

CITY OF WEST TORRENS



Notice of Panel Meeting

Notice is Hereby Given that a Meeting of the
COUNCIL ASSESSMENT PANEL

will be held in the George Robertson Room, Civic Centre
165 Sir Donald Bradman Drive, Hilton

on

**TUESDAY, 10 DECEMBER 2019
at 5.00pm**

**Donna Ferretti
Assessment Manager**

City of West Torrens Disclaimer

Council Assessment Panel

Please note that the contents of this Council Assessment Panel Agenda have yet to be considered and deliberated by the Council Assessment Panel therefore the recommendations may be adjusted or changed by the Council Assessment Panel in the process of making the formal Council Assessment Panel decision.

Note: The plans contained in this Agenda are subject to copyright and should not be copied without authorisation.

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1 MEETING OPENED**1.1 Evacuation Procedures****2 PRESENT****3 APOLOGIES****4 CONFIRMATION OF MINUTES****RECOMMENDATION**

That the Minutes of the meeting of the Council Assessment Panel held on 12 November 2019 be confirmed as a true and correct record.

5 DISCLOSURE STATEMENTS

In accordance with section 7 of the *Assessment Panel Members – Code of Conduct* the following information should be considered by Council Assessment Panel members prior to a meeting:

A member of a Council Assessment Panel who has a direct or indirect personal or pecuniary interest in a matter before the Council Assessment Panel (other than an indirect interest that exists in common with a substantial class of persons) –

- a. must, as soon as he or she becomes aware of his or her interest, disclose the nature and extent of the interest to the panel; and
- b. must not take part in any hearings conducted by the panel, or in any deliberations or decision of the panel, on the matter and must be absent from the meeting when any deliberations are taking place or decision is being made.

If an interest has been declared by any member of the panel, the Assessment Manager will record the nature of the interest in the minutes of meeting.

6 REPORTS OF THE ASSESSMENT MANAGER

6.1 411-415 Anzac Highway CAMDEN PARK

Application No 211/437/2019

Appearing before the Panel will be:

Representors: Caroline Bleach and Tina Hall of 407 Anzac Highway Camden Park wish to appear in support of the representation.

Steven Dennis and Sarah Dennis of 18 Creslin Terrace Camden Park wish to appear in support of the representation.

Applicant: Chris Vounasis and Milly Nott of Future Urban Group and Brad McKenzie of Junction Australia wish to appear in response to the representations.

DEVELOPMENT APPLICATION DETAILS

DESCRIPTION OF DEVELOPMENT	Staged development for the construction of two residential flat buildings, containing 39 apartments, (for affordable/social housing) twelve two-storey group dwellings and three row dwellings with Stage 1 – Group dwellings, Stage 2 – Private road, Stage 3 – Residential flat buildings and Stage 4 – Row dwellings
APPLICANT	Junction Australia
LODGEMENT DATE	6/5/2019
ZONE	Residential Zone
POLICY AREA	Medium Density Policy Area 18
APPLICATION TYPE	Merit
PUBLIC NOTIFICATION	Category 3
REFERRALS	<p>Internal</p> <ul style="list-style-type: none"> • City Assets • Heritage Advisor • Arboriculture (Street trees) • Environmental Health (Waste) <p>External</p> <ul style="list-style-type: none"> • Department of Planning, Transport and Infrastructure (DPTI)
DEVELOPMENT PLAN VERSION	Consolidated 12 July 2018
DELEGATION	<ul style="list-style-type: none"> • The relevant application proposes residential development of three or more storeys above finished ground level. • The relevant application is for a merit, Category 2 or Category 3 form of development, representations have been received and one or more representors wish to be heard on their representation.
RECOMMENDATION	Support with conditions
AUTHOR	Phil Smith

BACKGROUND

The applicant, Junction Australia, is a provider of a wide range of community support services and social housing. According to its website, Junction Australia assists over 8500 South Australians every year with a number of services.

The development seeks to transform a vacant former South Australian Housing Trust (SAHT) site.

There are no previous applications that are relevant to the proposed development of the site.

In accordance with SAHT requirements, Junction Australia will be required to enter into a Land Management Agreement in order to provide affordable housing. A copy of the deed agreed with the SAHT forms a part of the documentation submitted with this application. Junction and Women's Housing Ltd as Developer of the Land has committed to providing Affordable Housing through a Development Deed with SAHT on 5 November 2018 and Deed of Variation from 2 May 2019. As a part of the fulfilment of the Deeds, the applicant has the obligation to:

- develop and offer for sale 24 apartments comprised within the Affordable Housing Apartment Building as affordable housing (which number is subject to the terms and conditions of the Development Approval); and
- enter into an Affordable Housing Land Management Deed at least 21 days before settlement under the Contract of Sale.

The Affordable Housing Land Management Deed will be registered over Certificate of Title Volume 5606 Folio 197 and will confirm that the Land is subject to:

- A Land Management Deed pursuant to Section 57(1) of the Development Act;
- An Encumbrance to the South Australian Housing Trust.

These dealings outline obligations relating to the delivery of affordable housing outcomes.

SUBJECT LAND AND LOCALITY

The subject land is more commonly known as 411-415 Anzac Highway, Camden Park but is formally described as:

- Allotment 48, in Filed Plan 7052 in the area named Camden Park, Hundred of Adelaide, Volume 5420 Folio 162; and
- Allotment 49, in Filed Plan 7052 in the area named Camden Park, Hundred of Adelaide, Volume 5606 Folio 197.

The subject site is rectangular in shape with an 89.9 metre (m) wide frontage to Anzac Highway, a secondary frontage to Clifton Street of 58.9m and a site area of 4840 square metres (m²).

It is noted that there are no current encumbrances or Land Management Agreements on the Certificates of Title and there are no Regulated Trees on the subject site or on adjoining land that would be affected by the development.

The site is relatively flat and currently contains one building in the south-west corner of the site which will be demolished.

The locality consists mostly of residential land uses, however commercial land uses are prominent to the west, including Morphettville Racecourse. Westside Bikeway/Linear Reserve adjoins the site to the north and a childcare centre immediately abuts the site to the east.

Housing in the locality comprises a mixture of architectural styles interspersed with some newer housing stock. To the north of the site, housing is best described as single storey, with some double storey dwellings also evident. Adjacent to Anzac Highway, two and three storey apartment buildings are common.

The subject site is in close proximity to high frequency public transport options (including bus and tram routes) along Anzac Highway and Morphett Road and a large variety of shops further to the west in Glenelg.

As noted later in the report, there is no impact on the local heritage-listed trees as a result of this development.

The subject land and locality are shown on the photos, aerial imagery and maps below.



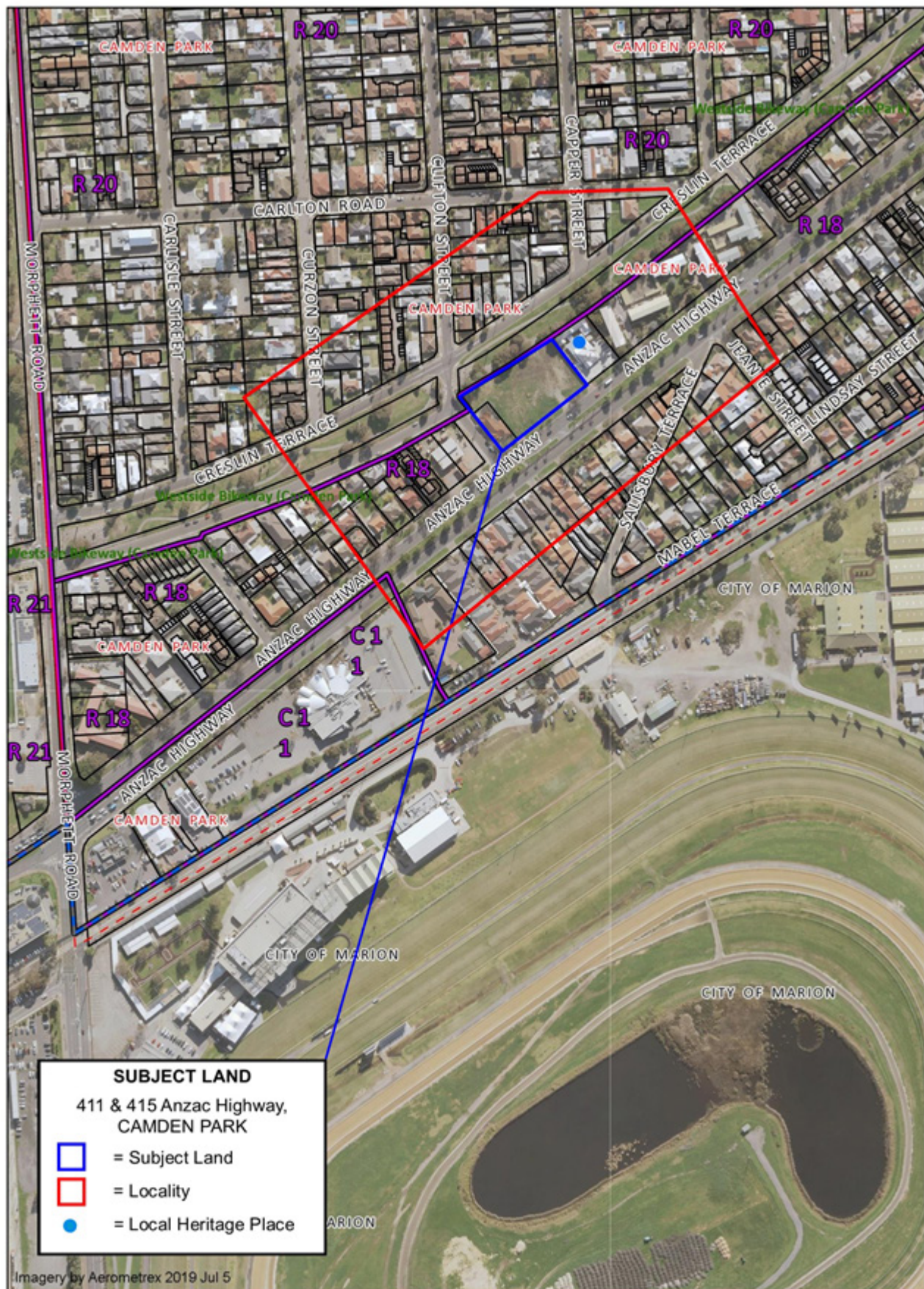
Figure 1 - Subject site viewed from Anzac Highway



Figure 2 - Subject Site and property abutting to the east



Figure 3 - Subject site and dwelling at 415 Anzac Highway to be demolished





Location Map WeTo/14

WEST TORRENS COUNCIL
Consolidated - 12 July 2018



Location Map WeTo/15

WEST TORRENS COUNCIL
Consolidated - 12 July 2018

PROPOSAL

The proposal comprises a staged development for the construction of two (2) residential flat buildings containing 39 apartments, and twelve two-storey group dwellings and three row dwellings.

As described in the planning statement provided by Future Urban, the proposed development is to be constructed in stages incorporating the following elements:

- Stage 1 will comprise the twelve (12) two-storey group dwellings;
- Stage 2 will involve the development of the private road;
- Stage 3 will comprise the two (2) residential flat buildings; and
- Stage 4 will comprise the three (3) row dwellings.

The four-storey residential flat building - the 'West Apartment Block' - is to be used for the purposes of accommodating social housing. This building comprises a ground level car park and three levels of social housing in the form of 15 apartments fronting Anzac Highway. Further detail on the apartment mix includes:

- one (1) 1 bedroom apartment, 48m² in area, with an 8m² balcony and no storage space;
- thirteen (13) 2 bedroom apartments, ranging in area from 66-71m², each with an 8m² balcony and 0.5-2.4m³ of storage space;
- finishes include precast concrete, compressed fibre cement (CFC) with a painted finish, timber look aluminium cladding, profiled steel vertical cladding in Colorbond®, aluminium windows and tubular steel balustrading;
- a further 18.06m³ of apartment storage is proposed within each building level corridor;
- 14 car spaces are provided within the ground level car park; and
- 4 visitor bicycle racks are proposed in front of the building.

The five-storey residential flat building - the 'East Apartment Block' - is to be offered as affordable housing. This building comprises a ground level car park and four levels of affordable housing in the form of 24 apartments fronting Anzac Highway. It is noted that the applicant has signed a deed with the South Australian Housing Trust to provide the social/affordable housing as proposed. Further detail on the apartment mix includes:

- four (4) 1 bedroom apartments, 46m² in area, each with an 11m² balcony and 2.4m³ of storage space;
- twenty (20) 2 bedroom apartments, ranging in area from 61-69m², each with an 11m² balcony and 2.4m³ of storage space;
- finishes include precast concrete, compressed fibre cement (CFC) with a painted finish, timber look aluminium cladding, profiled steel vertical cladding in Colorbond®, aluminium windows and tubular steel balustrading;
- a further 13.02m³ of apartment storage is proposed within each building level corridor;
- 21 car spaces are provided within the ground level car park, including 17.6m³ of additional storage for the apartments; and
- 4 visitor bicycle racks are proposed in front of the building.

The twelve (12) two-storey group dwellings fronting the Westside Bikeway/Creslin Terrace reserve will each incorporate:

- three (3) bedrooms and two (2) car parking spaces;
- floor areas ranging from 144.3m² to 210.3m² with ground level private open space varying between 28m² and 70m², and balconies varying between 8.7m² and 11.6m²; and
- finishes including hebel power panels with a roll on painted finish, CFC cladding with a painted finish, timber look aluminium cladding and aluminium windows.

The three (3) two-storey row dwellings fronting Clifton Street will each contain:

- three (3) bedrooms and two (2) car parking spaces;
- floor areas ranging from 134m² to 183.6m² with ground level private open space varying between 29.5m² and 66.3m², and balconies with an area of 5m²; and
- finishes including hebel power panels with a roll on painted finish, CFC cladding with a painted finish, timber look aluminium cladding and aluminium windows.

A private one-way road through the development site is proposed with access from Anzac Highway and egress onto Clifton Street. The layout is the result of various discussions with the Department of Planning, Transport and Infrastructure (DPTI) and Council to develop an appropriate access arrangement for the site. The Anzac Highway access point has been located as far east as possible away from the Clifton Street junction, a bus stop and U-turn median opening on Anzac Highway, providing sufficient separation to an existing driveway entry for the neighbouring site and to provide adequate protection for heritage-listed Ash Trees on Anzac Highway.

A landscape plan has been prepared by LCS Landscapes and features a variety of native and exotic plants including ground covers, climbers, shrubs, feature plants, trees and rain gardens throughout the development.

The relevant plans and documents are contained in **Attachment 2 (under separate cover)**.

PUBLIC NOTIFICATION

The application is a Category 3 form of development pursuant to Schedule 9 of the *Development Regulations 2008* or Procedural Matters section of the Residential Zone.

Properties notified	89 properties were notified during the public notification process.
Representations	3 representations were received.
Persons wishing to be heard	2 representors who wish to be heard. <ul style="list-style-type: none"> • Caroline Bleach and Tina Hall of 407 Anzac Highway Camden Park • Steven Dennis and Sarah Dennis of 18 Creslin Terrace Camden Park
Summary of representations	Concerns were raised regarding the following matters: <ul style="list-style-type: none"> • Overlooking the retirement village. • Building noise during children's sleep times in the childcare centre. • Dust and dirt associated with construction. • Privacy windows facing into the childcare centre gardens. • Contractors having respectful conversations. • The length of time to complete the project. • The pedestrian pathway leading out to the bike path may interrupt the free flowing nature of the bike path. • Parking congestion will increase in Creslin Terrace. • Any individual gates from the townhouse to the bike path. • As the buildings have an Anzac Highway address, all access should be from Anzac Highway.

Applicant's response to representations	<p>Summary of applicant's response:</p> <ul style="list-style-type: none"> • There will be no overlooking of the retirement village as a result of a large separation distance (40 metres) and street trees obscuring views. • The only windows associated with the residential flat building will be those at the end of the corridors and not windows associated with habitable rooms. These windows are setback into the building, limiting the range of view to approximately 32 degrees. This restricted view means that the outdoor play areas associated with the childcare centre will not be visible from the proposed residential flat building. • A Construction Management Plan will be prepared and issued to Council prior to the commencement of works. • It is also accepted practice that this plan be imposed as a standard condition of consent. • Notwithstanding the above, the applicant has had a positive meeting with this representor to discuss their concerns and has explained how the Construction Management Plan can address all related issues. • The proposal includes gates to each dwelling of 1.8m in height to provide adequate privacy and security, while also permitting direct access to the reserve. • Direct access will encourage residents and visitors to use the reserve, which will also encourage passive surveillance of the area. • The site is large and provides a link through the site to allow both residents of the proposed development and surrounding residents to utilise the link to access the bus stop on Anzac Highway or the bikeway. • The bikeway is sufficiently separated from the northern end of the subject site by 19m to ensure any pedestrian walking out of the pedestrian link to the bikeway can readily see cyclists and/or other pedestrians. • Any future upgrade of the reserve can ensure that any additional landscaping can maintain sightlines. • the link will encourage use of the reserve and bikeway, thereby also increasing passive surveillance.
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A copy of the representations and the applicant's response is contained in **Attachment 3**.

INTERNAL REFERRALS

Department	Comments
City Assets	The proposed stormwater management plan and calculations have been assessed as being acceptable.
Arboriculture Advisor	There are 2 existing <i>Koelreuteria paniculata</i> (Golden Rain) street trees and 1 existing <i>Callistemon Harkness</i> (Bottlebrush) street tree on Clifton Street that require removal to accommodate this development. City Operations will support their removal.

Environmental Health (Waste)	The Waste Management Plan provided is considered appropriate and suitable for the development. Liability waivers for kerbside collection and hard waste services will be required from the parties responsible for the private lane prior to commencement of Council services.
Heritage Advisor	<p>The proposed development is not considered to have a fatal impact on the Local Heritage Place (LHP). However the five storey Residential Flat Building is notably:</p> <ul style="list-style-type: none"> • higher than contemplated in the Policy Area; • of a greater scale and bulk than compatible with the LHP; • set further forward than the LHP obscuring views; • closer to the side boundary shared with the LHP than desirable; and • not stepped as suggested to improve the contextual transition.

EXTERNAL REFERRALS

Department	Comments
DPTI	DPTI supports the proposed access arrangements subject to conditions being placed on any approval granted for the development.
South Australia Housing Authority (SAHA)	Junction and Women's Housing Ltd as Developer of the Land has committed to providing Affordable Housing through a Development Deed with South Australian Housing Trust (SAHT). SAHT is supportive of this and has no issues subject to legal requirements the applicant will need to fulfil.

A copy of the relevant referral response/s is contained in **Attachment 4**.

RELEVANT DEVELOPMENT PLAN PROVISIONS

The subject land is located within the Residential Zone and, more specifically, Medium Density Policy Area 18 as described in the West Torrens Council Development Plan.

The relevant Desired Character statements are as follows:

Residential Zone - Desired Character
<p><i>This zone will contain predominantly residential development. There may also be some small-scale non-residential activities such as offices, shops, consulting rooms and educational establishments in certain locations. Non-residential activities will be complementary to surrounding dwellings.</i></p> <p><i>Allotments will be at very low, low and medium densities to provide a diversity of housing options in different parts of the zone. The range of allotment sizes will support the desired dwelling types anticipated in each policy area, and the minimum allotment sizes shall be treated as such in order to achieve the Desired Character for each policy area and, in turn, reinforce distinction between policy areas. Row dwellings and residential flat buildings will be common near centres and in policy areas where the desired density is higher, in contrast to the predominance of detached dwellings in policy areas where the distinct established character is identified for protection and enhancement. There will also be potential for semi-detached dwellings and group dwellings in other policy areas.</i></p>

*Residential development in the form of a multiple dwelling, residential flat building or group dwelling will not be undertaken in a **Historic Conservation Area**.*

Landscaping will be provided throughout the zone to enhance the appearance of buildings from the street as viewed by pedestrians, provide an appropriate transition between the public and private realm and reduce heat loads in summer.

Objectives	1, 2, 3, 4
Principles of Development Control	1, 5, 6, 15, 18

Medium Density Policy Area 18 - Desired Character

Allotments in this policy area will be at medium density, accommodating a range of dwelling types including residential flat buildings, row dwellings, group dwellings, semi-detached dwellings and some detached dwellings on small allotments. Allotment amalgamation to create larger development sites will occur to maximise the density of development while also achieving integrated design outcomes, particularly within a comfortable walking distance of centre zones. Vehicle access will occur from side streets and new rear public and private laneways wherever possible, also supporting the retention of existing street trees.

New buildings will contribute to a highly varied streetscape. Buildings will be up to 3 storeys and provide a strong presence to streets, other than in the part of the policy area in Underdale, Ashford (other than allotments adjacent to Residential Character Ashford Policy Area 22) and allotments bounded by Anzac Highway, Morphett Road and Cromer Street in Camden Park where buildings will be up to 4 storeys. Parking areas and garages will be located behind the front facade of buildings.

Buildings on the edge of the policy area which adjoin residential policy areas at lower densities will pay particular attention to managing the interface with adjoining dwellings, especially in terms of the appearance of building height and bulk, and overshadowing.

Development will be interspersed with landscaping, particularly behind the main road frontage, to enhance the appearance of buildings from the street as viewed by pedestrians, provide an appropriate transition between the public and private realm and reduce heat loads in summer.

Objectives	1
Principles of Development Control	1, 4, 5, 6, 7

Additional provisions of the Development Plan which relate to the proposed development are contained in **Attachment 1**.

QUANTITATIVE STANDARDS

The proposal is assessed for consistency with the quantitative requirements of the Development Plan as outlined in the table below:

DEVELOPMENT PLAN PROVISIONS	STANDARD	ASSESSMENT
SITE AREA <i>Medium Density Policy Area 18</i> <i>PDC 6, 7</i>	Group Dwelling 150m ² (min.) Residential Flat Building 100m ² (avg.) Affordable Housing/Social Housing Row Dwelling 150m ² (min.) -	Group dwellings 124.65m ² -134.55m ² (most are 141.5m ² -156m ²) Residential Flat Buildings 46m ² -71m ² Row Dwellings - 75.5m ² Does not Satisfy
SITE FRONTAGE <i>Medium Density Policy Area 18</i> <i>No requirement for</i> <i>affordable/social housing</i> <i>PDC 6 - balance of housing</i>	Group Dwellings - 7m Residential Flat Building - 15m (complete building) Row Dwelling - 5m	Group dwellings - 6.9m-9.4m Row Dwellings - 8m-11m Residential Flat Building - East - 36m Residential Flat Building - West - 28m Satisfies
SITE COVERAGE <i>Medium Density Policy Area 18</i> <i>PDC 5</i>	70% (max.)	Approximately 2227m ² of site coverage proposed = 46% Satisfies
PRIMARY STREET SETBACK <i>Medium Density Policy Area 18</i> <i>PDC 5</i>	3m (min.)	West Apartment Block - 4.4m (from Anzac Highway) East Apartment Block - 4.4 m (from Anzac Highway) Row Dwellings - 3m (from Clifton Street and Anzac Highway) Group Dwellings - approximately 5m (from internal laneway) Satisfies

SECONDARY STREET SETBACK <i>Medium Density Policy Area 18</i> <i>PDC 5</i>	1m (min.)	Dwelling 1 - 3m Dwelling 12 (Townhouse) - 2.36m Satisfies
SIDE SETBACKS <i>Residential Zone</i> <i>PDC 11</i>	0/1m	East Apartment Block - 7m (from eastern boundary) Group Dwelling (Townhouse 1) - 1 m Satisfies
REAR SETBACKS <i>Medium Density Policy Area 18</i> <i>PDC 5</i>	4m (min.)	3.02m Does Not Satisfy
BUILDING HEIGHT <i>Medium Density Policy Area 18</i> <i>PDC 5</i>	4 storeys or 16.5m (allotments bounded by Holbrooks Rd, Garden Tce and River Torrens in Underdale) 4 storeys or 16.5m (allotments bounded by ANZAC Hwy, Morphett Rd and Cromer St in Camden Park) 4 storeys or 16.5m (allotments in Ashford – other than those adjacent to Residential Character Ashford Policy Area 22)	5 storeys and 17.83m in height (East Apartment Block) Does Not Satisfy 4 storeys and 16.61m in height (West Apartment Block) Satisfies Row Dwelling and Town Houses - two storey Satisfies

<p>INTERNAL FLOOR AREA <i>Residential Development</i> <i>PDC 9</i></p>	<p>37m² (min.) - Studio (where there is no separate bedroom)</p> <p>50m² (min.) - 1 bedroom</p> <p>75m² (min.) - 2 bedroom</p> <p>100m² (min.) - 3+ bedroom</p>	<p>Minimum floor area for townhouses - 124.65m²</p> <p>Satisfies</p> <p>West Apartment Block - shortfalls range between 3m² for 1 bedroom and 2-7m² for 2 bedroom apartments</p> <p>East Apartment Block - shortfalls range between 4m² for 1 bedroom and 6-14m² for 2 bedroom apartments</p> <p>Type B/C Dwellings - 75.5m² (3 bedroom)</p> <p>Type A Dwellings - 88m² (3 bedroom)</p> <p>Satisfies / Does Not Satisfy</p>
<p>PRIVATE OPEN SPACE <i>Medium Density Policy Area 18</i> <i>PDC 7</i></p>	<p>24m² (minimum dimension of 3m) for ground level dwellings</p> <p>8m² (minimum dimension of 2m) for dwellings above ground level</p>	<p>West Apartment Block - all apartments have compliant areas and minimum dimension of 2.4m</p> <p>East Apartment Block - all apartments have compliant areas with minimum dimension of 2.4m</p> <p>Townhouses - minimum area of 22.5m² (one dwelling only) with minimum dimension of 3.02m</p> <p>Row Dwellings - minimum area of 27.7m² and minimum dimension of 3m</p> <p>Satisfies</p>

<p>STORAGE <i>Residential Development</i> PDC 31</p>	<p>8m³ (min.)</p>	<p>Row dwellings and Townhouses can easily accommodate 8m³ of storage within the garage and closet space in the dwellings</p> <p>East Apartment Block - are provided with 2.4m³ internally, a further 13.02m³ within each building level and 17.6m³ in the car park.</p> <p>West Apartment Block - are mostly provided with 2.4m³ of storage and a further 18.06m³ within each building level</p> <p>Satisfies</p>
<p>CAR PARKING SPACES <i>Transportation and Access</i> PDC 34</p> <p><i>Residential Zone</i> <i>Medium Density Policy Area 18</i> PDC 7</p>	<p>Detached, semi-detached, row and multiple dwellings - 2 car-parking spaces required, 1 of which is covered</p> <p>Group dwellings and Residential Flat Buildings - 2 car-parking spaces required, 1 of which is covered + an additional 0.25 spaces per dwelling</p> <p>1 space per dwelling (affordable housing)</p>	<p>Row Dwellings - 2 spaces, 1 covered</p> <p>Does Not Satisfy</p> <p>Townhouses - 2 spaces, 1 covered - (shortfall of 3 spaces)</p> <p>Does Not Satisfy</p> <p>West Apartment Block - 11 (shortfall of 4 spaces)</p> <p>Does Not Satisfy</p> <p>East Apartment Block - 24 provided</p> <p>Satisfies</p>



Figure 5 - Location of subject site (near bottom right corner) in relation to Centre Zones

Access is to be provided from side streets wherever possible and this is partially achieved with vehicles exiting the site in a one-way direction onto Clifton Street. Entry into the site will be from Anzac Highway, however this is not unexpected and is supported by Council and DPTI.

On this basis, the provisions and Desired Character Statement relating to land use and desired character are considered to be met.

Building Height

An extra 1.3m in overall building height has resulted in the eastern apartment block not strictly satisfying the height provision of 16.5m. The additional height is noted as being located closer to the Anzac Highway boundary which is advantageous, however the additional 1.3m is unlikely to be noticeable over this building height. It is also noted that the highest level tends to visually recede as a result of its darker tone and is stepped back, thus one would not have clear views of this additional height when viewing the building in close proximity.

Built Form

Within the Policy Area 18 Desired Character Statement, it is stated that new buildings will contribute to a highly varied streetscape and that allotments bounded by Anzac Highway, Morphet Road and Cromer Street in Camden Park (which includes the subject site), will be up to 4 storeys. In essence, the Desired Character Statement has emphasised a strong built form presence where adjacent to an arterial road, which has been incorporated into the design of this proposal with the two residential flat buildings being 3 and 4 storeys, and then tapering down to the two-storey row dwellings located at the intersection with Clifton Street.

The varied streetscape is further emphasised with the articulation and fenestration of the buildings that present to Anzac Highway. In addition to building height transition, the buildings have different styles of roof form and combine these design elements with varied colours, finishes and materials to emphasise their presence to Anzac Highway. The townhouses (group dwellings) to the rear are two storeys, thus the proposal appropriately transitions in height towards Creslin Terrace to the north. A further benefit of the 4 storey built form allows views to the north to create passive surveillance over Linear Reserve and the Westside Bikeway, without presenting as an imposing presence over the reserve as a result of the separation distance.

It should also be noted that the residential flat buildings do not turn their back to Anzac Highway thus maintaining an interactive presence to Anzac Highway which is desirable. In addition, with the exception of private open space areas that may adjoin street frontages (timber slat fencing), the proposal is mostly devoid of fencing, allowing for a more hospitable appearance.

On balance, it is considered that the built form has been appropriately designed in order to achieve the outcomes described within the Desired Character Statement and the relevant provisions for the reasons noted above.

Internal Floor Area

The West Apartment Block has shortfalls in internal floor area ranging from 2-7m² which is considered to be a minor departure from the provision. Similarly, the East Apartment Block has shortfalls of 6-14m² which are also considered to be minor.

An approximate shortfall of 12m² exists for the Type A dwellings. While there is less internal space, approximately 10m² of additional private open space in the form of balconies has been provided for the occupants, thus negating the shortfall.

The largest departure relates to the Apartment Type B and Type C dwellings which have a floor area shortfall of approximately 25m² each. While not insignificant, the shortfall effectively equates to the loss of an additional room, in this instance a second living space. It is clear from the plans that the dwellings are functional and are designed for smaller families which accords with the Desired Character Statement seeking a range of dwelling types.

Medium and High Rise Development (3 or More Storeys)

In terms of design and appearance, with regard to Principle of Development Control (PDC) 1, there is an expectation that buildings should be designed to respond to key features of the prevailing local context within the same zone as the development. This is achieved through built form proportions, materials, colours, finishes and glass among others. It is considered that the proposal satisfies the PDC in that the design incorporates a number of finishes, materials and colours, along with appropriate fenestration. The built form proposed is largely consistent with other buildings found further to the west of the site thus according with the PDC.

In terms of street interface, it is proposed to incorporate a number of windows, balconies and canopies to provide pedestrian-friendly and passive surveillance opportunities, in addition to entrances facing the street, thus achieving the requirements of PDCs 8, 9 and 10.

For developments of this scale, energy efficient buildings incorporating Environmentally Sustainable Design are envisaged and PDCs 20-24 illustrate how this can be achieved. Of note, deep soil planting should be provided to allow for substantial vegetation to assist with keeping the dwellings at appropriate temperatures which the proposal achieves. Given the flat roof design, photovoltaic solar panels and hot water systems can be incorporated to aid with energy efficiency. The site's orientation also allows for appropriate solar access particularly during winter months. It should also be noted that as part of the building rules requirements, the development will be required to achieve a six-star energy rating.

Other factors to be considered include compatible land use (in this case, residential), multi-storey buildings being located adjacent to Anzac Highway, and the use of transitional building heights towards more established single and double storey dwellings in the locality, all of which the proposal achieves.

On balance, it is considered that the proposal adequately satisfies the relevant provisions with respect to Medium and high density development.

Amenity

With respect to orientation, it is noted that each of the townhouses has a northerly aspect, thus satisfying PDC 2 of the Energy Efficiency module. The row dwellings will have a partial northerly aspect, in addition to a westerly aspect which will bring natural light into the dwellings and private open space areas for a significant portion of the day. Dwellings within the residential flat buildings on the north face will enjoy northern solar access thus also satisfying PDC 2. However the dwellings on the southern side of the buildings will have no northern aspect and some partial western solar access which is unavoidable given their orientation.

The two residential flat buildings are exempt from the requirement of privacy screening as they are 3 storeys or greater in building height pursuant to PDC 27 of the Residential Development module. The only overlooking potential lies with the townhouse units. Dwellings 5, 8, 9, 10 and 11 (type A) include 1.7m high obscured glass to their eastern/western sides. Furthermore, blade walls of 1m in length are included between Dwellings 1 – 2 and 3 – 4 (type B/B1) at ground and first floor levels.

Some balconies of Dwelling 6, 7 and 12 (type A) do not include any obscured glass. In these circumstances it is considered that views will predominantly be towards public areas and that elements of the built form (i.e. solid walls on balconies and side walls of dwellings), 1.8m fencing and rainwater tanks will reduce opportunities for overlooking into neighbouring areas of private open space to an acceptable degree.

Similarly, the viewing angle from the balconies of Dwellings 1 - 4 will be narrowed to predominantly public areas due to the blade walls, dwelling side walls, 1.8m high fencing and rainwater tanks.

It is important to note that the relevant provisions seek to minimise direct overlooking (Design and Appearance PDC 10) and not prevent overlooking altogether.

It is considered important for the amenity of future occupants that obscured glass not be included to all sides of the balconies so that casual surveillance can be provided by these balconies over the public areas, which will assist in crime prevention.

PDC 9 of the Design and Appearance module relates to overshadowing and must be assessed in relation to this development. Although there are two large residential flat buildings comprising part of this development, their location at the south-eastern end of the site ensures that shadows will be cast across Anzac Highway, Clifton Street or the internal laneway providing access through the subject site and not adjoining properties.

Noise emanating from the dwellings is not expected to be a significant issue with this development given the proximity of Anzac Highway, which has constant traffic noise at all hours. The applicant must ensure that appropriate acoustic treatments such as double glazed windows and acoustic insulation or a suitable alternative be employed so that residents will enjoy a reasonable level of amenity as a result of this arterial road location. This has been placed as a condition of the recommendation.

Lighting in the proposed laneway, the at-grade car parking areas associated with the residential flat buildings and the common pedestrian areas shall be suitably lit to address matters relating to safety and crime prevention. The lighting will not cause any unreasonable light spill and shall be in accordance with relevant Australian Standards, thus there are no issues in this regard.

Landscaping

A landscape plan prepared by LCS Landscapes has been submitted in support of the application. The landscaping is considered to achieve a softening of the built form and will improve the amenity of the site in accordance with the Objectives of the Landscaping, Fences and Walls section of the Development Plan.

PDC 1 of this section is considered to be satisfied in that the landscaping will reduce the impact of the larger buildings, enhance the appearance of road frontages, enhance and define outdoor spaces (including car parking areas), maximise shade and shelter and assist with heat absorption and reflection, amongst other positive attributes with the species selected. For example, the *Zelcova serrata* (Japanese Elm), to be planted throughout the development is often grown as an ornamental tree and due to its size and shape, provides considerable shading and autumn colour. This selection should assist with shading and enhancing the appearance of the built form.

All private, public and street frontages areas are proposed to have substantial plantings and it is considered, on balance, that the proposed landscaping sufficiently satisfies the provisions of the Landscaping, Fences and Walls module.

Traffic management

Council's Traffic Engineer has reviewed the proposal and has raised no objections from a traffic management perspective. All vehicles can enter and exit the site in a forward direction with only one way traffic movement allowed for throughout the site owing to the number of vehicles expected within the development. Access is from Anzac Highway and then vehicles will exit the site onto Clifton Street.

The application has also been reviewed by DPTI which had no objections to the proposal subject to a number of conditions being placed on any consent.

Council's Arboriculture Officer has also reviewed the development and confirms that there is no conflict with the existing *Fraxinus angustifolia* 'Raywood' (Claret Ash) street trees on Anzac Highway. No existing street trees on Anzac Highway frontage are to be removed or damaged during this development for access. Only 2 existing *Koelreuteria paniculata* (Golden Rain) street trees and 1 existing *Callistemon Harkness* (bottlebrush) street tree on Clifton Street require removal to accommodate this development with City Operations supporting their removal.

Car parking

It is considered that social housing would fall under the same banner as affordable housing given that the main objective of social housing is to provide persons that fall into a lower socio-economic bracket with the ability to find affordable housing.

It is noted that the Development Plan references affordable housing but not social housing and only requires 1 car parking space per unit, effectively halving the Development Plan parking requirement.

Social housing would still otherwise require 2 spaces per unit plus a provision for visitor parking of 0.25 spaces per unit which on face value is considered to be inequitable. The applicant has argued that the social housing car parking component should be assessed on the same basis as the affordable car parking provision, which is considered to have merit as the social housing units are unlikely to have any greater parking requirements than the affordable housing units. As Junction Australia, a known provider of affordable and social housing will be operating these units, they will be bound by a legally binding Land Management Agreement (LMA), and the criteria is re-assessed annually to ensure these requirements are met. A condition has been placed in the recommendation that will require Junction Australia to provide Council with a copy of the Land Management Agreement prior to occupation of the units.

The East and West Apartment Blocks have an overall shortfall in car parking of 4 spaces if the car parking rate for affordable housing (ie 1 space for each dwelling) is also applied for the social housing. Given that these blocks are to accommodate affordable and social housing, it is unlikely that all residents will have a car. On this basis, it could be assumed that the development will be able to accommodate the parking demand, especially in the context of its location on Anzac Highway, in close proximity to high frequency public transport routes (tram and bus). There is a bus stop directly in front of the West block as well as available on-street parking in the immediate locality.

The only other outstanding shortfall is 3 visitor spaces for the group dwellings. A shortfall of 3 spaces can easily be absorbed within the surrounding street network and could be accommodated within Creslin Terrace which will have direct access into the development and the group dwellings through the reserve and the publicly accessible link. This also has the benefit of keeping the open space active, enhancing passive surveillance. Accordingly, the relevant Development Plan provisions relating to car parking are considered to be met.

In terms of pedestrian access, the proposal highlights a pedestrian link through the development from the Westside Bikeway through to Anzac Highway which is in close proximity to the bus stop adjacent to the site. This design feature allows for greater ease of access through the development and passive surveillance.

Waste Management

The applicant has submitted a waste management plan prepared by Colby Phillips in support of the application. The plan proposes the following:

- On-site private collection will occur for the apartment buildings and group dwellings with collection access design to be “future-proofed” to enable a future Council skip bin collection service;
- Residents will have access to a 3 bin equivalent service;
- There will be a weekly collection frequency (which is what a future Council rear-lift service would most likely provide);
- Collection access will allow for an MRV-sized vehicle (i.e. at least 8.8m in length);
- The collection points will be located within 30m of the bin storage areas;
- On-site collection will occur in a forward entry and exit manner;
- Hard waste will occur on an as needs basis between the residents and Council;
- Each group dwelling will be provided with individual Council bin sets with each bin to be presented along the private road for Council kerbside collection;
- Each row dwelling will be provided with individual Council bin sets with each bin to be presented along Clifton Street for Council kerbside collection;
- Each apartment building will have their own waste storage room at Ground Level, adjacent to the resident lobby where residents would access the room via lift and car park area to dispose their waste and recycling;
- Bins from each waste room will be transferred (on designated collection days) by the property manager to the presentation areas along the private road for collection;
- Residents of the group dwellings and row dwellings will be responsible for moving bins between their property and the collection area; and
- Collections will be scheduled between 7am to 7pm, Monday to Saturday and 9am to 7pm on Sunday to avoid potential noise nuisances in line with the South Australian Environment Protection Policy (Noise) Policy 2007.

The Waste Management Plan has been reviewed and will be managed by Council's Waste Management Officer who has raised no objections.

Stormwater Management

The applicant has engaged with Council throughout the assessment process and has provided a Stormwater Management Plan in support of the application. The plan has been reviewed and is supported by Council's City Assets team.

SUMMARY

The proposed development offers a balanced mix of social, affordable and market driven housing that is of a reasonably high design standard. The applicant will be locked into a Land Management Agreement thus ensuring that proposal develops in accordance with the requirements of the South Australia Housing Authority.

The dwellings are functional and can rely on a mix of private open space and the public Linear Reserve to the rear for outdoor activity.

Vehicular access is considered appropriate and is supported by Council's engineers and DPTI.

Having considered all the relevant provisions of the Development Plan, the proposal is not considered to be seriously at variance with the Development Plan.

On balance the proposed development sufficiently accords with the relevant provisions contained within the West Torrens Council Development Plan Consolidated 12 July 2018 and warrants Development Plan Consent.

RECOMMENDATION

The Council Assessment Panel, having considered all aspects of the report, the application for consent to carry out development of land and pursuant to the provisions of the *Development Act 1993* resolves to GRANT Development Plan Consent for Application No. 211/437/2019 by Junction Australia to undertake the construction of two residential flat buildings, containing 39 apartments, twelve two-storey group dwellings and three row dwellings at 411-415 Anzac Highway, Camden Park (CTs 5606/197 and 5420/162) subject to the following conditions of consent and reserved matter:

Reserved Matters:

The following information shall be submitted for further assessment and approval by the City of West Torrens as reserved matters under Section 33(3) of the *Development Act 1993*:

1. A Land Management Agreement, be prepared and lodged in accordance with s57(1) of the Development Act at the applicant's expense, that will bind the applicant (Junction Australia) and the subject site in relation to this development with the South Australian Housing Trust. The agreement will be registered on the Certificate of Title, Volume 5606 Folio 197 in accordance with any and all requirements laid out by and to the satisfaction of the South Australian Housing Trust.
Reason: To ensure that the development proceeds in an orderly manner.
2. Details of acoustic treatments for the development in accordance with the *Minister's Specification SA 78B - Construction requirements for the control of external sound* are to be provided to Council prior to Development Approval being granted to demonstrate that the occupants of the dwellings will have an acceptable level of amenity. The details shall highlight but not be limited to insulation, double glazing, plant equipment screening and any other requirements deemed necessary to mitigate noise impacts.
Reason: To ensure that the development proceeds in an orderly manner.
3. A Construction Environmental Management Plan shall be prepared and submitted to Council prior to the commencement of construction on the land. The plan shall provide for:
 - a) Establishment of a controlled washing zone located on a hard surface at each entry/exit point to the site.
 - b) Containment of water run-off within the site for filtering and cleaning before being discharged into the stormwater system.

- c) Reduction of the potential for dust and other airborne particles by the use of water sprinklers or other means.
- d) Establishment of a compound on the site for storage of waste materials and litter. The compound must be covered to prevent litter from being blown away; and
- e) Correct positioning of all mechanical equipment to minimise the potential for noise pollution. The maximum noise level shall not exceed 45db(A) between the hours of 8.00pm until 8.00am the following morning and from 8.00pm Saturday until 9.00am on the following Sunday morning.

Reason: To ensure that the development proceeds in an orderly manner.

Development Plan Consent Conditions:

1. The development must be undertaken, completed and maintained in accordance with the plans and information detailed in this Application except where varied by any conditions listed below.

Reason: To ensure the proposal is developed in accordance with the plans and documents lodged with Council.

2. That all stormwater design and construction shall be in accordance with Australian Standards and recognised engineering best practices to ensure that stormwater does not adversely affect any adjoining property or public road and, for this purpose, stormwater drainage will not at any time:
 - a) Result in the entry of water into a building; or
 - b) Affect the stability of a building; or
 - c) Create unhealthy or dangerous conditions on the site or within the building; or
 - d) Flow or discharge onto the land of an adjoining owner; or
 - e) Flow across footpaths or public ways.

Reason: To ensure that adequate provision is made for the collection and dispersal of stormwater.

3. That all driveways, parking and manoeuvring areas shall be formed, surfaced with concrete, bitumen or paving, and be properly drained prior to occupation, and shall be maintained in reasonable condition at all times.

Reason: To provide safe and convenient parking and manoeuvring areas for users of the development.

4. That all landscaping shall be planted in accordance with the approved plans at the first available planting season. Any person(s) who have the benefit of this approval will cultivate, tend and nurture the landscaping, and shall replace any landscaping which may become diseased or die.

A watering system shall be installed at the time landscaping is established and thereafter maintained and operated so that all plants receive sufficient water to ensure their survival and growth.

Reason: To enhance the amenity of the site and locality and mitigate against heat loading.

5. That the upper level side and rear windows of the row dwellings fronting Clifton Street shall be provided with fixed obscure glass to a minimum height of 1.7 metres above the upper floor level to minimise the potential for overlooking of adjoining properties, prior to occupation of the building. The glazing in these windows shall be maintained in reasonable condition at all times.

Reason: To minimise the impact on privacy to residents of adjoining dwellings.

6. Any lights on the subject land must be directed and screened so that overspill of light into the nearby premises is avoided and minimal impact on passing motorists occurs.

Reason: To ensure that the proposed lighting does not cause undue disturbance, annoyance or inconvenience to adjoining landowners and motorists.

7. Driveways, parking and manoeuvring areas and footpaths shall be lit in accordance with the Australian Standards Association Code AS 1158 during the hours of darkness that they are in use. Such lights must be directed and screened so that overspill of light into nearby premises is avoided and minimal impact on passing motorists occurs.

Reason: To ensure that the proposed lighting does not cause undue disturbance, annoyance or inconvenience to adjoining landowners and motorists.

8. Directional signage shall be placed throughout the site to reinforce 'one-way vehicular movement only' within the private road.

Reason: To provide safe and convenient access for users of the development.

Conditions required by the Department of Planning, Transport and Infrastructure

9. All vehicular access shall be in general accordance with Hames Sharley Site Plan (Project Number: 31676, Drawing Number: SD0102, Revision E dated 16 November 2018) and Figures 5.1 and 5.2 in the Traffic Impact Assessment prepared by GTA Consultants (Reference S168630, Issue A dated 3 May 2019).

Reason: To satisfy the requirements of the Department of Planning, Transport and Infrastructure.

10. All vehicles using the one-way laneway shall enter from Anzac Highway and exit via Clifton Street in a forward direction. The entry and exit points and internal one-way laneway shall be signed and linemarked to reinforce the one-way traffic flow.

Reason: To satisfy the requirements of the Department of Planning, Transport and Infrastructure.

11. All off-street car parking shall be designed in accordance with AS/NZS 2890.1:2004 and AS/NZS 2890.6:2009. Additionally, clear sightlines, as shown in Figure 3.3 'Minimum Sight Lines for Pedestrian Safety' in AS/NZS 2890.1:2004, shall be provided at the property line to ensure adequate visibility between vehicles leaving the site and pedestrians on the adjacent footpath.

Reason: To satisfy the requirements of the Department of Planning, Transport and Infrastructure.

12. Any redundant crossover/s shall be closed and reinstated to Council's satisfaction at the applicant's cost prior to the development becoming operational.

Reason: To satisfy the requirements of the Department of Planning, Transport and Infrastructure.

13. Stormwater run-off shall be collected on-site and discharged without jeopardising the integrity and safety of the adjacent road network. Any alterations to the road drainage infrastructure required to facilitate this shall be at the applicant's cost.

Reason: To satisfy the requirements of the Department of Planning, Transport and Infrastructure.

Attachments

1. **Relevant Development Plan Provisions**
2. **Proposed Plans and Documents (under separate cover)**
3. **Representations and Applicant's response**
4. **Referral Responses**

General Section		
Crime Prevention	<i>Objectives</i>	1
	<i>Principles of Development Control</i>	1, 2, 3, 4, 5, 6, 7, 8, & 10
Design and Appearance	<i>Objectives</i>	1 & 2
	<i>Principles of Development Control</i>	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22 & 23
Energy Efficiency	<i>Objectives</i>	1 & 2
	<i>Principles of Development Control</i>	1, 2, 3 & 4
Landscaping, Fences and Walls	<i>Objectives</i>	1 & 2
	<i>Principles of Development Control</i>	1, 2, 3, 4, 5 & 6
Medium and High Rise Development (3 or more storeys)	<i>Objectives</i>	1, 2, 3, 4, 5, 6 & 7
	<i>Principles of Development Control</i>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 25, 26, 27 & 28
Orderly and Sustainable Development	<i>Objectives</i>	1, 2, 3, 4 & 5
	<i>Principles of Development Control</i>	1, 3, 5 & 7
Residential Development	<i>Objectives</i>	1, 2, 3, 4 & 5
	<i>Principles of Development Control</i>	1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32 & 33
Transportation and Access	<i>Objectives</i>	1, 2, 3 & 4
	<i>Principles of Development Control</i>	8, 11, 14, 15, 16, 18, 21, 22, 23, 24, 26, 28, 32, 34, 35, 36, 37, 39, 40, 41, 42, 43, 44, 45, 46 & 47
Waste	<i>Objectives</i>	1 & 2
	<i>Principles of Development Control</i>	1 & 2

STATEMENT OF REPRESENTATION
Pursuant to Section 38 of the Development Act 1993



TO Chief Executive Officer
 City of West Torrens
 165 Sir Donald Bradman Drive
 HILTON 5033

DEVELOPMENT No. 211/437/2019
 PROPERTY ADDRESS: 411 Anzac Highway, CAMDEN PARK SA 5038, 415 Anzac Highway,
 CAMDEN PARK SA 5038

YOUR FULL NAME	STEVEN DENNIS & SARAH DENNIS
YOUR ADDRESS	18 CRESLIN TLE, CAMDEN PARK
YOUR PHONE No	[REDACTED]
YOUR EMAIL	[REDACTED]
NATURE OF INTEREST	ADJOINING RESIDENT <small>(eg. Adjoining resident, owner of land in the vicinity etc.)</small>
REASON/S FOR REPRESENTATION	- ON ATTACHED LETTER <div style="text-align: right;">DOT 10.41. </div>
MY REPRESENTATIONS WOULD BE OVERCOME BY <small>(state action sought)</small>	- TAKING ON CONCERNS AND MAKING CHANGES AS SPECIFIED ON ATTACHED LETTER & ANZAC HWY ADDRESS, SHOULD ONLY BE ANZAC HWY ACCESS

Please indicate in the appropriate box below whether or not you wish to be heard by Council in respect to this submission:

I DO NOT WISH TO BE HEARD ☐

I DESIRE TO BE HEARD PERSONALLY ☒

I DESIRE TO BE REPRESENTED BY ☐

(PLEASE SPECIFY)

SIGNED

DATE

08-10-19

Responsible Officer: Phil Smith
 Ends: Tuesday 8 October 2019

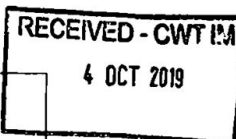
If space insufficient, please attach sheets

Main Concerns about the development from 18 Creslin Terrace

- The pathway leading out to the bike path. The plans indicate it to be an open access which opens directly on to the path. This is dangerous for pedestrians and bike riders as there is no other access like that close by. The bike path is free flowing and this will be of concern for all users of the path.
- Parking on Creslin Terrace. This is a concern as it is directly opposite our house. At the start of Creslin Terrace towards Stonehouse Ave there are constantly cars parked on the side of the road causing a bottle neck of cars. This is even worse at school drop off and pick up where cars drive crazy up and down the street. There is a parking sign across the road from 18 Creslin Terrace but it is very faded and never seen a member from the council police it
- Throughout the bike path there are other developments and they are not open to the public as such or even have gate access. I have been advised previously before there were housing trust units located on that site there were issues with unruly behaviour on the bike path and surrounds.
- On the plan there are multiple townhouses being built towards the back of the development backing on bike path. The plans did not look like there was gate access to each property but I strongly reject having any gate access individually to each property. Also could not tell on plans the fence size but this needs to enough to provide privacy for occupants and people who overlook the development.



