# Fleurieu Health and Wellbeing Precinct

**Planning Report** 

**March 2023** 



## **Contents**

1.	Introduction	3
	Background	3
2.	Site + locality assessment	4
	The Subject Site	4
	The Locality	5
3.	Proposal	8
	Nature of the development	8
	Car parking and access	8
	Soil contamination	9
	Landscaping + Native Vegetation	9
4.	<b>Development Plan Assessment</b>	10
	Procedural matters	10
	Land uses	10
	Building form + Layout	11
	Interface management	12
	Access + car parking	12
	Landscaping + Native Vegetation	13
	Stormwater management + Flooding	14
	Site Contamination	14
	Bushfire Prevention	14
_	Conclusion	16

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#### 1. Introduction

Jensen PLUS has been engaged by Troppo Architects to provide advice and assistance in relation to planning matters associated with the development application for the construction of the Fleurieu Health and Wellbeing Precinct at Chiton.

The precinct will be located on the corner of Ocean Road and Waterport Road, Chiton, abutting the existing Fleurieu Regional Aquatic Centre (FRAC).

This report has been prepared following a review of plans and related documents that are to be submitted with the development application. Furthermore, site visits that included an assessment of the surrounding locality, and discussions with the Alexandrina Council and Fleurieu Regional Aquatic Centre Authority have also informed the preparation of this report.

#### Background

The land was predominantly used for broadacre farming since European Settlement, up until the division of the land approximately ten years ago to facilitate the development of the Fleurieu Regional Aquatic Centre. The land was donated to the Councils by the Wright family to facilitate the development of this important regional community facility, and formed part of the development of a broader community precinct in this location, facilitated by the rezoning of the land from Rural to Community Facilities Policy area (within the previous Development Plan framework).

Over the past 20+ years the landowners have planted thousands of trees along the site's north, east and southern borders, as part of the neighbouring Beyond Estate development. These trees are now mature and surround the site.



## 2. Site + locality assessment

#### The Subject Site

The subject land is located at 1, 3 and 5 Fringe-Lily Place, Chiton.

The site contains three land parcels, identified from north to south in the below image as CT6181/105, CT6175/320, CT6175/321. An access road traverses a fourth land parcel (FRAC's land parcel), which is a public road for both access and car parking provision and has the following title CT6175/318. All four land parcels are in the *Community Facilities* zone.



Aerial photo of subject site's land parcels, red boundaries and FRAC's land parcel, yellow boundary (SAPPA).

The three land parcels combine to make a roughly rectangular shape, with Fringe-Lily Place removing a crescent section from the western boundary.

The site fronts onto Waterport Road (two-lane road), with the site's visibility largely concealed from the road due to the established tree line that runs along the approximately 155 metre frontage. The site is accessed off Waterport Road via Fringe-Lily Place, along with the neighbouring FRAC facility.

Fringe Lily-Place runs along a section of the site's western boundary and separates the site from the FRAC facility. The Place is a newly constructed two-lane cul-de-sac that includes two pedestrian crossings that connect the proposed development to the FRAC site (although both crossings have no connections due to landscaping and swale along the western edge of Fringe Lily Place).

The three land parcels are undeveloped, excluding a shed housing a bore pump on the most northern land parcel. The parcels are surrounded by an established tree line along the northern, eastern, and part of the southern boundaries, with a fig tree centrally located and bordering the northern and middle land parcels.

The site has a minor fall toward the southeast.

The neighbouring FRAC site faces onto and is accessed by both Waterport Road and Ocean Road, with the main structure located in the site's approximate centre.

The site's carparking is located to the north, west and south of the main buildings and are all linked together via internal roads.

Fringe-Lily Place runs along part of its eastern boundary and is separated from the FRAC facility through a landscaped swale and outdoor recreation and BBQ areas.

The southern end of the site includes large open spaces, a creek (that connects to the swale along Fringe-Lily Place), and the continuation of the proposed development site's southern tree line.

The FRAC site's northern and southern boundaries run along the same line as the proposed site's furthest northern and southern boundaries.



Photo of northern land parcel showing establish tree line screening the site from Waterport Road





Photo of the northern land parcel's fig tree



Photo of site's southern land parcel showing the eastern tree line and southern clearing. Photo taken from within the site looking south.



Photo from the site looking west towards the abutting FRAC facility and Fringe-Lily Place



Photo of northern tree line and existing shed in the site's northeast corner

#### The Locality

The proposed Fleurieu Health and Wellbeing Precinct is located approximately 2.0 km northwest and 3.5 km northeast from Port Elliot's and Victor Harbor's nearest residential areas.

The surrounding locality comprises of an industrial area to the north (opposite side of Waterport Road), the FRAC facility to the immediate west with residential housing up the hill further west (opposite side of Ocean Road), farming and rural living lands to the east and south, with the Beyond estate positioned further south along Ocean Road, and separated from the site by a creek and open space system that runs into the wetlands associated with the estate.

The northern industrial area is visually blocked by an established tree line, however, there are some locations along the tree line that allow impeded views from the site to the industrial area. The industrial area contains a mixture of single and double-storey steel structures (including sheds) on large allotments. The area contains a variety of light industry uses including interior fabrication businesses and a mixture of shops, such as a café and other professional business, such as exercise physiology. None of these businesses are accessed from Waterport Road, with their structures backing onto the road.

The closest EPA licenced premises are:

- Waste Recovery Facility (skip bin hire place) and waste transport business (category B), Licence No. 20422, approximately 300m northwest of the site.
- Crushing, grinding, or milling works (agricultural crop products), Licence No. 51735, approximately 200m north from the site.
- Petrol station, Licence No. 50859, approximately 240m northwest of the site.
- Concrete batching works, Licence No. 50049, approximately 470m northwest of the site.

Waterport Road runs along the site's northern boundary and does not contain any formalised footpaths or kerbing in front of the site. The Waterport Road/ Lincoln Road intersection is in front of the site, which provides access to the industrial area. Waterport Road is 80km/hr in front of the site.

The eastern farming land is undeveloped and used for broadacre farming. The subject site is visually screened from the farming land due to the tree line.

There are a few dwellings that are located within the



rural living lots along Mentone Road, with the closest dwelling located approximately 300m east of the site.

The area south of the site is undeveloped and contains a large basin, low-lying vegetation and is partly surround by trees. Although undeveloped it is zoned as rural living. The area to the south can be accessed from the site through an opening in the tree line, with an open post and wire fence separating the two areas. Further south of the basin is an open vegetated setting that separates the site from the southern residential areas

The site's western boundary borders on the newly constructed Fringe-Lily Place and FRAC facility. The facility is a contemporary structure that is accompanied by landscaped carparks and swales and is supported by designed outdoor areas that include BBQ and play areas. The facilities services, plant and rainwater tanks are concealed to increase the site's overall presentation. A walking path links the site's

eastern BBQ areas to its southern carpark. The site's carparking is located north, west, and south of the site's main structure and all carparks are connected together. The site is accessed to the west via Ocean Road and north via Fringe-Lily Place that connects to Waterport Road. The facility includes a 25-metre pool, rehabilitation pool, outdoor splash park, gym, outdoor play area, café, and BBQ areas.

The southwestern Hayborough residential area is located on the western side of Ocean Road. The area is constructed uphill from an open space and basin area that fronts onto the Waterport Road/ Ocean Road corner. The residential area contains large mostly single storey dwellings and is visually blocked from the proposed site due to the FRAC facility and southern and western tree lines The southern Chiton residential area, Beyond Estate, is separated by the proposed facility through the dense southern tree line



Aerial photo of locality (dashed yellow) and approximate outline of the site's development area (red)





Photo of basin located on abutting southern land parcel.



Photo from within the site looking north (over Waterport Road)



Photo of FRAC's car park entrance and Hayborough residential development (photo taken from FRAC's car park)



Photo of industrial area north of Waterport Road



Photo of FRAC site and swale along Fringe-Lily Place



Photo of Waterport Road access to FRAC and Fringe-Lily Place



Photo of Waterport Road section in front of site



## 3. Proposal

#### Nature of the development

The proposed development is for a Health and Wellbeing Precinct spread across several buildings comprising the following land uses:

- \_ childcare
- \_ day surgery
- \_ pharmacy
- \_ specialist suites
- radiology services
- short-term accommodation (for respite, layover, recovery)
- multipurpose areas, including the wellness commons and wetland suites to house ancillary health providers consulting rooms. These may also include rehabilitation treatment areas such as a small gym and in-house Pilates classes
- café and gallery
- art/ artisan spaces supported by food and beverage facility (potentially in the form of small food sales, restaurant, cellar door type facilities.

The site is laid out with a ring road and carpark area with the buildings separated by a spacious natural landscaped setting which including a lake and small streams. The intent is to create a spacious precinct that allows people to easily navigate their way through the landscaped paths and water elements and connect with nature to promote health and wellbeing and assist with healing.

Other development elements include roof-mounted solar panels.

The development will spread out over the three land parcels and with the development's landscaped areas, access road and parking, and not its structures slightly encroaching onto the FRAC land parcel.

The site's structure will be a mixture of double and single storey, constructed from a combination of concrete, timber, and steel where appropriate to reflect the natural setting. Verandahs and canopies will be scattered across the site providing shade and comfort to people traversing the site.

Structures will include large windows and openings, use earthy tones and materials and vegetation to further increase the connection with nature and the environment.

The proposed health and wellbeing precinct intends to reduce the area's existing shortfall in specialised health services, and facilities, including access to health specialists. The precinct will include short-term accommodation to encourage specialists to 'flyin', stay for a short-duration and service the area's community. The site's accommodation also provides a chance for regional patients to remain on site for treatment, instead of needing to undertake long, sometimes successive, and expensive journeys to other area's such as Adelaide for treatment.

The inclusion of a childcare, food and beverage and multipurpose facilities provides additional amenities for staff, visitors, and patients to create a well serviced precinct. But also links to and complements the FRAC facility.

#### Car parking and access

The site will contain 272 carparks that are mostly located along the sites eastern and southern boundaries, with additional carparking located along Fringe-Lily Place and near the childcare centre and northern accommodation building.

The development will create a ring road that is accessed off Fringe-Lily Place. The ring road will run in front of the childcare centre and connect to the site's eastern and southern carparking areas. The ring road will reconnect to the proposed extended Fringe-Lily Place and FRAC site's southern carparking area.

A new access point is proposed off Waterport Road that will access the site's eastern carparking areas.

A report has been prepared Tonkin dated 2 of March 2023. The report noted the following access treatments are required for the proposed development:

- An Extended Design Domain, approximately 6om long running east from the Waterport Road/ Fringe Lily access is required.
- A short, 55m, auxiliary left turn lane is warranted at the Left In/Left Out access, with a stop sign required at the Lincoln Road intersection.
- A 120m long auxiliary left turn lane is required at the Waterport Road/ Ocean Road intersection.



#### Soil contamination

Greencap has prepared a Preliminary Site Investigation report, dated February 2023, as well as a Site Contamination Declaration Form, dated 6<sup>th</sup> February 2023.

The report's findings were based on a combination of a desktop review of aerial photographs, certificate of titles, historical searches relating to the site, EPA searches, agency information, as well as an interview with the landowner and site visit on the 19<sup>th</sup> of January 2023.

The site was predominantly used for broadacre farming since early European Settlement up until the present day.

A review of the EPA Site Contamination Index found there were no notifications or reports relating directly to the site. The nearest listing relates to a Section 83A notification for a works depot located approximately 648m southwest of the site.

The report identified no potentially contaminating activities (including from industrial processes, chemical storage and transfer, raw materials used and products spills, losses, incidents and accidents) as defined by the State Planning Commission's Practice Direction 14 and a low likelihood of any complete source-pathway-receptor linkages regarding the site's proposed land uses.

The historical review found no activities of interest on adjacent land.

The report concluded that Greencap did not identify any evidence of site contamination that would preclude the site from the proposed mixed-use development.

#### Landscaping + Native Vegetation

The proposal will remove some of the eastern and southern trees to accommodate the proposals carparks and access paths. These trees are not native to the site but were planted by the owners over the past 20+ years. From the Native Vegetation Act 1991 Part 1(3) - Interpretation of native vegetation, part b), a plant intentionally sown or planted by a person unless the plant was sown or planted -

(i) in compliance with a condition imposed by the Council under this Act or by the Native Vegetation Authority under the repealed Act, or with the order of a court under this Act or the repealed Act; or

(ii) in pursuance of a proposal approved by the Council under Part 4 Division 2; or (iia) in circumstances involving the use of money paid into the Fund for the purpose of achieving a significant environmental benefit; or

(iii) in compliance with a condition imposed by a Minister, statutory authority or prescribed person or body under—

As the treeline was planted by the owners and not due to the above conditions, the overlay does not apply to the removal of these trees.



## 4. Development Plan Assessment

#### Procedural matters

The subject land is located within the Planning and Design Code's (the Code) *Community Facilities* zone, as shown below.



Zones (SAPPA)

The following overlays are applicable to the relevant land parcels:

- Environment and Food Production Area
- Hazards (Bushfire Medium Risk)
- \_ Hazards (Flooding)\*
- \_ Hazards (Flooding General)
- \_ Hazards (Flooding Evidence Required)^
- Native Vegetation
- Prescribed Water Resources Area
- \_ Water Resources
- \*Only applies to CT6175/318 (FRAC site) and minor encroachment to CT6181/105
- ^Only applies partly to CT6175/321

With the following technical and numeric variations (TNVs) apply to each land parcel:

- Maximum Building Height (Metres) (Maximum building height is 12m)
- Maximum Building Height (Levels) (Maximum building height is 3 levels)

Having determined how the development is defined the Community Facilities Zone's tables were subsequently examined to determine the categorisation of the proposal and the following conclusions have been reached:

- The nature of the development applied, including all its elements and proposed structures, are not completely referenced in Tables: 1 (Accepted Development Classification) or 2 (Deemed-to-Satisfy Classification)
- A Shop is referenced within Table 4 (Restricted Development Classification), however, with the exclusion of shops in the form of a restaurant or where the gross leasable floor area is less than 1,000m² and therefore does not apply to this proposal. The proposal contains restaurant type land uses including the Juice Bar, 264m² and the Café section of the Food, Beverage & Arts building, approximately 415m², with the shop component of the Food, Beverage & Arts building approximately 547m², less than the restrict size.
- Accordingly, the proposal is a Performance Assessed Development as it falls within the 'All other Code Assessed Development' class of development specified in Table 3 (Applicable Policies for Performance Assessed Development).
- This requires the proposal to be assessed on its respective merits against the relevant provisions of the Code.
- Some of the development's proposed elements including 'Office' and 'Consulting Room' are included in table 3 and will be assessed against the relevant polices.
- A review of Table 5 (Procedural Matters Notification) indicates that the application is subject to public notification.

#### Land uses

Community Facilities Zone: DO 1; PO 1.1, 1.2, 1.3, 1.4, 1.5.

Environment & Food Production Area Overlay: DO 1.

The Zone intends to provide a range of community, recreational and health care uses to the community.

The proposed health and wellbeing precinct will provide a range of health land uses, services, and facilities to support the community, including day surgery, x-ray rooms, radiology, consultation rooms and specialist suites. With other subordinate facilities including cafes, common/multipurpose areas (used by allied health professionals to provide areas for rehabilitation, health services etc.), administration/offices, and childcare centre there to provide staff, visitors and patients with amenity and are ancillary

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428

to/ support the precinct's main health and wellness function.

The site is proposing short-term accommodation, although the site is in the Environment and Food Production Area Overlay, the overlay does not speak against this type of accommodation and permits short-term accommodation, such as for tourism. This is comparable to the proposed development's short-term accommodation, which is there to support the health and wellbeing precinct's functionality in the following ways:

- Attracting specialists to attend and stay at the facility, allowing them to treat numerous clients/ patients per visit.
- Providing a place for regional and travelling patients to stay while being treated or recovering from a procedure.
- Providing a place for visitors to stay while visiting patients, the facility etc.

The site's ancillary/ subordinate food and beverage (shop) land uses provide amenity for the precinct, as well as provide additional services for the wider community and visitors of the neighbouring FRAC site. PO 1.2 Shops including restaurants are of a scale that is subordinate to the principal community use of the land. This context also needs to consider the FRAC site, with the proposed development's Food, Beverage & Arts building serving both sites.

#### Building form + Layout

Community Facilities Zone: PO 2.1, 2.4. Design in Urban Areas: DO 1; PO 1.1, 1.4, 1.5, 2.1, 2.2, 2.3, 4.1, 4.2, 4.3, 5.1, 14.2.

The Code intends for development to respond to its natural surroundings and positively contribute to the area's character. These elements should be reflected in the development's external appearance and form of buildings, while not impeding on safety or the environment.

A key design feature of the precinct is to create a setting that reflects and connects with the surrounding natural environment. The proposed structures incorporate earthy tones, natural materials (such as timber and natural stone), and green walls (internal and external) to reflect the surrounding natural setting and support health and wellbeing through biophilia.

The use of verandahs and trees for shade, native plants, roof-top solar panels, window orientations

and WSUD features improves the precinct's environmental performance and promotes sustainability.

The inclusion of water elements, such as the lake and waterways perform several tasks including flood mitigation, stormwater detention, reducing temperatures and providing white noise to assist in healing.

The precinct is connected through an internal network of landscaped and shaded walking paths, with vehicle access and parking located along the precinct's boundaries. This layout reflects the precinct's health and wellbeing intent through promoting walkability, reducing noise, and increasing pedestrian safety. With the development's spreadout layout and use of large windows/ opens providing additional surveillance.

A variety of ancillary land uses including multipurpose areas and large outdoor spaces provide locations for people to be active, bond, relax and heal. The precinct's naturalistic theme extends throughout these areas, with the development's variety of water elements, landscaping and built form provides different settings to accommodate the site's diverse visitors.

The proposal contains a mixture of single storey and double storey structures, with the maximum structure height being 10.9 metres. Therefore, the structures do not exceed the area's 12 metre and 3 levels TNVs. These heights, along with the fact that there is extensive vegetation around the perimeter of the site means that they are largely not going to be visible from the surrounding locality, despite the rising landform to the north (industrial estate) and west (Hayborough neighbourhood).

The proposed development is setback from all boundaries and screened from surrounding residential and industrial areas due to the treeline. This reflects the open and spacious feel of the development, without impacting on the site's visual amenity.

Individual structures do not encroach on more than one land parcel. This allows for development to be staged via land parcels (if needed) and prevents potential future development impacts from arising, e.g., setback requirements.



#### Interface management

*Interface between Land Uses: DO 1; PO 1.1, 1.2, 2.1, 3.1, 3.3, 4.3, 6.1, 6.2, 9.1, 9.6.* 

The Code intends for development to be designed and located to mitigate adverse effects on neighbouring areas and within the site's different areas/land uses.

The site contains sensitive land uses in the form of a childcare centre that need to be protected from adverse impacts. From the surrounding EPA licenced land uses, only the Crushing, grinding, or milling works (agricultural crop products) is located within the EPAs buffer distance which requires a separation of 300m, which is more than the approximate gap of 200m between the sites and approximately 240m between the structures. However, this business is a petfood store called Stockfeeds R Us and would not be expected to create a nuisance that would impact on the site's proposed sensitive use areas.

The north-western Waste Recovery Facility and waste transport business is located the required 300m distance, however, this is a skip bin business and would not be expected to create a nuisance that would impact on the site's proposed sensitive use area. Therefore, the site would not be adversely impacted by surrounding businesses.

The site's land parcels are not adjacent to residential land uses or neighbourhood type zones. The exception being the proposed load and ring-road on the FRAC site. However, any lighting required for the site will be aimed toward the ground to prevent light spill from impacting on motorists, pedestrians, and the site's short-term accommodation areas.

The spacious layout prevents roof-top solar from being impacted by overshadowing.

The site's proposed retail and professional land uses will operate during standard business hours, with the, thereby not disturbing the site's sensitive receivers (short-term accommodation). The Food, Beverage and Arts building trades until 10pm, however, the building is located approximately 130m away from the closest apartments used to house patients and is also blocked by the development's other structures. These conditions also provide privacy to the accommodation areas.

The Food, Beverage and Arts shops, including restaurant, are not restrained by DTS/DPF 2.1,

however, the building's Studio Lofts (second storey), will not be unreasonably impacted by the facility.

The established dense eastern tree line provides noise, dust and spray protection between the precinct and the farming activities, thereby, allowing both to simultaneously occur.

#### Access + car parking

Design in Urban Areas: DO 1; PO 7.2, 7.3, 7.4, 7.5, 7.6,

Transport, Access and Parking: DO 1; PO 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 3.1, 3.3, 3.4, 3.5, 3.8, 3.9, 4.1, 5.1, 6.1, 6.3, 6.4, 6.5, 6.6, 6.7, 8.1, 8.2.

The Code seeks that the development should create safe and effective/ efficient vehicle movements for pedestrians and motorists, and seamlessly integrates with the existing road network without adversely impacting on this network. Carparking areas should be well presented and provide shade and vegetation to soften their appearance and increase environmental performance and amenity.

The site's carparking is located along the development's periphery, which includes installing car park spaces along Fringe-Lily Place. There is an strip of 'internal' car parks that located in front of the north-eastern accommodation building.

The development includes several walking paths that connect the site's facilities to the surrounding car park areas. The facilities are also connected to each other through a network of landscaped and shaded pathways.

The two existing pedestrian crossings on Fringe-Lily Place will be retained, with other traffic calming mechanisms installed across the development, including slow points to increase pedestrian safety.

The road and pathway layout allows patients, visitors, and staff to walk or be driven in close proximity to facilities if needed, which increases safety by reducing pedestrian interaction with vehicles and is beneficial to the facilities patients who may benefit from being driven to treatment areas.

The car park areas will contain vegetated verges and islands, as well as be bounded by the established tree line. The combination of existing and new vegetation will soften the car parking appearance, provide shade, reduce heat absorption and allow water filtration.



The car park area will include dedicated disability spots scattered across the site. This is due to the proposed car park layout that surrounds the development, thereby, allowing convenient and easy access for people using the facility's many services.

The site's relatively flat surface, car park layout and proposed walking network that links all the proposed structures together supports universal access and makes it easier and convenient for all people using the site.

An internal ring road will be created within the development that connects Fringe-Lily Road to the site's secondary proposed entrance off Waterport Road. The ring-road loops around the proposed development and connects to the proposed extended Fringe-Lily Place and FRAC's rear carpark, thereby, creating three entry and access points for the development. With the access and ring-road able to support the development's intend vehicles, including a 14.5m rigid bus and 12.5m vehicle.

The internal ring road runs along the childcare centres frontage and incorporates a slip lane to allow for 'kiss and drop'. This function will allow parents to drop their kids off without impeded on the site's traffic flow. Car park spots are also located next to the childcare centre for longer stays.

A report has been prepared by Tonkin, dated 2 of March 2023.

Tonkin assessed the proposal's car park requirements and impact on the existing road network based on relevant Australian Standards and sections of the Code.

Tonkin analysed the proposed development's car park supply against the relevant provisions of the Code and relevant Australian Standards (visitor parking aligning with short term city and town centre parking, parking stations, hospital and medical centres) to determine a minimum car park requirement of 271 car parks. The proposed development will satisfy this by supplying 272 spaces that are scatted across the development. Eight of the supplied car parking spaces will be for disabled access and the proposal will provide 14 bicycle parking spots as determined by the Code.

Tonkin applied worst case scenarios (100% development capacity) to determine the proposal's impact on the surrounding road network. The report calculated that the proposed facility would experience 2,522 movements (1261 in and out) during typical weekdays (reduced on weekends).

The proposed development will increase both Waterport Road and Ocean Road's vehicle movements. However, the surrounding road network can support the additional traffic and does not require additional mitigation strategies e.g., roundabouts or traffic signals, however, a few slip lanes to cater for the increase in traffic movements.

The report found that the Level of Service for the Fringe Lily/Waterport Road access will increase post development from a B to a C (delay increase of 10seconds) and the Level of Service for the proposed Left in/Left Out Access at Fringe Lily and Lincoln Road Intersection will increase post development from a C to a D (delay increase of 11 seconds). The entire development will only be experiencing a DOS increase of 0.05. Tonkin concluded that the surrounding road network can support the additional traffic and does not require additional mitigation strategies e.g., roundabouts or traffic signals.

The report found that there is a relatively nominal post development distribution change and would not significantly alter how Waterport Road and Ocean Port Road operate in terms of their road functions.

#### Landscaping + Native Vegetation

Native Vegetation Overlay: DO 1; PO 1.1, 1.2, 1.4. Design in Urban Areas: DO 1; PO 3.1.

The Code intends for development to reflect the natural setting through landscaping that provides for community health, appearance, and amenity, and reduces temperatures while protecting existing natural vegetation.

The proposal seeks to incorporate greening through a variety of ways, including along paths, within carparks and recreational areas. The proposal will include a mixture of trees and low-lying vegetation to soften the built form and provide interest and colour, and connect the facility to the surrounding natural context.

The proposal will seek to include native vegetation to reflect the local context and setting, which includes the existing treelined boundary. Although some of the existing trees along the eastern and southern will be removed to accommodate the proposals carparks and access paths. Majority of the site's treeline will be maintained and continue to form a dense treeline that is part of the site's character.

The development's structures will overlook the vegetated areas through large windows and openings

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to increase the interaction between people and nature, which helps support healing through biophilia.

The variety and scattering of vegetation across the site will increase amenity through providing shade and lower temperatures that will encourage people to walk and be active, which are benefits to health and wellbeing. The scattered vegetation will also help to increase the area's biodiversity and maximise stormwater infiltration.

## Stormwater management + Flooding

Hazards (Flooding – General) Overlay: DO 1; PO 1.1, 2.1.

Hazards (Flooding – Evidence Required) Overlay: DO 1, PO 1.1, PO 2.1.

Prescribed Water Resources Area Overlay: DO 1; PO

Water Resources Overlay: DO 1, 2; PO 1.1, 1.2, 1.3, 1.5 Design in Urban Areas: DO 1; PO 42.1, 42.2, 42.3.

The Code seeks that development does not impact of the existing hydrological systems by altering predevelopment flows, creating a flooding hazard through altering surfaces, impacting on water quality and disrupting any downstream water requirements.

Buildings housing vulnerable people need to be designed and sited away from flood prone areas and allow for easy egress in case of a flooding event.

The proposed development incorporates large areas of vegetation scattered across the development that will help to manage stormwater to pre-development flows. The proposed development's lake will provide additional retention to prevent increases in pre-development flows, while providing an avenue for the area's stormwater to connect to the existing watercourse.

The development's stormwater treatments located either via GPTs for the car park or within the open swale and water bodies will improve stormwater quality to acceptable levels before making its way into the lake and existing watercourse. Additional water quality control measures will be placed at the lake's outlet to maintain water quality prior to discharge into the existing creek.

The development's short-stay accommodation buildings are located out of the Hazards (flooding – General) Overlay, which minimises the likelihood of these structures from being impeded by potential flood waters. The habitual buildings are sited near the 432

ring-road, which will allow for easy access and egress in case of a flood. Part of the childcare centre is located within the flooding overlay, however, the structure's design/ sitting, such as floor heights, will consider the 1% AEP flood event.

The scattering of vegetation and artificial water bodies will help reduce urban temperatures due to climate change and will provide additional areas for native fauna.

#### Site Contamination

Site Contamination: DO 1: PO 1.1

The Code intends land is suitable for proposed uses, which includes considering site contamination.

The potential mixed-use site contains land uses, including a childcare and short-term accommodation that are considered a more sensitive use then the site's predominate broadacre farming history.

Greencap performed a Preliminary Site Investigation on the proposed development's land parcels, which include a combination of a site visit, interview with the land-owner and a desktop analysis of historical data and photos. From their investigations Greencap did not identify any evidence of site contamination that would preclude the site from the proposed mixed-use development, which includes more sensitive land uses.

#### **Bushfire Prevention**

Hazards (Bushfire – Medium Risk) Overlay: DO 1, 2; PO 1.1, 2.1, 3.1, 3.2, 3.3, 5.1, 5.2, 5.3.

The Overlay intends for development to respond to a medium level bushfire risk through building design and layout that facilitates access for emergency vehicles to protect lives and assets from bushfire danger.

The proposed layout locates the development's carparking and internal ring road to the stie's periphery, which provides a buffer to the development's structures.

The proposed Waterport Road entrance provides an additional entrance and access point to the site, with the internal ring road linking to the two existing access points via Fringe-Lily Place and the FRAC's carparks.



The building designs reduce the ability to trap embers by being located on the ground and through the openness of ancillary structures, such as, verandahs.

The land uses containing sensitive receivers are located near the internal ring road and can leave the site through at least three access points that are all able to accommodate fire fighting vehicles. The internal ring road and access points are designed to allow for efficient emergency vehicle movements and fast and effective egress for the site's users, which is supported by the site's relative flatness.

The site will have consistent access to water supply for firefighting purposes through the ability to utilise the basin which will be a permanent water body. A pump and connection point can also be connected to the basin to allow for firefighting purposes.



## 5. Conclusion

The proposed development is for a Health and Wellbeing Precinct, which includes the construction of a childcare, day surgery, chemist, specialist suites, radiology services, short-term accommodation, multipurpose areas used for ancillary health professionals, such as occupational therapists, mental health professionals etc., food and beverage shops, ring road and carpark areas, and natural areas, including artificial waterbodies.

The proposed development provides the community with much needed specialised health and wellbeing facilities and services. The inclusion of short-term accommodation will provide regional patients and visitors a place to stay for treatment and encourage specialists to stay for short-durations and treat several patients at once.

The high amenity development will provide ancillary land uses, including a childcare and food and beverage places that will service the patients, staff, and visitors, which include FRAC visitors. Importantly, the facility complements and adds value to the existing FRAC facility and further benefits the community within the region.

The proposal's form, scale, material selection, layout and inclusion of a variety of landscaping and

waterbodies has considered the surrounding natural locality and attributes that support health and wellbeing to aid in patient recovery. The development responds to its setting, and is designed to sit within the locality with minimal intrusion and visibility.

The proposal's land uses, access points and ring-road has integrated with the surrounding road network and existing FRAC facility to create a holistic/ well-functioning site. The ring-road also provides a buffer in case of fire and a new access point to increase traffic efficiency.

The proposal's quantity of landscaping and inclusion of waterbodies will provide stormwater management that maintains and improves the site's current water quality and avoid impacts of peak water flows on downstream areas.

The development is considered to not be seriously at variance with the Code. Indeed, the proposal is considered to largely achieve the relevant performance criteria of the Community Facilities Zone, relevant Overlays, TNVs and the General Provisions. As such, is highly worthy of Planning Consent.







## **CONTENTS**

26

27

1	CONTENTS	28	NORTH MEWS - FLOORPLAN
2	LOCALITY PLAN	29	NORTH MEWS - ELEVATIONS
3	SITE PLAN	30	FOOD/ BEV/ ARTS - GROUND FLOOR PLAN
4	LANDSCAPING PLAN	31	FOO/ BEV/ ARTS - FIRST FLOOR PLAN
5	GROUND FLOOR - ELEMENTS	32	FOOD/ BEV/ ARTS - ELEVATIONS
6	UPPER FLOOR - ELEMENTS	33	JUICE BAR / CAFE - PLAN
7	PARKING PLAN	34	JUICE BAR / CAFE - ELEVATIONS
8	PEDESTRIAN MOVEMENT	35	SITE SECTIONS
9	SPINES & TRANSITIONS	36	MATERIALS/ VIBE BOARD
10	INFRASTRUCTURE SERVICES MASTER PLAN	37	3D VIEWS AERIAL OVERVIEW
11	AREA BREAKDOWN	38	3D VIEWS - CHILDCARE
12	RADIOLOGY & DAY SURGERY - PLAN	39	3D VIEWS - JUICE BAR/ CAFE / GRAND VERANDAH
13	RADIOLOGY & DAY SURGERY - ELEVATIONS	40	3D VIEWS - RADIOLOGY/ DAY SURGERY
14	SPECIALIST SUITES - GROUND FLOOR	41	3D VIEWS - SPECIALIST SUITES
15	SPECIALIST SUITES - FIRST FLOOR	42	3D VIEWS - WELLNESS/ MULTIPURPOSE/ COMMONS
16	SPECIALIST SUITES - ELEVATIONS	43	WATERPORT ROAD ENTRY STUDY
17	SPECIALIST SUITES - ELEVATIONS CONT.	44	STAGE 1 (a/b)
18	SPECIALIST SUITES - ELEVATIONS CONT.	45	STAGE 2 (a/b)
19	WELLNESS SUITES - PLAN	46	STAGE 3
20	WELLNESS SUITES - ELEVATIONS	47	STAGE 4
21	MULTIPURPOSE SUITES - PLAN	48	STAGE 5
22	MULTIPURPOSE SUITES - ELEVATIONS		
23	EARLY LEARNING CENTRE - PLAN		
24	EARLY LEARNING CENTRE - ELEVATIONS		
25	SOUTH MEWS - GROUND FLOOR PLAN		



SOUTH MEWS - FIRST FLOOR PLAN

SOUTH MEWS - ELEVATIONS





## EXISTING VEGETATION EXISTING VEGETATION NORTH MEWS EARLY LEARNING CENTRE 5.5 RL 19400 EXISTING FRAC PARKING ENTRY CAFE RL 18000 FIG TREE SOUTH MEWS COURT **FLEURIEU** RADIOLOGY DAY SURGERY **REGIONAL AQUATIC CENTRE OCEAN ROAD** SPECIALIST SUITES RL 17500 EPHEMERAL RL 17050 WELLNESS SUITES DRY CREEK WELLNESS SUITES **LAKE** RL 15800 COMMONS MULTIPURPOSE SUITES RL 16600 FOOD, BEV. RL 16400 & ART PROPOSED SERVICES EASEMENT 439

Scale 1: 1000

## 4.4 - Attachment 1 SITE PLAN KEY

BICYCLE PARKING

LOADING ZONE/ BIN COLLECTION

MAIN SWITCHBOARD LOCATION. TO BE CONFIRMED/ INTEGRATED INTO BUILDING SAPN TRANSFORMER LOCATION

SITE PLAN
FLEURIEU HEALTH & WELLBEING CHITON

#### 4.4 - Attachment 1 LANDSCAPING CHILDREN'S GARDEN EXISTING VEGETATION FIG TREE COURT GARDEN JAPANESE LAKE GARDEN EPHEMERAL WETLAND EARLY LEARNING CENTRE GARDEN NORTH MEWS COMMONS LAWN/ GARDEN SENSORY DRY CREEK GARDENS EXISTING FRAC PARKING ROADSIDE & PARKING VERGES WATERWAYS EPHEMERAL WATERWAYS ENTRY COURT CAFE FIG TREE SOUTH MEWS EXISTING FIG TREE COURT PROTECTED EXISTING GARDENS **FLEURIEU** DE 8888 1 1 1 RADIOLOGY DAY SURGERY **REGIONAL AQUATIC CENTRE**

LAKE

440

**OCEAN ROAD** 

Scale 1: 1000

# LANDSCAPING PLAN FLEURIEU HEALTH & WELLBEING CHITON

EPHEMERAL

MULTIPURPOSE

SPECIALIST SUITES

WELLNESS SUITES

WELLNESS SUITES

COMMONS

FOOD, BEV.

### **Planting Sections Plant List**

Section	Trees	Shrubs	Grasses	Groundcovers	Climbers	Aquatics
Children's garden	Eureka lemons; Valencia Orange; Liriodendon fastiagata Corymbia ficifolia; Eucalyptus lehmannii Eucalyptus youngiana	Adenanthos sericeus; calistemons various; ; westringia various; grevillea moonlight; Stachys byzantina; scaevola various; Banksia integrifolia prostrate;	Anigozanthos various Dianella various; Iomandra longifolia ; Eureka Kikuyu	Myoporum parvifolium; Eremophila glabra; Carpobrotus rossii Rosmarinus officinalis 'Prostratus'	Trachelospermum jasminoides; Pandorea jasminoides Hardenbergia violacea; Hibbertia scandens	Nil
Fig tree court garden	Existing 100year old fig and pear tree	Westringia various; grevillea moonlight; scaevola various	Eureka Kikuyu	Myoporum parvifolium; Rosmarinus officinalis 'Prostratus'; Eremophila glabra; Carpobrotus rossii	Trachelospermum jasminoides; Pandorea jasminoides Hardenbergia violacea; Hibbertia scandens	Nil
Roads parking verges lake edge	Chinese Elms; Tuckeroo; Robinia; Eucalyptus torquata Eucalyptus youngiana; Angophora costata	Grevillea moonlight; scaevola various; calistemons various	Anigozanthos various; Eureka Kikuyu (sterile, dwarf); Lomandra longifolia; Dianella various; Ficinia nodosa	Myoporum parvifolium ;Rosmarinus officinalis 'Prostratus'; Eremophila glabra; Carpobrotus rossii	Hibbertia scandens	Nardoo; Nymphoides Geminata; Mentha diemenica; Nymphoides Indica; Curly effusus;
Japanese lake garden	Parrotia persica	Azalea various; lomandra longifolia; acacia cognata limelight; Correas various; Banksia integrifolia prostrate	Lomandra longifolia		Trachelospermum jasminoides; Pandorea jasminoides Hardenbergia violacea	Nardoo; Nymphoides Geminata; Mentha diemenica; Nymphoides Indica; Curly effusus;
Ephemeral wetland garden	Corymbia ficifolia; Allocasuarina verticillata	Banksia integrifolia prostrate	Lomandra longifolia; Ficinia nodosa; Anigozanthos various	Myoporum parvifolium; Rosmarinus officinalis 'Prostratus'; Eremophila glabra; Carpobrotus rossii	Trachelospermum jasminoides; Pandorea jasminoide; Hardenbergia violacea	Nardoo; Curly effusus;
Commons Garden	Robinia; Quercus coccinea Allocasuarina verticillate Eucalyptus torquate Eucalyptus youngiana Angophora costata		Eureka Kikuyu(sterile dwarf) Lomandra longifolia	Myoporum parvifolium; Rosmarinus officinalis 'Prostratus'; Eremophila glabra; Carpobrotus rossii		Nil
Sensory dry creek garden	Magnolia various; Corymbia ficifolia; Eucalyptus lehmannii; Eucalyptus torquata; Allocasuarina verticillata; Eureka Lemon; valencia orange	Muraya; Aloysia triphylla; Adenanthos sericeus; Stachys byzantina; rosemary various; lemon myrtle; Prostanthera sieberi; Banksia integrifolia prostrate;	Lomandra longifolia; Ficinia nodosa; Anigozanthos	Myoporum parvifolium; Carpobrotus rossii; Rosmarinus officinalis 'Prostratus'; eremophila glabra;	Trachelospermum jasminoides; Pandorea jasminoides Hardenbergia violacea; Hibbertia scandens	Nardoo



Scale 1: 1000



EARLY LEARNING CENTRE

SOUTH MEWS - 2 STOREY

NORTH MEWS

CAFE/JUICE BAR

RADIOLOGY

DAY SURGERY

CHEMIST

WELLBEING

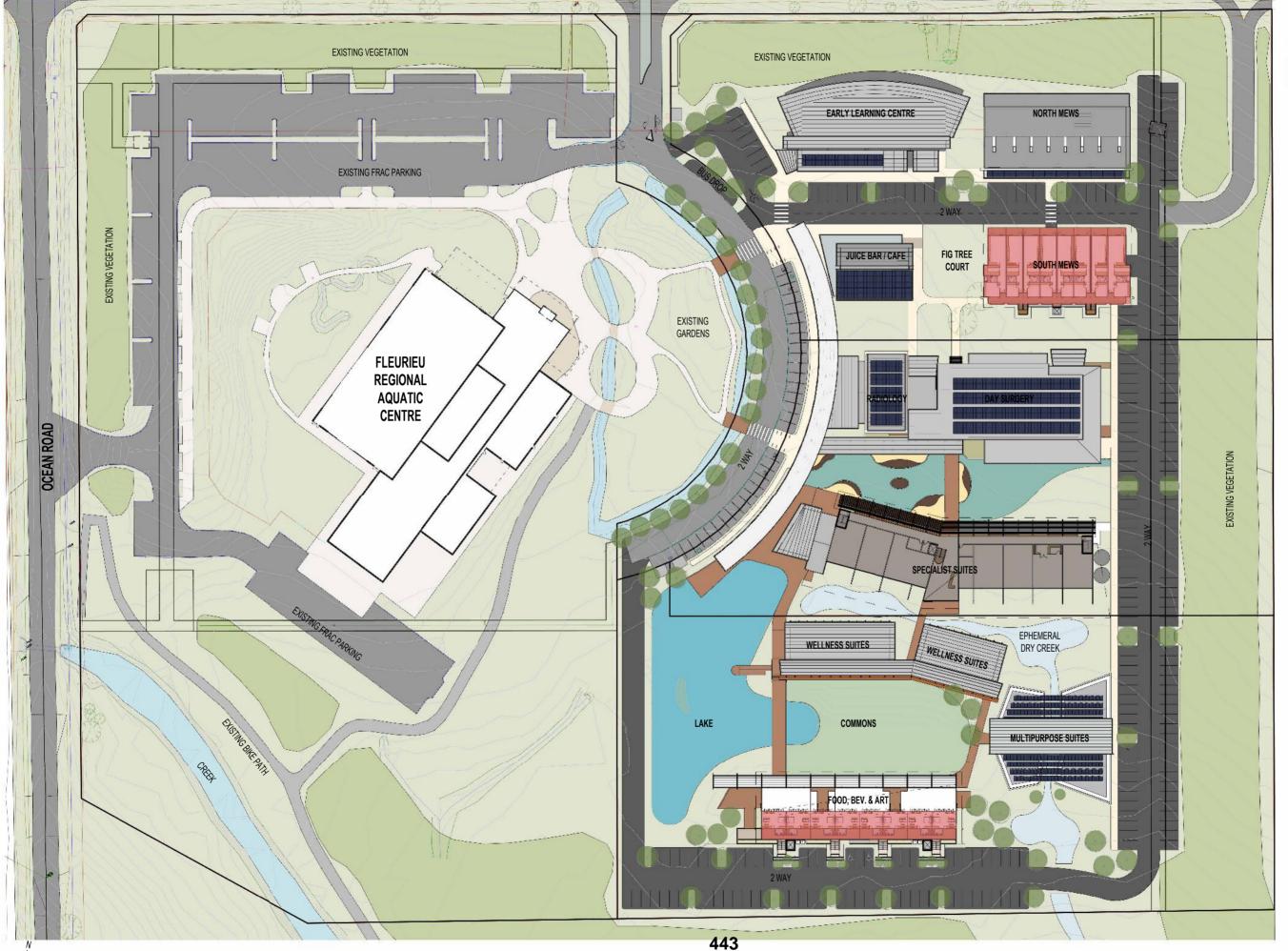
WELLBEING WETLANDS SUITES

FB & STUDIO

COMMONS SUITES

SPECIALIST SUITES - 2 STORY





Scale 1: 1000

## EXISTING VEGETATION **EXISTING VEGETATION** -EARLY LEARNING CENTRE EXISTING FRAC PARKING ENTRY COURT 9uice Bar/ FIG TREE COURT **EXISTING** GARDENS **FLEURIEU** FADIOLOGY DAY SURGERY **REGIONAL AQUATIC** CENTRE **OCEAN ROAD** SPECIALIST SUITES EPHEMERAL WELLNESS SUITES LAKE COMMONS MULTIPURPOSE SUITES FOOD, BEV. & ART OVERFLOW TO CREEK 444

Scale 1: 1000

#### 4.4 - Attachment 1

PARKING KEY

PUBLIC PARKING





#### PARKING DREAKDOWN

. PARKS

140 PUBLIC (INC DISABLED PARKS)
121 PRIVATE (INC DISABLED PARKS)

LOADING ZONES/ PARKS

271 TOTAL

## EXISTING VEGETATION EXISTING VEGETATION -EARLY LEARNING CENTRE EXISTING FRAC PARKING FIG TREE COURT Juice Bar/ CAFE **EXISTING** GARDENS **FLEURIEU** REGIONAL DAY SURGERY **AQUATIC** CENTRE OCEAN ROAD SPECIALIST SUITES EPHEMERAL WELLNES\$ SUITES LAKE COMMONS MULTIPURPOSE SUITES FOOD, BEV. & ART OVERFLOW TO CREEK 445

Scale 1: 1000

PUBLIC VEHICLE ACCESS

PRIMARY PUBLIC MOVEMENT

SECONDARY

WAITING

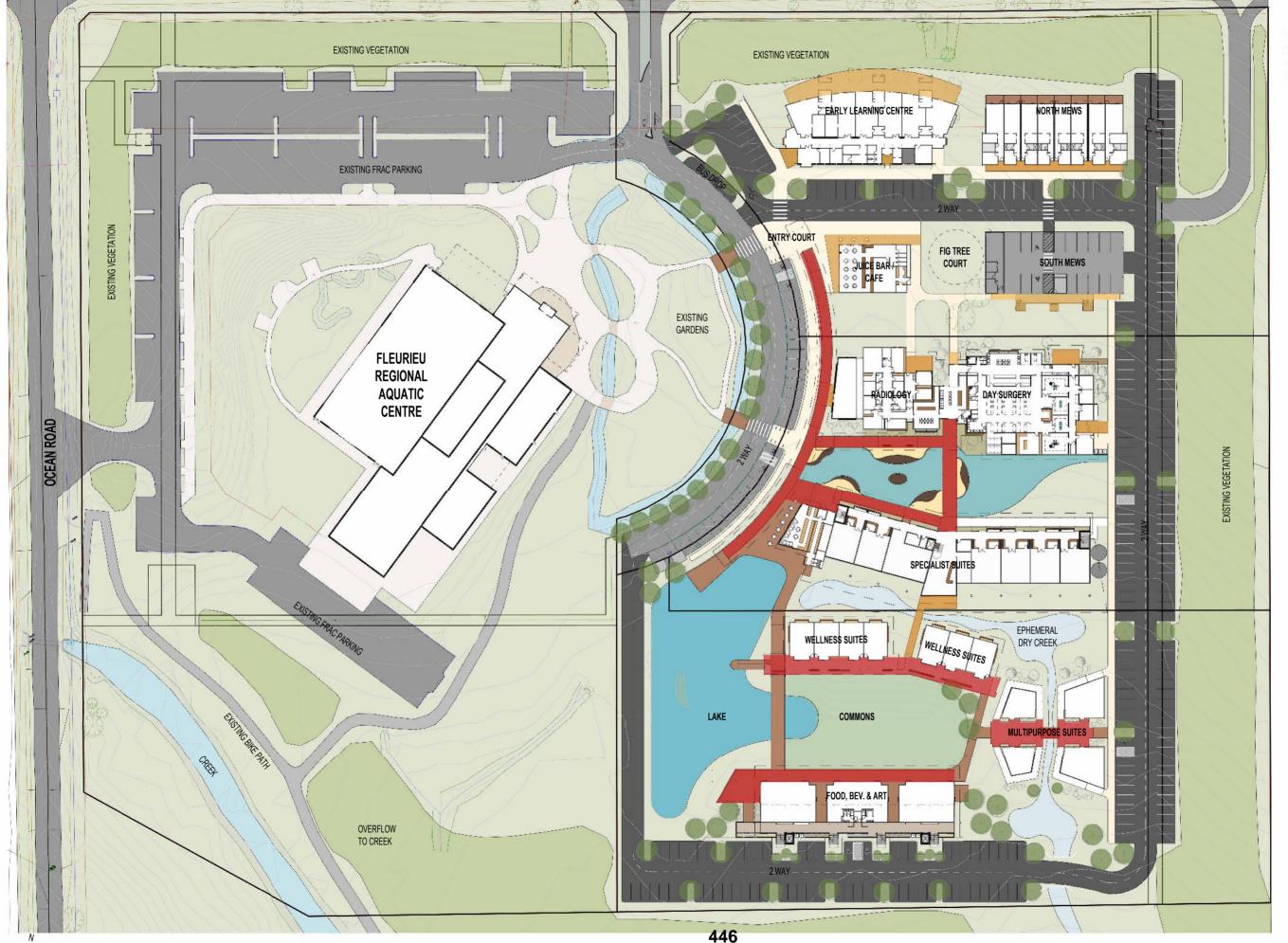
RECEPTION

PUBLIC TOILETS

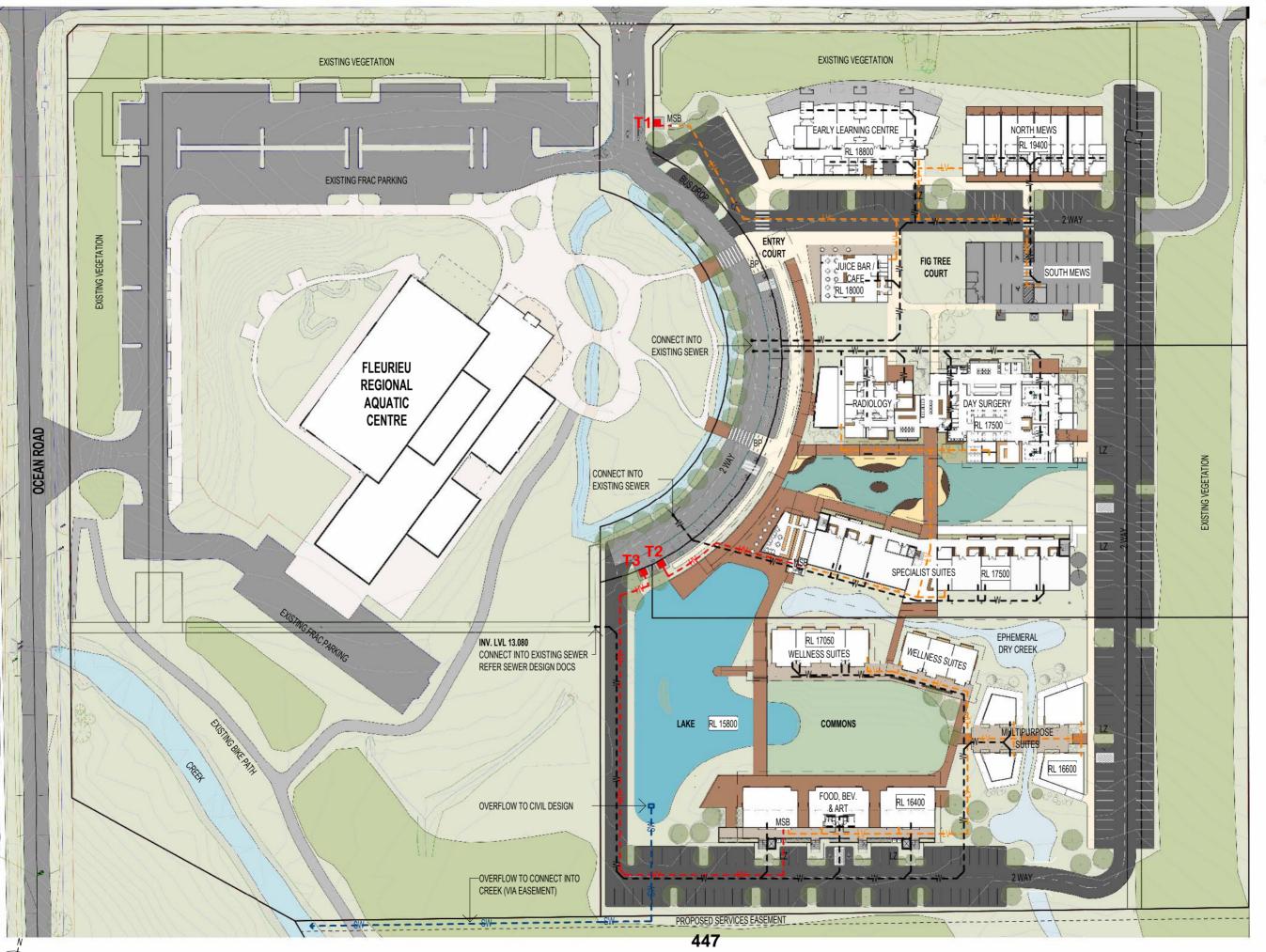
UPFRONT
ACTIVITY

SHARED WALKWAY/ BIKE PATH





Scale 1: 1000



- HV - CONNECTION TO SAPN TRANSFORMER

COMMON TRENCH WHERE SUITABLE

BUILDING CONNECTIONS FROM MAIN SWITCHBOARD (SITE SPECIFIC)

-LV - • COMMON TRENCH WHERE SUITABLE

 BUILDING DISTRIBUTION BOARD LOCATIONS YET TO BE DETERMINED

INDICATIVE WASTE RUNS

COMMON TRENCH WHERE SUITABLE

• BUILDING CONNECTIONS YET TO BE

-SW - INDICATIVE STORMWATER RUNS
- COMMON TRENCH WHERE SUITABLE

#### SITE PLAN KEY

LOADING ZONE/ BIN COLLECTION

MAIN SWITCHBOARD LOCATION. TO BE CONFIRMED/ INTEGRATED INTO BUILDING

SAPN TRANSFORMER LOCATION

10

ROOM SCHEDULE			ROOM SCHEDULE			ROOM SCHEDULE			ROOM SCHEDULE		
ADMIN	DAY SURGERY	7 m²									
BED PREP/ STORE	DAY SURGERY	25 m²	DDA	F&B	7 m <sup>2</sup>	ADMIN	RADIOLOGY	8 m²	CLEANER	SPECIALISTS - FIRST FLOOR	6
BOH CORRIDOR	DAY SURGERY	43 m <sup>2</sup>	EAST BREEZEWAY	F&B	33 m²	CHANGE 1	RADIOLOGY	2 m²	EAST CIRCULATION	SPECIALISTS - FIRST FLOOR	8
CHANGE	DAY SURGERY	4 m²	F/ WC	F&B	11 m²	CHANGE 2	RADIOLOGY	3 m²	FIRE STAIR EAST	SPECIALISTS - FIRST FLOOR	1
CLEAN STORES	DAY SURGERY	19 m²	M/ WC	F&B	12 m <sup>2</sup>	CHANGE 3	RADIOLOGY	3 m²	FIRE STAIR WEST	SPECIALISTS - FIRST FLOOR	1
CLEANER	DAY SURGERY	2 m²	STUDIO 1	F&B	37 m²	CONTROL 1	RADIOLOGY	8 m²	LIFT	SPECIALISTS - FIRST FLOOR	7
CLNR	DAY SURGERY	6 m²	STUDIO 2	F&B	37 m²	CONTROL 2	RADIOLOGY	7 m²	MEZZANINE	SPECIALISTS - FIRST FLOOR	4
DIS	DAY SURGERY	19 m²	STUDIO 3	F&B	37 m²	СТ	RADIOLOGY	40 m²	STAFF BATHROOM/ CHANG	GE SPECIALISTS - FIRST FLOOR	1
DIS CHANGE	DAY SURGERY	6 m²	STUDIO 4	F&B	37 m²	DIS CHANGE	RADIOLOGY	4 m²	SUITE 7	SPECIALISTS - FIRST FLOOR	9
F BATH/ CHANGE	DAY SURGERY	16 m <sup>2</sup>	STUDIO 5	F&B	37 m²	DIS WC	RADIOLOGY	4 m²	SUITE 8	SPECIALISTS - FIRST FLOOR	1
INDUCTION	DAY SURGERY	37 m²	STUDIO 6	F&B	37 m²	EQUIP	RADIOLOGY	7 m²	SUITE 9	SPECIALISTS - FIRST FLOOR	1
INDUCTION/ RECOVERY 1	DAY SURGERY	74 m²	STUDIO 7	F&B	37 m²	MAMMO	RADIOLOGY	13 m²	SUITE 10	SPECIALISTS - FIRST FLOOR	1
INTERVIEW	DAY SURGERY	9 m²	STUDIO 8	F&B	37 m²	MRI	RADIOLOGY	30 m²	SUITE 11	SPECIALISTS - FIRST FLOOR	1
LINEN STORE	DAY SURGERY	12 m <sup>2</sup>	TENANCY 1	F&B	171 m²	RADIOLOGY CIRCULATION	RADIOLOGY	66 m²	SUITE 12	SPECIALISTS - FIRST FLOOR	9
M BATH/ CHANGE	DAY SURGERY	16 m²	TENANCY 1 DECKING	F&B	139 m²	RADIOLOGY RECEPTION	RADIOLOGY	21 m²	SUITE 13	SPECIALISTS - FIRST FLOOR	9
MANAGER	DAY SURGERY	9 m²	TENANCY 2	F&B	159 m²	RADIOLOGY WAITING	RADIOLOGY	42 m²	TOILETS	SPECIALISTS - FIRST FLOOR	1
NON STERILE CIRCULATIO	N DAY SURGERY	98 m²	TENANCY 2 DECKING	F&B	72 m²	REPORTING	RADIOLOGY	18 m²	WEST CIRCULATION	SPECIALISTS - FIRST FLOOR	6
NURSES STATION	DAY SURGERY	24 m²	TENANCY 3	F&B	171 m²	STAFF CHANGE	RADIOLOGY	15 m²			
PLANT	DAY SURGERY	12 m <sup>2</sup>	TENANCY 3 DECKING	F&B	58 m²	STAFF CIRCULATION	RADIOLOGY	23 m²	BINS	SPECIALISTS - GROUND FLOOR	9
PREP	DAY SURGERY	10 m <sup>2</sup>	WEST BREEZEWAY	F&B	33 m²	STAFF ROOM	RADIOLOGY	22 m²	CAFE	SPECIALISTS - GROUND FLOOR	8
PROCEDURE 1	DAY SURGERY	23 m²				ULTRASOUND 1	RADIOLOGY	15 m²	CAFE BOH	SPECIALISTS - GROUND FLOOR	2
PROCEDURE 2	DAY SURGERY	23 m²	GALLERY	GALLERY	132 m²	ULTRASOUND 2	RADIOLOGY	15 m²	CAFE WC'S	SPECIALISTS - GROUND FLOOR	9
RECEPTION	DAY SURGERY	19 m²				ULTRASOUND 3	RADIOLOGY	13 m²	CLEANER	SPECIALISTS - GROUND FLOOR	6
RECOVERY 2	DAY SURGERY	30 m <sup>2</sup>	BOH/STORE	JUICE BAR/ CAFE	16 m²	X RAY	RADIOLOGY	32 m²	COOL RM	SPECIALISTS - GROUND FLOOR	7
RECOVERY ROOM 1	DAY SURGERY	9 m²	CAFE	JUICE BAR/ CAFE	116 m²				CRATES	SPECIALISTS - GROUND FLOOR	1
RECOVERY ROOM 2	DAY SURGERY	10 m <sup>2</sup>	JUICE BAR	JUICE BAR/ CAFE	38 m²	CLEANER/ STORE	SOUTH MEWS - GROUND	15 m²	DIS WC	SPECIALISTS - GROUND FLOOR	7
STAFF ENTRY	DAY SURGERY	22 m²	KITCHEN	JUICE BAR/ CAFE	58 m²	GROUND UNIT	SOUTH MEWS - GROUND	84 m²	EAST CIRCULATION	SPECIALISTS - GROUND FLOOR	8
STAFF ROOM	DAY SURGERY	43 m²	TOILETS	JUICE BAR/ CAFE	18 m²	PARKING	SOUTH MEWS - GROUND	554 m²	FIRE STAIR EAST	SPECIALISTS - GROUND FLOOR	1
STERILE CIRCULATION	DAY SURGERY	150 m²				PLANT	SOUTH MEWS - GROUND	3 m²	FIRE STAIR WEST	SPECIALISTS - GROUND FLOOR	1
STORE	DAY SURGERY	29 m²	MULTIPURPOSE-SUITE-1	MULTIPURPOSE	67 m²				FOYER/RECEPTION	SPECIALISTS - GROUND FLOOR	1
			I								

106 m<sup>2</sup>

60 m<sup>2</sup>

113 m<sup>2</sup>

92 m<sup>2</sup>

78 m<sup>2</sup>

78 m²

78 m²

78 m²

 $78 \text{ m}^2$ 

78 m²

93 m²

MULTIPURPOSE

MULTIPURPOSE

MULTIPURPOSE

NORTH MEWS

MULTIPURPOSE-SUITE-2

MULTIPURPOSE-SUITE-3

MULTIPURPOSE-SUITE-4

UNIT 1 - ACCESS

UNIT 2

UNIT 3

UNIT 4

UNIT 5

UNIT 6

UNIT 7

UNIT 8

ENTRY VERANDAH

UNIT 1

UNIT 2

UNIT 3

UNIT 4

UNIT 5

UNIT 6

UNIT 7

UNIT 8

UNIT 1 DECK

UNIT 2 DECK

**UNIT 3 DECK** 

UNIT 4 DECK

UNIT 5 DECK

UNIT 6 DECK

UNIT 7 DECK

**UNIT 8 DECK** 

THEATRE 1

THEATRE 2

WAITING LOUNGE

WAITING

WC

ADMIN

AM F WC

AM M WC

BOH ENTRY

COURTYARD

ENTRY VERANDAH

ENTRY/ RECEPTION

EQ UNI WC + SHR

KINDER GALLERY

LEARNING HUB 1

LEARNING HUB 2

LEARNING HUB 3

LEARNING HUB 4

LEARNING HUB 5

LEARNING HUB 6

OUTDOOR STORE

OUTDOOR STORE 2

OUTDOOR STORE 3

PARENTS ROOM

PREP 1

PREP 2

PREP 3

**PROGRAM** 

SLEEP RM 1

SLEEP RM 2

STAFF

STORE

WET 1

WET 2

KITCHEN

LDRY

DAY SURGERY

DAY SURGERY

DAY SURGERY

DAY SURGERY

DAY SURGERY

ELC

45 m<sup>2</sup>

45 m<sup>2</sup>

51 m<sup>2</sup>

20 m<sup>2</sup>

10 m<sup>2</sup>

12 m<sup>2</sup>

 $3 \, m^2$ 

 $3 \, m^2$ 

 $8 \text{ m}^2$ 

16 m<sup>2</sup>

20 m<sup>2</sup>

29 m²

 $7 \text{ m}^2$ 

124 m<sup>2</sup>

36 m<sup>2</sup>

 $7 \text{ m}^2$ 

65 m<sup>2</sup>

70 m<sup>2</sup>

71 m<sup>2</sup>

70 m<sup>2</sup>

67 m²

68 m²

 $6 \text{ m}^2$ 

 $8 \text{ m}^2$ 

 $6 \, \text{m}^2$ 

22 m<sup>2</sup>

 $7 \text{ m}^2$ 

9 m<sup>2</sup>

 $9 \text{ m}^2$ 

15 m<sup>2</sup>

23 m<sup>2</sup>

23 m<sup>2</sup>

25 m²

 $5 \, \text{m}^2$ 

18 m²

 $35 \, m^2$ 

DAY SURGERY	976 m²
ELC	888 m²
F&B	1163 m <sup>2</sup>
GALLERY	132 m²
JUICE BAR/ CAFE	246 m²
MULTIPURPOSE	346 m²
NORTH MEWS	656 m²
RADIOLOGY	409 m²
SOUTH MEWS - GROUND	657 m²
SOUTH MEWS - UPPER	829 m²
SPECIALISTS - FIRST FLOOR	973 m²
SPECIALISTS - GROUND FLOOR	1249 m²
WELLNESS	485 m²
TOTAL	9009 m <sup>2</sup>

**FLOOR** 80 m<sup>2</sup> **FLOOR** 13 m<sup>2</sup> **FLOOR** 13 m<sup>2</sup> SPECIALISTS - GROUND FLOOR 133 m<sup>2</sup> FOYER/RECEPTION SOUTH MEWS - UPPER 81 m<sup>2</sup> LIFT SPECIALISTS - GROUND FLOOR 7 m<sup>2</sup> SOUTH MEWS - UPPER 93 m² PATHOLOGY SPECIALISTS - GROUND FLOOR 36 m<sup>2</sup> SOUTH MEWS - UPPER 12 m<sup>2</sup> PHARMACY SPECIALISTS - GROUND FLOOR 128 m<sup>2</sup> SOUTH MEWS - UPPER 78 m<sup>2</sup> STAFF BATHROOM/ CHANGE SPECIALISTS - GROUND FLOOR 13 m<sup>2</sup> SOUTH MEWS - UPPER 11 m<sup>2</sup> SUITE 1 SPECIALISTS - GROUND FLOOR 96 m<sup>2</sup> SOUTH MEWS - UPPER 78 m² SUITE 2 SPECIALISTS - GROUND FLOOR 102 m<sup>2</sup> SOUTH MEWS - UPPER 11 m² SUITE 3 SPECIALISTS - GROUND FLOOR SOUTH MEWS - UPPER 78 m² SUITE 4 SPECIALISTS - GROUND FLOOR SOUTH MEWS - UPPER 11 m<sup>2</sup> SUITE 5 SPECIALISTS - GROUND FLOOR SOUTH MEWS - UPPER  $78 \text{ m}^2$ SUITE 6 SPECIALISTS - GROUND FLOOR 93 m<sup>2</sup>

WELLNESS

WELLNESS

WELLNESS

WELLNESS

WELLNESS

WELLNESS

WELLNESS

SPECIALISTS - GROUND FLOOR

SPECIALISTS - GROUND FLOOR

TOILETS

WEST CIRCULATION

COMMONS-SUITE-1

COMMONS-SUITE-2

COMMONS-SUITE-3

COMMONS-SUITE-4

COMMONS-SUITE-5

COMMONS-SUITE-6

COMMONS-SUITE-7

SOUTH MEWS - UPPER

11 m<sup>2</sup>

78 m²

11 m²

78 m²

11 m<sup>2</sup>

93 m²

12 m<sup>2</sup>

 $6 \text{ m}^2$ 

80 m<sup>2</sup>

13 m<sup>2</sup>

13 m<sup>2</sup>

45 m<sup>2</sup>

13 m<sup>2</sup>

96 m²

103 m<sup>2</sup>

128 m<sup>2</sup>

100 m<sup>2</sup>

100 m<sup>2</sup>

99 m²

93 m<sup>2</sup>

14 m<sup>2</sup>

63 m<sup>2</sup>

9 m<sup>2</sup>

81 m<sup>2</sup>

22 m<sup>2</sup>

9 m<sup>2</sup>

 $6 \text{ m}^2$ 

 $7 \text{ m}^2$ 

19 m²

14 m²

63 m²

70 m<sup>2</sup>

69 m²

69 m²

70 m<sup>2</sup>

70 m<sup>2</sup>

69 m²

69 m²

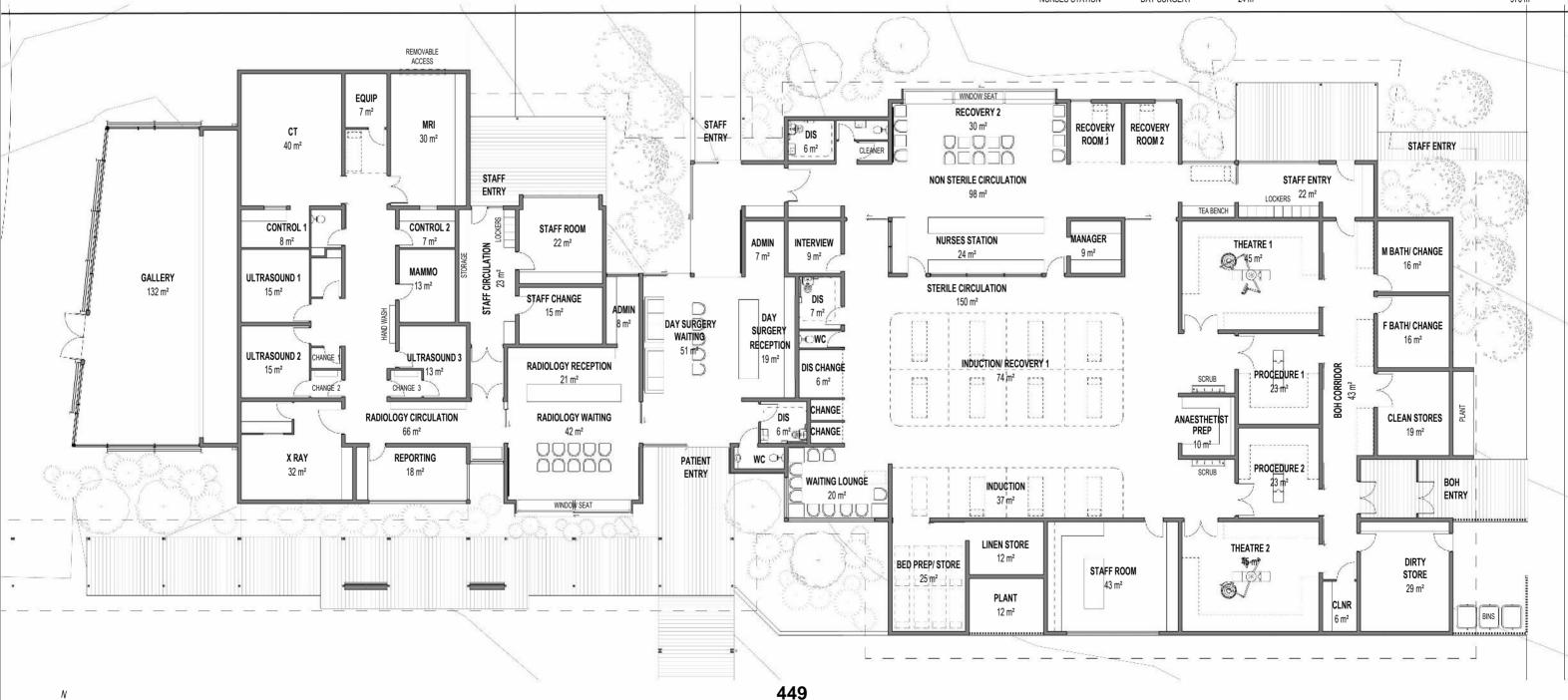
9009 m<sup>2</sup>

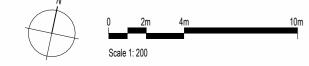
 $7 \text{ m}^2$ 

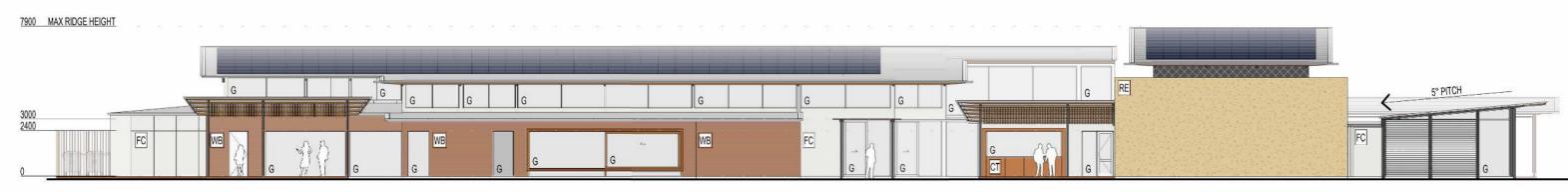
 $7 \text{ m}^2$ 



RADIOLOGY - RO	OOM SCHEDULE		RADIOLOGY - ROOM	SCHEDULE			DAY SURGERY - ROO	OM SCHEDULE		DAY SURGERY - ROO	OM SCHEDULE	
ADMIN	RADIOLOGY	8 m²	RADIOLOGY CIRCULATION	I RADIOLOGY	66 m²		ADMIN	DAY SURGERY	7 m²	PLANT	DAY SURGERY	12 m²
CHANGE 1	RADIOLOGY	2 m²	RADIOLOGY RECEPTION	RADIOLOGY	21 m²		BED PREP/ STORE	DAY SURGERY	25 m²	PREP	DAY SURGERY	10 m²
CHANGE 2	RADIOLOGY	3 m²	RADIOLOGY WAITING	RADIOLOGY	42 m²		BOH CORRIDOR	DAY SURGERY	43 m²	PROCEDURE 1	DAY SURGERY	23 m²
CHANGE 3	RADIOLOGY	3 m²	REPORTING	RADIOLOGY	18 m²		CHANGE	DAY SURGERY	4 m²	PROCEDURE 2	DAY SURGERY	23 m²
CONTROL 1	RADIOLOGY	8 m²	STAFF CHANGE	RADIOLOGY	15 m²		CLEAN STORES	DAY SURGERY	19 m²	RECEPTION	DAY SURGERY	19 m²
CONTROL 2	RADIOLOGY	7 m²	STAFF CIRCULATION	RADIOLOGY	23 m²		CLEANER	DAY SURGERY	2 m²	RECOVERY 2	DAY SURGERY	30 m²
CT	RADIOLOGY	40 m <sup>2</sup>	STAFF ROOM	RADIOLOGY	22 m²		CLNR	DAY SURGERY	6 m²	RECOVERY ROOM 1	DAY SURGERY	9 m²
DIS CHANGE	RADIOLOGY	4 m²	ULTRASOUND 1	RADIOLOGY	15 m²		DIS	DAY SURGERY	19 m²	RECOVERY ROOM 2	DAY SURGERY	10 m²
DIS WC	RADIOLOGY	4 m²	ULTRASOUND 2	RADIOLOGY	15 m²		DIS CHANGE	DAY SURGERY	6 m²	STAFF ENTRY	DAY SURGERY	22 m²
EQUIP	RADIOLOGY	7 m²	ULTRASOUND 3	RADIOLOGY	13 m²		F BATH/ CHANGE	DAY SURGERY	16 m²	STAFF ROOM	DAY SURGERY	43 m²
MAMMO	RADIOLOGY	13 m²	X RAY	RADIOLOGY	32 m²		INDUCTION	DAY SURGERY	37 m²	STERILE CIRCULATION	DAY SURGERY	150 m²
MRI	RADIOLOGY	30 m²			409 m²		INDUCTION/ RECOVERY 1	DAY SURGERY	74 m²	STORE	DAY SURGERY	29 m²
							INTERVIEW	DAY SURGERY	9 m²	THEATRE 1	DAY SURGERY	45 m²
							LINEN STORE	DAY SURGERY	12 m²	THEATRE 2	DAY SURGERY	45 m²
							M BATH/ CHANGE	DAY SURGERY	16 m²	WAITING	DAY SURGERY	51 m²
							MANAGER	DAY SURGERY	9 m²	WAITING LOUNGE	DAY SURGERY	20 m²
							NON STERILE CIRCULATION	ON DAY SURGERY	98 m²	WC	DAY SURGERY	10 m²
							NURSES STATION	DAY SURGERY	24 m²			976 m²

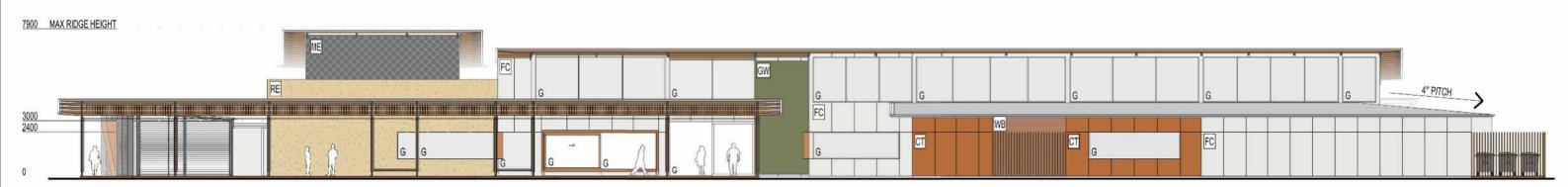






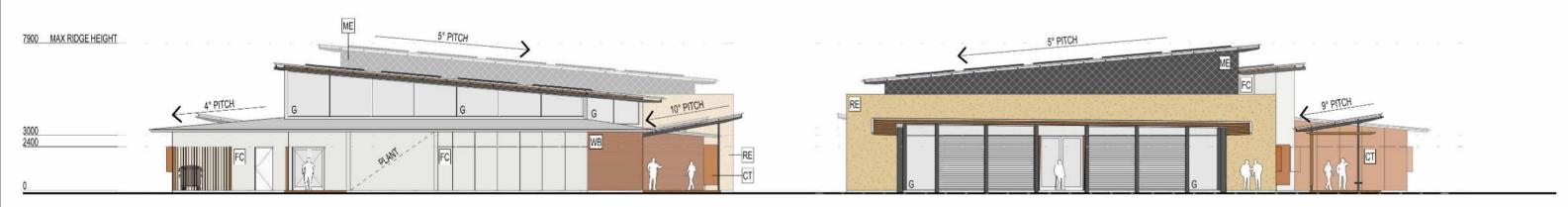
#### NORTH ELEVATION

1:200



#### SOUTH ELEVATION

1:200



#### EAST ELEVATION\_1\_200

1:200

WEST ELEVATION
1:200

WALL MATERIAL KEY

CT CORTEN STEEL SHEETING

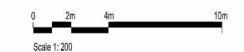
FC COMPRESSED FIBRE CEMENT SHEETING

GW GREEN WALL, MESH

ME PERFORATED MESH

RE RAMMED EARTH WALL

WB HARDWOOD WEATHERBOARDS





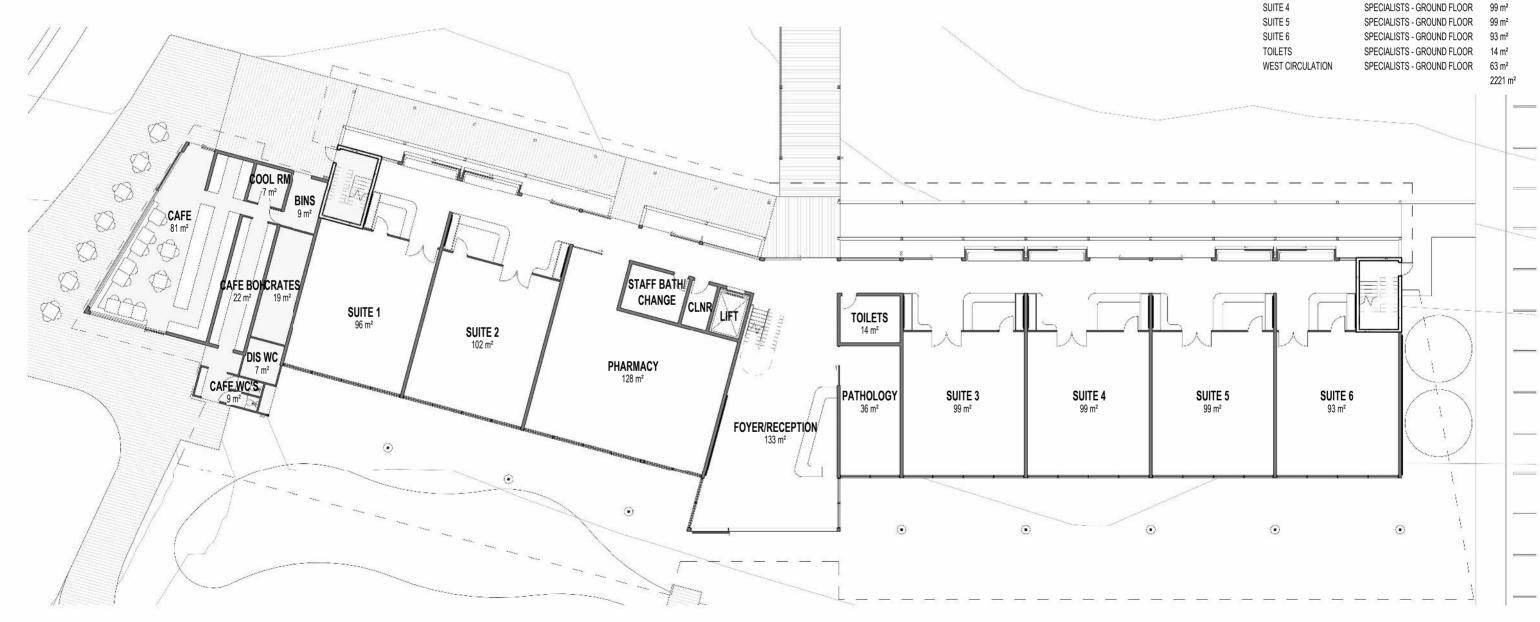


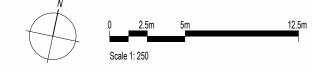
21/09/2023

#### SPECIALIST SUITES - ROOM SCHEDULE SPECIALIST SUITES - ROOM SCHEDULE

CLEANER	SPECIALISTS - FIRST FLOOR	$6 \text{ m}^2$
EAST CIRCULATION	SPECIALISTS - FIRST FLOOR	80 m²
FIRE STAIR EAST	SPECIALISTS - FIRST FLOOR	13 m²
FIRE STAIR WEST	SPECIALISTS - FIRST FLOOR	13 m²
LIFT	SPECIALISTS - FIRST FLOOR	$7 \text{ m}^2$
MEZZANINE	SPECIALISTS - FIRST FLOOR	45 m²
STAFF BATHROOM/ CHANGE	SPECIALISTS - FIRST FLOOR	13 m²
SUITE 7	SPECIALISTS - FIRST FLOOR	96 m²
SUITE 8	SPECIALISTS - FIRST FLOOR	103 m²
SUITE 9	SPECIALISTS - FIRST FLOOR	128 m²
SUITE 10	SPECIALISTS - FIRST FLOOR	100 m <sup>2</sup>
SUITE 11	SPECIALISTS - FIRST FLOOR	100 m <sup>2</sup>
SUITE 12	SPECIALISTS - FIRST FLOOR	99 m²
SUITE 13	SPECIALISTS - FIRST FLOOR	93 m²
TOILETS	SPECIALISTS - FIRST FLOOR	14 m²
WEST CIRCULATION	SPECIALISTS - FIRST FLOOR	63 m²

BINS SPECIALISTS - GROUND FLOOR 9 m<sup>2</sup> CAFE SPECIALISTS - GROUND FLOOR CAFE BOH SPECIALISTS - GROUND FLOOR 22 m<sup>2</sup> CAFE WC'S SPECIALISTS - GROUND FLOOR 9 m² CLEANER 6 m² SPECIALISTS - GROUND FLOOR COOL RM SPECIALISTS - GROUND FLOOR 7 m<sup>2</sup> CRATES SPECIALISTS - GROUND FLOOR 19 m² DIS WC 7 m² SPECIALISTS - GROUND FLOOR EAST CIRCULATION SPECIALISTS - GROUND FLOOR 80 m<sup>2</sup> FIRE STAIR EAST SPECIALISTS - GROUND FLOOR 13 m<sup>2</sup> FIRE STAIR WEST SPECIALISTS - GROUND FLOOR 13 m<sup>2</sup> FOYER/RECEPTION SPECIALISTS - GROUND FLOOR 133 m<sup>2</sup> LIFT SPECIALISTS - GROUND FLOOR  $7 \text{ m}^2$ PATHOLOGY SPECIALISTS - GROUND FLOOR 36 m² PHARMACY SPECIALISTS - GROUND FLOOR 128 m<sup>2</sup> STAFF BATHROOM/ CHANGE SPECIALISTS - GROUND FLOOR 13 m<sup>2</sup> SUITE 1 SPECIALISTS - GROUND FLOOR 96 m² SUITE 2 SPECIALISTS - GROUND FLOOR 102 m<sup>2</sup> SUITE 3 SPECIALISTS - GROUND FLOOR



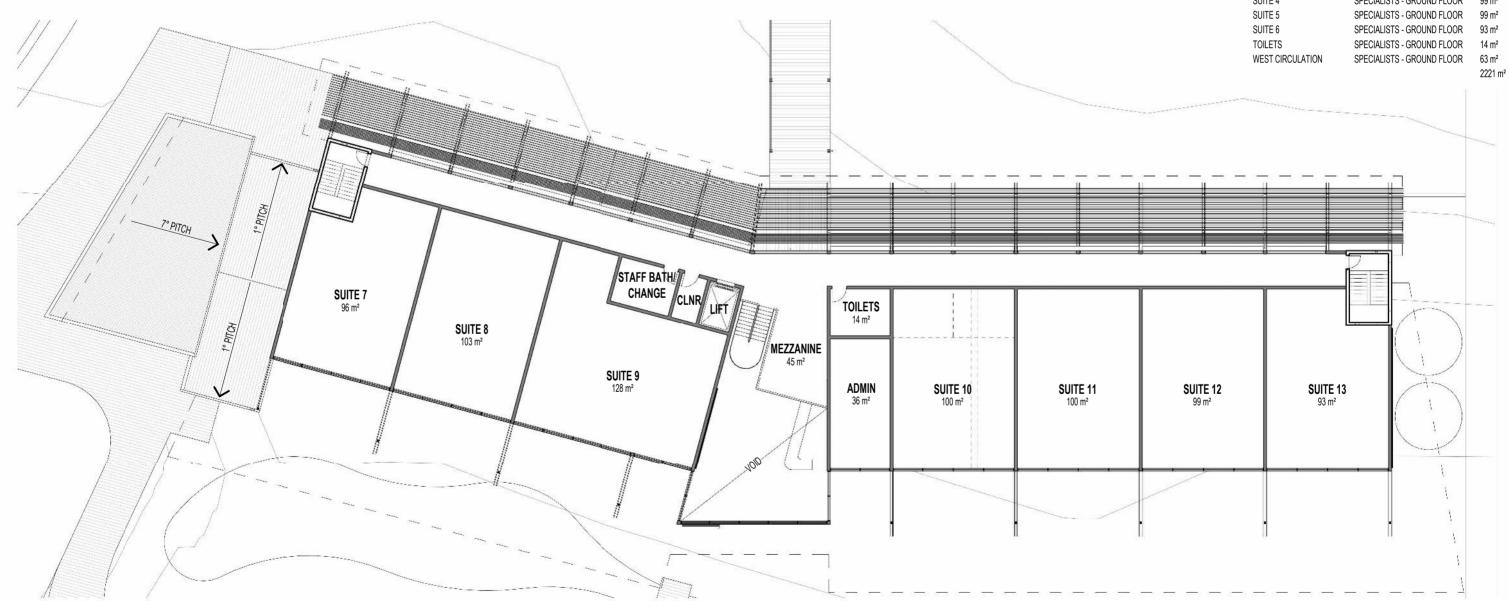




#### SPECIALIST SUITES - ROOM SCHEDULE SPECIALIST SUITES - ROOM SCHEDULE

CLEANER	SPECIALISTS - FIRST FLOOR	$6  m^2$
EAST CIRCULATION	SPECIALISTS - FIRST FLOOR	80 m²
FIRE STAIR EAST	SPECIALISTS - FIRST FLOOR	13 m²
FIRE STAIR WEST	SPECIALISTS - FIRST FLOOR	13 m²
LIFT	SPECIALISTS - FIRST FLOOR	$7  m^2$
MEZZANINE	SPECIALISTS - FIRST FLOOR	45 m²
STAFF BATHROOM/ CHANGE	SPECIALISTS - FIRST FLOOR	13 m²
SUITE 7	SPECIALISTS - FIRST FLOOR	96 m²
SUITE 8	SPECIALISTS - FIRST FLOOR	103 m²
SUITE 9	SPECIALISTS - FIRST FLOOR	128 m²
SUITE 10	SPECIALISTS - FIRST FLOOR	100 m²
SUITE 11	SPECIALISTS - FIRST FLOOR	100 m <sup>2</sup>
SUITE 12	SPECIALISTS - FIRST FLOOR	99 m²
SUITE 13	SPECIALISTS - FIRST FLOOR	93 m²
TOILETS	SPECIALISTS - FIRST FLOOR	14 m²
WEST CIRCULATION	SPECIALISTS - FIRST FLOOR	63 m²

BINS SPECIALISTS - GROUND FLOOR 9 m<sup>2</sup> CAFE SPECIALISTS - GROUND FLOOR CAFE BOH SPECIALISTS - GROUND FLOOR CAFE WC'S 9 m² SPECIALISTS - GROUND FLOOR CLEANER SPECIALISTS - GROUND FLOOR 6 m² COOL RM SPECIALISTS - GROUND FLOOR 7 m² CRATES 19 m² SPECIALISTS - GROUND FLOOR DIS WC 7 m² SPECIALISTS - GROUND FLOOR EAST CIRCULATION SPECIALISTS - GROUND FLOOR 80 m<sup>2</sup> FIRE STAIR EAST SPECIALISTS - GROUND FLOOR 13 m<sup>2</sup> FIRE STAIR WEST SPECIALISTS - GROUND FLOOR 13 m<sup>2</sup> FOYER/RECEPTION SPECIALISTS - GROUND FLOOR 133 m<sup>2</sup> LIFT SPECIALISTS - GROUND FLOOR 7 m<sup>2</sup> PATHOLOGY SPECIALISTS - GROUND FLOOR 36 m² PHARMACY SPECIALISTS - GROUND FLOOR 128 m<sup>2</sup> STAFF BATHROOM/ CHANGE SPECIALISTS - GROUND FLOOR 13 m<sup>2</sup> SUITE 1 96 m² SPECIALISTS - GROUND FLOOR SUITE 2 SPECIALISTS - GROUND FLOOR 102 m<sup>2</sup> SUITE 3 SPECIALISTS - GROUND FLOOR 99 m<sup>2</sup> SUITE 4 SPECIALISTS - GROUND FLOOR 99 m<sup>2</sup>





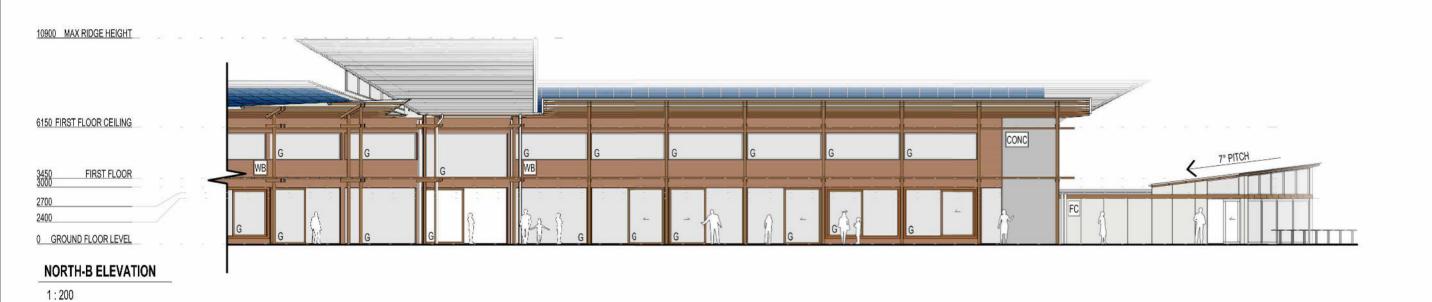






#### NORTH-A ELEVATION

1:200

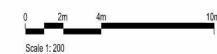


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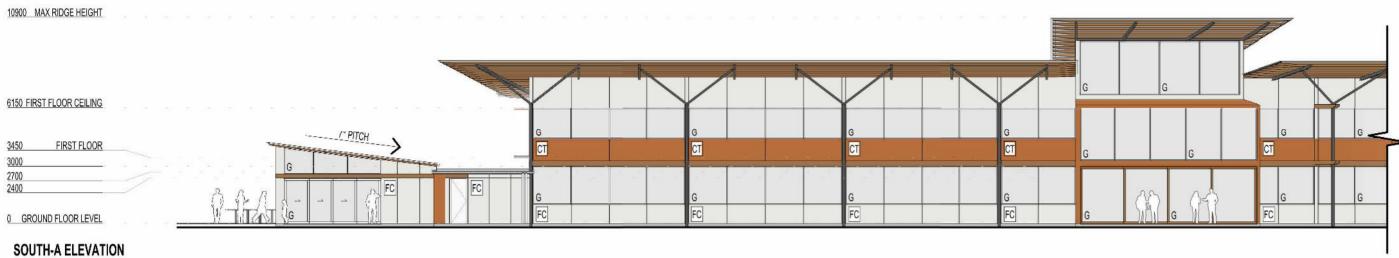
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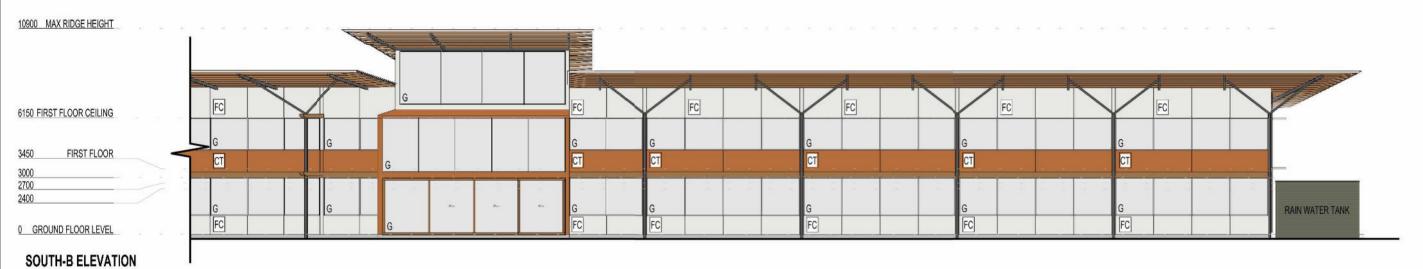
ME PERFORATED MESH RE RAMMED EARTH WALL HARDWOOD WEATHERBOARDS







1:200



1:200

#### WALL MATERIAL KEY

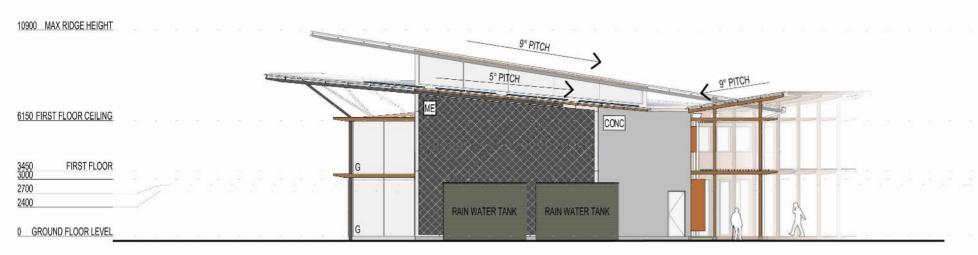
OFF FORM CONCRETE CONC CORTEN STEEL SHEETING CT

FC COMPRESSED FIBRE CEMENT SHEETING

GW GREEN WALL, MESH ME PERFORATED MESH

RE RAMMED EARTH WALL HARDWOOD WEATHERBOARDS





#### **EAST ELEVATION**

1:200



#### **WEST ELEVATION**

1:200

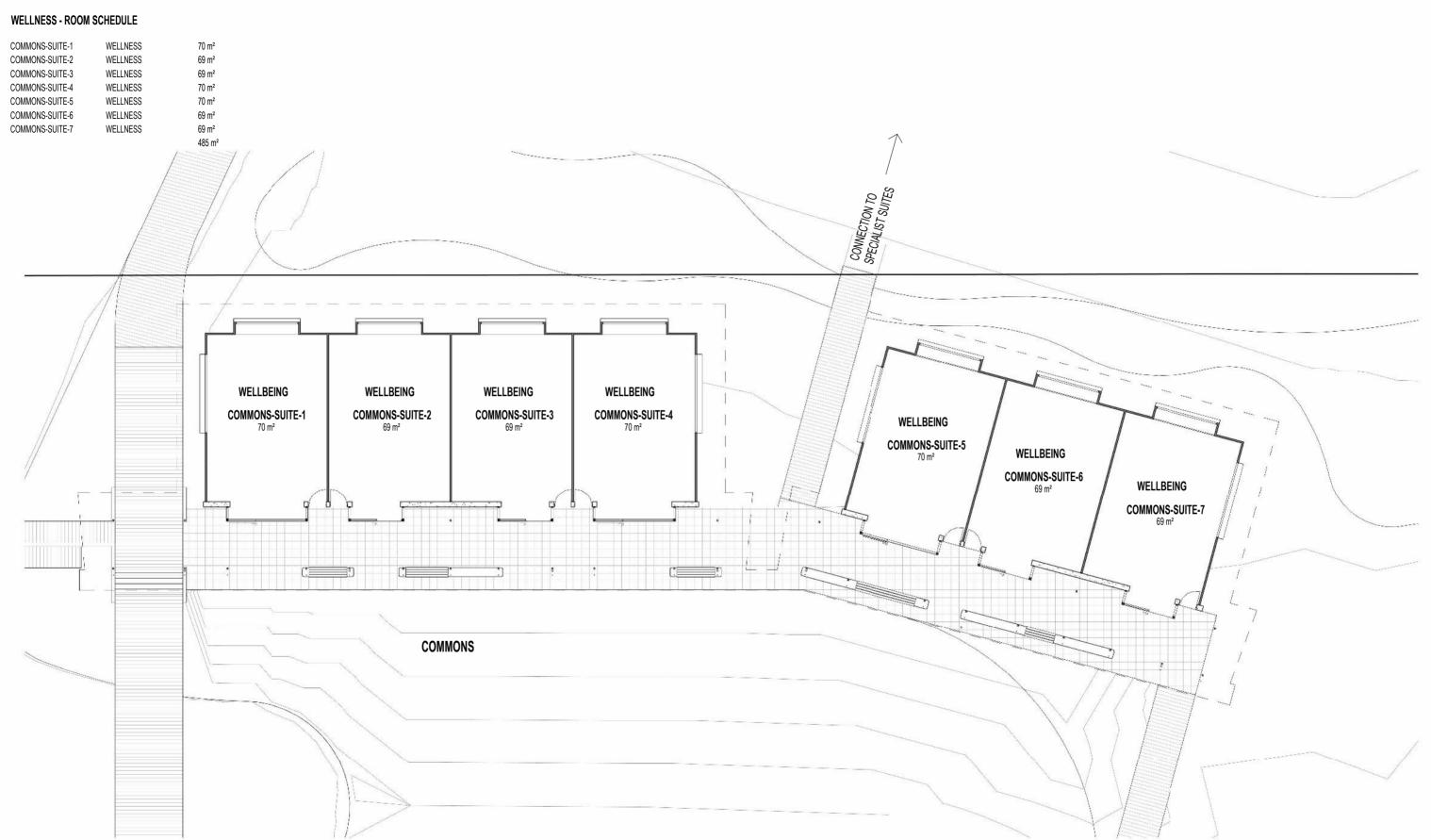
#### WALL MATERIAL KEY

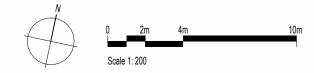
CONC OFF FORM CONCRETE
CT CORTEN STEEL SHEETING
FC COMPRESSED FIBRE CEMENT SHEETING
GW GREEN WALL, MESH

ME PERFORATED MESH
RE RAMMED EARTH WALL
WB HARDWOOD WEATHERBOARDS



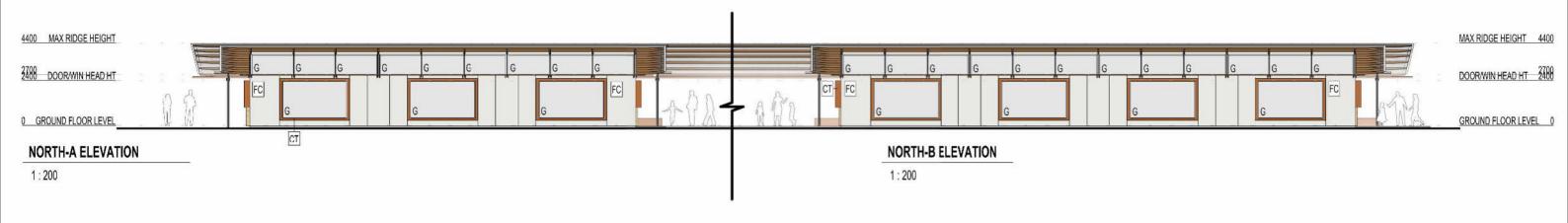
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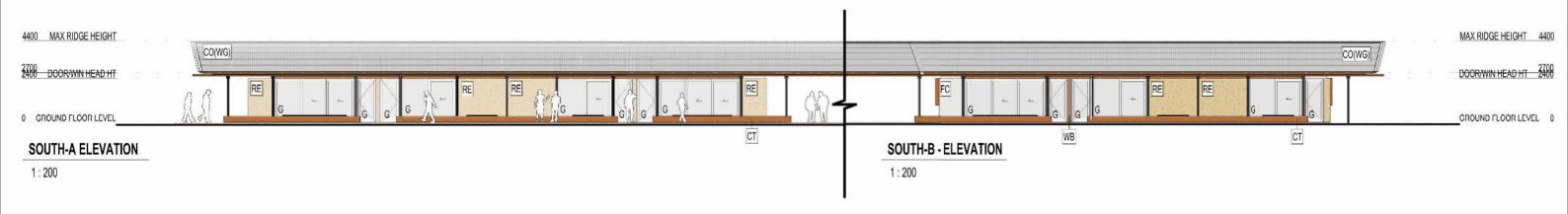














#### WALL MATERIAL KEY

CT CORTEN STEEL PANELS

FC COMPRESSED FIBRE CEMENT SHEETING

PB PLASTERBOARD LINING, PAINT FINISH AS SPEC.

