

## **Rymill Park Apartments Pty Ltd and Rymill Park Apartments Unit Trust**

Demolition of existing office building and construction of 16 level mixed use building with basement and associated car parking

### **2-6 Hutt Street, Adelaide**

DA Number 020/A053/19

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## OVERVIEW

<b>Application No</b>	020/A053/19
<b>Unique ID/KNET ID</b>	2019/12797/01
<b>Applicant</b>	Rymill Park Apartments Pty Ltd & Rymill Park Apartments Unit Trust
<b>Proposal</b>	Demolition of existing 2-storey office building and construction of a 16-level mixed use building with basement and associated car parking
<b>Subject Land</b>	2-6 Hutt Street, Adelaide
<b>Zone/Policy Area</b>	Capital City Zone/No policy area applies
<b>Relevant Authority</b>	State Commission Assessment Panel
<b>Lodgement Date</b>	1 October 2019
<b>Council</b>	City of Adelaide
<b>Development Plan</b>	Adelaide (City) Development Plan (25 July 2019 with amendments gazetted on 26 September 2019 (consolidated date 17 October 2019))
<b>Type of Development</b>	Merit
<b>Public Notification</b>	Category 2
<b>Representations</b>	Seven representations received (1 of which was invalid), and three representors wish to be heard
<b>Referral Agencies</b>	Nil (the Government Architect entered into a pre-lodgement agreement and referral was not required)
<b>Report Author</b>	David Bills, Consultant Planner
<b>RECOMMENDATION</b>	Development Plan Consent subject to conditions

## EXECUTIVE SUMMARY

The application is for the demolition of an existing office building and the construction of a mixed use building of 16 levels comprising 2 basement car parking levels; ground floor with restaurant, apartment entry foyer and services; mezzanine with resident lounge and meeting/dining conference facilities, terrace, amenities and storage; car parking on levels 1 and 2; and apartments on levels 3 to 14 inclusive.

A similar 16-level mixed use building with basement and associated car parking development proposed by this applicant on this site has previously been granted Development Plan Consent, however this is neither relied upon by the applicant nor considered as part of the assessment of this current application.

For clarity, the following brief timeline summarises the application history at this site:

- 24 May 2018 – SCAP deferred Development Application 020/A081/17 for the applicant to provide further information.
- 14 June 2018 – SCAP granted Development Plan Consent to 020/A081/17 subject to conditions.
- September 2018 – the applicant made a new application for a similar 16 level building in Development Application 020/A080/18. The assessment of this application has not been finalised and remains on hold.
- 1 October 2019 – Application 020/A053/19 (current application and the subject of this assessment) lodged with SCAP.
- 30 October 2019 – Application 020/A081/17 is cancelled at the applicant's request.

Located within the Capital City Zone, the predominantly residential building responds to the high-scale desired character envisaged in the Zone with high street walls that frame the streets, together with an interesting pedestrian environment and human scale at ground floor levels. Non-residential uses are included at the ground floor level and

mezzanine levels around the prominent corner of Hutt Street and East Terrace consistent with the intent of the Zone.

The proposed combination of land uses are explicitly envisaged within the Zone and the building achieves a high standard of external appearance which is also specifically contemplated in the Zone. The siting of the building along with the inclusion of a podium are consistent with the intent of the Zone.

The site of the proposed development is immediately adjacent to the City Living Zone to the east of the subject land and the Park Lands Zone to the north.

A 22 metre height limit is identified for the subject land. Development should not exceed this height unless, notwithstanding its height, it has regard to the context that forms the positive character of the locality and is sympathetic to the desired character of the Zone and where specified criteria are satisfied.

Accordingly, a consideration of the proposed building height of 53.9 metres and its interface with the surrounding context is a key planning consideration for this proposal.

The proposed development is considered to satisfy the criteria for exceeding the specified maximum height under the Capital City Zone.

Category 2 representations expressed concern about the proposed building height, as well as about potential traffic congestion and overlooking from the proposed development into existing dwellings to the east. While these concerns are recognised, the design measures and supporting materials provided with the application demonstrate that appropriate measures have been or will be taken to address and minimise these impacts to meet the Development Plan guidelines.

The proposed development also successfully addresses other key planning and technical issues. It is therefore considered appropriate for Development Plan Consent to be granted subject to planning conditions recommended in this report.

## **ASSESSMENT REPORT**

### **1. BACKGROUND**

#### **1.1 Strategic Context**

Recent amendments to the Adelaide (City) Development Plan include a Minor Amendments DPA (Ministerial) on interim operation as well as Section 29(2)(a) and 29(2)(b)(ii) amendments. These were gazetted before this application was lodged however they have little policy bearing on the assessment of the application as they do not alter the effect of an underlying policy reflected in the Development Plan.

The City of Adelaide Minor Amendments Development Plan Amendment (DPA) was on public consultation from 25 July 2019 to 19 September 2019 and is currently under consideration by the Minister for Planning.

The Minister has put this DPA on Interim Operation which places the amended policy into effect from the commencement of consultation (25 July 2019) until a final decision is made on the policy by the Minister (maximum time limit of 12 months).

The Minister has amended the Development Plan for the City of Adelaide to strengthen design standards and remove policy ambiguity in relation to over-height development in the Capital City Zone.

The DPA achieves this by:

- ensuring that proposals for over-height development have appropriate regard to positive local context and are sympathetic to desired character and city form, including a transition of building heights
- refining design and sustainability policy measures to improve policy expression and ensure their practical application to over-height development proposals in the zone, while ensuring higher standards of design and sustainability and a greater contribution to the public realm than for proposals that are within prescribed height limits
- elevating the provision of affordable housing and the retention, conservation and re-use of heritage buildings and important character elements as standalone incentives to achieving over-height development.

Specifically, the following changes have been made to PDC 21 of the Capital City Zone in the Adelaide (City) Development Plan:

- amending part (a) of the policy to ensure that proposals for over-height development have appropriate regard to positive local context and are sympathetic to desired character and city form, including a transition of building heights
- amending part (b) of the policy to refine design and sustainability policy measures to improve policy expression and ensure their practical application to over-height development proposals in the zone, while ensuring higher standards of design and sustainability and a greater contribution to the public realm than for proposals that are within prescribed height limits
- elevating the provision of affordable housing and the retention, conservation and re-use of heritage buildings and important character elements as standalone incentives to achieving over-height development.

## 1.2 Pre-Lodgement Process

A Pre-Lodgement Agreement has been entered into between the applicant and the South Australian Government Architect. In accordance with section 37AA of the *Development Act 1993*, as a result of the Pre-Lodgement Agreement having been entered into, the application has not been referred to the Government Architect as would otherwise be the case under Schedule 8 to the *Development Regulations 2008*.

The project was presented to the Design Review Panel on five occasions and the proponent participated in one Desktop Review session across a series of applications for a 16 storey building on the subject land. The Government Architect has specifically noted an acknowledgement of the willingness the applicant has engaged with Design Review and (without further elaboration) the change made subsequent to the third Design Review session.

The Pre-Lodgement Agreement with the Government Architect is dated 27 September 2019 and lists the Tectvs architectural drawings submitted with this application. It notes, in part, the following:

- *My support for a development of the proposed scale is contingent on the delivery of the high quality design outcome presented.*
- *I support the ground floor configuration that activates the north and west frontages and the provision of separate entrances for public and private uses. The ground floor includes a restaurant with a dedicated entrance off East Terrace and double height green wall feature that covers the expressed curved car park ramp, which I support.*
- *The Hutt Street residential entry lobby is well-defined and provides a good sense of address. The proposal achieves clear site (sic) lines between the entrance and the secure lift lobby and provides security for the residents by way of the*

*secure airlock. I support the inclusion of an indoor garden, seating and artwork within the lift lobby and encourage further consideration of the placement and integration of furniture as the project progresses.*

- *The garage door, fire door and wall lining above are all clad with metal routed panelling, with the view to achieving a uniform recessive expression. I support this approach.*
- *Cleo Lane accommodates vehicle access to above ground car parking, waste collection, a bin store and the site's transformer. Given the shared nature of Cleo Lane, I welcome the project team's intent to engage with adjacent landowners to achieve a mutually agreeable outcome for the shared space. In my view, the consideration given to the amenity of the laneway and transition between the private laneway and public realm will reinforce the development's sense of place and contextual relationship.*
- *I anticipate ongoing protection and maintenance of the street trees, and support utilising the street tree canopy for outdoor seating.*
- *Access to the mezzanine level is via the restaurant entry off East Terrace, which I support as it offers flexibility for potential adaptive reuse. A large cantilevered curvilinear terrace extends over the Hutt Street corner, capturing Park Land views and northern light, which I anticipate will be desirable to residents and result in streetscape activation. In my view, the shape of the corner canopy also strengthens the sculptural qualities of the design.*
- *I commend the decision to provide two levels of car parking below ground and support the reduction of above ground car parking to two levels. I also support the car park floor to floor dimensions that allow for potential adaptive reuse.*
- *Support the proposed mix and layouts of the apartments that are generous and offer a high level of amenity. I also support the provision of 2.7 metre ceiling heights typically and light and ventilation access to habitable rooms.*
- *I consider the site to be prominent with landmark characteristics afforded by its Park Lands setting and elevated position. As such, in principle I support an approach for a building that exceeds the 22 metre height limit envisaged by the Development Plan. Given development of this scale will become a significant backdrop to the Park Lands and will be viewed from all angles, my support for the height from a design perspective is contingent on a continued commitment and delivery of the high quality design outcome presented, particularly in relation to the refined architectural expression, choice materiality, apartment amenity, sustainability initiatives and servicing strategy as well as public realm contribution.*
- *I support the approach for a robust and simple expression that presents a slender built form that is articulated into two elements, as this assists in managing the development's mass and scale. I also support the horizontal emphasis resulting from the expressed Glass Reinforced Concrete beams, which are modelled to include lips that taper and vary the facade depth.*
- *I acknowledge the studies undertaken by the design team that explore alternative roof profiles. In my view, however an opportunity exists to further refine the penthouse roof forms to assist in mitigating the height of the development. I also urge further consideration of the layout of the PV panels with the view to reducing the visual impact of the roof line.*
- *I strongly support the depth of investigations and modelling undertaken regarding the performance of the building at this early stage of design development. I also support the inclusion of ESD initiatives such as a rooftop solar photo-voltaic array, electric vehicle charging and rainwater harvesting. My support for the development is contingent on maximising the thermal*

*performance of the building and continued commitment and delivery of the ESD ambition that exceeds the minimum quantitative requirements.*

- *I support the engagement of a landscape architect and urge ongoing collaboration as design development progresses to achieve integrated and successful delivery of the landscape elements.*
- *While I am not of the view that the level three terrace is a rooftop garden, I do acknowledge the benefits of this space including accessibility, micro climate, maintenance and contribution to managing urban heat island effects at street level.*
- *To ensure the most successful design outcome is achieved the State Commission Assessment Panel may like to consider conditions or reserved matters to protect the following elements of the proposal, as design details are produced in due course:*
  - *Collaboration with Council to achieve an integrated outcome for all new paving treatments*
  - *Refinement of the penthouse roof forms to assist in mitigating the height of the development and further consideration of the layout of the photo-voltaic panels with the view to reducing the visual impact of the roof line*
  - *Final samples of selected materials*

## **2. DESCRIPTION OF PROPOSAL**

Application details are contained in the ATTACHMENTS.

The proposal is for the demolition of the existing building on the subject land and the construction of a single building comprising:

- two levels of basement car parking (28 cars);
- a restaurant, apartment foyer, bin store and common areas at ground level;
- communal meeting, dining and lounge spaces for apartment residents on a mezzanine level, with a terrace proposed to encroach over the Hutt Street and East Terrace road reserves;
- two further car parking levels (28 cars) including secure bicycle storage at levels 1 and 2. In total, 56 marked car parking spaces, 46 resident bicycle parking spaces and 6 visitor bicycle parking spaces will be provided;
- a communal resident rooftop garden and seating area at level 3;
- 38 apartments in total across levels 3 to 14.

Ground-level setbacks are 1.05 metres to Hutt Street and East Terrace, and 4.2 metres to Cleo Lane. No setback is provided to the southern site boundary.

At levels 1 and 2, no setbacks to any boundaries are provided.

At levels 3 to 14 no setbacks to any boundaries are provided, except for a 4.3 metre setback to the southern boundary to accommodate the rooftop garden at level 3 and the space above it.

Pedestrian access will be to the apartment foyer from Hutt Street, and to the restaurant from separate entrance doors from Hutt Street and East Terrace.

Vehicle access is proposed from East Terrace via the existing left-in, left-out movement into Cleo Lane, and then onto vehicle ramps for access to the upper-level car parking. A separate driveway from Hutt Street (also left-in, left-out) provides access to the basement car parks. The driveway crossover to Hutt Street accommodates the retention of the existing street tree in this location.

The setback of the proposed building to Cleo Lane is proposed to allow for an increase to the width of this private road to accommodate all traffic movements and will allow two-way traffic movements along the northern 20 metres of Cleo Lane.

At ground level, the façade of the proposed building to Hutt Street and East Terrace will primarily be glazed. At upper levels, bronze and dark glass will be framed concrete in a light finish, with copper and bluestone elements. These materials and finishes are depicted in the application materials and form part of the drawing set subject to a pre-lodgement agreement with the Government Architect.

Landscaped areas will be provided in the form of:

- an internal green wall to the carpark ramp wall behind the ground-floor restaurant, up to the communal areas at mezzanine level;
- an internal “dry garden” to the residential entry from Hutt Street; and
- a communal rooftop garden at level 3 including a communal dining area, seating, decking, arbour structure and fire pit.

Further landscaping is intended to be provided to improve the amenity of Cleo Lane. The applicant has indicated that this will be undertaken in further consultation with both the land owners and Council.

A summary of the proposal is as follows:

<b>Land Use Description</b>	Residential flat building with associated resident common areas and restaurant
<b>Building Height</b>	53.9 metres above ground level (to rooftop excluding lift overrun and solar panels)
<b>Description of levels</b>	Basements 1 and 2: 28 car spaces (20 standard, 8 small) Ground Floor: Restaurant (including kitchen), apartment entry and lift lobbies, bin store, waste collection area and waste vehicle collection point, car park access ramps, visitor bicycle rack (6 bikes) Levels 1 and 2: 28 car spaces (24 standard, 4 small); bike storage room (46 bikes) Levels 3 to 14: 38 Apartments (4 one-bedroom, 21 two-bedroom, 12 three-bedroom, 1 four-bedroom)
<b>Floor areas</b>	Restaurant – 135m <sup>2</sup> Apartments – Ranging between 70m <sup>2</sup> and 445m <sup>2</sup> .
<b>Private open space</b>	Ranging between 8m <sup>2</sup> and 145m <sup>2</sup> per apartment.
<b>Site Access</b>	Pedestrian access – Hutt Street (apartments), Hutt Street and East Terrace (restaurant) Vehicle access – Cleo Lane and Hutt Street Bicycle room access – via lift lobby to Level 2 Bin store – Cleo Lane
<b>Car and Bicycle Parking</b>	56 car parking spaces (44 standard, 12 small) 46 resident and 6 visitor bicycle parking spaces
<b>Encroachments</b>	The mezzanine level terrace will encroach over the Hutt Street and East Terrace footpaths New paving to roadway, waste collection area and temporary waste vehicle collection point will encroach over Cleo Lane (a private laneway)
<b>Staging</b>	No staging is indicated in the application materials.

### 3. SITE AND LOCALITY

#### 3.1 Site Description

The site consists of a single allotment, described as follows:

Lot No	Street	Suburb	Hundred	Title Reference
Allotment 118 on Filed Plan 181770	2-6 Hutt Street	Adelaide	Adelaide	CT Volume 5876 Folio 101

The subject land is located at the south-eastern corner of the intersection of Hutt Street and East Terrace. The subject land is rectangular in shape with frontages to Hutt Street (20.74 metres) and East Terrace (27.44 metres). The total site area is approximately 569m<sup>2</sup>.

The land has access to a Right of Way over the rear 3.05 metres of 82 and 83 East Terrace, comprising Cleo Lane. The Cleo Lane frontage is 20.74 metres.

The subject land is generally flat. Existing improvements comprise a 2-storey brick office building with the main entrance to its northern (East Terrace) frontage. The building covers substantially the whole of subject land, with some landscaping provided in narrow setbacks from the main (East Terrace and Hutt Street) frontages.

#### 3.2 Locality

Within the locality, both East Terrace and Hutt Street serve as important links for pedestrians, cyclists and motorists within the City of Adelaide, and from the City to the eastern and south-eastern suburbs. East Terrace, where it adjoins the subject land, provides three lanes of traffic for eastbound and turning vehicles, with marked bicycle lanes in each direction. Hutt Street provides two lanes for southbound traffic, and also has marked bicycle lanes in each direction. Along the Hutt Street boundary of the subject land, short-term paid on-street parking is provided in right-angle parking bays indented into the footpath. A number of established street trees line Hutt Street in the vicinity of the subject land.

North of the subject land, across East Terrace, is that part of the Adelaide Park Lands known as Rymill Park (Murlawirrapurka) featuring established gardens, an ornamental lake and other recreational facilities. Further north, the O'Bahn Bus Tunnel portal connects north-east suburban buses to the Grenfell Street bus corridor.

East of the subject land, across Cleo Lane, a 4-storey apartment building has northern and eastern frontages to East Terrace. Further south, Cleo Lane provides rear access to several townhouse dwellings that have their primary frontages to East Terrace.

The southern boundary of the subject land adjoins a two-storey office building with basement parking accessed off Hutt Street. Immediately further south is Rymill House which (including its former coach house and wall) is listed as a State Heritage Place.

West of the subject land, directly opposite it across Hutt Street, is a prominent 4-storey office building, and further south a row of smaller-scale office and commercial buildings, some of them former dwellings.

The wider locality, taking in areas either side of Hutt Street, has seen substantial development either undertaken or approved in recent years:

- a range of existing buildings on and around Flinders Street including Zen Apartments, the Flinders Street Project and 260 Flinders Street, ranging between 6 and approximately 14 storeys;
- the existing Tivoli Apartments on Pirie Street of 9 storeys;
- an approval for Tower 2 at 260 Flinders Street of 21 storeys;

- development at 293-297 Pirie Street of 16 storeys (60 metres), approved on 29 April 2016 and amended on 14 August 2017;
- development at 262-266 Pirie Street of a 25 level (80 metre) mixed use building, approved on 9 June 2016;
- development at 53-55 Hutt Street of a 12 storey mixed use building, approved on 16 May 2017 (Opus Apartments, recently commenced construction); and
- development at 248-253 East Terrace of a residential flat building of 8 storeys (currently under construction).

Together with existing development, upon completion of some or all of these proposed developments the built form nature of the area between the core Adelaide CBD and the east park lands will substantially change. In particular, the skyline looking towards the Adelaide CBD from the east park lands will feature, in the foreground to the towers of the CBD, buildings of a similar or greater height than the proposed development, extending northwards and southwards along Hutt Street and its environs.

Similarly, looking southwards from Rymill Park, there will be a line of buildings between the taller towers of the CBD and Hutt Street of a similar height to the proposed development, with a continuing graduation downwards in height towards the east to the lower 8 storey building at 248-253 Hutt Street.

Figure 1 – Location Map



#### 4. COUNCIL COMMENTS or TECHNICAL ADVICE

##### 4.1 City of Adelaide

The City of Adelaide provided its comments to the State Commission Assessment Panel in a letter dated 29 October 2019. It did not express an opinion either in favour or opposition to the proposal and confined its comments to a range of technical matters.

Council's comments are summarised as follows:

##### **Roads/Footpaths Engineering**

- Any disused driveway inverts resulting from the development are to be reinstated to equivalent footpath levels to Council standards and specifications.
- Any damage caused to Council road, footpath and kerbing infrastructure during development will be the responsibility of the developer to rectify to a standard that equals or improves the predevelopment condition.
- Existing crossovers and new crossovers have been proposed. All new or alterations to existing crossovers require Council approval outside of the application process and also need to be to Council standards and specifications via City Works Guidelines.
- Existing boundary (back of path) levels must not be modified. Finished floor levels must be based around retaining the existing back of path levels subject to the following:
  - If the level difference between top of kerb and back of path is less than 50 mm; and
  - If the existing cross fall(s) exceed 4% (1:25).
- If any of the above conditions exist for any footpath infrastructure adjacent the perimeter of the site boundary then please contact the Lead Asset Consultant Streets prior to setting finished floor levels.

##### **Torrens and Stormwater**

- Stormwater runoff from the proposal must be contained within the property boundaries, collected and discharged to the East Terrace road reserve. Stormwater discharge to East Terrace should utilize the two existing stormwater footpath crossovers in East Terrace.
- Considering Cleo Lane is subject to existing rights of way to adjacent property owners, stormwater runoff from the proposed development should not be discharged to this lane.
- Any proposed collection of ground seepage water from the basement carparking levels (1 and 2) must not be discharged to the property stormwater system. Any collected ground seepage water from the basement levels must be discharged to either sewer or the proposed property recycled water system.
- Collected seepage water from proposed landscaped areas must not be discharged to the property stormwater system. Any collected landscaping seepage water must be discharged to either sewer or the property recycled water system.
- Any collected splash water from proposed swimming pools on levels 13 and 14 must not be discharged to the property stormwater system. Any collected splash water from the proposed rooftop swimming pools must be discharged to either sewer or the property recycled water system.
- Any collected surface water from levels 1 and 2 (carparking) must not be discharged to the property stormwater system. Any collected surface water from the carparking levels must be discharged to either sewer or the property recycled water system.

- The proposed entrance levels to the basement carparking levels must be designed with a significant freeboard to 1% AEP flood levels in East Terrace taken to be equivalent top of kerb level in East Terrace.

#### **Lighting/Electrical/CCTV**

- The proposed development works may impact on public lighting near the site. Public lighting installed on Hutt Street is owned and maintained by Council and consists of street lighting columns/luminaires with associated underground cabling and pits. The public lighting on Bartels Road is owned and maintained by SA Power Networks and consists of stobie pole mounted lighting with associated overhead electrical cabling spanning between columns.
- If temporary hoarding or site works require modification of existing Council and/or SA Power Network's public lighting (including associated infrastructure such as cabling etc.) shall meet Council requirements and all costs borne directly by the developer.
- All modifications requiring temporary removal, relocation, provision of lighting, reinstatement of existing Council and/or SA Power Network's public lighting shall meet Council requirements and all costs borne directly by the developer.
- Any damage to Council infrastructure, including damage to public lighting and u/g ducting etc. caused by projects works or loading of site crane onto pathways will be repaired to meet Council requirements and at the cost of the developer.
- Lighting under the proposed canopies shall meet Council's under veranda requirements shall be installed.
- Obtrusive Lighting – Lighting design and installation to be fully compliant with Australian Standard - AS 4282 - 1997 Control of the Obtrusive Effects of Outdoor Lighting. Sign off by consultant required to confirm compliance. In addition, provide relevant lighting calculation grid detailing property boundary lines for Council review and records.

#### **Street Trees**

- The existing street trees in Hutt Street must be retained due to their high amenity value and importance to the Hutt Street streetscape.

#### **Traffic/Transport**

- The traffic design does not meet the minimum requirements under AS2890.1:2004, with associated fundamental risks to safe operation and usability of the proposed development.
- The report argues the requirement of AS2890.1 to use a B99 vehicle for certain manoeuvres is unnecessary as they have identified two larger vehicles with turning radii similar to, though still larger than that of a B85. Whilst turning radii for some 4WD vehicles have improved, vehicles like the Toyota Camry have a turning circle of 12.2 - 12.4m depending on the model, which is significantly wider than the B85 turning radius used to assess the car park. The B99 therefore remains a relevant vehicle as required by the Standard.
- The report notes that functional design of the car park relies on the B85 being the design vehicle and that minimum clearances would not be available to a larger vehicle. This is not only in contradiction of the requirements of AS2890.1 (which requires the use of the B99 design vehicle), but also means the car park as proposed is unusable for a considerable range of motor vehicles.
- The widths of car parks as proposed, would not be suitable for many vehicles. The widths of 4WD vehicles has been increasing beyond that nominated for the B99. For example a Land Rover Discovery (and even with the example of the Toyota Land Cruiser 200 series provided in the traffic report) the vehicle would

only just fit within the nominated space and would not be able to open a door sufficiently to get in/out with a vehicle parked adjacent.

- The note in AS2890.1 table 1.1 to Class 1A use includes, 'The modelling of vehicle manoeuvring into Class 1A spaces shows however, that many drivers may have difficulty driving into and out of such spaces, especially those with vehicles larger than the B85 vehicle. Furthermore, they may have difficulty entering and leaving the vehicle in the narrower spaces.' It should be noted that the Class 1A parking proposed requires 3-point entry and exit into 90 degree parking spaces.
- Larger sedans, vans and 4WD's would not be able to safely manoeuvre within the car park and would have great difficulty using the parking spaces proposed for the above reasons.
- The report refers to red and green lights at ramps, but for exiting movement it speaks to drivers needing to wait before exiting their parking bay. How will a driver see when it is green if they are parked facing the wall?
- Confirmation is required that adequate height clearance is available for waste collection.

#### **Waste**

- The proposed plans and waste management report identify that a requirement to have spare bins underneath the chute system when bins are being emptied can be satisfied.
- This can be accommodated as a procedure by rotating the bins at the time of emptying by the engaged contractor.
- The proposal is supported.

#### **Encroachments**

- A balcony is proposed at mezzanine level over the Hutt Street and East Terrace footpaths which meets Council's Encroachment Policy adopted on 26 March 2019.
- Sunshades are proposed to extend from levels 4 to 14 over both Hutt Street and East Terrace. These will extend a maximum of 600mm over both streets which meets Council's Encroachment Policy.

These comments, where appropriate, have been applied either as conditions of approval or notations that form part of the recommendation.

### **5. STATUTORY REFERRAL BODY COMMENTS**

No statutory referrals were required, or made, in respect of the proposed development, as a result of a Pre-Lodgement Agreement being concluded with the South Australian Government Architect, and the height of the proposed development not exceeding the prescribed height limits specified for the subject land under the Adelaide (City) Airport Building Heights Map Adel/1 (Overlay 5).