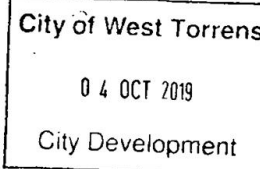
STATEMENT OF REPRESENTATION
Pursuant to Section 38 of the Development Act 1993



TO Chief Executive Officer
 City of West Torrens
 165 Sir Donald Bradman Drive
 HILTON 5033

DEVELOPMENT No. 211/437/2019
 PROPERTY ADDRESS: 411 Anzac Highway, CAMDEN PARK SA 5038, 415 Anzac Highway,
 CAMDEN PARK SA 5038

YOUR FULL NAME	Caroline Bleach and Tina Hall
YOUR ADDRESS	407 Anzac Highway Camden Park 5038
YOUR PHONE No	
YOUR EMAIL	
NATURE OF INTEREST	Adjoining Resident/Childcare <small>(eg. Adjoining resident, owner of land in the vicinity etc.)</small>
REASON/S FOR REPRESENTATION Owners of the Home2Home Early Education + care childcare next door	
MY REPRESENTATIONS WOULD BE OVERCOME BY (state action sought) • Building Noise • our children's sleep times • Building dust + dirt • Privacy windows facing into our gardens • Driveway entrance • Contractors respectful conversations • Timescale	
Please indicate in the appropriate box below whether or not you wish to be heard by Council in respect to this submission: I DO NOT WISH TO BE HEARD <input type="checkbox"/> I DESIRE TO BE HEARD PERSONALLY <input checked="" type="checkbox"/> I DESIRE TO BE REPRESENTED BY _____ (PLEASE SPECIFY) <input type="checkbox"/>	
SIGNED <u>Caroline Bleach</u> <u>Tina Hall</u> DATE <u>30.9.19</u>	



Responsible Officer: Phil Smith
 Ends: Tuesday 8 October 2019

If space insufficient, please attach sheets

STATEMENT OF REPRESENTATION
Pursuant to Section 38 of the Development Act 1993

TO Chief Executive Officer
 City of West Torrens
 165 Sir Donald Bradman Drive
 HILTON 5033

DEVELOPMENT No. 211/437/2019
 PROPERTY ADDRESS: 411 Anzac Highway, CAMDEN PARK SA 5038, 415 Anzac Highway,
 CAMDEN PARK SA 5038

YOUR FULL NAME	Thelma May TRUSSELL
YOUR ADDRESS	Unit 2/424-445 Anzac Hwy. Camden Park. 5038
YOUR PHONE No	[REDACTED]
YOUR EMAIL	[REDACTED]
NATURE OF INTEREST	Resident Holdfast gds (eg. Adjoining resident, owner of land in the vicinity etc.) Retirement Village.
REASON/S FOR REPRESENTATION Concerns of High Rise buildings overlooking our Retirement Village, with many aged Residences.	
MY REPRESENTATIONS WOULD BE OVERCOME BY (state action sought)	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> City of West Torrens 03 OCT 2019 City Development </div>

Please indicate in the appropriate box below whether or not you wish to be heard by Council in respect to this submission:

I DO NOT WISH TO BE HEARD ☒

I DESIRE TO BE HEARD PERSONALLY ☐

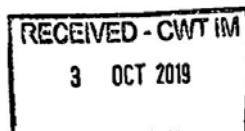
I DESIRE TO BE REPRESENTED BY _____ ☐

(PLEASE SPECIFY)

SIGNED

DATE

Thelma M. Trussell
 25/9/2019



Responsible Officer: Phil Smith
 Ends: Tuesday 8 October 2019

If space insufficient, please attach sheets

REF: 0334 – 411 – 415 Anzac Highway, Camden Park

18 October 2019

Mr Phil Smith
Senior Development Officer – City Development
City of West Torrens
165 Sir Donald Bradman Drive
HILTON SA 5033



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89 King William Street
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Adelaide SA 5001
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W: www.futureurbangroup.com
E: info@futureurbangroup.com
ABN: 34 452 110 398

Dear Phil,

**RESPONSE TO REPRESENTATIONS RECEIVED IN RELATION TO DA 211/437/2019
AT 411 – 415 ANZAC HIGHWAY, CAMDEN PARK.**

We write on behalf of the applicant, Junction Australia, in response to the representations received in relation to the abovementioned development application.

We have been provided with a total of three representations from:

- Thelma May Trussell (Unit 2 /424 – 440 Anzac Highway, Camden Park);
- Steven and Sarah Dennis (18 Creslin Terrace, Camden Park); and
- Caroline Bleach and Tina Hall (407 Anzac Highway, Camden Park).

The matters raised by the representors are addressed under the headings below.

PARKING ON CRESLIN TERRACE

Parking on Creslin Terrace was raised as a concern by Mr and Mrs Dennis.

We note that the following car parking rates are applicable to each component of the development:

- Row dwellings – 2 car spaces, one of which is covered (Table WeTo/2);
- Group dwellings – 2 car spaces, one of which is covered plus 0.25 visitor car spaces per dwelling (Table WeTo/2); and
- Residential flat buildings – 1 car space where affordable housing is being provided (Policy Area PDC 7).

Based on these rates, each component of the development should provide the following:

- Row dwellings – 2 resident car spaces each;
- Group dwellings – 2 resident car spaces each plus a total of 3 visitor car spaces; and
- Residential flat building – 1 resident car space each where affordable/social housing is being provided.

The row dwellings satisfy the relevant car parking rate.

REF 0334 | 18 October 2019





The group dwellings satisfy the resident car parking rate however do not provide any on-site visitor car parking. Whilst we acknowledge that the three visitor car spaces could be accommodated within Creslin Terrace, visitors may also park on either Gunnawarra Avenue, Clifton Street or Anzac Highway (on weekends, or otherwise outside of Bus Zone and Clearway times). Importantly, these spaces will not be required at all times and instead, will likely only be required during peak visitation hours which are generally during the evenings and on weekends, and in any case, outside of school hours.

With respect to the residential flat buildings it is important to note that the West Apartment Block will be managed by Junction Australia for the purpose of providing social housing. In our opinion, this type of housing is defined as 'affordable'.

Junction Australia have assessed the car parking demands across other sites under their management in April 2019. This assessment found that approximately 75% of residents own a vehicle which is parked on site. The remaining 25% do not own a vehicle. In our opinion, this would not be uncharacteristic for this type of housing given the low income of residents and the social characteristics of the housing developed by Junction Australia. If a similar percentage of residents were to own a car in this particular residential flat building then a total of 12 car spaces would be required to support likely occupant needs.

A more recent survey conducted in August 2019 (extracted below) provides a specific insight into the car ownership of Junction social housing tenants in the Inner South region (the area surrounding the subject site, including Morphetville, Mitchell Park and directly surrounding suburbs). It is worth noting that many of these areas are not as well served with Public Transport as subject site. This survey found that only 65% of residents owned a vehicle, and the remaining 35% did not own a vehicle, which directly impacts the need for onsite and visitor car parking. On this basis, if the proposed West Apartment Block had a similar percentage of vehicle ownership, a total of 10 car parking spaces would be required to support needs of these residents.

Table 1 Survey results.

Q.14 How many registered motor vehicles are used by residents in your home?	
Counts Break %	Inner South
Respondents	
Base Respondents	400
No Vehicles	139 (35% approx.)
One Vehicle	203 (51% approx.)
Two Vehicles	40 (10%)
Three Vehicles or more	18 (5% approx.)

The East Apartment Block which will comprise 100% affordable housing. The 24 apartments will therefore generate a demand for 24 car spaces.

The overall demand generated by the residential flat buildings will be 34 - 36 car spaces. The combined car parking areas under each apartment block provide a total of 35 cars spaces, which represents either a shortfall or overprovision of one space depending on which usage percentage is adopted.

In either scenario, we have formed the opinion that adequate car parking is provided to the proposed development in consideration of the subject site's close proximity to high frequency public transport services (buses and trams) and high accessibility to cycling networks (e.g. the Westside Bikeway, the Mike Turtur Bikeway and the bicycle lanes within the Anzac Highway roadway).



In consideration of all the above we are of the opinion that the proposed development provides sufficient car parking in recognition of PDC 44 which provides:

***PDC 44** On-site vehicle parking should be provided having regard to:*

- (a) the number, nature and size of proposed dwellings*
- (b) proximity to centre facilities, public and community transport within walking distance of the dwellings*
- (c) the anticipated mobility and transport requirements of the likely occupants, particularly groups such as aged persons.*

[underline emphasis added]

In our opinion, the proposed development will not adversely impact car parking availability on Creslin Terrace.

LINK TO LINEAR RESERVE / BIKEWAY

In response to the concern raised by Mr and Mrs Dennis, it is important to note the following:

- the site is large and providing a link through the site allows both residents of the proposed development and surrounding residents with the opportunity to utilise the link to access the bus stop on Anzac Highway or the bikeway;
- the bikeway is sufficiently separated from the northern end of the subject site by some 19 metres to ensure any pedestrian walking out of the pedestrian link to the bikeway can readily see cyclists and/or other pedestrians;
- any future upgrade of the reserve can ensure that any additional landscaping can maintain sightlines; and
- the link will encourage use of the reserve and bikeway, thereby also increasing passive surveillance.

Overall, we are of the opinion that the design of the pedestrian link will not present any unreasonable impacts upon the bikeway in terms of safety or bicycle/pedestrian flow.

PRIVATE ACCESS GATES AND FENCING TO LINEAR RESERVE / BIKEWAY

Mr and Mrs Dennis seek confirmation of the proposed fence height along the northern boundary and whether a gate would be provided to each dwelling adjoining the Linear Reserve/ Westside Bikeway.

We can confirm that the proposal includes gates to each dwelling. The fence and gates will be 1.8 metres high in order to provide adequate privacy and security, whilst also permitting direct access to the reserve.

Direct access will encourage residents and visitors to use the reserve, which will also encourage passive surveillance of the area.



OVERLOOKING

Ms Bleach, Ms Hall, and Ms Trussell identified overlooking as a concern.

In relation to Ms Trussell's property at Unit 2 /424 – 440 Anzac Highway, Camden Park, we respectfully suggest that there will not be any unreasonable overlooking from the proposed development, as the subject site is separated from the retirement village by Anzac Highway, three rows of street trees and a distance of over 40 metres. Further, we note that the majority of the areas of (what appears to be) private open space associated with the dwellings in the retirement village are covered, therefore overlooking would not be unreasonable in these circumstances.

Figure 2 Covered areas of private open space at 424 – 440 Anzac Highway.



In relation to the Childcare Centre at 407 Anzac Highway, Camden Park, it is important to note that the only windows associated with the residential flat building facing this property will be those at the end of the corridors and not windows associated with habitable rooms. These windows are setback into the building, thereby limiting the range of view to approximately 32 degrees. This restricted view means that the outdoor play areas associated with the childcare centre will not be visible from the proposed residential flat building. This is shown in the sight line drawing overleaf.



Figure 3 Sightlines from the eastern corridor window.



The eastern side of the group dwelling adjoining this property features a single upper level window. As this window has a sill height of 1.6 metres and is located above the stairway, the potential for overlooking is considered to be appropriately minimised.

In consideration of all the above, the proposed development does not result in any unreasonable overlooking.

CONSTRUCTION MANAGEMENT

Ms Bleach and Ms Hall understandably expressed concern in relation to how the following aspects of the development's construction would affect the land at 407 Anzac Highway:

- construction noise (in relation to children sleeping times);
- dust and dirt;
- contractor's conversations; and
- timeline.



We can confirm that a Construction Management Plan will be prepared and issued to Council prior to the commencement of works. It is an accepted practise that this plan deals with these types of issues in accordance with all relevant standards that may apply.

It is also accepted practise that this plan be imposed as a standard condition of consent.

Notwithstanding the above, the applicant has had a positive meeting with this representor to discuss their concerns and have explained how the Construction Management Plan can address all related issues.

CONCLUSION

We consider that the matters raised by the representors have been appropriately addressed, and that the proposed development warrants Development Plan Consent.

It would be appreciated if we could please be kept informed of the date of the relevant Council Assessment Panel meeting, as we reserve our right to appear on behalf of the applicant and respond to any third party submissions.

Should you wish to discuss the above matters further, do not hesitate to call our office on (08) 8221 5511.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Milly Nott'.

Milly Nott
Urban Planner



19-Nov-2019

SA Affordable Housing
RENEWAL SA
GPO Box 698
ADELAIDE SA 5001

By email - affordablehousing@sa.gov.au

Dear Sir / Madam

DEVELOPMENT APPLICATION: 211/437/2019
APPLICANT: JUNCTION AUSTRALIA
SUBJECT LAND: 411 Anzac Highway, CAMDEN PARK SA 5038, 415 Anzac Highway, CAMDEN PARK SA 5038
PROPOSAL: Construction of two residential flat buildings, containing 39 apartments, twelve two-storey group dwellings and three row dwellings

Pursuant to Section 37 of the *Development Act 1993* the above application is referred to you for a report since it falls within a class of development prescribed under the Eighth Schedule of the *Development Regulations 2008*.

As discussed with Rachel Knuckey of Council, treatment of your response as an urgent request is greatly appreciated.

It would also be appreciated that if you seek additional information from the applicant in accordance with Section 37(2) of the Act, the Council be notified of this action, the time specified in which this is to be complied with (and any subsequent extension thereto), and when a report is likely to be forwarded to Council.

Should you require further advice on this application, please do not hesitate to contact the Council on 8416 6333 or email development@wtcc.sa.gov.au.

Yours faithfully

A handwritten signature in black ink, appearing to read "Phil Smith".

Phil Smith
Senior Development Officer – Planning
City Development

In reply please quote 2019/00267, Process ID: 583592
 Enquiries to Reece Loughron
 Telephone (08) 7109 7876
 E-mail dpti.luc@sa.gov.au



Government of South Australia

Department of Planning,
 Transport and Infrastructure

POLICY, STRATEGY AND
 PROGRAM DEVELOPMENT

Transport Assessment and
 Policy Reform

GPO Box 1533
 ADELAIDE SA 5001

ABN 92 366 288 135

7 August 2019

Mr Phil Smith
 City of West Torrens
 165 Sir Donald Bradman Drive
 HILTON SA 5033

Dear Mr Smith

SCHEDULE 8 - REFERRAL RESPONSE

Development No.	211/437/19
Applicant	Junction Australia C/- Future Urban Group
Location	415 and 411 Anzac Highway (corner Clifton Street), Camden Park – Lots 48 and 49 in FP 7052
Proposal	Construction of two residential flat buildings comprising 39 apartments, twelve two-storey group dwellings and three row dwellings

I refer to the above development application forwarded to the Commissioner of Highways (CoH) in accordance with Section 37 of the *Development Act 1993*. The proposed development involves development adjacent a main road as described above.

The following response is provided in accordance with Section 37(4)(b) of the *Development Act 1993* and Schedule 8 of the *Development Regulations 2008*.

CONSIDERATION

The subject site abuts Anzac Highway, an arterial road under the care, control and management of the CoH and Clifton Street, a local road under the care, control and management of the City of West Torrens. The adjacent section of Anzac Highway is identified as a Major Traffic Route, Primary Freight Route, Major Cycling Route and Public Transport Corridor under the Department of Planning, Transport and Infrastructure's (DPTI's) 'A Functional Hierarchy for South Australia's Land Transport Network'. At this location, Anzac Highway carries approximately 33,700 vehicles per day (2.5% commercial vehicles) and has a posted speed limit of 60km/h. Clifton Street has a default urban speed limit of 50km/h.

Access and Road Safety

Access to the proposed development is via a private one-way laneway, with an entry from Anzac Highway and exit to Clifton Street, as shown on the Hames Sharley Overall Site Plan (Project Number: 31676, Drawing Number: SD0102, Revision E dated 16 November 2018) and Figures 5.1 and 5.2 in the Traffic Impact Assessment prepared by GTA Consultants (Reference S168630, Issue A dated 3 May 2019). The proposed entry and exit points are

#14308314

acceptable to DPTI. The proposed access points to Clifton Street for the abutting three two-storey row dwellings are located clear of AS/NZS 2890.1:2004 – Figure 3.1 'Prohibited Location of Access Driveways'.

Waste Management

The Waste Management Plan by Colby Phillips Advisory dated 2 May 2019 and Traffic Impact Assessment prepared by GTA Consultants indicate that the private one-way laneway has been designed for vehicles up to 10 metres in length and shows the proposed collection points. It is noted that the collection of bins for townhouses 12-15 may result in the refuse vehicle blocking entry movements for a short period of time. This collection area should desirably be redesigned/relocated to also enable a vehicle to pass while collection is taking place.

Road Widening

The Hames Sharley Overall Site Plan indicates that all development, including fencing, will be clear of the potential 4.5 metres x 4.5 metres cut-off requirement from the Anzac Highway/Clifton Street corner of the site, which is acceptable to DPTI. Landscaping within the corner cut-off area should desirably be restricted to low growing vegetation to maximise sight lines at this location. Further road widening advice is provided in the below note to the applicant.

ADVICE

DPTI supports the proposed access arrangements and advises the planning authority to attach the following conditions to any approval:

1. All vehicular access shall be in general accordance with Hames Sharley Site Plan, (Project Number: 31676, Drawing Number: SD0102, Revision E dated 16 November 2018) and Figures 5.1 and 5.2 in the Traffic Impact Assessment prepared by GTA Consultants (Reference S168630, Issue A dated 3 May 2019).
2. All vehicles using the one-way laneway shall enter from Anzac Highway and exit via Clifton Street in a forward direction. The entry and exit points and internal one-way laneway shall be signed and linemarked to reinforce the one-way traffic flow.
3. All off-street car parking shall be designed in accordance with AS/NZS 2890.1:2004 and AS/NZS 2890.6:2009. Additionally, clear sightlines, as shown in Figure 3.3 'Minimum Sight Lines for Pedestrian Safety' in AS/NZS 2890.1:2004, shall be provided at the property line to ensure adequate visibility between vehicles leaving the site and pedestrians on the adjacent footpath.
4. Any redundant crossover/s shall be closed and reinstated to Council's satisfaction at the applicant's cost prior to the development becoming operational.
5. Stormwater run-off shall be collected on-site and discharged without jeopardising the integrity and safety of the adjacent road network. Any alterations to the road drainage infrastructure required to facilitate this shall be at the applicant's cost.

#14308314

The following note provides important information for the benefit of the applicant and is required to be included in any approval:

- The Metropolitan Adelaide Road Widening Plan shows that a 4.5 metres x 4.5 metres cut-off may be required from the Anzac Highway/Clifton Street corner of the site for possible future road purposes. The consent of the Commissioner of Highways under the *Metropolitan Adelaide Road Widening Plan Act 1972* is required to all new building works located on or within 6 metres of the possible requirements.

The attached consent form should be completed by the applicant and returned to DPTI (dpti.luc@sa.gov.au), together with a copy of the Decision Notification Form and the approved site plan/s.

Yours sincerely,



A/MANAGER, TRANSPORT ASSESSMENT AND POLICY REFORM
for **COMMISSIONER OF HIGHWAYS**

Encl: Application for consent of the Commissioner of Highways for building work

A copy of the decision notification form should be forwarded to dpti.developmentapplications@sa.gov.au

#14308314



Government of South Australia
Department of Planning,
Transport and Infrastructure

METROPOLITAN ADELAIDE ROAD WIDENING PLAN ACT, 1972

APPLICATION FOR CONSENT OF THE COMMISSIONER OF HIGHWAYS FOR BUILDING WORK

Owner's Name _____

Applicant's Name _____
(If not owner)

Relationship to Owner (Lessee, Prospective Purchaser, Etc.) _____

Postal Address _____
Postcode _____

Location of Proposed Building Works (Full Details Required):

L.T.O. Plan No.: _____ Allotment No.: _____ Section: _____

Hundred: _____ House No.: _____

Street Name _____ Suburb: _____

Certificate of Title _____

Volume _____ Folio _____

Nature of Proposed Building Work _____

Proposed Location of Building Work on Land:

Distance from existing front road boundary to nearest point of building _____

Distance from existing side boundary (if on corner) to nearest point of building _____

Total estimated cost of proposed building work \$ _____

Estimated cost of proposed building work on land to which the Act applies \$ _____

Signature(s): _____ Date _____
(Applicant) (Owner or Authorised Agent)

Notes:

1. *Three (3) copies of the approved site plan describing fully the nature and extent of the proposal must be forwarded with this application form together with one copy of the notification of the relevant authority's decision to approve the development under the Development Act 1993.*
2. *The Act requires that the consent of the Commissioner of Highways must be obtained for any building work on land to which the Act applies.*
3. *The Act applies to all land shown on the Metropolitan Adelaide Road Widening Plan as possibly required for road widening and all land within six metres of the boundary of that land.*

PLEASE RETURN TO:

COMMISSIONER OF HIGHWAYS
DEPARTMENT OF PLANNING, TRANSPORT AND INFRASTRUCTURE
GPO BOX 1533
ADELAIDE SA 5001

For further information regarding the Metropolitan Adelaide Road Widening Plan Act,
please contact DPTI on (08) 7109 7878.

DOCS AND FILES/ #1177683

Preliminary Traffic, Flooding & Stormwater Assessment

Development Application No: 211/437/2019

Assessing Officer: Phil Smith
Site Address: 411 Anzac Highway, CAMDEN PARK SA 5038, 415
Anzac Highway, CAMDEN PARK SA 5038
Certificate of Title: CT-5606/197, CT-5420/162
**Description of
Development** Construction of two residential flat buildings,
containing 39 apartments, twelve two-storey group
dwellings and three row dwellings

TO THE TECHNICAL OFFICER - CITY ASSETS

Please provide your comments in relation to:

- ☐ Site drainage and stormwater disposal
- ☐ Required FFL
- ☐ On-site vehicle parking and manoeuvrability
- ☐ New Crossover
- ☐ Your advice is also sought on other aspects of the proposal as follows:

.....
.....

PLANNING OFFICER - Phil Smith

DATE 24 June, 2019

City of **West Torrens**

Between the City and the Sea

Memo

To Phil Smith
From Richard Tan
Date 24-Jun-2019
Subject 211/437/2019, 411 Anzac Highway, CAMDEN PARK SA 5038, 415 Anzac Highway, CAMDEN PARK SA 5038

Phil Smith,

The following City Assets Department comments are provided with regards to the assessment of the above development application:

Note: I noted that there is inconsistency in provided plans. The driveways location and landscaping/pavement of the individual dwellings do not match in some plans (eg, page 8 to 10). It should be noted that the following assessment is based on the layout as indicated on page 8 of the provided plan, where there is an on-street car parking space being maintained on Clifton Street, between the frontage of Lot 2 & 3 of individual dwellings.

The following traffic and parking comments in dot point 1.1 have been provided by Council's Traffic Consultant, Mr Frank Siow.

1.0 TRAFFIC AND PARKING

1.1 The proposal comprises of:

- 15 group/row dwellings
- 20 2br apartments and 4 1br apartments East building
- 12 2br apartments and 3 1br apartments West building
- Provision of 2 spaces per group/row dwellings
- Provision of 24 spaces for the East building apartments (designated as Affordable Housing)
- Provision of 11 spaces for the West building apartments (proposed social housing apartments)

Design Queries

1. The garage setbacks for the group/row dwellings are not dimensioned. A minimum 5.5m setback distance is required to allow a vehicle to park in front of the proposed garage.
2. The space adjacent to E15 is assumed to be a 'turn bay' space, given the dead end car park arrangement. This space should be line-marked accordingly as a 'turn bay' space.



City of **West Torrens**

Between the City and the Sea

3. Given the column arrangement adjacent to space W10, the space should be checked to ensure that door opening is not obstructed as per AS/NZS 2890.1-2004.
4. At the exit point of the roadway to Clifton Street, there appears to be no assessment undertaken if adequate sight lines are available for the exit driver to view oncoming traffic from the north approach of Clifton Street. Adequate vehicular and pedestrian sight lines shall be provided for this exit point.
5. There is a waste bin area located within the entry roadway adjacent to the East building. Council have previously recommended that the waste bin area be shifted and the entry roadway widened so that a refuse truck when stopped to pick up the bins would not obstruct entry vehicles from Anzac Highway. It would appear that this issue has not been addressed or turn path diagrams provided to show that the truck when stopped would not block access for the cars following it.
6. The turn path diagram for the refuse truck shows that the truck would encroach into the kerbside parking opposite in Clifton Street when exiting the site towards Anzac Highway. I understand that Council would not be prohibiting the parking in Clifton Street, as shown in the diagram, to accommodate the required turn. The exit driveway should be amended accordingly.

Parking Assessment

7. The parking requirement for the group/row dwellings (2 spaces per dwelling) would satisfy the Development Plan requirement.
8. The parking requirement for the East building, assessed under the category of 'Affordable Housing', would satisfy the Development Plan requirement. I assume that a condition would be included denoting this category of housing.
9. The parking for the West building is stated as for 'social housing'. There is limited parking information available for housing of this nature. While the Applicant has provided some parking data to support the lower parking provision, I am of the opinion that it would not be appropriate to rely on this limited parking survey as a basis for the assessment. If the West building were to be approved with a discounted parking rate, on the basis of the Applicant's social housing intent, there would need to be suitable and enforceable conditions included to ensure that: (1) in the future the apartments cannot be sold off as normal residential apartments (where the parking requirement is significantly greater) and (2) the West building is approved under the operation of Junction Australia (being the nominated social housing operator). If both (1) and (2) were considered appropriate by the assessing planner, then I am of the opinion that the 'Affordable Housing' parking rate would be



reasonable to apply to the West building. Therefore 12 parking spaces should be provided for the West building. One option to increase the parking may be to provide an additional parking bay off the roadway to satisfy this requirement.

- 1.2 As mentioned in the preliminary assessment, the ultimate ownership and practical functionality of the two apartment would need to cognisant of the unrestricted and shared parking between the buildings.

It is recommended that in association with an approval of this development that Conditions similar to the following are included (or address via other mechanisms):

- All parking spaces within the car parking areas under both apartment buildings must remain unallocated to individual apartments and freely available to all tenants and visitors of the apartment buildings.
- Any staging of the development must ensure that the parking provision for each apartment building is provided for in totality prior to the occupancy of the building.

- 1.3 I noted that a shared zone sign has been proposed within the private road. It is recommended that the road and footpath within the 'shared zone' should be designed to the relevant standards.

The commentary provided previously regarding 'one way' arrangement for the private road is still outstanding. I noted that pedestrian crossings has been commented in the previous assessment, however, that has been removed in the revised plan. Previous comment has been attached in the following for information:

Based on the provision of a 'one way' arrangement for the private road within the development, suitable signage to reinforce this one way movement should be included within the plans for the development, located on entry points to the development and reinforced within the site at repeater locations. Further some plans provide notation of formalised pedestrian crossings within the development, which are considered formal traffic control device which require separate approvals and designing in accordance with specific standards and guidelines.

It is recommended that the revised designs include nomination of appropriate signage to reinforce the one way movement of traffic through the site and demonstration of the design and approval behind any



City of **West Torrens**

Between the City and the Sea

devices/controls within the site which can be considered formal traffic control devices.

2.0 WASTE MANAGEMENT

- 2.1** Due to the scale, size and complexity of the development application, it is recommended that further assessment from Council's Waste Management Team is required.

It is recommended that further assessment from Council's Waste Management Team is required.

3.0 VERGE INTERACTION

- 3.1** The new access point from Anzac Highway has been amended to Council's recommendation and has been assessed as satisfying Council's requirements.
- 3.2** The provided amended 'Overall Site Plan' (Hames Sharley, Ref: 31676-SC0102-E, dated 16/11/2018) would implies that the developer has agreed to the proposal of working in partnership with Council to improve and upscale the public road verge adjacent to the development.

It is however recommended that a formal acknowledgement from the developer should be provided regarding the consent to the working in partnership with Council's proposal and the contribution of \$8,000 for the improvement and upscaling works to the public road verge adjacent to the development.

4.0 FFL CONSIDERATION

- 4.1** Information nominated in the TMK plans for the development calls for a FFL of 9.50m for all of the new buildings within the development site.

Based on Council's typical expectation for new FFLs to be established a minimum of 350mm above the highest adjacent street water table level, the nominated level would effectively satisfy this requirement.

(It is noted that this requirement would not be met in relation to a small amount of kerbing near the corner, however it is considered that this level is a localised elevation and not critical to the overall consideration)

5.0 STORMWATER MANAGEMENT

Information nominated in the TMK plans proposes to address elements of stormwater management. It is noted the concept engineering plans and a



City of **West Torrens**

Between the City and the Sea

performance summary has been provided, however no supporting information as would typically be anticipated has been provided.

5.1 Stormwater Harvest and Re-use

Previously City Assets has encourage the harvest and re-use of stormwater for this development, however, the provided plan has no indication of stormwater being re-use. As the stormwater detention requirement and stormwater quality target for this development has not been met, I have reattached previous comments for applicant's consideration.

For developments of this nature, City Assets typically strongly encourages the inclusion of stormwater collection and active re-use, particularly within apartment buildings where a high demand is present and hence a high volume of reduction of stormwater runoff from the site can be simply achieved.

TMK engineers have indicated that each of the individual dwellings will include the standard minimum building code 1000 litre re-use tank, whilst nothing is to be provided in relation to the apartments as these are not 'required' under building code classification.

Collection and active re-use of stormwater in developments of this nature can go a long way towards the achieving the other stormwater management measures if water quality and detention, as well as the sustainability benefits which area achieve through water conservation considerations.

In relation to individual townhouse dwellings within the development, City Assets now offer an 'alternate approach' to the management of stormwater runoff from these allotments which is considered as a single solution to quantity, quality and re-use controls off this element of the development. This 'alternate solution' would comprise the following measures and controls;

- *Installation of a 3,000 litre rainwater tank to each dwelling (no detention element).*
- *Rainwater tanks plumbed to deliver recycled water ALL toilets and laundry cold water outlet. (Can also be connected to Hot Water Service if desired).*
- *A minimum of 90% of the dwelling roof area is to have its stormwater runoff directed to the rainwater tank.*



- Mains water backup, pump and plumbing arrangements as typically required to support such an installation are to be compliant with the standard Building Code requirements associated with a compulsory rainwater tank installation.
- The stormwater collection and re-use system is to be installed and operational prior to occupancy of the dwelling. (to be reinforced through Planning Condition)

Should this 'alternative approach' be adopted for the individual dwellings within the development no further stormwater management measures would be required from these elements of the development, they would only be required in association with the common road and apartment buildings.

5.2 Stormwater Detention

I noted that a revised stormwater calculation has been provided.

The provided stormwater calculation has indicated that TMK has calculated the pre-development peak flow rate based on Council's current stormwater standard with the intensity of a 10 min storm duration, which is reasonable.

The post development peak discharged has however been calculated based on the critical storm event at higher duration. Generally this is not acceptable as comparing both pre-development and post development peak flow rate, the design duration/storm intensity should be using the same parameter. (ie. If the site has provided calculation for pre-development discharge rate using the 10 min rainfall intensity of a 20 year ARI storm event, then calculation for post development should be using the same rainfall intensity of a 20 year ARI storm event). The calculation to determine the detention tank capacity has not been included in the provided documents.

The provided invert for the box culvert has suggested there is no head allowance for the water from the culvert to flow in to the public system. This has indicated that a pump is likely to be required to be able to fully drain the water from the culvert.

It is also unclear regarding the accuracy of the proposed invert to the SEP at Anzac Highway. Based on the provided information, the depth of the SEP is assumed to be 1.19m, however on-site measurements has indicated that the SEP is approximately 0.7m. Further clarification should be provided. As the stormwater for the development is proposed



to be connected to the existing Council's stormwater system, a backflow prevention valve is required to be installed.

5.3 Stormwater Quality Improvement

TMK plans nominate for all stormwater runoff from the individual dwellings to directly discharge from the site, bypassing any control measures of note, including stormwater quality improvement. The provided plan has also indicated that stormwater runoff from the roof of both apartments will be discharged to the box culvert, bypassing the bio-retention trench. It would now appear that the roofs area from individual dwelling 1-15 and the apartments' roof area, which in total equal to around 50% of the overall site stormwater runoff is untreated which simplistically would make it near impossible to achieve stormwater quality targets.

It is recommended that further consideration and supporting information is required to be provided in relation to all facets of stormwater management within the development. It is considered that the currently nominated measures from this perspective is substantially shortfall of the standard expectation.

Regards
Richard Tan
Civil Engineer

From: [Richard Tan](#)
To: [Phil Smith](#)
Subject: RE: City Assets comments - 411-415 Anzac Highway Camden Park - 211/437/2019
Date: Thursday, 12 September 2019 4:34:35 PM
Attachments: [image007.png](#)
[image008.jpg](#)
[image009.jpg](#)
[image010.jpg](#)
[image011.jpg](#)

Hi Phil

I have reviewed the latest provided calculation and plan. Although the calculation and the plan does not match up (ie, the calculation is generally for detention tank, and it would seem reasonable to say that TMK engineer has swap a detention tank with a retention tank), however, as previously commented, City Assets has run calculation through In-Site Water Tools developed by Water Sensitive SA and in principle, the proposed stormwater management plan and calculation has been assessed as acceptable.

Regards

Richard Tan
Development Engineer
City of West Torrens
Phone: 0884166296
Email: rtan@wtcc.sa.gov.au

From: Alex Perez [<mailto:aperez@tmkeng.com.au>]
Sent: Tuesday, 10 September 2019 3:59 PM
To: Andrew King ; Richard Tan ; Phil Smith
Cc: Peter Wellington ; Milly Nott ; Brad McKenzie
Subject: RE: City Assets comments - 411-415 Anzac Highway Camden Park - 211/437/2019

Hi Gentlemen,

Please find attached the amended civil drawings as requested showing a 20,000L of storage for the apartment buildings.

Kind regards,

Alex Perez
BEng (Civil)
Engineer

D (08) 8238 4146 | **M**
E aperez@tmkeng.com.au
Level 6, 100 Pirie St, Adelaide, SA, 5000
www.tmkeng.com.au



TMK Consulting Engineers

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

Parking for Visitors to TMK Head Office

TMK Consulting Engineers have made car parking available for visitors to its Level 6, 100 Pirie Street office. To access this you should park in the UPark on Wyatt Street, located at 18 - 34 Wyatt Street, between Grenfell & Pirie Streets. Enter from either Wyatt St or Hyde St and obtain the normal parking ticket on entry. Prior to leaving our office, please ask one of our Reception staff for a UPark on Wyatt Street voucher to use when exiting the car park.

WARNING

The information contained in this message and any attached files is confidential and is intended for the sole use of the individual or entity to whom it is addressed and others authorised to receive it. If you are not the intended recipient you are hereby notified that any disclosure, copying, distribution or taking any action in reliance of the contents of this

Environmental Health Assessment

Development Application No: 211/437/2019

Assessing Officer: Phil Smith

Site Address: 411 Anzac Highway, CAMDEN PARK SA 5038,
415 Anzac Highway, CAMDEN PARK SA 5038

Certificate of Title: CT-5606/197, CT-5420/162

Description of Development Construction of two residential flat buildings, containing 39 apartments, twelve two-storey group dwellings and three row dwellings

TO THE ENV HEALTH OFFICER - REGULATORY SERVICES

Please provide your comments in relation to:

☐ Any aspect that you feel needs further attention or detail

.....
.....

Memo

To Phil Smith
From Nick Teoh
Date 19 July 2019
Subject 211/437/2019, 411 Anzac Highway, Camden Park SA 5038

Dear Phil,

The following Waste Management comments are provided with regards to the assessment of the above develop application:

The Waste Management Plan provided is considered appropriate and suitable for the development. Liability waivers for kerbside collection and hard waste services will be required from the parties responsible for the private lane prior to commencement of Council services.

Regards,
Nick Teoh
Team Leader Waste Management

Arboricultural Assessment of Street Trees

Development Application No: 211/437/2019

REFERRAL DUE DATE: 22 May 2019

Assessing Officer: **Phil Smith**
Site Address: **411 Anzac Highway, CAMDEN PARK SA 5038, 415 Anzac Highway, CAMDEN PARK SA 5038**
Certificate of Title: **CT-5606/197, CT-5420/162**
Description of Development: **Construction of two residential flat buildings, containing 39 apartments, twelve two-storey group dwellings and three row dwellings**

TO THE TECHNICAL OFFICER – CITY ASSETS

Please provide your comments in relation to:

- ☐ The removal of or impact upon the Street Tree
- ☐ Species of Tree:
- ☐ Your advice is also sought on other aspects of the proposal as follows:

PLANNING OFFICER - Phil Smith

DATE 7 May 2019

FROM THE TECHNICAL OFFICER

I have examined the plans as requested and provide comments as follow.

I have examined the plans as requested and provide comments as follow.
As with all development applications it must be proven beyond reasonable doubt that all alternatives have been explored so not to hinder the progress of any street tree(s).

Any proposed development that does not consider "AS4970 Protection of Trees on Development Sites", is likely to require revision until all plans accurately correspond with the specific tree information detailed in this standard.

Verge interaction must consider all services which cross council land, including stormwater outlets (and other) and will need to be maintained a minimum of 2.0m from any existing street tree (unless otherwise negotiated). This must be indicated / documented for appropriate approval.

A site investigation together with the information provided of the site has revealed that there are 2 existing *Koelreuteria paniculata* (Golden Rain) street trees and 1 existing *Callistemon Harkness* (bottlebrush) street tree on Clifton Street that require removal to accommodate this development. City Operations will support their removal.

- Tree 1 = \$ 226.00
- Tree 2 = \$ 904.00
- Tree 3 = No charge due to height and poor condition
- Total = \$ 1130.00**

There is no conflict with the existing *Fraxinus angustifolia* 'Raywood' (Claret Ash) street trees on Anzac Highway. No existing street trees on Anzac Highway frontage are to be removed or damaged during this development.

With reference to the City of West Torrens, Fees and Charges Document 2018-2019 "Tree removal for driveway construction", once Council has assessed all circumstances and considered it acceptable that a street tree can be removed, a fee is calculated based on Council's standard schedule of fees and charges.

This fee is used to offsets the loss of the asset (street tree) to the community, with funds received invested in Council's annual Greening Program.

As a result of the proposed development on the corner Anzac Highway and Clifton Street, City Operations has considered the health, structure, form, useful life expectancy, and age of the street trees and will support their removal.

A fee of \$ 1130.00.00 will be required prior to the commencement of any work.

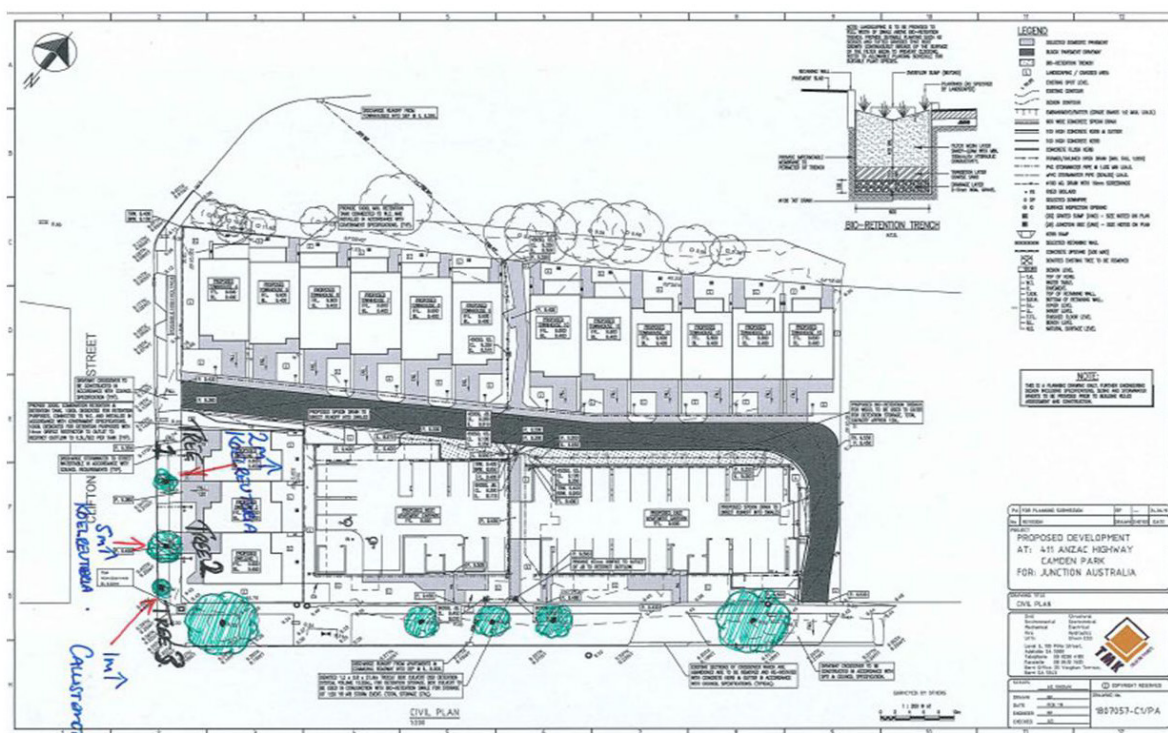
Please note, under no circumstances is any individuals other than council staff permitted to interfere with a street tree. If pruning etc. is required, council must be notified via the appropriate request, and council staff will perform all works associated with the community asset.

Final crossover locations will be confirmed once appropriate consultation has been received from the applicant and they have submitted "an application to construct a vehicle crossing place(s) across council land".

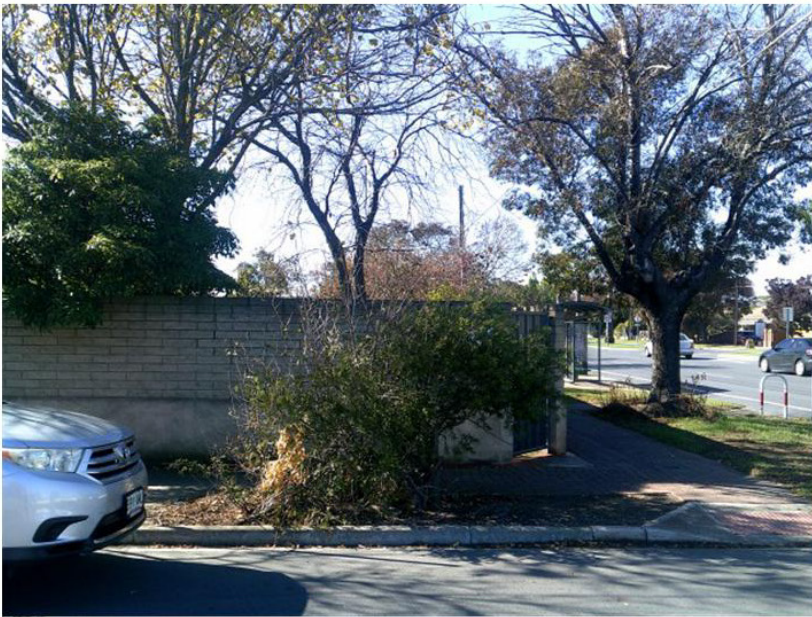
**Rick Holmes
Arboriculture Assistant
165 Sir Donald Bradman Drive
Hilton SA 5033**

**Telephone: 8416 6333
Fax: 8443 5709
Email: rholmes@wtcc.sa.gov.au**

DATE: 16/05/2019



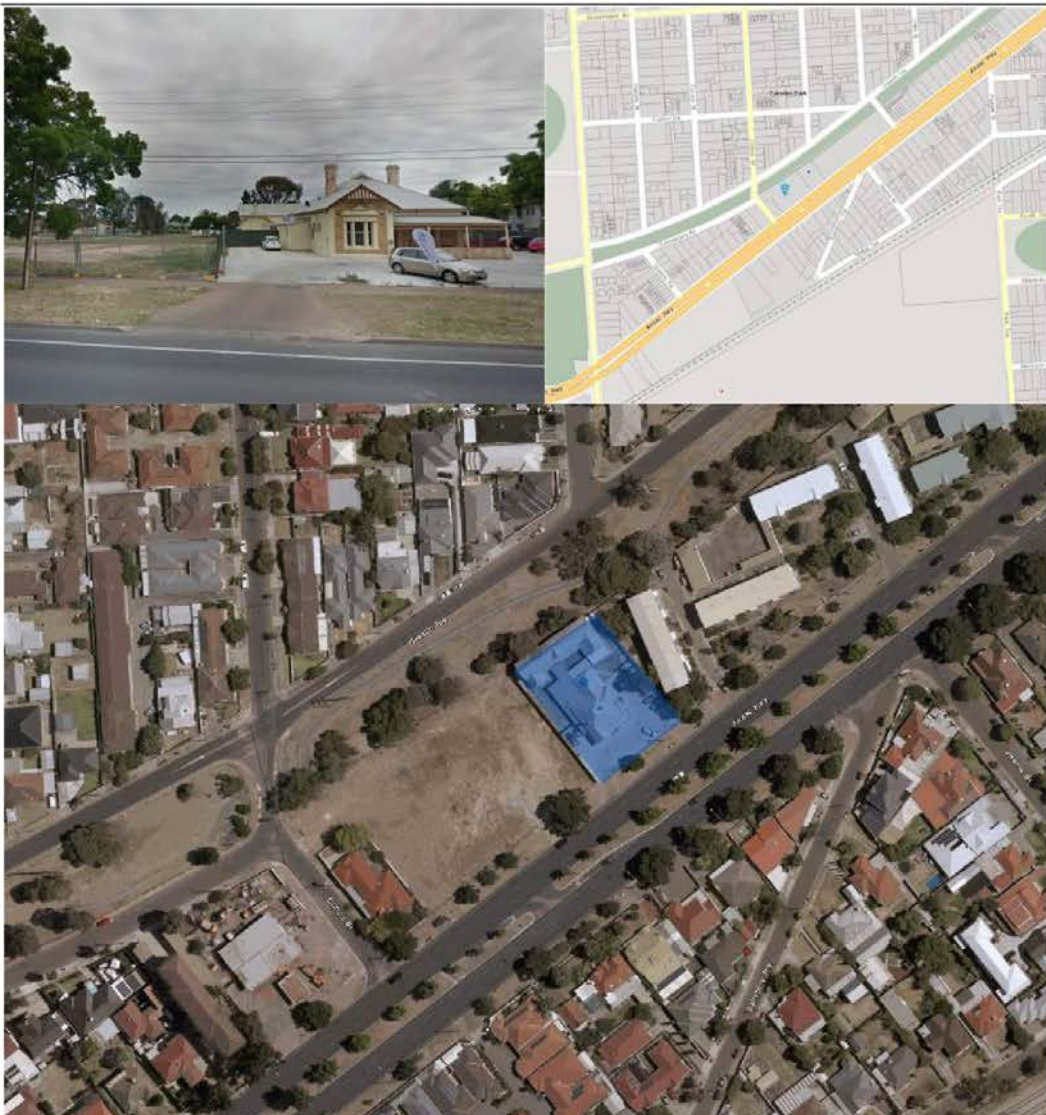






City of West Torrens Heritage Advisor Comment

Planning Application No.: 211/437/2019
Location: 411-415 Anzac Highway, CAMDEN PARK
Zone: Residential
Policy Area: 18 – Medium Density
Heritage Status: Adjacent a Local Heritage Place
Proposal: Construction of two residential flat buildings, containing 39 apartments, twelve two-storey group dwellings and three row dwellings
To: Phil Smith
Date:



City of West Torrens Heritage Advisor Comment



Description:

The proposed staged development involves the following:

Stage 1	12 two-storey Group dwellings in two groups of six separated by the link and facing a Reserve
Stage 2	A one way Private Road off Anzac Highway providing access to Stage
Stage 3	Two Residential Flat Buildings separated by a link; one will be five storey and the other four storey
Stage 4	Three two-storey row dwellings facing Clifton Street

City of West Torrens Heritage Advisor Comment

The north east boundary of the proposed development is shared with a Local Heritage Place at 407 Anzac Highway.

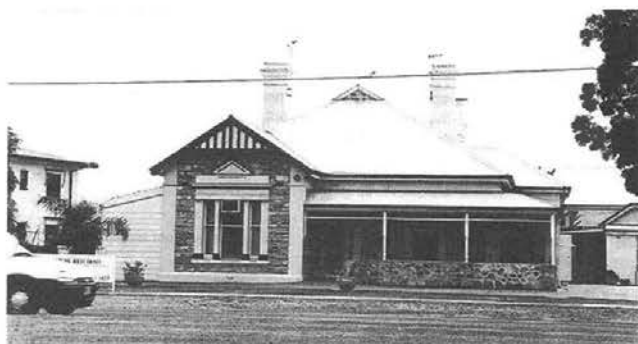
The Local Heritage Place is described as:

House & Coach House: External form and detailing of residence fronting Anzac Highway and external form and detailing of two storeyed building along rear boundary of property (1998 Heritage Survey Ref CP01), fulfilling the Section 23(4) criteria of the Development Act 1993:

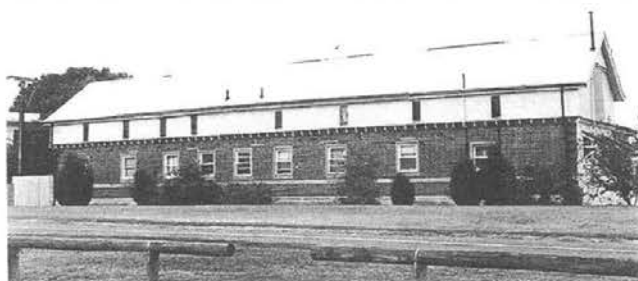
(4) A Development Plan may designate a place as a place of local heritage value if—

(a) the house and coachhouse display historical, and social themes that are of importance to the local area;
or

(d) the house and coachhouse display aesthetic merit, design characteristics of significance to the local area as the house is an excellent representation of a turn of the century villa and the associated coach house is a distinctive element.



View from Anzac Highway looking north



View from Carlton Road looking South

West Torrens Heritage Survey (1998)

71

McDougall & Vines

The Residential Flat Building with frontage to Anzac Highway has a proposed setback of 5700mm from the North East boundary between the proposed development and the Local Heritage Place at 407 Anzac Highway.