RE RAMMED EARTH WALL

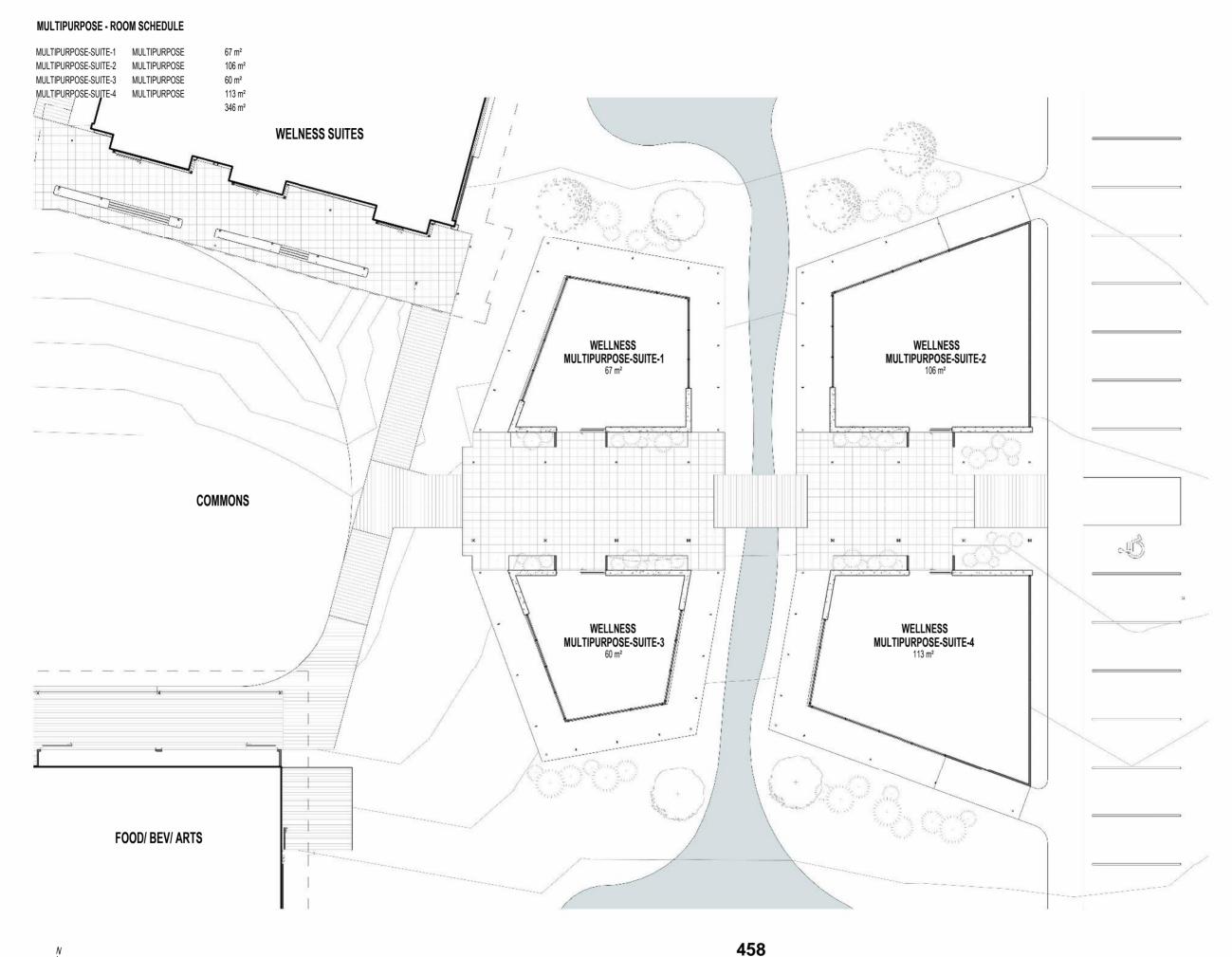
WB HARDWOOD WEATHERBOARDS

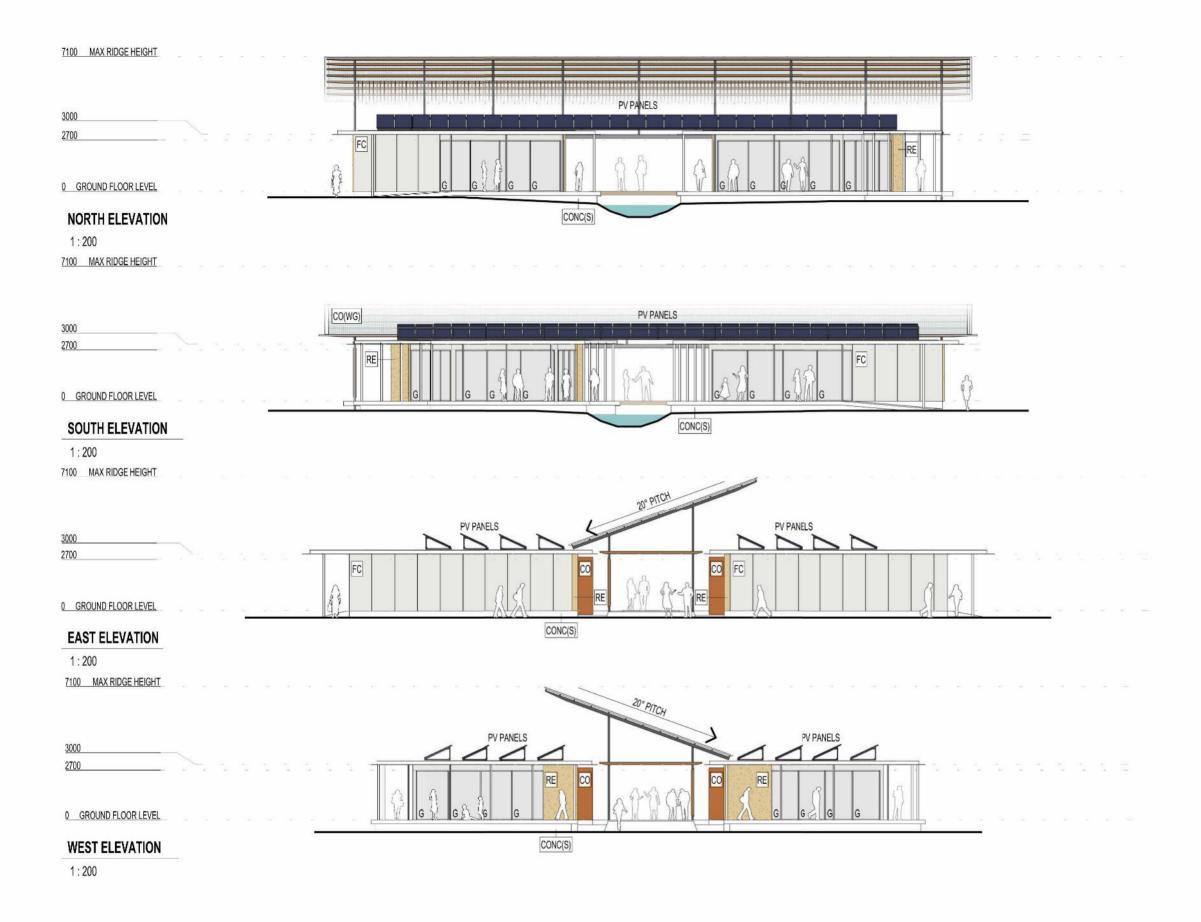






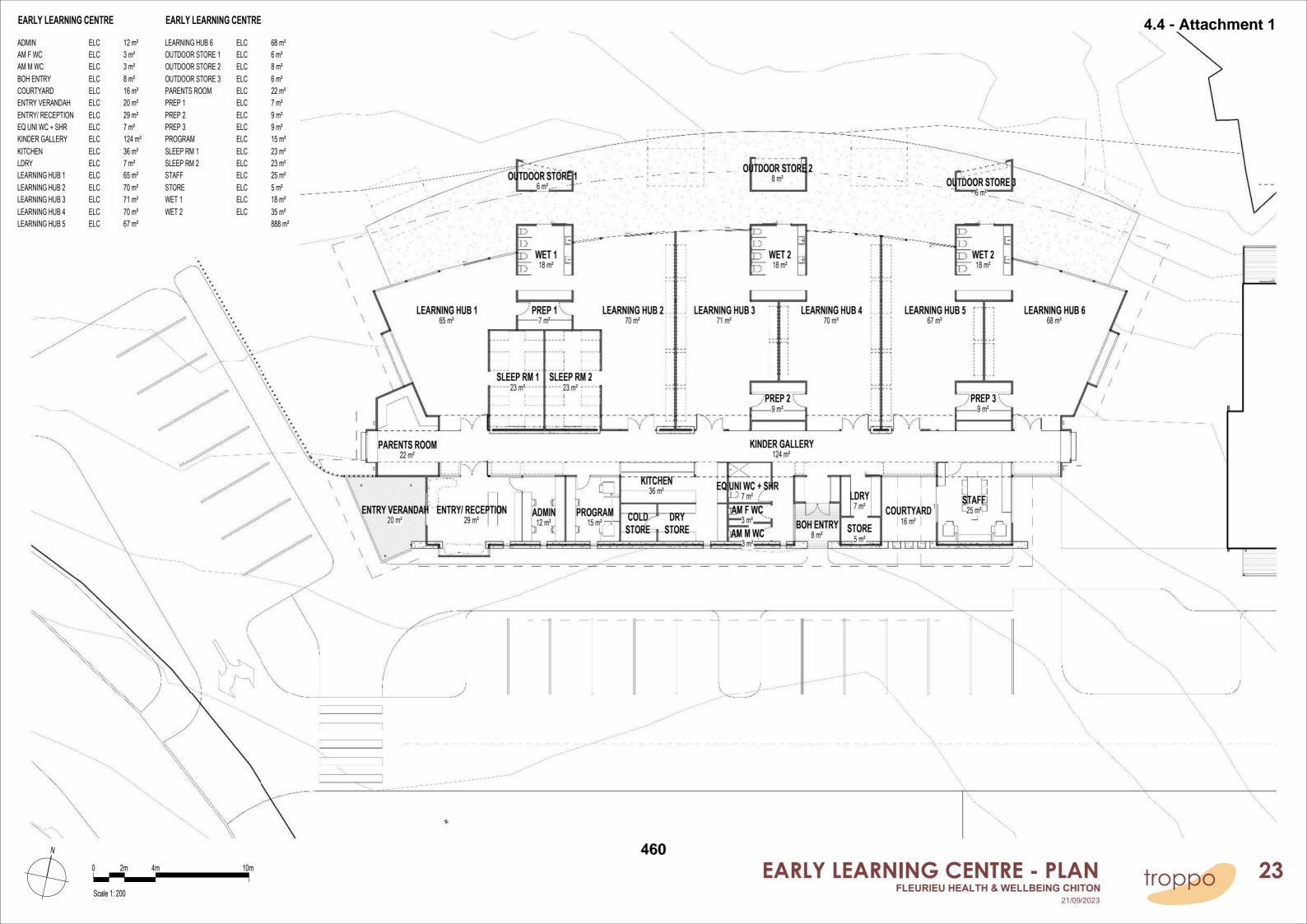


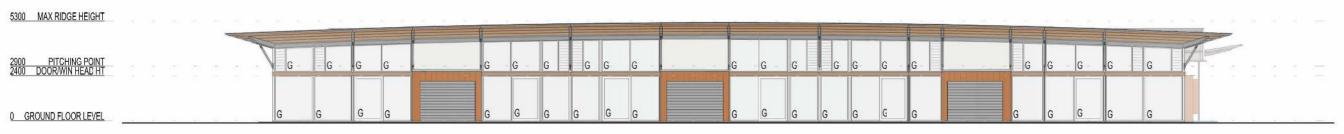




#### WALL MATERIAL KEY

CO CORTEN STEEL PANELS
CONC(S) CONCRETE SEALED FINISH
FC COMPRESSED FIBRE CEMENT SHEETING
RE RAMMED EARTH WALL



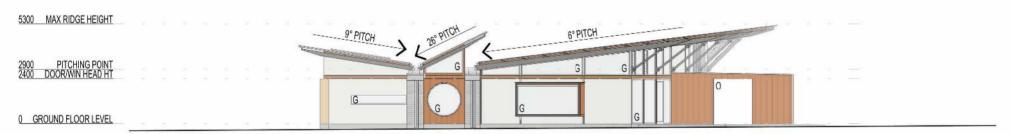


#### **NORTH ELEVATION**



461

#### **SOUTH ELEVATION**

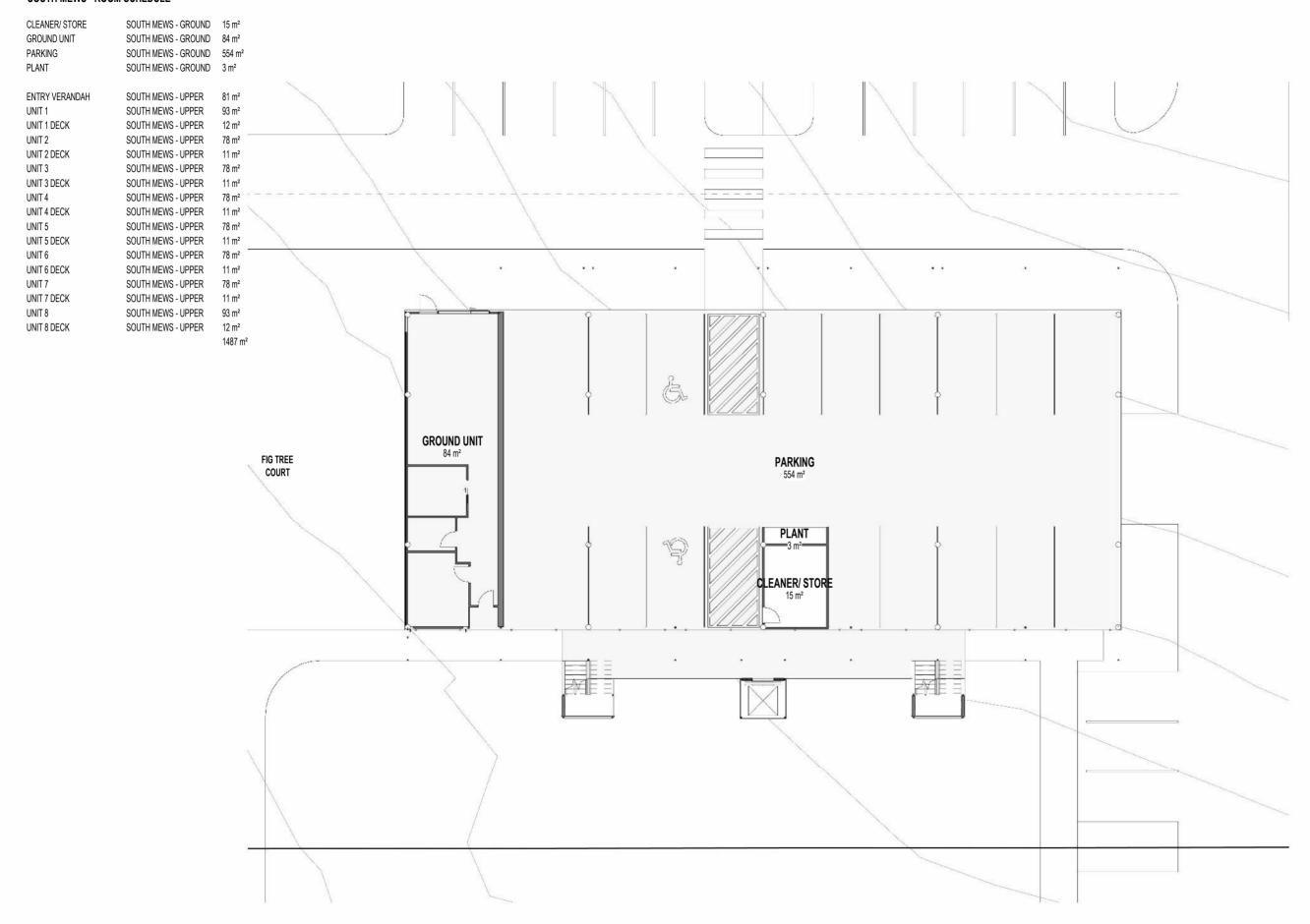


#### **EAST ELEVATION**



#### **WEST ELEVATION**

#### SOUTH MEWS - ROOM SCHEDULE

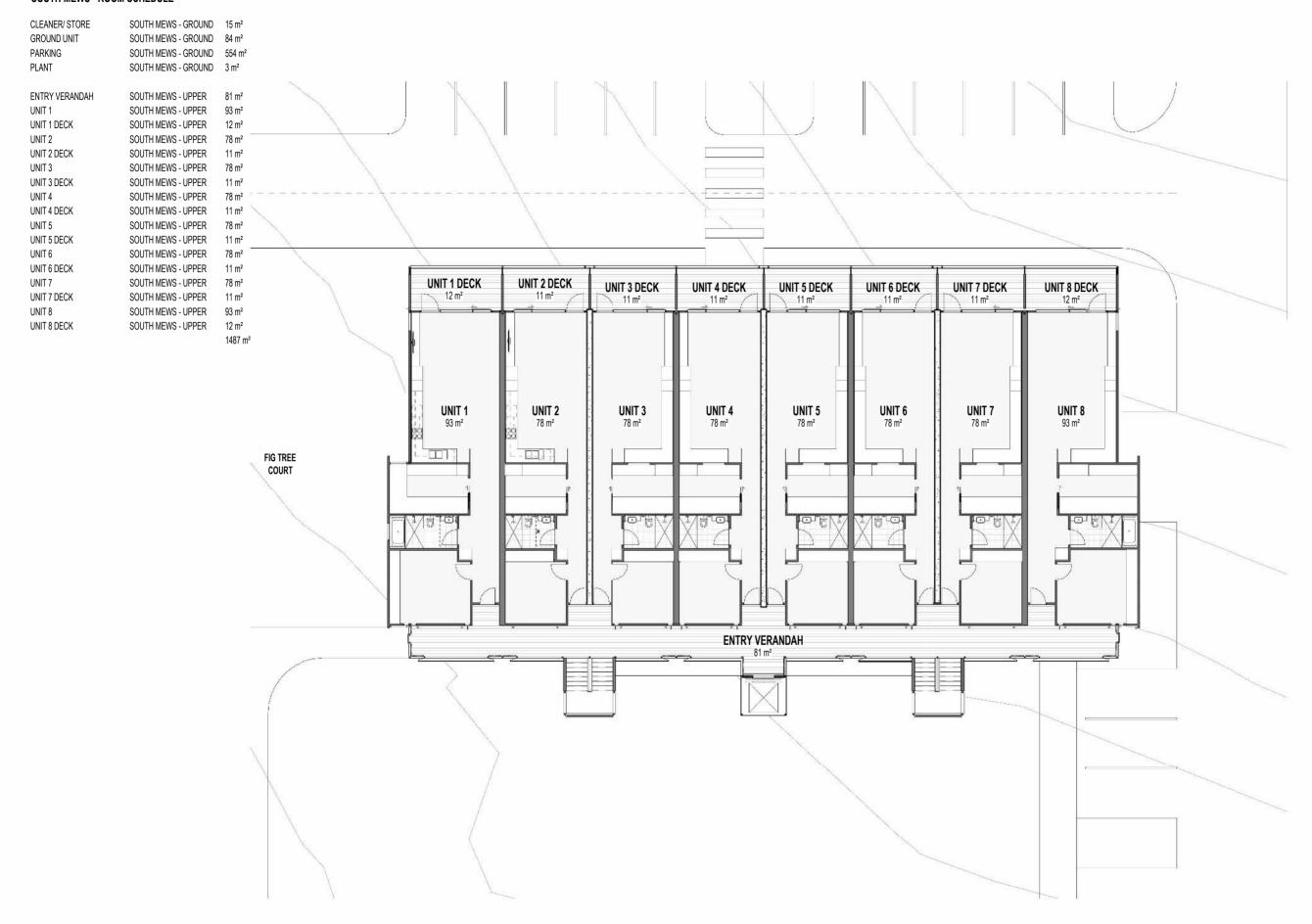








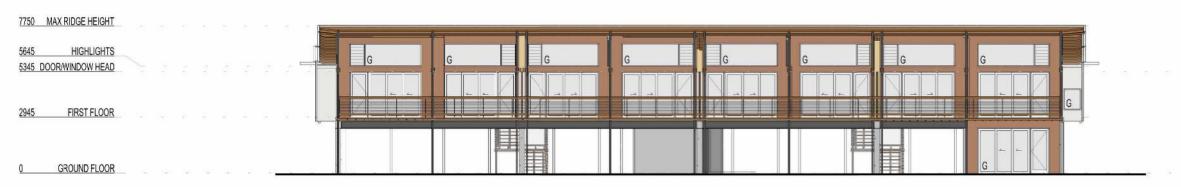
#### SOUTH MEWS - ROOM SCHEDULE



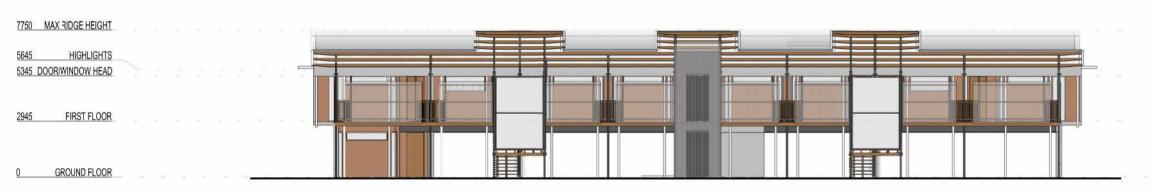








#### **NORTH ELEVATION**



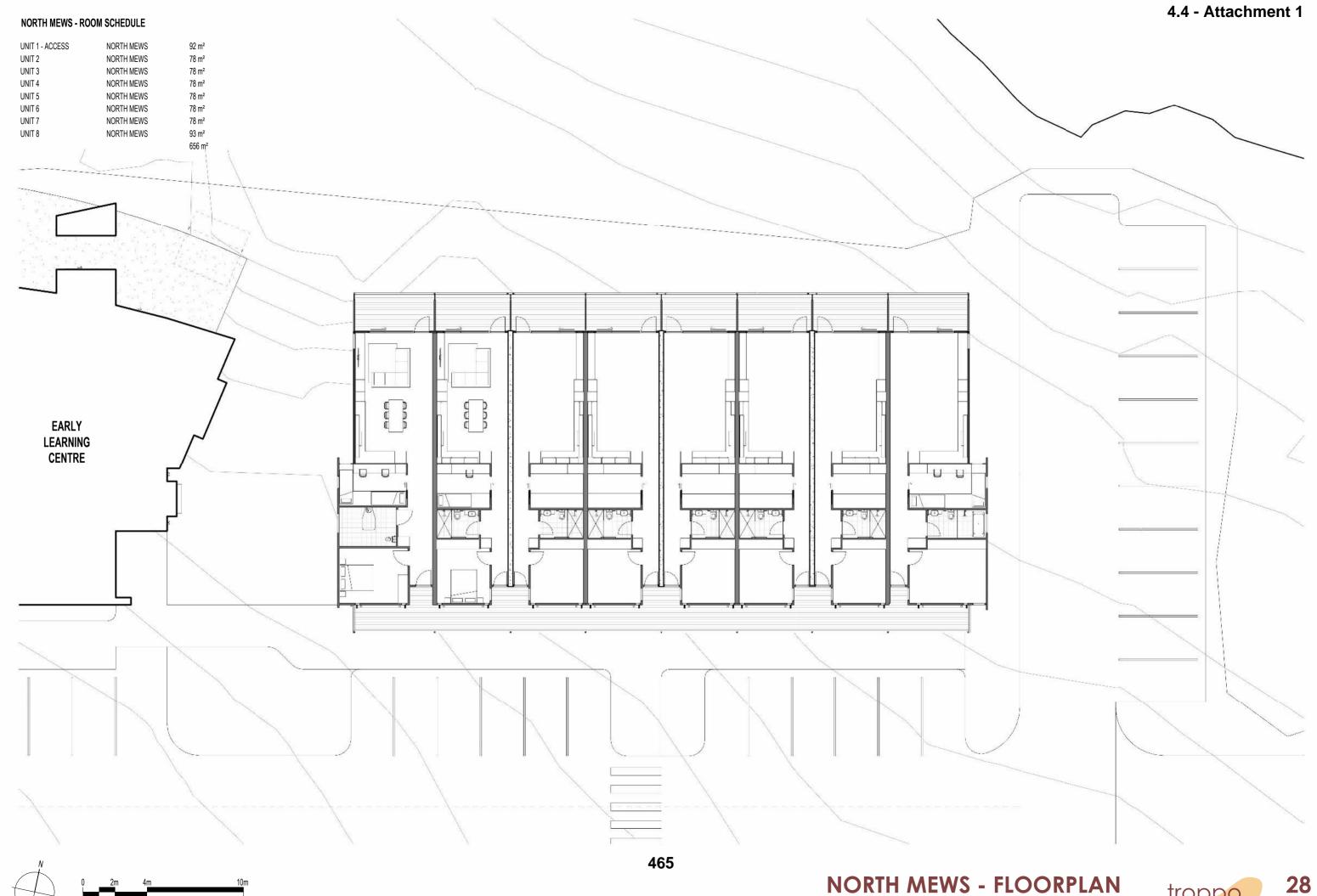
#### **SOUTH ELEVATION**

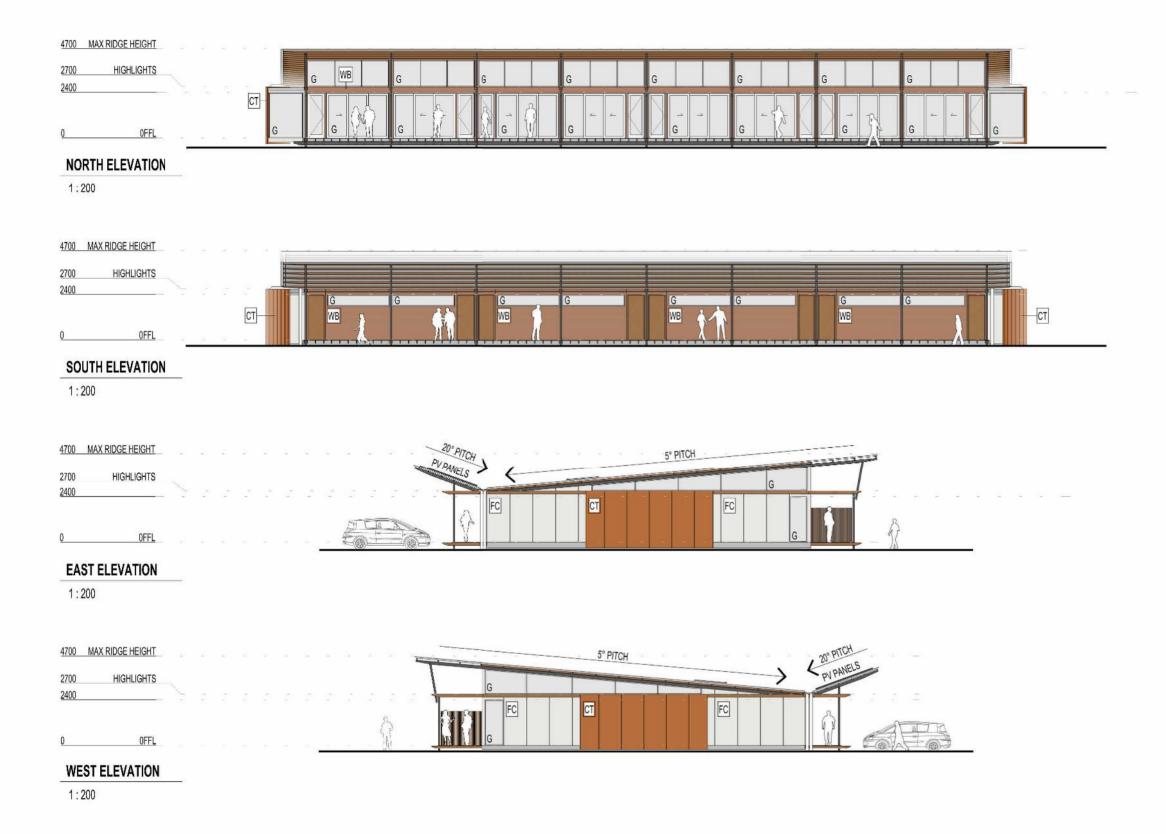


#### **EAST ELEVATION**



#### **WEST ELEVATION**



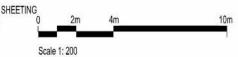


WALL MATERIAL KEY

CORTEN STEEL SHEETING

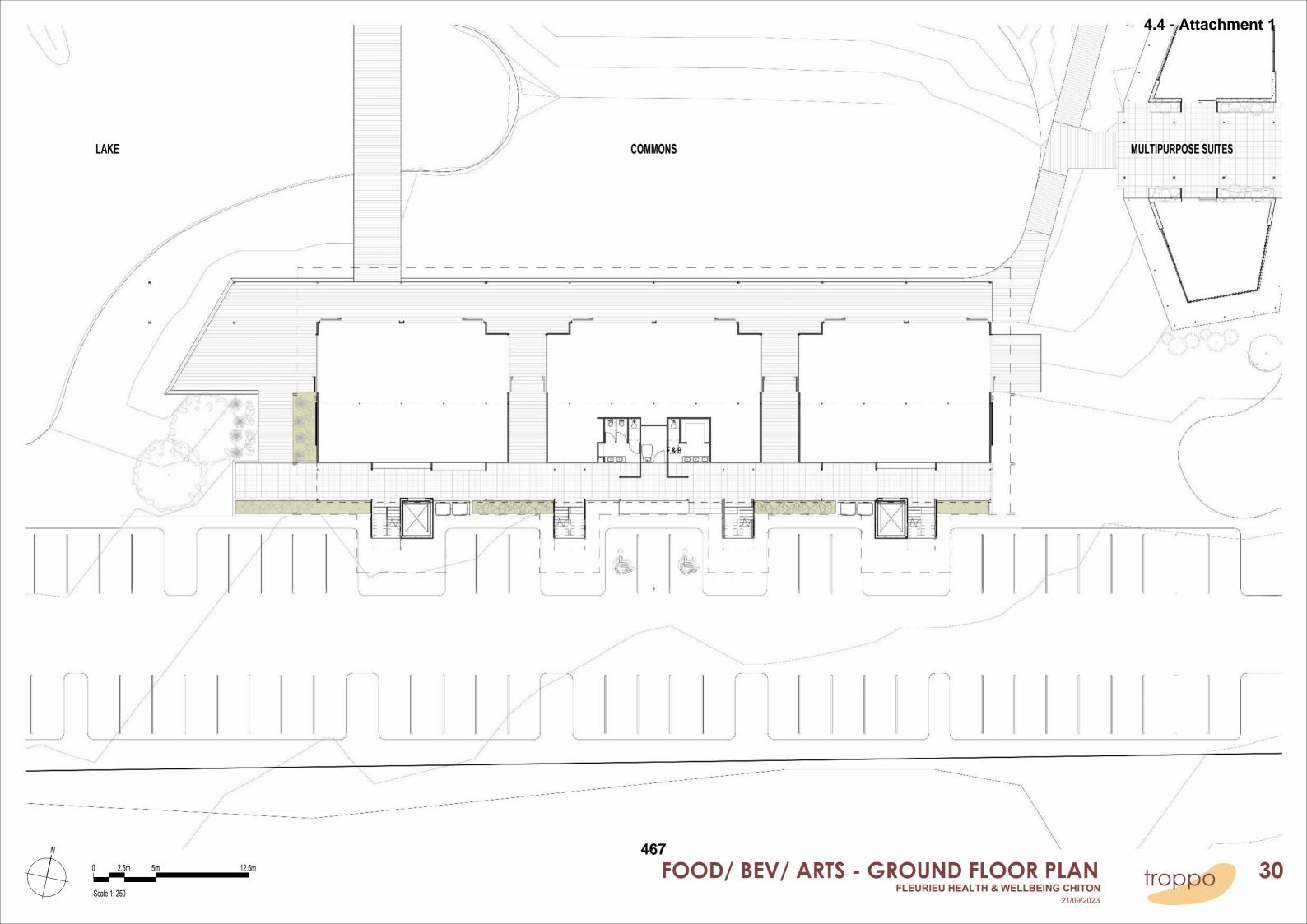
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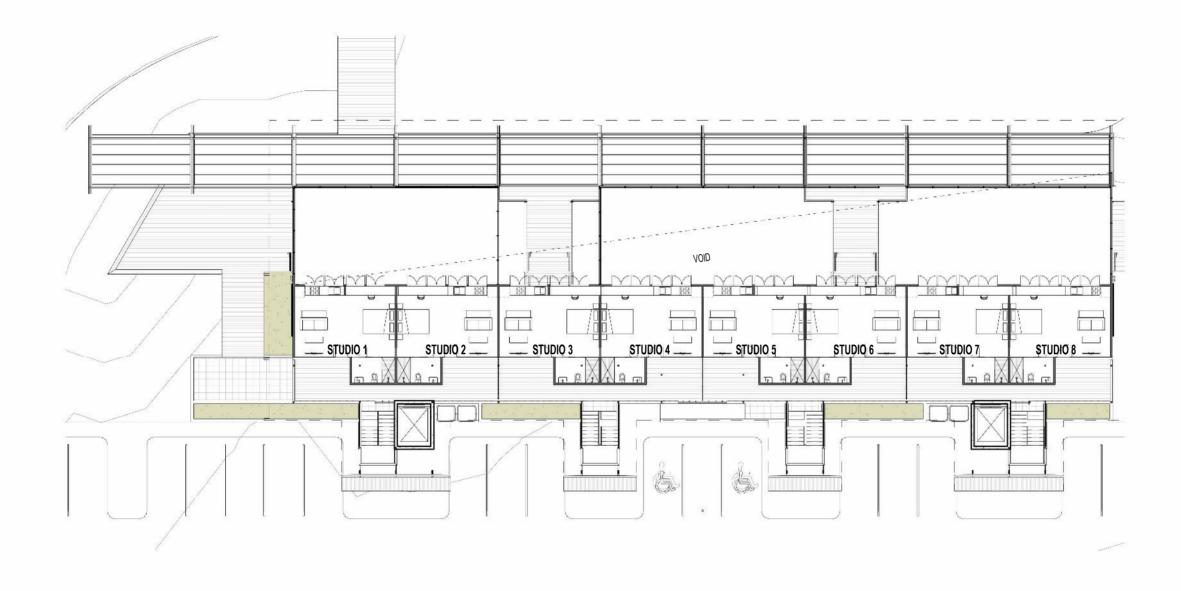
WB HARDWOOD WEATHERBOARD











468







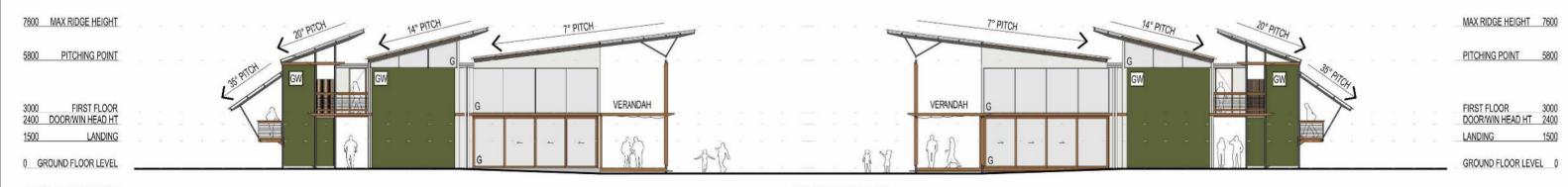
#### NORTH ELEVATION

1:200



#### **SOUTH ELEVATION**

1:200



469

EAST ELEVATION WEST ELEVATION

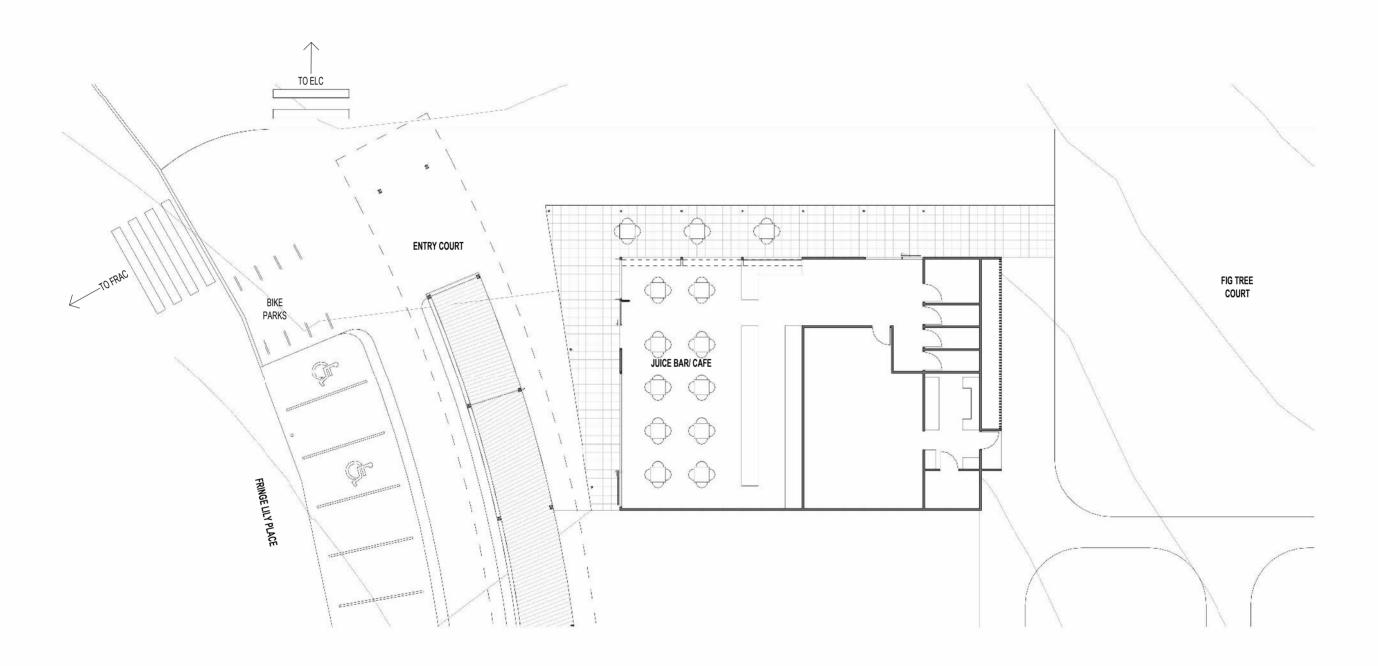
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#### WALL MATERIAL KEY

FC COMPRESSED FIBRE CEMENT SHEETING

GW GREEN WALL MESH

Scale 1: 200



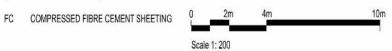






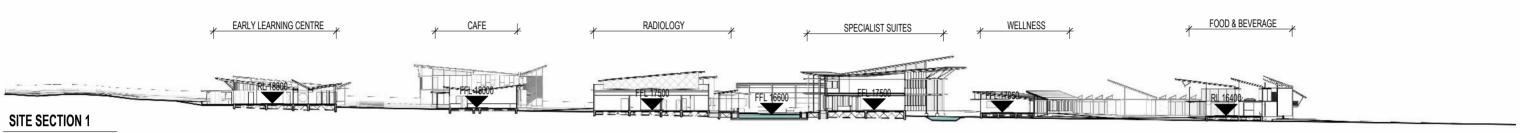


WALL MATERIAL KEY

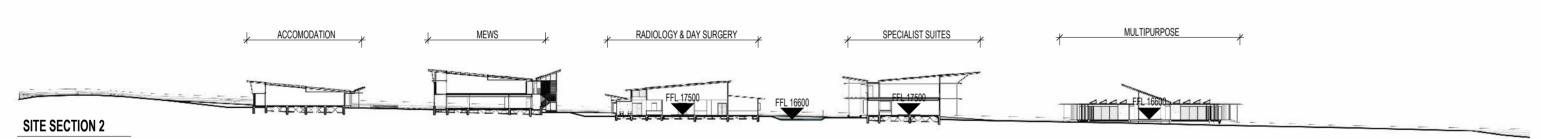




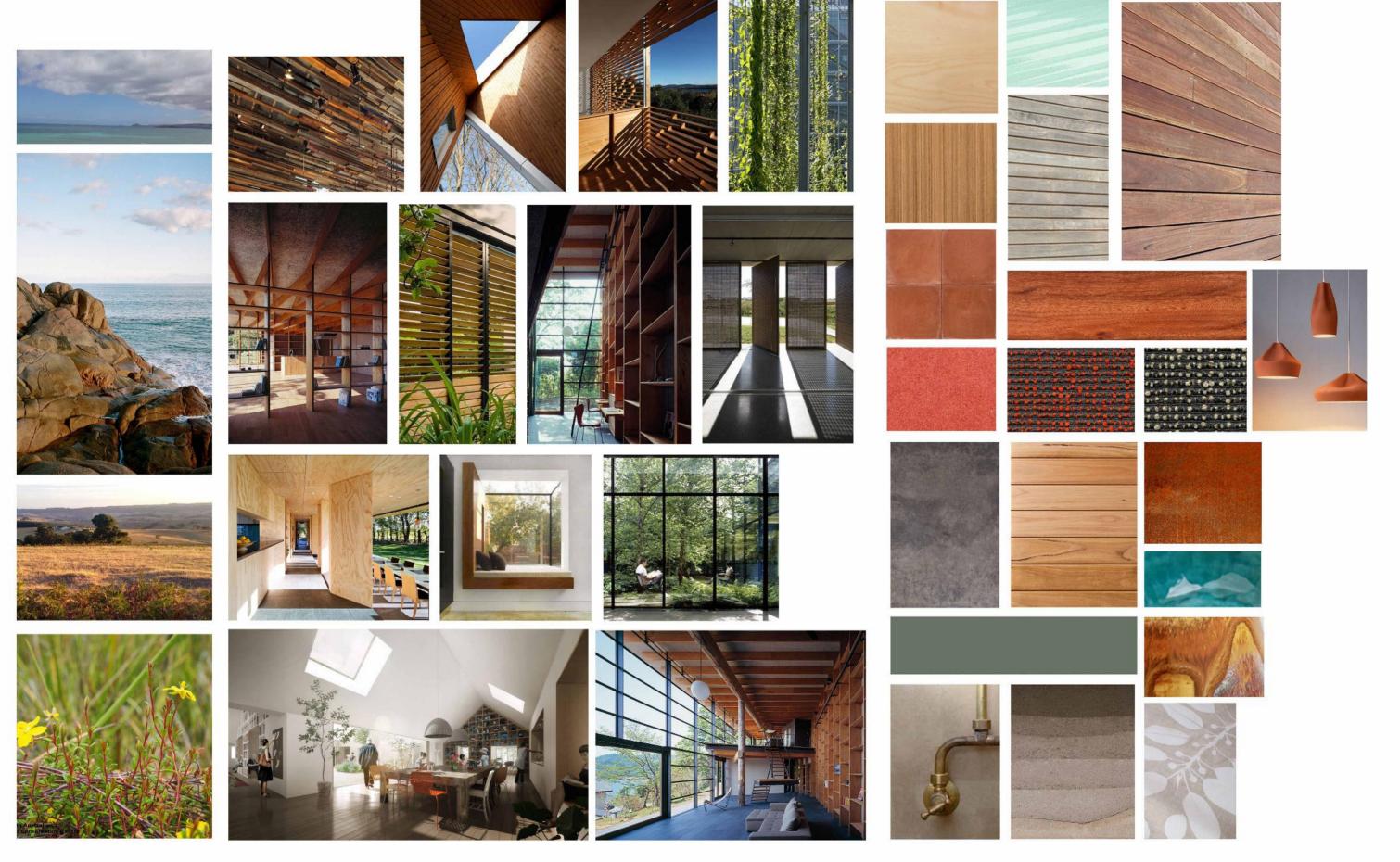




1:750



1:750







**CHILDCARE AERIAL OVERVIEW** 



CHILDCARE ENTRY COURT



CHILDCARE KISS AND DROP



3D VIEWS - CHILDCARE FLEURIEU HEALTH & WELLBEING CHITON 21/09/2023

CHILDCARE ENTRY







**JAPANESE GARDEN ENTRY** 



DAY SURGERY WAITING ROOM



LINKWAY DECK ENTRY



**DAY SURGERY RECOVERY** 



**VIEW ACROSS WATER** 



FOYER/ RECEPTION VIEW SOUTH



**JAPANESE GARDEN ENTRY** 



**GROUND FLOOR WAITING AREA** 



**WELLNESS SUITES - NORTH** 



**MULTIPURPOSE SUITES** 



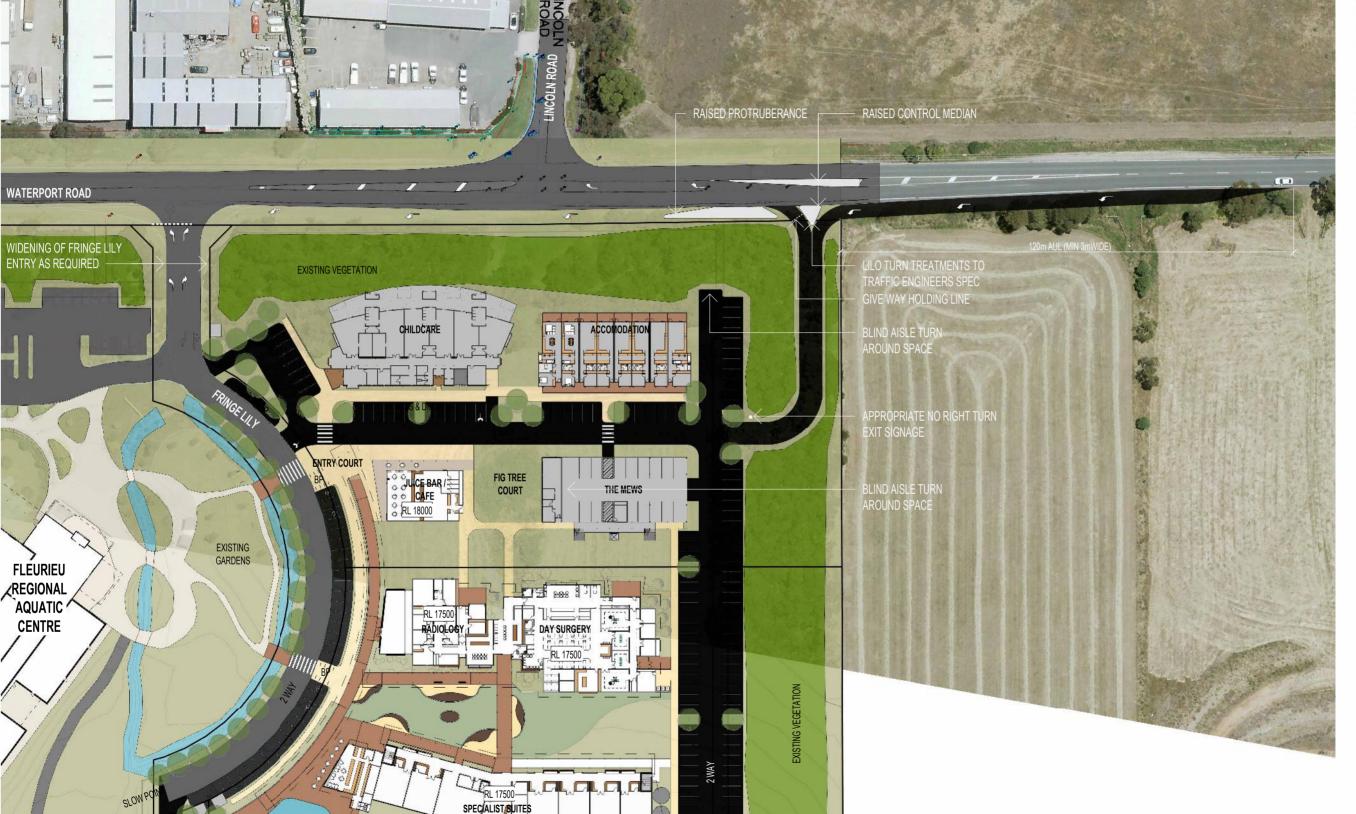
**WELLNESS SUITES - SOUTH/ COMMONS** 



MULTIPURPOSE COURT/ DRY CREEK

## 4.4 - Attachment 1 AREA SCHEDULE

DAY SURGERY 976 m² ELC 888 m² F&B 1163 m² GALLERY 132 m² JUICE BAR/ CAFE 246 m² MULTIPURPOSE 346 m<sup>2</sup> NORTH MEWS 656 m<sup>2</sup> RADIOLOGY 409 m<sup>2</sup> SOUTH MEWS - GROUND 657 m<sup>2</sup> SOUTH MEWS - UPPER 829 m<sup>2</sup> SPECIALISTS - FIRST FLOOR 973 m<sup>2</sup> SPECIALISTS - GROUND FLOOR 1249 m<sup>2</sup> WELLNESS 485 m² TOTAL 9009 m<sup>2</sup>

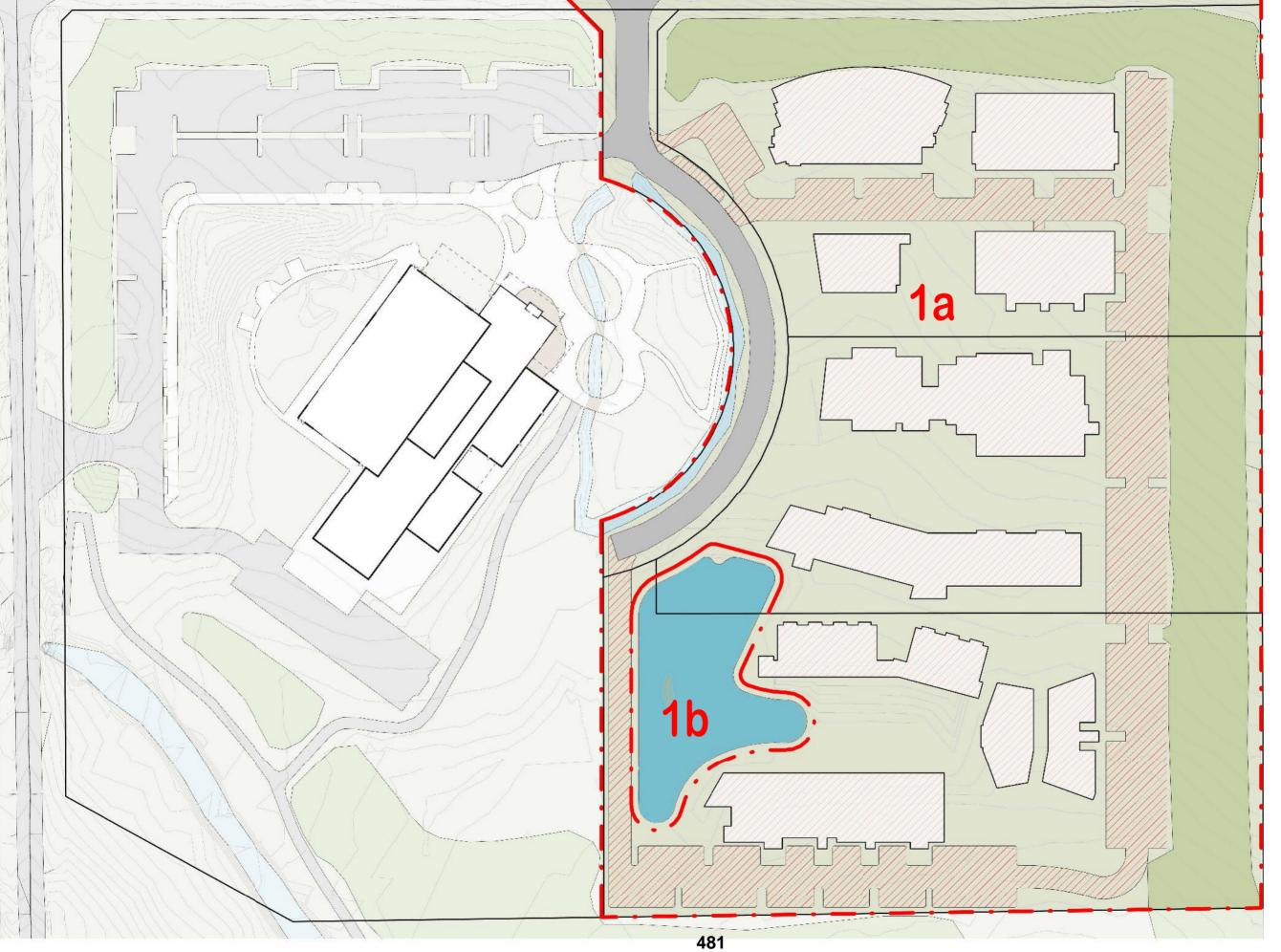


**EPHEMERAL** 

Scale 1: 1000

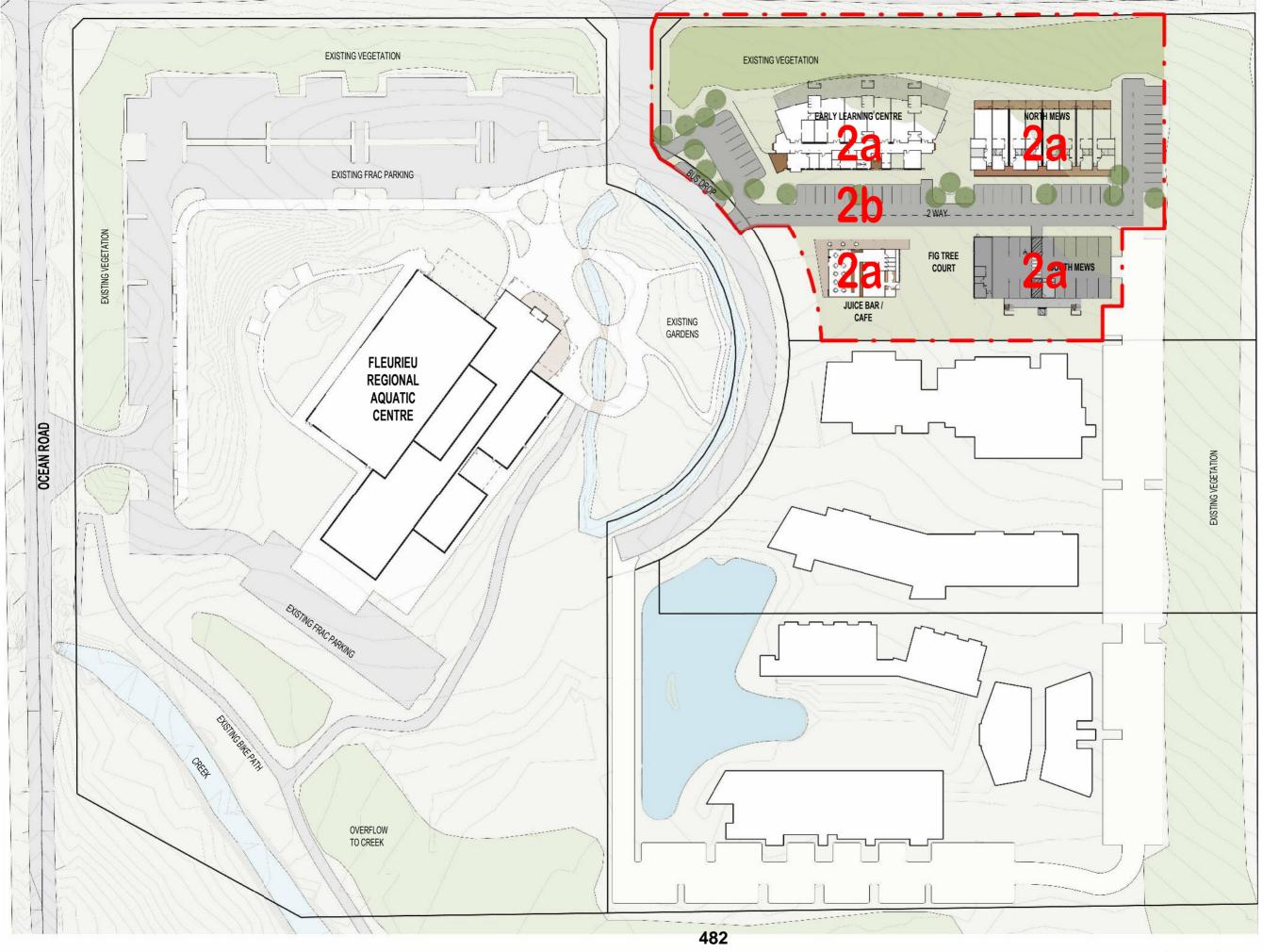
BULK EARTH WORKS

- 1a ESTABLISHMENT OF BUILDING PADS ROADWAY BASE PREP DEEP TRENCHING FOR SITE SERVICES
- 1b · LAKE ASSOCIATED CIVIL WORKS



# 

2b • INTERNAL ROADWAYS & PARKING



## EXISTING VEGETATION EXISTING VEGETATION EARLY LEARNING CENTRE EXISTING FRAC PARKING O GUICE BARI/ FIG TREE SOUTH MEWS COURT **EXISTING** GARDENS **FLEURIEU REGIONAL AQUATIC** CENTRE **OCEAN ROAD EXISTING VEGETATION** EPHEMERAL DRY CREEK WELLNES\$ SUITES WELLNESS SUITES LAKE MULTIPURPOSE SUITES FOOD, BEV. & ART OVERFLOW TO CREEK 483

### 4.4 Attachment 1

SOUTH SITE

- 3a BUILDING CONSTRUCTED IN SOUTHERN LOT

  - WELLNESS SUITESMULTIPURPOSE SUITES
  - FOOD & BEVERAGE
  - COMMONS
- ASSOCIATED WALKWAYS/ LANDSCAPING
- 3b SOUTH SITE INTERNAL ROADWAYS
  - LOOP ROAD & PARKING

## **EXISTING VEGETATION** EXISTING VEGETATION EARLY LEARNING CENTRE EXISTING FRAC PARKING - 2 WAY ENTRY COURT Suice Bart FIG TREE COURT **EXISTING** GARDENS **FLEURIEU** DAYSURGERY **REGIONAL AQUATIC** CENTRE **OCEAN ROAD** # **EXISTING VEGETATION** SPECIALIST SUITES EPHEMERAL WELLNES\$ SUITES DRY CREEK LAKE COMMONS MULTIPURPOSE SUITES FOOD, BEV. & ART OVERFLOW TO CREEK 484

## 4.4 Attachment 1

CENTRAL SITE

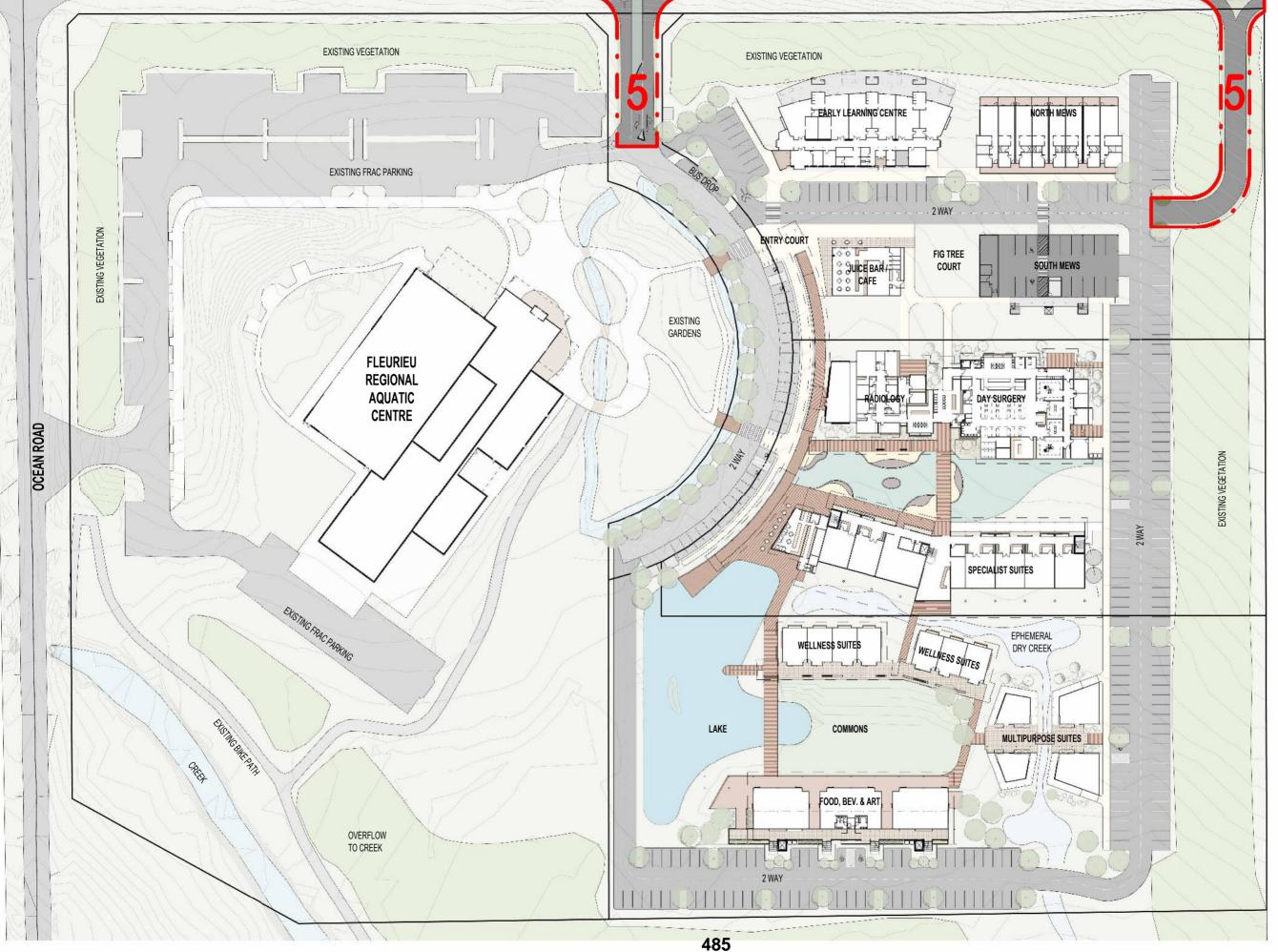
- CONSTRUCTION OF CENTRAL BUILDINGS
   SPECIALIST SUITES
   RADIOLOGY

  - DAY SURGERYASSOCIATED WALKWAYS/ LANDSCAPING
- 4b · CENTRAL SITE CIVIL WORKS
  - CENTRAL LAKE/ GARDEN
     CURVED LINKWAY DECK
  - FRINGE LILY PARKING

## 4.4. Attachment 1

DETAILED CIVIL WORKS

- WATERPORT ROAD IN/OUT ACCESS
- WIDENING OF FRINGE LILY ENTRY



#### **Tom Gregory**

**Subject:** RE: Fleurieu Health and Wellbeing

Attachments: Waterport\_Ocean Road Markup.pdf; 222031\_SIDRA Fleurieu Health Movement

Summaries - BD Update.docx; 222031\_TRAFFIC CONTROL (LINCOLN

WATERPORT).pdf

From: Tom Gregory

Sent: Friday, September 1, 2023 1:39 PM

To: Matt Atkinson < Matt. Atkinson@alexandrina.sa.gov.au>

Cc: Steve Wright <Steven.Wright@SFleurieuCHWBprecinct.com.au>; Jacqui clarke <sw2752@gmail.com>; Cameron

Gibbons < Cameron. Gibbons@alexandrina.sa.gov.au>; Ben Green < bengreen@bengreen.com.au>

Subject: RE: Fleurieu Health and Wellbeing

Hi Matt

Further to our phone 'meeting' last week and the below summary, we have had Tonkin's undertake some further work. Tonkin's have provided advice on:

- 1. Redistribution of vehicles excluding the FRAC link to Ocean Road.
- 2. A potential solution in response to any concerns which might arise with respect to U-Turns being performed at Lincoln Road as a result of the proposed left-out ("LO") of the secondary access point. Indicative illustrations provided. There is nothing in the proposal which would preclude such a future solution if required and authorised/agreed in future by the relevant authorities.
- 3. The best location for a potential roundabout in the vicinity of the site (IF one is required at some point in the future), including indicative illustrations demonstrating suitable land allocation. Again, there is nothing in the proposal which would preclude such a future solution if required and authorised/agreed in future by the relevant authorities.

I provide the following summary of the findings.

#### 1. Redistribution

Please see the below and attached dealing with the results of the redistribution excluding the Ocean Road access. The modelling configuration is based on the relocated left-in/left-out access to the east, as per attached traffic control sketch.

The key take-away points made by Tonkins from the modelling (as per attached file):

- Waterport/Ocean
  - Level of Service ("LOS") increases from C to D for the right turn movement on Ocean Rd in the AM.
     (Tonkins) don't see this as an issue. Queues are not even 5 vehicles long. Delays only just reach above 30 seconds.
- Fringe-Lily
  - LOS increases from C to D for the right turn movement on Fringe-Lily in the AM. Also (Tonkins) don't see any issues with this. Queues are not even 3 vehicles long. Delays still under 30 seconds, so plenty of wiggle room before the 35 seconds delay of LOS E.
- Lincoln/Out
  - Minimal change.

486

Overall, these results look promising, these LOS results are within the allowable ranges of delay in accordance with DIT master spec.

#### 2. Potential U-Turn Solutions - Lincoln Road

Tonkins provided the below comments/sketches for the Waterport/Lincoln Road intersection. Pdf version also attached. These works are simply put forward to demonstrate there is an option to deal with this issue if it is seen as necessary at some point in future and if agreement is reached between all relevant authorities to implement the works.



#### 3. Roundabout Location

To avoid any doubt I'll make it clear from the outset that it is the position of the applicant that there is no requirement for a roundabout and the construction of a roundabout does not form part of this proposal and there is no offer (present or future) by my client/the applicant to be involved in any way in the construction/provision/funding of a roundabout. The purpose of providing information about this potential future option (which, indeed, may never be required) is simply to demonstrate that there is nothing in the proposal which would preclude such a future solution if the relevant authorities wish to implement it in future.

Tonkins provided the below sketch for a roundabout at Waterport/Ocean. Tonkins note that the dimensions are referenced against the Austroads Guide to Road Design Part 4B for a B-Double vehicle.

Tonkins also provided the following comments regarding the site of the potential future roundabout:

Ocean Road would be defined in a road hierarchy as a collector road, which has greater daily and peak traffic periods than Fringe Lily (a local road) is anticipated to receive.

As opposed to Ocean Road, Fringe Lily Place will receive peaks around 150-170veh/hr in the AM and PM from the development, and we foresee there will be a drop off in vehicle volumes outside of these periods. This hasn't been the case for Ocean Road adjacent to Waterport Road, which shows consistent 200-300 hourly traffic volumes, between 7am and 6pm (data collected in Dec 22). In accordance with the Safe System Principles, greater volumes mean

greater exposure to crash risk, and the risk of right angles crashes occurring at Waterport/Ocean vs Waterport/Fringe Lily will be greater.

Roundabouts are one of/if not the most effective device at reducing the severity and frequency of angle crashes.

Roundabouts are best suited to intersections where there are competitive vehicle flows in either road approaches or where there is a high risk of angle crashes.

We would recommend the roundabout of the Waterport/Ocean Road intersection is preferred over a roundabout at Fringe Lily Place (or Lincoln) due to the greater comparative volumes and the associated road safety benefits.



It is noted that there are also opportunities for the above solution to provide a link through to Commerce Crescent to the north, which could also alleviate pressure at the Lincoln/Waterport junction.

We trust that this assists staff in their discussions around 'future proofing' Waterport Road. The applicant's position is that future solutions such as a roundabout, IF required (and we certainly do not acknowledge any current or apparent future need), would be readily available for the relevant authorities to implement (whether the development proceeds or not) and there is nothing whatsoever in the design or layout of the proposal which would preclude the authorities from pursuing such a future solution.

Can you please provide an update on these internal discussions?

Regards

Tom Gregory
Senior Associate



PO Box 392, Brighton SA 5048

Office 51 Broadway, Glenelg South SA 5045

M 0410 506 877

E tomgregory@bengreen.com.auW www.bengreen.com.au

488



## 4.4 - Attachment 2 AREA SCHEDULE

ACCOMMODATION 596 m² CHILDCARE 658 m<sup>2</sup> DAY SURGERY 976 m² F&B 953 m² GALLERY 132 m² JUICE BAR/ CAFE 246 m<sup>2</sup> MULTIPURPOSE 346 m<sup>2</sup> RADIOLOGY 409 m<sup>2</sup> SPECIALISTS - FIRST FLOOR 973 m<sup>2</sup> SPECIALISTS - GROUND FLOOR 1249 m<sup>2</sup> THE MEWS - LOWER 75 m² THE MEWS - UPPER 596 m² WELLNESS 485 m² TOTAL 7693 m<sup>2</sup>



**EPHEMERAL** 

RL 16600

Scale 1: 1000

**WATERPORT ROAD ENTRY STUDY** FLEURIEU HEALTH & WELLBEING CHITON



VSite: 101 [Waterport / Ocean - Post Dev - AM - 09/03 - Option 3 - Re-Dist (Site Folder: Post Dev (James Vols)\_EA 09/03 - 28.08.23 Changes - Option 3 - BD)]

#### Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site

Civo vva	, ,	,													
Vehicle I	<b>Movem</b>	ent Performance													
Mov	Turn	Mov	Demand	l Flows	Arriva	l Flows	Deg.	Aver.	Level of	95% Back	Of Queue	Prop.	Eff.	Aver.	Aver.
ID	Turri	Class	[ Total	HV]	[ Total	HV]	Satn	Delay	Service	[ Veh.	Dist ]	Que	Stop Rate	No. of S	peed
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Oc	ean Ro	ad													
1	L2	All MCs	81	8.0	81	8.0	0.717	16.7	LOS C	4.7	34.8	0.88	1.26	1.90	40.5
3	R2	All MCs	165	8.0	165	8.0	0.717	31.0	LOS D	4.7	34.8	0.88	1.26	1.90	40.4
Approach			246	8.0	246	8.0	0.717	26.3	LOS D	4.7	34.8	0.88	1.26	1.90	40.5
East: Wat	erport F	Road													
4	L2	All MCs	162	14.0	162	14.0	0.366	5.8	LOS A	0.0	0.0	0.00	0.15	0.00	55.4
5	T1	All MCs	479	14.0	479	14.0	0.366	0.1	LOS A	0.0	0.0	0.00	0.15	0.00	58.4
Approach			641	14.0	641	14.0	0.366	1.6	NA	0.0	0.0	0.00	0.15	0.00	57.6
West: Wa	terport	Road													
11	T1	All MCs	320	14.0	320	14.0	0.177	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	37	14.0	37	14.0	0.052	9.6	LOS A	0.2	1.5	0.60	0.77	0.60	49.2
Approach			357	14.0	357	14.0	0.177	1.0	NA	0.2	1.5	0.06	0.08	0.06	58.6
All Vehicle	es		1244	12.8	1244	12.8	0.717	6.3	NA	4.7	34.8	0.19	0.35	0.39	53.4

VSite: 101 [Waterport / Ocean - Post Dev - PM - 09/03 - Option 3 - Re-Dist (Site Folder: Post Dev (James Vols)\_EA 09/03 - 28.08.23 Changes - Option 3 - BD)]

#### Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site

	(	- 3/													
Vehicle N	/lovem	ent Perform	ance												
Mov		Mov	Demand	Flows	Arrival	Flows	Deg.	Aver.	Level of	95% Back	Of Queue	Prop.	Eff.	Aver.	Aver.
ID	Turn	Class	[ Total	HV]	[ Total	HV]	Satn	Delay	Service	[ Veh.	Dist]	Que	Stop Rate	No. of S	peed
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Oc	ean Ro	ad													
1	L2	All MCs	65	8.0	65	8.0	0.524	10.8	LOS B	2.9	21.4	0.77	1.06	1.25	44.5
3	R2	All MCs	151	8.0	151	8.0	0.524	21.4	LOS C	2.9	21.4	0.77	1.06	1.25	44.4
Approach			216	8.0	216	8.0	0.524	18.2	LOS C	2.9	21.4	0.77	1.06	1.25	44.4
East: Wate	erport F	Road													
4	L2	All MCs	158	14.0	158	14.0	0.312	5.8	LOS A	0.0	0.0	0.00	0.17	0.00	55.3
5	T1	All MCs	387	14.0	387	14.0	0.312	0.1	LOS A	0.0	0.0	0.00	0.17	0.00	58.3
Approach			545	14.0	545	14.0	0.312	1.8	NA	0.0	0.0	0.00	0.17	0.00	57.4
West: Wat	terport f	Road													
11	T1	All MCs	303	14.0	303	14.0	0.168	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	49	14.0	49	14.0	0.059	8.6	LOS A	0.2	1.8	0.56	0.73	0.56	49.9
Approach			353	14.0	353	14.0	0.168	1.3	NA	0.2	1.8	0.08	0.10	0.08	58.3
All Vehicle	es		1114	12.8	1114	12.8	0.524	4.8	NA	2.9	21.4	0.17	0.32	0.27	54.6

VSite: 101 [Waterport / Fringe-Lily - Post Dev - AM - 09/03 - Option 3 - Re-Dist (Site Folder: Post Dev (James Vols)\_EA 09/03 - 28.08.23 Changes - Option 3 - BD)]

## Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site

	4 - 4													
veme	ent Performand	:e												
т	Mov	Demand	Flows	Arrival	Flows	Deg.	Aver.	Level of	95% Back	Of Queue	Prop.	Eff.	Aver.	Aver.
Turn	Class	[ Total	HV]	[ Total	HV]	Satn	Delay	Service	[ Veh.	Dist ]	Que	Stop Rate	Cycles	peed
		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
e-Lily	Place													
L2	All MCs	56	0.0	56	0.0	0.531	12.6	LOS B	2.6	18.0	0.85	1.07	1.32	42.5
R2	All MCs	111	0.0	111	0.0	0.531	27.5	LOS D	2.6	18.0	0.85	1.07	1.32	42.4
		166	0.0	166	0.0	0.531	22.5	LOS C	2.6	18.0	0.85	1.07	1.32	42.4
port R	oad (East Appro	ach)												
L2	All MCs	86	0.0	86	0.0	0.351	5.6	LOS A	0.0	0.0	0.00	0.08	0.00	56.5
T1	All MCs	538	14.0	538	14.0	0.351	0.1	LOS A	0.0	0.0	0.00	0.08	0.00	58.9
		624	12.1	624	12.1	0.351	0.9	NA	0.0	0.0	0.00	0.08	0.00	58.6
rport F	Road (West Appr	oach)												
T1	All MCs	388	14.0	388	14.0	0.215	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
R2	All MCs	116	0.0	116	0.0	0.133	8.7	LOS A	0.5	3.8	0.59	0.80	0.59	50.4
		504	10.8	504	10.8	0.215	2.0	NA	0.5	3.8	0.14	0.18	0.14	57.4
		1295	10.0	1295	10.0	0.531	4.1	NA	2.6	18.0	0.16	0.25	0.22	55.4
r	Furn L2 R2 oort R L2 T1 port F	Furn Mov Class e-Lily Place L2 All MCs R2 All MCs oort Road (East Appro L2 All MCs T1 All MCs port Road (West Appr	Furn Mov Class [Total veh/h e-Lily Place L2 All MCs 56 R2 All MCs 111 166  oort Road (East Approach) L2 All MCs 86 T1 All MCs 538 624  port Road (West Approach) T1 All MCs 388 R2 All MCs 116 504	Furn Mov Class [Total HV] veh/h % e-Lilly Place L2 All MCs 56 0.0 R2 All MCs 111 0.0 166 0.0  oort Road (East Approach) L2 All MCs 86 0.0 T1 All MCs 538 14.0 624 12.1  port Road (West Approach) T1 All MCs 388 14.0 R2 All MCs 116 0.0 504 10.8	Furn Mov Class [Total HV] [Total veh/h % veh/h weh/h w	Mov Class [Total HV] [Total HV] veh/h % veh/h % e-Lily Place L2 All MCs 56 0.0 56 0.0 R2 All MCs 111 0.0 111 0.0 R2 All MCs 1166 0.0 166 0.0  oort Road (East Approach) L2 All MCs 86 0.0 86 0.0 L2 All MCs 538 14.0 538 14.0 Fort Road (West Approach) T1 All MCs 388 14.0 388 14.0  port Road (West Approach) T1 All MCs 388 14.0 388 14.0 R2 All MCs 116 0.0 116 0.0 F0 108 504 10.8	Purn Mov Class   Total HV   Total HV   Satn veh/h % veh/h % veh/h % veh/h % veh/h % v/c e-Lily Place   L2 All MCs   56 0.0   56 0.0   0.531     R2 All MCs   111 0.0   111 0.0   0.531     R2 All MCs   166 0.0   166   0.0   0.531     Ort Road (East Approach)   L2 All MCs   86 0.0   86   0.0   0.351     T1 All MCs   538   14.0   538   14.0   0.351     F2 All MCs   388   14.0   388   14.0   0.351     F3 All MCs   388   14.0   388   14.0   0.215     R2 All MCs   116   0.0   116   0.0   0.133     F3 All MCs   116   0.0   116   0.0   0.133     F4 All MCs   116   0.0   116   0.0   0.133     F4 All MCs   116   0.0   116   0.0   0.133     F4 All MCs   116   0.0   116   0.0   0.133     F5 All MCs   10.8   504   10.8   0.215     F5 All MCs   10.8   10.8	Purn Mov Class	Turn Mov Class   Total HV   Total HV   Satn Deg. Aver. Level of Service Veh/h % veh/h % veh/h % v/c sec Ve-Lily Place   L2 All MCs   56 0.0   56 0.0   0.531   12.6   LOS B R2 All MCs   111 0.0   111 0.0   0.531   27.5   LOS D R2   L2 All MCs   166 0.0   166 0.0   0.531   22.5   LOS C R2   L3 All MCs   166 0.0   166 0.0   0.531   22.5   LOS C R2   L3 All MCs   86 0.0   86 0.0   0.351   5.6   LOS A R3   L3 All MCs   12.1   624   12.1   0.351   0.1   LOS A R4   L3 All MCs   388   14.0   388   14.0   0.215   0.1   LOS A R4   L3 All MCs   388   14.0   388   14.0   0.215   0.1   LOS A R4   L3 All MCs   116   0.0   116   0.0   0.133   8.7   LOS A R4   L3 All MCs   116   0.0   116   0.0   0.133   8.7   LOS A R4   L3 All MCs   116   0.0   116   0.0   0.133   8.7   LOS A R5   LOS	Furn Mov Class	Furn Mov Class	Nov Class   Total HV   Total HV   Satin Delay   Service   Veh. Dist   Que   Prop.   Que	Novertical Note   Demand Flows   Arrival Flows   Deg.   Aver.   Delay   Service   Service   (Veh.   Dist.)   Que   Stop Rate	No. of Section   No. of Section   Section

VSite: 101 [Waterport / Fringe-Lily - Post Dev - PM - 09/03 - Option 3 - Re-Dist (Site Folder: Post Dev (James Vols)\_EA 09/03 - 28.08.23 Changes - Option 3 - BD)]

## Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site

	(														
Vehicle M	lovem	ent Performa	nce												
Mov	Turn	Mov	Demand	Flows	Arrival	l Flows	Deg.	Aver.	Level of	95% Back	Of Queue	Prop.	Eff.	Aver.	Aver.
ID	Turri	Class	[ Total	HV]	[ Total	HV]	Satn	Delay	Service	[ Veh.	Dist ]	Que	Stop Rate	No. of S	peed
			veh/h	%	veh/h	%	v/c	sec		veh	m			_	km/h
South: Frin	nge-Lily	Place													
1	L2	All MCs	52	0.0	52	0.0	0.400	9.8	LOS A	1.8	12.7	0.78	0.99	1.05	45.2
3	R2	All MCs	100	0.0	100	0.0	0.400	21.1	LOS C	1.8	12.7	0.78	0.99	1.05	45.1
Approach			152	0.0	152	0.0	0.400	17.3	LOS C	1.8	12.7	0.78	0.99	1.05	45.2
East: Wate	erport F	Road (East App	roach)												
4	L2	All MCs	62	0.0	62	0.0	0.309	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	56.7
5	T1	All MCs	486	14.0	486	14.0	0.309	0.1	LOS A	0.0	0.0	0.00	0.07	0.00	59.1
Approach			548	12.4	548	12.4	0.309	0.7	NA	0.0	0.0	0.00	0.07	0.00	58.8
West: Wat	erport I	Road (West Ap	proach)												
11	T1	All MCs	387	14.0	387	14.0	0.214	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	72	0.0	72	0.0	0.074	7.9	LOS A	0.3	2.1	0.54	0.73	0.54	50.9
Approach			459	11.8	459	11.8	0.214	1.3	NA	0.3	2.1	0.08	0.11	0.08	58.3
All Vehicle	s		1159	10.6	1159	10.6	0.400	3.1	NA	1.8	12.7	0.14	0.21	0.17	56.4

VSite: 101 [Waterport / Lincoln - Post Dev - AM - 09/03 - Option 3 - Re-Dist (Site Folder: Post Dev (James Vols)\_EA 09/03 - 28.08.23 Changes - Option 3 - BD)]

#### Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site

	Movem	ent Perform	ance	_											
Mov		Mov	Demand	Flows	Arriva	Flows	Deg.	Aver.	Level of	95% Back	c Of Queue	Prop.	Eff.	Aver.	Aver.
ID	Turn	Class	[ Total	HV]	[ Total	HV]	Satn	Delay	Service	[ Veh.	Dist ]	Que	Stop Rate	No. of S	peed
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
East: Wat	erport F	Road (East Ap	proach)												
5	T1	All MCs	403	14.0	403	14.0	0.223	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	26	8.0	26	8.0	0.026	6.6	LOS A	0.1	8.0	0.50	0.65	0.50	46.5
Approach			429	13.6	429	13.6	0.223	0.4	NA	0.1	0.8	0.03	0.04	0.03	58.8
North: Lin	coln Ro	ad													
7	L2	All MCs	20	14.0	20	14.0	0.105	7.9	LOS A	0.3	2.7	0.65	0.83	0.65	40.9
9	R2	All MCs	22	14.0	22	14.0	0.105	18.6	LOS C	0.3	2.7	0.65	0.83	0.65	47.0
Approach			42	14.0	42	14.0	0.105	13.5	LOS B	0.3	2.7	0.65	0.83	0.65	44.7
West: Wa	terport I	Road (West A	pproach)												
10	L2	All MCs	37	8.0	37	8.0	0.264	5.7	LOS A	0.0	0.0	0.00	0.05	0.00	56.6
11	T1	All MCs	435	14.0	435	14.0	0.264	0.1	LOS A	0.0	0.0	0.00	0.05	0.00	59.1
Approach			472	13.5	472	13.5	0.264	0.5	NA	0.0	0.0	0.00	0.05	0.00	58.7
All Vehicle	es		943	13.6	943	13.6	0.264	1.0	NA	0.3	2.7	0.04	0.08	0.04	57.7

VSite: 101 [Waterport / Lincoln - Post Dev - PM - 09/03 - Option 3 - Re-Dist (Site Folder: Post Dev (James Vols)\_EA 09/03 - 28.08.23 Changes - Option 3 - BD)]

## Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site

	, (														
Vehicle N	Movem	ent Perform	ance												
Mov	Turn	Mov	Demand	Flows	Arriva	Flows	Deg.	Aver.	Level of	95% Back	Of Queue	Prop.	Eff.	Aver.	Aver.
ID	Turri	Class	[ Total	HV]	[ Total	HV]	Satn	Delay	Service	[ Veh.	Dist ]	Que	Stop Rate	No. of S	peed
			veh/h	%	veh/h	%	v/c	sec		veh	m			_	km/h
East: Wate	erport F	Road (East Ap	proach)												
5	T1	All MCs	394	14.0	394	14.0	0.218	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	19	8.0	19	8.0	0.019	6.5	LOS A	0.1	0.6	0.50	0.63	0.50	46.6
Approach			413	13.7	413	13.7	0.218	0.3	NA	0.1	0.6	0.02	0.03	0.02	59.1
North: Line	coln Ro	ad													
7	L2	All MCs	14	14.0	14	14.0	0.121	7.9	LOS A	0.4	3.1	0.68	0.87	0.68	39.9
9	R2	All MCs	29	14.0	29	14.0	0.121	18.0	LOS C	0.4	3.1	0.68	0.87	0.68	46.2
Approach			43	14.0	43	14.0	0.121	14.8	LOS B	0.4	3.1	0.68	0.87	0.68	44.7
West: Wat	terport	Road (West A	pproach)												
10	L2	All MCs	25	8.0	25	8.0	0.258	5.7	LOS A	0.0	0.0	0.00	0.03	0.00	56.7
11	T1	All MCs	436	14.0	436	14.0	0.258	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	59.3
Approach			461	13.7	461	13.7	0.258	0.4	NA	0.0	0.0	0.00	0.03	0.00	59.0
All Vehicle	es		917	13.7	917	13.7	0.258	1.0	NA	0.4	3.1	0.04	0.07	0.04	57.8

VSite: 101 [Waterport / LinLout - Post Dev - AM - 09/03 - Option 3 - Re-Dist (Site Folder: Post Dev (James Vols)\_EA 09/03 - 28.08.23 Changes - Option 3 - BD)]

## Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site

	lovem	ent Perforn	nance													
Mov	_	Mov	De	mand Fl	ows	Arriva	l Flows	Deg.	Aver.	Level of	95% Back	COf Queue	Prop.	Eff.	Aver.	Aver.
ID	Turn	Class	[ To	otal l	HV]	[ Total	HV]	Satn	Delay	Service	[ Veh.	Dist ]	Que	Stop Rate	No. of S	peed
			ve	h/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Linl	Lout Le	g														
1	L2	All MCs		78	0.0	78	0.0	0.072	6.1	LOS A	0.3	1.9	0.44	0.65	0.44	30.1
Approach				78	0.0	78	0.0	0.072	6.1	LOS A	0.3	1.9	0.44	0.65	0.44	30.1
East: Wate	erport F	Road (East A	pproach)													
4	L2	All MCs		88	0.0	88	0.0	0.270	5.6	LOS A	0.0	0.0	0.00	0.11	0.00	54.1
5	T1	All MCs	4	403 ′	14.0	403	14.0	0.270	0.1	LOS A	0.0	0.0	0.00	0.11	0.00	58.0
Approach			4	492	11.5	492	11.5	0.270	1.1	NA	0.0	0.0	0.00	0.11	0.00	57.2
West: Wat	erport l	Road (West	Approach)													
11	T1	All MCs	4	455 <i>′</i>	14.0	455	14.0	0.254	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			4	455	14.0	455	14.0	0.254	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8
All Vehicle	s		10	024	11.7	1024	11.7	0.270	1.0	NA	0.3	1.9	0.03	0.10	0.03	57.4

VSite: 101 [Waterport / LinLout - Post Dev - PM - 09/03 - Option 3 - Re-Dist (Site Folder: Post Dev (James Vols)\_EA 09/03 - 28.08.23 Changes - Option 3 - BD)]

### Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site

	lovem	ent Performa	ance												
Mov	Turn	Mov	Demand	l Flows	Arrival	l Flows	Deg.	Aver.	Level of	95% Back	Of Queue	Prop.	Eff.	Aver.	Aver.
ID	Turri	Class	[ Total	HV]	[ Total	HV]	Satn	Delay	Service	[ Veh.	Dist]	Que	Stop Rate	No. of S Cycles	peed
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Lin	Lout Le	g													
1	L2	All MCs	68	0.0	68	0.0	0.062	6.1	LOS A	0.2	1.7	0.43	0.64	0.43	30.2
Approach			68	0.0	68	0.0	0.062	6.1	LOS A	0.2	1.7	0.43	0.64	0.43	30.2
East: Wate	erport R	Road (East App	oroach)												
4	L2	All MCs	63	0.0	63	0.0	0.250	5.6	LOS A	0.0	0.0	0.00	0.08	0.00	54.5
5	T1	All MCs	392	14.0	392	14.0	0.250	0.1	LOS A	0.0	0.0	0.00	0.08	0.00	58.4
Approach			455	12.1	455	12.1	0.250	8.0	NA	0.0	0.0	0.00	0.08	0.00	57.8
West: Wat	terport F	Road (West Ap	oproach)												
11	T1	All MCs	449	14.0	449	14.0	0.251	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			449	14.0	449	14.0	0.251	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicle	es		973	12.1	973	12.1	0.251	8.0	NA	0.2	1.7	0.03	0.08	0.03	57.8

# **Southern Fleurieu Health and Wellbeing Precinct**

Traffic Impact Assessment

**Troppo Architects** 

2 March 2023

Ref: 222031R001RevC





# **Document History and Status**

Rev	Description	Author	Reviewed	Approved	Date
Α	Draft for Client Comment	JA	-	-	13/1/23
В	Updated following client comment and with SIDRA analysis	JA	PS	PS	25/1/23
С	Update following updated facility numbers	JA	PS	PS	9/3/23

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## **Contents**

**Project: Southern Fleurieu Health and Wellbeing Precinct | Traffic Impact Assessment** 

Client: Troppo Architects Ref: 222031R001RevC

1	Introduction	5
1.1	Site Location	5
1.2	Scope and study area	ε
1.3	Proposed Development	7
1.4	Pre-lodgement written advice	7
2	Existing Conditions	8
2.1	Land use and zoning	8
2.2	Existing Road Network	9
2.3	Public Transport	12
2.4	Pedestrian infrastructure	12
2.5	Existing traffic volumes	13
2.6	Pre Development Trip Distribution	17
2.7	Parking	19
3	The Proposed Development	20
3.1	Car Parking Design	20
3.2	Car Parking Supply	20
3.3	Internal Turning Movements	21
3.4	Traffic Generation	21
3.5	Traffic Distribution	23
3.6	Traffic Impacts	28
4	Infrastructure Design	34
4.1	Public Transport	34
4.2	Walking and Cycling	34
4.3	Turning Lane Warrants - Waterport Road/Fringe Lily Access	34
4.4	Turning Lane Warrants - Waterport Road/Left in Left Out Access	35
4.5	Turning Lane Warrants - Ocean Road/FRAC Access	36
4.6	Turning Lane Warrants – Waterport Road/Ocean Road	36
5	Summary and Recommendations	37

# 4.4 - Attachment 2



## **Tables**

Table 1 Traffic Volume Summary: Waterport Road (2022)	9
Table 2 Traffic Volume Summary: Ocean Road (2022)	10
Table 3: Traffic Volume Summary: Ocean Road (2022)	10
Table 4 Traffic Volume Summary: Lincoln Road (2022)	10
Table 5 Traffic Volume Summary: Victor Harbor Road (2021)	11
Table 6 Traffic Volume Summary: Port Elliot Road (2019)	11
Table 7: Changes in Post Development Peak Trip Generation	25
Table 8: Change in Traffic Distribution Post Development	27
Table 9: Traffic Growth - Post Development Conditions	28
Table 10: Post Development Turning Numbers (FRAC Ocean Road Access Point)	29
Table 11: Post Development Turning Numbers (Fringe Lily Waterport Road Access Point)	30
Table 12: Post Development Turning Numbers (Fringe Lily Waterport Road Access Point)	31
Table 13: Waterport Road/Ocean Road Post Development Traffic Impacts	32
Table 14: Change in Level of Service Based on AGTM P3	33
Figures	
Figure 1: Site Location SF Health and Wellbeing Precinct	5
Figure 2: Overview of Scope and Study Area	
Figure 3: Planning Zones and Subject Area	
Figure 4: Goolwa - Victor Harbor - Adelaide Bus Route	
Figure 5: Ocean Road Access Point Turning Points	
Figure 6: Waterport Road Access Point Turning Points	
Figure 7: Waterport Road and Ocean Road Turning Counts	
Figure 8: Waterport Road and Lincoln Road Turning Counts	
Figure 9: Pre Development Trip Distribution (Total)	
Figure 10: FRAC Off Street Parking Footprint	
Figure 11: Floor Areas per Facility	
Figure 12: Post Development Daily Impacts on Accesses	
Figure 13: Post Development Access Distribution - AM Peak	
Figure 14: Post Development Access Distribution - PM Peak	
Figure 15: FRAC Ocean Road Access Point	
Figure 16: FRAC Ocean Road Access Point	
Figure 17: Fringe Lily Place/Waterport Road Access Point	
Figure 18: Left In/Left Out Access w Lincoln	
Figure 19: Warrants for Turn Lane Treatments (90km/h D.S)	
Figure 20: Warrants for Turn Lane Treatments (90km/h D.S)	
Figure 21: Warrants for Turn Lane Treatments (70km/h D.S)	

## **Appendices**

Appendix A - Concept Site Plan



## 1 Introduction

Development has been proposed at the Greenfields's site, immediately adjacent to (east side) the Fleurieu Regional Aquatic Centre (FRAC), 4 College Road Chiton. An architectural design for a masterplan of the proposed health and wellbeing development includes the construction of new buildings and facilities, open space areas and connectivity to the FRAC. Troppo Architects and their respective clients are in the process of preparing a DA for lodgement to Alexandrina Council.

The client committee received a pre-lodgement written advice from Alexandrina Council dated 8 December 2022. Within this pre-lodgement written advice it was recommended that the development complete an assessment of internal/external traffic impacts of the development within the surrounding area. Tonkin was engaged Troppo to complete a Traffic Impact Assessment to support the proposed development. The proposed development has been provided in Appendix A.

This report has been completed with reference to the requirements of the South Australian Planning and Design Code, Guide to Traffic Generating Developments and Austroads Guide to Traffic Management Part 12.

Pre-development conditions have been based upon the site at the time of inspection in December 2022.

#### 1.1 Site Location

The Southern Fleurieu Health & Wellbeing Precinct (SFH&WP) is located within Chiton, approximately 4km northwest of the Port Elliot CBD and 5km from Victor Harbour. (Refer **Error! Reference source not found.** below). Connectivity to the site is provided on Fringe Lily Place which abuts the FRAC, accessible from both Ocean Road and Waterport Road (Refer Figure 1).



Figure 1: Site Location SF Health and Wellbeing Precinct



## 1.2 Scope and study area



Figure 2: Overview of Scope and Study Area

The scope and the study area for the Traffic Impact Assessment has been limited to the local roads within the immediate vicinity of the site and nearby intersections. An overview of the study area is show above (Figure 2).