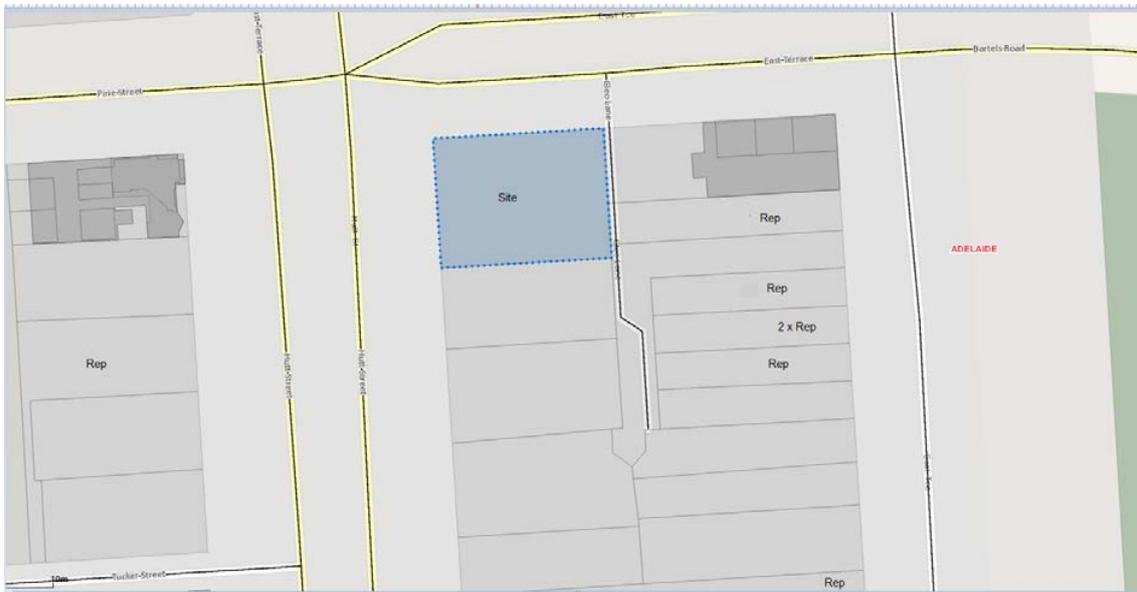
### **6. PUBLIC NOTIFICATION**

The application was notified as a Category 2 development pursuant to Capital City Zone Principle 40 which assigns any development where the site of the development is adjacent land to land in the City Living Zone or Adelaide Historic (Conservation) Zone and it exceeds 22 metres in building height as being Category 2 for public notification purposes.

Public notification was undertaken (by directly contacting adjoining owners and occupiers of the land) and seven representations were received, of which one is invalid (as the representor was not notified as the owner or occupier of adjacent land). A representation

made by a person who is not entitled to be given notice of the relevant application is not required to be taken into account by the relevant authority.

Figure 2 – Representation Map



A total of three representors wish to be heard by the State Commission Assessment Panel. A copy of each representation and the applicant's response is contained in the ATTACHMENTS.

Representors raised, in summary, the following issues and concerns:

- the potential for construction of the proposed development to cause disruption to staff and clients using nearby premises;
- use of the term "Rymill" and infringement on trademarks;
- the height of the proposed development exceeding the height prescribed for the subject land under the Development Plan, and being out of scale and character with its surrounds;
- the height of the development results in the proposal being seriously at variance;
- noise and odour impacts from the proposed ground-floor restaurant;
- the scale and intensity of the development would reduce the level of residential amenity enjoyed by that land and by "all dwellings within the adjoining City Living Zone", including through noise and other impacts of traffic, waste collection, operation of the restaurant and plant and equipment;
- overlooking from the proposed development into some parts of adjoining land, including in particular into the rear courtyard, bedroom and living room windows;
- solar shading and overlooking of bedrooms on the western side of the subject land;
- generally, shadowing impacts from the proposed development including the loss of sunlight to potential future solar cell arrays on nearby properties;
- suitability of vehicle access to the proposed development from East Terrace via Cleo Lane and the capacity of these existing roads to meet the additional demand, particularly at peak periods and during special events, including the

suggestion that vehicle access to the proposed development should be from Hutt Street;

- traffic impacts of waste disposal truck movements in Cleo Lane;
- design and suitability of the internal parking and circulation paths;
- additional demand for on-street car parking caused by the proposed development, and the potential for the development to exacerbate traffic, congestion and parking problems in the area;
- potential structural impacts of the construction of the proposed development on nearby buildings, and the need to ensure ongoing access from Cleo Lane to adjoining residences throughout the construction period;
- potential for additional wind impacts;
- reduction in property values; and
- potential to establish a precedent.

A number of representors provided detailed submissions in support of the proposed development, with additional technical planning and traffic reports.

## Applicant's Response

The applicant provided a response to the representations which, in summary, notes:

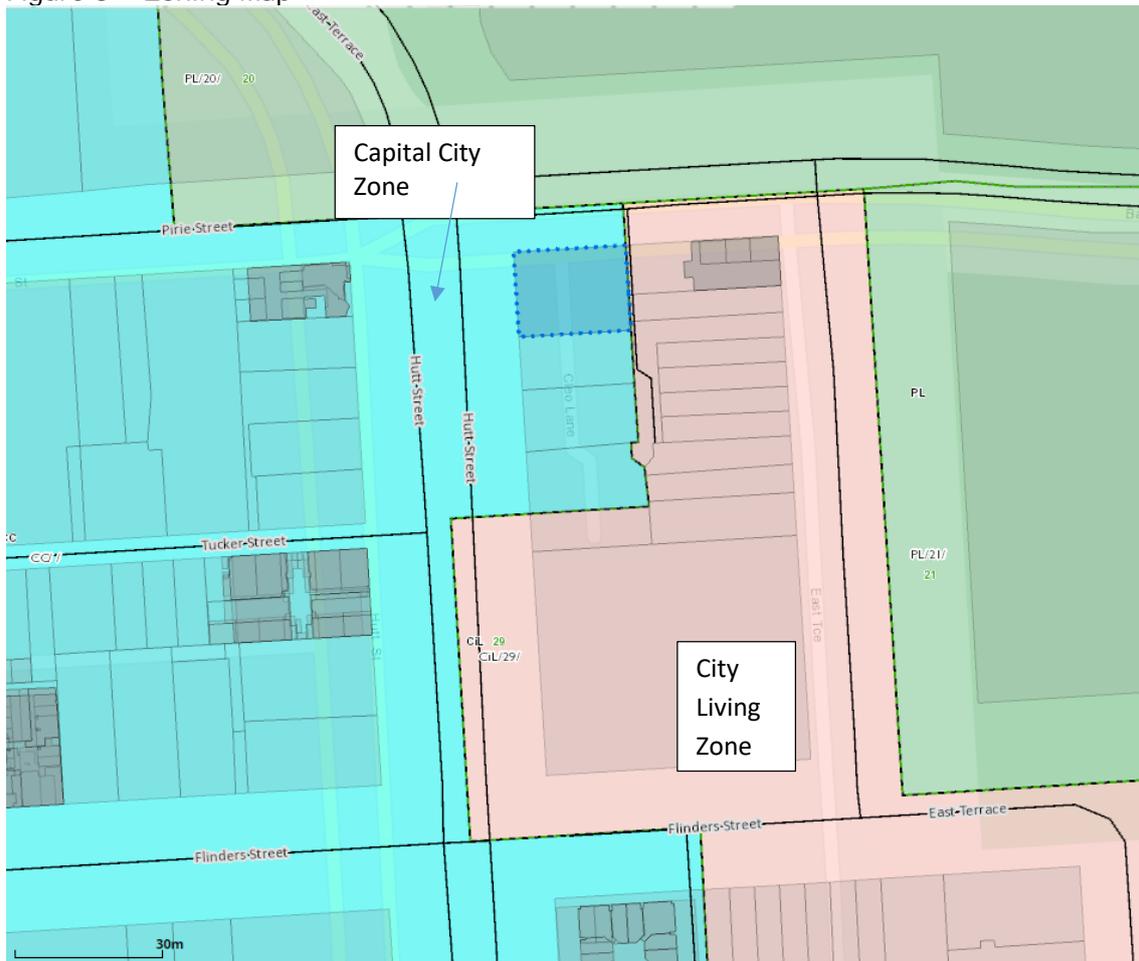
- The contentions about precedent and impact on value are unsubstantiated and in any event are irrelevant to a planning assessment.
- Relevant construction impacts to be dealt with by Construction Environment Management Plan.
- Trade marks are not relevant to the assessment of the application
- The Signalised ramp system satisfies AS/NZS 2890.1:2004.
- The design calculations (using conservative estimates) indicate that there is a 1.9% chance that a vehicle would be required to wait for another vehicle at any given time.
- No queuing on Cleo Lane will intrude into private land.
- Sight lines are acceptable.
- Ramp profile and turn paths are suitable.
- There is adequate loading area for café deliveries.
- Safe access and egress for service and waste vehicles is provided.
- The applicant proposes to offer a right of way to the other land owners who enjoy rights over the lane. If those other land owners decline to accept the grant of a right of way, that is a matter for them. The physical layout of the widened lane will mean that even regardless of the rights of way, access over the wider area will in a practical sense be readily available.
- Council Wide PDC 167 and Capital City Zone PDC 16 and 21 all expressly provide a policy framework for buildings taller than the Concept Plan guideline. The application documents detail how the proposal satisfies the terms of PDC 21 in particular.
- The application is consistent with its context.
- The development conforms to the desired character and high standard of design.
- A previous development plan consent issued for the site has been cancelled. Another application has been lodged but is not presently being pursued. Neither are in any way relevant to the assessment of this current application which must be judged on its own merits.
- Access to sunlight maintained.
- Appropriate privacy treatments are proposed.
- Appropriate waste management measures are proposed.
- Given that the Development Plan expressly provides (eg Zone PDC 16 and 21) for the height guideline to be amended to achieve a range of other design aspirations, this proposal cannot in the circumstances be "seriously at variance" with that very policy regime.

## 7. POLICY OVERVIEW

The subject land is within the Capital City Zone as shown below in Figure 2 and as described within the Adelaide (City) Development Plan 25 July 2019 with amendments gazetted on 26 September 2019 (consolidated date 17 October 2019). No Policy Area applies to the subject land.

Relevant planning policies are contained in Appendix One and summarised below.

Figure 3 – Zoning Map



### 7.1 Zone

The Desired Character for the Capital City Zone is as the economic and cultural focus of the State, with an increased population complementing the opportunities and experiences provided in the City and increasing its vibrancy.

High scale development is envisaged, with walls that frame the streets, and create an interesting pedestrian environment. Maintaining human scale at ground floor levels is emphasised through careful building articulation and fenestration, frequent openings, verandahs, balconies, awnings and other features that provide weather protection. In narrow and minor streets or laneways the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure.

A 22 metre maximum building height is identified for the subject land. Development should not exceed the maximum building height unless it has regard to the context that supports the positive character of the locality, is sympathetic to the desired character of the Zone and satisfies additional criteria. Section 8.4 of this report outlines further discussion regarding the height of the proposed development.

Non-residential land uses at ground-floor level such as shops, cafés and restaurants are encouraged.

New development is to achieve high design quality by being contextual, durable, inclusive, sustainable and amenable.

Minor streets and laneways will have a sense of enclosure (a tall street wall compared to street width), and an intimate, welcoming and comfortable pedestrian environment.

Restaurant and Residential Flat Building are envisaged forms of development within the Capital City Zone.

## **7.2 Council Wide**

The Council Wide section of the Development Plan provides relevant guidance in relation to the following areas:

- Housing Choice
- Medium to High Scale Residential
- Environmental
- Heritage and Conservation
- Built Form and Townscape
- Transport and Access

The relevant provisions and an assessment of the proposed development against them are set out in sections 8.2 to 8.9 of this report.

## **7.3 Overlays**

### **7.3.1 Affordable Housing**

The subject land is within the area covered by Overlay 1 – Affordable Housing under the Development Plan. PDC 1 of Overlay 1 provides that development comprising 20 or more dwellings should include a minimum of 15 percent affordable housing.

The applicant has advised its intention is to deliver high-quality owner-occupied apartments at a price point well above the affordable housing price threshold. The applicant has not therefore included affordable housing as a part of the proposed development. This is not a mandatory requirement.

### **7.3.2 Adelaide City Airport Building Heights**

Prescribed height limits are specified for the subject land under the Adelaide (City) Airport Building Heights Map Adel/1 (Overlay 5). The height of the proposed building above ground level (53.9 metres) is substantially less than the specified height for the site (approximately 110 metres above ground level, or 153.5 metres AHD).

## **8. PLANNING ASSESSMENT**

The application has been assessed against the relevant provisions of the Adelaide (City) Development Plan (25 July 2019 with amendments gazetted on 26 September 2019 (consolidated date 17 October 2019)), which are contained in Appendix One. This version of the Development Plan was gazetted on 26 September 2019, prior to the lodgement of the application on 1 October 2019 and accordingly is considered the relevant version of the Development Plan for the assessment of this application.

### **8.1 Quantitative Provisions**

	<b>Development Plan Guideline</b>	<b>Proposed</b>	<b>Guideline Achieved</b>	<b>Comment</b>
<b>Site Area</b>	No applicable Guideline in		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	

	<b>Development Plan Guideline</b>	<b>Proposed</b>	<b>Guideline Achieved</b>	<b>Comment</b>
	relation to Capital City Zone			
<b>Building Height</b>	Maximum 22 metres unless additional height criteria in PDC 21 of Capital City Zone are satisfied	53.9 metres (to rooftop level)	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	Eligible for additional height in accordance with Capital City Zone – see section 8.4.
<b>Land Use</b>	Envisaged forms of development within the Capital City Zone include Restaurant and Residential Flat Building.	Restaurant Residential Flat Building	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	
<b>Car Parking</b>	No requirement for provision of car parking within the Capital City Zone.	56 car parking spaces at basement and upper levels	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	
<b>Bicycle Parking</b>	46 resident bicycle parking spaces  7 visitor bicycle parking spaces	46 resident bicycle parking spaces  6 visitor bicycle parking spaces	YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/>	Refer to section 8.9 for further discussion
<b>Front Setback</b>	Built to street frontage with above-podium setback of 3-6 metres	Small ground-level setbacks proposed, with minimal setbacks at upper levels.	YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/>	Seen as appropriate as part of articulation of building mass. See section 8.5.1 for discussion.
<b>Rear Setback</b>	None applicable		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	
<b>Side Setback</b>	None applicable		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	
<b>Private Open Space</b>	1 bedroom – 8m <sup>2</sup> 2 bedroom – 15m <sup>2</sup> 3+ bedroom – 15m <sup>2</sup>	Between 8m <sup>2</sup> and 145m <sup>2</sup> to each apartment	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	

## 8.2 Land Use and Character

The Capital City Zone explicitly contemplates a range of desired land uses. These include residential flat buildings and cafes as proposed as part of this application.

The Desired Character anticipates that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy. Furthermore, it also envisages non-residential land uses at ground floor level that generate high levels of pedestrian activity such as shops, cafés and restaurants will occur throughout the Zone. High-scale development is envisaged in the Zone with high street walls that frame the streets.

In terms of zoning and land use, the proposed high scale residential building with associated ground floor café is supported in the Capital City Zone.

The Desired Character for the Capital City Zone is for new development which achieves high design quality by being:

- (a) **Contextual** – so that it responds to its surroundings, recognises and carefully considers the adjacent built form, and positively contributes to the character of the immediate area.
- (b) **Durable** – by being fit for purpose, adaptable and long lasting, and carefully considers the existing development around it.
- (c) **Inclusive** – by integrating landscape design to optimize pedestrian and cyclist usability, privacy, and equitable access, and also promote the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimize security and safety both internally and into the public realm, for occupants and visitors alike.
- (d) **Sustainable** – by integrating sustainable systems into new buildings and the surrounding landscape design to improve environmental performance and minimise energy consumption.
- (e) **Amenable** – by providing natural light and ventilation to habitable spaces.

The proposed development is considered to achieve high design quality assessed against these five criteria.

The building responds to its prominent corner site and park lands outlook by providing a defined and activated built form city edge. The design of the built form and configuration of the ground floor are both supported by the Government Architect.

The building is fit for purpose and includes measures for adaptability, noting the Government Architect's advice that the car park floor to floor dimensions allow for potential adaptive reuse.

The design responds to the inclusive requirements and provides for equitable access, cyclist usability and high quality public spaces.

The development outlines significant sustainability measures including rooftop PV, electric vehicle charging and rainwater harvesting along with high performance measures including an interstitial blind system and electro-chromatic privacy glass.

The support of the South Australian Government Architect, as noted in the Pre-Lodgement Agreement and outlined in section 1.2 above, is significant, including support for the scale and height of the development, the green wall feature and indoor garden, access for car parking and services off Cleo Lane and the built form and finish elements of the development.

In terms of land use and character, the proposal is considered to generally accord with the relevant provisions of the Development Plan.

### 8.3 Design and Appearance

Zone Principles of Development Control (PDC) 6-12 and 14-15 all relate to the design and appearance of new buildings. Development should be of a high standard of architectural design and finish which is appropriate to the City's role and image as the capital of the State (PDC 6) and Buildings should achieve a high standard of external appearance by:

- (a) the use of high quality materials and finishes. This may be achieved through the use of materials such as masonry, natural stone, prefinished materials that minimise staining, discolouring or deterioration, and avoiding painted surfaces particularly above ground level;

- (b) providing a high degree of visual interest through articulation, avoiding any large blank facades, and incorporating design features within blank walls on side boundaries which have the potential to be built out;
- (c) ensuring lower levels are well integrated with, and contribute to a vibrant public realm; and
- (d) ensuring any ground and first floor level car parking elements are sleeved by residential or non-residential land uses (such as shops, offices and consulting rooms) to ensure an activated street frontage.

Zone PDC 12 envisages buildings should be designed to include a podium/street wall height and upper level setback (in the order of 3-6 metres) that:

- (a) relates to the scale and context of adjoining built form;
- (b) provides a human scale at street level;
- (c) creates a well-defined and continuity of frontage.

It is noted that the design of the proposed building responds to these provisions, noting that the pre-lodgement agreement with the Government Architect largely address the issues of design quality and scale. This agreement notes, in part, that a high-quality design outcome is proposed and support is provided for the building form and massing, materials proposed, podium treatment adopted and the overall architectural expression.

It is considered that the proposed building aligns with the design and appearance qualities sought by the Development Plan.

#### 8.4 Building Height

Council Wide Provisions – Built Form and Townscape, Objective 46 seeks a reinforcement of the city's grid pattern of streets through measures including high-rise development framing the Park Lands.

The desired character includes high-scale development envisaged in the Zone with high street walls that frame the streets.

Capital City Zone, PDC 21 provides that development should not except in specified circumstances exceed the maximum building height shown in the relevant Concept Plan. Concept Plan Figure CC/2 shows a maximum building height of 22 metres applying to the subject land. The plans accompanying the Application show a maximum building height above street level of 53.9 metres to roof level (excluding the solar panels and lift overrun)

PDC 21 states:

21. *Development should not exceed the maximum building height shown in Concept Plan Figures CC/1 and 2 unless, notwithstanding its height, it has regard to the context that forms the positive character of the locality and is sympathetic to the desired character of the Zone or Policy Area and the anticipated city form expressed in Concept Plan Figures CC/1 and 2, and:*
  - (a) *if the development incorporates the retention, conservation and reuse of a building which is a listed heritage place or an existing built form and fabric that contributes positively to the character of the local area; or*
  - (b) *more than 15% of dwellings are affordable housing; or*
  - (c) *only if:*
    - (i) *at least three of the following are provided:*
      - (1) *the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjacent Zone, Policy Area or building height area on Concept Plan Figures CC/1 and 2;*
      - (2) *high quality open space that is universally accessible and is directly connected to, and well integrated with, public realm areas of the street;*
      - (3) *high quality, safe and secure, universally accessible pedestrian linkages that connect through the development site;*
      - (4) *no on site car parking is provided;*
      - (5) *active uses are located on at least 75% of the public street frontages of the building, with any above ground car parking located behind;*
      - (6) *a range of dwelling types that includes at least 10% of 3+ bedroom apartments;*
      - (7) *the building is adjacent to the Park Lands;*
      - (8) *the impact on adjacent properties is no greater than a building of the maximum height on Concept Plan Figures CC/1 and 2 in relation to sunlight access and overlooking; and*

(ii) *at least three of the following sustainable design measures are provided:*

- (1) *a communal useable garden integrated with the design of the building that covers the majority of a rooftop area supported by services that ensure ongoing maintenance;*
- (2) *living landscaped vertical surfaces of at least 50 square metres supported by services that ensure ongoing maintenance;*
- (3) *passive heating and cooling design elements including solar shading integrated into the building;*
- (4) *higher amenity through provision of private open space in excess of minimum requirements by 25% for at least 50% of dwellings;*
- (5) *solar photovoltaic cells on the majority of the available roof area, supported by services that ensure ongoing maintenance.*

In addition, PDC 16 contemplates that development exceeding the applicable maximum building height, and meeting the relevant quantitative provisions, should demonstrate a significantly higher standard of design outcome in relation to qualitative policy provisions, including site configuration that acknowledges and responds to desired future character, and responds to the conditions and special qualities of a locality including pedestrian and cyclist amenity, activation, sustainability and public realm and streetscape contribution.

Council Wide PDC 191 (Built Form and Townscape) envisages new development on major corner sites should define and reinforce the townscape importance of such sites, noting that one design technique contemplated is greater building height at corners.

Assessed against the PDC 21 criteria, the following observations are made:

- *The proposed development will complement its context, having regard to adjacent built form and the desired character of the locality.*

In the immediate environs of the subject land, existing built form is generally 2 to 4 storeys in height, however the applicable zoning contemplates significantly taller built form. Within the wider context of the subject land, recent developments reflect the taller and more intense built form of development contemplated. Current and approved apartment and mixed used buildings in Flinders Street, Pirie Street, Hutt Street and East Terrace are generally in the 8 to 14 storey range. Buildings on Pirie Street (293-297 and 262-266) have been approved with height in the range of 60 to 80 metres. Further to the north, and also fronting the Park Lands, is an approval for a 60 metre building (292-300 Rundle Street). The location of the proposed development, opposite expansive and formally developed park lands and close to the commercial and retail hubs of Hutt Street and Rundle Street, combined with its high level of accessibility to public transport services, mean that the development can be viewed as complementary to the existing and evolving desired character of its context.

The design and materiality of the lower levels of the building comprising the mezzanine and above ground parking levels present as a base podium compared to the higher residential levels. This complements the height of the adjacent apartment building on East Terrace / Bartels Road and others located further south along Hutt Street. This podium configuration is supported by the Government Architect.

The desired character for the Capital City Zone, including daytime, evening and night time activity; high-scale development with high street walls that frame the streets; and an interesting pedestrian environment and human scale at ground floor levels all support a mixed-use development of significant scale.

As outlined in section 8.2 and 8.3, the proposed development is consistent with the Desired Character for high design quality of new development within the Capital City Zone, including by being contextual with its surrounds, durable and inclusive, incorporating appropriate sustainability measures and by providing a high level of amenity to habitable spaces.

- *The proposed development will complement the anticipated city form in Concept Plan Figure CC/2.*

While the site is within a portion of the Capital City Zone with a maximum building height of 22 metres, it is within 70 metres of portions of the Capital City Zone where a 53 metre maximum prescribed height applies (which commences one allotment to the west opposite Hutt Street). Within this locality, approved and 'in-construction' apartment and mixed-use buildings are establishing a character akin with areas of taller built form elsewhere in the Adelaide CBD core (where no building height limitation exists). Similarly, current and approved development along Hutt Street and to East Terrace will extend that character closer to the subject land.

The height of proposed development, although taller than the maximum building height of 22 metres for the subject site, is consistent and complementary to the heights contemplated some 70 metres west, the backdrop against which the development will be viewed from the approach into the city.

- *At least three of the features specified in paragraph (c)(i) of PDC 21 are provided*

In the wider context, the proposed development is considered to provide an orderly transition from the open space of the park lands up to existing taller buildings in the Adelaide CBD core.

The proposal includes a landscape concept for the Cleo Lane upgrade, internal green wall and communal terrace at level 3. The green spaces within the building are high quality and universally accessible (other than level 3 terrace which is not publicly accessible, but accessible to all residents). The landscaping treatment is well integrated with the public realm.

The site does not include linkages that function as thoroughfares through the site, however the restaurant is publicly accessible.

The restaurant provides an active frontage to approximately 84% of the East Terrace building frontage and approximately 74% of the Hutt Street building frontage is active.

A total of 13 dwellings out of 38 (some 34%) are of 3 or more bedrooms, well exceeding the 10% specified.

The building is adjacent the Parks Lands.

The impact on adjacent properties is considered to be no greater than a 22m tall building in terms of sunlight access and overlooking.

Accordingly, it is considered that at least three of the criteria are satisfied.

- *At least three of the features specified in paragraph (c)(ii) of PDC 21 are provided*

Rooftop gardens are proposed at Level 3. To the extent that the uppermost roof level is not available for use as a rooftop garden because it is reserved for a solar photovoltaic array, this is also considered to be a desirable sustainability outcome. A condition is proposed to ensure ongoing maintenance of the rooftop gardens.

It is noted that the Government Architect is not of the view that this terrace is a rooftop garden however there are nevertheless benefits of this space including accessibility, micro climate, maintenance and contribution to managing urban heat island effects.

A substantial internal green wall is proposed to the restaurant and the common space above in excess of 50 square metres. A condition is proposed to ensure ongoing maintenance of the green wall.

Passive heating and cooling design elements including solar shading are incorporated. The west-facing façade of the proposed development will feature double glazing with integrated interstitial blinds, under automated control with manual override available.

Higher amenity to dwellings through provision of private open space in excess of minimum requirements, access to natural light and ventilation to all habitable spaces and common circulation areas is provided. Private open spaces are provided to meet the minimum prescribed for all 38 apartments, and in excess of those standards to 4 apartments. Each apartment enjoys access to natural light and ventilation. Natural ventilation is provided to corridors and lift lobbies. A greater degree of amenity is also afforded to occupants by virtue of the generous size of most of the apartments proposed, which exceed (some significantly) the minimum floor areas envisaged by the Development Plan.

Solar PV cells are provided to the majority of the available roof space (in turn relocating a roof garden to the level 3 terrace) on the majority of the available roof area and will be supported with ongoing maintenance.

The required PDC 21 criteria are satisfied and accordingly the Development Plan provides support for a building that exceeds the maximum height of 22 metres.

The Development Plan provides no further guidance as to what additional height may be supported.