The 'Group Dwellings' facing the Linear Reserve has not provided a setback dimension from the boundary shared with the Coach house of the Local Heritage Place, which appears to abut the boundary.

The Residential Flat building has undercroft carparking at Ground floor, screened by timber look aluminium slats. Three upper levels have coloured precast concrete panels and the upper level has timber look aluminium cladding. The building is 17.83m high.

City of West Torrens Heritage Advisor Comment

Stair and lift wells are clad in a dark CFC Cladding and the cantilever balconies are framed with light coloured compressed sheet cladding.

The upper level has a sloping roof to the north west face. The apartment levels have the apartments grouped around a central corridor that runs parallel to Anzac Highway.

The Group dwellings are two storey with a single garage, visitor parking, living to the ground and bedrooms to the upper level. The roof form features a sloping roof, rendered lightweight finish and timber look aluminium cladding.

The Medium Density Policy Area 18 contemplates four storey development on the Subject Land.

As development adjacent to a Local Heritage Item within the Residential Zone and Policy Area 18 – Medium Density, I have considered the following Development Plan Provisions:

Heritage Places

OBJECTIVES: 1,2,3

PRINCIPLES OF DEVELOPMENT CONTROL: 1,2,5,6,7

Policy Area 18 – Medium Density

OBJECTIVES: 1

PRINCIPLES OF DEVELOPMENT CONTROL: 1

Residential Zone

OBJECTIVES: 4

PRINCIPLES OF DEVELOPMENT CONTROL : 5,7,10,11,12,13

Assessment:

In relation to Heritage Places, the Local Heritage Place is on a separate allotment and will be retained, satisfying Objectives 1 and 2 of Heritage Places.

There is minimal separation distance from the side wall of the Place to the flank wall of the Residential Flat Building of approximately 15 metres compared to a height of 17.83 metres. While this ensures the physical setting of the LHP will be reasonably conserved on its own land, satisfying Objective 3, the impact of the new development and its proximity to the side boundary, suggests a greater set back or a stepped approach to the side of the building would assist in forming a more respectful transition between the new building and the Local Heritage Place.

The proposal does not affect PDC 1 of Heritage Places, because no demolition is proposed. While the principal elevations of the Place will be retained, views to the Place will be altered, particularly from the south west, because the proposed development is forward of the Local Heritage Place, albeit on separate land, but nonetheless obscuring that view.

The side distance separation provides some comfort that the LHP setting is preserved and views to and from the Place also not significantly disturbed.

However the relative scale and bulk of the proposal and the height of the flank walls of the adjacent five storey Residential Flat Building creates a less than compatible relationship.

The articulation of the façade creates a reasonable proportion and composition of smaller design elements, although designed in contrast to the single storey former dwelling. PDC 6 of Heritage Places is difficult to fully satisfy.

The advice of PDC 7 suggests that stepping in parts of the building that are taller than the front façade, to create a less harsh transition, would be desirable.

The contextual relationship between the rear Group dwellings and the Coach house are considered reasonable.

City of West Torrens Heritage Advisor Comment

The Desired Character of the Policy Area that contemplates affordable housing and up to four storey development is not satisfied by the five storey proposal, especially in relation to the height of the building adjacent to a heritage place.

Desired Character encourages the managing of interfaces with lower density residential development, providing building height and bulk as techniques to consider in making the transition.

The proposal is further forward than the LHP and higher than the maximum height for the Policy Area.

PDC 10 of the zone seeks to minimise the visual impact of buildings from adjoining properties. PDC 11 of the Zone suggests a greater set back is required, given the height of the five storey building.

Conclusion:

The proposed development is not considered to have a fatal impact on the Local Heritage Place. However the five storey Residential Flat building is notably:

- higher than contemplated in the Policy Area;
- of a greater scale and bulk than compatible with the LHP;
- set further forward than the Local Heritage Place obscuring views;
- closer to the side boundary shared with the Local Heritage Place than desirable;
- not stepped as suggested to improve the contextual transition.

Douglas Alexander

6.2 2 Fitch Road, FULHAM

Application No 211/858/2019

DEVELOPMENT APPLICATION DETAILS

DESCRIPTION OF DEVELOPMENT	Installation of a shipping container in association with the existing dwelling for a period of one year
APPLICANT	Rob Bruin
LODGEMENT DATE	3 September 2019
ZONE	Residential Zone
POLICY AREA	Low Density Policy Area 21
APPLICATION TYPE	Merit
PUBLIC NOTIFICATION	Category 1
REFERRALS	Internal <ul style="list-style-type: none"> • Nil External <ul style="list-style-type: none"> • Nil
DEVELOPMENT PLAN VERSION	12 July 2018
DELEGATION	<ul style="list-style-type: none"> • The relevant application proposes a merit form of development and, in the opinion of the delegate, should be refused, except where the application is to be refused for a failure to provide information pursuant to section 39 of the Act or where a referral agency direct that the application is refused pursuant to section 37 of the Act.
RECOMMENDATION	Refuse
AUTHOR	Phil Smith

BACKGROUND

It is noted that this matter has been a longstanding compliance issue spanning a number of years between Council and the applicant.

The applicant previously sought to have the shipping container relocated as part of DA 211/417/2015 to construct a single storey dwelling to the rear, however Council suggested at that time that the shipping container component be removed from the application.

It is understood that the shipping container was previously on the land now known as 33A Coral Sea Road (the rear of the subject land prior to its division from the site). Once the land was divided, the container was relocated onto the newly created subject land.

SUBJECT LAND AND LOCALITY

The subject land is formally described as Common Property Primary Community Plan 40416, in the area named Fulham, Hundred of Adelaide, Volume 6174 Folio 204, more commonly known as 2 Fitch Road, Fulham.

The subject site is irregular in shape with an 18.9 metre (m) wide frontage, a secondary frontage to Coral Sea Road of 15.6m and a site area of 543 square metres (m²).

It is noted that there are no encumbrances or Land Management Agreements on the Certificate of Title and there are no Regulated Trees on the subject site or on adjoining land that would be affected by the development.

The site is relatively flat and currently contains a detached dwelling and a small shed to the rear, in addition to the shipping container.

The locality consists primarily of residential land uses with a mixture of architectural styles ranging from post-war to recently constructed contemporary dwellings. A long, narrow reserve adjoins the site to the north.

The subject land and locality are shown on the aerial imagery and maps below.



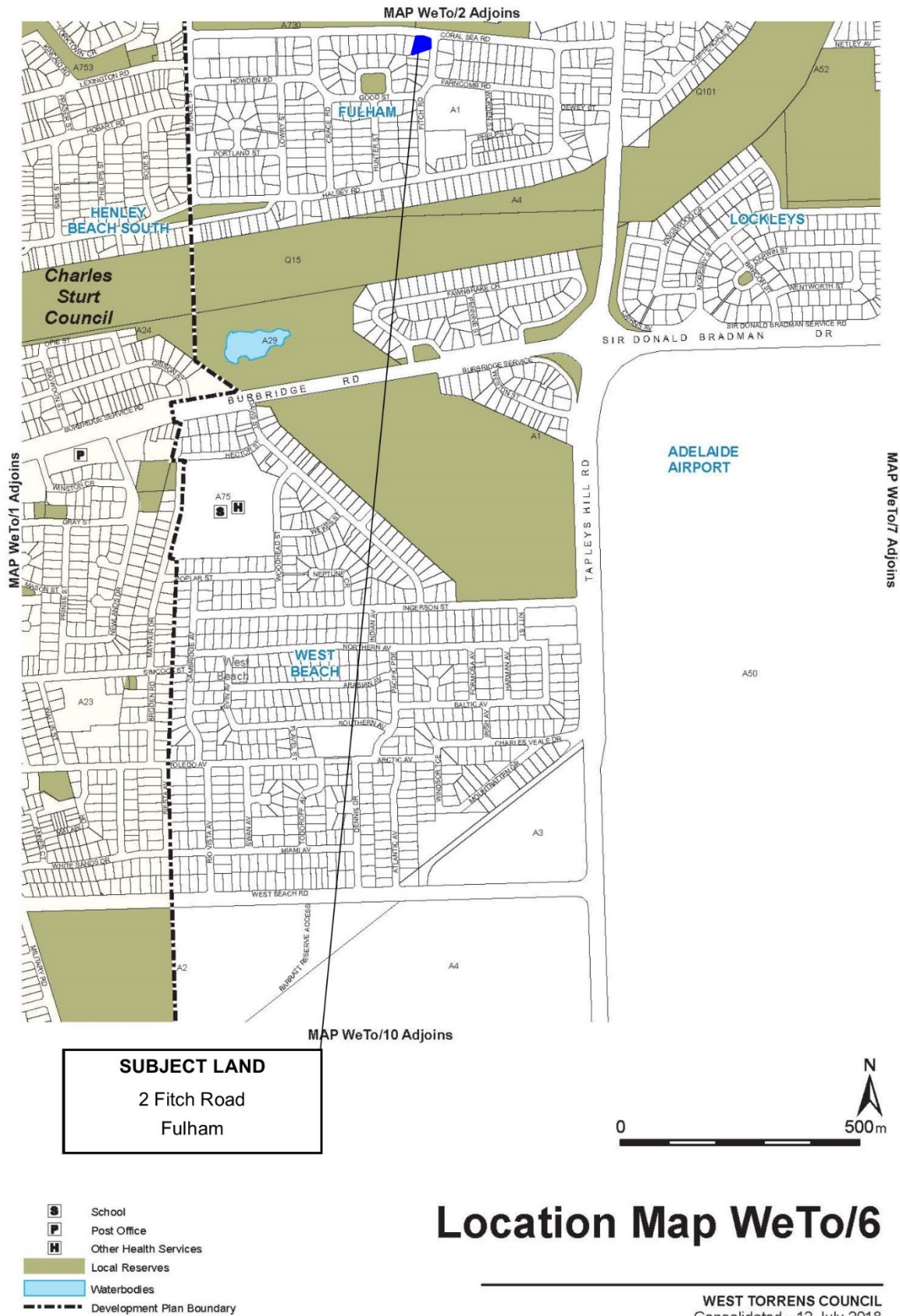




Figure 1 - View of the subject site approaching the intersection of Fitch Road and Coral Sea Road



Figure 2 - View of the shipping container from Coral Sea Road



Figure 3 - View of the shipping container from Fitch Road/Coral Sea Road intersection



Figure 4 - Close up of shipping container



Figure 5 - Relationship of shipping container with adjoining property (33A Coral Sea Road)
Source: Google Streetview

PROPOSAL

The application seeks approval to continue to locate a shipping container (a residential outbuilding) on the subject land for a temporary period of one year to store renovation building equipment, tools and the like.

The shipping container measures 6.1m in length by 2.44m in width and 2.6m in height. The container is painted white in contrast to the dwelling which is finished in cream render and maroon accents (trim, awnings).

The structure is located forward of the dwelling by 1.7m, 650mm from the side boundary to 33A Coral Sea Road and approximately 1m from the Coral Sea Road boundary.

The shipping container is proposed to be clad in galvanised custom orb sheeting or vertically installed wooded decking to display a more 'domestic' appearance.

A number of renovations are occurring on the site and the container is being used to store these related materials and tools.

A lack of accessibility prevents the structure from being located at the rear of the dwelling.

The relevant plans and documents are contained in **Attachment 2**.

RELEVANT DEVELOPMENT PLAN PROVISIONS

The subject land is located within the Residential Zone and, more specifically, Low Density Policy Area 21 as described in the West Torrens Council Development Plan.

The relevant Desired Character statements are as follows:

Residential Zone - Desired Character	
<i>This zone will contain predominantly residential development. There may also be some small-scale non-residential activities such as offices, shops, consulting rooms and educational establishments in certain locations. Non-residential activities will be complementary to surrounding dwellings.</i>	
<i>Allotments will be at very low, low and medium densities to provide a diversity of housing options in different parts of the zone. The range of allotment sizes will support the desired dwelling types anticipated in each policy area, and the minimum allotment sizes shall be treated as such in order to achieve the Desired Character for each policy area and, in turn, reinforce distinction between policy areas. Row dwellings and residential flat buildings will be common near centres and in policy areas where the desired density is higher, in contrast to the predominance of detached dwellings in policy areas where the distinct established character is identified for protection and enhancement. There will also be potential for semi-detached dwellings and group dwellings in other policy areas.</i>	
<i>Residential development in the form of a multiple dwelling, residential flat building or group dwelling will not be undertaken in a Historic Conservation Area.</i>	
<i>Landscaping will be provided throughout the zone to enhance the appearance of buildings from the street as viewed by pedestrians, provide an appropriate transition between the public and private realm and reduce heat loads in summer.</i>	
Objectives	4
Principles of Development Control	1, 2, 3, 4, 5, 6, 8

Low Density Policy Area 21 - Desired Character	
<p><i>This policy area will have a low density character. In order to preserve this, development will predominantly involve the replacement of detached dwellings with the same (or buildings in the form of detached dwellings).</i></p> <p><i>There will be a denser allotment pattern and some alternative dwelling types, such as semi-detached and row dwellings, close to centre zones where it is desirable for more residents to live and take advantage of the variety of facilities focused on centre zones. Battleaxe subdivision will not occur in the policy area to preserve a pattern of rectangular allotments developed with buildings that have a direct street frontage. In the area bounded by Henley Beach Road, Torrens Avenue and the Linear Park, where the consistent allotment pattern is a significant positive feature of the locality, subdivision will reinforce the existing allotment pattern.</i></p> <p><i>Buildings will be up to 2 storeys in height. Garages and carports will be located behind the front façade of buildings. Buildings in the area bounded by Henley Beach Road, Torrens Avenue and the Linear Park will be complementary to existing dwellings through the incorporation of design features such as pitched roofs, eaves and variation in the texture of building materials.</i></p> <p><i>Development will be interspersed with landscaping, particularly behind the main road frontage, to enhance the appearance of buildings from the street as viewed by pedestrians, provide an appropriate transition between the public and private realm and reduce heat loads in summer. Low and open-style front fencing will contribute to a sense of space between buildings.</i></p>	
Objectives	1
Principles of Development Control	1, 2

Additional provisions of the Development Plan which relate to the proposed development are contained in **Attachment 1**.

QUANTITATIVE STANDARDS

The proposal is assessed for consistency with the quantitative requirements of the Development Plan as outlines in the table below:

DEVELOPMENT PLAN PROVISIONS	STANDARD	ASSESSMENT
MAXIMUM FLOOR AREA <i>Residential Development</i> <i>PDC 16</i>	60m ²	14.8m ² Satisfies
PRIMARY STREET SETBACK <i>Residential Development</i> <i>PDC 16</i>	Outbuildings should not protrude forward of any part of its associated dwelling	1.7m forward of dwelling Does not satisfy
SECONDARY STREET SETBACK <i>Residential Development</i> <i>PDC 16</i>	0.9m or in line with the existing dwelling	1m Satisfies

BUILDING HEIGHT <i>Residential Development</i> <i>PDC 16</i>	5m	2.59m Satisfies
MAXIMUM WALL HEIGHT <i>Residential Development</i> <i>PDC 16</i>	3m	2.59m Satisfies

ASSESSMENT

In assessing the merits or otherwise of the application, the proposed development is discussed under the following sub headings:

Land Use/Desired Character

The proposed land use for a domestic outbuilding is an envisaged use within the Residential Zone and within the Low Density Policy area where the site is located.

However, Objective 1 of the Design and Appearance module of the Development Plan asks for development to be of a 'high standard and appearance that responds to and reinforces positive aspects of the local environment and built form'. The shipping container is neither a structure of a high standard and appearance nor reflects positive aspects of the local environment or built form. The shipping container shows no likeness to the dwelling on the subject site or dwellings in the locality more generally and is in a prominent and highly visible location. Furthermore, PDC 14 of the Residential Development module is clear in seeking outbuildings to have a roof form and pitch, building materials and detailing that complement the associated dwelling. It is considered that the proposed shipping container does not satisfy these requirements.

PDC 1 of the Design and Appearance module states that buildings should reflect the desired character of the locality having regard to building height and external materials. Furthermore, PDC 6 of this module effectively states that transportable buildings, which this container is akin to, should have architectural detailing to give the appearance of a permanent structure. While it is acknowledged that the applicant is proposing to attach vertical timber decking to the container to conceal its appearance, it is considered that the decking does not go far enough to conceal the container in a way that would give the appearance of a permanent structure or a structure that would be consistent with other like domestic structures found within the Residential Zone.

On this basis, it is considered that the proposed shipping container is not an envisaged or desired land use in the locality, and does not satisfy the relevant principle of the Development Plan relating to land use and desired character.

Built Form

The shipping container does not achieve an appropriate built form that fits within the context of the locality. As shown in the figures above, the container dominates the streetscape and is therefore contrary to PDC 16 of the Residential Development module. Figure 2 is most telling as it effectively blocks the entire view of the dwelling from Coral Sea Road. In addition, the container is located 1.7m further forward of the front face of the dwelling which is also contrary to PDC 16.

Amenity

In terms of amenity, it is considered that the adjoining property at 33A Coral Sea Road will suffer amenity loss as a result of having clear views of the container from the habitable room facing the street. This can be clearly seen in Figure 5 above.

Furthermore, it is considered that the locality in general will experience substantial amenity loss as a result of the siting of the proposed container with no landscaping or fencing provided to obstruct views toward the structure. The fact that the structure sits forward of the dwelling, which can clearly be seen from most vantage points in proximity of the site, only serves to exacerbate its inappropriateness in the locality.

SUMMARY

The proposed shipping container is not considered to be an appropriate and desired land use in the locality. Notwithstanding its temporary status, the container is proposed to sit forward of the dwelling and is therefore highly visible from two street frontages. Its external appearance and materials are not in keeping with other domestic structures found in the Policy Area, and the container is considered to present as an imposing, out-of-context form of residential development, particularly to Coral Sea Road.

Having considered all the relevant Objectives and Principles of the Development Plan, the proposal is not considered to be seriously at variance with the Development Plan.

On balance however, the proposed development does not sufficiently accord with the relevant provisions contained within the West Torrens Council Development Plan Consolidated 12 July 2018 and does not warrant Development Plan Consent.

RECOMMENDATION

The Council Assessment Panel, having considered all aspects of the report, the application for consent to carry out development of land and pursuant to the provisions of the *Development Act 1993* resolves to REFUSE Development Plan Consent, for Application No. 211/858/2019 by Rob Bruin to install a shipping container at 2 Fitch Road Fulham (CT 6174/204) as the proposed development is contrary to the following provisions of the West Torrens Council Development Plan Consolidated 12 July 2018:

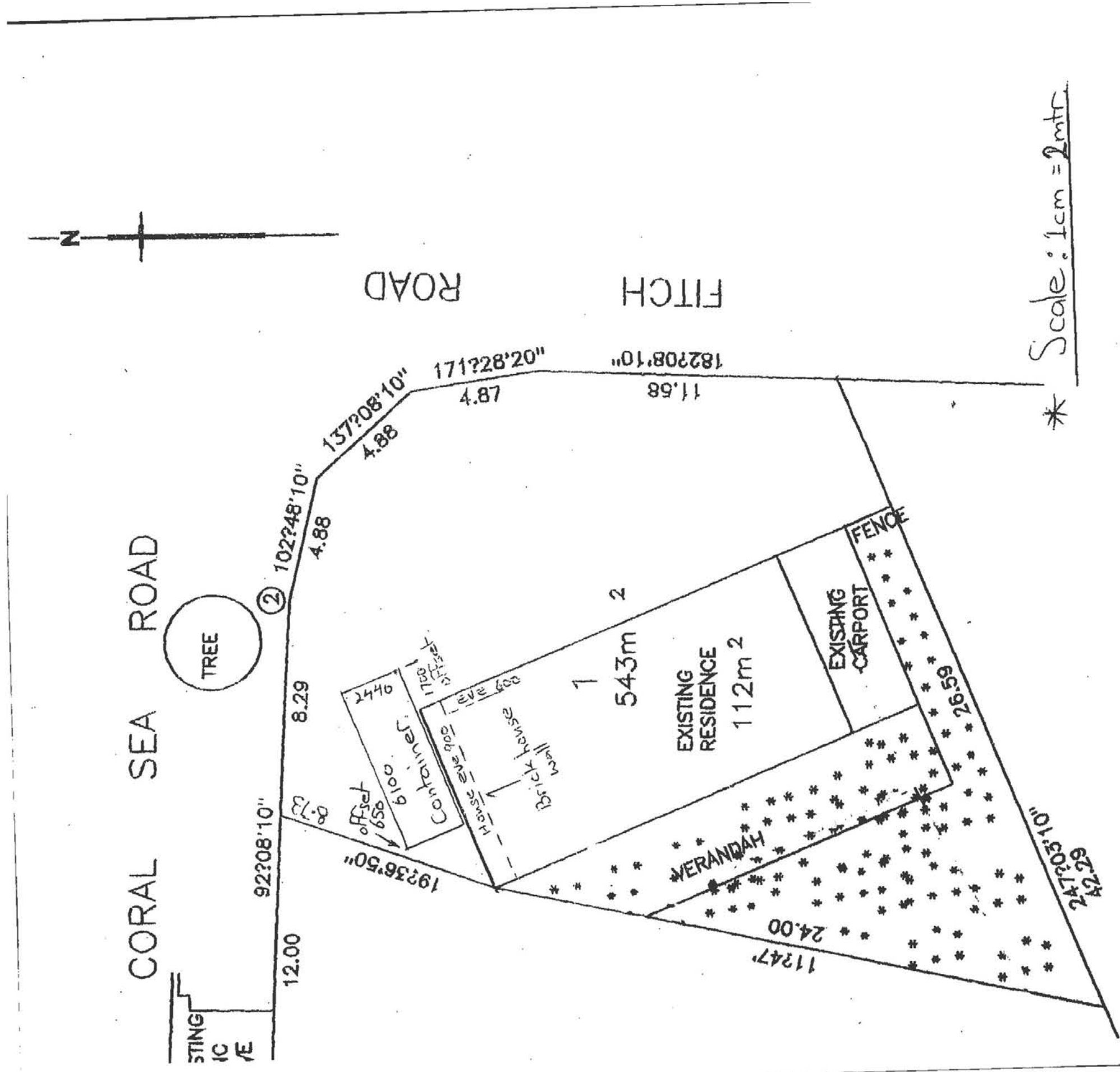
- General Section: Design and Appearance, Objective 1 and Principle of Development Control 1
Reason: The development is not of an appropriate design standard to reinforce positive aspects of the local environment and built form in terms of external materials and colours, roof form and pitch, façade articulation and detailing.
- General Section: Design and Appearance, Principle of Development Control 6
Reason: The development does not display suitable architectural detailing to give the appearance of a permanent structure.
- General Section: Orderly and Sustainable Development, Objectives 1, 3 & 4
Reason: The development is not to be carried out in an orderly manner.
- General Section: Orderly and Sustainable Development, Principle of Development Control 1
Reason: The development will prejudice the development of the Residential Zone for its intended purpose.
- General Section: Residential Development, Principles of Development Control 4, 14 & 16
Reason: The development is located forward of the dwelling and will dominate the streetscape.
- Residential Zone, Objective 4
Reason: The development does not contribute to the desired character of the zone.
- Residential Zone, Low Density Policy Area 21, Objective 1
Reason: The development does not contribute to the desired character of the zone.

Attachments

- 1. Relevant Development Plan Provisions**
- 2. Proposed plans**

Relevant Development Plan Provisions

Design and Appearance	<i>Objectives</i>	1 & 2
	<i>Principles of Development Control</i>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 & 25
Orderly and Sustainable Development	<i>Objectives</i>	1, 2, 3, 4 & 5
	<i>Principles of Development Control</i>	1, 2, 3, 4, 5, 6, 7 & 8
Residential Development	<i>Objectives</i>	1, 2, 3, 4 & 5
	<i>Principles of Development Control</i>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34 & 35

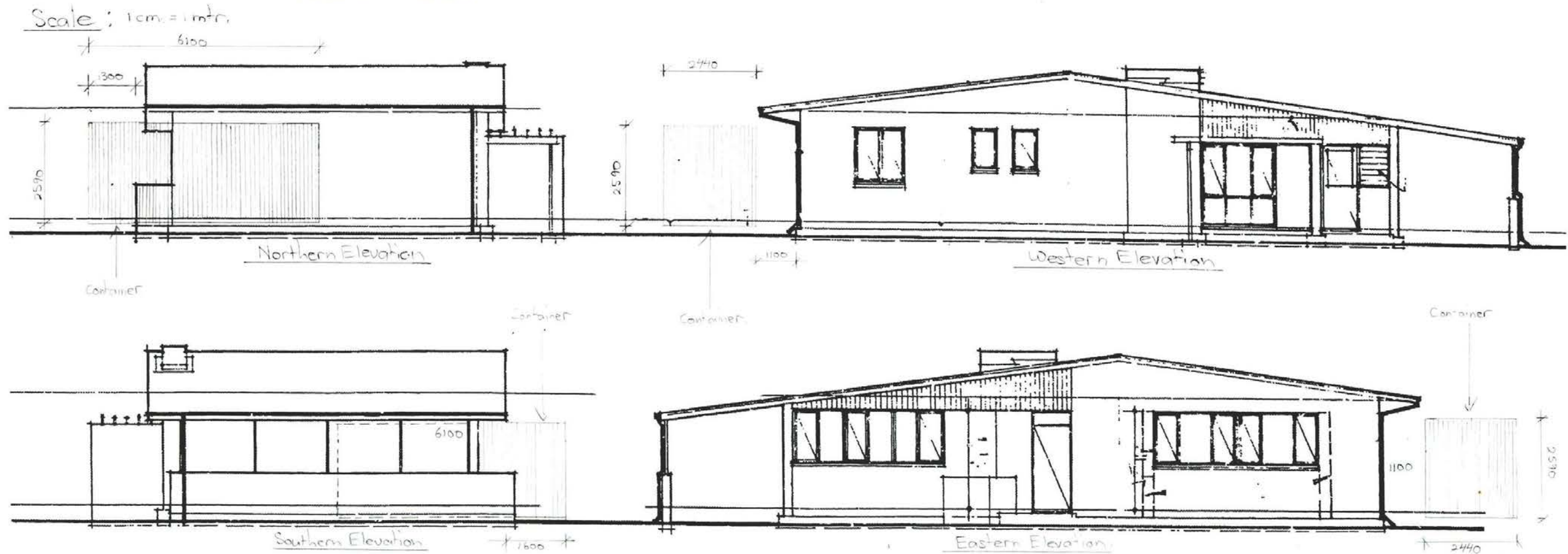


NOTE: ALL DATA IS SUBJECT TO
CERTIFIED SURVEY AND APPROVAL
BY THE LANDS TITLES OFFICE

Note: Temporary Development approval sought for one year only. The structure is a temporary structure associated with the additional land use. The structure can not be placed at the rear of the house due to no access being available. The structure is proposed to be cladded with galvanised custom Orb sheet cladding or horizontally installed wooden decking if preferred by council, as seen here. → The structure will be used for renovation and repair of the rear of the house, repair of stormwater, fencing and plumbing. Including finishing interior renovations, white out preventative maintenance, installation of planter boxes, garage door repair and general painting through out. For these purposes the structure is being used to store materials and tools.



example of cladding.



6.3 34 Fulham Park Drive, FULHAM

Application No 211/1077/2019

DEVELOPMENT APPLICATION DETAILS

DESCRIPTION OF DEVELOPMENT	Land division - Torrens Title; SCAP No. 211/D114/19; Creating one (1) additional allotment
APPLICANT	L Condo
LODGEMENT DATE	29 October 2019
ZONE	Residential Zone
POLICY AREA	Low Density Policy Area 21
APPLICATION TYPE	Merit
PUBLIC NOTIFICATION	Category 1
REFERRALS	Internal <ul style="list-style-type: none"> • City Operations External <ul style="list-style-type: none"> • State Commission Assessment Panel (SCAP) • South Australian Water Corporation (SA Water)
DEVELOPMENT PLAN VERSION	12 July 2018
DELEGATION	<ul style="list-style-type: none"> • The relevant application proposes a merit form of development and, in the opinion of the delegate, should be refused, except where the application is to be refused for a failure to provide information pursuant to section 39 of the Act or where a referral agency direct that the application is refused pursuant to section 37 of the Act.
RECOMMENDATION	Refuse
AUTHOR	Amelia De Ruvo

SUBJECT LAND AND LOCALITY

The subject land is formally described in Certificate of Title Volume 5670 Folio 424, comprising allotment 191 in Deposited Plan 4791 in the area named Lockleys, Hundred of Adelaide, or more commonly known as 34 Fulham Park Drive, Lockleys. There are no easements, encumbrances or Land Management Agreements affecting the subject site.

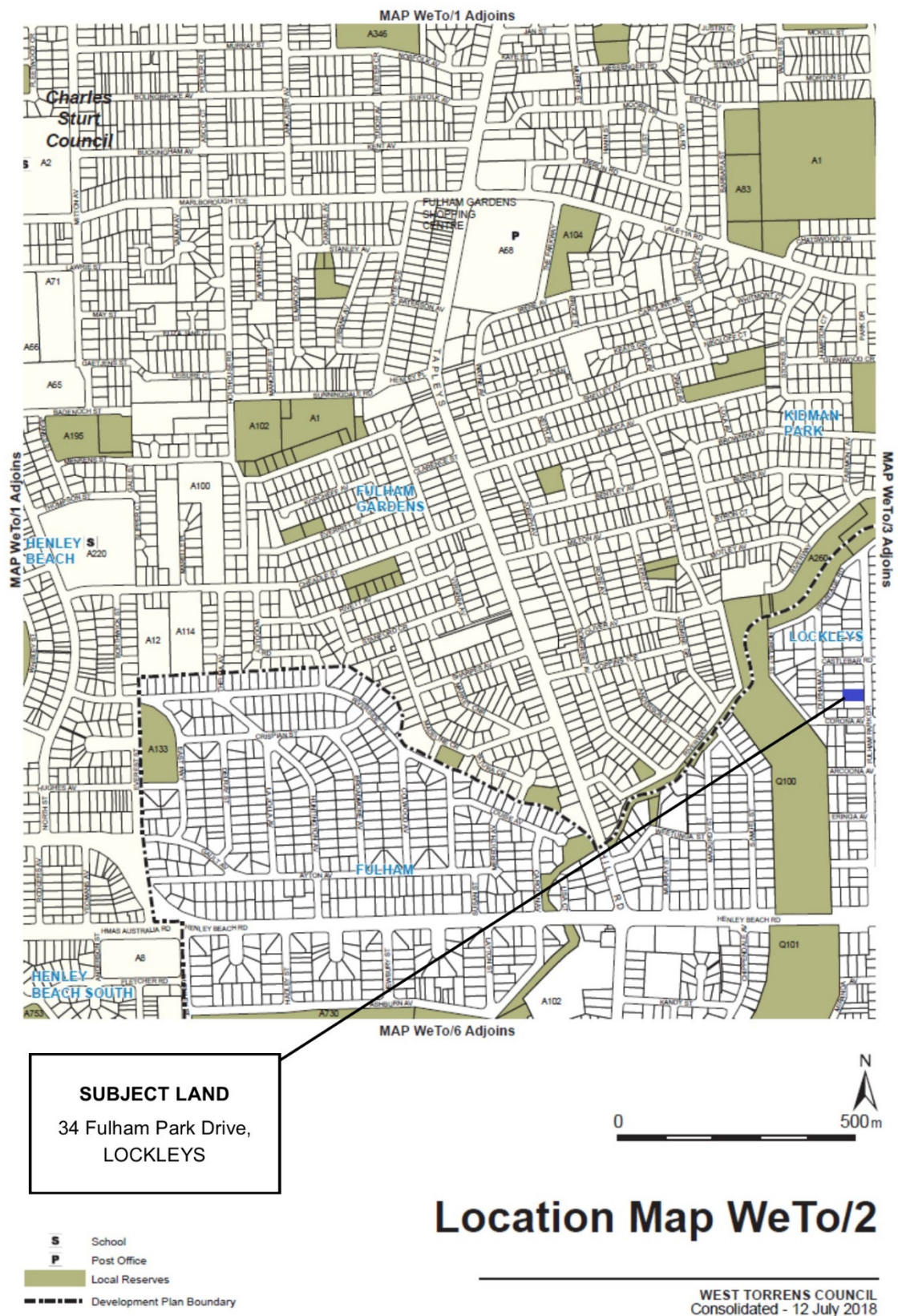
The subject site is an existing residential site located on the western side of Fulham Park Drive, approximately 450 metres (m) north of Henley Beach Road. The subject site is rectangular in shape with a 18.9m wide frontage to Fulham Park Drive, a depth of 42.67m and an overall site area of 806.5 square metres (m²). The site currently contains a single storey detached dwelling with an attached verandah and an outbuilding. The topography of the subject site is generally flat.

The locality is residential in nature comprised of single and double storey detached dwellings. To the west of the subject site is the Karrawirra Parri River, also known as the Torrens River.

The allotment pattern within the locality maintains a fairly consistent pattern of rectangular allotments. Site areas and frontage widths vary across the locality with site areas between 400m² and 900m² and frontage widths between 9m and 19m.

The subject land and locality are shown on the aerial imagery and maps below.





PROPOSAL

The application seeks approval for a Torrens Title land division creating one additional allotment.

Proposed allotments 50 and 51 are mirrored allotments, each of which are rectangular in shape with a 9.45m wide frontage to Fulham Park Drive, a depth of 42.67m and an overall site area of 403m². An existing single width crossover is able to service proposed allotment 50. A new single width crossover can be accommodated to allow for vehicular access to proposed allotment 51, with an approved reduced offset of 1.5m from the existing street tree.

The relevant plans and supporting documents are contained within **Attachment 2**.

INTERNAL REFERRAL

Department	Comments
City Operations	<ul style="list-style-type: none"> Council's Arboriculture officer supports a reduced offset of 1.5m from the existing Lophostemon Confertus (Queensland Box) street tree (see Figure 1 below).



Figure 1: City Assets' requirements

EXTERNAL REFERRALS

Department	Comments
SCAP	<ul style="list-style-type: none"> SCAP has raised no concerns with the proposal. Standard conditions of consent have been recommended should the application be supported.
SA Water	<ul style="list-style-type: none"> SA Water has raised no concerns with the proposal. The developer will be required to meet the requirements of SA Water for the provision of water and sewerages services. Standard conditions of consent have been recommended should the application be supported.

A copy of the relevant referral responses are contained in **Attachment 3**.

RELEVANT DEVELOPMENT PLAN PROVISIONS

The subject land is located within the Residential Zone and, more specifically, Low Density Policy Area 21, as described in the West Torrens Council Development Plan.

The relevant Desired Character statements are as follows:

Residential Zone	
<p><i>This zone will contain predominantly residential development. There may also be some small-scale non-residential activities such as offices, shops, consulting rooms and educational establishments in certain locations. Non-residential activities will be complementary to surrounding dwellings.</i></p> <p><i>Allotments will be at very low, low and medium densities to provide a diversity of housing options in different parts of the zone. The range of allotment sizes will support the desired dwelling types anticipated in each policy area, and the minimum allotment sizes shall be treated as such in order to achieve the Desired Character for each policy area and, in turn, reinforce distinction between policy areas. Row dwellings and residential flat buildings will be common near centres and in policy areas where the desired density is higher, in contrast to the predominance of detached dwellings in policy areas where the distinct established character is identified for protection and enhancement. There will also be potential for semi-detached dwellings and group dwellings in other policy areas.</i></p> <p><i>Residential development in the form of a multiple dwelling, residential flat building or group dwelling will not be undertaken in a Historic Conservation Area.</i></p> <p><i>Landscaping will be provided throughout the zone to enhance the appearance of buildings from the street as viewed by pedestrians, provide an appropriate transition between the public and private realm and reduce heat loads in summer.</i></p>	
Objectives	1, 2 & 4
Principles of Development Control	1 & 5

Low Density Policy Area 21	
<p><i>This policy area will have a low density character. In order to preserve this, development will predominantly involve the replacement of detached dwellings with the same (or buildings in the form of detached dwellings).</i></p> <p><i>There will be a denser allotment pattern and some alternative dwelling types, such as semi-detached and row dwellings, close to centre zones where it is desirable for more residents to live and take advantage of the variety of facilities focused on centre zones. Battleaxe subdivision will not occur in the policy area to preserve a pattern of rectangular allotments developed with buildings that have a direct street frontage. In the area bounded by Henley Beach Road, Torrens Avenue and the Linear Park, where the consistent allotment pattern is a significant positive feature of the locality, subdivision will reinforce the existing allotment pattern.</i></p> <p><i>Buildings will be up to 2 storeys in height. Garages and carports will be located behind the front façade of buildings. Buildings in the area bounded by Henley Beach Road, Torrens Avenue and the Linear Park will be complementary to existing dwellings through the incorporation of design features such as pitched roofs, eaves and variation in the texture of building materials.</i></p> <p><i>Development will be interspersed with landscaping, particularly behind the main road frontage, to enhance the appearance of buildings from the street as viewed by pedestrians, provide an appropriate transition between the public and private realm and reduce heat loads in summer. Low and open-style front fencing will contribute to a sense of space between buildings.</i></p>	
Objective	1
Principles of Development Control	1, 2 & 6

Additional provisions of the Development Plan which relate to the proposed development are contained in **Attachment 1**.

QUANTITATIVE STANDARDS

The proposal is assessed for consistency with the quantitative requirements of the Development Plan as outlined in the table below:

DEVELOPMENT PLAN PROVISIONS	STANDARD	ASSESSMENT	
		Lot 50	Lot 51
SITE AREA <i>Low Density Policy Area 21</i> <i>PDC 6</i>	420m ² (min.)	403m ² Does Not Satisfy	403m ² Does Not Satisfy
SITE FRONTAGE <i>Low Density Policy Area 21</i> <i>PDC 6</i>	12m	9.45m Does Not Satisfy	9.45m Does Not Satisfy

ASSESSMENT

In assessing the merits or otherwise of the application, the proposed development is discussed under the following sub headings:

Land Use

Residential development, in the form of detached dwellings, is an envisaged form of development within Low Density Policy Area 21. It is noted that the size and configuration of proposed allotments 50 and 51 would enable the construction of a detached dwellings. Accordingly, the proposed land division is considered to be an appropriate form of development within the Policy Area.

Site Areas

Principle of Development Control (PDC) 6 of Low Density Policy Area 21 seeks to create allotments with site areas greater than 420m². The proposed allotments fail to satisfy the minimum site area requirements specified within the Policy Area by 17m² or 4.1%.

Frontage Width

In addition, the proposal fails to satisfy the minimum frontage width requirements of PDC 6 of Low Density Policy Area 21. The proposed allotments seek a frontage width of 9.45m, a shortfall of 2.55m or 21.3%.

Pattern of Development

Reinforcement of the existing allotment pattern is a key provision set out in Objective 1 and PDC 2 of the Policy Area, which aligns closely to the Desired Character Statement as follows:

In the area bounded by Henley Beach Road, Torrens Avenue and the Linear Park, where the consistent allotment pattern is a significant positive feature of the locality, subdivision will reinforce the existing allotment pattern.

The subject site is located within this area which has been specifically referenced for its consistent allotment pattern and the positive attributes it brings to the public realm.

To some degree it is considered that the proposed allotments would maintain the rectangular shape sought by the Desired Character Statement. However, in narrowing the allotment frontage widths to 9.45m, the shape of the allotments have been altered, limiting the manner in which they can be developed. This could potentially create an undesirable development outcome that would not meet the intent of the Desired Character Statement. The proposed allotments are considered to be inconsistent with the existing pattern of development and would diminish, rather than reinforce, the existing allotment pattern (please refer to Figure 3 below).

As described in the Desired Character Statement, reinforcing the existing allotment pattern is significant positive feature within the Policy Area. Within the immediate locality the average frontage width is 15.3m with an average site area 642.9m². This pattern of development is considered to be an essential aspect of the established character of the area bounded by Henley Beach Road, Torrens Avenue and Linear Park. The existing allotments allow for dwellings to be constructed on wide sites with generous space available for landscaping. Accordingly, the proposed allotments are not considered suitable for their intended purpose.

It should be noted that within Low Density Policy Area 21, a denser allotment pattern is sought when a site is located within 400m of a Local Centre Zone. In this instance, the subject site is not located within one of these specified areas and therefore a denser allotment pattern, as sought by the proposal, is not envisaged. Accordingly, the proposed land division is not considered to be consistent with either the Desired Character of the Policy Area or the pattern of development within the locality.

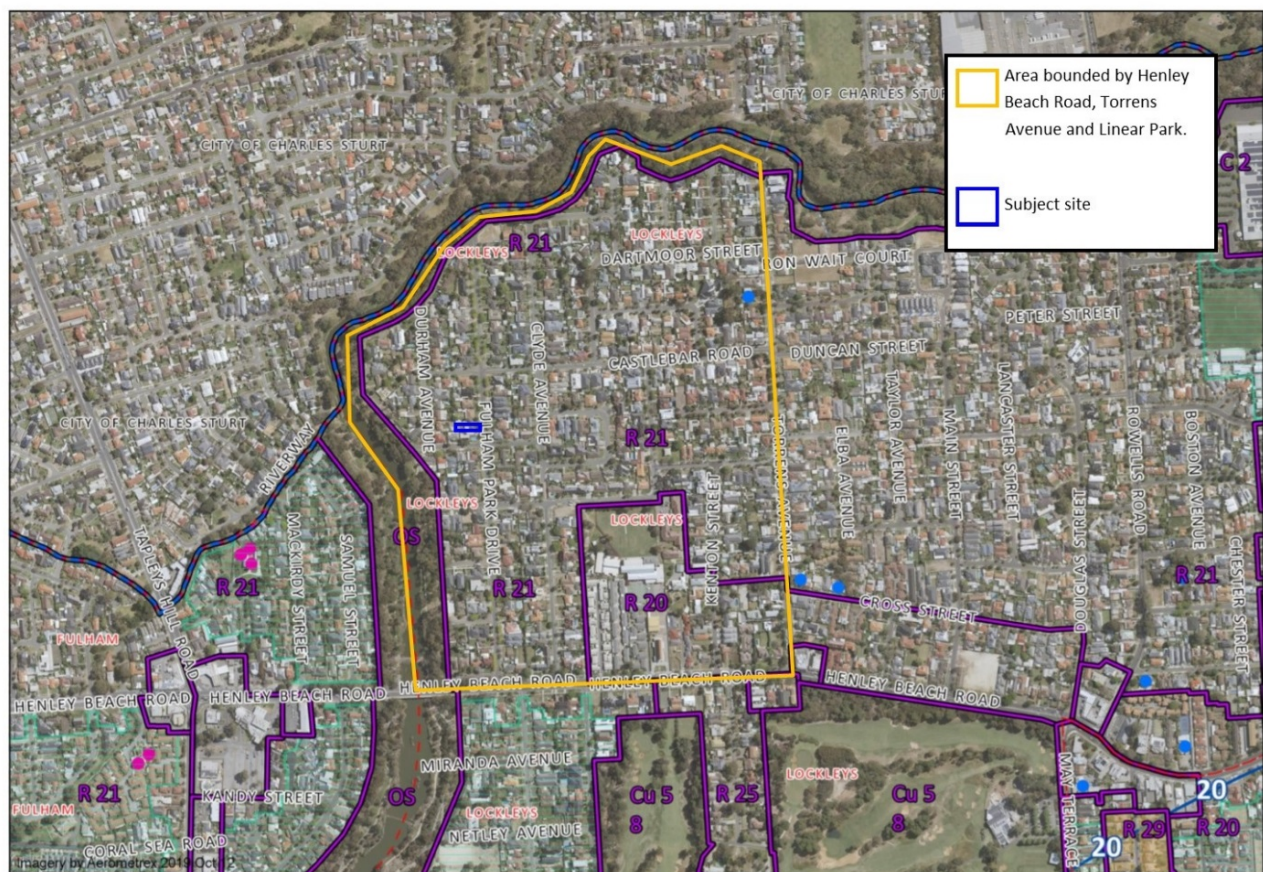


Figure 2: Aerial image of the area bounded by Henley Beach Road, Torrens Avenue and Linear Park (Source: West Maps)

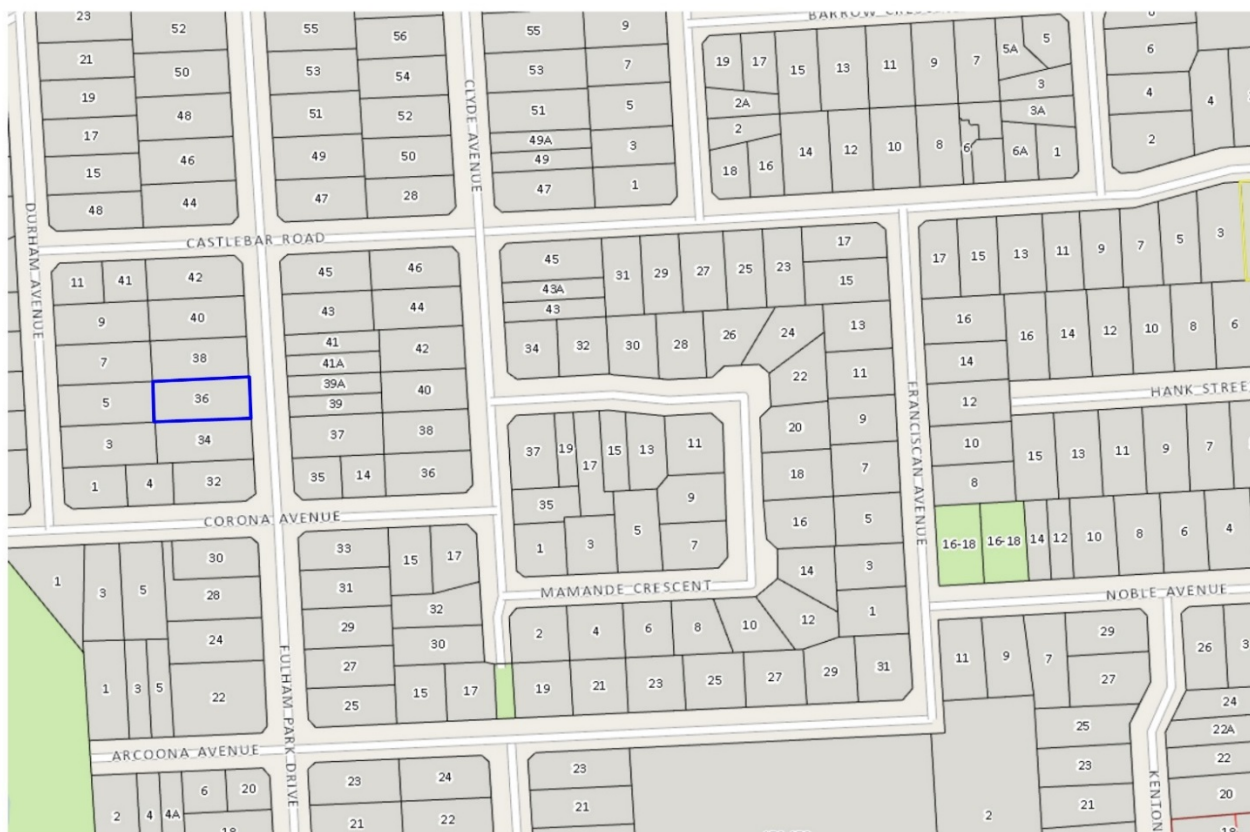


Figure 3: Aerial image of allotment pattern within the immediate and wider locality
(Source: West Maps)

SUMMARY

The proposed allotments do not satisfy the minimum site area and frontage width requirements of Low Density Policy Area 21. As a result, the proposed allotments are inconsistent with the existing allotment pattern in the locality - which is an important positive feature of the Policy Area specifically referenced in the Desired Character Statement as needing to be reinforced.

While it is acknowledged that there are 4 existing allotments with reduced frontage widths and site areas located within the immediate locality, it is considered that the prevailing pattern of development has not been altered to the extent that would allow for the proposal to be supported.

Having considered all the relevant Objectives and Principles of the Development Plan, the proposal is not considered to be seriously at variance with the Development Plan.

On balance the proposed development does not sufficiently accord with the relevant provisions contained within the West Torrens Council Development Plan Consolidated 12 July 2018 and does not warrant Development Plan Consent, Land Division Consent and Development Approval.

RECOMMENDATION

The Council Assessment Panel, having considered all aspects of the report, the application for consent to carry out development of land and pursuant to the provisions of the *Development Act 1993* resolves to REFUSE Development Plan Consent, Land Division Consent and Development Approval for Application No. 211/1077/2019 by L Condo for a land division - Torrens Title; SCAP No. 211/D114/19; creating one (1) additional allotment at 34 Fulham Park Drive, FULHAM (CT 5670/424) as the proposed development is contrary to the following provisions of the West Torrens Council Development Plan Consolidated 12 July 2018:

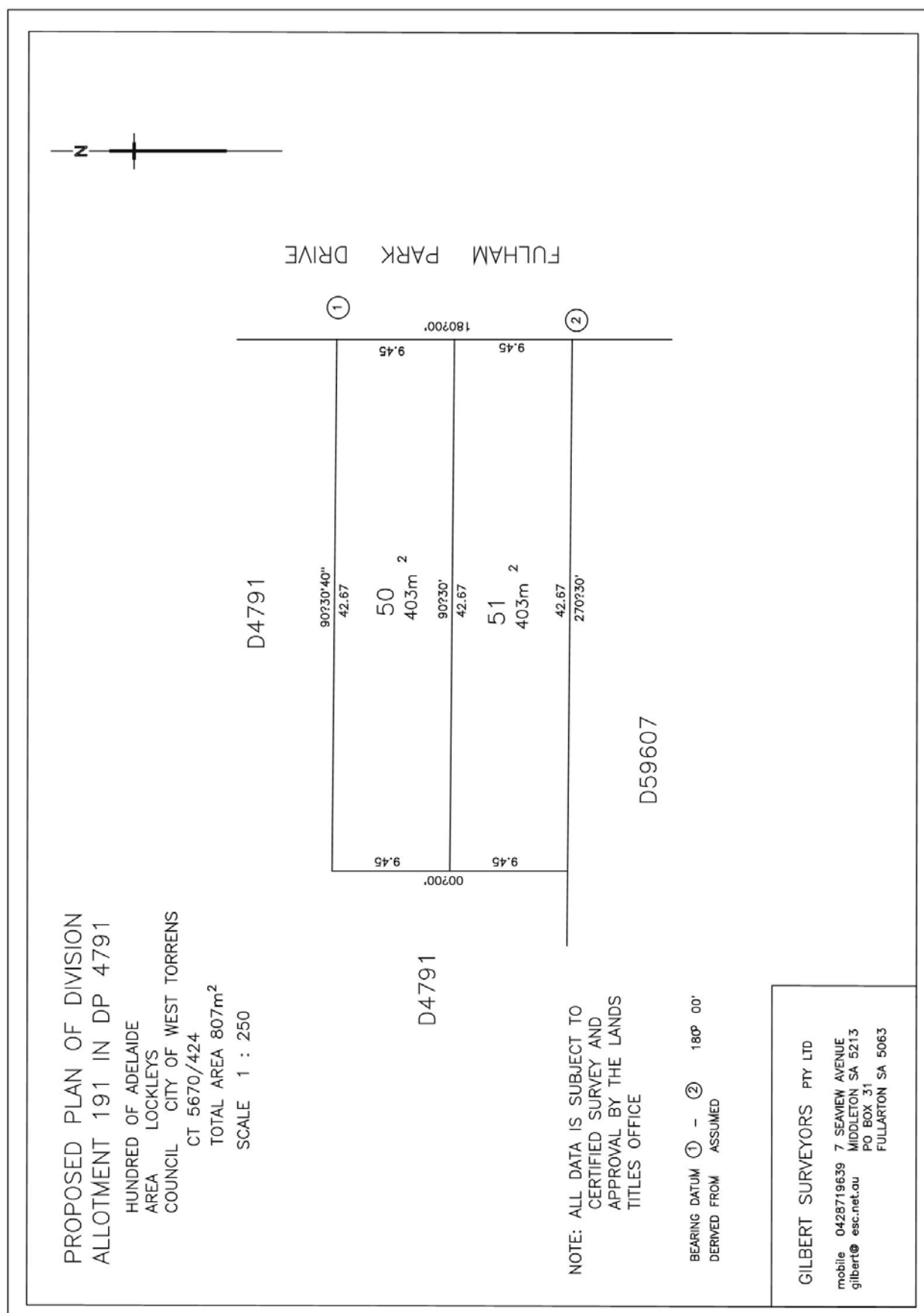
- Residential Zone: Objective 4 and Principle of Development Control 5.
Reason: The proposed plan is at odds with the desired character for the zone and policy area.
- Low Density Policy Area 21: Objective 1.
Reason: The proposed land division is at odds with the desired character of the policy area.
- Low Density Policy Area 21: Principle of Development Control 6.
Reason: The proposed land division creates allotments that do not satisfy the minimum site area and frontage requirements.