The scope for the traffic impact assessment includes:

- · Undertake and assess the traffic data on the surrounding road network, inclusive of tube counts and 14hr turning assessments surrounding the site. Locations of the tube counts and turning assessments are as follows:
  - Turning Assessment Intersection of Ocean Road and Waterport Road
  - Turning Assessment Intersection of Lincoln Road and Waterport Road
  - Turning Assessment Intersection of Waterport Road and Fringe-Lily Place
  - Turning Assessment Access of Ocean Road and the Fleurieu Aquatic Centre
  - Tube Count Waterport Road (Between Ocean Road and Lincoln Park Drive)
     Tube Count Waterport Road (Between Fringe Lily Place and Lincoln Road)
     Tube Count Ocean Road (Between FRAC Entry and Waterport Road)
- Based on preliminary advice form Alexandrina Council, identify whole of site parking provision requirements for vehicle and cycle parking based on the proposed new development and advise if proposed parking is sufficient against the Planning and Design Code.
- Undertake and review traffic generation of the proposed development based on the size and usage times of the facilities and using the RMS publication 'Guide to Traffic Generating Developments' and Traffic Engineering principles.
- Understand and estimate expected traffic distribution from the proposed development both during peak periods and daily periods.
- Identify and assess any impacts to the surrounding road network based on the proposed new development and modifications to the access arrangements. This includes using SIDRA software to perform intersection modelling and appreciate potential performance impacts of the surrounding road network.
- Determine required impact mitigating treatment or mitigation strategies based on the points above.



## 1.3 Proposed Development

The proposed precinct concept plan is contained in Appendix A. As per the most recent concept site plan (23.01.2022), the proposed development includes:

- A new internal ring road that connects between Fringe Lily Place and a 'left in, left out' access approximately 100m east, opposite Lincoln Road. The ring road currently is segregated into three segments based on access types (staff/service vehicle vs public vehicle access).
- A new access connection to the FRAC through the southernmost car park to the ring road.
- Angled parking surrounding the ring road network accommodating provisions between staff/service and public vehicle access areas.
- An additional off street angled parking area that connects to the southernmost existing FRAC car park.
- New childcare facility
- New café facility
- New accommodation facilities (mixed tourism, short term and long term stay)
- A new radiology and day surgery facility
- New specialist/physio suites
- · New wellness commons & wetland suites
- A new food, beverage and art facility.

## 1.4 Pre-lodgement written advice

The pre-lodgement written advice from Alexandrina Council dated 8 December 2022 details the following in relation to transport infrastructure for the development in terms of the Traffic Impact Assessment:

#### New Access:

Did not support the new access (which will be the third access into the wellness centre) as it is too close to the junction of Waterport Road / Lincoln Road, and allowing the third access point to proceed will likely create traffic conflict. There is already provision for turning movements at the existing access points off Waterport Road and Ocean Road. .... request that they omit this proposed access point (unless they have compelling evidence to prove that this access is imperative and will improve safety) and reconfigure the internal layout to provide internal access to the proposed car parks on the eastern side of the development – they could create a ring road.

#### • Traffic & Parking:

Number of car parks - can the developer please demonstrate how they calculated the number of car parks required for this development? And the expected traffic volumes generated by the development.

#### • Engagement

Engagement with City of Victor Harbor must be undertaken, as all new traffic generated will use their roads to access the property.



## **2 Existing Conditions**

This section of the report details the existing traffic and road conditions based on desktop, site inspection and data obtained from tube and intersection counts concerning the surrounding road network near to the proposed development. As previously mentioned, the subject site falls within the LGA boundary of Alexandrina Council, however it is important to note that Waterport Road, Lincoln Road and Ocean Road both fall under the care and control of City of Victor Harbour Council.

## 2.1 Land use and zoning

As per **Error! Reference source not found.** below, the Subject site and surrounding areas are zones into a mixture of zones is zoned under the planning and design code.

- Abbreviations refer to the subject site as CF Community Facilities
- Surrounding areas include areas zones under the following abbreviations, Ru (Rural), PRuL (Productive Rural Landscape, RuL (Rural Living), E (Employment) and SN (Suburban Neighbourhood).

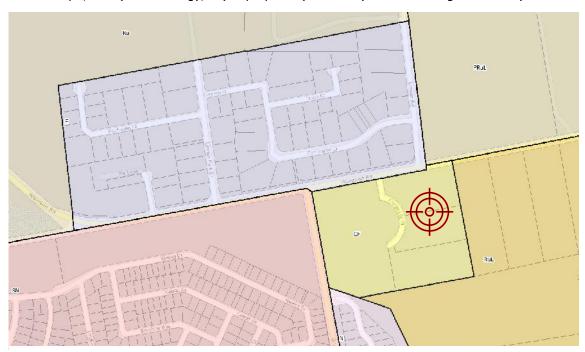


Figure 3: Planning Zones and Subject Area

The employment zone, referred to as the Lincoln Park Industrial Area, covers the main area located north of the subject site. This area attracts commercial traffic from the Waterport Road/Victor Harbour Road intersection, with egress points at Lincoln Road (east of the development) and Lincoln Park Drive (west of the development).

The suburban neighbourhood zone is located west of the development within the Victor Harbour LGA and has no egress points onto Waterport Road, however, this zone has access onto Ocean Road from Aquamarine Boulevard, 300m south of the FRAC Ocean Road access point. This zone accommodates mainly single story detached dwellings and is currently still subject to future growth based on observations of recent satellite imagery.

According to the Australian Bureau of Statistics, Alexandrina Council is expected to see an increase in development of new dwellings, seeing a 20% change in population and household forecasts for Port Elliot (and Chiton) between 2021 and 2041.



## 2.2 Existing Road Network

The existing road network expected to be directly impacted by the proposed development includes:

- Waterport Road
- Ocean Road
- · Lincoln Road
- Port Elliot Road (under the care and control of Department for Infrastructure and Transport)
- Victor Harbour Road (under the care and control of Department for Infrastructure and Transport)

Details of the traffic counts undertaken, and a summary of existing available traffic count volumes is detailed in the sections below.

#### 2.2.1 Waterport Road

Waterport Road is a two-lane two-way road, subject to a posted speed limit of 80km/h. Waterport Road transitions between the Victor Harbor Council and Alexandrina Council LGA boundaries at Ocean Road. Waterport Road affords vehicle movements in an east-west direction connecting to Port Elliot Road to the east and Victor Harbor Road to the west. There are limited frontages along Waterport Road which provides an important east-west transport connection, effectively bypassing the residential and lower speed limited area along Port Elliot Road to the south. Access to FRAC is provided on Fringe Lily Place approximately 180m east of the Ocean Road intersection and 100m west of Lincoln Road.

Waterport Road provides for limited provisions of on-street parking, accommodating for varying lengths of pull over areas on both sides of the roadway. Waterport Road services no bus stops or routes.

Waterport Road contains numerous channelised left and right turn lanes for east and westbound vehicles respectively. The intersections of Waterport Road with Ocean Road, Fringe Lily Place, andLincoln Road have dedicated right turn lanes for ingress. No dedicated left turn lanes were observed within the scope of the study area.

Summary of the traffic volumes along Waterport Road, east and west of the intersection with Ocean Road, are summarised below.

**Table 1 Traffic Volume Summary: Waterport Road (2022)** 

Street	Direction	Daily Traffic	AADT (2-way)	AM Peak	AM vol	PM Peak	PM vol	CV %
Waterport Road (east)	Westbound Eastbound	3617 3539	7156	8am - 9am	796	3pm- 4pm	796	10
Waterport Road (west)	Westbound Eastbound	3215 3081	6297	8am - 9am	712	3pm- 4pm	662	14



#### 2.2.2 Ocean Road

Ocean Road is a two-lane two-way road, subject to a posted speed limit of 60km/h. Ocean Road falls under the care and control of Victor Harbor Council and provides an important north-south connection for vehicle movements in a north-south direction connecting to Waterport Road and Port Elliot Road respectively. Ocean Road provides access to the FRAC approximately 130m south of Waterport Road, with the majority of residential frontages occurring further south of both FRAC and the proposed development.

Ocean Road provides for two community bus services that operates mainly during school peak periods; however, this service route operates further south on Ocean Road and not adjacent to the proposed development and FRAC. Ocean Road contains numerous channelised right turn lanes for northbound and southbound vehicles. The intersection of Ocean Road with the FRAC access has a dedicated right turn lane for ingress. No dedicated left turn lanes were observed within the scope of the study area. A pedestrian refuge and crossing area is provided on Ocean Road south of the FRAC access point, which provides walking and cycling connectivity for the residential development to the west.

Summary of the traffic volumes on Ocean Road, south of Waterport Road, are summarised below.

**Table 2 Traffic Volume Summary: Ocean Road (2022)** 

Street	Direction	Daily Traffic	AADT (2-way)					CV %
Ocean Road (North of FRAC Access)	Northbound Southbound	1424 1389	2814	8am - 9am	299	3pm- 4pm	330	9

**Table 3: Traffic Volume Summary: Ocean Road (2022)** 

Street	Direction		AADT (2-way)					
Ocean Road (South of FRAC Access) *	Northbound Southbound	1716 1485	3201	8am - 9am	343	3pm- 4pm	358	8am - 9am

<sup>\*</sup>Note to obtain daily traffic and AADT we have applied a factor of 1.20 to the raw data based on the 12hr turning movement summary collected at Ocean Road FRAC Access

#### 2.2.3 Lincoln Road

Lincoln Road is a two-lane two-way road, subject to the default urban speed limit of 50km/h. Lincoln Road falls under the care and control of Victor Harbor Council and provides a north-south connection for vehicle movements to the Lincoln Park Industrial Area. At the intersection of Waterport Road, Lincoln Road is controlled by a give way arrangement.

Summary of the traffic volumes on Lincoln Road, are summarised below.

**Table 4 Traffic Volume Summary: Lincoln Road (2022)** 

Street	Direction		AADT (2-way)					CV %
Lincoln Road*	Northbound Southbound	671 653	1324	815am - 915am	102	3pm- 4pm	86	8

<sup>\*</sup>Note to obtain daily traffic and AADT we have applied a factor of 1.30 to the 12hr turning movement summary collected at Lincoln Road / Waterport Road.



#### 2.2.4 Victor Harbor Road

Victor Harbor Road is a two lane, two way road that forms one of the primary regional connections between Metropolitan Adelaide and the Fleurieu Peninsula. It is subject to varying speed limits of posted 80km/h and 100km/h and falls under the care and control of the Department for Infrastructure and Transport (DIT). Victor Harbor Road intersects with Waterport Road 1.5km west of the proposed development and FRAC site.

Estimated traffic volumes on Victor Harbor Road, are summarised below.

Table 5 Traffic Volume Summary: Victor Harbor Road (2021)

Street	AADT (2-way)	CV %
Victor Harbor Road	7700	8

#### 2.2.5 Port Elliot Road

Port Elliot Road is a two lane, two way road that forms one of the primary connections between Victor Harbor and Port Elliot. It is subject to a posted speed limit of posted 60km/h and falls under the care and control of the Department for Infrastructure and Transport (DIT). Port Elliot Road intersects with Ocean Road 1km south of the proposed development and FRAC site.

Estimated traffic volumes on Port Elliot Road, are summarised below.

**Table 6 Traffic Volume Summary: Port Elliot Road (2019)** 

Street	AADT (2-way)	CV %
Port Elliot Road	8400	4



## 2.3 Public Transport

FRAC is currently not service by any public or private bus routes within the subject area. A small section of Ocean Road is serviced by a school bus service (Community Bus 1 & 2) during school AM and PM peak periods.

The Goolwa Victor Harbor Adelaide Bus Service (1251, 1252, 1253, 1254) does not service Waterport Road and Ocean Road, and travels along Port Elliot Road (Figure X), where the likelihood of higher patronage would be higher.

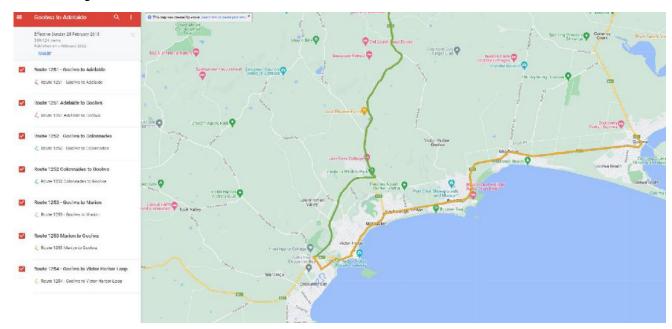


Figure 4: Goolwa - Victor Harbor - Adelaide Bus Route

#### 2.4 Pedestrian infrastructure

As per Section 2.2.2 Ocean Road contains a pedestrian refuge crossing point to the FRAC for east-west walking and cycling connectivity.

Ocean Road also provides a 3m wide path on the western side of the road verge which subsequently terminates at the pedestrian refuge adjacent to the FRAC. Waterport Road contains no footpaths on either side of the roadway.



## 2.5 Existing traffic volumes

## 2.5.1 Existing Site Access

Turning Assessments were performed at the access points for the FRAC building at both Ocean Road and Fringe Lily Place. For a detailed breakdown of the turning assessments, refer Appendix B.

#### 2.5.1.1 Ocean Road

As per Figure 5 below, turning movements at Ocean Road and the FRAC access point were recorded and assigned a movement number. Movements as a proportion of the total turning movements on Ocean Road have been applied and considered to be the level of traffic distribution from FRAC onto the local road network.

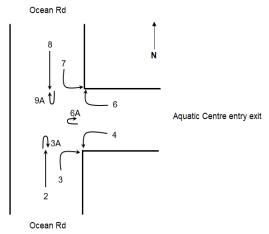


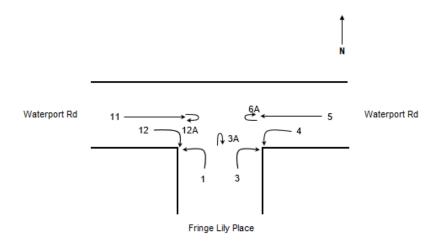
Figure 5: Ocean Road Access Point Turning Points

	Total	(12hr)	AM Peak (8a	am - 9am)	PM Peak (	3pm-4pm)
Intersection Leg	North	South	North	South	North	South
FRAC Egress (6 & 4)	79	182	5	14	10	19
Distribution (%)	30	70	33	67	34	66
FRAC Ingress (7 & 3)	60	163	13	22	9	8
Distribution (%)	27	73	28	72	53	47



#### 2.5.1.2 Fringe Lily Place

As per Figure 6 below, access is provided to the site and FRAC via the Fringe Lily Place access. Turning movements at Waterport Road and Fringe Lily Place were recorded and assigned a movement number. Movements as a proportion of the total turning movements on Waterport Road have been applied and considered to be the level of traffic distribution from FRAC onto the local road network.



**Figure 6: Waterport Road Access Point Turning Points** 

	Total	(12hr)	AM Peak (8a	am - 9am)	PM Peak (	3pm-4pm)
Intersection Leg	East	West	East	West	East	West
Fringe Lily Egress (3 & 1)	109	71	7	4	13	10
Distribution (%)	61	39	64	36	57	43
Fringe Lily Ingress (4 & 12)	147	75	21	13	15	5
Distribution (%)	66	34	62	38	75	25



## 2.5.2 Waterport Road/Ocean Road

As per Figure 7 below, the local road network is also influenced within the subject area, as such predevelopment conditions were collected at the intersection of Waterport Road and Ocean Road. Movements as a proportion of the total turning movements on Waterport Road have been applied and considered to be the level of traffic distribution within the surrounding road network on a typical day.

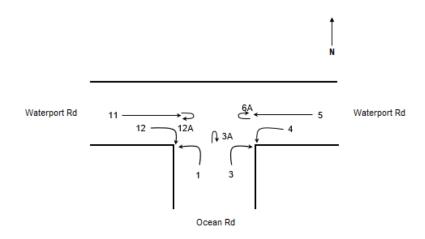


Figure 7: Waterport Road and Ocean Road Turning Counts

	Total	(12hr)	AM Peak (8	am - 9am)	PM Peak (	3pm-4pm)
Intersection Leg	East	West	East	West	East	West
Ocean Road Egress (3 & 1)	888	453	106	67	108	55
Distribution (%)	66	34	61	39	66	34
Ocean Road Ingress (4 & 12)	859	437	93	121	43	49
Distribution (%)	66	34	43	57	47	53



## 2.5.3 Waterport Road/Lincoln Road

As per Figure 8 below, the local road network is also influenced within the subject area, as such predevelopment conditions were collected at the intersection of Waterport Road and Lincoln Road. Movements as a proportion of the total turning movements on Waterport Road have been applied and considered to be the level of traffic distribution within the surrounding road network on a typical day.

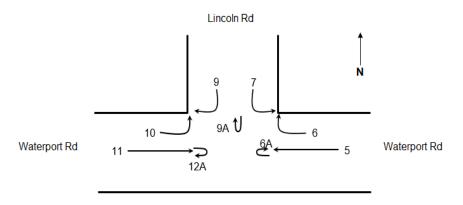


Figure 8: Waterport Road and Lincoln Road Turning Counts

	Total	(12hr)	AM Peak (8	am - 9am)	PM Peak (	3pm-4pm)
Intersection Leg	East	West	East	West	East	West
Lincoln Road Egress (7 & 9)	198	304	19	21	13	28
Distribution (%)	39	61	48	52	32	68
Lincoln Road Ingress (6 & 10)	179	306	25	35	18	24
Distribution (%)	37	63	42	58	43	57



## 2.6 Pre Development Trip Distribution

Based on the above traffic volumes, the total trips for the pre-developed site have been summarised in the image below.



Figure 9: Pre Development Trip Distribution (Total)

- The majority of movements at the subject site originates predominantly from the east and south of the development. This is not surprising given the higher residential densities in east and south of the site.
- Ocean Road maintains a higher number of total in/out movements (223 in, 261 out) when compared to the Waterport Road access (222 in, 180 out), this is despite Waterport Road receiving a higher average of daily traffic.
- The demand at each access is distributed evenly during the peak periods however where the in/out movements between the FRAC Ocean Road access (AM = 35 in/19 out, PM = 17 in/29 out) and FRAC Waterport access (AM = 34 in/11 out, PM = 20 in/23 out) was much more balance.
- The distributed movements at the FRAC access during peak periods continued to be skewed toward traffic generated from the east and south of the site. The only exception to this was the Waterport Road access which distributed movements almost equally east and west during the PM peak.



### 2.6.1 SIDRA Intersection Analysis (Pre Development Conditions)

For the purpose of impact assessments, peak hours are generally determined to be the main factor in the performance of an intersection. In traffic engineering, the degree of saturation of an intersection or road is a measure of how much demand it is experiencing compared to its total capacity. The degree of saturation is a ratio of demand to capacity on each approach to the junction, with a value of 1.0 meaning that demand and capacity are equal and no further traffic is able to progress through the junction (high congestion). As per Austroads GTM Part 3, the target degrees of saturation of 0.90 for signals, 0.85 for roundabouts and 0.80 for unsignalized intersections (such as Waterport Road/Ocean Road etc.) are generally agreed to. These are usually called 'practical degrees of saturation'.

To develop an assessment for future analysis, we have undertaken and developed a base case intersection model for all accesses and intersections. For a detailed breakdown of our pre development SIDRA analysis please refer to Appendix C. A summary of our base case results are detailed below.

#### 2.6.1.1 Waterport Road/Fringe Lily Place

This intersection is performing acceptably, where for the AM and PM peak period, DOS does not exceed 0.25 and 0.23 respectively. The maximum queuing on Fringe Lily is around 1 vehicle with an average delay of 14 seconds for the right turn movement in the morning peak.

#### 2.6.1.2 Ocean Road/FRAC Access

This intersection is performing acceptably, where for the AM and PM peak period, DOS does not exceed 0.09 and 0.07 respectively. The maximum queuing in Ocean Road is around 1 vehicle with an average delay of 6 seconds for the right turn movement in the morning peak.

#### 2.6.1.3 Waterport Road/Lincoln Road

This intersection is performing acceptably, where for the AM and PM peak period, DOS does not exceed 0.24 and 0.20 respectively. The maximum queuing in Lincoln Road is around 1 vehicle with an average delay of 15 seconds for the right turn movement in the morning peak.

#### 2.6.1.4 Waterport Road/Ocean Road

This intersection is performing acceptably, where for the AM and PM peak period, DOS does not exceed 0.32 and 0.26 respectively. The maximum queuing in Ocean Road is around 2 vehicles with an average delay of 14 seconds for the right turn movement in the morning peak.



## 2.7 Parking

Parking within the subject area is mainly situated within the FRAC footprint. Off-street parking is readily available north, west and south of the FRAC building. These comprise a number of 90 degree angled car parks (169 total, 8 staff, 8 disabled parking spaces with shared zones). There is also a drop off area situated on the north side of the building that is approximately 45m in total length (3 – 4 buses).



Figure 10: FRAC Off Street Parking Footprint

Observations at this site in December 2022 illustrated a strong occupancy rate to the north side of the FRAC building. However, overall, the occupancy rate during the time of visit was low-medium and did not exceed 50% occupancy.

Discussing the parking utilisation with FRAC administration, noted that the current parking demand at the facility is low and barely 'filled' at all, specifically during expected peak periods.

The current parking arrangements to the north and west of the FRAC will not be altered as part of the development.



## 3 The Proposed Development

## 3.1 Car Parking Design

The intended parking arrangement is shown within Appendix A for the development. The proposed development incorporates angled parking (90 degree) within the road layout design. Parking has been distributed across the development and a total of 273 angled spaces have been proposed.

The car parking for the development has been assessed against the requirements of Australian Standard 2890.1: 2004 Parking Facilities Part 1 – Off-street car parking and Australian Standard 2890.6: 2009 Parking Facilities Part 6 – Off-street car parking for people with disabilities.

Visitor parking spaces shall comply with User Class 3, which aligns with short term city and town centre parking, parking stations, hospital, and medical centres. The size of parking spaces for 90° parking are a minimum of 5.4m long by 2.6m wide with 5.8m wide aisles. Staff parking spaces shall comply with User Class 1, and which aligns with staff and residential uses. Size of parking spaces for 90° parking are a minimum of 5.4m long by 2.4m wide with 6.2m wide aisles.

The parking areas in the proposed development has not been dimensioned at this point in time, however, shall meet the requirements of 2890.1.

Existing pedestrian crossings have been retained to provide connectivity between the development and FRAC (existing gardens) along Fringe Lily Place. The layout design also incorporates slow points at locations to act as traffic control devices. Due to the 'aisle length' of the proposed ring road around the development, and in accordance with AS2890.1, the layout shall also consider traffic control devices to encourage lower vehicle speeds.

## 3.2 Car Parking Supply

We have calculated the level of provisions for off-street parking based on the requirements set out in the SA's Planning and Design Code (PDC). We have noted that some facilities defined under the PDC did not have a specific parking provision rate, we have assigned a development class accordingly.

Development Facility	Area (m²)	Development Class	Required Visitor Carparks
Accommodation/F&B Elevations	595	Tourist Accommodation	16
Childcare	658	Childcare Centre	30
Day Surgery	982	Hospital - Private	27
F&B (140 Seats) + Arts	318	Shop - Restaurant + Take Away	60
Radiology	541	Library	22
Juice Bar/Café (60 Seats)	264	Shop - Restaurant + Take Away	24
Multipurpose	346	Indoor Recreation	16
Specialists - First	973	Consulting Room	28
Specialists - Ground	1249	Consulting Room	24
The Mews	1338	Tourist Accommodation	8
Wellness	485	Consulting Room	16
Total		518	271 car parks



Based on the peri-urban nature of the development location, we predict that staff will predominantly travel by car, and as such staff are included in the above ratios and numbers.

Based on the Disability Access Standards requirements for carparking spaces for people with a disability, we have determined that approximately 6 spaces will be required across the development. We recommend these are distributed strategically across the development where high activity is expected.

The PDC also states the required bicycle space provisions, which total 14 bicycle spaces shall be provided as part of the development. Based on the low-medium occupancy rate of the FRAC building, and the likelihood that the required visitor spaces as part of the development may be shared use from adjacent facilities, the provisions for parking within the proposed development are satisfied.

## 3.3 Internal Turning Movements

We have reviewed the previous turning path assessments undertaken by GTA Consultants in 2015 and provided our own assessments in Appendix D. The Ocean Road FRAC access has not been included within this assessment as we have assumed DA approval was provided based on a 12.5m design vehicle and 14.5m rigid bus movement.

Due to the expected shared bus movements between the FRAC facility and the proposed development, turning assessments were previously run at the Fringe Lily Access/Waterport Road access with a 14.5m rigid bus, As the geometric layout has not changed significantly, this movement is considered acceptable, and the Fringe Lily/Waterport Road access won't require significant design changes.

A 12.5m design vehicle had turning movements run within the Ring Road, which was confirmed to have no issues with access. The civil design will need to consider the access requirements for this type of vehicle at the relevant internal intersections. This may have an impact on the level of angled parking that can be provided, however we appreciate there is some flexibility with the off-street parking supply through shared usage with the FRAC development and also shared usage within the development's facilities.

Refuse and service vehicle access are also provided on the eastern side of the development which, based on the 12.5m check would illustrate no issues with access.

#### 3.4 Traffic Generation

As per the Proposed Masterplan, the development includes a mixture of community facilities ranging from childcare to day surgery and accommodation. Approximate areas for facilities have been provided in Figure 11 (right). These new facilities will have an influence on demand to the subject site and as such traffic generation rates in accordance with industry accepted standards (*RTA Guide to Traffic Generating Developments*) will be applied where possible.

Based on the definition of facilities provided in Figure 10, the following rates have been applied per facility under the respective RTA Guide Definitions. A trip is defined as a one way vehicular movement from one point to another excluding the return journey. Therefore, a return trip to / from a land use is counted as two trips.

- Accommodation = Daily Trips 3 per unit, 0.4pk trips per unit.
- Childcare (120 children capacity, 15 staff) = 0.8 AM trips/child, 0.7 PM trips/child
- Day Surgery (8 beds, 10 staff, patient usage ½ day or full day)
  - 12.0 peak trips based on 100% use of 8 beds and staff arrival/departure, 22 single daily trips (including peak) as
- Figure 11: Floor Areas per Facility

arrival/departure, 22 single daily trips (including peak) as likelihood of patients/staff arriving for the half day would only total 10 trips or - ITE Trip Generation Manual suggest for a Hospital 0.97 trips per unit for 1000 SF GFA



- Food and Beverage (Restaurant) = 60 daily vehicle trips/100m2 GFA, 5 peak trips/100m2 GFA
- Food and Beverage (Elevations) & The Mews = High Density residential flat building, 0.29 peak trips per unit, we have assumed 3 trips per unit for daily trips.
- Multipurpose/Wetlands Suite (4 suites) = Considered under the RTA guide to be a gymnasium based on holding exercise classes = 20 daily trips per 100m<sup>2</sup>
- Radiology (7 beds, 10 staff, patient usage 30min) = No Data Available via RTA
  - 18 peak trips based on 100% use of 7 beds and staff arrival/departure, 134 single daily trips (including peak) **or**
  - ITE Trip Generation Manual suggest for a Clinic 3.28 trips per unit for 1000 SF GFA
- Specialists (13 suites, 24 staff, patient usage 30min) = No Data Available via RTA Guide
  - 50 peak trips based on 100% use of 13 suites staff arrival/departure, 256 single daily trips (including peak)
- Wellness Suites (7 suites, patient usage 1hr) = No Data Available via RTA Guide
  - 17 peak trips based on 100% use of 7 suites staff arrival/departure, 150 single daily trips (including peak) or
  - İTE Trip Generation Manual suggest for a Clinic 3.28 trips per unit for 1000 SF GFA
- Arts = Due to the hybrid nature of the Arts being merged with the F&B area, trip generation is likely to be shared in this instance.
- Café = We anticipate the traffic generation from the Café will be shared with the Radiology, Day Surgery and Mews Apartments, as a secondary generator, we expect only 25% of traffic generation will occur.

The information in the table below includes the expected operating times for each facility, generation unit rates and the respective daily and peak trip generation. It is important to ensure that expected peak periods are captured under the peak trip generation.

Facility and Operating Time	Proposed Facility	Unit Rate (Daily, Peak)	Daily Trip Generation	Peak Trip Generation and Respective Period
Accommodation (24/7)	8 units	3, 0.4	24	3 (9am-10am, 12pm-1pm)
Childcare (6am-6pm)	120 children	1.7, 0.8AM/0.7PM	204	96, 84 (8am-9am, 3pm-4pm)
Day Surgery (8am-5pm)	982m²	22, 0.97 per 1000 SF	22	10 (8am-9am, 4pm-5pm)
Food and Beverage (7am-10pm)	438m²	60 per 100m², 5 per 100m²	262.8	22 (8am-9am, 5pm-6pm)
F&B Elevations (24/7)	8 units	3, 0.29	24	2 (9am-10am, 12pm-1pm)
Wetlands Suite (6am-6pm)	346m²	20 per 100m²	69	12
Radiology (8am-5pm)	409m²	134, 3.28 per 1000 SF	134	14 (8am-9am, 4pm-5pm)
Specialists (9am-5pm)	13 suites	256, 50	256	50 (8am-9am, 4pm-5pm)
The Mews (24/7)	8 units	3, 0.29 <b>520</b>	24	2 (9am-10am, 12pm-1pm)



Wellness Suites (9am-5pm)	485m²	150, 3.28 per 1000 SF	150	17
Arts	Shared	-	-	-
Café (8am-5pm)	264m² Shared (25% generation)	364, 62	91	16 (8am-9am, 12pm-1pm)
	TOTAL		1	1261 daily trips

In a high activity scenario, the post-development conditions are expected to generate approximately 2,522 movements (1261 in, 1261 out). We anticipate these numbers will be much less on the weekend due to lack of weekend operating times for traffic generating facilities. We do not expect that this will be typical of a normal weekday for the development, and in some instances the development may operate <100% capacity. For the purposes of this assessment our traffic generation, distribution and impacts have been based on 100% use of the development.

#### 3.5 Traffic Distribution

Based on a review of the existing road network and existing land use surrounding the site, we have assumed the distribution of traffic through the surrounding network may change due to the additional access arrangements and the greater function applied to the Fringe Lily Place and Left In Left Out access.

#### 3.5.1 Access Point Traffic distribution

With the Fringe Lily Access receiving a higher importance in terms of access function, we expect to see a higher proportion of trips entering/exiting onto Waterport Road. Due to the location of the traffic generating facilities, we anticipate that there will be a level of balance between the west and north accesses. Facilities have been grouped based on their position within the development and an estimated proportion of traffic generation belonging to these facilities have been calculated with respect to the three new access points accordingly.

#### 3.5.1.1 Northernmost - Accommodation/Childcare/Mews = 204 trips

We understand the frontage of the northernmost block of facilities will be subject to a two way traffic arrangement. This will allow for distribution westbound for both access points on Waterport Road, and eastbound movements at the Fringe Lily Access.

#### In:

- 45% Fringe Lily Access = 30% west leg, 70% east leg = 92 (28, 64)
- 10% Ocean Road Access = 100% south leg = 20
- 45% Left in Left Out Access = 100% east leg = 92

#### Out:

- 60% Fringe Lily Access = 20% west leg, 80% east leg = 124 (25, 99)
- 40% Left in Left Out Access = 100% west leg = 90

#### 3.5.1.2 Middle - Day Surgery/Radiology/Specialists/Cafe = 503 trips

In a similar way to how the current trip distribution operates at the existing access points, we would expect similar distribution from the east and south of the development. We note that the left in left out access will have a predominant use for staff parking, however it is not clear at this stage whether this area will have access control. We have assumed that staff will enter/exit through the left in left out access accordingly. We may also see a higher catchment travelling from the northwest, rather than the southeast, as we will assume some trips will be generated to non-local traffic.



#### In:

- 35% Fringe Lily Access = 40% west leg, 60% east leg = 176 (70,106)
- 35% Ocean Road Access = 30% north leg, 70% south leg = 176 (53,123)
- 30% Left in Left Out Access = 100% east leg = 151

#### Out

- 55% Fringe Lily Access = 20% west leg, 80% east leg = 277 (55,221)
- 35% Ocean Road Access = 30% north leg, 70% south leg = 176 (53,70)
- 10% Left in Left Out Access = 100% west leg = 50

#### 3.5.1.3 Southernmost - Wellness Centre/Wellness Suites/Food & Beverage = 506 trips

Based on the proximity of the Ocean Road access to the southernmost area, we will still anticipate to still see the predominant movement of traffic occur at Fringe Lily Drive, however with a much more balanced proportion between the main accesses. We may also see a higher catchment travelling from the northwest, rather than the southeast, as we will assume some trips will be generated to non-local traffic.

#### In:

- 35% Fringe Lily Access = 40% west leg, 60% east leg = 177 (71,106)
- 40% Ocean Road Access = 40% north leg, 60% south leg = 202 (81,121)
- 25% Left in Left Out Access = 100% east leg = 127

#### Out:

- 45% Fringe Lily Access = 20% west leg, 80% east leg = 228 (45,183)
- 45% Ocean Road Access = 30% north leg, 70% south leg = 228 (68,160)
- 10% Left in Left Out Access = 100% west leg = 50

Based on the calculated trip generation and distribution, we have assessed each access point for the proposed development. Figure 12 below illustrates how we anticipate how each access point will perform.



Figure 12: Post Development Daily Impacts on Accesses

- The black labels represent the current movements from our 2022 turning data
- Red represents post development 'out' movements

  522
- Green represents post development 'in' movements.



Fringe Lily Place will see the highest proportion of in/out movements occur, followed by the Ocean Road FRAC access and the Left In/Left Out access.

### 3.5.2 Traffic Distribution (Peak Periods)

We propose to use the same percentages of distribution for our peak period analysis undertake in Section 3.6.1. Peak periods on the external road network operate between the hours of 8am-9am for AM peaks, and 3pm-4pm for PM peaks.

As some peaks for facilities within the development won't match the same AM/PM peak periods mentioned above, we have accommodated for the expected changes in trip generation to synchronise with the road network peak periods (Table 7 below), ultimately representing the highest activity levels on the internal/external road network.

**Table 7: Changes in Post Development Peak Trip Generation** 

Facility and Operating Time	Peak Trip Generation and Respective Peak Period	Changed Trip Generation for AM and PM Road Network Peak Periods (AM, PM)		
Accommodation (24/7)	3 (9am-10am, 12pm-1pm)	2, 2		
Childcare (6am-6pm)	96, 84 (8am-9am, 3pm-4pm)	96, 84		
Day Surgery (8am-5pm)	10 (8am-9am, 4pm-5pm)	10, 4		
Food and Beverage (7am-10pm)	22 (8am-9am, 5pm-6pm)	22, 18		
F&B Elevations (24/7)	3 (9am-10am, 12pm-1pm)	2,2		
Wetlands Suite (6am-6pm)	12	12, 8		
Radiology (8am-5pm)	14 (8am-9am, 4pm-5pm)	14, 12		
Specialists (9am-5pm)	50 (8am-9am, 4pm-5pm)	50, 38		
The Mews (24/7)	2 (9am-10am, 12pm-1pm)	1, 2		
Wellness Suites (9am-5pm)	17	17, 12		
Café (8am-5pm)	16 (8am-9am, 12pm-1pm)	16, 5		
TOTAL	242 AM peak trips	rips, 187 PM peak trips		



3.5.2.1 Northernmost – Accommodation/Childcare/Mews = 99 trips AM (92 out), 88 trips PM (81 in)

#### In:

- 45% Fringe Lily Access = 30% west leg, 70% east leg = 44 (13/31), 36 (10/26)
- 10% Ocean Road Access = 100% south leg = 11, 9
- 45% Left in Left Out Access = 100% east leg = 44, 36

#### Out:

- 60% Fringe Lily Access = 20% west leg, 80% east leg = 55 (11/44), 53 (10/42)
- 40% Left in Left Out Access = 100% west leg = 37, 35
- 3.5.2.2 Middle Day Surgery/Radiology/Specialists/Cafe = 90 trips AM (83 out), 59 trips PM (52 in)

#### In:

- 35% Fringe Lily Access = 40% west leg, 60% east leg = 32(13/19), 18(7/11)
- 35% Ocean Road Access = 30% north leg, 70% south leg = 32(10/22), 18(5/13)
- 30% Left in Left Out Access = 100% east leg = 26, 16

#### Out:

- 55% Fringe Lily Access = 20% west leg, 80% east leg = 46(9/37), 32(6/26)
- 35% Ocean Road Access = 30% north leg, 70% south leg = 29(9/20), 21(6/15)
- 10% Left in Left Out Access = 100% west leg = 8, 6
- 3.5.2.3 Southernmost Wellness Centre/Wellness Suites/F&B = 53 trips AM (46 out), 40 trips PM (33 in)

#### In:

- 35% Fringe Lily Access = 40% west leg, 60% east leg = 18(7/11), 12(5/7)
- 40% Ocean Road Access = 40% north leg, 60% south leg = 21(8/13), 13(5/8)
- 25% Left in Left Out Access = 100% east leg = 14, 8

#### Out:

- 45% Fringe Lily Access = 20% west leg, 80% east leg = 21(4/17), 18(4/14)
- 45% Ocean Road Access = 30% north leg, 70% south leg = 21(6/15), 18(6/12)
- 10% Left in Left Out Access = 100% west leg = 4, 4



Figure 13: Post Development Access Distribution - AM Peak





Figure 14: Post Development Access Distribution - PM Peak

Our analysis determined that the in/out trips for the development would likely be different at each peak period due to the staff arriving during those periods and not departing until after the peak hour. We catered for approximately 25% of the staff arriving during the AM peak hour which resulted in less return trips at the egress points. Likewise applying the same rate, for the PM peak hour we would see more staff leave than arrive during this time. Figures 13 and 14 illustrate how we expect the development to operate during each respective peak period.

#### 3.5.3 Traffic Distribution Overall

The table below illustrates the expected change in traffic behaviour post development for Waterport and Ocean Road.

	Tot	al (AADT)	AM Peak (8a	ım - 9am)	PM Peak (3p	om-4pm)
Intersection Leg	East	West	East	West	East	West
Ocean Road Out	66 (+1%)	34 (-1%)	61(-2%)	39(+2%)	66(-2%)	34(+2%)
Ocean Road In	66(-2%)	34(+2%)	68	32	71(-3%)	29(+3%)
Waterport Road	52 (-)	48 (-)	57 (-)	43 (-)	53 (-2%)	47 (+2%)

**Table 8: Change in Traffic Distribution Post Development** 

This is a relatively nominal distribution change, and not one that we would expect any significant changes to how both Waterport Road and Ocean Road operate in terms of road function.



## 3.6 Traffic Impacts

The proposed development does not have an estimated open date as the time of this assessment. Estimating traffic growth for the future and when the development is open may not be accurate and result in an unreliable assumption for how the road network performs. We have therefore estimated and have assessed the post development conditions based on the current data that was collected in 2022.

### 3.6.1 Waterport Road & Ocean Road (Traffic Growth)

**Table 9: Traffic Growth - Post Development Conditions** 

Street	Direction	Daily Traffic	AADT (2-way)
Waterport Road (east of Ocean Road)	Westbound Eastbound	3897+125+190 (4212) 3705+169 (3874)	8086 (+12%)
Waterport Road (west of Ocean Road)	Westbound Eastbound	3443 + 178 (3621) 3198 + 152 (3350)	6971 (+11%)
Ocean Road (North of FRAC Access)	Northbound Southbound	1475 + 121 (1596) 1426 + 223 (1649)	3245 (+11%)
Ocean Road (South of FRAC Access)	Northbound Southbound	1559 + 264 (1823) 1548 + 230 + 89 (1867)	3690 (+16%)

Both Waterport Road and Ocean Road will see a notable increase in vehicle movements due to the development. Our peak hour analysis will determine if these roads are still operating under acceptable conditions from a mid-block perspective.

In accordance with the Austroads Guide to Traffic Management Part 3, Level of Service (LOS) contributes to ranges of Volume to Capacity (V/C) Ratios, where certain thresholds apply for V/C ratios, they have an inversely proportional influence on LOS. In general, there are six levels of service, designated A to F, with LOS A representing the best operating condition and service quality from the users' perspective.

Examples of LOS are as follows (As an example we have based these figures from Austroads GTM Part 3 – Multilane Highway):

- LOS A Free flowing low flows (<700 veh/lane/hr)
  - Volume/Capacity Ratio 0.32
- LOS B Moderate design flows (700-1100 veh/lane/hr)
  - Volume/Capacity Ratio 0.50
- LOS C Flows encountered on urban roads (1,100-1,575 veh/lane/hr)
  - Volume/Capacity Ratio 0.72
- LOS D Appropriate to flows near tolerable capacity (1,575 2,015 veh/lane/hr)
  - o Volume/Capacity Ratio 0.92
- LOS E At or near actual capacity (> 2015 veh/lane/hr)
  - Volume/Capacity Ratio 1.0

Assessing both Waterport Road and Ocean Road from a midblock perspective, post development peak periods illustrate that Waterport Road and Ocean Road do not exceed 900veh/hr and 400veh/hr respectively. Splitting these values into a per lane volume, indicates the highest values of 486 and 190 veh/ln/hr for Waterport Road and Ocean Road respectively. We have assumed that the lane capacity of both Waterport Road and Ocean Road equate to 1000veh/lane/hr, by calculating V/C ratio at peak periods, for Waterport Road = LOS A (.49), for Ocean Road = LOS A (0.19). Which would indicate post-development volumes are operating under acceptable flow conditions from a mid-block perspective.



#### 3.6.2 Access Points

In Australia and New Zealand, the analysis of unsignalised intersections should be evaluated using SIDRA Intersection or an equivalent program. Each access point was assessed using SIDRA modelling to understand the expected development impacts at each point. We have used the following inputs for our analysis and also reviewed the major roads from a mid-block perspective.

### 3.6.2.1 FRAC Ocean Road Access Point

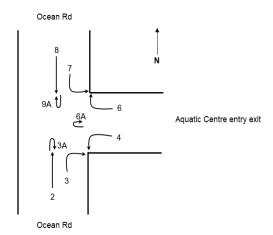


Figure 16 and Table 10 illustrates the expected turning movements (daily, AM peak and PM peak) at the Ocean Road access point.

From a mid-block perspective, we also note that at most we expect approximately 350 vehicles to travel on Ocean Road during the peak periods. This is well within the capacity of Ocean Road to accommodate for as we expect 190 vehicles operate in one direction during the peak period.

From the SIDRA results, this intersection is performing acceptably, where for the AM and PM peak period, DOS does not exceed 0.1. The maximum queuing on Ocean Road is around 1 vehicle with an average delay of 6 seconds for the right turn movement in the morning peak.

Figure 16: FRAC Ocean Road Access Point

Table 10: Post Development Turning Numbers (FRAC Ocean Road Access Point)

	Total (	AADT)		Peak - 9am)		Peak -4pm)
Intersection Leg	North	South	North	South	North	South
Frac Egress (6 & 4)	200	412	20	49	22	46
Frac Ingress (7 & 3)	194	427	31	68	19	38
Ocean Road through (8 & 2)	1559	1450	136	190	170	161



## 3.6.2.2 Waterport Road/Fringe Lily

Figure 17 and Table 11 illustrates the expected turning movements (daily, AM peak and PM peak) at the Fringe Lily Place/Waterport Road access point.

From a mid-block perspective, we also note that at most we expect approximately 900 vehicles to travel on Waterport during the peak periods. This is well within the capacity of Waterport Road to accommodate for as we expect up to 500 vehicles to travel in one direction on this road during peak periods.

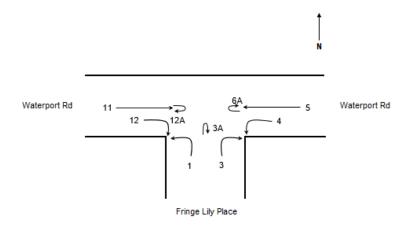


Figure 17: Fringe Lily Place/Waterport Road Access Point

From the SIDRA results, this intersection is performing acceptably, where for the AM and PM peak period, DOS does not exceed 0.33 and 0.27 respectively. The maximum queuing on Fringe Lily Place is around 2 vehicles with an average delay of 20 seconds for the right turn movement in the morning peak.

Table 11: Post Development Turning Numbers (Fringe Lily Waterport Road Access Point)

	Total (	(AADT)	AM F (8am -	Peak · 9am)	PM I (3pm·	Peak -4pm)
Intersection Leg	East	West	East	West	East	West
Frac Egress (3 & 1)	485	189	105	28	95	30
Frac Ingress (4 & 12)	407	236	82	46	59	28
Waterport Road through (5 & 11)	4141	3705	486	369	442	368



#### 3.6.3 External Road Network

### 3.6.3.1 Left in-Left Out Egress/Lincoln Road Intersection

As the left in/left out access is to be constructed almost directly opposite the Lincoln Road intersection, we have analysed the operation of this intersection under the post-development conditions incorporating both the left in left out movements and the movements at the Lincoln Road intersection.

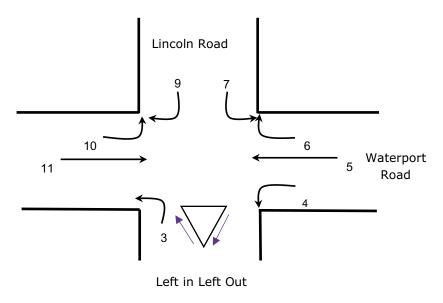


Figure 18: Left In/Left Out Access w Lincoln

Figure 18 and Table 12 illustrates the expected turning movements (daily, AM peak and PM peak) at the new Left in Left Out access point.

Similar to the other access on Waterport Road, we expect approximately up to 900 vehicles to travel on Waterport during the peak periods. This is well within the capacity of Waterport Road to accommodate as up to 400 vehicles travel in one direction on this road during peak periods.

From the SIDRA results, this intersection is performing acceptably, where for the AM and PM peak period, DOS does not

exceed 0.26 and 0.27 respectively. The maximum queuing on Lincoln Road is around 1 vehicle with an average delay of 22 seconds for the right turn movement in the morning peak.

**Table 12: Post Development Turning Numbers (Fringe Lily Waterport Road Access Point)** 

	Total (	AADT)		Peak - 9am)	PM F (3pm-	Peak 4pm)
Intersection Leg	East	West	East	West	East	West
Left In (4)	370	-	84	-	60	-
Left Out (3)	-	190	-	49	-	45
Waterport Road (5 & 11)	4141	3705	358	413	354	414
Lincoln Road Egress (7 & 9)	237	365	19	21	13	28
Lincoln Road Ingress (6 & 10)	184	367	25	35	18	24



### 3.6.3.2 Waterport Road / Ocean Road

Table 13 below illustrates the post development turning volumes of the Waterport Road/Ocean Road intersection. This incorporates the existing turning movements and the post development generated numbers with this summary. We have already tested the midblock capacity numbers of both Waterport Road and Ocean Road and have determined that post-development these roads will operate at worst under LOS B conditions.

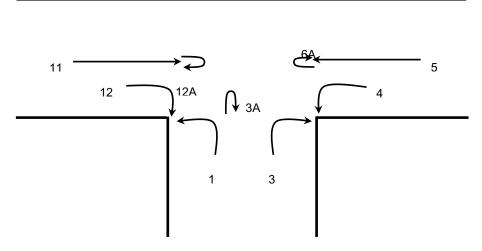


Figure 19: Waterport Road/Ocean Road Intersection

From the SIDRA results, this intersection is performing acceptably, where for the AM and PM peak period, DOS does not exceed 0.42 and 0.37 respectively. The maximum queuing on Ocean Road is around 3 vehicles with an average delay of 1 seconds for the right turn movement in the morning peak.

**Table 13: Waterport Road/Ocean Road Post Development Traffic Impacts** 

	Total (A	ADT)		Peak - 9am)	PM F (3pm-	
Intersection Leg	East	West	East	West	East	West
Ocean Road Egress (3 & 1)	1078	518	111	77	113	62
Ocean Road Ingress (4 & 12)	1148	565	119	53	123	57
Waterport Road (5 & 11)	3148	2796	440	286	356	278



### 3.6.3.3 Summary of Performance

We have previously discussed Degree of Saturation in Section 2.6.1 when we had developed our base case. However, we have also taken the worst possible values from the pre and post development conditions for each access point and intersection leg to determine the change, if any to the LOS at each respective location. Table 15 illustrates the changes in Level of Service and DOS to each access point and intersection between pre and post development conditions. For the full results of our post development SIDRA analysis, refer to Appendix E.

Table 14: Change in Level of Service Based on AGTM P3

Site	Base Case Worst DOS	Post Development DOS	Base Case LOS (delay seconds)	Post Development LOS (delay seconds)
Ocean Road FRAC Access	0.096	0.11	LOS A (7s)	LOS A (8s)
Fringe Lily/Waterport Road Access	0.257	0.43	LOS B (13s)	LOS C (23s)
Left In/Left Out Waterport Road Lincoln Road Intersection	0.241	0.26	LOS C (15s)	LOS D (26s)
Waterport Road/Ocean Road Intersection	0.322	0.41	LOS B (14s)	LOS B (19s)
	Average 1	Increase – 0.05	Average increa	ase – 5 seconds

Changes to the level of service on Fringe Lily/Waterport Road and the Left in/Left Out access are at Fringe Lily and Lincoln Road respectively. Based on these values, we do not anticipate any mitigation strategies are required at this point in time, as suitable solutions would likely involve roundabouts/traffic signals to manage the priority for turn movements. Solutions such as these would not be recommended at this point, primarily due to the low number of turn movements during the peak periods from the minor legs and the manageable impacts to delays that the development has on the road network.

Furthermore, our assumptions have been based on the development operating at 100% capacity, which may not be reflective of a typical weekday.

## **4 Infrastructure Design**

### 4.1 Public Transport

Given the expected public traffic generation and interest that this development will provide, liaison with the public transport authority should be undertaken to introduce appropriately located bus services adjacent to or within the development.

Community Buses and School Bus Services are already expected to have shared use to the FRAC facility and will have access to the development via the Ring Road and through the FRAC off street car park.

However, not every patron may have access to a private vehicle, and as such public transport should be considered to increase modal connectivity and sustainability to the proposed development.

### 4.2 Walking and Cycling

The proposed development has proposed a suitable level of footpaths that connect to the facilities accordingly through an attractive series of walkways and strategically placed crossing points into the gardens located west of the development.

This also connects into the existing shared use bike paths that traverse through the southern wetlands and through the western residential development via Ocean Road. Northern connectivity is limited by the lack of residential and active transport options north of the proposed development. East of the development are horticultural land that does not have any demand for such infrastructure. The civil design of this precinct should incorporate DDA ramps and infrastructure as it is progressed.

### 4.3 Turning Lane Warrants - Waterport Road/Fringe Lily Access

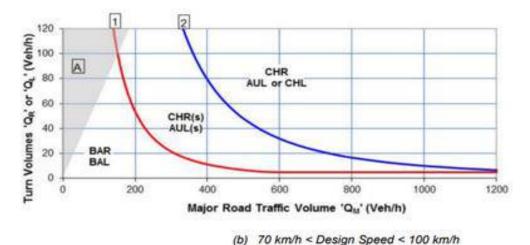


Figure 20: Warrants for Turn Lane Treatments (90km/h D.S)

Based on the design speed of 90km/h on Waterport Road (posted speed limit of 80km/h), the following figure above (Figure 16) shall be used for determining turn lane warrants at an unsignalized intersection. In this instance, we propose to use the same methodology for this access point based on the post-development volumes.



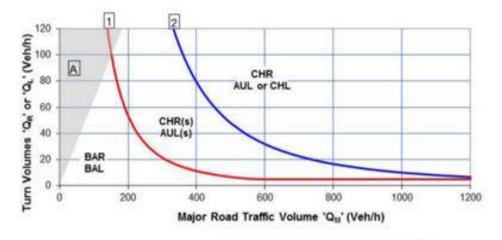
Turn Movement	Major Road Peak Volume (Qm)	Turn Treatment Required
Right Turn Peak Volume (Qr) = 46	937	CHR
Left Turn Peak Volume (QI) = 82	486	AUL

For the right turn movements at this intersection, the proposed warrant for a Channelised Right Turn treatment is recommended and satisfied. This is currently installed at this access and as such the length of the right turn lane is acceptable.

An auxiliary left turn lane will also be required at this access. A preliminary review of Austroads indicated this would extend for approximately 120m east of the access point. Noting that this would conflict with the left in left out access. Subject to further investigations, an Extended Design Domain (EDD) could be adopted to reduce the extents of the AUL to approximately 60m. This would eliminate the potential conflict between vehicles at the Left in/out access and left turn movements into the Fringe Lily Access.

It is important to note that based on the undertaken turning assessment of the pre-development conditions, the introduction of an AUL at the Fringe Lily Access would already be warranted based on a left turn volume of 21 peak vehicles, and a major road peak volume of 456 vehicles. The development is anticipated to add 46 movements and 30 vehicles to the left turn and major road volumes respectively.

# 4.4 Turning Lane Warrants - Waterport Road/Left in Left Out Access



(b) 70 km/h < Design Speed < 100 km/h

Figure 21: Warrants for Turn Lane Treatments (90km/h D.S)

Turn Movement	Major Road Peak Volume (Qm)	Turn Treatment Required
Left Turn Peak Volume (QI) = 84	501	AUL

Based on our peak turning movements at the new access, an auxiliary left turn lane is warranted at the Left In/Left Out access. A preliminary review of Austroads Geometric design indicated this would extend between 90 and 125m east of the left in/left out access point. This would also assist with the turn movements for the 12.5m rigid bus design vehicle.

We would also recommend a Stop Sign be installed on the northern leg of this intersection (Lincoln Road) to adhere to the relevant standards. 533



### 4.5 Turning Lane Warrants - Ocean Road/FRAC Access

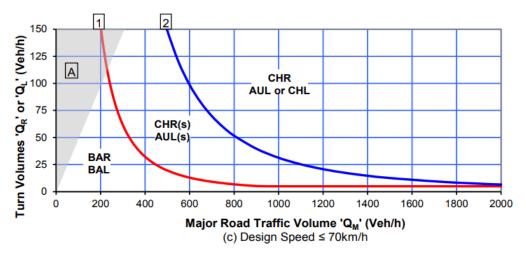


Figure 22: Warrants for Turn Lane Treatments (70km/h D.S)

Turn Movement	Major Road Peak Volume (Qm)	Turn Treatment Required
Right Turn Peak Volume (Qr) = 68	357	CHR(s)
Left Turn Peak Volume (QI) = 31	136	BAL

Due to the lower posted speed on Ocean Road, the design speed will be different than the Waterport Road access, and lowered to 70km/h. In the instance this has changed, a different figure is extrapolated from Austroads, see Figure 17. Based on our peak turning movements at the Ocean Road access, a channelised right turn lane (short) is warranted. This is currently installed at this access and as such the length of the right turn lane is acceptable.

A Basic Auxiliary left turn is also required for left turning movements, which also appears to be installed at this access point.

### 4.6 Turning Lane Warrants - Waterport Road/Ocean Road

Turn Movement	Major Road Peak Volume (Qm)	Turn Treatment Required
Right Turn Peak Volume (Qr) = 53	845	CHR
Left Turn Peak Volume (QI) = 119	440	AUL

For the right turn movements at this intersection, the proposed warrant for a Channelised Right Turn treatment is recommended and satisfied. This is currently installed at this access and as such the length of the right turn lane is acceptable.

An auxiliary left turn lane will also be required at this intersection. A preliminary review of Austroads indicated this would extend for approximately 120m east of the access point.

It is important to note that based on the undertaken turning assessment of the pre-development conditions, the introduction of an AUL(s) would already be warranted based on a left turn volume of 93 peak vehicles, and a major road peak volume of 349 vehicles at the same time.



## **5 Summary and Recommendations**

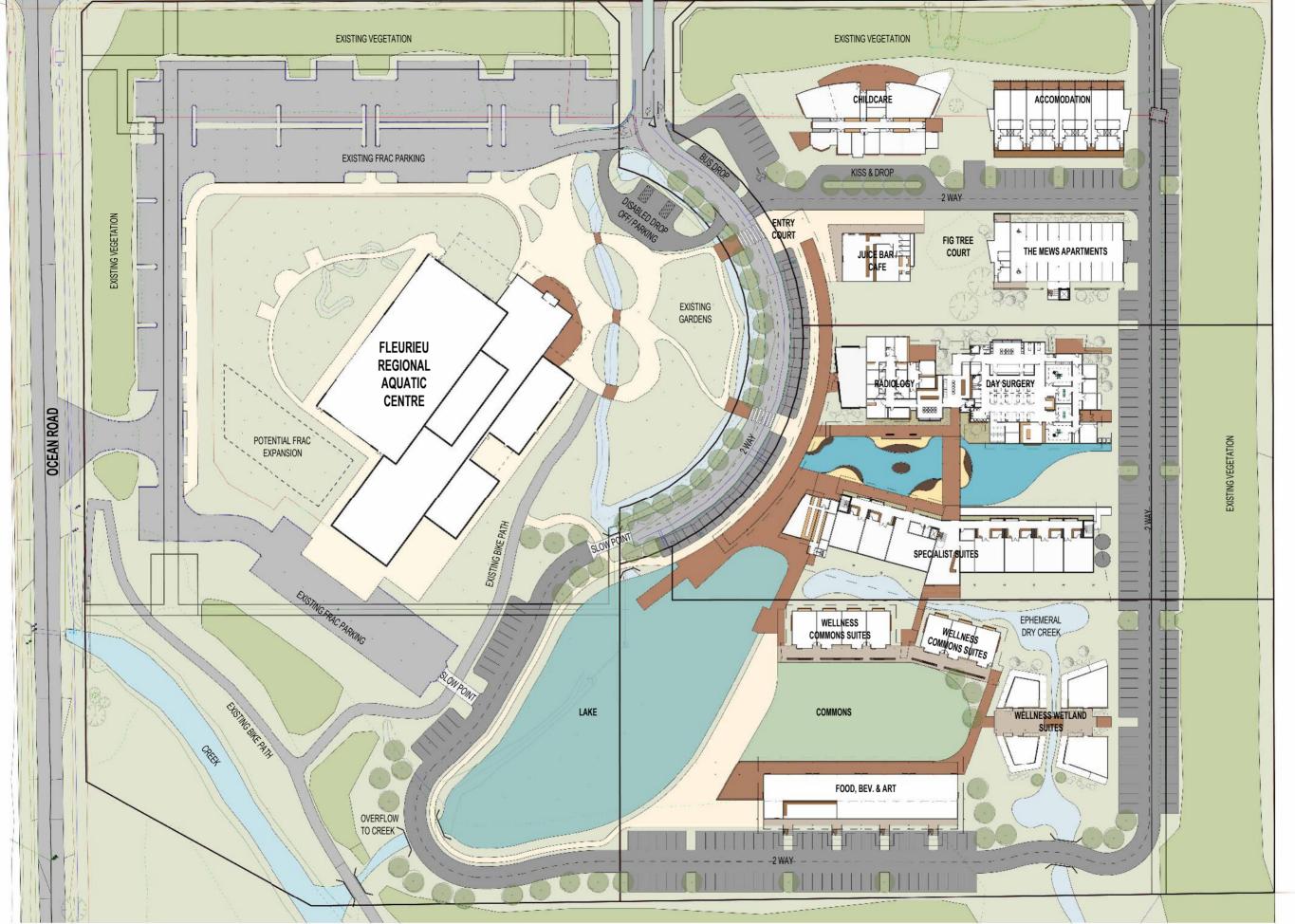
- Tonkin were tasked with developing a traffic impact assessment to demonstrate the impacts of a new greenfield site located on the corner of Waterport Road and Ocean Road and adjacent to the Fleurieu Regional Aquatic Centre (FRAC) immediately west of the site.
- Pre-lodgement written advice from Alexandrina Council recommended that this report describe the traffic generated by the development, calculate demand for off-street parking and the impacts of the development on the local road network.
- The proposed development encompasses a mixture of facilities with different uses such as accommodation, childcare, surgery, therapy rooms, exercise centre, café, restaurant, and recreational facilities. A new ring road will be built to provide access to all facilities by extending the existing Fringe Lily Place and by creating linkage to the Waterport Road access at Fringe Lily Place, the FRAC access at Ocean Road, and a new left in left out access at Waterport Road east of Fringe Lily Place.
- The development proposed road and parking layout will adhere AS2890.1, by maintaining acceptable aisle widths and angled parking space dimensions subject to the respective user classes (User Class 1 & 3). Angled parking has been distributed across the development as a total of 273 off street parking spaces. We have calculated that approximately 271 off-street parks will be required in accordance with the Planning and Design Code. The proposed development satisfies the off-street car parking requirements, where any potential shortfall of off-street parking provisions will be shared with the FRAC existing car park which was observed to have low occupancy levels.
- Service vehicle access is also accommodated for within the development. The proposed development has been checked with a 12.5m rigid vehicle has been checked through the ring road and at the Waterport Road access points. Minor widening is due to occur at the left in left out access, to ensure acceptable turn paths, however this could be progressed further at the concept civil design level. A 14.5m rigid vehicle was also checked at the Fringe Lily Place Access point from previous assessments undertaken by GTA (now Stantec) Consultants, this geometric arrangement has not changed as part of this proposal and is suitable for ingress/egress.
- We have calculated traffic generation from the development and estimate approximately 2,359 (total
  in/out) daily trips will be generated by the development at 100% operation and capacity, peak periods
  will generate 242 AM peak trips and 187 PM peak trips respectively. Due to this we anticipate some
  growth on Waterport Road and Ocean Road, distributed amongst the two access points on Waterport
  road and the FRAC access point on Ocean Road.
- Traffic will be concentrated at the Fringe Lily/Waterport Road access, followed by Ocean Road and subsequently the left in left out Waterport Road access. We don't anticipate the main ingress/egress of traffic to the development will change from the current conditions, which sees traffic approach/depart from/to the south and east of the development. Minor changes in traffic distribution are expected due to additional demand west of the development, however this is a nominal change.
- Combining the existing traffic volumes and post-development traffic volumes, indicates the mid-block capacity of the surrounding road network is not expected to exceed LOS B, which illustrates these roads operate under moderate free flowing conditions.
- The SIDRA analysis for this assessment indicated a minor impact on the external road network, an
  average increase on DOS was 0.05 and delay was 5 seconds across all accesses and intersections. Due to
  the low number of movements we recommend no upgrades to the intersections such as roundabouts or
  signals are required at this point.
- To improve alternative transport options, liaison with the public transport authority should occur to encourage patronage to and from the development and to reduce the reliance of private car use. The installation of bus stops and amendment of bus routes would be recommended by the transport/road authority once the development is operational. Acceptable cycling and walking infrastructure has been incorporated within the proposed development.
- An auxiliary left turn lane will also be required at the Waterport Road/Fringe Lily Access, using extended design parameters to eliminate conflict with the Left in Left out access.
- An auxiliary left turn lane (short) will also be required at the left in left out access due to the number of left in vehicles entering from Waterport Road. This should be supplemented with a Stop Sign arrangement on the Lincoln Road northern leg approach.
- A review of Waterport/Ocean Road indicates that an auxiliary left turn lane is required on Waterport Road to improve the movement at this intersection.

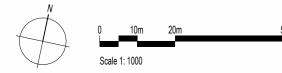


## **Appendix A - Concept Site Plan**

# 4.4.- Attachment 2

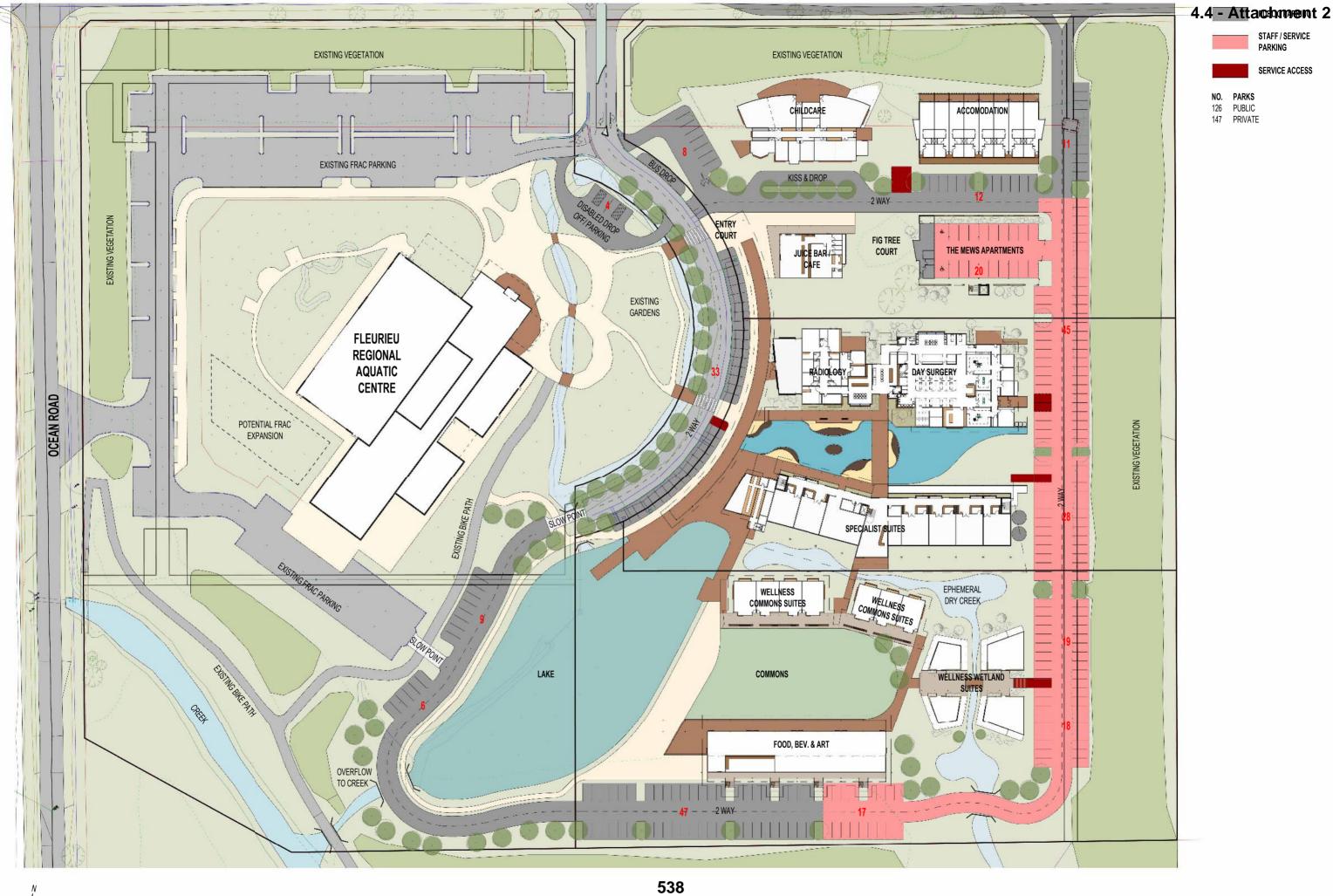
ACCOMMODATION 596 m² CHILDCARE 658 m² DAY SURGERY 982 m² F&B 882 m² GALLERY 132 m² MULTIPURPOSE 346 m² RADIOLOGY 409 m² SPECIALISTS - FIRST FLOOR 973 m² SPECIALISTS - GROUND FLOOR 1249 m² THE MEWS - LOWER 75 m² THE MEWS - UPPER WELLNESS TOTAL 7381 m<sup>2</sup>

















STAFF / SERVICE PARKING

SERVICE ACCESS



Scale 1: 500

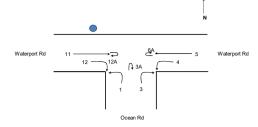




## **Appendix B – Turning Movement Summary**



Client : Tonkin
Job : Waterport Rd Southern Fleuri
Day/Date : Tuesday, 29 November 2022
Survey Location : Waterport Rd & Ocean Rd
Woethor : Fleuri

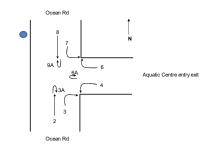




Time		Move	ment 1			Mov	ement 3			Mover	ment 3A		I	Move	ment 4			Movemen	nt 5			Movem	ent 6A			Movement	11	1	Movem	nent 12			Movem	ent 12A		1		
Period	Light	Heavy	Bus	Total	Light	Heavy		Total	Light	Heavy	Bus	Total	Light	Heavy	Bus	Total	Light			Total	Light	Heavy	Bus	Total	Light		us Tota	Light		Bus	Total	Light	Heavy	Bus	Total	Total of all Movements	Peak Hour Volu	Jme
7:00 - 7:15	3	1	0	4	9	0	0	9	0	0	0	0	4	0	0	4	23	2	0	25	0	0	0	0	33	0	0 33	5	1	0	6	0	0	0	0	81	7:00 - 8:00	487
7:15 - 7:30	2	2	0	4	16	0	0	16	0	0	0	0	5	1	0	6	25	1	1	27	0	0	0	0	32	2	0 34	5	3	0	8	0	0	0	0	95	7:15 - 8:15	560
7:30 - 7:45	9	0	0	9	17	1	0	18	0	0	0	0	9	2	0	11	33	5	2	40	0	0	0	0	35	3	0 38	4	2	0	6	0	0	0	0	122	7:30 - 8:30	687
7:45 - 8:00	13	3	0	16	25	3	2	30	0	0	0		15	0	1	16	64	3		68	0	0	0	0	51		0 51	6	1	1	8	0	0	0	0	189	7:45 - 8:45	824
	10	2	0	12	17	0	0	17	0	0			9		0	9	64	2		67	0	0	0	0	37		0 39	6	4	0	10	0	0	0	0	154		
8:00 - 8:15	14	1									0	0		0									0							0							8:00 - 9:00	904
8:15 - 8:30			0	15	26	1	0	27	0	0	0	"	23	0	0	23	87	5		96	0	0		0	50		0 54	5	2		7	0	0	0	0	222	8:15 - 9:15	921
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8:45 - 9:00	9	2	0	11	20	0	0	20	0	0	0	0	40	0	0	40	86	4		91	0	0	0	0	87		1 90	12	5	0	17	0	0	0	0	269	8:45 - 9:45	755
9:00 - 9:15	17	3	0	20	18	1	0	19	0	0	0	0	12	0	0	12	53	3	0	56	0	0	0	0	51	2	2 55	8	1	0	9	0	0	0	0	171	9:00 - 10:00	672
9:15 - 9:30	10	2	0	12	17	0	0	17	0	0	0	0	19	0	0	19	46	5	0	51	0	0	0	0	44	5	0 49	7	3	0	10	0	0	0	0	158	9:15 - 10:15	668
9:30 - 9:45	6	3	0	9	28	1	0	29	0	0	0	0	11	1	0	12	31	4	0	35	0	0	0	0	62	3	1 66	4	2	0	6	0	0	0	0	157	9:30 - 10:30	652
9:45 - 10:00	8	3	0	11	17	1	0	18	0	0	0	0	15	1	0	16	66	5	0	71	0	0	0	0	59	4	0 63	4	3	0	7	0	0	0	0	186	9:45 - 10:45	647
10:00 - 10:15	7	3	0	10	8	0	0	8	0	0	0	0	21	1	0	22	57	4	0	61	0	0	0	0	48	4	0 52	13	1	0	14	0	0	0	0	167	10:00 - 11:00	620
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	7	2	0													-							0					4		0					0			
12:00 - 12:15				9	12	1	1	14	0	0	0	0	16	0	0	16	53			59	0	0		0	58		0 61		2		6	0	0	0		165	12:00 - 13:00	
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16:45 - 17:00	7	0	0	7	18	1	0	19	0	0	0	0	20	0	0	20	52	2	0	54	0	0	0	0	47	3	0 50	17	0	0	17	0	0	0	0	167	16:45 - 17:45	656
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18:15 - 18:30	2	0	0	2	6	0	0	6	0	0	0	0	13	0	0	13	41	0	0	41	0	0	0	0	33	1	0 34	4	0	0	4	0	0	0	0	100	AM Peak	921
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18:45 - 19:00	2	0	0	2	10	0	0	10	0	0	0	0	3	0	0	3	18			19	0	0	0	0	13		0 14	2	0	0	2	0	0	0	0	50		
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PM Peak	47	6	2	55	106	1	1	108	0	0	0	0	119	2	0	121	277	9	8	294	0	0	0	0	244	7	4 255	47	2	0	49	0	0	0	0	882		



: Tonkin : Waterport Rd Southern Fleurieu Health : Tuesday, 29 November 2022 : Ocean Rd & Aquatic Centre entry exit

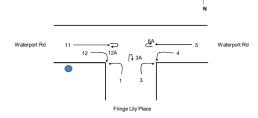




Time		Mover	nent 2			Move	ement 3			Mover	ment 3A			Move	ment 4			Movem	nent 6			Movem	ent 6A			Move	ment 7			Movement	8			Movement	9A			
Period	Light	Heavy	Bus	Total	Light	Heavy		Total	Light	Heavy	Bus	Total	Light	Heavy	Bus	Total	Light	Heavy	Bus	Total	Light	Heavy	Bus	Total	Light	Heavy	Bus	Total	Light	Heavy B		tal L	ight I		lus Total	Total of all Movements	Peak Hour Volu	ime
7:00 - 7:15	11	1	0	12	0	0	0	0	0	0	0	0	5	0	0	5	1	0	0	1	0	0	0	0	0	0	0	0	8	1	) 9	,	0	0	0 0	27	7:00 - 8:00	191
7:15 - 7:30	23	2	0	25	1	0	0	1	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	8	4	1:	2	0	0	0 0	42	7:15 - 8:15	218
7:30 - 7:45	25	1	0	26	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	0	0	3	11	3	) 1	4	0	0	0 0	46	7:30 - 8:30	253
7:45 - 8:00	36	5	2	43	7	0	0	7	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	1	20	2	2 2	4	0	0	0 0	76	7:45 - 8:45	303
8:00 - 8:15	28	2	0	30	2	0	0	2	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	14	4	) 1:	В	0	0	0 0	54	8:00 - 9:00	326
8:15 - 8:30	40	2	0	42	3	0	0	3	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	26		2		0	0	0 0	77	8:15 - 9:15	343
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8:45 - 9:00	29	2	0	31	8	0	0	8	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	6	0	0	6	44		) 4	_	0		0 0	99	8:45 - 9:45	295
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9:15 - 9:30	25	2	0	27	4	0	0	4	0	0	0	0	3	0	0	3	2	0	0	2	0	0	0	0	1	0	0	1	25		2		0		0 0	65	9:15 - 10:15	248
9:30 - 9:45	34	4	0	38	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	1	14		) 1		0		0 0	60	9:30 - 10:30	233
9:45 - 10:00	23	4	0	27	3	0	0	3	0	0	0	0	4	0	0	4	2	0	0	2	0	0	0	0	0	0	0	0	19		2		0		0 0	59	9:45 - 10:45	239
10:00 - 10:15	13	2	0	15	2	0	0	2	0	0	0	0	10	0	0	10	2	0	0	2	0	0	0	0	2	1	0	3	31		3:	_	0		0 0	64	10:00 - 11:00	
10:15 - 10:30	19	1	0	20	5	0	0	5	0	0	0	0	8	0	0	8	2	0	0	2	0	0	0	0	1	0	0	1	11		1		0		0 0	50	10:15 - 11:15	226
10:30 - 10:45	21	0	0	21	5	0	0	5	0	0	0	0	4	0	0	4	1	0	0	1	0	0	0	0	4	0	0	4	29	2	3		0	0	0 0	66	10:30 - 11:30	233
10:45 - 11:00	20	2	0	22	4	0	0	4	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	1	0	0	1	18	4	1 2	3	0	0	0 0	57	10:45 - 11:45	221
11:00 - 11:15	16	4	0	20	3	1	0	4	0	0	0	0	7	0	0	7	2	0	1	3	0	0	0	0	2	0	0	2	14	3	1	7	0	0	0 0	53	11:00 - 12:00	233
11:15 - 11:30	21	1	0	22	5	0	0	5	0	0	0	0	2	0	0	2	2	0	0	2	0	0	0	0	0	0	0	0	22	4	2	6	0	0	0 0	57	11:15 - 12:15	232
11:30 - 11:45	16	3	0	19	2	0	0	2	0	0	0	0	2	0	0	2	1	0	0	1	0	0	0	0	1	0	0	1	26	3	2	9	0	0	0 0	54	11:30 - 12:30	243
11:45 - 12:00	25	3	0	28	1	0	0	1	0	0	0	0	7	0	0	7	4	0	0	4	0	0	0	0	2	0	0	2	26	1	2	7	0	0	0 0	69	11:45 - 12:45	243
12:00 - 12:15	15	3	0	18	3	0	0	3	0	0	0	0	4	0	0	4	4	0	1	5	0	0	0	0	0	0	0	0	20	2	2	2	0	0	0 0	52	12:00 - 13:00	236
12:15 - 12:30	28	2	0	30	3	0	0	3	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	28	0	2	В	0	0	0	68	12:15 - 13:15	248
12:30 - 12:45	23	1	0	24	3	0	0	3	0	0	0	0	4	0	0	4	1	0	0	1	0	0	0	0	0	0	0	0	20	2	2	2	0	0	0 0	54	12:30 - 13:30	245
12:45 - 13:00	26	2	0	28	3	0	0	3	0	0	0	0	3	0	0	3	2	0	0	2	0	0	0	0	1	0	0	1	23	2	2	5	0	0	0 0	62	12:45 - 13:45	252
13:00 - 13:15	36	2	0	38	6	0	0	6	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	2	0	0	2	15	0	1	5	0	0	0 0	64	13:00 - 14:00	246
13:15 - 13:30	26	2	0	28	9	0	0	9	0	0	0	0	5	0	0	5	1	0	0	1	0	0	0	0	0	0	0	0	20	2	2	2	0	0	0 0	65	13:15 - 14:15	228
13:30 - 13:45	19	2	0	21	5	0	0	5	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	29	1	3	0	0	0	0 0	61	13:30 - 14:30	223
13:45 - 14:00	19	1	0	20	3	1	0	4	0	0	0	0	3	0	0	3	3	0	0	3	0	0	0	0	2	0	0	2	22	2	2	4	0	0	0 0	56	13:45 - 14:45	239
14:00 - 14:15	22	1	0	23	2	0	0	2	0	0	0	0	2	0	0	2	1	0	1	2	0	0	0	0	2	0	0	2	13	2	1	5	0	0	0 0	46	14:00 - 15:00	252
14:15 - 14:30	22	3	0	25	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	31	1	3:	2	0	0	0 0	60	14:15 - 15:15	299
14:30 - 14:45	37	1	0	38	1	0	0	1	0	0	0	0	5	0	0	5	7	0	0	7	0	0	0	0	0	0	0	0	26	0	2	6	0	0	0 0	77	14:30 - 15:30	343
14:45 - 15:00	28	1	0	29	2	0	0	2	0	0	0	0	3	0	0	3	3	0	1	4	0	0	0	0	0	0	0	0	30	1	3	1	0	0	0 0	69	14:45 - 15:45	355
15:00 - 15:15	37	0	0	37	2	0	0	2	0	0	0	0	9	0	0	9	5	0	0	5	0	0	0	0	2	0	0	2	34	4	3	В	0	0	0 0	93	15:00 - 16:00	358
15:15 - 15:30	40	4	1	45	1	0	0	1	0	0	0	0	5	1	0	6	3	0	0	3	0	0	0	0	1	0	0	1	48	0	) 4	В	0	0	0 0	104	15:15 - 16:15	344
15:30 - 15:45	41	2	1	44	2	0	0	2	0	0	0	0	1	0	0	1	2	0	0	2	0	0	0	0	1	0	0	1	38		3:	_	0		0 0	89	15:30 - 16:30	328
15:45 - 16:00	23	2	1	26	3	0	0	3	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	0	0	5	34		3		1	0	0 1	72	15:45 - 16:45	308
16:00 - 16:15	34	1	0	35	3	0	0	3	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	34		3		0		0 0	79	16:00 - 17:00	
16:15 - 16:30	28	3	0	31	7	0	0	7	0	0	0	0	5	0	0	5	1	0	0	1	0	0	0	0	1	0	0	1	43		) 4		0		0 0	88	16:15 - 17:15	
16:30 - 16:45	19	2	0	21	2	0	0	2	0	0	0	0	3	0	0	3	2	0	0	2	0	0	0	0	0	0	0	0	41		) 4		0		0 0	69	16:30 - 17:30	
16:45 - 17:00	22	1	0	23	1	0	0	1	0	0	0	0	4	0	0	4	3	0	0	3	0	0	0	0	0	0	0	0	33		3		0		0 0	65	16:45 - 17:45	
17:00 - 17:15		0	0	22	6	0	0	6	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	38		3:		0		0 0	68	17:00 - 18:00	
	22															-															-					-		
17:15 - 17:30	21	1	0	22	3	0	0	3	0	0	0	0	4	0	0	4	1	0	0	1	0	0	0	0	2	0	0	2	30		3		0		0 0	62	17:15 - 18:15	
17:30 - 17:45	22	1	0	23	1	0	0	1	0	0	0	0	3	0	0	3	2	0	0	2	0	0	0	0	0	0	0	0	29		3		0		0 0	59	17:30 - 18:30	
17:45 - 18:00	9	0	0	9	3	0	0	3	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	19		) 1:		0		0 0	35	17:45 - 18:45	
18:00 - 18:15	11	0	0	11	8	0	0	8	0	0	0	0	2	0	0	2	4	0	0	4	0	0	0	0	0	0	0	0	17		) 1		0		0 0	42	18:00 - 19:00	-
18:15 - 18:30	8	0	0	8	3	0	0	3	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	17		) 1		0		0 0	34	AM Peak	343
18:30 - 18:45	15	0	0	15	3	0	0	3	0	0	0	0	3	0	0	3	1	0	0	1	0	0	0	0	3	0	0	3	11		) 1		0		0 0	36	PM Peak	358
18:45 - 19:00	11	0	0	11	2	0	0	2	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	5		5		0		0 0	20	1	
Total  AM Peak	1177 157		6 1	1267 167	161	0	0	163 22	0	0	0	0	181	0	0	182	74 5	0	5 0	79 5	0	0	0	0	59 13	1	0	60 13	1155		12	_	1		0 2	2991 343	-	
Am Feak	131	,		107	- 22	0							- (**			14		,	,	,		,	,	,				.0			12				·   '	343		



Client : Tonkin
Job : Waterport Rd Southern Fleurieu iDay/Date : Tuesday, 29 November 2022
Survey Location : Waterport Rd & Fringe Lily Place
Westber : Fine

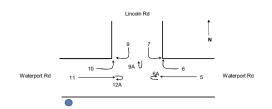




Time Period	Light	Heavy	ment 1 Bus	Total	Light	Move	Bus	Total	Light	Moven	nent 3A Bus	Total	Light	Mover	ment 4 Bus	Total	Light	Moven	nent 5 Bus	Total	Light	Moven	nent 6A Bus	Total	Light	Mover	ment 11 Bus	Total	Light	Moveme	nt 12 Bus	Total	Light	Movemen		otal To	otal of all	Peak Hour Volu	me
7:00 - 7:15	0	0	0	0	2	0	0	2	0	0	0	0	2	0	0	2	27	3	0	30	0	0	0	0	36	0	0	36	1	0	0	1	0	0		0 Mc	ovements 71	7:00 - 8:00	436
																															_						88		
7:15 - 7:30	0	0	0	0	3	0	0	3	0	0	0	0	1	0	0	1	28	2	1	31	0	0	0	0	51	1	0	52	1	0	0	1	0	0		0		7:15 - 8:15	500
7:30 - 7:45	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	44	5	2	51	0	0	0	0	46	5	0	51	1	0	0	1	0	0		0	105	7:30 - 8:30	614
7:45 - 8:00	0	0	0	0	1	0	0	1	0	0	0	0	6	0	0	6	77	4	2	83	0	0	0	0	76	3	2	81	1	0	0	1	0	0		0	172	7:45 - 8:45	740
8:00 - 8:15	1	0	0	1	1	0	0	1	0	0	0	0	2	0	0	2	71	3	1	75	0	0	0	0	52	2	0	54	2	0	0	2	0	0	0	0	135	8:00 - 9:00	824
8:15 - 8:30	1	0	0	1	1	0	0	1	0	0	0	0	3	0	0	3	110	5	4	119	0	0	0	0	73	5	0	78	0	0	0	0	0	0	0	0	202	8:15 - 9:15	834
8:30 - 8:45	1	0	0	1	1	0	0	1	0	0	0	0	6	0	0	6	114	3	0	117	0	0	0	0	94	3	7	104	2	0	0	2	0	0	0	0	231	8:30 - 9:30	780
8:45 - 9:00	1	0	0	1	4	0	0	4	0	0	0	0	8	0	0	8	127	5	1	133	0	0	0	0	100	1	1	102	8	0	0	8	0	0	0	0	256	8:45 - 9:45	689
9:00 - 9:15	1	0	0	1	1	0	0	1	0	0	0	0	4	0	0	4	63	3	0	66	0	0	0	0	64	4	2	70	3	0	0	3	0	0	0	0	145	9:00 - 10:00	625
9:15 - 9:30	1	0	0	1	5	0	0	5	0	0	0	0	3	0	0	3	66	5	0	71	0	0	0	0	61	5	0	66	2	0	0	2	0	0	0	0	148	9:15 - 10:15	627
9:30 - 9:45	0	0	0	0	2	0	0	2	0	0	0	0	4	0	0	4	40	5	0	45	0	0	0	0	82	4	2	88	1	0	0	1	0	0	0	0	140	9:30 - 10:30	617
9:45 - 10:00	3	0	0	3	8	0	0	8	0	0	0	0	7	0	0	7	80	6	0	86	0	0	0	0	81	5	0	86	2	0	0	2	0	0	0	0	192	9:45 - 10:45	615
10:00 - 10:15	3	0	0	3	3	0	0	3	0	0	0	0	3	0	0	3	75	5	0	80	0	0	0	0	54	4	0	58	0	0	0	0	0	0	0	0	147	10:00 - 11:00	573
10:15 - 10:30	1	0	0	1	2	0	0	2	0	0	0	0	5	0	0	5	64	5	0	69	0	0	0	0	57	1	1	59	2	0	0	2	0	0	0	0	138	10:15 - 11:15	564
10:30 - 10:45	2	0	0	2	3	0	0	3	0	0	0	0	3	0	0	3	68	3	0	71	0	0	0	0	55	3	1	59	0	0	0	0	0	0	0	0	138	10:30 - 11:30	571
10:45 - 11:00	3	0	0	3	2	0	0	2	0	0	0	0	4	0	1	5	73	1	1	75	0	0	0	0	52	9	0	61	4	0	0	4	0	0	0	0	150	10:45 - 11:45	564
11:00 - 11:15	1	0	0	1	5	1	0	6	0	0	0	0	0	0	0	0	50	5	0	55	0	0	0	0	72	2	2	76	0	0	0	0	0	0	0	0	138	11:00 - 12:00	573
11:15 - 11:30	1	0	0	1	1	0	0	1	0	0	0	0	2	0	0	2	65	5	1	71	0	0	0	0	64	6	0	70	0	0	0	0	0	0	0	0	145	11:15 - 12:15	589
11:30 - 11:45	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	61	2	0	63	0	0	0	0	58	7	0	65	0	0	0	0	0	0	0	0	131	11:30 - 12:30	596
11:45 - 12:00	1	0	0	1	3	0	0	3	0	0	0	0	1	0	1	2	73	4	0	77	0	0	0	0	69	6	0	75	1	0	0	1	0	0	0	0	159	11:45 - 12:45	606
12:00 - 12:15	2	0	0	2	2	0	0	2	0	0	0	0	4	0	0	4	65	7	0	72	0	0	0	0	68	4	1	73	1	0	0	1	0	0	0	0	154	12:00 - 13:00	586
12:15 - 12:30	2	0	0	2	3	0	0	3	0	0	0	0	4	0	0	4	67	6	0	73	0	0	0	0	67	3	0	70	0	0	0	0	0	0	0	0	152	12:15 - 13:15	579
12:30 - 12:45	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	4	70	3	0	73	0	0	0	0	55	5	0	60	3	0	0	3	0	0	_	0	141	12:30 - 13:30	575
12:45 - 13:00	2	0	0	2	2	0	0	2	0	0	0	0	2	0	0	2	59	3	1	63	0	0	0	0	64	4	0	68	2	0	0	2	0	0		0	139	12:45 - 13:45	580
13:00 - 13:15	1	0	0	1	1	0	0	1	0	0	0	0	2	0	1	3	62	5	0	67	0	0	0	0	60	11	1	72	3	0	0	3	0	0		0	147	13:00 - 14:00	596
13:15 - 13:30	1	0	0	1	0	0	0		0	0	0	0	2	0	0	2	60	2	0	62	0	0	0	0	71	6	1	78	5	0	0	5	0	0		0	148	13:15 - 14:15	576
		0	0								0												0			5	0												
13:30 - 13:45	1			1	3	0	0	3	0	0		0	4	0	1	5	65	2	0	67	0	0		0	61			66	4	0	0	4	0	0		0	146	13:30 - 14:30	577
13:45 - 14:00	0	0	0	0	3	0	0	3	0	0	0	0	8	0	0	8	73	4	0	77	0	0	0	0	59	5	0	64	3	0	0	3	0	0		0	155	13:45 - 14:45	581
14:00 - 14:15	2	0	0	2	1	0	0	1	0	0	0	0	3	0	0	3	59	2	1	62	0	0	0	0	55	2	1	58	1	0	0	1	0	0		0	127	14:00 - 15:00	601
14:15 - 14:30	2	0	0	2	3	0	0	3	0	0	0	0	1	0	0	1	77	4	0	81	0	0	0	0	57	5	0	62	0	0	0	0	0	0		0	149	14:15 - 15:15	681
14:30 - 14:45	2	0	0	2	1	0	0	1	0	0	0	0	4	0	1	5	71	0	0	71	0	0	0	0	67	2	0	69	2	0	0	2	0	0		0	150	14:30 - 15:30	761
14:45 - 15:00	0	0	0	0	6	0	0	6	0	0	0	0	3	0	0	3	70	5	3	78	0	0	0	0	84	3	0	87	1	0	0	1	0	0	0	0	175	14:45 - 15:45	800
15:00 - 15:15	6	0	0	6	9	0	0	9	0	0	0	0	2	0	0	2	82	5	5	92	0	0	0	0	94	0	1	95	3	0	0	3	0	0	0	0	207	15:00 - 16:00	805
15:15 - 15:30	1	0	0	1	1	0	0	1	0	0	0	0	6	0	0	6	135	1	2	138	0	0	0	0	78	4	1	83	0	0	0	0	0	0	0	0	229	15:15 - 16:15	798
15:30 - 15:45	2	0	0	2	0	0	0	0	0	0	0	0	4	0	0	4	85	1	1	87	0	0	0	0	93	2	1	96	0	0	0	0	0	0	0	0	189	15:30 - 16:30	740
15:45 - 16:00	1	0	0	1	3	0	0	3	0	0	0	0	3	0	0	3	80	2	0	82	0	0	0	0	83	4	2	89	2	0	0	2	0	0	0	0	180	15:45 - 16:45	710
16:00 - 16:15	3	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	97	1	2	100	0	0	0	0	95	0	0	95	1	0	0	1	0	0	0	0	200	16:00 - 17:00	674
16:15 - 16:30	4	0	0	4	1	0	0	1	0	0	0	0	3	0	0	3	80	4	0	84	0	0	0	0	71	5	2	78	1	0	0	1	0	0	0	0	171	16:15 - 17:15	649
16:30 - 16:45	1	0	0	1	1	0	0	1	0	0	0	0	1	0	0	1	81	3	0	84	0	0	0	0	70	2	0	72	0	0	0	0	0	0	0	0	159	16:30 - 17:30	633
16:45 - 17:00	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	68	4	0	72	0	0	0	0	62	4	0	66	1	0	0	1	0	0	0	0	144	16:45 - 17:45	602
17:00 - 17:15	2	0	0	2	3	0	0	3	0	0	0	0	2	0	0	2	89	2	0	91	0	0	0	0	74	0	1	75	2	0	0	2	0	0	0	0	175	17:00 - 18:00	552
17:15 - 17:30	2	0	0	2	1	0	0	1	0	0	0	0	5	0	0	5	65	2	0	67	0	0	0	0	75	4	0	79	1	0	0	1	0	0	0	0	155	17:15 - 18:15	467
17:30 - 17:45	3	0	0	3	1	0	0	1	0	0	0	0	1	0	0	1	70	3	0	73	0	0	0	0	47	1	0	48	2	0	0	2	0	0	0	0	128	17:30 - 18:30	406
17:45 - 18:00	1	0	0	1	1	0	0	1	0	0	0	0	1	0	0	1	42	1	0	43	0	0	0	0	45	1	0	46	2	0	0	2	0	0	0	0	94	17:45 - 18:45	366
18:00 - 18:15	1	0	0	1	3	0	0	3	0	0	0	0	1	0	0	1	38	0	0	38	0	0	0	0	43	2	0	45	2	0	0	2	0	0	0	0	90	18:00 - 19:00	323
18:15 - 18:30	0	0	0	0	2	0	0	2	0	0	0	0	1	0	0	1	51	0	0	51	0	0	0	0	39	1	0	40	0	0	0	0	0	0	0	0	94	AM Peak	834
18:30 - 18:45	3	0	0	3	1	0	0	1	0	0	0	0	3	0	0	3	35	1	0	36	0	0	0	0	43	1	0	44	1	0	0	1	0	0	0	0	88	PM Peak	805
18:45 - 19:00	1	0	0	1	4	0	0	4	0	0	0	0	0	0	0	0	19	1	0	20	0	0	0	0	24	1	0	25	1	0	0	1	0	0	0	0	51		
Total	71	0	0	71	108	1	0	109	0	0	0	0	142	0	5	147	3291	153	28	3472	0	0	0	0	3101	163	30	3294	75	0	0	75	0	0	0	0	7168		
AM Peak	4	0	0	4	7	0	0	7	0	0	0	0	21	0	0	21	414	16	5	435	0	0	0	0	331	13	10	354	13	0	0	13	0	0	0	0	834		
DIA DI																																							



Client : Tonkin
Job : Waterport Rd Southern Fleurieu Healtl
Day/Dat : Tuesday, 29 November 2022
Survey Location : Waterport Rd & Lincoln Rd





																																			104				
Time Period	Light	Mover	ment 5 Bus	Total	Light	Heavy	Bus	Total	Light	Heavy	nent 6A Bus	Total	Light	Mover	ment 7 Bus	Total	Light	Mover	Bus	Total	Light	Movem	Bus	Total	Light	Moven	ment 10 Bus	Total	Light	Moveme	ent 11 Bus	Total	Light	Movemen		Total T	Total of all	Peak Hour Volu	me
7:00 - 7:15	26	1	0	27	2	0	0	2	0	0	0	0	2	0	0	2	3	2	0	5	0	0	0	0	6	0	0	6	32	0	0	32	0	0		0	Movements 74	7:00 - 8:00	476
7:15 - 7:30	29	2	0	31	5	0	0	5	0	0	0	0	7	1	0	8	0	0	1	1	0	0	0	0	5	0	0	5	49	1	0	50	0	0		0	100	7:15 - 8:15	546
7:30 - 7:45	43	5	0	48	7	1	0	8	0	0	0	0	3	1	0	4	2	0	2	4	0	0	0	0	6	1	0	7	40	4	0	44	0	0		0	115	7:30 - 8:30	658
									0				7																								187		
7:45 - 8:00	81	3	0	84	8	0	0	8		0	0	0		1	0	8	2	1	2	5	0	0	0	0	17	0	0	17	60	3	2	65	0	0		0		7:45 - 8:45	780
8:00 - 8:15	71	3	1	75	6	0	0	6	0	0	0	0	6	0	0	6	2	0	0	2	0	0	0	0	7	0	0	7	46	2	0	48	0	0		0	144	8:00 - 9:00	853
8:15 - 8:30	109	5	4	118	7	0	0	7	0	0	0	0	4	0	0	4	4	0	0	4	0	0	0	0	8	0	0	8	66	5	0	71	0	0	0	0	212	8:15 - 9:15	863
8:30 - 8:45	115	3	0	118	6	0	0	6	0	0	0	0	2	1	0	3	5	0	0	5	0	0	0	0	2	0	6	8	93	3	1	97	0	0	0	0	237	8:30 - 9:30	804
8:45 - 9:00	130	5	0	135	7	1	0	8	0	0	0	0	5	0	0	5	5	0	1	6	0	0	0	0	12	0	0	12	92	1	1	94	0	0	0	0	260	8:45 - 9:45	715
9:00 - 9:15	61	3	0	64	5	1	0	6	0	0	0	0	5	1	1	7	6	0	0	6	0	0	0	0	5	2	0	7	60	2	2	64	0	0	0	0	154	9:00 - 10:00	656
9:15 - 9:30	61	3	0	64	2	1	0	3	0	0	0	0	3	2	0	5	8	2	0	10	0	0	0	0	8	1	0	9	58	4	0	62	0	0	0	0	153	9:15 - 10:15	651
9:30 - 9:45	41	4	0	45	4	1	0	5	0	0	0	0	3	1	0	4	3	1	0	4	0	0	0	0	8	0	0	8	76	4	2	82	0	0	0	0	148	9:30 - 10:30	639
9:45 - 10:00	80	6	0	86	7	3	0	10	0	0	0	0	4	0	0	4	7	0	0	7	0	0	0	0	17	0	0	17	72	5	0	77	0	0	0	0	201	9:45 - 10:45	637
10:00 - 10:15	69	4	0	73	1	0	0	1	0	0	0	0	4	0	0	4	9	1	0	10	0	0	0	0	8	1	0	9	49	3	0	52	0	0	0	0	149	10:00 - 11:00	585
10:15 - 10:30	64	5	0	69	2	1	0	3	0	0	0	0	2	0	1	3	5	0	0	5	0	0	0	0	3	0	0	3	56	1	1	58	0	0	0	0	141	10:15 - 11:15	583
10:30 - 10:45	66	3	0	69	2	0	0	2	0	0	0	0	7	1	0	8	5	0	0	5	0	0	0	0	6	0	1	7	52	3	0	55	0	0	0	0	146	10:30 - 11:30	590
10:45 - 11:00	69	0	1	70	3	0	1	4	0	0	0	0	0	2	0	2	8	1	1	10	0	0	0	0	10	0	0	10	44	9	0	53	0	0	0	0	149	10:45 - 11:45	583
11:00 - 11:15	46	4	0	50	4	1	0	5	0	0	0	0	4	1	0	5	4	1	0	5	0	0	0	0	12	1	0	13	65	2	2	69	0	0	0	0	147	11:00 - 12:00	595
11:15 - 11:30	60	5	1	66	2	0	0	2	0	0	0	0	2	0	0	2	7	0	0	7	0	0	0	0	6	0	0	6	59	6	0	65	0	0	0	0	148	11:15 - 12:15	608
11:30 - 11:45	58	1	0	59	4	0	0	4	0	0	0	0	4	0	0	4	3	1	0	4	0	0	0	0	3	0	0	3	58	7	0	65	0	0	0	0	139	11:30 - 12:30	620
11:45 - 12:00	66	4	1	71	2	0	0	2	0	0	0	0	2	0	0	2	8	0	0	8	0	0	0	0	10	2	0	12	62	4	0	66	0	0		0	161	11:45 - 12:45	622
12:00 - 12:15	51	7	0	58	5	0	0	5	0	0	0	0	3	1	0	4	18	0	0	18	0	0	0	0	1	1	0	2	69	3	1	73	0	0		0	160	12:00 - 13:00	610
				-																																			
12:15 - 12:30	66	6	0	72	3	2	0	5	0	0	0	0	3	2	0	5	5	0	0	5	0	0	0	0	4	1	0	5	66	2	0	68	0	0		0	160	12:15 - 13:15	600
12:30 - 12:45	70	2	0	72	2	0	0	2	0	0	0	0	2	0	0	2	4	1	0	5	0	0	0	0	1	0	0	1	54	5	0	59	0	0		0	141	12:30 - 13:30	590
12:45 - 13:00	57	3	1	61	6	1	0	7	0	0	0	0	6	1	0	7	4	0	0	4	0	0	0	0	1	2	0	3	65	2	0	67	0	0		0	149	12:45 - 13:45	600
13:00 - 13:15	58	4	1	63	3	0	0	3	0	0	0	0	4	0	0	4	6	1	0	7	0	0	0	0	9	2	0	11	52	9	1	62	0	0	0	0	150	13:00 - 14:00	612
13:15 - 13:30	59	2	0	61	5	1	0	6	0	0	0	0	1	1	0	2	3	0	0	3	0	0	0	0	9	0	0	9	62	6	1	69	0	0	0	0	150	13:15 - 14:15	593
13:30 - 13:45	59	2	1	62	4	0	0	4	0	0	0	0	4	2	0	6	10	0	0	10	0	0	0	0	7	1	0	8	57	4	0	61	0	0	0	0	151	13:30 - 14:30	596
13:45 - 14:00	74	4	0	78	4	1	0	5	0	0	0	0	4	0	0	4	7	0	0	7	0	0	0	0	6	0	0	6	56	5	0	61	0	0	0	0	161	13:45 - 14:45	602
14:00 - 14:15	57	2	1	60	0	1	0	1	0	0	0	0	5	1	0	6	5	0	0	5	0	0	0	0	6	0	0	6	50	2	1	53	0	0	0	0	131	14:00 - 15:00	626
14:15 - 14:30	72	4	0	76	2	1	1	4	0	0	0	0	2	0	0	2	6	0	0	6	0	0	0	0	7	0	0	7	53	5	0	58	0	0	0	0	153	14:15 - 15:15	705
14:30 - 14:45	66	0	0	66	4	0	0	4	0	0	0	0	7	0	0	7	9	0	1	10	0	0	0	0	7	0	0	7	61	2	0	63	0	0	0	0	157	14:30 - 15:30	787
14:45 - 15:00	68	4	1	73	4	1	0	5	0	0	0	0	5	1	0	6	5	1	2	8	0	0	0	0	10	1	0	11	80	2	0	82	0	0	0	0	185	14:45 - 15:45	822
15:00 - 15:15	78	5	1	84	7	2	0	9	0	0	0	0	3	0	0	3	6	0	4	10	0	0	0	0	6	0	0	6	97	0	1	98	0	0	0	0	210	15:00 - 16:00	824
15:15 - 15:30	133	1	2	136	4	0	0	4	0	0	0	0	2	1	0	3	8	0	0	8	0	0	0	0	6	1	0	7	73	3	1	77	0	0	0	0	235	15:15 - 16:15	819
15:30 - 15:45	83	1	0	84	4	0	0	4	0	0	0	0	1	0	0	1	6	0	1	7	0	0	0	0	3	0	0	3	90	2	1	93	0	0	0	0	192	15:30 - 16:30	761
15:45 - 16:00	80	2	0	82	3	1	0	4	0	0	0	0	4	2	0	6	3	0	0	3	0	0	0	0	8	0	0	8	78	4	2	84	0	0	0	0	187	15:45 - 16:45	734
16:00 - 16:15	89	1	2	92	4	1	1	6	0	0	0	0	2	1	0	3	8	0	0	8	0	0	0	0	7	0	0	7	89	0	0	89	0	0		0	205	16:00 - 17:00	703
16:15 - 16:30	76	4	0	80	3	0	1	4	0	0	0	0	7	0	0	7	7	0	0	7	0	0	0	0	6	1	2	9	66	4	0	70	0	0		0	177	16:15 - 17:15	684
16:30 - 16:45	72	3	0	75	3	0	0	3	0	0	0	0	4	0	0	4	10	0	0	10	0	0	0	0	1	0	0	1	70	2	0	72	0	0		0	165	16:30 - 17:30	666
16:45 - 17:00	65	4	0	69	7	4	0	11	0	0	0	0	4	0	0	4	6	0	0	6	0	0	0	0	2	0	0	2	60	4	0	64	0	0		0	156	16:45 - 17:45	629
17:00 - 17:15	70	2	0	72	7	1	0	8	0	0	0	0	7	0	0	7	21	0	0	21	0	0	0	0	2	0	0	2	75	0	1	76	0	0		0	186	17:00 - 18:00	565
17:15 - 17:30	68	2	0	70	4	0	0	4	0	0	0	0	3	0	0	3	2	0	0	2	0	0	0	0	0	1	0	1	76	3	0	79	0	0		0	159	17:15 - 18:15	467
17:30 - 17:45	62	3	0	65	2	0	0	2	0	0	0	0	3	0	0	3	9	0	0	9	0	0	0	0	3	1	0	4	45	0	0	45	0	0		0	128	17:30 - 18:30	
17:45 - 18:00	40	1	0	41	0	0	0	0	0	0	0	0	1	0	0	1	3	0	0	3	0	0	0	0	5	0	0	5	41	1	0	42	0	0		0	92	17:45 - 18:45	366
18:00 - 18:15	34	0	0	34	0	0	0	0	0	0	0	0	1	0	0	1	5	0	0	5	0	0	0	0	0	0	0	0	46	2	0	48	0	0		0	88	18:00 - 19:00	325
18:15 - 18:30	50	0	0	50	2	0	0	2	0	0	0	0	3	0	0	3	2	0	0	2	0	0	0	0	0	0	0	0	41	1	0	42	0	0	0	0	99	AM Peak	863
18:30 - 18:45	38	1	0	39	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	43	1	0	44	0	0	0	0	87	PM Peak	824
18:45 - 19:00	17	1	0	18	1	0	0	1	0	0	0	0	1	0	0	1	2	0	0	2	0	0	0	0	0	0	0	0	28	1	0	29	0	0	0	0	51		
Total		140	18	3315		27	4	210	0	0	0	0	171	25	2	198	276	13	15	304	0	0	0	0	277	20	9	306	2932	144	21	3097	0	0		0	7430		
AM Peak	415	16	4	435	25	2	0	27	0	0	0	0	16	2	1	19	20	0	1	21	0	0	0	0	27	2	6	35	311	11	4	326	0	0	0	0	863		



## **Appendix C – Pre Development SIDRA Results**

V Site: 101 [Waterport / Ocean - Base - AM (Site Folder:

General)]

New Site

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

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM, FLO [ Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Oce	an Road												
1	L2 R2	67 106	7 3	71 112	10.4 2.8	0.322 0.322	8.1 14.2	LOS A LOS B	1.5 1.5	10.9 10.9	0.62 0.62	0.85 0.85	0.75 0.75	48.7 48.6
Appro		173 port Roa	10 d	182	5.8	0.322	11.8	LOS B	1.5	10.9	0.62	0.85	0.75	48.6
4	L2	93	u 1	98	1.1	0.250	5.6	LOSA	0.0	0.0	0.00	0.13	0.00	57.1
5	T1	349	21	367	6.0	0.250	0.1	LOSA	0.0	0.0	0.00	0.13	0.00	58.7
Appro	oach	442	22	465	5.0	0.250	1.2	NA	0.0	0.0	0.00	0.13	0.00	58.3
West	: Wate	rport Roa	ad											
11 12	T1 R2	263 43	20 9	277 45	7.6 20.9	0.148 0.047	0.0 8.0	LOS A LOS A	0.0 0.2	0.0 1.6	0.00 0.51	0.00 0.68	0.00 0.51	59.9 50.5
Appro	oach	306	29	322	9.5	0.148	1.1	NA	0.2	1.6	0.07	0.10	0.07	58.4
All Vehic	eles	921	61	969	6.6	0.322	3.2	NA	1.5	10.9	0.14	0.25	0.16	56.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

Queue Model: SIDRA Standard.