Capital City Zone, PDC 25 states:

- 25 *Parts of a development that exceed the prescribed maximum building height shown on Concept Plan Figures CC/1 and 2 that are directly adjacent to the City Living, Main Street (Adelaide) or the Adelaide Historic (Conservation) Zone boundaries should be designed to minimise visual impacts on sensitive uses in the adjoining zones and to maintain the established or desired future character of the area. This may be achieved through a number of techniques such as additional setback, avoiding tall sheer walls, centrally locating taller elements, providing variation of light and shadow through articulation to provide a sense of depth and create visual interest, and the like.*

The proposed development is built to the boundary between the Capital City Zone (applicable to the subject land), and the adjoining City Living Zone. While no additional setback is therefore provided, some off-site setback is provided by the fact that Cleo Lane, a private road of some 3 metres in width, runs along the eastern boundary of the subject land. Additional on-site setbacks for properties on the eastern side of Cleo Lane

mean that a distance of approximately 5.5 metres will exist between the proposed development and the closest building to the east.

It is noted that the Government Architect, whilst not the planning authority, has considered the issue of building height, noting the following:

*"The proposed building height is 53.9 metres, with a marginal set down of the eastern building element. I consider the site to be prominent with landmark characteristics afforded by its Park Lands setting and elevated position. As such, in principle I support an approach for a building that exceeds the 22 metre height limit envisaged by the Development Plan. Given development of this scale will become a significant backdrop to the Park Lands and will be viewed from all angles, my support for the height from a design perspective is contingent on a continued commitment and delivery of the high quality design outcome presented, particularly in relation to the refined architectural expression, choice materiality, apartment amenity, sustainability initiatives and servicing strategy as well as public realm contribution....."*

*The solid southern boundary wall is articulated with a negative band above the podium and textured vertical expression that relates to the profile of the northern podium facade and tapers towards the top of the building. The top of the solid south facade is also curved, which further refines its appearance. I support the resulting architectural expression, including the vertical emphasis and cohesive relationship with the overall building expression. I anticipate refinement of the connection of the precast units in the next stages of detailed design development. I also recommend the negative band be expressed using an integral rather than an applied finish."*

It is considered that the Development Plan explicitly contemplates buildings that will exceed the stated maximum building height under certain conditions. These conditions are outlined in Zone PDC 21 and have been recently amended as part of the Ministerial DPA on interim operation. Assessed against PDC 21, the proposed development satisfies the relevant requirements to qualify to exceed maximum building height shown in Concept Plan Figures CC/1 and 2. In addition to meeting this provision, the applicant also has a pre-lodgement agreement from the Government Architect who has considered the issue of height and scale independently from the criteria in PDC 21 and provided support for the building as proposed.

It is considered that in this context, the proposed building height is acceptable.

## **8.5 Built Form and Townscape**

### **8.5.1 Building Setbacks**

Council wide PDC 179 contemplates that buildings within the Capital City Zone should be built to the street edge to reinforce the grid pattern, create a continuity of frontage and provide definition and enclosure to the public realm whilst contributing to the interest, vitality and security of the pedestrian environment.

The development is proposed to reinforce the grid pattern and is generally built to street edges and provided with visual interest through active frontages and pedestrian entries into the building.

The Capital City Zone contemplates that the podium/street wall height, and upper level setback (in the order of 3-6 metres) should relate to the scale and context of adjoining built form; provide a human scale at street level; create a well-defined and continuity of frontage; and otherwise contribute to pedestrian comfort and interest (Capital City Zone, PDC 12).

The proposed development does not provide upper level setbacks in the order of 3 to 6 metres, however the proposed podium nevertheless relates to the scale

and context of adjoining built form, provides a human scale and street level and creates a continuity of frontage. The tower forms above have varied setbacks as a result of the architectural expression, curved corners and concrete beam design.

It is considered that the proposed setbacks are generally consistent with the policy intent.

### **8.5.2 Composition and Proportion**

The development is generally consistent with Council wide PDC 181. The new building establishes frontages creating clearly defined edges, proposes a new composition and points of interest, introduces elements for future neighbouring buildings. The development is consistent with provisions that seek to emphasise the importance of the building according to the street hierarchy and in particular its prominent corner location.

The development generally accords with the Composition and Proportion provisions.

### **8.5.3 Articulation and Modelling**

PDC 182 (Built Form and Townscape) requires that building façades fronting streets or other public spaces should be composed with an appropriate scale, rhythm and proportion which responds to the use of the building, the desired character of the locality and the modelling and proportions of adjacent buildings.

Suggested design techniques include a design which defines a base, middle and top, related to the overall proportion of the building; using façade elements such as sun shading to reflect the orientation of the site; and using a variation of contrasting surface finishes, textures, colours or patterns. These techniques are proposed as part of the design.

The building is divided into a ground/mezzanine level and provided with active and permeable frontages. Above this level and within the podium are parking levels 1 and 2, expressed with solid facades and above which are the upper residential floors.

The development generally accords with the Articulation and Modelling provisions.

### **8.5.4 Materials, Colours and Finishes**

Council Wide PDC 187 (Built Form and Townscape) provides that the design, external materials, colours and finishes of buildings should have regard to their surrounding townscape context, built form and public environment, consistent with the desired character of the relevant Zone and Policy Area.

A wide range of materials and finishes are present within the locality.

The proposed materials and finishes detailed in the proposal plans are appropriate for the locality and generally supported by the Government Architect.

The retention of the quality of materials proposed for the building in the detailed design and development of the development is critical to the proposal and is particularly highlighted as part of the Pre-Lodgement Agreement comments by the Government Architect.

A proposed condition will require approval by SCAP of the final detailed materials schedule in consultation with the Government Architect.

The development generally accords with the Materials, Colours and Finishes provisions.

#### **8.5.5 Corner Sites**

PDC 191 (Built Form and Townscape) provides that new development on major corner sites should define and reinforce the townscape importance of these sites with appropriately scaled buildings that establish an architectural form on the corner; abut the street frontage; and address all street frontages. Design techniques include articulation and modelling; prominent entrances and/or windows; and increased roof expression or building height at the corner.

The development generally accords with the Corner Sites provisions.

#### **8.5.6 Sky and Roof Lines**

Roof top plan and ancillary equipment is generally screened and designed to minimise the visual impact consistent with PDC 194.

The building is provided with a well designed roof top that includes features that form part of its overall architectural form and composition including an integrated parapet consistent with PDC 193.

#### **8.5.7 Landscaping**

PDC 207 (Built Form and Townscape - Landscaping) provides that landscaping should be selected and designed for water conservation; form an integral part of the design of development; and be used to foster human scale, define spaces, reinforce paths and edges, screen utility areas and enhance the visual amenity of the area.

The landscaping for the proposed development is considered to generally meet the requirements of PDC 207. The design of the rooftop garden to level 3, the indoor green wall to the restaurant and the paving and landscaping to the widened Cleo Lane are the subject of more detailed design to be approved by the SCAP, and to effective ongoing maintenance. Conditions to this effect are proposed.

#### **8.5.8 Advertising/Signage**

Objective 56 – Advertising within Built Form and Townscape aims for outdoor advertisements that are designed and located to reinforce the desired character and amenity of their location, to be concise and efficient, including by not contributing to confusion and visual clutter, and not to create a hazard. PDC's 211 to 217 set out design and location standards for advertising signage.

Indicative signage elements are depicted on the perspectives that accompanied the application, however no information as to the dimensions, materials, illumination or other details in relation to the signage has been provided. It is therefore recommended that the approval should not include any signage elements, and that all signage should be the subject of a separate application for Development Plan Consent.

## 8.6 Housing Choice

Objectives include a variety of housing options which suit the widely differing needs of future residents (Housing Choice, Objective 6); a range of long and short term residential opportunities to increase the number and range of dwellings available (Objective 7) and a broad range of accommodation to meet the needs of specific groups while ensuring integration with existing residential communities (Objective 8).

The proposed development will provide a range of compact and large apartments in an established residential area well served by existing infrastructure and facilities.

The development generally accords with the Housing Choice provisions.

## 8.7 Medium to High Scale Residential/ Serviced Apartment

Council Wide Objective 22 seeks medium to high-scale residential development with high standards of amenity, environmental performance and internal layouts; which is adaptable to meet a variety of accommodation and living needs; and which includes well-designed and functional recreation and storage areas.

Related PDC's 48 to 81 seek to enhance the amenity of residential apartment developments through high standards of amenity, legibility and safety in design. Identified measures include building entrances which are oriented towards the street and which are visible and easily identified. Entrances to individual dwellings should be located as close as practical to lift and/or lobby access and avoid the creation of potential areas for entrapment.

Access to daylight and an external outlook, and opportunities for natural ventilation should be maximised, with ceiling heights of 2.7 metres or more to residential habitable rooms above the first-floor level of mixed use buildings. Private open space should be provided to dwellings at the rate of at least 8m<sup>2</sup> (for 1 bedroom dwellings), 11m<sup>2</sup> (for 2 bedroom dwellings) and 15m<sup>2</sup> (dwellings of 3 or more bedrooms).

Minimum dwelling sizes of 50m<sup>2</sup> (for 1 bedroom dwellings), 65m<sup>2</sup> (for 2 bedroom dwellings) and 80m<sup>2</sup> (for 3 bedroom dwellings, with an additional 15m<sup>2</sup> for each additional bedroom) are specified.

Site facilities should include a common mail box structure and waste storage and collection facilities. Storage facilities should be provided at the rate of at least 8m<sup>3</sup> for 1 bedroom dwellings, 10m<sup>3</sup> for 2 bedroom dwellings and 12m<sup>3</sup> for dwellings of 3 or more bedrooms, with 50% of storage space within the dwelling and the remainder in the basement or other communal areas.

Medium to high-scale residential development should be designed and sited to minimise the potential overlooking of habitable rooms such as bedrooms and living areas of adjacent development (PDC 66). Habitable room windows balconies, roof gardens, terraces and decks should be set back from boundaries with adjacent sites at least 3 metres to provide an adequate level of amenity and privacy and to not restrict the reasonable development of adjacent sites (PDC 67).

The application demonstrates that the proposed development will generally accord with the provisions in relation to Medium to High Scale Residential Development. In particular:

- The entrance to the residential lobby is clearly identifiable and accessible from Hutt Street. On upper residential levels, each apartment has direct and convenient access to the lift lobby.
- Apartments are will provided with windows and terrace doors to take advantage of daylight and natural ventilation. The ceiling height of apartment floors (2.7 metres for levels 3 to 13, and from 3 to 4.4 metres for level 14), meet the specified minimum requirement.

- Private open space is provided to each apartment at or in excess of the prescribed rate. Each apartment meets the minimum floor area specified based on the number of bedrooms.
- Habitable room windows and balconies are set back from the southern boundary with an adjacent site by at least 3 metres, in accordance with PDC 67. While the level 3 roof garden is built to the southern site boundary, it will not restrict any reasonable development of the adjoining site.
- Habitable room windows and balconies are built to the eastern site boundary with Cleo Lane. While it is noted that this is a private road and may not therefore qualify as an “adjacent site”, there is some potential for overlooking from east-facing windows and balconies of the proposed development into habitable rooms of adjacent development.

Overlooking potential has been considered in the applicant’s drawing set (Drawing P-16 Rev v1-2) and demonstrates that the façade design and internal configuration in levels 3 to 7 will effectively minimise any overlooking potential.

- A waste room and a common mail box structure are provided at ground floor level. Storage for individual apartments is allocated in a communal area on the mezzanine level and the application material indicates that storage which exceeds the required volumes is provided within each apartment.

The development generally accords with the Medium to High Scale Residential/ Serviced Apartments provisions.

## **8.8 Environmental Factors**

### **8.8.1 Crime Prevention**

Development should promote the safety and security of the community in the public realm and within development, through the promotion of natural surveillance and other design measures (Environmental – Crime Prevention Through Urban Design, PDCs 82 to 84).

In particular, the proposed development:

- orientating windows, doors and building entrances towards the street, open spaces, car parks, pedestrian routes and public transport stops
- avoids high walls, blank facades, carports and landscaping that obscures direct views to public areas
- positions the restaurant and public space areas so they are bound by roads on at least two road frontages or overlooked by development
- creates a complementary mix of day and night-time activities, such as residential, commercial, recreational and community uses, that extend the duration and level of intensity of public activity
- locates main entrances and exits at the front of a site and in view of a street
- is designed to overlook streets, public and communal open space to allow casual surveillance.

The development generally accords with the Crime Prevention Through Urban Design provisions.

### **8.8.2 Operating Hours and Associated Activities of Licensed Premises**

No specific details are provided about the nature of the tenancy in the ground floor, other than a suggestion that it is intended that the future operator will be more akin to a coffee/dessert bar than a traditional restaurant.

The application makes no mention of whether a liquor licence is sought, albeit that it is considered likely that a café and/or dessert bar would typically be licenced.

The Desired Character for the Capital City Zone refers to the Zone being active “during the day, evening and late night... non-residential land uses at ground floor level that generate high levels of pedestrian activity such as ... restaurants will occur throughout the Zone”. Use of the ground floor of the proposed development as a restaurant, which will activate two key street frontages within the Capital City Zone, is therefore consistent with the Desired Character for the Zone.

### **8.8.3 Noise Emissions**

An acoustic assessment is provided with the application documents, prepared by Sonus and dated December 2017. In summary the report has considered the proposal against the relevant Development Plan provisions in Council wide Principles 68 and 89-97.

In summary the key findings are as follows:

- The assessment considers the noise from traffic and street activity on surrounding roads into the development and the noise from car parking, mechanical plant and rubbish collection from the proposed development to other noise sensitive land uses.
- The proposed development includes a restaurant at ground level. The assessment of noise from this area will be made at the time of liquor licence application, when the operator is known, if the proposed operation has any potential to impact noise sensitive land uses in the vicinity
- The key noise issue for the site is the impact of traffic at the intersection of Hutt Street, East Terrace, Bartels Road and Pirie Street on the amenity of the development. The assessment ensures that the proposed building construction will adequately protect against the intrusion of noise from the traffic in the vicinity.
- In addition, a preliminary assessment of the environmental noise from car parking, mechanical plant operating and rubbish collection at the proposed development has been conducted.
- The relevant assessment criteria are expected to be practicably achieved without any significant acoustic treatment.

It is considered that the proposal generally satisfies the relevant noise provisions of the Development Plan.

### **8.8.4 Waste Management**

A dedicated area for on-site waste collection and sorting of recyclable materials and refuse should be provided within all new development.

This has been provided in a bins/store area on the ground floor.

A dedicated area for the collection and sorting of construction waste and the recycling of building materials during construction as appropriate to the size and nature of the development should be provided and screened from public view.

This will be required via the CEMP to be provided separately by way of a condition of approval.

Development greater than 2,000 square metres of total floor area should manage waste by:

- (a) containing a dedicated area for the collection and sorting of construction waste and recyclable building materials;
- (b) on-site storage and management of waste;
- (c) disposal of non-recyclable waste; and
- (d) incorporating waste water and stormwater re-use including the treatment and re-use of grey water.

A Waste Management Preliminary Draft Report prepared by Infraplan and dated April 2018 is provided with the application. The report concludes the following:

- Waste generation for the proposed residential and retail development was estimated using Zero Waste SA guidelines.
- Using ZWSA guide, a Complex Waste Management System is recommended for the proposed high density mixed-use development
- A private waste collection operator will be engaged to collect waste generated from the proposed development
- Separate waste storage bins will be provided for residents and café/restaurant tenancy on the ground level.
- Residential waste is proposed for weekly collection; café/restaurant tenancy is proposed to have twice a week waste collection.
- Sufficient waste storage capacity for each of the three waste streams has been provisioned on-site to meet estimated waste generation demand.
- Sufficient Hard waste and e-waste storage area is provisioned within the bin storage area.
- Residents will be able to avail up to 12 per year, at call, free hard waste and e-waste service offered by ACC.
- The bin storage area will be centrally located near the lift lobby.
- A bin cleaning area has been provisioned within the bin storage area.
- In case a fully automatic system is not installed, a community attendant will be required to periodically monitor bin capacity under bin chutes and replace filled bins with empty bins.
- The attendant will also be responsible for upkeep of the bin storage area.
- Waste collection vehicles will have to reverse into Cleo Lane, temporarily blocking access to/from upper parking levels. It is recommended that bin collection times be strictly adhered to by the operator and be communicated to residents to minimise impacts to residents using upper parking levels.
- It is recommended that waste collection should be done outside peak periods (7-9am, 3-6pm) to minimise impact to traffic on the surrounding road network.
- The proposed number of bins are deemed sufficient for the proposed development for the stated collection frequency by private operator.

It is considered that the application satisfies the relevant waste management provisions of the Development Plan.

### 8.8.5 Contaminated Sites

Council Wide PDC 105 (Environmental – Contaminated Sites) requires that where there is evidence or reasonable suspicion that land (including underground water) may have been contaminated, development should only occur where it is demonstrated that the land can be made suitable for its intended use prior to commencement of that use.

The application material provides no evidence that any measures have been taken to ascertain whether any potential exists for contamination of land or underground water because of previous use of the site.

It is recommended as a condition of Development Plan Consent that a statement demonstrating suitability of the site for its intended use be provided prior to the commencement of any superstructure works.

### 8.8.6 Energy Efficiency

New residential development and residential extensions should be designed to minimise energy consumption and limit greenhouse gas emissions.

A Sustainability Strategy dated 31 October 2017 and prepared by D Squared Consulting accompanies the application. It outlines overriding principles which will be applied to the proposed development to reduce its impact on the environment, both at construction and operational phases.

The Strategy outlines Sustainability Guiding Principles for the proposed development, including that the development is attractive to residents, visitors and the surrounding community. Buildings are designed in accordance with best practice in sustainable development and the development encourages sustainable living within a high-quality environment. The development provides a positive social return on investment and the development promotes the notion of biodiversity at podium and street level. The Strategy promotes a development that delivers on the triple bottom line of environmental, economic and social sustainability.

The Report describes sustainability initiatives included in the proposed development, as follows:

*Social and community sustainability initiatives* which are provided include:

- visual connection with the local environment.
- easily accessible communal areas for visitors and residents.
- green walls and landscaping at podium and street levels to connect indoor and outdoor spaces and promote the notion of urban biodiversity.

*Water sustainability initiatives* included in the proposed development are:

- selection of fittings with a minimum 6 Star WELS (for taps), 4 Star (for WCs) and 3 Star (for showers).
- selection of appropriate landscape planting to minimise irrigation watering use; providing rainwater storage and re-use systems for landscape and green wall irrigation.
- and providing firefighting systems with a test water recycling facility.

*Sustainable transport initiatives* within the proposed development include:

- provision of secure bicycle storage facilities for residents (at least one rack per apartment) with additional racks for visitors at ground floor level.

- an option for apartment purchasers to have an electric vehicle charge point provided at their car parking space.

*Sustainable energy initiatives* including:

- an active façade of high-performance double glazing with integrated adjustable interstitial blinds (under automated control with manual override available).
- access to daylight and natural ventilation for apartments and for all common areas at ground level and above.
- use of electro-chromic glass in strategic locations to provide additional privacy and solar load reduction.
- supply of electricity via an inset (embedded) network, so that residents can benefit from the option of reduced electricity supply rates and the ability to share renewable energy from the building's solar PV array.
- daylight control to lighting systems in common areas, selection of energy efficient lighting fittings and use of LED for all lighting.
- functional zoning of apartment air conditioning systems (e.g. living rooms, bedrooms) with automatic and manual controls. All apartment air conditioning units to be inverter controlled and rated to highest available Energy Star rating. Units to be operable in fan mode, providing low energy air circulation.
- provision of a "kill switch" to each apartment allowing one-touch isolation of lighting and air conditioning power when apartment is vacant.
- provision of a 39kW roof-mounted solar photovoltaic array, connected via the inset network to benefit all residents and tenants. It is sized to provide renewable energy equivalent to 100% of common area power needs, including car park ventilation.
- design of apartments, tenancies and common areas to exceed applicable energy performance standards by 30% or better.
- use of light-coloured external finishes to improve thermal performance.
- use of gas for water heating and cooking to reduce peak electricity demand, reduce overall carbon footprint and improve economic outcomes for residents.
- building energy management system including smart metering to record and monitor and assist in controlling energy use.
- providing for natural ventilation to car park levels where possible, and where not possible using measures to reduce the energy use of mechanical ventilation systems by 80%.
- providing retractable clothes racks to apartments to minimise electric clothes drier use.
- providing retail and commercial tenancy air conditioning systems with an economy cycle control allowing 100% outside air to be used when external weather conditions allow.

*Waste initiatives:*

- minimising construction waste through efficient design techniques such as standardisation and, where practicable, off-site fabrication.
- management of construction waste through the implementation of an approved Environmental Management Plan.

- construction waste to be sorted and binned on-site, with a minimum of 90% to be diverted from landfill.
- apartment kitchens designed to accommodate split bins for general, recycling and compost waste.
- provision of ventilated and weather-proof storage facilities for the collection and disposal of general, recyclable, organic, bulky and e-waste, with separation on-site for ease of recycling.
- provision of a waste chute for general and recyclable waste for all apartment levels.

*Indoor environment quality initiatives:*

- use of paints, sealants, adhesives, carpets, coverings and furniture with low off-gassing properties (low VOC and low formaldehyde).
- maximising access to daylight while minimising glare to all residential areas.
- all dwellings to be fully naturally ventilated.
- all common areas at ground level and above to be fully naturally cross-ventilated.
- electro-chromic glass provided to some glazing to improve occupant privacy.

*Construction initiatives:*

- use of locally sourced, recycled or recovered materials wherever viable.
- use of materials with low embodied energy and carbon profile, where practicable.
- use of building materials with a recycled material content where viable.
- use of off-site fabrication techniques to reduce on-site construction time, waste and greenhouse gas emissions, wherever practicable.

*Landscape and biodiversity initiatives:*

- strategic use of landscape and green walls improve thermal performance and air quality and to introduce the notion of biodiversity.

In addition to these specific measures the Report outlines modelling undertaken in the course of design development of the building façade to determine a solution compliant with the planning requirement for an innovative approach to managing solar loads on west-facing elevations, and other applicable criteria in relation to appearance, design, maintaining daylight access and views, and energy efficiency.

The chosen façade design featuring high-performance double-glazing with interstitial blinds was presented to the ODASA Design Review Panel and as a result was optimised to use the proposed concrete building form as an external shading device.

The development generally accords with the Energy Efficiency provisions.

### 8.8.7 Micro-climate and Sunlight

#### *Wind*

Development should be designed and sited to minimise micro-climactic impact on adjacent land or buildings, including effects of patterns of wind (Environmental – Micro-climate and Sunlight PDC 119). Development that is over 21 metres in height and is to be built to the street frontage should minimise wind tunnel effect through methods which may include use of a podium base with a tower above, aligned to deflect wind away from the street; substantial verandas to deflect downward-travelling wind flows; or placing one building windward of another building (PDC 125).

A letter “Resultant Wind Effects at Street Level” in relation to the proposed development prepared by DR Partners and dated 30 November 2017 accompanies the application and assesses wind impact from the proposed development as negligible to minor to pedestrian traffic on Rundle Street (should be Hutt Street) and East Terrace. Wind impacts have been addressed through use of podium with tower above built form; and use of substantial verandas to deflect downward travelling wind flows.

#### *Sunlight*

Development should be designed and sited to minimise micro-climactic impact on adjacent land or buildings, including effects of patterns of daylight, sunlight and shadow (Environmental – Micro-climate and Sunlight PDC 119). Development should not significantly reduce daylight to private or communal open space and habitable rooms in zones including the City Living Zone (PDC 121).

In addition, development in a non-residential Zone that is adjacent to land in the City Living Zone (and other named zones) should minimise overshadowing on sensitive uses by ensuring:

- (a) north-facing windows to habitable rooms of existing dwellings in those zones received at least 3 hours of direct sunlight over a portion of their surface between 9:00am and 3:00pm on 21 June;
- (b) ground level open space of existing residential buildings in those zones receive direct sunlight for a minimum of 2 hours between 9:00am and 3:00pm on 21 June to at least the smaller of half of the existing ground level open space, and 35 square metres of the existing ground level open space (with at least one of the area’s dimensions measuring 2.5 metres).

(PDC 174).

Shadow diagrams were provided with the application and show that during the winter solstice, the proposed development will cast shadows to the south, south-west and south-east of the site not shadowed by existing or proposed development. Some of these areas include dwellings with private open space areas. The additional shadowing impact of the proposed development at the summer solstice is minor.

Additional shadowing impacts during the winter solstice from the proposed development are not unreasonable in the context of a development within the Capital City Zone which meets the criteria for exceeding the specified maximum height, as does the proposed development.

Based on the shadow diagrams provided, the ground level open space of existing residential buildings within the City Living Zone will not be in shadow from the proposed development between 9am and approximately 12 noon on 21 June, and so will meet the criteria of PDC 174.

### 8.8.8 Stormwater Management

Development should maximise the use of stormwater (Environmental – Stormwater Management, Objective 35). Development should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow (PDC 127). Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site (PDC 128).

A letter in relation to Stormwater impacts of the proposed development prepared by DR Partners and dated 30 November 2017 accompanies the application. It states that since the impervious proportion of the site will not be altered by the proposed development, no on-site stormwater detention is required.

Major flood events (1 in 100 year ARI) will be catered for by overland flow paths discharging to surrounding streets, and floor levels will be set back above existing footpath levels in accordance with Council requirements.

Notwithstanding there is no need to detain stormwater, the proposed development does seek to store and re-use stormwater from the roof of the building for the irrigation of landscaping on the site (including the roof top terrace space on Level 3 and the planters and green walls proposed within the building. This approach is commended by Council and is consistent with the intent of the provisions of the Development Plan.

### 8.8.9 Infrastructure

Provision should be made for utility services to the site of a development, including provision for the supply of water, gas and electricity and for the satisfactory disposal and potential re-use of sewage and waste water, drainage and storm water from the site of the development.

Service structures, plant and equipment within a site should be designed to be an integral part of the development and should be suitably screened from public spaces or streets.

Infrastructure and utility services, including provision for the supply of water, gas and electricity should be put in common trenches or conduits.

Development should only occur where it has access to adequate utilities and services, including:

- (a) electricity supply;
- (b) water supply;
- (c) drainage and stormwater systems;
- (d) effluent disposal systems;
- (e) formed all-weather public roads;
- (f) telecommunications services; and
- (g) gas services.

A Building Services Report prepared by Lucid Consulting Australia and dated 13 December 2017 accompanies the application. It reports that:

- Discussion with SA Power Networks (SAPN) has resolved that a dedicated on-site transformer will be required to service the proposed development. Subject to final calculations, a 500kVa-rated transformer will be required.
- Electricity connection will be via high-voltage feed to the on-site transformer from existing SAPN high voltage infrastructure running along the Hutt Street (western) edge of the site. The electrical distribution

system will include fire-rated mains to the main distribution switchboard on Level 2, including meters for each individual apartment and essential services power distribution.

