siting, Configuration and Design	
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.
Movement and Access	
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.	
Communal Open Space	
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 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 39.2 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.
Site Facilities / Waste Storage	
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	DTS/DPF 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.	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.
Student Accommodation	
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 (b) common or shared facilities to enable a more efficient use of space, including: (i) shared cooking, laundry and external drying facilities (ii) internal and external communal and private open space provided in accordance with Design in Urban Areas Table 1 - Private Open Space (iii) common storage facilities at the rate of $8m^3$ for every 2 dwellings or students (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 (v) bicycle parking at the rate of one space for every 2 students.
PO 41.2 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.	DTS/DPF 41.2 None are applicable.

All non-residential development	
Water Sensitive Design	
PO 42.1 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.	DTS/DPF 42.1 None are applicable.
PO 42.2 Water discharged from a development site is of a physical, chemical and biological condition equivalent to or better than its pre-developed state.	DTS/DPF 42.2 None are applicable.
PO 42.3 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.	DTS/DPF 42.3 None are applicable.
Wash-down and Waste Loading and Unloading	
PO 43.1 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: (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 (b) paved with an impervious material to facilitate wastewater collection (c) of sufficient size to prevent 'splash-out' or 'over-spray' of wastewater from the wash-down area (d) are designed to drain wastewater to either: (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 (ii) a holding tank and its subsequent removal off-site on a regular basis.	DTS/DPF 43.1 None are applicable.
Laneway Development	
Infrastructure and Access	
PO 44.1 Development with a primary street comprising a laneway, alley, lane, right of way or similar minor thoroughfare only occurs where: (a) existing utility infrastructure and services are capable of accommodating the development (b) the primary street can support access by emergency and regular service vehicles (such as waste collection)	DTS/DPF 44.1 Development with a primary street frontage that is not an alley, lane, right of way or similar public thoroughfare.

(c) it does not require the provision or upgrading of infrastructure on public land (such as footpaths and stormwater management systems) (d) safety of pedestrians or vehicle movement is maintained (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.	

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 <301m2: 24m2 located behind the building line. (b) Site area ≥ 301m2: 60m2 located behind the building line. Minimum directly accessible from a living room: 16m2 / 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^2, 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^2 / minimum dimension 3m
	Dwellings above ground level:	
	Studio (no separate bedroom)	4m^2 / minimum dimension 1.8m
	One bedroom dwelling	8m^2 / minimum dimension 2.1m
	Two bedroom dwelling	11m^2 / minimum dimension 2.4m
	Three + bedroom dwelling	15 m^2 / minimum dimension 2.6m

Forestry

Assessment Provisions (AP)

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.
PO 1.4 Commercial forestry plantations are separated from reserves gazetted under the *National Parks and Wildlife Act 1972* and/or *Wilderness Protection Act 1992* to minimise fire risk and potential for weed infestation.	DTS/DPF 1.4 Commercial forestry plantations and operations associated with their establishment, management and harvesting are set back 50m or more from a reserve gazetted under the *National Parks and Wildlife Act 1972* and/or *Wilderness Protection Act 1992*.
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: (a) do not involve cultivation (excluding spot cultivation) in drainage lines (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) (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).
Fire Management	

<table>
<tr><td>PO 3.1

Commercial forestry plantations incorporate appropriate firebreaks and fire management design elements.</td><td>DTS/DPF 3.1

Commercial forestry plantations provide:

(a) 7m or more wide external boundary firebreaks for plantations of 40ha or less
(b) 10m or more wide external boundary firebreaks for plantations of between 40ha and 100ha
(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.</td></tr>
<tr><td>PO 3.2

Commercial forestry plantations incorporate appropriate fire management access tracks.</td><td>DTS/DPF 3.2

Commercial forestry plantation fire management access tracks:

(a) are incorporated within all firebreaks
(b) are 7m or more wide with a vertical clearance of 4m or more
(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
(d) partition the plantation into units of 40ha or less in area.</td></tr>
<tr><td colspan="2">Power-line Clearances</td></tr>
<tr><td>PO 4.1

Commercial forestry plantations achieve and maintain appropriate clearances from aboveground powerlines.</td><td>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:

<table>
<tr><th>Voltage of transmission line</th><th>Tower or Pole</th><th>Minimum horizontal clearance distance between plantings and transmission lines</th></tr>
<tr><td>500 kV</td><td>Tower</td><td>38m</td></tr>
<tr><td>275 kV</td><td>Tower</td><td>25m</td></tr>
<tr><td>132 kV</td><td>Tower</td><td>30m</td></tr>
<tr><td>132 kV</td><td>Pole</td><td>20m</td></tr>
<tr><td>66 kV</td><td>Pole</td><td>20m</td></tr>
<tr><td>Less than 66 kV</td><td>Pole</td><td>20m</td></tr>
</table>
</td></tr>
</table>