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

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

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V Site: 101 [Waterport / Ocean - Base - PM (Site Folder:

General)]

New Site

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

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM. FLO [ Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop. I Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Ocea	an Road												
1 3 Appro	L2 R2 pach	55 108 163	8 2 10	58 114 172	14.5 1.9 6.1	0.266 0.266 0.266	7.0 11.6 10.1	LOS A LOS B	1.1 1.1 1.1	8.4 8.4 8.4	0.55 0.55 0.55	0.78 0.78 0.78	0.58 0.58 0.58	49.8 49.8 49.8
East:	Water	port Roa												
5	L2 T1	121 244	17	127 257	1.7 7.0	0.208	5.6 0.1	LOSA	0.0	0.0	0.00	0.20	0.00	56.5 58.1
Appro		365 rport Roa	19 ad	384	5.2	0.208	1.9	NA	0.0	0.0	0.00	0.20	0.00	57.5
11 12	T1 R2	255 49	11 2	268 52	4.3 4.1	0.141 0.043	0.0 6.9	LOS A LOS A	0.0 0.2	0.0 1.3	0.00 0.44	0.00 0.64	0.00 0.44	59.9 51.7
Appro	oach	304	13	320	4.3	0.141	1.1	NA	0.2	1.3	0.07	0.10	0.07	58.4
Vehic	eles	832	42	876	5.0	0.266	3.2	NA	1.1	8.4	0.13	0.28	0.14	56.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

Queue Model: SIDRA Standard.

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

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

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V Site: 101 [Waterport / Fringe-Lily - Base - AM (Site Folder:

General)]

New Site

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

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM. FLO [ Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop.   Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	ո։ Fring	ge-Lily Pl	ace											
1 3 Appro	L2 R2 pach	4 7 11	0 0 0	4 7 12	0.0 0.0 0.0	0.024 0.024 0.024	7.2 13.5 11.2	LOS A LOS B	0.1 0.1 0.1	0.6 0.6 0.6	0.60 0.60 0.60	0.74 0.74 0.74	0.60 0.60 0.60	49.5 49.1 49.2
East:	Water	port Roa	d											
4 5 Appro	L2 T1 pach	21 435 456	0 21 21	22 458 480	0.0 4.8 4.6	0.257 0.257 0.257	5.6 0.1 0.3	LOS A LOS A NA	0.0 0.0 0.0	0.0 0.0 0.0	0.00 0.00 0.00	0.03 0.03 0.03	0.00 0.00 0.00	58.0 59.6 59.5
West	: Wate	rport Roa	ad											
11 12	T1 R2	354 13	23 0	373 14	6.5 0.0	0.197 0.013	0.1 7.2	LOS A LOS A	0.0 0.1	0.0 0.4	0.00 0.49	0.00 0.62	0.00 0.49	59.9 51.9
Appro	oach	367	23	386	6.3	0.197	0.3	NA	0.1	0.4	0.02	0.02	0.02	59.6
All Vehic	eles	834	44	878	5.3	0.257	0.5	NA	0.1	0.6	0.02	0.03	0.02	59.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

Queue Model: SIDRA Standard.

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

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

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V Site: 101 [Waterport / Fringe-Lily - Base - PM (Site Folder:

General)]

New Site

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

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM, FLO [ Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop. I Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	ո։ Fring	ge-Lily Pl	ace											
1 3 Appro	L2 R2	10 13 23	0 0 0	11 14 24	0.0 0.0 0.0	0.044 0.044 0.044	7.1 12.9 10.4	LOS A LOS B	0.2 0.2 0.2	1.1 1.1 1.1	0.57 0.57 0.57	0.74 0.74 0.74	0.57 0.57 0.57	50.1 49.7 49.9
East:	Water	port Roa	d											
4 5	L2 T1	15 399 414	0 17 17	16 420 436	0.0 4.3 4.1	0.232 0.232 0.232	5.6 0.1 0.3	LOS A LOS A NA	0.0	0.0	0.00 0.00 0.00	0.02 0.02 0.02	0.00 0.00 0.00	58.1 59.7 59.6
Appro		rport Roa		430	4.1	0.232	0.3	INA	0.0	0.0	0.00	0.02	0.00	59.6
11 12	T1 R2	363 5	15 0	382 5	4.1 0.0	0.199 0.005	0.1 7.0	LOS A LOS A	0.0	0.0 0.1	0.00 0.46	0.00 0.58	0.00 0.46	59.9 52.0
Appro	oach	368	15 32	387 847	4.1	0.199	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.8
Vehic	les	805	32	847	4.0	0.232	0.5	NA	0.2	1.1	0.02	0.04	0.02	59.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

Queue Model: SIDRA Standard.

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

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

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V Site: 101 [Waterport / Lincoln - Base - AM (Site Folder:

General)]

New Site

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

Vehi	cle Mo	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM, FLO [ Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop.   Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Water	port Roa	d											
5 6	T1 R2	435 27	20 2	458 28	4.6 7.4	0.241 0.024	0.1 7.0	LOS A LOS A	0.0 0.1	0.0 0.8	0.00 0.44	0.00 0.62	0.00 0.44	59.9 51.7
Appro	oach	462	22	486	4.8	0.241	0.5	NA	0.1	0.8	0.03	0.04	0.03	59.3
North	: Linco	oln Road												
7	L2	19	3	20	15.8	0.086	7.1	LOSA	0.3	2.4	0.57	0.75	0.57	48.9
9	R2	22	2	23	9.1	0.086	14.9	LOS B	0.3	2.4	0.57	0.75	0.57	48.7
Appro	oach	41	5	43	12.2	0.086	11.3	LOS B	0.3	2.4	0.57	0.75	0.57	48.8
West	: Wate	rport Roa	ad											
10 11	L2 T1	35 326	8 15	37 343	22.9 4.6	0.204 0.204	5.9 0.1	LOS A LOS A	0.0 0.0	0.0 0.0	0.00	0.06 0.06	0.00	56.7 59.5
Appro		361	23	380	6.4	0.204	0.6	NA	0.0	0.0	0.00	0.06	0.00	59.5
All Vehic	eles	864	50	909	5.8	0.241	1.0	NA	0.3	2.4	0.04	0.08	0.04	58.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

Queue Model: SIDRA Standard.

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

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

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V Site: 101 [Waterport / Lincoln - Base - PM (Site Folder:

General)]

New Site

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

Vehi	cle Mo	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM, FLO [ Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop.   Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Water	port Roa	d											
5 6	T1 R2	386 21	12 3	406 22	3.1 14.3	0.212 0.020	0.1 7.2	LOS A LOS A	0.0 0.1	0.0 0.7	0.00 0.46	0.00 0.62	0.00 0.46	59.9 51.3
Appro	oach	407	15	428	3.7	0.212	0.4	NA	0.1	0.7	0.02	0.03	0.02	59.4
North	: Linco	oln Road												
7	L2	13	3	14	23.1	0.100	7.5	LOSA	0.4	2.9	0.61	0.80	0.61	47.9
9	R2	28	5	29	17.9	0.100	15.1	LOS C	0.4	2.9	0.61	0.80	0.61	47.6
Appro	oach	41	8	43	19.5	0.100	12.7	LOS B	0.4	2.9	0.61	0.80	0.61	47.7
West	: Wate	rport Roa	ad											
10	L2	24	1	25	4.2	0.209	5.6	LOSA	0.0	0.0	0.00	0.04	0.00	57.7
11	T1	352	14	371	4.0	0.209	0.1	LOSA	0.0	0.0	0.00	0.04	0.00	59.5
Appro	oach	376	15	396	4.0	0.209	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.4
All Vehic	eles	824	38	867	4.6	0.212	1.0	NA	0.4	2.9	0.04	0.07	0.04	58.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

Queue Model: SIDRA Standard.

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

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

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V Site: 101 [Ocean Rd / Fleurieu Aquatic Centre Access - Base -

AM (Site Folder: General)]

New Site

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

Vehi	cle M	ovemen	t Perfor	rmance										
Mov ID	Turn	INP VOLU [ Total		DEM. FLO [ Total		Deg. Satn		Level of Service		ACK OF EUE Dist]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Ocea	an Road												
2	T1	167	10	176	6.0	0.096	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	60.0
3	R2	22	0	23	0.0	0.015	5.9	LOSA	0.1	0.5	0.25	0.55	0.25	52.6
Appro	oach	189	10	199	5.3	0.096	0.7	NA	0.1	0.5	0.03	0.06	0.03	59.0
East:	Fleuri	eu Aquat	ic Centre	)										
4	L2	14	0	15	0.0	0.017	5.9	LOSA	0.1	0.4	0.25	0.55	0.25	52.9
6	R2	5	0	5	0.0	0.017	7.4	LOSA	0.1	0.4	0.25	0.55	0.25	52.4
Appro	oach	19	0	20	0.0	0.017	6.3	LOSA	0.1	0.4	0.25	0.55	0.25	52.8
North	n: Ocea	an Road												
7	L2	13	0	14	0.0	0.077	5.6	LOSA	0.0	0.0	0.00	0.06	0.00	57.8
8	T1	121	10	127	8.3	0.077	0.0	LOSA	0.0	0.0	0.00	0.06	0.00	59.4
Appro	oach	134	10	141	7.5	0.077	0.6	NA	0.0	0.0	0.00	0.06	0.00	59.2
All Vehic	eles	342	20	360	5.8	0.096	1.0	NA	0.1	0.5	0.03	0.09	0.03	58.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

Queue Model: SIDRA Standard.

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

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

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V Site: 101 [Ocean Rd / Fleurieu Aquatic Centre Access - Base -

PM (Site Folder: General)]

New Site

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

Vehi	cle M	ovemen	t Perfor	mance										
Mov ID	Turn	INP VOLU [ Total		DEM. FLO [ Total		Deg. Satn		Level of Service		ACK OF EUE Dist]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: Ocea	an Road												
2	T1	152	11	160	7.2	0.087	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	60.0
3	R2	8	0	8	0.0	0.005	6.0	LOSA	0.0	0.2	0.28	0.54	0.28	52.5
Appro	oach	160	11	168	6.9	0.087	0.3	NA	0.0	0.2	0.01	0.03	0.01	59.5
East:	Fleuri	eu Aquat	ic Centre	;										
4	L2	19	1	20	5.3	0.028	6.1	LOSA	0.1	0.8	0.30	0.57	0.30	52.5
6	R2	10	0	11	0.0	0.028	7.5	LOSA	0.1	0.8	0.30	0.57	0.30	52.3
Appro	oach	29	1	31	3.4	0.028	6.6	LOSA	0.1	8.0	0.30	0.57	0.30	52.4
North	: Ocea	an Road												
7	L2	9	0	9	0.0	0.093	5.6	LOSA	0.0	0.0	0.00	0.03	0.00	58.0
8	T1	159	5	167	3.1	0.093	0.0	LOSA	0.0	0.0	0.00	0.03	0.00	59.7
Appro	oach	168	5	177	3.0	0.093	0.3	NA	0.0	0.0	0.00	0.03	0.00	59.6
All Vehic	les	357	17	376	4.8	0.093	0.8	NA	0.1	0.8	0.03	0.07	0.03	58.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

Queue Model: SIDRA Standard.

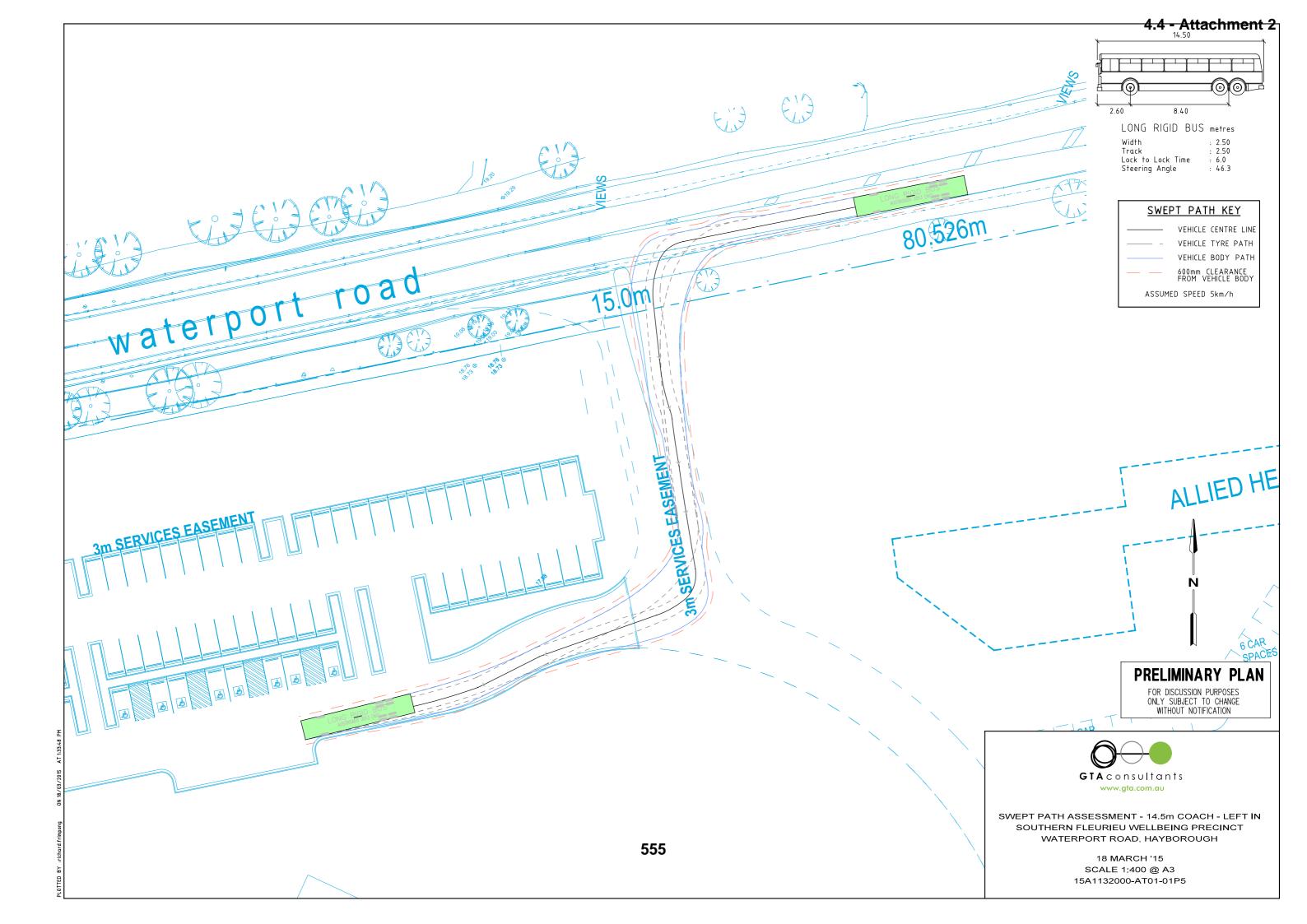
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

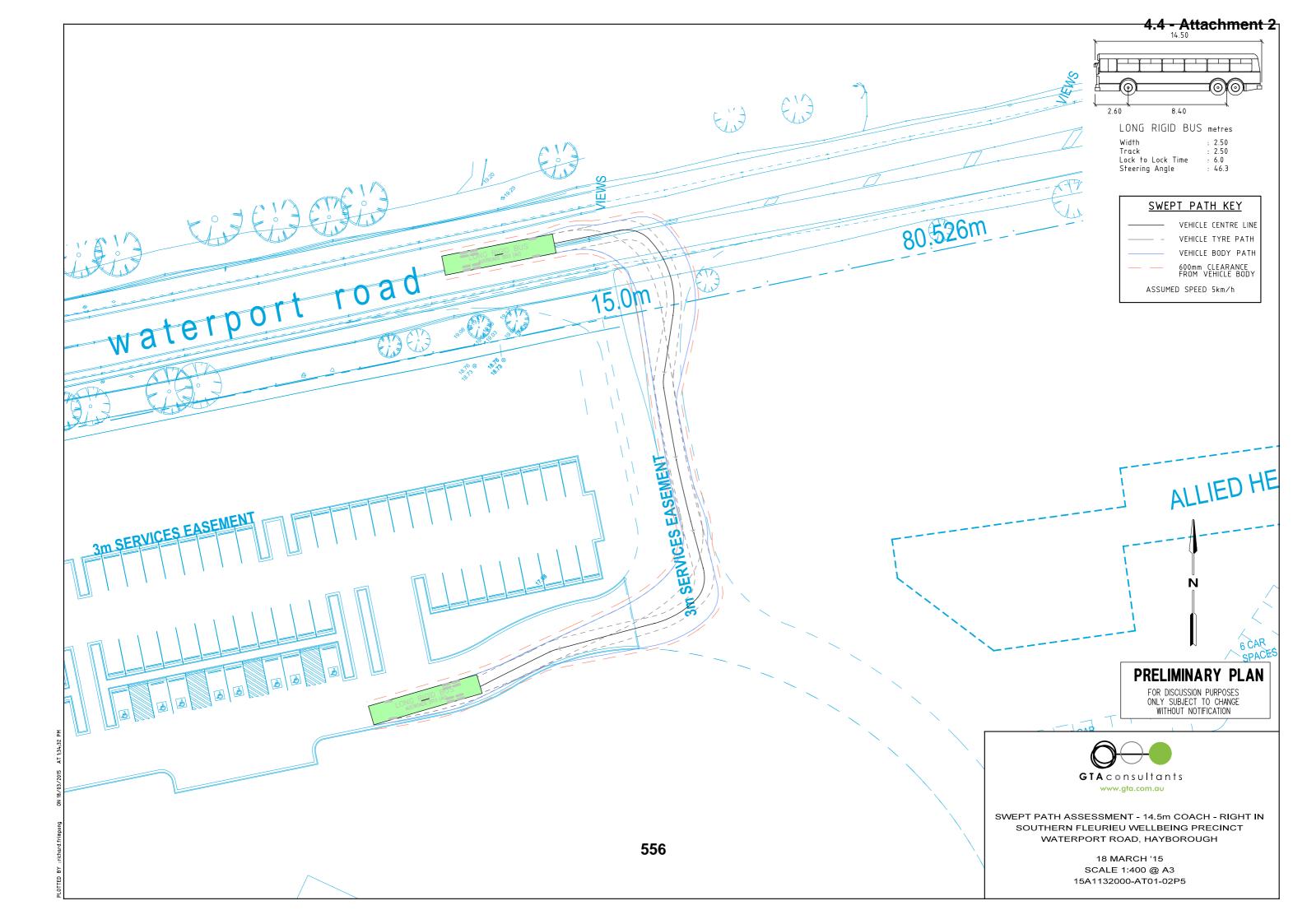
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

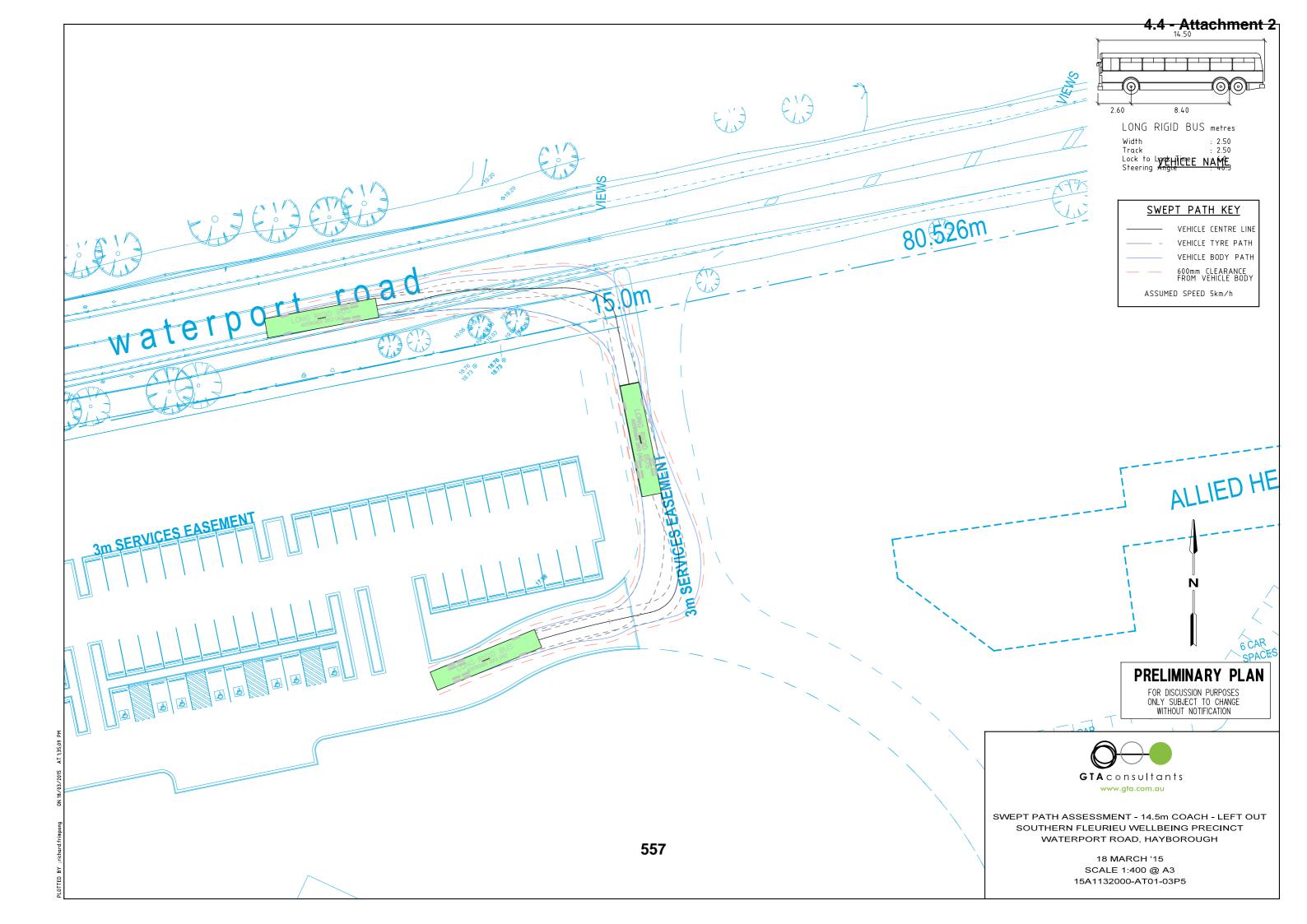
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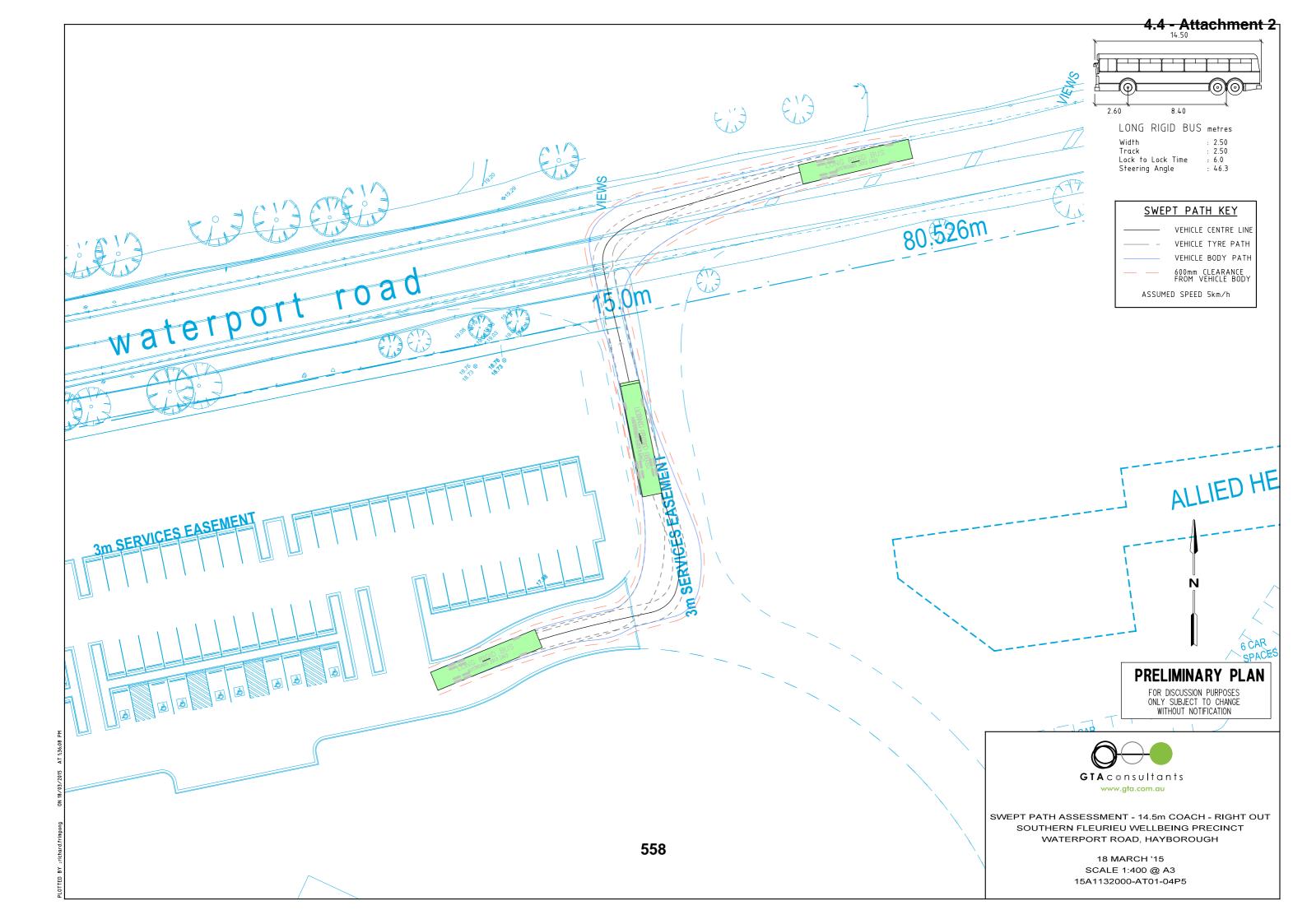


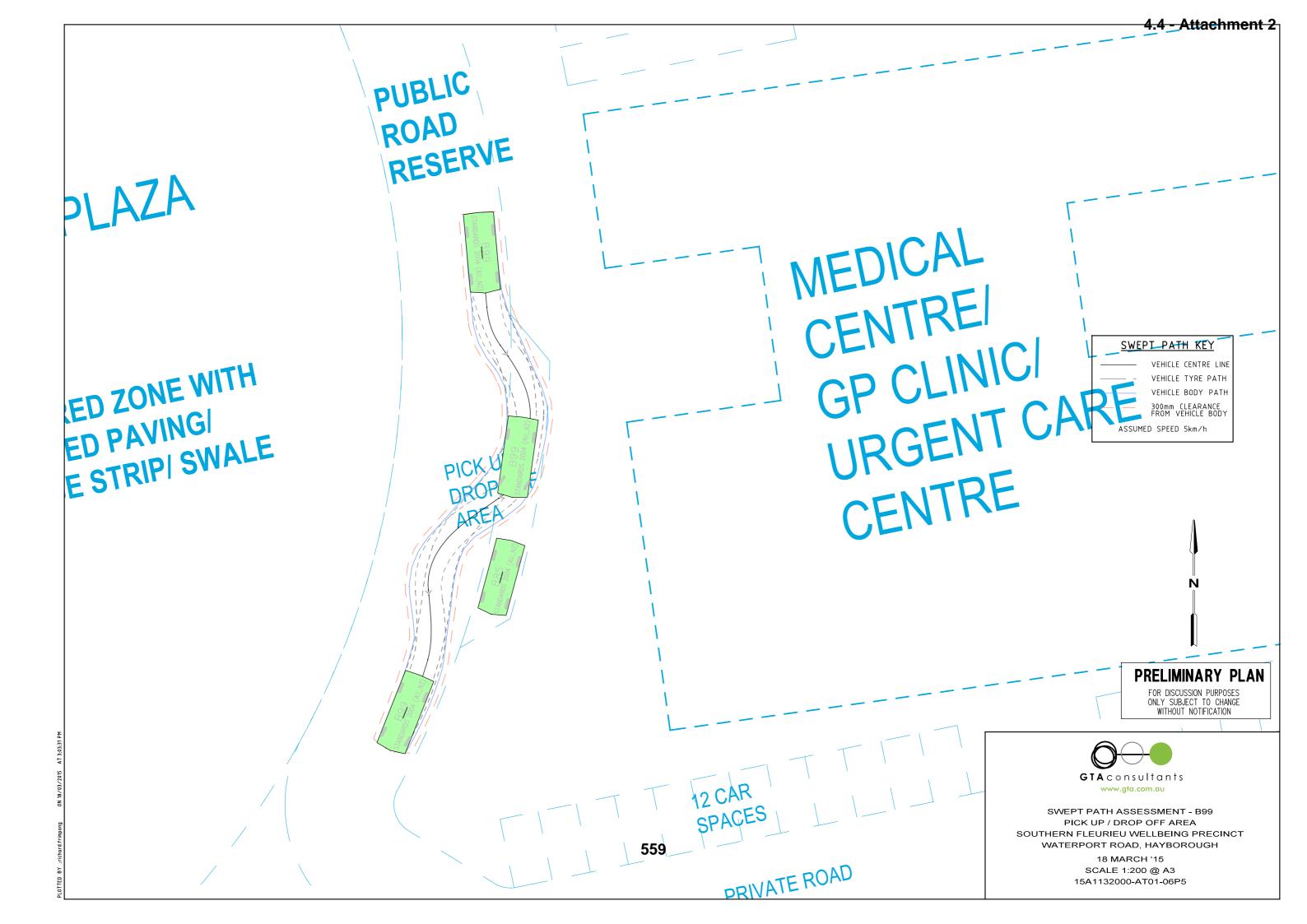
## **Appendix D - Turn Paths**

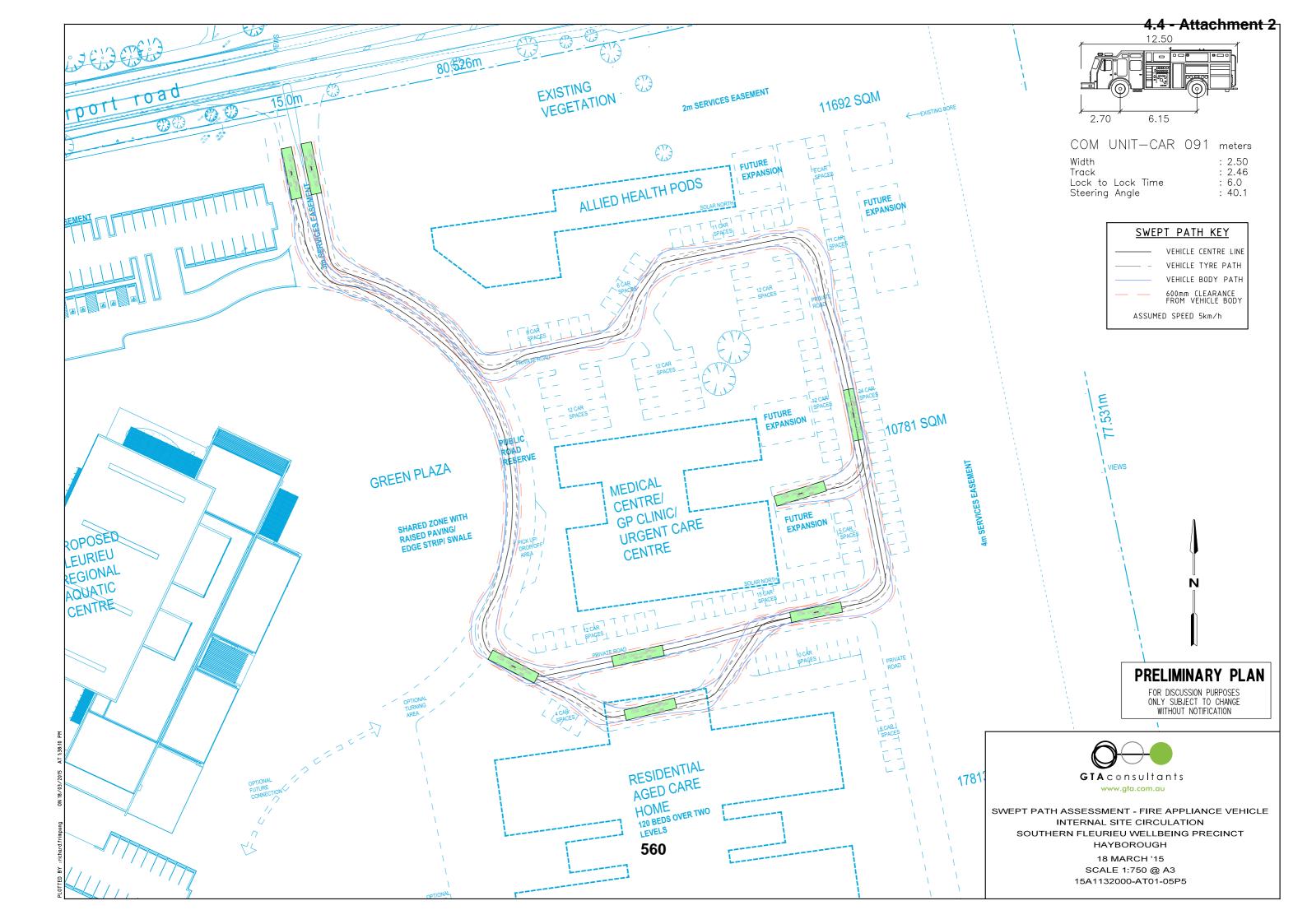


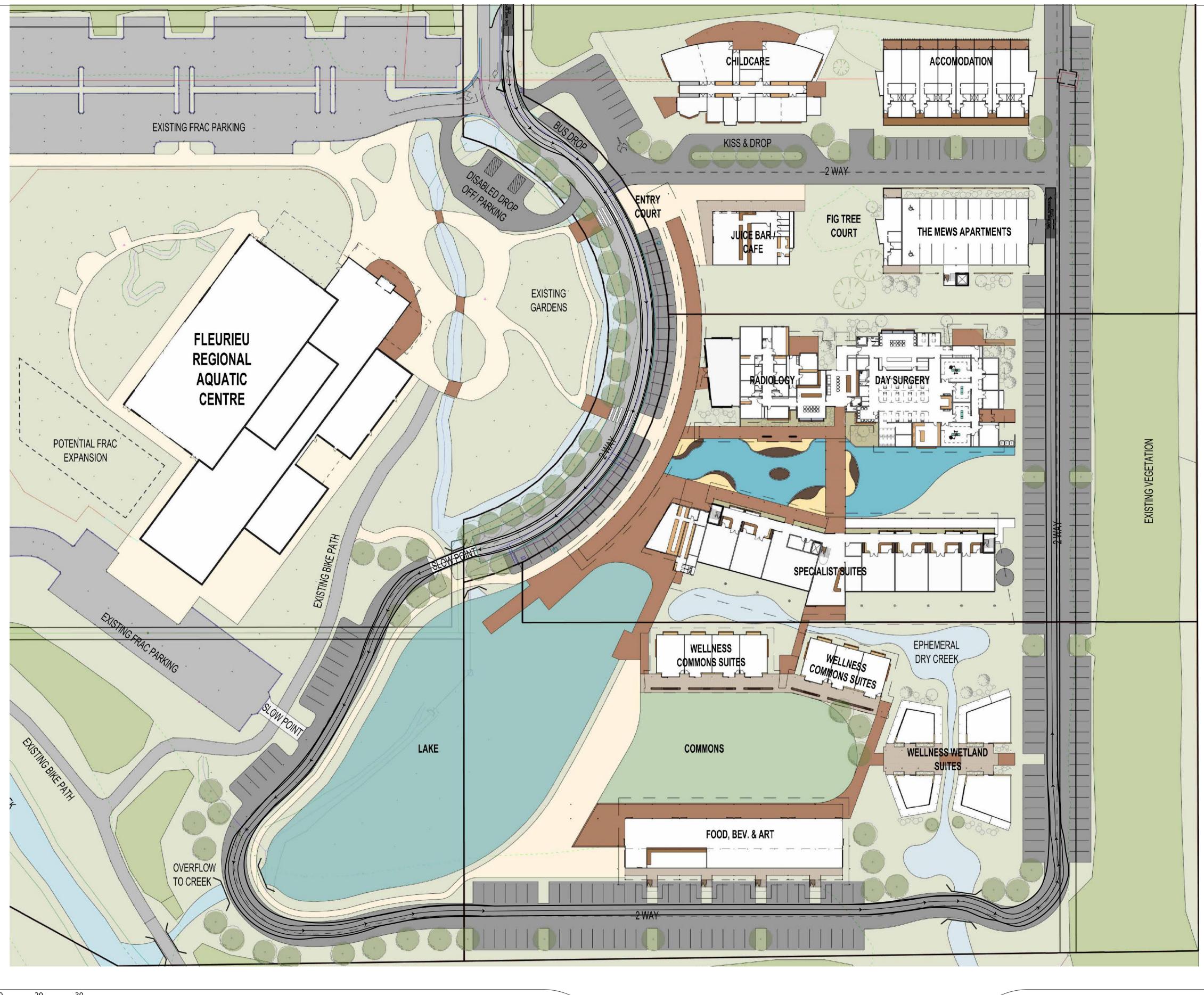












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# SOUTHERN FLEURIEU HEALTH

TURN PATHS (12.5m RIGID BUS)

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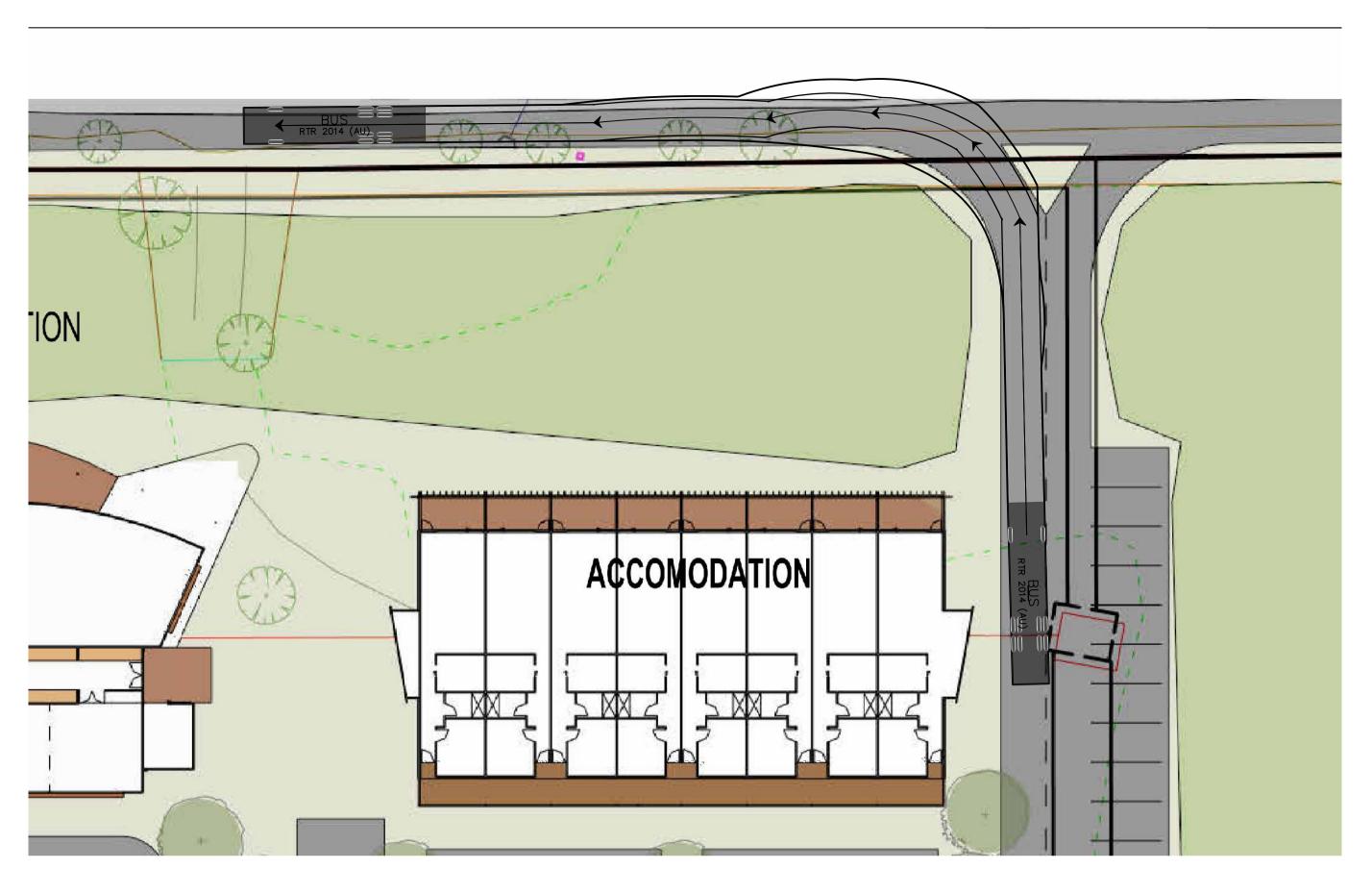
FILENAME: PROJECT NUMBER DRAWING NUMBER REVISION 222031\_TURN PATHS.DWG 222031 001

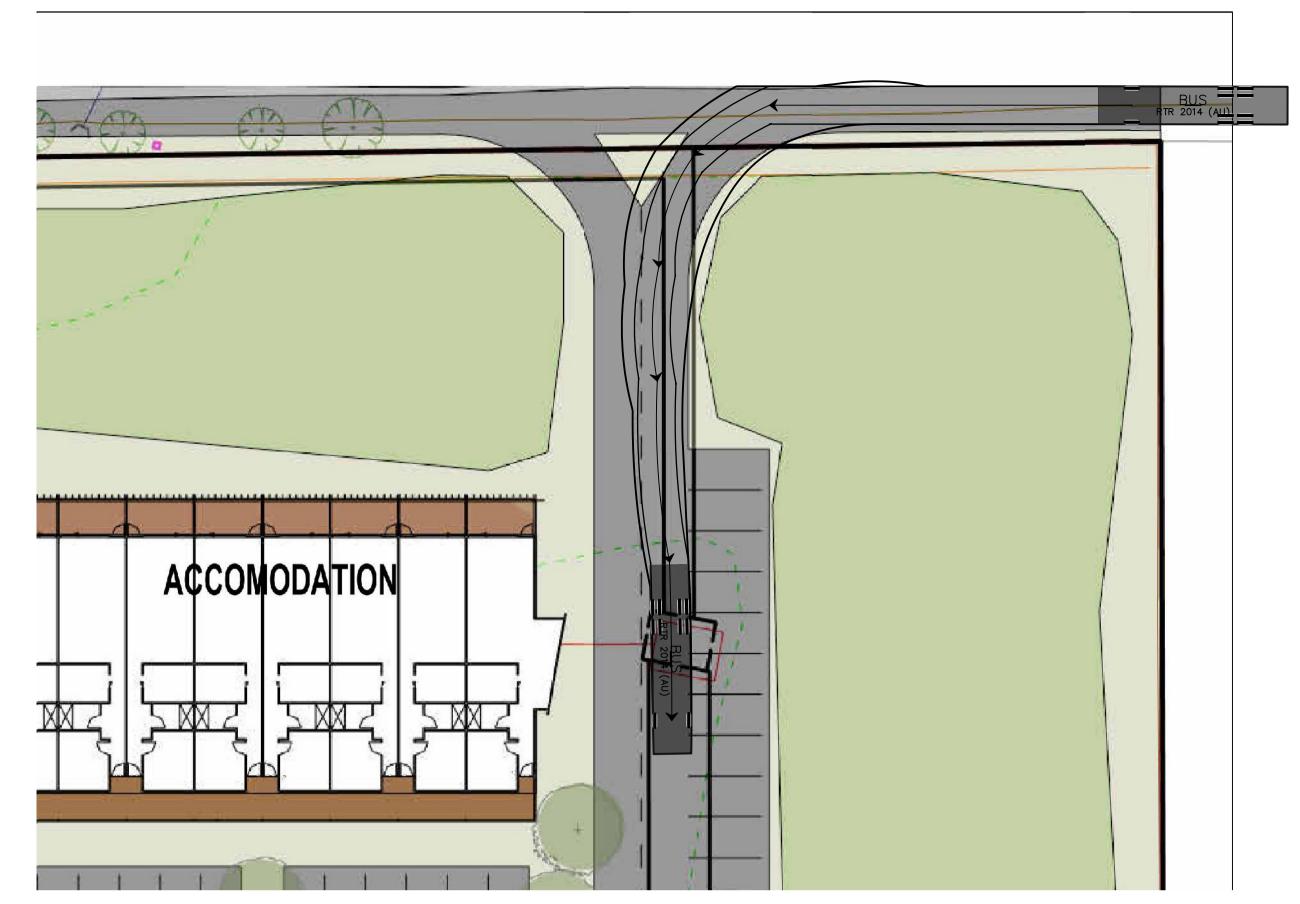
SHEET SIZE **A1** 100mm ON ORIGINAL DRAWING - DO NOT SCALE DRAWING COORDS: GDA2020 MGA ZONE 54 DATUM: ALL LEVELS TO A.H.D. SCALE: 1:500 SURVEYED: SURVEY DATE: APPROVED / PROJECT LEADER JAMES ARNOLD AMENDMENT / REASON FOR ISSUE DATE DES. DWN. © TONKIN CONSULTING

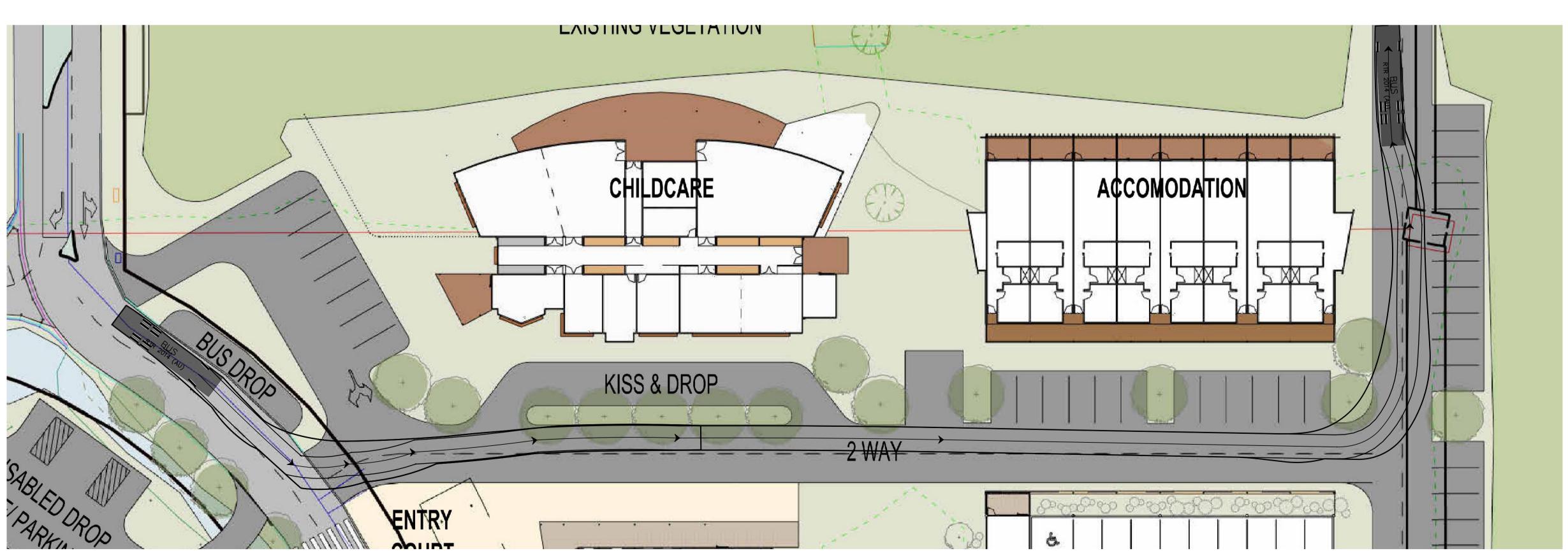
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SHEET SIZE

COORDS: DATUM: SCALE: 1:250 SURVEYED: SURVEY DATE: APPROVED / PROJECT LEADER JAMES ARNOLD AMENDMENT / REASON FOR ISSUE DATE DES. DWN.

PUBLIC UTILITIES:

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SOUTHERN FLEURIEU HEALTH

TURN PATHS (12.5m RIGID BUS)

FILENAME: PROJECT NUMBER DRAWING NUMBER REVISION 222031\_TURN PATHS.DWG 222031 002

562



# **Appendix E – Post Development SIDRA Results**

V Site: 101 [Waterport / Ocean - Post Dev - AM - 09/03 (Site

Folder: Post Dev (James Vols)\_EA 09/03)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

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

Vehic	le Mo	ovement	Performa	nce										
Mov ID	Turn	Mov Class	Demand Flows [ Total HV ] veh/h %	F	rival lows HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service		Back Of Jeue Dist ] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South	: Ocea	an Road												
1	L2	All MCs	81 8.0	81	8.0	0.497	11.1	LOS B	2.5	18.9	0.77	1.04	1.21	44.5
3	R2	All MCs	117 8.0	117	8.0	0.497	23.0	LOS C	2.5	18.9	0.77	1.04	1.21	44.4
Appro	ach		198 8.0	198	8.0	0.497	18.1	LOS C	2.5	18.9	0.77	1.04	1.21	44.5
East:	Water	port Road	I											
4	L2	All MCs	125 14.0	125	14.0	0.335	5.8	LOSA	0.0	0.0	0.00	0.13	0.00	55.6
5	T1	All MCs	463 14.0	463	14.0	0.335	0.1	LOSA	0.0	0.0	0.00	0.13	0.00	58.6
Appro	ach		588 14.0	588	14.0	0.335	1.3	NA	0.0	0.0	0.00	0.13	0.00	58.0
West:	Wate	rport Roa	d											
11	T1	All MCs	301 14.0	301	14.0	0.167	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	56 14.0	56	14.0	0.072	9.1	LOSA	0.3	2.2	0.58	0.76	0.58	49.5
Appro	ach		357 14.0	357	14.0	0.167	1.5	NA	0.3	2.2	0.09	0.12	0.09	58.0
All Ve	hicles		1143 13.0	1143	13.0	0.497	4.3	NA	2.5	18.9	0.16	0.28	0.24	55.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: \\internal.tonkin.com.au\\tondata\Projects\2022\222031 Southern Fleurieu Health TIA - Troppo Architects\4 Working\6 SIDRA\Model.sip9

V Site: 101 [Waterport / Ocean - Post Dev - PM - 09/03 (Site

Folder: Post Dev (James Vols)\_EA 09/03)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

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

Vehic	le Mo	ovement	Performa	nce									
Mov ID	Turn	Mov Class		Arrival Flows [ Total HV ] veh/h %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% B Que [ Veh. veh	ack Of eue Dist ] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South	: Ocea	an Road											
1	L2	All MCs	65 8.0	65 8.0	0.406	9.2	LOSA	2.0	14.8	0.71	0.96	0.99	46.2
3	R2	All MCs	119 8.0	119 8.0	0.406	18.5	LOS C	2.0	14.8	0.71	0.96	0.99	46.1
Appro	ach		184 8.0	184 8.0	0.406	15.2	LOS C	2.0	14.8	0.71	0.96	0.99	46.1
East: \	Water	port Road	l										
4	L2	All MCs	129 14.0	129 14.0	0.288	5.8	LOSA	0.0	0.0	0.00	0.15	0.00	55.4
5	T1	All MCs	375 14.0	375 14.0	0.288	0.1	LOSA	0.0	0.0	0.00	0.15	0.00	58.5
Appro	ach		504 14.0	504 14.0	0.288	1.6	NA	0.0	0.0	0.00	0.15	0.00	57.7
West:	Wate	rport Roa	d										
11	T1	All MCs	293 14.0	293 14.0	0.162	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	60 14.0	60 14.0	0.067	8.3	LOS A	0.3	2.1	0.54	0.72	0.54	50.1
Appro	ach		353 14.0	353 14.0	0.162	1.4	NA	0.3	2.1	0.09	0.12	0.09	58.0
All Vel	hicles		1041 12.9	1041 12.9	0.406	3.9	NA	2.0	14.8	0.16	0.28	0.21	55.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: \internal.tonkin.com.au\tondata\Projects\2022\222031 Southern Fleurieu Health TIA - Troppo Architects\4 Working\6 SIDRA\Model.sip9

V Site: 101 [Waterport / Fringe-Lily - Post Dev - AM - 09/03 (Site

Folder: Post Dev (James Vols)\_EA 09/03)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

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

Vehic	le Mo	ovement	Performa	nce									
Mov ID	Turn	Mov Class	Demand Flows [ Total HV ] veh/h %	Arrival Flows [ Total HV ] veh/h %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Ba Que [ Veh. veh		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South	: Fring	ge-Lily Pla	ice										
1	L2	All MCs	29 0.0	29 0.0	0.433	10.8	LOS B	1.9	13.5	0.82	1.01	1.14	43.7
3	R2	All MCs	111 0.0	111 0.0	0.433	22.5	LOS C	1.9	13.5	0.82	1.01	1.14	43.7
Appro	ach		140 0.0	140 0.0	0.433	20.0	LOS C	1.9	13.5	0.82	1.01	1.14	43.7
East:	Water	port Road	I										
4	L2	All MCs	86 0.0	86 0.0	0.336	5.6	LOS A	0.0	0.0	0.00	0.09	0.00	56.5
5	T1	All MCs	512 14.0	512 14.0	0.336	0.1	LOS A	0.0	0.0	0.00	0.09	0.00	58.9
Appro	ach		598 12.0	598 12.0	0.336	0.9	NA	0.0	0.0	0.00	0.09	0.00	58.5
West:	Wate	rport Roa	d										
11	T1	All MCs	388 14.0	388 14.0	0.215	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	48 0.0	48 0.0	0.054	8.2	LOS A	0.2	1.5	0.56	0.73	0.56	50.7
Appro	ach		437 12.4	437 12.4	0.215	1.0	NA	0.2	1.5	0.06	0.08	0.06	58.7
All Ve	hicles		1175 10.7	1175 10.7	0.433	3.2	NA	1.9	13.5	0.12	0.19	0.16	56.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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V Site: 101 [Waterport / Fringe-Lily - Post Dev - PM - 09/03 (Site

Folder: Post Dev (James Vols)\_EA 09/03)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

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

Vehic	cle Mo	ovement	Perfor	mar	псе										
Mov ID	Turn	Mov Class	Dema Flo [ Total H veh/h	ows IV]	FI	rival ows HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service		Back Of ueue Dist ] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South	: Fring	ge-Lily Pla	ace												
1	L2	All MCs	32	0.0	32	0.0	0.345	9.1	LOSA	1.5	10.4	0.76	0.96	0.96	45.7
3	R2	All MCs	100	0.0	100	0.0	0.345	18.7	LOS C	1.5	10.4	0.76	0.96	0.96	45.7
Appro	ach		132	0.0	132	0.0	0.345	16.4	LOS C	1.5	10.4	0.76	0.96	0.96	45.7
East:	Water	port Road	t												
4	L2	All MCs	62	0.0	62	0.0	0.297	5.6	LOSA	0.0	0.0	0.00	0.07	0.00	56.7
5	T1	All MCs	465 1	4.0	465	14.0	0.297	0.1	LOSA	0.0	0.0	0.00	0.07	0.00	59.1
Appro	ach		527 1	2.4	527	12.4	0.297	0.7	NA	0.0	0.0	0.00	0.07	0.00	58.8
West:	Wate	rport Roa	d												
11	T1	All MCs	387 1	4.0	387	14.0	0.214	0.1	LOSA	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	29	0.0	29	0.0	0.029	7.7	LOSA	0.1	0.8	0.52	0.68	0.52	51.1
Appro	ach		417 1	3.0	417	13.0	0.214	0.6	NA	0.1	0.8	0.04	0.05	0.04	59.2
All Ve	hicles		1076 1	1.1	1076	11.1	0.345	2.6	NA	1.5	10.4	0.11	0.17	0.13	56.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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∇ Site: 101 [Waterport / Lincoln - Post Dev - AM - 09/03 (Site)

Folder: Post Dev (James Vols)\_EA 09/03)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

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

Vehic	cle Mo	ovement	Performa	nce									
Mov ID	Turn	Mov Class	Demand Flows [ Total HV ] veh/h %	Arrival Flows [ Total HV ] veh/h %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Ba Que [ Veh. veh		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South	: LinLo	out Leg											
1	L2	All MCs	52 0.0	52 0.0	0.046	7.0	LOSA	0.2	1.2	0.42	0.63	0.42	51.6
Appro	ach		52 0.0	52 0.0	0.046	7.0	LOSA	0.2	1.2	0.42	0.63	0.42	51.6
East:	Water	port Road	l										
4	L2	All MCs	88 0.0	88 0.0	0.256	5.6	LOSA	0.0	0.0	0.00	0.11	0.00	56.3
5	T1	All MCs	377 14.0	377 14.0	0.256	0.1	LOSA	0.0	0.0	0.00	0.11	0.00	58.7
6	R2	All MCs	26 8.0	26 8.0	0.026	7.7	LOSA	0.1	8.0	0.50	0.66	0.50	50.8
Appro	ach		492 11.2	492 11.2	0.256	1.5	NA	0.1	8.0	0.03	0.14	0.03	57.8
North:	Linco	In Road											
7	L2	All MCs	20 14.0	20 14.0	0.144	7.9	LOSA	0.5	3.5	0.70	0.87	0.70	44.9
9	R2	All MCs	22 14.0	22 14.0	0.144	25.7	LOS D	0.5	3.5	0.70	0.87	0.70	44.8
Appro	ach		42 14.0	42 14.0	0.144	17.2	LOS C	0.5	3.5	0.70	0.87	0.70	44.9
West:	Water	port Roa	d										
10	L2	All MCs	37 8.0	37 8.0	0.264	5.7	LOSA	0.0	0.0	0.00	0.05	0.00	56.6
11	T1	All MCs	435 14.0	435 14.0	0.264	0.1	LOSA	0.0	0.0	0.00	0.05	0.00	59.4
Appro	ach		472 13.5	472 13.5	0.264	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.2
All Ve	hicles		1057 11.8	1057 11.8	0.264	1.9	NA	0.5	3.5	0.06	0.15	0.06	57.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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V Site: 101 [Waterport / Lincoln - Post Dev - PM - 09/03 (Site

Folder: Post Dev (James Vols)\_EA 09/03)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

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

Vehic	cle Mo	ovement	Performa	nce									
Mov ID	Turn	Mov Class	Demand Flows [ Total HV ] veh/h %	Arrival Flows [ Total HV ] veh/h %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Ba Que [ Veh. veh		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South	: LinLo	out Leg											
1	L2	All MCs	47 0.0	47 0.0	0.042	6.9	LOSA	0.2	1.1	0.42	0.63	0.42	51.6
Appro	ach		47 0.0	47 0.0	0.042	6.9	LOSA	0.2	1.1	0.42	0.63	0.42	51.6
East:	Water	port Road	l										
4	L2	All MCs	63 0.0	63 0.0	0.240	5.6	LOSA	0.0	0.0	0.00	0.09	0.00	56.6
5	T1	All MCs	373 14.0	373 14.0	0.240	0.1	LOSA	0.0	0.0	0.00	0.09	0.00	59.0
6	R2	All MCs	19 8.0	19 8.0	0.019	7.6	LOSA	0.1	0.6	0.50	0.64	0.50	50.9
Appro	ach		455 11.8	455 11.8	0.240	1.2	NA	0.1	0.6	0.02	0.11	0.02	58.2
North:	Linco	In Road											
7	L2	All MCs	14 14.0	14 14.0	0.170	7.9	LOSA	0.5	4.2	0.75	0.89	0.75	43.7
9	R2	All MCs	29 14.0	29 14.0	0.170	24.7	LOS C	0.5	4.2	0.75	0.89	0.75	43.6
Appro	ach		43 14.0	43 14.0	0.170	19.4	LOS C	0.5	4.2	0.75	0.89	0.75	43.7
West:	Water	port Roa	d										
10	L2	All MCs	25 8.0	25 8.0	0.258	5.7	LOSA	0.0	0.0	0.00	0.03	0.00	56.7
11	T1	All MCs	436 14.0	436 14.0	0.258	0.1	LOSA	0.0	0.0	0.00	0.03	0.00	59.5
Appro	ach		461 13.7	461 13.7	0.258	0.4	NA	0.0	0.0	0.00	0.03	0.00	59.4
All Ve	hicles		1006 12.2	1006 12.2	0.258	1.9	NA	0.5	4.2	0.06	0.13	0.06	57.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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V Site: 101 [Ocean Rd / Fleurieu Aquatic Centre Access - Post Dev - AM - 09/03 (Site Folder: Post Dev (James Vols)\_EA 09/03)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

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

Vehic	le Mo	ovement	Perfo	rma	nce										
Mov ID	Turn	Mov Class		lows HV]		rival ows HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service		Back Of leue Dist ] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South	: Ocea	an Road													
2	T1	All MCs	200	8.0	200	8.0	0.109	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	72	0.0	72	0.0	0.047	6.0	LOS A	0.2	1.5	0.29	0.56	0.29	51.9
Appro	ach		272	5.9	272	5.9	0.109	1.6	NA	0.2	1.5	0.08	0.15	0.08	57.6
East:	Fleuri	eu Aquati	c Centre	е											
4	L2	All MCs	48	0.0	48	0.0	0.066	6.0	LOSA	0.3	1.8	0.32	0.57	0.32	51.9
6	R2	All MCs	23	0.0	23	0.0	0.066	8.4	LOS A	0.3	1.8	0.32	0.57	0.32	51.8
Appro	ach		72	0.0	72	0.0	0.066	6.8	LOSA	0.3	1.8	0.32	0.57	0.32	51.9
North:	Ocea	ın Road													
7	L2	All MCs	33	0.0	33	0.0	0.095	5.6	LOSA	0.0	0.0	0.00	0.11	0.00	56.5
8	T1	All MCs	143	8.0	143	8.0	0.095	0.0	LOS A	0.0	0.0	0.00	0.11	0.00	58.9
Appro	ach		176	6.5	176	6.5	0.095	1.1	NA	0.0	0.0	0.00	0.11	0.00	58.4
All Vel	hicles		519	5.3	519	5.3	0.109	2.1	NA	0.3	1.8	0.08	0.19	0.08	57.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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V Site: 101 [Ocean Rd / Fleurieu Aquatic Centre Access - Post Dev - PM - 09/03 (Site Folder: Post Dev (James Vols)\_EA 09/03)]

Output produced by SIDRA INTERSECTION Version: 9.1.2.202

New Site

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

Vehic	le Mo	ovement	Perfo	rma	nce										
Mov ID	Turn	Mov Class		lows HV]		rival ows HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service		Back Of eue Dist ] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South	: Ocea	an Road													
2	T1	All MCs	169	8.0	169	8.0	0.092	0.0	LOSA	0.0	0.0	0.00	0.00	0.00	60.0
3	R2	All MCs	40	0.0	40	0.0	0.027	6.1	LOS A	0.1	0.8	0.30	0.56	0.30	51.9
Appro	ach		209	6.5	209	6.5	0.092	1.2	NA	0.1	0.8	0.06	0.11	0.06	58.2
East:	Fleuri	eu Aquati	c Centre	е											
4	L2	All MCs	48	0.0	48	0.0	0.066	6.1	LOSA	0.3	1.8	0.34	0.58	0.34	51.9
6	R2	All MCs	23	0.0	23	0.0	0.066	8.1	LOS A	0.3	1.8	0.34	0.58	0.34	51.7
Appro	ach		72	0.0	72	0.0	0.066	6.8	LOSA	0.3	1.8	0.34	0.58	0.34	51.8
North:	Ocea	ın Road													
7	L2	All MCs	20	0.0	20	0.0	0.108	5.6	LOSA	0.0	0.0	0.00	0.06	0.00	56.9
8	T1	All MCs	179	8.0	179	8.0	0.108	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	59.4
Appro	ach		199	7.2	199	7.2	0.108	0.6	NA	0.0	0.0	0.00	0.06	0.00	59.1
All Vel	hicles		480	5.8	480	5.8	0.108	1.8	NA	0.3	1.8	0.08	0.16	0.08	57.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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# SITE CONTAMINATION DECLARATION FORM

Council area: Alexandrina Council

Regarding the land comprised in Certificate(s) of Title Register Book Volume 6181, Folio 105; Volume 6175, Folio 321; and Volume 6175, Folio 320

I Angus Robinson, a site contamination consultant, certify the following details:

## Part 1—Investigations

(a) I have relied on the following reports to complete this statement:

Preliminary Site Investigation - 1,3&5 Fringe Lily Place, Chiton (Greencap, February 2023)

(b) Investigations were conducted in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM).

The 2022 Preliminary Site Investigation has been conducted in general accordance with the ASC NEPM.

## Part 3—Site contamination exists or may exist\*

- (a) site contamination exists or may exist on or below the surface of the land\* as a result of a class 1 activity (including where a class 1 activity exists or previously existed on adjacent land\*), class 2 activity, class 3 activity (see the State Planning Commission Practice Direction 14 (Site Contamination Assessment)), or notification of site contamination of underground water (as shown on the South Australian Property and Planning Atlas) including where such a notification exists on adjacent land\*;
- (b) the site contamination or potential site contamination originated or is likely to have originated—
  - (i) on the subject land\*—
    - (A) as a result of the following activities carried on there

Nil

of RL

Signed: Date: 06.02.2023

If being lodged electronically please tick to indicate agreement to this declaration.

Name of company or business / accreditation body and number

Greencap Pty Ltd



Note 1—Investigations found the existence of 'fill or soil importation' on-site (i.e. importation, to a premises of a business, of soil or other fill originating from a site at which another potentially contaminating activity has taken place pursuant Schedule 3 of the *Environment Protection Regulations 2009*). Fill or soil importation is not a potentially contaminating activity for the purposes of the *State Planning Commission Practice Direction: (Site Contamination Assessment)*, but remains a potentially contaminating activity under the *Environment Protection Regulations 2009*. The EPA's Industry Guideline on 'Construction environmental management plans (CEMP)' provides assistance on meeting the obligations of the *Environment Protection Act 1993*.

**Note 2—**It is an offence to provide false or misleading information on this Form. Maximum penalty: \$20 000 pursuant to section 217 of the *Planning, Development and Infrastructure Act 2016.* 

Note 3—The "subject land" is the land the subject of the subject development application.

**Note 4—**"Adjacent land" is defined in section 3(1) of the *Planning, Development and Infrastructure Act 2016* to mean "in relation to other land, means land that is no more than 60 metres from the other land".





12 Greenhill Road Wayville SA 5034

# PRELIMINARY SITE INVESTIGATION

February 2023 J181191

1, 3 and 5 Fringe Lily Place, Chiton, South Australia

**Troppo Architects** 



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# **Document Control**

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#### **EXECUTIVE SUMMARY**

Greencap was commissioned by Troppo Architects to undertake a Preliminary Site Investigation for the site located at 1,3 and 5 Fringe Lily Place, South Australia. The site has an area of approximately 39,000 square metres and is currently used for broadacre farming purposes. The site is proposed to be redeveloped for mixed-use purposes which includes a childcare, medical and wellbeing specialist offices, radiology centre, day surgery, plant nursery, gallery and a café.

The objective of the investigation was to provide an assessment of whether site contamination exists, may exist or is unlikely to exist in relation to its proposed redevelopment for mixed use purposes. The scope of work consisted of a desktop study to identify site characteristics, a review of available site history information, and a site inspection to verify the findings of the desktop study.

The historical information reviewed indicates the site has been used primarily for broadacre farming since early European settlement until present day. Several activities of interest associated with past and present site uses were identified, but no potentially contaminating activities as defined by The State Planning Commission's Practice Direction 14 were noted to have occurred at the site historically and/or currently.

There were no activities of interest identified on adjacent land during the historical review.

A site contamination declaration form has been completed and is presented under a separate cover.



# **Preliminary Site Investigation**

# **Troppo Architects**

# 1, 3 and 5 Fringe Lily Place, Chiton, S.A.

# **Table of Contents**

EXEC	JTIVE S	SUMMARY	ii
1	INTRO	DDUCTION	1
2	SITE [	DETAILS	3
	2.1	Site Identification	3
	2.2	Site Description and Current Land Use of the Site	3
	2.3	Proposed Site Use and Users	8
3	SITE H	HISTORY	11
	3.1	Historical Maps, Plans and Aerial Photographs	11
	3.2	Previous Owners and Occupiers of the Site	13
	3.3	Services to the Property	13
	3.4	Previous and Present Site Use and Structures	13
	3.5	Industrial processes carried out on site and the products manufactured	14
	3.6	Chemical storage and transfer areas	14
	3.7	Raw materials used	14
	3.8	Products spills, losses, incidents, and accidents (including fire)	14
	3.9	Government Searches	14
	3.10	Discharges to land and water	15
	3.11	Wastes Produced	15
	3.12	Power generation	15
	3.13	Waste disposal and imported fill	15
	3.14	Earthmoving activities carried out on the site	15
	3.15	Sources of information	15
4	ENVIE	RONMENTAL SETTING	16
	4.1	Regional Geology	16
	4.2	Hydrogeology	16
5	SITE I	NSPECTION	17
6	SUMI	MARY OF POTENTIALLY CONTAMINATING ACTIVITIES	19
7	CONC	CEPTUAL SITE MODEL	21
	7.1	Potentially Contaminating Activities	21
	7.2	Potential Receptors	21
	7.3	Potential Exposure Pathways	21
	7.4	Source-Pathway-Receptor Linkages	21
8	CONC	CLUSIONS	23
Appe	ndix A	Property Parcel Report	1



Appendix B	x B Proposed Development Plans				
Appendix C	dix C Lotsearch Report (Maps, Aerial, Historic Business Records, Etc)				
Appendix D Current and Historical Certificates of Title					
Appendix E	Site Concept Plans				
Appendix F	EPA Section 7 Reponse	VI			
<b>Report Figures</b>					
Figure 1: Site L	ocation Plan	1			
Figure 2: Aeria	I Image of the Site	5			
<b>Report Tables</b>					
Table 1: Site De	etails	3			
Table 2: Site De	escription	3			
	ary of Aerial Photograph Observations				
Table 4: Geolog	gical Information	16			
Table 5: Site In	Fable 5: Site Inspection Observations1				
Table 6: Details	s of Potentially Contaminating Activities	19			



# 1 INTRODUCTION

Greencap Pty Ltd (Greencap) was commissioned by Troppo Architects to undertake a Preliminary Site Investigation (PSI) for three separate adjoining parcels of land located at 1,3 and 5 Fringe Lily Place, South Australia ('the site'). The approximate location of the site is presented in Source: https://apps.nearmap.com/maps

Figure 1.



Source: https://apps.nearmap.com/maps

Figure 1: Site Location Plan

Greencap understands the site is located within the Alexandria Council Community Facilities Zone. Greencap has been provided with a proposed ground floor development plan for the site dated 2 September 2022. Based on this, Greencap understands that the site is proposed to be redeveloped for mixed use purposes including a childcare, medical and wellbeing specialist offices, radiology centre, day surgery, plant nursery, gallery and a café.

#### 1.1 Objectives

A Preliminary Site Investigation (PSI) represents the first stage of the site assessment process, as defined in Schedule B2 of the National Environment Protection (Assessment of Site Contamination), 1999 as amended 2013 (ASC NEPM 1999). The main objectives of the PSI are as follows:



- To identify the potential for the site to be contaminated based on a desktop historical review, site walkover and inspection
- To identify receptors, potential sources of contamination, likely pathways and any on or offsite features of immediate concern;
- To provide a preliminary Conceptual Site Model (CSM) of the nature and extent of potential contamination and sufficient data for a preliminary qualitative risk assessment; and

The objective of the investigation was to provide an assessment of whether site contamination exists, may exist or is unlikely to exist in the context of the proposed redevelopment of the site for mixed use purposes.

#### 1.2 Methodology

The preliminary site investigation was undertaken in accordance with the Greencap proposal dated 12 January 2023. The methodology implemented for the works is based on guidance provided within:

- The National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) (NEPM)
- SA EPA publication 'Guidelines for the assessment and remediation of site contamination', as revised November 2019.
- Australian Standard 'Guide to the investigation and sampling of potentially contaminated soil'; AS4482.1-2005.

The methodology adopted for the investigation included: -

- A desktop study to identify site characteristics site location, site layout, building construction, geological and hydrogeological setting.
- A site history identifying historical owners/operators/occupiers, land uses and activities.
- A site inspection to validate anecdotal evidence or historical information and to identify additional evidence of potential site contamination.
- Interviews with site owners, operators and/or occupiers (if available).



# 2 SITE DETAILS

#### 2.1 Site Identification

The site details are summarised in Table 1. A Copy of the property parcel report (obtained from the South Australian Property and Planning Atlas - SAPPA) is presented in Appendix A.

**Table 1: Site Details** 

Category	Details			
Common Name	1, 3 and 5 Fringe Lily Place, Chiton, South Australia			
Certificate of Title and allotment details	<ul> <li>1 Fringe Lilly Place – Volume 6181 Folio 105, A51/D112935</li> <li>3 Fringe Lily Place – Volume 6175 Folio 320, A52/D112935</li> <li>5 Fringe Lily Place – Volume 6175 Folio 321, A53/D112935</li> </ul>			
Address	1, 3 and 5 Fringe Lily Place, Chiton, South Australia			
Owner	Fleurieu Health and Wellbeing Pty Ltd			
Municipality	Alexandrina Council			
Zoning	Community Facilities (Z0903) - CF			

# 2.2 Site Description and Current Land Use of the Site

A site inspection was conducted by an experienced Greencap consultant on 19 January 2023. Site details including the land use and that of neighbouring properties are presented in Table 2. A recent aerial image of the site (January 2023) is presented in Source: Lotsearch (January 2023)

Figure 2 and a series of photographs taken during the site inspection follow.

**Table 2: Site Description** 

Item	Detail			
Current use of the site	Vacant			
Proposed use of the site	Mixed use (community facilities)			
Site Occupier	Unoccupied			
Site area (approximate)	39,780m <sup>2</sup>			
Site Description	The site is of an irregular rectangular shape and encompasses three separate adjoining parcels of land bound by Waterport Road to the north, Fringe Lily Place to the west, agricultural land to the east and Chiton wetlands to the south. The entire site surface is unsealed and is covered with low lying wheat straw. Some trees and vegetation exist along the north, east and southwestern boundary lines and within the central portion of Allotment 51. There is a small, shed structure located in the northeastern portion of the site.			
Neighbouring land uses	North: Waterport Road followed by commercial land use.  East: Agricultural farmland  South: Chiton Wetlands  West: Fringe Lily Place followed by Fleurieu Aquatic Centre			









Source: Lotsearch (January 2023)

Figure 2: Aerial Image of the Site





Photograph 1: Facing west showing the northern portion of the site.



Photograph 2: Showing the small shed located in the northeastern portion of the site used to house a submersible bore associated with the Chiton wetlands.





Photograph 2: Facing west showing the central portion of the site (foreground) and Fluerieu Aquatic Centre (background).



Photograph 4: Facing east showing the southern portion of the site.  ${\color{red} \bf 586}$ 



# 2.3 Proposed Site Use and Users

It is understood that the owner is looking to redevelop the site for mixed-use purposes which includes a childcare, medical and wellbeing specialist offices, radiology centre, day surgery, plant nursery, gallery and a café. A copy of the proposed development plan is provided in Appendix B.



# 3 ENVIRONMENTAL SETTING

The site is located within an area zoned community facilities and is surrounded by mixed use land use including commercial properties to the north, agricultural farmland to the east, wetlands to the south and recreational and open space land use to the west. The Fleurieu Aquatic Centre is located immediately west of the site beyond Fringe Lily Place.

The government portal 'Location SA' was accessed to identify and assess water bodies and water courses (potential sensitive receptors) within a 2km radius of the site. Potential sensitive ecological receptors located within the 2km radius include the Chiton wetlands located immediately south of the site. An ephemeral water course is also located intersecting the site and which meanders in a north to south direction towards the estuary at Watson Gap which flows directly into the Southern Ocean located approximately 1.5km south of the site.

#### 3.1 Regional Geology

The South Australian Resources information Gateway portal which supplies electronic geoscientific and geospatial data was accessed through the Lotsearch report (see Appendix C). This information is summarised in **Error! Reference source not found.** 

Item Detail (data source) Surface Geology Cape Jervis Formation described as glacio-marine and fluvioglacial sediments and residual erratics. (DEWNR SA) Soil Units and classifications Chromosol (Atlas of Australian Soils) Outwash plains: hard alkaline red soils, small areas cracking clay soils, also hard alkaline yellow mottled soils, various alluvial soils (unclassified) in the stream valleys. Acid Sulphate soil potential Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small, localised areas. (Australian Soil Resource Information System) No drilling performed on site. Drilling logs info (SARIG)

**Table 3: Geological Information** 

#### 3.2 Hydrogeology

Reference to the online South Australian Resource Information Geoserver (SARIG) produced by the Department of the Premier and Cabinet of South Australia indicates that the expected depth to groundwater is between 10 - 20 metres below ground level (m bgl). The groundwater salinity is expected to range between 7000 and 14,000 parts per million (ppm) expressed as total dissolved solids (TDS).

Details of registered groundwater bores within a 2km search radius of the site from publicly available information provided by the Department for Environment and Water information is presented in the Lotsearch report in Appendix C.



There was one well identified onsite, number 6626-491. This well was drilled in February 2008 to maximum depth of 90 metres below ground level (bgl) with depth to water recorded at 37m bgl. The status and purpose of the well was not listed. A total of 43 wells were identified within the 2 km radius. The nearest operational well to site, number 6626-230, is located approximately 394m east of the site and listed as being used for irrigation purposes. This well was drilled to 80m with depth to water recorded at 7.0 m below ground level (bgl) and total dissolved solids (TDS) of 2,030 mg/L. The next closest listed drillhole with depth to water data is 559m east, was drilled for irrigation purposes in 1983 to a depth of 29 m bgl with a standing water level of 16.0 m bgl.

The groundwater aquifers at the site and in the surrounding area are described regionally as: Fractured Rocks – (Cambrian and Precambrian rocks) – quartzite, sandstone, limestone, dolomite, slate, marble, siltstone, phyllite, schist and gneiss.



### 4 SITE HISTORY

The history of the site has been researched to identify historical land use and potential sources of contamination. Information has been sourced primarily from the Lotsearch property report. This property report contains historical information, EPA public register information and information on the environmental setting from a historical land use database. A summary of the key points in this report is provided below. A copy of the Lotsearch report is presented as Appendix C.

## 4.1 Historical Maps, Plans and Aerial Photographs

The approximate location of the site is indicated on the 1876 Hundred Map of Goolwa produced by the Surveyor General's Office provided in the Lotsearch report (Appendix C). This indicates the site was located on the original Allotment 88. Features of significance in the 1876 Hundred of Yatala map include a main road abutting the northern portion of the site (current day Waterport Road) and another main road (current day Mentone Road) located approximately 200 m to the south of the site.

Other features of significance in historical maps provided within the Lotsearch report include a quarry and a rifle range located approximately 300m and 600m northwest of the site respectively in the 1942 Topographic Map prepared by the Commonwealth Section Imperial General Staff.

#### **Aerial Photographs**

Aerial photographs of the site dating from 1936 in approximate 10-year intervals have been reviewed by Greencap. Copies of the aerial photographs viewed are presented in Appendix C. A summary of the observations made from these photographs is provided in Table 4.

**Table 4: Summary of Aerial Photograph Observations** 

Year	Observations				
1949	The aerial image is black and white and of moderate quality.  The site is undeveloped and appears to be part of a larger parcel of land, likely used for broadacre farming purposes. A small cluster of trees was observed in the central northern portion of the site.  The surrounding areas appear to also be used for broad acre farming. An unsealed road (current day Waterport Road) is evident immediately north of the site. What appears to be an ephemeral water course is located approximately 75m southwest of the site.				
1956	The aerial image is black and white and of poor quality.  There are no significant changes evident to the site or surrounding area since the 1949 aerial photograph.				
1960	The aerial image is black and white and of poor quality.  There are no significant changes evident to the site or surrounding area since the 1956 aerial photograph.				
1974	The aerial image is black and white and of moderate quality. The site appears to be divided from north to south with the majority of the eastern portion now utilised for cropping (hay or wheat production)  There are no significant changes evident to the site or surrounding area since the 1949 aerial photograph with the exception of a what appears to be a small pond or damn located approximately 75m south of the site.				
1978	The aerial image is in colour and of moderate quality.  There are no significant changes evident to the site since the 1974 aerial photograph with				

590



Year	Observations			
	the exception of the development of a small shed or canopy structure located in the central northern portion of the site. Due to the poor contrast of the imagery the structure is difficult distinguish.			
	In the surrounding area, the unsealed gravel road identified in the 1940 aerial photograph now appears to be sealed with bitumen surface covering. No other significant changes are evident in the surrounding area.			
	The aerial image is in colour and of good quality.			
1989	There are no significant changes evident to the site since the 1978 aerial photograph.  In the surrounding area to the north (beyond current day Waterport Road) earthworks and land clearance is evident, likely for future construction of civil infrastructure.			
	The aerial image is in colour and of good quality.			
1999	There are no significant changes evident to the site since the 1989 aerial photograph with the exception of the shed/canopy structure identified in the 1978 aerial photograph, which has now been removed.			
	In the surrounding area to the north, development of civil infrastructure (roadways) is apparent, along with the establishment of a number of commercial buildings.			
	The aerial image is in colour and of high quality.			
2003	No significant changes are evident to the site since the 1999 aerial imagery.			
	In the surrounding area there appears to be further commercial development to the north of the site with the advent of additional buildings in the area.			
	The aerial image is in colour and of high quality.			
2010	There are no significant changes evident to the site aside from the construction of a small shed like structure in the northeastern portion of the site and habitat establishment (trees) along the northern and eastern site boundary lines and in the southwestern portion of the site.			
	The surrounding area appears much the same as the 2003 aerial photograph, however, there is evidence of habitat establishment to the northwest, south and southwest of the site. A large pond (forming the current day Chiton wetlands) is evident approximately 30 metres to the south of the site.			
	The aerial image is in colour and of high quality.			
2014	There are no significant changes evident to the site since the 2010 aerial photograph aside from further growth of the flora along the northern and eastern site boundary lines and in the southwestern portion of the site which now appears more established.			
	The surrounding area appears much the same as the 2010 aerial photograph aside from the establishment of a large pond (forming the current day Chiton wetlands) evident approximately 30 m to the south of the site.			
	The aerial image is in colour and of high quality.			
2022	There are no significant changes to the site since the 2014 aerial photograph.			
	In the surrounding area there is significant development apparent to the west of the site with the construction of a roadway (current day Fringe Lily Place) followed by a large building (current day Fleurieu Aquatic Centre) with adjoining carpark and landscaped areas. To the southwest of the site there is also evidence of commercial development with a number of buildings having been established bound by a newly established cul-de-sac. To			

591



Year	Observations
	the south of the site flora surrounding the Chiton wetlands appears further established.

#### 4.2 Previous Owners and Occupiers of the Site

#### Certificate of Titles Searches

A historical ownership search was conducted on the current Certificate of Title dating back to 1807.

Prior to 1955 the site boundary was incorporated within a portion of three separate certificates of title forming a larger allotment of land (the original allotment No#88). During this time the site was simultaneously owned by various parties who used the site for broadacre farming parties. Previous owners' occupations worth noting included;

- A blacksmith;
- A shoemaker; and
- A brickmaker.

The three separate Certificates of Title were then jointly acquired by Lindsay Lawrence George Campbell (grazier) between 1954 and 1955. The Titles were later sold to Neil Mackenzie and Ross Mackenzie, (farmers) in 1973 who owned it until 2003 when the land developers Grove One Pty. Ltd. acquired the three Titles. Grove One Pty Ltd subdivided the larger allotment into smaller parcels of land, splitting the site into three individual Certificates of Title. These allotments were acquired by its current owner Fleurieu Health & Wellbeing Pty Ltd in March 2022. The current and historical Certificates of Title are presented in Appendix D.

#### **Historical Business Directory Searches**

A search of the Universal Business Directory (UBD) and Sands and McDougall South Australian Street, Trade, Professional and Municipal Directory was conducted between 1910 and 1991. The search indicated that there were no businesses of interest within a 250m radius of the site.

A broader search of businesses directories not listed but matched to a road or area showed a business listed as 'Craft Built Interiors' matched to a road 10m from the site on Waterport Road. The business activity was not listed.

# 4.3 Services to the Property

A search of http://maps.sa.gov.au/drainageplans/ was undertaken to determine if any plans were available. No sanitary drainage plans were available for the site.

## 4.4 Previous and Present Site Use and Structures

Aerial imagery and Certificate of Title information suggests the site has been used primarily for broad acre farming purposes since early European settlement until present day.

The only structures present on site have included a small shed/canopy structure located within the central northern portion of the site which was constructed sometime between 1970 and demolished sometime between 1989 and 1999. An existing small shed constructed primarily of galvanised iron is located in the northeastern portion of the site and based on aerial imagery was constructed sometime between 2003 and 2010. It is noted access within the shed was not permissible during the site inspection undertaken by Greencap on 19 January 2023.



Follow up anecdotal information provided by the previous owner (Steve Wright) suggests the former shed in the central northern portion of the site was used as a hay shed and the existing shed located in the northeastern portion of the site is used to house a submersible bore (powered by 3phase electricity) associated with the Chiton wetlands located immediately south of the site.

#### 4.5 Industrial processes carried out on site and the products manufactured

No evidence was found of industrial processes or manufacturing of products being undertaken at the site.

#### 4.6 Chemical storage and transfer areas

No evidence of any chemical storage was observed during the site inspection and none identified from the historical information reviewed.

#### 4.7 Raw materials used

None identified.

#### 4.8 Products spills, losses, incidents, and accidents (including fire)

None identified.

## 4.9 Government Searches

#### **EPA Section 7**

The South Australia Environment Protection Authority (EPA) has a statutory obligation under the *Land and Business (Sale and Conveyancing) Act, 1994* to provide information relating to environment protection. As such, a search was conducted of the EPA database for information relating to the subject land in accordance with Section 7 of the *Land and Business (Sale and Conveyancing) Act, 1994*. The EPA holds records of issues associated with:

- particulars of mortgages, charges, prescribed encumbrances affecting the land; or
- particulars relating to environmental protection including:
  - environmental assessments.
  - waste depots.
  - production of certain waste; and
  - waste on land.

The responses provided by the EPA indicted that they hold no records of the above particulars / activities being undertaken at the site. A copy of the responses is presented in Appendix F.

#### **EPA Site Contamination Index**

The EPA's on-line Site Contamination Index provides information relating to notifications and reports received by the EPA since 1 July 2009 under *the Act*. The Index provides information relating to Contamination and Audit notifications and reports that relate to specific suburbs or towns.

There were no notifications or reports relating directly to the site.

The nearest listing relates to a Section 83A notification for a works depot located approximately 648m southwest of the site.

No other notifications/reports within an approximate one-kilometre radius of the site are summarised were listed on the EPA site contamination index.

The EPA site contamination index notifications and listings are summarised within the Lotsearch report provided in Appendix C.

593

14



#### **EPA Environment Protection and Clean Up Orders**

There were no records within the data set buffer relating to EPA Environment protection and clean up orders.

#### Other Information

There are several EPA licences for properties in the vicinity of the site. Details are provided in Appendix C and can be summarised as follows:

- A licence for a petrol station listed for 2 Trade Court, Hindmarsh Valley, located approximately 244m northwest of the site.
- A licence for a waste recycling depot listed for Allotment 6 Commerce Crescent, Hindmarsh Valley, located approximately 302m northwest of the site.