- Preliminary discussions have been undertaken with SAPN in relation to re-positioning an existing power pole on East Terrace to provide clear access to the widened Cleo Lane, and reinstating street lighting to the new pole.
- NBN Co. is expected to serve the subject land by the anticipated completion date of the proposed development. The site has current access to Telstra copper communications infrastructure.
- Existing 150mm PVC sewer mains run along the East Terrace and Cleo Lane boundaries of the site. While a single connection will be sufficient to serve the site, the final number of connections will be resolved during detailed design.
- SA Water town water mains are provided to all 3 street frontages of the site. As SA Water will require that the development is served at minimum by a 200mm town main, it is expected that 200mm mains will be extended from the existing 400mm trunk main in Bartels Road to supply the proposed development with domestic cold water and fire services connections. A 50mm water meter will be provided near the East Terrace boundary of the site. Ground and mezzanine levels will be fed directly from the town mains, with above-carpark levels to be served via 2 x 5,000 litre capacity break tanks and an associated domestic cold water pressure pump assembly. Combined hydrant and sprinkler systems will be served by a 150mm connection to the proposed upgraded town main in East Terrace.
- Natural gas will be provided from existing low pressure gas mains in East Terrace or Hutt Street to a gas meter enclosure positioned at the rear of the building within a fire-rated enclosure under the ground-mezzanine stairs.
- The proposed development will include 2 passenger lifts serving all levels of the building, with one sized to accommodate a stretcher in accordance with Building Code requirements.

## **8.9 Transport and Access**

Development should provide safe, convenient and comfortable access and movement (Transport and Access, PDC 224), including by reflecting the significance and increasing the permeability of the identified pedestrian network (PDC 226), and by providing an adequate supply of on-site secure bicycle parking (PDC 234). No specific requirement for provision of on-site car parking arises for development in the Capital City Zone.

A Traffic Impact Statement Report dated September 2019 and prepared by InfraPlan accompanies the application. It includes a technical assessment of the operation and capacity of proposed carparking and access points, and an analysis of the likely traffic generation of the proposed development and its impact on the surrounding road network. It includes recommendations for changes to the proposed development to ensure adequate performance of the surrounding road and traffic network.

The report finds that:

- 1. The subject development will replace existing commercial tenancies with a mixed use residential and commercial development;*
- 2. The development proposal includes a building setback of 3.0m along Cleo Lane to facilitate two-way traffic movement along the property boundary;*

3. *The proposed building setback on Cleo Lane is envisaged to improve access for other residences having parking access from Cleo Lane;*
4. *No changes are proposed to traffic movements at the existing Cleo Lane access, which will continue to operate as left-in-left-out only;*
5. *The proposed development will have negligible impact on the surrounding road network in terms of trips generated with only minor increases on Cleo Lane and Hutt Street;*
6. *The subject development will eliminate six at-grade off-street carparks accessible from Cleo Lane;*
7. *A total 56 parking spaces are proposed in two sections – basement and above ground parking levels;*
8. *No visitor parking is proposed on-site, visitors can use existing on-street carparks along Hutt Street, Pirie Street and Bartels Road;*
9. *Existing access to at grade carparks from Cleo Lane will be replaced by a two-way, single lane ramp providing access to the upper parking levels;*
10. *A new crossover will be created along Hutt Street to offer access to a two-way, single lane ramp to the basement car parking levels;*
11. *The new crossover will require removal of approximately 5x on-street parking spaces but will provide 1x new space for possible use as a loading zone and 2x new motorcycle parking spaces*
12. *The proposed single lane ramps will require a signalling system to allow for and control one-way, reversible movements. Guiding principles for designing such a signalling system are provided in this report and shall be reviewed at the detailed design stage;*
13. *A total of 53 bicycle parking spaces (46 for residents and 7 for visitors/customers) are required for the proposed development with 38 dwelling units and ground floor tenancy;*
14. *46 bicycle parking spaces for residents will be provided on Level 2, accessible via lifts. 6 visitor cycle parking spaces will be provided on site with the one shortfall to use existing or future on-street bicycle parking spaces in the vicinity;*
15. *All bicycle parking provision shall be in compliance with AS2890.3 – Bicycle Parking*
16. *The proposed carpark design was assessed and found to be in general compliance with Australian Standards. Any site-specific design techniques that deviate from the Standards have been identified in detail; and*
17. *A waste storage area is proposed on ground level with vehicular access from Cleo Lane. Please refer to the separate Waste Management Report for details on the proposed Waste Management System.*

The Council and a representor raised a number of queries with respect to the traffic and parking report. In the applicant's response to representations further supporting information was provided including minor revisions to ramp layouts and sections with supporting turnpaths. The applicant also provided the following information:

*Signalised ramp system satisfies AS/NZS 2890.1:2004.*

It is correct to observe that the Australian Standard does not provide specific guidance on this particular design. The Standard was written in 2004, before 2-way, single lane ramps were a common inclusion in CBD developments. Like many such designs that are not expressly envisaged by the Standard, an assessment is based on engineering judgement. The 2-way, single-lane ramp for

50 Flinders Street, Adelaide was designed using the same engineering judgement as deployed for this development. That ramp system is operating successfully.

The City of Adelaide (the relevant road authority) has also accepted this scenario at this site

*Limited queuing probability*

The probability "p=0.13" from Austroads Part 3 equates to a maximum queue of 1 vehicle. However, there is no '0' queuing possibility on this graph such that even with a real life '0' utilisation ratio, the queue length is still shown as 1 vehicle. The design calculations (using conservative estimates) indicate that there is a 1.9% chance that a vehicle would be required to wait for another vehicle at any given time (see page 28 of the InfraPlan TIS). This is such an insignificant probability that it is almost irrelevant.

*No queuing on Cleo Lane to intrude into private land*

As discussed below, the offer to grant rights of way over the widened lane avoids any concern about the tenure of that area.

*Sight lines acceptable*

The representors' scenario shows 3 vehicles at one time (1 waiting, 1 arriving and 1 exiting) which, based on the queueing analysis, is an extremely unlikely scenario and an unrealistic design criteria. The turn paths illustrated by MFY are all B99 vehicles (eg, Ford Transit Van / Toyota Land Cruiser) which are not common vehicles, particularly occurring all at once as illustrated. Even if this very unlikely circumstance were to occur, the speed that the vehicles are travelling would be so low that there is a similarly very low probability of any collision.

Likewise, the speed at which a vehicle will enter Cleo Lane provides sufficient sight distance to see a vehicle in Cleo Lane, 'propped' even closely adjacent to East Terrace. For a domestic property access as is relevant here, the sight line requirement is based on the posted speed limit or 85th percentile speed limit of the frontage road. Given that the subject vehicle would have just entered the Lane from East Terrace and the exiting vehicle is required to stop (under the T-junction rule) and therefore would be almost stationary while looking for oncoming vehicles, most vehicle speeds would be around the 10km/h mark. At this speed, measures such as sight distance have a diminished importance given the almost exponential reduction of the impact of braking distance, reaction time and consequence should in the unlikely event of a collision.

The minimum value put forward by AS2890.1 is based on a 40km/h speed limit. This conservative approach does not consider the specific site conditions, therefore requiring a sight distance that is plainly not applicable in this situation. The calculation itself stems from the Approach Sight Distance calculation detailed in Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections. Using this formula with a speed of 10km/h results in a sight distance requirement of 5m in each direction which can be met with the current proposal.

The low speed and low consequence in conjunction with the very low vehicle numbers of Cleo Lane mean that the sightline provisions of the proposal are appropriate.

*Ramp profile suitable and reaches floor levels*

The reference to the 1:10 slope was an error in the InfraPlan report. All grade changes and transitions comply with AS2890 and the ramps do meet the relevant floor heights. Amended drawings are attached to clearly demonstrate these two items are addressed.

*Suitable turn paths*

The turn paths show that there is sufficient space for turning, see Figure 1 and Figure 2 Attached.

*Adequate loading for café deliveries*

This development occurs in an inner-city environment with many other cafes and restaurants that do not have loading bays large enough for Medium Rigid Vehicles directly in front of their sites. If an MRV is required it will deliver outside of business hours and either straddle 2 parking bays or park elsewhere and wheel the goods via a trolley.

*Safe access and egress for service and waste vehicles*

East Tce is designated as a Secondary Access Road in the Adelaide (City) Development Plan. Clause 3.2.3 from AS2890.2 however refers to Regular Service – Major Road. This clause is more relevant for large developments on arterial roads and therefore has no direct application to this proposal.

Refuse collection will occur early in the morning when the traffic volumes are minimal (similar to a minor road). The low frequency of waste removal is more in-line with an occasional service not a regular service. The speed limit is 50km/h, not 60km/h (or more) as would apply to major roads. The appropriate Clause of the Standard is in fact is 3.2.2 Occasional Service. This Clause provides that:

*Reverse manoeuvres at the property boundary, if permitted by the relevant authority shall be limited to one only, either on entering or departing, and shall be subject to consideration of both safety and obstruction to other on-street traffic.*

The requirements of the relevant clause are therefore met.

In addition, PDC 248 provides that "Buildings located along primary and secondary access roads should be sited to avoid the need for vehicles to reverse on to the road (unless the dimensions of the site make this impractical)". The dimensions of this site make this impractical, similar to many other inner-city developments.

It is considered that on the basis of this additional clarification, that the proposal generally satisfies the relevant provisions relating to transport and access.

## 9. CONCLUSION

With the exception of building height, the proposed development generally complies (or can comply by way of condition) with the relevant Development Plan provisions including land use, setbacks from site boundaries, micro-climactic (wind) impacts, the incorporation of sustainable design features, waste management and car and bicycle parking and internal amenity of the apartments.

The height of the proposed building exceeds the 22 metre maximum building height expressed in Concept Plan Figure CC/2, however the Zone specifically contemplates buildings can exceed the maximum building height shown in Concept Plan Figures CC/1 and 2 where the building has regard to the context that forms the positive character of the locality and is sympathetic to the desired character of the Zone or Policy Area and the anticipated city form expressed in Concept Plan Figures CC/1 and 2, and satisfies a minimum number of qualifications and sustainable design measures. The proposal meets this requirement.

Notwithstanding that the proposal meets these requirements, the Development Plan offers no further specific guidance on what building height could be achieved.

The height of the building does not give rise to a referral requirement in respect of Adelaide Airport operations.

It is considered the building height of the proposed new development is justified by its design and its relationship to its locality. In Hutt Street, and the wider locality, a number of buildings already completed or approved for construction are of a similar height, or taller than, the proposed new building. As these new buildings are completed, a visual and built form link will emerge between the Adelaide CBD core and areas around Hutt Street and East Terrace. The proposed development, although exceeding the maximum prescribed 22 metre height for the subject site, will be consistent with and complementary of the emerging and anticipated built form in this area.

The proposed development is considered to achieve a high design standard, as demonstrated by the inclusion of the required number of design and sustainability measures and as acknowledged by the Pre-Lodgement Agreement entered into by the applicant and the Government Architect in respect of the proposed development.

On balance, the proposed development will make a positive contribution to the desired character of the Capital City Zone. It will substantially increase the population of this precinct and as a result its daytime and night-time vibrancy. It will increase the activation of this key interface between the city and the park lands and form a defined edge to mark that interface. It will provide significant opportunities for active and passive surveillance of the public realm during day and night-time hours and will enhance public safety.

It is concluded that the proposed development warrants Development Plan Consent, subject to the conditions set out in the following section.

## 10. RECOMMENDATION

It is recommended that the State Commission Assessment Panel:

- 1) RESOLVE that the proposed development is NOT seriously at variance with the policies in the Development Plan.
- 2) RESOLVE that the State Commission Assessment Panel is satisfied that the proposal generally accords with the related Objectives and Principles of Development Control of the Adelaide (City) Development Plan Consolidated 25 July 2019 with amendments gazetted on 26 September 2019 (consolidated date 17 October 2019).
- 3) RESOLVE to grant Development Plan Consent to Development Application O20/A053/19 by Rymill Park Apartments Pty Ltd and Rymill Park Apartments Unit Trust for demolition of the existing office building and the construction of a 16-level mixed use building at 2–6 Hutt, Adelaide, subject to the following conditions of consent.

## PLANNING CONDITIONS

1. That except where minor amendments may be required by other relevant Acts, or by conditions imposed by this application, the development shall be established in strict accordance with the details and following plans submitted in Development Application No O20/A053/19 except where varied by conditions below.

*Reason for condition: to ensure the development is constructed in accordance with endorsed plans and application details.*

2. Prior to Development Approval being issued for superstructure works, a final detailed schedule of materials and finishes shall be submitted to the satisfaction of the State Commission Assessment Panel in consultation with the Government Architect.

*Reason for condition: to ensure the proposed materials and finishes are consistent with the level of quality represented in the documentation.*

3. Prior to Development Approval being issued for superstructure works, a final detailed design for penthouse roof forms including the layout of the photo-voltaic panels shall

be submitted to the satisfaction of the State Commission Assessment Panel in consultation with the Government Architect. The detailed design must assist in mitigating the height of the development and the visual impact of the roof line.

*Reason for condition: to ensure the roof forms are designed to mitigate the visual impact of the roofline.*

4. All vehicle car parks, driveways and vehicle entry and manoeuvring areas shall be designed and constructed in accordance with Australian Standards (AS/NZS 2890.1:2004 and AS/NZS 2890.6.2009) and be constructed, drained and paved with bitumen, concrete or paving bricks in accordance with sound engineering practice and appropriately line marked to the reasonable satisfaction of the SCAP prior to the occupation or use of the development.

*Reason for condition: to ensure relevant Australian standards are met.*

5. All bicycle parking spaces shall be designed and constructed in accordance with Australian Standard 2890.3-2015.

*Reason for condition: to ensure relevant Australian standards are met.*

6. Access to the bicycle storage area on Level 2 shall be designed to be free of any steps between the lift and the storage cage door and should allow sufficient width for a person walking their bicycle. The door to bicycle storage area should avoid the use of heavy swing doors and where possible should be automated and access to the storage area. These details shall be, provided to the reasonable satisfaction of the State Commission Assessment Panel in consultation, with the City of Adelaide, prior to the Development Approval being issued for superstructure works.

*Reason for condition: to ensure there is convenient and safe access to the bike storage areas.*

7. Prior to Development Approval being issued, additional details shall be provided to the satisfaction of the State Commission Assessment Panel documenting the design and management of the traffic management system to control one-way, reversible movement of vehicles through the car parking levels and ramps.

*Reason for condition: to ensure adequate traffic arrangements are achieved.*

8. The hours of operation of the restaurant (or other retail or commercial or licensed premises however described) forming part of the development shall not exceed the times specified in any applicable liquor licence or if no such times are specified, the times:

8.1 Sunday to Thursday (excluding public holidays) - 7am to 10pm.

8.2 Friday and Saturday (excluding public holidays) - 7am to 12am.

8.3 Public holidays - 7am to 10pm.

*Reason for condition: to limit the hours of operation so as to minimise unreasonable noise impacts for residents within the building and the broader locality.*

9. The finished floor level of the ground floor level entry shall match that of the existing footpath unless otherwise agreed to by the State Commission Assessment Panel.

*Reason for condition: to ensure appropriate access to the building which is not hindered by different floor levels.*

10. Prior to the commencement of construction, a dilapidation report (i.e. condition survey) prepared by a qualified engineer shall be provided to the State Commission Assessment Panel to ensure the stability and protection of adjoining buildings, structures and Council assets.

*Reason for condition: for measures to be put in place so that adjoining buildings and structures are appropriately protected during construction.*

11. A statement by a suitably qualified professional that demonstrates that the land is suitable for its intended use (or can reasonably be made suitable for its intended use) shall be submitted to the State Commission Assessment Panel prior to any superstructure works.

*Reason for condition: to ensure that any contamination on the land is identified and the land is made suitable for its intended use.*

12. The acoustic attenuation measures recommended in the Acoustic Assessment, dated December 2017 by Sonus, shall be fully incorporated into the building rules documentation to the reasonable satisfaction of the State Commission Assessment Panel. Such acoustic measures shall be made operational prior to the occupation or use of the development.

*Reason for condition: to ensure appropriate noise attenuation measures are in place.*

13. Air conditioning or air extraction plant or ducting shall be screened such that no unreasonable nuisance or loss of amenity is caused to residents and users of properties in the locality to the reasonable satisfaction of the State Commission Assessment Panel.

*Reason for condition: to ensure there is not unreasonable noise levels emanating from the development so as to unreasonably impact on the adjacent properties.*

14. Waste collection from the subject land will be strictly in accordance with the Waste Management Preliminary Draft Report dated 18 April 2018 (or any revised or updated report endorsed by the SCAP). Collection times will be strictly adhered to and communicated to residents to minimise inconvenience to residents using upper parking levels.

*Reason for condition: to minimise unreasonable noise and traffic impacts for residents within the building and the broader locality.*

15. All external lighting on the subject land shall be designed and constructed to conform to Australian Standard (AS 4282-1997).

*Reason for condition: to ensure relevant Australian standards are met.*

16. All Council, utility or state-agency maintained infrastructure (i.e. roads, kerbs, drains, crossovers, lighting, footpaths etc.) that is demolished, altered, removed or damaged during the construction of the development shall be reinstated to Council, utility or state agency specifications. All costs associated with these works shall be met by the proponent.

*Reason for condition: to ensure Council infrastructure requirements are met.*

17. A detailed landscaping plan for the level 3 rooftop garden and the internal green wall shall be submitted to the reasonable satisfaction of the State Commission Assessment Panel prior to Building Rules Consent being granted for superstructure works. This shall identify planting medium depths, irrigation methods, inspection and maintenance

schedules and methods and other features of the landscaping scheme to demonstrate viability of all plantings. The detailed landscaping plan shall be reflected, as necessary, in all other relevant plans and drawings (including, for example, sectional drawings).

18. A detailed landscaping and pavement plan for Cleo Lane (where it forms the boundary of the subject site) shall be submitted to the reasonable satisfaction of the State Commission Assessment Panel prior to Building Rules Consent being granted for superstructure works. The pavement plan must demonstrate collaboration with Council to achieve an integrated outcome for all new paving treatments and with adjoining landowners and Council to achieve a satisfactory landscaping outcome. The landscaping plan shall identify planting medium depths, irrigation methods, inspection and maintenance schedules and methods and other features of the landscaping scheme to demonstrate viability of all plantings. The paving plan and the detailed landscaping plan shall be reflected, as necessary, in all other relevant plans and drawings (including, for example, sectional drawings).
19. Landscaping shown on the approved plans (including without limitation the green wall, the rooftop garden and the landscaping and paving to Cleo Lane) shall be established prior to the occupation of the development and shall be inspected regularly and maintained and nurtured at all times with any diseased or dying plants to be replaced.
20. A watering system shall be installed at the time landscaping is established, and operated so that all plants receive sufficient water to ensure their survival and growth.

*Reason for landscaping conditions: to ensure appropriate landscaping is provided for the subject land and maintained and nurtured at all times.*

21. A final detailed Stormwater Management Plan shall be submitted to the satisfaction of the State Commission Assessment Panel, in consultation with the City of Adelaide. The details of the plan shall be incorporated within the Building Rules Consent documentation, submitted for Development Approval, and be implemented prior to occupation or use of the development.
22. All stormwater design and construction shall be in accordance with Australian Standard AS/NZS 3500.3:2015 (Part 3) to ensure that stormwater does not adversely affect any adjoining property or public road.
23. Any collection of water from:
  - seepage in the basement carparking levels
  - seepage from proposed planter boxes, green wall or roof garden
  - splash areas around proposed swimming pools
  - surface areas of car parks on levels 1 and 2
 must not be discharged to the property stormwater system, but into either the sewer or property recycled water system.

*Reason for stormwater conditions: to ensure stormwater infrastructure is designed and constructed to minimise potential for flood risk to adjoining property or public roads associated with stormwater runoff in accordance with the necessary standard.*

#### ADVISORY NOTES

- a. This Development Plan Consent will expire after 12 months from the date of this Notification, unless final Development Approval from Council has been received within that period or this Consent has been extended by the State Commission Assessment Panel.
- b. The applicant is also advised that any act or work authorised or required by this Notification must be substantially commenced within 1 year of the final Development

Approval issued by Council and substantially completed within 3 years of the date of final Development Approval issued by Council, unless that Development Approval is extended by the Council.

- c. The applicant has a right of appeal against the conditions which have been imposed on this Development Plan Consent. Such an appeal must be lodged at the Environment, Resources and Development Court within two months from the day of receiving this notice or such longer time as the Court may allow. The applicant is asked to contact the Court if wishing to appeal. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide, (telephone number 8204 0289).
- d. The applicant shall ensure there is no objection from any of the public utilities in respect of underground or overhead services and any alterations that may be required are to be at the applicant's expense.
- e. As work is being undertaken on or near the subject land boundary, the applicant should ensure that the boundaries are clearly defined, by a Licensed Surveyor, prior to the commencement of any building work.
- f. Any proposed works within the public realm adjacent to the site, including the installation of street furniture, planting of street trees, roadway modifications or changes to temporary parking controls shall be undertaken in consultation with the City of Adelaide. Improvements to the adjacent public realm outside of the identified subject land are not part of this planning consent.
- g. All Council, utility or state-agency maintained infrastructure (i.e. roads, kerbs, drains, crossovers, footpaths etc.) that is demolished, altered, removed or damaged during the construction of the development shall be reinstated to Council, utility or state agency specifications. All costs associated with these works shall be met by the proponent.
- h. Approval for the construction methodology of the proposed building may be required from the Secretary for the Commonwealth Department of Infrastructure and Regional Development, in accordance with the Airports Act 1996 and the Airports (Protection of Airspace) Regulations 1996.
- i. Any further proposed addition to the structure, including aerials, masts and vent/exhaust stacks, must be subject to a separate assessment by the Commonwealth Department of Infrastructure and Regional Development. Crane operations associated with construction shall be the subject of a separate application. Adelaide Airport Limited requires 48 days prior notice of any crane operations during the construction.
- j. This application makes the commitment to retain the street tree on Hutt Street to the front of the proposed driveway access. Construction of the development should ensure that the street tree is not damaged and incorporate appropriate protective measures as required by Council.
- k. The applicant is reminded of their obligations under the Local Nuisance and Litter Control Act 2016 and the Environment Protection Act 1993, in regard to the appropriate management of environmental impacts and matters of local nuisance. For further information about appropriate management of construction site, please contact the City of Adelaide.
- j. The applicant is reminded of its general environmental duty, as required by Section 25 of the Environment Protection Act, to take all reasonable and practical measures to ensure that the activities on the whole site, including during construction, do not pollute the environment in a way which causes or may cause environmental harm.

- k. Building sites can also be major contributors of suspended solids, concrete wash, building materials and wastes, to stormwater and, potentially, receiving waters, if there are inappropriate management practices. Construction work and site preparation must be undertaken in a manner that does not allow the escape of soil, sediment or other pollutants by wind or water to the stormwater system at levels that breach the EPA's *Environment Protection (Water Quality) Policy 2003*.
- l. During construction the applicant must ensure that every effort is made to minimise noise and dust emissions generated from site works, particularly by use of heavy machinery and vehicular movements.
- m. Construction must be carried out so that it complies with the Construction Noise provisions of Part 6, Division1 of the *Environment Protection (Noise) Policy 2007*. A copy of the Policy can be viewed at: <http://www.legislation.sa.gov.au>
- n. Any information sheets, guidelines documents, codes of practice, technical bulletins etc. that are reference in this response can be accessed on the following web site: <http://www.epa.sa.gov.au>
- o. Signage has not been assessed and does not form part of this application. A separate application must be lodged for any signage/advertisement on the land.

**David Bills**  
**Consultant Planner**

# Rymill

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**Project**

Rymill Park Apartments - 2 Hutt Street, Adelaide, SA, 5000

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**Issue**

ODASA Pre-Lodgement Agreement

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**Description**

Plan Drawings, Elevations, Sections and Visualisations

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**Date**

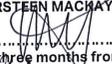
20-09-2019

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**Version**

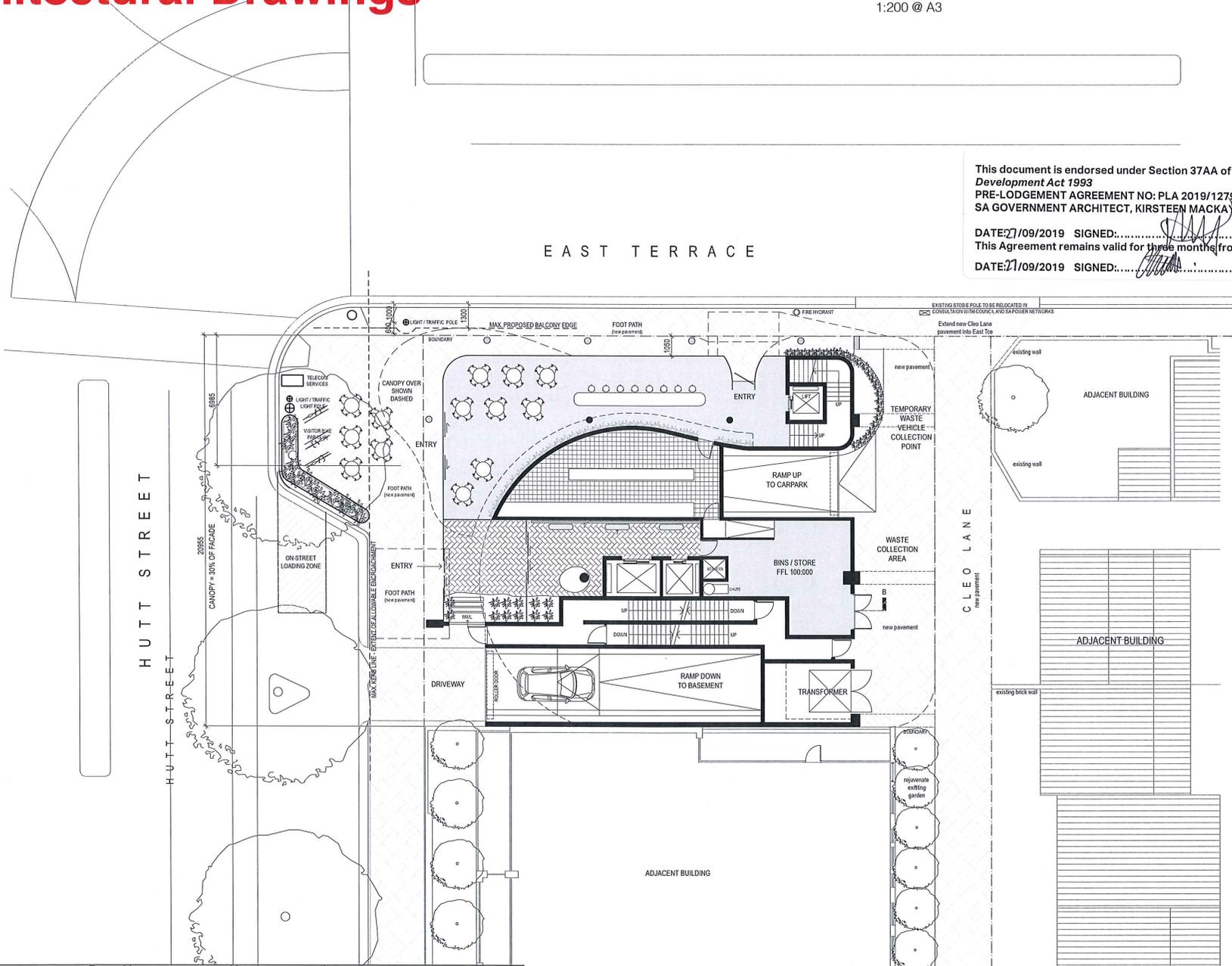
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SA GOVERNMENT ARCHITECT, KIRSTEEN MACHAY

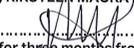
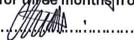
DATE: 20/09/2019 SIGNED:  .....