Housing Renewal

Assessment Provisions (AP)

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	
PO 2.1 Buildings generally do not exceed 3 building levels unless in locations close to public transport, centres and/or open space.	DTS/DPF 2.1 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).
PO 2.2 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.	DTS/DPF 2.2 None are applicable.
Primary Street Setback	
PO 3.1 Buildings are set back from the primary street boundary to contribute to an attractive streetscape character.	DTS/DPF 3.1 Buildings are no closer to the primary street (excluding any balcony, verandah, porch, awning or similar structure) than 3m.
Secondary Street Setback	
PO 4.1 Buildings are set back from secondary street boundaries to maintain separation between building walls and public streets and contribute to a suburban streetscape character.	DTS/DPF 4.1 Buildings are set back at least 900mm from the boundary of the allotment with a secondary street frontage.

Boundary Walls	
PO 5.1 Boundary walls are limited in height and length to manage visual impacts and access to natural light and ventilation.	DTS/DPF 5.1 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): (a) adjoin or abut a boundary wall of a building on adjoining land for the same length and height (b) do not: (i) exceed 3.2m in height from the lower of the natural or finished ground level (ii) exceed 11.5m in length (iii) when combined with other walls on the boundary of the subject development site, a maximum 45% of the length of the boundary (iv) encroach within 3 metres of any other existing or proposed boundary walls on the subject land.
PO 5.2 Dwellings in a semi-detached, row or terrace arrangement maintain space between buildings consistent with a suburban streetscape character.	DTS/DPF 5.2 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.
Side Boundary Setback	
PO 6.1 Buildings are set back from side boundaries to provide: (a) separation between dwellings in a way that contributes to a suburban character (b) access to natural light and ventilation for neighbours.	DTS/DPF 6.1 Other than walls located on a side boundary, buildings are set back from side boundaries: (a) at least 900mm where the wall height is up to 3m (b) other than for a wall facing a southern side boundary, at least 900mm plus 1/3 of the wall height above 3m (c) at least 1.9m plus 1/3 of the wall height above 3m for walls facing a southern side boundary.
Rear Boundary Setback	
PO 7.1 Buildings are set back from rear boundaries to provide: (a) separation between dwellings in a way that contributes to a suburban character (b) access to natural light and ventilation for neighbours (c) private open space (d) space for landscaping and vegetation.	DTS/DPF 7.1 Dwellings are set back from the rear boundary: (a) 3m or more for the first building level (b) 5m or more for any subsequent building level.
Buildings elevation design	
PO 8.1 Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and common driveway areas.	DTS/DPF 8.1 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:

	(a) a minimum of 30% of the building elevation is set back an additional 300mm from the building line (b) a porch or portico projects at least 1m from the building elevation (c) a balcony projects from the building elevation (d) a verandah projects at least 1m from the building elevation (e) eaves of a minimum 400mm width extend along the width of the front elevation (f) a minimum 30% of the width of the upper level projects forward from the lower level primary building line by at least 300mm. (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.
PO 8.2 Dwellings incorporate windows along primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.	DTS/DPF 8.2 Each dwelling with a frontage to a public street: (a) includes at least one window facing the primary street from a habitable room that has a minimum internal room dimension of 2.4m (b) has an aggregate window area of at least $2m^2$ facing the primary street
PO 8.3 The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	DTS/DPF 8.3 None are applicable.
PO 8.4 Built form considers local context and provides a quality design response through scale, massing, materials, colours and architectural expression.	DTS/DPF 8.4 None are applicable.
PO 8.5 Entrances to multi-storey buildings are: (a) oriented towards the street (b) visible and easily identifiable from the street (c) designed to include a common mail box structure.	DTS/DPF 8.5 None are applicable.
Outlook and amenity	
PO 9.1 Living rooms have an external outlook to provide a high standard of amenity for occupants.	DTS/DPF 9.1 A living room of a dwelling incorporates a window with an external outlook towards the street frontage or private open space.
PO 9.2 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.	DTS/DPF 9.2 None are applicable.

Private Open Space

PO 10.1

Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.

DTS/DPF 10.1

Private open space is provided in accordance with the following table:

Dwelling Type	Dwelling / Site Configuration	Minimum Rate
Dwelling (at ground level)		Total area: 24m^2 located behind the building line Minimum adjacent to a living room: 16m^2 with a minimum dimension 3m
Dwelling (above ground level)	Studio	4m^2 / minimum dimension 1.8m
	One bedroom dwelling	8m^2 / minimum dimension 2.1m
	Two bedroom dwelling	11m^2 / minimum dimension 2.4m
	Three + bedroom dwelling	15 m^2 / 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:

(a) provide useable outdoor space that suits the needs of occupants;
(b) take advantage of desirable orientation and vistas; and
(c) adequately define public and private space.