The other licences listed relate to applications, transfers or licenses surrendered and/or for properties beyond 400m of the site and are not considered relevant in terms of this investigation.

#### 4.10 Discharges to land and water

None identified, other than stormwater runoff to roadside stormwater drains. Anecdotal information provided by previous owner Steve Wright suggests water pumped from the submersible bore located in the northeastern portion of the site discharges into Chiton wetlands located immediately south of the site.

#### 4.11 Wastes Produced

None identified.

## 4.12 Power generation

None identified.

# 4.13 Waste disposal and imported fill

During the site inspection, there was no evidence of waste disposal or significant areas of filling. There is potential for fill material to have been imported to the site for levelling purposes during development of the small shed/canopy structure identified in the 1978 aerial photograph and during development of the existing small shed located in the northeastern portion of the site. Based on the small size of the sheds, any potential imported fill used for levelling purposes would have been of negligent volume and it is considered likely any imported fill would have been natural material sourced from the surrounding region.

# 4.14 Earthmoving activities carried out on the site

None identified during the site inspection or from a review of aerial imagery. There is the potential for minor earthworks to have been undertaken historically in the areas of the two previously mentioned shed structures.

#### 4.15 Sources of information

- Lotsearch various data sources refer page 2 of Appendix C.
- Steve Wright (Former Owner One Grove) provision of information on past uses of the site.
- Alexandrina Council Information on zoning and relevant historical information.
- Department of Agriculture, Fisheries and Forestry and CSIRO Provision of acid sulphate soil information.
- Department for Environment, Water & Natural Resources, South Australia Provision of aerial photographs and groundwater information.

594



- Department for Planning, Transport and Infrastructure, Lands Titles Office, South Australia Provision of Certificate of Title information.
- Former Department of Mines and Energy Provision of Groundwater and Geology information.
- Department for the Premier and Cabinet, SafeWork SA Provision of dangerous substance licence information.
- Department for water, land, and biodiversity conservation Provision of Groundwater Information.
- Nearmap.com and Google Maps- provision of recent site aerial photographs and maps.
- South Australian Environment Protection Authority Information on any known environmental issues on the site.
- South Australian Resources Information Gateway Provision of geology and hydrogeology at the site.
- State Library of South Australia Information on past occupancy (Sands and McDougall Information).
- Government of South Australia Location SA Portal Surface water information.



# 5 SITE INSPECTION

A site inspection was conducted on 19 January 2023 with the objective of validating anecdotal and historical information and to locate and identify additional evidence of potential contamination including:

- structures and storage areas including underground tanks, waste pits and lagoons, hazardous materials storage, electrical transformers and hydraulic equipment, asbestos products, septic tanks and drain fields; and
- obvious visual contamination indicators such as disturbed vegetation, discoloured, oily or disturbed soil and / or the presence of any odours.

A summary of the site inspection findings is presented in Table 5.

**Table 5: Site Inspection Observations** 

ltem	Details			
	The site at the time of the inspection was vacant.			
Current uses of the site and surrounding land	Waterport Road exists immediately north of the site followed by commercial/industrial land use. Fringe Lily Place exists immediately west to the site followed by open space and recreational land use (Southern Fleurieu Health and Wellbeing Precinct).			
	Agricultural farmland exists to the east and Chiton Wetlands exist to the south.			
Disturbed, coloured, or stained soil	None identified.			
Bare soil patches	The site is covered in low lying wheat straw (recently harvested). No significant bare soil patches were identified.			
Disturbed or distressed vegetation	None identified.			
Unusual odour	None identified.			
Quality of surface water	None identified.			
Sheens on water surfaces	None identified.			
Site Topography and surface water drainage	The site slopes to the south toward Chiton wetlands. Surface water from the site drains to the south towards the wetlands and to a stormwater culvert with riprap located in the southwestern portion of the site.			
Presence and type of groundwater bores on the site and adjacent landholdings	One groundwater bore — No. 6626-491 is listed (Waterconnect) for the site located in the north eastern portion of the site. The bore was not physically sighted by Greencap during the site inspection, however, anecdotal information provided by the previous owner (Steve Wright) suggests this bore is located within the shed identified in the northeastern portion of the site and used for the Chiton wetlands located immediately south of the site.			
Condition of groundwater bore headworks	Unknown			
Measurement of groundwater levels	37 m bgl (Waterconnect)			
Conditions of building, roads, infrastructure etc.	One small shed exists in the northeastern portion of the site. The shed is constructed predominantly of galvanised steel of good condition. Access was not permissible during the site inspection. Anecdotal information provided by Steve Wright suggests the shed is used to house a submersible bore (powered by 3phase electricity) used for the Chiton wetlands located immediately south of the site.			
The means of heating and cooling buildings on the site	Not applicable			



ltem	Details			
Presence of asbestos on the ground surface	None identified.			
Presence of stockpiles, fill containment areas, sumps, drains, waste disposal areas, etc.	No stockpiles, fill containment areas, sumps, drains, waste disposal areas or drainage structures were evident on the site, however there was evidence of a culvert with rip rap located immediately adjacent the site to the west and southwest.			
Evidence of cut and fill activities	None identified.			
Presence of pits, ponds, and lagoons	None identified onsite. Chiton wetlands exist immediately south of the site.			
Presence and condition of chemical containers holding tanks, bunds, etc	None identified.			
Presence and condition of any underground storage tanks (USTs) and associated infrastructure	None identified.			
Underground structures that may be associated with sub-surface contamination	None identified.			
Condition of materials storage and handling facilities and any solid or liquid waste disposal areas	None identified.			
Any evidence of on-site spillage of dangerous goods and/or off-site migration.	None identified.			



# **6 SUMMARY OF POTENTIALLY CONTAMINATING ACTIVITIES**

The historical site review has revealed several potentially contaminating activities (PCAs) across the site. Table 6 details the activities of interest, associated chemicals and their persistence, mobility, potentially affected media and commentary regarding the identified PCA and 'Class' activity as defined in Practice Direction 14 - Site Contamination Assessment (Version 2, June 2022) issued by the State Planning Commission.

**Table 6: Details of Potentially Contaminating Activities** 

PCA and location	PCA Class	Chemicals of Interest	Persistence and mobility	Potentially Affected Media	Comments regarding the PCAs
Potential use of pesticides, herbicides, and fertilisers (including previous site use for broadacre farming and/or for general maintenance).	NA	Arsenic, OCP, OPP, herbicides (including triazines), TRH	Heavy metals – Mobility = low, persistence = high OCP – Mobility = low to moderate, persistence = high OPP – Mobility = low to moderate, persistence = low Herbicides – Mobility = low to moderate, persistence = moderate to high TRH – Mobility = moderate, persistence = moderate	Soil	The site appears to have been used for low intensity broadacre farming/ stock grazing purposes and hay production from early establishment (early 1800's) until present day. No areas of intensive application of chemicals were identified from findings of the site history review. Any impacts would likely be limited to near surface soils. Agricultural activities are specifically excluded in the Environment Protection Regulations 2009, for routine spraying, in accordance with manufacturers' instructions, of pesticides used in broadacre farming. This exclusion is considered to apply to the subject site.
Historic use of fill from various sources brought onto the site for levelling purposes.	NA	Heavy metals, OCPs, PAHs, TRH/BTEX	Heavy metals - Mobility = low, persistence = high  OCP - Mobility = low to moderate, persistence = high  PAHs - Mobility = low, persistence = high  TRH - Mobility = moderate, persistence = moderate  BTEX - Mobility = moderate, persistence = high	Soil	Fill or soil importation is not a potentially contaminating activity for the purposes of the State Planning Commission Practice Direction 14 - Site Contamination Assessment but remains a potentially contaminating activity under the Environment Protection Regulations 2009. It is noted that a former hay shed was noted to exist in the central northern portion of the site sometime between 1970 and demolished sometime prior to 1999. Additionally, one existing small shed used to house a submersible pump associated with the Chiton wetlands is currently located in the northeastern portion of the site. There is the potential for fill to have been brought onto the site for levelling purposes as part of construction of both these sheds, however, given the small footprint of both sheds and the likely scenario that any imported fill used for levelling purposes during construction would have been natural material sourced from the surrounding region, Greencap considers this PCA negligible.



PCA and location	PCA Class	Chemicals of Interest	Persistence and mobility	Potentially Affected Media	Comments regarding the PCAs
Storage of equipment used for site maintenance in the former hay shed in the central northern portion of the site and in the existing shed located in the northeastern portion of the site.	-	Various but may include Heavy metals, TRH/BTEX, volatile organic compounds (VOC)	Heavy metals – mobility = low; persistence = high TRH – mobility = moderate; persistence = moderate BTEX – mobility = moderate; persistence = high VOC – mobility = high; persistence = high	Soil and Air	As mentioned above, aerial imagery shows a former shed/canopy structure noted to exist in the central northern portion of the site sometime between 1970 and demolished sometime prior to 1999. Anecdotal evidence suggests this shed was used predominantly as a farm hay shed. Additionally, one existing small shed is currently located in the northeastern portion of the site and used to house a submersible pump (powered by 3phase electricity) associated with the Chiton wetlands to the south of the site.  There is the potential for farm equipment to have been stored within these sheds historically. Any potential impacts are considered to be limited to shallow surface soils.

BTEX = benzene, toluene, ethylbenzene, xylenes

OCP = organochlorine pesticides

OPP = organophosphorus pesticides

PAH = polycyclic aromatic hydrocarbons

TRH = total recoverable hydrocarbons

No activities of interest were identified on nearby properties during the historical review.



### 7 CONCEPTUAL SITE MODEL

### 7.1 Potentially Contaminating Activities

A summary of the potentially contaminating activities, both onsite and offsite is presented in Section 6.

### 7.2 Potential Receptors

The site is to be redeveloped for mixed use purposes including a childcare, medical and wellbeing specialist offices, radiology centre, day surgery, plant nursery, gallery and a café. The potential human receptors identified include:

- The future occupiers of the site (children and site workers) and visitors to the site (parents).
- Construction / maintenance workers.
- Offsite properties.
- Offsite users of extracted groundwater.

The nearest environmental receptor is the Chiton wetlands located immediately south of the southern site boundary line.

### 7.3 Potential Exposure Pathways

Exposure in relation to site contamination means an exposure pathway that a chemical substance takes from its source to reach a human population, such as incidental ingestion of surface soil or indoor dust, indoor and outdoor inhalation of dust, or consumption of home grown produce. Potential exposure pathways considered relevant for the site are:

### Human

- Indoor inhalation of dust.
- Outdoor inhalation of dust.
- Dermal contact with shallow soil and dust.
- Incidental ingestion of shallow soil and dust.
- Indoor inhalation of vapours from soil.
- Outdoor inhalation of vapour from soil.
- Contact or ingestion of groundwater.

### **Ecological**

- Direct contact/uptake of contaminated airborne particles, soil, sediment, surface water, surface water runoff or groundwater.
- Ingestion of contaminated flora or fauna.

### 7.4 Source-Pathway-Receptor Linkages

Several on-site activities of interest were identified in the site history review, but these are not considered potentially contaminating activities as defined in Practice Direction 14. No Class 1 activities were identified to have occurred onsite or on adjacent land (i.e. within 50 metres of the site).

Based on the nature of the historical activities undertaken at the site and the identified activities of interest there is a low likelihood of any complete source-pathway-receptor linkages in terms of the proposed use of the site for use for mixed use purposes.

600





The actual nature and extent of any site contamination could only be assessed through intrusive investigations but given the overall low risk of site contamination existing and the nature of the proposed development, these are not warranted. Greencap recommends a Construction Environmental Management Plan (CEMP) be prepared and implemented to manage unexpected finds during development of the site.





### 8 CONCLUSIONS

### **Site History**

The available historical information indicates that the site has been used for broad acre farming and/or grazing purposes from early European settlement (early 1800's) up until present day. The site inspection and historical site information reviewed has revealed little evidence of any potentially contaminating activities as defined by the Planning Commission's Practice Direction 14 (version 2, June 2022) having occurred on the site. The following activities of interest are noted for consideration:

- The possible use of pesticides, herbicides, and fertilisers used for broadacre farming and/or for general site
  maintenance. No specific areas of intensive application of chemicals were identified. Under the State
  Planning Commission's Practice Direction 14 (June 2022), agricultural activities and non-intensive
  application of a listed substance to animals, plants, land or water are not classed as a potentially
  contaminating activity.
- Potential historical use of fill brought onto the site for levelling purposes for the construction of the former shed/canopy structure located in the central northern portion of the site and for the existing shed located in the northeastern portion of the site. Fill or soil importation is not a potentially contaminating activity for the purposes of Practice Direction 14 but remains a potentially contaminating activity under the Environment Protection Regulations 2009. Given the small footprint of the two structures and the likelihood any fill brought onto site for levelling purposes as part of construction would have been natural material sourced from the region, Greencap considers this potentially contaminating activity to be negligible.
- Potential storage of farming equipment and/or materials in the former hay shed and in the existing shed
  located in the northeastern portion of the site. Although the exact nature of equipment/materials stored in
  the sheds (if any) was not revealed during the investigation, there was no evidence to suggest any
  contamination of significance associated.

### **Concluding Statement**

This PSI has been prepared to support a development application pertaining to a proposed mixed-use development at the site. As such, the discussion regarding potentially contaminating activities has been linked back to the State Planning Commissions Practice Direction 14 – Site Contamination Assessment 2021 (as revised in June 2022).

Based on the nature of the historical activities undertaken at the site and the identified activities of interest there were no identified complete source-pathway-receptor linkages in terms of the proposed development.

Several activities of interest associated with past and present site uses were identified, but no potentially contaminating activities as defined by The State Planning Commission's Practice Direction 14 were noted to have occurred at the site historically and/or currently. In summary, Greencap has not identified any evidence of site contamination to exist at the site or in the immediate surrounds which would preclude the site from the proposed mixed-use development. On the basis of this, there are no additional environmental investigation works required in order to assess the suitability of the site for the proposed development.

A site contamination declaration form has been completed and is presented under a separate cover.



**Preliminary Site Investigation** 

**Troppo Architects** 

1,3&5 Fringe Lily Place, Chiton, SA

**APPENDIX A** PROPERTY PARCEL REPORT

### **SAPPA Parcel Report**

Date Created: January 11, 2023

### The South Australian Property and Planning Atlas is available at the Plan SA website <a href="https://sappa.plan.sa.gov.au/">https://sappa.plan.sa.gov.au/</a>



**Address Details** 

**Unit Number:** 

Scale ≈ 1:2257 (on A4 page)

\_. . . .

Street Number: 1

Street Name: FRINGE-LILY

Street Type: PL

Suburb: CHITON

Postcode: 5211

**Property Details:** 

Council: ALEXANDRINA COUNCIL

State Electorate: FINNISS (2014), FINNISS (2018), FINNISS

(2022)

Hundred: GOOLWA

Valuation Number: 453824243\*

100 metres≈

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Title Reference: CT6181/105
Plan No. Parcel No.: D112935A51

Zoning details next page



### **Zone Details**

### **Zones**

Community Facilities (Z0903) - CF

### **Overlays**

### Environment and Food Production Area (O1502)

The Environment and Food Production Area Overlay is an area of rural, landscape, environmental or food production significance within Greater Adelaide that is protected from urban encroachment

### Hazards (Flooding) (O2403)

The Hazards (Flooding) Overlay seeks to minimise flood hazard risk to people, property, infrastructure and the environment.

### Hazards (Bushfire - Medium Risk) (O2408) - Medium

The Hazards (Bushfire - Medium Risk) Overlay seeks to ensure development responds to the medium level of bushfire risk by siting and designing buildings to mitigate threat and impact of bushfires on life and property and facilitating access for emergency service vehicles.

### Hazards (Flooding - General) (O2414)

The Hazards (Flooding - General) Overlay seeks to minimise impacts of general flood risk through appropriate siting and design of development.

### Native Vegetation (O4202)

The Native Vegetation Overlay seeks to protect, retain and restore areas of native vegetation.

### Prescribed Water Resources Area (O4802)

The Prescribed Water Resources Area Overlay seeks to ensure the sustainable use of water in prescribed water resource areas.

### Water Resources (O6902)

The Water Resources Overlay seeks to protect the quality of surface waters in South Australia.

### **Variations**

Maximum Building Height (Metres) (V0002) - 12

Maximum building height is 12m

Maximum Building Height (Levels) (V0008) - 3

Maximum building height is 3 levels

### **SAPPA Parcel Report**

Date Created: January 11, 2023

### The South Australian Property and Planning Atlas is available at the Plan SA website <a href="https://sappa.plan.sa.gov.au/">https://sappa.plan.sa.gov.au/</a>



**Address Details** 

Scale  $\approx$  1:2257 (on A4 page)

100 metres≈

**Unit Number:** 

**Street Number:** 

**Street Name:** FRINGE-LILY

**Street Type:** PL

Suburb: **CHITON** 

Postcode: 5211

**Property Details:** 

Council: ALEXANDRINA COUNCIL

FINNISS (2014), FINNISS (2018), FINNISS **State Electorate:** 

(2022)

**Federal Electorate:** MAYO (2013), MAYO (2016), MAYO (2019) 606

**Hundred: GOOLWA** 

**Valuation Number:** 4538242464

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Title Reference: CT6175/321
Plan No. Parcel No.: D112935A53

Zoning details next page



### **Zone Details**

### **Zones**

Community Facilities (Z0903) - CF

### **Overlays**

### Environment and Food Production Area (O1502)

The Environment and Food Production Area Overlay is an area of rural, landscape, environmental or food production significance within Greater Adelaide that is protected from urban encroachment

### Hazards (Bushfire - Medium Risk) (O2408) - Medium

The Hazards (Bushfire - Medium Risk) Overlay seeks to ensure development responds to the medium level of bushfire risk by siting and designing buildings to mitigate threat and impact of bushfires on life and property and facilitating access for emergency service vehicles.

### Hazards (Flooding - General) (O2414)

The Hazards (Flooding - General) Overlay seeks to minimise impacts of general flood risk through appropriate siting and design of development.

### Hazards (Flooding - Evidence Required) (O2416)

The Hazards (Flooding - Evidence Required) Overlay adopts a precautionary approach to mitigate potential impacts of potential flood risk through appropriate siting and design of development.

### Native Vegetation (O4202)

The Native Vegetation Overlay seeks to protect, retain and restore areas of native vegetation.

### Prescribed Water Resources Area (O4802)

The Prescribed Water Resources Area Overlay seeks to ensure the sustainable use of water in prescribed water resource areas.

### Water Resources (O6902)

The Water Resources Overlay seeks to protect the quality of surface waters in South Australia.

### **Variations**

### Maximum Building Height (Metres) (V0002) - 12

Maximum building height is 12m

### Maximum Building Height (Levels) (V0008) - 3

Maximum building height is 3 levels

### **SAPPA Parcel Report**

Date Created: January 11, 2023

The South Australian Property and Planning Atlas is available at the Plan SA website https://sappa.plan.sa.gov.au/



**Address Details** 

Scale ≈ 1:2257 (on A4 page)

Unit Number:

Street Number: 3

Street Name: FRINGE-LILY

Street Type: PL

**Suburb:** CHITON

Postcode: 5211

**Property Details:** 

Council: ALEXANDRINA COUNCIL

State Electorate: FINNISS (2014), FINNISS (2018), FINNISS

(2022)

Federal Electorate: MAYO (2013), MAYO (2016), MAYO (2019) 608

**Hundred:** GOOLWA

Valuation Number: 4538242448

100 metres≈

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Title Reference: CT6175/320
Plan No. Parcel No.: D112935A52

Zoning details next page



### **Zone Details**

### **Zones**

Community Facilities (Z0903) - CF

### **Overlays**

### Environment and Food Production Area (O1502)

The Environment and Food Production Area Overlay is an area of rural, landscape, environmental or food production significance within Greater Adelaide that is protected from urban encroachment

### Hazards (Bushfire - Medium Risk) (O2408) - Medium

The Hazards (Bushfire - Medium Risk) Overlay seeks to ensure development responds to the medium level of bushfire risk by siting and designing buildings to mitigate threat and impact of bushfires on life and property and facilitating access for emergency service vehicles.

### Hazards (Flooding - General) (O2414)

The Hazards (Flooding - General) Overlay seeks to minimise impacts of general flood risk through appropriate siting and design of development.

### Native Vegetation (O4202)

The Native Vegetation Overlay seeks to protect, retain and restore areas of native vegetation.

### Prescribed Water Resources Area (O4802)

The Prescribed Water Resources Area Overlay seeks to ensure the sustainable use of water in prescribed water resource areas.

### Water Resources (O6902)

The Water Resources Overlay seeks to protect the quality of surface waters in South Australia.

### **Variations**

Maximum Building Height (Metres) (V0002) - 12

Maximum building height is 12m

Maximum Building Height (Levels) (V0008) - 3

Maximum building height is 3 levels



**Preliminary Site Investigation** 

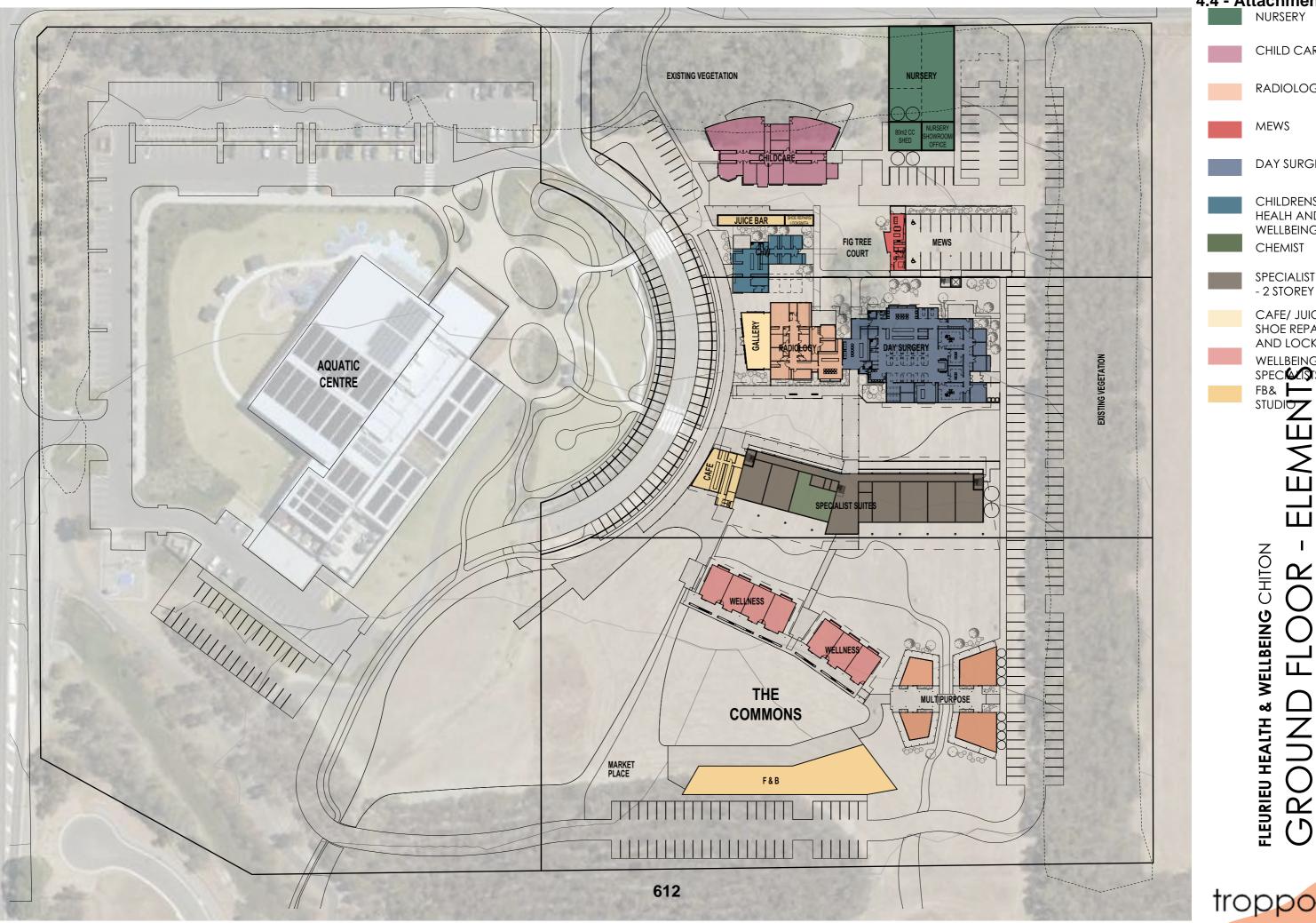
**Troppo Architects** 

1,3&5 Fringe Lily Place, Chiton, SA

**APPENDIX B** PROPOSED DEVELOPMENT PLANS







4.4 - Attachment 3

NURSERY

CHILD CARE

**RADIOLOGY** 

**MEWS** 

DAY SURGERY

**CHILDRENS HEALH AND** WELLBEING

SPECIALIST SUITES

CAFE/ JUICE BAR

SHOE REPAIRS AND LOCKERS WELLBEING

SPECIALISTS FB&

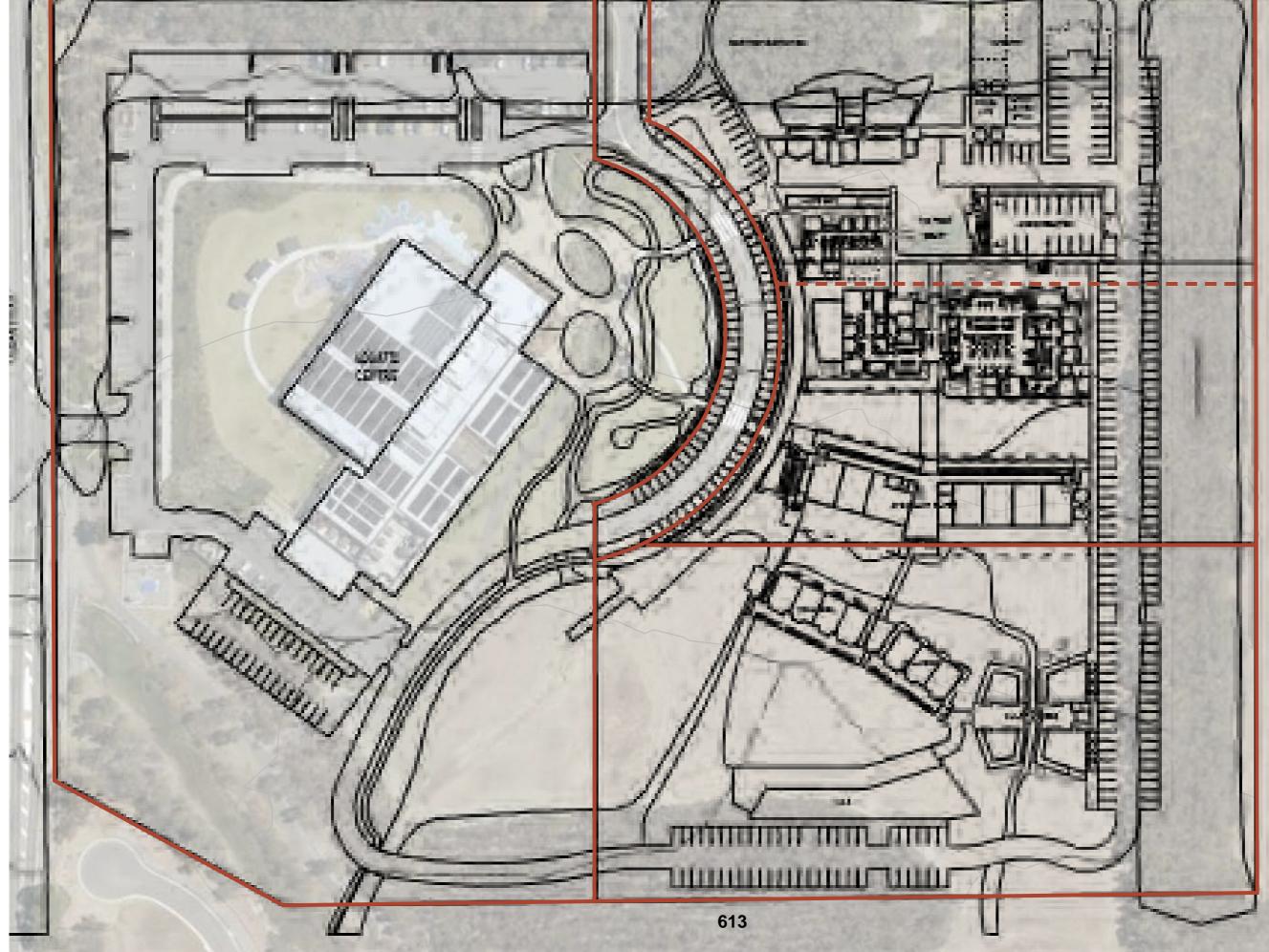
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# FLEURIEU HEALTH & WELLBEING CHITON LOT BOUNDARIES

troppo









**Preliminary Site Investigation** 

**Troppo Architects** 

1,3&5 Fringe Lily Place, Chiton, SA

**APPENDIX C** LOTSEARCH REPORT (MAPS, AERIAL, HISTORIC BUSINESS RECORDS, ETC)



Date: 17 Jan 2023 14:37:02 Reference: LS039663 EP

Address: 1-5 Fringe-Lily Place, Chiton, SA 5211

### Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features. You should obtain independent advice before you make any decision based on the information within the report. The detailed terms applicable to use of this report are set out at the end of this report.

# **Dataset Listing**

Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)		No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	PSMA Australia Limited	01/11/2021	01/11/2021	Quarterly	-	-	-	-
EPA Site Contamination Index	EPA South Australia	06/01/2023	06/01/2023	Monthly	1000m	0	0	1
EPA Environmental Protection Orders	EPA South Australia	19/12/2022	19/12/2022	Monthly	1000m	0	0	0
EPA Environmental Authorisations	EPA South Australia	19/12/2022	19/12/2022	Monthly	1000m	0	0	9
EPA Assessment Areas	EPA South Australia	18/10/2022	18/10/2022	Quarterly	1000m	0	0	0
EPA Groundwater Prohibition Areas	EPA South Australia	13/12/2022	20/08/2022	Monthly	1000m	0	0	0
Defence PFAS Investigation & Management Program - Investigation Sites	Department of Defence	06/01/2023	06/01/2023	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Department of Defence	06/01/2023	06/01/2023	Monthly	2000m	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	13/12/2022	13/12/2022	Monthly	2000m	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	02/09/2022	02/09/2022	Quarterly	2000m	0	0	0
National Waste Management Facilities Database	Geoscience Australia	26/05/2022	07/03/2017	Annually	1000m	0	0	0
EPA Collection Depots	EPA South Australia	20/12/2022	20/08/2022	Quarterly	1000m	0	0	0
National Liquid Fuel Facilities	Geoscience Australia	23/08/2022	15/03/2012	Annually	1000m	0	0	0
Historical Business Directories (Premise & Intersection Matches)	Hardie Grant, Sands & McDougall			Not required	150m	0	0	0
Historical Business Directories (Road & Area Matches)	Hardie Grant, Sands & McDougall			Not required	150m	-	1	1
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant, Sands & McDougall			Not required	500m	0	0	0
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant, Sands & McDougall			Not required	500m	-	0	0
Mines and Mineral Deposits	Department for Energy and Mining	18/10/2022	18/10/2022	Quarterly	1000m	0	0	4
Groundwater Aquifers	Department for Environment and Water	29/03/2021	01/01/2008	Annually	1000m	1	1	2
Drillholes	Department for Environment and Water	19/10/2022	07/10/2022	Quarterly	2000m	1	1	43
Surface Geology 1:100,000	Department for Energy and Mining	12/07/2018	01/07/2018	As required	1000m	1	2	4
Geological Linear Structures 1:100,000	Department for Energy and Mining	12/07/2018	01/07/2018	As required	1000m	0	0	0
Atlas of Australian Soils	ABARES	19/05/2017	17/02/2011	As required	1000m	1	1	3
Soil Types	Department for Environment and Water	12/07/2018	01/07/2009	As required	1000m	1	2	5
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013		1000m	1	1	1
Acid Sulfate Soil Potential	Department for Environment and Water	06/04/2022	18/02/2020		1000m	1	2	3
Soil Salinity - Watertable Induced	Department for Environment and Water	23/06/2022	09/06/2016	Annually	1000m	1	2	4
Soil Salinity - Non-watertable	Department for Environment and Water	19/04/2022	18/02/2020	Annually	1000m	1	1	2
Soil Salinity - Non-watertable (magnesia patches)	Department for Environment and Water	19/04/2022	18/02/2020	Annually	1000m	1	1	2

# 4.4 - Attachment 3

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Planning and Design Code - Zones	Attorney-General's Department	13/12/2022	23/06/2022	Monthly	1000m	2	5	7
Planning and Design Code - Subzones	Attorney-General's Department	13/12/2022	20/01/2022	Monthly	1000m	0	0	0
Land Use Generalised 2020	Department of Planning, Transport and Infrastructure	18/10/2022	07/03/2022	Annually	1000m	1	8	13
Commonwealth Heritage List	Australian Government Department of Agriculture, Water and the Environment	03/06/2022	13/04/2022	Annually	1000m	0	0	0
National Heritage List	Australian Government Department of Agriculture, Water and the Environment	03/06/2022	13/04/2022	Annually	1000m	0	0	0
State Heritage Areas	Department for Environment and Water	06/04/2022	18/02/2020	Annually	1000m	0	0	0
SA Heritage Places	Department for Environment and Water	19/10/2022	23/09/2021	Quarterly	1000m	0	0	1
Aboriginal Land	Department for Energy and Mining	06/04/2022	08/04/2018	Annually	1000m	0	0	0
Planning and Design Code - Overlays - Bushfire	Attorney-General's Department	13/12/2022	13/12/2022	Monthly	1000m	1	3	3
Bushfires and Prescribed Burns History	Department for Environment and Water	06/04/2022	24/02/2020	Annually	1000m	0	0	0
Planning and Design Code - Overlays - Flooding	Attorney-General's Department	13/12/2022	13/12/2022	Monthly	1000m	3	3	3
Groundwater Dependent Ecosystems Atlas	Bureau of Meteorology	28/10/2022	26/10/2022	Annually	1000m	0	0	1
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	28/10/2022	26/10/2022	Annually	1000m	0	0	1
Ramsar Wetland Areas	Department for Environment and Water	28/03/2022	18/02/2020	Annually	1000m	0	0	0

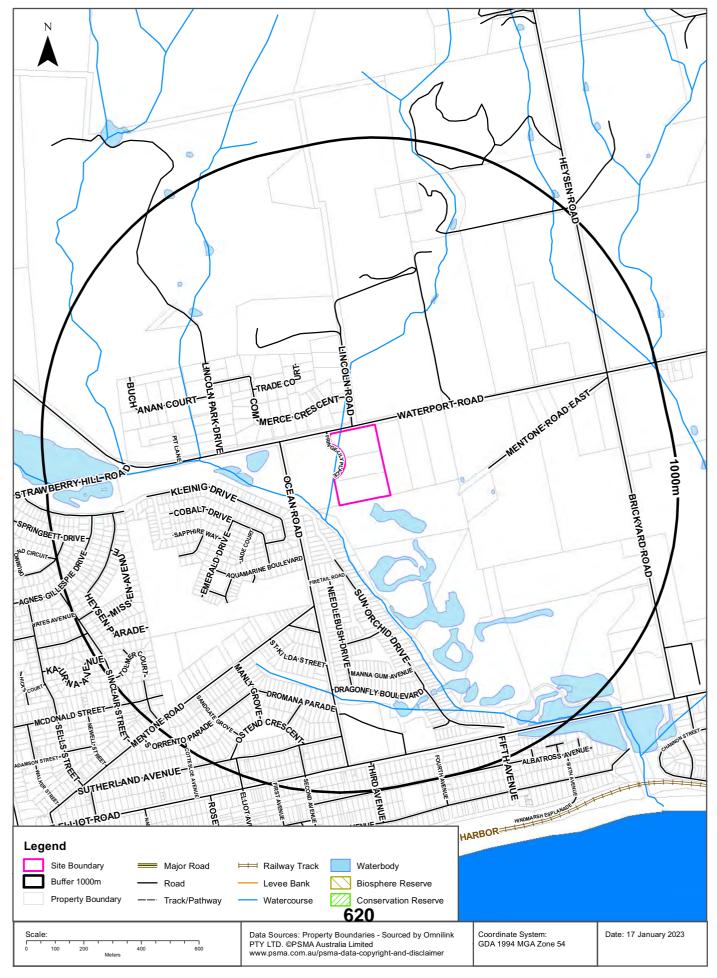
# **Site Diagram**





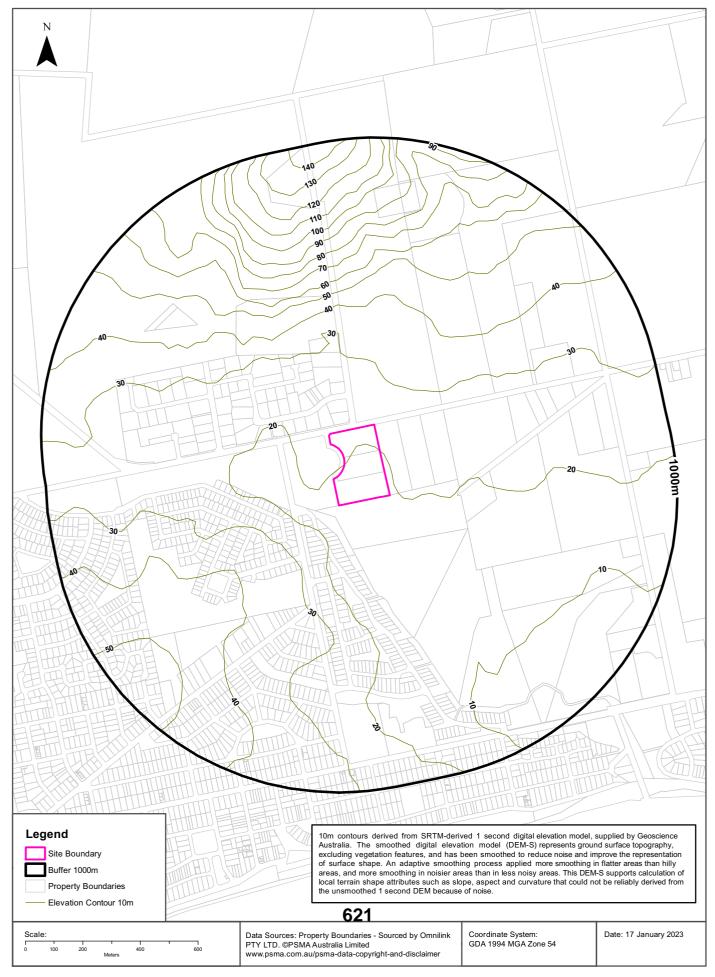
# **Topographic Features**





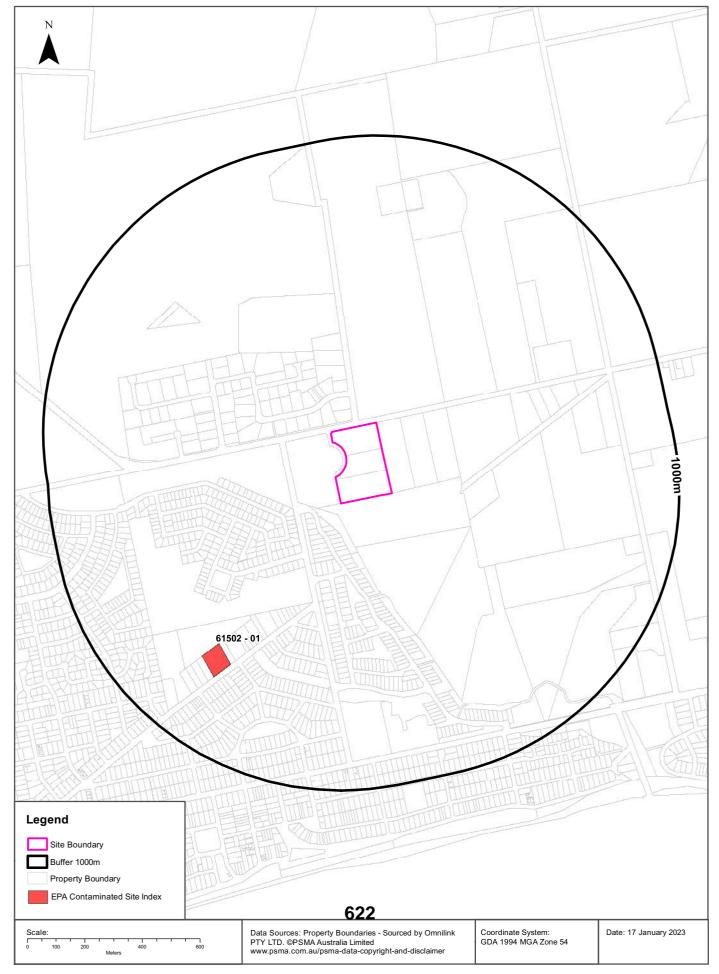
### **Elevation Contours**





# **EPA Site Contamination Index**





# **EPA Contaminated Land**

1-5 Fringe-Lily Place, Chiton, SA 5211

# **EPA Site Contamination Index**

Sites on the EPA Contamination Index within the dataset buffer:

Notification No	Туре	Address	Activity	Status	LocConf	Dist	Dir
61502 - 01	S83A Notification	41-47 Mentone Road HAYBOROUGH SA 5211	Works depots	Current EPA List	Premise Match	648m	South West

Site Contamination Index Data Source: EPA South Australia

# **EPA Public Register**

1-5 Fringe-Lily Place, Chiton, SA 5211

# **EPA Environment Protection and Clean Up Orders**

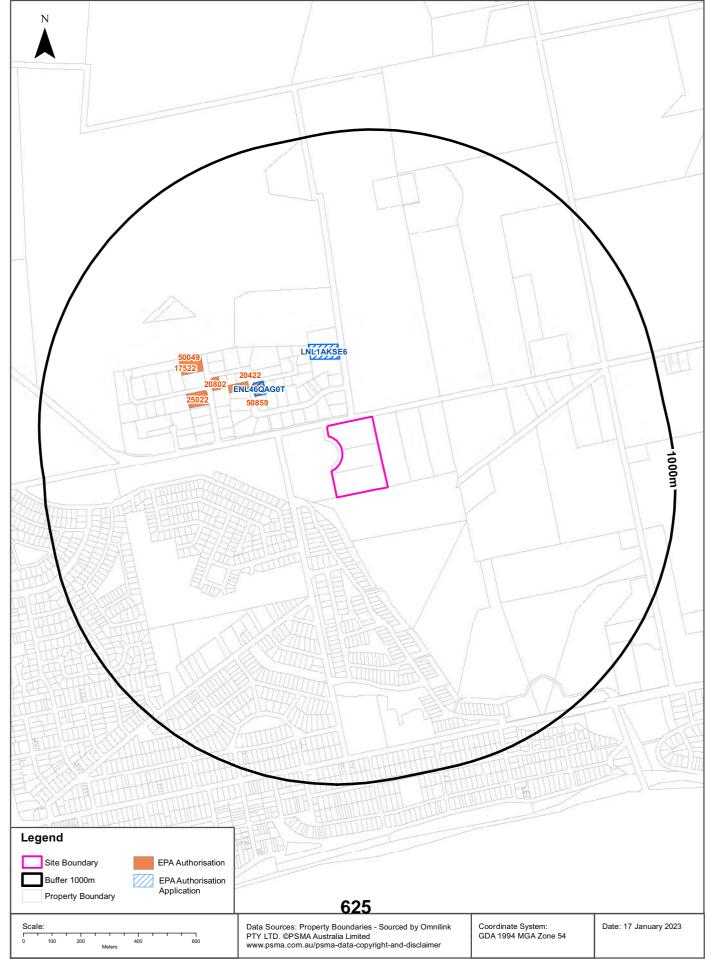
EPA Environment Protection and Clean Up Orders, within the dataset buffer:

Record No.	Record Type	Record Status	Entity	Site Address	Activity	EPA Register Status	LocConf	Dist	Dir
N/A	No records in buffer								

Authorisations Data Source: EPA South Australia

# **EPA Authorisations and Applications**





# **EPA Public Register**

1-5 Fringe-Lily Place, Chiton, SA 5211

# **EPA Authorisations and Applications**

EPA Authorisations and Authorisation Applications within the dataset buffer:

Record No.	Record Type	Record Status	Entity	Site Address	Activity	EPA Register Status	LocConf	Dist	Dir
LNL1A KSE6	LICENCE APPLICATION	Processing	FLEURIEU STOCKFEEDS PTY LTD	7-11 Lincoln Road, HINDMARSH VALLEY SA 5211	grinding or milling works (agricultural crop products),Crushing	Current EPA Register	Premise Match	219m	North
50859	LICENCE	Issued	FREDERICKS PETROLEUM PTY. LTD.	2 Trade Court, HINDMARSH VALLEY SA 5211	Petrol stations	Current EPA Register	Premise Match	244m	North West
ENL46 QAG0T	LICENCE APPLICATION	Authorisation Updated	FREDERICKS PETROLEUM PTY. LTD.	2 Trade Court, HINDMARSH VALLEY SA 5211	Petrol stations	Current EPA Register	Premise Match	244m	North West
20422	LICENCE	Issued	MATTHEW ROBERT NOTTLE, NICOLE ENZA DELUCA- CARDILLO	Allotment 6 (DP 72316) Commerce Crescent, HINDMARSH VALLEY, 5211, SA	Waste recycling depot (waste for resource recovery or transfer)	Current EPA Register	Premise Match	302m	North West
20802	LICENCE	Surrendered	ANGUS MICHAEL CAHILL, PAUL ANTHONY CAHILL, LISA MARGARET CAHILL, JULIE FRANCES CAHILL	Allotment 2 (DP 72316) Commerce Crescent,, HINDMARSH VALLEY, 5211, SA	Waste recycling depot (waste for resource recovery or transfer)	Current EPA Register	Premise Match	394m	North West
25022	LICENCE	Issued	FLEURIEU BLAST AND PAINT PTY LTD	Various Locations Throughout SA and 9 Lincoln Park Drive, HINDMARSH VALLEY, 5211, SA	Abrasive blasting	Current EPA Register	Premise Match	419m	West
17522	LICENCE	Transferred	HALLETT CONCRETE PTY. LTD.	Allotment 14 (DP 72316) Lincoln Drive, HINDMARSH VALLEY, 5211, SA	Concrete batching works	Current EPA Register	Premise Match	474m	North West
50049	LICENCE	Issued	DIRECT-MIX CONCRETE PROPRIETARY LIMITED	Allotment 14 (DP 72316) Lincoln Drive, HINDMARSH VALLEY, 5211, SA	Concrete batching works	Current EPA Register	Premise Match	474m	North West
17587	LICENCE	Issued	CITY OF VICTOR HARBOR	Various Sites Within Victor Harbor Council Boundaries, VICTOR HARBOR, SA	Dredging - for each day on which dredging occurs during the licence period,Earthworks drainage - for each day on which earthworks drainage takes place during the licence period	Current EPA Register	Suburb Match	-	-

Authorisations Data Source: EPA South Australia

# **EPA Assessment and Groundwater Prohibition Areas**

1-5 Fringe-Lily Place, Chiton, SA 5211

# **EPA Assessment Areas**

EPA Assessment Areas within the dataset buffer:

Map Id	Supplied Ref	Area Name	Map Link	Status	Location Confidence	Distance	Direction
N/A	No records in buffer						

Assessment Areas Data Source: EPA South Australia

# **EPA Assessment and Groundwater Prohibition Areas**

1-5 Fringe-Lily Place, Chiton, SA 5211

# **EPA Groundwater Prohibition Areas**

EPA Groundwater Prohibition Areas within the dataset buffer:

Map Id	Site Name	Location Confidence	Distance	Direction
N/A	No records in buffer			

Groundwater ProhibitionAreas Data Source: EPA South Australia

# **PFAS Investigation & Management Programs**

1-5 Fringe-Lily Place, Chiton, SA 5211

# **Defence PFAS Investigation & Management Program Investigation Sites**

Sites being investigated by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Location Confidence	Distance	Direction
N/A	No records in buffer				

Defence PFAS Investigation & Management Program Data Custodian: Department of Defence, Australian Government

# **Defence PFAS Investigation & Management Program Management Sites**

Sites being managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Location Confidence	Distance	Direction
N/A	No records in buffer				

Defence PFAS Investigation & Management Program Data Custodian: Department of Defence, Australian Government

## Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Location Confidence	Distance	Direction
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

# **Defence Sites**

1-5 Fringe-Lily Place, Chiton, SA 5211

# **Defence 3 Year Regional Contamination Investigation Program**

Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property II	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
N/A	No records in buffer					

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

# **Waste Management and Liquid Fuel Facilities**

1-5 Fringe-Lily Place, Chiton, SA 5211

# **National Waste Management Site Database**

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Revised Date	Location Confidence	Distance	Direction
N/A	No records in buffer								

Waste Management Facilities Data Source: Australian Government Geoscience Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **EPA Approved Container Collection Depots**

EPA approved container collection depots within the dataset buffer:

Mapld	Name	Address	Suburb	Loc Conf	Distance	Direction
N/A	No records in buffer					

Collection Depot Data Source: EPA South Australia

# **National Liquid Fuel Facilities**

National Liquid Fuel Facilties within the dataset buffer:

Map Id	Owner	Name	Address	Suburb	Class	Operational Status	Operator	Revision Date	Loc Conf	Dist	Dir
N/A	No records in buffer										

National Liquid Fuel Facilities Data Source: Geoscience Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# **Historical Business Directories**





# **Historical Business Directories**

1-5 Fringe-Lily Place, Chiton, SA 5211

# **Business Directory Records 1910-1991 Premise or Road Intersection Matches**

Universal Business Directory and Sands & McDougall Directory records, from years 1991, 1973, 1965, 1955, 1950, 1940, 1930, 1920 & 1910, mapped to a premise or road intersection within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
N/A	No records in buffer						

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# **Business Directory Records 1910-1991 Road or Area Matches**

Universal Business Directory and Sands & McDougall Directory records, from years 1991, 1973, 1965, 1955, 1950, 1940, 1930, 1920 & 1910, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
	1 Not Listed	Craft Built Interiors.frlmrre. Genrl. Mfr, Shed 6. Waterport Rd Port Elliot	13347	1991	Road Match	10m

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#### **Historical Business Directories**

1-5 Fringe-Lily Place, Chiton, SA 5211

## Dry Cleaners, Motor Garages & Service Stations 1930-1991 Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories and Sands & McDougall's Directories, from years 1991, 1973, 1965, 1955, 1950, 1940 & 1930, mapped to a premise or road intersection, within the dataset buffer.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
N/A	No records in buffer						

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## Dry Cleaners, Motor Garages & Service Stations 1930-1991 Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories and Sands & McDougall's Directories, from years 1991, 1973, 1965, 1955, 1950, 1940 & 1930, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Map I	d Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer					

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# Aerial Imagery 2022 1-5 Fringe-Lily Place, Chiton, SA 5211









# Aerial Imagery 2010 1-5 Fringe-Lily Place, Chiton, SA 5211





























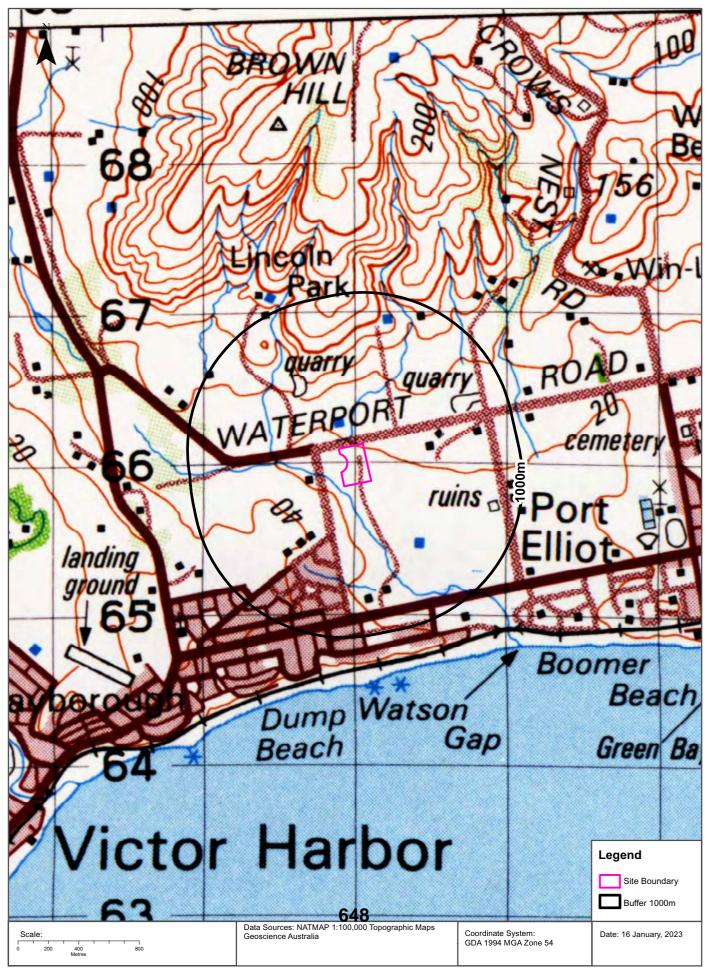






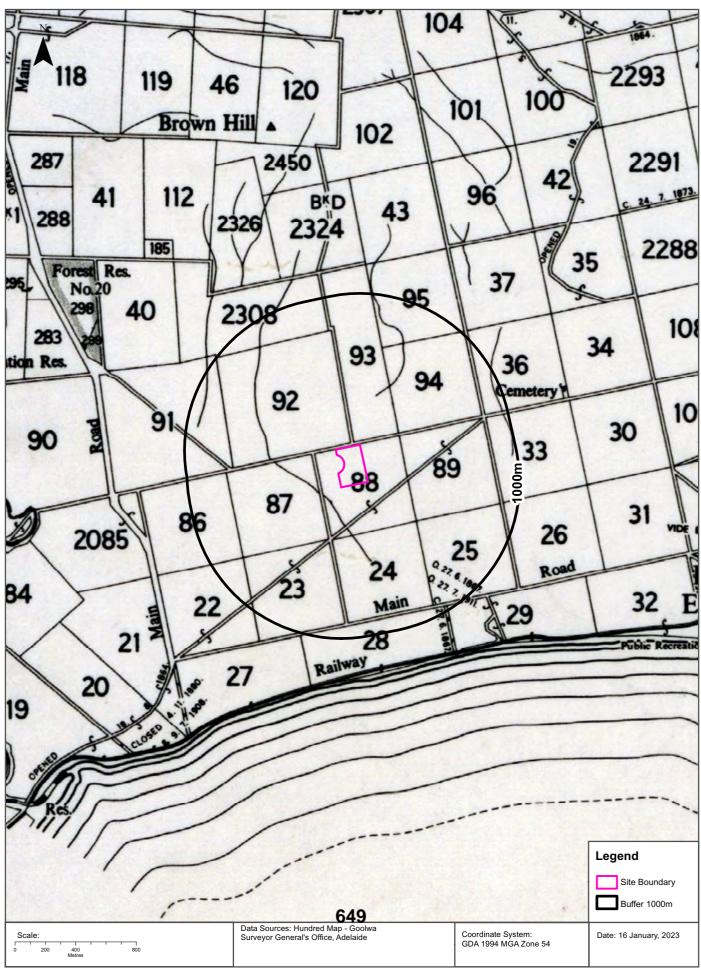






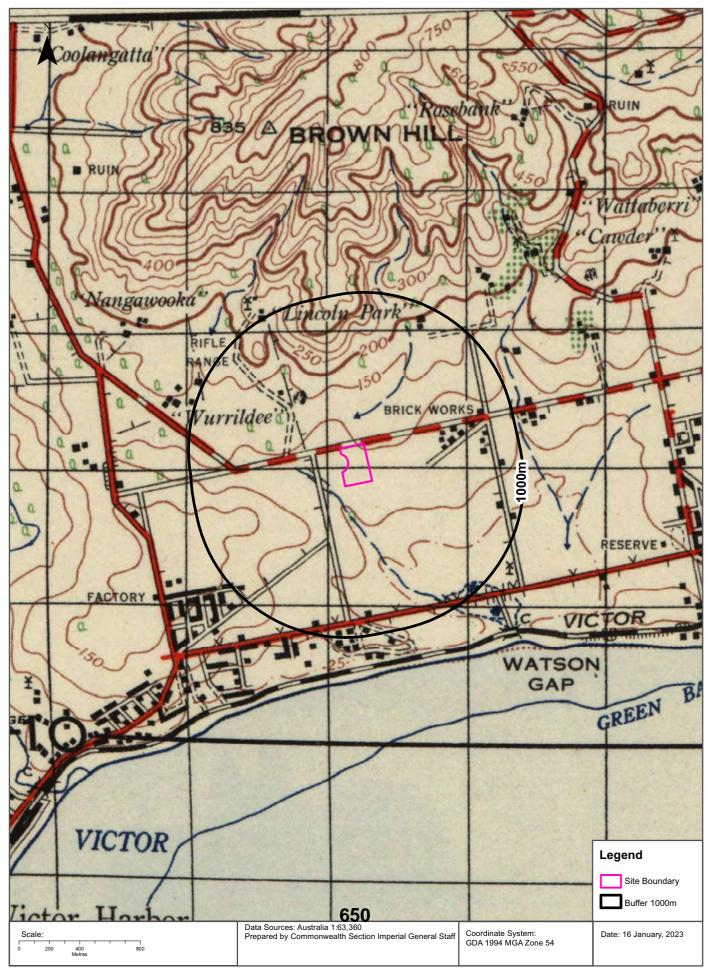
#### **Historical Map 1961**





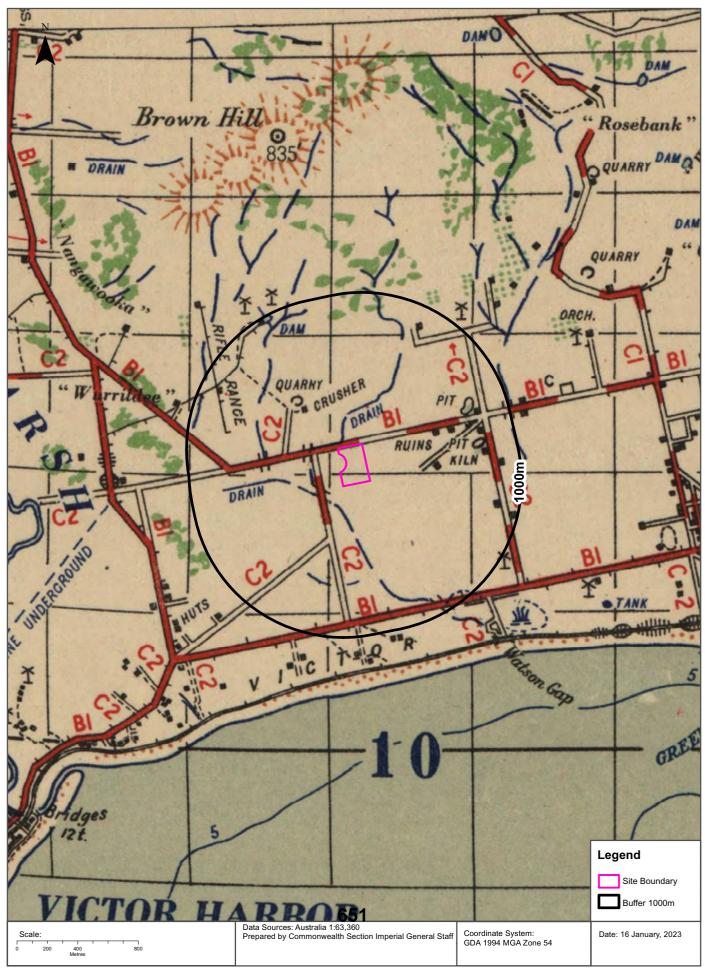
#### **Historical Map c.1956**





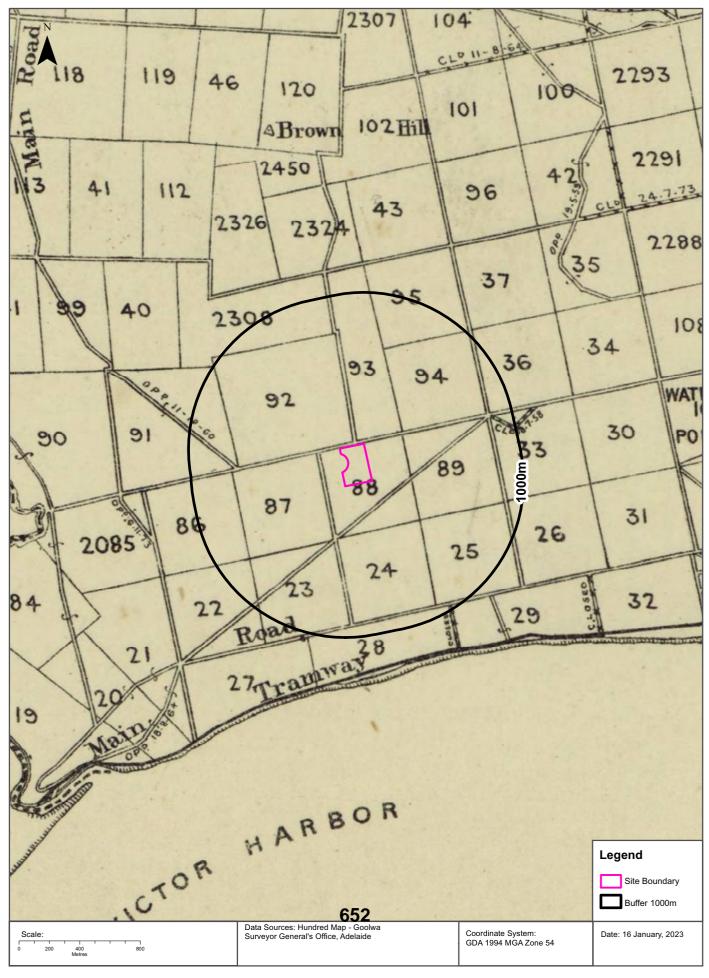
#### **Historical Map c.1942**





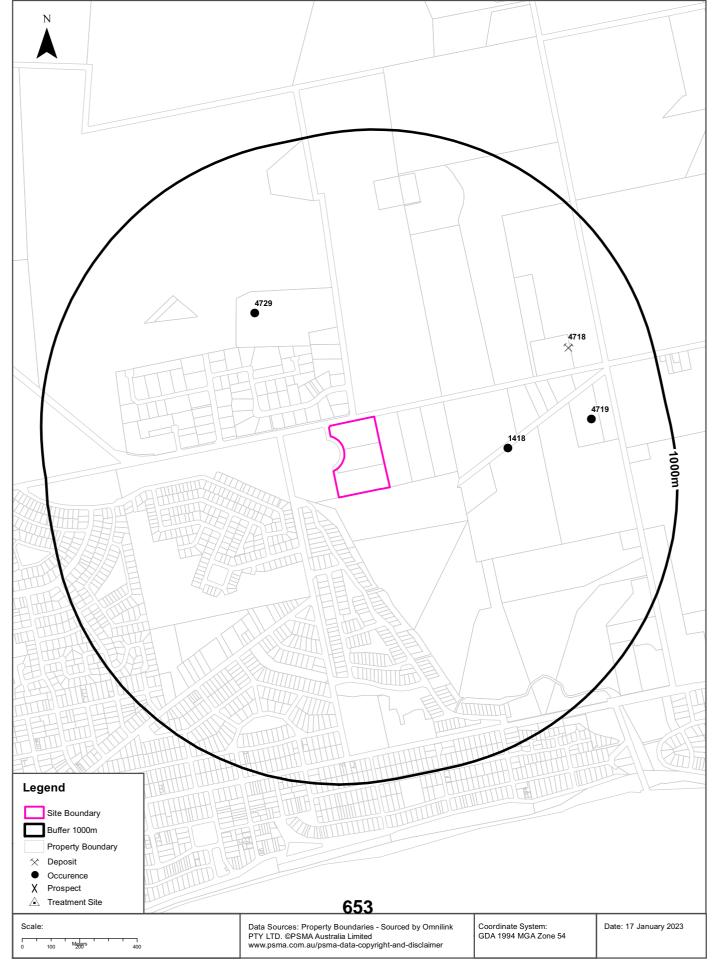
#### **Historical Map 1876**





#### **Mines and Mineral Deposits**





## **Mining**

1-5 Fringe-Lily Place, Chiton, SA 5211

## **Mines and Mineral Deposits**

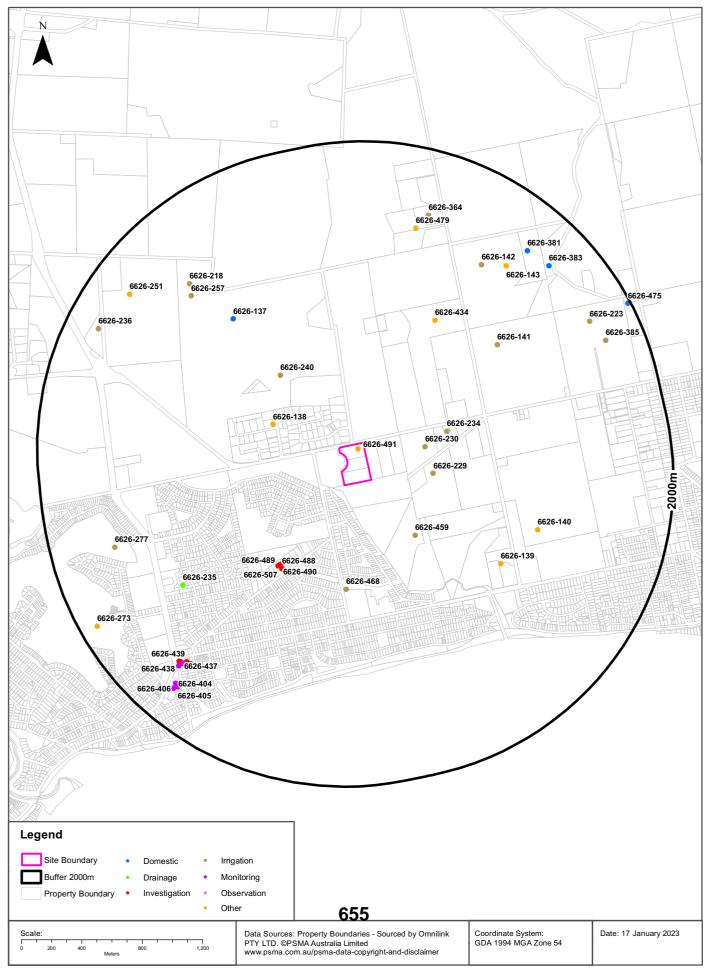
Mines and mineral deposits within the dataset buffer:

Deposit No.	Name	Class	Status	Commodity	Year	Description	Dist	Dir
1418	WOODS ALLUVIALS	OCCURRENCE	Not worked	Gold	1891	fine gold reported in alluvium in 1871, on section 89, Hundred of Goolwa.	431m	East
4729	WELCHS	OCCURRENCE	Rehabilitated	Schist	1930	alternating beds of mica schist and quartz-mica schist of the Balquidder Formation. Material considered for use as ballast in barrage construction. Current area of light industry. Recorded production in 1939 of 3048t.	472m	North West
4718	ARCADIAN	DEPOSIT	Ceased	Clay	1921	developed on deposit of Quaternary sedimentary clay in 1921. Last recorded production in 1980 for incomplete figures indicating >9,000 tonne recovered.	717m	North East
4719	CHURCH	OCCURRENCE	Rehabilitated	Clay	1921	deposit of alluvial clay with a long history of sporadic production from 1921 to the 1970s. No complete production figures available. Reportedly the clay was excellent for brick making. Now rehabilitated, and adjacent to a residence.	736m	East

All Mines and Mineral Deposits Data Source: Dept. of State Development, Resources and Energy - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

#### **Drillholes**





#### **Groundwater and Drillholes**

1-5 Fringe-Lily Place, Chiton, SA 5211

## **Groundwater Aquifers**

Groundwater aquifers within the dataset buffer:

Aquifer Code	Description	Distance	Direction
30	Fractured Rocks - Cambrian and Precambrian rocks - quartzite, sandstone, limestone, dolomite, slate, marble, siltstone, phyllite, schist and gneiss	0m	On-site
100	ocean	912m	South

Groundwater Aquifers Data Source: Dept. of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

#### **Drillholes**

Drillholes within the dataset buffer:

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	PH	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6626- 491	247170				2008-02-11	90.00		35.15				0.600 0	37.00	37.00	-1.85	0m	On- site
6626- 230	38310		Operational	Irrigation	1983-03-18	80.00		25.23		2030	3650	1.100 0	7.00	7.00	18.23	394m	East
6626- 229	38309		Abandoned	Irrigation	1983-05-07	105.00		20.38								413m	East
6626- 138	38218	SPRING		Spring				30.06		2199	3950					466m	North West
6626- 459	247295			Irrigation	2009-01-23	274.00				3684	6550					468m	South East
6626- 234	38314		Operational	Irrigation	1983-11-18	68.00		29.12		2556	4580	1.500 0	16.00	16.00	13.12	559m	East
6626- 240	38320		Operational	Irrigation	1984-10-28	150.00		47.04		2143	3850	7.500 0	0.50	0.50	46.54	621m	North West
6626- 489	287342	SB11/MW 2		Investigation	2015-05-13	13.20							9.70	9.70		677m	South West
6626- 507	347165		Dry	Investigation	2020-06-12	13.00										691m	South West
6626- 488	287341	SB10/MW 1		Investigation	2015-05-13	10.00										692m	South West
6626- 468	254711		Backfilled	Irrigation	2008-02-04	105.00						1.000 0				693m	South
6626- 490	287343	SB12/MW 3		Investigation	2015-05-14	15.30							12.90	12.90		693m	South West
6626- 434	220466				2006-07-05	72.00		74.18		1776	3200	3.000	22.00	22.00	52.18	941m	North East
6626- 139	38219		Operational	Stock		2.70		7.56	8.20	4640	8200		2.40	2.40	5.16	1023 m	South East
6626- 141	38221		Unknown	Irrigation		2.44		42.03		1673	3016		1.83	1.83	40.20	1100 m	North East
6626- 137	38217		Unknown	Domestic; Stock		24.38		68.11		1771	3192		0.00	0.00	68.11	1108 m	North West
6626- 140	38220		Unknown		1936-01-20	60.96		9.08		1838	3311		1.83	1.83	7.25	1151 m	East
6626- 235	38315		Operational	Drainage	1984-04-10	152.00		53.53		4589	8110	1.000	37.00	37.00	16.53	1260 m	South West
6626- 257	38337		Rehabilitate d	Irrigation	1987-04-10	156.00		77.58		2177	3910	19.00 00	18.00	18.00	59.58	1406 m	North West
6626- 142	38222		Unknown	Irrigation		CE (		89.51	6.70	3600	6405					1417 m	North East

656

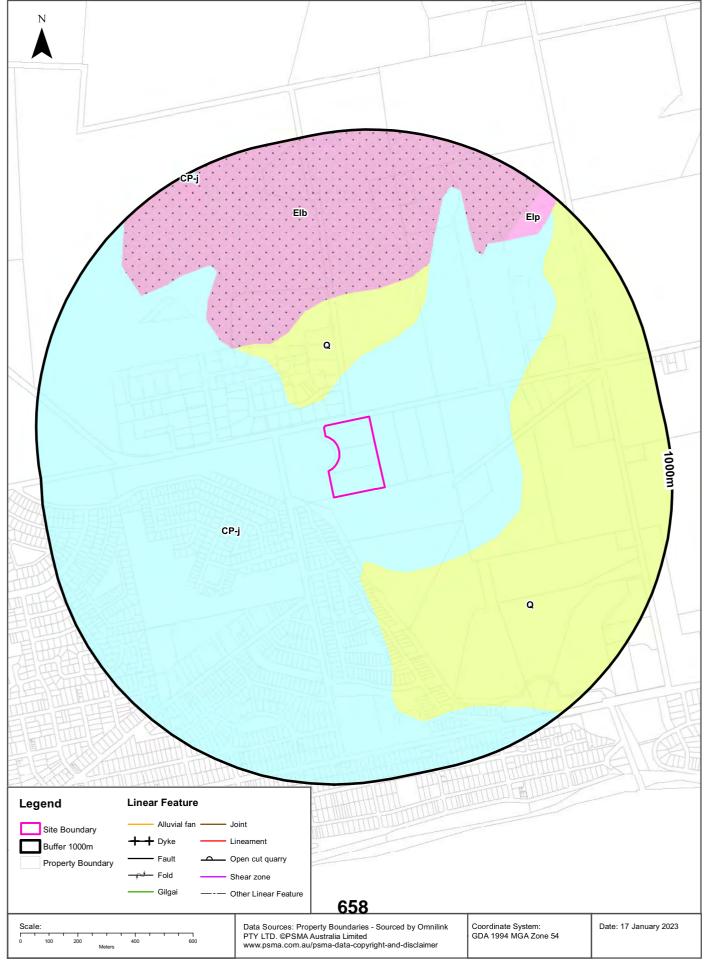
## 4.4 - Attachment 3

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	PH	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6626- 479	272763				2012-03-19	122.00				1322	2390	2.875 0	53.00	53.00		1466 m	North
6626- 218	38298		Operational	Irrigation	1981-04-27	66.00		111.82	6.70	1083	1960	6.250 0	0.00	0.00	111.82	1472 m	North West
6626- 143	38223	DAM		Dam				75.31	7.00	3385	6032					1510 m	North East
6626- 469	256122	SB/MW 22		Investigation	2008-01-10	14.00							11.80	11.80		1564 m	South West
6626- 364	168449			Irrigation	1998-03-04	87.00		142.70		1390	2510	3.000	45.00	45.00	97.70	1570 m	North
6626- 471	262188	SB/MW 24		Investigation	2010-01-21	13.00							10.60	10.60		1570 m	South West
6626- 277	38357		Abandoned	Irrigation	1990-04-30	105.00		30.30					0.00	0.00	30.30	1576 m	West
6626- 439	228489	SB15/MW 15		Monitoring	2005-08-24	12.00		43.98					7.80	7.80	36.18	1596 m	South West
6626- 440	228490	SB16/MW 16		Monitoring	2005-08-25	14.50		43.41					12.50	12.50	30.91	1600 m	South West
6626- 472	262189	SB/MW 23		Investigation	2010-01-20	8.00							6.80	6.80		1603 m	South West
6626- 438	228488	SB10/MW 10		Monitoring	2005-08-23	14.00		43.95					10.00	10.00	33.95	1605 m	South West
6626- 437	228487	SB9/MW9		Monitoring	2005-08-26	8.50		43.74					8.50	8.50	35.24	1624 m	South West
6626- 381	184801			Domestic; Stock	2001-02-14	156.00		68.01		1821	3280	0.500				1675 m	North East
6626- 383	186831			Domestic	2001-06-30	122.00		77.82		1474	2660	0.500	35.00	35.00	42.82	1700 m	North East
6626- 223	38303		Abandoned	Irrigation	1983-02-07	74.00		42.77		2819 6	4400 0	0.500				1703 m	North East
6626- 251	38331		Flowing	Stock	1986-08-28	121.50		80.50		1300	2350	13.75 00	0.00	0.00	80.50	1723 m	North West
6626- 406	200146	MW 3		Monitoring	2004-02-20	12.00		38.40					7.32	7.32	31.08	1725 m	South West
6626- 405	200145	MW 2		Monitoring	2004-02-19	13.00		36.87					7.28	7.28	29.59	1733 m	South West
6626- 385	188246			Irrigation	2001-02-06	76.00		36.00		1266	2290	19.00 00	17.00	17.00	19.00	1745 m	North East
6626- 404	200144	MW 1		Monitoring	2004-02-19	15.00		38.53					8.00	8.00	30.53	1760 m	South West
6626- 236	38316		Flowing	Irrigation	1984-07-18	138.50		42.30		1199	2170	22.50 00	0.00	0.00	42.30	1781 m	North West
6626- 273	38353		Operational	Environment al; Recreational	1990-01-10	47.00		13.85		1846	3322	24.00 00	16.00	16.00	-2.15	1885 m	South West
6626- 475	150887		Operational	Domestic; Stock	1995-05-08	64.00		174.90		1328	2400	13.00 00	12.00	12.00	162.90	1982 m	North East

Drillholes Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 4.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/4.0/

## Geology 1:100,000





## **Geology**

1-5 Fringe-Lily Place, Chiton, SA 5211

#### **Surface Geology 1:100,000**

Surface Geology Units within the dataset buffer:

Map Unit Code	Name	Description	Parent Name	Province	Age	Min Age	Max Age	Dist	Dir
CP-j	Cape Jervis Formation	Glacio-marine and fluvioglacial sediments and residual erratics.	Unnamed GIS Unit - see description	TROUBRIDGE BASIN	CARBONIFERO US-PERMIAN	Sakmarian	Carboniferous	0m	On- site
Q	Unnamed GIS Unit - see description	Undifferentiated Quaternary rocks.		UNKNOWN	PLEISTOCENE- HOLOCENE	Quaternary	Quaternary	87m	North
Elb	Balquhidder Formation	Sandstone and siltstone, laminated, graded bedding, flame structures and ripple drift crossbedding. Channelling.	Bollaparud da Subgroup	KANMANTOO TROUGH (ADELAIDE GEOSYNCLINE)	CAMBRIAN	Floran	Templetonian	342m	North
Elp	Petrel Cove Formation	Grey-black Bouma-like sandstone-mudstone couplets. Climbing ripples, ball and pillow structures, channelled.	Bollaparud da Subgroup	KANMANTOO TROUGH (ADELAIDE GEOSYNCLINE)	CAMBRIAN	Cambrian	Cambrian	767m	North East

Geology Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 4.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/4.0/

#### Linear Structures 1:100,000

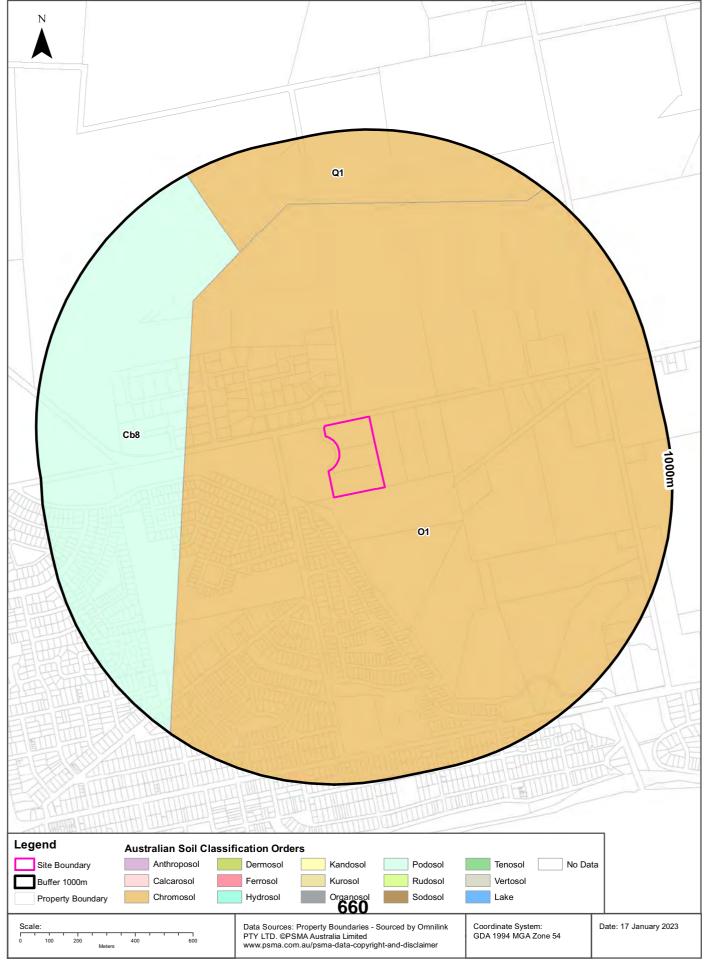
Linear geological structures within the dataset buffer:

Map Code	Description	Distance	Direction
N/A	No records in buffer		

Geology Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 4.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/4.0/

#### **Atlas of Australian Soils**





## Soils

1-5 Fringe-Lily Place, Chiton, SA 5211

#### **Atlas of Australian Soils**

Soil mapping units and Australian Soil Classification orders within the dataset buffer:

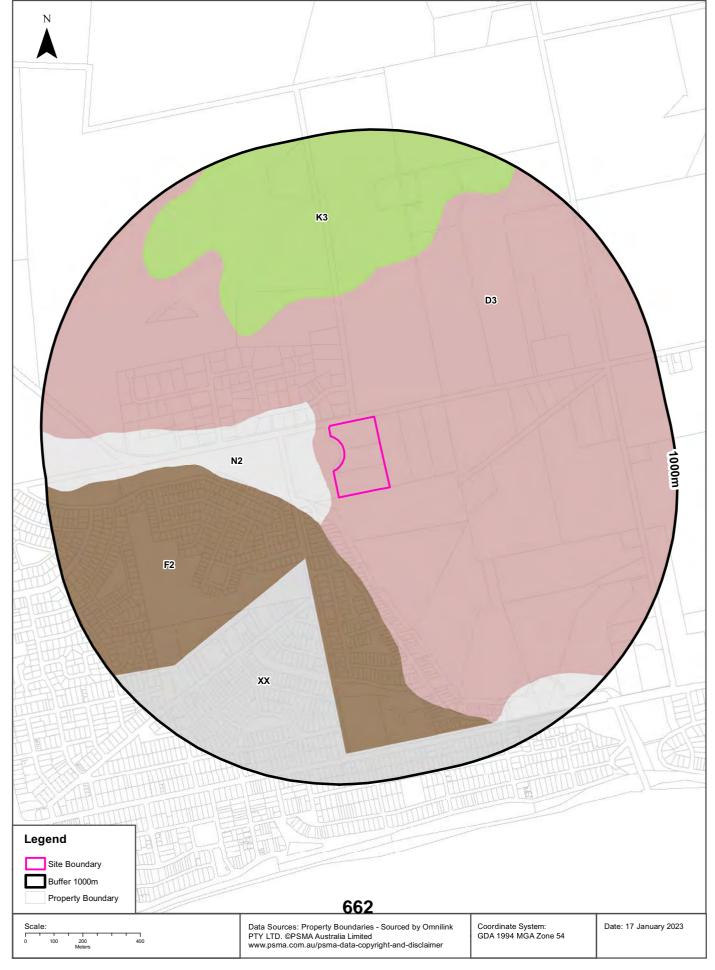
Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
01	Chromosol	Outwash plains: hard alkaline red soils (Dr2.23 with small areas Dr2.33); small areas cracking clay soils (Ug5.15, Ug5.16, and Ug5.2), also hard alkaline yellow mottled soils (Dy3.43); minor areas (Um6.21) and (Uf6.11); various alluvial soils (unclassified) in the stream valleys.	0m	On-site
Cb8	Podosol	Undulating land: leached sands (Uc2.3 including Uc2.33) in association with hard acidic yellow mottled soils (Dy3.61), some of which contain ironstone gravel, and sandy neutral yellow mottled soils (Dy5.82); small areas of shallow sand soils (Uc4.11) and shallow grey-brown sandy soils (Uc6. 11) on ridge and hilltops.	479m	West
Q1	Chromosol	Hills and hill slopes: hard neutral red soils (Dr2.22) with small areas of shallow dense loamy soils (Um5.41) and smaller areas of red and brown shallow loamy soils (Um6.42 and Um6.43) on slopes, and also (Dy3.61) on the crests of some hills and ridges. Minor areas of soils common to adjacent map units.	673m	North

Atlas of Australian Soils Data Source: CSIRO

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## **Soil Types**





## Soils

1-5 Fringe-Lily Place, Chiton, SA 5211

## **Soil Types**

Soil types within the dataset buffer:

Map category code	Soil type description	Distance	Direction
D3	Loam over poorly structured red clay	0m	On-site
N2	Saline soil	27m	West
F2	Sandy loam over poorly structured brown or dark clay	113m	South West
XX	Not applicable - No assessment/analysis undertaken	243m	South
K3	Acidic sandy loam over red clay on rock	414m	North

Soil Types Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Atlas of Australian Acid Sulfate Soils**





#### **Acid Sulfate Soils**

1-5 Fringe-Lily Place, Chiton, SA 5211

#### **Atlas of Australian Acid Sulfate Soils**

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance	Direction
С	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m	On-site

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO

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#### **Acid Sulfate Soils Potential**





#### **Acid Sulfate Soils**

1-5 Fringe-Lily Place, Chiton, SA 5211

#### **Acid Sulfate Soil Potential**

Acid sulfate soil potential within the dataset buffer:

Map category code	Proportion of land susceptible to the development of acid sulfate soils	Distance	Direction
Α	Negligible	0m	On-site
Е	More than 60%	27m	West
X	Not applicable - No assessment/analysis undertaken	243m	South

Acid Sulfate Soils Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## Soil Salinity - Watertable Induced





## Soil Salinity - Non-watertable





## **Soil Salinity - Non-watertable (Magnesia Patches)**





## **Soil Salinity**

1-5 Fringe-Lily Place, Chiton, SA 5211

### Soil Salinity - Watertable Induced

Watertable induced soil salinity within the dataset buffer:

Map category code	Severity description	Distance	Direction
В	Moderately low salinity, or less than 2% of land affected by highly saline seepage	0m	On-site
F	High salinity (mainly secondary) affects more than 50% of the land	27m	West
Α	Negligible	113m	South West
X	Not applicable - No assessment/analysis undertaken	243m	South

Salinity Watertable Induced Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### Soil Salinity - Non-Watertable

Non-watertable soil salinity within the dataset buffer:

Map category code	Severity description	Surface ECe (dS/m)	Subsoil ECe (dS/m)	Distance	Direction
Α	Low	<2	<4	0m	On-site
X	Not applicable - No assessment/analysis undertaken			243m	South

Salinity Non-Watertable Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## Soil Salinity - Non-Watertable (Magnesia Patches)

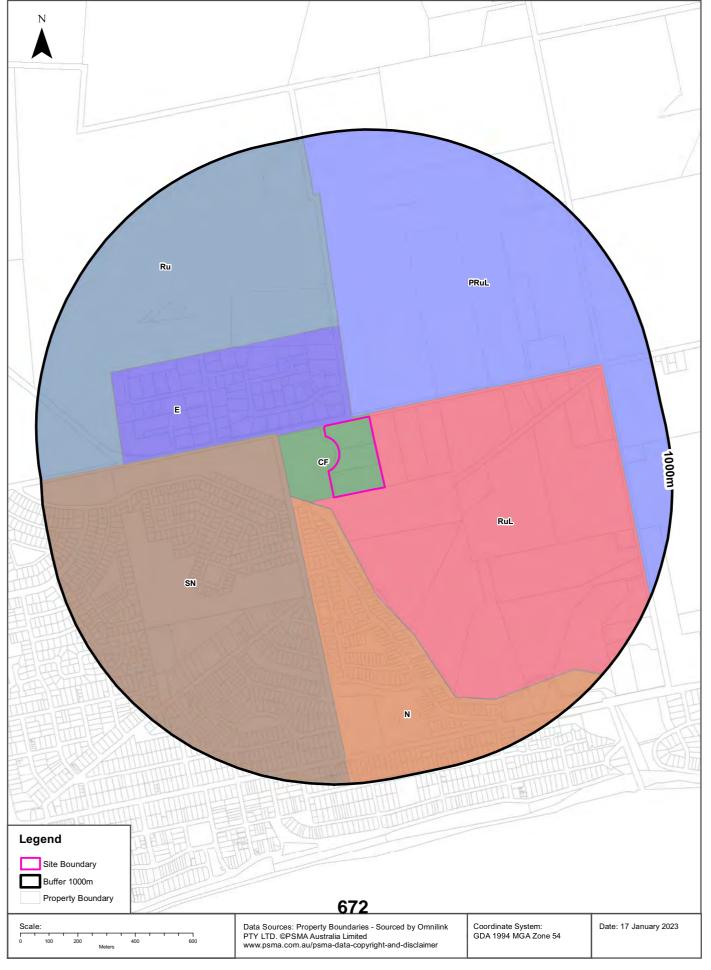
Magnesia patches within the dataset buffer:

Map category code	Proportion of land affected by magnesia patches	Distance	Direction
Α	Negligible	0m	On-site
X	Not applicable - No assessment/analysis undertaken	243m	South

Salinity Non-Watertable (Magnesia Patches) Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

# Planning and Design Code Zones 1-5 Fringe-Lily Place, Chiton, SA 5211





## **Planning**

1-5 Fringe-Lily Place, Chiton, SA 5211

## **Planning and Design Code - Zones**

Planning and Design Code zones within the dataset buffer:

Map Id	Zone Code	Zone Name	Legal Start Date	Status	Distance	Direction
CF	Z0903	Community Facilities	19/03/2021	0	0m	On-site
RuL	Z5405	Rural Living	19/03/2021	0	0m	On-site
E	Z1501	Employment	19/03/2021	0	1m	North West
PRuL	Z4802	Productive Rural Landscape	19/03/2021	0	10m	North East
N	Z4201	Neighbourhood	19/03/2021	0	41m	South
SN	Z5707	Suburban Neighbourhood	19/03/2021	0	147m	South West
Ru	Z5404	Rural	19/03/2021	0	332m	North West

Planning and Design Code Zones Data Source: Attorney-General's Department - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Planning and Design Code - Subzones**

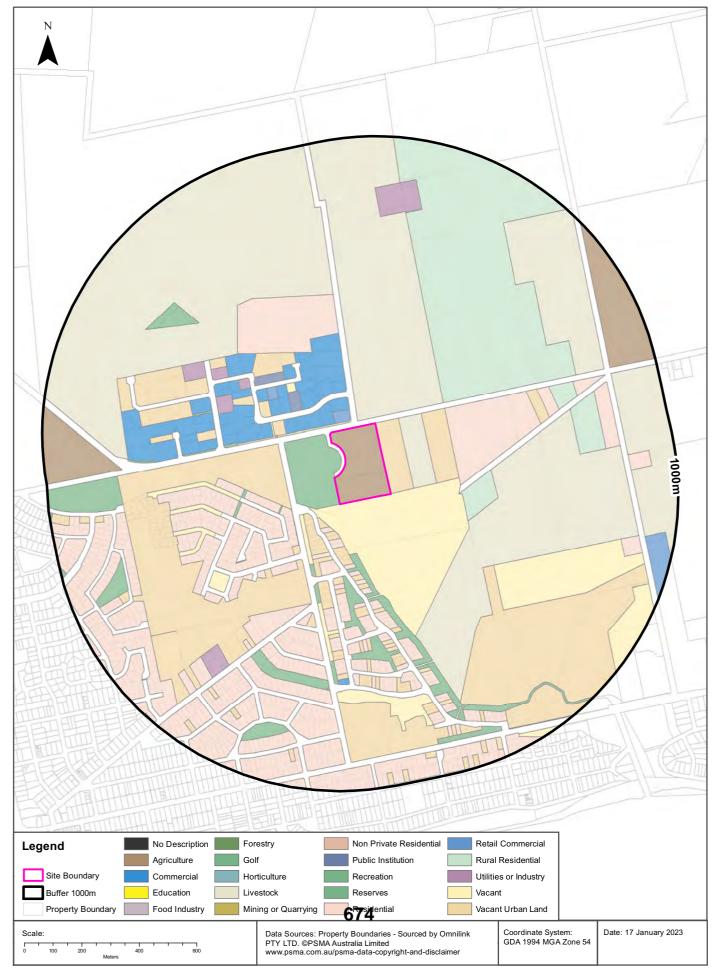
Planning and Design Code subzones within the dataset buffer:

Map Id	Subzone Code	Subzone Name	Legal Start Date	Status	Distance	Direction
N/A	No records in buffer					

Planning and Design Code Subzones Data Source: Attorney-General's Department - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Land Use Generalised**





## **Planning**

1-5 Fringe-Lily Place, Chiton, SA 5211

### **Land Use Generalised**

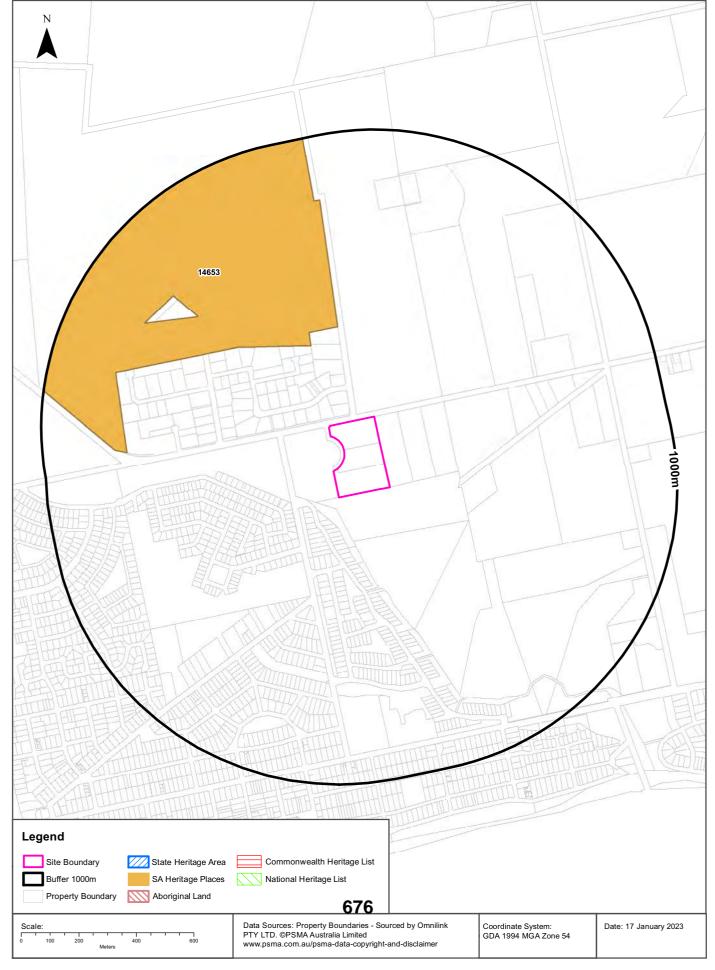
Land use classes within the dataset buffer:

Description	Distance	Direction
Agriculture	0m	On-site
Recreation	0m	West
Vacant	0m	South East
Vacant Urban Land	0m	East
Livestock	19m	North
Commercial	26m	North West
Retail Commercial	26m	North
Residential	86m	South West
Public Institution	126m	North West
Reserves	168m	South West
Utilities or Industry	182m	West
Rural Residential	235m	East
Non Private Residential	688m	South

Land Use Generalised Data Source: Dept of Planning, Transport and Infrastructure - South Australia Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

## Heritage





## **Heritage**

1-5 Fringe-Lily Place, Chiton, SA 5211

### **Commonwealth Heritage List**

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch Creative Commons 3.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/3.0/au/deed.en

### **National Heritage List**

What are the National Heritage List Items located within the dataset buffer? Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch Creative Commons 3.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/3.0/au/deed.en

### **State Heritage Areas**

State Heritage Areas within the dataset buffer:

Heritage Id	Name	Distance	Direction
N/A	No records in buffer		

Heritage Areas Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **SA Heritage Places**

SA Heritage Places within the dataset buffer:

Heritage No	Location	Heritage Class	Australian Class	Details	Auth Date	Distance	Direction
14653	15 Lincoln Park Drive (off) HINDMARSH VALLEY	Local	House	'Lincoln Park'	2/10/2003	287m	North West

 $Heritage\ Places\ Data\ Source:\ Dept\ of\ Environment,\ Water\ and\ Natural\ Resources\ -\ South\ Australia\ Creative\ Commons\ 3.0\ \\ \\ \\ \\ \\ \\ Commonwealth\ of\ Australia\ http://creativecommons.org/licenses/by/3.0/au/deed.en$ 

## **Aboriginal Land**

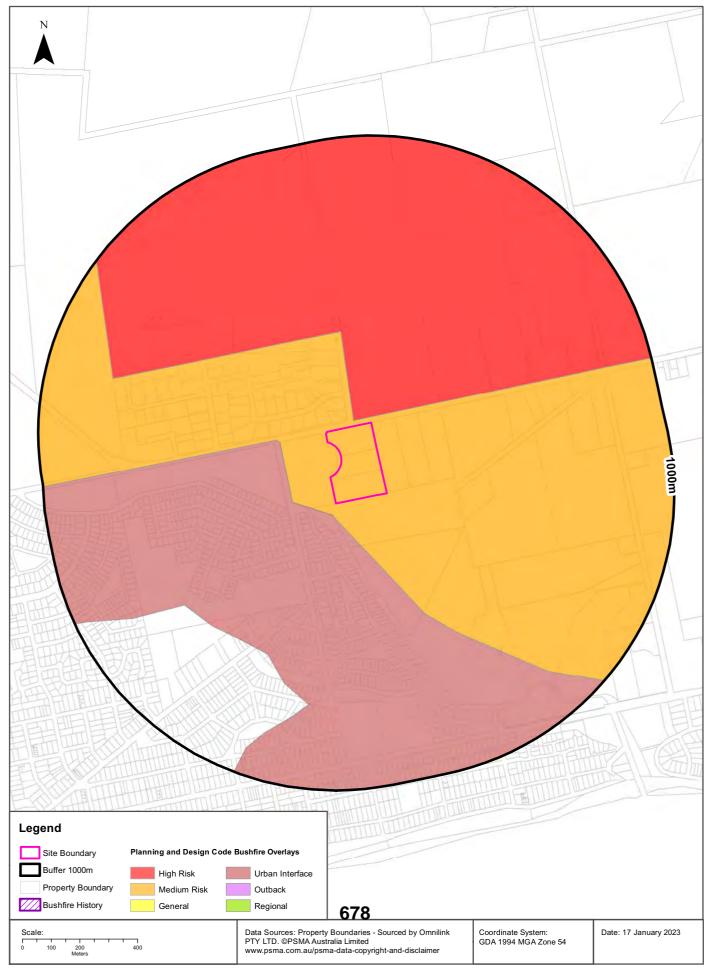
Aboriginal Land within the dataset buffer:

Map Id	<b>Grant Date</b>	Address	Locality	Description	Title	Distance	Direction
N/A	No records in buffer						

Aboriginal Land Data Source: Department of State Development, Resources and Energy - South Australia

### **Natural Hazards - Bushfire**





### **Natural Hazards**

1-5 Fringe-Lily Place, Chiton, SA 5211

### **Bushfire Overlays**

Bushfire Overlays from the Planning and Design Code within the dataset buffer:

Overlay Id	Name	Description	Legal Start Date	Legal End Date	Distance	Direction
O2408	Hazards (Bushfire - Medium Risk)	The Hazards (Bushfire - Medium Risk) Overlay seeks to ensure development responds to the medium level of bushfire risk by siting and designing buildings to mitigate threat and impact of bushfires on life and property and facilitating access for emergency	19/03/2021		0m	On-site
O2408	Hazards (Bushfire - High Risk)	The Hazards (Bushfire - High Risk) Overlay seeks to ensure development responds to the high level of bushfire risk by siting and designing buildings to mitigate threat and impact of bushfires on life and property, facilitating access for emergency servic	4/11/2021		19m	North
O2408	Hazards (Bushfire - Urban Interface)	The Hazards (Bushfire - Urban Interface) Overlay seeks to ensure urban neighbourhoods adjoining bushfire risk areas allow access through to bushfire risk areas, are designed to protect life and property from the threat of bushfire and facilitate evacuati	19/03/2021		41m	South

Bushfire Overlays Data Source: Attorney-General's Department - South Australia Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

## **Bushfires and Prescribed Burns History**

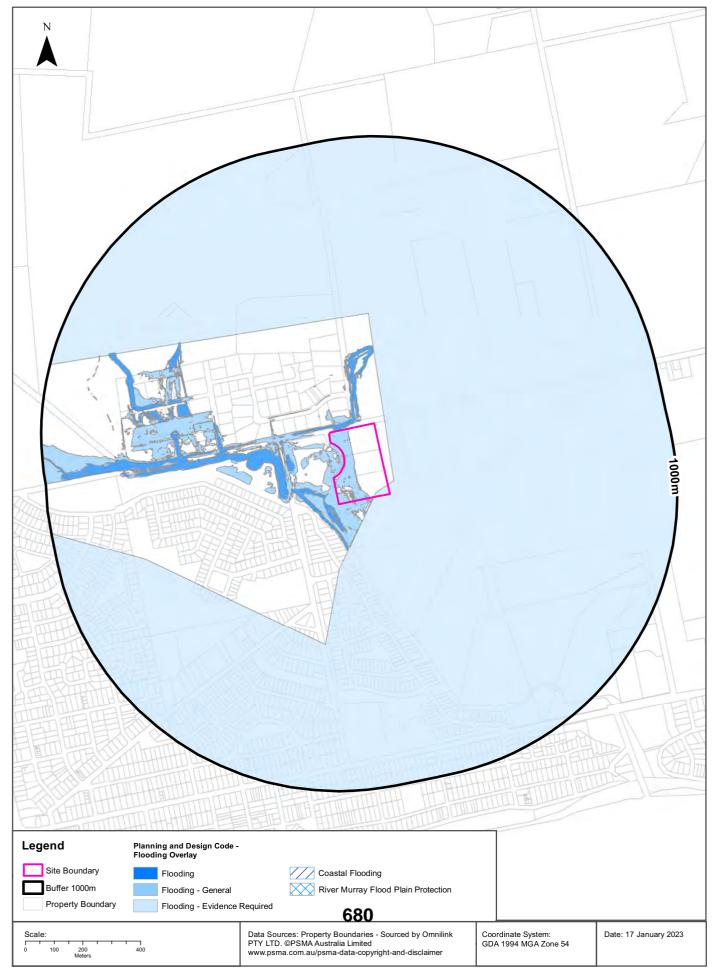
Bushfires and prescribed burns within the dataset buffer:

Map Id	Incident No.	Incident Name	Incident Type	Date of Fire	Area of Fire (ha)	Distance	Direction
N/A	No records in buffer						

Bushfires and Prescribed Burns History Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

### **Natural Hazards - Flood**





## **Natural Hazards**

1-5 Fringe-Lily Place, Chiton, SA 5211

## **Flooding Overlays**

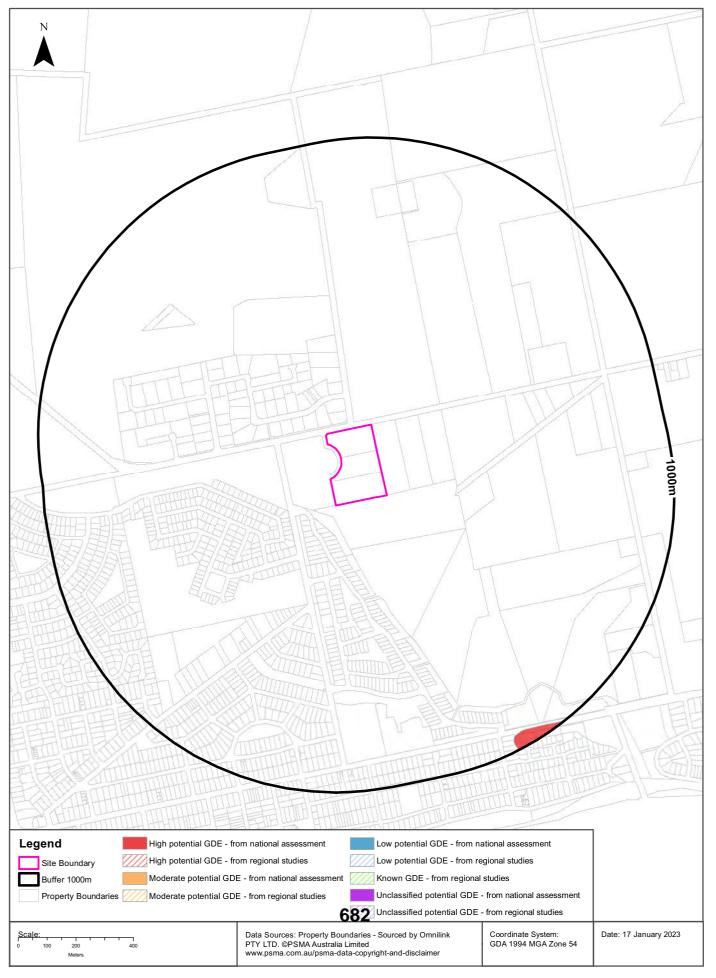
Flooding Overlays from the Planning and Design Code within the dataset buffer:

Overlay Id	Name	Description	Legal Start	Legal End	Distance	Direction
O2403	Hazards (Flooding)	The Hazards (Flooding) Overlay seeks to minimise flood hazard risk to people, property, infrastructure and the environment.	10/11/2022		0m	On-site
O2414	Hazards (Flooding - General)	The Hazards (Flooding - General) Overlay seeks to minimise impacts of general flood risk through appropriate siting and design of development.	10/11/2022		0m	On-site
O2416	Hazards (Flooding - Evidence Required)	The Hazards (Flooding - Evidence Required) Overlay adopts a precautionary approach to mitigate potential impacts of potential flood risk through appropriate siting and design of development.	10/11/2022		0m	On-site

Flooding Overlays Data Source: Attorney-General's Department - South Australia Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

## **Ecological Constraints - Groundwater Dependent Ecosystems Atlas**





## **Ecological Constraints**

1-5 Fringe-Lily Place, Chiton, SA 5211

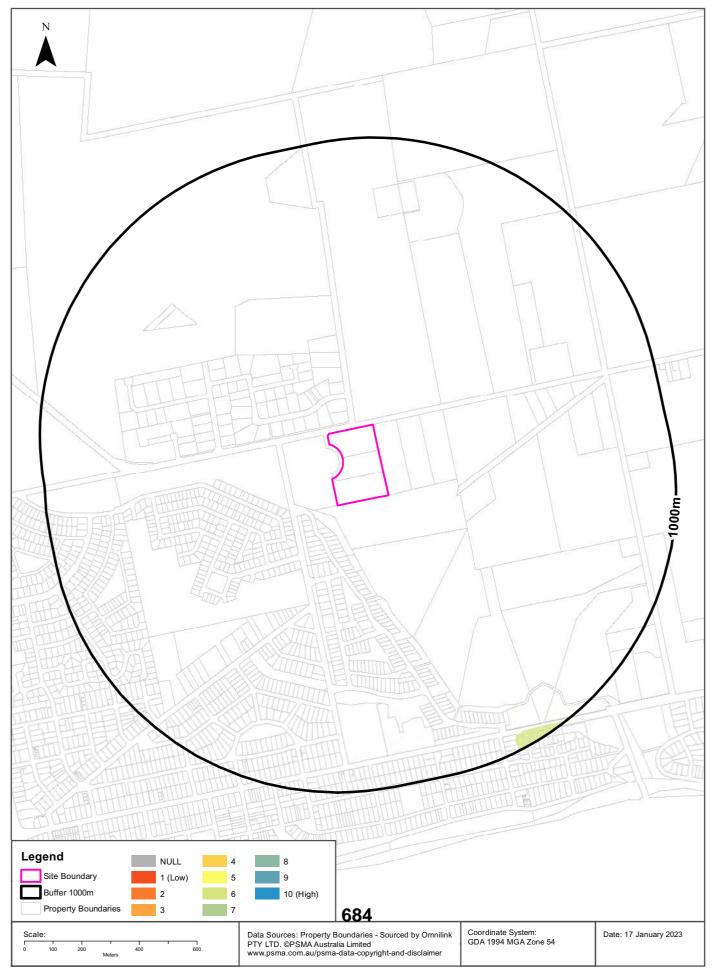
## **Groundwater Dependent Ecosystems Atlas**

Туре	Name	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial		High potential GDE - from national assessment	Complex fold belt of prominent ranges in north, chiefly quartzite with vales on weaker rocks; stepped fault blocks and islands in south, mainly of weathered metamorphic rocks with ferruginous cappings.	Vegetation		946m	South East

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Ecological Constraints - Inflow Dependent Ecosystems Likelihood**





## **Ecological Constraints**

1-5 Fringe-Lily Place, Chiton, SA 5211

## **Inflow Dependent Ecosystems Likelihood**

Туре	Name	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial			Complex fold belt of prominent ranges in north, chiefly quartzite with vales on weaker rocks; stepped fault blocks and islands in south, mainly of weathered metamorphic rocks with ferruginous cappings.	Vegetation		946m	South East

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Ecological Constraints**

1-5 Fringe-Lily Place, Chiton, SA 5211

### **Ramsar Wetlands**

What Ramsar wetland areas exist within the dataset buffer?