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 DATE: 27/09/2019 SIGNED: 

Project 28061 - 2 Hutt Street	Page Name Site Plan	Number P-01	Issue Date 20-09-2019	Rev No. v1-3
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# Architectural Drawings

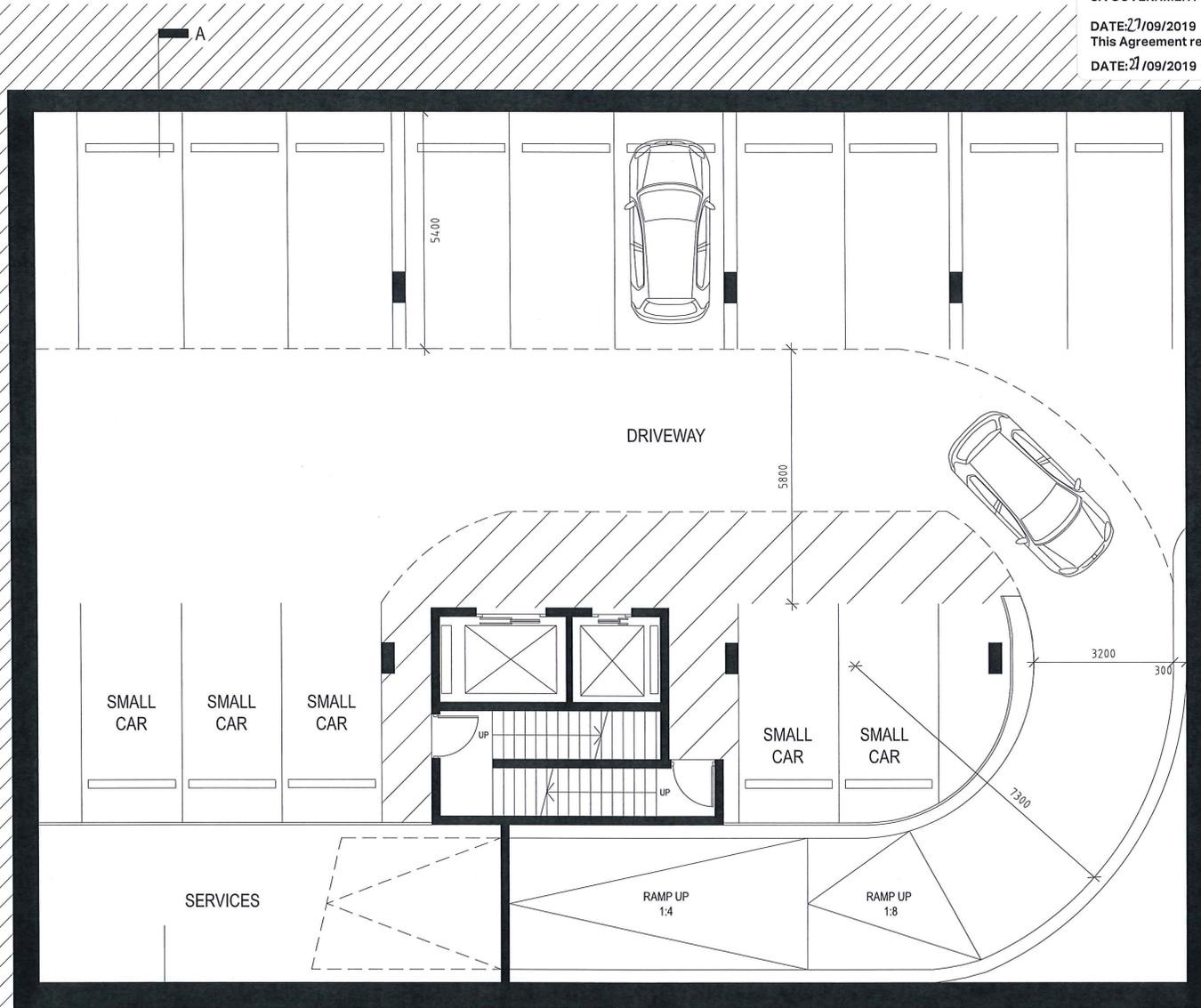
## Plans

Basement 2 - Carpark  
1:100 @ A3

tectvs

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- L14
- L13
- L10-12
- L5-9
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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Basement 2 Plan	P-02	20-09-2018	v1-2

# Architectural Drawings

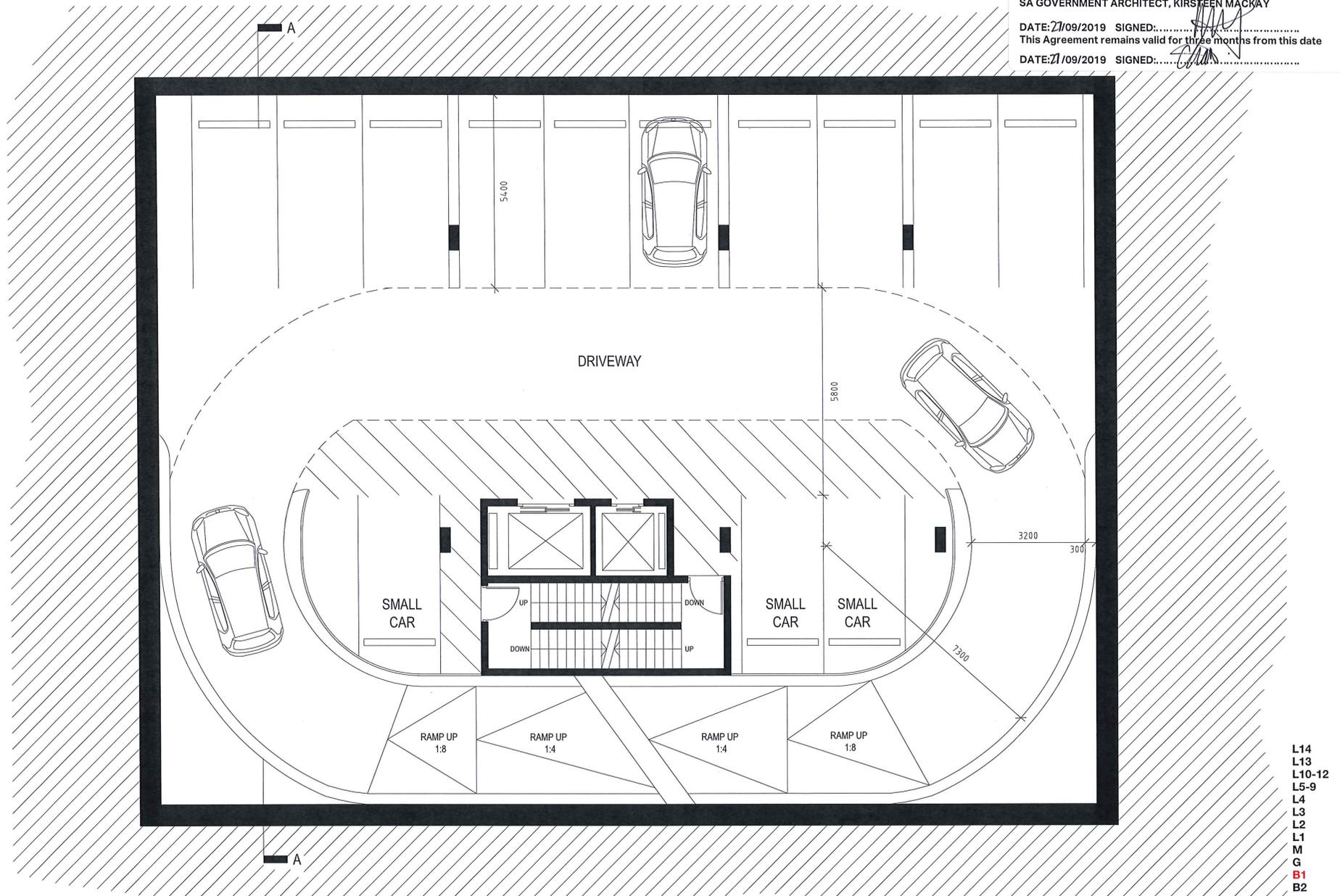
## Plans

tectvs

Basement 1 - Carpark  
1:100 @ A3

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- L10-12
- L5-9
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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Basement 1 Plan	P-03	20-09-2019	v1-2

# Drawings

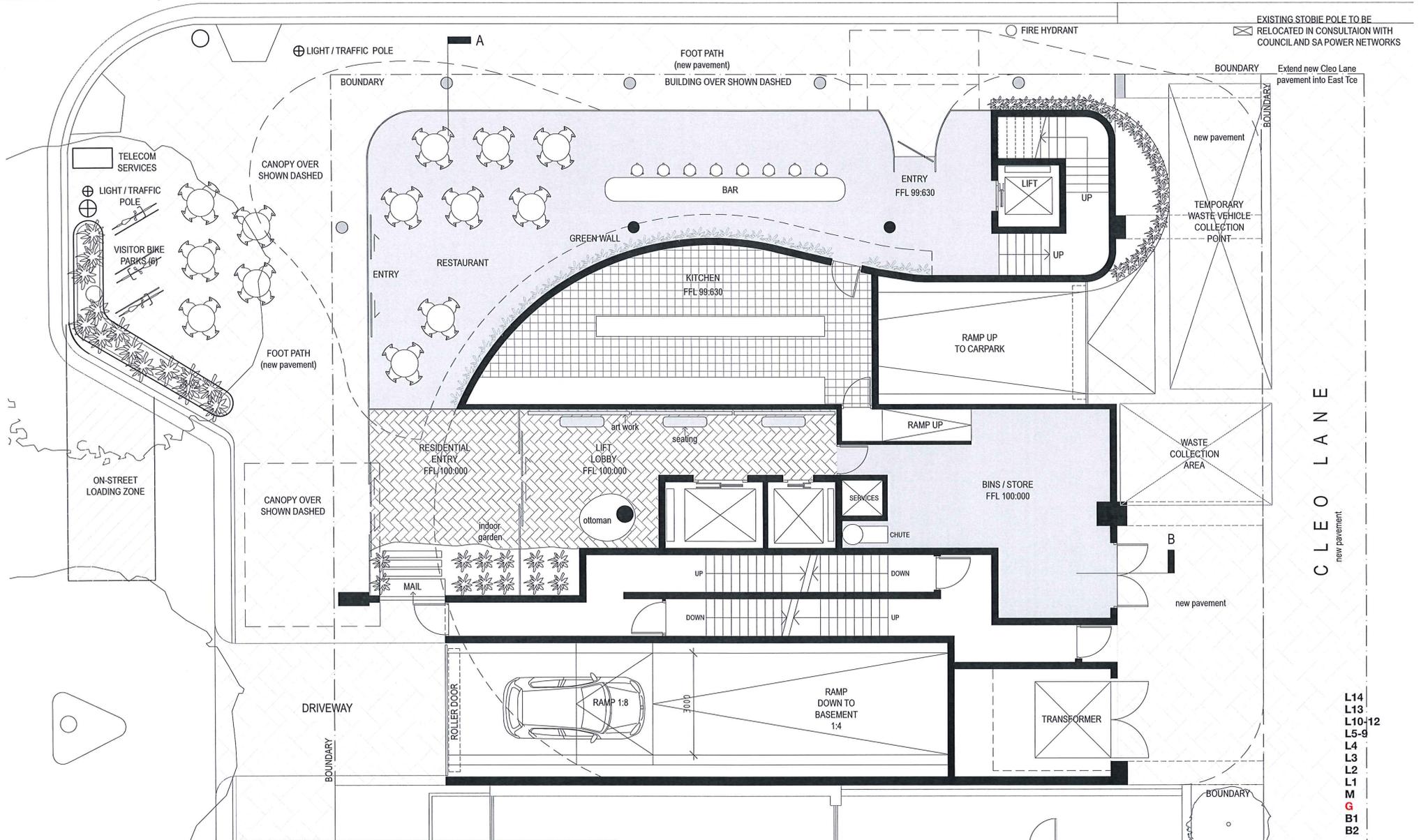
## Plans

### Ground Level - Restaurant & Amenity

1:100 @ A3



## EAST TERRACE



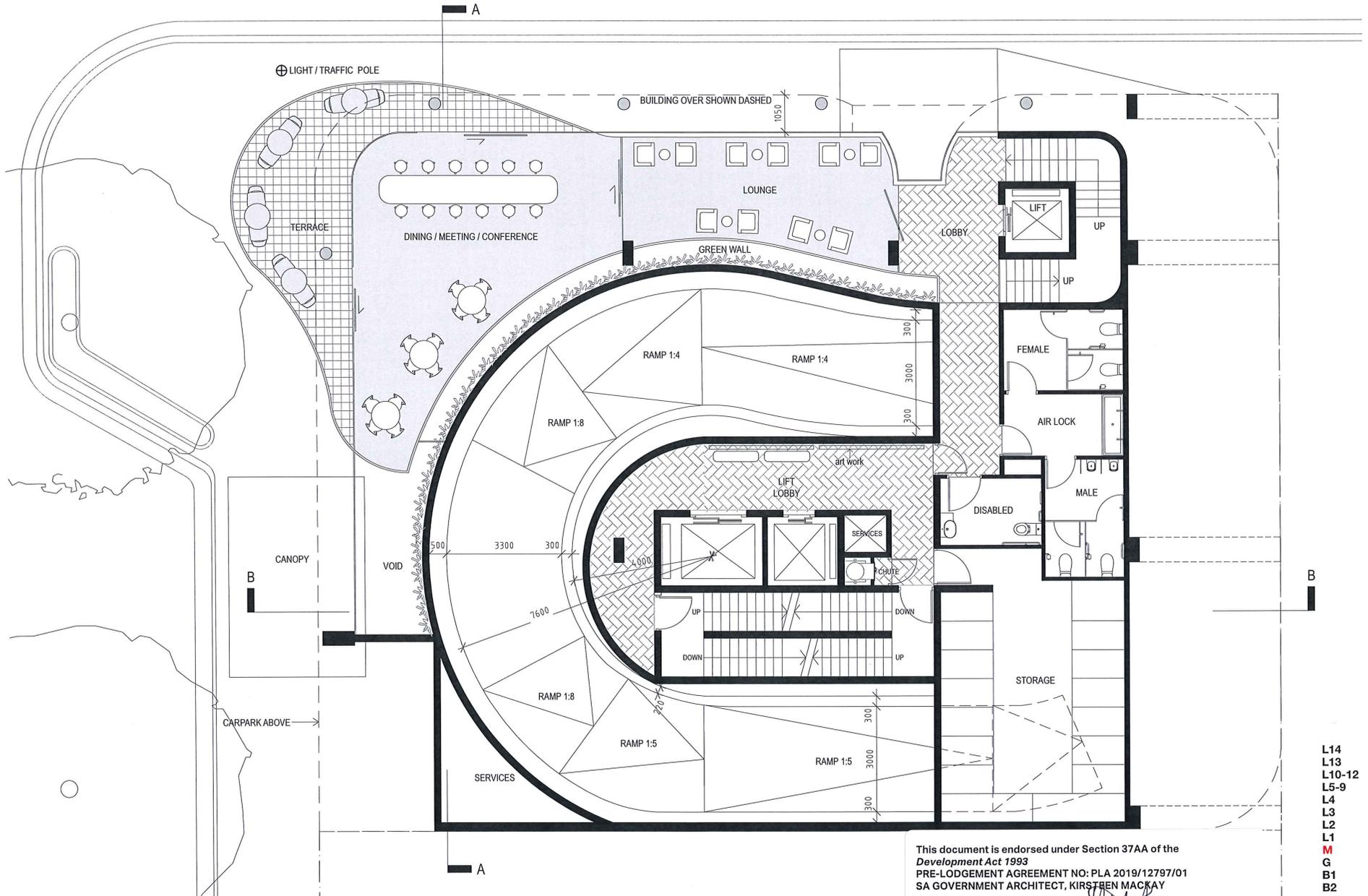
EXISTING STOBIE POLE TO BE RELOCATED IN CONSULTATION WITH COUNCIL AND SA POWER NETWORKS

Extend new Cleo Lane pavement into East Terrace

CLEO LANE  
new pavement

- L14
- L13
- L10-12
- L5-9
- L4
- L3
- L2
- L1
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Project 28061 - 2 Hutt Street	Page Name Ground Floor Plan	Number P-04	Issue Date 20-09-2019	Rev No. v1-3
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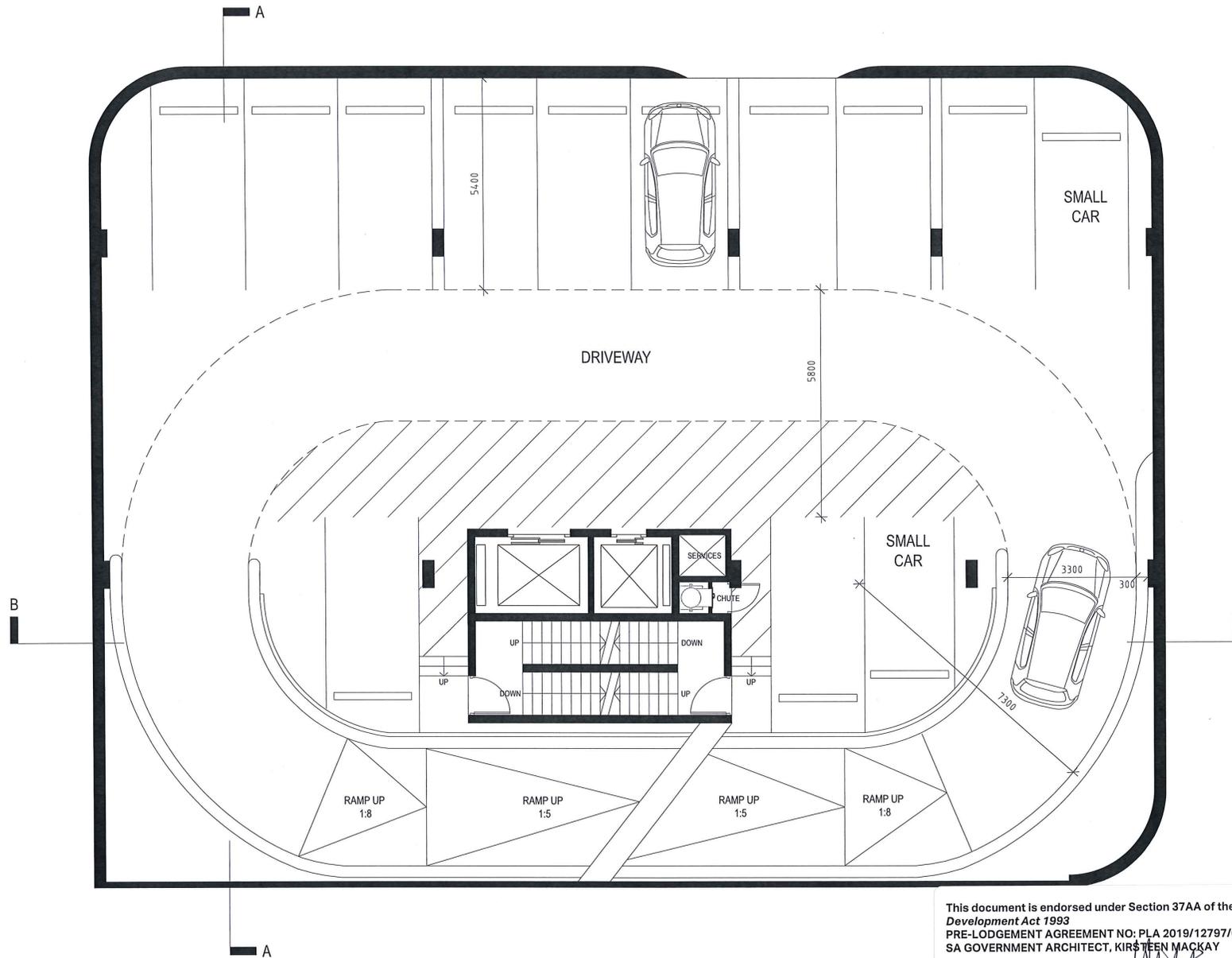


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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Mezzanine Plan	P-05	20-09-2019	v1-2

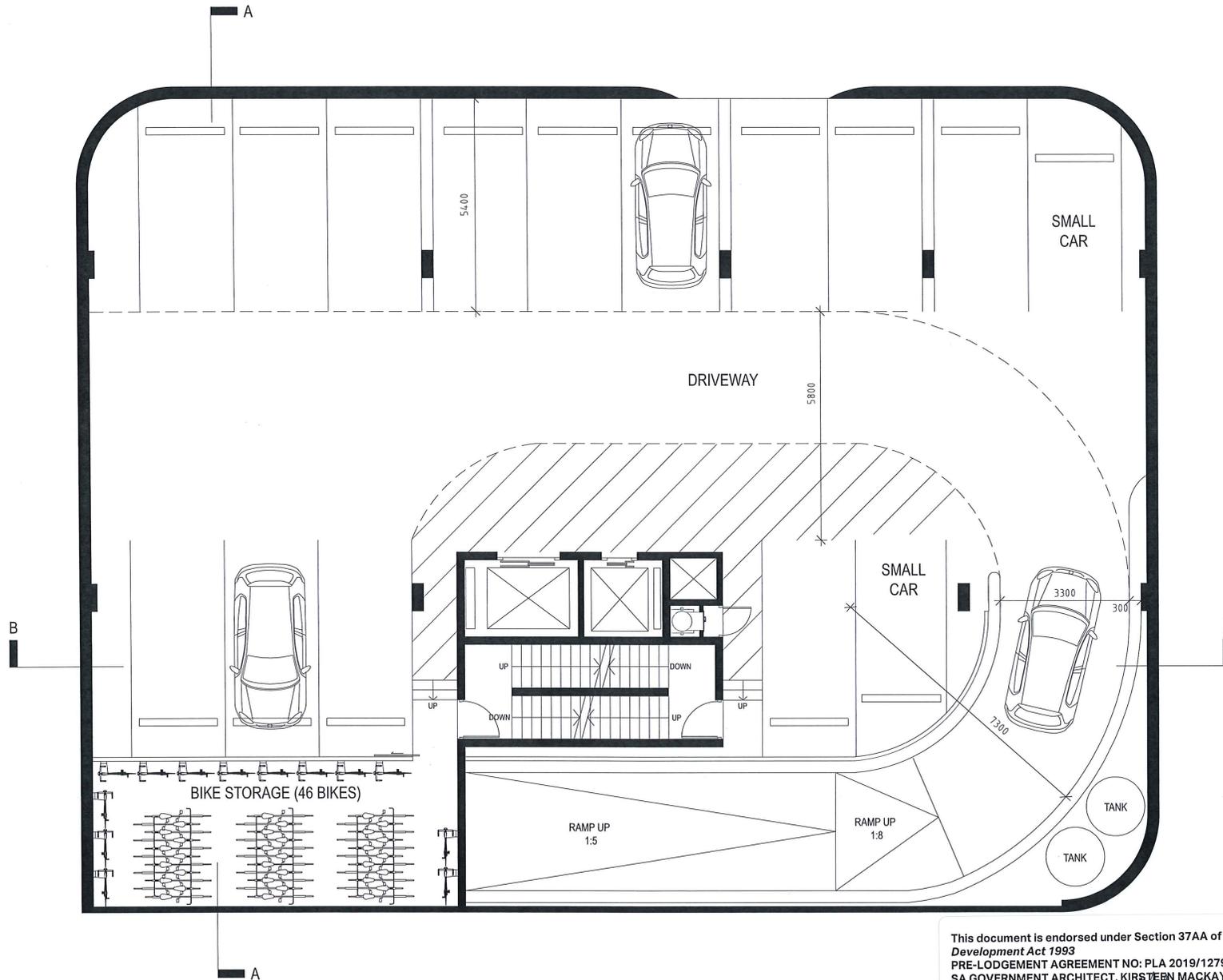


Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Level 1 Plan	P-06	20-09-2019	v1-2

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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Level 2 Plan	P-07	20-09-2019	v1-2

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- L14
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- L5-9
- L4
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- L2**
- L1
- M
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- B1
- B2

# Architectural Drawings

## Plans

tectvs



Level 3 - Residential & Roof Garden  
1:100 @ A3

APARTMENT	302
Total	- 70 sqm
Living	- 62 sqm
Terrace	- 8 sqm
Beds	- 1
Baths	- 1.5