Attachments

1. Relevant Development Plan provisions
2. Plan of Division and Supporting Documents
3. Referral responses

Relevant Development Plan Provisions

General Section		
Land Division	<i>Objectives</i>	1, 2, 3 & 4
	<i>Principles of Development Control</i>	1, 2, 4, 5, 6, 8, 11, 12, 13, 14, 15, 16 & 17
Orderly and Sustainable Development	<i>Objectives</i>	1, 2, 3, 4 & 5
	<i>Principles of Development Control</i>	1
Residential Development	<i>Objectives</i>	1, 2, 4 & 5
	<i>Principles of Development Control</i>	1 & 3
Transportation and Access	<i>Objectives</i>	2, 3 & 4
	<i>Principles of Development Control</i>	1, 2, 8, 10, 11, 17, 18, 19, 23, 24 & 36





PO BOX 9061 HENLEY BEACH SOUTH SA 5022
Mobile: 0478 509 777
Email: bill@townplanningadvisors.com.au
Website: www.townplanningadvisors.com.au

23 October 2019

Ms Rachel Knuckey
Team Leader - Planning
City of West Torrens
165 Sir Donald Bradman Drive
HILTON SA 5033

Dear Rachel,

RE: To divide land (1 into 2) at 34 Fulham Park Drive, LOCKLEYS.

Town Planning Advisors have been engaged to prepare a brief Planning Assessment Report in relation to the merits of the above land division proposal.

I have inspected the subject land and locality and have reviewed the proposal against the relevant provisions of the West Torrens Council Development Plan (Consolidated 12 July 2018).

1.0 Subject Land and Locality

The subject land is located at 34 Fulham Park Drive Lockleys, which is more particularly described as Allotment 191 in File Plan 4791 CT Reference Volume 5670 Folio 424.

The subject land comprises a large regular shaped allotment with an 18.9 metre frontage to Fulham Park Drive and a depth of 42.67 metres to provide a total site area of 806 square metres. The subject land is developed with a single storey detached dwelling (circa 1950s) with an integrated garage located on the northern side boundary.

The existing dwelling has not been subject to significant development during its course of existence. A small verandah to the south of the dwelling was constructed as an addition to the original dwelling. Furthermore an outbuilding in the form of a garage was constructed in the north western corner of the allotment. The site is devoid of any significant vegetation.



Figure 1: Subject land (34 Fulham Park Drive, Lockleys)



Figure 2: Subject land and locality

Fulham Park Drive is a residential road that runs in a north-south orientation leading to Frontage Road to the north and Henley Beach Road to the south.

While several large allotments are noted within the locality, it is worthy to note that some redevelopment has occurred within the area resulting in the construction of two-storey detached or semi-detached dwellings on smaller slightly narrower allotments. Examples of such dwellings are located on the eastern side of Fulham Park Drive at 41 & 41A and 39 & 39A Fulham Park Drive.

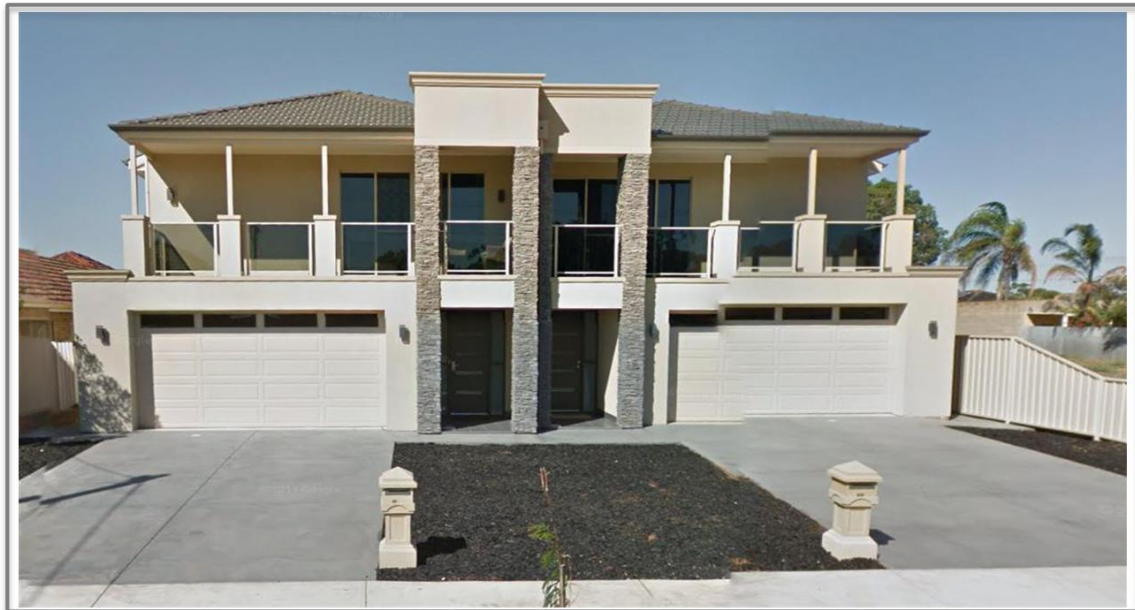


Figure 3: Recent development of narrow width allotments, 41 & 41A Fulham Park Drive.

The subject land is situated within Low-Density Policy Area 21 of the Residential Zone.

3.0 Proposal

The proposal seeks approval to divide the subject land (1 into 2) by dividing the existing allotment down the middle. This will result in two rectangular shaped allotments fronting Fulham Park Drive both with frontage widths of 9.45m and site areas of 403sqm.

4.0 Planning Assessment

4.1 Procedural Matters

The Procedural Matters section of the Residential Zone does not list Land Division as either being a complying or non-complying kind of development as such, the proposed development requires the consent of Council and must, therefore, be assessed as a merit application.

4.2 Public Notification

The Residential Zone prescribes public notification categories in addition to those detailed in Schedule 9 of the Development Regulations 2008. In this instance, the Development Plan does not designate the proposal as either Category 1 or 2. However, Part 1 of Schedule 9 of the Development Regulations 2008 designates the following as Category 1:

2 Except where the development is classified as non-complying under the relevant Development Plan, any development which comprises —

(f) the division of land which creates not more than 4 additional allotments.

Based on the above, the proposal is deemed to be a Category 1 form of development and is therefore exempt from public notification.

4.3 Referrals

While comments have been collectively provided by SCAP and SA Water, the proposed division of land does not contain any aspects which would otherwise require a separate referral according to Schedule 8 of the Development Regulations 2008. Further, the proposal is not captured within Schedules 21 or 22 of the Development Regulations 2008 as being a development of environmental significance.

5.0 Assessment Against Development Plan

5.1 Land Division

The Desired Character statement for Low Density Policy Area 21 states:

This policy area will have a low density character. In order to preserve this, development will predominantly involve the replacement of detached dwellings with the same (or buildings in the form of detached dwellings).

There will be a denser allotment pattern and some alternative dwelling types, such as semi-detached and row dwellings, close to centre zones where it is desirable for more residents to live and take advantage of the variety of facilities focused on centre zones. Battle-axe subdivision will not occur in the policy area to preserve a pattern of rectangular allotments developed with buildings that have a direct street frontage. In the area bounded by Henley Beach Road, Torrens Avenue and the Linear Park, where the consistent allotment pattern is a significant positive feature of the locality, subdivision will reinforce the existing allotment pattern.

Buildings will be up to 2 storeys in height. Garages and carports will be located behind the front façade of buildings. Buildings in the area bounded by Henley Beach Road, Torrens Avenue and the Linear Park will be complementary to existing dwellings through the incorporation of design features such as pitched roofs, eaves and variation in the texture of building materials.

Development will be interspersed with landscaping, particularly behind the main road frontage, to enhance the appearance of buildings from the street as viewed by pedestrians, provide an appropriate transition between the public and private realm and reduce heat loads in summer. Low and open-style front fencing will contribute to a sense of space between buildings.

In respect to the above, the proposed division of land will not involve or result in the creation of a battle-axe allotment which is noted as being an inappropriate form of subdivision within the Policy Area 21 of the Residential Zone. Moreover, the proposed division of land will result in the creation of two regular shaped allotments, thereby preserving the pattern of regular shaped allotments fronting Fulham Park Drive. Also, it is worthy to note that the wider locality supports several regular-shaped allotments with varying frontage widths, similar to those proposed within this application.

5.2 Site Area and Dimensions

Form and Character		
2	Development should not be undertaken unless it is consistent with the desired character for the policy area.	
3	Except when located within 400 metres of a centre zone, a dwelling should have a minimum site area (and in the case of residential flat buildings, an average site area per dwelling) and a frontage to a public road not less than that shown in the following table:	
Dwelling type	Site area (square metres)	Minimum frontage (metres)
Detached	420 minimum	12
Semi-detached	420 minimum	12

PDC 3 of Policy Area 21 states that detached dwellings should have a minimum site area of 420m² and a minimum frontage width of 12.0 metres. Both of the proposed allotments fall short of the quantitative requirements of the development plan. Each allotment contains a 403sqm area, a shortfall of 17sqm or 4% per allotment. The frontages of both allotments are 9.45m, 2.55m short of the anticipated 12m requirement.

Although this being the case, it is noted that within 50 metres diagonally to the east of the subject land are two allotments that were divided in the same manner as the proposed. 41 & 41A and 39 & 39A Fulham Park Drive are examples of narrow frontage developments accommodating semi-detached and detached dwellings which function without impacting on the amenity on both the occupants of each site and the immediate locality.

It must be noted that a quantitative departure should not automatically prove “fatal” to the planning merit of a development. In this regard, the matter of AG Building and Developments Pty Ltd v City of Holdfast Bay & Tanti [2009] SASC 11 is highly instructive.

“...it does not follow that because some minimum quantitative standards or guidelines are not met, the proposal must be rejected.”

Concerning the proper assessment process in the AG Building matter it was also noted:

“It required an assessment not of particular issues in watertight compartments, but rather as part of a single complex planning problem – whether the proposal as a whole should be approved.”

The shortfall from the quantitative guide concerning the width of the proposed allotments will not be “at odds” with the locality, where allotments with a road frontage of around 9.5m have been recently established.

In considering the locality, I am mindful of the decision of the Supreme Court in the matter of Unley and Hall and Ors (6 May 2002) which stated:

“... the existing characteristics of the land may mean that objectives and principles of development control have very little relevance. Furthermore, development must be judged in its historical and factual context.”

That is it appears that the requirement for a 12-metre frontage plays a reduced role within the locality where 1 into 2 land divisions and dwellings on allotments with a frontage of around 9.5 metres are evident.

I am of the opinion that a standard size dwelling could satisfactorily be designed and constructed on both proposed allotments in accordance with the relevant residential provisions contained within the West Torrens Development Plan, with its own adequate provision for on-site car parking and private open space, whilst also achieving suitable setback distances from front, side and rear boundaries.

6.0 Conclusion

Notwithstanding the shortfalls as mentioned in the planning assessment, I consider the proposal to be not seriously at variance with the West Torrens Council Development Plan (consolidated 12 July 2018) and to display sufficient planning merit to warrant the granting of Land Division Consent and Development Approval.

IN summary, I find:

- The proposed division of land will result in the creation of suitably sized allotments which could be satisfactorily developed to accommodate a future detached dwelling in accordance with the relevant residential provisions of the West Torrens Development Plan;
- That vehicle access to both proposed allotments can be satisfactorily achieved without conflicting with existing public infrastructure including stobie poles, street trees, side entry or communication pits; and
- The proposed division of land reinforces an established pattern of conventional rectangular shaped allotments in the immediate and broader locality.

For the reasons outlined above, I consider Development Plan Consent to be warranted.

Should you have any queries or require any further information or clarification with any components of this application, please do not hesitate to contact by calling me on 0478 509 777 or by email bill@townplanningadvisors.com.au.

Yours faithfully



Bill Stefanopoulos, MPiA
BA Planning, Grad Dip Environmental Planning



Arboricultural Assessment of Street Trees

Development Application No: 211/1077/2019

REFERRAL DUE DATE: 18 November 2019

Assessing Officer: **Amelia DeRuvo**
Site Address: **34 Fulham Park Drive, LOCKLEYS SA 5032**
Certificate of Title: **CT-5670/424**
Description of Development **Land division - Torrens Title; SCAP No. 211/D116/19; Create one (1) additional allotment**

TO THE TECHNICAL OFFICER – CITY ASSETS

Please provide your comments in relation to:

- ☐ **The removal of or impact upon the Street Tree**
- ☐ **Species of Tree:**
- ☐ **Your advice is also sought on other aspects of the proposal as follows:**

PLANNING OFFICER - Amelia DeRuvo

DATE 4 November 2019

FROM THE TECHNICAL OFFICER

I have examined the plans as requested and provide comments as follow.

As with all development applications it must be proven beyond reasonable doubt that all alternatives have been explored so not to hinder the progress of any street tree(s).

Any proposed development that does not consider "AS4970 Protection of Trees on Development Sites", is likely to require revision until all plans accurately correspond with the specific tree information detailed in this standard.

Verge interaction must consider all services that cross council land including stormwater (and other) which will need to be maintained a minimum of 2.0m from any existing street tree (unless existing or otherwise negotiated). All services must be indicated/documentated on appropriate plans for Council assessment and approval.

A site investigation together with the information provided has revealed that the location of the *Lophostemon confertus* (Queensland Box) street tree is located 6.0m from the southern property boundary in front of block 51.

For City Operations to support this land division a reduced offset of 1.5m from the existing street tree will be a minimum offset and will be supported. Hence this will leave approximately 3.6m to accommodate a crossover width at the property boundary of 3.0m plus the flare.

As a result of the proposed land division on Fulham Park Drive, in this instance City Operations will support a reduced offset of 1.5m from the *Lophostemon confertus* (Queensland Box) street tree.

Please note, under no circumstances is any individuals other than council staff permitted to interfere with a street tree. If pruning etc. is required, council must be notified via the appropriate customer request, and council staff will perform all works associated with the community asset.

Final crossover locations will be confirmed once appropriate documentation has been received from the applicant and they have submitted "an application to construct a vehicle crossing place(s) across council land".

**Sam Harvey
Technical Support Officer Arboriculture (Acting)
165 Sir Donald Bradman Drive
Hilton SA 5033**

**Telephone: 8416 6333
Fax: 8443 5709**

DATE: 15/11/2019







30 October 2019

Our Ref: H0091431

The Chairman
State Commission Assessment Panel
50 Flinders St
ADELAIDE SA 5000

Dear Sir/Madam

PROPOSED LAND DIVISION APPLICATION NO: 211/D116/19 AT LOCKLEYS

In response to the abovementioned proposal, I advise that pursuant to Section 33 of the Development Act it is necessary for the developer to satisfy this Corporation's requirements, which are listed below.

The financial requirements of SA Water shall be met for the provision of water supply and sewerage services.

On receipt of the developer details and site specifications an investigation will be carried out to determine if the connections to your development will be standard or non standard fees.

On approval of the application, it is the developers/owners responsibility to ensure all internal pipework (water and wastewater) that crosses the allotment boundaries has been severed or redirected at the developers/owners cost to ensure that the pipework relating to each allotment is contained within its boundaries.

Yours faithfully

JOSIE BONNET
for **MANAGER LAND DEVELOPMENT & CONNECTIONS**

SA Water
Level 6, 250 Victoria Square
ADELAIDE SA 5000
Ph (08) 7424 1119
Inquiries JOSIE BONNET
Telephone 7424 1119

Contact Planning Services
Telephone 7109 7016
Email dldptipdclearanceletters@sa.gov.au



30 October 2019

The Chief Executive Officer
City of West Torrens

Dear Sir/Madam

Re: Proposed Application No. 211/D116/19 (ID 66433)
for Land Division by Mr LAURENCE CONDO

In accordance with Section 33 of the Development Act 1993 and Regulation 29 (1) of the Development Regulations 2008, and further to my advice dated 28 October 2019, I advise that the State Commission Assessment Panel (SCAP) has consulted with SA Water Corporation (only) regarding this land division application. A copy of their response has been uploaded in EDALA for your consideration. The Commission has no further comment to make on this application, however there may be local planning issues which Council should consider prior to making its decision.

I further advise that the State Commission Assessment Panel has the following requirements under Section 33(1)(c) of the Development Act 1993 which must be included as conditions of land division approval on Council's Decision Notification (should such approval be granted).

1. The financial requirements of SA Water shall be met for the provision of water supply and sewerage services.
On receipt of the developer details and site specifications an investigation will be carried out to determine if the connections to your development will be standard or non standard fees.
On approval of the application, it is the developers/owners responsibility to ensure all internal pipework (water and wastewater) that crosses the allotment boundaries has been severed or redirected at the developers/owners cost to ensure that the pipework relating to each allotment is contained within its boundaries.
2. Payment of \$7616 into the Planning and Development Fund (1 allotment(s) @ \$7616/allotment).
Payment may be made by credit card via the internet at www.edala.sa.gov.au or by phone (7109 7018), by cheque payable to the Department of Planning, Transport and Infrastructure and marked "Not Negotiable" and sent to GPO Box 1815, Adelaide 5001 or in person, at Level 5, 50 Flinders Street, Adelaide.
3. A final plan complying with the requirements for plans as set out in the Manual of Survey Practice Volume 1 (Plan Presentation and Guidelines) issued by the Registrar General to be lodged with the State Commission Assessment Panel for Land Division Certificate purposes.

The SA Water Corporation will, in due course, correspond directly with the applicant/agent regarding this land division proposal.

PLEASE UPLOAD THE DECISION NOTIFICATION FORM (VIA EDALA) FOLLOWING COUNCIL'S DECISION.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'Biljana B.'.

Biljana Prokic
Land Division Coordinator - Planning Services
as delegate of
STATE COMMISSION ASSESSMENT PANEL

6.4 13 Norman Street, UNDERDALE

Application No 211/909/2019

DEVELOPMENT APPLICATION DETAILS

DESCRIPTION OF DEVELOPMENT	Removal of two Regulated Eucalyptus camaldulensis (River red gum) trees and one Significant Eucalyptus camaldulensis (River red gum) tree
APPLICANT	Ali Dost Safi
LODGEMENT DATE	17 September 2019
ZONE	Residential Zone
POLICY AREA	Low Density Policy Area 21
APPLICATION TYPE	Merit
PUBLIC NOTIFICATION	Category 1
REFERRALS	Internal <ul style="list-style-type: none"> Arboriculture Advisor External <ul style="list-style-type: none"> Nil
DEVELOPMENT PLAN VERSION	12 July 2018
DELEGATION	<ul style="list-style-type: none"> The relevant application proposes a merit form of development and, in the opinion of the delegate, should be refused, except where the application is to be refused for a failure to provide information pursuant to section 39 of the Act or where a referral agency direct that the application is refused pursuant to section 37 of the Act.
RECOMMENDATION	Refuse
AUTHORS	Sonia Gallarello and Ebony Cetinich

BACKGROUND

The applicant was given the opportunity to provide expert advice, such as an arborist report, in support of the application. As the applicant failed to provide any further information, the proposal must be assessed in its current form.

SUBJECT LAND AND LOCALITY

The subject land is formally described as Allotment 2 in Deposited Plan 12152 in the area named Underdale, Hundred of Adelaide, Volume 5470 Folio 330, more commonly known as 13 Norman Street, Underdale. The subject site is rectangular in shape with a 20 metre (m) wide frontage to Norman Street, a secondary frontage of 39m to Sheriff Street, a corner cut off of 4m and a site area of approximately 956 square metres (m²).

It is noted that there are no easements, encumbrances or Land Management Agreements on the Certificate of Title.

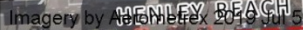
The site currently contains a single storey detached dwelling and a domestic outbuilding. The trees proposed to be removed are located in the rear yard adjacent to the eastern boundary of the site as seen below (Image 1).

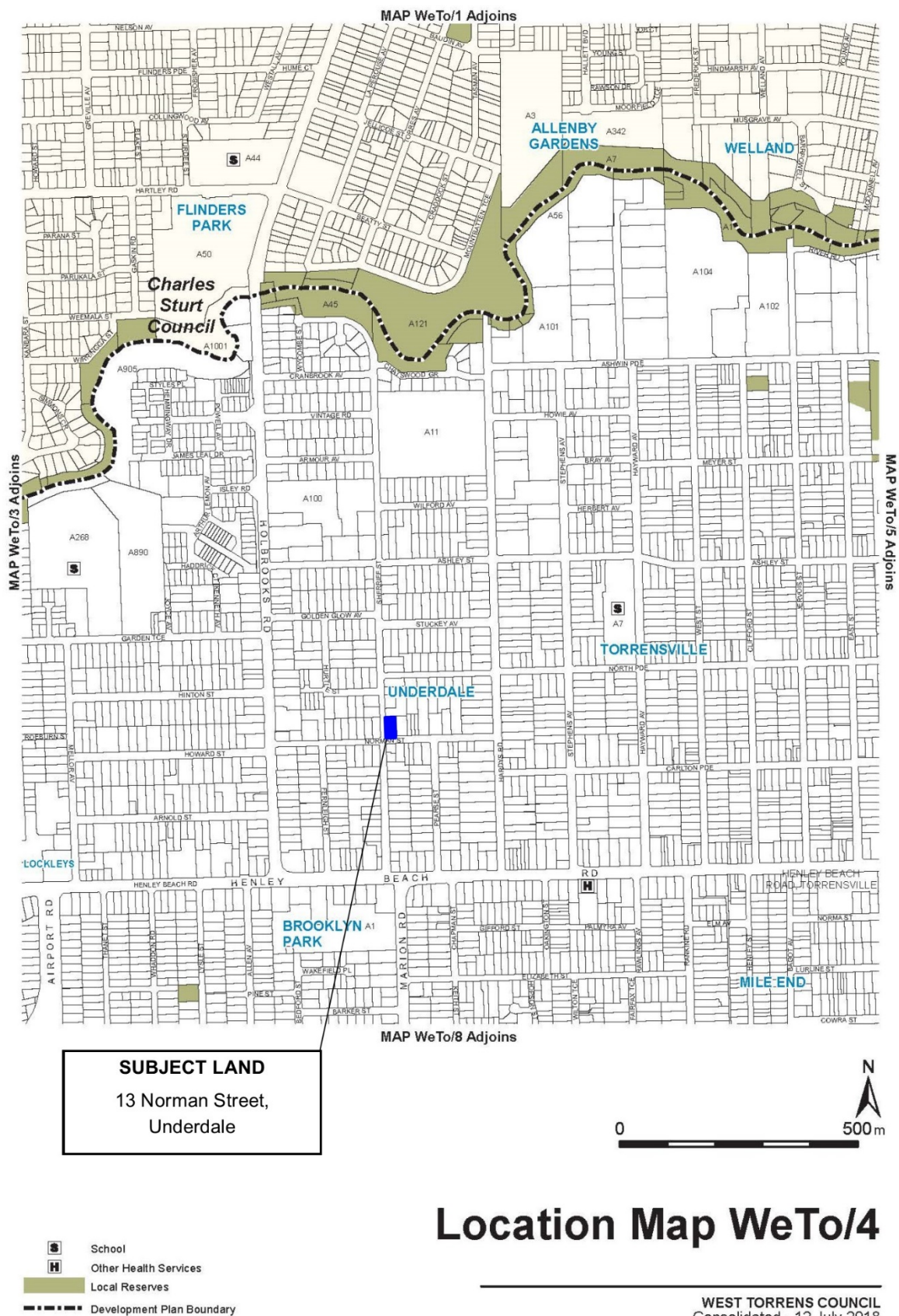
The locality consists of residential development, predominantly in the form of single storey detached and group dwellings. There are two other large Eucalyptus trees within the locality, one at 125 North Parade and one at 7-11 Hurtle Street, Underdale. There are no other large trees within the locality.



Image 1

The subject land and locality are shown on the aerial imagery and maps below.





PROPOSAL

The applicant is seeking Development Approval for the removal of two Regulated and one Significant *Eucalyptus camaldulensis* trees, commonly known as River Red Gums. The trees are located within close proximity to one another in the rear yard adjacent to the eastern property boundary. The location of the subject trees is shown in the locality plan above.

The applicant stated that the trees are old and decayed, lean over the neighbour's property and have cracked a concrete footpath, which has prompted this development application. No expert advice in support of tree removal has been provided by the applicant.

The relevant plans and documents are contained in **Attachment 1**.

PUBLIC NOTIFICATION

Tree damaging activity in relation to a Regulated Tree situated on private land is listed as a Category 1 form of development pursuant to Schedule 9, Part 1 (13) of the *Development Regulations 2008*. Accordingly, public notification of the application was not required.

INTERNAL REFERRALS

Department	Comments
Arboriculture Advisor	<ul style="list-style-type: none"> The trees are an excellent representative of their species due to their visual amenity, good overall health and long safe life expectancy if maintained. They are reproductively mature and are estimated to be in excess of 75 years old. Mature indigenous trees are important for biological reasons as they provide a unique suitable habitat for a wide range of animals, plants and invertebrates. There is minimal evidence of pruning work. Despite this, only a small amount of deadwood is located throughout the canopies and no previous major limb failures were identified. There are no visible signs of fungal fruiting bodies or major active pests and diseases. The presence of Longicorn Beetles (borers) is confirmed, however, this is typical in mature Eucalypt species and does not compromise the health or structural integrity of a healthy tree. Foliage colour is good and foliage density is typical of this species. The trees have an estimated useful life expectancy in excess of 50 years. Good quality pruning practices such as tip reduction and crown thinning will reduce the likelihood of limb failure by gradually suppressing over-extended growth over the neighbouring property to the east. Provided that these trees are managed correctly, the risk to personal safety is likely to remain at an acceptable level over the long term. By utilising qualified arborists and appropriate design and construction techniques, this site can be developed while retaining the subject trees. Medium to long-term management is sustainable and therefore, retention is warranted and recommended.

A copy of the relevant referral response is contained in **Attachment 2**.

RELEVANT DEVELOPMENT PLAN PROVISIONS

The subject land is located within the Residential Zone and, more specifically, Low Density Policy Area 21 as described in the West Torrens Council Development Plan. The main provisions of the Development Plan which relate to the proposed development are as follows:

<u>General Section</u>		
Regulated Trees	Objectives	1 & 2
	Principles of Development Control	1, 2 & 3
Significant Trees	Objectives	1 & 2
	Principles of Development Control	1, 2, 3, 4 & 5

ASSESSMENT

In assessing the merits or otherwise of the application, the proposed development is discussed under the following sub headings, which reflect the key Development Plan provisions related to Regulated and Significant Trees.

Character and Visual Amenity

The subject trees are highly visible from Norman Street, adjoining properties and the locality more generally due their height and canopy spread. The trees are considered to form a notable element of the landscape which is largely void of other tall and mature indigenous tree species. Given their high visibility, form, and maturity, the subject trees are considered to provide important aesthetic benefit and make an important contribution to the character of the area.

For these reasons, tree removal cannot be supported by Objective 1 and Principles of Development Control (PDCs) 1(a) and 1(f) of the Significant Trees module and Objectives 1 and 2(a) of the Regulated Trees module.

Images 2 to 6 below are taken from various locations around the locality highlighting the widespread visibility of the trees. Please refer to the locality plan in the section above for the location and direction of sight for all images.



Image 2



Image 3

**Image 4****Image 5****Image 6****Tree Species**

The species is not listed as rare or endangered, so removal of the trees could be supported by PDC 1(b) of the Significant Trees and Objective 2(c) of the Regulated Trees modules.

Indigenous to Locality

The subject trees are of a species that is indigenous to South Australia and the local area. Removal of the trees does not satisfy Objective 2(b) of the Regulated Trees module.

Environmental Benefit

It is considered that the subject trees provide important environmental benefits and an important habitat for native fauna whilst maintaining biodiversity in the local area. This is based on the indigenous status of the trees, their mature size and the limited number of other mature indigenous trees within the locality. Council's consulting arborist has stated that mature indigenous species such as these subject trees are especially important for biological reasons as they provide conditions suitable for a wide range of animals, plants and invertebrates. Tree removal is therefore inconsistent with Objective 1 and PDCs 1(c) and 1(e) of the Significant Trees module and Objectives 1 and 2(d) of the Regulated Trees module.

Tree Health

Upon performing a visual inspection of the subject trees, Council's consulting arborist found that they are in good overall health with no visible signs of fungal fruiting bodies or major active pests or diseases. Minor non-damaging borer activity is present, however, this is typical of almost all mature Eucalypt species throughout the state and does not compromise the health or structural integrity of a healthy tree. The useful life expectancy of the trees is estimated to be in excess of 50 years.

There is minimal evidence of pruning work. In spite of this, there is only a small amount of deadwood located within the canopies and some over-extended branches, particularly towards the adjoining property to the east. Good quality pruning practices such as tip reduction and crown thinning could rectify both concerns and reduce the potential for limb failure.

Taking into consideration the expert advice in relation to the health of the subject trees, their removal cannot be supported by PDC 3(a)(i) of the Significant Trees module and PDC 2(a) of the Regulated Trees module.

Tree Structure and Risk to Safety

Taking into consideration the expert advice of Council's consulting arborist, the subject trees do not currently present an unacceptable or material risk to public or private safety. The trees are in good health and there is no evidence of previous limb failure. Suitable pruning options are available to remove deadwood and maintain over extended branches. Accordingly, removal cannot be supported by PDCs 3(a)(ii) and 3(e)(ii) of the Significant Trees module and PDC 2(b) of the Regulated Trees module. It is noted that medium to long-term management of the trees is required in order to maintain the acceptable level of risk posed by the trees.

Damage to a Building/Structure

Upon undertaking a site inspection, damage to a substantial building or structure of value was not visibly evident. The applicant has not provided any evidence demonstrating that the trees are causing damage to a building or structure. It is acknowledged that the applicant has stated that the trees are causing damage to a concrete footpath. However, the Significant Tree provisions call for removal to be justified on the basis that substantial damage to a substantial building or structure of value is being caused. The footpath in question is not considered to be a substantial building or structure of value.

It is also acknowledged that the trees partially extend over the applicant's property at 11 Norman Street. Taking into consideration the expert advice in relation to tree health, tree structure and risk to safety, the trees are not considered to be threatening to cause substantial damage to the adjacent buildings and structures provided that they are properly maintained. As such, removal cannot be supported by PDCs 3(b) and 3(e)(iii) of the Significant Trees module and PDC 2(c) of the Regulated Trees module.

Appropriate Development

No development other than tree removal is proposed. As such, removal of the subject trees cannot be supported by Objective 2 of the Significant Trees module and PDC 2(d) of the Regulated Trees module.

Alternative Remediation Treatments

As discussed above, pruning in accordance with Australian Standard AS 4373- 07 '*Pruning of Amenity Trees*' could be undertaken in order to remove dead wood and maintain overextended limbs. Council's consulting arborist has stated that medium to long-term management of the trees is feasible.

Given that alternative remediation treatments are available, tree removal cannot be supported by PDCs 3(c), 3(d), and 3(e)(v) of the Significant Trees module.

SUMMARY

The subject trees are highly visible and form notable elements in the landscape. They provide important aesthetic and environmental benefit to the local area given their maturity and indigenous status, and are in good health. While borer activity is present it does not compromise the health or structure of the trees. The canopy of the trees, which includes some over-extended limbs, can be suitably managed by appropriate pruning.

Having considered all the relevant Objectives and Principles of the Development Plan, the proposal is not considered to be seriously at variance with the Development Plan.

On balance it is considered that the proposed development does not sufficiently accord with the relevant provisions contained within the West Torrens (City) Development Plan consolidated 12 July 2018 and does not warrant Development Plan Consent or Development Approval.

RECOMMENDATION

The Council Assessment Panel, having considered all aspects of the report, the application for consent to carry out development of land and pursuant to the provisions of the *Development Act 1993* resolves to REFUSE Development Plan Consent and Development Approval for Application No. 211/909/2019 by Ali Dost Safi to undertake the removal of two Regulated *Eucalyptus camaldulensis* (River red gum) trees and one Significant *Eucalyptus camaldulensis* (River red gum) tree at 13 Norman Street, Underdale (CT 5470/330).

The proposed development is contrary to the following provisions of the West Torrens Council Development Plan Consolidated 12 July 2018:

- General Section, Regulated Trees Objective 1.
Reason: The tree provides important aesthetic and environmental benefit.
- General Section, Regulated Trees Objective 2(a)(b)(d).
Reason: The tree significantly contributes to the character and visual amenity of the locality, is indigenous to South Australia and the local area and provides an important habitat for native fauna.
- General Section, Regulated Trees PDC 2(a)(b)(c)(d).
Reason: The tree is not diseased and its life expectancy is not short, does not represent a material risk to public or private safety, is not currently causing damage to a building and is not preventing reasonable development of the site.
- General Section, Significant Trees Objective 1.
Reason: The tree provides important aesthetic and environmental benefits.
- General Section, Significant Trees Objective 2.
Reason: The tree is not preventing appropriate development on the site.
- General Section, Significant Trees PDC 1(a)(c)(e)(f).
Reason: The tree makes an important contribution to the character and amenity of the local area, provides an important habitat for native fauna, is important to the maintenance of biodiversity in the local environment and forms a notable visual element to the landscape of the local area.
- General Section, Significant Trees PDC 3(a)(b)(c)(d)(e).
Reason: The tree is not diseased, its life expectancy is not short, it does not represent an unacceptable risk to public or private safety, is not currently causing or threatening to cause substantial damage to a substantial building or structure of value, it is not preventing appropriate development on the site and reasonable alternative remediation options are available.

Attachments

- 1. Proposed Plans and Documents**
- 2. Referral Response**

Regulated and Significant Tree proposal form

Civic Centre: 165 Sir Donald Bradman Drive, Hilton SA 5033. Office hours: Mon - Fri 8.30am - 5pm. Phone: (08) 8416 6333. Email: development@wtcc.sa.gov.au. Web: westtorrens.sa.gov.au.



Property No: 13	Street: Norman St, Underdale	
Title: Mr	Given name: Ali Dast	Family name: Sagi
Company name:		
Address: 97 Marion Road		
Cowandilla		P/Code: 5033
Telephone	Mobile	Email address

1. Details of tree

Circumference of trunk 1m above natural ground level: 2.5 m, 2.5 m, 3.4 m
 Height of tree: 6, 6, 7 (meters)
 Spread of tree: 2, 3, 5 (meters)
 Species or type of tree: Eucalyptus Camadlucenzis (River Red Gum)

2. Site plan

Please attach site plan scale not less than 1:200.

3. Photograph(s)

Yes ☒ If yes provide details No ☐

4. Details of the proposed activity you want to undertake affecting the Regulated/Significant Tree (e.g. pruning, removal etc.).

Removal of trees by three

5. Is the tree, or does the tree appear to be diseased?

Yes ☒ If yes provide details No ☐

old and decayed

6. Does the tree represent an unacceptable risk to public or private safety?

Yes ☒ If yes provide details No ☐

The middle tree leans right over neighbour's home. The Third tree root has already damaged the concrete pathway and it might damaged the house in short time frame in future.

7. If you answer yes to - 6, 7 or 8, have all other remedial steps been determined ineffective by a suitably qualified professional?

Yes ☐ If yes, provide details No ☒

8. Is the tree causing or threatening to cause substantial damage to a building or structure of value?

Yes ☒ If yes, provide details No ☐

As I mentioned in reply no. 6, the middle tree leans towards neighbour home and another has already damaged the concrete path & its root might damage and will definitely impact future development.

9. Has specialist advice been obtained (from a qualified arboriculturalist, botanist or horticulturalist)?

Yes ☒ If yes, please attach info No ☐

Just verbally, ~~he said~~ In his opinion I won't have difficulty to get council approval to remove these trees.

10. If your application involves the division of land, is it likely that the application will result in substantial "tree-damaging" activity to a Regulated/Significant Tree?

Yes ☒ If yes, provide details No ☐

We only have thought about it because the land is big but have not received or enquire about it yet.

11. Should Council approve the pruning or removal of a Regulated/Significant Tree, it is a legislative requirement that 2 - 3 replacement trees to be planted on the subject site.

In the instance that replacement trees cannot appropriately be planted on the site, are you willing to make payment of an amount specified in the *Development Regulations 2008* to the Urban Tree Fund in lieu of planting replacement trees?

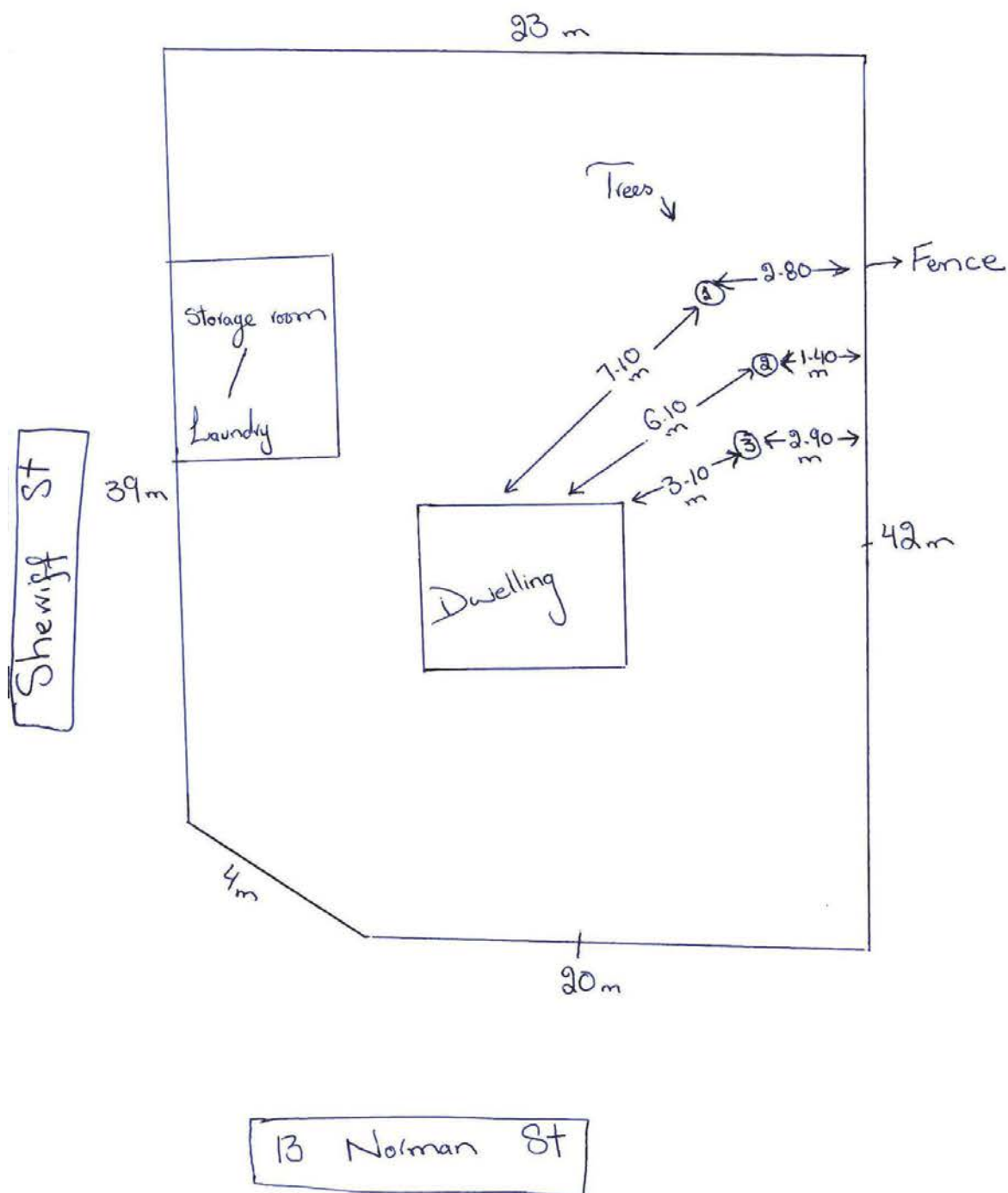
Yes ☐ No ☒

Will replace with 2-3 replacement trees on the subject site.

Signed:



Date: 16 / 9 / 2019







Arboricultural Assessment of Non-Council Owned Significant Tree/s

Development Application No: **211/909/2019**

Referral Due Date:

Assessing Officer:

Site Address: **13 Norman Street, Underdale**

Certificate of Title: **CT 4214/535**

Description of Development **Removal of two (2) regulated trees and one (1) significant tree**

To be completed by: **CONSULTING ARBORIST**

SPECIES & COMMON NAME: *Eucalyptus camaldulensis* (River Red Gums) x3

TOTAL CIRCUMFERENCE:
 Tree 1: 2500mm
 Tree 2: 2500mm
 Tree 3: 3400mm

MULTI-TRUNK: No

The following comments are provided with regards to the relevant Objectives and Principles of Development Control of the General Section, Significant Tree Section of the West Torrens Council Development Plan:

OBJECTIVE 1

The conservation of significant trees, in Metropolitan Adelaide, that provide important aesthetic and environmental benefit.

OBJECTIVE 2:

The conservation of significant trees in balance with achieving appropriate development.

PDC 1:

Development should preserve the following attributes where a significant tree demonstrates at least one of the following attributes:

- | | |
|---|------------|
| (a) Makes an important contribution to the character or amenity of the local area; or | Yes |
| (b) Is indigenous to the local area and its species is listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species | No |
| (c) Represents an important habitat for native fauna | Yes |
| (d) Is part of a wildlife corridor or a remnant area of native vegetation | Yes |
| (e) Is important to the maintenance of biodiversity in the local environment | Yes |
| (f) Forms a notable visual element to the landscape of the local area | Yes |

PDC 2:

Development should be undertaken so that it has a minimum adverse effect on the health of a significant tree.

PDC 3:

Significant trees should be preserved, and tree-damaging activity should not be undertaken, unless:

- (a) In the case of tree removal, where at least one of the following apply:
 - (i) The tree is diseased and its life expectancy is short
No
 - (ii) The tree represents an unacceptable risk to public or private safety
No
 - (iii) The tree is within 20 metres of a residential, tourist accommodation or habitable building and is a bushfire hazard within a Bushfire Prone Area
No
- (b) The tree is shown to be causing or threatening to cause substantial damage to a substantial building or structure of value
No
- (c) All other reasonable remedial treatments and measures have been determined to be ineffective
No
- (d) It is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring. **No**
- (e) In any other case, and of the following circumstances apply:
 - (i) The work is required for the removal of dead wood, treatment of disease, or is in the general interest of the health of the tree
No
 - (ii) The work is required due to unacceptable risk to public or private safety
No
 - (iii) The tree is shown to be causing or threatening to cause damage to a substantial building or structure of value
No
 - (iv) The aesthetic appearance and structural integrity of the tree is maintained
No
 - (v) It is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring
No

PDC 4:

Development involving ground work activities such as excavation, filling, and sealing of surrounding surfaces (whether such work takes place on the site of a significant tree or otherwise) should only be undertaken where the aesthetic appearance, health and integrity of a significant tree, including its root system, will not be adversely affected.

PDC 5

Land should not be divided or developed where the division or development would be likely to result in a substantial tree-damaging activity occurring to a significant tree.

ADDITIONAL COMMENTS:

I have examined the plans as requested and provide comments as follow:

These trees are an excellent representative of their species due to their visual amenity, good overall health and long safe life expectancy if maintained.

Their presence contributes significantly to the amenity and biodiversity of the local area and these values are further enhanced by the lack of trees of comparative maturity in the immediate area.

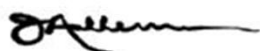
They are reproductively mature and are estimated to be in excess of 75 years old. They are especially important for biological reasons providing conditions suitable for a wide range of other plants and animals, many of which require the unique environment provided by an older tree.

Minimal evidence of pruning work was noted and none appears to have been undertaken in recent years. Despite this, only a small amount of deadwood is located throughout the canopies and no previous major limb failures have been identified. Good quality pruning practices such as tip reduction and crown thinning will further reduce the likelihood of limb failure. A staged pruning program should be initiated to gradually suppressing over- extended growth where required particularly over the neighbouring property to the east. This will ensure the level of risk posed by these trees will remain at an acceptable level.

There were no visible signs of fungal fruiting bodies or active pests and diseases noted. Minor non-damaging borer activity was present on the trunk and loose bark. This is evident on almost all mature Eucalypts and does not indicate reduced health or structure. Foliage colour is good and foliage density is typical of this species. If site conditions remain conducive to tree health, their useful life expectancy is estimated to be in excess of 50 years.

Provided that these trees are managed correctly, the risk to personal safety of site users is likely to remain at an acceptable level over the long term. Having given consideration to the plans provided, and observations made of the trees, I conclude that the desired outcome of 'tree removal' is unjustified, as the applicant has not provided sufficient evidence that can be considered as satisfying the criteria required.

By utilising qualified arborists and appropriate design and construction techniques, this site can be developed while retaining the significant/ regulated trees. I believe medium to long-term management is sustainable and therefore, retention is warranted and recommended.

RECOMMENDATION:**RETAIN**

Jarrad Allen

CALYPSO TREE CO.

Date: 09/10/19

PHOTOGRAPHS ATTACHED:

6.5 9 Speed Avenue, NORTH PLYMPTON

Application No 211/125/2019

DEVELOPMENT APPLICATION DETAILS

DESCRIPTION OF DEVELOPMENT	Removal of two (2) significant trees - Eucalyptus camaldulensis (River Red Gum)
APPLICANT	Blake Horder
LODGEMENT DATE	11 February 2019
ZONE	Residential Zone
POLICY AREA	Low Density Policy Area 20
APPLICATION TYPE	Merit
PUBLIC NOTIFICATION	Category 1
REFERRALS	Internal <ul style="list-style-type: none"> Arboriculture Advisor External <ul style="list-style-type: none"> Nil
DEVELOPMENT PLAN VERSION	12 July 2018
DELEGATION	<ul style="list-style-type: none"> The relevant application proposes a merit form of development and, in the opinion of the delegate, should be refused, except where the application is to be refused for a failure to provide information pursuant to section 39 of the Act or where a referral agency direct that the application is refused pursuant to section 37 of the Act.
RECOMMENDATION	Refuse
AUTHORS	Sonia Gallarello and Ebony Cetinich

BACKGROUND

The applicant was given the opportunity to provide expert advice, such as an arborist report, in support of the application. As the applicant failed to provide any further information, the proposal must be assessed in its current form.

SUBJECT LAND AND LOCALITY

The subject land is formally described as common property, Community Plan 22373, in the area named North Plympton, Hundred of Adelaide, Volume 5922 Folio 813, more commonly known as 9 Speed Avenue, North Plympton. The subject site is irregular in shape with a 12 metre (m) wide frontage to Speed Avenue and an area of 343 square metres (m²).

The site provides vehicular and pedestrian access to three group dwellings to the east and contains a large landscaping bed accommodating the two significant trees proposed to be removed as part of this development application (See Image 1 below).

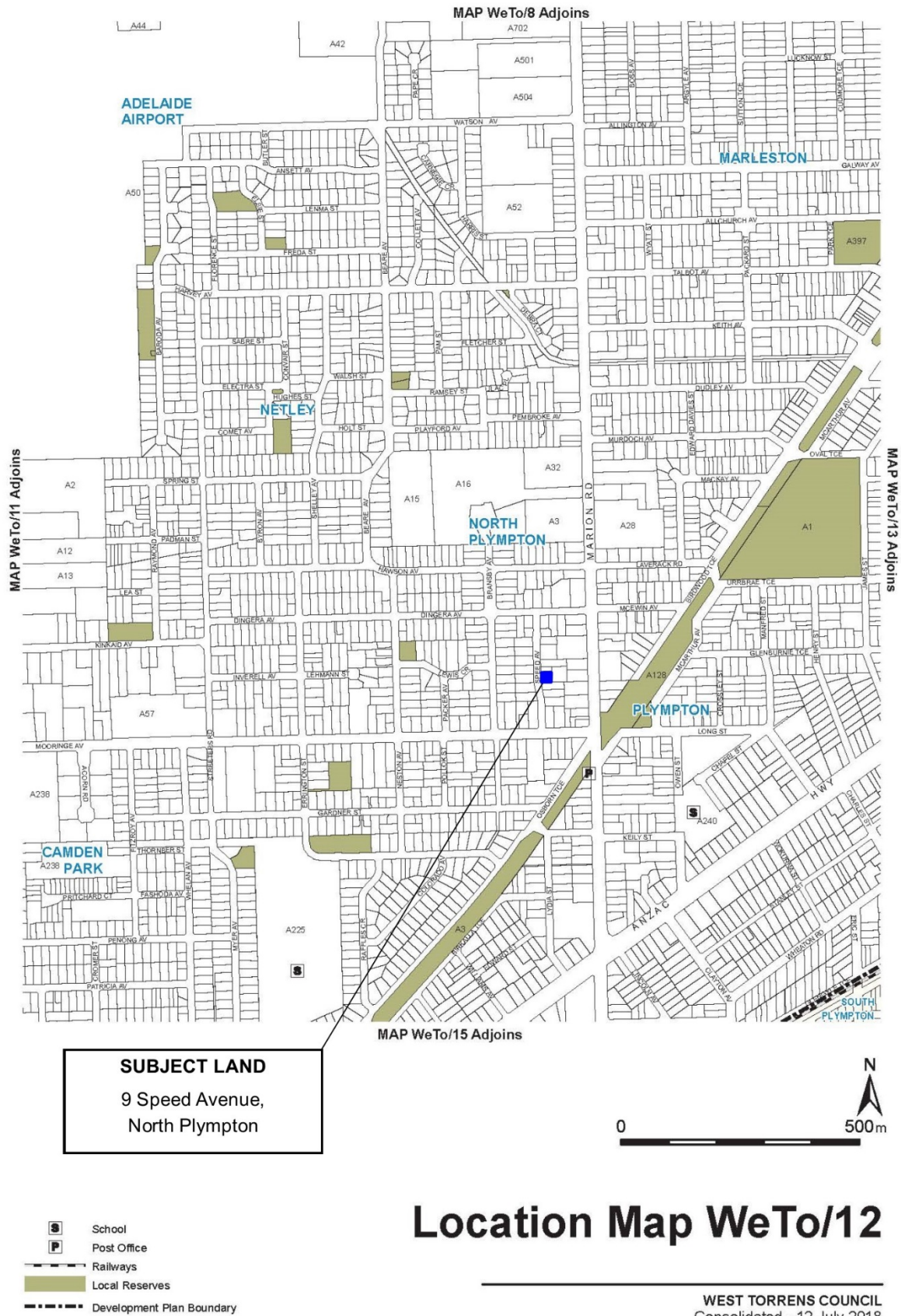
The locality consists of residential development in the form of single storey detached and group dwellings. Small shrubs and trees are common but no other significant vegetation is situated within the locality.