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:

(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
(b) have sill heights greater than or equal to 1.5m above finished floor level
(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.
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: (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 or (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: (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 or (ii) 1.7m above finished floor level in all other cases
Landscaping	
PO 12.1 Soft landscaping is incorporated into development to: (a) minimise heat absorption and reflection (b) maximise shade and shelter (c) maximise stormwater infiltration and biodiversity (d) enhance the appearance of land and streetscapes.	DTS/DPF 12.1 Residential development incorporates pervious areas for soft landscaping with a minimum dimension of 700mm provided in accordance with (a) and (b): (a) 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^2) — Minimum percentage of site <150 — 10% <200 — 15% 200-450 — 20% >450 — 25% (b) at least 30% of land between the road boundary and the building line.
Water Sensitive Design	
PO 13.1 Residential development is designed to capture and use stormwater to: (a) maximise efficient use of water resources (b) manage peak stormwater runoff flows and volume to ensure the carrying capacities of downstream systems are not overloaded (c) manage runoff quality to maintain, as close as practical, pre-development conditions.	DTS/DPF 13.1 None are applicable.
Car Parking	

PO 14.1 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.	DTS/DPF 14.1 On-site car parking is provided at the following rates per dwelling: (a) 2 or fewer bedrooms - 1 car parking space (b) 3 or more bedrooms - 2 car parking spaces.
PO 14.2 Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.	DTS/DPF 14.2 Residential parking spaces enclosed by fencing, walls or other obstructions with the following internal dimensions (separate from any waste storage area): (a) single parking spaces: (i) a minimum length of 5.4m (ii) a minimum width of 3.0m (iii) a minimum garage door width of 2.4m (b) double parking spaces (side by side): (i) a minimum length of 5.4m (ii) a minimum width of 5.5m (iii) minimum garage door width of 2.4m per space.
PO 14.3 Uncovered car parking spaces are of dimensions to be functional, accessible and convenient.	DTS/DPF 14.3 Uncovered car parking spaces have: (a) a minimum length of 5.4m (b) a minimum width of 2.4m (c) a minimum width between the centre line of the space and any fence, wall or other obstruction of 1.5m.
PO 14.4 Residential flat buildings and group dwelling developments provide sufficient on-site visitor car parking to cater for anticipated demand.	DTS/DPF 14.4 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.
PO 14.5 Residential flat buildings provide dedicated areas for bicycle parking.	DTS/DPF 14.5 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 $2m^2$ 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 or 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: 1. minimum 0.33 on-street spaces per dwelling on the site (rounded up to the nearest whole number) 2. Minimum car park length of 5.4m where a vehicle can enter or exit a space directly 3. minimum car park length of 6m for an intermediate space located between two other parking spaces.
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: (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.
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: (a) studio: not less than $6m^3$ (b) 1 bedroom dwelling / apartment: not less than $8m^3$ (c) 2 bedroom dwelling / apartment: not less than $10m^3$ (d) 3+ bedroom dwelling / apartment: not less than $12m^3$.
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: (a) excavation exceeding a vertical height of 1m or

	(b) filling exceeding a vertical height of 1m or (c) a total combined excavation and filling vertical height exceeding 2m.
Service connections and infrastructure	
PO 20.1 Dwellings are provided with appropriate service connections and infrastructure.	DTS/DPF 20.1 The site and building: (a) have the ability to be connected to a permanent potable water supply (b) have the ability to be connected to a sewerage system, or a wastewater system approved under the *South Australian Public Health Act 2011* (c) have the ability to be connected to electricity supply (d) have the ability to be connected to an adequate water supply (and pressure) for fire-fighting purposes (e) would not be contrary to the Regulations prescribed for the purposes of Section 86 of the *Electricity Act 1996*.
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 more sensitive use (c) involves a change in the use of land to a more sensitive use on land at which site contamination does not exist (as demonstrated in a site contamination declaration form) (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: (i) a site contamination audit report has been prepared under Part 10A of the *Environment Protection Act 1993* in relation to the land within the previous 5 years which states that A. site contamination 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 remediation) or 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) and (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).