APARTMENT	303
Total	- 93 sqm
Living	- 82 sqm
Terrace	- 11 sqm
Beds	- 2
Baths	- 2

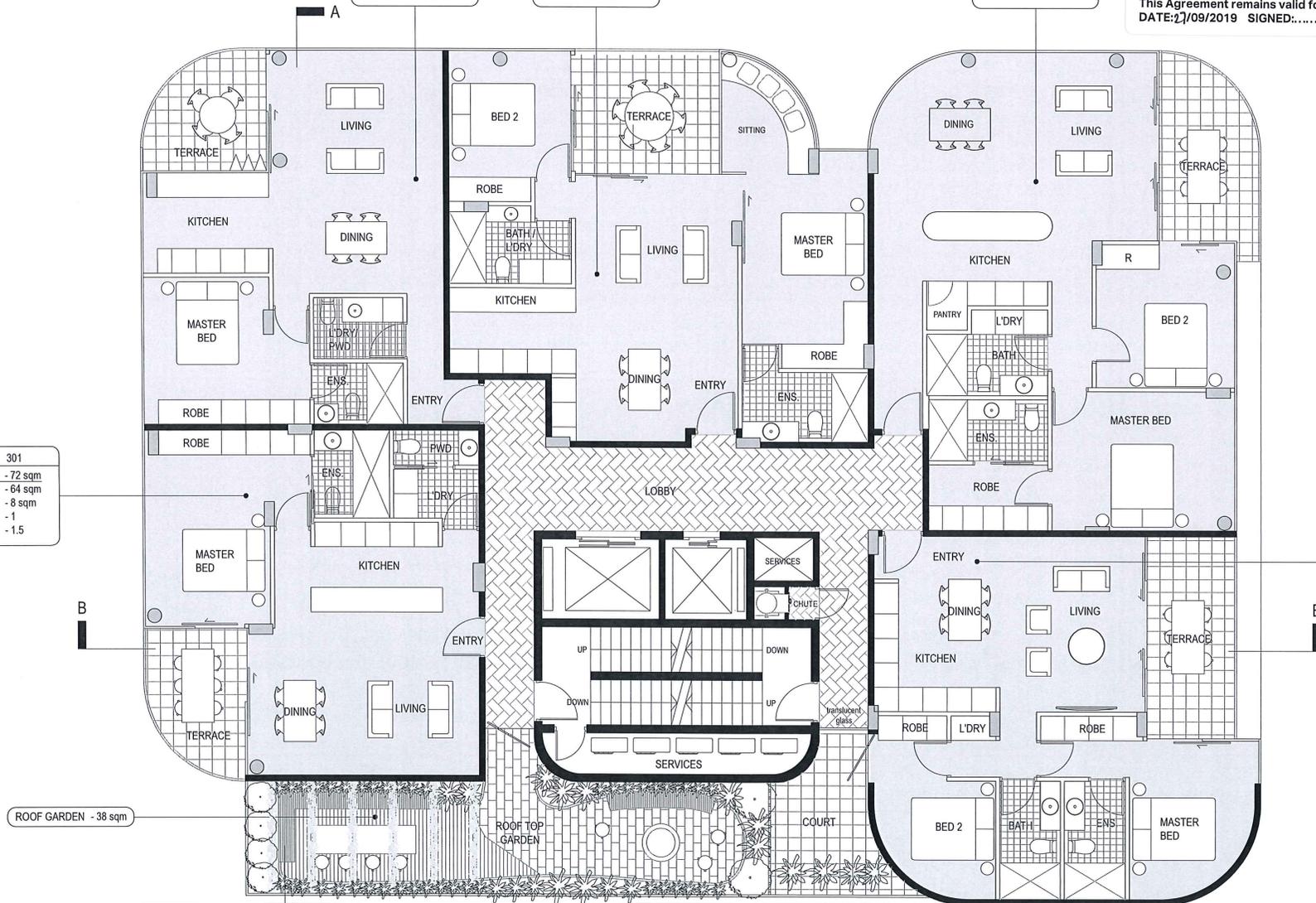
APARTMENT	304
Total	- 104 sqm
Living	- 93 sqm
Terrace	- 11 sqm
Beds	- 2
Baths	- 2

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DATE: 27/09/2019 SIGNED: [Signature]

APARTMENT	301
Total	- 72 sqm
Living	- 64 sqm
Terrace	- 8 sqm
Beds	- 1
Baths	- 1.5

APARTMENT	305
Total	- 91 sqm
Living	- 71 sqm
Terrace	- 11 sqm
Court	- 9 sqm
Beds	- 2
Baths	- 2



ROOF GARDEN - 38 sqm

ROOF TOP GARDEN

COURT

- L14
- L13
- L10-12
- L5-9
- L4
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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Level 3 Plan	P-08	20-09-2019	v1-1

# Architectural Drawings

## Plans

### Level 4 - Residential

1:100 @ A3



APARTMENT 402	
Total	- 70 sqm
Living	- 62 sqm
Balcony	- 8 sqm
Beds	- 1
Baths	- 1.5

APARTMENT 403	
Total	- 93 sqm
Living	- 82 sqm
Balcony	- 11 sqm
Beds	- 2
Baths	- 2

APARTMENT 404	
Total	- 104 sqm
Living	- 93 sqm
Balcony	- 11 sqm
Beds	- 2
Baths	- 2

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APARTMENT 401	
Total	- 72 sqm
Living	- 64 sqm
Balcony	- 8 sqm
Beds	- 1
Baths	- 1.5

APARTMENT 405	
Total	- 82 sqm
Living	- 71 sqm
Balcony	- 11 sqm
Beds	- 2
Baths	- 2

- L14
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- L10-12
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- L4**
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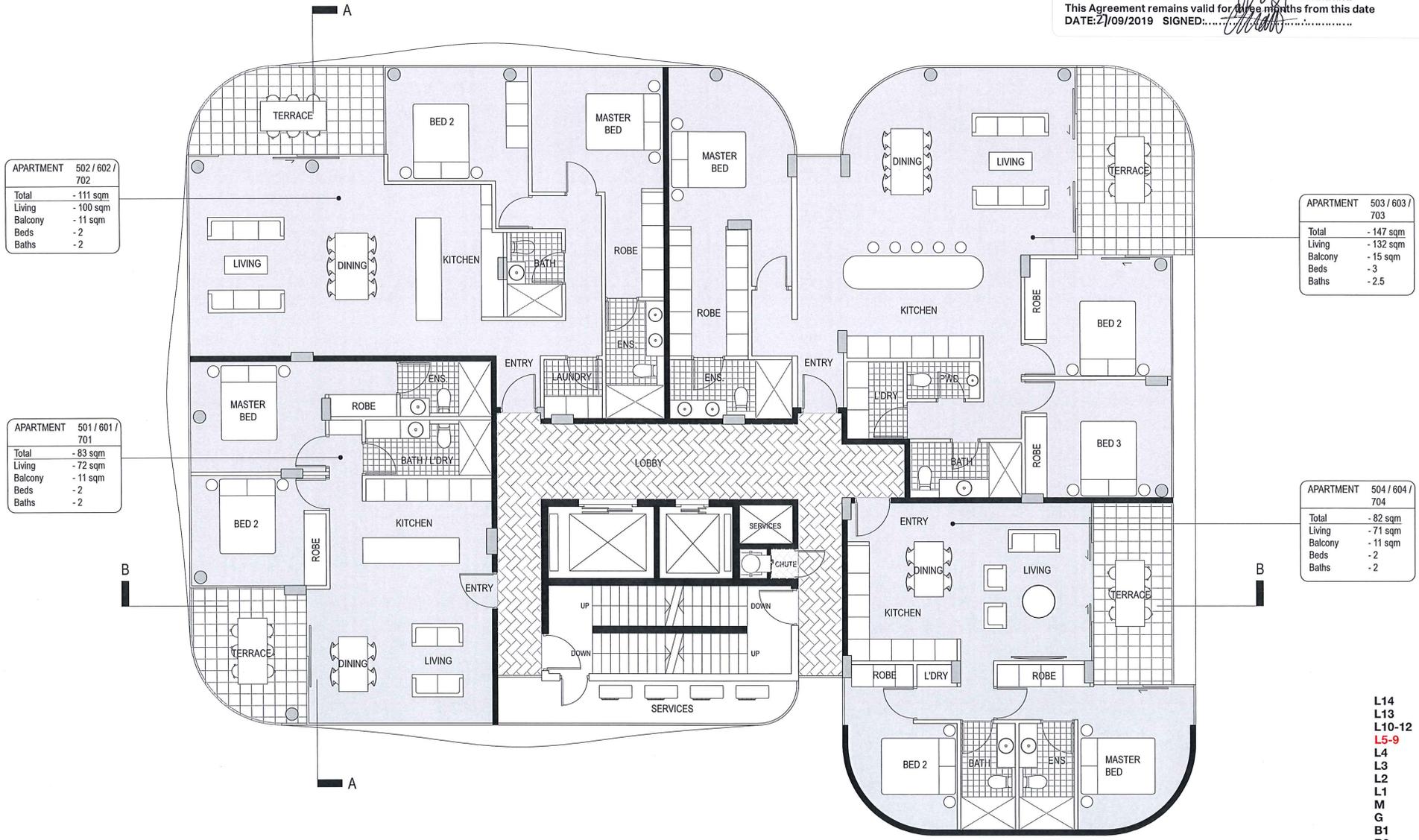
# Architectural Drawings

## Plans

tectvs

Level 5-7 - Residential  
1:100 @ A3

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APARTMENT	502 / 602 / 702
Total	- 111 sqm
Living	- 100 sqm
Balcony	- 11 sqm
Beds	- 2
Baths	- 2

APARTMENT	501 / 601 / 701
Total	- 83 sqm
Living	- 72 sqm
Balcony	- 11 sqm
Beds	- 2
Baths	- 2

APARTMENT	503 / 603 / 703
Total	- 147 sqm
Living	- 132 sqm
Balcony	- 15 sqm
Beds	- 3
Baths	- 2.5

APARTMENT	504 / 604 / 704
Total	- 82 sqm
Living	- 71 sqm
Balcony	- 11 sqm
Beds	- 2
Baths	- 2

- L14
- L13
- L10-12
- L5-9
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# Architectural Drawings

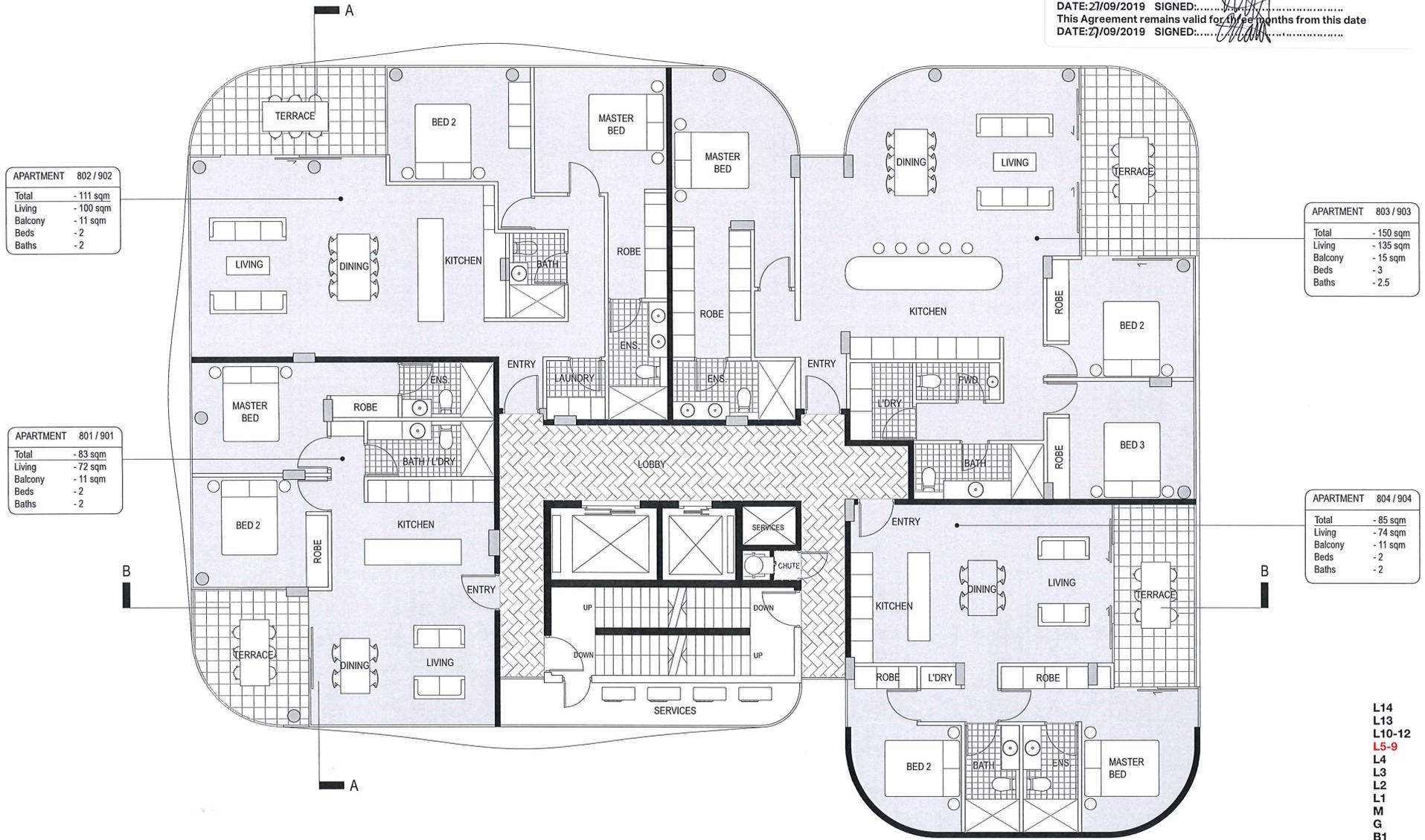
## Plans

Level 8-9 - Residential  
1:100 @ A3

tectvs

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DATE: 27/09/2019 SIGNED: .....



APARTMENT 802 / 902	
Total	- 111 sqm
Living	- 100 sqm
Balcony	- 11 sqm
Beds	- 2
Baths	- 2

APARTMENT 801 / 901	
Total	- 83 sqm
Living	- 72 sqm
Balcony	- 11 sqm
Beds	- 2
Baths	- 2

APARTMENT 803 / 903	
Total	- 150 sqm
Living	- 135 sqm
Balcony	- 15 sqm
Beds	- 3
Baths	- 2.5

APARTMENT 804 / 904	
Total	- 85 sqm
Living	- 74 sqm
Balcony	- 11 sqm
Beds	- 2
Baths	- 2

- L14
- L13
- L10-12
- L5-9
- L4
- L3
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# Architectural Drawings

## Plans

Level 10-12 - Residential  
1:100 @ A3

tectvs

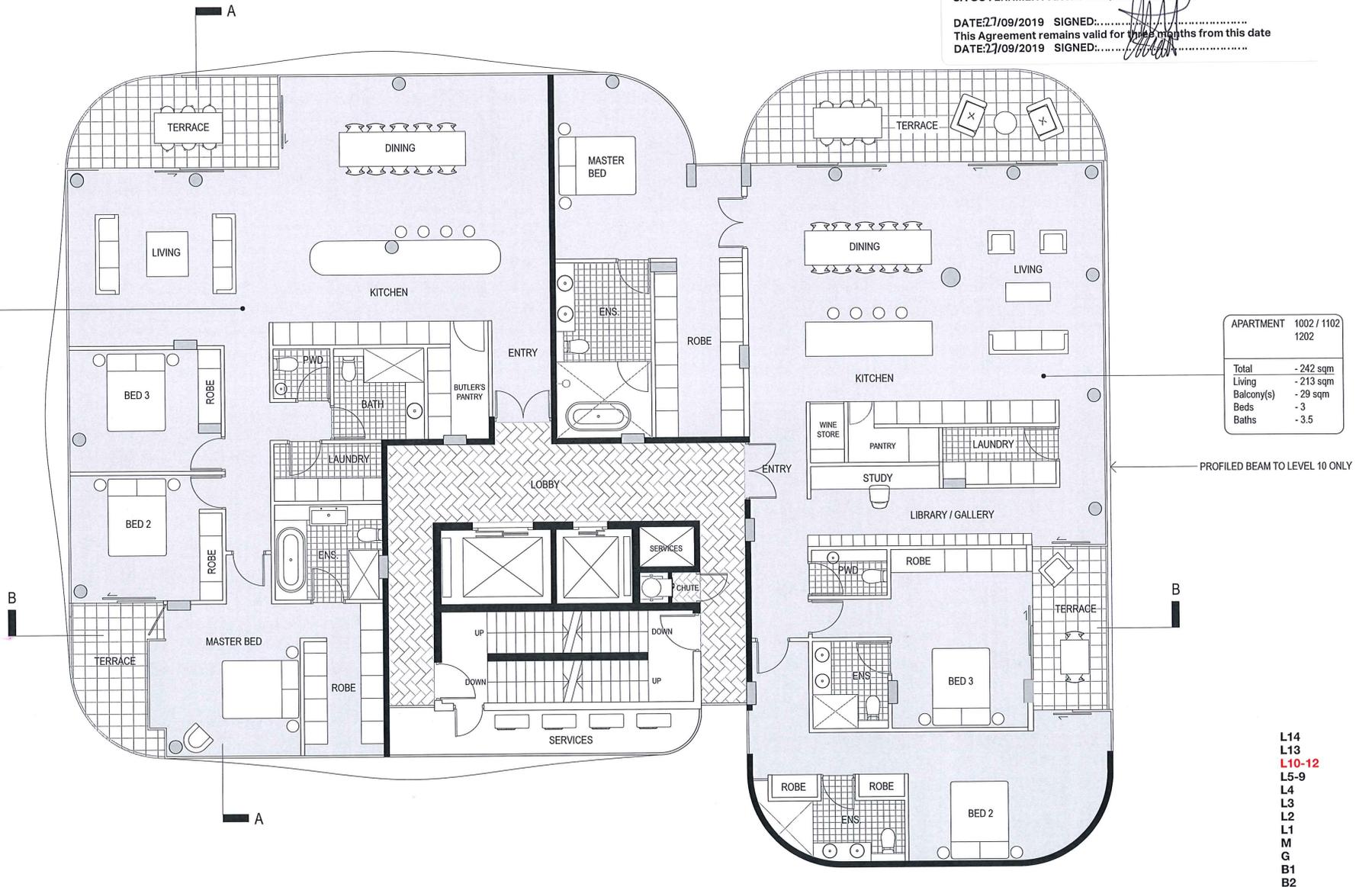


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DATE: 27/09/2019 SIGNED: .....

APARTMENT	1001 / 1101	1201
Total	- 191 sqm	
Living	- 171 sqm	
Balcony(s)	- 20 sqm	
Beds	- 3	
Baths	- 2.5	

APARTMENT	1002 / 1102	1202
Total	- 242 sqm	
Living	- 213 sqm	
Balcony(s)	- 29 sqm	
Beds	- 3	
Baths	- 3.5	



- L14
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- L10-12
- L5-9
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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Level 10 - 12 Plan	P-11	20-09-2019	v1-1

# Architectural Drawings

## Plans

tectvs

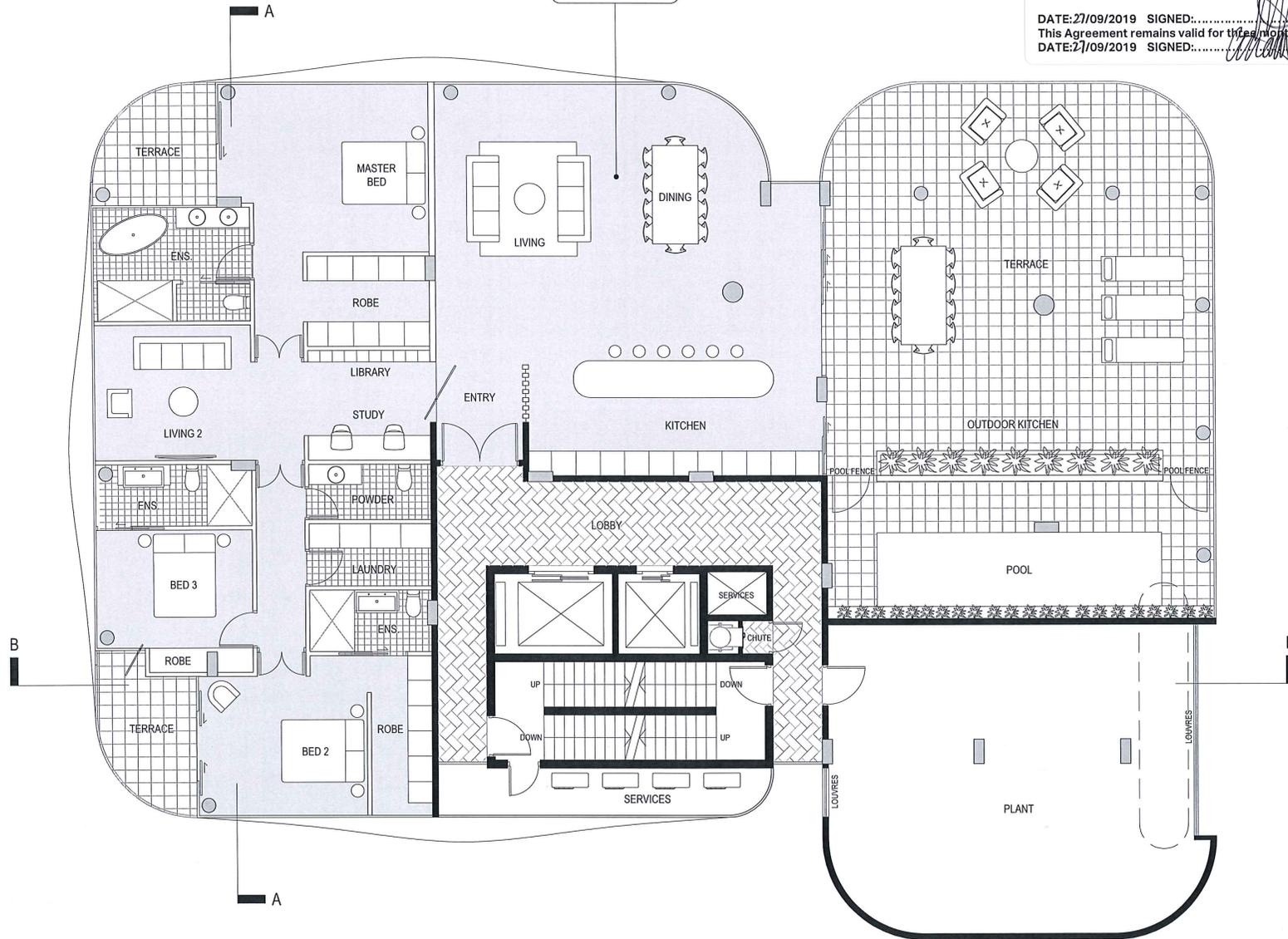


Level 13 - Sub-Penthouse  
1:100 @ A3

APARTMENT 1301	
Total	- 358 sqm
Living	- 220 sqm
Balcony(s)	- 138 sqm
Beds	- 3
Baths	- 3.5

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- L14
- L13
- L10-12
- L5-9
- L4
- L3
- L2
- L1
- M
- G
- B1
- B2

Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Level 13 Plan	P-12	20-09-2019	v1-0

# Architectural Drawings

## Plans

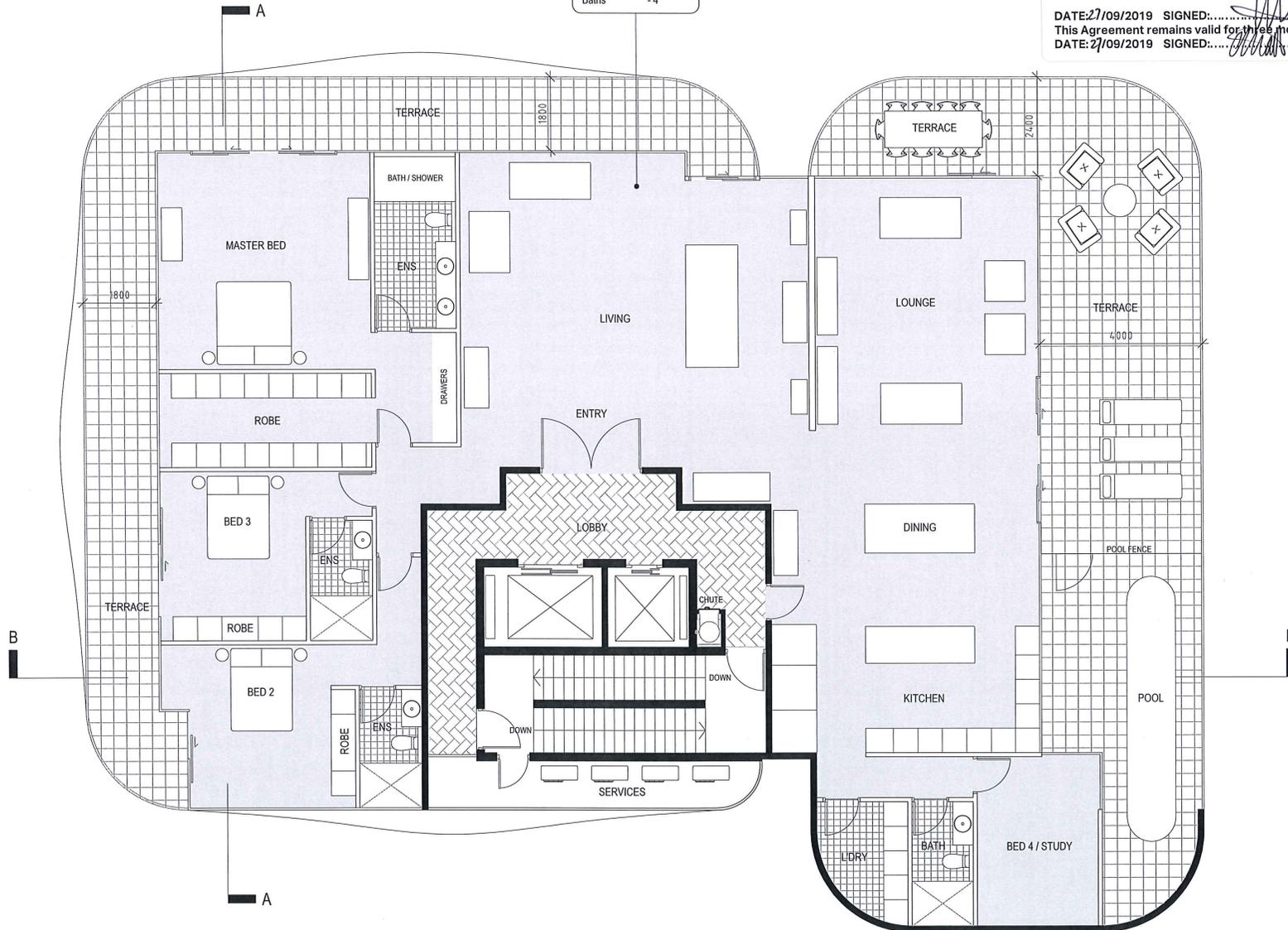


Level 14 - Penthouse  
1:100 @ A3

APARTMENT 1401	
Total	- 445 sqm
Living	- 300 sqm
Balcony(s)	- 145 sqm
Beds	- 4
Baths	- 4