Image 1 - Subject trees

The subject land and locality are shown on the aerial imagery and maps below.





PROPOSAL

The applicant is seeking Development Approval for the removal of two (2) significant *Eucalyptus camaldulensis* (River red gum) trees located within the common driveway of a group of three units.

The applicant claims that the trees have 'Longhorned Borer' infestation, are poorly maintained and are a threat to property and safety, which has prompted this development application.

No expert advice in support of tree removal has been provided by the applicant.

The relevant plans and documents are contained in **Attachment 1**.

PUBLIC NOTIFICATION

Tree damaging activity in relation to a Regulated Tree situated on private land is listed as a Category 1 form of development pursuant to Schedule 9, Part 1 (13) of the *Development Regulations 2008*. Accordingly, public notification of the application was not required.

INTERNAL REFERRALS

Department	Comments
Arboriculture Advisor	<ul style="list-style-type: none"> • The trees are an excellent representative of their species due to their visual amenity, excellent overall health, structure and long safe life expectancy. • Mature indigenous trees are important for biological reasons as they provide a suitable habitat for a wide range of animals, plants and invertebrates. • There is no evidence of pruning work. Therefore, a moderate amount of deadwood is located within both canopies. • All major branch junctions appear sound and well structured, however, some slightly over extended limbs are evident. Pruning in accordance with AS4373- 07 '<i>Pruning of Amenity Trees</i>' can rectify this problem. • There is no evidence of limb failure. • There are no visible signs of fungal fruiting bodies or major active pests and diseases. The presence of Longicorn Beetles (borers) is confirmed, however, this is typical in mature Eucalypt species and does not compromise the health or structural integrity of a healthy tree. • Foliage colour is good and foliage density is typical of this species. • The trees have an estimated useful life expectancy in excess of 50 years. • The risk posed by these trees is broadly acceptable. • Medium to long- term management is sustainable and therefore, retention is warranted and recommended.

A copy of the relevant referral response is contained in **Attachment 2**.

RELEVANT DEVELOPMENT PLAN PROVISIONS

The subject land is located within the Residential Zone and, more specifically, Low Density Policy Area 20 as described in the West Torrens Council Development Plan. The main provisions of the Development Plan which relate to the proposed development are as follows:

<u>General Section</u>		
Regulated Trees	Objectives	1 & 2
	Principles of Development Control	1, 2 & 3
Significant Trees	Objectives	1 & 2
	Principles of Development Control	1, 2, 3, 4 & 5

ASSESSMENT

In assessing the merits or otherwise of the application, the proposed development is discussed under the following sub headings, which reflect the key Development Plan provisions related to Regulated and Significant Trees.

Character and Visual Amenity

The subject trees are highly visible from Speed Avenue, adjoining properties and the locality more generally due their height and canopy spread. The trees are considered to form a notable element of the landscape, which is largely void of other tall and mature indigenous tree species. Given their high visibility, form, and maturity, the subject trees are considered to provide important aesthetic benefit and make an important contribution to the character of the area.

For these reasons, Objective 1 and Principles of Development Control (PDCs) 1(a) and 1(f) of the Significant Trees module and Objectives 1 and 2(a) of the Regulated Trees module are satisfied.

Images 2 to 7 below were taken from various locations around the locality highlighting the widespread visibility of the trees. Please refer to the locality plan in the section above for the location and direction of sight for all images.



Image 2



Image 3



Image 4



Image 5



Image 6



Image 7

Tree Species

The species is not listed as rare or endangered, so removal of the trees could be supported by PDC 1(b) of the Significant Trees and Objective 2(c) of the Regulated Trees modules.

Indigenous to Locality

The subject trees are of a species that is indigenous to South Australia and the local area. Accordingly, removal of the trees does not satisfy Objective 2(b) of the Regulated Trees module.

Environmental Benefit

It is considered that the subject trees provide important environmental benefits and an important habitat for native fauna whilst maintaining biodiversity in the local area. This is based on the indigenous status of the trees, their mature size and the limited number of other mature indigenous trees within the locality. Council's consulting arborist has stated that mature indigenous species, such as the subject trees, are especially important for biological reasons as they provide conditions suitable for a wide range of animals, plants and invertebrates. Tree removal is therefore at odds with Objective 1 and PDCs 1(c) and 1(e) of the Significant Trees module and Objectives 1 and 2(d) of the Regulated Trees module.

Tree Health

Upon performing a visual inspection of the subject trees, Council's consulting arborist found that they are in excellent overall health with no visible signs of fungal fruiting bodies or major active pests or diseases. It is noted that Longicorn Beetles are present, however, this is typical of almost all mature Eucalypt species throughout the state and does not compromise the health or structural integrity of a healthy tree. The useful life expectancy of the trees is estimated to be in excess of 50 years.

There is no evidence of pruning work, therefore, a moderate amount of deadwood is located within both canopies and there are some over-extended branches. This is a typical characteristic of healthy and vigorous River Red Gums and pruning in accordance with Australian Standard AS 4373- 07 '*Pruning of Amenity Trees*' could rectify these concerns.

Taking into consideration the expert advice in relation to the health of the subject trees, their removal is also at odds with PDC 3(a)(i) of the Significant Trees module and PDC 2(a) of the Regulated Trees module.

Tree Structure and Risk to Safety

Council's consulting arborist opined the subject trees do not currently present an unacceptable or material risk to public or private safety. The trees are in excellent health and all major branch junctions are sound and well structured. As previously discussed, suitable pruning options are available to remove deadwood and maintain over-extended branches. Accordingly, removal cannot be supported as PDCs 3(a)(ii) and 3(e)(ii) of the Significant Trees module and PDC 2(b) of the Regulated Trees module are not satisfied.

It is important to note that medium to long-term management of the trees is required in order to maintain the acceptable level of risk posed by the trees.

Damage to a Building/Structure

Upon undertaking a site inspection, damage to a substantial building or structure of value was not visibly evident. The applicant has not provided any evidence demonstrating that the trees are causing damage to a building or structure. It is acknowledged that the applicant has stated that the trees are causing damage to a concrete plinth on the boundary, however the Significant Tree provisions call for removal to be justified on the basis that substantial damage to a substantial building or structure of value is being caused. The plinth in question is not considered to be a substantial building, and any damage arising from the trees could likely be rectified.

It is also acknowledged that the trees partially extend over the applicant's property at 7 Speed Avenue, Plympton. Taking into consideration the expert advice in relation to tree health, tree structure and risk to safety, and in the absence of any contrasting professional opinion, the trees are not considered to be threatening to cause substantial damage to the adjacent buildings and structures. As such PDCs 3(b) and 3(e)(iii) of the Significant Trees module and PDC 2(c) of the Regulated Trees module are not satisfied.

Appropriate Development

No development other than tree removal is proposed. As such, removal of the subject trees cannot be supported by Objective 2 of the Significant Trees module and PDC 2(d) of the Regulated Trees module.

Alternative Remediation Treatments

As discussed above, pruning in accordance with Australian Standard AS 4373- 07 '*Pruning of Amenity Trees*' could be undertaken in order to remove dead wood and maintain over-extended limbs. Council's consulting arborist has stated that medium to long term management of the trees is sustainable.

Given that alternative remediation treatments are available, PDCs 3(c), 3(d), and 3(e)(v) of the Significant Trees module are not satisfied.

SUMMARY

The subject trees are highly visible and form a notable element in the landscape. They provide important aesthetic and environmental benefits to the local area given their maturity and indigenous status. The trees are considered to be in excellent health and are structurally sound. While borer activity is present, this does not compromise the health or structure of the trees. There is deadwood in the canopy of the trees and some over-extended limbs, both of which can be suitably managed by a regular pruning regime in accordance with Australian Standard AS 4373-07 'Pruning of Amenity Trees'. The current risk to safety is considered acceptable and medium to long term management of the trees is feasible.

Having considered all the relevant Objectives and Principles of the Development Plan, the proposal is not considered to be seriously at variance with the Development Plan.

On balance it is considered that the proposed development does not sufficiently accord with the relevant provisions contained within the West Torrens (City) Development Plan consolidated 12 July 2018 and does not warrant Development Plan Consent or Development Approval.

RECOMMENDATION

The Council Assessment Panel, having considered all aspects of the report, the application for consent to carry out development of land and pursuant to the provisions of the *Development Act 1993* resolves to REFUSE Development Plan Consent and Development Approval for Application No. 211/125/2019 by Blake Horder to undertake the removal of two (2) significant trees - *Eucalyptus Camaldulensis* (River Red Gum) at 9 Speed Avenue, North Plympton (CT 5922/813).

The proposed development is contrary to the following provisions of the West Torrens Council Development Plan Consolidated 12 July 2018:

- General Section, Regulated Trees Objective 1.
Reason: The tree provides important aesthetic and environmental benefit.
- General Section, Regulated Trees Objective 2(a)(b)(d).
Reason: The tree significantly contributes to the character and visual amenity of the locality, is indigenous to South Australia and the local area and provides an important habitat for native fauna.
- General Section, Regulated Trees PDC 2(a)(b)(c)(d).
Reason: The tree is not diseased and its life expectancy is not short, does not represent a material risk to public or private safety, is not currently causing damage to a building and is not preventing reasonable development of the site.
- General Section, Significant Trees Objective 1.
Reason: The tree provides important aesthetic and environmental benefits.
- General Section, Significant Trees Objective 2.
Reason: The tree is not preventing appropriate development on the site.
- General Section, Significant Trees PDC 1(a)(c)(e)(f).
Reason: The tree makes an important contribution to the character and amenity of the local area, provides an important habitat for native fauna, is important to the maintenance of biodiversity in the local environment and forms a notable visual element to the landscape of the local area.

- General Section, Significant Trees PDC 3(a)(b)(c)(d)(e).

Reason: The tree is not diseased, its life expectancy is not short, it does not represent an unacceptable risk to public or private safety, is not currently causing or threatening to cause substantial damage to a substantial building or structure of value, it is not preventing appropriate development on the site and reasonable alternative remediation options are available.

Attachments

- 1. Proposed Plans and Documents**
- 2. Referral Response**

Regulated and Significant Tree proposal form

Civic Centre: 165 Sir Donald Bradman Drive, Hilton SA 5033. Office hours: Mon - Fri 8.30am - 5pm. Phone: (08) 8416 6333. Email: development@wtcc.sa.gov.au. Web: westtorrens.sa.gov.au.



Property No:	9	Street:	Speed Avenue, NORTH PLUMPTON	
Title:	Mr	Given name:	Blake	Family name:
HORDER				
Company name:				
Address:				
7 Speed Avenue, NORTH PLUMPTON				
P/Code: 5037				
Telephone	Mobile	Email address		
/				
1. Details of tree				
Circumference of trunk 1m above natural ground level: Tree 1: 4.2m, Tree 2: 3.7m				
Height of tree: refer to photos. Est 85 ft.				
Spread of tree: refer to photos. Est 50.9m				
Species or type of tree: Eucalyptus - possibly red gum.				
2. Site plan				
Please attach site plan scale not less than 1:200.				
3. Photograph(s)				
Yes <input checked="" type="checkbox"/> If yes provide details No <input type="checkbox"/>				
4. Details of the proposed activity you want to undertake affecting the Regulated/Significant Tree (e.g. pruning, removal etc.).				
Removal of two significant trees.				
5. Is the tree, or does the tree appear to be diseased?				
Yes <input checked="" type="checkbox"/> If yes provide details No <input type="checkbox"/>				
Eucalyptus Longhorned Borer infestation present on both trees. - see attached documentation.				
6. Does the tree represent an unacceptable risk to public or private safety?				
Yes <input checked="" type="checkbox"/> If yes provide details No <input type="checkbox"/>				
Please see attached documentation.				

7. If you answer yes to - 6, 7 or 8, have all other remedial steps been determined ineffective by a suitably qualified professional?

Yes ☐ If yes, provide details No ☒

8. Is the tree causing or threatening to cause substantial damage to a building or structure of value?

Yes ☒ If yes, provide details No ☐

Please see attached documentation

9. Has specialist advice been obtained (from a qualified arboriculturalist, botanist or horticulturalist)?

Yes ☐ If yes, please attach info No ☒

Please see attached documentation.

10. If your application involves the division of land, is it likely that the application will result in substantial "tree-damaging" activity to a Regulated/Significant Tree?

Yes ☐ If yes, provide details No ☐

N/A - no division of land.

11. Should Council approve the pruning or removal of a Regulated/Significant Tree, it is a legislative requirement that 2 - 3 replacement trees to be planted on the subject site.

In the instance that replacement trees cannot appropriately be planted on the site, are you willing to make payment of an amount specified in the *Development Regulations 2008* to the Urban Tree Fund in lieu of planting replacement trees?

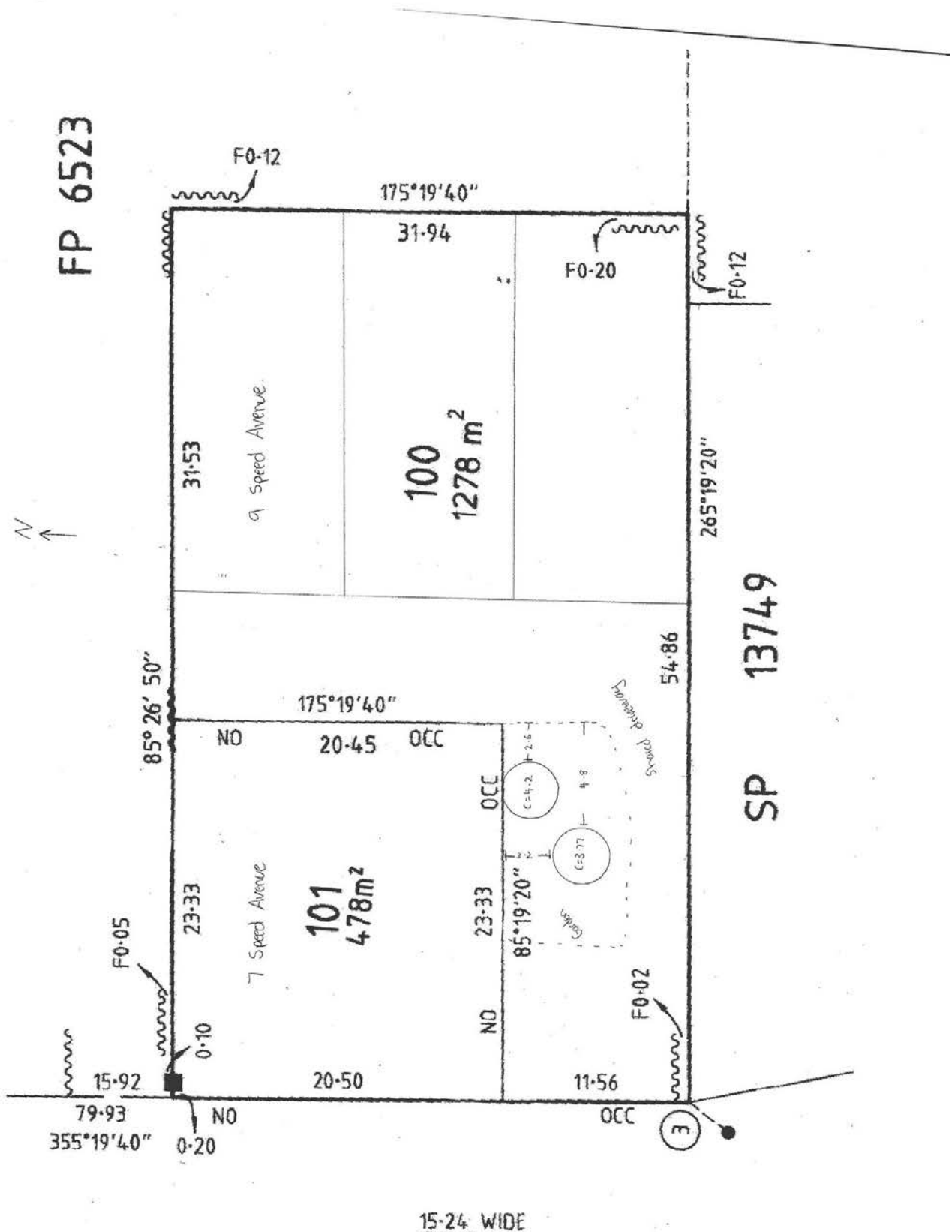
Yes ☐ No ☒

- Owners of land may wish to replant replacement trees at their expense.

Signed:



Date: 27/01/19



Other supporting information:**Application:**

I am the owner of the property at 7 Speed Avenue, North Plympton. This application refers to two significant trees located on the common garden area of 9 Speed Avenue North Plympton. The application is submitted for consideration in authorising the removal of two significant eucalyptus trees.

Evidence of disease:

In about March/April 2013 I was approved by the West Torrens Council – by visual inspection – to remove a significant eucalyptus tree located within my backyard at 7 Speed Avenue. (Photo 1)

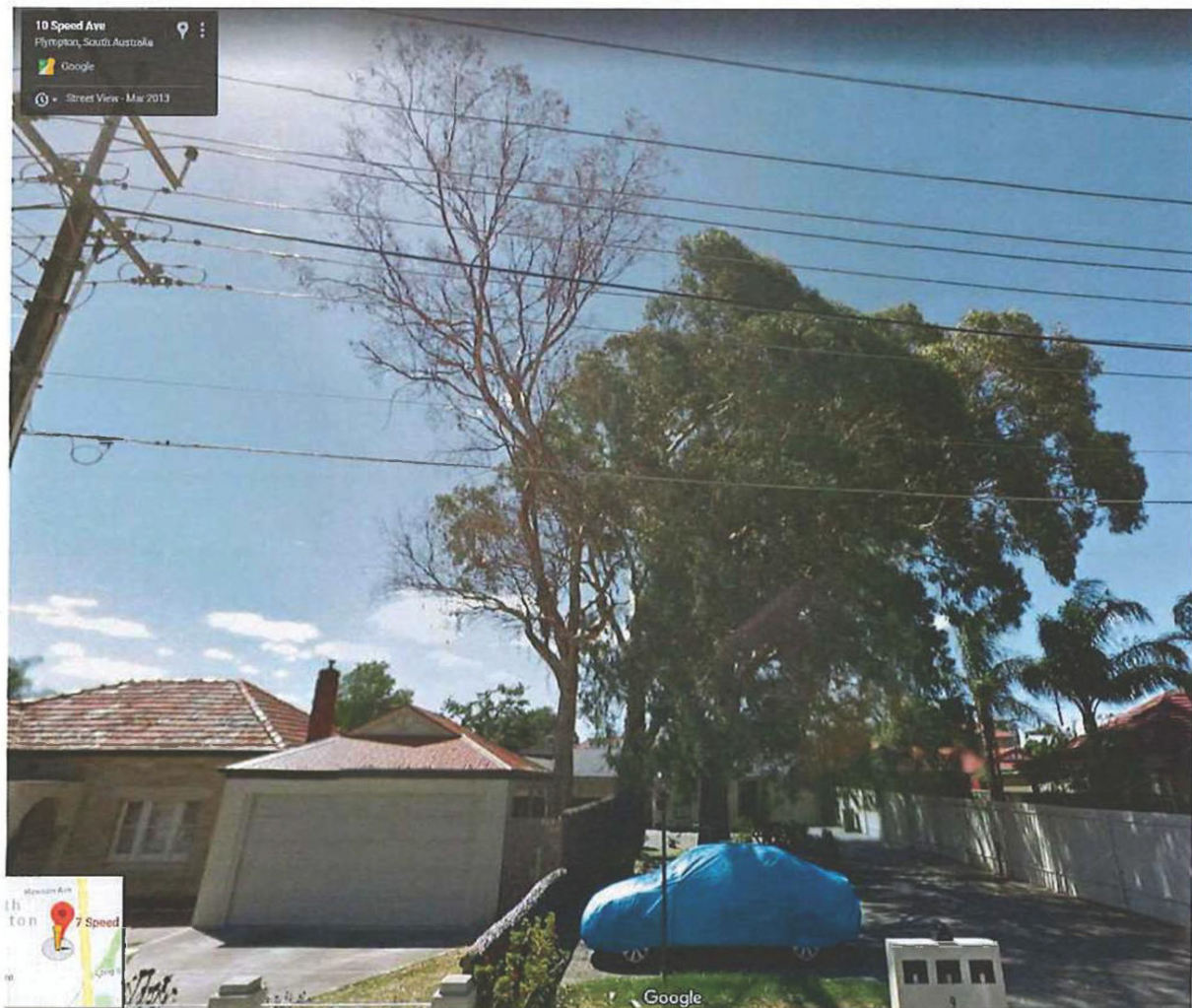


Photo 1 – Dead tree at 7 Speed Avenue prior to removal. March 2013.

The tree had succumb to a wood borer, and evidence of the borer holes and unique patterns in the wood were clear when the tree was cut down. I have retained some wood from this tree if need be inspected. I recall seeing the large white borer larvae in the holes of the cut limbs as they were felled. A significant number of beetles were also present. Prior to the tree being removed, my property sustained damage to gutters, roof tiles, likely cracking to interior walls, from large falling branches/limbs/roots. Whilst I accepted a normal amount of

material falling from the tree and the adjoining two trees (located at 9 Speed Avenue) in a healthy state, as the tree began to die and unacceptable amount of foliage began to fall from the tree, some of which caused significant damage to a garage gutter and colorbond roofing panels due to the size of the branches that began to fall. The tree was removed as the risk of larger limbs falling on the house or garage became unacceptable. I removed the tree at my own cost and due to my own safety concerns.

Recently we had our house perimeter sprayed for pest maintenance. Along with the usual spiders and other common household insects that were killed by the spray, I noticed the unusual but similar beetles that I had seen in 2013. (Photo 2)



Photo 2 – Eucalyptus Longhorned Borer

I had not known the name of the beetle in 2013. After some research I have identified the beetles that I located as likely to be the Eucalyptus Longhorned Borer or *Phoracantha semipunctata*. The beetle was unmistakable with the long antennae and pattern on the rear. This prompted me to inspect the two other eucalyptus trees for similar evidence of a borer infestation that I had seen on my tree in 2013. (The tree that I removed from 7 Speed Avenue was intertwined at the canopy with the two trees of concern in 9 Speed Avenue) My thought was that it may be likely that the infestation spread to the other trees due to their proximity to each other.

Upon inspection I saw evidence of borer infestation in both trees on 9 Speed Avenue. (photos 3,4,5,6, 7, 8 – taken 5 January 2019) Some of the borer holes were confined to the outer layer of bark, however there were many holes that extended deep into the main trunk of the tree. Some of which appeared to be quite fresh due to the tailings caused by the larvae being present. The holes are visible from the base of the trunk and up the trunk 10 – 15m higher. I stuck a small stick into some of the holes and it is apparent that the holes are quite deep, at least 20cm in some places and likely deeper due to them not being a perfectly straight hole and likely curving.



Photo 3 – Borer holes



Photo 4 – Borer hole



Photo 5 –
Borer hole
with fresh
'tailings'

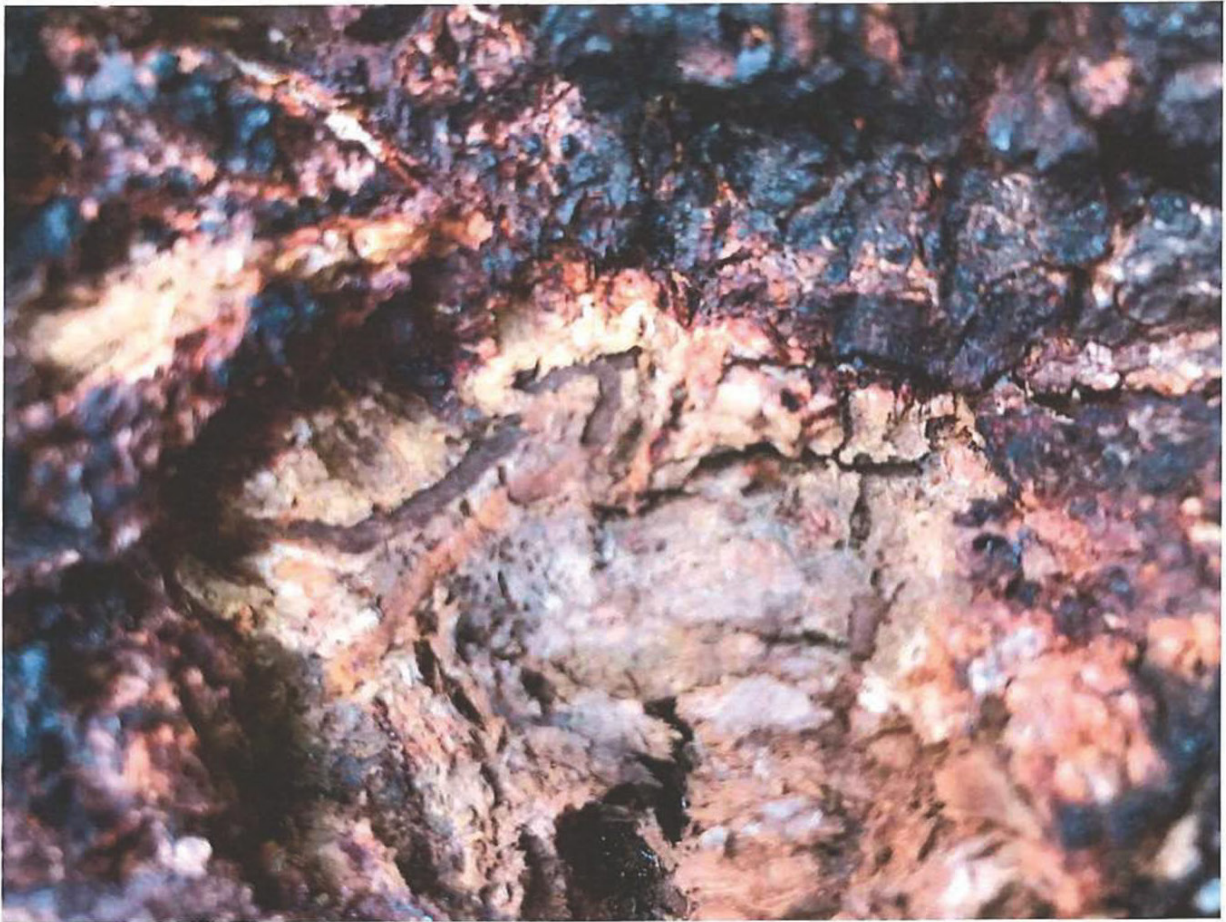


Photo 6 – Under bark scarring caused by beetles/borers.



Photo 7 – Borer holes with sap leakage.

Issues:

I am aware that in the 9 years or so that I have been the owner of 7 Speed Avenue, that the two trees at 9 Speed have never been professionally pruned. The only pruning that they have been subjected to is when I recently removed some branches that were hanging low over my fence and some low hanging branches at the request of the neighbours. I am not aware of any chemical treatments that they trees have been subjected to.

I am aware that the Eucalyptus Longhorned Borer are attracted to freshly cut wood, dying limbs and trees suffering from stress, especially lack of water. The trees are in an area of common garden that do not receive any additional watering above rainfall. It is likely these trees are suffering stress due to lack of water, allowing for the infestation to occur.

I am extremely concerned that the borer infestation will cause these two trees to completely die off as did the third tree in 2013. In the process of dying, the risk of large limbs falling and causing significant damage to premises at 9 Speed, 11 Speed and my property are real and unacceptable giving the nature of this infestation. It is not likely that chemical treatment will control or eradicate the infestation, as chemical treatments for these pests are ineffective once the larvae are inside the trunk of the tree, the chemical treatment is only effective for external beetles and eggs. It is likely the damage is irreversible.

To compound matter, the two significant trees are in dire need of pruning. There is a significant amount of 'dead wood' on both trees from bottom to top of the canopy, where branches have died off. Many of these branches snap off and fall during periods of strong wind.

Tree roots have also caused damage - Cracking is now evident on a concrete plinth my southern boundary fence, likely due to the root system. One significant tree is only centimetres from my boundary brush fence, whilst the other is about 3m from the boundary. The western most tree has a vast majority of its limbs 'off-centre' leaning south westerly. If a large limb was to fall, it would likely destroy a garage, part of my house, two vehicles, deck and fence. Not to mention any persons/pets in the house, garage or outside would be at significant risk of injury or death. It is not likely to cause damage to any premises at number 9 due to the angle it is currently leaning.

Quite simply, I do not want to make a fuss or cause any issues, I love the birds the trees bring, the shade and majestic nature of these beautiful trees, but they are too close to my house, too big and unacceptable to have them remain with a borer infestation. I do not want to wait until a limb comes down and causes more than minor damage for something to be done about the trees, or wait until they are completely dead. The time to act on removing these trees is before they become such a risk that they need be taken down by the SES after they have already destroyed part or all of a surrounding premises or caused injury or death, which is not an over exaggeration. To be outside on a windy day underneath these trees is truly frightening.

I am particularly concerned that during the upcoming summer months, large limbs may crack and fall, in particular the western most tree which does appear to have the majority of weight off centre and leaning westerly – likely due to the other tree only allowing it to grow in that direction. Some dead limbs are metres in length and are thick enough to cause structural damage if they were to fall. I have already observed days where large amounts of bark are shed from the tree. On some occasions the bark collected from my driveway from

one day is enough to entirely fill a green bin. This may also be an indication of stress on the tree.

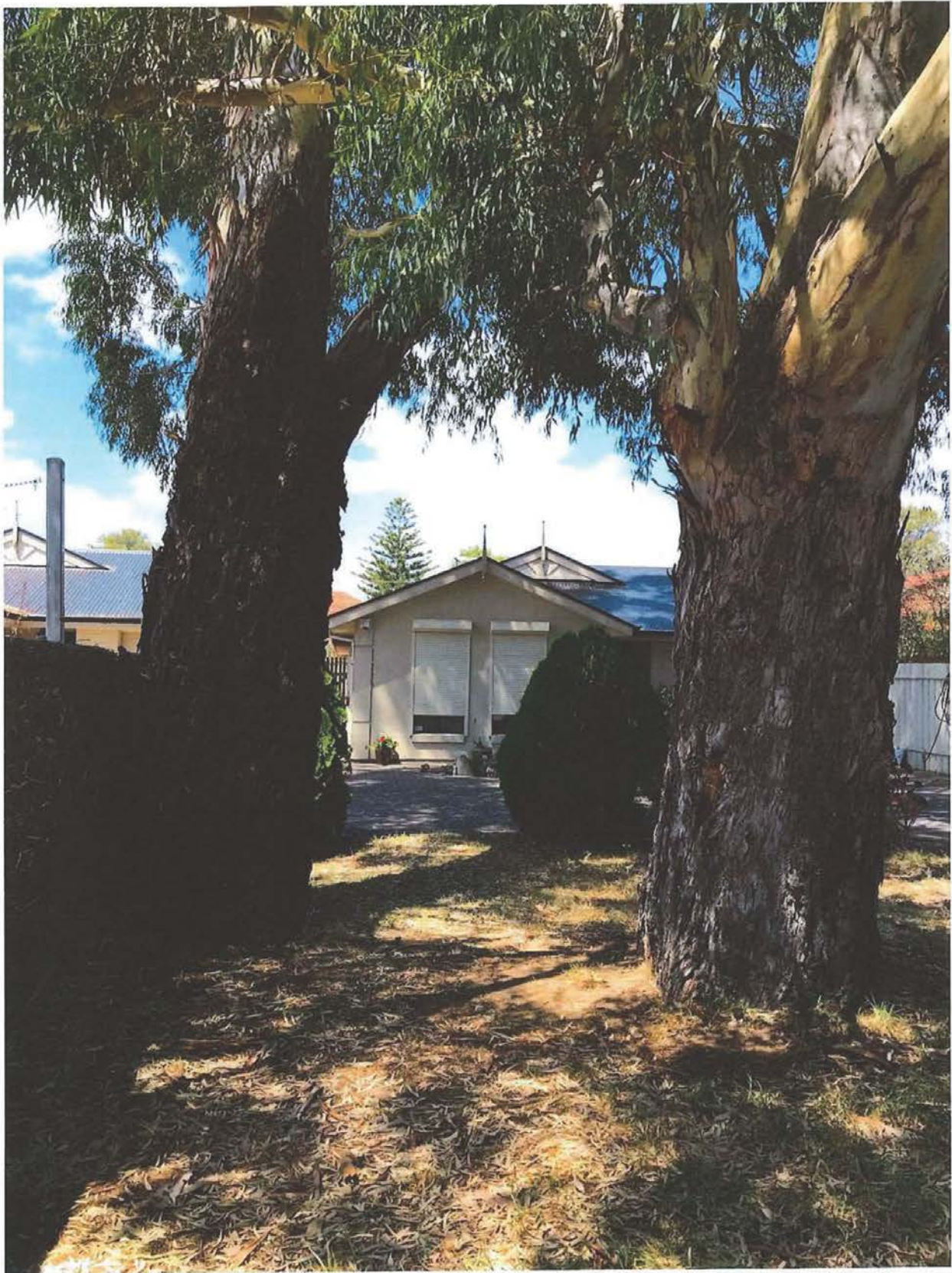
Outcomes:

I will be informing the occupants of the three units at 9 Speed Avenue of the outcome of this application. If the application to remove the trees is granted the occupants will be put on notice in writing that they will be responsible for any costs associated with damage caused by these trees, my advice is that this may in turn void any strata insurance they hold once notified of the unsafe nature of the tree. If the application is not granted, the council may be held liable for any costs associated with damage caused that could have been prevented by granting the removal of the affected trees.

I am happy to meet with a council representative or discuss this matter further.

Kind regards,

Blake HORDER
7 Speed Avenue, NORTH PLYMPTON





Arboricultural Assessment of Non-Council Owned Significant Tree/s

Development Application No: **211/125/2019**

Referral Due Date: 27 February 2019

Assessing Officer: **Ebony Cetinich**
 Site Address: **9 Speed Avenue, NORTH PLYMPTON SA 5037**
 Certificate of Title: **CT-CT-5922/813**
 Description of Development **Removal of two significant trees - Eucalyptus camaldulensis (Redgum)**

Please contact the assessing officer on 84166342 or email ecetinich@wtcc.sa.gov.au if any further information is required and to send completed referral responses.

To be completed by: **TECHNICAL OFFICER ARORICULTURE – CITY WORKS**

SPECIES & COMMON NAME: *Eucalyptus camaldulensis* (River Red Gum) x2

TOTAL CIRCUMFERENCE: 4200mm & 3800mm

MULTI-TRUNK: No

The following comments are provided with regards to the relevant Objectives and Principles of Development Control of the General Section, Significant Tree Section of the West Torrens Council Development Plan:

OBJECTIVE 1

The conservation of significant trees, in Metropolitan Adelaide, that provide important aesthetic and environmental benefit.

OBJECTIVE 2:

The conservation of significant trees in balance with achieving appropriate development.

PDC 1:

Development should preserve the following attributes where a significant tree demonstrates at least one of the following attributes:

- | | |
|---|------------|
| (a) Makes an important contribution to the character or amenity of the local area; or | Yes |
| (b) Is indigenous to the local area and its species is listed under the National Parks and Wildlife Act 1972 as a rare or endangered native species | No |
| (c) Represents an important habitat for native fauna | Yes |
| (d) Is part of a wildlife corridor or a remnant area of native vegetation | Yes |
| (e) Is important to the maintenance of biodiversity in the local environment | Yes |
| (f) Forms a notable visual element to the landscape of the local area | Yes |

PDC 2:

Development should be undertaken so that it has a minimum adverse effect on the health of a significant tree.

PDC 3:

Significant trees should be preserved, and tree-damaging activity should not be undertaken, unless:

- (a) In the case of tree removal, where at least one of the following apply:
 - (i) The tree is diseased and its life expectancy is short **No**
 - (ii) The tree represents an unacceptable risk to public or private safety **No**
 - (iii) The tree is within 20 metres of a residential, tourist accommodation or habitable building and is a bushfire hazard within a Bushfire Prone Area **No**
- (b) The tree is shown to be causing or threatening to cause substantial damage to a substantial building or structure of value **No**
- (c) All other reasonable remedial treatments and measures have been determined to be ineffective **No**
- (d) It is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring. **No**
- (e) In any other case, and of the following circumstances apply:
 - (i) The work is required for the removal of dead wood, treatment of disease, or is in the general interest of the health of the tree **No**
 - (ii) The work is required due to unacceptable risk to public or private safety **No**
 - (iii) The tree is shown to be causing or threatening to cause damage to a substantial building or structure of value **No**
 - (iv) The aesthetic appearance and structural integrity of the tree is maintained **No**
 - (v) It is demonstrated that all reasonable alternative development options and design solutions have been considered to prevent substantial tree-damaging activity occurring **No**

PDC 4:

Development involving ground work activities such as excavation, filling, and sealing of surrounding surfaces (whether such work takes place on the site of a significant tree or otherwise) should only be undertaken where the aesthetic appearance, health and integrity of a significant tree, including its root system, will not be adversely affected.

PDC 5

Land should not be divided or developed where the division or development would be likely to result in a substantial tree-damaging activity occurring to a significant tree.

ADDITIONAL COMMENTS:

As requested, a site inspection was carried out on 11th February to assess two significant *Eucalyptus camaldulensis* located in the front yard of 9 Speed Avenue, North Plympton.

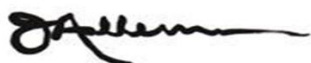
These trees are an excellent representative of their species due to their visual amenity, excellent overall health, structure and long safe life expectancy. Mature indigenous species such as this are especially important for biological reasons as they provide conditions suitable for a wide range of animals, plants and invertebrates, many of which require the unique environment provided by an older tree.

The subject trees show no evidence of pruning work. Therefore, a moderate amount of deadwood is located within both canopies. All major branch junctions throughout the trees appear sound and well structured.

Due to their robust, broad-spreading nature, the *Eucalyptus camaldulensis* contains some slightly over extended limbs where foliage is located mostly at branch extremities, particularly to the west and over the neighbouring property to the south. However, no evidence of limb failure was noted. This is a typical characteristic of a healthy, vigorous *E. camaldulensis* and pruning in accordance with AS 4373- 07 'Pruning of Amenity Trees' can rectify this problem.

There were no visible signs of fungal fruiting bodies or major active pests and diseases noted, however, the presence of Longicorn Beetles (borers) is confirmed by the accumulation of small oval shaped exit holes on the main stem. This is typical in almost all mature Eucalypt species throughout the state and does not compromise the health or structural integrity of a healthy tree. Foliage colour is good and foliage density is typical of this species. If site conditions remain conducive to tree health, their useful life expectancy is estimated to be in excess of 50 years. The risk posed by these trees is considered broadly acceptable.

Having given consideration to the plans provided, and observations made of the trees, I conclude that the desired outcome of 'tree removal' is unjustified, as the applicant has not provided sufficient evidence that can be considered as satisfying the criteria required. I believe medium to long- term management is sustainable and therefore, retention is warranted and recommended.

RECOMMENDATION:**RETAIN**

Jarrad Allen
Calypso Tree Co

DATE: 26/02/19

PHOTO's ATTACHED:



7 CONFIDENTIAL REPORTS OF THE ASSESSMENT MANAGER

Nil

8 SUMMARY OF COURT APPEALS

8.1 Summary of ERD Court matters, items determined by SCAP/Minister/Governor and deferred CAP items - December 2019

Brief

This report presents information in relation to:

1. any planning appeals before the Environment, Resources and Development (ERD) Court;
2. any matters being determined by the State Commission Assessment Panel (SCAP);
3. any matters determined by the Minister of Planning (Section 49);
4. any matters determined by the Governor of South Australia (Section 46); and
5. any deferred items previously considered by the Council Assessment Panel.

Development Application appeals before the ERD Court

Nil

Matters pending determination by SCAP

Reason for referral	DA number	Address	Description of development
Schedule 10	211/M030/18	192 ANZAC Highway, GLANDORE	Eight-storey RFB, 40 dwellings & removal of regulated tree
Schedule 10	211/M015/19	1 Glenburnie Terrace, PLYMPTON	Six-storey RFB, 32 dwellings & associated car parking
Schedule 10	211/M018/19	6 Ebor Avenue, MILE END	Mixed use building comprising ground floor shop & residential apartments

Matters pending determination by the Minister of Planning

Reason for referral	DA number	Address	Description of development
Section 49	211/V007/12 V3	Lot 2 in FP 1000, West Beach Road WEST BEACH	Variation - removal of east-west internal road

Matters pending determination by the Governor of South Australia

Nil

Deferred CAP Items

Nil

Conclusion

This report is current as at 28 November 2019.

RECOMMENDATION

The Council Assessment Panel receive and note the information.

Attachments

Nil

9 OTHER BUSINESS**10 MEETING CLOSE**

CITY OF WEST TORRENS



ATTACHMENTS

UNDER SEPARATE COVER

Council Assessment Panel

10 December 2019

Item 6.1 - 411-415 Anzac Highway CAMDEN PARK

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PLANNING REPORT

411 – 415 ANZAC HIGHWAY, CAMDEN PARK

CONSTRUCTION OF TWO (2) RESIDENTIAL FLAT BUILDINGS,
TWELVE (12) GROUP DWELLINGS AND THREE (3) ROW DWELLINGS

Prepared for:
Junction Australia

Date:
03.05.2019



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V2	Final Draft	CV	2/05/19
V3	Final	CV	03/05/19

REF 0334 | 3 May 2019





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1. INTRODUCTION

This planning statement relates to a proposal by Junction Australia to construct two (2) residential flat buildings, twelve (12) group dwellings and three (3) row dwellings and associated landscaping and private access road at 411 Anzac Highway, Camden Park.

One of the residential flat buildings will be used by Junction Australia for the purposes of accommodating social housing. The other residential flat building will be offered as affordable housing. All remaining dwellings will be offered to market.

The purpose of the development is to transform a vacant former South Australian Housing Trust site into a 'tenure-blind' mixed residential development where a new socially integrated community will be created through quality spaces, building design and linkages with the surrounding area. By offering contemporary and innovative social and affordable living opportunities, a greater housing diversity will be provided.

The development provides the potential (subject to Council agreement) to enhance and deliver an improved community space by directing the open space contribution fees generated by the development into the adjacent reserve to provide a greater community benefit.

In preparing this planning statement, we have:

- inspected the land in question and its surroundings;
- identified and reviewed what we consider to be the most pertinent provisions of the West Torrens Council Development Plan (consolidated 12 July 2018);
- held numerous pre-lodgement meetings with Council Administration;
- reviewed the following which form appendices to this planning statement:
 - » Appendix 1 – Architectural Design prepared by Hames Sharley;
 - » Appendix 2 – Landscape Plan prepared by LCS Landscapes;
 - » Appendix 3 – Traffic Impact Statement prepared by GTA Consultants;
 - » Appendix 4 – Waste Management Plan prepared by Colby Phillips Advisory;
 - » Appendix 5 – Stormwater Management Plan prepared by TMK Consulting Engineers;

This planning statement contains our description of the land in question, its surroundings and the proposal, as well as our assessment of the proposal against what we consider to be the most pertinent provisions of the Development Plan.



2. PROPOSAL DESCRIPTION

2.1 OVERVIEW

The proposed development involves the construction of the following:

- one five storey residential flat building ('East Apartment Block') comprising ground level car park and four levels of affordable housing in the form of 24 apartments fronting Anzac Highway;
- one four storey residential flat building ('West Apartment Block') comprising ground level car park and three levels of social housing in the form of 15 apartments fronting Anzac Highway;
- twelve two-storey group dwellings ('Group Dwellings') fronting the Westside Bikeway/Creslin Terrace reserve;
- three two-storey row dwellings ('Row Dwellings') fronting Clifton Street;
- a private one-way road with an Anzac Highway access and Clifton Street egress;
- landscaping across the site; and
- potential landscaping of the Westside Bikeway/Creslin Street reserve subject to Council agreement and offset to the open space contribution fee.

Each of the elements of the proposal will be discussed in greater detail following.

2.2 EAST APARTMENT BLOCK

The east apartment block will comprise 100% affordable housing summarised as follows.

Table 2.1 Summary of the proposed affordable housing apartments.

Dwelling Type	Number	Area (m ²)	Balcony (m ²)	Storage (m ³)
One Bedroom	4	46	11	2.4
Two Bedroom	20	61-69	11	2.4

The apartment building will be constructed of precast concrete, CFC with a painted finish, timber look aluminium cladding, profiled steel vertical cladding in Colorbond, aluminium windows and tubular steel balustrading.

A further 13.02 cubic metres of apartment storage is proposed within each building level corridor.

A total of 21 car spaces are provided within the ground level car park, including 17.6 cubic metres of additional storage for the apartments.

A total of 4 visitor bicycle racks are proposed in front of the building.



2.3 WEST APARTMENT BLOCK

The west apartment block will comprise 100% social housing summarised as follows:

Table 2.2 Summary of affordable housing apartments

Dwelling Type	Number	Area (m ²)	Balcony (m ²)	Storage (m ³)
One Bedroom (AS1428 compliant)	1	48	8	0
Two Bedroom (1 x AS1428 compliant)	13	66-71	8	0.5 – 2.4

The apartment building will be constructed of precast concrete, CFC with a painted finish, timber look aluminium cladding, profiled steel vertical cladding in Colorbond, aluminium windows and tubular steel balustrading.

A further 18.06 cubic metres of apartment storage is proposed within each building level corridor.

A total of 14 car spaces are provided within the ground level car park.

A total of 4 visitor bicycle racks are proposed in front of the building.

2.4 ROW DWELLINGS

The two storey row dwellings will be offered to the market and will contain three bedrooms and two car spaces. The row dwellings have a floor area varying between 134 square metres and 183.63 square metres with ground level private open space varying between 29.5 square metres and 66.3 square metres and balconies with an area of 5 square metres.

The row dwellings will be constructed of hebel power panel with a roll on painted finish, CFC cladding with a painted finish, timber look aluminium cladding and aluminium windows.

2.5 GROUP DWELLINGS

The two storey group dwellings will also be offered to the market and will all contain three bedrooms and two car spaces. The row dwellings have a floor area varying between 144.34 square metres and 210.28 square metres with ground level private open space varying between 28 square metres and 70 square metres and balconies varying between 8.74 square metres and 11.62 square metres.

The group dwellings will be constructed of hebel power panel with a roll on painted finish, CFC cladding with a painted finish, timber look aluminium cladding and aluminium windows.

2.6 PRIVATE ROAD

The proposed development includes a private one-way road with an entry on Anzac Highway and exit on Clifton Street. The layout is the result of various discussions with DPTI and Council to develop an appropriate access arrangement for the site.

The Anzac Highway access point has been located as far east as possible away from the Clifton Street junction, a bus stop and U-turn median opening on Anzac Highway. The access point has been designed to provide separation to an entry driveway for the neighbouring site; existing infrastructure in the verge including a stobie pole and stormwater pit; and to provide a refuge between driveways for pedestrians.



The Clifton Street egress point is located approximately 17 metres south of the Gunnawarra Avenue/Clifton Street intersection and satisfies AS2890.1:2004 as the location is outside of the prohibited zone.

2.7 LANDSCAPING

The landscape plan prepared by LCS Landscapes is contained within Appendix 2. The plan identifies the following:

- driveway threshold and feature paving and planting;
- entrance landscape including reclaimed red pavers and feature planting;
- pathway threshold (pedestrian through link) including reclaimed red pavers, arbor with climbing plant, feature planting and in-built furniture and bollard lighting between the private road and reserve;
- dense tree planting along the Anzac Highway frontage;
- feature paving banding and thresholds;
- formal rain gardens;
- street lighting through the private road;
- new footpath and driveway crossovers to match existing Anzac Highway paving;
- front fencing for all row and group dwellings;
- retention of existing reserve trees, provide potential for irrigation, seating area and small shelter with defined pathways to the Westside Bikeway and Creslin Terrace.

Full details of all tree and plant species and fencing are contained within the landscape plan and need not be repeated here.

It is important to note that a key principle of the landscaping plan and proposal is to direct open space contribution fees to the improvement of the adjacent reserve. Where an application provides for the division of land into more than 20 allotments, and one or more allotments is less than one hectare in area, up to 12.5 per cent of the area to be divided can be vested in the council or the Crown (as the case requires) to be held as open space; or the applicant make the financial contribution.

It is acknowledged that the final design of the open space will be subject to a separate Council process however the proposed landscaping plan should be used as the mechanism to formally commence this process with Council's open space team and Council members.