Infrastructure and Renewable Energy Facilities

Assessment Provisions (AP)

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: (i) on areas already cleared of native vegetation (ii) where there is minimal interference or	DTS/DPF 5.1 None are applicable.

disturbance to existing native vegetation or biodiversity (b) grouping utility buildings and structures with non-residential development, where practicable.	
PO 5.2 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.	DTS/DPF 5.2 None are applicable.
PO 5.3 Battery storage facilities are co-located with substation infrastructure where practicable to minimise the development footprint and reduce environmental impacts.	DTS/DPF 5.3 None are applicable.
Telecommunication Facilities	
PO 6.1 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.	DTS/DPF 6.1 None are applicable.
PO 6.2 Telecommunications antennae are located as close as practicable to support structures to manage overall bulk and mitigate impacts on visual amenity.	DTS/DPF 6.2 None are applicable.
PO 6.3 Telecommunications facilities, particularly towers/monopoles, are located and sized to mitigate visual impacts by the following methods: (a) where technically feasible, incorporating the facility within an existing structure that may serve another purpose or all of the following: (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 (c) using materials and finishes that complement the environment (d) screening using landscaping and vegetation, particularly for equipment shelters and huts.	DTS/DPF 6.3 None are applicable.
Renewable Energy Facilities	

PO 7.1 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.	DTS/DPF 7.1 None are applicable.
Renewable Energy Facilities (Wind Farm)	
PO 8.1 Visual impact of wind turbine generators on the amenity of residential and tourist development is reduced through appropriate separation.	DTS/DPF 8.1 Wind turbine generators are: (a) set back at least 2000m from the base of a turbine to any of the following zones: (i) Rural Settlement Zone (ii) Township Zone (iii) Rural Living Zone (iv) Rural Neighbourhood Zone with an additional 10m setback per additional metre over 150m overall turbine height (measured from the base of the turbine). (b) set back at least 1500m from the base of the turbine to non-associated (non-stakeholder) dwellings and tourist accommodation
PO 8.2 The visual impact of wind turbine generators on natural landscapes is managed by: (a) designing wind turbine generators to be uniform in colour, size and shape (b) coordinating blade rotation and direction (c) mounting wind turbine generators on tubular towers as opposed to lattice towers.	DTS/DPF 8.2 None are applicable.
PO 8.3 Wind turbine generators and ancillary development minimise potential for bird and bat strike.	DTS/DPF 8.3 None are applicable.
PO 8.4 Wind turbine generators incorporate recognition systems or physical markers to minimise the risk to aircraft operations.	DTS/DPF 8.4 No Commonwealth air safety (CASA / ASA) or Defence requirement is applicable.
PO 8.5 Meteorological masts and guidewires are identifiable to aircraft through the use of colour bands, marker balls, high visibility sleeves or flashing strobes.	DTS/DPF 8.5 None are applicable.
Renewable Energy Facilities (Solar Power)	
PO 9.1 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.	DTS/DPF 9.1 None are applicable.

PO 9.2

Ground mounted solar power facilities allow for movement of wildlife by:

(a) incorporating wildlife corridors and habitat refuges

(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.

DTS/DPF 9.2

None are applicable.

PO 9.3

Amenity impacts of solar power facilities are minimised through separation from conservation areas and sensitive receivers in other ownership.

DTS/DPF 9.3

Ground mounted solar power facilities are set back from land boundaries, conservation areas and relevant zones in accordance with the following criteria:

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[1]
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

Notes:

1. Does not apply when the site of the proposed ground mounted solar power facility is located within one of these zones.

PO 9.4

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.

DTS/DPF 9.4

None are applicable.

Hydropower / Pumped Hydropower Facilities	
PO 10.1 Hydropower / pumped hydropower facility storage is designed and operated to minimise the risk of storage dam failure.	DTS/DPF 10.1 None are applicable.
PO 10.2 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.	DTS/DPF 10.2 None are applicable.
PO 10.3 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.	DTS/DPF 10.3 None are applicable.
Water Supply	
PO 11.1 Development is connected to an appropriate water supply to meet the ongoing requirements of the intended use.	DTS/DPF 11.1 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.
PO 11.2 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.	DTS/DPF 11.2 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: (a) exclusively for domestic use (b) connected to the roof drainage system of the dwelling.
Wastewater Services	
PO 12.1 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: (a) it is wholly located and contained within the allotment of the development it will service (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 (c) septic tank effluent drainage fields and other wastewater disposal areas are located away from watercourses and flood prone, sloping,	DTS/DPF 12.1 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: (a) the system is wholly located and contained within the allotment of development it will service; and (b) the system will comply with the requirements of the South Australian Public Health Act 2011.

saline or poorly drained land to minimise environmental harm.	
PO 12.2 Effluent drainage fields and other wastewater disposal areas are maintained to ensure the effective operation of waste systems and minimise risks to human health and the environment.	DTS/DPF 12.2 Development is not built on, or encroaches within, an area that is, or will be, required for a sewerage system or waste control system.
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 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 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)

<table>
<tr><th>Performance Outcome</th><th>Deemed-to-Satisfy Criteria / Designated Performance Feature</th></tr>
<tr><td colspan="2">General Land Use Compatibility</td></tr>
<tr><td>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.</td><td>DTS/DPF 1.1

None are applicable.</td></tr>
<tr><td>PO 1.2

Development adjacent to a site containing a sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers is designed to minimise adverse impacts.</td><td>DTS/DPF 1.2