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- L14
- L13
- L10-12
- L5-9
- L4
- L3
- L2
- L1
- M
- G
- B1
- B2

Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Level 14 Plan	P-13	20-09-2019	v1-0

# Architectural Drawings

## Plans

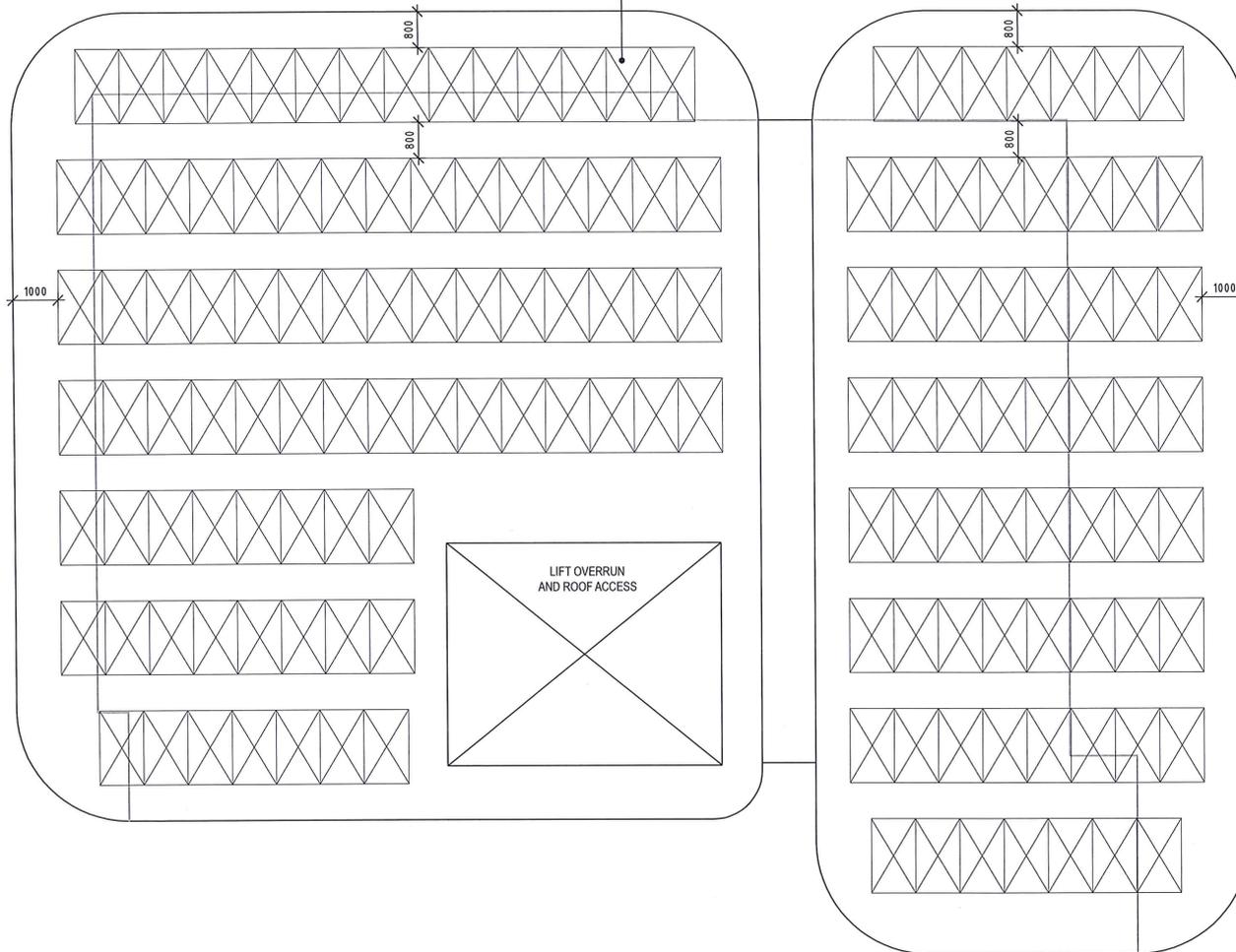
tectvs



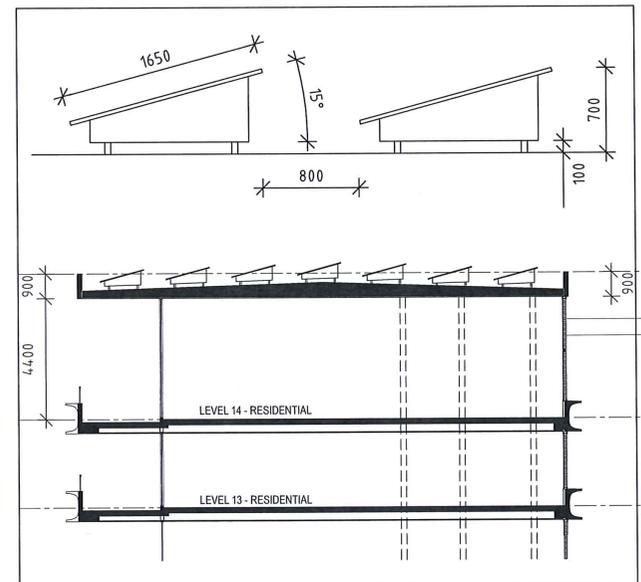
Roof  
1:100 @ A3

### Roof Plan

PV PANELS 144  
Total = 39kW (270W)  
144 panels @ 1650 x 990 mm



### Sections



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*[Signature]*

Project 28061 - 2 Hutt Street	Page Name Roof Plan + Section	Number P-14	Issue Date 20-09-2019	Rev No. v1-1
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# Architectural Drawings

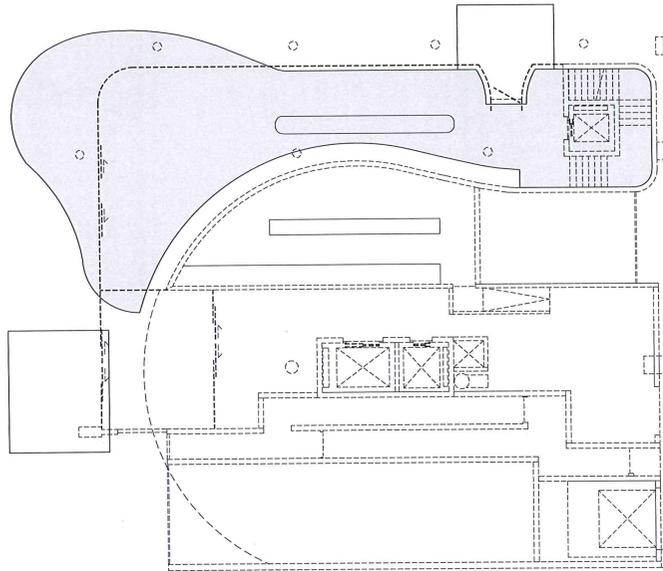
## Plans

### Ceiling Plans - Ground + Mezzanine

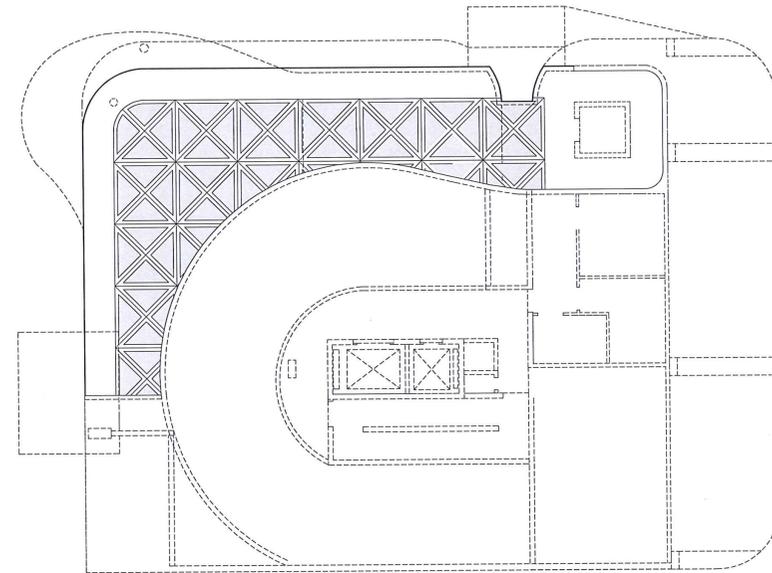
1:200 @ A3

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GROUND LEVEL



MEZZANINE

- L14
- L13
- L10-12
- L5-9
- L4
- L3
- L2
- L1
- M**
- G**
- B1
- B2

Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Ceiling Plans	P-15	20-09-2019	v1-2



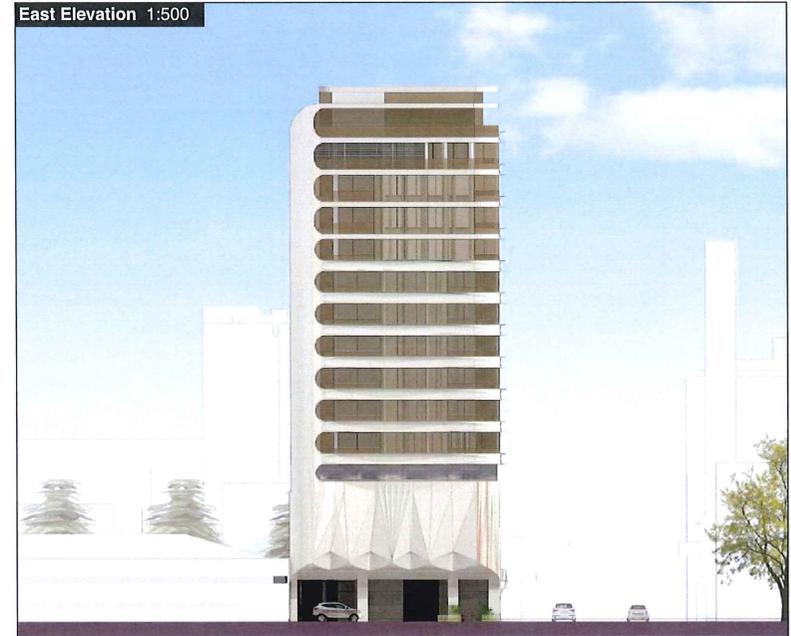
# Architectural Drawings

## Elevations

North & East Elevations  
1:500

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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Elevations	P-17	20-09-2019	v1-2

# Architectural Drawings

## Elevations

South & West Elevations  
1:500

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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Elevations	P-18	20-09-2019	v1-2

# Design Visualisation

## Perspective One

Looking South-East  
East Terrace

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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Visualisation	P-19	20-09-2019	v1-0

# Design Visualisation

**Perspective One  
(Main Perspective  
showing changes)**

Looking South-East  
East Terrace

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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Visualisation	P-19-A	20-09-2019	v1-1

# Design Visualisation

## Perspective Two

Looking North-East  
Hutt Street

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*[Signature]*



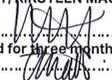
Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Visualisation	P-20	20-09-2019	v1-1

# Design Visualisation

## Perspective Three

Looking North  
Cleo Lane

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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Visualisation	P-21	20-09-2019	v1-2

\*Cleo Lane landscape shown indicatively only

# Design Visualisation

## Perspective Four

Looking South-West  
East Terrace

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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Visualisation	P-22	20-09-2019	v1-2

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# Phase: Proposal

## Public Realm Contribution

### Cafe/Laneway/Urban Realm

A series of strategies and tactics aim to improve urban amenity.

Restaurant



Laneway



Widened Footpaths



Public Art Study

Hutt Street - Residential Entry



Greenwall - Plant Selections



Greenwall - Precedents



Foyer - Precedents



Residential Foyer & Lobby - art shown indicatively only



# Design Response: Proposal

## Greening Strategy



### Activation

A landscape approach that extends the parklands towards the urban context, with high quality universally accessible open space provided at ground level, combined with a rooftop garden on Level 3.

The proposal features multiple green spaces including:

- Community rooftop garden (Level 3)
- Internal greenwall in both the restaurant space (substantial), resident lounge and residential entry, which will be supported by services to ensure ongoing maintenance
- Internal dry garden to residential entry
- Street tree protection and maintenance

\*Cleo Lane landscape shown indicatively only

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### Technical Information

#### 2-Storey Greenwall

Internal green walls in both the commercial areas and residential entry will provide a striking visual statement as well as reducing air pollutants, improving acoustics and cooling air temperature, improving energy efficiency.

A standard recommendation of 0.7 litres of water per day / m2 and that maintenance inspections occur fortnightly with works carried out as required has been factored into the ongoing requirements of the green wall. It is anticipated that for best performance, additional LED lighting to minimum of 3,500lx may be required to supplement natural lighting conditions.

Species selection will be detailed in collaboration with a green wall specialist supplier to ensure viable species are used

#### Street Tree Protection

Existing street trees will be assessed using AS 4790-2009 Protection of Trees on Development Sites. Two large existing street trees adjacent to the property *Platanus x acerfolius* London Plane.

They will need to be protected in accordance with AS 4790-2009 during construction and will need to be watered to Adelaide City Councils current maintenance schedule.

Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Greening Strategy	P-24	20-09-2019	v1-1

# S: Landscape

## Cleo Lane

### Amenity & Interface Upgrades

Cleo lane is proposed to undergo improvements in amenity, access and utility. Significantly, the development widens Cleo Lane, taking space from the proposal, to enable improved traffic flow. A green canopy greets new plantings and visitor bicycle parking.

### Visualisations



\*Cleo Lane landscape shown indicatively only

### Planting



Cleo Lane is a shared laneway used to access adjacent properties.

The development includes a resurfaced laneway with amenity planting that will provide an improved entry experience to the proposed apartment building and adjacent properties.

Materiality of the laneway will be carefully considered to ensure a practical and robust surface that will withstand the public/ private nature of usage.

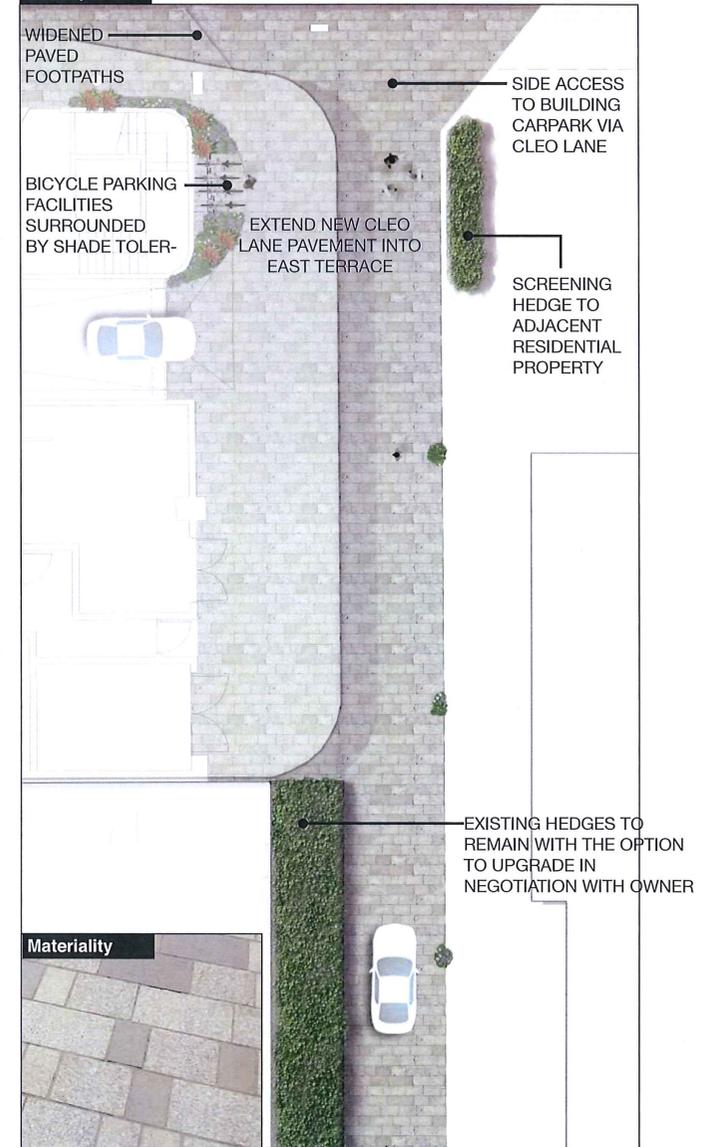
Paved surfaces will be a hard-wearing granite or similar to complement the standard public realm material palette used in the city.

Planting will be irrigated from a meter in the proposed development and managed as a part of the building strata. This will ensure the viability of the proposed planting.

Any lower level planting to be hardy verge planting of lomandra or dianella varieties.

**All finishes and landscaping to the laneway will be negotiated with adjacent landowners and Adelaide City Council to ensure an appropriate design response and integration with the public realm.**

### Concept Plan



### Materiality



\*Cleo Lane landscape shown indicatively only

Project 28061 - 2 Hutt Street	Page Name Landscape Design	Number P-25	Issue Date 20-09-2019	Rev No. v1-1
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# Landsc

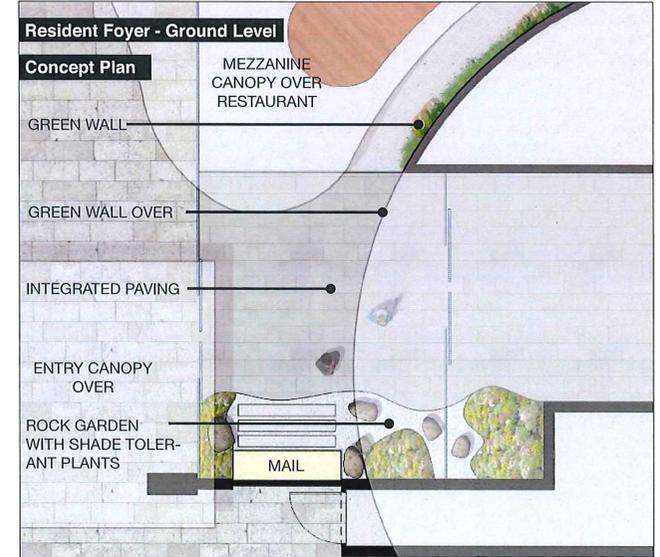
## Roof Garden + Resident Foyer

### Amenity for Residents

A rooftop garden with BBQ and fire pit facilities along with a rock garden in the main residential entrance foyer adds further amenity for the residents of the development. The addition of these green spaces provides further extension of the parklands into the development and the city and provides greening on the city at a street level scale.

### Roof Garden - Level 3

#### Concept Plan



### Precedents



### Precedents

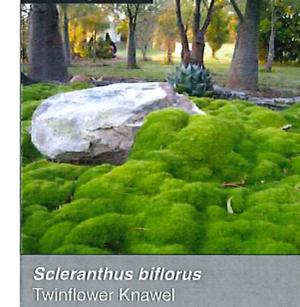


### Planting



Project 28061 - 2 Hutt Street	Page Name Landscape Design	Number P-26	Issue Date 20-09-2019	Rev No. v1-1
----------------------------------	-------------------------------	----------------	--------------------------	-----------------

### Planting



The indoor foyer garden contains a formalised arrangement of differing sized pebbles and rocks to create dry landscape with mounded areas covered with shade tolerant groundcovers to provide a green highlight.

All ground covers will require a minimum 150mm depth of growing media and a drainage layer for irrigation. Garden bed can be mounded to reduce garden bed depth below finished surface level.

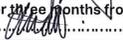
# Design Response: Materials

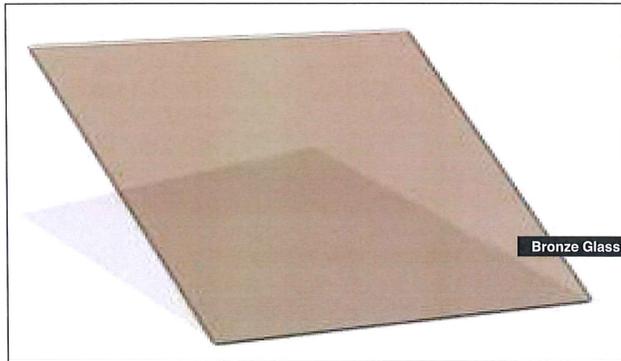
## External

### Materials/External Finishes & Textures

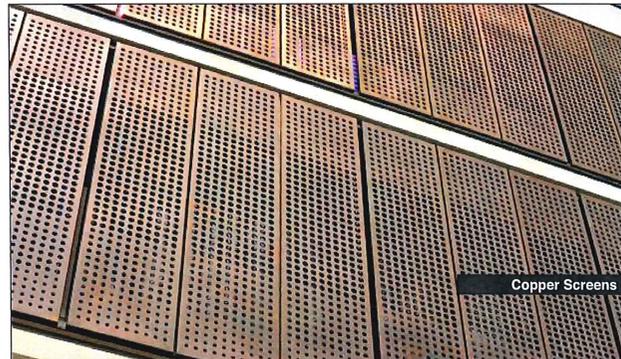
Expressive, clean, and upmarket, exterior material choices focus on speaking to the site by introducing natural forms and greenery to the building, with other materials playing with light.

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Bronze Glass



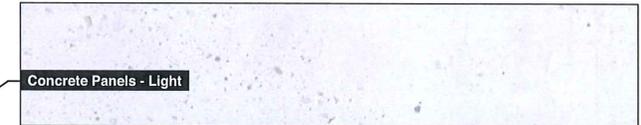
Copper Screens



Traditional Adelaide Bluestone



Bronze Glass



Concrete Panels - Light



Glass - Dark



Profiled Concrete - Light



Copper Strips



Ribbed Metal - Axolotl Routed Graphite Smooth



Green Wall

# Design Response: Materials

External

**Materials Board**

A material board representing the anticipated exterior finishes was presented to the design review panel.

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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Material Board	P-28	20-09-2019	v1-0

# Hutt Street Entry Study

## Perspectives

Design Study for the Hutt Street Residential and Car Entries  
NTS

Residential and Car Entry

Perspective 1



Residential and Car Entry

Perspective 2



Perspective 3



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Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Hutt Street Entry Study	P-29	20-09-2019	v1-0

# East Facade Beam Study

## Inverted Beam Design

Design Study for the Inverted Beams to the Eastern Facade  
NTS

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Beam Type 1 - Levels 8 - 10



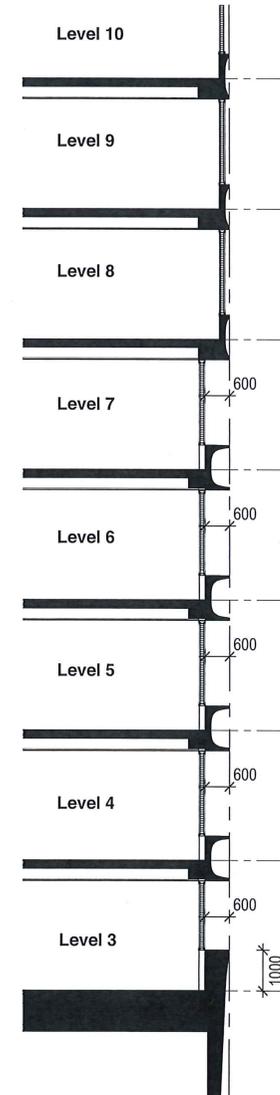
Perspective 1



Beam Type 2 - Levels 4 - 7



Section Detail - NTS



Perspective 2



# DEVELOPMENT APPLICATION FORM

**AUTHORITY:** STATE COMMISSION ASSESSMENT PANEL

**APPLICANT:** 16 FRANKLIN STREET PROPERTY TRUST PTY LTD

Postal Address: C / - FUTURE URBAN PTY LTD

GPO BOX 2403, ADELAIDE, SOUTH AUSTRALIA, 5001

**OWNER:** 16 FRANKLIN STREET PROPERTY TRUST PTY LTD

Postal Address: C / - FUTURE URBAN PTY LTD

GPO BOX 2403, ADELAIDE, SOUTH AUSTRALIA, 5001

**BUILDER:** TO BE CONFIRMED

Postal Address: \_\_\_\_\_

Licence No: \_\_\_\_\_

**CONTACT PERSON FOR FURTHER INFORMATION:**

Name: MISS MILLY NOTT

Telephone: (08) 8221 5511

Email: MILLY@FUTUREURBANGROUP.COM

Mobile: 0450 965 858

**EXISTING USE:** OFFICE

**FOR OFFICE USE**

Development No: \_\_\_\_\_

Previous Development No: \_\_\_\_\_

Assessment No: \_\_\_\_\_

<input type="checkbox"/> Complying	Application forwarded to DA
<input type="checkbox"/> Non-complying	
<input type="checkbox"/> Notification Cat 2	
<input type="checkbox"/> Notification Cat 3	
<input type="checkbox"/> Referrals/Concurrence	
<input type="checkbox"/> DA Commission	Commission/Council on: _____ / _____ / _____
Decision: _____	
Type: _____	
Date: _____ / _____ / _____	

	Decision	Fees	Receipt No	Date
Planning:	YES			
Building:				
Land Division:				
Additional:				
Dev Approval:				

**DESCRIPTION OF PROPOSED DEVELOPMENT:** SIGNAGE

**LOCATION OF PROPOSED DEVELOPMENT:**

House No: 16 Lot No: 800 Road: FRANKLIN STREET Town/Suburb: ADELAIDE

Section No (full/part): \_\_\_\_\_ Hundred: \_\_\_\_\_ Volume: 6122 Folio: 319

**LAND DIVISION:**

Site Area (m<sup>2</sup>): \_\_\_\_\_ Reserve Area (m<sup>2</sup>): \_\_\_\_\_ No of Existing Allotments: \_\_\_\_\_

Number of Additional Allotments - (Excluding Road and Reserve): \_\_\_\_\_ Lease: YES:  NO:

DOES EITHER SCHEDULE 21 OR 22 OF THE *DEVELOPMENT REGULATIONS 2008* APPLY? YES:  NO:

HAS THE *CONSTRUCTION INDUSTRY TRAINING FUND ACT 1993* LEVY BEEN PAID? YES:  NO:

**DEVELOPMENT COST** (Do not include any fit-out costs): \$ 6,000.00

I acknowledge that copies of this development application and any supporting documentation may be provided to interested persons in accordance with the *Development Regulations 2008*.