2.8 STORMWATER

The stormwater management plan prepared by TMK Consulting Engineers is contained within Appendix 5. In summary, the stormwater management plan confirms the following:

- the West Torrens Council requires post-development flows from a 1:20 Yr ARI storm event to be limited to pre-development flows from a 1:20 Yr ARI storm event of a 0.25 coefficient;
- the design for stormwater detention has been split into two catchments identified as 'A' and 'B' in the plan;



- catchment A comprises of the community titled allotment only. Within this catchment 50% of post development roof areas (apartment roof areas only), will be directed into detention storage along with 85% of the post development paved and landscaped areas. The remaining 50% roof runoff (group dwellings) and 15% of the paved and landscaped areas will be discharged un-detained;
- catchment B comprises of the row dwellings. The entire roof area from these dwellings will be directed into detention storage;
- all stormwater directed into detention storage will be discharged into council infrastructure at Anzac Highway. All un-detained runoff (i.e. group and row dwellings) will be discharged into council infrastructure to the north of the site via stormwater entry pits at Creslin Terrace and Clifton Street;
- detention storage has been provided in the form of a 'Rocla' Box Culvert OSD System combined with two bio-retention swales to hold the 27kL required for detention storage;
- the 'Rocla' Box Culvert OSD system (15.55kL) has been proposed as part of the underground storage network;
- bio-retention trenches have been designed and sized to cater for the balance of the detention storage and will serve as a Water Sensitive Urban Design method in accordance with council requirements;
- the row dwellings will each contain 2kL above ground tanks each with 1kL dedicated for retention use and the remaining 1kL for detention storage; and
- the group dwellings will each contain a 1kL tank for retention use.

2.9 WASTE MANAGEMENT

The waste management plan prepared by Colby Phillips is contained in Appendix 4. In summary, the waste management plan confirms the following:

- on-site private collection will occur for the apartment buildings and group dwellings with collection access design to be "future-proofed" to enable a future Council skip bin collection service;
- residents will have access to a 3-bin equivalent service;
- there will be a weekly collection frequency (which is what a future Council rear-lift service would most likely provide);
- collection access will allow for an MRV-sized vehicle (i.e. at least 8.8m in length);
- the collection points will be located within 30m of the bin storage areas;
- on-site collection will occur in a forward entry and exit manner;
- hard waste will occur on an as needs between the resident and Council;
- each group dwelling will be provided with individual Council bin sets with each bin to be presented along the private road for Council kerbside collection;
- each row dwelling will be provided with individual Council bin sets with each bin to be presented along Clifton Street for Council kerbside collection;



- each apartment building will have their own waste storage room at Ground Level, adjacent to the resident lobby where residents would access the room via lift and car park area to dispose their waste and recycling;
- bins from each waste room will be transferred (on designated collection days) by the property manager to the presentation areas along the private road for collection;
- residents of the group dwellings and row dwellings will be responsible for moving bins between their property and the collection area; and
- collections will be scheduled between 7am to 7pm, Monday to Saturday and 9am to 7pm on Sunday to avoid potential noise nuisances in line with the South Australian Environment Protection Policy (Noise) Policy 2007.

2.10 DEVELOPMENT STAGING

The development will be constructed in accordance with the staging plan as follows:

- Stage 1 – Group dwellings
- Stage 2 – Private road
- Stage 3 – Residential flat buildings
- Stage 4 – Row dwellings



3. SITE AND LOCALITY

The subject site is located along the northern side of Anzac Highway, to the north east of its intersection with Clifton Street and to the south east of Creslin Terrace. The site comprises of two allotments legally identified as follows:

- Allotment 49 in Certificate of Title Volume 5606 Folio 197; and
- Allotment 48 in Certificate of Title Volume 5420 Folio 162.

The site has frontage to Anzac Highway and Clifton Street of 89.92 metres and 58.92 metres respectively. The northern boundary of the subject site abuts the Westside Bikeway and Creslin Terrace for 87.8 metres. Overall, the subject site has an area of approximately 4,840 square metres.

Figure 3.1 *Site and Locality.*



The site is predominantly vacant and cleared of all structures and vegetation with the exception of the dwelling located on 415 Anzac Highway which will be demolished through a separate development application.

The site has one existing crossover along Anzac Highway and a total of three crossovers along Clifton Street.

The site is located within the 4-storey designated area of Policy Area 18 of the Residential Zone. The site is located within an Affordable Housing Designated Area.

Adjoining to the south of the subject site appears to be a decommissioned petrol filling/motor repair station, and to the north east is a Local Heritage listed single storey building currently used as a childcare centre.



The broader locality presents a number of dwelling types. Buildings range between single storey detached dwellings up to three storey residential flat buildings. Overall, the northern side of Anzac Highway represents a diverse, medium density character.

Within the locality and specifically in the 4-storey designated area of Policy Area 18, we note the following:

- a three-storey residential building at 421 Anzac Highway which has an average site area of approximately 80 square metres;
- a two-storey residential flat building at 443 Anzac Highway which has an average site area of approximately 119 square metres; and
- a three-storey residential flat building at 445 Anzac Highway which has an average site area of 99 square metres.

Other notable elements in the locality include a large retirement village on the southern side of Anzac Highway, the Morphetville Motor Inn, The Junction Hotel and the Morphetville Racecourse. Approximately 400 metres west of the subject site is Immanuel College, the West Torrens Birkalla Soccer Club ovals and Camden Oval.

Anzac Highway is a two-way arterial road which supports three vehicle lanes in both directions, separated by a raised median strip. The road reserve is approximately 40 metres wide with on-street car parking permitted outside of clearway times. Anzac Highway is restricted to 60 kilometres per hour and carries approximately 39,000 vehicles per day.

The site is highly accessible by public transport. There is a bus stop directly in front of the subject site and another approximately 50 metres away on the southern side of Anzac Highway. The tram network is located approximately 450 metres to the south west (Morphettville Racecourse stop). The Westside Bikeway is located within the reserve which abuts the site to the north.

The median strip, as well as the verges on either side of the roadway are vegetated with lawns and mature "Clarent Ash" trees. These "Clarent Ash" trees are also Local Heritage listed.

The site adjoins Low Density Policy Area 20 to the north.



4. PROCEDURAL MATTERS

4.1 THE RELEVANT AUTHORITY

The proposed development is not of a type listed in Schedule 10 of the *Development Regulations 2008*, and as such, Council is the relevant authority for planning assessment purposes.

4.2 THE RELEVANT DEVELOPMENT PLAN

The relevant version of the West Torrens Council Development Plan for procedural and assessment purposes was consolidated on 12 July 2018.

4.3 TYPE OF DEVELOPMENT

As prescribed in the Procedural Matters section of the relevant Development Plan, the proposal does not satisfy the criteria for a complying or a non-complying type of development. As such, the proposal must be assessed and subsequently determined on its merits by Council.

4.4 CATEGORY OF DEVELOPMENT

We have determined the proposal to be a category 3 form of development.



5. DEVELOPMENT ASSESSEMENT

We have reviewed the West Torrens Council Development Plan (consolidated 12 July 2018) and consider the following provisions most relevant in the assessment of this application.

Medium Density Policy Area 18

Objective: 1.

PDC: 1 and 4 – 7.

Residential Zone

Objective: 1 – 4.

PDC: 1, 2, 4 – 7, 9, and 10 – 16.

City Wide

Community Facilities

Objective: 1 and 2.

PDC: 1, 2 and 3.

Crime Prevention

Objective: 1.

PDC: 1 – 8, and 10.

Design and Appearance

Objective: 1 and 2.

PDC: 1 – 5, 7 – 15, 19 and 23.

Energy Efficiency

Objective: 1 and 2.

PDC: 1 – 3.

Heritage Places

Objective: 3

PDC: 2, 6, 9 and 10.

Land Division

Objective: 1 – 4.

PDC: 1, 2, 4 – 6, 8, 13 – 15, and 17.



Landscaping, Fences and Walls

Objective: 1 – 2.

PDC: 1 – 4, and 6.

Medium and High Rise Development (3 or More Storeys)

Objectives: 1 – 5, and 7.

PDC: 1 – 12, 14 – 21, 23 – 28,

Natural Resources

Objective: 2, 5 – 7, and 10.

PDC: 5 – 14, and 16.

Orderly and Sustainable Development

Objective: 1 – 5.

PDC: 1, 3, and 5 – 7.

Residential Development

Objective: 1 – 5.

PDC: 1, 3 – 13, 16 – 23, and 27 – 33.

Transportation and Access

Objective: 2 and 4.

PDC: 2, 4, 5, 8 – 18, 19, 21 – 30, 32, and 34 – 45.

Waste

Objective: 1 and 2.

PDC: 1 – 6.

Affordable Housing Overlay

Objectives: 1 and 2.

PDC: 1.

In consideration of the above, we have formed the opinion that the most relevant planning issues relating to the proposed development can be summarised under the following themes:

- Desired character;
- Density;
- Design and appearance;

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- Building height;
- Heritage places;
- Apartment amenity;
- Setbacks;
- Traffic, access and car parking;
- Overshadowing; and
- Overlooking

5.1 DESIRED CHARACTER

The desired character statement for Medium Density Policy Area 18 envisages a medium density where a range of dwelling types including residential flat buildings, row dwellings, group dwellings, semi-detached dwellings and some detached dwellings on small allotments are provided.

The Policy Area encourages allotment amalgamation to create larger development sites to maximise the density of development while also achieving integrated design outcomes, particularly within a comfortable walking distance of centre zones. Vehicle access is envisaged to occur from side streets and new rear public and private laneways wherever possible. The retention of existing street trees is supported.

New buildings are encouraged to contribute to a highly varied streetscape. Buildings up to 4 storeys in height are envisaged within this part of the Policy Area. Parking areas are to be located behind the front facade of buildings.

Buildings on the edge of the policy area which adjoin residential policy areas at lower densities are to pay particular attention to managing the interface with adjoining dwellings, especially in terms of the appearance of building height and bulk, and overshadowing.

Development is to be interspersed with landscaping, particularly behind the main road frontage, to enhance the appearance of buildings from the street as viewed by pedestrians, provide an appropriate transition between the public and private realm and reduce heat loads in summer.

In our opinion, the proposed development strikes a chord with the desired character statement for the following reasons:

- a range of dwelling types is provided including residential flat buildings, row dwellings and group dwellings;
- whilst the development represents a high density, the density is comparable with and some cases lower than other existing developments within the prescribed four storey area of the Policy Area;
- the development involves allotment amalgamation to create a larger development site to maximise the density of development whilst also achieving an integrated design outcome, a permeable and publicly accessible development and in close proximity to public transport and cycle ways;
- vehicle access is envisaged to occur from a new private road;
- all existing street trees will be retained and new street trees are proposed to be planted;



- new buildings are encouraged to contribute to a highly varied streetscape where the taller buildings are appropriately sited along Anzac Highway and the lower scale buildings are located along Clifton Street and the Creslin Street reserve to respect the low-density policy area interface;
- all car parking is provided under the residential flat buildings and screened from view or within the building form to form discrete elements when viewed from the public realm;
- the proposed development does not present any unreasonable built form impacts upon the low-density policy area interface in regard to building height and bulk, overshadowing or overlooking; and,
- landscaping is incorporated as a key feature within the development connecting Anzac Highway to the Creslin Street reserve through the site, enhancing the overall amenity and comfort of the site, and potentially improving that portion of the Creslin Street reserve abutting the site by directing open space contribution fees to this space (subject to Council Agreement).

In consideration of the above, we have formed the opinion that the proposed development substantially conforms with the desired character statement.

5.2 DENSITY

Policy Area PDC 4 envisages medium density development that achieves gross densities of between 23 and 45 dwellings per hectare (which translates to net densities of between 40 and 67 dwellings per hectare, where net density can be calculated by dividing 10000 by the site area and multiplying that number by the number of proposed dwellings for the site) should be in the form of 2 to 4 storey buildings.

As mentioned previously, whilst the development represents a higher density, it is comparable with and some cases lower than other existing developments within the prescribed four storey area of the Policy Area.

It is also important to note both Policy Area PDC 6 and 7 in this particular instance. Policy Area PDC 6 envisages a minimum site area (and in the case of residential flat buildings, an average site area per dwelling) and a frontage to a public road not less than that shown in the following table:

Table 5.1 Density and frontages

Dwelling Type	Site Area (square metres)	Minimum Frontage (metres)
Group dwelling	150 minimum	7
Residential flat building	150 average	15 (for complete building)
Row dwelling	150 minimum	5

The proposed group dwellings and row dwellings will be offered to market therefore the minimum 150 square metre site area would apply to these dwelling sites. The proposed site areas vary between 134 square metres and 210 square metres. Whilst some of these site areas fall short of 150 square metres, we do not consider the shortfall in some site areas detrimental to the overall merit of the development when a significant amount of land has been provided to a publicly accessible link. If this area were to be removed and offered back into each dwelling site then the shortfall would not exist. In our opinion, the public benefit associated with the link between Anzac Highway and the reserve provides a positive feature of the development and one that outweighs the shortfall in some of the dwelling sites.



All other dwellings contained within the apartment buildings will be offered as either affordable or social housing and therefore it is our view that Policy Area PDC 7 should apply. The average site area envisaged for these particular dwellings is 100 square metres.

The average site area proposed for the apartments is less than 100 square metres whether the site is to be calculated on an apartment area basis or over the area occupied by each apartment building (including curtilage and links). However, should the reserve area be included (defined by the area bound by the bicycle path and site boundaries extensions to the bicycle path) then the average site area would be achieved. We believe that in this particular instance the relevant area of the reserve could be included in the calculation as the proposal will result in a potential upgrade of this space for the benefit of not only residents of the development but the surrounding community generally.

Notwithstanding, for various reasons previously articulated throughout our assessment of desired character and following assessment in relation to design and appearance, we have formed the opinion that the proposed density is acceptable.

5.3 DESIGN AND APPEARANCE

The desired character statement envisages buildings on the edge of the policy area which adjoin residential policy areas at lower densities to pay particular attention to managing the interface with adjoining dwellings, especially in terms of the appearance of building height and bulk, and overshadowing.

In our opinion, the approach to massing and the scale transition across the site is consistent with the desired character statement. The higher built form elements are appropriately sited towards Anzac Highway and the lower built form elements are appropriately sited towards the reserve which is located within the low density policy area. This approach also ensures that the lower scale dwellings along Creslin Terrace are not adversely affected in regard to building height, bulk and overshadowing.

The overall development provides a site coverage of 45% which is less than the 70% stipulated by Policy Area PDC 5.

We have reviewed the proposed development against the Design and Appearance section of the Development Plan. In our opinion the proposal achieves the relevant provisions in that:

- the buildings have been designed in a manner that reflects the desired character of the locality by incorporating a contemporary designs that has regard to the envisaged building height, mass and proportion, materiality, roof form, façade expression and articulation (PDC 1);
- the proposed external materials will not be reflective or result in glare (PDC 2);
- services will be screened from public view by being integrated as part of the overall building design (PDC 4);
- balconies have been integrated into the overall form and detail of the building, providing articulation, comfort and opportunities for passive surveillance of Anzac Highway, the private road and reserve (PDC 5);
- the overall development has a unified design and expression ensuring the appearance from all roads, reserve and private road is of a high quality enhancing the amenity of the locality (PDC 12);
- the building has been highly articulated on all facades through the use of materials, built form and glazing so as to avoid extensive areas of uninterrupted walling (PDC 14);



- pedestrian access points have been emphasised and will be directly accessible from public street frontages, the reserve and also vehicle parking areas (PDC 15);
- service areas, rainwater tanks and loading areas have been locating behind the main façades, and screened from public view through the use of landscaping and built form (PDC 19);
- more than 10 percent of the site is landscaped with the potential to upgrade the reserve space subject to Council agreement (Landscaping, Fences and Walls PDC 4);
- landscaping has been utilised throughout the development (Landscaping, Fences and Walls PDC 1) to:
 - » enhance the appearance of the development when viewed from public areas and internally;
 - » complement, soften and reduce the apparent bulk and scale of buildings;
 - » screen car parking, service and loading areas;
 - » assist in managing climatic conditions (through limiting sun and wind exposure); and
 - » increase the permeability of the site;

We have reviewed the proposal against the relevant provisions of the Medium and High-rise Development section and note that:

- the development is contextual and responds to its surroundings, having regard to adjacent built form and character of the locality and the Desired Character for the Zone and Policy Area (Objective 3);
- the buildings have been designed to respond to key features of the prevailing local context within the same zone as the development (PDC 1);
- the appearance of the group dwellings and row dwellings provides variation in setbacks but maintains an overall coherent expression through the use of materials, repeated patterns, facade spacings and landscaping treatment (PDC 2);
- windows and doors, verandas and balcony elements have been used to provide variation of light and shadow and to contribute to a sense of depth in the building façades (PDC 3);
- a comfortable human scale at ground level is achieved through the use of elements such as variation in materials and form, building projections and elements that provide shelter and landscaping. The façades of the apartment buildings are also broken up into distinct elements to enhance the expression of the built form (PDC 4);
- the materials and finishes used are all durable and will age well to minimise ongoing maintenance requirements (PDC 6);
- the pedestrian link provides an attractive, high quality and pedestrian friendly frontage that is well landscaped with such landscaping extending across the building frontages to appropriately screen the car parking areas (PDC 8);
- the development in its entirety is universally accessible (PDC 11); and,
- all group dwelling and row dwellings have individual direct pedestrian access to Clifton Street, the private road and/or the reserve (PDC 12).



Overall, we believe the design and appearance of the development is appropriate in this particular context. The design represents a sensible height and scale transition, an integrated approach to housing diversity and a community benefit in the provision of a publicly accessible pedestrian link through the site.

5.4 BUILDING HEIGHT

The proposed development varies between two and five storeys. Policy Area PDC 5 envisages a maximum building height for the subject site of four storeys or 16.5 metres (measured from natural ground level).

The majority of the development has a height substantially less than four storeys or 16.5 metres. The East Apartment Block is the only building on the site that exceeds the maximum height being five storeys or 18.18 metres above natural ground level. We have calculated this height to the highest point of the building (stair and lift over-run lids) however it is important to note that the definition of building height in Schedule 1 of the *Development Regulations 2008* which provides:

building height means the maximum vertical distance between the natural or finished ground level at any point of any part of a building and the finished roof height at its highest point, ignoring any antenna, aerial, chimney, flagpole or the like

In our opinion, it is arguable whether the stair and lift over-run lids are to be included in the height calculation as they could fall under 'or the like'. If they were to be excluded from the calculation, the height of the building would be 17.8 metres which results in only a small exceedance of the maximum 16.5 metres. This exceedance represents only a 7.9% increase which in our opinion is minor in this particular context.

It is also important to consider the height of this building on the context of the overall development. The higher built form elements are appropriately sited towards Anzac Highway and the lower built form elements are appropriately sited towards the reserve which is located within the low density policy area. This approach also ensures that the lower scale dwellings along Creslin Terrace are not adversely affected in regard to building height, bulk and overshadowing. The height and scale transition across the site is consistent with the desired character statement.

5.5 HERITAGE PLACES

We have reviewed those provisions which relate to development adjacent to heritage places given that the building to the northeast is identified as a local heritage place. PDC 6 provides that development that 'materially affects' the context within which the heritage place is situated should be compatible with the heritage place.

We have formed the opinion that the development does not materially affect the context within which the heritage place is situated for the following reasons:

- the proposed development is separated from the local heritage place by some 14 metres;
- the proposed driveway is sited along the common boundary adjacent to the driveway of the heritage place to respect the nature of setback pattern;
- the design of the development does not seek to replicate historic detailing of the heritage place;
- the various elements of the development do not detract from the form and materials of the heritage place;



- given the scale of development contemplated in this part of the policy area and the proposed side setbacks to the common boundary (group dwellings and East Apartment Block) the historic character and visual prominence of the heritage place when viewed from Anzac Highway will be substantially maintained;
- the development PDC 6 also states that it is not necessary to replicate historic detailing, however design elements that should be compatible include, but are not limited to scale and bulk, width of frontage, boundary setback patterns, proportion and composition of design elements such as roof lines, openings, fencing and landscaping and the colour and texture of external materials.

For all the above reasons, we have formed the opinion that the proposed development substantially conforms with PDC 7 and PDC 8 to achieve a comfortable relationship with the heritage place.

5.6 APARTMENT AMENITY

Upon reviewing the relevant apartment amenity provisions of the Development Plan, we consider the key issues relate to natural ventilation and light, outlook, apartment size, private open space, storage and site facilities.

5.6.1 Natural Light and Ventilation

With respect to natural light and ventilation, all apartments have habitable rooms, windows and balconies designed and positioned with adequate separation and screening from one another to provide visual and acoustic privacy and which allow for natural ventilation and the infiltration of daylight into interior and outdoor spaces satisfying Medium and High-Rise Development PDC 14.

5.6.2 Outlook

The location of living rooms and balconies creates the opportunity for attractive outlooks and views whether these occur over public spaces or the landscaped private road which achieves Medium and High-Rise Development PDC 15 and 18.

Certain apartments would be able to obtain views of the sea and hills.

5.6.3 Apartment Size

The apartment buildings contain a range of apartment sizes and types (one and two bedroom including apartments designed to accommodate people with disabilities). Further, the group and row dwellings provide a three bedroom option to provide a full range of dwelling types across the site to support a diverse and integrated community. The size and range of dwelling types substantially conform with the intent of the relevant provisions to provide a high-quality living environment and high-level of amenity.

5.6.4 Private Open Space

All row and group dwellings provide private open space in accordance with Residential Development PDC 19 and all apartments achieve the minimum area of 8 square metres and minimum dimension of 2 metres for the provision of affordable/social housing in accordance with Policy Area PDC 7.



5.6.5 Storage

All apartments are provided with internal storage areas and/or access to corridor storage which is provided on each building level and/or the storage area within the ground level car park (East Apartment Block only).

All external apartment storage is conveniently located and screened from view from streets and neighbouring properties.

In our opinion, the proposed storage areas substantially conform with the relevant provisions of the Development Plan.

5.6.6 Site Facilities

Residential Development PDC 30 encourages group dwellings and residential flat buildings to provide various site facilities such as mail box facilities, bicycle parking and waste areas. All group dwellings (and for that matter the row dwellings) will be provided with individual mail boxes and provision for bicycle parking on-site. All bins will also be provided within each dwelling site.

Both residential flat buildings will be provided with a mail box facility within the ground level lobby and accessible bicycle parking for visitors.

5.7 SETBACKS

For this particular development, we have identified Anzac Highway as the primary road frontage for the apartment buildings and Clifton Street as the primary road frontage for the row dwellings. The group dwellings have a frontage to the private road, a rear setback to the reserve and a secondary frontage to Clifton Street.

According to Policy Area PDC 5 the row dwellings all satisfy the primary road setback of 3 metres. The row dwellings are setback 3 metres from their rear boundary which is within the recommended 4 metres however approximately 40% of the rear façade is setback greater than 4 metres which provides articulation and variation across these dwelling types.

The residential flat buildings substantially accord with PDC 5 with the exception of the balcony elements and the eastern corner of the East Apartment Block. In our opinion, the encroachments within the 3 metre setback are not fatal in consideration of the articulation created by these particular built form elements and the benefits associated with passive surveillance by bringing the balconies closer to the Anzac Highway footpath. In our opinion, the width of Anzac Highway and in particular the wide footpath can handle the proposed massing. The East Apartment Block is setback 5.3 metres from the side boundary (northeast) which is considered acceptable in the absence of any criteria within PDC 5 and the substantial setback to the adjacent local heritage place.

The group dwellings are setback greater than 3 metres from the private road and greater than 1 metre from Clifton Street however are within the recommended 4 metre rear setback. PDC 5 does not stipulate a side setback therefore we have referred to Zone PDC 11 which seeks a 2 metre side setback in these circumstances. The eastern most group dwelling is setback within 2m of the northeast side boundary.

The eastern block of group dwellings are all setback beyond 4 metres from the rear boundary with the exception of predominantly the balcony element. We do not consider this encroachment detrimental in recognition of the adjacency of the reserve and the passive surveillance benefits.



We also do not consider the side boundary setback fatal given that a previous building was sited on the common boundary and the new building will not present any overshadowing impacts upon the adjacent property. The adjacent property is also non-residential in nature.

Overall, we are of the opinion that the siting of the development is appropriate in relation to surrounding land.

5.8 CAR PARKING, TRAFFIC AND ACCESS

5.8.1 Car Parking

With respect to car parking the following rates are applicable to each component of the development:

- Row dwellings – 2 car spaces, one of which is covered (Table WeTo/2);
- Group dwellings – 2 car spaces, one of which is covered plus 0.25 visitor car spaces per dwelling (Table WeTo/2); and
- Residential flat buildings – 1 car space where affordable housing is being provided (Policy Area PDC 7).

Based on these rates, each component of the development should provide the following:

- Row dwellings – 2 resident car spaces each;
- Group dwellings – 2 resident car spaces each plus a total of 3 visitor car spaces; and
- Residential flat building – 1 resident car space each where affordable/social housing is being provided.

The row dwellings satisfy the relevant car parking rate.

The group dwellings satisfy the resident car parking rate however do not provide any on-site visitor car parking. In our opinion, the three visitor car spaces could be accommodated within Creslin Terrace which will have direct access into the development and the group dwellings through the reserve and the publicly accessible link. The also has the benefit of keeping the open space active, enhancing passive surveillance.

With respect to the residential flat buildings it is important to note that the West Apartment Block will be managed by Junction Australia for the purpose of providing 100% social housing. This means that all 15 apartments will be occupied by low or moderate income persons, people with particular needs (including two apartments designed specifically for people with disabilities) or people who experience barriers toward long term sustainable housing, where rent is based on a percentage of income received. In our opinion, the type of housing provided by Junction Australia is defined as 'affordable'.

Junction Australia have assessed the car parking demands across other sites under their management in April 2019.

This assessment found that approximately 75% of residents own a vehicle which is parked on site. The remaining 25% do not own a vehicle. In our opinion, this would not be uncharacteristic for this type of housing given the low income of residents and the social characteristics of the housing developed by Junction Australia. If a similar percentage of residents were to own a car in this particular residential flat building then a total of 12 car spaces would be required to support likely occupant needs.



The East Apartment Block which will comprise of 100% affordable housing. The 24 apartments will therefore generate a demand for 24 car spaces.

The overall demand generated by the residential flat buildings will be 36 car spaces. The car parking areas under each apartment block provide a total of 35 car spaces which represents a shortfall of one car space.

In our opinion, the shortfall is minor in consideration of the following:

- there are a total of four one bedroom apartments that will be offered as affordable housing and it is likely that at least one will be occupied by a person that will not require a car space;
- the site is well serviced by public transport with a bus stop adjacent the front of the site on Anzac Highway which is a go-zone with a maximum wait of 15 minutes between 7:30am and 6:30pm from Monday to Friday;
- the site is located approximately 600 to 700 metres walking distance from the Adelaide to Glenelg tram (Stops 11 and 12) which is serviced every 10 minutes between 7:00am – 7:00pm on weekdays, 7:00am – 6:00pm on weekends and up to 20 minutes outside of these times;
- the Westside Bikeway, which is a shared path for pedestrians and cyclists is located within the adjacent reserve providing a link between Glenelg and Adelaide;
- the site is located within close proximity to the Mike Turtur Bikeway along the Adelaide to Glenelg Tram corridor located to the south of Anzac Highway; and
- bicycle lanes operate on Anzac Highway between 7:00am – 9:00am (Adelaide bound) and 4:30pm and 6:00pm (Glenelg bound).

In consideration of all the above we are of the opinion that the proposed development provides sufficient car parking in recognition of PDC 44 which provides:

PDC 44 On-site vehicle parking should be provided having regard to:

- (a) *the number, nature and size of proposed dwellings*
- (b) *proximity to centre facilities, public and community transport within walking distance of the dwellings*
- (c) *the anticipated mobility and transport requirements of the likely occupants, particularly groups such as aged persons.*

[underline emphasis added]

GTA Consultants have confirmed that the proposed internal layout is consistent with the Australian Standards for Off-Street Car Parking (AS2890.1:2004) and the Australian Standards for Parking for People with Disabilities (AS2890.6:2009).

5.8.2 Traffic

According to GTA Consultants, the total traffic generation of the site would be very low. When considering existing traffic volumes in the vicinity of the site, the addition of 28 trips during the peak hours onto the road network is considered negligible. Therefore, the traffic generated by the proposed development could not be expected to compromise the safety or function of the surrounding road network.



GTA Consultants have also assessed the waste collection movements. Refuse collection for the group dwellings will be undertaken by a vehicle up to 10 metres long. Residents of the group dwellings would be required to move their bins within one of the two separate areas for standard side loading.

The row dwellings fronting Clifton Street would store their bins along the street for collection which is consistent with standard practice.

Collection for the apartments will occur within the same waste areas however on a separate day to minimise conflict with collection for the group dwellings.

The turn path diagrams prepared by GTA Consultants confirm that there will be no conflict between a waste truck and resident vehicles.

With respect to the above we are comfortable with the overall traffic impact.

5.8.3 Access

The proposed development includes a private one-way road with an entry on Anzac Highway and exit on Clifton Street. The layout is the result of various discussions with DPTI and Council to develop an appropriate access arrangement for the site.

The Anzac Highway access point has been located as far east as possible away from the Clifton Street junction, a bus stop and U-turn median opening on Anzac Highway. The access point has been designed to provide separation to an entry driveway for the neighbouring site; existing infrastructure in the verge including a stobie pole and stormwater pit; and to provide a refuge between driveways for pedestrians.

The Clifton Street egress point is located approximately 17 metres south of the Gunnawarra Avenue/Clifton Street intersection and according to GTA Consultants satisfies AS2890.1:2004 as the location is outside of the prohibited zone.

5.8.4 Bicycle Parking

Each of the group dwellings and row dwellings have sufficient space to accommodate a bicycle within their respective properties including with the garage.

For the residential flat buildings, the following rates apply.

Table 5.2 *Bicycle parking rates*

Form of Development	Resident	Visitor
Residential flat building	1 for every 4 dwellings	1 for every 10 dwellings

Based on these rates, the East Apartment Block should provide 6 resident spaces and 2.4 visitor spaces. The West Apartment Block should provide 3.75 resident spaces and 1.5 visitor spaces.

Each apartment block has been provided with dedicated bicycle parking to satisfy the residential demands. Further, an opportunity exists for residents to have a 'cycloc' hanging system within their apartment should they prefer to store their bicycle within their apartment.

All visitor spaces are contained at the front of the residential flat building in the form of bicycle racks.



5.9 OVERSHADOWING

The provisions relating to overshadowing relate to existing dwellings or existing dwellings on adjacent allotments (see Residential PDC 11 and 12).

Whilst these provisions do not strictly apply to the proposed development it is important to understand the intent of these provisions.

Residential Development PDC 11 encourages development to ensure that north-facing windows to habitable rooms of existing dwelling(s) on the same allotment, and on adjacent allotments, receive at least 3 hours of direct sunlight over a portion of their surface between 9.00 am and 5.00 pm on the 21st June.

Residential PDC 12 encourages development to ensure that ground-level open space of existing buildings receives direct sunlight for a minimum of two hours between 9.00 am and 3.00 pm on 21 June to at least the smaller of the following:

- (a) half of the existing ground-level open space; and
- (b) 35 square metres of the existing ground-level open space (with at least one of the area's dimensions measuring 2.5 metres).

We have reviewed the shadow diagrams prepared by Hames Sharley and it is apparent to us that the orientation and location of the subject site means that the majority of overshadowing will occur on Anzac Highway. No surrounding residential properties will be detrimentally affected.

It is apparent to us that all group and row dwellings will receive adequate direct sunlight during the morning and/or afternoon hours satisfying the intent of the relevant provisions.

5.10 OVERLOOKING

Due to the location of the site and the siting, design and relationship between buildings we are of the opinion that there is a very low likelihood of any overlooking of surrounding residential properties and within the development itself achieving all relevant Development Plan provisions.



6. CONCLUSION

The proposed development will deliver a number of significant benefits to the area. These benefits include, but are not limited to the following:

- transforming a vacant site into a 'tenure-blind' mixed residential development;
- creating a socially integrated community through quality spaces, building design and linkages with the surrounding area;
- delivering high quality urban design that transforms the current urban plan;
- creating greater housing diversity, connected streetscapes and potentially an upgraded public reserve;
- delivering innovative stormwater drainage;
- offering contemporary and innovative social and affordable living opportunities;
- potentially enhancing and delivering an improved community space with direct linkages to the site; and
- presenting no adverse impacts upon the character or amenity of the locality.

In our opinion, these benefits strike a chord with the relevant provisions of the Development Plan.

Accordingly, the proposal warrants Development Plan Consent.



APPENDIX 1. ARCHITECTURAL DESIGN



APPENDIX 2. LANDSCAPE PLAN



APPENDIX 3. TRAFFIC IMPACT STATEMENT



APPENDIX 4. WASTE MANAGEMENT PLAN




APPENDIX 5. STORMWATER MANAGEMENT PLAN






SITE LOCALITY
NOT TO SCALE




SITE LOCALITY
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

Status:
Path: C:\Users\lvadnere\Documents\31676 - ANZAC Highway\lvadnere.rvt


Scale: 1:100 @ A1
0 8
© Hames Sharley

North: 

Project Number: 31676
Drawing Number: SD0002
Revision: A
Date: 06/28/18







STAGING
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

Status:
Path:


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Scale: 1:200 @ A1


0 16

Hames Sharley

North:



Project Number: 31676
Drawing Number: SD0004
Revision:
Date: 16/11/18





	VIEW SOUTH WEST JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY	Status: Path: C:\Users\m.steele\Documents\31676 - ANZAC Highway_M.Steele@hamesharley.com.au\nt	Scale: 1:200 @ A1 0 16 © Hames Sharley:	North: 	Project Number: 31676 Drawing Number: SD005 Revision: Date: 16/11/18	
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NORTH EAST



SOUTH EAST



SOUTH WEST



	GENERAL - BIRDSEYE VIEWS AND PERSPECTIVES JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY	Status: Path: C:\Users\m.steele\Documents\31676 - ANZAC Highway_M.Steele@hamesharley.com.au\nt	Scale: 1:100 @ A1 0 8 © Hames Sharley:	North: 	Project Number: 31676	
					Drawing Number: SD0001 Revision: C Date: 06/28/12	



SITE PLAN - TRAFFIC & PEDESTRIAN MOVEMENT
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

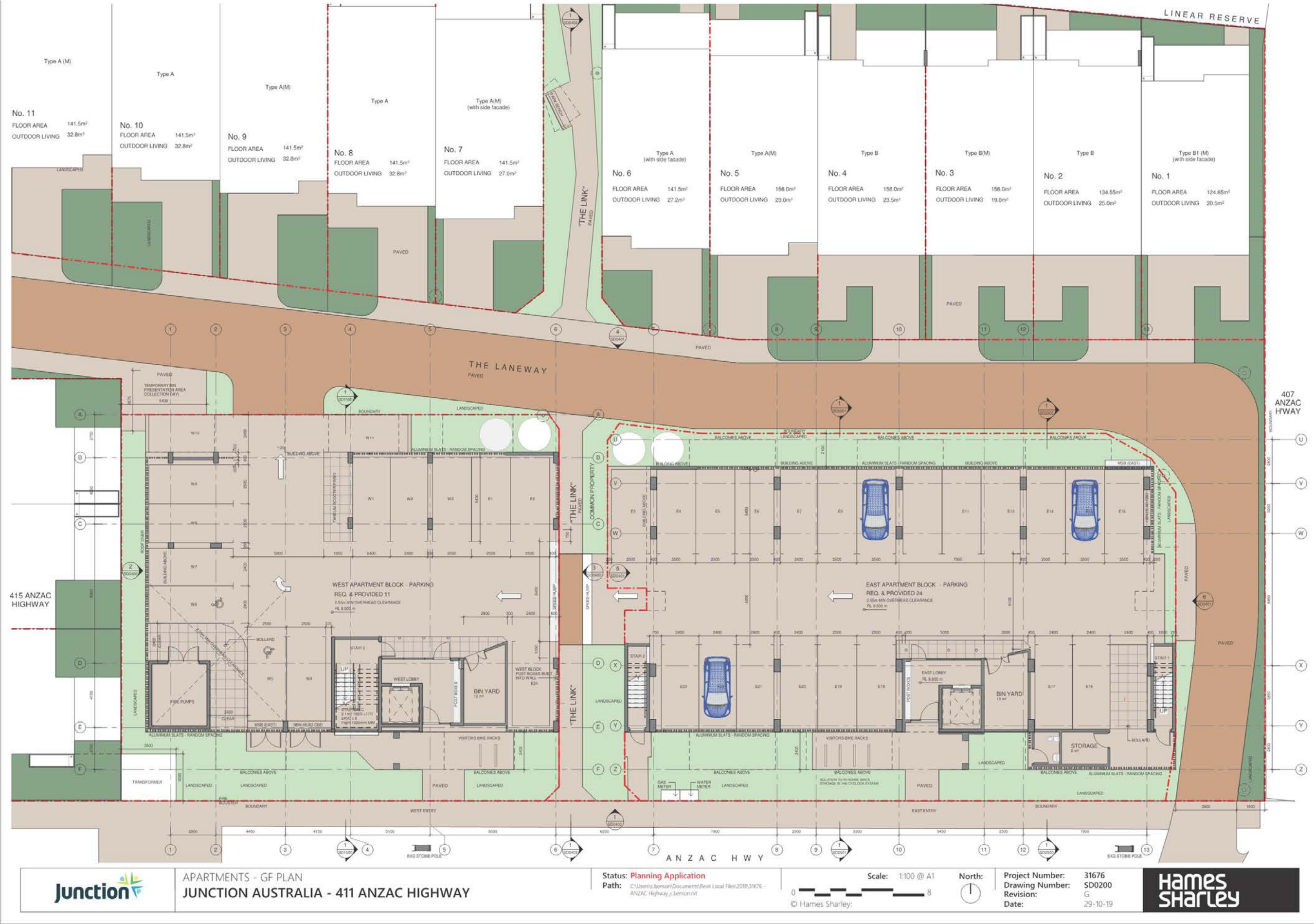
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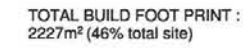
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Project Number: 31676
Drawing Number: SD0106
Revision: D
Date: 29-10-19







HAMES
SHARLEY



TOWN HOUSE TYPE 'A' - ELEVATIONS
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

Status: **Planning Application**
Path: C:\Users\c.benson\Documents\Revit Local Files\2018\31676 - ANZAC Highway_c.benson.rvt

Scale: 1:100 @ A1
0 8
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Project Number: 31676
Drawing Number: SD3200
Revision: D
Date: 29-10-19

Hames Sharley



TOWN HOUSE TYPE 'A' - FLOOR PLANS
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

Status: **Planning Application**
Path: C:\Users\c.benson\Documents\Revit Local Files\2018\31676 - ANZAC Highway_c.benson.rvt

Scale: 1:50 @ A1
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© Hames Sharley



Project Number: 31676
Drawing Number: SD3100
Revision: F
Date: 29-10-19

Hames Sharley



TOWN HOUSE TYPE 'B' - ELEVATIONS
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

Status: Planning Application
Path: C:\Users\c.benson\Documents\Revit Local Files\2018\31676 - ANZAC Highway_c.benson.rvt

Scale: 1:100 @ A1
0 8
© Hames Sharley



Project Number: 31676
Drawing Number: SD3500
Revision: D
Date: 29-10-19

Hames
Sharley



TOWN HOUSE TYPE 'B' - FLOOR PLANS
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

Status: **Planning Application**
Path: C:\Users\c.benson\Documents\Revit Local Files\2018\31676 - ANZAC Highway_c.benson.rvt

Scale: 1:50 @ A1
0 4
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Project Number: 31676
Drawing Number: SD3400
Revision: F
Date: 29-10-19



TMK CONSULTING ENGINEERS

1811249_SMR-PA

24 April 2019



STORMWATER MANAGEMENT REPORT

PROPOSED DEVELOPMENT
411 ANZAC HIGHWAY
CAMDEN PARK SA

prepared for

JUNCTION AUSTRALIA



Civil - Structural - Environmental - Geotechnical - Mechanical - Electrical - Fire - Hydraulics - Lifts - Green ESD
Level 6, 100 Pirie Street, Adelaide SA 5000 Telephone (08) 8238 4100 Facsimile (08) 8410 1405
Berri Office: 25 Vaughan Terrace, Berri SA 5343
Email: tmksa@tmkeng.com.au



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Our Ref: 1807057_SMR-PA
24 April 2019

Junction Australia
168 Greenhill Rd
PARKSIDE SA 5063

ATTENTION: BRAD MCKENZIE
[bmckenzie@junctionaustralia.org.au]

Email: Brad McKenzie

Dear Brad,

**RE: STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 ANZAC HIGHWAY, CAMDEN PARK SA**

TMK Consulting Engineers is pleased to present a PDF copy of our Stormwater Management Plan for the above project. This report has been prepared to comply with the following relevant SAA Standards and Guides:

- ARRB Special Report 35: *Subsurface drainage of road structures*;
- Australian Rainfall and Runoff, Volumes 1 & 2: *A guide to flood estimation*;
- Australian Runoff Quality: *A guide to water sensitive urban design*;
- Storm Drainage Design in Small Urban Catchments: *A handbook for Australian practice*;
- *Water Sensitive Urban Design (WSUD) Technical manual for the greater Adelaide region*;
- *Urban Stormwater Best Practice Environmental Management Guidelines*.

This report must be read in conjunction with all attachments. Changes to the design or construction must not be made without further written advice from the Engineer.

This report is valid for a period of 24 months, based on current standards and regulations.

If you require further information or clarification regarding any aspect of this report, please do not hesitate to contact the undersigned.

For and on behalf of
TMK Consulting Engineers

ROBERT PIRONE
Senior Civil Design Technical Officer



Civil - Structural - Environmental - Geotechnical - Mechanical - Electrical - Fire - Hydraulics - Lifts - Green ESD
Level 6, 100 Pirie Street, Adelaide SA 5000 Telephone (08) 8238 4100 Facsimile (08) 8410 1405
Berris Office: 25 Vaughan Terrace, Berris SA 5343 Email: tmksa@tmkeng.com.au



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24 April 2019



STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 Anzac Highway, Camden Park SA

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Our Ref: 1807057_SMR-PA
24 April 2019



STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 Anzac Highway, Camden Park SA

1 INTRODUCTION

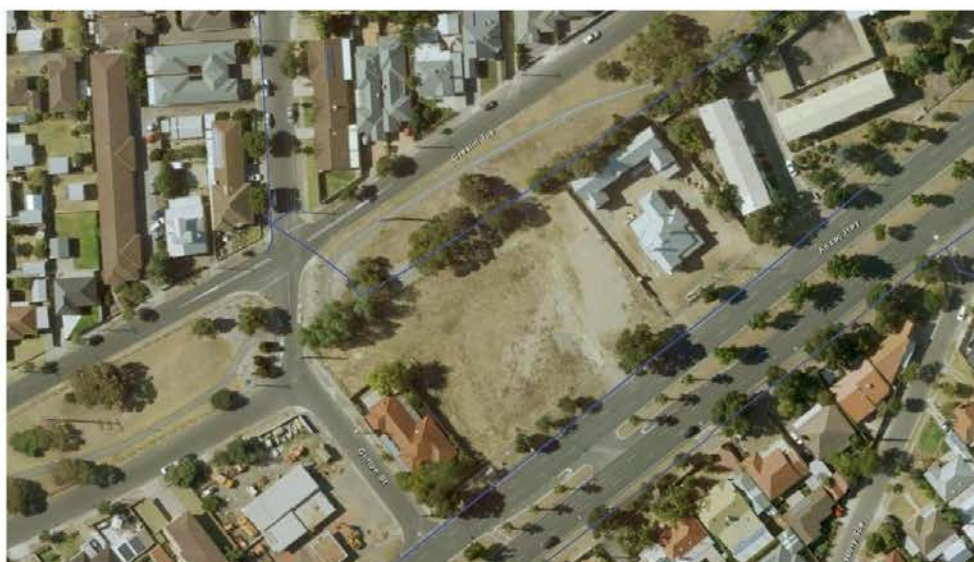
1.1 Overview

The subject site as noted in image below is located at 411 Anzac Highway, Camden Park on the corner of Clifton St. The site is approx 4,800m² with a relatively flat topography. The site is located within the City of West Torrens council zone. A council park is located adjacent to the site to the north with the main city to Glenelg bike way passing through.



1.2 Existing Stormwater Drainage Network

There appears to be an existing storm water pipe located to the north of the site, running parallel with the northern boundary then flowing to the north across Creslin Tce. An SEP is located at the intersection of Creslin Tce & Clifton St. There also appears to be a storm water pipe located to the south of the site along Anzac Hwy. This appears to run downhill towards Glenelg. There are three SEP's located along the allotment frontage that discharge into this pipe.



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STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 Anzac Highway, Camden Park SA

2 STORMWATER OBJECTIVES AND STRATEGIES

2.1 Stormwater Objectives

The majority of the site is currently vacant with only one existing residence currently on the site. Council requires post-development flows from a 1:20 Yr ARI storm event to be limited to pre-development flows from a 1:20 Yr ARI storm event of a 0.25 coefficient.

2.2 Stormwater Management Strategies

Design for storm water detention has been split into two catchments A & B.

Catchment A comprises of the community titled allotment only. Within this catchment 50% of post development roof areas (Apartment roof only), is to be directed into detention storage along with 85% of the post development paved and landscaped areas. The remaining 50% roof runoff (Townhouses) & 15% of paved and landscaped areas will be discharged un-detained.

Catchment B comprises of the 3 Torrens titled allotments. The entire roof area from these three allotments is to be directed into detention storage.

All storm water directed into detention storage is to be discharged into council infrastructure at Anzac Highway. All un-detained runoff (ie Townhouses) is to be discharged into council infrastructure to the north of the site via SEP at Creslin Tce & Clifton St.

Detention storage has been provided in the form of a 'Rocla' Box Culvert OSD System combined with two bio-retention swales to hold the 27kL required for detention storage.

2.2.1 The Conventional Underground Drainage System

A 'Rocla' Box Culvert OSD system (15.55kL) has been proposed as part of the underground storage network.

2.2.2 Bio-Retention Trench

Bio-retention trenches have been designed & sized to cater for the balance of the detention storage. Storage within both trenches is approx 12kL. Bio-retention trenches will serve as a Water Sensitive Urban Design method in accordance with council requirements.

2.2.3 Rainwater Tanks

The three Torrens title allotments contain 2kL above ground tanks each with 1kL dedicated for retention use & the remaining 1kL for detention storage. The townhouses located within the community titled allotment each contain a 1kL tank for retention use.

2.2.4 Overland Flow Path

The overland flow path will flow to the west of the site & out to Clifton St.

2.3 Stormwater Volume Summary

CATCHMENT A	
o Box Culvert	15.55kL
o Bio-retention swale	12.00kL
Total	27.55kL
CATCHMENT B	
o Tanks Total	3.00kL

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STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 Anzac Highway, Camden Park SA

3 STORMWATER MODELLING AND ASSESSMENT

3.1 Pre vs Post Development Flow Calculations

3.1.1 Catchment A

The allowable pre-development flow rate from the catchment for a 1:20 Yr ARI, 5 Min storm duration is 27.86L/sec.

STORMWATER CALCULATIONS - DETERMINATION OF DETENTION TANK SIZES

Design Storm Intensity Table (mm/hr) - (from <http://www.bom.gov.au/cgi-bin/hydro/has/CDIRSWebBasic>)

STORM LOCATION Adelaide

Latitude 34°59'S; Longitude 138°44'E

Adelaide

DURATION	AVERAGE RETURN INTERVAL (YEARS)						
	1	2	5	10	20	50	100
5 mins	52.80	69.00	89.40	104.00	123.00	151.00	175.00
6 mins	49.10	64.50	83.50	96.70	115.00	141.00	163.00
10 mins	39.80	52.00	66.00	77.10	91.30	112.00	129.00
20 mins	28.30	36.80	46.80	53.40	62.80	76.20	87.30
30 mins	22.70	29.40	37.10	42.30	49.50	59.80	68.30
1 hour	15.20	19.70	24.60	27.90	32.50	39.00	44.40
2 hours	10.10	13.00	16.20	18.30	21.20	25.40	28.90
3 hours	7.92	10.20	12.70	14.30	16.60	19.90	22.50
6 hours	5.24	6.75	8.37	9.44	11.00	13.10	14.90
12 hours	3.45	4.44	5.52	6.23	7.23	8.65	9.83
24 hours	2.22	2.86	3.58	4.05	4.72	5.66	6.44
48 hours	1.38	1.78	2.24	2.55	2.98	3.60	4.11
72 hours	1.02	1.32	1.67	1.90	2.23	2.70	3.10

PRE-DEVELOPMENT

Design ARI (yr)		20 yr	
Design Duration (min)		10 min	
Design Storm Intensity (mm/hr)		91.30 mm/hr	
Design Parameters	C	Area (m ²)	% Area Detained
Roof	0.90	0	0.00
Paving	0.75	0	0.00
Grass / Landscaping	0.25	4394	0.00
	Total Area	4394 m ²	
Weighted C (C _w)*	0.25		

Max pre-development flow $Q_p = \Sigma(C_i A_i / 3600)$:

Roof	0.00 L/s
Paving	0.00 L/s
Grass / Landscaping	27.86 L/s

Pre-development flow = 27.86 L/s

Use Max Allowable Flow = 27.86 L/s

Note: The weighted average value of the runoff coefficient, C_w, includes roof, paving, grassed and landscaped areas of the site.

POST-DEVELOPMENT (*Determine Critical Storm)

Design ARI (yr)		20 yr	
Design Duration (min)		45 min	
Design Storm Intensity (mm/hr)		41.00 mm/hr	
Design Parameters	C	Area (m ²)	% Area Detained
Roof	0.90	2080	50.00
Paving	0.75	1330	85.00
Grass / Landscaping	0.15	984	85.00
	Total Area	4394 m ²	
Weighted C (C _w)*	0.69		

Summary of Design Flows

Undetained flow, $Q_u = \Sigma(C_i A_i / 3600)$:

Roof	10.66 L/s
Paving	1.70 L/s
Grass / Landscaping	0.25 L/s

Design undetained flow = 12.62 L/s

Max. outflows from detention tanks:

Site water runoff	
Pumped	0.00 L/s
Piped	0.00 L/s
Roof water runoff	
Orifice-restricted	15.17 L/s

Total Max. Design Outflow = 27.78 L/s

< 27.86 L/s Allowed ∴ OK

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STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 Anzac Highway, Camden Park SA

STORMWATER CALCULATIONS - STORMWATER RUN-OFF - ORIFICE-RESTRICTED

Time of Concentration, T_c

Design Storm ARI (yr) 20 yr (from page SW1)
Design Storm Duration (mins) 45 mins (from page SW1)
Design Storm Intensity, i 41.00 mm/hr (from page SW1)
=> For run-off calculations, use $T_c =$ 10.0 mins <=Duration ∴ Use $T_c = 10$ mins.