Wetland	Distance	Direction
No records in buffer		

Ramsar Wetlands Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

## **Location Confidences**

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading "LC" or "LocConf". These codes lookup to the following location confidences:

LC Code	Location Confidence
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced to an approximate or general area
Road Match	Georeferenced to a road or rail corridor
Road Intersection	Georeferenced to a road intersection
Buffered Point	A point feature buffered to x metres
Adjacent Match	Land adjacent to a georeferenced feature
Network of Features	Georeferenced to a network of features
Suburb Match	Georeferenced to a suburb boundary
As Supplied	Spatial data supplied by provider

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**Preliminary Site Investigation** 

**Troppo Architects** 

1,3&5 Fringe Lily Place, Chiton, SA

**APPENDIX D** CURRENT AND HISTORICAL CERTIFICATES OF TITLE

PURPOSE:	DIVISION		AREA	A NAME:	HAYBO	DROUGH			APPROVED:	
MAP REF:	6626/02/L, 6626/02/G,	6626/02/K, 6626/0	02/F COUI	NCIL:	ALEXA	NDRINA COUNCIL			DEPOSITED:	D112935
LAST PLAN:			DEVE	ELOPMEN'	T NO: <sup>455/D0</sup>	15/15/001/45138				SHEET 1 OF 8 51942_text_01_v04_Version_4
AGENT DETAILS	: ANDREW & ASSOCIA 311 ANGAS STREET ADELAIDE SA 5000 PH: 82321954 FAX: 82327678	TES		VEYORS TIFICATIO	N. superv		nce with the Si	urvey Act 1992. 2) That the	his plan has been made from surv field work was completed on the 2	reys carried out by me or under my persona 22nd day of March 2016
AGENT CODE: REFERENCE:	DSCA 215071-4H									
SUBJECT TITLE PREFIX VOLUM CT 6150  OTHER TITLES A	ME FOLIO OTHER 455	PARCEL ALLOTMEN	T(S) COMPRISING PIECES		NUMBER (920*,921*)	PLAN D	NUMBER 95272	HUNDRED / IA / DIV GOOLWA GOOLWA GOOLWA GOOLWA	ISION TOWN	REFERENCE NUMBI SECTION 24 SECTION 25 SECTION 88 CLOSED ROAD
EASEMENT DETA STATUS EXTINGUISH	AILS: LAND BURDENED CT 6019/510	FORM SHORT	CATEGORY  FREE AND UNRESTRICTED RIGHOR WAY		NTIFIER 095272	PURPOSE		IN FAVOL 50.51.52.53		CREATION RTC 11027932
EXISTING	970*	LONG	RIGHT(S) OF WAY	С						RTC 10767930
EXISTING	970*	LONG	RIGHT(S) OF WAY	F						RTC 11027932
EXISTING	970*	SERVICE	EASEMENT(S)	В		FOR DRAINAG	E PURPOSES	THE COUN	CIL FOR THE AREA	223LG RPA
EXISTING	970*.971*	SERVICE	EASEMENT(S)	G		FOR DRAINAG	E PURPOSES	THE COUN	CIL FOR THE AREA	223LG RPA
EXISTING	970*	LONG	RIGHT(S) OF WAY	D						RTC 12239920
EXISTING		SHORT	FREE AND UNRESTRICTED RIGH OF WAY	HT(S) K				970*.971*		RTC 11027932
NEW	50	SERVICE	EASEMENT(S)	А		<b>69</b> PR ELECTRIC	CITY SUPPLY	DISTRIBUT TO LEASE 8	ION LESSOR CORPORATION (S	SUBJECT 223LG RPA

NOT YET APPROVED
4.4 - Attachment 3



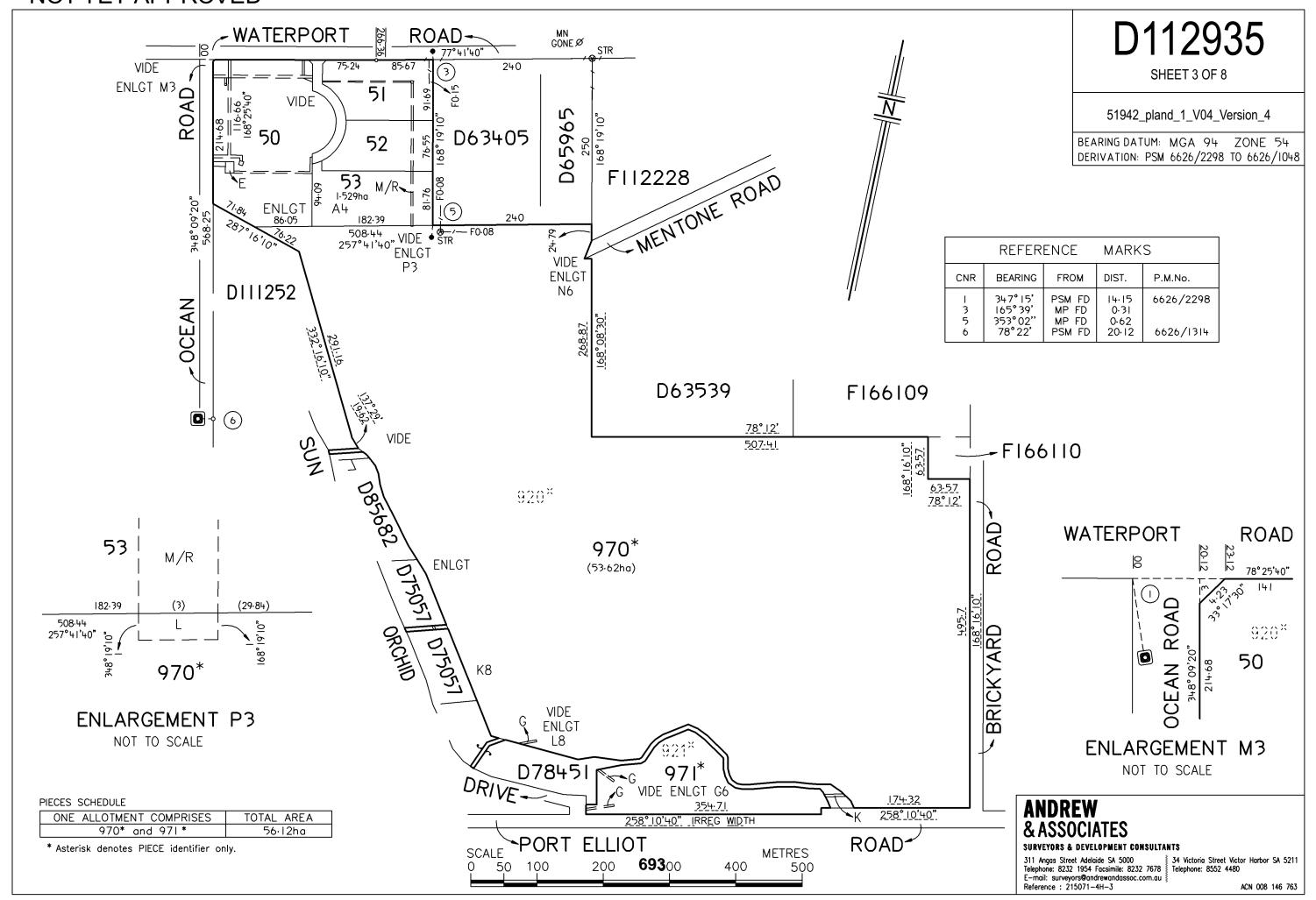
D112935

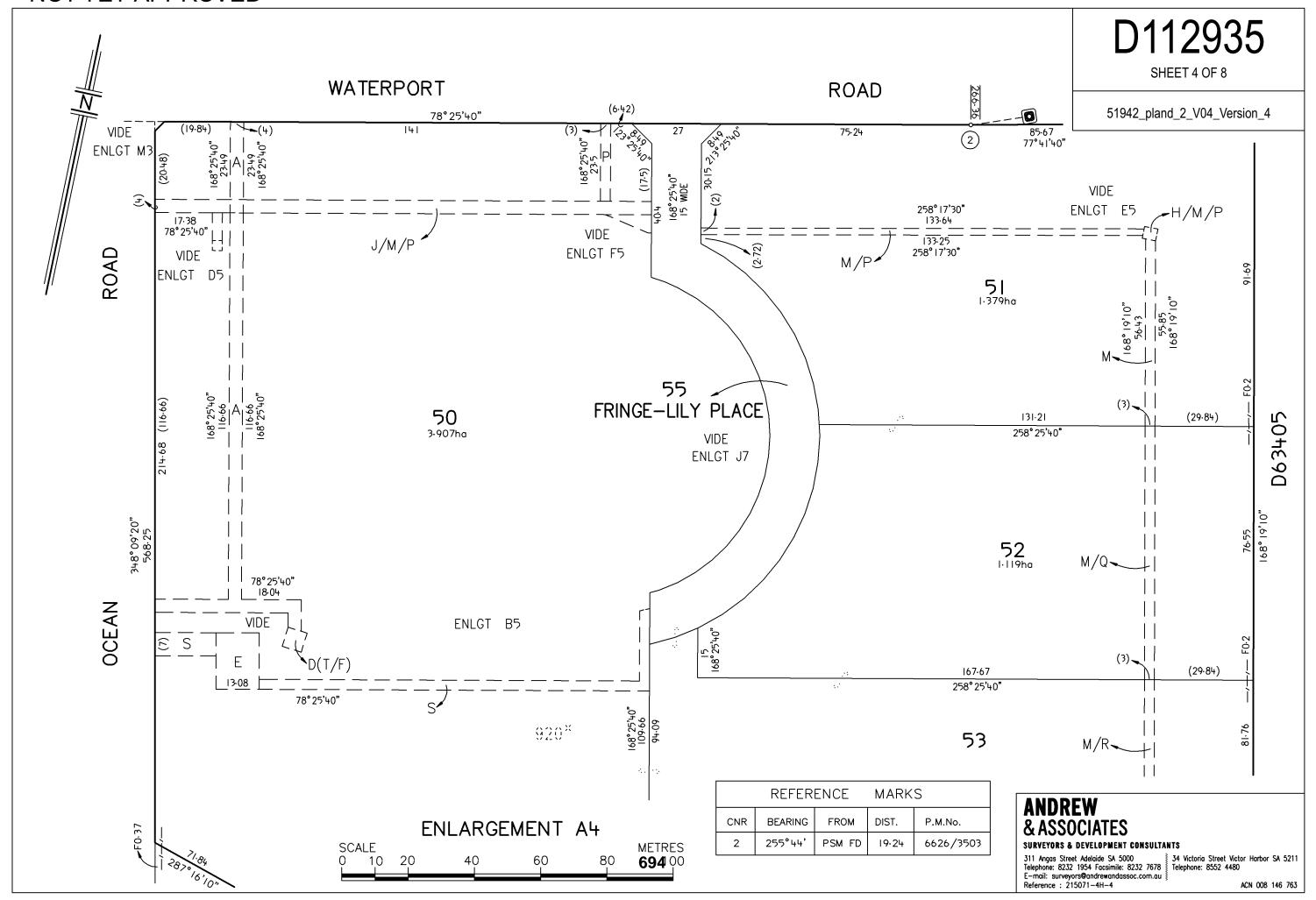
SHEET 2 OF 8

51942\_text\_01\_v04\_Version\_4

EASEMENT DE STATUS	TAILS: LAND BURDENED	FORM	CATEGORY	IDENTIFIER	PURPOSE	IN FAVOUR OF	CREATION
	EMAD BONDENED		OATEGORT		TOTAL GOL		ONEATION
NEW	50.51	LONG	EASEMENT(S)	Н	FOR WATER PURPOSES	970*.971*	
NEW	50	SHORT	EASEMENT(S)	J	FOR THE TRANSMISSION OF TELECOMMUNICATION SIGNALS BY UNDERGROUND CABLE	51.52.53	
NEW	50	SERVICE	EASEMENT(S)	D(T/F)	FOR ELECTRICITY SUPPLY PURPOSES	DISTRIBUTION LESSOR CORPORATION (SUBJECT TO LEASE 8890000)	223LG RPA
NEW	50	SERVICE	EASEMENT(S)	Е	FOR SEWERAGE PURPOSES	SOUTH AUSTRALIAN WATER CORPORATION	223LG RPA
NEW	50	SERVICE	EASEMENT(S)	S	FOR SEWERAGE PURPOSES	SOUTH AUSTRALIAN WATER CORPORATION	223LG RPA
NEW	50.51.52.53	SHORT	EASEMENT(S)	M	FOR WATER SUPPLY PURPOSES	970*.971*	
NEW	50.51	SHORT	EASEMENT(S)	Р	FOR THE TRANSMISSION OF ELECTRICITY BY UNDERGROUND CABLE	970*.971*	
NEW	52	SHORT	EASEMENT(S)	Q	FOR DRAINAGE PURPOSES	51	
NEW	53	SHORT	EASEMENT(S)	R	FOR DRAINAGE PURPOSES	51.52	
NEW	970*	SHORT	EASEMENT(S)	L	FOR DRAINAGE PURPOSES	51.52.53	

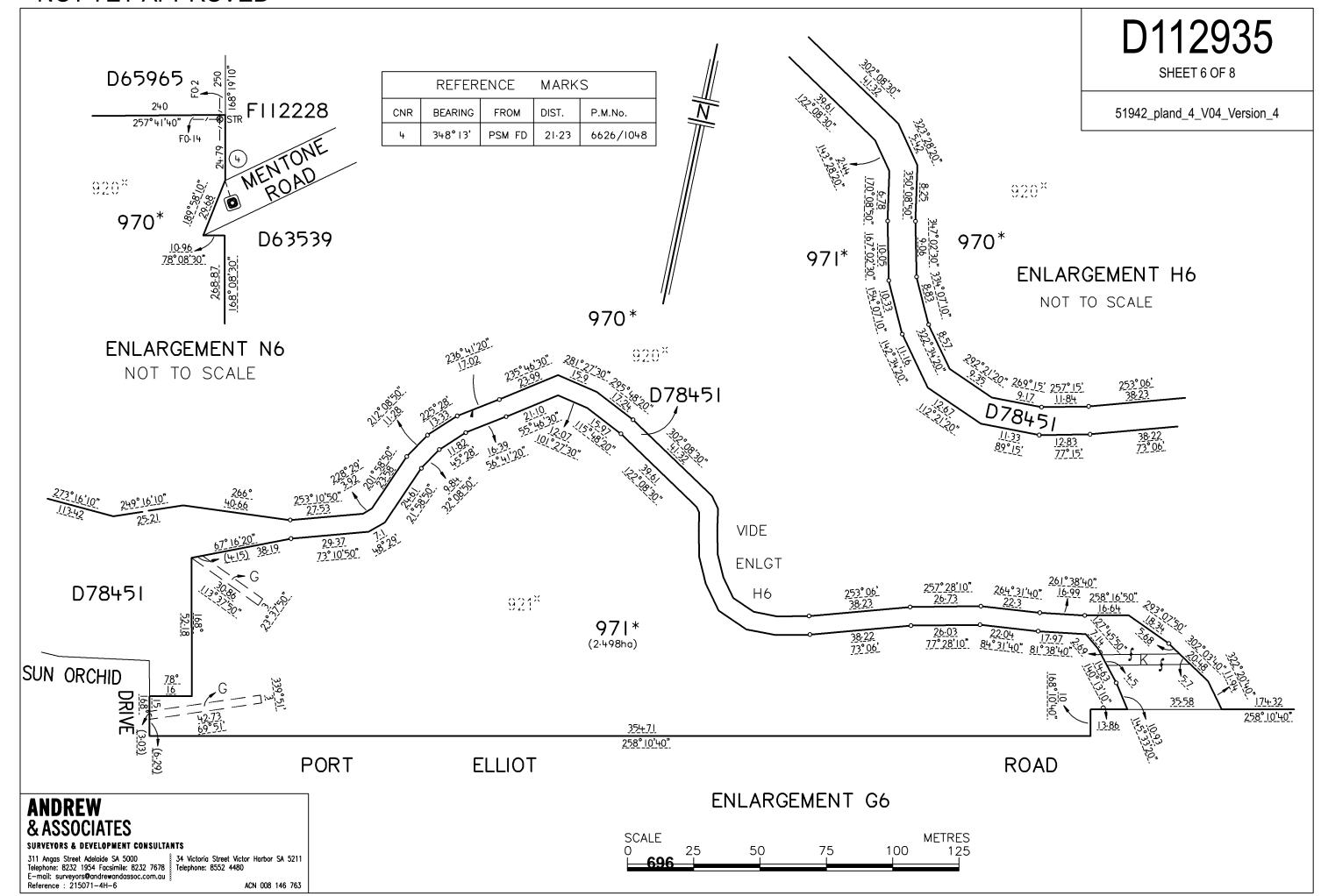
ANNOTATIONS: NO OCCUPATION ON SUBJECT LAND UNLESS OTHERWISE SHOWN

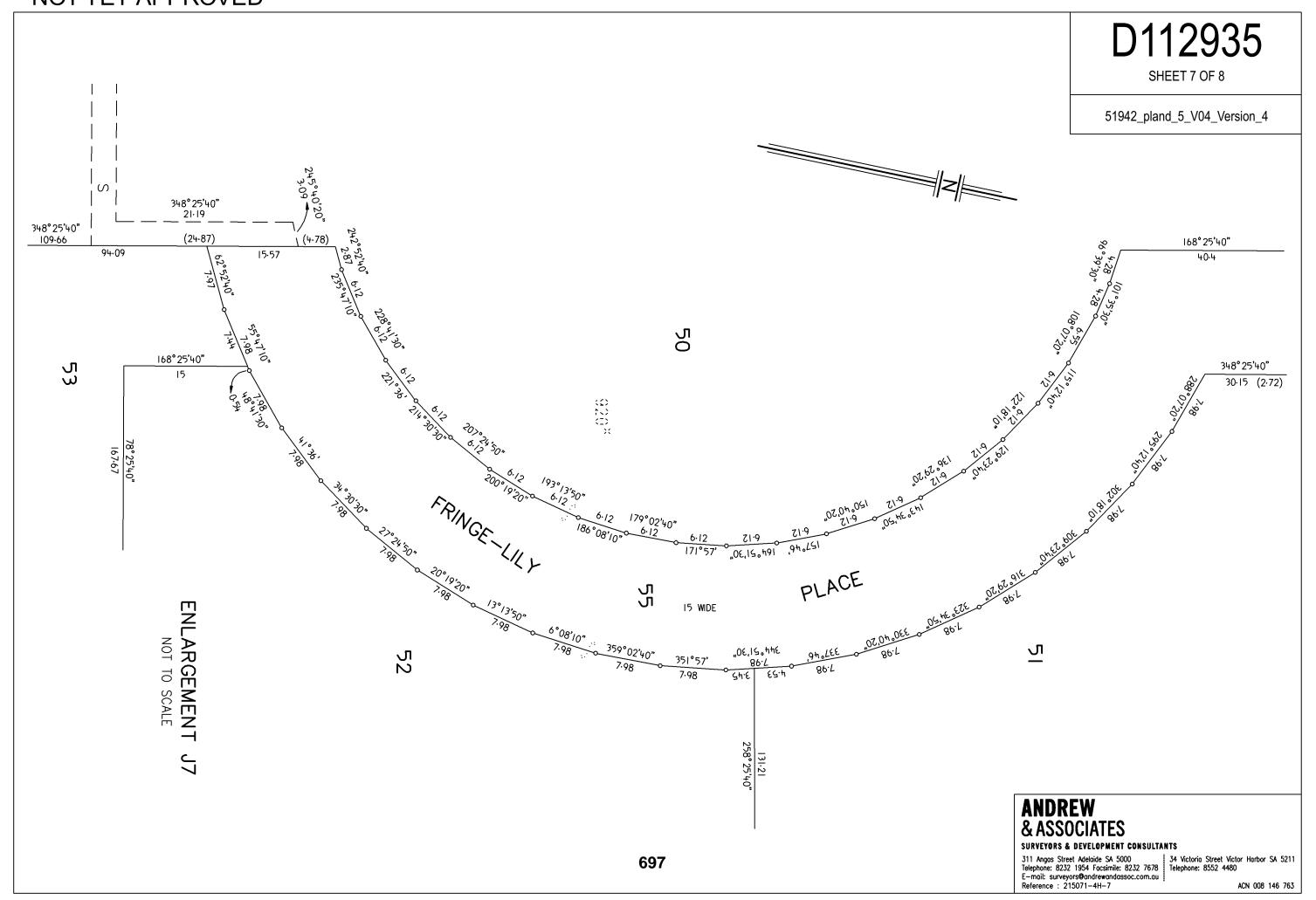


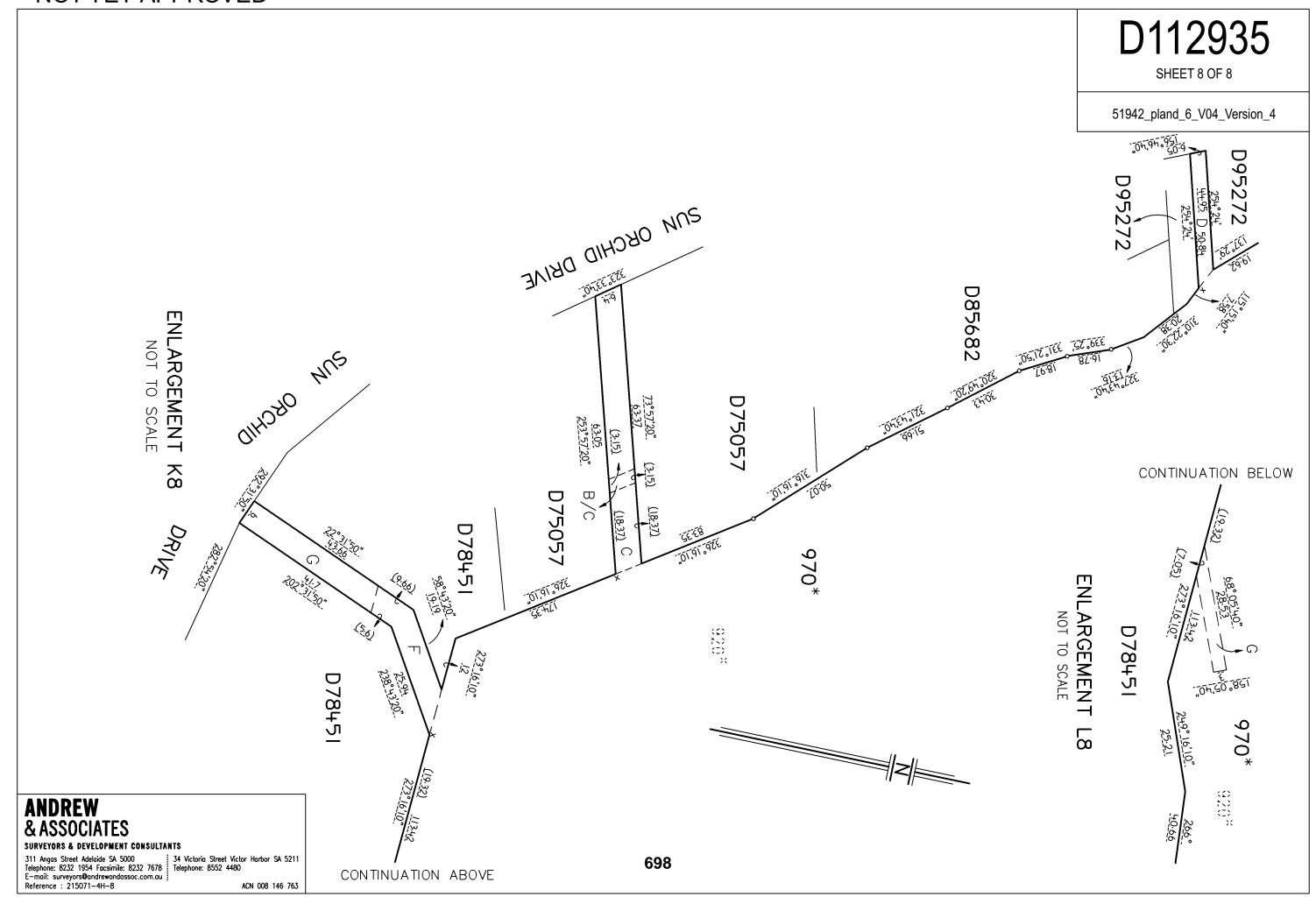


**NOT YET APPROVED** D112935 SHEET 5 OF 8 51942\_pland\_3\_V04\_Version\_4 50 **~**A/J/M/P J/M/P J/M/P ROAD 78° 25'40" 17.38 78°25'40" **50** 78° 25'40" \_\_18.04\_\_ 22-13 348°09'20" 568·25 40<u>·2</u> 78°25'40" 78° 25'40" \_\_\_\_3 258° 25'40" 18.45 S <u>\_\_\_</u> 18.45 Ε ENLARGEMENT D5 78° 25'40" OCEAN NOT TO SCALE S 13.08 117.72 78°25'40" 258° 17'30" 133-64 M/P **ENLARGEMENT B5** NOT TO SCALE 133-25 FRINGE-LILY 258° 17'30" 51 55.85 168° 19'10" 920<sup>×</sup> **ENLARGEMENT E5** ENLARGEMENT F5 NOT TO SCALE NOT TO SCALE ANDREW & ASSOCIATES SURVEYORS & DEVELOPMENT CONSULTANTS 311 Angas Street Adelaide SA 5000 Telephone: 8232 1954 Focsimile: 8232 7678 E-mail: surveyors@andrewandassoc.com.au Reference: 215071-4H-5 34 Victoria Street Victor Harbor SA 5211 Telephone: 8552 4480 695

ACN 008 146 763









Product
Date/Time
Customer Reference
Order ID

**Auta Attachment**) **3** 20/01/2023 01:19PM Troppo Architects 20230120004264



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 6175 Folio 320

Parent Title(s) CT 6150/455

Creating Dealing(s) RTC 12537970

Title Issued 07/06/2016 Edition 4 Edition Issued 20/04/2022

## **Estate Type**

**FEE SIMPLE** 

## **Registered Proprietor**

FLEURIEU HEALTH & WELLBEING PTY. LTD. (ACN: 656 728 568) OF L 5 63 PIRIE STREET ADELAIDE SA 5000

## **Description of Land**

ALLOTMENT 52 DEPOSITED PLAN 112935 IN THE AREA NAMED CHITON HUNDRED OF GOOLWA

### **Easements**

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED M ON D112935 FOR WATER SUPPLY PURPOSES (RTC 12537970)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED Q ON D112935 FOR DRAINAGE PURPOSES (RTC 12537970)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED J ON D112935 FOR THE TRANSMISSION OF TELECOMMUNICATION SIGNALS BY UNDERGROUND CABLE (RTC 12537970)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED L ON D112935 FOR DRAINAGE PURPOSES (RTC 12537970)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED R ON D112935 FOR DRAINAGE PURPOSES (RTC 12537970)

## **Schedule of Dealings**

NIL

### **Notations**

Dealings Affecting Title NIL

Priority Notices NIL

Notations on Plan NIL

**Registrar-General's Notes** 

AREA NAME UPDATED VIDE GOVERNMENT GAZETTE DATED 07/06/2018

Administrative Interests NIL

699



Product Date/Time **Customer Reference** Order ID

4s4rical Attachment 3 20/01/2023 01:19PM Troppo Architects

20230120004264

## **Certificate of Title**

Title Reference: CT 6175/320

Status: **CURRENT** 

Parent Title(s): CT 6150/455

Dealing(s) Creating Title:

RTC 12537970

Title Issued: 07/06/2016

**Edition:** 

## **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
08/04/2022	20/04/2022	13761162	TRANSFER	REGISTERE D	FLEURIEU HEALTH & WELLBEING PTY. LTD. (ACN: 656 728 568)
27/10/2016	14/11/2016	12622460	TRANSFER	REGISTERE D	BEYOND MEDICAL PROPERTIES PTY. LTD. (ACN: 602 992 290)
27/10/2016	14/11/2016	12622459	DISCHARGE OF MORTGAGE	REGISTERE D	12583559
15/08/2016	21/10/2016	12583559	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION (ACN: 007 457 141)

700



**Product** 

AcAster Attachment 3 (CT 6181/105)

Date/Time Customer Reference Order ID 20/01/2023 01:30PM Troppo Architects 20230120004425



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 6181 Folio 105

Parent Title(s) CT 6175/319, CT 6175/322

Creating Dealing(s) VE 12578185

**Title Issued** 27/09/2016 **Edition** 5 **Edition Issued** 05/05/2022

### **Estate Type**

**FEE SIMPLE** 

## **Registered Proprietor**

FLEURIEU HEALTH & WELLBEING NO. 2 PTY. LTD. (ACN: 658 243 479) OF L 5 63 PIRIE STREET ADELAIDE SA 5000

## **Description of Land**

ALLOTMENT 51 DEPOSITED PLAN 112935 IN THE AREA NAMED CHITON HUNDRED OF GOOLWA

### **Easements**

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED H ON D112935 (RTC 12537970)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED T ON F251356 FOR WATER SUPPLY PURPOSES (RTC 12537970)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED U ON F251356 FOR THE TRANSMISSION OF ELECTRICITY BY UNDERGROUND CABLE (RTC 12537970)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED J ON D112935 FOR THE TRANSMISSION OF TELECOMMUNICATION SIGNALS BY UNDERGROUND CABLE (RTC 12537970)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED L ON D112935 FOR DRAINAGE PURPOSES (RTC 12537970)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED Q ON D112935 FOR DRAINAGE PURPOSES (RTC 12537970)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED R ON D112935 FOR DRAINAGE PURPOSES (RTC 12537970)

## **Schedule of Dealings**

NIL

### **Notations**

Dealings Affecting Title NIL

Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes

AREA NAME UPDATED VIDE GOVERNMENT GAZETTE 701 ED 07/06/2018



Product

4 Ata Attachment 3 (CT 6181/105)

Date/Time Customer Reference Order ID 20/01/2023 01:30PM Troppo Architects 20230120004425

**Administrative Interests** 

NIL



Product Date/Time **Customer Reference** Order ID

4s4rical Attachment 3 20/01/2023 01:30PM Troppo Architects

20230120004425

## **Certificate of Title**

Title Reference: CT 6181/105

Status: **CURRENT** 

Parent Title(s): CT 6175/319, CT 6175/322

Dealing(s) Creating Title:

VE 12578185

Title Issued: 27/09/2016

**Edition:** 5

## **Dealings**

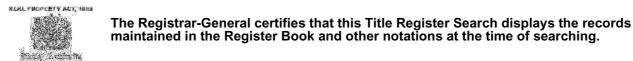
Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
28/04/2022	05/05/2022	13773893	TRANSFER	REGISTERE D	FLEURIEU HEALTH & WELLBEING NO. 2 PTY. LTD. (ACN: 658 243 479)
20/09/2019	08/10/2019	13176843	TRANSFER	REGISTERE D	STEVEN ROBERT WRIGHT, MARGIT WRIGHT
24/04/2018	27/04/2018	12911570	DISCHARGE OF MORTGAGE	REGISTERE D	12583559
15/08/2016	21/10/2016	12583559	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION (ACN: 007 457 141)



**Product** 

AcAster Attachment 3 (CT 6175/321)

Date/Time Customer Reference Order ID 20/01/2023 01:34PM Troppo Architects 20230120004475





### Certificate of Title - Volume 6175 Folio 321

Parent Title(s) CT 6150/455

Creating Dealing(s) RTC 12537970

Title Issued 07/06/2016 Edition 4 Edition Issued 05/05/2022

## **Estate Type**

**FEE SIMPLE** 

## **Registered Proprietor**

FLEURIEU HEALTH & WELLBEING NO. 3 PTY. LTD. (ACN: 658 243 559) OF L 5 63 PIRIE STREET ADELAIDE SA 5000

## **Description of Land**

ALLOTMENT 53 DEPOSITED PLAN 112935 IN THE AREA NAMED CHITON HUNDRED OF GOOLWA

### **Easements**

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED M ON D112935 FOR WATER SUPPLY PURPOSES (RTC 12537970)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED R ON D112935 FOR DRAINAGE PURPOSES (RTC 12537970)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED J ON D112935 FOR THE TRANSMISSION OF TELECOMMUNICATION SIGNALS BY UNDERGROUND CABLE (RTC 12537970)

TOGETHER WITH EASEMENT(S) OVER THE LAND MARKED L ON D112935 FOR DRAINAGE PURPOSES (RTC 12537970)

## **Schedule of Dealings**

NIL

### **Notations**

Dealings Affecting Title NIL

Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes

AREA NAME UPDATED VIDE GOVERNMENT GAZETTE DATED 07/06/2018

Administrative Interests NIL

704



Product Date/Time **Customer Reference** Order ID

4s4rical Attachment 3 20/01/2023 01:34PM Troppo Architects

20230120004475

## **Certificate of Title**

Title Reference: CT 6175/321

Status: **CURRENT** 

Parent Title(s): CT 6150/455

Dealing(s) Creating Title:

RTC 12537970

Title Issued:

07/06/2016

**Edition:** 

## **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
28/04/2022	05/05/2022	13773907	TRANSFER	REGISTERE D	FLEURIEU HEALTH & WELLBEING NO. 3 PTY. LTD. (ACN: 658 243 559)
24/04/2018	27/04/2018	12911570	DISCHARGE OF MORTGAGE	REGISTERE D	12583559
15/08/2016	21/10/2016	12583559	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION (ACN: 007 457 141)

BANCELLED 4.4 - Attachment 3 new Register Book 2308 NOL 104 Vol. CVII Folio 163 John William (Idams the Younger of Port Ellid Shometer subject nevertheless to such incumbrances liens and interest as monorial underwellen 58 and bounded ab appears in the plan in the actived green That is to say First in that prece of therestouch trying a print flund as bundence de links or thereabout at the Eastock siele cleven cheers eil Hundred deposited in the Office of he Duweyer lan and was originally granted the sich day of Chagust 1831 under the hund and seal six Kourt Office of the Young Siglement Governor of the said Rovence to Jumes In witness whereof. I have hereunto signed us name and affixed my seal this leventestifth day of hovembed one thousand eight hundred and with seven Signed the 26 War of hoot. 18 by in presence of ower of attorney 10218271 produced the 7 km Accement 11. 30 Entered the 4 la 706

Cransfer Jo 358644 - Attachment 3 Mortgage NO. 20304, from John William adams to alfred Hardy . Produced Walter Freen of Fort Ellios Buck Man November 1864 at moon. Registrar Gent. matter of an estate in fee surple. we the within land Vroduced for Regio teation the 24 day Leptember 1900 ransfer of the above thent gage to. 20304 by endorsement thereow dated 11 august 1868 from Heath Repolls from Wifred Hardy to Sir Charles lesoper of Bath in excland. Offere d 12 day august 1868 at moon. Manufaitte Copy Revisional Mortgage No 415277 (Including other land) from Walter Treen other land from Walter Treen Cramofer Nº59938 from John William australia Produces for regionalion. Svi Charles Cooper of Barani to tongland Anight of the above Land Produced the 10 th day of Nove ber 1870 the above mortgaged: 415274 is discharged from the Sum of Leventy five founds and the within land tursuant to application 11°218268 altred spence a latelacte agent wither is descharged from the Attordey ex Come Emily frace Cooper whole of the principal Rum thereby secured as appear. and folin cooper to prosector of qui by premorandum h: 495793 It the we be simple in the inthin a succed for regionation cand in the aldermetistor with the of September will reviewed and adveil taled leagesting 1909 att 11. 1400 the 24 day his at 1878 and the 24 th Newman Edwards Dep Regard billy 1883 atthe clione named There Posser who died on the 24" day Unausperh = 497923, prom dian 1889. as aspen a higher Walter Green administration dated the It day for to Walter James Harding of Port alliot Blacksmith of an 1837. froduced for regististion the In proceempler 1887 at 11. 30 am, estate in fee suiple for registration the 21 day of Ransfer A° 218270 from alfred Sucure October 1909 at 12.20 pm John Hooper Cooper or Kenter on Theme Vorusit Edward Up the sent England Solicitor and Samuel Melvel Cooper of hewerette under i TRANSMISSION APPLICATION No. 1354309 Eduland Solicetor on the within law Thany trestach Carsons of Immentally and arthur predict Parsons of Benamush tally box Farmers a her weed for registration the " clay PROPRIETOR OF AN ESTATE IN FEE SIMPLE IN THE WITHIN d December 1887 at 11. 30 mm THE 20 DAY OF ACCEPTAGE 1945 will Bushy NAMED Falls, James Carding OF THE ABOVE-WHO DIED ON THE DAY OF CAPITLE 19 4/ AS AFPEARS BY PROBATE DATED THE 20 DAY OF GLOCK PRODUCED FOR REGISTRATION THE 8 DAY OF CLOCK 19 4/ AT 1/4 M. Transfor 10254952 from John Cooper and Samuel Jestert Cooper October Reffer Lavington yes like of Port Victor DEP. REG. GENL. gentleman of an estate in fee 71650 61 produced poregistration the 4 Harry Fishach Parsons and As thur Thederick day James 1892 at 2.15 pm Varsons To William Lenny Chester dettle hampton tragery PRODUCED FOR REGISTRATION THE June 1951 AT 12.300m fullised DAY. MIG. GENT. Au face of et

south Australia



(CERTIFICATE OF TITLE.)

Register Book,

Walter James Harding of But Elliot Blacksmith

is the proprietor of an estate in fee simple subject nevertheless to such incumbrances liens and interests as are notified by memorial underwritten or endorsed hereon in Those pieces land situated in the Country of Which said pieces of land contains together country one were and two roads or thereahouts and are now particularly delineated or the said pieces of land contains together country one were and two roads or thereahouts and are now particularly delineated or the said of the width of way for a way if any which may exist over a slight of land of the width of twenty first links or thereahouts as more particularly delineated in the said plan and therein marked Towals Food

which said Section 40 delineated in the public map of the said Mundred deposited in the office of the Surveyor-General.

In witness whereof I have hereunto signed my name and affixed my seal this wenty first day of Rovember 1900

Signed the Liverty first day of Mooconter 1900 in the presence of

MENTONE (Q Q)

a

0

Registrar-General.

89

Leasing only

Cosubdivision Approved under

43 T.P. & D. Act 1452 of 19:

Book 16 Page. 14

Mentone Rd. vide Docket 29/1988

The land in this Certificate is
REDESIGNATED

as | ALLOTMENT(8) comprising
Pieces | & 5
in Re-Identification Plan FP40295

13

24

88

	, which was a second of the se
LEASE No. 1048232 FROM	TRANSFER No. 1680610
Walter James Harding	harry les hach Parsons and As than Fraderick
To Vernon alfred Harding of	larsons William thenry thester
hostion 2	
16F THE WITHIN LAND. TERM 3 YEARS FROM THE	of Vettlehampton Traguer
DAY OF January 19 PRODUCED FOR REGISTRA	OF AN ESTATE IN THE SIMPLE IN THE WITHIN LAND
TION THE 11 DAY DESeptember 1978 AT 12 40 pm	PRODUCED NOW REGISTRATION THE /6 DAYON
(metuding ofthe flyed)	Person of am 15 entre
	" ferling RMG. GBML.
MARIA DEP. REG. CENT.	DRP. REG. GERLA
	7 (0/2)
DE1113/19	
Extension The term of the within Lease	TRANSFER No. 1817421 FROM
11. 1018232 is entry Nort law hine Wetter bene	William Henry shester to
he I day of January 1931 with an addition	Landsay Lawrence george Campbell
orunant as appeared by Memorandum 11	of Wester Harbour Grazier
orana ar appearer by personantian of	
1113779 Ryoduced for registration the	OR AN ESTATE IN FEE SIMPLE IN THE WITHIN LAND
3 day of February 1931 at 3pm	PROMICED FOR REGISTRATION THE 29 DAY OF
19 peste left page good	January 1954 AT 11-15 am
1019	hui so
Stension - The term ofhe when pare to 10482 82	furthing DEP. REG. CENLS
of which I say the	
is extended for o years from the lary of January	MORTGAGE No. /8/7422 FROM
1936 with an additional Overnet as appears	
or to emorandum de 12238 91 goroduced 101	
registration the Y day of November 19 36 at	
100	10 Inc Election Southern
4 Hentelow Aprilate	PRODUCED FOR REGISTRATION THE 29 DAY OF
E-12239	January 54 11/18 am
6 + . 41 + 11 . 1. Tour 40	(Including other land)
Extension - The term of the within feare to	Level 1. A DED DEC CAPAGE
1048232 is intended for 5 years from	
the I day of January 1941 with an	81817422 73599446 M3579447
altered Covenant adapters of hannendum	The property to the property to the property to
802 1332992 Readuced for registration	
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PRODUCED7/11/ 1973 ATIO 55 am
110 6 day of fanudy 1941 at 11 Bm	A O Sharman pro? DEP. REG. GEN.
coffeelas spoff	M. Sharman June
Harry N. C.	
TDANOMICCIONI ADDITICATIONI NO 1201 300	TRANSFER No. 3539 44 6 16
TRANSMISSION APPLICATION No. 1354309	Neil Me Kenzie and Ross Mc Kenzie,
Parsons of tendement taday box Farmers are	Farmers, both of One Jon Hell, 5114
PROPRIETOR OF AN ESTATE IN FEE SIMPLE IN THE WITHIN	as senanes in Bommon
HAND AS THE EXECUT AO NAMED IN THE WILL DATED	OF THE WITHIN LANDAPRODUCED 1/1/1973 AT 10 550-M.
THE 20 DAY OF december 1940	A Charman Amo. DEP. REG. GEN.
NAMED Waller James Harding OF THE ABOVE-	dr. J.
	MORTGAGE No. 3539447
1941 AS APPEARS BY PROBATE DATED THE 20 DAY OF June 1941 PRODUCED FOR REGISTRATION	Lindsay Laurence George Campbell
THE TOAY OF Cetober 1941 AT/ 1 M.	
Nohten man	PRODUCED 7/11/ 1973 ATIO 55 am DEP REG. GEN.
DEP. REG. GENL.	DEP. REG. GEN.
	1 Towarman June
E/Use Class	DM 4316385.
EXTENSION THE TERM OF THE WITHIN LEAMS	DISCHARGE OF MORTGAGE No. 3537447
No. 1048232 ** ** TENDED until the 31 day of bary 1951	VIDE No.4316335 PRODUCED 8-/ 1977 ADSGM
	VIDE NO.
WITH ALTERED AND ADDITIONAL COVENANTS AS THE	
APPEARS BY MEMORANDUM No. 1456345	DUD CT DET DET AND
APPHARS BY MEMORANDUM No. 1456345	DUP CT. REQ. FOR AMEND
PROBUCED FOR ENGISTRATION THE S MAY OF	DUP CT. REQ. FOR AMEND
PRODUCED FOR ENGISTRATION THE S MAY OF	DUP CT. REQ. FOR AMEND
PROBUCED FOR ENGISTRACION THE 8 BAY OF April 1046 at 1 pm	
PRODUCED FOR ENGISTRATION THE S MAY OF	DUP CT. REP. FOR AMEND
PRODUCED FOR EXCISTRATION THE S MAY OF	

# South Australia.



## (CERTIFICATE OF TITLE.)

Register Book,

Vol. 2308

Folio 104

- New Certificate of Title for the whole of the Land in Vol. 107 Folio 163 -

WILLIAM HENRY CHESTER of Littlehampton Grazier -

is the proprietor of an estate in fee simple

subject nevertheless to such encumbrances liens and interests as are notified by memorial underwritten or endorsed hereon in THOSE pieces of land situate in the HUNDRED of GOOLWA COUNTY of HINDMARSH being PORTIONS OF SECTION 88 containing together five acres one rood and seventeen perches or thereabouts and more particularly delineated and bounded as appears in the plan in the margin hereof and therein colored green TOGETHER with a right of way with or without horses carts and carriages in through over and along the Private Road as delineated in the said plan and therein colored brown —

Which said Section is delineated in the public map of the said Hundred deposited in the Land Office at Adelaide.

Signed the 1954, in the presence of Australia Registrar-General Re

TRANSFER No. /8/742/.

William Henry Chester to Kindsay Lawrence George bampbell of Tector Harbour Grazier

OF AN ESTATE IN FEE SIMPLE IN THE WITHIN LAND PRODUCED FOR REGISTRATION THE 29 DAY OF January 1954 AT /1-15 lm.

DEP. REG. GENLS

MORTGAGE No. 1817422. FROM

Lindsay Lawrence George bambbell

TO THE ENGLISH SCOTTISH AND AUSTRALIAN BANK LIMITED.

PRODUCED FOR REGISTRATION THE 29. DAY OF

anwary 1954, AT 11.5 cm.

(Sallading others land)

further DEP. REG GENL

11817412 735394417

THE WITHIN LAND IS DISCHARGED FROM MORTGAGE
No. 1817 422
BY ENDORSEMENT THEREON.
PRODUCED 7/1/1 1973 AT 10.55000

DEP REG. GEN.

TRANSFER NO. 3539446 to

New Mc Kengue and Ross Mc Kengue,

Farmers. Both of One The Hell, 5114

OF THE WITHIN LANDAPRODUCED 1/11/1973 AT10.55a.M.

DEP. REG. GEN.

MORTGAGE No. 3539447 TO

Lindour Lawrence George Bampbell

PRODUCED 7/11/ 1973 AT 10.55am

DEP. REG. GEN.

DIN 4316335

VIDE No. 43/633S PRODUCED 3-/ 197 ATS:55M

DUP. CT. RED. FOR AMEND.

CANCELLED
CONVERTED TO A COMPUTERISED TITLE



# South Australia.



### (CERTIFICATE OF TITLE.)

Register Book,
Vol. 2391 Folio 60

Pursuant to Real Property (Registration of Titles) Act 1945 (Search No.1419)

LINDSAY LAWRENCE GEORGE CAMPBELL of Victor Harbour Grazier

is the proprietor of an estate in fee simple
subject nevertheless to such encumbrances liens and interests as are notified by memorial underwritten or endorsed hereon in

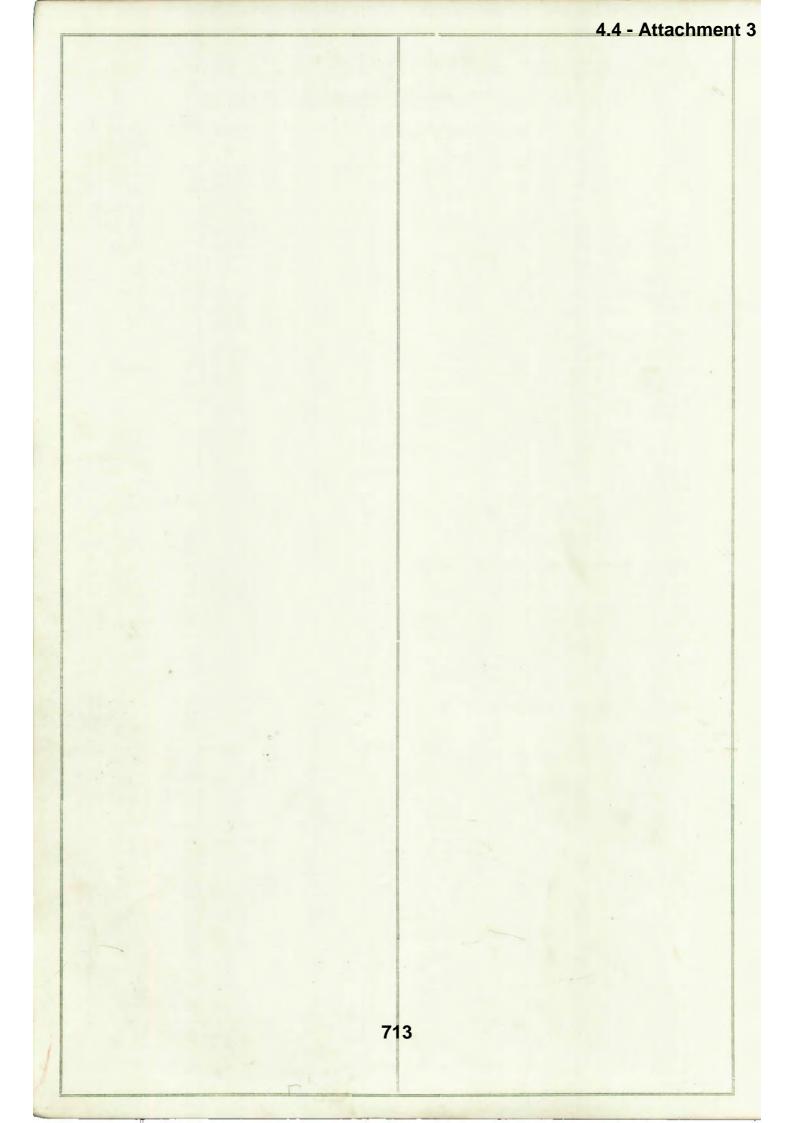
THAT piece of land situate in the HUNDRED of GOOLWA COUNTY of HINDMARSH

being PORTIONOF SECTION 88 containing three acres or thereabouts and more particularly delineated and bounded as appears in the plan in the margin hereof and therein colored green

Which said Section 18 delineated in the public map of the said Hundred deposited in the Land Office at Adelaide. In witness whereof I have hereunto signed my name and affixed my seal this 1955 Signed the 1955, in the presence of Registrar-General. The land in this Certificate Is REDESIGNATED BS ALLOTMENT(S) 3 in Re-Identification Plan FP40295 TRANSFER No. 3539446 % Neil Mc Kenzie and Ross Mc Kenzie, Farmers, both of One The Hill, 511+ OF THE WITHIN LANDPRODUCED 1/11/1973 AT 10. 550.M.

DEP. REG. GEN. MORTGAGE No. 3539447 Lindsay Laurence George Camptell PRODUCED 7/1/ 1973 ATIO . 85 OF CLUDING OLIVER LAND DEP. REG. GEN. DISCHARGE OF MORTGAGE No. 3539447 VIDE No.43/6355 PRODUCED 8. / 1979 AT3-644 10s - 712

Dup CT requires arenda. A





4s4rical Attachmentil3 01/02/2023 08:53AM EPPO312300 20230201000695

## **Certificate of Title**

Title Reference: CT 5749/280 Status: **CANCELLED** 

Parent Title(s): CT 2391/60

Dealing(s) Creating Title:

**Title Cancelled:** 

**CONVERTED TITLE** 

Title Issued: 24/03/2000

04/02/2004 Child Title(s): CT 5911/43, CT 5911/44, CT 5911/45

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
10/12/2003	05/02/2004	9744020	UNCERTIFIED APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)
31/03/2003	30/05/2003	9559280	MORTGAGE	REGISTERE D	NEIL MCKENZIE, ROSS MCKENZIE
31/03/2003	30/05/2003	9559279	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION
31/03/2003	30/05/2003	9559278	TRANSFER	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)
31/03/2003	30/05/2003	9559277	WITHDRAWAL OF CAVEAT	REGISTERE D	8895592
24/05/2000	30/06/2000	8895592	CAVEAT	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)

Land Services SA Page 1 of 1

714

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4s4rical Attachmentil3 01/02/2023 09:05AM EPPO312300 20230201000832

## **Certificate of Title**

Title Reference: CT 5784/919

Status: **CANCELLED** 

Parent Title(s): CT 2308/104

Dealing(s) Creating Title:

**CONVERTED TITLE** 

Title Issued: 27/06/2000

**Title Cancelled:** 04/02/2004

Child Title(s): CT 5911/44, CT 5911/45

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
10/12/2003	05/02/2004	9744020	UNCERTIFIED APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)
31/03/2003	30/05/2003	9559280	MORTGAGE	REGISTERE D	NEIL MCKENZIE, ROSS MCKENZIE
31/03/2003	30/05/2003	9559279	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION
31/03/2003	30/05/2003	9559278	TRANSFER	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)
31/03/2003	30/05/2003	9559277	WITHDRAWAL OF CAVEAT	REGISTERE D	8895592
24/05/2000	30/06/2000	8895592	CAVEAT	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)

Land Services SA Page 1 of 1



4s4rical Attachmentil3 01/02/2023 09:12AM EPPO312300 20230201000960

## **Certificate of Title**

Title Reference: CT 5784/920

Status: **CANCELLED** 

Parent Title(s): CT 669/21

Dealing(s) Creating Title:

**CONVERTED TITLE** 

Title Issued: 27/06/2000

**Title Cancelled:** 04/02/2004

Child Title(s): CT 5911/43, CT 5911/44, CT 5911/45, CT 5911/46 AND OTHERS

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
10/12/2003	05/02/2004	9744020	UNCERTIFIED APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)
31/03/2003	30/05/2003	9559280	MORTGAGE	REGISTERE D	NEIL MCKENZIE, ROSS MCKENZIE
31/03/2003	30/05/2003	9559279	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION
31/03/2003	30/05/2003	9559278	TRANSFER	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)
31/03/2003	30/05/2003	9559277	WITHDRAWAL OF CAVEAT	REGISTERE D	8895592
24/05/2000	30/06/2000	8895592	CAVEAT	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)

Land Services SA Page 1 of 1



4s4rical Attachmentil3 01/02/2023 08:51AM EPPO312300 20230201000679

## **Certificate of Title**

Title Reference: CT 5911/45

Status: **CANCELLED** 

Parent Title(s): CT 5749/280, CT 5784/919, CT 5784/920

Dealing(s) Creating Title:

RTU 9744020

Title Issued: 04/02/2004

**Title Cancelled:** 03/12/2004

Child Title(s): CT 5931/456, CT 5931/457

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
14/10/2004	07/12/2004	10087980	UNCERTIFIED APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)
31/03/2003	30/05/2003	9559280	MORTGAGE	REGISTERE D	NEIL MCKENZIE, ROSS MCKENZIE
31/03/2003	30/05/2003	9559279	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION



4starical Attachmentua 01/02/2023 08:50AM EPPO312300 20230201000667

## **Certificate of Title**

Title Reference: CT 5931/457

Status: **CANCELLED** 

Parent Title(s): CT 5911/45, CT 5911/46

Dealing(s) Creating Title:

RTU 10087980

Title Issued: 03/12/2004

**Title Cancelled:** 17/09/2007

Child Title(s): CT 5993/736, CT 5993/737, CT 5993/738, CT 5993/739 AND OTHERS

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
09/08/2007	18/09/2007	10767930	CERTIFIED APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405), STEVEN ROBERT WRIGHT, MARGIT WRIGHT
29/03/2006	01/05/2006	10428675	MORTGAGE	REGISTERE D	NATIONAL AUSTRALIA BANK LTD.
29/03/2006	01/05/2006	10428674	DISCHARGE OF MORTGAGE	REGISTERE D	9559279
13/02/2006	24/02/2006	10399289	DISCHARGE OF MORTGAGE	REGISTERE D	9559280
31/03/2003	30/05/2003	9559280	MORTGAGE	REGISTERE D	NEIL MCKENZIE, ROSS MCKENZIE
31/03/2003	30/05/2003	9559279	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION

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4s4rical Attachmentil3 01/02/2023 08:49AM EPPO312300 20230201000656

## **Certificate of Title**

Title Reference: CT 5993/786

Status: **CANCELLED** 

Parent Title(s): CT 5931/457

Dealing(s) Creating Title:

RTC 10767930

Title Issued: 17/09/2007

**Title Cancelled:** 02/09/2008

Child Title(s): CT 6017/430

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
30/04/2008	03/09/2008	10952283	APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION AND ISSUE OF NEW CERTIFICATES OF TITLE	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405)
08/02/2008	06/03/2008	10897339	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION
19/11/2007	27/11/2007	10840649	DISCHARGE OF MORTGAGE	REGISTERE D	10428675
29/03/2006	01/05/2006	10428675	MORTGAGE	REGISTERE D	NATIONAL AUSTRALIA BANK LTD.



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## **Certificate of Title**

Title Reference: CT 6017/430

Status: **CANCELLED** 

Parent Title(s): CT 5993/786

Dealing(s) Creating Title:

RTD 10952283

Title Issued: 02/09/2008

**Title Cancelled:** 25/09/2008

Child Title(s): CT 6019/476, CT 6019/477, CT 6019/478, CT 6019/479 AND OTHERS

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
03/09/2008	26/09/2008	11027932	CERTIFIED APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405), STEVEN ROBERT WRIGHT, MARGIT WRIGHT
08/02/2008	06/03/2008	10897339	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION

Land Services SA Page 1 of 1



4s4rical Attachmentil3 01/02/2023 08:47AM EPPO312300 20230201000628

## **Certificate of Title**

Title Reference: CT 6019/508

Status: **CANCELLED** 

Parent Title(s): CT 6017/430

Dealing(s) Creating Title:

RTC 11027932

CT 6082/450, CT 6082/451

Title Issued: 25/09/2008

**Title Cancelled:** 22/08/2011

**Edition:** 

# **Dealings**

Child Title(s):

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
22/07/2011	24/08/2011	11618222	CERTIFIED APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405), ALEXANDRINA COUNCIL

Land Services SA Page 1 of 1



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Page 1 of 1

## **Certificate of Title**

Title Reference: CT 6082/451

Status: **CANCELLED** 

Parent Title(s): CT 6019/508

Dealing(s) Creating Title:

RTC 11618222

Title Issued: 22/08/2011

**Title Cancelled:** 23/12/2014

Child Title(s): CT 6150/452, CT 6150/453, CT 6150/455, CT 6150/460 AND OTHERS

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
02/12/2014	24/12/2014	12239920	CERTIFIED APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION	REGISTERE D	GROVE ONE PTY. LTD. (ACN: 008 089 405), STEVEN ROBERT WRIGHT, MARGIT WRIGHT
15/09/2014	04/10/2014	12197869	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION



4s4rical Attachmentil3 01/02/2023 08:43AM EPPO312300 20230201000579

## **Certificate of Title**

Title Reference: CT 6150/455

Status: **CANCELLED** 

Parent Title(s): CT 6082/451

Dealing(s) Creating Title:

RTC 12239920

Title Issued: 23/12/2014

**Title Cancelled:** 07/06/2016

Child Title(s): CT 6175/318, CT 6175/319, CT 6175/320, CT 6175/321 AND OTHERS

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
31/05/2016	07/06/2016	12537970	CERTIFIED APPLICATION FOR DEPOSIT OF A PLAN OF DIVISION	REGISTERE D	ALEXANDRINA COUNCIL, GROVE ONE PTY. LTD.
14/05/2015	16/06/2015	12326979	DISCHARGE OF MORTGAGE	REGISTERE D	12197869
15/09/2014	04/10/2014	12197869	MORTGAGE	REGISTERE D	WESTPAC BANKING CORPORATION



4s4rical Attachmentil3 01/02/2023 08:41AM EPJ181191 20230201000546

## **Certificate of Title**

Title Reference: CT 6175/319

Status: **CANCELLED** 

Parent Title(s): CT 6150/455

Dealing(s) Creating Title:

RTC 12537970

Title Issued: 07/06/2016

**Title Cancelled:** 27/09/2016

Child Title(s): CT 6181/105, CT 6181/106

**Edition:** 

# **Dealings**

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
04/08/2016	27/09/2016	12578185	APPLICATION FOR EXTINGUISHM ENT/VARIATIO N OF EASEMENT	REGISTERE D	



4s4rical Attachmentil3 01/02/2023 08:42AM EPPO312300 20230201000558

## **Certificate of Title**

Title Reference: CT 6175/322

Status: **CANCELLED** 

Parent Title(s): CT 6150/455

Dealing(s) Creating Title:

RTC 12537970

07/06/2016

**Title Cancelled:** 27/09/2016

Child Title(s): CT 6181/105, CT 6181/106

**Edition:** 

# **Dealings**

Title Issued:

Lodgeme Date	nt	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
04/08/201	6	27/09/2016	12578185	APPLICATION FOR EXTINGUISHM ENT/VARIATIO N OF EASEMENT	REGISTERE D	



**Preliminary Site Investigation** 

**Troppo Architects** 

1,3&5 Fringe Lily Place, Chiton, SA

**APPENDIX E** EPA SECTION 7 REPONSE



# Environment Protection Authority GPO Box 2607 Adelaide SA 5001 211 Victoria Square Adelaide SA 5000 T (08) 8204 2004 Country areas 1800 623 445

Greencap 12 Greenhill Road WAYVILLE SA 5034 Contact: Section 7 Telephone: (08) 8204 2026 Email: epasection7@sa.gov.au

Contact: Public Register Telephone: (08) 8204 9128 Email: epa.publicregister@sa.gov.au

18 January, 2023

#### **EPA STATEMENT TO FORM 1 - CONTRACTS FOR SALE OF LAND OR BUSINESS**

The EPA provides this statement to assist the vendor meet its obligations under section 7(1)(b) of the *Land and Business (Sale and Conveyancing) Act 1994*. A response to the questions prescribed in Schedule 1-Contracts for sale of land or business-forms (Divisions 1 and 2) of the *Land and Business (Sale and Conveyancing) Act 1994* is provided in relation to the land.

I refer to your enquiry concerning the parcel of land comprised in

Title Reference CT Volume 6181 Folio 105

Address 1 Fringe-lily Place, CHITON SA 5211

#### Schedule - Division 1 - Land and Business (Sale and Conveyancing) Regulations 2010

#### PARTICULARS OF MORTGAGES, CHARGES AND PRESCRIBED ENCUMBRANCES AFFECTING THE LAND

#### 8. Environment Protection Act 1993

Does the EPA hold any of the following details relating to the Environment Protection Act 1993:

8.1	Section 59 - Environment performance agreement that is registered in relation to the land.	NO
8.2	Section 93 - Environment protection order that is registered in relation to the land.	NO
8.3	Section 93A - Environment protection order relating to cessation of activity that is registered in relation to the land.	NO
8.4	Section 99 - Clean-up order that is registered in relation to the land.	NO
8.5	Section 100 - Clean-up authorisation that is registered in relation to the land.	NO
8.6	Section 103H - Site contamination assessment order that is registered in relation to the land.	NO
8 7	Section 103J - Site remediation order that is registered in relation to the land.	NO

8.8	Section 103N - Notice of declaration of special management area in relation to the land (due to possible existence of site contamination).	NO
8.9	Section 103P - Notation of site contamination audit report in relation to the land.	NO
8.10	Section 103S - Notice of prohibition or restriction on taking water affected by site contamination in relation to the land.	NO
Sched	lule – Division 2 – Land and Business (Sale and Conveyancing) Regulations 2010	
PART	ICULARS RELATING TO ENVIRONMENT PROTECTION	
3-Lice	ences and exemptions recorded by EPA in public register	
Does t	the EPA hold any of the following details in the public register:	
a)	details of a current licence issued under Part 6 of the <i>Environment Protection Act 1993</i> to conduct any prescribed activity of environmental significance under Schedule 1 of that Act at the land?	NO
b)	details of a licence no longer in force issued under Part 6 of the <i>Environment Protection Act</i> 1993 to conduct any prescribed activity of environmental significance under Schedule 1 of that Act at the land?	NO
c)	details of a current exemption issued under Part 6 of the <i>Environment Protection Act 1993</i> from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
d)	details of an exemption no longer in force issued under Part 6 of the <i>Environment Protection</i> Act 1993 from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
e)	details of a licence issued under the repealed South Australian Waste Management Commission Act 1979 to operate a waste depot at the land?	NO
f)	details of a licence issued under the repealed Waste Management Act 1987 to operate a waste depot at the land?	NO
g)	details of a licence issued under the repealed <i>South Australian Waste Management Commission Act 1979</i> to produce waste of a prescribed kind (within the meaning of that Act) at the land?	NO
h)	details of a licence issued under the repealed Waste Management Act 1987 to produce prescribed waste (within the meaning of that Act) at the land?	NO
4-Poll	ution and site contamination on the land - details recorded by the EPA in public register	
Does tand:	the EPA hold any of the following details in the public register in relation to the land or part of the	
a)	details of serious or material environmental harm caused or threatened in the course of an activity (whether or not notified under section 83 of the <i>Environment Protection Act 1993</i> )?	NO

**728**CT Volume 6181 Folio 105
page 2 of 3

b)	details of site contamination notified to the EPA under section 83A of the <i>Environment Protection Act</i> 1993?	NO
c)	a copy of a report of an environmental assessment (whether prepared by the EPA or some other person or body and whether or not required under legislation) that forms part of the information required to be recorded in the public register?	NO
d)	a copy of a site contamination audit report?	NO
e)	details of an agreement for the exclusion or limitation of liability for site contamination to which section 103E of the <i>Environment Protection Act 1993</i> applies?	NO
f)	details of an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act</i> 1993?	NO
g)	details of an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under section 103K of the <i>Environment Protection Act 1993?</i>	NO
h)	details of a notification under section 103Z(1) of the <i>Environment Protection Act 1993</i> relating to the commencement of a site contamination audit?	NO
i)	details of a notification under section 103Z(2) of the <i>Environment Protection Act 1993</i> relating to the termination before completion of a site contamination audit?	NO
j)	details of records, held by the former South Australian Waste Management Commission under the repealed Waste Management Act 1987, of waste (within the meaning of that Act) having been deposited on the land between 1 January 1983 and 30 April 1995?	NO
5-Poli	lution and site contamination on the land - other details held by EPA	
Does	the EPA hold any of the following details in relation to the land or part of the land:	
a)	a copy of a report known as a "Health Commission Report" prepared by or on behalf of the South Australian Health Commission (under the repealed South Australian Health Commission	NO
	Act 1976)?	
b)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act 1993?</i>	NO
b)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site contamination assessment	NO NO
	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103l of the <i>Environment Protection Act 1993?</i> details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under	

All care and diligence has been taken to access the above information from available records. Historical records provided to the EPA concerning matters arising prior to 1 May 1995 are limited and may not be accurate or complete.

CT Volume 6181 Folio 105 page 3 of 3



#### **Environment Protection Authority** GPO Box 2607 Adelaide SA 5001 211 Victoria Square Adelaide SA 5000 T (08) 8204 2004 Country areas 1800 623 445

Greencap 12 Greenhill Road WAYVILLE SA 5034

Contact: Section 7 Telephone: (08) 8204 2026 Email: epasection7@sa.gov.au

> Contact: Public Register Telephone: (08) 8204 9128

Email: epa.publicregister@sa.gov.au

18 January, 2023

#### **EPA STATEMENT TO FORM 1 - CONTRACTS FOR SALE OF LAND OR BUSINESS**

The EPA provides this statement to assist the vendor meet its obligations under section 7(1)(b) of the Land and Business (Sale and Conveyancing) Act 1994. A response to the questions prescribed in Schedule 1-Contracts for sale of land or business-forms (Divisions 1 and 2) of the Land and Business (Sale and Conveyancing) Act 1994 is provided in relation to the land.

I refer to your enquiry concerning the parcel of land comprised in

Title Reference CT Volume 6175 Folio 320

Address 3 Fringe - Lily Place, CHITON SA 5211

#### Schedule - Division 1 - Land and Business (Sale and Conveyancing) Regulations 2010

#### PARTICULARS OF MORTGAGES, CHARGES AND PRESCRIBED ENCUMBRANCES AFFECTING THE LAND

#### 8. Environment Protection Act 1993

Does the EPA hold any of the following details relating to the Environment Protection Act 1993:

8.1	Section 59 - Environment performance agreement that is registered in relation to the land.	NO
8.2	Section 93 - Environment protection order that is registered in relation to the land.	NO
8.3	Section 93A - Environment protection order relating to cessation of activity that is registered in relation to the land.	NO
8.4	Section 99 - Clean-up order that is registered in relation to the land.	NO
8.5	Section 100 - Clean-up authorisation that is registered in relation to the land.	NO
8.6	Section 103H - Site contamination assessment order that is registered in relation to the land.	NO
8.7	Section 103J - Site remediation order that is registered in relation to the land.	NO

8.8	Section 103N - Notice of declaration of special management area in relation to the land (due to possible existence of site contamination).	NO
8.9	Section 103P - Notation of site contamination audit report in relation to the land.	NO
8.10	Section 103S - Notice of prohibition or restriction on taking water affected by site contamination in relation to the land.	NO
Sched	dule – Division 2 – Land and Business (Sale and Conveyancing) Regulations 2010	
PART	ICULARS RELATING TO ENVIRONMENT PROTECTION	
3-Lice	ences and exemptions recorded by EPA in public register	
Does t	the EPA hold any of the following details in the public register:	
a)	details of a current licence issued under Part 6 of the <i>Environment Protection Act 1993</i> to conduct any prescribed activity of environmental significance under Schedule 1 of that Act at the land?	NO
b)	details of a licence no longer in force issued under Part 6 of the <i>Environment Protection Act</i> 1993 to conduct any prescribed activity of environmental significance under Schedule 1 of that Act at the land?	NO
c)	details of a current exemption issued under Part 6 of the <i>Environment Protection Act 1993</i> from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
d)	details of an exemption no longer in force issued under Part 6 of the <i>Environment Protection</i> Act 1993 from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
e)	details of a licence issued under the repealed South Australian Waste Management Commission Act 1979 to operate a waste depot at the land?	NO
f)	details of a licence issued under the repealed <i>Waste Management Act 1987</i> to operate a waste depot at the land?	NO
g)	details of a licence issued under the repealed South Australian Waste Management Commission Act 1979 to produce waste of a prescribed kind (within the meaning of that Act) at the land?	NO
h)	details of a licence issued under the repealed <i>Waste Management Act 1987</i> to produce prescribed waste (within the meaning of that Act) at the land?	NO
4-Poll	ution and site contamination on the land - details recorded by the EPA in public register	
Does tand:	the EPA hold any of the following details in the public register in relation to the land or part of the	
a)	details of serious or material environmental harm caused or threatened in the course of an activity (whether or not notified under section 83 of the <i>Environment Protection Act 1993</i> )?	NO

**731**CT Volume 6175 Folio 320 page 2 of 3

b)	details of site contamination notified to the EPA under section 83A of the <i>Environment Protection Act 1993</i> ?	NO
c)	a copy of a report of an environmental assessment (whether prepared by the EPA or some other person or body and whether or not required under legislation) that forms part of the information required to be recorded in the public register?	NO
d)	a copy of a site contamination audit report?	NO
e)	details of an agreement for the exclusion or limitation of liability for site contamination to which section 103E of the <i>Environment Protection Act 1993</i> applies?	NO
f)	details of an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act</i> 1993?	NO
g)	details of an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under section 103K of the <i>Environment Protection Act 1993?</i>	NO
h)	details of a notification under section 103Z(1) of the <i>Environment Protection Act 1993</i> relating to the commencement of a site contamination audit?	NO
i)	details of a notification under section 103Z(2) of the <i>Environment Protection Act 1993</i> relating to the termination before completion of a site contamination audit?	NO
j)	details of records, held by the former South Australian Waste Management Commission under the repealed Waste Management Act 1987, of waste (within the meaning of that Act) having been deposited on the land between 1 January 1983 and 30 April 1995?	NO
5-Pol	lution and site contamination on the land - other details held by EPA	
Does	the EPA hold any of the following details in relation to the land or part of the land:	
a)	a copy of a report known as a "Health Commission Report" prepared by or on behalf of the South Australian Health Commission (under the repealed South Australian Health Commission Act 1976)?	NO
b)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act 1993?</i>	NO
c)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under section 103K of the <i>Environment Protection Act 1993</i> ?	NO
d)	a copy of a pre-1 July 2009 site audit report?	NO
e)	details relating to the termination before completion of a pre-1 July 2009 site audit?	NO

All care and diligence has been taken to access the above information from available records. Historical records provided to the EPA concerning matters arising prior to 1 May 1995 are limited and may not be accurate or complete.

CT Volume 6175 Folio 320 page 3 of 3



#### Environment Protection Authority GPO Box 2607 Adelaide SA 5001 211 Victoria Square Adelaide SA 5000 T (08) 8204 2004 Country areas 1800 623 445

Greencap 12 Greenhill Road WAYVILLE SA 5034 Contact: Section 7 Telephone: (08) 8204 2026 Email: epasection7@sa.gov.au

Contact: Public Register Telephone: (08) 8204 9128 Email: epa.publicregister@sa.gov.au

18 January, 2023

#### **EPA STATEMENT TO FORM 1 - CONTRACTS FOR SALE OF LAND OR BUSINESS**

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I refer to your enquiry concerning the parcel of land comprised in

Title Reference CT Volume 6175 Folio 321

Address 5 Fringe - Lily Place, CHITON SA 5211

#### Schedule - Division 1 - Land and Business (Sale and Conveyancing) Regulations 2010

#### PARTICULARS OF MORTGAGES, CHARGES AND PRESCRIBED ENCUMBRANCES AFFECTING THE LAND

#### 8. Environment Protection Act 1993

Does the EPA hold any of the following details relating to the Environment Protection Act 1993:

8.1	Section 59 - Environment performance agreement that is registered in relation to the land.	NO
8.2	Section 93 - Environment protection order that is registered in relation to the land.	NO
8.3	Section 93A - Environment protection order relating to cessation of activity that is registered in relation to the land.	NO
8.4	Section 99 - Clean-up order that is registered in relation to the land.	NO
8.5	Section 100 - Clean-up authorisation that is registered in relation to the land.	NO
8.6	Section 103H - Site contamination assessment order that is registered in relation to the land.	NO
8.7	Section 103J - Site remediation order that is registered in relation to the land.	NO

**733**CT Volume 6175 Folio 321

page 1 of 3

8.8	Section 103N - Notice of declaration of special management area in relation to the land (due to possible existence of site contamination).	NO
8.9	Section 103P - Notation of site contamination audit report in relation to the land.	NO
8.10	Section 103S - Notice of prohibition or restriction on taking water affected by site contamination in relation to the land.	NO
Sched	dule – Division 2 – Land and Business (Sale and Conveyancing) Regulations 2010	
PART	ICULARS RELATING TO ENVIRONMENT PROTECTION	
3-Lice	ences and exemptions recorded by EPA in public register	
Does	the EPA hold any of the following details in the public register:	
a)	details of a current licence issued under Part 6 of the <i>Environment Protection Act 1993</i> to conduct any prescribed activity of environmental significance under Schedule 1 of that Act at the land?	NO
b)	details of a licence no longer in force issued under Part 6 of the <i>Environment Protection Act</i> 1993 to conduct any prescribed activity of environmental significance under Schedule 1 of that Act at the land?	NO
c)	details of a current exemption issued under Part 6 of the <i>Environment Protection Act 1993</i> from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
d)	details of an exemption no longer in force issued under Part 6 of the <i>Environment Protection</i> Act 1993 from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
e)	details of a licence issued under the repealed South Australian Waste Management Commission Act 1979 to operate a waste depot at the land?	NO
f)	details of a licence issued under the repealed Waste Management Act 1987 to operate a waste depot at the land?	NO
g)	details of a licence issued under the repealed South Australian Waste Management Commission Act 1979 to produce waste of a prescribed kind (within the meaning of that Act) at the land?	NO
h)	details of a licence issued under the repealed <i>Waste Management Act 1987</i> to produce prescribed waste (within the meaning of that Act) at the land?	NO
4-Poli	lution and site contamination on the land - details recorded by the EPA in public register	
Does land:	the EPA hold any of the following details in the public register in relation to the land or part of the	
a)	details of serious or material environmental harm caused or threatened in the course of an	NO

**734**CT Volume 6175 Folio 321

page 2 of 3

activity (whether or not notified under section 83 of the Environment Protection Act 1993)?

b)	details of site contamination notified to the EPA under section 83A of the <i>Environment Protection Act 1993</i> ?	NO
c)	a copy of a report of an environmental assessment (whether prepared by the EPA or some other person or body and whether or not required under legislation) that forms part of the information required to be recorded in the public register?	NO
d)	a copy of a site contamination audit report?	NO
e)	details of an agreement for the exclusion or limitation of liability for site contamination to which section 103E of the <i>Environment Protection Act 1993</i> applies?	NO
f)	details of an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act</i> 1993?	NO
g)	details of an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under section 103K of the <i>Environment Protection Act 1993?</i>	NO
h)	details of a notification under section 103Z(1) of the <i>Environment Protection Act 1993</i> relating to the commencement of a site contamination audit?	NO
i)	details of a notification under section 103Z(2) of the <i>Environment Protection Act 1993</i> relating to the termination before completion of a site contamination audit?	NO
j)	details of records, held by the former South Australian Waste Management Commission under the repealed Waste Management Act 1987, of waste (within the meaning of that Act) having been deposited on the land between 1 January 1983 and 30 April 1995?	NO
5-Pol	lution and site contamination on the land - other details held by EPA	
Does	the EPA hold any of the following details in relation to the land or part of the land:	
a)	a copy of a report known as a "Health Commission Report" prepared by or on behalf of the South Australian Health Commission (under the repealed South Australian Health Commission Act 1976)?	NO
b)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act 1993?</i>	NO
c)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under section 103K of the <i>Environment Protection Act 1993</i> ?	NO
d)	a copy of a pre-1 July 2009 site audit report?	NO
e)	details relating to the termination before completion of a pre-1 July 2009 site audit?	NO

All care and diligence has been taken to access the above information from available records. Historical records provided to the EPA concerning matters arising prior to 1 May 1995 are limited and may not be accurate or complete.

**CT Volume 6175 Folio 321** page 3 of 3

# **Details of Representations**

## **Application Summary**

Application ID	23006901
Proposal	Construction of an integrated health and wellbeing precinct comprising of day surgery, radiology services, specialist suites, multipurpose consulting spaces and ancillary cafe and gallery, together with a childcare centre, 25 short-term accommodation units, shops and artisan spaces with associated with driveways, carparking, landscaping and wetlands
Location	1 FRINGE-LILY PL CHITON SA 5211, 3 FRINGE-LILY PL CHITON SA 5211, 4 OCEAN RD CHITON SA 5211, 5 FRINGE-LILY PL CHITON SA 5211

## Representations

### **Representor 1** - Meredyth Taylor

Name	Meredyth Taylor
Address	3 BRICKNELL ROAD GOOLWA NORTH SA, 5214 Australia
Submission Date	23/05/2023 09:42 AM
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 support the development with some concerns

#### Reasons

My concern is the apparent lack of clarity in the planning details about the number of trees to be removed from the site. See attached document

#### **Attached Documents**

FluerieuHealth\_taylor-5599340.pdf

#### A VOICE FOR THE TREES!

The Australian government has launched a **Nature Positive** policy for all new developments. (Australian Government Department of Climate Change, Energy, the Environment and Water. https://www.dcceew.gov.au/environment/epbc/publications/nature-positive-plan).

A **nature positive** approach enriches biodiversity, stores carbon, purifies water and reduces pandemic risk. It enhances the resilience of our planet and our societies. This is a paradigm shift; in the past we have attempted to do less harm and to tread lightly, but now there is a new world view that asks what if we go beyond damage limitation to enhance ecosystems. (World Economic Forum https://www.weforum.org/agenda/2021/06/what-is-nature-positive-and-why-is-it-the-key-to-our-future/)

Regardless of whether these trees are 'native' to South Australia I point out that there is almost zero native vegetation surviving in the VH/Chiton/Middleton/Pt Elliott/Goolwa etc area.

**Any and all trees are important** These trees are 20years old. Even if replanting occurred they would not mature until 2043. They also provide wildlife habitat, carbon sink, a cooling effect and visual amenity.

The Recent Alexandrina Tree Canopy study revealed only a 11 percent tree canopy across the Region and that average was increased by Ashbourne at 49 percent.

See (https://www.alexandrina.sa.gov.au/\_\_data/assets/pdf\_file/0034/1325788/Tree-Canopy-Cover-Alexandrina\_Final-Report.pdf).

Trees add to the community's sense of well-being. A Health and Well-being centre should keep trees. There is ample evidence about the relationship between trees and health and wellbeing. For example, The Oxford Textbook on Nature and Public Health (https://academic.oup.com/book/31752?login=false).

If there is concern about carparks there is available space to the east of the swim centre. My observation is that this area is hardly utilised. Over the last two years and at various occasions during the day /evening I have counted at least 80 unused carparks. Let's share Carparks. There are an excessive number of carparks in this development - we estimate 250! How tragic that trees are removed for car parks.

The Alexandrina Council's vision 2040 is for a Liveable, Green and Connected community. This project only provides Connection.

(https://www.alexandrina.sa.gov.au/ data/assets/pdf file/0037/848773/A2040 Narrative.pdf)

There are 3 key themes: Liveable – Increase township greening and planting for canopy cover; Green – Reduce Council greenhouse gas emissions/ advocate for the uptake of renewable energy; Connected – Support prosperity and wellbeing in Alexandrina/ build the resilience of communities, the economy and the environment in a changing climate.

The State Government has identified 8 regions across the State, with the Fleurieu and Hills Landscape Plan (https://cdn.environment.sa.gov.au/landscape/docs/hf/hf\_landscape\_plan\_2021-26.pdf).

There are five priorities with a target of 30% of land conserved for nature. As a large farming Region, it is incumbent on all to preserve nature, including at 1 Fringe-Lily Place.

Australia is the only first world nation cited as a leader in de-forestation. (https://newsroom.unsw.edu.au/news/science-tech/australia's-land-clearing-rate-once-again-among-highest-world).

When trees are removed we reduce our carbon sink. In Alexandrina there are few tree planted in publicly owned land, so we need to encourage private land owners to increase biodiversity.

We are in a climate crisis, the Alexandrina Council declared a Climate Emergency and established a CEEC. - working for three years towards carbon neutrality/ environmental conservation.

The next phase of CEEC is to encourage ratepayers to adopt carbon neutral/biodiversity actions. This includes new buildings as construction is one of the greatest carbon emitters. (https://www.alexandrina.sa.gov.au/council/committees/climate-emergency-advisory-committee).

This project could be a Nature Positive development, Troppo Architects could fully use their ESD credentials as stated in their website.

Step 1: respond to climate and the local setting

The Beyond Today states:

Will unfold amid unique surrounds characterised by wetlands, natural vegetation and a magnificent backdrop of trees, with all buildings - most notably the independent living facility - designed to capture panoramic views and contribute towards creating healthier and happier living, working and visiting environments.

[http://beyondtoday.com.au/wellbeing.htm]

The current design will see the 'magnificent backdrop of trees' significantly reduced; this is not NATURE POSITIVE.

Representations 4.4 - Attachment 4

#### **Representor 2** - Steve Mathewson

Name	Steve Mathewson
Address	PO Box 15 PORT ELLIOT SA, 5212 Australia
Submission Date	26/05/2023 04:48 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 specific reasons I have concerns with granting planning consent is as follows: The Fleurieu Regional Aquatic Centre Authority's Charter outlines the objects and purposes of the Authority. Clause 1.6.8 of the Charter states that one of the objects is to maximise participation in and use of the aquatic centre programs provided at the Aquatic Centre and the facilities and services of the Aquatic Centre by users of all ages and abilities. The Authority has a focus on ensuring improved access and inclusion for older people and people living with disability. I have reviewed the development application on the Plan SA portal. It appears that the traffic model has been revised since I met with developers in February 2023. Based on meetings held between the developers and the Authority at that time, I provided in principle support for the development in a letter dated 24 March 2023. This support was provided subject to further discussions on effective rights of way and the use of Authority land. These discussions have not occurred, and agreement has not yet been reached on these matters. Until an appropriate agreement is reached, the Authority is not in a position to approve access to our land as proposed. The revised traffic model appears to propose access through the main entrance off Waterport Road. If this is the case, the access will negatively impact Fleurieu Aquatic Centre's amenity of the land owned by the Authority. The plans appear to propose four accessible parking bays situated between the precinct and the Aquatic Centre, on Authority land. The Authority is expecting further discussion in relation to accessible parking and drop off areas, and for these to be addressed as part of the development. I have written to the developers and included a copy of this representation.

#### **Attached Documents**



Level 1, 21 Roper Street
Adelaide 5000 South Australia
08 8338 5511
ABN 56 607 616 295
www.jensenplus.com.au

230706 P3622 Response to Representations

7 July 2023

Cameron Gibbons Acting Manager Development Assessment Alexandrina Council

By email: cameron.gibbons@alexandrina.sa.gov.au

Dear Cameron

# 23006901 Development Application for a Health and Wellbeing Precinct at 1, 3 & 5 Fringe-Lily Place and 4 Ocean Road, Chiton \_ Response to Representation

Thank you for providing the two representations received by Council in response to the notification of the subject application.

We note that the two representations are from:

- 1. Meredyth Taylor of 3 Bricknell Road, Goolwa North, approximately 14.7km east of the proposed development application's site. It is noted that the submission is in support of the proposal with some concerns, additionally Meredyth seeks to be heard as part of her representation.
- 2. Steve Mathewson, as chairperson and independent member of the Fleurieu Regional Aquatic Centre Authority he is representing the Authority. The Fleurieu Regional Aquatic Centre abuts the development, with the proposed development seeking to be accessed off the Centre's land and will develop carparking on this land. It is noted that the submission is in support of the proposal with some concerns, additionally Steve seeks to be heard as part of the Authority's representation.

As both representation's concerns are unique, we will individually address the responses below.

Ms Taylor is concerned about the lack of clarity regarding how many of the area's trees will be removed to accommodate the proposed development's carparking. Other concerns, which all relate to the removal of trees are in regard to:

- \_ The impact on the precinct's to health and wellbeing and amenity outcomes
- Impact on biodiversity, water quality and carbon storage
- Reducing Alexandrina Council's relatively small tree canopy cover
- \_ Being at odds with local and state government strategies.
- Suggestion to use FRAC's spare car park spaces to limit the proposed development's carpark footprint.

Ms Taylor's concern for removal of the trees is acknowledged, however, the proposal seeks to maintain as many of the existing trees as possible across the site, having regard to balancing the existing site features, and the desired outcome for a spacious landscaped setting for the development. This includes a range of landscaped spaces between buildings and regular plantings within car parks.



All trees to be removed have been planted by the applicant as part of the original Beyond Today development. The concerns relating to the loss of backdrop are noted, but are not supported. The southernmost band of plantings which separate the site from the rural living lots (and wetland ponds) to the south will not be completely removed by the proposed development. This maintains a treed backdrop to this location, when viewed from both sides. Similarly, removal of plantings has been minimised along the eastern and northern edges of the site such as to maintain the landscaped edge to the site, which also encloses the site.

In this regard, the proposal is considered to suitably address both the original intent of the Beyond development (which has no relevance to the assessment of the subject application, but nevertheless remains important to the applicant), the desire to establish a leading, regional scale health and wellbeing facility for the community, and the policies within the Planning and Design Code.

Mr Mathewson's comments, on behalf of FRACA is noted and disappointing given previous conversations and support provided in several meetings and correspondence that have informed the proposal and the lodgement of the subject application. Notwithstanding this, the applicant acknowledges the need to formalise arrangements between the two sites and has sought legal advice in the preparation of a legal agreement for signing of the FRACA:

- which identifies and formalises the rights of way over the land in question, and
- \_ which provides for the maintenance and taking on of liability for the basin that is proposed to straddle the boundaries.