None are applicable.</td></tr>
<tr><td colspan="2">Hours of Operation</td></tr>
<tr><td>PO 2.1

Non-residential development does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers) or an adjacent zone primarily for sensitive receivers through its hours of operation having regard to:

(a) the nature of the development
(b) measures to mitigate off-site impacts
(c) the extent to which the development is desired in the zone
(d) measures that might be taken in an adjacent zone primarily for sensitive receivers that mitigate adverse impacts without unreasonably compromising the intended use of that land.</td><td>DTS/DPF 2.1

Development operating within the following hours:

<table><tr><th>Class of Development</th><th>Hours of operation</th></tr><tr><td>Consulting room</td><td>7am to 9pm, Monday to Friday
8am to 5pm, Saturday</td></tr><tr><td>Office</td><td>7am to 9pm, Monday to Friday
8am to 5pm, Saturday</td></tr><tr><td>Shop, other than any one or combination of the following:</td><td>7am to 9pm, Monday to Friday
8am to 5pm, Saturday and Sunday</td></tr></table></td></tr>
</table>

	(a) restaurant (b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone	
Overshadowing		
PO 3.1 Overshadowing of habitable room windows of adjacent residential land uses in: a. a neighbourhood-type zone is minimised to maintain access to direct winter sunlight b. other zones is managed to enable access to direct winter sunlight.	DTS/DPF 3.1 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.	
PO 3.2 Overshadowing of the primary area of private open space or communal open space of adjacent residential land uses in: a. a neighbourhood type zone is minimised to maintain access to direct winter sunlight b. other zones is managed to enable access to direct winter sunlight.	DTS/DPF 3.2 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: a. for ground level private open space, the smaller of the following: i. half the existing ground level open space or ii. 35m2 of the existing ground level open space (with at least one of the area's dimensions measuring 2.5m) b. for ground level communal open space, at least half of the existing ground level open space.	
PO 3.3 Development does not unduly reduce the generating capacity of adjacent rooftop solar energy facilities taking into account: (a) the form of development contemplated in the zone (b) the orientation of the solar energy facilities (c) the extent to which the solar energy facilities are already overshadowed.	DTS/DPF 3.3 None are applicable.	
PO 3.4 Development that incorporates moving parts, including windmills and wind farms, are located and operated to not cause unreasonable nuisance to nearby dwellings and tourist accommodation caused by shadow flicker.	DTS/DPF 3.4 None are applicable.	
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	DTS/DPF 4.1 Noise that affects sensitive receivers achieves the relevant Environment Protection (Noise) Policy criteria.	

<table>
<tr><td>lawfully approved sensitive receivers).</td><td></td></tr>
<tr><td>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.</td><td>DTS/DPF 4.2

None are applicable.</td></tr>
<tr><td>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).</td><td>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.</td></tr>
<tr><td>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.</td><td>DTS/DPF 4.4

Adjacent land is used for residential purposes.</td></tr>
<tr><td>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).</td><td>DTS/DPF 4.5

None are applicable.</td></tr>
<tr><td>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.</td><td>DTS/DPF 4.6

Development incorporating music includes noise attenuation measures that will achieve the following noise levels:

<table><tr><th>Assessment location</th><th>Music noise level</th></tr><tr><td>Externally at the nearest existing or envisaged noise sensitive location</td><td>Less than 8dB above the level of background noise ($L_{90,15min}$) in any octave band of the sound spectrum (LOCT10,15 <</td></tr></table></td></tr>
</table>

	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 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.	DTS/DPF 5.1 None are applicable.
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	DTS/DPF 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.	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 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.	DTS/DPF 9.5 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: (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 (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 (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 (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 (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.
PO 9.6 Setbacks and vegetation plantings along allotment boundaries should be incorporated to mitigate the potential impacts of	DTS/DPF 9.6 None are applicable.

spray drift and other impacts associated with agricultural and horticultural activities.	
PO 9.7 Urban development does not prejudice existing agricultural and horticultural activities through appropriate separation and design techniques.	DTS/DPF 9.7 None are applicable.
Interface with Mines and Quarries (Rural and Remote Areas)	
PO 10.1 Sensitive receivers are separated from existing mines to minimise the adverse impacts from noise, dust and vibration.	DTS/DPF 10.1 Sensitive receivers are located no closer than 500m from the boundary of a Mining Production Tenement under the *Mining Act 1971*.

Land Division

Assessment Provisions (AP)

Desired Outcome	
DO 1	Land division: (a) creates allotments with the appropriate dimensions and shape for their intended use (b) allows efficient provision of new infrastructure and the optimum use of underutilised infrastructure (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 (d) facilitates solar access through allotment orientation (e) creates a compact urban form that supports active travel, walkability and the use of public transport (f) avoids areas of high natural hazard risk.