Design Parameters	C	Area (m ²)	% Area Detained
Roof	0.90	2080	50.00
Paving	0.75	1330	85.00
Grass / Landscaping	0.15	984	85.00

Detained flow, $Q_d = \Sigma(CiA_d/3600)$:

Roof	10.66 L/s
Paving	9.66 L/s
Grass / Landscaping	1.43 L/s
Design detained flow =	<u>21.75 L/s</u>

=> Try the following retention tank design parameters:

Max Allowable outflow from storage =	<u>15.25 L/s</u>	(0.00 L/s is still available for outflow)
Number of orifice detention tanks	1	Each tank volume above orifice 26,815 L
Max. head allowed above orifice	950 mm	=> Each Tank Plan Area = 28.23 m ²
Outlet coefficient, C_o	0.6	
Orifice diameter, D_o	87 mm	=> Orifice area, $A_o = \pi(D_o/2)^2$ 5,945 mm ²

Graph Time v Flow:

Time (mins)	InFlow (L/s)	OutFlow (L/s)
0	0.00	0.00
10	21.75	5.72
45	21.75	14.93
55	0.00	14.38

Max. Calculated Outflow:

$Q_{max_{out}} = 15.17$ L/s
< 15.25 L/s Max. Allowed ∴ OK

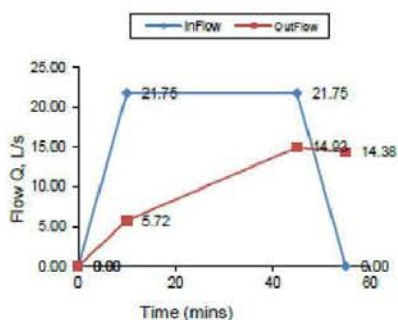
Max. Calculated Head of Water:

$H = 950$ mm
< 950 mm Max. Allowed ∴ OK

=> Volume of Water To Be Detained:

$V = 26,813$ L
i.e. $V = 26.81$ m³

=>USE



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STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 Anzac Highway, Camden Park SA

3.1.2 Catchment B

The allowable pre-development flow rate from the catchment for a 1:20 Yr ARI, Critical storm duration is 2.86L/sec.

STORMWATER CALCULATIONS - DETERMINATION OF DETENTION TANK SIZES

Design Storm Intensity Table (mm/hr) - (from <http://www.bom.gov.au/cgi-bin/hydro/has/CDIRSWebBasic>)

STORM LOCATION Adelaide



Latitude 34°59'S; Longitude 138°44'E

Adelaide

DURATION	AVERAGE RETURN INTERVAL (YEARS)						
	1	2	5	10	20	50	100
5 mins	62.60	69.00	89.40	104.00	123.00	151.00	175.00
6 mins	49.10	64.50	83.50	96.70	115.00	141.00	163.00
10 mins	39.80	52.00	66.90	77.10	91.30	112.00	129.00
20 mins	28.30	36.80	46.80	53.40	62.80	76.20	87.30
30 mins	22.70	29.40	37.10	42.30	49.50	59.80	68.30
1 hour	15.20	19.70	24.60	27.90	32.50	39.00	44.40
2 hours	10.10	13.00	16.20	18.30	21.20	25.40	28.90
3 hours	7.92	10.20	12.70	14.30	16.60	19.90	22.50
6 hours	5.24	6.75	8.37	9.44	11.00	13.10	14.90
12 hours	3.45	4.44	5.52	6.23	7.23	8.65	9.83
24 hours	2.22	2.86	3.58	4.05	4.72	5.66	6.44
48 hours	1.38	1.78	2.24	2.55	2.98	3.60	4.11
72 hours	1.02	1.32	1.67	1.90	2.23	2.70	3.10

PRE-DEVELOPMENT

Design ARI (yr) 20 yr
Design Duration (min) 10 min
Design Storm Intensity (mm/hr) 91.30 mm/hr

Design Parameters	C	Area (m ²)	% Area Detained
Roof	0.90	0	0.00
Paving	0.75	0	0.00
Grass / Landscaping	0.25	451	0.00
Total Area		451 m²	
Weighted C (C _w) [*]	0.25		

Max pre-development flow $Q_p = \Sigma(C_i A_i / 3600)$:

Roof	0.00 L/s
Paving	0.00 L/s
Grass / Landscaping	2.86 L/s

Pre-development flow = 2.86 L/s

Use Max Allowable Flow = 2.86 L/s

Note: The weighted average value of the runoff coefficient, C_w, includes roof, paving, grassed and landscaped areas of the site.

POST-DEVELOPMENT (*Determine Critical Storm)

Design ARI (yr) 20 yr
Design Duration (min) 45 min
Design Storm Intensity (mm/hr) 41.00 mm/hr

Design Parameters	C	Area (m ²)	% Area Detained
Roof	0.90	220	100.00
Paving	0.75	138	0.00
Grass / Landscaping	0.15	93	0.00
Total Area		451 m²	
Weighted C (C _w) [*]	0.70		

Summary of Design Flows

Undetained flow, $Q_u = \Sigma(C_i A_u / 3600)$:

Roof	0.00 L/s
Paving	1.18 L/s
Grass / Landscaping	0.16 L/s

Design undetained flow = 1.34 L/s

Max. outflows from detention tanks:

Site water runoff	
Pumped	0.00 L/s
Piped	0.00 L/s
Roof water runoff	
Orifice-restricted	1.47 L/s

Total Max. Design Outflow = 2.81 L/s

< 2.86 L/s Allowed ∴ OK

Our Ref: 1807057_SMR-PA
24 April 2019



STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 Anzac Highway, Camden Park SA

STORMWATER CALCULATIONS - STORMWATER RUN-OFF - ORIFICE-RESTRICTED

Time of Concentration, T_c

Design Storm ARI (yr) 20 yr (from page SW4)
Design Storm Duration (mins) 45 mins (from page SW4)
Design Storm Intensity, i 41.00 mm/hr (from page SW4)
=> For run-off calculations, use $T_c =$ 10.0 mins <=Duration ∴ Use $T_c = 10$ mins.

Design Parameters	C	Area (m ²)	% Area Detained
Roof	0.90	220	100.00
Paving	0.75	138	0.00
Grass / Landscaping	0.15	93	0.00

Detained flow, $Q_d = \Sigma(CiA_d/3600)$:

Roof	2.26 L/s
Paving	0.00 L/s
Grass / Landscaping	0.00 L/s
Design detained flow =	<u>2.26 L/s</u>

=> Try the following retention tank design parameters:

Max Allowable outflow from storage =	<u>1.52 L/s</u>	(0.00 L/s is still available for outflow)
Number of orifice detention tanks	3	Each tank volume above orifice 1,000 L
Max. head allowed above orifice	1,450 mm	=> Each Tank Plan Area = 0.69 m ²
Outlet coefficient, C_o	0.6	
Orifice diameter, D_o	14 mm	=> Orifice area, $A_o = \pi(D_o/2)^2$ 154 mm ²

Graph Time v Flow:

Time (mins)	InFlow (L/s)	OutFlow (L/s)
0	0.00	0.00
10	2.26	0.58
45	2.26	1.44
55	0.00	1.41

Max. Calculated Outflow:

$Q_{max,out} = 1.47$ L/s

< 1.52 L/s Max. Allowed ∴ OK

Max. Calculated Head of Water:

$H = 1,420$ mm

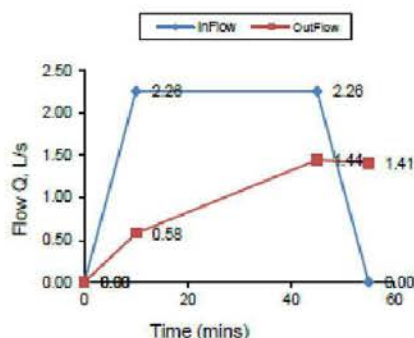
< 1,450 mm Max. Allowed ∴ OK

=> Volume of Water To Be Detained:

$V = 2,939$ L

i.e. $V = 2.94$ m³

=>USE



Our Ref: 1807057_SMR-PA
24 April 2019



STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 Anzac Highway, Camden Park SA

3.1.3 Catchment Plan



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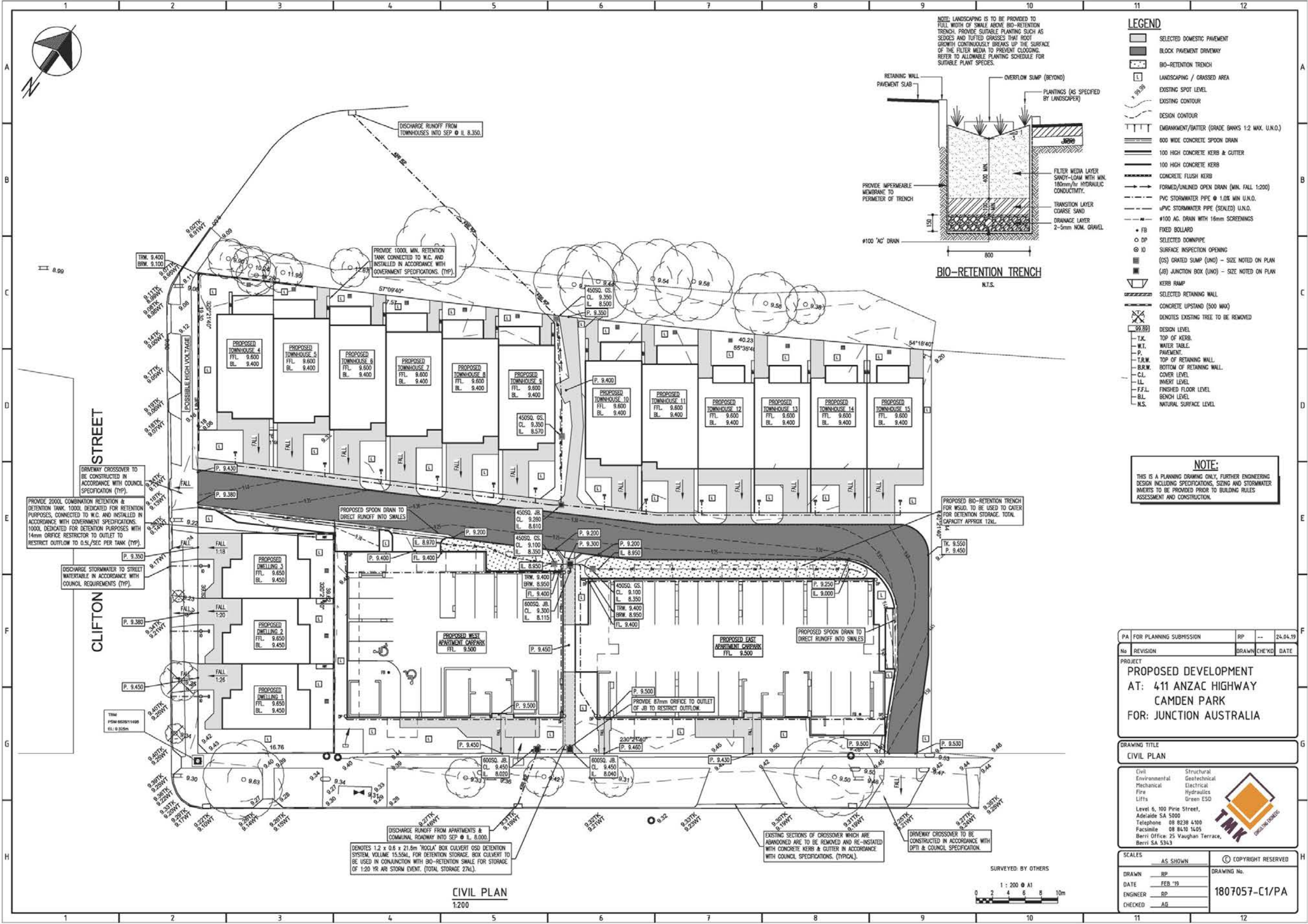
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24 April 2019

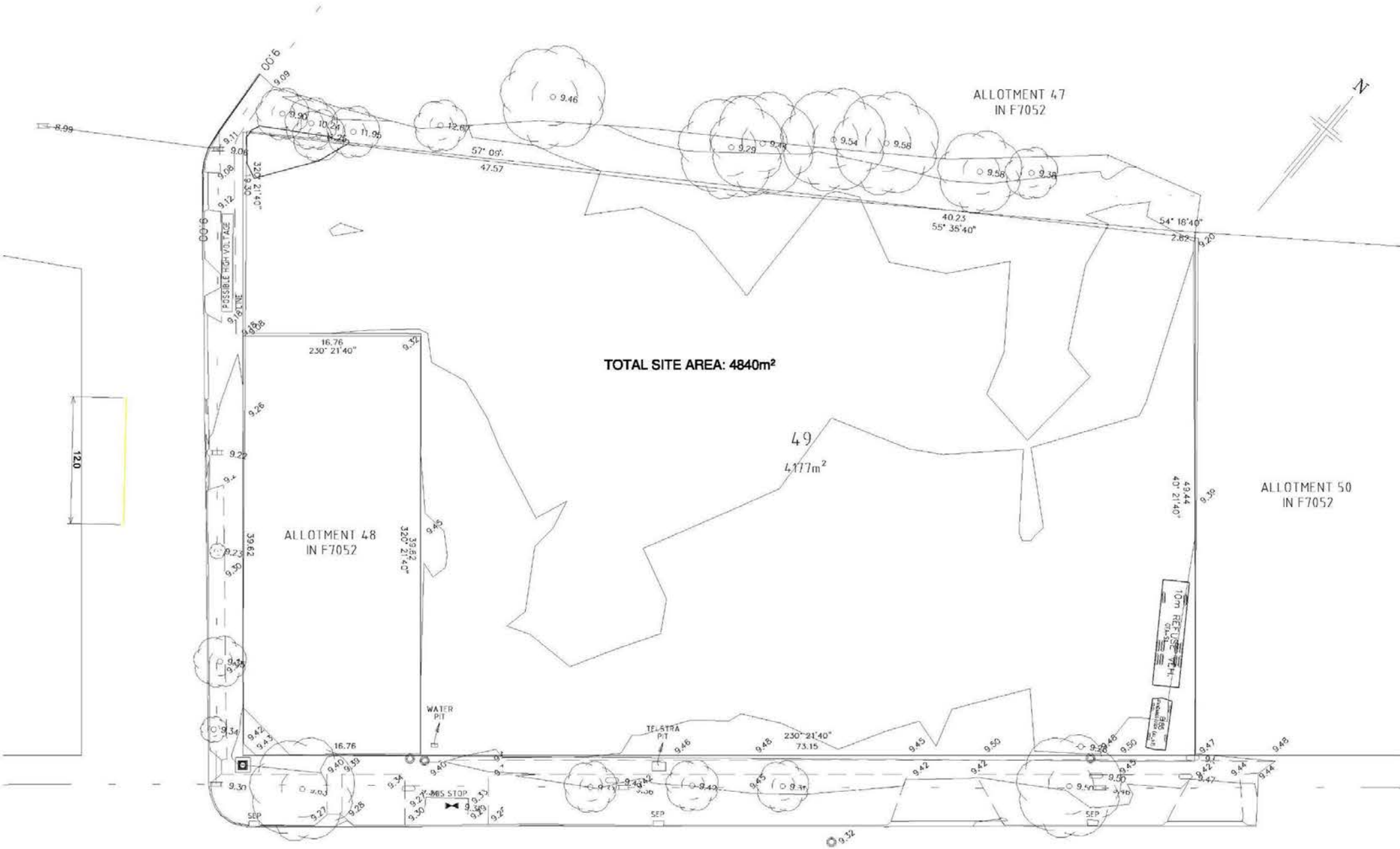






STORMWATER MANAGEMENT PLAN
PROPOSED DEVELOPMENT
411 Anzac Highway, Camden Park SA

APPENDIX A: Civil Plan

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	SURVEY PLAN JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY	Status: Path: C:\Users\lvdhron\Documents\31676 - ANZAC Highway\lvdhron.rvt	 Scale: 1:200 @ A1 © Hames Sharley.	 North:	Project Number: 31676	
					Drawing Number: SD0101	
					Revision: A	
					Date: 16/11/18	

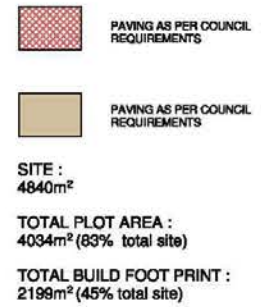
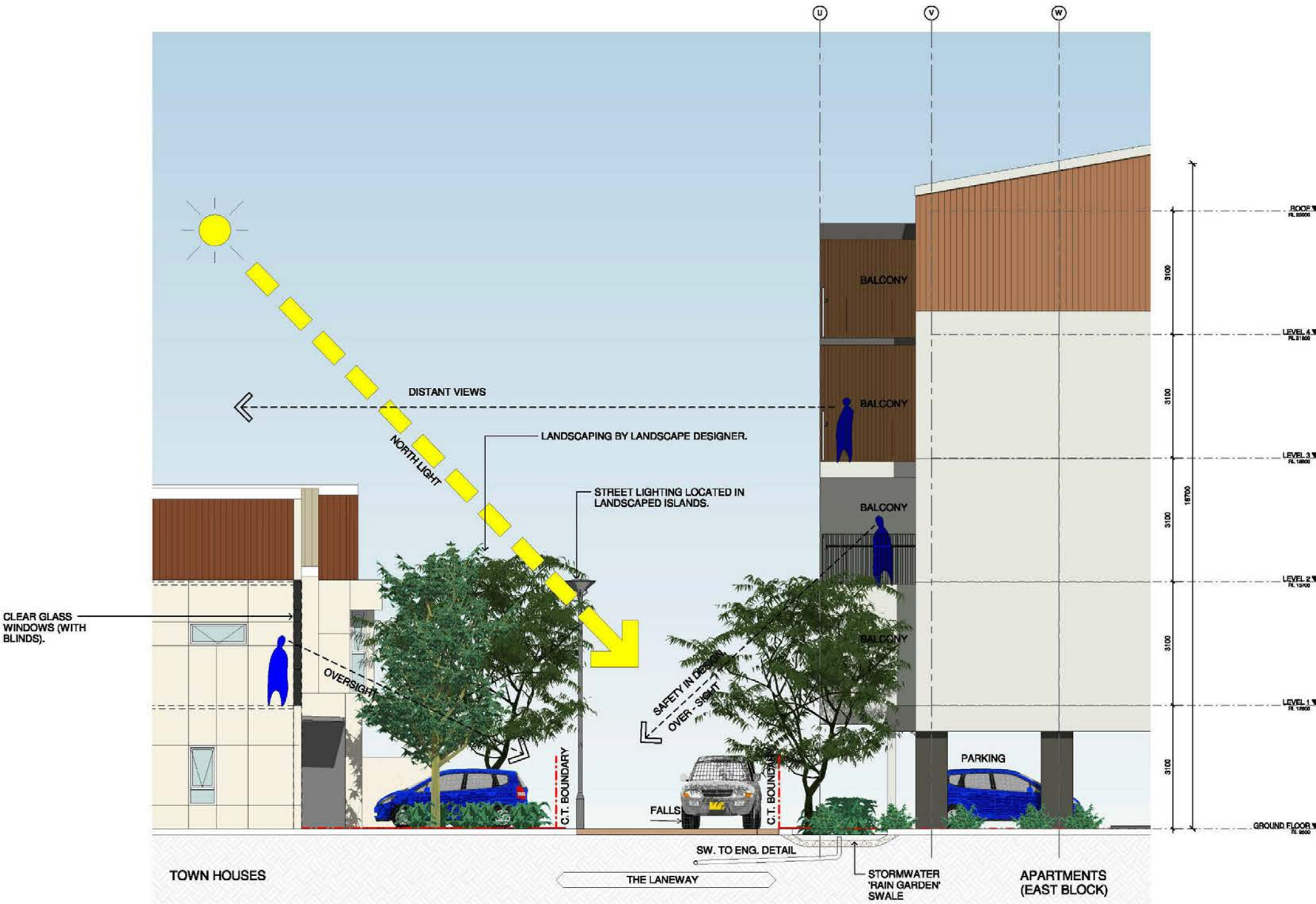





Figure 1 – Ground Level plan for Development, reproduced from the Drawings. Includes details of proposed waste system including collection points



THE LANEWAY - TYPICAL SECTION
1:50

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					Drawing Number: SD0112 Revision: A Date: 16/11/18	





STREETSCAPE ELEVATIONS
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

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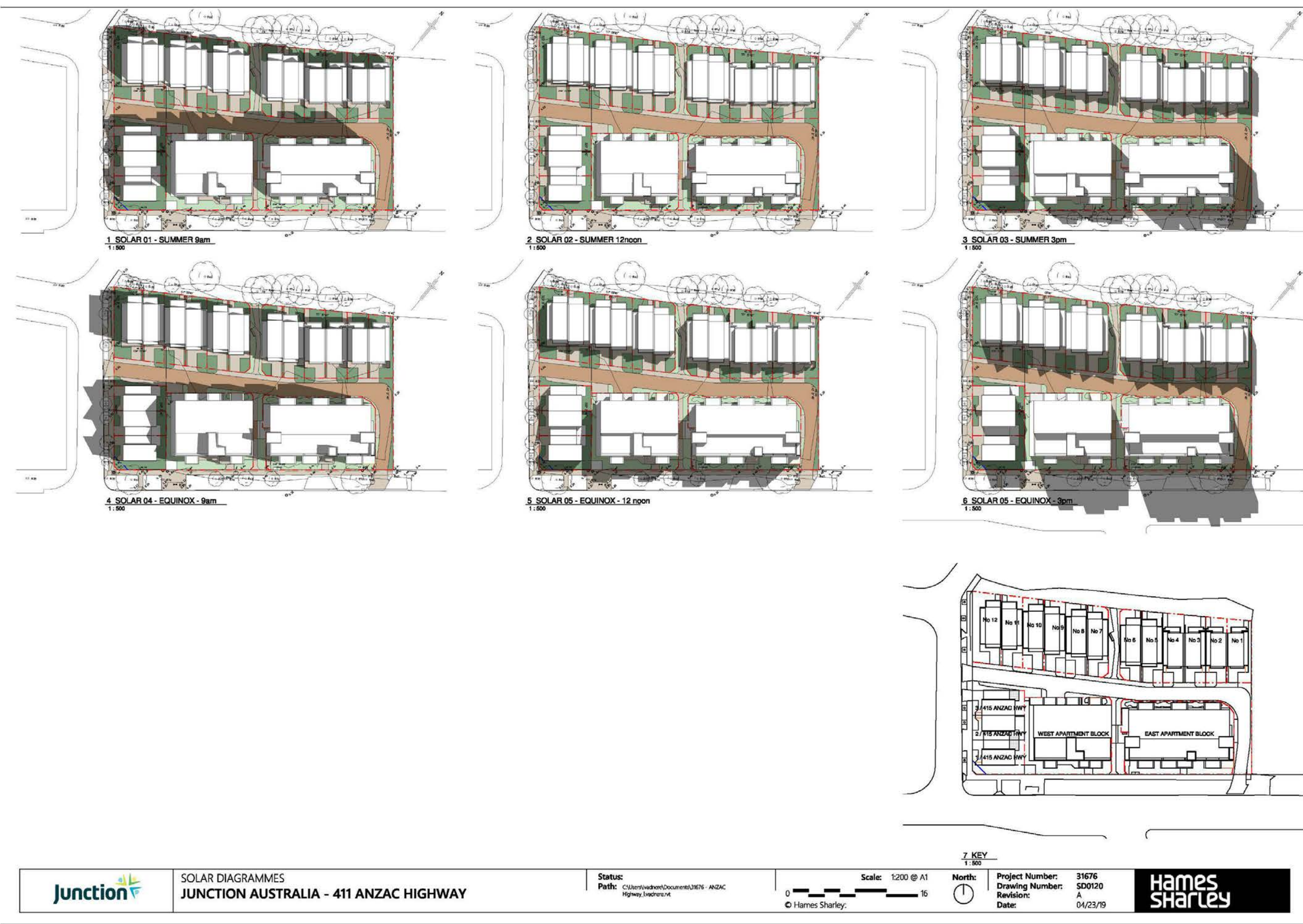
Hames Sharley

North:

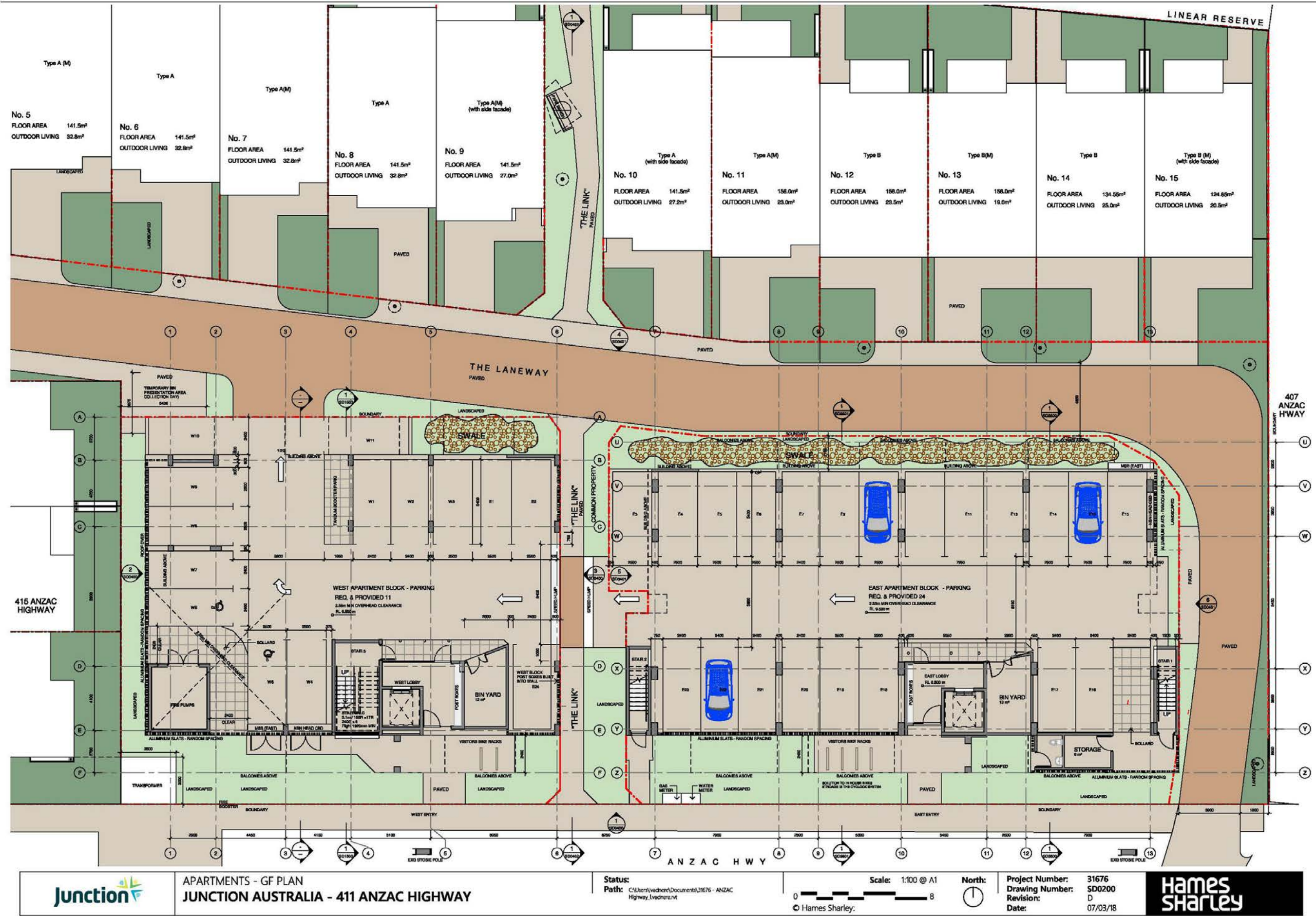


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Revision: A
Date: 01/10/19

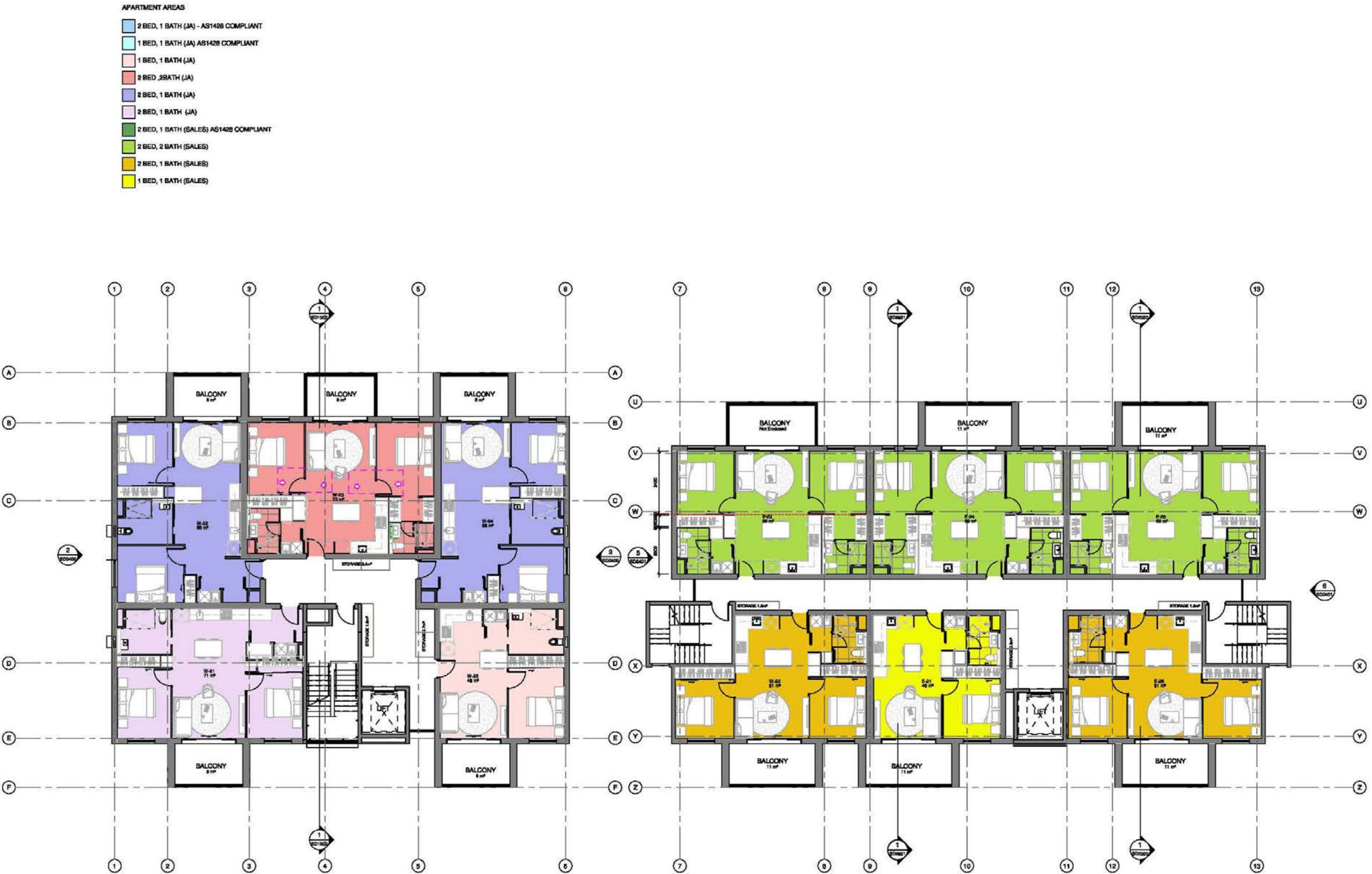



















APARTMENTS - LEVEL 3 PLANS
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

Status:
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North: 

Project Number: 31676
Drawing Number: SD0203
Revision: A
Date: 16/11/18









APARTMENTS - LEVEL 4 PLANS
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

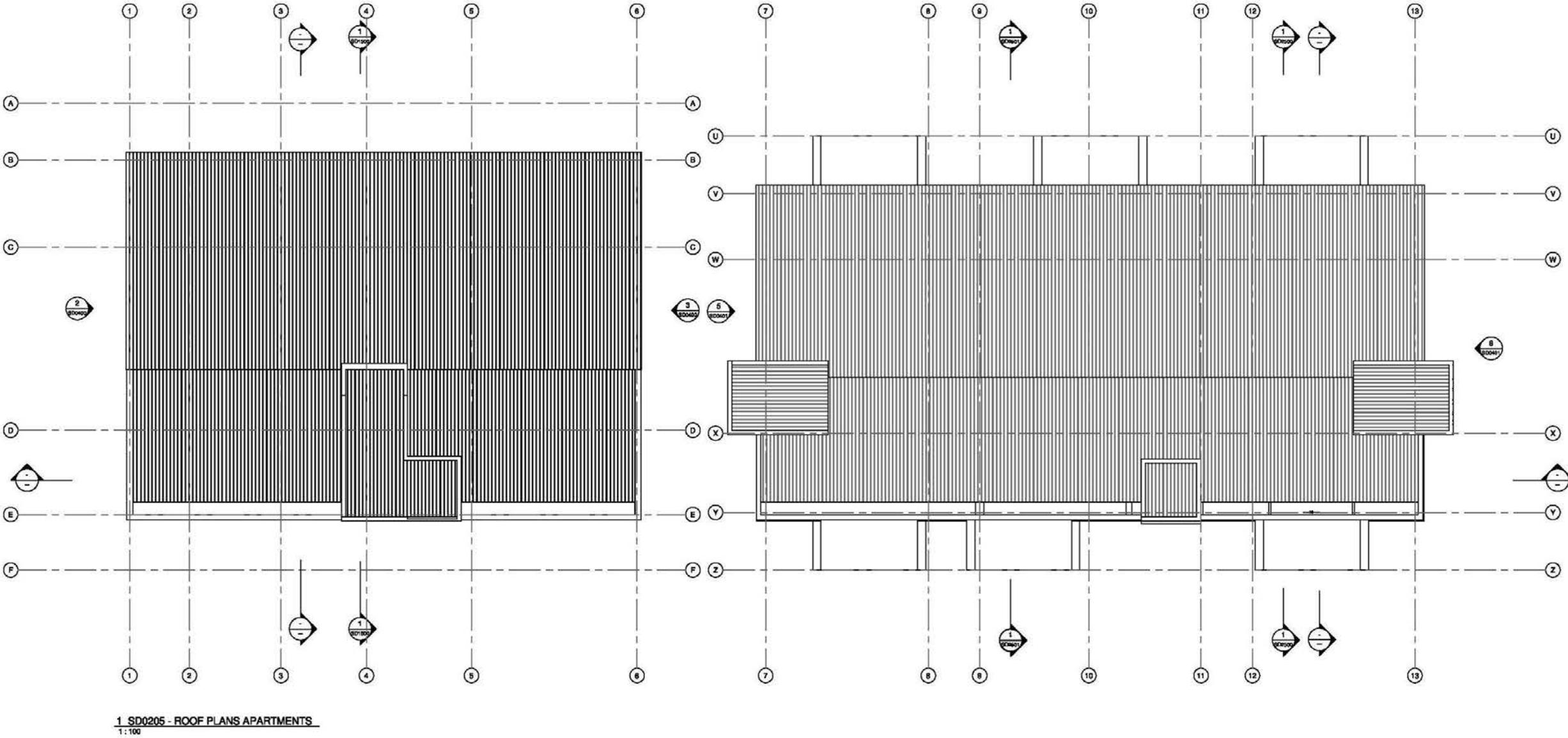
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Hames Sharley

North: 

Project Number: 31676
Drawing Number: SD0204
Revision: A
Date: 16/11/18





	APARTMENTS - ROOF PLANS JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY	Status: Path: C:\Users\lvidrene\Documents\31676 - ANZAC Highway\lvidrene.rvt	 Scale: 1:200 @ A1 © Hames Sharley.	 North:	Project Number: 31676	
					Drawing Number: SD0205 Revision: A Date: 16/11/18	




2 APARTMENTS ELEVATION - WEST
Scale: 1:100



3 APARTMENTS ELEVATION - EAST
Scale: 1:100



1 APARTMENTS ELEVATION - SOUTH
Scale: 1:100




OVERALL ELEVATIONS - APARTMENTS
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

Status:
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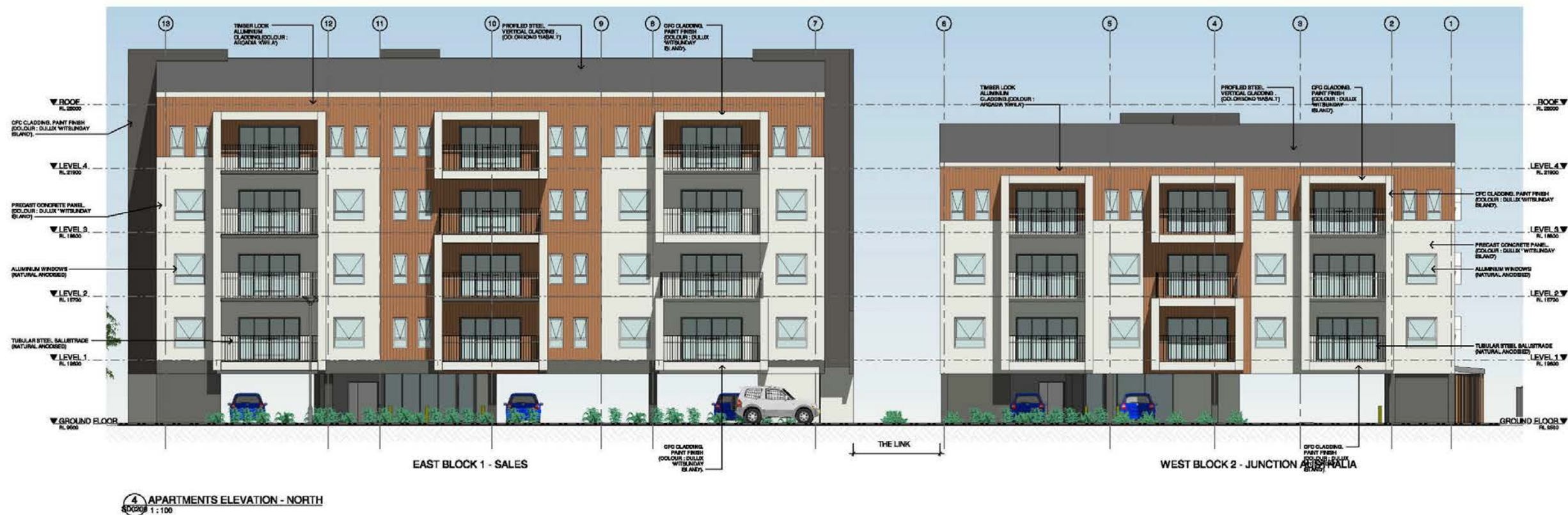
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Project Number:
Drawing Number:
Revision:
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OVERALL ELEVATIONS - APARTMENTS
JUNCTION AUSTRALIA - 411 ANZAC HIGHWAY

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Hames Sharley

North:






Project Number: 31676
Drawing Number: SD0401
Revision: A
Date: 02/26/19





SITE SECTION - 01
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411 Anzac Highway: *Apartment & Townhouse Residential Development* **Waste Management Plan**

Prepared for: Junction Australia

2 May 2019

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- IMPORTANT NOTES -

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Document verification

Description	Waste Management Plan for 411 Anzac Highway: Apartment & Townhouse Residential Development; Client: Junction Australia		
Version	FINAL		
Issued	2/05/2019		
Verification	Prepared by	Checked by	Approved by
Name	C. Colby	Client	C Colby
Signature			

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1 Introduction

This document presents a waste management plan (WMP) for the proposed (Apartment Building and Townhouse) Development at 411 Anzac Highway, Camden Park (the "Development"). The Developer is Junction Australia, Project Architect is Hames Sharley, and Traffic Engineer is GTA Consultants. The Development is in the City of West Torrens (Council).

The WMP explains how the Development would manage waste effectively to achieve regulatory requirements and desired design and operating objectives, including those recommended by the South Australian Better Practice Guide (State Guideline) (Zero Waste SA, 2014) and Council expectations for waste management in these types of development. It incorporates advice received from Council based on preliminary waste concepts proposed for the Development (City of West Torrens, 16 April 2019). The WMP should be read in conjunction with other planning approval documentation for the Development referenced herein.

2 Development Description

Per plans (Drawing No SD102, SD105, SD106 and SD200, issued 16/11/18) and other information provided by the Project Architect, the Development is on a ca. 4,900m² site – see Ground-level plan in Figure 1 overleaf – and comprises:

- Two apartment Buildings (facing Anzac Highway), each on separate Community Titles:
 - Apartment Building West – comprising 15 apartments (with 27 bedrooms in total);
 - Apartment Building – comprising 24 apartments (with 44 bedrooms);
- 3×3-bed Torrens Title townhouses (no. 1-3) in the Southern corner of the site, facing onto Clifton St.
- 12×2-bed community Title townhouses (Nos. 4-15) behind and to the North of these apartment buildings (with garage access via private lane);

Note: Figure 1 overleaf illustrates some of the proposed waste management arrangements described later herein.

Table 1 below summarises the Development's land use metrics (for waste system design).

- This table includes the recommended Waste Resource Generation Rate (WRGR) classification (for each land use) based on the State Guideline (Zero Waste SA, 2014), which are used for estimation of waste and recycling volumes to assess waste storage required for the site.

The Apartment Buildings and Community Title townhouses (and each of their Community Corporations) at the Development would be joined together under a single site-based community-title, which would manage the shared areas between them, including the private lane connecting vehicular entry at Anzac Highway to vehicular exit at Clifton St. This private lane would provide resident access to and from the Apartment Buildings' Ground-level car parking areas, and garage access by Community Title townhouse residents.

Table 1 – Summary of land uses for the Development, their WRGR Description(s) and relevant Development Metric(s)

Land Use	Description	Site Location	Land Use Type/WRGR Classification*	Development Metric(s)	
Residential	Townhouses (Community-Title)	Private lane access	Medium Density Residential Dwelling - With Garden Waste	12	Dwellings
				36	Bedrooms
	Townhouses (Torrens-titled)	Facing Clifton St	Medium Density Residential Dwelling - With Garden Waste	3	Dwellings
				9	Bedrooms
	Apartment Building (West)	WEST BLOCK, facing Anzac Highway	High Density Residential Dwelling	15	Apartments
			Showroom	27	Bedrooms
	Apartment Building (East)	EAST BLOCK, facing Anzac Highway	High Density Residential Dwelling	75	m ² GFA
			Showroom	24	Apartments
				44	Bedrooms
				100	m ² GFA

* Per classification for Waste Resource Generation Rates (WRGRs) in the State Guidelines (Zero Waste SA, 2014)



Figure 1 – Ground Level plan for Development, reproduced from the Drawings. Includes details of proposed waste system including collection points

3 Design Assumptions

3.1 Council Engagement

Previous discussions (by Colby Phillips Advisory) with Council on waste management for other similar developments proposed in the City of West Torrens have identified a range of general preferences or requirements for design of waste systems in these types of developments.

Based on these previous discussions, a preliminary concept for the waste system at the Development was prepared (like that illustrated in Figure 1) and submitted to Council followed by several (phone and email) discussions (City of West Torrens, 16 April 2019) to refine the concept towards a version that Council could support. A key outcome from this engagement was that:

- Council may support their kerbside collection truck using the private lane to deliver kerbside collection to Community-title houses, subject to:
 - Liability waiver for their contractor;
 - Construction of private lane rated to handle a 23-tonne refuse truck;
 - Appropriate presentation of bins including spacing of bins (e.g. 0.9-1m allowance per bin); and
 - Providing enough on-site storage space (within each townhouse site) for Council's standard kerbside bin site.
- The proposed use of private land for kerbside collection could also "future-proof" collection access in event of a future Council skip bin collection to Apartment buildings.

The final waste system concept provided to Council (and as is proposed herein) therefore made the following assumptions.

- **Apartment Buildings –**
 - On-site private collection along private lane of bins from Apartment buildings, with collection access design "future-proofed" to enable a future Council skip bin collection service.
 - With the following expected by Council for design and operation of these apartment waste systems.
 - *Design should align to South Australian Better Practice Guide – Waste Management in Residential or Mixed-Use Developments (Zero Waste SA, 2014).*
 - *Residents should have access to a 3-bin equivalent service (in line with Waste Hierarchy expectation, Council recycling objectives, and to exempt waste collected from a further resource recovery requirement¹):*
 - General waste;
 - Dry recycling; and
 - Food waste.
 - *Access to waste disposal should be convenient and accessible to residents including mobility impaired residents.*
 - *Waste disposal and bin storage areas should be designed where possible to be unobtrusive and minimise visual detracting and nuisances, including screening from public view and neighbours.*
 - *Bin storage should provide for weekly collection frequency (which is what a future Council rear-lift service would most likely provide).*
 - *Collection access should, at a minimum, allow for an MRV-sized vehicle (i.e. at least 8.8m in length).*

¹ Per the South Australian Environment Protection Policy (Waste-to-Resources) Policy 2010

- *The waste system should provide convenient access for bin collection from waste storages to accommodate a future Council waste collection (i.e. The collection point should be within 30m of the bin storage area).*
- *There is a preference for on-site collection with forward entry and exit, but reverse entry, forward exit and on-street collection may be acceptable under certain circumstances (subject to Council review and approval).*
- *Collections should ideally be scheduled 7am-7pm weekdays and Saturdays and 9am-7pm Sundays to avoid potential noise nuisances in line with the South Australian Environment Protection Policy (Noise) Policy 2007*
- *In addition, Council may be willing to provide residents with access to their at-call hard waste collection*
(www.westtorrens.sa.gov.au/CWT/content/Waste_and_recycling/Hard_waste) if site provision can be made and agreed with Council for suitable presentation and collection arrangements.
- **Community Title Townhouses** (Nos. 4-15)–
 - Individual Council bin sets for each townhouse with bins presented along private lane for Council kerbside collection.
 - Design to include incorporating the specific Council requirements mentioned above for using the private lane for kerbside (and hard waste) collection.
 - Other elements to reflect expectations by Council for design and operation of residential kerbside collection systems.
- **Torrens-Title Townhouses** (Nos 1-3) –
 - Council kerbside presentation and collection from Clifton St.
 - Again, system design to reflect Council expectations for operation of residential kerbside collection systems.

3.2 Waste & Recycling Service Provision

Table 2 overleaf outlines the recommended waste services by land use per Table 1. The different waste service classifications listed in Table 2 are explained below.

- **Routine Services** – These require on-site waste storage and routine and regular collections, which for residential development usually include general waste, recyclables and garden/food waste.
- **On-call services** – These involve non-frequent collections, such as Hard waste and are organised on an as-needed basis.
- **Maintenance services** – Some waste items (e.g. lighting in the common areas of apartment building) may be removed and disposed of by the contractor providing the related maintenance service (and hence on-site waste storage is not usually needed or provided).
- **External Services** – These are where waste items (e.g. printer cartridges, lighting) can be dropped off by tenants/residents at external locations (e.g. Officeworks, waste depot) (and thus, separate on-site waste storage is not usually needed or provided).

Table 2 – Expected or recommended waste & recycling services for the Development

Service Type	Apartment Buildings		Townhouses (Community-Title)	Townhouses (Torrens-titled)
	Dwellings	Public Access Areas		
<i>Routine (regularly scheduled)</i>	<ul style="list-style-type: none">• General Waste• Recycling• Food Organics	<ul style="list-style-type: none">• General Waste	<ul style="list-style-type: none">• General Waste• Recycling• Food Organics/Yard Clippings	
<i>On-call (as needed)</i>	<ul style="list-style-type: none">• Hard/E-waste			
<i>Maintenance (waste removed by contractor)</i>	<ul style="list-style-type: none">• Garden Waste (Common Areas)		<ul style="list-style-type: none">• Garden Waste (Common Areas only)	N/A
	<ul style="list-style-type: none">• Lighting (where applicable)			
<i>External (by tenant off-site)</i>	<ul style="list-style-type: none">• Lighting• Printer Cartridges• Batteries			

3.3 Waste & Recycling Volumes

Table 3 below estimates expected waste and recycling volumes for the Development (in Litres/week).

WRGRs (in the State Guideline) do not exist for lighting, printer cartridge or battery waste. Volumes of these waste items, however, are relatively small, and thus, have not been estimated.

Table 3 – Estimated waste & recycling volumes (Litres/week) for proposed development. N/A – Not Applicable; NE – Not estimated

Waste/Recycling Service	Apartment Building (West)		Apartment Building (East)		Townhouses (Community-Title)	Townhouses (Torrens-titled)
	Dwellings	Active Public Areas	Dwellings	Active Public Areas	Dwellings	Dwellings
	L/week	L/week	L/week	L/week	L/week	L/week
General Waste	810	276	1,320	368	1,260	315
Dry Comingled Recycling	675		1,100		1,080	270
Food/Garden Organics	270		440		720	180
Hard waste	189	13	308	18	252	63
E-waste	34	1.1	55	1.4	45	11
Lighting waste	NE (minimal volumes)					
Printer Cartridges/Batteries	NE (minimal volumes)					
TOTAL	1,978	290	3,223	386	3,357	839

3.4 Project Team input

Discussions were held with the Developer (Junction Australia), Project Architect (Hames Sharley) and the Traffic Consultant (GTA Consultants), to confirm most appropriate types of waste storage, the location and space available for this storage to be located, and how waste and recycling bins could be collected. These requirements and/or preferences were also incorporated into the design and operation of the waste system proposed herein.

4 Waste Management System

4.1 Waste Storage Area(s)

There would be there the following waste bin storage areas (Waste Storage Areas) at the Development, all located at Ground Level as shown in Figure 1 (on pg. 3).

1) Apartment Building Waste Areas (one waste room per building)

- Each Apartment Building would have their own waste storage room at Ground Level, adjacent the resident Lobby.
- These would be shared local disposal and waste storage rooms for all residents in that building, who would access the room via lift and car park area to dispose their waste and recycling.
- Bins from each room would be transferred (on designated collection days) to a presentation area along the private lane at the Western corner of Apartment Building West, where a slipway area would enable a rear-lift collection truck to park and empty bins (on weekly basis).

2) Torrens-titled and Community Titled Townhouses

- These townhouses would each be provided with a standard Council kerbside collection 3-bin set (i.e. presently 140/240/240L MGBs).
- These bins would be stored as follows.
 - Torrens-titled townhouses (Nos. 1-3) – in a screened area in their front yards
 - Community-titled townhouses (Nos. 4-15) –
 - *General waste & recycling MGBs – in townhouse garage areas*
 - *Organics bin – discrete location in townhouse yard (with screening if and as needed).*
- Residents would transfer bins to their kerbside collection point on Council designated collection days (for collection by Council kerbside trucks).
 - Torrens-titled townhouses (Nos. 1-3) – bins would be presented along Clifton St
 - Community-titled townhouses (Nos. 4-15) – bins would be presented in designated areas along the private lane
 - *Townhouses No. 4-11 – would present bins in the slipway area also used as temporary parking for rear-lift collection at the Western end of private lane (with rear-lift collection scheduled to occur outside non-Council kerbside collection days to avoid conflict).*
 - *Townhouses Nos. 12-15 – would present bins in a designated presentation area at the Eastern end of the private land (near entry point from Anzac Highway).*

Table 4 overleaf gives a schedule of recommended bin storage in each of these areas for Routine Services (to land uses these Waste Storage Areas will service). This Table includes for each land use and service:

- Number and type of bins;
- Collection frequency (expected or proposed); and
- Service provider and expected collection truck type.