A copy of this document (provided to FRACA for agreement) is enclosed for your information.

This document, and its formal registration, has been prepared by the applicant and will be formalised entirely at the applicant's expense and represents the goodwill of the applicant in resolving this matter (aside from the planning process) and provide Council with the confidence that it intends to address the matters raised by FRACA relating to formalised arrangements.

I trust that this response addresses the matters raised by the respondents. Please contact me on 8338 5511 if any further clarification on the above matters is required.

Yours faithfully

**Daniel Marotti** Urban Planner

Jensen PLUS





Cameron Gibbons PO Box 21 GOOLWA SA 5214

13 July 2023

Dear Cameron,

Hills and Fleurieu Landscape Board

Cnr Walker and Mann St Mount Barker SA 5251

Tel 08 8391 7500

hf.landscapeboard @sa.gov.au landscape.sa.gov.au

#### Hills and Fleurieu Landscape Board Development Application Response

#### **Development Application Number: 23006901**

**Location:** 1 Fringe-Lily Pl Chiton CT 6181/105; 3 Fringe-Lily Pl Chiton CT 6175/320; and 5 Fringe-Lily Pl Chiton CT 6175/321.

**Proposal:** Construction of an integrated health and wellbeing precinct comprising of day surgery, radiology services, specialist suites, multipurpose consulting spaces and ancillary cafe and gallery, together with a childcare centre, 25 short-term accommodation units, shops and artisan spaces with associated with driveways, car parking, landscaping and wetlands. The site has an area of approximately 39,000 square metres and is currently used for broadacre farming purposes.

#### **Response:**

The proposed development site includes the construction of two lakes (referred to as main lake/wetland and Japanese gardens) and the construction of a new ephemeral dry creek. These are Water Affecting Activities under section 104(3) and of the *Landscape South Australia Act 2019*, which would otherwise require a permit were it's not for the operation of section 106(1)(e) of that Act.

#### Site description

The proposed development is located entirely within the surface water catchment of the Hindmarsh and Iman Rivers. It is also located entirely within Western Mount Lofty Ranges (WMLR) Water Allocation Plan (WAP) surface water management zone Brown Hill. An existing watercourse classified as a stream order 2 traverses northwest of the site through Fleurieu Aquatic Centre.

#### Proposed lakes and ephemeral creek

It is understood the proposed lakes and ephemeral dry creek are intended to provide detention of flows from the new proposed development. The main lake is located on an existing watercourse. Runoff from the carpark and road areas will be directed through systems of bio-retention swales and the ephemeral creek. It is also understood that the development incorporates large areas of vegetation to assist in managing stormwater to predevelopment flows and GPTs to improve stormwater quality to acceptable levels before discharge downstream. Majority of the runoff from the adjacent swimming centre will be captured in the main lake. A preliminary assessment undertaken by Drew Rudd Engineers estimated the surface area of the lakes to be approximately 4122m² and 751m². MUSIC modelling indicated that post development average annual runoff volume is greater than the pre-development average annual runoff volume resulting in approximately 3.23 megalitres surplus of water.

Whilst the proposed development is only at concept design phase, it is evident that the intended purpose of the lakes is to maintain pre-development flows and water quality remediation. Information as it stands does not confirm whether water captured in the lakes

will be returned to the watercourse post diversion, and so this is a matter must be confirmed by the proponent in the preparation of their final designs.

### **Requested conditions:**

- A Stormwater Management Plan must be prepared and submitted to the satisfaction of the Hills and Fleurieu Landscape Board prior to the granting of development approval detailing how the following requirements will be achieved:
  - a. The proposed lakes combined store a volume of water no greater than 3.23 megalitres as a result of the new development.
  - b. Any watercourse water proposed to be captured onsite must be released as close as reasonably practical to the natural flow path and returned downstream to the existing watercourse that's runs under Ocean Road.
  - c. The main lakes design includes a spillway that regulates downstream flow and ensures its functionality remains free of blockages, which would prevent the passing of all intercepted flows.
  - d. Works will not cause adverse impacts to the environment, including (but not limited to) erosion, pollution and other water users at downstream extraction points.
- Construction shall not be undertaken a minimum of 3 days before and/or during a high rainfall event (20mm or greater) to reduce the risk of damage to the watercourse bed and banks. Weather forecasts reported by the Bureau of Meteorology are available on-line and the seven day forecast must be checked before work commences.
- 2. There must be a minimum distance of 20 meters between a watercourse or well and the fuelling site for machinery used to undertake construction.
- 3. The proposed works must be undertaken in a manner that prevents silt or sediment leaving the site including, but not limited to, the use of erosion and sediment control measures, such as catch/diversion drains, re-vegetation, hay bale barriers, filter fences, sediment traps and basins.
- 4. Post-construction, the lakes must be appropriately re-vegetated using locally indigenous species to minimise future erosion and sedimentation downstream. The Hills and Fleurieu Landscape Board's Sedge and Rush Planting Guide for Creeks and Dams provides information on species selection and optimal planting locations in relation to creeks and dams (or lakes).

If you would like to discuss the Boards response or require any additional information, please contact me on 0448 282 893 or via email at <a href="mailto:Ellen.Watson@sa.gov.au">Ellen.Watson@sa.gov.au</a>.

Yours sincerely

Ellen Watson

Senior Project Officer, Water Planning

**Landscapes Hills & Fleurieu** 

# **CONSULTING ROOMS**

### 1 FRINGE-LILY PL CHITON SA 5211

Address:

Click to view a detailed interactive SAILIS

4.4 - Attachment 7

To view a detailed interactive property map in SAPPA click on the map below



### **Property Zoning Details**

Zone

**Community Facilities** 

Overlay

Environment and Food Production Area

Hazards (Flooding)

Hazards (Bushfire - Medium Risk) Hazards (Flooding - General)

Native Vegetation

Prescribed Water Resources Area

Water Resources

Local Variation (TNV)

Maximum Building Height (Metres) (Maximum building height is 12m)
Maximum Building Height (Levels) (Maximum building height is 3 levels)

### Selected Development(s)

### Consulting room

This development may be subject to multiple assessment pathways. Please review the document below to determine which pathway may be applicable based on the proposed development compliances to standards. If no assessment pathway is shown this mean the proposed development will default to performance assessed. Please contact your local council in this instance. Refer to Part 1 - Rules of Interpretation - Determination of Classes of Development

### 3 FRINGE-LILY PL CHITON SA 5211

Address:

Click to view a detailed interactive SALIS in SAILIS

4.4 - Attachment 7

To view a detailed interactive property map in SAPPA click on the map below



### **Property Zoning Details**

Zone

**Community Facilities** 

Overlay

**Environment and Food Production Area** Hazards (Bushfire - Medium Risk) Hazards (Flooding - General)

Native Vegetation

Prescribed Water Resources Area

Water Resources

Local Variation (TNV)

Maximum Building Height (Metres) (Maximum building height is 12m) Maximum Building Height (Levels) (Maximum building height is 3 levels)

### **5 FRINGE-LILY PL CHITON SA 5211**

Address:

Click to view a detailed interactive SAILIS

### 4.4 - Attachment 7

To view a detailed interactive property map in SAPPA click on the map below



### **Property Zoning Details**

**Community Facilities** 

Overlay

**Environment and Food Production Area** Hazards (Bushfire - Medium Risk) Hazards (Flooding - General)

Hazards (Flooding - Evidence Required)

Native Vegetation

Prescribed Water Resources Area

Water Resources

Local Variation (TNV)

Maximum Building Height (Metres) (Maximum building height is 12m) Maximum Building Height (Levels) (Maximum building height is 3 levels)

### Selected Development(s)

### Consulting room

This development may be subject to multiple assessment pathways. Please review the document below to determine which pathway may be applicable based on the proposed development compliances to standards. If no assessment pathway is shown this mean the proposed development will default to performance assessed. Please contact your local council in this instance. Refer to Part 1 - Rules of Interpretation - Determination of Classes of Development

Property Policy Information for above selection

### Consulting room - Code Assessed - Performance Assessed

### Part 2 - Zones and Sub Zones

### **Community Facilities Zone**

### Assessment Provisions (AP)

Desired Outcome (DO)

	Desired Outcome
00 1	Provision of a range of community, educational, recreational and health care facilities.
	747

### Performance Outcome

### Deemed-to-Satisfy Cricehagnt 7 **Designated Performance Feature**

Land Use and Intensity

Development is associated with or ancillary to the provision of community, educational, recreational and / or health care services.

DTS/DPF 1.1

Development comprises one or more of the following:

- (a) Cemetery
- (b) Community facility
- (c) Consulting room
- (d) Educational establishment
- (e) Emergency services facility
- (f) Health care facility
- (g) Hospital
- (h) Indoor recreation facility
- (i) Library
- (j) Office associated with community service
- (k) Place of worship
- (I) Pre-school
- (m) Recreation area
- (n) Shop

Integration and coordination of land uses to enhance the accessibility and efficiency of service delivery.

DTS/DPF 1.4

None are applicable.

PO 1.5

Development avoids inhibiting or prejudicing future delivery of community, educational, recreational or health care services.

DTS/DPF 1.5

None are applicable.

PO 1.6

Community facilities are designed to encourage flexible and adaptable use of open space and facilities for a range of uses over time.

DTS/DPF 1.6

None are applicable.

**Building Height and Setbacks** 

PO 2.1

Building height is consistent with the maximum height expressed in any relevant Building Height Technical and Numeric Variation or otherwise generally consistent with the prevailing character of the locality and height of nearby buildings.

DTS/DPF 2.1

Other than on a Catalyst site in the St Andrews Hospital Precinct Subzone, development does not exceed the following building height(s):

### Maximum Building Height (Levels)

Maximum building height is 3 levels

Maximum Building Height (Metres)

Maximum building height is 12m

In relation to DTS/DPF 2.1, in instances where:

- (a) more than one value is returned in the same field, refer to the Maximum Building Height (Levels) Technical and Numeric Variation layer or Maximum Building Height (Metres) Technical and Numeric Variation layer in the SA planning database to determine the applicable value relevant to the site of the proposed development
- (b) only one value is returned (i.e. there is one blank field), then the relevant height in metres or building levels applies with no criteria for
- no value is returned (i.e. there are blank fields for both maximum building height (metres) and maximum building height (levels), then none are applicable and the relevant development cannot be classified as deemed-to-satisfy.

PO 2 2

Buildings mitigate the visual impacts of massing on residential development within a neighbourhood-type zone.

DTS/DPF 2.2

Except in the St Andrews Hospital Precinct Subzone and the part of the WHC and Memorial Hospital Precinct Subzone north of Kermode Street, buildings **748** constructed within a building envelope provided by a 45 degree plane measured from a height of 3m above natural ground level at the boundary of an allotment used for residential purposes within a neighbourhood-type zone

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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.

In relation to DTS/DPF 4.1, 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 4.1 is met.

### 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 7249 otification 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	Exceptions
(Column A)	(Column B)
<ol> <li>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.</li> </ol>	None specified.
2. Any development involving any of the following (or of any combination of any of the following):  (a) advertisement (b) air handling unit, air conditioning system or exhaust fan (c) building work on railway land (d) community facility (e) educational establishment (f) fence (g) pre-school (h) private bushfire shelter (i) protective tree netting structure (j) recreation area (k) retaining wall (l) shade sail (m) solar photovoltaic panels (roof mounted) (n) swimming pool or spa pool (o) water tank.	Except development that exceeds the maximum building height specified in Community Facilities Zone DTS/DPF 2.1 or does not satisfy any of the following:  1. Community Facilities Zone DTS/DPF 2.2 2. Community Facilities Zone DTS/DPF 2.3.
3. Any development involving any of the following (or of any combination of any of the following):  (a) internal building works  (b) land division  (c) replacement building  (d) temporary accommodation in an area affected by bushfire  (e) tree damaging activity.	None specified.
4. Consulting room.	Except where the site of the development is adjacent land to a site (or land) used for residential purposes in a neighbourhood-type zone.
5. 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.
6. Office.	Except office that exceeds the maximum building height specified in Community Facilities Zone DTS/DPF 2.1, or is on a Catalyst Site in the St Andrews Hospital Precinct Subzone and exceeds the maximum building height in Community Facilities Zone DTS/DPF 2.1 that applies to development not on a Catalyst Site, or does not satisfy any of the following:  1. Community Facilities Zone DTS/DPF 1.3 2. Community Facilities Zone DTS/DPF 2.2 3. Community Facilities Zone DTS/DPF 2.3.
7. Shop. <b>75</b>	Except shop that exceeds the maximum building height specified in Community Facilities Zone DTS/DPF 2.1, or is on a Catalyst Site in the St Ondrews Hospital Precinct Subzone and exceeds the maximum building height in Community Facilities Zone DTS/DPF 2.1 that applies to development not on a

Policy24	P&D Code (in effect) Version 2023.5 30/03/202
	Catalyst Site, or does not satisfy any of the following:  4.4 - Attachment 7  1. Community Facilities Zone DTS/DPF 1.2  2. Community Facilities Zone DTS/DPF 2.2  3. Community Facilities Zone DTS/DPF 2.3.
8. Telecommunications facility.	<ol> <li>Except telecommunications facility that:</li> <li>is within 50m of a neighbourhood-type zone or</li> <li>exceeds 30m in height or</li> <li>is on a site that is adjacent land to a site (or land) used for residential purposes.</li> </ol>
Placement of Notices - Exemptions for Performance A	Assessed Development
None specified.	
Placement of Notices - Exemptions for Restricted Dev	velopment

None specified.

### Part 3 - Overlays

### Hazards (Bushfire - Medium Risk) Overlay

### Assessment Provisions (AP)

Desired Outcome (DO)

	Desired Outcome			
DO 1	Development, including land division responds to the medium level of bushfire risk and potential for ember attack and radiant heat by siting and designing buildings in a manner that mitigates the threat and impact of bushfires on life and property taking into account the increased frequency and intensity of bushfires as a result of climate change.			
DO 2	To facilitate access for emergency service vehicles to aid the protection of lives and assets from bushfire danger.			

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Sit	ing
PO 1.1	DTS/DPF 1.1
Buildings and structures are located away from areas that pose an unacceptable bushfire risk as a result of vegetation cover and type, and terrain.	None are applicable.
Built	Form
PO 2.1  Buildings and structures are designed and configured to reduce the impact of bushfire through using designs that reduce the potential for trapping burning debris against or underneath the building or structure, or between the ground and building floor level in the case of transportable buildings and building stilts.	

### Policy24

#### PO 2.2

Extensions to buildings, outbuildings and other ancillary structures are sited and constructed using materials to minimise the threat of fire spread to residential and tourist accommodation (including boarding houses, hostels, dormitory style accommodation, student accommodation and Workers' accommodation) in the event of bushfire.

### DTS/DPF 2.2

Outbuildings and other ancillary structure 4.4 site Attachment m7 the habitable building.

Vehicle Access - Roads, Driveways and Fire Tracks

### PO 5.1

Roads are designed and constructed to facilitate the safe and effective:

- access, operation and evacuation of fire-fighting vehicles and emergency personnel
- (b) evacuation of residents, occupants and visitors.

### DTS/DPF 5.1

### 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 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)
  - (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 5.2

Access to habitable buildings is designed and constructed to facilitate the safe and effective:

- access, operation and evacuation of fire-fighting vehicles and emergency personnel
- (b) evacuation of residents, occupants and visitors.

### DTS/DPF 5.2

Access is in accordance with (a) or (b):

- 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)
  - 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:

752

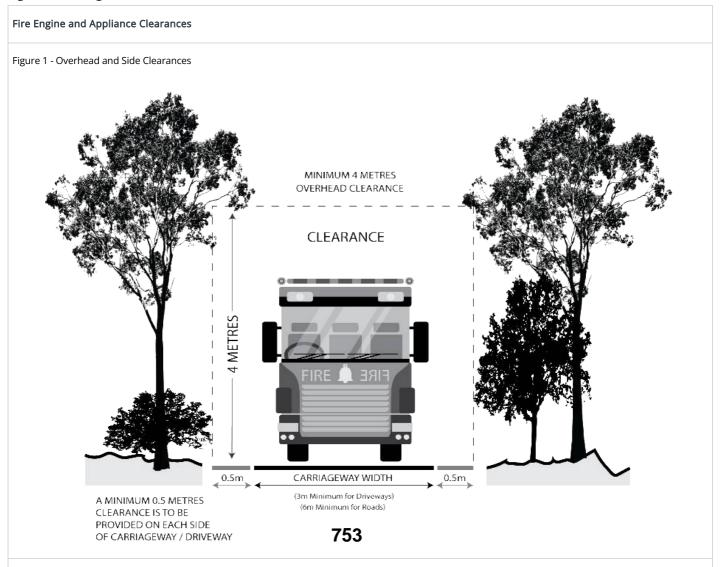
Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
	A. a loop road around the building or 4.4 - Attachment 7  B. a turning area with a minimum radius of 12.5m (Figure 3) or  C. a 'T' or 'Y' shaped turning area with a minimum formed length of 11m and minimum internal radii of 9.5m (Figure 4)  (xi) incorporate solid, all-weather crossings over any watercourse that support fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes.
PO 5.3  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 5.3 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	•	Statutory Reference
None	None	None	None

### **Figures and Diagrams**



### Roads and Driveway Design

4.4 - Attachment 7

Figure 2 - Road and Driveway Curves

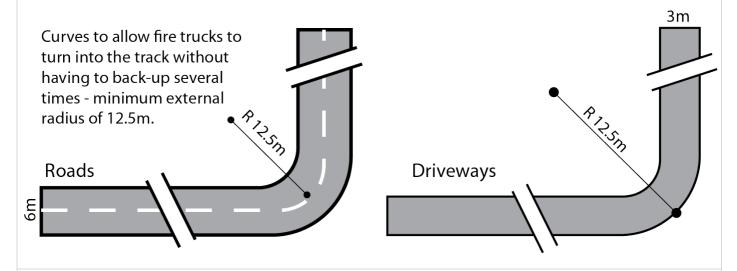


Figure 3 - Full Circle Turning Area

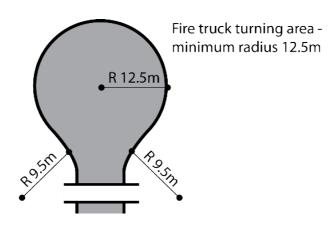
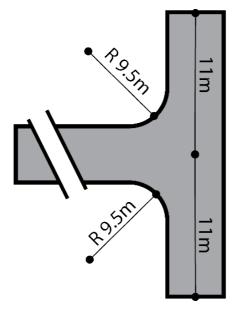


Figure 4 - 'T' or 'Y' Shaped Turning Head



"T" shaped turning area for fire trucks to reverse into so they can turn around

- minimum length 11m.

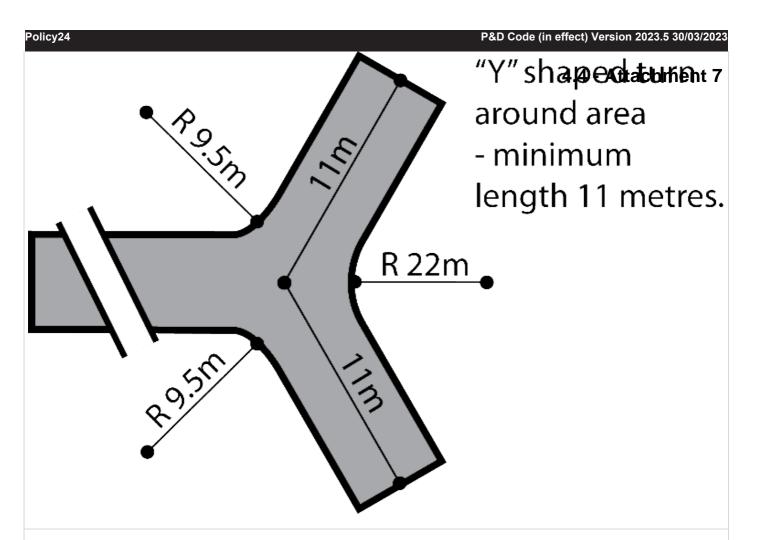
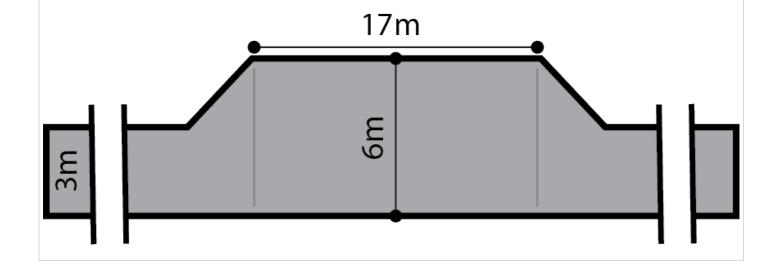


Figure 5 - Driveway Passing Bays

Passing bay for fire trucks - minimum width 6 metres, minimum length 17 metres.



Hazards (Flooding) Overlay

**Assessment Provisions (AP)** 

755

Desired Outcome (DO)

# Desired Outcome 4.4 - Attachment 7 DO 1 Impacts on people, property, infrastructure and the environment from high flood risk are minimised by retaining areas free from development, and minimising intensification where development has occurred.

Performance Outcome	Deemed-to-Satisfy Criteria /
	Designated Performance Feature
Flood R	esilience
PO 3.1	DTS/DPF 3.1
Development avoids the need for flood protection works.	None are applicable.
PO 3.2	DTS/DPF 3.2
Development does not cause unacceptable impacts on any adjoining property by the diversion of flood waters or an increase in flood velocity or flood level.	None are applicable.
PO 3.3	DTS/DPF 3.3
Development does not impede the flow of floodwaters through the allotment or the surrounding land, or cause an unacceptable loss of flood storage.	None are applicable.
PO 3.4	DTS/DPF 3.4
Development avoids frequently flooded or high velocity areas, other than where it is part of a flood mitigation scheme to reduce flood impact.	Other than a recreation area, development is located outside of the 5% AEP principal flow path.
PO 3.5	DTS/DPF 3.5
Buildings are sited, designed and constructed to prevent the entry of floodwaters in a 1% AEP flood event where the entry of floodwaters is likely to result in undue damage to, or compromise ongoing activities within, buildings.	Buildings comprise one of the following:  (a) a porch or portico with at least 2 open sides (b) a verandah with at least 3 open sides (c) a carport or outbuilding with at least 2 open sides (whichever elevations face the direction of the flow) (d) any post construction with open sides (e) a building with a finished floor level that is at least 300mm above the height of a 1% AEP flood event.
Environmen	tal Protection
PO 4.1	DTS/DPF 4.1
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 during a 1% AEP flood event to avoid potential environmental harm.	Development involving the storage or disposal of hazardous materials is wholly located outside of the 1% AEP flood plain or flow path.
PO 4.2	DTS/DPF 4.2
Development does not create or aggravate the potential for erosion or siltation or lead to the destruction of vegetation during a flood.	None are applicable.
Site Ear	rthworks
PO 5.1	DTS/DPF 5.1
The depth and extent of filling required to raise the finished floor level of a building does not cause unacceptable impact on any adjoining property by diversion of flood waters, an increase in flood velocity or flood level, or an unacceptable loss of flood storage.	None are applicable.
PO 5.2	DTS/DPF 5.2
Driveways, access tracks and parking areas are designed and constructed (5)	Filling for ancillary purposes:
minimise excavation and filling.	(a) does not exceed 300mm above existing ground level

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
	(b) is no more than 5m wide.  4.4 - Attachment 7
Act	ress 4.4 - Attachment 7
PO 6.1	DTS/DPF 6.1
Development does not occur on land:	None are applicable.
(a) from which evacuation to areas not vulnerable to flood risk is not possible during a 1% AEP flood event	
(b) which cannot be accessed by emergency services vehicles or essential utility service vehicles during a 1% AEP flood event.	
PO 6.2	DTS/DPF 6.2
Access driveways and tracks to significant development (i.e. dwellings, places of work, etc.) consist of a safe, all-weather trafficable surface that is accessible during a 1% AEP flood event.	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
None	None	None	None

### 4.4 - Attachment 7

Hazards (Flooding – General) Overlay

Assessment Provisions (AP)

**758** 

Desired Outcome (DO)

# Desired Outcome 4.4 - Attachment 7 DO 1 Impacts on people, property, infrastructure and the environment from general flood risk are minimised 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 F	Resilience
PO 2.1  Development is sited, designed and constructed to prevent the entry of floodwaters where the entry of flood waters is likely to result in undue damage to or compromise ongoing activities within buildings.	DTS/DPF 2.1  Habitable buildings, commercial and industrial buildings, and buildings used for animal keeping incorporate a finished ground and floor level not less than:  In instances where no finished floor level value is specified, a building incorporates a finished floor level at least 300mm above the height of a 1% AEP flood event.
Environmental Protection	
PO 3.1  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 during a 1% AEP flood event to avoid potential environmental harm.	DTS/DPF 3.1  Development involving the storage or disposal of hazardous materials is wholly located outside of the 1% AEP flood plain or flow path.

### 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

### Hazards (Flooding - Evidence Required) Overlay

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome		
DO 1	Development adopts a precautionary approach to mitigate potential impacts on people, property, infrastructure and the environment from potential flood risk through the appropriate siting and design of development.	

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

# 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 resultant least 300mm above: Deemed-to-Satisfy Criteria / Designated Performance Feature 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:

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
	(a) the highest point of top of kerb of the primary street or <b>4.4 - Attachment 7</b> (b) the highest point of natural ground level at the primary street boundary where there is no kerb	

### 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

### **Native Vegetation Overlay**

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome		
DO 1	Areas of native vegetation are protected, retained and restored in order to sustain biodiversity, threatened species and vegetation communities, fauna habitat, ecosystem services, carbon storage and amenity values.	

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Environmen	tal Protection
PO 1.1	DTS/DPF 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.	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	DTS/DPF 1.2
Native vegetation clearance in association with development avoids the following:	None are applicable.
<ul> <li>(a) significant wildlife habitat and movement corridors</li> <li>(b) rare, vulnerable or endangered plants species</li> <li>(c) native vegetation that is significant because it is located in an area which has been extensively cleared</li> <li>(d) native vegetation that is growing in, or in association with, a wetland environment.</li> </ul>	
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.

### Procedural Matters (PM) - Referrals

### 4.4 - Attachment 7

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
Development that is the subject of a report prepared in accordance with Regulation 18(2)(a) of the <i>Native Vegetation Regulations 2017</i> that categorises the clearance, or potential clearance, as 'Level 3 clearance' or 'Level 4 clearance'.	Native Vegetation Council	To provide expert assessment and direction to the relevant authority on the potential impacts of development on native vegetation.	Development of a class to which Schedule 9 clause 3 item 11 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

### Water Resources Overlay

### **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome		
DO 1	Protection of the quality of surface waters considering adverse water quality impacts associated with projected reductions in rainfall and warmer air temperatures as a result of climate change.		
DO 2	Maintain the conveyance function and natural flow paths of watercourses to assist in the management of flood waters and stormwater runoff.		

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Water C	atchment
PO 1.1	DTS/DPF 1.1
Watercourses and their beds, banks, wetlands and floodplains (1% AEP flood extent) are not damaged or modified and are retained in their natural state, except where modification is required for essential access or maintenance purposes.	None are applicable.
PO 1.2	DTS/DPF 1.2
Development avoids interfering with the existing hydrology or water regime of swamps and wetlands other than to improve the existing conditions to enhance environmental values.	None are applicable.
PO 1.5	DTS/DPF 1.5
Development that increases surface water run-off includes a suitably sized strip of vegetated land on each side of a watercourse to filter runoff to:  (a) reduce the impacts on native aquatic ecosystems (b) minimise soil loss eroding into the watercourse.	A strip of land 20m or more wide measured from the top of existing banks on each side of the watercourse is free from development, livestock use and revegetated with locally indigenous vegetation.
PO 1.6	DTS/DPF 1.6

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
Development resulting in the depositing or placing of an object or solid material in a watercourse or lake occurs only where it involves any of the following:	None are applicable.  4.4 - Attachment 7
<ul> <li>(a) the construction of an erosion control structure</li> <li>(b) devices or structures used to extract or regulate water flowing in a watercourse</li> <li>(c) devices used for scientific purposes</li> <li>(d) the rehabilitation of watercourses.</li> </ul>	
PO 1.7	DTS/DPF 1.7
Watercourses, floodplains (1% AEP flood extent) and wetlands protected and enhanced by retaining and protecting existing native vegetation.	None are applicable.
PO 1.8	DTS/DPF 1.8
Watercourses, floodplains (1% AEP flood extent) and wetlands are protected and enhanced by stabilising watercourse banks and reducing sediments and nutrients entering the watercourse.	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
None	None	None	None

### Part 4 - General Development Policies

### Clearance from Overhead Powerlines

### Assessment Provisions (AP)

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1	DTS/DPF 1.1
Buildings are adequately separated from aboveground powerlines to minimise potential hazard to people and property.	One of the following is satisfied:  (a) a declaration is provided by or on behalf of the applicant to the effect that the proposal would not be contrary to the regulations prescribed for the purposes of section 86 of the <i>Electricity Act 1996</i> (b) there are no aboveground powerlines adjoining the site that are the subject of the proposed development.

### Design in Urban Areas

### **Assessment Provisions (AP)**

Desired Outcome (DO)

763

	Desired Outcome	4.4 - Attachment 7
DO 1 Deve	elopment is:	
(a) (b) (c) (d)	contextual - by considering, recognising and carefully responding to its natural surrounding contributing to the character of the locality durable - fit for purpose, adaptable and long lasting inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, priprovision of quality spaces integrated with the public realm that can be used for access a safety both internally and within the public realm, for occupants and visitors sustainable - by integrating sustainable techniques into the design and siting of developm health, urban heat, water management, environmental performance, biodiversity and loconsumption.	vacy and equitable access and promoting the nd recreation and help optimise security and nent and landscaping to improve community

Performance Outcome	Deemed-to-Satisfy Criteria /
	Designated Performance Feature
All Deve	elopment
External A	Appearance
PO 1.1	DTS/DPF 1.1
Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).	None are applicable.
PO 1.2	DTS/DPF 1.2
Where zero or minor setbacks are desirable, development provides shelter over footpaths (in the form of verandahs, awnings, canopies and the like, with adequate lighting) to positively contribute to the walkability, comfort and safety of the public realm.	None are applicable.
PO 1.3	DTS/DPF 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.	None are applicable.
PO 1.4	DTS/DPF 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:	Development does not incorporate any structures that protrude beyond the roofline.
<ul> <li>(a) positioning plant and equipment discretely, in unobtrusive locations as viewed from public roads and spaces</li> <li>(b) screening rooftop plant and equipment from view</li> <li>(c) when located on the roof of non-residential development, locating the plant and equipment as far as practicable from adjacent sensitive land uses.</li> </ul>	
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.	Safety
PO 2.1	DTS/DPF 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.	None are applicable.
PO 2.2 <b>764</b>	DTS/DPF 2.2
Development is designed to differentiate public, communal and private areas.	
<u> </u>	+

Policy24	Pad Code (in effect) version 2023.5 30/03/2023
PO 2.3	DTS/DPF 2.3
Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.	None are applicable. 4.4 - Attachment 7
PO 2.4	DTS/DPF 2.4
Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.	None are applicable.
PO 2.5	DTS/DPF 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.	None are applicable.
Lands	scaping
PO 3.1	DTS/DPF 3.1
Soft landscaping and tree planting are incorporated to:	None are applicable.
<ul> <li>(a) minimise heat absorption and reflection</li> <li>(b) maximise shade and shelter</li> <li>(c) maximise stormwater infiltration</li> <li>(d) enhance the appearance of land and streetscapes.</li> </ul>	
Environmenta	al Performance
PO 4.1	DTS/DPF 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.	None are applicable.
PO 4.2	DTS/DPF 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.	None are applicable.
PO 4.3	DTS/DPF 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.	None are applicable.
On-site Waste Ti	reatment Systems
PO 6.1	DTS/DPF 6.1
Dedicated on-site effluent disposal areas do not include any areas to be used	Effluent disposal drainage areas do not:
for, or could be reasonably foreseen to be used for, private open space, driveways or car parking.	<ul> <li>(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</li> <li>(b) use an area also used as a driveway</li> <li>(c) encroach within an area used for on-site car parking or result in less on-site car parking than that specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.</li> </ul>
	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 <b>76</b> 5	DTS/DPF 7.2
Vehicle parking areas appropriately located, designed and constructed to	None are applicable.

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
minimise impacts on adjacent sensitive receivers through measures such as ensuring they are attractively developed and landscaped, screen fenced and the like.	4.4 - Attachment 7
PO 7.3	DTS/DPF 7.3
Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.	None are applicable.
PO 7.4	DTS/DPF 7.4
Street-level vehicle parking areas incorporate tree planting to provide shade, reduce solar heat absorption and reflection.	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	DTS/DPF 7.5
Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.	Vehicle parking areas comprising 10 or more car parking spaces include soft landscaping with a minimum dimension of:
	<ul><li>(a) 1m along all public road frontages and allotment boundaries</li><li>(b) 1m between double rows of car parking spaces.</li></ul>
PO 7.6	DTS/DPF 7.6
Vehicle parking areas and associated driveways are landscaped to provide shade and positively contribute to amenity.	None are applicable.
PO 7.7	DTS/DPF 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.	None are applicable.
Earthworks ar	nd sloping land
PO 8.1	DTS/DPF 8.1
Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	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	DTS/DPF 8.2
Driveways and access tracks designed and constructed to allow safe and convenient access on sloping land.	Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8) satisfy (a) and (b):
	<ul> <li>(a) do not have a gradient exceeding 25% (1-in-4) at any point along the driveway</li> <li>(b) are constructed with an all-weather trafficable surface.</li> </ul>
PO 8.3	DTS/DPF 8.3
Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8):	None are applicable.
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<ul> <li>(a) do not contribute to the instability of embankments and cuttings</li> <li>(b) provide level transition areas for the safe movement of people and goods to and from the development</li> <li>(c) are designed to integrate with the natural topography of the land.</li> </ul>	
(b) provide level transition areas for the safe movement of people and goods to and from the development	DTS/DPF 8.4
(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 8.4  None are applicable.
(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.  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	
(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.  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.	None are applicable.
(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.  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.  PO 8.5  Development does not occur on land at risk of landslip or increase the potential for landslip or land surface instability.	None are applicable.  DTS/DPF 8.5

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones.	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	DTS/DPF 10.2	
Development mitigates direct overlooking from balconies to habitable rooms	One of the following is satisfied:	
and private open space of adjoining residential uses in neighbourhood type zones.	<ul> <li>(a) the longest side of the balcony or terrace will face a public road, public road reserve or public reserve that is at least 15m wide in all places faced by the balcony or terrace or</li> <li>(b) all sides of balconies or terraces on upper building levels are permanently obscured by screening with a maximum 25% transparency/openings fixed to a minimum height of:         <ol> <li>(i) 1.5m above finished floor level where the balcony is located at least 15 metres from the nearest habitable window of a dwelling on adjacent land</li> <li>or</li> </ol> </li> </ul>	
	(ii) 1.7m above finished floor level in all other cases	
Site Facilities / Waste Storage (exclu	ding low rise residential development)	
PO 11.1	DTS/DPF 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.	None are applicable.	
PO 11.2	DTS/DPF11.2	
Communal waste storage and collection areas are located, enclosed and designed to be screened from view from the public domain, open space and dwellings.	None are applicable.	
PO 11.3	DTS/DPF11.3	
Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.	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.	None are applicable.	
PO 11.5	DTS/DPF 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.	None are applicable.	
	Medium and High Rise	
External /	Appearance	
PO 12.1	DTS/DPF 12.1	
Buildings positively contribute to the character of the local area by responding to local context.	None are applicable.	
PO 12.2	DTS/DPF 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.	None are applicable.	
PO 12.3	DTS/DPF 12.3	
Buildings are designed to reduce visual mass by breaking up building elevations into distinct elements.	None are applicable.	
PO 12.4	DTS/DPF 12.4	
Boundary walls visible from public land include visually interesting treatments to break up large blank elevations. 767	None are applicable.	
PO 12.5	DTS/DPF 12.5	

Policy24	P&D Code (in effect) Version 2023.5 30/03/202		
External materials and finishes are durable and age well to minimise ongoing maintenance requirements.	Buildings utilise a combination of the following external materials and finishes  4.4 - Attachment 7  (a) masonry (b) natural stone (c) pre-finished materials that minimise staining, discolouring or deterioration.		
PO 12.6	DTS/DPF 12.6		
Street-facing building elevations are designed to provide attractive, high quality and pedestrian-friendly street frontages.	(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	DTS/DPF 12.7		
Entrances to multi-storey buildings are safe, attractive, welcoming, functional and contribute to streetscape character.	<ul> <li>(a) oriented towards the street</li> <li>(b) clearly visible and easily identifiable from the street and vehicle parking areas</li> <li>(c) designed to be prominent, accentuated and a welcoming feature if there are no active or occupied ground floor uses</li> <li>(d) designed to provide shelter, a sense of personal address and transitional space around the entry</li> <li>(e) located as close as practicable to the lift and / or lobby access to minimise the need for long access corridors</li> <li>(f) designed to avoid the creation of potential areas of entrapment.</li> </ul>		
PO 12.8	DTS/DPF 12.8		
Building services, plant and mechanical equipment are screened from the public realm.	None are applicable.		
Lands	ccaping		
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	DTS/DPF 13.2		
Deep soil zones are provided to retain existing vegetation or provide areas that can accommodate new deep root vegetation, including tall trees with large canopies to provide shade and soften the appearance of multi-storey buildings.	Multi-storey development provides deep soil zones and incorporates trees at not less than the following rates, except in a location or zone where full site coverage is desired.		
	Site area Minimum deep Minimum Tree / deep soil soil area dimension zones		
	<300 m <sup>2</sup> 10 m <sup>2</sup> 1.5m 1 small tree / 10 m <sup>2</sup>		
	300-1500 m <sup>2</sup> 7% site area 3m 1 medium tree / 30 m <sup>2</sup>		
	>1500 m <sup>2</sup> 7% site area  6m  1 large or medium tree / 60 m <sup>2</sup>		
	Tree size and site area definitions		
768	Small tree 4-6m mature height and 2-4m canopy spread		

Medium tree

6-12m mature height and 4-8m canopy spread

Policy24		P&D Code (in effect) Version 2023.5 30/03/2023
	Large tree	12m mature height a Ant cathtachment 7
	Site area	The total area for development site, not average area per dwelling
PO 13.3	DTS/DPF 13.3	
Deep soil zones with access to natural light are provided to assist in maintaining vegetation health.	None are applicabl	e.
PO 13.4	DTS/DPF 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.	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.	
Enviro	nmental	
PO 14.1	DTS/DPF 14.1	
Development minimises detrimental micro-climatic impacts on adjacent land and buildings.	None are applicabl	e.
PO 14.2	DTS/DPF 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.	None are applicabl	le.
PO 14.3	DTS/DPF 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.	None are applicabl	le.
Car P	arking	
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 parkin 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	DTS/DPF 15.2	
Multi-level vehicle parking structures within buildings complement the surrounding built form in terms of height, massing and scale.	None are applicabl	e.
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:	DTS/DPF 16.1 None are applicabl	le.

or areas with those of other buildings so that views are oblique rather than direct to avoid any where appropriately that interrupt views or that provide a spatial separation between balconies or windows of habitable rooms screening devices that are integrated into the building design and have minimal negative effect on residents' or neighbours' amenity.  All non-residential development  Water Sensitive Design  DTSDPF 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.  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.  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.  Wash-down and Waste Loading and Unloading  PO 43.1  None are applicable.  DTS/DPF 43.1  None are applicable.  DTS/DPF 43.1  None are applicable.  OTS/DPF 43.1  None are applicable.	Policy	24	P&D Code (in effect) Version 2023.5 30/03/2023
(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.  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.  PO 42.2  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 sist to ensure that development does not increase peak flows in downstream systems.  Watch down and Waste Loading and Unioading  PO 43.1  Areas for activities including loading and unloading, storage of waste refuse bins in commercial and industrial development 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-ff  (b) pevel with an impervious material to facilitate wastewater collection of sufficient size to prevent 'splash-out' or 'over-spray' of wastewater from the wash-down area  provided a prevent splash-out or 'over-spray' of wastewater from the wash-down area is paid to a sewer,  In the provided area to exclude the entry of external surface stormwater union.  (a) ar teasiment device such as a sediment trap and coalescing plated oil-sprayed with an impervious material to a sewer,	(a)	appropriate site layout and building orientation	
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.  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.  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.  PO 42.3  DTS/DPF 42.2  None are applicable.  DTS/DPF 42.3  None are applicable.  DTS/DPF 42.3  None are applicable.  DTS/DPF 42.3  None are applicable.  DTS/DPF 43.1  None are applicable.  DTS/DPF 43.1  None are applicable.  ODS/DPF 43.1  None are applicable.	(b)	or areas with those of other buildings so that views are oblique rather	4.4 - Attachment 7
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Development likely to result in risk of export of sediment, suspended solids, organic matter, nutrients, oil and grease include stormwater.  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.  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.  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:  (1) a treatment device such as a sediment trap and coalescing plate oil separator with subsequent disposal to a sewer,		Water Sens	itive Design
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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,		paved with an impervious material to facilitate wastewater collection	
(i) a treatment device such as a sediment trap and coalescing plate oil separator with subsequent disposal to a sewer,	(c)		
plate oil separator with subsequent disposal to a sewer,	(d)	•	
or		plate oil separator with subsequent disposal to a sewer, private or Community Wastewater Management Scheme	
(ii) a holding tank and its subsequent removal off-site on a regular basis.			

### Infrastructure and Renewable Energy Facilities

### **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome
DO 1	Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and manages adverse visual impacts on natural and rural landscapes and residential amenity.

### Performance Outcome

## Deemed-to-Satisfy Effection 17 Designated Performance Feature

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:

- 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, saline or poorly drained land to minimise environmental harm.

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:

- 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.

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.

### Interface between Land Uses

### **Assessment Provisions (AP)**

Desired Outcome (DO)

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

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

### Performance Outcome

### Deemed-to-Satisfy Criteria / Designated Performance Feature

Hours of Operation

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
- 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.

DTS/DPF 2.1

Development operating within the following hours:

Class of Development	Hours of operation
Consulting room	7am to 9pm, Monday to Friday 8am to 5pm, Saturday
Office	7am to 9pm, Monday to Friday 8am to 5pm, Saturday
Shop, other than any one or combination of the following:	7am to 9pm, Monday to Friday 8am to 5pm, Saturday and Sunday

77*′* 

Policy24	P&D Code (in effect) Version 2023.5 30/03/202	
	(b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone	
Over	shadowing	
PO 3.1	DTS/DPF 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.	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	DTS/DPF 3.2	
Overshadowing of the primary area of private open space or communal open space of adjacent residential land uses in:	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:	
<ul> <li>a. a neighbourhood type zone is minimised to maintain access to direct winter sunlight</li> <li>b. other zones is managed to enable access to direct winter sunlight.</li> </ul>	<ul> <li>a. for ground level private open space, the smaller of the following:</li> <li>i. half the existing ground level open space</li> <li>or</li> <li>ii. 35m2 of the existing ground level open space (with at least one of the area's dimensions measuring 2.5m)</li> <li>b. for ground level communal open space, at least half of the existing ground level open space.</li> </ul>	
PO 3.3	DTS/DPF 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.	None are applicable.	
	lting Noise or Vibration	
PO 4.1	DTS/DPF 4.1	
Development that emits noise (other than music) does not unreasonably impact the amenity of sensitive receivers (or lawfully approved sensitive receivers).	Noise that affects sensitive receivers achieves the relevant Environment Protection (Noise) Policy criteria.	
PO 4.2	DTS/DPF 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:		
<ul> <li>(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</li> <li>(b) when sited outdoors, locating such areas as far as practicable from adjacent sensitive receivers and zones primarily intended to</li> </ul>		
accommodate sensitive receivers  (c) housing plant and equipment within an enclosed structure or acoust enclosure	ic	
(d) providing a suitable acoustic barrier between the plant and / or equipment and the adjacent sensitive receiver boundary or zone.		
PO 4.5	DTS/DPF 4.5	
Outdoor areas associated with licensed premises (such as beer gardens or	Mara and and Backla	

Policy24	P&D (	Code (in effect) Version 2023.5 30/03/20
receivers).		A.A. Attack as a state
PO 4.6	DTS/DPF 4.6	4.4 - Attachment
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	Development incorporating music includes noise attenuation measures that will achieve the following noise levels:	
sensitive receivers.	Assessment location	Music noise level
	Externally at the nearest existing or envisaged noise sensitive location	Less than 8dB above the level of background noise (L <sub>90,15min</sub> ) in any octave band of the sound spectrum (LOCT10,15 < LOCT90,15 + 8dB)
Air C	Quality	1
PO 5.2	DTS/DPF 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:	None are applicable.	
<ul> <li>incorporating appropriate treatment technology before exhaust emissions are released</li> <li>locating and designing chimneys or exhaust flues to maximise the dispersion of exhaust emissions, taking into account the location of sensitive receivers.</li> </ul>		
Ligh	t Spill	
PO 6.1	DTS/DPF 6.1	
External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved sensitive receivers).	None are applicable.	
Solar Reflec	ctivity / Glare	
PO 7.1	DTS/DPF 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.	None are applicable.	

### Out of Activity Centre Development

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome		
DO1	The role of Activity Centres in contributing to the form and pattern of development and enabling equitable and convenient access to a range of shopping, administrative, cultural, entertainment and other facilities in a single trip is maintained and reinforced.	

Performance Outcomes and Deemed to Satisfy / Designated Performance Outcome Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1	DTS/DPF 1.1
Non-residential development outside Activity Centres of a scale and type that does not diminish the role of Activity Centres:	None are applicable.
(a) as primary locations for shopping, administrative, cultural, entertainment and community services (b) as a focus for regular social and business gatherings	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
(c) in contributing to or maintaining a pattern of development that supports equitable community access to services and facilities.	4.4 - Attachment 7	
PO 1.2	DTS/DPF 1.2	
Out-of-activity centre non-residential development complements Activity Centres through the provision of services and facilities:	None are applicable.	
(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.		

### **Site Contamination**

### Assessment Provisions (AP)

Desired Outcome (DO)

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	DTS/DPF 1.1		
Ensure land is suitable for use when land use changes to a more sensitive use.	Development satisfies (a), (b), (c) or (d):		
	<ul> <li>(a) does not involve a change in the use of land</li> <li>(b) involves a change in the use of land that does not constitute a change to a more sensitive use</li> <li>(c) involves a change in the use of land to a more sensitive use on land at which site contamination is unlikely to exist (as demonstrated in a site contamination declaration form)</li> <li>(d) involves a change in the use of land to a more sensitive use on land at which site contamination exists, or may exist (as demonstrated in a site contamination declaration form), and satisfies both of the following: <ul> <li>(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 <ul> <li>or</li> <li>B. the land is suitable for the proposed use or range of uses (without the need for any further remediation) or</li> <li>C. where remediation is, or remains, necessary for the proposed use (or range of uses), remediation work has been carried out or will be carried out (and the applicant has provided a written undertaking that the remediation works will be implemented in association with the development)</li> </ul> </li> <li>and <ul> <li>(ii) no other class 1 activity or class 2 activity has taken place at the land since the preparation of the site contamination audit report (as demonstrated in a site contamination declaration form).</li> </ul> </li> </ul></li></ul>		
774			

### Transport, Access and Parking

### 4.4 - Attachment 7

### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome		
DO 1	A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.	

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature		
Movement Systems			
PO 1.2	DTS/DPF 1.2		
Development is designed to discourage commercial and industrial vehicle movements through residential streets and adjacent other sensitive receivers.	None are applicable.		
PO 1.4	DTS/DPF 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.	All vehicle manoeuvring occurs onsite.		
Sigh	tlines		
PO 2.1	DTS/DPF 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.	None are applicable.		
PO 2.2	DTS/DPF 2.2		
Walls, fencing and landscaping adjacent to driveways and corner sites are designed to provide adequate sightlines between vehicles and pedestrians.	None are applicable.		
Vehicle	e Access		
PO 3.1	DTS/DPF 3.1		
Safe and convenient access minimises impact or interruption on the operation of public roads.	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	DTS/DPF 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.	None are applicable.		
PO 3.3	DTS/DPF 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.	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	DTS/DPF 3.5		

Policy24 P&D Code (in effect) Version 2023.5 30/03/2023 Vehicle access to designated car parking spaces satisfy (a) or (b): Access points are located so as not to interfere with street trees, existing is provided via a lawfully existing 4 4 hori Attachment 7 street furniture (including directional signs, lighting, seating and weather access point for which consent has been granted shelters) or infrastructure services to maintain the appearance of the application for the division of land streetscape, preserve local amenity and minimise disruption to utility (b) where newly proposed, is set back: infrastructure assets. 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 2m or more from the base of the trunk of a street tree unless consent is provided from the tree owner for a lesser (iii) 6m or more from the tangent point of an intersection of 2 or more roads outside of the marked lines or infrastructure dedicating a pedestrian crossing. PO 3.6 DTS/DPF 3.6 Driveways and access points are separated and minimised in number to Driveways and access points: optimise the provision of on-street visitor parking (where on-street parking is for sites with a frontage to a public road of 20m or less, one access appropriate). point no greater than 3.5m in width is provided for sites with a frontage to a public road greater than 20m: a single access point no greater than 6m in width is provided (ii) not more than two access points with a width of 3.5m each are provided. PO 3.7 DTS/DPF 3.7 Access points are appropriately separated from level crossings to avoid Development does not involve a new or modified access or cause an increase interference and ensure their safe ongoing operation. 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 DTS/DPF 3.8 Driveways, access points, access tracks and parking areas are designed and None are applicable. constructed to allow adequate movement and manoeuvrability having regard to the types of vehicles that are reasonably anticipated. DTS/DPF 3 9 Development is designed to ensure vehicle circulation between activity areas None are applicable. occurs within the site without the need to use public roads. Access for People with Disabilities PO 4.1 DTS/DPF 4.1 Development is sited and designed to provide safe, dignified and convenient None are applicable. access for people with a disability. Vehicle Parking Rates PO 5 1 DTS/DPF 5 1 Sufficient on-site vehicle parking and specifically marked accessible car Development provides a number of car parking spaces on-site at a rate no parking places are provided to meet the needs of the development or land less than the amount calculated using one of the following, whichever is use having regard to factors that may support a reduced on-site rate such as: relevant: availability of on-street car parking Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements (b) shared use of other parking areas (b) Transport, Access and Parking Table 2 - Off-Street Vehicle Parking (c) in relation to a mixed-use development, where the hours of Requirements in Designated Areas operation of commercial activities complement the residential use of (c) if located in an area where a lawfully established carparking fund the site, the provision of vehicle parking may be shared operates, the number of spaces calculated under (a) or (b) less the the adaptive reuse of a State or Local Heritage Place. 776 number of spaces offset by contribution to the fund.

Policy24 P&D Code (in effect) Version 2023.5 30/03/20		
Vehicle Pa	rking Areas	
PO 6.1	DTS/DPF 6.1 4.4 - Attachment 7	
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.	Movement between vehicle parking areas within the site can occur without the need to use a public road.	
PO 6.2	DTS/DPF 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.	None are applicable.	
PO 6.3	DTS/DPF 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.	None are applicable.	
PO 6.4	DTS/DPF 6.4	
Pedestrian linkages between parking areas and the development are provided and are safe and convenient.	None are applicable.	
PO 6.5	DTS/DPF 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.	None are applicable.	
PO 6.6	DTS/DPF 6.6	
Loading areas and designated parking spaces for service vehicles are provided within the boundary of the site.	Loading areas and designated parking spaces are wholly located within the site.	
Undercroft and Below Ground	Garaging and Parking of Vehicles	
PO 7.1	DTS/DPF 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.	None are applicable.	
Bicycle Parking in	Designated Areas	
PO 9.1	DTS/DPF 9.1	
The provision of adequately sized on-site bicycle parking facilities encourages cycling as an active transport mode.	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	DTS/DPF 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.	None are applicable.	
PO 9.3	DTS/DPF 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.	None are applicable.	
Corner	Cut-Offs	
PO 10.1	DTS/DPF 10.1	
Development is located and designed to ensure drivers can safely turn into and out of public road junctions.	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:	

**777** 

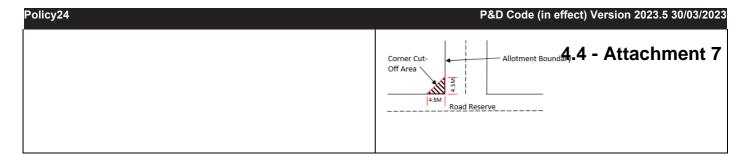


Table 1 - General Off-Street Car Parking Requirements

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.	
Health Related Uses		
Consulting room 4 spaces per consulting room excluding ancillary facilities.		

Table 2 - Off-Street Car Parking Requirements in Designated Areas

Class of Car Parking Rate Development		Designated Areas	
	Where a developmore than one determined the overall will be taken to be car parking reduced the developments.		
	Minimum number of	Maximum number of	
	spaces	spaces	
	Non-residentia	al development	
Non-residential development excluding tourist accommodation	3 spaces per 100m2 of gross leasable floor area.	5 spaces per 100m2 of gross leasable floor area.	City Living Zone
			Urban Corridor (Boulevard) Zone
			Urban Corridor (Business) Zone
			Urban Corridor (Living) Zone
			Urban Corridor (Main Street ) Zone
			Urban Neighbourhood Zone
		Lycontian! calumn identifies locations w	

Table 2 - CriteriaThe following criteria are used in conjunction with Table 27778 xception' column identifies locations where the criteria do not apply and the car parking rates in Table 2 are applicable.

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
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 <sup>(2)</sup> (b) is within 400 metres of a bus interchange <sup>(1)</sup> (c) is within 400 metres of an O-Bahn interchange <sup>(1)</sup> (d) is within 400 metres of a passenger rail station <sup>(1)</sup> (e) is within 400 metres of a passenger tram station <sup>(1)</sup> (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

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.  1 space per 20 employees plus 1 space per 20 consulting rooms for customers.	
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 Urban Corridor (Living) Zone Urban Corridor (Main Street ) Zone Urban Neighbourhood Zone	Metropolitan Adelaide

# **ALL OTHER ELEMENTS**

#### 1 FRINGE-LILY PL CHITON SA 5211

#### Address:

Click to view a detailed interactive SAILIS in SAILIS

## 4.4 - Attachment 7

To view a detailed interactive property map in SAPPA click on the map below



# **Property Zoning Details**

Zon

**Community Facilities** 

Overlay

**Environment and Food Production Area** 

Hazards (Flooding)

Hazards (Bushfire - Medium Risk) Hazards (Flooding - General)

Native Vegetation

Prescribed Water Resources Area

Water Resources

Local Variation (TNV)

Maximum Building Height (Metres) (Maximum building height is 12m) Maximum Building Height (Levels) (Maximum building height is 3 levels)

#### **Development Pathways**

## Community Facilities

#### 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.

- Building work on railway land
- Internal building work
- Partial demolition of a building or structure
- Shade sail
- Solar photovoltaic panels (roof mounted)
- 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.

- Advertisement
- Temporary accommodation in an area affected by bushfire

#### 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.

- Advertisement
- Consulting room
- Demolition
- Office

781

#### **3 FRINGE-LILY PL CHITON SA 5211**

#### Address:

Click to view a detailed interactive SAILIS

# 4.4 - Attachment 7

To view a detailed interactive property map in SAPPA click on the map below



#### **Property Zoning Details**

**Community Facilities** 

Overlay

**Environment and Food Production Area** Hazards (Bushfire - Medium Risk) Hazards (Flooding - General) Native Vegetation

Prescribed Water Resources Area

Water Resources

Local Variation (TNV)

Maximum Building Height (Metres) (Maximum building height is 12m) Maximum Building Height (Levels) (Maximum building height is 3 levels)

# **Development Pathways**

# ■ Community Facilities

## 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.

- Brush fence
- Building work on railway land
- Educational establishment
- Internal building work
- Partial demolition of a building or structure
- Private bushfire shelter
- Protective tree netting structure
- Shade sail
- Solar photovoltaic panels (roof mounted)
- Swimming pool or spa pool
- 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.

- Advertisement
- Temporary accommodation in an area affected by bushfire

782

#### **5 FRINGE-LILY PL CHITON SA 5211**

Address:

Click to view a detailed interactive SAILIS

## 4.4 - Attachment 7

To view a detailed interactive property map in SAPPA click on the map below



# **Property Zoning Details**

Zon

#### Community Facilities

Overlay

Environment and Food Production Area Hazards (Bushfire - Medium Risk) Hazards (Flooding - General)

Hazards (Flooding - Evidence Required)

Native Vegetation

Prescribed Water Resources Area

Water Resources

Local Variation (TNV)

Maximum Building Height (Metres) (Maximum building height is 12m) Maximum Building Height (Levels) (Maximum building height is 3 levels)

#### **Development Pathways**

## Community Facilities

#### 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.

- Brush fence
- Building work on railway land
- Educational establishment
- Internal building work
- Partial demolition of a building or structure
- Private bushfire shelter
- Protective tree netting structure
- Shade sail
- Solar photovoltaic panels (roof mounted)
- Swimming pool or spa pool
- 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.

- Advertisement
- Temporary accommodation in an area affected by bushfire

#### 3. Code Assessed - Performance Assessed

Performance Assessed development types listed below are those 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.

- Retaining wall
- Tree-damaging activity

# 4.4 - Attachment 7

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

# **Community Facilities Zone**

**Assessment Provisions (AP)** 

Desired Outcome (DO)

Desired Outcome	
DO 1	Provision of a range of community, educational, recreational and health care facilities.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature	
Land Use and Intensity		
P0 1.1	DTS/DPF 1.1	
Development is associated with or ancillary to the provision of community, educational, recreational and / or health care services.	Development comprises one or more of the following:  (a) Cemetery (b) Community facility (c) Consulting room (d) Educational establishment (e) Emergency services facility (f) Health care facility (g) Hospital (h) Indoor recreation facility (i) Library (j) Office associated with community service (k) Place of worship (l) Pre-school (m) Recreation area (n) Shop	
P0 1.2 Shops including restaurants are of a scale that is subordinate to the principal community use of land.	DTS/DPF 1.2  Shop gross leasable floor area does not exceed 250m <sup>2</sup> .	
PO 1.3	DTS/DPF 1.3	
Offices are of a scale that is subordinate to the principal community use of land.	Office gross leasable floor area does not exceed 250m <sup>2</sup> .	
P01.4 <b>78</b>	DTS/DPF 1.4	
Integration and coordination of land uses to enhance the accessibility and	None are applicable.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/202
efficiency of service delivery.	
P0 1.5	dts/dpf 1.5 4.4 - Attachment 7
Development avoids inhibiting or prejudicing future delivery of community,	None are applicable
educational, recreational or health care services.	None are applicable.
PO 1.6	DTS/DPF 1.6
Community facilities are designed to encourage flexible and adaptable use of open space and facilities for a range of uses over time.	None are applicable.
PO 1.7	DTS/DPF 1.7
Expansion of existing community services such as educational establishments, community facilities and pre-schools in a manner which complements the scale of development envisaged by the desired outcome for the neighbourhood.	Alteration of or addition to existing educational establishments, community facilities or pre-schools where all the following are satisfied:  (a) set back at least 3m from any boundary shared with a residential land
and notification and the second secon	use
	(b) building height not exceeding 1 building level
	(c) the total floor area of the building not exceeding 150% of the total floor area prior to the addition/alteration
	(d) development satisfies 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.
Building Height and Setbacks	
PO 2.1 DTS/DPF 2.1	
Building height is consistent with the maximum height expressed in any relevant <i>Building Height Technical and Numeric Variation</i> or otherwise generally consistent with the prevailing character of the locality and height of nearby	Other than on a Catalyst site in the St Andrews Hospital Precinct Subzone, development does not exceed the following building height(s):
buildings.	Maximum Building Height (Levels)
	Maximum building height is 3 levels
	Maximum Building Height (Metres)
	Maximum building height is 12m
	In relation to DTS/DPF 2.1, in instances where:
	(a) more than one value is returned in the same field, refer to the Maximum Building Height (Levels) Technical and Numeric Variation layer or Maximum Building Height (Metres) Technical and Numeric Variation layer in the SA planning database to determine the applicable value relevant to the site of the proposed development
	<ul> <li>(b) only one value is returned (i.e. there is one blank field), then the relevant height in metres or building levels applies with no criteria for the other</li> </ul>
	(c) no value is returned (i.e. there are blank fields for both maximum building height (metres) and maximum building height (levels), then none are applicable and the relevant development cannot be classified as deemed-to-satisfy.
P0 2.2	DTS/DPF 2.2
Buildings mitigate the visual impacts of massing on residential development within a neighbourhood-type zone.	Except in the St Andrews Hospital Precinct Subzone and the part of the WHC and Memorial Hospital Precinct Subzone north of Kermode Street, buildings constructed within a building envelope provided by a 45 degree plane measured from a height of 3m above natural ground level at the boundary of

786

plan and DTS/DPF 4.1 is met.

#### Table 5 - Procedural Matters (PM) - Notification

# 4.4 - Attachment 7

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.

ass of Development	Exceptions
Column A)	(Column B)
Development which, in the opinion of the relevant author minor nature only and will not unreasonably impact on to or occupiers of land in the locality of the site of the development.	the owners None specified.
2. Any development involving any of the following (or of an combination of any of the following):  (a) advertisement (b) air handling unit, air conditioning system or exit (c) building work on railway land (d) community facility (e) educational establishment (f) fence (g) pre-school (h) private bushfire shelter (i) protective tree netting structure (j) recreation area (k) retaining wall (l) shade sail (m) solar photovoltaic panels (roof mounted) (n) swimming pool or spa pool (o) water tank.	in Community Facilities Zone DTS/DPF 2.1 or does not satisfy any of the
3. Any development involving any of the following (or of an combination of any of the following):  (a) internal building works  (b) land division  (c) replacement building  (d) temporary accommodation in an area affected bushfire  (e) tree damaging activity.	None specified.
4. Consulting room.	Except where the site of the development is adjacent land to a site (or land) used for residential purposes in a neighbourhood-type zone.
5. 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.
6. Office.	787xcept office that exceeds the maximum building height specified in Community Facilities Zone DTS/DPF 2.1, or is on a Catalyst Site in the St Andrews Hospital Precinct Subzone and exceeds the maximum building height

Policy24 P&D Code (in effect) Version 2023.5 30/03/2		
	in Community Facilities Zone DTS/DPF 2.1 that applies to development not on a Catalyst Site, or does not satisfy any of the All Aving: Attachment 7  1. Community Facilities Zone DTS/DPF 1.3	
	2. Community Facilities Zone DTS/DPF 2.2 3. Community Facilities Zone DTS/DPF 2.3.	
7. Shop.	Except shop that exceeds the maximum building height specified in Community Facilities Zone DTS/DPF 2.1, or is on a Catalyst Site in the St Andrews Hospital Precinct Subzone and exceeds the maximum building height in Community Facilities Zone DTS/DPF 2.1 that applies to development not on a Catalyst Site, or does not satisfy any of the following:  1. Community Facilities Zone DTS/DPF 1.2 2. Community Facilities Zone DTS/DPF 2.2 3. Community Facilities Zone DTS/DPF 2.3.	
8. Telecommunications facility.	Except telecommunications facility that:  1. is within 50m of a neighbourhood-type zone or 2. exceeds 30m in height or 3. is on a site that is adjacent land to a site (or land) used for residential purposes.	
Placement of Notices - Exemptions for Performance Assessed Development		

None specified.

**Placement of Notices - Exemptions for Restricted Development** 

None specified.

# Part 3 - Overlays

# **Environment and Food Production Areas Overlay**

# **Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome	
DO 1	Protection of valuable rural, landscape, environmental and food production areas from urban encroachment.

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
P0 1.1 <b>788</b>	DTS/DPF 1.1
Land division undertaken in accordance with Section 7 of the <i>Planning</i> , Development and Infrastructure Act 2016.	None are applicable.

# 4.4 - Attachment 7

## **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
None	None	None	None

# Hazards (Bushfire - Medium Risk) Overlay

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome		
DO 1	Development, including land division responds to the medium level of bushfire risk and potential for ember attack and radiant heat by siting and designing buildings in a manner that mitigates the threat and impact of bushfires on life and property taking into account the increased frequency and intensity of bushfires as a result of climate change.		
DO 2	To facilitate access for emergency service vehicles to aid the protection of lives and assets from bushfire danger.		

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature	
Siting		
P0 1.1	DTS/DPF 1.1	
Buildings and structures are located away from areas that pose an unacceptable bushfire risk as a result of vegetation cover and type, and terrain.	None are applicable.	
Built Form		
PO 2.1	DTS/DPF 2.1	
Buildings and structures are designed and configured to reduce the impact of bushfire through using designs that reduce the potential for trapping burning debris against or underneath the building or structure, or between the ground and building floor level in the case of transportable buildings and buildings on stilts.	None are applicable.	
PO 2.2	DTS/DPF 2.2	
Extensions to buildings, outbuildings and other ancillary structures are sited and constructed using materials to minimise the threat of fire spread to residential and tourist accommodation (including boarding houses, hostels, dormitory style accommodation, student accommodation and Workers' accommodation) in the event of bushfire.	Outbuildings and other ancillary structures are sited no closer than 6m from the habitable building.	
786 Habitable	Buildings	
PO 3.1	DTS/DPF 3.1	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023			
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.	None are applicable.  4.4 - Attachment			
PO 3.2	DTS/DPF 3.2			
Residential, tourist accommodation and habitable buildings for vulnerable communities (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation) is sited away from vegetated areas that pose an unacceptable bushfire risk.	Residential, 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.			
P0 3.3	DTS/DPF 3.3			
Residential, tourist accommodation and habitable buildings for vulnerable communities, (including boarding houses, hostels, dormitory style accommodation, student accommodation and workers' accommodation), has a dedicated area available that is capable of accommodating a bushfire protection system comprising firefighting equipment and water supply in accordance with Ministerial Building Standard MBS 008 - Designated bushfire prone areas - additional requirements.	None are applicable.			
	Division I			
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 4.1  None are applicable.			
P0 4.2	DTS/DPF 4.2			
Land division is designed to provide a continuous street pattern to facilitate the safe movement and evacuation of emergency vehicles, residents, occupants and visitors.	None are applicable.			
PO 4.3	DTS/DPF 4.3			
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.	None are applicable.			
PO 4.4  Land division incorporates perimeter roads of adequate design in conjunction with bushfire buffer zones to achieve adequate separation between residential allotments and areas of unacceptable bushfire risk and to support safe access for the purposes of fire-fighting.	DTS/DPF 4.4 None are applicable.			
Vehicle Access - Roads,	Driveways and Fire Tracks			
P0 5.1 Roads are designed and constructed to facilitate the safe and effective:	DTS/DPF 5.1 Roads:			
(a) access, operation and evacuation of fire-fighting vehicles and emergency personnel (b) evacuation of residents, occupants and visitors.  790	<ul> <li>(a) are constructed with a formed, all-weather surface</li> <li>(b) have a gradient of not more than 16 degrees (1-in-3.5) at any point along the road</li> <li>(c) have a cross fall of not more than 6 degrees (1-in-9.5) at any point along the road</li> <li>(d) have a minimum formed road width of 6m</li> <li>(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)</li> <li>(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)</li> <li>(g) incorporating cul-de-sac endings or dead end roads do not exceed</li> </ul>			

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Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
	200m in length and the end of the road has either:  (i) a turning area with a miniqua formattachment 7  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 5.2	DTS/DPF 5.2
Access to habitable buildings is designed and constructed to facilitate the safe and effective:	Access is in accordance with (a) or (b):
(a) access, operation and evacuation of fire-fighting vehicles and emergency personnel	(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) evacuation of residents, occupants and visitors.	(b) driveways:
	(i) do not exceed 600m in length
	(ii) are constructed with a formed, all-weather surface
	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)
	<sup>(vii)</sup> 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 5.3	DTS/DPF 5.3
Development does not rely on fire tracks as means of evacuation or access for fire-fighting purposes unless there are no safe alternatives available.	None are applicable.

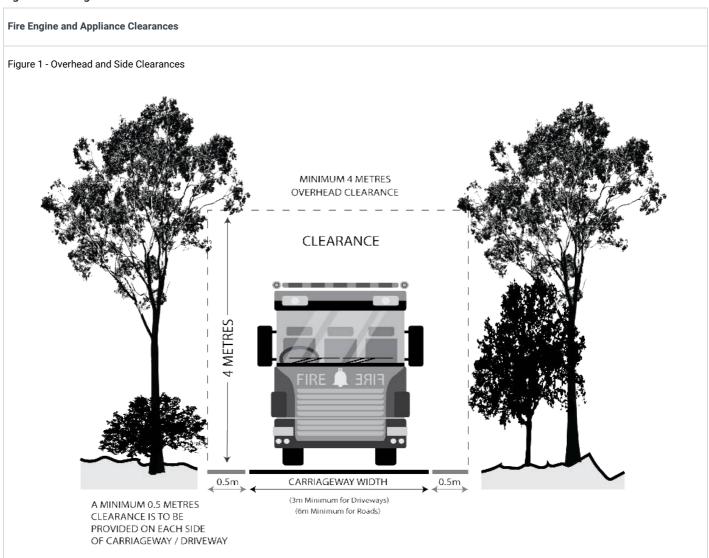
# Procedural Matters (PM) - Referrals

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
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Policy24	P&D Code (in effect) Version 2023.5 30/			
			Reference	
		4.4 - Attachn		
None	None	None	None	

## **Figures and Diagrams**



#### **Roads and Driveway Design**

Figure 2 - Road and Driveway Curves

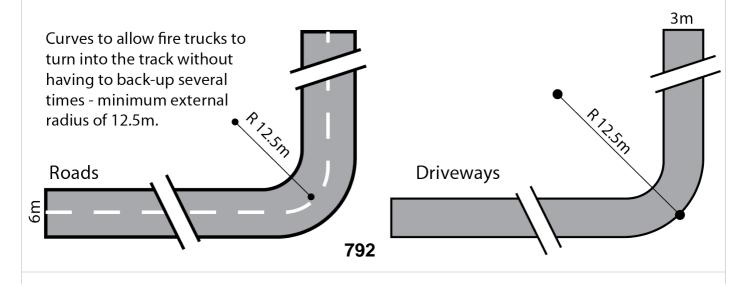


Figure 3 - Full Circle Turning Area

4.4 - Attachment 7

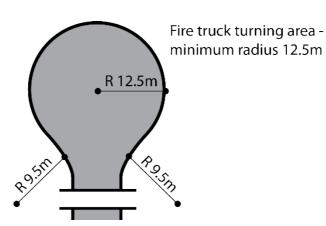
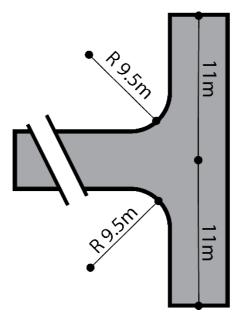


Figure 4 - 'T' or 'Y' Shaped Turning Head



"T" shaped turning area for fire trucks to reverse into so they can turn around

- minimum length 11m.

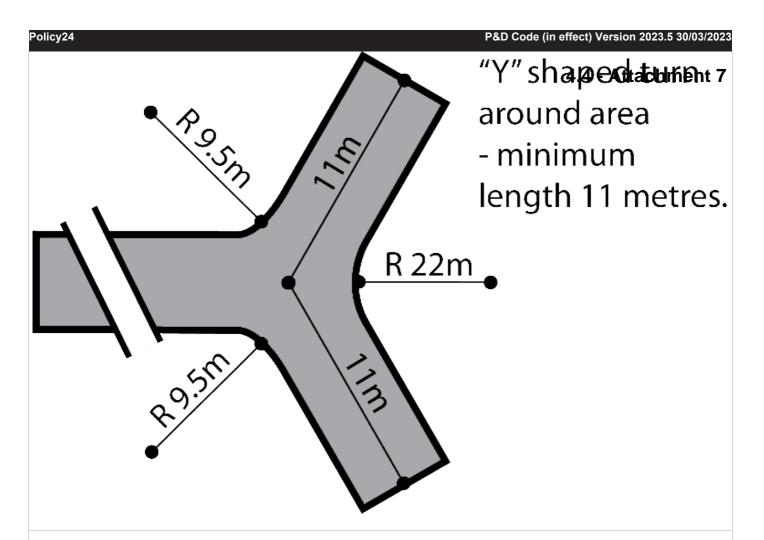
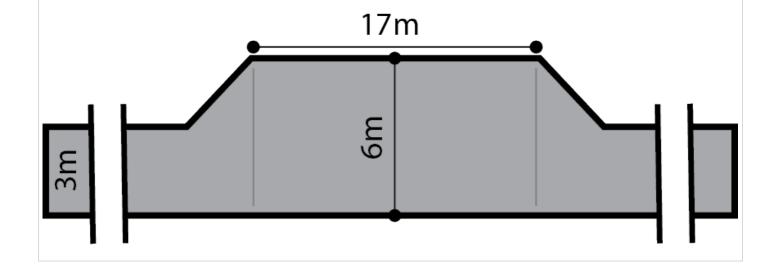


Figure 5 - Driveway Passing Bays

Passing bay for fire trucks - minimum width 6 metres, minimum length 17 metres.



**Hazards (Flooding) Overlay** 

794

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# 4.4 - Attachment 7

Desired Outcome (DO)

Desired Outcome				
Impacts on people, property, infrastructure and the environment from high flood risk are minimised by retaining areas free from development, and minimising intensification where development has occurred.				

Performance Outcome	Deemed-to-Satisfy Criteria /		
	Designated Performance Feature		
Land	Division		
P0 1.1	DTS/DPF 1.1		
Land division is limited to areas where the consequences to buildings and safety are low and can be readily managed or overcome.	None are applicable.		
Lar	nd Use		
P0 2.1	DTS/DPF 2.1		
Development sited and designed to minimise exposure of people and property to unacceptable flood risk.	None are applicable.		
P0 2.2	DTS/DPF 2.2		
Buildings housing vulnerable people, community services facilities, key infrastructure and emergency services are sited away from flood prone areas to enable uninterrupted operation of services and reduce likelihood of entrapment.	Pre-schools, educational establishments, retirement and supported accommodation, emergency services facilities, hospitals and prisons are not located within the Overlay area.		
Flood	Resilience		
P0 3.1	DTS/DPF 3.1		
Development avoids the need for flood protection works.	None are applicable.		
P0 3.2	DTS/DPF 3.2		
Development does not cause unacceptable impacts on any adjoining property by the diversion of flood waters or an increase in flood velocity or flood level.	None are applicable.		
P0 3.3	DTS/DPF 3.3		
Development does not impede the flow of floodwaters through the allotment or the surrounding land, or cause an unacceptable loss of flood storage.	None are applicable.		
PO 3.4	DTS/DPF 3.4		
Development avoids frequently flooded or high velocity areas, other than where it is part of a flood mitigation scheme to reduce flood impact.	Other than a recreation area, development is located outside of the 5% AEP principal flow path.		
PO 3.5	DTS/DPF 3.5		
Buildings are sited, designed and constructed to prevent the entry of floodwaters in a 1% AEP flood event where the entry of floodwaters is likely to result in undue damage to, or compromise ongoing activities within, buildings.	<ul> <li>(a) a porch or portico with at least 2 open sides</li> <li>(b) a verandah with at least 3 open sides</li> <li>(c) a carport or outbuilding with at least 2 open sides (whichever elevations face the direction of the flow)</li> </ul>		

Policy24	P&D Code (in effect) Version 2023.5 30/03/202			
	height of a 1% AEP flood event.			
PO 3.6	4.4 - Attachment 7			
Fences do not unreasonably impede floodwaters.	A post and wire fence (other than a chain mesh fence).			
Environment	 tal Protection			
PO 4.1	DTS/DPF 4.1			
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 during a 1% AEP flood event to avoid potential environmental harm.	Development involving the storage or disposal of hazardous materials is wholly located outside of the 1% AEP flood plain or flow path.			
P0 4.2	DTS/DPF 4.2			
Development does not create or aggravate the potential for erosion or siltation or lead to the destruction of vegetation during a flood.	None are applicable.			
Site Ear	rthworks			
PO 5.1	DTS/DPF 5.1			
The depth and extent of filling required to raise the finished floor level of a building does not cause unacceptable impact on any adjoining property by diversion of flood waters, an increase in flood velocity or flood level, or an unacceptable loss of flood storage.	None are applicable.			
P0 5.2	DTS/DPF 5.2			
Driveways, access tracks and parking areas are designed and constructed to minimise excavation and filling.	Filling for ancillary purposes:			
	<ul><li>(a) does not exceed 300mm above existing ground level</li><li>(b) is no more than 5m wide.</li></ul>			
Acc	cess			
P0 6.1	DTS/DPF 6.1			
Development does not occur on land:	None are applicable.			
(a) from which evacuation to areas not vulnerable to flood risk is not possible during a 1% AEP flood event				
(b) which cannot be accessed by emergency services vehicles or essential utility service vehicles during a 1% AEP flood event.				
PO 6.2	DTS/DPF 6.2			
Access driveways and tracks to significant development (i.e. dwellings, places of work, etc.) consist of a safe, all-weather trafficable surface that is accessible during a 1% AEP flood event.	None are applicable.			

# 4.4 - Attachment 7

**Hazards (Flooding - Evidence Required) Overlay** 

**Assessment Provisions (AP)** 

Desired Outcome (DO)

Desired	Outcome
	tential impacts on people, property, infrastructure and the environment from
potential flood risk through the appropriate siting and design of	

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

797

Performance Outcome Deemed-to-Satisfy Criteria /

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023  Designated Performance Feature		
Flood R	desilience		
PO 1.1	DTS/DPF 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.	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		
Environmen	tal Protection		
PO 2.1	DTS/DPF 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.	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

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Hazards (Flooding – General) Overlay

**Assessment Provisions (AP)** 

Desired Outcome (DO) 799

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Land	d Use
P0 1.1	DTS/DPF 1.1
Buildings housing vulnerable people, community services facilities, key infrastructure and emergency services are sited away from flood areas enable uninterrupted operation of services and reduce likelihood of entrapment.	Pre-schools, educational establishments, retirement and supported accommodation, emergency services facilities, hospitals and prisons located outside the 1% AEP flood event.
Flood R	esilience
P0 2.1	DTS/DPF 2.1
Development is sited, designed and constructed to prevent the entry of floodwaters where the entry of flood waters is likely to result in undue damage to or compromise ongoing activities within buildings.	Habitable buildings, commercial and industrial buildings, and buildings used for animal keeping incorporate a finished ground and floor level not less than:  In instances where no finished floor level value is specified, a building incorporates a finished floor level at least 300mm above the height of a 1% AEP flood event.
Environmen	tal Protection
PO 3.1  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 during a 1% AEP flood event to avoid potential environmental harm.	DTS/DPF 3.1  Development involving the storage or disposal of hazardous materials is wholly located outside of the 1% AEP flood plain or flow path.

## 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

## **Native Vegetation Overlay**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome
Areas of native vegetation are protected, retained and re <b>solution</b> order to sustain biodiversity, threatened species and vegetation communities, fauna habitat, ecosystem services, carbon storage and amenity values.

#### 4.4 - Attachment 7

#### **Performance Outcome Deemed-to-Satisfy Criteria / Designated Performance Feature** Environmental Protection PO 1.1 DTS/DPF 1.1 Development avoids, or where it cannot be practically avoided, minimises the An application is accompanied by: clearance of native vegetation taking into account the siting of buildings, (a) a declaration stating that the proposal will not, or would not, involve access points, bushfire protection measures and building maintenance. 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 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 DTS/DPF 1.2 Native vegetation clearance in association with development avoids the None are applicable. following: (a) significant wildlife habitat and movement corridors (b) 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 PO 1.3 DTS/DPF 1.3 Intensive animal husbandry and agricultural activities are sited, set back and Development within 500 metres of a boundary of a State Significant Native designed to minimise impacts on native vegetation, including impacts on Vegetation Area does not involve any of the following: native vegetation in an adjacent State Significant Native Vegetation Area, from: (a) horticulture (a) the spread of pest plants and phytophthora (b) intensive animal husbandry (b) the spread of non-indigenous plants species (c) excessive nutrient loading of the soil or loading arising from surface (d) commercial forestry water runoff (e) aquaculture. soil compaction chemical spray drift. PO 1 4 DTS/DPF 1 4 Development restores and enhances biodiversity and habitat values through None are applicable. revegetation using locally indigenous plant species. Land division PO 2.1 DTS/DPF 2.1 Land division does not result in the fragmentation of land containing native Land division where: vegetation, or necessitate the clearance of native vegetation, unless such (a) an application is accompanied by one of the following: clearance is considered minor, taking into account the location of allotment (i) a declaration stating that none of the allotments in the boundaries, access ways, fire breaks, boundary fencing and potential building proposed plan of division contain native vegetation under the siting or the like. Native Vegetation Act 1991 801

(ii) a declaration stating that no native vegetation clearance under the *Native Vegetation Act 1991* will be required as a

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
	result of the division of land  (iii) a report prepared in accardance valted thin 2011 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 prepared in accordance with Regulation 18(2)(a) of the <i>Native Vegetation Regulations 2017</i> that categorises the clearance, or potential clearance, as 'Level 3 clearance' or 'Level 4 clearance'.	Native Vegetation Council	To provide expert assessment and direction to the relevant authority on the potential impacts of development on native vegetation.	Development of a class to which Schedule 9 clause 3 item 11 of the Planning, Development and Infrastructure (General) Regulations 2017 applies.

# **Prescribed Water Resources Area Overlay**

# **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome
DO 1	Sustainable water use in prescribed 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	DTS/DPF 1.1
All development, but in particular development involving any of the following:	Development satisfies either of the following:
(a) horticulture	(a) the applicant has a current water licence in which sufficient spare

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
(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.	capacity exists to accommodate the water needs of the proposed use or 4.4 - Attachment 7  (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  Commercial forestry that requires a forest water licence under Part 8 Division 6 of the Landscape South Australia Act 2019.	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.

# **Water Resources Overlay**

# **Assessment Provisions (AP)**

803

Desired Outcome (DO)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Water C	atchment
P0 1.1	DTS/DPF 1.1
Watercourses and their beds, banks, wetlands and floodplains (1% AEP flood extent) are not damaged or modified and are retained in their natural state, except where modification is required for essential access or maintenance purposes.	None are applicable.
P0 1.2	DTS/DPF 1.2
Development avoids interfering with the existing hydrology or water regime of swamps and wetlands other than to improve the existing conditions to enhance environmental values.	None are applicable.
PO 1.3	DTS/DPF 1.3
Wetlands and low-lying areas providing habitat for native flora and fauna are not drained, except temporarily for essential management purposes to enhance environmental values.	None are applicable.
P0 1.4	DTS/DPF 1.4
Watercourses, areas of remnant native vegetation, or areas prone to erosion that are capable of natural regeneration are fenced off to limit stock access.	None are applicable.
PO 1.5	DTS/DPF 1.5
Development that increases surface water run-off includes a suitably sized strip of vegetated land on each side of a watercourse to filter runoff to:	A strip of land 20m or more wide measured from the top of existing banks on each side of the watercourse is free from development, livestock use and revegetated with locally indigenous vegetation.
(a) reduce the impacts on native aquatic ecosystems (b) minimise soil loss eroding into the watercourse.	
PO 1.6	DTS/DPF 1.6
Development resulting in the depositing or placing of an object or solid material in a watercourse or lake occurs only where it involves any of the following:	None are applicable.
(a) the construction of an erosion control structure     (b) devices or structures used to extract or regulate water flowing in a watercourse	
(c) devices used for scientific purposes (d) the rehabilitation of watercourses.	
PO 1.7	DTS/DPF 1.7
Watercourses, floodplains (1% AEP flood extent) and wetlands protected and enhanced by retaining and protecting existing native vegetation.	None are applicable.
PO 1.8	DTS/DPF 1.8
Watercourses, floodplains (1% AEP flood extent) and wetlands are protected and enhanced by stabilising watercourse banks and reducing sediments and nutrients entering the watercourse.	None are applicable.
PO 1.9	DTS/DPF 1.9

Policy24		P&D Code (in effect) Version 2023.5 30/03/2023
Dams, water tanks and diversion drains are located and constructed to maintain the quality and quantity of flows required to meet environmental and downstream needs.	None are applicable.	4.4 - Attachment 7

#### Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
None	None	None	None

# Part 4 - General Development Policies

#### **Advertisements**

## **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome
DO 1	Advertisements and advertising hoardings are appropriate to context, efficient and effective in communicating with the public, limited in number to avoid clutter, and do not create hazard.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Арре	arance
PO 1.1	DTS/DPF 1.1
Advertisements are compatible and integrated with the design of the building and/or land they are located on.	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
805	(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

Policy24	P&D Code (in effect) Version 2023.5 30/03/202
	the second storey of the building  B. does not protrud baond Attachinent 7 verandah structure below  C. does not have a sign face that exceeds 1m2 per side.
	<ul> <li>(d) if located below canopy level, are flush with a wall</li> <li>(e) if located at canopy level, are in the form of a fascia sign</li> <li>(f) if located above a canopy: <ul> <li>(i) are flush with a wall</li> <li>(ii) do not have any part rising above parapet height</li> <li>(iii) are not attached to the roof of the building.</li> </ul> </li> <li>(g) if attached to a verandah, no part of the advertisement protrudes beyond the outer limits of the verandah structure</li> <li>(h) if attached to a two-storey building, have no part located above the finished floor level of the second storey of the building</li> <li>(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.</li> </ul>
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:
	concealed by the associated advertisement and decorative detailing or     or     on int visible from an adjacent public street or thoroughfare, other than a support structure in the form of a single or dual post design.
P0 1.3	DTS/DPF 1.3
Advertising does not encroach on public land or the land of an adjacent allotment.	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	DTS/DPF 1.5
Advertisements and/or advertising hoardings are of a scale and size appropriate to the character of the locality.	None are applicable.
Proliferation of	Advertisements
P0 2.1	DTS/DPF 2.1
Proliferation of advertisements is minimised to avoid visual clutter and untidiness.	No more than one freestanding advertisement is displayed per occupancy.
PO 2.2	DTS/DPF 2.2
Multiple business or activity advertisements are co-located and coordinated to avoid visual clutter and untidiness.	Advertising of a multiple business or activity complex is located on a single advertisement fixture or structure.
P0 2.3	DTS/DPF 2.3
Proliferation of advertisements attached to buildings is minimised to avoid visual clutter and untidiness.	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.
806 Advertisir	ng Content
P0 3.1	DTS/DPF 3.1

Policy24 P&D Code (in effect) Version 2023.5			
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.	Advertisements contain information limited to a lawful existing or propose activity or activities on the same site as the advertisement.		
Amenity Impacts			
PO 4.1	DTS/DPF 4.1		
Light spill from advertisement illumination does not unreasonably compromise the amenity of sensitive receivers.	Advertisements do not incorporate any illumination.		
Sa	fety		
P0 5.1	DTS/DPF 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.	Advertisements have a minimum clearance of 2.5m between the top of the footpath and base of the underside of the sign.		
P0 5.2	DTS/DPF 5.2		
Advertisements and/or advertising hoardings do not distract or create a hazard to drivers through excessive illumination.	No advertisement illumination is proposed.		
P0 5.3	DTS/DPF 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.  PO 5.4  Advertisements and/or advertising hoardings do not create a hazard by	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  Corner Cut-Off Area  Allotment Boundary Off Area  DTS/DPF 5.4  Advertisements and/or advertising hoardings are not located along or		
distracting drivers from the primary driving task at a location where the demands on driver concentration are high.	adjacent to a road having a speed limit of 80km/h or more.		
PO 5.5	DTS/DPF 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.	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	DTS/DPF 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.  807	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**

# 4.4 - Attachment 7

## **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome
DO 1	Animals are kept at a density that is not beyond the carrying capacity of the land and in a manner that minimises their adverse effects on the environment, local amenity and surrounding development.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature	
Siting a	nd Design	
P01.1	DTS/DPF 1.1	
Animal keeping, horse keeping and associated activities do not create adverse impacts on the environment or the amenity of the locality.	None are applicable.	
P0 1.2	DTS/DPF 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.	None are applicable.	
Horse	Keeping	
PO 2.1	DTS/DPF 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.	None are applicable.	
PO 2.2	DTS/DPF 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.	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.	
P0 2.3	DTS/DPF 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.	Septic tank effluent disposal areas are enclosed with a horse-proof barrier such as a fence to exclude horses from this area.	
P0 2.4	DTS/DPF 2.4	
To minimise environmental harm and adverse impacts on water resources, stables, horse shelters and associated yards are appropriately set back from a watercourse.	Stables, horse shelters and associated yards are set back 50m or more f a watercourse.	
P0 2.5	DTS/DPF 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.	Stables, horse shelters and associated yards are not located on land with a slope greater than 10% (1-in-10).	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023		
Ker	nnels		
P0 3.1	DTS/DPF 3.1 4.4 - Attachment 7		
Kennel flooring is constructed with an impervious material to facilitate regular cleaning.	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	DTS/DPF 3.2		
Kennels and exercise yards are designed and sited to minimise noise nuisance to neighbours through measures such as:	Kennels are sited 500m or more from the nearest sensitive receiver on land in other ownership.		
<ul><li>(a) adopting appropriate separation distances</li><li>(b) orientating openings away from sensitive receivers.</li></ul>			
PO 3.3	DTS/DPF 3.3		
Dogs are regularly observed and managed to minimise nuisance impact on adjoining sensitive receivers from animal behaviour.	Kennels are sited in association with a permanent dwelling on the land.		
Wa	astes		
P0 4.1	DTS/DPF 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.	None are applicable.		
P0 4.2	DTS/DPF 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.	Waste storage facilities (other than wastewater lagoons) are located outside the 1% AEP flood event areas.		

# Aquaculture

# Assessment Provisions (AP)

Desired Outcome (DO)

	Desired Outcome
DO 1	Aquaculture facilities are developed in an ecologically, economically and socially sustainable manner to support an equitable sharing of marine, coastal and inland resources and mitigate conflict with other water-based and land-based uses.

Performance 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:	
809	(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.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
PO 1.2	DTS/DPF 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.	None are applicable. 4.4 - Attachment 7
P0 1.3	DTS/DPF 1.3
Land-based aquaculture and associated components are sited and designed to prevent pond leakage that would pollute groundwater.	None are applicable.
PO 1.4	DTS/DPF 1.4
Land-based aquaculture and associated components are sited and designed to prevent farmed species escaping and entering into any waters.	None are applicable.
PO 1.5	DTS/DPF 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.	None are applicable.
PO 1.6	DTS/DPF 1.6
Pipe inlets and outlets associated with land-based aquaculture are sited and designed to minimise the risk of disease transmission.	None are applicable.
PO 1.7	DTS/DPF 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.	None are applicable.
Marine Base	d Aquaculture
PO 2.1	DTS/DPF 2.1
Marine aquaculture is sited and designed to minimise its adverse impacts on sensitive ecological areas including:	None are applicable.
(a) creeks and estuaries (b) wetlands (c) significant seagrass and mangrove communities (d) marine habitats and ecosystems.	
PO 2.2	DTS/DPF 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.	None are applicable.
P0 2.3	DTS/DPF 2.3
Marine aquaculture is designed to not involve discharge of human waste on the site, on any adjacent land or into nearby waters.	None are applicable.
PO 2.4	DTS/DPF 2.4
Marine aquaculture (other than inter-tidal aquaculture) is located an appropriate distance seaward of the high water mark.	Marine aquaculture development is located 100m or more seaward of the high water mark.
PO 2.5	DTS/DPF 2.5
Marine aquaculture is sited and designed to not obstruct or interfere with:	None are applicable.
<ul> <li>(a) areas of high public use</li> <li>(b) areas, including beaches, used for recreational activities such as swimming, fishing, skiing, sailing and other water sports</li> <li>(c) areas of outstanding visual or environmental value</li> <li>(d) areas of high tourism value</li> <li>(e) areas of important regional or state economic activity, including</li> </ul>	
commercial ports, wharfs and jetties  (f) the operation of infrastructure facilities including inlet and outlet pipes associated with the desalination of sea water.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
PO 2.6	DTS/DPF 2.6
Marine aquaculture is sited and designed to minimise interference and obstruction to the natural processes of the coastal and marine environment.	None are applicable. 4.4 - Attachment 7
PO 2.7	DTS/DPF 2.7
Marine aquaculture is designed to be as unobtrusive as practicable by incorporating measures such as:	None are applicable.
using feed hoppers painted in subdued colours and suspending them as close as possible to the surface of the water     positioning structures to protrude the minimum distance practicable	
above the surface of the water  (c) avoiding the use of shelters and structures above cages and platforms unless necessary to exclude predators and protected species from interacting with the farming structures and/or stock inside the cages, or for safety reasons	
(d) positioning racks, floats and other farm structures in unobtrusive locations landward from the shoreline.	
PO 2.8	DTS/DPF 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.	None are applicable.
PO 2.9	DTS/DPF 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.	None are applicable.
PO 2.10	DTS/DPF 2.10
Marine aquaculture is sited to minimise potential impacts on, and to protect the integrity of, reserves under the <i>National Parks and Wildlife Act 1972</i> .	Marine aquaculture is located 1000m or more seaward of the boundary of any reserve under the <i>National Parks and Wildlife</i> Act 1972.
P0 2.11	DTS/DPF 2.11
Onshore storage, cooling and processing facilities do not impair the coastline and its visual amenity by:	None are applicable.
(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.	
Navigation	n and Safety
P0 3.1	DTS/DPF 3.1
Marine aquaculture sites are suitably marked to maintain navigational safety.	None are applicable.
P0 3.2	DTS/DPF 3.2
Marine aquaculture is sited to provide adequate separation between farms for safe navigation.	None are applicable.
Environmenta	al Management
PO 4.1	DTS/DPF 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.	None are applicable.
PO 4.2	DTS/DPF 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.	None are applicable.

Policy24		P&D Code (in effect) Version 2023.5 30/03/2023
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.	4.4 - Attachment 7
PO 4.4	DTS/DPF 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.	None are applicable.	

# **Beverage Production in Rural Areas**

# **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome
DO 1	Mitigation of potential amenity and environmental impacts of value-adding beverage production facilities such as wineries, distilleries, cideries and breweries.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Odour a	and Noise
PO 1.1	DTS/DPF 1.1
Beverage production activities are designed and sited to minimise odour impacts on rural amenity.	None are applicable.
PO 1.2	DTS/DPF 1.2
Beverage production activities are designed and sited to minimise noise impacts on sensitive receivers.	None are applicable.
PO 1.3	DTS/DPF 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.	None are applicable.
PO 1.4	DTS/DPF 1.4
Breweries are designed to minimise odours emitted during boiling and fermentation stages of production.	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	DTS/DPF 2.1
Beverage production wastewater management systems (including wastewater irrigation) are set back from watercourses to minimise adverse impacts on water resources.	Wastewater management systems are set back 50m or more from the banks of watercourses and bores.

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
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.  4.4 - Attachment 7
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.
Wastewat	er 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.	None are applicable.

# **Bulk Handling and Storage Facilities**

# **Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome		
DO 1	Facilities for the bulk handling and storage of agricultural, mineral, petroleum, rock, ore or other similar commodities are designed to minimise adverse impacts on transport networks, the landscape and surrounding land uses.	

Performance Outcome	Deemed-to-Satisfy Criteria / 813 Designated Performance Feature
	Siting and Design

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023		
PO 1.1	DTS/DPF 1.1		
Bulk handling and storage facilities are sited and designed to minimise risks of adverse air quality and noise impacts on sensitive receivers.	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		
P0 2.1	DTS/DPF 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.	None are applicable.		
PO 2.2	DTS/DPF 2.2		
Bulk handling and storage facilities incorporate landscaping to assist with screening and dust filtration.	None are applicable.		
Access and Parking			
PO 3.1	DTS/DPF 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.	Roadways and vehicle parking areas are sealed with an all-weather surface.		
Slipways, Wharv	res and Pontoons		
P0 4.1	DTS/DPF 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.	None are applicable.		

# **Clearance from Overhead Powerlines**

# Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Protection of human health and safety when undertaking development in the vicinity of overhead transmission powerlines.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	4.4 - Attachment 7 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)

Desired Outcome		
DO 1	Development is:	
	<ul> <li>(a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributes to the character of the immediate area</li> <li>(b) durable - fit for purpose, adaptable and long lasting</li> <li>(c) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access, and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors</li> <li>(d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.</li> </ul>	

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
All deve	Plopment
External A	ppearance
P0 1.1	DTS/DPF 1.1
Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).	None are applicable.
P0 1.2	DTS/DPF 1.2
Where zero or minor setbacks are desirable, development provides shelter over footpaths (in the form of verandahs, awnings, canopies and the like, with adequate lighting) to positively contribute to the walkability, comfort and safety of the public realm.	None are applicable.
PO 1.3	DTS/DPF 1.3
Building elevations facing the primary street (other than ancillary buildings) are designed and detailed to convey purpose, identify main access points complement the streetscape.	None are applicable.