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 *Development Act 1993* or *Planning, Development and Infrastructure Act 2016* 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 movement of pedestrian, cycle and vehicular traffic.	DTS/DPF 3.2 None are applicable.
PO 3.3	DTS/DPF 3.3

Land division does not impede access to publicly owned open space and/or recreation facilities.	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 Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.	DTS/DPF 3.8 None are applicable.
PO 3.9 Roads, open space and thoroughfares provide safe and convenient linkages to the surrounding open space and transport network.	DTS/DPF 3.9 None are applicable.
PO 3.10 Public streets are designed to enable tree planting to provide shade and enhance the amenity of streetscapes.	DTS/DPF 3.10 None are applicable.
PO 3.11 Local streets are designed to create low-speed environments that are safe for cyclists and pedestrians.	DTS/DPF 3.11 None are applicable.
Infrastructure	
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 basins, are sited and designed to allow sediments to settle prior to discharge into watercourses or the marine environment.	DTS/DPF 4.5 None are applicable.
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 Land allocated for open space is suitable for its intended active and passive recreational use considering gradient and potential for inundation.	DTS/DPF 9.2 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.
Water Sensitive Design	
PO 10.1 Land division creating 20 or more residential 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 non-residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of	DTS/DPF 10.2 None are applicable.

stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	
PO 10.3 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 10.3 None are applicable.
Solar Orientation	
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 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)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Navigation and Safety	
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 structures.	DTS/DPF 1.3 None are applicable.
PO 1.4	DTS/DPF 1.4

Commercial shipping lanes are not impaired by marinas and on-water structures.	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 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	DTS/DPF 5.6

Pedestrian and bicycle movement after dark is focused along clearly defined, adequately lit routes with observable entries and exits.	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	
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 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: (a) that support the needs of local residents and workers, particularly in underserviced locations (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.	DTS/DPF 1.2 None are applicable.

Resource Extraction

Assessment Provisions (AP)

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	
PO 1.1 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.	DTS/DPF 1.1 None are applicable.
PO 1.2 Resource extraction activities avoid damage to cultural sites or artefacts.	DTS/DPF 1.2 None are applicable.
Water Quality	
PO 2.1 Stormwater and/or wastewater from resource extraction activities is diverted into appropriately sized treatment and retention systems to enable reuse on site.	DTS/DPF 2.1 None are applicable.
Separation Treatments, Buffers and Landscaping	
PO 3.1 Resource extraction activities minimise adverse impacts upon sensitive receivers through incorporation of separation distances and/or mounding/vegetation.	DTS/DPF 3.1 None are applicable.
PO 3.2 Resource extraction activities are screened from view from adjacent land by perimeter landscaping and/or mounding.	DTS/DPF 3.2 None are applicable.

Site Contamination

Assessment Provisions (AP)

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 Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
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): (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 more sensitive use (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) (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: (i) a site contamination audit report has been prepared under Part 10A of the *Environment Protection Act 1993* in relation to the land within the previous 5 years which states that- A. site contamination 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 remediation) or 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) and (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).

Tourism Development

Assessment Provisions (AP)

Desired Outcome	
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: (a) it supports immersive natural experiences (b) it showcases South Australia's landscapes and produce (c) its events and functions are connected to local food, wine and nature.	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	DTS/DPF 3.1 None are applicable.

bushfire).	
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 cleared as a result of bushfire) or degraded areas or where environmental improvements can be achieved.	DTS/DPF 3.3 None are applicable.
PO 3.4 Tourist accommodation is designed to prevent conversion to private dwellings through: (a) comprising a minimum of 10 accommodation units (b) clustering separated individual accommodation units (c) being of a size unsuitable for a private dwelling (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.	DTS/DPF 3.4 None are applicable.

Transport, Access and Parking

Assessment Provisions (AP)

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	
PO 1.1 Development is integrated with the existing transport system and designed to minimise its potential impact on the functional	DTS/DPF 1.1 None are applicable.

performance of the transport system.	
PO 1.2 Development is designed to discourage commercial and industrial vehicle movements through residential streets and adjacent other sensitive receivers.	DTS/DPF 1.2 None are applicable.
PO 1.3 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.	DTS/DPF 1.3 None are applicable.
PO 1.4 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.	DTS/DPF 1.4 All vehicle manoeuvring occurs onsite.
Sightlines	
PO 2.1 Sightlines at intersections, pedestrian and cycle crossings, and crossovers to allotments for motorists, cyclists and pedestrians are maintained or enhanced to ensure safety for all road users and pedestrians.	DTS/DPF 2.1 None are applicable.
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	DTS/DPF 3.4

Access points are sited and designed to minimise any adverse impacts on neighbouring properties.	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	DTS/DPF 3.9 None are applicable.

public roads.	
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 1 - General Off-Street Car Parking Requirements (b) Transport, Access and Parking Table 2 - Off-Street Vehicle Parking Requirements in Designated Areas (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.