Potential configurations in these Waste Storage Areas for recommended bin storage (per Table 4) are illustrated in Figure 1.

- These illustrations demonstrate that adequate space is provided or should be available in these Waste Storage Areas to meet the site's waste management requirements.

Table 4 – Waste storage and bin schedule for Routine Services, including collection frequency and collection service provider

Waste Storage Area(s)	Location	Routine Service	Estimated Waste/Recycling Volumes (L/week)	Provider	Collection Frequency (Events/week)	Max. Bins/Items Stored & Collected (per Event)		
						No.	Size (L)	Type
Townhouses Nos 4-15 (Community-Title)	Townhouse yard/garage	General Waste	1260	Council kerbside	Weekly	12	140	MGB
		Dry Comingled Recycling	1080		Fortnightly	12	240	MGB
		Food/Garden Organics	720		Fortnightly	12	240	MGB
Townhouses Nos. 1-3 (Torrens-titled)	Townhouse yard area	General Waste	315		Weekly	3	140	MGB
		Dry Comingled Recycling	270		Fortnightly	3	240	MGB
		Food/Garden Organics	180		Fortnightly	3	240	MGB
Apartment Building (West)	Ground Level, enclosed room, adjacent collection point	General Waste	1086	Private/Future Council	Weekly	1	1,100	Skip
		Dry Comingled Recycling	675		Weekly	1	1,100	Skip
		Food/Garden Organics	270		Weekly	2	240	MGB
Apartment Building (East)	Ground Level, enclosed room, adjacent collection point	General Waste	1688		Weekly	2	1,100	Skip
		Dry Comingled Recycling	1100		Weekly	1	1,100	Skip
		Food/Garden Organics	440		Weekly	2	240	MGB

4.2 System Operation – Routine Services

4.2.1 User Storage

All residents (in apartment buildings and townhouses) would be provided with suitable kitchen bins with handles to enable easy carriage from dwellings to their Waste Storage Areas for disposal, e.g. see Figure 2 overleaf:

- General waste bin – at least 20L in size (bag lined)
- Commingled recycling waste bin - at least 20L in size
- Food organics bin (as specified or otherwise agreed with Council) (compostable bag lined)

Note: West Torrens' residents can collect a free kitchen caddy and one roll of compostable bags from the Civic Centre at 165 Sir Donald Bradman Drive. Additional bags are also available free from the Civic Centre and the Hamra Centre Library. See:

https://www.westtorrens.sa.gov.au/CWT/content/Waste_and_recycling/Food_waste_recycling

{Cont. overleaf}



Figure 2 – Examples of suitable waste and recycling kitchen bins: (a) General waste & recycling - 2x20L Buckets with carry-handles in pull-out draw (Adelaide City Council, 2016); and (b): Bench-top food waste kitchen caddy with handles (Source: https://www.westtorrens.sa.gov.au/CWT/content/Waste_and_recycling/Food_waste_recycling)

4.2.2 Local Disposal (inc. Transfer Pathways)

The Waste Storage Areas (described in Section 4.1) would be the local disposal points as follows. Transfer pathways (from dwellings/tenancies to local disposal areas) are described below and depicted in Figure 1.

- 1) **Apartment Residents** – Residents would carry waste/recycling from their apartments via corridors, Lift and Lobby to their Waste Storage Area (in that building) and dispose into shared bin(s) provided in this area (per Figure 1).
- 2) **Townhouse Residents** – Residents would carry waste/recycling to bins in their yard and/or garage for disposal (per Figure 1).

All transfer paths in the Development to these local disposal areas should be free of steps, grades \leq 1:12, with appropriate hard/even surfaces, and wide enough (i.e. $\geq 0.9m$) for residents to safely navigate when carrying or transferring their waste or recycling.

4.2.3 Bin Presentation & Waste/Recycling Collection (inc. Transfer Pathways)

- 1) **Apartment Buildings** –
 - On designated collection days, the Property Manager(s) would transfer bins from waste storage rooms to the presentation area along the private lane at the Western corner of Apartment Building West (per Figure 1).
 - The waste contractor (private or future Council) would enter the private lane from Anzac Highway, travel to Western end of lane, temporarily park using the slipway provided, pull (skip and/or MGB) bins out of presentation area, empty them, then return empty bins back to the presentation area.
 - Later that day, the Property Manager(s) would transfer bins back to storage rooms in each apartment building.
 - *Note: Residents would be notified of collection days and periods when bins may not be present in the waste rooms so they would know not to use them or to take waste to the presentation area if needed. A 240L general waste MGB has been allocated to each waste room so that residents can temporarily dispose of waste if an emergency during these periods.*

2) Townhouses –

- On designated Council kerbside collection days, residents would transfer relevant bins (usually the evening before) from their garage to their kerbside presentation point as proposed in Figure 1.
 - For Torrens-Title townhouses (Nos. 1-3), this presentation point would be road verge in front of their property along Clifton St
 - For Community-Title townhouses (Nos 4-15), this presentation point would be in the designated areas at Eastern end or Western end of the private lane.
 - *The bin presentation locations in these areas would be marked out and numbered to indicate townhouse presentation allocation and type of bin, to ensure orderly and correct presentation of bins (including bin position and to maintain spacing).*
- The Council kerbside contractor would empty bins.
 - It is expected that the Council contractor would start from Anzac Highway, pick up bins in the private lane for Community-Title townhouses Nos. 12-15, then travel to Western end of private lane to pick up bins for Community-Title townhouses Nos. 4-11, then turn left onto Clifton St to pick up the bins for Torrens-Title townhouses Nos. 1-3 – but these logistics would ultimately be decided by Council.
- After collection, residents would return their empty bins (from presentation area) to their garage.

All collection or bin transfer paths should be free of steps, grades $\leq 1:10$, with appropriate hard level surfaces, and wide enough to accommodate the types of bins/skips being transferred.

4.2.4 Collection Point & Collection events

- **Rear-lift skip bin & MGB collections for Apartment Building –**
 - The collection point would be a proposed temporary parking area along the private lane at its Western end (per Figure 1), where the private or future Council waste contractor would be able to park their collection truck near the presentation area using slipway area provided.
 - Collections (for each service) would be weekly (on same or different day), and the time required for collection events should be less than 5-10min (per service) to lift all bins (per event for each service).
 - Scheduling of collections would ensure they occur outside Council kerbside collection days to avoid access conflicts to the slipway area at Western end of private lane (which has been multipurposed for kerbside presentation from Community-Title townhouses).
- **Council kerbside collections to Townhouses –**
 - Kerbside collection occurs from the road where bin presentation is made with the (side-lifting) truck lifting and emptying the MGBs presented on the road verge.
 - Collection time per bin is usually less than 5 seconds and all bins (per service collection).
 - *For Community-Title townhouses Nos. 12-15, each collection of 4 bins per service should take no longer than 30 seconds to complete (and these Council kerbside trucks normally come during AM, when most residents would be exiting the site to Clifton St).*
 - *For Community-Title townhouses Nos. 4-11, the kerbside collection could take up to a minute per service*
 - *For Torrens-Title townhouses (Nos. 1-3) along Clifton St, all bins should be picked up within 30 seconds per service (allowing for stopping and travel between presented bins).*

4.2.5 Collection Vehicles & Access

- **Rear-lift skip bin & MGB collections for Apartment Building –**
 - These rear-lift trucks can come on a variety of sizes, but Council has requested that provision is made for an at least *MRV-sized vehicle (i.e. 8.8m in length)*
 - Collection access via private lane for refuse collection using a 10m long truck has been modelled and confirmed by the Traffic Engineer (GTA Consultants, 24 April 2019) – see Figure 3 overleaf.
- **Council kerbside collections to Torrens-titled Townhouses –**
 - Council already operates kerbside collections along Anzac Highway using standard-sized (up to 10m side-lifting) collection vehicles supplied by its waste contractor, Solo Resource Recovery.
 - Consequently, there should be no issues with providing this service for kerbside collection by Council to Townhouses at the Development along the private lane and Clifton St (as proposed in this WMP).

Note: To support collection access via private lane, this lane will be designed to handle an up to 23-tonne refuse truck per Council requirements.

4.3 Hard Waste collection services

Residents should be able to access the Council's at-call hard waste collection, where each household is eligible for two (free) hard waste collections per year (see: www.westtorrens.sa.gov.au/CWT/content/Waste_and_recycling/Hard_waste), as follows.

- **Torrens-titled townhouse residents –** should be able to book and organise these at-call hard waste services directly with Council.
 - For Community-Title townhouses (Nos. 4-15), the Community / Strata Corporation (on residents' behalf) should inquire with Council regarding how these residents can access the Council hard waste collection when the Development becomes operational, including establishing suitable arrangements and (kerbside and/or on-site) presentation location(s) for the service.
 - *This presentation location could be on verge areas along private lane in front of their townhouses, a site boundary road verge area along Clifton St, their kerbside bin presentation areas along the private lane, and/or even using the Apartments' bin presentation area (at Western corner of Apartment Building West).*
 - For Torrens-Title townhouses (Nos. 1-3) along Clifton St, these residents should be able to present hard waste at kerbside in front of their properties (as other Council residents do).
- **Apartment residents –**
 - The Community / Strata Corporation (on residents' behalf) should inquire with Council regarding how these residents can access the Council hard waste collection when the building becomes operational, including establishing suitable arrangements and a (kerbside or on-site) presentation location for the service.
 - *This presentation location could be Apartments' bin presentation area and/or a road verge area along Anzac Highway.*
 - In event that a Council service is not available, the Community / Strata Corporation would facilitate private hard waste collection services for residents.
 - *This would involve at-call hard waste collection by a private contractor organised by residents direct from their dwellings (or using a temporary on-site presentation area).*
 - *The waste contractor could temporarily use the slipway loading area at Western end of private lane for access and parking to deliver hard waste collection services.*



Figure 3 – Swept path modelling of 10m refuse truck from Anzac Highway to private lane and back onto Clifton St for collection of waste and recycling

4.4 Collection & Traffic Issues

The proposed collection arrangements were described in Section 4.2 above.

- *For rear-lift collection services to the Development, we recommend that collections should be scheduled on week days and between 7am and 6pm, ideally at times outside peak access periods (by residents) to (and from) the Development and peak traffic periods along Anzac Highway.*
- *For kerbside collection, Council already operates kerbside collection services along Anzac Highway and in surrounding streets to other neighbouring properties, which would be used to provide services to the Development.*

We do not expect that the collection services proposed for the Development should prove problematic for local traffic or cause any other significant traffic issues (above that already occurring for existing Council kerbside collection services to other neighbouring properties).

4.5 Operation, Management & Communication

- **Waste system operation and management –**
 - **Torrens-titled & Community-title townhouse residents** – Would be responsible for managing their waste systems following advice from Council regarding access, operation and use of their kerbside collection service.
 - **Apartment residents** – The Community / Strata Corporation would be responsible for managing and operating the waste systems at the site.
 - *Council should be consulted on waste system operation and management and may provide advice and support to the Community / Strata Corporations and their residents.*
- **Building User Manual** – Advice and instructions on waste management and using the waste systems would be included by the Developer in the Building User Manuals developed for residents, including contact information for further information, questions and issues.
 - *Council should be consulted on this advice and instructions and may provide relevant information to include in the Building User Manual, particularly for the Apartment residents.*
 - *This may include advice to residents on how to properly dispose of other waste / recycling items including lighting, batteries and hazardous household waste.*
- **Community/Strata title arrangements for Apartment Building and Community-title Townhouses** – Obligations for these residents and/or property owners to properly access, operate and use the waste systems provided would be written into the (various) Community/Strata plan(s) lodged with the Lands Titles Office.
- **Emergency Response Plan for Apartment Building Townhouses** – Should include response measures (or contingencies) for:
 - Waste collection services suspended or not available; and
 - Lift access failure (to Ground Level Waste Storage Areas, with focus on impact and contingency measures for mobility impaired residents).

4.6 Other Waste System Design or Management Issues

The following would be considered and/or implemented. More details for some of these items can be resolved at detailed design stage with the waste contractor and/or Council.

- 1) **Bins** – These would align to Council bin colours or otherwise comply with Australian Standard for Mobile Waste Containers (AS 4213).
 - *Council should be consulted on bin selection and colours for residential waste bins where they are providing a collection service.*
- 2) **Signage** –

- Appropriate signage in all shared Waste Storage Areas should be used to ensure correct disposal of waste and recycling.
 - This signage should conform to the signage requirements of Council and/or State Guideline (Zero Waste SA, 2014) for other Waste Storage Areas.
 - *Council should be consulted on signage for waste systems and may supply signage to the Development for this purpose.*
- 3) Vermin, hygiene & odour management (Inc. ventilation)**
- Inspection & Cleaning –
 - An inspection and cleaning regime would be developed and implemented by Community / Strata Corporation for Apartment Building and Community-title Townhouse waste systems at the Development, including ensuring that surfaces and floors around disposal areas, transfer pathways and waste storage and/or presentation areas are kept clean and hygienic and free of loose waste and recycling materials.
 - *The Waste Storage areas in apartment buildings should be graded to a sewer drain with tiling or epoxy coating to floors and adjacent walls to waterproof the area and for cleaning.*
 - Odour Control –
 - Apartment Building Waste Storage Areas –
 - *This Waste Storage area should be mechanically ventilated to ensure negative pressure for control of odours.*
 - *The ventilation would extract to atmosphere, to prevent odour build up.*
 - *The extraction vent discharge location would be selected to avoid impact on residents, tenants and/or neighbours.*
 - *It should be a requirement for food waste bins in these areas that lids are closed after disposal events.*
 - Townhouses – It is recommended that ventilation (mechanical or natural) should be provided where bins are stored in garage areas to avoid potential odour build-up, with the vent discharge to external area designed to minimise any impact on residents and/or neighbours.
 - Bin cleaning (& On-site Bin Wash Area) –
 - Temporary on-site bin cleaning areas are provided on-site and multipurposed with each Apartment Building waste area – see Figure 1.
 - *These bin wash areas would require grading to a sewer drain with basket screen to remove gross solids, tiles or epoxy coating to water-proof adjacent walls and flooring, standard cold-water supply faucet and commercial-grade electrical power supply (if pressure washer system is to be used), plus (temporary) bunds and screens for use during bin wash events.*
 - Bin washing activity would be managed by the relevant or nominated Strata/Community Corporation.
 - Bin cleaning may be outsourced to an external contractor as part of the above hygiene and odour management programs at the Development.
 - *In this event, an external contractor can remove bins from site, replacing them with an empty spare, clean the bins, then return them to site.*
- 4) Access & security –**
- Access to the Apartment Building Waste Storage Areas for disposal or collection should be secure and only accessible by key or fob or access code.
 - *This key or fob or access code would be provided to residents and waste contractor(s) delivering services to the Development.*
 - *CCTV is recommended to monitor waste disposal practices in all Waste Storage Areas.*

5 References

Adelaide City Council. (2016). *Guide to waste & recycling bins.*

City of West Torrens. (16 April 2019). *Email correspondence with N. Teoh, Waste Coordinator re: waste system concept for 411 Anzac Highway proposed development.*

GTA Consultants. (24 April 2019). *411 Anzac Highway, Camden Park, Residential Development, Transport Impact Assessment.*

Zero Waste SA. (2014). *South Australian Better Practice Guide – Waste Management in Residential or Mixed Use Developments.*

411 Anzac Highway, Camden Park

Residential Development
Transport Impact Assessment

Prepared by: GTA Consultants (SA) Pty Ltd for Junction Australia
on 3/05/19
Reference: S168630
Issue #: A



411 Anzac Highway, Camden Park

Residential Development Transport Impact Assessment

Client: Junction Australia

3/05/19

Reference: S168630

Issue #: A

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	03/05/19	Final	Joy Yu	Richard Frimpong	Paul Morris	

GTA Report (04.10)

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INTRODUCTION

1. INTRODUCTION

01

INTRODUCTION

1.1. Background

A residential development is proposed for a site located on the corner of Anzac Highway and Clifton Street in Camden Park.

GTA Consultants has been engaged by Junction Australia to prepare a Transport Impact Assessment of the proposed development.

1.2. Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the proposed development, including consideration of the following:

1. existing traffic and parking conditions surrounding the site
2. parking demand likely to be generated by the proposed development
3. suitability of the proposed parking in terms of supply (quantity) and layout
4. traffic generation characteristics of the proposed development
5. proposed access arrangements for the site
6. transport impact of the development proposal on the surrounding road network.

1.3. References

In preparing this report, reference has been made to the following:

- City of West Torrens Council Development Plan (consolidated 12 July 2018)
- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2002
- Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009
- Plans for the proposed development prepared by Hames Sharley
- Traffic and car parking surveys undertaken by GTA Consultants as referenced in the context of this report
- Various technical data as referenced in this report
- An inspection of the site and its surrounds
- Other documents as nominated.

EXISTING CONDITIONS

2. EXISTING CONDITIONS

02

EXISTING CONDITIONS

2.1. Subject Site

The subject site is located at 411 – 415 Anzac Highway on the corner of Anzac Highway and Clifton Street in Camden Park. The site of approximately 5000 sq. m has frontages of 86 metre to Anzac Highway and 60 metres to Clifton Street, with a council reserve along the northern boundary and a child care centre on the eastern boundary.

The site is located within a residential zone and is currently unoccupied. The surrounding properties include a mix of residential and commercial land uses and the Morphettville Racecourse approximately 500 metres away.

The location of the subject site and the surrounding environs is shown in Figure 2.1.

Figure 2.1: Subject Site and its Environs



(PhotoMap courtesy of NearMap Pty Ltd)

2.2. Road Network

2.2.1. Adjoining Roads

Anzac Highway

Anzac Highway is an arterial road under the care and control of the Department of Planning, Transport and Infrastructure (DPTI). It is a two-way road aligned in a north-east to south-west direction and configured with dual 3 lanes carriageways separated by a wide median set within a 40-metre-wide road reserve (approximately as measured adjacent the site.). Kerbside parking is permitted on both sides of Anzac Highway except during Clearway/Bicycle Lane operation hours of 7:30am – 9:00am adjacent the site.

Anzac Highway carries approximately 33,700 vehicles per day¹.

¹ Based on DPTI traffic volume estimates in 2017 obtained from Location SA Map Viewer.

EXISTING CONDITIONS

Clifton Street

Clifton Street is a local road under the care and control of the City of West Torrens. It is a two-way road configured with a single carriageway 8.5 metres wide with one lane in each direction. Clifton Street is set within a 15.2-metre-wide road reserve (approximately measured adjacent the site). Kerbside parking is typically permitted on Clifton Street, except one space on the west side of Clifton Street which operates as a no-stopping zone between 12 noon and 5:00pm on race days (at the nearby Morphettville Racecourse).

Clifton Street carries approximately 500 vehicles per day.²

Gunnawarra Avenue

Gunnawarra Avenue is a local road under the care and control of the City of West Torrens. It is a two-way road configured with a single carriageway 9.0-metre-wide with one travel lane in each direction. Gunnawarra Avenue is set within a 13.5-metre-wide road reserve (approximately). Un-restricted kerbside parking is permitted on Gunnawarra Avenue.

Gunnawarra Avenue carries approximately 300 vehicles per day.²

Anzac Highway and Clifton Street are shown in Figure 2.2 and Figure 2.3 respectively.

Figure 2.2: Anzac Highway viewing northeast
(Adjacent to Site)



Figure 2.3: Clifton Street viewing northwest
(Adjacent to Site)



2.2.2. Surrounding Intersections

The following intersections currently exist in the vicinity of the site:

- Anzac Highway/Clifton Street (unsignalised)
- Clifton Street/Gunnawarra Avenue (unsignalised).

2.2.3. Traffic Volumes

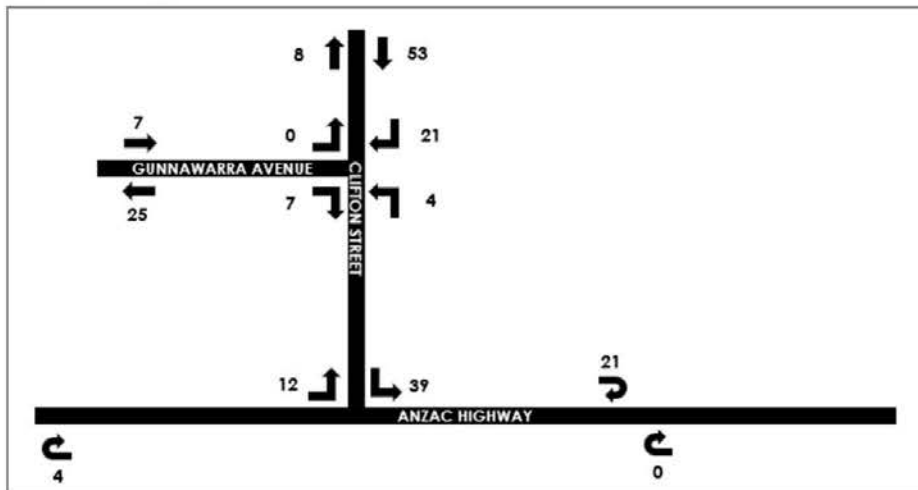
GTA Consultants undertook traffic movement counts on key roads in the vicinity of the site on Thursday 12 July 2018 between 5:00pm – 6:15pm.

The PM peak hour traffic volumes are shown in Figure 2.4.

² Based on the PM Peak hour traffic counts undertaken by GTA on 16 August 2018 and assuming a peak-to-daily ratio of 10% for local roads.

EXISTING CONDITIONS

Figure 2.4: Existing PM Peak Hour Traffic Volumes



2.2.4. Road Crashes History

A review of the reported road crashes history for the roads and intersections adjoining the subject site has been sourced from the DPTI between 2013 and end of 2017. A summary of the road crashes for the last available five-year period is presented in Table 2.1.

Table 2.1: Crash Summary 2013 - 2017

Location	No. of Crashes	Type of Crash	Total Casualties
Intersection of Clifton St and Anzac Hwy	1	1 x Hit Fixed Object	0
Anzac Hwy between Clifton St and the Eastern Subject Site Boundary	0	0	0
Clifton St between Anzac Hwy and Gunnawarra Ave	0	0	0
Clifton St Between Gunnawarra Ave and Creslin Tce	2	1 x Roll Over 1 x Right Angle	2 x Minor Injury

Source: DPTI road crashes dataset accessed via data.sa.gov.au

Based on the above, the crash history surrounding the subject site is low.

2.3. Sustainable Transport Infrastructure

2.3.1. Public Transport

The site is well serviced by public transport with a bus stop adjacent the front of the site on Anzac Highway. Anzac Highway is a go-zone with at a maximum wait of 15 minutes between 7:30am and 6:30pm from Monday to Friday.

The Adelaide to Glenelg tram is located to the south of Anzac Highway with the site located between Stops 11 and 12 of the tram line. This would be approximately 600 to 700 metres walking distance to each stop respectively. The tram provides access to Glenelg and the Adelaide CBD, as well as various residential and commercial precincts in various locations along the tramline. (Services every 10 minutes between 7:00am – 7:00pm on weekdays, 7:00am – 6:00pm on weekends and up to 20 minutes outside of these times).

EXISTING CONDITIONS

Figure 2.5 shows the subject site in relation to existing public transport routes within its vicinity whilst Table 2.2 summarises the road-based routes and major destinations that can be reached using these services.

Figure 2.5: Public Transport Map

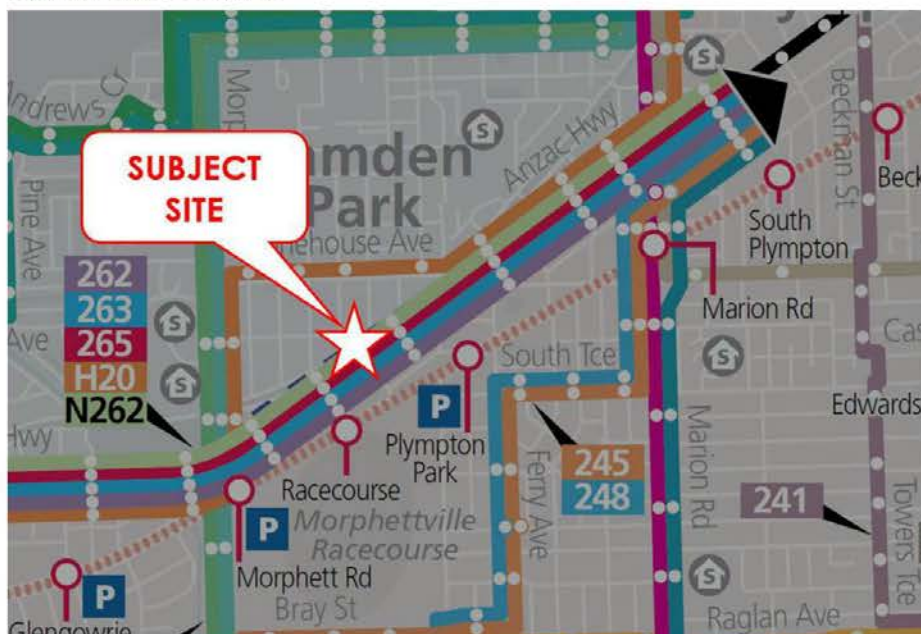


Table 2.2: Public Transport Provision

Service	Route No's	Route Description	Distance to Nearest Stop (m)	Frequency On/Off Peak
Bus	262,263	Marion Centre Interchange to City	0	Maximum every 15 minutes between 7.30am and 6.30pm Monday to Friday; every 30 minutes at night, Saturday, Sunday and Public Holiday until 10pm
	265	Marion Centre Interchange, Brighton & Glenelg Interchange to City		
Tram		Glenelg to Royal Adelaide Hospital Glenelg to Festival Plaza	650	Maximum every 10 minutes before 6pm; Maximum every 20 minutes after 6pm

2.3.2. Pedestrian Infrastructure

The location of the site provides excellent pedestrian connections as described below:

- There are pedestrian footpaths on both sides of Anzac Highway as well as a refuge crossing facility in the median with kerb ramps on each carriageway.
- There is a pedestrian footpath on the eastern side of Clifton Street.
- The westside bikeway, which is shared path for pedestrians and cyclists linking between Glenelg and Adelaide is located in the reserve to the north of the site.

2.3.3. Cycle Infrastructure

The site is also well serviced with cycling infrastructure:

EXISTING CONDITIONS

- The westside bikeway, which is shared path for pedestrians and cyclists linking between Glenelg and Adelaide is located in the reserve to the north of the site.
- The site is also within close proximity to the Mike Turtur Bikeway along the Adelaide to Glenelg Tram corridor located to the south of Anzac Highway.
- Bicycle lanes operate on Anzac Highway between 7:00am – 9:00am (Adelaide bound) and 4:30pm and 6:00pm (Glenelg bound).

DEVELOPMENT PROPOSAL

3. DEVELOPMENT PROPOSAL

03



S168630 // 3/05/19
Transport Impact Assessment // Issue: A
411 Anzac Highway, Camden Park, Residential Development

9

DEVELOPMENT PROPOSAL

3.1. Land Uses

The proposal comprises 15 townhouses and 39 apartment dwellings, as summarised in Table 3.1. While the townhouses will all be sold privately, the apartment will comprise a mix of social and affordable housing. Figure 3.1 has also been prepared to consider the site layout.

Table 3.1: Proposed Dwelling Schedule

Type of Dwelling	Bedrooms	Quantity
Townhouse	3	3
	2	12
TOTAL		15
Apartment	2	32
	1	7
TOTAL		39

Figure 3.1: Proposed Development



3.2. Car Parking

Each townhouse will have two (2) car parking spaces, consisting of a single enclosed garage and an additional space on the driveway in front of the dwelling. A total of 35 car parking spaces have been provided for the apartments.

3.3. Vehicle Access

Vehicle access for the site is proposed via a one-way private road within the site with an ingress on Anzac Highway and an egress onto Clifton Street.

DEVELOPMENT PROPOSAL

All dwellings will be accessed via the one-way roadway, except for three (3) townhouse dwellings which will front onto Clifton Street.

3.4. Bicycle Facilities

A total 14 bicycle spaces will be provided within the site.

3.5. Pedestrian Facilities

A pedestrian link will be provided within the site, providing a direct link between Anzac Highway and the Westside Bikeway shared path. This path would also link to a footpath which runs parallel to the private roadway, servicing the townhouses. The apartment building will have a direct link between the lobby and Anzac Highway.

3.6. Refuse Collection

Private refuse collection is proposed for the dwellings with internal access to the site. Two bin storage areas will be provided along the internal roadway which would service all these dwellings. The Clifton Street fronting townhouses will be serviced via Council waste collection vehicles.

CAR PARKING

4. CAR PARKING

04

CAR PARKING

4.1. Development Plan Car Parking Requirements

4.1.1. Development Plan

Parking rates are set out in Table WeTo/2 of the West Torrens Development Plan, which specifies the following rates in Table 4.1. Townhouses are typically classed as row dwellings, while the apartments are typically considered as part of a residential flat building.

Table 4.1: Development Plan Parking Rates as per WeTo/2

Land Use	Development Plan Parking Rates
Dwelling <ul style="list-style-type: none"> - detached - semi-detached - row 	2 car parking spaces per dwelling, one of which is covered
Dwelling <ul style="list-style-type: none"> - multiple - group - within a residential flat building 	2 car parking spaces per dwelling, one of which is covered + an additional 0.25 car parking spaces per dwelling

It is noted that the site is in the Residential – Medium Density Policy Area 18 which states the following in PDC 7:

Dwellings constituting affordable housing (as defined by the South Australian Housing Trust Regulations as amended) should be designed within the following parameters and have a minimum site area (and in the case of residential flat buildings, an average site area per dwelling) not less than that shown in the following table: (extract of below)

Minimum Number of on-site car parking spaces (one of which should be covered)

– Residential Flat Building 1

Based on above, Table 4.2 has been prepared to consider the development plan parking requirement for the proposed development.

Table 4.2: Development Plan Parking Requirement

Land Use	Quantity	Development Plan Parking Rate	Development Plan Parking Requirement
Row Dwelling (Townhouse)	15	2 car parking spaces per dwelling	30 car parking spaces
Residential Flat Building (Apartments)	39	1 car parking space per dwelling for residents	39 car parking spaces
		0.25 car parking spaces per dwelling for visitors	10 car parking spaces
TOTAL			79 car parking spaces

4.2. Adequacy of Parking Supply

The car parking provision of 2 spaces per dwelling (one of which is covered) for the proposed 15 townhouses will meet the requirements of the Development Plan.

The provision of 35 car parking spaces for the 39 apartments will be less than the Development Plan requirements for car parking in Table WeTo/2 Off Street Vehicle Parking Requirements and the Medium Density Policy 18 PDC 7. It should be noted that the proposed apartments are to be built by Junction Australia as a mix of affordable and social housing.

Junction Australia provide houses that are allocated to low or moderate income persons or people with particular needs or barriers toward long term sustainable housing, and rent is based on a percentage of income received.

CAR PARKING

The East Block will comprise 24 apartments, all of which will be affordable housing. These will be allocated with one car park per apartment (24 car parking spaces in total).

The West Block will comprise 15 apartments with 11 car parks and will be managed by Junction Australia as social housing. A review of parking demands at other Junction Australia sites was undertaken by Junction Australia in April 2019 based on phone call sample survey of residents. This survey found that approximately 75% of residents own a vehicle which is parked on site, with 25% not having a vehicle parked. This would be expected given the low income of residents, social characteristics of the housing developed by Junction Australia. Based on this rate, a total of 11-12 spaces would be required for the social housing apartments.

Therefore, the proposed provision of 24 car parking spaces for the East Block satisfies the requirement set out in the Medium Density Policy Area PDC 7. The provision of 11 car parking spaces within the West Block would also meet the anticipated demand based on phone survey conducted by Junction Australia. The proximity of high frequency public transport including bus and tram would further assist in reducing the demand for resident parking.

Visitor parking for the site based on 0.25 spaces per apartment would equate to 10 spaces. There would be parking available on-street for visitor parking on both Anzac Highway and Clifton Street, as well as 7 on-street parking spaces along Creslin Terrace.

4.3. Internal Layout

The proposed internal layout is consistent with the Australian Standards for Off-Street Car Parking (AS2890.1:2004) and the Australian Standards for Parking for People with Disabilities (AS2890.6:2009). The key features are detailed below.

- The internal roadway is 4.2 metres wide minimum which exceeds the minimum requirement for a one-way roadway (3.0 metres).
- Minimum driveway width of the townhouses is 3.2 metres which exceeds the minimum requirement. The minimum apron width requirement of 5.6 metre (300 mm including clearance) is met for the townhouses fronting the internal roadway and exceeded for the townhouses fronting Clifton Street.
- The refuse collection area for the apartments has been designed to enable a vehicle to pass while collection is taking place.
- Car parking spaces are 2.4 metres wide x 5.4 metre long and set within a 5.8 metre wide aisle, which meets User Class 1A requirements (residential & low turnover parking).
- The 2 x Disabled car parking spaces are 2.4 metres wide x 5.4 metres long and are accompanied by a shared space of 2.4 metres wide x 5.4 metres long as per the standard. The provision of disabled parking is also in accordance with the West Torrens Development Plan
- A 1.0 metre blind aisle extension will be provided within the apartment undercroft car parks.
- A turnaround area is provided at the rear of the apartment car park to enable safe entry and exit from the vicinity.
- A minimum 2.55 metre headroom clearance will be provided within the car parks and above the shared spaces of the disabled car parking spaces in the west apartment block, exceeding the Standard.

VEHICLE ACCESS

5. VEHICLE ACCESS

05

VEHICLE ACCESS

5.1. Access Arrangements

The proposed development will include two access points with an entry driveway on Anzac Highway and exit driveway on Clifton Street to support the proposed one-way road within the site.

The Anzac Highway access point has been located as far east as possible away from the Clifton Street junction, a bus stop and U-turn median opening on Anzac Highway. The access point has been designed to provide separation to an entry driveway for the neighbouring site, separation from existing infrastructure in the verge including a stobie pole and stormwater pit, and provide a refuge between driveways for pedestrians. This layout is the result of discussion with DPTI and Council to develop an appropriate access arrangement for the site.

Figure 5.1 has been prepared to show the proposed ingress.

Figure 5.1: Proposed Ingress Configuration



The Clifton Street access point is proposed approximately 17 metres south of the Gunnawarra Avenue/Clifton Street Intersection and will facilitate egress only. The access point meets AS2890.1:2004 with the location outside of the prohibited zone.

Figure 5.2 shows the proposed egress onto Clifton Street.

VEHICLE ACCESS**Figure 5.2: Proposed Egress Configuration**

SUSTAINABLE TRANSPORT
INFRASTRUCTURE

6. SUSTAINABLE TRANSPORT INFRASTRUCTURE

06

SUSTAINABLE TRANSPORT INFRASTRUCTURE

6.1. Development Plan Bicycle Parking

The Development Plan does not provide any bicycle parking requirements for the residential zone. It does include parking requirements for Bicycles in Table WeTo/7. This table recommends parking at the following rates.

Residential Component of multi-storey building/residential flat building

- Resident: 1 for every 4 dwelling
- Visitor 1 for every 10 dwellings

Provision of these rates for the proposed apartment building would equate to 10 spaces for residents plus 4 spaces for visitors, for a total of 14 spaces.

6.2. Walking and Cycling Network

As discussed in Section 2.3.2, a pedestrian connection has been provided between Anzac Highway and the Westside Bikeway, and footpath on Anzac Highway. This provides a strong walking and cycling integration between the site and the external network of paths and bicycle lanes.

6.3. Public Transport

As discussed in Section 2.3.1, the site is located adjacent a bus stop, which provides high frequency services. The site is also within walking distance of the tramline (Stop 11 or 12), which provides services at a frequency of 10 minutes between 7:00am and 7:00pm on weekdays, 7:00am – 6:00pm on weekends and up to 20 minute frequency outside of these times.

LOADING FACILITIES

7. LOADING FACILITIES

07

LOADING FACILITIES

7.1. Development Plan Requirements

Principles of Development Control (PDC) 14 of the Transport and Access Section states the following with respect to loading/waste collection:

Development should provide for the on-site loading, unloading and turning of all traffic, including any waste collection vehicles, likely to be generated.

7.2. Refuse Collection

Refuse collection for the proposed development will be provided as follows:

Townhouses (3 off - Clifton Street frontage)	Council collection
Townhouses (internal access)	Private Collection
Apartments	Private collection

Standard kerbside collection will be undertaken by a Council refuse collection vehicle for the 3 dwellings which front onto Clifton Street. For the remaining dwellings, private collection will be carried out with up to a 10.0-metre-long truck entering via a left turn from Anzac Highway and exiting onto Clifton Street. Within the site, two communal bin areas have been provided for the townhouses. The western bin communal area has also been multi-purposed as an indented parking for rear lift collection for the apartments. It is noted that refuse collection for the townhouses and apartments will be carried out on separate days.

A detailed waste management plan has been prepared by Chris Colby Advisory (14 April 2019), which details the on-site operation in more detail.

The following turn paths have been prepared to demonstrate how the site would operate with refuse collection.

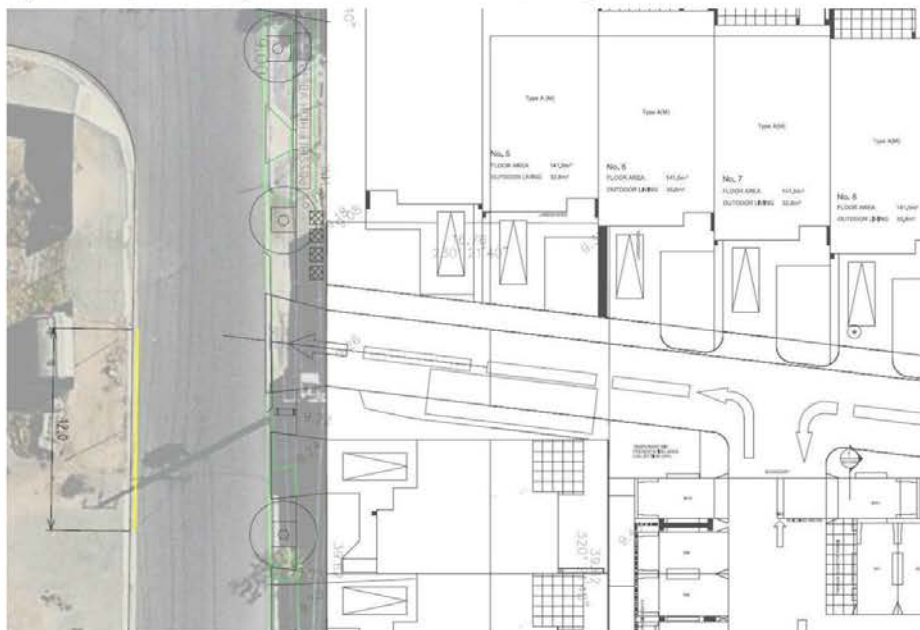
- Figure 7.1 considers the turn path which shows the circulation route
- Figure 7.2 considers the traffic control required to enable un-restricted exit movements from Clifton Street (yellow line marking)
- Figure 7.3 demonstrates a vehicle passing a parked refuse collection vehicle during apartment waste collection
- Figure 7.4 shows a car entering townhouse #4 & #5 while the collection vehicle is parked within the indented bay
- Figure 7.5 shows a car exiting townhouse #4 & #5 while the collection vehicle is parked within the indented bay

LOADING FACILITIES

Figure 7.1: Swept paths of a 10.0 metre refuse vehicle



Figure 7.2: Proposed Parking Control Treatment – Yellow Line marking



LOADING FACILITIES

Figure 7.3: B99 Vehicle passing a stored waste collection vehicle

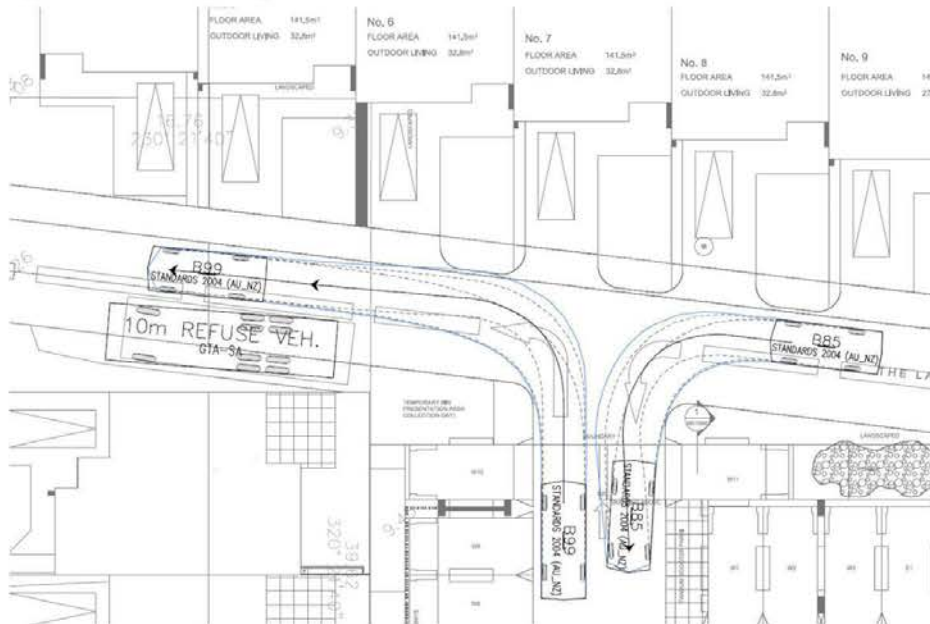
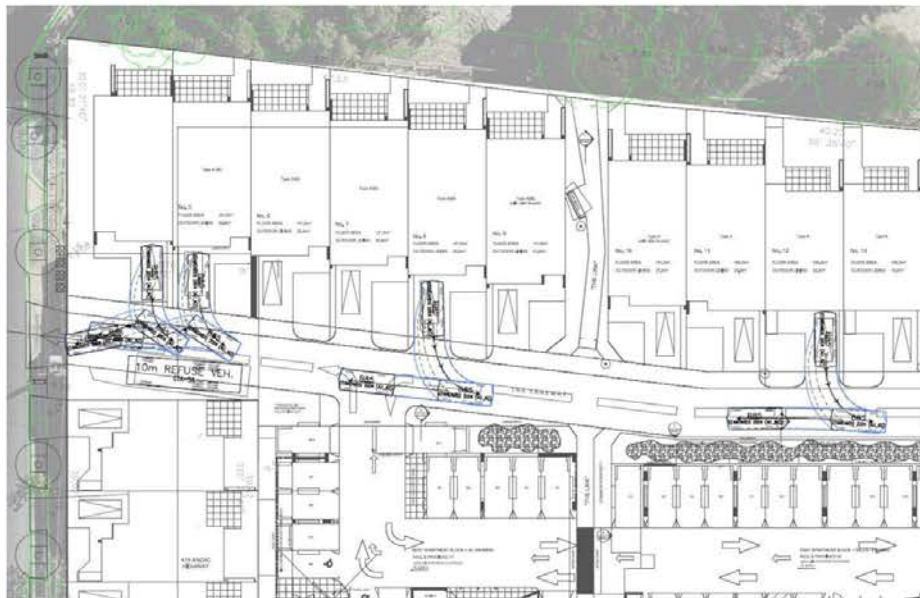


Figure 7.4: Townhouse entry for B85 vehicle during apartment waste collection



LOADING FACILITIES

Figure 7.5: Townhouse exit for B85 vehicle during apartment waste collection



TRAFFIC IMPACT ASSESSMENT

8. TRAFFIC IMPACT ASSESSMENT

08

TRAFFIC IMPACT ASSESSMENT

8.1. Traffic Generation

8.1.1. Design Rates

Traffic generation rates have been sourced from the 'Guide to Traffic Generating Developments' (RTA NSW, 2002, henceforth referred to as RTA Guide). As a conservative assessment, it was assumed all dwellings were medium density. The rates are specified below:

Medium Density (Three or more bedrooms)

– Weekday peak hour trips 0.5 – 0.65 trips per dwelling

Medium Density (Up to two bedrooms)

– Weekday peak hour trips 0.4 – 0.5 trips per dwelling

Based on the above, Table 8.1 has been prepared to consider the traffic generation for the site.

Table 8.1: Traffic Generation Estimates

Description	Bedrooms	Quantity	Trips per Dwelling	Development Plan Trip Generation
Townhouse	3	15	0.65	10
Apartment	2	32	0.5	16
	1	7	0.5	4
TOTAL				30

Based on the above, the site can expect to generate up to 30 trips during the AM and PM Peak Hours respectively.

8.1.2. Distribution and Assignment

The directional distribution and assignment of traffic generated by the proposed development will be influenced by a number of factors, including the:

1. Configuration of the arterial road network in the immediate vicinity of the site
2. Existing operation of intersections providing access between the local and arterial road network
3. Distribution of households in the vicinity of the site
4. Surrounding employment centres, retail centres and schools in relation to the site
5. Configuration of access points to the site.

Having consideration to the above, for the purposes of estimating vehicle movements, it was assumed during the PM Peak Hour that 30 % of traffic was approaching from the east while 70 % of traffic was approaching from the west. An inbound outbound split of 80:20 was also assumed.

In consideration of the above, Figure 8.1 has been prepared to show the marginal increase during the PM Peak while Figure 8.2 have been prepared to show the post development traffic following full development.

TRAFFIC IMPACT ASSESSMENT

Figure 8.1: PM Peak Hour Site Generated Traffic Volumes

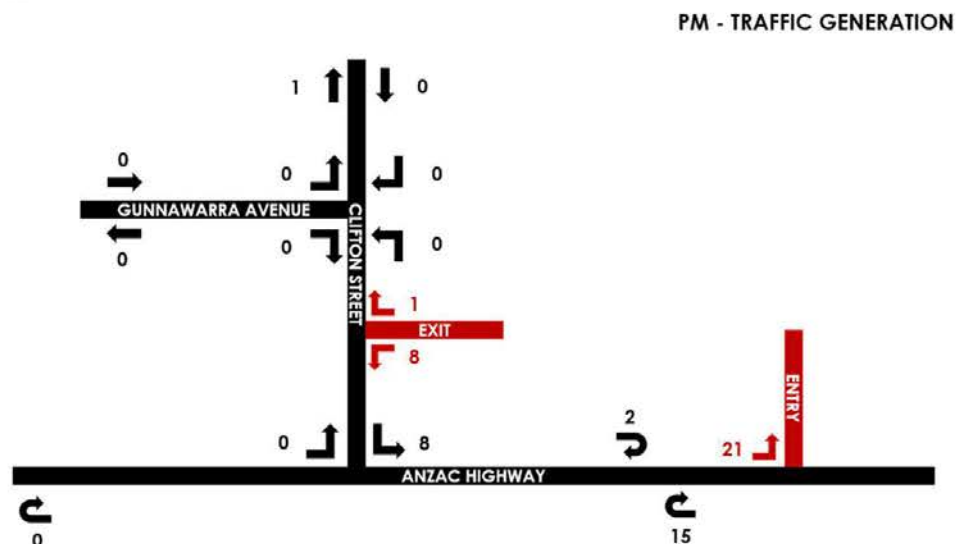
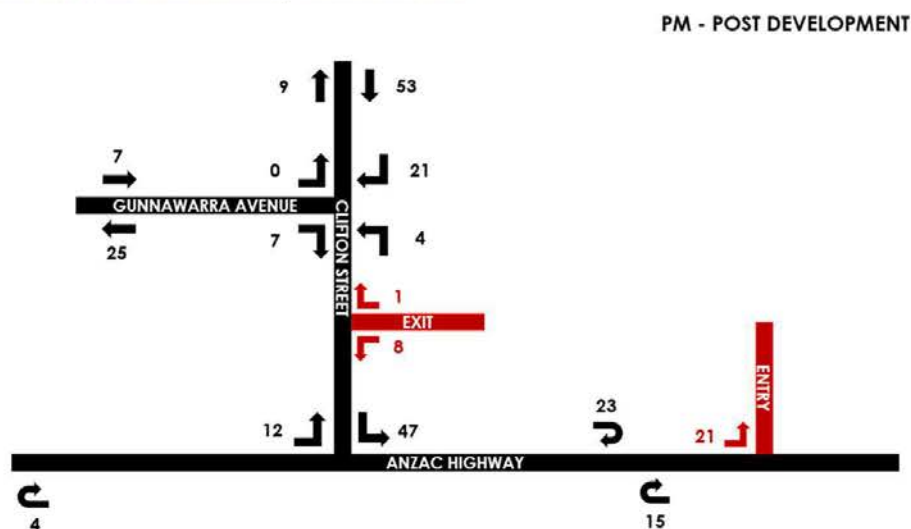


Figure 8.2: PM Peak Hour Post Development Traffic Volumes



8.2. Traffic Impact

The total traffic generation of the site is very low. When considering existing traffic volumes in the vicinity of the site, the addition of 30 trips during the peak hours onto the road network is considered negligible. Therefore, the traffic generated by the proposed development could not be expected to compromise the safety or function of the surrounding road network.

CONCLUSION

9. CONCLUSION

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CONCLUSION

Based on the analysis and discussions presented within this report, the following conclusions are made:

1. The proposed development comprises a residential subdivision for 15 townhouse dwellings and 39 apartments.
2. The proposed development generates a development plan parking requirement of 30 car parking spaces for the townhouses which meets the development plan requirements.
3. 35 car parking spaces have been provided for the 39 apartments. Given the social and affordable housing nature of the apartments and their close proximity to public transport and active travel options, this provision is considered appropriate.
4. The proposed parking layout is consistent with the dimensional requirements as set out in the Australian Standards for Off Street Car Parking (AS2890.1:2004) and the Australian Standards for Parking for People with Disabilities (AS2890.6:2009).
5. The provision for 14 bicycle parking spaces is considered appropriate to meet the anticipated demands.
6. The site provides an excellent pedestrian link between Anzac Highway and the Westside Bikeway, which better integrates the site to the local walking and cycling network.
7. Refuse collection for the townhouses will be undertaken by a vehicle up to 10.0 metres long. The townhouses fronting the internal roadway would store their bins within two separate areas for standard side loading. The townhouse fronting Clifton Street would store their bins along the street for collection which is consistent with standard practice. The western bin storage area will be integrated as a multi-use indented bay for apartment waste collection. This would take place on a separate day to minimise conflict with collection for the townhouses. Collection for apartment waste will also take place for vehicles up to a 10-metre-long truck.
8. The site is expected to generate up to 30 trips during the AM and PM Peak Hours.
9. The addition of 30 trips would not adversely impact the external road network.