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
P0 1.4	DTS/DPF 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:	Development does not incorporate any stactors tattacamente 7 roofline.
(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.	
PO 1.5	DTS/DPF 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.	None are applicable.
Sa	fety
PO 2.1	DTS/DPF 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.	None are applicable.
P0 2.2	DTS/DPF 2.2
Development is designed to differentiate public, communal and private areas.	None are applicable.
PO 2.3	DTS/DPF 2.3
Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.	None are applicable.
P0 2.4	DTS/DPF 2.4
Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.	None are applicable.
P0 2.5	DTS/DPF 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.	None are applicable.
Lands	caping
PO 3.1	DTS/DPF 3.1
Soft landscaping and tree planting is incorporated to:	None are applicable.
(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.	
PO 3.2	DTS/DPF 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.	None are applicable.
Environmenta	al Performance
P0 4.1	DTS/DPF 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.	
PO 4.2	DTS/DPF 4.2
1	ı

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
Buildings are sited and designed to maximise passive environmental performance and minimise energy consumption and reliance on mechanical systems, such as heating and cooling.	None are applicable.  4.4 - Attachment	
P0 4.3	DTS/DPF 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.	None are applicable.	
Water Sen:	sitive Design	
P0 5.1	DTS/DPF 5.1	
Development is sited and designed to maintain natural hydrological systems without negatively impacting:	None are applicable.	
(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.		
On-site Waste Tr	eatment Systems	
PO 6.1	DTS/DPF 6.1	
Dedicated on-site effluent disposal areas do not include any areas to be used	Effluent disposal drainage areas do not:	
for, or could be reasonably foreseen to be used for, private open space, driveways or car parking.	<ul> <li>(a) encroach within an area used as private open space or result in less private open space than that specified in Design Table 1 - Private Open Space</li> <li>(b) use an area also used as a driveway</li> <li>(c) encroach within an area used for on-site car parking or result in less on-site car parking than that specified in Transport, Access and Parking Table 1 - General Off-Street Car Parking Requirements or Table 2 - Off-Street Car Parking Requirements in Designated Areas.</li> </ul>	
Carparking	Appearance	
Carparking PO 7.1	Appearance DTS/DPF 7.1	
P0 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:		
P0 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	DTS/DPF 7.1	
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	DTS/DPF 7.1	
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 7.1  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.  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	DTS/DPF 7.1  None are applicable.  DTS/DPF 7.2	
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.  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 7.1  None are applicable.  DTS/DPF 7.2  None are applicable.	
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.  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.  Po 7.3  Safe, legible, direct and accessible pedestrian connections are provided	DTS/DPF 7.1  None are applicable.  DTS/DPF 7.2  None are applicable.  DTS/DPF 7.3	
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.  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.  PO 7.3  Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.	DTS/DPF 7.1  None are applicable.  DTS/DPF 7.2  None are applicable.  DTS/DPF 7.3  None are applicable.	
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.  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.  Po 7.3  Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.  Po 7.4  Street level vehicle parking areas incorporate tree planting to provide shade	DTS/DPF 7.1  None are applicable.  DTS/DPF 7.2  None are applicable.  DTS/DPF 7.3  None are applicable.  DTS/DPF 7.4	
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.  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.  Po 7.3  Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.  Po 7.4  Street level vehicle parking areas incorporate tree planting to provide shade and reduce solar heat absorption and reflection.  Po 7.5  Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.	DTS/DPF 7.2  None are applicable.  DTS/DPF 7.3  None are applicable.  DTS/DPF 7.4  None are applicable.  DTS/DPF 7.5  None are applicable.	
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.  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.  Po 7.3  Safe, legible, direct and accessible pedestrian connections are provided between parking areas and the development.  Po 7.4  Street level vehicle parking areas incorporate tree planting to provide shade and reduce solar heat absorption and reflection.  Po 7.5  Street level parking areas incorporate soft landscaping to improve visual appearance when viewed from within the site and from public places.	DTS/DPF 7.2  None are applicable.  DTS/DPF 7.2  None are applicable.  DTS/DPF 7.3  None are applicable.  DTS/DPF 7.4  None are applicable.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
shade and positively contribute to amenity.	4.4 - Attachment 7	
P0 7.7	DTS/DPF 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.	None are applicable.	
Earthworks ar	nd sloping land	
PO 8.1	DTS/DPF 8.1	
Development, including any associated driveways and access tracks, minimises the need for earthworks to limit disturbance to natural topography.	Development does not involve any of the following:	
iniminises the need for earthworks to limit disturbance to natural topography.	(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.	
P0 8.2	DTS/DPF 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).	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	DTS/DPF 8.3	
Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8):	None are applicable.	
do not contribute to the instability of embankments and cuttings     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.		
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.	
P0 8.5	DTS/DPF 8.5	
Development does not occur on land at risk of landslip nor increases the potential for landslip or land surface instability.	None are applicable.	
Fences a	and Walls	
PO 9.1	DTS/DPF 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.	None are applicable.	
PO 9.2	DTS/DPF 9.2	
Landscaping incorporated on the low side of retaining walls is visible from public roads and public open space to minimise visual impacts.	A vegetated landscaped strip 1m wide or more is provided against the low side of a retaining wall.	
Overlooking / Visual Privacy	(in building 3 storeys or less)	
PO 10.1	DTS/DPF 10.1	
Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.	Upper level windows facing side or rear boundaries shared with a residential allotment/site satisfy one of the following:	
	(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	
818	(b) have sill heights greater than or equal to 1.5m above finished floor level	
I	ı	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
	incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the findomattice in adjacent to any part of the window less than 1.5 m above the finished floor level.	
P0 10.2	DTS/DPF 10.2	
Development mitigates direct overlooking from balconies, terraces and decks to habitable rooms and private open space of adjoining residential uses.	One of the following is satisfied:  (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 Residentia	al development	
Front elevations and	d passive surveillance	
P0 11.1	DTS/DPF 11.1	
Dwellings incorporate windows along primary street frontages to encourage	Each dwelling with a frontage to a public street:	
passive surveillance and make a positive contribution to the streetscape.	(a) includes at least one window facing the primary street from a	
	(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 <sup>2</sup> facing the primary street.	
P0 11.2	DTS/DPF 11.2	
Dwellings incorporate entry doors within street frontages to address the street and provide a legible entry point for visitors.	Dwellings with a frontage to a public street have an entry door visible from th primary street boundary.	
Outlook a	and amenity	
PO 12.1	DTS/DPF 12.1	
Living rooms have an external outlook to provide a high standard of amenity for occupants.	A living room of a dwelling incorporates a window with an outlook towards the street frontage or private open space, public open space, or waterfront areas.	
PO 12.2	DTS/DPF 12.2	
Bedrooms are separated or shielded from active communal recreation areas, common access areas and vehicle parking areas and access ways to mitigate noise and artificial light intrusion.	None are applicable.	
Ancillary D	Development	
PO 13.1	DTS/DPF 13.1	
Residential ancillary buildings and structures are sited and designed to not detract from the streetscape or appearance of buildings on the site or neighbouring properties.	Ancillary buildings:  (a) are ancillary to a dwelling erected on the same site  (b) have a floor area not exceeding 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)	
819	(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	

Policy24			P&D Code (in effect) Version	n 2023.5 30/03/2023
			B. for dwellings comprising two at the building lips for ntings 7m in width	
	(e)		ted on a boundary (not being a boundary ordary street), do not exceed a length of a longer wall or structure exists on the situated on the same allotment boundand the proposed wall or structure will be belength of boundary as the existing adjato the same or lesser extent	11.5m unless: adjacent site and is ary utilt along the same
	(f) (g)	a prima bounda will not bounda existina	ted on a boundary of the allotment (not lary street or secondary street), all walls of any will not exceed 45% of the length of the located within 3m of any other wall are unless on an adjacent site on that bord wall of a building that would be adjaced wall or structure	or structures on the hat boundary along the same undary there is an
	(h) have a wall height or post height not exc ground level (and not including a gable e  (i) have a roof height where no part of the roof the natural ground level		level (and not including a gable end) roof height where no part of the roof is r	
	(j) (k)	reflecti retains	in sheet metal, is pre-colour treated or pa ve colour a total area of soft landscaping in accor ver is less: a total area as determined by the follow	rdance with (i) or (ii),
		,	Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site
			<150 150-200	10%
			201-450	20%
			>450	25%
		(ii)	the amount of existing soft landscapin development occurring.	g prior to the
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 Taba 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.			port, Access and g Requirements or
P0 13.3	DTS/DP	F 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.			cated at least 5m from ning allotment
Garage a	ppearanc	e		
PO 14.1				
Garaging is designed to not detract from the streetscape or appearance of a dwelling	Garag	es and ca	rports facing a street:	

Downloaded on 14/04/2023 Generated By Policy24 Page 35 of 102

dwelling.

Residential development creating a common driveway / access includes a stormwater management system designed to mitigate peak flows and	Development creating a common driveway / access that services 5 or more dwellings:  4.4 - Attachment 7	
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.	(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	DTS/DPF 19.1	
Enclosed parking spaces are of a size and dimensions to be functional, accessible and convenient.	Residential car parking spaces enclosed by fencing, walls or other structuhave 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.	
P0 19.2	DTS/DPF 19.2	
Uncovered parking spaces are of a size and dimensions to be functional, accessible and convenient.	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	
P0 19.3	DTS/DPF 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.	Driveways and access points on sites with a frontage to a public road of 1 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	DTS/DPF 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.	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.	
P0 19.5	DTS/DPF 19.5	
Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.	Driveways are designed and sited so that:	
822	(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	
OZZ	(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	
ownloaded on 14/04/2023 Generated	By Policy24 Page 37 of 103	

Policy24

P&D Code (in effect) Version 2023.5 30/03/2023

Policy24	centreline of any dedica access (measured from boundary (c) if located to provide acc	ted car parking space to which it provides the front 4.4 - Attachment 7  tess from an alley, lane or right of way - the y is at least 6.2m wide along the boundary of
PO 19.6  Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	(a) minimum 0.33 on-street to the nearest whole nut (b) minimum car park lengt space directly (c) minimum carpark lengtle	able abutting the site's street frontage, on- ordance with the following requirements: it spaces per dwelling on the site (rounded up mber) h of 5.4m where a vehicle can enter or exit a in of 6m for an intermediate space located ing spaces or to an end obstruction where the
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 Trans	portable 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 material and finish cons	ween the building and ground level is clad in a sistent with the building.
Group dwelling, residential flat bu	ildings and battle-axe development	
Am	enity	
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 follow table:	
	Number of bedrooms	Minimum internal floor area
	Studio	35m <sup>2</sup>
	1 bedroom	50m <sup>2</sup>
	2 bedroom	65m <sup>2</sup>
	3+ bedrooms	80m <sup>2</sup> and any dwelling over 3 bedrooms provides an additional 15m <sup>2</sup> for every additional bedroom
PO 22.2	DTS/DPF 22.2	
The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.	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	DTS/DPF 22.4  Dwelling sites/allotments are no	t in the form of a battle-axe arrangement.
	Py Policy24	Page 38 of 102

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
existing neighbourhood context.		
Communa	Open Space 4.4 - Attachment 7	
P0 23.1	DTS/DPF 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.	None are applicable.	
P0 23.2	DTS/DPF 23.2	
Communal open space is of sufficient size and dimensions to cater for group recreation.	Communal open space incorporates a minimum dimension of 5 metres.	
PO 23.3	DTS/DPF 23.3	
Communal open space is designed and sited to:	None are applicable.	
be conveniently accessed by the dwellings which it services     have regard to acoustic, safety, security and wind effects.		
PO 23.4	DTS/DPF 23.4	
Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	None are applicable.	
PO 23.5	DTS/DPF 23.5	
Communal open space is designed and sited to:	None are applicable.	
in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings     in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.		
Carparking, access	and manoeuvrability	
PO 24.1	DTS/DPF 24.1	
Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	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:	
	parking is retained adjacent the subject site in accordance with the following	
	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	
provision of on-street visitor parking.	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	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.  DTS/DPF 24.2  Access to group dwellings or dwellings within a residential flat building is	
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.	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.  DTS/DPF 24.2  Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.	
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.  PO 24.3  Residential driveways that service more than one dwelling are designed to	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.  DTS/DPF 24.2  Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.  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.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
PO 24.5	DTS/DPF 24.5 4.4 - Attachment 7	
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.	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	DTS/DPF 24.6	
Dwellings are adequately separated from common driveways and manoeuvring areas.	Dwelling walls with entry doors or ground level habitable room windows at set back at least 1.5m from any driveway or area designated for the movement and manoeuvring of vehicles.	
Soft Lar	ndscaping	
PO 25.1	DTS/DPF 25.1	
Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.	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	DTS/DPF 25.2	
Soft landscaping is provided that improves the appearance of common driveways.	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 a	/ Waste Storage	
PO 26.1	DTS/DPF 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.	None are applicable.	
PO 26.2	DTS/DPF 26.2	
Provision is made for suitable external clothes drying facilities.	None are applicable.	
PO 26.3	DTS/DPF 26.3	
Provision is made for suitable household waste and recyclable material storage facilities which are:	None are applicable.	
located away, or screened, from public view, and     conveniently located in proximity to dwellings and the waste collection point.		
PO 26.4	DTS/DPF 26.4	
Waste and recyclable material storage areas are located away from dwellings.	s. Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.	
PO 26.5	DTS/DPF 26.5	
Where waste bins cannot be conveniently collected from the street, provision is made for on-site waste collection, designed to accommodate the safe and convenient access, egress and movement of waste collection vehicles.	None are applicable.	
PO 26.6	DTS/DPF 26.6	
Services including gas and water meters are conveniently located and screened from public view.	None are applicable.	
Supported accommodati	on and retirement facilities	
Siting and 0	Configuration	
PO 27.1	DTS/DPF 27.1	
Supported accommodation and housing for aged persons and people with disabilities is located where on-site movement of residents is not unduly restricted by the slope of the land.	None are applicable.	
0/4	and Access	
PO 28.1	DTS/DPF 28.1	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
Development is designed to support safe and convenient access and movement for residents by providing:	None are applicable.  4.4 - Attachment 7
(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 29.1	DTS/DPF 29.1
Development is designed to provide attractive, convenient and comfortable indoor and outdoor communal areas to be used by residents and visitors.	None are applicable.
PO 29.2	DTS/DPF 29.2
Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	None are applicable.
PO 29.3	DTS/DPF 29.3
Communal open space is of sufficient size and dimensions to cater for group recreation.	Communal open space incorporates a minimum dimension of 5 metres.
PO 29.4	DTS/DPF 29.4
Communal open space is designed and sited to:	None are applicable.
(a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	
PO 29.5	DTS/DPF 29.5
Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	None are applicable.
PO 29.6	DTS/DPF 29.6
Communal open space is designed and sited to:	None are applicable.
in relation to rooftop or elevated gardens, minimise overlooking into habitable room windows or onto the useable private open space of other dwellings     in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	
PO 30.1	Waste Storage DTS/DPF 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.	None are applicable.
PO 30.2	DTS/DPF 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.	None are applicable.
PO 30.3	DTS/DPF 30.3
Provision is made for suitable external clothes drying facilities.	None are applicable.
PO 30.4	DTS/DPF 30.4
Provision is made for suitable household waste and recyclable material storage facilities conveniently located and screened from public view.  826	None are applicable.
PO 30.5	DTS/DPF 30.5

Policy24	P&D Code (in effect) Version 2023.5 30/03/202
Waste and recyclable material storage areas are located away from dwellings.	Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window. 4.4 - Attachment 7
PO 30.6	DTS/DPF 30.6
Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.	None are applicable.
PO 30.7	DTS/DPF 30.7
Services including gas and water meters are conveniently located and screened from public view.	None are applicable.
All non-residen	I tial development
Water Sen	sitive Design
P0 31.1	DTS/DPF 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.	None are applicable.
P0 31.2	DTS/DPF 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.	None are applicable.
Wash-down and Waste	Loading and Unloading
PO 32.1	DTS/DPF 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:	None are applicable.
(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:	
<ul> <li>a treatment device such as a sediment trap and coalescing plate oil separator with subsequent disposal to a sewer, private or Community Wastewater Management Scheme or</li> </ul>	
<ul> <li>(ii) a holding tank and its subsequent removal off-site on a regular basis.</li> </ul>	

## 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	Total area: 16m <sup>2</sup> , which may be used as second car parking space, provided on each site

## **Design in Urban Areas**

### **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome				
DO 1	Development is:				
	<ul> <li>(a) contextual - by considering, recognising and carefully responding to its natural surroundings or built environment and positively contributing to the character of the locality</li> <li>(b) durable - fit for purpose, adaptable and long lasting</li> <li>(c) inclusive - by integrating landscape design to optimise pedestrian and cyclist usability, privacy and equitable access and promoting the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimise security and safety both internally and within the public realm, for occupants and visitors</li> <li>(d) sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption.</li> </ul>				

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature		
All Development			
External A	ppearance		
P0 1.1	DTS/DPF 1.1		
Buildings reinforce corners through changes in setback, articulation, materials, colour and massing (including height, width, bulk, roof form and slope).	None are applicable.		
P0 1.2	DTS/DPF 1.2		
Where zero or minor setbacks are desirable, development provides shelter over footpaths (in the form of verandahs, awnings, canopies and the like, with adequate lighting) to positively contribute to the walkability, comfort and safety of the public realm.	None are applicable.		
P0 1.3	DTS/DPF 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.	None are applicable.		
P0 1.4	DTS/DPF 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:	Development does not incorporate any structures that protrude beyond the roofline.		
(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 plant and equipment as far as practicable from adjacent sensitive land uses.			

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
PO 1.5	DTS/DPF 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.	None are applicable.  4.4 - Attachment 7
Se	fety
PO 2.1	DTS/DPF 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.	None are applicable.
PO 2.2	DTS/DPF 2.2
Development is designed to differentiate public, communal and private areas.	None are applicable.
PO 2.3	DTS/DPF 2.3
Buildings are designed with safe, perceptible and direct access from public street frontages and vehicle parking areas.	None are applicable.
P0 2.4	DTS/DPF 2.4
Development at street level is designed to maximise opportunities for passive surveillance of the adjacent public realm.	None are applicable.
PO 2.5	DTS/DPF 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.	None are applicable.
Lands	scaping
PO 3.1	DTS/DPF 3.1
Soft landscaping and tree planting are incorporated to:	None are applicable.
(a) minimise heat absorption and reflection (b) maximise shade and shelter (c) maximise stormwater infiltration (d) enhance the appearance of land and streetscapes.	
Environment	al Performance
PO 4.1	DTS/DPF 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.	None are applicable.
PO 4.2	DTS/DPF 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.	None are applicable.
PO 4.3	DTS/DPF 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.	None are applicable.
Water Sen	sitive Design
PO 5.1	DTS/DPF 5.1
Development is sited and designed to maintain natural hydrological systems without negatively impacting:	None are applicable.
(a) the quantity and quality of surface water and groundwater	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
	(c) a total combined excavation and filling vertical height of 2m or more.  4.4 - Attachment 7
PO 8.2	DTS/DPF 8.2
Driveways and access tracks designed and constructed to allow safe and convenient access on sloping land.	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	DTS/DPF 8.3
Driveways and access tracks on sloping land (with a gradient exceeding 1 in 8):	None are applicable.
(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.	
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	DTS/DPF 8.5
Development does not occur on land at risk of landslip or increase the potential for landslip or land surface instability.	None are applicable.
Fences	and walls
PO 9.1	DTS/DPF 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.	None are applicable.
PO 9.2	DTS/DPF 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.	A vegetated landscaped strip 1m wide or more is provided against the low side of a retaining wall.
Overlooking / Visual Pr	ivacy (low rise buildings)
PO 10.1	DTS/DPF 10.1
Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses in neighbourhood-type zones.	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	DTS/DPF 10.2
Development mitigates direct overlooking from balconies to habitable rooms and private open space of adjoining residential uses in neighbourhood type	One of the following is satisfied:
zones.	(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
83	(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

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023		
00 F 300 (ML + 0) / L	ding low rise residential development) 4.4 - Attachment 7		
PO 11.1	ding low rise residential development)  DTS/DPF 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.	None are applicable.		
P0 11.2	DTS/DPF 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.	None are applicable.		
PO 11.3	DTS/DPF 11.3		
Communal waste storage and collection areas are designed to be well ventilated and located away from habitable rooms.	None are applicable.		
P0 11.4	DTS/DPF 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.	None are applicable.		
PO 11.5  For mixed use developments, non-residential waste and recycling storage	None are applicable.		
areas and access provide opportunities for on-site management of food waste through composting or other waste recovery as appropriate.			
	ledium and High Rise		
External A	ppearance		
PO 12.1	DTS/DPF 12.1		
Buildings positively contribute to the character of the local area by responding to local context.	None are applicable.		
PO 12.2	DTS/DPF 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.	None are applicable.		
PO 12.3	DTS/DPF 12.3		
Buildings are designed to reduce visual mass by breaking up building elevations into distinct elements.	None are applicable.		
PO 12.4	DTS/DPF 12.4		
Boundary walls visible from public land include visually interesting treatments to break up large blank elevations.	None are applicable.		
PO 12.5	DTS/DPF 12.5		
External materials and finishes are durable and age well to minimise ongoing maintenance requirements.	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	DTS/DPF 12.6		
Street-facing building elevations are designed to provide attractive, high quality and pedestrian-friendly street frontages.	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	DTS/DPF 12.7		
Entrances to multi-storey buildings are safe, attractive, welcoming, functional and contribute to streetscape character.	Entrances to multi-storey buildings are:		
	parking areas		

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023			
	(c) designed to be prominent, accentuated and a welcoming feature if there are no active or occupied gauge floo Attachment 7  (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.			
Building services, plant and mechanical equipment are screened from the public realm.	DTS/DPF 12.8  None are applicable.			
Lands	caping			
PO 13.1	DTS/DPF 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.	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			
PO 13.2	DTS/DPF 13.2			
Deep soil zones are provided to retain existing vegetation or provide areas that can accommodate new deep root vegetation, including tall trees with large canopies to provide shade and soften the appearance of multi-storey buildings.	Multi-storey development provides deep soil zones and incorporates trees at not less than the following rates, except in a location or zone where full site coverage is desired.			
	Site area	Minimum deep soil area	Minimum dimension	Tree / deep soil zones
	<300 m <sup>2</sup>	10 m <sup>2</sup>	1.5m	1 small tree / 10 m <sup>2</sup>
	300-1500 m <sup>2</sup>	7% site area	3m	1 medium tree / 30 m <sup>2</sup>
	>1500 m <sup>2</sup>	7% site area	6m	1 large or medium tree / 60 m <sup>2</sup>
	Tree size and site	area definitions		
	Small tree	4-6m mature heigh	nt and 2-4m canopy	spread
	Medium tree	6-12m mature heig	ght and 4-8m canopy	spread /
	Large tree	12m mature heigh	t and >8m canopy ទរុ	oread
	Site area	The total area for o	development site, no	t average area per
PO 13.3	DTS/DPF 13.3			
Deep soil zones with access to natural light are provided to assist in maintaining vegetation health.	None are applicable.			
PO 13.4	DTS/DPF 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.	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.			
Enviror	nmental			
PO 14.1	DTS/DPF 14.1			

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
Development minimises detrimental micro-climatic impacts on adjacent land and buildings.	None are applicable.  4.4 - Attachment 7
PO 14.2	DTS/DPF 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.	None are applicable.
P0 14.3	DTS/DPF 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:	None are applicable.
a podium at the base of a tall tower and aligned with the street to deflect wind away from the street     substantial verandahs around a building to deflect downward travelling wind flows over pedestrian areas     the placement of buildings and use of setbacks to deflect the wind at ground level     avoiding tall shear elevations that create windy conditions at street level.	
Car P PO 15.1	DTS/DPF 15.1
Multi-level vehicle parking structures are designed to contribute to active street frontages and complement neighbouring buildings.	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	DTS/DPF 15.2
Multi-level vehicle parking structures within buildings complement the surrounding built form in terms of height, massing and scale.	None are applicable.
Overlooking/	Visual Privacy
PO 16.1	DTS/DPF 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	None are applicable.
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.	
	development
	passive surveillance
Po 17.1  Dwellings incorporate windows facing primary street frontages to encourage passive surveillance and make a positive contribution to the streetscape.  834	DTS/DPF 17.1  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 2m² facing the primary street.

Policy24	P&D Code (in effect) Version 2023.5 30/03/202
	<150
	<150 4.4 - Attachment 7 150-200 150-200
	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.
Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers.	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.
Residential Devel	opment - Low Rise
External a	appearance
PO 20.1	DTS/DPF 20.1
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 will be in front or
	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	DTS/DPF 20.2
Dwelling elevations facing public streets and common driveways make a positive contribution to the streetscape and the appearance of common driveway areas.	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 fror 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
836	the building elevation in a single material or finish.

Policy24 P&D Code (in effect) Version 2023.5 30/03/202				
		4.4 - A	ttachment 7	
PO 20.3	DTS/DPF 20.3			
The visual mass of larger buildings is reduced when viewed from adjoining allotments or public streets.	None are applicable			
Private 0	pen Space			
P0 21.1	DTS/DPF 2	21.1		
Dwellings are provided with suitable sized areas of usable private open space to meet the needs of occupants.	Private open space is provided in accordance with Design in Urban Areas Table 1 - Private Open Space.			
P0 21.2	DTS/DPF	21.2		
Private open space is positioned to provide convenient access from internal living areas.	Private open space is directly accessible from a habitable room.			
Lands	caping			
P0 22.1	DTS/DPF	22.1		
Soft landscaping is incorporated into development to:  (a) minimise heat absorption and reflection		tial development incorporates soft landscaping on of 700mm provided in accordance with (a)		
<ul> <li>(a) minimise heat absorption and reflection</li> <li>(b) contribute shade and shelter</li> <li>(c) provide for stormwater infiltration and biodiversity</li> </ul>	(a)	a total area as determined by the following tab	ile:	
(d) enhance the appearance of land and streetscapes.		Dwelling site area (or in the case of residential flat building or group dwelling(s), average site area) (m <sup>2</sup> )	Minimum percentage of site	
		<150	10%	
		150-200	15%	
		>200-450	20%	
		>450	25%	
		at least 30% of any land between the primary s primary building line.	treet boundary and the	
Car parking, access	and manoe	euvrability		
P0 23.1	DTS/DPF	23.1		
Enclosed car parking spaces are of dimensions to be functional, accessible and convenient.		tial car parking spaces enclosed by fencing, wa following internal dimensions (separate from		
	(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 2.4n	n	
	(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		
PO 23.2	DTS/DPF	23.2		
Uncovered car parking space are of dimensions to be functional, accessible and convenient.		ed car parking spaces have:		
837	(b)	a minimum length of 5.4m a minimum width of 2.4m a minimum width between the centre line of th wall or other obstruction of 1.5m.	e space and any fence,	
	<del> </del>			

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Page 53 of 102

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	800mm between the waste bin storage area and the street.	
Design of Transportable	4.4 - Attachment 7	
	PF 25.1	
	ings satisfy (a) or (b):	
arance of a permanent structure. (a) (b)	are not transportable 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 Ris	e (including serviced apartments)	
Outlook and Visual F	rivacy	
DTS/D	PF 26.1	
nd level dwellings have a satisfactory short range visual outlook to public, Build munal or private open space.	ngs:	
(a) (b)	provide a habitable room at ground or first level with a window facing toward the street 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.	
.2 DTS/D	PF 26.2	
	inished floor level of ground level dwellings in multi-storey developments sed by up to 1.2m.	
Private Open Spa	се	
DTS/D	PF 27.1	
	te open space provided in accordance with Design in Urban Areas Table ivate Open Space.	
Residential amenity in multi-	evel buildings	
DTS/D	PF 28.1	
·	are separated by at least 6m from one another where there is a direct line sight between them and 3m or more from a side or rear property boundar	
2 DTS/D	PF 28.2	
onies are designed, positioned and integrated into the overall tectural form and detail of the development to:	nies utilise one or a combination of the following design elements:	
respond to daylight, wind, and acoustic conditions to maximise (b)	sun screens	
comfort and provide visual privacy (c)	pergolas louvres	
allow views and casual surveillance of the street while providing for safety and visual privacy of nearby living spaces and private outdoor areas.  (d)  (e)	green facades openable walls.	
.3 DTS/D	PF 28.3	
	nies open directly from a habitable room and incorporate a minimum nsion of 2m.	
4 DTS/D	PF 28.4	
pant needs. provi	ings (not including student accommodation or serviced apartments) are ded with storage at the following rates with at least 50% or more of the ge volume to be provided within the dwelling:	
(a)	studio: not less than 6m <sup>3</sup>	
(b)	1 bedroom dwelling / apartment: not less than 8m <sup>3</sup>	
839 (c)	2 bedroom dwelling / apartment: not less than 10m <sup>3</sup> 3+ bedroom dwelling / apartment: not less than 12m <sup>3</sup> .	
	DF 28 5	
DTS/D	PF 28.5	

Policy24	F&D Code (III	епест) version 2023.5 30/03/2023
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.	(a) are not used as the primary so (b) up to 18m in height have a min 6m if overlooked by bedrooms	nimum horizontal dimension of 6m, or
PO 28.6	DTS/DPF 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.	None are applicable.	
PO 28.7	DTS/DPF 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.	None are applicable.	
Dwelling Co	onfiguration	
PO 29.1	DTS/DPF 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.	Buildings containing in excess of 10 dwellings provide at least one of each the following:  (a) studio (where there is no separate bedroom) (b) 1 bedroom dwelling / apartment with a floor area of at least 50m <sup>2</sup> (c) 2 bedroom dwelling / apartment with a floor area of at least 65m <sup>2</sup> (d) 3+ bedroom dwelling / apartment with a floor area of at least 80m <sup>2</sup> and any dwelling over 3 bedrooms provides an additional 15m <sup>2</sup> for every additional bedroom.	
PO 29.2	DTS/DPF 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.	None are applicable.	
Commo	on Areas	
PO 30.1	DTS/DPF 30.1	
The size of lifts, lobbies and corridors is sufficient to accommodate movement of bicycles, strollers, mobility aids and visitor waiting areas.	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 corridor exceed 12m in length from a core.	
Group Dwellings, Residential Flat B	Luildings and Battle axe Development	
	enity	
PO 31.1	DTS/DPF 31.1	
Dwellings are of a suitable size to provide a high standard of amenity for occupants.	Dis/DPF 31.1  Dwellings have a minimum internal floor area in accordance with the followin table:	
	Number of bedrooms	Minimum internal floor area
		35m <sup>2</sup>
	Studio	35m²
	1 bedroom	50m <sup>2</sup>
840	1 bedroom 2 bedroom 3+ bedrooms	50m <sup>2</sup>

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
PO 31.2	DTS/DPF 31.2
The orientation and siting of buildings minimises impacts on the amenity, outlook and privacy of occupants and neighbours.	None are applicable. 4.4 - Attachment 7
PO 31.3	DTS/DPF 31.3
Development maximises the number of dwellings that face public open space and public streets and limits dwellings oriented towards adjoining properties.	None are applicable.
PO 31.4	DTS/DPF 31.4
Battle-axe development is appropriately sited and designed to respond to the existing neighbourhood context.	Dwelling sites/allotments are not in the form of a battle-axe arrangement.
Communal	Open Space
PO 32.1	DTS/DPF 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.	None are applicable.
PO 32.2	DTS/DPF 32.2
Communal open space is of sufficient size and dimensions to cater for group recreation.	Communal open space incorporates a minimum dimension of 5 metres.
PO 32.3	DTS/DPF 32.3
Communal open space is designed and sited to:	None are applicable.
(a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	
PO 32.4	DTS/DPF 32.4
Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	None are applicable.
PO 32.5	DTS/DPF 32.5
Communal open space is designed and sited to:	None are applicable.
(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.	
Car parking, access	and manoeuvrability
PO 33.1	DTS/DPF 33.1
Driveways and access points are designed and distributed to optimise the provision of on-street visitor parking.	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	DTS/DPF 33.2
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.	Access to group dwellings or dwellings within a residential flat building is provided via a single common driveway.
PO 33.3	DTS/DPF 33.3
Residential driveways that service more than one dwelling are designed to allow safe and convenient movement.	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:
841	(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

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
	passing point at least every 30 metres with a minimum width of 5.5m and a minimum langur of 6Attachment 7	
P0 33.4	DTS/DPF 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.	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.	
P0 33.5	DTS/DPF 33.5	
Dwellings are adequately separated from common driveways and manoeuvring areas.	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 lan	dscaping	
P0 34.1	DTS/DPF 34.1	
Soft landscaping is provided between dwellings and common driveways to improve the outlook for occupants and appearance of common areas.	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.	
P0 34.2	DTS/DPF 34.2	
Battle-axe or common driveways incorporate landscaping and permeability to improve appearance and assist in stormwater management.	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	
P0 35.1	DTS/DPF 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.	None are applicable.	
P0 35.2	DTS/DPF 35.2	
Provision is made for suitable external clothes drying facilities.	None are applicable.	
P0 35.3	DTS/DPF 35.3	
Provision is made for suitable household waste and recyclable material storage facilities which are:	None are applicable.	
<ul> <li>(a) located away, or screened, from public view, and</li> <li>(b) conveniently located in proximity to dwellings and the waste collection point.</li> </ul>		
P0 35.4	DTS/DPF 35.4	
Waste and recyclable material storage areas are located away from dwellings.	Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.	
P0 35.5	DTS/DPF 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.	None are applicable.	
PO 35.6	DTS/DPF 35.6	
Services including gas and water meters are conveniently located and screened from public view.	None are applicable.	
	ve urban design	
PO 36.1	DTS/DPF 36.1	
Residential development creating a common driveway / access includes	None are applicable.	
stormwater management systems that minimise the discharge of sediment,	пчопе аге аррисавие.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	4.4 - Attachment 7
PO 36.2	DTS/DPF 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.	None are applicable.
Supported Accommodati	on and retirement facilities
Siting, Configur	ation and Design
PO 37.1	DTS/DPF 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.	None are applicable.
PO 37.2	DTS/DPF 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.	None are applicable.
	and Access
PO 38.1	DTS/DPF 38.1
Development is designed to support safe and convenient access and movement for residents by providing:	None are applicable.
<ul> <li>(a) ground-level access or lifted access to all units</li> <li>(b) level entry porches, ramps, paths, driveways, passenger loading areas and areas adjacent to footpaths that allow for the passing of wheelchairs and resting places</li> <li>(c) car parks with gradients no steeper than 1-in-40, and of sufficient area to provide for wheelchair manoeuvrability</li> <li>(d) kerb ramps at pedestrian crossing points.</li> </ul>	
Communal	Open Space
PO 39.1	DTS/DPF 39.1
Development is designed to provide attractive, convenient and comfortable indoor and outdoor communal areas to be used by residents and visitors.	None are applicable.
PO 39.2	DTS/DPF 39.2
Private open space provision may be substituted for communal open space which is designed and sited to meet the recreation and amenity needs of residents.	None are applicable.
PO 39.3	DTS/DPF 39.3
Communal open space is of sufficient size and dimensions to cater for group recreation.	Communal open space incorporates a minimum dimension of 5 metres.
PO 39.4	DTS/DPF 39.4
Communal open space is designed and sited to:	None are applicable.
(a) be conveniently accessed by the dwellings which it services (b) have regard to acoustic, safety, security and wind effects.	
PO 39.5	DTS/DPF 39.5
Communal open space contains landscaping and facilities that are functional, attractive and encourage recreational use.	None are applicable.
PO 39.6	DTS/DPF 39.6
Communal open space is designed and sited to:	None are applicable.
(a) in relation to rooftop or elevated gardens, minimise overlooking habitable room windows or onto the useable private open space of other dwellings	

Policy24	icy24 P&D Code (in effect) Version 2023.5 30/03/20		
(b) in relation to ground floor communal space, be overlooked by habitable rooms to facilitate passive surveillance.	4.4 - Attachment 7		
Site Facilities	/ Waste Storage		
P0 40.1	DTS/DPF 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.	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	DTS/DPF 40.3		
Provision is made for suitable external clothes drying facilities.	None are applicable.		
PO 40.4	DTS/DPF 40.4		
Provision is made for suitable household waste and recyclable material storage facilities conveniently located away, or screened, from view.	None are applicable.		
PO 40.5	DTS/DPF 40.5		
Waste and recyclable material storage areas are located away from dwellings.	Dedicated waste and recyclable material storage areas are located at least 3m from any habitable room window.		
PO 40.6	DTS/DPF 40.6		
Provision is made for on-site waste collection where 10 or more bins are to be collected at any one time.	e None are applicable.		
P0 40.7	DTS/DPF 40.7		
Services, including gas and water meters, are conveniently located and screened from public view.	None are applicable.		
Student Acc	commodation		
P0 41.1	DTS/DPF 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.	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 8m³ 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.		
P0 41.2	DTS/DPF 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.	None are applicable.		
All non-resider	Itial development		
Water Sen	sitive Design		
PO 42.1 <b>84</b> 4	DTS/DPF 42.1		
Development likely to result in risk of export of sediment, suspended solids,	None are applicable.		

Policy24	P&D Code (in effect) Version 2023.5 30/03/202
organic matter, nutrients, oil and grease include stormwater management	
systems designed to minimise pollutants entering stormwater.	4.4 - Attachment 7
P0 42.2	DTS/DPF 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.	None are applicable.
PO 42.3	DTS/DPF 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.	None are applicable.
Wash-down and Waste	Loading and Unloading
P0 43.1	DTS/DPF 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 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.	None are applicable.
Laneway D	 evelopment
Infrastructur	e and Access
P0 44.1	DTS/DPF 44.1
Development with a primary street comprising a laneway, alley, lane, right of way or similar minor thoroughfare only occurs where:	Development with a primary street frontage that is not an alley, lane, right of way or similar public thoroughfare.
(a) existing utility infrastructure and services are capable of accommodating the development	
<ul> <li>the primary street can support access by emergency and regular service vehicles (such as waste collection)</li> </ul>	
(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	

### Table 1 - Private Open Space

the development to support an appropriate development intensity and orderly development of land fronting minor thoroughfares.

Dwelling Type	Dwelling / Site Configuration	Minimum Rate
Dwelling (at ground level, other than a residential flat building that includes above ground dwellings)	845	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:

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
		16m2 / with a minimum dimension 3m.
		4.4 - Attachment 7
Cabin or caravan (permanently fixed to the ground) in a residential park or caravan and tourist park		Total area: 16m <sup>2</sup> , which may be uses as second car parking space, provided on each site intended for residential occupation.
Dwelling in a residential flat building or mixed use building which incorporate above ground level dwellings	Dwellings at ground level:	15m <sup>2</sup> / minimum dimension 3m
	Dwellings above ground level:	
	Studio (no separate bedroom)	4m <sup>2</sup> / minimum dimension 1.8m
	One bedroom dwelling	8m <sup>2</sup> / minimum dimension 2.1m
	Two bedroom dwelling	11m <sup>2</sup> / minimum dimension 2.4m
	Three + bedroom dwelling	15 m <sup>2</sup> / minimum dimension 2.6m

# Forestry

## **Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome		
	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 Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature	
Si	ting	
PO 1.1	DTS/DPF 1.1	
Commercial forestry plantations are established where there is no detrimental effect on the physical environment or scenic quality of the rural landscape.	None are applicable.	
PO 1.2	DTS/DPF 1.2	
Commercial forestry plantations are established on slopes that are stable to minimise the risk of soil erosion.	Commercial forestry plantations are not located on land with a slope exceeding 20% (1-in-5).	
PO 1.3	DTS/DPF 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.	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	DTS/DPF 1.4	
Commercial forestry plantations are separated from reserves gazetted under the National Parks and Wildlife Act 1972 and/or Wilderness Protection Act 1992	Commercial forestry plantations and operations associated with their establishment, management and harvesting are set back 50m or more from a	

Policy24		Version 2023.5 30/03/2023	
to minimise fire risk and potential for weed infestation.	reserve gazetted under the National Parks and Wilderness Protection Act 1992. <b>4.4</b>	Wildlife Act 1972 and/or - Attachment 7	
Water P	otection		
P0 2.1	DTS/DPF 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.	None are applicable.		
PO 2.2	DTS/DPF 2.2		
Appropriate siting, layout and design measures are adopted to minimise the impact of commercial forestry plantations on surface water resources.	(a) do not involve cultivation (excluding spot cultivation) in drainage lin (b) are set back 20m or more from the banks of any major watercours (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 or watercourse or sinkhole ( with no direct connection to an aquifer).		
Fire Mar	agement		
P0 3.1	DTS/DPF 3.1		
Commercial forestry plantations incorporate appropriate firebreaks and fire	Commercial forestry plantations provide:		
management design elements.	<ul> <li>(a) 7m or more wide external boundary firebreaks for plantations of 4 or less</li> <li>(b) 10m or more wide external boundary firebreaks for plantations of between 40ha and 100ha</li> <li>(c) 20m or more wide external boundary firebreaks, or 10m with an additional 10m or more of fuel-reduced plantation, for plantations 100ha or greater.</li> </ul>		
P0 3.2	DTS/DPF 3.2		
Commercial forestry plantations incorporate appropriate 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.		
Power-line	Clearances		
PO 4.1  Commercial forestry plantations achieve and maintain appropriate clearances from aboveground powerlines.	DTS/DPF 4.1  Commercial forestry plantations incorporating trees with an expected ma height of greater than 6m meet the clearance requirements listed in the following table:		
	Pole	Minimum horizontal clearance distance between plantings and transmission lines	
	500 kV Tower 3	38m	
	275 kV Tower 2	25m	
	132 kV Tower 3	30m	
	132 kV Pole 2	20m	
847	66 kV Pole 2	20m	
047	Less than 66 kV Pole 2	20m	

# 4.4 - Attachment 7

## **Housing Renewal**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome				
	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 Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature					
Land Use and Intensity						
PO 1.1	DTS/DPF 1.1					
Residential development provides a range of housing choices.	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	DTS/DPF 1.2					
Medium-density housing options or higher are located in close proximity to public transit, open space and/or activity centres.	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).					
P0 2.2	DTS/DPF 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.	None are applicable.					
Primary St	reet 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 S	Street Setback					
	DTS/DPF 4.1  Buildings are set back at least 900mm from the boundary of the allotment					
separation between building walls and public streets and contribute to a suburban streetscape character.	with a secondary street frontage.					

Downloaded on 14/04/2023 Generated By Policy24 Page 64 of 102

the walls of the building elevation, with a maximum of 80% of the

building elevation in a single material or finish.

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023		
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  4.4 - Attachment 7  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 2m² 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 an 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 O <sub>I</sub>	oen Space		
PO 10.1  Dwellings are provided with suitable sized areas of usable private open space	DTS/DPF 10.1  Private open space is provided in accordance with the following table:		
to meet the needs of occupants.	Dwelling Type	Dwelling / Site	Minimum Rate
	Dwelling (at ground level)		Total area: 24m <sup>2</sup> located behind the building line Minimum adjacent to a living room: 16m <sup>2</sup> with a minimum dimension 3m
	Dwelling (above ground level)	Studio	4m <sup>2</sup> / minimum dimension 1.8m
		One bedroom dwelling	8m² / minimum dimension 2.1m
		Two bedroom dwelling	11m² / minimum dimension 2.4m
		Three + bedroom dwelling	15 m <sup>2</sup> / minimum dimension 2.6m
PO 10.2	DTS/DPF 10.2	<u> </u>	

Policy24  Private open space positioned to provide convenient access from internal	P&D Code (in effect) Version 2023.5 30/03/2023 At least 50% of the required area of private open space is accessible from a
living areas.	habitable room. 4.4 - Attachment 7
PO 10.3	DTS/DPF 10.3
Private open space is positioned and designed to:	None are applicable.
<ul> <li>(a) provide useable outdoor space that suits the needs of occupants;</li> <li>(b) take advantage of desirable orientation and vistas; and</li> <li>(c) adequately define public and private space.</li> </ul>	
Visua	privacy
P0 11.1	DTS/DPF 11.1
Development mitigates direct overlooking from upper level windows to habitable rooms and private open spaces of adjoining residential uses.	Upper level windows facing side or rear boundaries shared with another residential allotment/site satisfy one of the following:
	<ul> <li>(a) are permanently obscured to a height of 1.5m above finished floor level and are fixed or not capable of being opened more than 200mm</li> <li>(b) have sill heights greater than or equal to 1.5m above finished floor level</li> <li>(c) incorporate screening with a maximum of 25% openings, permanently fixed no more than 500mm from the window surface and sited adjacent to any part of the window less than 1.5m above the finished floor.</li> </ul>
P0 11.2	DTS/DPF 11.2
Development mitigates direct overlooking from upper level balconies and terraces to habitable rooms and private open space of adjoining residential uses.	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
Lands	scaping
PO 12.1	DTS/DPF 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.	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) (m²)  where the provided in accordance with (a) and (b):  (b):  (a) a total area as determined by the following table:  Dwelling site area (or in the case of residential flat building percentage of site  10%  10%  15%
	200-450 20%
	(b) at least 30% of land between the road boundary and the building line.
Water Sen	I sitive Design
P0 13.1	DTS/DPF 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 85' (c) manage runoff quality to maintain, as close as practical, predevelopment conditions.	None are applicable.

Diviewage are located and designed to facilitate safe access and ogress while maximishing and variable for street tree planting, landscaped street frontages and construction of variable for street tree planting, landscaped street frontages and construction of variable for street tree with street infrastructure or street trees.    Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.    Vehicle access to designated car parking spaces satisfy (a) or (b):   Vehicle access to designated car parking spaces satisfy (a) or (b):   Vehicle access to designated car parking spaces satisfy (a) or (b):   Vehicle access to designated car parking spaces satisfy (a) or (b):   Vehicle access to designated car parking spaces satisfy (a) or (b):   Vehicle access to designated car parking spaces satisfy (a) or (b):   Vehicle access to designated car parking spaces satisfy (a) or (b):   Vehicle access to designated car parking spaces satisfy (a) or (b):   Vehicle access to designated car parking spaces satisfy (a) or (b):   Vehicle access to the shorting tree tree unlet on the final tree of the division of land to the vehicle of any application for the vehicle part point of an interescent of 2 or more roads   Vehicle access to the shorting spaces and the space of access on the boundary of the application of the vehicle of any application of the transfer functions are parking spaces.    Vehicle access to designated car parking spaces and the should any tree of the vehicle of any application of the transfer functions are parking to the transfer functions and tree tree unlet of the vehicle of any applications of the transfer functions are parking applications on the transfer functions are parking applications on the parking of the transfer functions are parking applications and the parking of the parking of the parking of the tr	Policy24	P&D Code (in effect) Version 2023.5 30/03/202	
Discore 17.2  Diveways are located and designed to facilitate safe access and egress while Normal American State (1997) and available for street tree planting, landscaped attent frontages and on-street parking.  Discore 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.  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces on the boundary (a) the al	storage needs of the development considering the intensity and	4.4 - Attachment 7	
Driveways are located and designed to facilitate safe access and egress while maximising and available for street tree planting, landscaped street frontages.  P3 17 2	Vehicle	Access	
maximising land available for street tree planning, landscaped street frontages and on-street parking.  PO172  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces satisfy (a) or (b):  Vehicle access to designated car parking spaces as takes to an access point or an access data parking spaces.  Vehicle access to designated car parking spaces as takes to an access that the street is on access access in the pace of access data pace of access and the space of access access to the access access to the access access and the pace of access access access access access and the pace of access access access access access access access access and the pace of access	PO 17.1	DTS/DPF 17.1	
Vehicle access is safe, convenient, minimises interruption to the operation of public roads and does not interfere with street infrastructure or street trees.  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) O. Shor more from any street furniture, street pole, infrastructure services pit, or other stormwater or utility infrastructure services pit, or other stormwater or utility infrastructure services pit, or other stormwater or utility or more from the base of the trunk of a street tree unlied of the marked lines or infrastructure dedicating a pedestrian crossing.  PD 17.3  Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.  Of 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 carpor is not more than 1-ia-4 on average  (b) they are allegard relative to the street so that there is no more than a 20 degree deviation from 90 degrees between the centreline of any dedicated parking space to which it provides are unlied to the street so that there is no more than a 20 degree deviation from 90 degrees between the centreline of any dedicated parking space to which it provides are some specific to which it provides are some provides and specific to which it provides are some provides and specific to which it provides are some provides and specific to which it provides are some provides and specific to which it provides are some specific to which it provides are some provides and specific to which it provides are some provides and the specific to which it provides are some provides and the specific to which it provides are some provides and the specific to which it provides are some provides and the specific to which it provides are some prov	maximising land available for street tree planting, landscaped street frontages	None are applicable.	
public roads and does not interfere with street infrastructure or street trees.  (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:  (a) 0. Smor more from may street furniture, street pole, infrastructure unless consent is provided from the sase of the trunk of a street tree unless consent is provided from the tree owner for a lesser distant infrastructure unless consent is provided from the sase of the trunk of a street tree unless consent is provided from the tree owner for a lesser distant owner.  (b) 2m or more from the base of the trunk of a street tree unless consent is provided from the sase of the trunk of a street tree unless consent is provided from the tree owner for a lesser distant owner.  (b) 6m or more from the base of the trunk of a street tree unless consent is provided from the sase of the trunk of a street tree unless consent is provided from the sase of the trunk of a street tree unless consent is provided from the sase of the trunk of a street tree unless consent is provided from the sase of the trunk of a street tree unless consent is provided from the sase of the trunk of a street tree unless consent is provided from the sase of the same tree of	P0 17.2	DTS/DPF 17.2	
Driveways are designed to enable safe and convenient vehicle movements from the public road to on-site parking spaces.  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 carpor is not more than 1-4 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 noad 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 boundar of the allotment / site.  Driveways and access points are designed and distributed to optimise the provision of on-street parking.  Driveways and access points are designed and distributed to optimise the provision of on-street parking.  Driveways and access points are designed and distributed to optimise the provision of on-street parking.  Driveways and access points are designed and distributed to optimise the provision of on-street parking.  Driveways and access points are designed and distributed to optimise the provision of 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 on 33 on-street spaces per dwelling on the site (rounded up to the nearest whole number)  (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.	·	(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	
from the public road to on-site parking spaces.  (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 or way is at least 6.2m wide along the bounda of the allotment / site.  PO 17.4  Driveways and access points are designed and distributed to optimise the provision of on-street parking.  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 is available abutting the site's street frontage, on-street parking is available abutting the site's street frontage, on-street parking is available abutting the site's street frontage, on-street parking is available abutting the site's street frontage, on-street parking is available abutting the site's street frontage, on-street parking is retained in accordance with the following requirements:  (a) minimum car park length of 6m for an intermediate space located between two other parking spaces or to an end obstruction where the parking is indented.	P0 17.3		
Driveways and access points are designed and distributed to optimise the provision of on-street parking.  Where 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.	,	<ul> <li>(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</li> <li>(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.</li> <li>(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.</li> </ul>	
PO 17.5  Residential driveways that service more than one dwelling of a dimension to allow safe and convenient movement.  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.	Driveways and access points are designed and distributed to optimise the	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	
Residential driveways that service more than one dwelling of a dimension to allow safe and convenient movement.  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.		between two onler parking spaces.	
allow safe and convenient movement.  (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.			
D017.6 <b>Q5.7</b> DT0/DDF17.6	-	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	
(FU 17.0	PO 17.6 <b>853</b>	DTS/DPF 17.6	

Policy24 P&D Code (in effect) Version 2023.5 30/0		
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.	Driveways providing access to more than one dwelling, or a dwelling on a battle-axe site, allow a B85 passenger vehicle to enter and existing arrange parking spaces in no more than a three-point turn manoeuvre	
PO 17.7	DTS/DPF 17.7	
Dwellings are adequately separated from common driveways and manoeuvring areas.	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.	
Sto	I rage	
PO 18.1	DTS/DPF 18.1	
Dwellings are provided with sufficient and accessible space for storage to meet likely occupant needs.	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 <sup>3</sup>	
	(b) 1 bedroom dwelling / apartment: not less than 8m <sup>3</sup>	
	(c) 2 bedroom dwelling / apartment: not less than 10m <sup>3</sup>	
	(d) 3+ bedroom dwelling / apartment: not less than 12m <sup>3</sup> .	
Earth	nworks	
PO 19.1	DTS/DPF 19.1	
Development, including any associated driveways and access tracks,	The development does not involve:	
minimises the need for earthworks to limit disturbance to natural topography.	(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 connection	I ns and infrastructure	
PO 20.1	DTS/DPF 20.1	
Dwellings are provided with appropriate service connections and	The site and building:	
infrastructure.	<ul> <li>(a) have the ability to be connected to a permanent potable water supply</li> <li>(b) have the ability to be connected to a sewerage system, or a wastewater system approved under the South Australian Public Health Act 2011</li> <li>(c) have the ability to be connected to electricity supply</li> </ul>	
	(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 <i>Electricity Act 1996</i> .	
Site conf	I tamination	
PO 21.1	DTS/DPF 21.1	
Land that is suitable for sensitive land uses to provide a safe environment.	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 <u>more sensitive use</u> on land at which <u>site contamination</u> does not exist (as demonstrated in a <u>site</u>	
	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) <u>a site contamination audit report</u> has been prepared under Part 10A of the <i>Environment Protection Act 1993</i> in relation to the land within the previous 5 years which states that  A. <u>site contamination</u> does not exist (or no longer exists) at the land	
854	or	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
	C. where <u>remediation</u> is, or remains, necessary for the proposed use (or rate of the proposed use (or rate of the proposed use of the proposed us
	and  (ii) no other <u>class 1 activity</u> or <u>class 2 activity</u> has taken place at the land since the preparation of the site contamination audit report (as demonstrated in a <u>site contamination declaration form</u> ).

# Infrastructure and Renewable Energy Facilities

# Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome		
DO 1	Efficient provision of infrastructure networks and services, renewable energy facilities and ancillary development in a manner that minimises hazard, is environmentally and culturally sensitive and manages adverse visual impacts on natural and rural landscapes and residential amenity.	

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
	General
PO 1.1	DTS/DPF 1.1
Development is located and designed to minimise hazard or nuisance adjacent development and land uses.	to None are applicable.
	Visual Amenity
PO 2.1	DTS/DPF 2.1
The visual impact of above-ground infrastructure networks and servic (excluding high voltage transmission lines), renewable energy facilities (excluding wind farms), energy storage facilities and ancillary develop minimised from townships, scenic routes and public roads by:  (a) utilising features of the natural landscape to obscure views we practicable	s ment is
(b) siting development below ridgelines where practicable (c) avoiding visually sensitive and significant landscapes (d) using materials and finishes with low-reflectivity and colours to 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 accommon or zoned to primarily accommodate sensitive receivers.	ne
PO 2.2	855 <sub>DTS/DPF 2.2</sub>
Pumping stations, battery storage facilities, maintenance sheds and o	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
ancillary structures incorporate vegetation buffers to reduce adverse visual	
impacts on adjacent land.	4.4 - Attachment 7
P0 2.3	DTS/DPF 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.	None are applicable.
Rehah	ilitation
PO 3.1	DTS/DPF 3.1
Progressive rehabilitation (incorporating revegetation) of disturbed areas,	None are applicable.
ahead of or upon decommissioning of areas used for renewable energy facilities and transmission corridors.	
Hazard M:	I anagement
P0 4.1	DTS/DPF 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.	None are applicable.
PO 4.2	DTS/DPF 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.	None are applicable.
P0 4.3	DTS/DPF 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.	None are applicable.
Electricity Infrastructure an	nd Battery Storage Facilities
PO 5.1	DTS/DPF 5.1
Electricity infrastructure is located to minimise visual impacts through techniques including:	None are applicable.
(a) siting utilities and services:	
PO 5.2	DTS/DPF 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.	None are applicable.
P0 5.3	DTS/DPF 5.3
Battery storage facilities are co-located with substation infrastructure where practicable to minimise the development footprint and reduce environmental impacts.	None are applicable.
Telecommunio	Leation Facilities
PO 6.1	DTS/DPF 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.	None are applicable.
P0 6.2	DTS/DPF 6.2

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
Telecommunications antennae are located as close as practicable to support structures to manage overall bulk and mitigate impacts on visual amenity.	None are applicable.  4.4 - Attachment 7	
P0 6.3	DTS/DPF 6.3	
Telecommunications facilities, particularly towers/monopoles, are located and sized to mitigate visual impacts by the following methods:	None are applicable.	
(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	;	
using materials and finishes that complement the environment     screening using landscaping and vegetation, particularly for equipment shelters and huts.		
Renewable	Energy Facilities	
P0 7.1	DTS/DPF 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.	None are applicable.	
Renewable Energy	Facilities (Wind Farm)	
PO 8.1	DTS/DPF 8.1	
Visual impact of wind turbine generators on the amenity of residential and tourist development is reduced through appropriate separation.	(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	DTS/DPF 8.2	
The visual impact of wind turbine generators on natural landscapes is managed by:	None are applicable.	
designing wind turbine generators to be uniform in colour, size and shape     coordinating blade rotation and direction     mounting wind turbine generators on tubular towers as opposed to lattice towers.		
PO 8.3	DTS/DPF 8.3	
Wind turbine generators and ancillary development minimise potential for bird and bat strike.	None are applicable.	
PO 8.4	DTS/DPF 8.4	
Wind turbine generators incorporate recognition systems or physical markers to minimise the risk to aircraft operations.	No Commonwealth air safety (CASA / ASA) or Defence requirement is applicable.	
PO 8.5	DTS/DPF 8.5	
Meteorological masts and guidewires are identifiable to aircraft through <b>85</b> use of colour bands, marker balls, high visibility sleeves or flashing strobes.	None are applicable.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
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.	None are applicable.  4.4 - Attachment 7	
Water	Supply	
PO 11.1	DTS/DPF 11.1	
Development is connected to an appropriate water supply to meet the ongoing requirements of the intended use.	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	DTS/DPF 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.	A dwelling is connected, or will be connected, to a reticulated water scheme of 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.	
Wastewat	er Services	
PO 12.1	DTS/DPF 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, saline or poorly drained land to minimise environmental harm.	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.	
P0 12.2	DTS/DPF 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.	Development is not built on, or encroaches within, an area that is, or will be, required for a sewerage system or waste control system.	
Temporar	y Facilities	
PO 13.1	DTS/DPF 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.	A waste collection and disposal service is used to dispose of the volume of waste at the rate it is generated.	
PO 13.2	DTS/DPF 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.	None are applicable.	

# **Intensive Animal Husbandry and Dairies**

#### Assessment Provisions (AP)

Desired Outcome (DO)

# 4.4 - Attachment 7

Desired Outcome		
	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 Outcome	Deemed-to-Satisfy Criteria /		
Siting a	Designated Performance Feature		
PO 1.1 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.	None are applicable.		
P0 1.2	DTS/DPF 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.	None are applicable.		
P0 1.3	DTS/DPF 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.	None are applicable.		
PO 1.4	DTS/DPF 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.	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.		
P0 1.5	DTS/DPF 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.	Lagoons for the storage or treatment of milking shed effluent are set back 20m or more from public roads.		
W	aste		
PO 2.1	DTS/DPF 2.1		
Storage of manure, used litter and other wastes (other than waste water lagoons) is sited, designed, constructed and managed to:			
<ul> <li>(a) avoid attracting and harbouring vermin</li> <li>(b) avoid polluting water resources</li> <li>(c) be located outside 1% AEP flood event areas.</li> </ul>			
Soil and Water Protection			
P0 3.1	DTS/DPF 3.1		
To avoid environmental harm and adverse effects on water resources, intensive animal husbandry operations are appropriately set back from:	Intensive animal husbandry operations are set back:  (a) 800m or more from a public water supply reservoir		
(a) public water supply reservoirs (b) major watercourses (third order or higher stream)	(b) 200m or more from a major watercourse (third order or higher stream)		
(b) major watercourses (third order or higher stream) (c) any other watercourse, bore or well used for domestic or stock water supplies.	(c) 100m or more from any other watercourse, bore or well used for domestic or stock water supplies.		
P0 3.2	DTS/DPF 3.2		

Policy	24		P&D Code (in effect) Version 2023.5 30/03/2023
	ve animal husbandry operations and dairies incorporate appropriately ed effluent and run-off facilities that:	None are applicable.	4.4 - Attachment 7
(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.		

#### **Interface between Land Uses**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

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

Use Compatibility	
DTS/DPF 1.1	
None are applicable.	
DTS/DPF 1.2	
None are applicable.	
of Operation	
DTS/DPF 2.1	
Development operating within	n the following hours:
Class of Development	Hours of operation
Consulting room	7am to 9pm, Monday to Friday 8am to 5pm, Saturday
	oam to Spin, Saturday
Office	7am to 9pm, Monday to Friday
	8am to 5pm, Saturday
Shop, other than any one or combination of the	7am to 9pm, Monday to Friday
following:  (a) restaurant	8am to 5pm, Saturday and Sunday
	DTS/DPF 1.2 None are applicable.  of Operation  DTS/DPF 2.1 Development operating within  Class of Development  Consulting room  Office  Shop, other than any one or combination of the following:

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
	(b) cellar door in the Productive Rural Landscape Zone, Rural Zone or Rural Horticulture Zone
Oversha	adowing
PO 3.1	DTS/DPF 3.1
Overshadowing of habitable room windows of adjacent residential land uses in:	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.
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.	
PO 3.2	DTS/DPF 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	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:
winter sunlight  b. other zones is managed to enable access to direct winter sunlight.	<ul> <li>a. for ground level private open space, the smaller of the following:</li> <li>i. half the existing ground level open space</li> <li>or</li> <li>ii. 35m2 of the existing ground level open space (with at least one of the area's dimensions measuring 2.5m)</li> <li>b. for ground level communal open space, at least half of the existing ground level open space.</li> </ul>
PO 3.3	DTS/DPF 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.	None are applicable.
P0 3.4	DTS/DPF 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.	None are applicable.
Activities Generatin	g 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:	DTS/DPF 4.2  None are applicable.
(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 accentage.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
equipment and the adjacent sensitive receiver boundary or zone.	4.4 - Attachment 7
Po 4.3  Fixed plant and equipment in the form of pumps and/or filtration systems for a swimming pool or spa are positioned and/or housed to not cause unreasonable noise nuisance to adjacent sensitive receivers (or lawfully approved sensitive receivers).	DTS/DPF 4.3  The pump and/or filtration system ancillary to a dwelling erected on the same site is:  (a) enclosed in a solid acoustic structure located at least 5m from the nearest habitable room located on an adjoining allotment or  (b) located at least 12m from the nearest habitable room located on an
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.	adjoining allotment.  DTS/DPF 4.4  Adjacent land is used for residential purposes.
P0 4.5  Outdoor areas associated with licensed premises (such as beer gardens or dining areas) are designed and/or sited to not cause unreasonable noise impact on existing adjacent sensitive receivers (or lawfully approved sensitive receivers).	DTS/DPF 4.5  None are applicable.
Po 4.6  Development incorporating music achieves suitable acoustic amenity when measured at the boundary of an adjacent sensitive receiver (or lawfully approved sensitive receiver) or zone primarily intended to accommodate sensitive receivers.	DTS/DPF 4.6  Development incorporating music includes noise attenuation measures that will achieve the following noise levels:
	Externally at the nearest existing or envisaged noise sensitive location  Externally at the nearest existing or envisaged noise sensitive location  Less than 8dB above the level of background noise (L <sub>90,15min</sub> ) in any octave band of the sound spectrum (LOCT10,15 < LOCT90,15 + 8dB)
Air C	Quality
P0 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	DTS/DPF 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.	None are applicable.
Ligh	I t Spill
PO 6.1	DTS/DPF 6.1
External lighting is positioned and designed to not cause unreasonable light spill impact on adjacent sensitive receivers (or lawfully approved sensitive receivers).	None are applicable.
PO 6.2	DTS/DPF 6.2
External lighting is not hazardous to motorists and cyclists.	None are applicable.
Solar Refle	ctivity / Glare

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
impacts associated with agricultural and horticultural activities.	4.4 - Attachment 7
PO 9.7	DTS/DPF 9.7
Urban development does not prejudice existing agricultural and horticultural activities through appropriate separation and design techniques.	None are applicable.
Interface with Mines and Qua	arries (Rural and Remote Areas)
PO 10.1	DTS/DPF 10.1
Sensitive receivers are separated from existing mines to minimise the adverse impacts from noise, dust and vibration.	Sensitive receivers are located no closer than 500m from the boundary of a Mining Production Tenement under the <i>Mining Act 1971</i> .

#### **Land Division**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome		
DO 1	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	
P0 1.1	DTS/DPF 1.1	
Land division creates allotments suitable for their intended use.	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.	
P0 1.2	DTS/DPF 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.	None are applicable.	
Design a	and Layout	
P0 2.1 <b>86</b> 5	DTS/DPF 2.1	
Land division results in a pattern of development that minimises the likelihood	None are applicable.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
of future earthworks and retaining walls.	
PO 2.2	4.4 - Attachment 7
Land division enables the appropriate management of interface impacts	None are applicable.
between potentially conflicting land uses and/or zones.	
PO 2.3	DTS/DPF 2.3
Land division maximises the number of allotments that face public open space and public streets.	None are applicable.
PO 2.4	DTS/DPF 2.4
Land division is integrated with site features, adjacent land uses, the existing transport network and available infrastructure.	None are applicable.
PO 2.5	DTS/DPF 2.5
Development and infrastructure is provided and staged in a manner that supports an orderly and economic provision of land, infrastructure and services.	None are applicable.
PO 2.6	DTS/DPF 2.6
Land division results in watercourses being retained within open space and development taking place on land not subject to flooding.	None are applicable.
P0 2.7	DTS/DPF 2.7
Land division results in legible street patterns connected to the surrounding street network.	None are applicable.
PO 2.8	DTS/DPF 2.8
Land division is designed to preserve existing vegetation of value including native vegetation and regulated and significant trees.	None are applicable.
Roads at	d Access
PO 3.1	DTS/DPF 3.1
PO 3.1  Land division provides allotments with access to an all-weather public road.	DTS/DPF 3.1  None are applicable.
Land division provides allotments with access to an all-weather public road.	None are applicable.  DTS/DPF 3.2
Land division provides allotments with access to an all-weather public road.  PO 3.2  Street patterns and intersections are designed to enable the safe and efficient	None are applicable.  DTS/DPF 3.2
Land division provides allotments with access to an all-weather public road.  PO 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.	None are applicable.  DTS/DPF 3.2  None are applicable.
Land division provides allotments with access to an all-weather public road.  PO 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.  PO 3.3  Land division does not impede access to publicly owned open space and/or	None are applicable.  DTS/DPF 3.2  None are applicable.  DTS/DPF 3.3
Land division provides allotments with access to an all-weather public road.  PO 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.  PO 3.3  Land division does not impede access to publicly owned open space and/or recreation facilities.	None are applicable.  DTS/DPF 3.2  None are applicable.  DTS/DPF 3.3  None are applicable.
Land division provides allotments with access to an all-weather public road.  PO 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.  PO 3.3  Land division does not impede access to publicly owned open space and/or recreation facilities.  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	None are applicable.  DTS/DPF 3.2  None are applicable.  DTS/DPF 3.3  None are applicable.  DTS/DPF 3.4
Land division provides allotments with access to an all-weather public road.  P0 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.  P0 3.3  Land division does not impede access to publicly owned open space and/or recreation facilities.  P0 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.	None are applicable.  DTS/DPF 3.2  None are applicable.  DTS/DPF 3.3  None are applicable.  DTS/DPF 3.4  None are applicable.
Land division provides allotments with access to an all-weather public road.  PO 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.  PO 3.3  Land division does not impede access to publicly owned open space and/or recreation facilities.  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.  PO 3.5  Road reserves are designed to accommodate pedestrian and cycling	None are applicable.  DTS/DPF 3.2  None are applicable.  DTS/DPF 3.3  None are applicable.  DTS/DPF 3.4  None are applicable.  DTS/DPF 3.5
Land division provides allotments with access to an all-weather public road.  P0 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.  P0 3.3  Land division does not impede access to publicly owned open space and/or recreation facilities.  P0 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.  P0 3.5  Road reserves are designed to accommodate pedestrian and cycling infrastructure, street tree planting, landscaping and street furniture.	None are applicable.  DTS/DPF 3.2  None are applicable.  DTS/DPF 3.3  None are applicable.  DTS/DPF 3.4  None are applicable.  DTS/DPF 3.5  None are applicable.
Land division provides allotments with access to an all-weather public road.  PO 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.  PO 3.3  Land division does not impede access to publicly owned open space and/or recreation facilities.  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.  PO 3.5  Road reserves are designed to accommodate pedestrian and cycling infrastructure, street tree planting, landscaping and street furniture.	None are applicable.  DTS/DPF 3.2  None are applicable.  DTS/DPF 3.3  None are applicable.  DTS/DPF 3.4  None are applicable.  DTS/DPF 3.5  None are applicable.  DTS/DPF 3.6
Land division provides allotments with access to an all-weather public road.  P0 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.  P0 3.3  Land division does not impede access to publicly owned open space and/or recreation facilities.  P0 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.  P0 3.5  Road reserves are designed to accommodate pedestrian and cycling infrastructure, street tree planting, landscaping and street furniture.  P0 3.6  Road reserves accommodate stormwater drainage and public utilities.	None are applicable.  DTS/DPF 3.2  None are applicable.  DTS/DPF 3.3  None are applicable.  DTS/DPF 3.4  None are applicable.  DTS/DPF 3.5  None are applicable.  DTS/DPF 3.6  None are applicable.
Land division provides allotments with access to an all-weather public road.  PO 3.2  Street patterns and intersections are designed to enable the safe and efficient movement of pedestrian, cycle and vehicular traffic.  PO 3.3  Land division does not impede access to publicly owned open space and/or recreation facilities.  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.  PO 3.5  Road reserves are designed to accommodate pedestrian and cycling infrastructure, street tree planting, landscaping and street furniture.  PO 3.6  Road reserves accommodate stormwater drainage and public utilities.  PO 3.7  Road reserves provide unobstructed vehicular access and egress to and from individual allotments and sites.	None are applicable.  DTS/DPF 3.2  None are applicable.  DTS/DPF 3.3  None are applicable.  DTS/DPF 3.4  None are applicable.  DTS/DPF 3.5  None are applicable.  DTS/DPF 3.6  None are applicable.  DTS/DPF 3.7

Policy24 P&D Code (in effect) Version 2023.5 30/03/2023			
movement of pedestrian, cycle and vehicular traffic.			
PO 3.9	4.4 - Attachment 7		
Roads, open space and thoroughfares provide safe and convenient linkages to			
the surrounding open space and transport network.	None are applicable.		
PO 3.10	DTS/DPF 3.10		
Public streets are designed to enable tree planting to provide shade and enhance the amenity of streetscapes.	None are applicable.		
P0 3.11	DTS/DPF 3.11		
Local streets are designed to create low-speed environments that are safe for cyclists and pedestrians.	None are applicable.		
Infrast	ructure		
PO 4.1	DTS/DPF 4.1		
Land division incorporates public utility services within road reserves or dedicated easements.	None are applicable.		
P0 4.2	DTS/DPF 4.2		
Waste water, sewage and other effluent is capable of being disposed of from	Each allotment can be connected to:		
each allotment without risk to public health or the environment.	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	DTS/DPF 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.	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	DTS/DPF 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.	None are applicable.		
P0 4.5	DTS/DPF 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.	None are applicable.		
PO 4.6	DTS/DPF 4.6		
Constructed wetland systems, including associated detention and retention basins, are sited and designed to function as a landscape feature.	None are applicable.		
Minor Land Division	I (Under 20 Allotments)		
Open	Space		
PO 5.1	DTS/DPF 5.1		
Land division proposing an additional allotment under 1 hectare provides or supports the provision of open space.	None are applicable.		
Solar O	ientation		
P0 6.1	DTS/DPF 6.1		
Land division for residential purposes facilitates solar access through	None are applicable.		
allotment orientation.			
	sitive Design		
- Water Serio			

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
P0 7.1	DTS/DPF 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.	None are applicable. 4.4 - Attachment 7
PO 7.2	DTS/DPF 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.	None are applicable.
Battle-Axe D	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
PO 8.3	5.5m.
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.	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	on (20+ Allotments)
	Space
P0 9.1  Land division allocates or retains evenly distributed, high quality areas of open space to improve residential amenity and provide urban heat amelioration.	DTS/DPF 9.1  None are applicable.
PO 9.2	DTS/DPF 9.2
Land allocated for open space is suitable for its intended active and passive recreational use considering gradient and potential for inundation.	None are applicable.
PO 9.3	DTS/DPF 9.3
Land allocated for active recreation has dimensions capable of accommodating a range of active recreational activities.	None are applicable.
Water Sens	sitive Design
PO 10.1	DTS/DPF 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.	None are applicable.
PO 10.2	DTS/DPF 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 stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream	None are applicable.

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
systems.	4.4 - Attachment 7
PO 10.3	DTS/DPF 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.	None are applicable.
Solar 0	rientation
P0 11.1	DTS/DPF 11.1
Land division creating 20 or more allotments for residential purposes facilitates solar access through allotment orientation and allotment dimensions.	None are applicable.

#### **Marinas and On-Water Structures**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

	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 Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature	
Navigation	n and Safety	
P0 1.1	DTS/DPF 1.1	
Safe public access is provided or maintained to the waterfront, public infrastructure and recreation areas.	None are applicable.	
P0 1.2	DTS/DPF 1.2	
The operation of wharves is not impaired by marinas and on-water structures.	None are applicable.	
P0 1.3	DTS/DPF 1.3	
Navigation and access channels are not impaired by marinas and on-water structures.	None are applicable.	
P0 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 commercia shipping lanes.	
PO 1.5	DTS/DPF 1.5	
Marinas and on-water structures are located to avoid interfering with the operation or function of a water supply pumping station.	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.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
PO 1.6  Maintenance of on-water infrastructure, including revetment walls, is not impaired by marinas and on-water structures.	DTS/DPF1.6  None are applicable.  4.4 - Attachment 7	
Environmental Protection		
PO 2.1	DTS/DPF 2.1	
Development is sited and designed to facilitate water circulation and exchange.	None are applicable.	

# **Open Space and Recreation**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome		
DO 1	Pleasant, functional and accessible open space and recreation facilities are provided at State, regional, district, neighbourhood and local levels for active and passive recreation, biodiversity, community health, urban cooling, tree canopy cover, visual amenity, gathering spaces, wildlife and waterway corridors, and a range of other functions and at a range of sizes that reflect the purpose of that open space.	

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature		
Land Use:	and Intensity		
P0 1.1	DTS/DPF 1.1		
Recreation facilities are compatible with surrounding land uses and activities.	None are applicable.		
PO 1.2	DTS/DPF 1.2		
Open space areas include natural or landscaped areas using locally indigenous plant species and large trees.	None are applicable.		
Design	and Siting		
PO 2.1	DTS/DPF 2.1		
Open space and recreation facilities address adjacent public roads to optimise pedestrian access and visibility.	None are applicable.		
PO 2.2	DTS/DPF 2.2		
Open space and recreation facilities incorporate park furniture, shaded areas and resting places.	None are applicable.		
P0 2.3	DTS/DPF 2.3		
Open space and recreation facilities link habitats, wildlife corridors and existing open spaces and recreation facilities.	None are applicable.		
Pedestrians	s and Cyclists		
PO 3.1 <b>870</b>	DTS/DPF 3.1		
Open space incorporates:	None are applicable.		

Policy	24	P&D Code (in effect) Version 2023.5 30/03/2023
(a)	pedestrian and cycle linkages to other open spaces, centres, schools and public transport nodes;	4.4 - Attachment 7
(b)	safe crossing points where pedestrian routes intersect the road network;	
(c)	easily identified access points.	
	Usal	bility
PO 4.1		DTS/DPF 4.1
	llocated for open space is suitable for its intended active and passive tional use taking into consideration its gradient and potential for tion.	None are applicable.
	Safety an	d Security
PO 5.1		DTS/DPF 5.1
-	space is overlooked by housing, commercial or other development to e casual surveillance where possible.	None are applicable.
PO 5.2		DTS/DPF 5.2
Play ed	quipment is located to maximise opportunities for passive surveillance.	None are applicable.
PO 5.3		DTS/DPF 5.3
	caping provided in open space and recreation facilities maximises unities for casual surveillance throughout the park.	None are applicable.
PO 5.4		DTS/DPF 5.4
	d parks and playgrounds have more than one entrance or exit to see potential entrapment.	None are applicable.
PO 5.5		DTS/DPF 5.5
	ate lighting is provided around toilets, telephones, seating, litter bins, e storage, car parks and other such facilities.	None are applicable.
PO 5.6		DTS/DPF 5.6
	trian and bicycle movement after dark is focused along clearly defined, ately lit routes with observable entries and exits.	None are applicable.
	Sign	nage
PO 6.1		DTS/DPF 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.		None are applicable.
	Buildings an	nd Structures
P0 7.1		DTS/DPF 7.1
	gs and car parking areas in open space areas are designed, located and ale to be unobtrusive.	None are applicable.
P0 7.2		DTS/DPF 7.2
	gs and structures in open space areas are clustered where practical to that the majority of the site remains open.	None are applicable.
P0 7.3		DTS/DPF 7.3
Develo	pment in open space is constructed to minimise the extent of ious surfaces.	None are applicable.
P0 7.4		DTS/DPF 7.4
scenic	pment that abuts or includes a coastal reserve or Crown land used for conservation or recreational purposes is located and designed to have to the purpose, management and amenity of the reserve.	None are applicable.
	87.0	caping

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
Open space and recreation facilities provide for the planting and retention of large trees and vegetation.	None are applicable.  4.4 - Attachment 7
PO 8.2	DTS/DPF 8.2
Landscaping in open space and recreation facilities provides shade and windbreaks:	None are applicable.
<ul> <li>(a) along cyclist and pedestrian routes;</li> <li>(b) around picnic and barbecue areas;</li> <li>(c) in car parking areas.</li> </ul>	
PO 8.3	DTS/DPF 8.3
Landscaping in open space facilitates habitat for local fauna and facilitates biodiversity.	None are applicable.
PO 8.4	DTS/DPF 8.4
Landscaping including trees and other vegetation passively watered with local rainfall run-off, where practicable.	None are applicable.

# **Out of Activity Centre Development**

#### Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome		
D01	The role of Activity Centres in contributing to the form and pattern of development and enabling equitable and convenient access to a range of	
	shopping, administrative, cultural, entertainment and other facilities in a single trip is maintained and reinforced.	

Performance Outcomes and Deemed to Satisfy / Designated Performance Outcome Criteria

	Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1		DTS/DPF 1.1
	sidential development outside Activity Centres of a scale and type that ot diminish the role of Activity Centres:	None are applicable.
(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.	
PO 1.2		DTS/DPF 1.2
	activity centre non-residential development complements Activity s through the provision of services and facilities:	None are applicable.
(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.	

#### **Resource Extraction**

#### **Assessment Provisions (AP)**

4.4 - Attachment 7

Desired Outcome (DO)

Desired Outcome	
DO 1	Resource extraction activities are developed in a manner that minimises human and environmental impacts.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature	
Land Use a	nd Intensity	
P0 1.1	DTS/DPF 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.	None are applicable.	
P0 1.2	DTS/DPF 1.2	
Resource extraction activities avoid damage to cultural sites or artefacts.	None are applicable.	
Water	Quality	
P0 2.1	DTS/DPF 2.1	
Stormwater and/or wastewater from resource extraction activities is diverted into appropriately sized treatment and retention systems to enable reuse on site.	None are applicable.	
Separation Treatments, Buffers and Landscaping		
PO 3.1	DTS/DPF 3.1	
Resource extraction activities minimise adverse impacts upon sensitive receivers through incorporation of separation distances and/or mounding/vegetation.	None are applicable.	
P0 3.2	DTS/DPF 3.2	
Resource extraction activities are screened from view from adjacent land by perimeter landscaping and/or mounding.	None are applicable.	

#### **Site Contamination**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome		
DO 1	Ensure land is suitable for the proposed use in circumstames where it is, or may have been, subject to site contamination.	

Performance Outcome		Deemed-to-Satisfy-Critacianient 7 Designated Performance Feature
P0 1.1	DTS/DP	/DPF 1.1
Po 1.1  Ensure land is suitable for use when land use changes to a more sensitive use.	DTS/DP	does not involve a change in the use of land involves a change in the use of land involves a change in the use of land to a more sensitive use 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) 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 audi- report (as demonstrated in a site contamination declaration form).

# **Tourism Development**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

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 Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature		
87ê Aeral			
PO 1.1	DTS/DPF 1.1		

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
Tourism development complements and contributes to local, natural, cultural	None are applicable.	
or historical context where:	4.4 - Attachment 7	
(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.		
P0 1.2	DTS/DPF 1.2	
Tourism development comprising multiple accommodation units (including any facilities and activities for use by guests and visitors) is clustered to	None are applicable.	
minimise environmental and contextual impact.		
Caravan and	Tourist Parks	
PO 2.1	DTS/DPF 2.1	
Potential conflicts between long-term residents and short-term tourists are	None are applicable.	
minimised through suitable siting and design measures.		
P0 2.2	DTS/DPF 2.2	
Occupants are provided privacy and amenity through landscaping and fencing.	None are applicable.	
P0 2.3	DTS/DPF 2.3	
Communal open space and centrally located recreation facilities are provided	12.5% or more of a caravan park comprises clearly defined communal open	
for guests and visitors.	space, landscaped areas and areas for recreation.	
PO 2.4	DTS/DPF 2.4	
Perimeter landscaping is used to enhance the amenity of the locality.	None are applicable.	
PO 2.5	DTS/DPF 2.5	
Amenity blocks (showers, toilets, laundry and kitchen facilities) are sufficient	None are applicable.	
to serve the full occupancy of the development.		
PO 2.6	DTS/DPF 2.6	
Long-term occupation does not displace tourist accommodation, particularly	None are applicable.	
in important tourist destinations such as coastal and riverine locations.		
Tourist accommodation in areas constituted	under the National Parks and Wildlife Act 1972	
P0 3.1	DTS/DPF 3.1	
Tourist accommodation avoids delicate or environmentally sensitive areas	None are applicable.	
such as sand dunes, cliff tops, estuaries, wetlands or substantially intact		
strata of native vegetation (including regenerated areas of native vegetation		
lost through bushfire).		
P0 3.2	DTS/DPF 3.2	
Tourist accommodation is sited and designed in a manner that is subservient	None are applicable.	
to the natural environment and where adverse impacts on natural features,	Note are applicable.	
landscapes, habitats and cultural assets are avoided.		
D0.2.2	DTS/DDE 2.2	
P0 3.3	DTS/DPF 3.3	
Tourist accommodation and recreational facilities, including associated access ways and ancillary structures, are located on cleared (other than where	None are applicable.	
cleared as a result of bushfire) or degraded areas or where environmental		
improvements can be achieved.		
PO 3.4	DTS/DPF 3.4	
Tourist accommodation is designed to prevent conversion to private dwellings through:	None are applicable.	
(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 prior dwelling such as kitchens and laundries are excluded from, or		
physically separated from individual accommodation units, or are of a		

# **Transport, Access and Parking**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

Desired Outcome			
DO 1	A comprehensive, integrated and connected transport system that is safe, sustainable, efficient, convenient and accessible to all users.		

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature	
Moveme	nt Systems	
PO 1.1	DTS/DPF 1.1	
Development is integrated with the existing transport system and designed to minimise its potential impact on the functional performance of the transport system.	None are applicable.	
PO 1.2	DTS/DPF 1.2	
Development is designed to discourage commercial and industrial vehicle movements through residential streets and adjacent other sensitive receivers.	None are applicable.	
PO 1.3	DTS/DPF 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.	None are applicable.	
PO 1.4	DTS/DPF 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.	All vehicle manoeuvring occurs onsite.	
Sightlines		
PO 2.1	DTS/DPF 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.	None are applicable.	
PO 2.2	DTS/DPF 2.2	
Walls, fencing and landscaping adjacent to driveways and corner sites are designed to provide adequate sightlines between vehicles and pedestrians.	None are applicable.	
Vehicle Access		
PO 3.1	DTS/DPF 3.1	
Safe and convenient access minimises impact or interruption on the operation of public roads.	The access is:  (a) provided via a lawfully existing or authorised driveway or access point	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023 or an access point for which consent has been granted as part of an
	application for the division of land 4.4 - Attachment 7
	(b) not located within 6m of an intersection of 2 or more roads or a pedestrian activated crossing.
PO 3.2	DTS/DPF 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.	None are applicable.
PO 3.3	DTS/DPF 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.	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	DTS/DPF 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.	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	DTS/DPF 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).	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	DTS/DPF 3.7
Access points are appropriately separated from level crossings to avoid interference and ensure their safe ongoing operation.	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	DTS/DPF 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.	None are applicable.
PO 3.9 <b>877</b>	DTS/DPF 3.9
Development is designed to ensure vehicle circulation between activity areas occurs within the site without the need to use public roads.	None are applicable.

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
Internal road and vehicle parking areas are surfaced to prevent dust becoming a nuisance to park residents and occupants.	None are applicable. 4.4 - Attachment 7	
PO 8.2	DTS/DPF 8.2	
Traffic circulation and movement within the park is pedestrian friendly and promotes low speed vehicle movement.	None are applicable.	
Bicycle Parking in	Designated Areas	
PO 9.1	DTS/DPF 9.1	
The provision of adequately sized on-site bicycle parking facilities encourages cycling as an active transport mode.	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	DTS/DPF 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.	None are applicable.	
PO 9.3	DTS/DPF 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.	None are applicable.	
Corner	Cut-Offs	
PO 10.1	DTS/DPF 10.1	
Development is located and designed to ensure drivers can safely turn into and out of public road junctions.	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:	
	Corner Cut- Off Area    4.5M   Road Reserve	

#### 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.	
879	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.	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
Group Dwelling	Dwelling with 1 or 2 bedrooms (including rooms capable of being used as a
	bedroom) - 1 space per dwelling.  4.4 - Attachment 7
	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	welling 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. rearloaded)	welling 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 / Supporte	d 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.
	relopment (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.
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
Touriet accommodation	cabin.
Tourist accommodation  Comme	1 car parking space per accommodation unit / guest room.
Auction room/ depot	1 space per 100m2 of building floor area plus an additional 2 spaces.
Automotive collision repair	3 spaces per service bay.
Call centre	8 spaces per 100m2 of gross leasable floor area.
Motor repair station	3 spaces per service bay.
Office Retail fuel outlet	4 spaces per 100m2 of gross leasable floor area.  3 spaces per 100m2 gross leasable floor area.
Service trade premises	2.5 spaces per 100m2 of gross leasable floor area
	1 space per 100m2 of outdoor area used for display purposes.
Shop (no commercial kitchen)	5.5 spaces per 100m2 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
	1

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023
	parking, vehicle loading and unloading, and the storage and collection of
	refuse are shared. 4.4 - Attachment 7
	5 spaces per 100m2 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 100m2 of gross leasable floor area.
Shop (in the form of a restaurant or involving a commercial kitchen)	Premises with a dine-in service only (which may include a take-away component with no drive-through) - 0.4 spaces per seat.
	Premises with take-away service but with no seats - 12 spaces per 100m2 of total floor area plus a drive-through queue capacity of ten vehicles measured from the pick-up point.
	Premises with a dine-in and drive-through take-away service - 0.3 spaces per seat plus a drive through queue capacity of 10 vehicles measured from the pick-up point.
Commu	nity and Civic Uses
Childcare centre	0.25 spaces per child
Community facility	10 spaces per 100m2 of total floor area.
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.
Hall / meeting hall	0.2 spaces per seat.
Library	4 spaces per 100m2 of total floor area.
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)
	th Related Uses
Consulting room  Hospital	4 spaces per consulting room excluding ancillary facilities.      4.5 spaces per bed for a public hospital.
	1.5 spaces per bed for a private hospital.
Recreational a	and Entertainment Uses
Cinema complex	.2 spaces per seat.
Concert hall / theatre	0.2 spaces per seat.
Hotel	1 space for every 2m2 of total floor area in a public bar plus 1 space for every 6m2 of total floor area available to the public in a lounge, beer garden plus 1 space per 2 gaming machines, plus 1 space per 3 seats in a restaurant.
Indoor recreation facility	6.5 spaces per 100m2 of total floor area for a Fitness Centre
	4.5 spaces per 100m2 of total floor area for all other Indoor recreation facilities.
Industry/	/Employment Uses
Fuel depot	1.5 spaces per 100m2 total floor area
In dissame	1 spaces per 100m2 of outdoor area used for fuel depot activity purposes.
Industry	1.5 spaces per 100m2 of total floor area.
Store Timber yard	0.5 spaces per 100m2 of total floor area.  1.5 spaces per 100m2 of total floor area
	1 space per 100m2 of outdoor area used for display purposes.
	0.5 spaces per 100m2 total floor area.
Warehouse	
	Other Uses

# Table 2 - Off-Street Car Parking Requirements in Designated A83

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 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		Designated Areas	
	where a development than one development overall car parking			
		be the sum of the car parking rates for each development type.		
		Maximum number		
	of spaces	of spaces		
	Developme	ent 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:	Capital City Zone City Main Street Zone	
		1 space for each dwelling with a total	City Riverbank Zone	
		floor area less than 75 square metres	Adelaide Park Lands Zone	
		2 spaces for each dwelling with a total floor area between 75 square metres and 150 square metres	Business Neighbourhood Zone (within the City of Adelaide)	
		3 spaces for each dwelling with a total floor area greater than 150 square metres.  Residential flat building or Residential	The St Andrews Hospital Precinct Subzone and Women's and Children's Hospital Precinct Subzone of the Community Facilities Zone	
		component of a multi-storey building:  1 visitor space for each 6 dwellings.	·	
	Non-residenti	al development		
Non-residential development excluding tourist accommodation	3 spaces per 100m2 of gross leasable floor area.	5 spaces per 100m2 of gross leasable floor area.	City Living Zone	
			Urban Corridor (Boulevard) Zone	
			Urban Corridor (Business) Zone	
			Urban Corridor (Living) Zone	
			Urban Corridor (Main Street ) Zone	
			Urban Neighbourhood Zone	
Non-residential development excluding tourist accommodation	3 spaces per 100m2 of gross leasable floor area.	6 spaces per 100m2 of gross leasable floor area.	Strategic Innovation Zone	
excitating tourist accommodation	icasable noor area.	leasable floor area.	Suburban Activity Centre Zone	
			Suburban Business Zone	
			Business Neighbourhood Zone	
			Suburban Main Street Zone	
	882		Urban Activity Centre Zone	
Tourist accommodation	1 space for every 4 bedrooms up to	1 space per 2 bedrooms up to 100		
	100 bedrooms plus 1 space for every	bedrooms and 1 space per 4	City Living Zone	

Policy24		P&D Code (ir	n effect) Version 2023.5 30/03/2023
	5 bedrooms over 100 bedrooms	bedrooms over 100 bedrooms	Urban Activity Centre Zone 4.4 - Attachment 7 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 visitor parking.	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

Table 2 - CriteriaThe 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) All zones in the City of Adelaide (b) Strategic Innovation Zone in the following locations: (i) City of Burnside (ii) City of Marion
<ul> <li>(a) is within 200 metres of any section of road reserve along which a bus service operates as a high frequency public transit service<sup>(2)</sup></li> <li>(b) is within 400 metres of a bus interchange<sup>(1)</sup></li> <li>(c) is within 400 metres of an O-Bahn interchange<sup>(1)</sup></li> <li>(d) is within 400 metres of a passenger rail station<sup>(1)</sup></li> <li>(e) is within 400 metres of a passenger tram station<sup>(1)</sup></li> <li>(f) is within 400 metres of the Adelaide Parklands.</li> </ul>	(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 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 3.4 - Attachment 7

Class of	Bicyc	le Parking Rate		
Development				
Development	Where a development comprises more than one development			
	type, then the overall bicycle parking rate will be taken to be the			
Consulting room	sum of the bicycle parking rates for each development type.			
Educational	1 space per 20 employees plus 1 space per 20 consulting rooms for customers.  For a secondary school - 1 space per 20 full-time time employees plus 10 percent of the total number of employee spaces for			
establishment	visitors.			
Hospital	For tertiary education - 1 space per 20 employees plus 1 space per 10 full time students.  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 200m2 of gro			
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			
Office	gaming room floor area.  1 space for every 200m2 of gross leasable floor area plus 2 spaces plus 1 space per 1000m2 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 dwellin 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	·	us 1 space for every 600m2 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	Metropolitan Adelaide		
	Business Neighbourhood Zone Strategic Innovation Zone	Metropolitan Adelaide		
		Metropolitan Adelaide		
	Strategic Innovation Zone	Metropolitan Adelaide		
	Strategic Innovation Zone Suburban Activity Centre Zone	Metropolitan Adelaide		
	Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone	Metropolitan Adelaide		
	Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone Suburban Main Street Zone	Metropolitan Adelaide		
	Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone Suburban Main Street Zone Urban Activity Centre Zone	Metropolitan Adelaide		
	Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone Suburban Main Street Zone Urban Activity Centre Zone Urban Corridor (Boulevard) Zone	Metropolitan Adelaide		
	Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone Suburban Main Street Zone Urban Activity Centre Zone Urban Corridor (Boulevard) Zone Urban Corridor (Business) Zone	Metropolitan Adelaide		
	Strategic Innovation Zone Suburban Activity Centre Zone Suburban Business Zone Suburban Main Street Zone Urban Activity Centre Zone Urban Corridor (Boulevard) Zone Urban Corridor (Business) Zone Urban Corridor (Living) Zone	Metropolitan Adelaide		

# 4.4 - Attachment 7

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome
DO 1	Mitigation of the potential environmental and amenity impacts of waste treatment and management facilities.

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature	
Siting		
P0 1.1	DTS/DPF 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.	None are applicable.	
Soil and Wa	ter Protection	
PO 2.1	DTS/DPF 2.1	
Soil, groundwater and surface water are protected from contamination from waste treatment and management facilities through measures such as:	None are applicable.	
(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.		
PO 2.2	DTS/DPF 2.2	
Wastewater lagoons are set back from watercourses to minimise environmental harm and adverse effects on water resources.	Wastewater lagoons are set back 50m or more from watercourse banks.	
PO 2.3	DTS/DPF 2.3	
Wastewater lagoons are designed and sited to:	None are applicable.	
(a) avoid intersecting underground waters;		
(b) avoid inundation by flood waters;		
<ul> <li>(c) ensure lagoon contents do not overflow;</li> <li>(d) include a liner designed to prevent leakage.</li> </ul>		
PO 2.4	DTS/DPF 2.4	
Waste operations areas of landfills and organic waste processing facilities are set back from watercourses to minimise adverse impacts on water resources.	Waste operations areas are set back 100m or more from watercourse banks.	
Am	enity	
PO 3.1	DTS/DPF 3.1	
Waste treatment and management facilities are screened, located and designed to minimise adverse visual impacts on amenity.	None are applicable.	
	+	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
P0 3.2	DTS/DPF 3.2	
Access routes to waste treatment and management facilities via residential streets is avoided.	None are applicable. 4.4 - Attachment 7	
P0 3.3	DTS/DPF 3.3	
Litter control measures minimise the incidence of windblown litter.	None are applicable.	
PO 3.4	DTS/DPF 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.	None are applicable.	
Access		
PO 4.1	DTS/DPF 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.	None are applicable.	
PO 4.2	DTS/DPF 4.2	
Suitable access for emergency vehicles is provided to and within waste treatment or management sites.	None are applicable.	
Fencing at	nd Security	
PO 5.1	DTS/DPF 5.1	
Security fencing provided around waste treatment and management facilities prevents unauthorised access to operations and potential hazard to the public.	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.	
Lar	dfill	
P0 6.1	DTS/DPF 6.1	
Landfill gas emissions are managed in an environmentally acceptable manner.	None are applicable.	
PO 6.2	DTS/DPF 6.2	
Landfill facilities are separated from areas of environmental significance and land used for public recreation and enjoyment.	Landfill facilities are set back 250m or more from a public open space reserve, forest reserve, national park or Conservation Zone.	
P0 6.3	DTS/DPF 6.3	
Landfill facilities are located on land that is not subject to land slip.	None are applicable.	
PO 6.4	DTS/DPF 6.4	
Landfill facilities are separated from areas subject to flooding.	Landfill facilities are set back 500m or more from land inundated in a 1% AEP flood event.	
Organic Waste Processing Facilities		
P0 7.1	DTS/DPF 7.1	
Organic waste processing facilities are separated from the coast to avoid potential environment harm.	Organic waste processing facilities are set back 500m or more from the coastal high water mark.	
P0 7.2	DTS/DPF 7.2	
Organic waste processing facilities are located on land where the engineered liner and underlying seasonal water table cannot intersect.	None are applicable.	
P0 7.3	DTS/DPF 7.3	
Organic waste processing facilities are sited away from areas of environmental significance and land used for public recreation and enjoyment.	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	DTS/DPF 7.4	
Organic waste processing facilities are located on land that is not subject to land slip.	None are applicable.	
PO 7.5	DTS/DPF 7.5	

Policy24	P&D Code (in effect) Version 2023.5 30/03/2023	
Organic waste processing facilities separated from areas subject to flooding.	Organic waste processing facilities are set back 500m or more from land inundated in a 1% AEP flood event.  4.4 - Attachment 7	
Major Wastewater Treatment Facilities		
PO 8.1	DTS/DPF 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.	None are applicable.	
P0 8.2	DTS/DPF 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.	None are applicable.	

#### **Workers' accommodation and Settlements**

#### **Assessment Provisions (AP)**

Desired Outcome (DO)

	Desired Outcome
DO 1	Appropriately designed and located accommodation for seasonal and short-term workers in rural areas that minimises environmental and social impacts.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
P0 1.1	DTS/DPF 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.	None are applicable.
P0 1.2	DTS/DPF 1.2
Workers' accommodation and settlements are sited and designed to minimise nuisance impacts on the amenity of adjacent users of land.	None are applicable.
P0 1.3	DTS/DPF 1.3
Workers' accommodation and settlements are built with materials and colours that blend with the landscape.	None are applicable.
P0 1.4	DTS/DPF 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.	None are applicable.

No criteria applies to this land use. Please check the definition of the land use for further detail.