PO 6.7 On-site visitor parking spaces are sited and designed to be accessible to all visitors at all times.	DTS/DPF 6.7 None are applicable.
Undercroft and Below Ground Garaging and Parking of Vehicles	
PO 7.1 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.	DTS/DPF 7.1 None are applicable.
Internal Roads and Parking Areas in Residential Parks and Caravan and Tourist Parks	
PO 8.1 Internal road and vehicle parking areas are surfaced to prevent dust becoming a nuisance to park residents and occupants.	DTS/DPF 8.1 None are applicable.
PO 8.2 Traffic circulation and movement within the park is pedestrian friendly and promotes low speed vehicle movement.	DTS/DPF 8.2 None are applicable.
Bicycle Parking in Designated Areas	
PO 9.1 The provision of adequately sized on-site bicycle parking facilities encourages cycling as an active transport mode.	DTS/DPF 9.1 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.
PO 9.2 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.	DTS/DPF 9.2 None are applicable.
PO 9.3 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.	DTS/DPF 9.3 None are applicable.
Corner Cut-Offs	
PO 10.1 Development is located and designed to ensure drivers can safely turn into and out of public road junctions.	DTS/DPF 10.1 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:

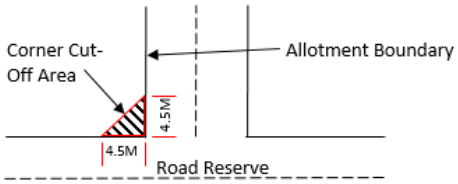


Table 1 - General Off-Street Car Parking Requirements

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.

Class of Development	Car Parking Rate (unless varied by Table 2 onwards) 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.
Residential Development	
Detached Dwelling	Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling. 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.
Group Dwelling	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. 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. 0.33 spaces per dwelling for visitor parking where development involves 3 or more dwellings.
Residential Flat Building	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. 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. 0.33 spaces per dwelling for visitor parking where development involves 3 or more dwellings.
Row Dwelling where vehicle access is from the primary street	Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling. 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.
Row Dwelling where vehicle access is not from the primary street (i.e. rear-loaded)	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. 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.
Semi-Detached Dwelling	Dwelling with 1 bedroom (including rooms capable of being used as a bedroom) - 1 space per dwelling. 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.
Aged / Supported Accommodation	
Retirement village	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling. 0.2 spaces per dwelling for visitor parking.
Supported accommodation	0.3 spaces per bed.
Residential Development (Other)	
Ancillary accommodation	No additional requirements beyond those associated with the main dwelling.
Residential park	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a bedroom) - 1 space per dwelling. Dwelling with 3 or more bedrooms (including rooms capable of being used as a bedroom) - 2 spaces per dwelling. 0.2 spaces per dwelling for visitor parking.
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 park / tourist park	Parks with 100 sites or less - a minimum of 1 space per 10 sites to be used for accommodation. Parks with more than 100 sites - a minimum of 1 space per 15 sites used for accommodation. A minimum of 1 space for every caravan (permanently fixed to the ground) or cabin.
Tourist accommodation	1 car parking space per accommodation unit / guest room.
Commercial Uses	
Auction room/ depot	1 space per 100m^2 of building floor area plus an additional 2 spaces.
Automotive collision repair	3 spaces per service bay.
Call centre	8 spaces per 100m^2 of gross leasable floor area.
Motor repair station	3 spaces per service bay.
Office	4 spaces per 100m^2 of gross leasable floor area.

Retail fuel outlet	3 spaces per 100m^2 gross leasable floor area.
Service trade premises	2.5 spaces per 100m^2 of gross leasable floor area 1 space per 100m^2 of outdoor area used for display purposes.
Shop (no commercial kitchen)	5.5 spaces per 100m^2 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. 5 spaces per 100m^2 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 refuse are shared.
Shop (in the form of a bulky goods outlet)	2.5 spaces per 100m^2 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 100m^2 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	
Childcare centre	0.25 spaces per child
Library	4 spaces per 100m^2 of total floor area.
Community facility	10 spaces per 100m^2 of total floor area.
Hall / meeting hall	0.2 spaces per seat.
Place of worship	1 space for every 3 visitor seats.
Pre-school	1 per employee plus 0.25 per child (drop off/pick up bays)
Educational establishment	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.
Health Related Uses	
Hospital	4.5 spaces per bed for a public hospital. 1.5 spaces per bed for a private hospital.
Consulting room	4 spaces per consulting room excluding ancillary facilities.
Recreational and Entertainment Uses	
Cinema complex	0.2 spaces per seat.
Concert hall / theatre	0.2 spaces per seat.
Hotel	1 space for every 2m^2 of total floor area in a public bar plus 1 space for every 6m^2 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 100m^2 of total floor area for a Fitness Centre 4.5 spaces per 100m^2 of total floor area for all other Indoor recreation facilities.
Industry/Employment Uses	
Fuel depot	1.5 spaces per 100m^2 total floor area 1 spaces per 100m^2 of outdoor area used for fuel depot activity purposes.
Industry	1.5 spaces per 100m^2 of total floor area.
Store	0.5 spaces per 100m^2 of total floor area.
Timber yard	1.5 spaces per 100m^2 of total floor area 1 space per 100m^2 of outdoor area used for display purposes.
Warehouse	0.5 spaces per 100m^2 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 100m^2 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 subject to the following:

(a) the location of the development is unable to satisfy the requirements of Table 2 – Criteria (other than where a location is exempted from the application of those criteria)
or
(b) the development satisfies Table 2 – Criteria (or is exempt from those criteria) and is located in an area where a lawfully established carparking fund operates, in which case the number of spaces are reduced by an amount equal to the number of spaces offset by contribution to the fund.

Class of Development	Car Parking Rate **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.**		Designated Areas
	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 100m^2 of gross leasable floor area.	5 spaces per 100m^2 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
Non-residential development excluding tourist accommodation	3 spaces per 100m^2 of gross leasable floor area.	6 spaces per 100m^2 of gross leasable floor area.	Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone Business Neighbourhood Zone Suburban Main Street Zone Urban Activity Centre Zone
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	City Living 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
Residential development			
Residential component of a multi-storey building	Dwelling with no separate bedroom -0.25 spaces per dwelling 1 bedroom dwelling - 0.75 spaces per dwelling 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.	None specified.	City Living Zone Strategic Innovation 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
Residential flat building	Dwelling with no separate bedroom -0.25 spaces per dwelling 1 bedroom dwelling - 0.75 spaces per dwelling 2 bedroom dwelling - 1 space per dwelling 3 or more bedroom dwelling - 1.25 spaces per dwelling 0.25 spaces per dwelling for	None specified.	City Living 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

	visitor parking.		

Table 2 - Criteria:
The following criteria are used in conjunction with Table 2. The 'Exception' column identifies locations where the criteria do not apply and the car parking rates in Table 2 are applicable.

Criteria	Exceptions
The designated area is wholly located within Metropolitan Adelaide and any part of the development site satisfies one or more of the following: (a) is within 200 metres of any section of road reserve along which a bus service operates as a high frequency public transit service(2) (b) is within 400 metres of a bus interchange(1) (c) is within 400 metres of an O-Bahn interchange(1) (d) is within 400 metres of a passenger rail station(1) (e) is within 400 metres of a passenger tram station(1) (f) is within 400 metres of the Adelaide Parklands.	(a) All zones in the City of Adelaide (b) Strategic Innovation Zone in the following locations: (i) City of Burnside (ii) City of Marion (iii) City of Mitcham (c) Urban Corridor (Boulevard) Zone (d) Urban Corridor (Business) Zone (e) Urban Corridor (Living) Zone (f) Urban Corridor (Main Street) Zone (g) Urban Neighbourhood Zone

[NOTE(S): (1)Measured from an area that contains any platform(s), shelter(s) or stop(s) where people congregate for the purpose waiting to board a bus, tram or train, but does not include areas used for the parking of vehicles. (2) A high frequency public transit service is a route serviced every 15 minutes between 7.30am and 6.30pm Monday to Friday and every 30 minutes at night, Saturday, Sunday and public holidays until 10pm.]

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 establishment	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^2 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^2 of gross leasable floor area plus 2 spaces plus 1 space per 1000m^2 of gross leasable floor area for visitors.
Pre-school	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^2 of gross leasable floor area plus 1 space for every 600m^2 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

Designated Area	**Relevant part of the State** **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 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	Metropolitan Adelaide

Urban Corridor (Living) Zone Urban Corridor (Main Street) Zone Urban Neighbourhood Zone	

Waste Treatment and Management Facilities

Assessment Provisions (AP)

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: (a) containing potential groundwater and surface water contaminants within waste operations areas (b) diverting clean stormwater away from waste operations areas and potentially contaminated areas (c) providing a leachate barrier between waste operations areas and underlying soil and groundwater.	DTS/DPF 2.1 None are applicable.
PO 2.2 Wastewater lagoons are set back from watercourses to minimise environmental harm and adverse effects on water resources.	DTS/DPF 2.2 Wastewater lagoons are set back 50m or more from watercourse banks.

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	DTS/DPF 6.1 None are applicable.

acceptable manner.	
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 1	Appropriately designed and located accommodation for seasonal and short-term workers in rural areas that minimises environmental and social impacts.

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 Workers' accommodation and settlements are sited and designed to minimise nuisance impacts on the amenity of adjacent users of land.	DTS/DPF 1.2 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.