**SIGNATURE:** 

**Dated:** 26 SEPTEMBER 2019

ON BEHALF OF 16 FRANKLIN STREET PROPERTY TRUST PTY LTD



## PLANNING STATEMENT

### 16 LEVEL MIXED USE BUILDING

2 HUTT STREET, ADELAIDE

Prepared for:  
Rymill Park Apartments P/L &  
Rymill Park Apartments Unit Trust

Date:  
27 September 2019



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**Document Control**

Revision	Description	Author	Date
V1	Final	CV/TK	27 September 2019



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## 1. INTRODUCTION

This planning statement relates to a proposal by Rymill Park Apartments P/L & Rymill Park Apartments Unit Trust to demolish the existing two storey office building on the south-eastern corner of the Hutt Street and East Terrace intersection, and to subsequently replace it with a 16 level, mixed use building (including mezzanine between ground and first floor levels).

The proposed building will contain:

- two levels of basement parking (the basement car park will contain 28 spaces);
- a restaurant on the ground floor level which has been designed to face Hutt Street and East Terrace;
- a communal dining, meeting, lounge, library and conference area on the mezzanine between the ground floor level and Level 1;
- two additional levels of parking between the mezzanine and Level 3 (these levels will combine to accommodate another 28 spaces)
- a storage enclosure on Level 2 which has been designed to accommodate up to, but not exceeding, 46 bicycles;
- two, one bedroom dwellings and three, two bedroom dwellings on Levels 3 and 4;
- three, two bedroom dwellings and one, three bedroom dwelling on Levels 5, 6, 7, 8 and 9;
- two, three bedroom dwellings on Levels 10, 11 and 12;
- a three bedroom dwelling on Level 13; and
- a four bedroom dwelling on Level 14.

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 Adelaide (City) Development Plan ('the Development Plan');
- proceeded through the Pre-Lodgement Planning and Design Review process and reached a Pre-Lodgement Agreement;
- reviewed the following which form appendices to this planning statement:
  - » Appendix 1 - Tectvs Architectural Context Report (dated 4 September 2018);
  - » Appendix 2 – Signed Pre-Lodgement Agreement Documents (signed 23 August 2018);
  - » Appendix 3 - Traffic Impact Statement prepared by InfraPlan (dated 24 August 2018);
  - » Appendix 4 - Waste Management Plan prepared by InfraPlan (dated 18 April 2018);
  - » Appendix 5 - Sustainability Strategy Report prepared by D Squared (dated 31 October 2017);
  - » Appendix 6 - Wind Report prepared by DR Partners (dated 30 November 2017);
  - » Appendix 7 - Stormwater Plan prepared by DR Partners (dated 30 November 2017);
  - » Appendix 8 - Acoustic Assessment prepared by Sonus (dated December 2017); and
  - » Appendix 9 – Building Services Report prepared by Lucid (dated 13 December 2017).



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. PRE-LODGE MENT PLANNING AND DESIGN REVIEW PROCESS

The proposal evolved significantly and positively through five design review panel sessions and one desktop session plus Pre-Lodgement Panel meetings and numerous meetings with Adelaide City Council and DPTI.

A Pre-Lodgement Agreement has been reached with the Office of Design and Architecture (SA).

### 3. THE LAND

The land is located on the south-eastern corner of the Hutt Street and East Terrace intersection.

The land consists of one allotment only, legally described as Allotment 118 in Certificate of Title, Volume 5876 Folio 101, otherwise known as 2 Hutt Street, Adelaide. The land also has free and unrestricted right(s) of way over the portion of land marked “A”, otherwise a portion of land comprising Cleo Lane, which will continue to be utilised by the proposed development.

The allotment upon which the development will be constructed has a primary frontage of 20.74 metres to Hutt Street on its western side, a secondary frontage of 27.44 metres to East Terrace on its northern side, a tertiary frontage of 20.74 metres to Cleo Lane on its eastern side and an area of approximately 569.1 square metres.

**Figure 1** *Subject Site and Locality.*



The land contains a two storey office building which uses Cleo Lane for access purposes. The office contains 6 car spaces accessed directly off Cleo Lane. Vehicles parking within these car spaces are required to reverse out into Cleo Lane to enter East Terrace in a forward direction.

#### 4. THE LOCALITY

The locality displays a diverse character and context containing large expanses of open space to the north and east (Park Lands) low to medium rise development to the east and south and medium to high scale development to the west.

Rymill Park forms part of the Adelaide Park Lands and hosts many cultural events and festivals annually. It contributes significantly to the amenity and context of the subject site. The Park Lands extend to the east and between it and the subject site lies the City Living Zone (East Terrace Policy Area). This part of the City Living Zone contains a variety of dwellings fronting East Terrace and backing on to Cleo Lane. Rymill House (a State Heritage Place) forms a notable built form feature at the end of Cleo Lane. Dwellings between Rymill House and the subject site are predominately two to three storeys in height; however, a four-storey residential flat building exists to the east of the subject site. Vehicle access to garages associated with these dwellings and offices fronting Hutt Street (including the subject site) is provided via Cleo Lane.

Cleo Lane is a private lane of approximately 3 metres in width allowing left-in-left-out traffic movements. Currently, this width is not adequate to support two-way traffic movements. It is evident that some property owners along the eastern side of Cleo Lane have set back buildings by up to 3 metres, however as these setbacks are not continuous, Cleo Lane continues to function as a single width laneway. Through traffic to East Terrace is restricted.

East Terrace supports two-way traffic (which expands to four lanes at the intersection with Hutt Street). A bicycle lane exists along both sides of East Terrace, Bartels Road and Pirie Street. Parking along East Terrace, Bartels Road and Pirie Street is restricted (ticketed).

Whilst pedestrian footpaths exist along both sides of East Terrace, it is noted that the footpath adjacent to the northern boundary of the subject site is narrow, being only 1.4 metres (approximately) in width.

A variety of land uses exist along Hutt Street; however, they are predominantly commercial in nature ranging between one and five storeys. The northern portion of Hutt Street (north of Flinders Street) contains a mix of older buildings (not heritage listed) and more recent developments of varying heights between one and five storeys. Architecturally, within the immediate vicinity of the subject site there is a consistency in the use of brick, rendered cement, stone and glass materials, and curved building features. Bluestone also appears frequently in the area bound by East Terrace, Hutt Street and Flinders Street.

South of Flinders Street, buildings fronting Hutt Street are predominantly one and two storeys in height, however buildings located on corner sites are generally higher (up to 5 storeys). We note the Opus development at 53-55 Hutt Street which is under construction and will be approximately 45m in overall height.

Hutt Street supports two lanes of traffic travelling in both a northerly and southerly direction. Street trees are reasonably evenly spread along both the eastern and western sides of Hutt Street. South of the intersection between Hutt Street and Flinders Street is a landscaped median strip including trees and low height shrubs.

A bicycle lane exists along both sides of Hutt Street with the west lane terminating at its intersection with Tucker Street.

Restricted (ticketed) on-street car parking exists along both the eastern and western sides of Hutt Street.



The locality to the west of the site has experienced recent development such as the 'Zen' apartment complex at 248-256 Flinders Street which is an 8 storey building. To Zen's west is the 'Art' Apartment complex at 242 Flinders Street which is a 14 level building.

A boutique hotel, (Clarion Hotel Soho) of 6 levels is located on the corner of Tucker Street and Flinders Street.

Two significant developments were also recently approved by the Development Assessment Commission (as it was known at the time) on Pirie Street with heights of approximately 60 metres and 80 metres (293-297 Pirie Street and 262-266 Pirie Street, respectively). Construction of 293-297 Pirie Street is near completion. This development is located at the south-western edge of the Park Lands. To the north of this development at the intersection of East Terrace and Rundle Street (292-300 Rundle Street) is a 60 metre high building that was also recently approved (through the Environment, Resources and Development Court).

The subject site is located adjacent to two major public transport routes, which are serviced by more than 15 routes along East Terrace, Hutt Street and Bartels Road. The nearest bus stops to the site are all within 230 metres, with the closest being within 50 metres. Other bus stops located along Grenfell Street are within 350 metres to 400 metres (5-7 minutes' walk), and will connect users to most locations within Metropolitan Adelaide.

## 5. THE PROPOSAL

### 5.1 Overview

This planning report relates to a proposal by Rymill Park Apartments P/L & Rymill Park Apartments Unit Trust to demolish the existing two storey office building on the south-eastern corner of the intersection between Hutt Street and East Terrace, and to subsequently replace it with a 16 level, mixed use building (including mezzanine between ground and first floor levels).

### 5.2 Demolition

The existing office building is proposed to be demolished.

### 5.3 Land Use Mix

The proposed development will comprise of a “shop” in the form of a restaurant at Ground Level, and “dwellings” in the form of apartments between Level 3 and Level 14. These uses are defined in Schedule 1 of the *Development Regulations 2008*.

It is intended that the future tenant/operator of the restaurant space will be more akin to a coffee/dessert bar than a restaurant in a traditional sense. As such, no grease traps or exhausts associated with frying and the like will be required.

### 5.4 Dwelling Density

The net density of this development equates to 667.72 dwellings per hectare<sup>1</sup>. It is clearly a form of high density residential development.

### 5.5 Dwelling Composition

#### 5.5.1 Level 3

Level 3 will accommodate a total of five dwellings, including two, one bedroom dwellings and three, two bedroom dwellings.

The composition of each dwelling on Level 3 is set out in Table 5.1 overleaf.

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<sup>1</sup> The net density of this development was calculated by dividing the total number of dwellings within the proposed building (38) by the area of the land in hectares (0.05691).

**Table 5.1** *Composition on Level 3*

Dwelling	Floor Area	Bedrooms	Private Open Space	Storage	Satisfies Development Plan Requirements?
301	72 square metres	One	8.0 square metres	13.8 cubic metres	Yes
302	70 square metres	One	8.0 square metres	12.6 cubic metres	Yes
303	93 square metres	Two	11 square metres	21.1 cubic metres	Yes
304	104 square metres	Two	11 square metres	16.9 cubic metres	Yes
305	91 square metres	Two	20 square metres	14.8 cubic metres	Yes

#### 5.5.2 Level 4

Level 4 will accommodate a total of five dwellings, including two, one bedroom dwellings and three, two bedroom dwellings.

The composition of each dwelling on Level 4 is set out in Table 5.2 below.

**Table 5.2** – *Composition on Level 4*

Dwelling	Floor Area	Bedrooms	Private Open Space	Storage	Satisfies Development Plan Requirements?
401	72 square metres	One	8.0 square metres	13.8 cubic metres	Yes
402	70 square metres	One	8.0 square metres	12.6 cubic metres	Yes
403	93 square metres	Two	11 square metres	21.1 cubic metres	Yes
404	104 square metres	Two	11 square metres	16.9 cubic metres	Yes
405	82 square metres	Two	11 square metres	14.8 cubic metres	Yes

#### 5.5.3 Levels 5 to 9

Levels 5, 6, 7, 8 and 9 will each accommodate four dwellings (20 dwellings in total), including three, two bedroom dwellings (15, two bedroom dwellings in total) and one, three bedroom dwelling (five, three bedroom dwellings in total).

The composition of each dwelling on Levels 5, 6, 7, 8 and 9 is set out in Table 5.3 overleaf.

**Table 5.3** *Composition on Levels 5 to 9*

Dwellings	Floor Area	Bedrooms	Private Open Space	Storage	Satisfies Development Plan Requirements?
501, 601, 701, 801 and 901	83 square metres	Two	11 square metres	14.6 cubic metres	Yes
502, 602, 702, 802 and 902	111 square metres	Two	11 square metres	18.3 cubic metres	Yes
503, 603 and 703	147 square metres	Three	15 square metres	30.6 cubic metres	Yes
803 and 903	150 square metres	Three	15 square metres	31.6 cubic metres	Yes
504, 604 and 704	82 square metres	Two	11 square metres	14.6 cubic metres	Yes
804 and 904	85 square metres	Two	11 square metres	15 cubic metres	Yes

#### 5.5.4 Levels 10 to 12

Levels 10, 11 and 12 will each accommodate two, three bedroom dwellings (six, three bedroom dwellings in total).

The composition of each dwelling on Levels 10, 11 and 12 is set out in Table 5.4 below.

**Table 5.4** *Dwelling Composition on Levels 10 to 12*

Dwellings	Floor Area	Bedrooms	Private Open Space	Storage	Satisfies Development Plan Requirements?
1001, 1101 and 1201	191 square metres	Three	20 square metres	36.6 cubic metres	Yes
1002, 1102 and 1202	242 square metres	Three	29 square metres	46.3 cubic metres	Yes

#### 5.5.5 Level 13

Level 13 will accommodate a three bedroom dwelling.

The composition of the only dwelling on Level 13 is set out in Table 5.5 below.

**Table 5.5** *Dwelling Composition on Level 13*

Dwelling	Floor Area	Bedrooms	Private Open Space	Storage	Satisfies Development Plan Requirements?
Sub-Penthouse (1301)	358 square metres	Three	138 square metres	40.2 cubic metres	Yes

### 5.5.6 Level 14

Level 14 will accommodate a three bedroom dwelling as well.

The composition of the only dwelling on Level 14 is set out in Table 5.6 below.

**Table 5.6** *Dwelling Composition on Level 14*

Dwelling	Floor Area	Bedrooms	Private Open Space	Storage	Satisfies Development Plan Requirements?
Penthouse (1401)	445 square metres	Four	145 square metres	53.5 cubic metres	Yes

## 5.6 Common Areas

Common areas are proposed throughout the building for use by future residents and their visitors. These areas and their uses are specified below:

- lobby space at ground level with seating area, artwork and an indoor garden;
- common lounge area at the mezzanine level, with catering/kitchen facilities, conference room, terrace, library, bathroom and storage facilities; and
- rooftop garden and seating area of 37 square metres in area at Level 3.

## 5.7 Siting

At ground level the proposed building will be setback 1.05 metres from Hutt Street and East Terrace and 4.3 metres from Cleo Lane. The building will be sited on the southern boundary.

The mezzanine level contains a terrace that will encroach over the Hutt Street and East Terrace footpaths. A canopy over the residential entry will also extend over Hutt Street.

Levels 1 and 2 will be built to the boundaries on all sides.

Levels 3 to 14 will be built to the boundaries except for the area accommodating the roof top garden and space above which provides a 4.3 metre setback to the southern boundary.

## 5.7 Floor to Ceiling Heights

The various floor to ceiling heights are captured within Table 5.7 below.

**Table 5.7** *Floor to Ceiling Heights*

Level	Floor to Ceiling Height
Basement 2	2.65 metres
Basement 1	2.02 metres
Ground	3.6 metres
Mezzanine	2.8 metres
Levels 1 to 13	2.7 metres
Level 14	3 metres to 4.4 metres

## 5.8 Building Height

The proposed building will be 53.9 metres in height (excluding the lift overrun and solar panels).

## 5.9 External Materials

The proposal includes external materials as specified below:

- bronze and dark glass;
- panel concrete and profiled concrete;
- copper strips and screens;
- ribbed metal; and
- traditional Adelaide bluestone.

## 5.10 Access

Vehicular access to the subject site will be gained via a left in, left out movement on Hutt Street and via Cleo Lane through a left in, left out movement on East Terrace.

Two, single lane, two way access ramps will provide access to the upper and basement car parking levels. One ramp will be accessible via Hutt Street and will provide access to the basement car parking levels. The other will be accessible via Cleo Lane and provide access to the upper car parking levels.

A 5.6 metre crossover from Hutt Street will provide access to the ramp leading to the basement car parking. To accommodate this crossover, approximately five on street car parking spaces are proposed to be replaced by a loading zone space and two motorcycle spaces. The street tree directly to the west of the proposed crossover is to be retained and will act as a divider for entering and exiting traffic.

Access to the ramp from East Terrace, via Cleo Lane will be improved by providing a 4.3 metre setback from the eastern boundary at Ground Level. This allows Cleo Lane to support two-way traffic movements for approximately 20 metres, thereby improving passing opportunities and allowing simultaneous entry and exit movements into/out of Cleo Lane. A potential clear zone approximately 6 metres wide in the southern most lane of East Terrace adjacent to Cleo Lane is also being sought from the Adelaide City Council to enable Cleo Lane residents to enter traffic during peak morning periods with ease, avoiding any potential for queuing.

Ramp circulation and access will be controlled via a signal system, and adequate space for queuing has been provided to both ramps. Further details of this system are provided in the Traffic Impact Statement prepared by Infracore at Appendix 3.

The Council has agreed that these vehicle access arrangements are acceptable.

Pedestrians access to the site will be gained via the main apartment entry from Hutt Street or through the restaurant sliding doors along Hutt Street and East Terrace.

It is intended that residents who currently access their properties via Cleo Lane will be provided with formal rights of way over that portion of the subject land which has been offered by the applicant to increase the width of the lane to facilitate two-way traffic movement. This will be offered as part of a separate and future process.

### 5.11 Bicycle Parking

A secure enclosure for the occupants of the dwellings will be provided in the south-western corner of Level 2. The enclosure has been designed to accommodate up to, but not exceeding, 46 bicycles at any one time.

A rack for visitors will also be provided on the eastern side of the northern-most stairwell. The rack has been designed to accommodate up to, but not exceeding, six bicycles at any one time.

### 5.12 Car Parking

The proposed building will contain 56 line-marked spaces, including 44 'standard' spaces and 12 'small' spaces.

The number and type of spaces on each level of the proposed building is captured with Table 5.8 below.

**Table 5.8** – Number and Type of Spaces per Level

Level	'Standard' Spaces	'Small' Spaces	Total
Basement 1	10	3	13
Basement 2	10	5	15
Level 1	11	2	13
Level 2	13	2	15

### 5.13 Stormwater

The proposal will re-use roof water for the irrigation of landscaping and green walls which will ensure their long-term sustainability. The community strata will be responsible for the maintenance and operation of the rainwater tank and system.

### 5.14 Waste

A Waste Management Plan for the proposed development has been prepared by InfraPlan Pty Ltd, and is included in Appendix 4.

The proposed development utilises a chute system with waste collected by a private waste contractor in an area adjacent to Cleo Lane.

Within each apartment there will be integrated bin systems providing segregated compartments to encourage the sorting of co-mingled recycling, non-recyclable waste and organic food waste streams. Residents will be required to transport their waste to a chute room located on each residential level. The chute will include a diverter, allowing residents to allocate their waste as either 'general' or 'recycling'. Waste will then travel down to the bin storage room on ground level, and distributed into each waste stream bin accordingly. Monitoring of the waste bins will be undertaken by building services, with full bins replaced as required. Organic waste will need to be deposited by residents directly to the bin storage area.

Commercial tenants will be required to manually transport all waste streams into their allocated commercial bins in the bin storage area.

To avoid traffic impacts on Cleo Lane and noise impacts to its residents, waste is proposed to be collected via Cleo Lane between 9:00am and 6:00pm. This avoids potential conflicts during the morning and afternoon peak traffic periods (i.e. between 7:00am and 9:00am and between 3:00pm and 6:00pm) and the sensitive hours of the day that may impact upon residential amenity (i.e. between 9:00pm and 7:00am the following day).

The waste collection vehicle will reverse into Cleo Lane from East Terrace, and park briefly within the waste collection area while the private contractor wheels out the filled bins from the bin storage area, loads the waste, then returns the empty bins. Infracplan have confirmed in their Traffic Impact Statement that a vehicle entering or existing Cleo Lane will be able to pass the parked waste vehicle.

The proposed loading zone on Hutt Street is adequately sized to accommodate the manoeuvring and parking of a smaller type of waste collection vehicle which is currently not readily available. When these vehicles become more available, the opportunity exists for all waste to be collected on Hutt Street.

All residential waste will be collected on a weekly basis, whereas commercial waste will be collected twice a week. Details of the collection days will be finalised with the café/restaurant tenant once confirmed.

The following bins will be provided for the proposed development, as per InfraPlan’s estimated waste volume calculations:

**Table 5.9** – *Estimated waste volumes and recommended bin sizes.*

Number and Type of Bins Provided	1,000L	660L	240L
General Waste	2 x Residential 2 x Commercial	1 x Residential	1 x Commercial
Recycling	2 x Residential 1 x Commercial	-	2 x Commercial
Organic	3 x Commercial	1 x Residential	1 x Residential
Total	10	2	4

Hard waste and e-waste will be stored in a 4.9 cubic metres area allocated within the bin storage room, and collected from the subject site by separate contractors by arrangement when required.

### 5.15 Landscaping

Landscaping forms a key component of the overall appearance of the proposed building. The following landscaped areas are proposed to be provided:

- an internal green wall which utilises the structural ramp carpark wall from behind the restaurant/café on Ground Level up to the communal areas at the Mezzanine Level;
- an internal “dry garden” to the residential entry from Hutt Street;
- a communal rooftop garden at Level 3 including a communal dining area, integrated planter seating, decking, integrated arbour structure and a fire pit.

All landscaped areas are to be supported with adequate services to ensure their ongoing maintenance. It is proposed that the green wall will be provided with 0.7 litres of water per square metre, per day, and that maintenance inspection be carried out fortnightly and works carried out as required. The applicant will seek the advice of a green wall specialist to ensure that appropriate, durable and viable plant species are selected. For best performance, it has also been anticipated that additional LED lighting to a minimum of 3,500lx may be required to supplement natural lighting conditions.

It is also the intent of the applicant to improve the amenity of Cleo Lane by including additional landscaping and a green canopy over this space, however at this stage the design is only conceptual and will be pursued through a separate process with adjacent land owners and the Council.

### 5.16 Letter Boxes

A communal letter box will be installed along the southern side of the Hutt Street entrance.

Occupants of the dwellings will therefore be able to retrieve their mail from within the proposed building.

### 5.17 Building Services

A Building Services Report has been prepared by Lucid Consulting Australia which is included in Appendix 9. In summary, Lucid has advised the following:

- a dedicated on-site transformer will be required to service the development. Subject to final estimated maximum demand calculations, the transformer will be 500kva rated;
- NBN Co have confirmed that their roll-out will have extended to this site by the anticipated completion date however should timing not be feasible the site has access to Telstra copper communications infrastructure;
- the site has access to a 150mm PVC sewer main in both East Terrace and Cleo Lane at the rear which is sufficient to service the site;
- a 50mm water meter will be required to service the development;
- a 150mm fire services connection is proposed to be derived from the proposed upgraded town main in East Terrace to serve the building's combined hydrant and sprinkler systems;
- the site has access to a 250mm low pressure gas mains in East Terrace and a 100mm low pressure gas mains in Hutt Street;
- the building will be provided with all necessary electrical, communication, fire, hydraulic, mechanical and vertical transportation services to function efficiently and in a sustainable manner.

### 5.18 Environmental Sustainability

A Sustainability Strategy for the proposed development has been prepared by D Squared Consulting Pty Ltd, and is included in Appendix 5. Following is a summary of the key features to be included in the development:

- Water Efficiency:
  - » water efficient fittings of a minimum 6 Star WELS rating for taps, 4 Star for WCs and 3 Star for showers;
  - » selection of appropriate landscape planting to minimise irrigation water use;
  - » provision of rainwater storage and re-use systems for landscape and green wall irrigation; and
  - » provision of firefighting systems with a test water recycling facility.
- Transport:
  - » provision of bicycle storage facilities for apartment residents and visitors, with a minimum of one secure rack provided per apartment and additional racks for visitors at ground floor level;
  - » provision of end of trip facilities for the retail and commercial tenants, including secure bicycle racks and locker space; and
  - » all apartment purchasers will be offered the option of the provision of an electric vehicle charge point at their car park space, to promote the de-carbonisation of Adelaide's transport network. Dependent upon the final size of PV array installed, a number of these points can be supplied with 100% renewable energy.

- Energy:
  - » Active façade:
    - use of high performance double glazing with integrated and adjustable interstitial blinds, access to daylight, and natural ventilation of the apartments to reduce energy demands;
    - solar sensors will be included in the façade, and will automatically control the interstitial blind systems. Occupants will have the ability to manually override the automated control of the blinds as preferred; and
    - electro-chromic glass has been incorporated in strategic locations to provide additional privacy and solar load reduction.
  - » designing and certifying the apartments to achieve an energy performance at least 30% better than current Building Code minimum NatHERS rating of 6 Stars average, representing a dwelling average NatHERS Rating of 8 Stars;
  - » designing the tenancy and common areas to achieve an energy performance at least 30% better than a deemed to satisfy compliant space in accordance with the NCC/BCA Section J, JV3 methodology;
  - » electricity will be supplied via an inset (embedded) network, so that residents can benefit from the option of reduced electricity supply rates, and the ability to share renewable energy from the building solar PV array;
  - » air conditioning systems within the apartments will be zoned to functional areas (e.g. living rooms, bedrooms), and provided with automatic and manual controls. They will be inverter controlled and rated to the highest available Energy Star rating, and include the option to operate in fan mode providing low energy air circulation;
  - » provision of a “kill switch” to each apartment, which allows a one touch isolation of all lighting and air conditioning power when the apartment is vacant;
  - » provision of a 39kW roof mounted solar photovoltaic array. The array will be connected via the inset network so that it can benefit all residents and tenants in the development, but is sized to adequately provide renewable energy equivalent to 100% of the common area power needs, including car park ventilation;
  - » daylight control to lighting systems in common areas;
  - » use of energy efficient, LED lighting fittings;
  - » use of light coloured external finishes (in particular roof coverings) to reflect heat, reduce solar gain, and reduce the “heat island effect”;
  - » use of solar gas boosted hot water systems, gas hobs, and European Energy Label A category ovens for cooking throughout to reduce peak electricity demands, reduce the overall development carbon footprint, and provide an economical amenity for apartment owners;
  - » provision of a building energy management system with smart metering to automatically record and monitor the building's resource use and establish trends and profiles to assist with the ongoing control of energy use (this information will be made available on-line);

- » as far as practicable, designing the car park levels to be naturally ventilated. In areas where access to natural ventilation is not possible, the car parking will be mechanically ventilated but with a system designed using an engineered approach, with variable speed drives and carbon monoxide automatic control, to reduce fan energy use by 80% when compared to a conventional system;
- » providing apartment owners with retractable clothes racks in their apartments, to minimise electric clothes drier use. These facilities will also minimise the incidence of clothes drying on exposed balconies; and
- » providing retail and commercial tenancy space air conditioning systems with an economy cycle control allowing 100% outside air to be used for free cooling purposes when external weather conditions allow.
- Indoor Environmental Quality:
  - » using paints, sealants, adhesives, carpets, coverings and furniture which have low off-gassing properties (low VOC, low formaldehyde);
  - » maximising access to daylight to all residential areas whilst minimising glare;
  - » all dwellings will be fully naturally ventilated;
  - » all common areas at ground level and above will be fully naturally cross ventilated; and
  - » electro-chromic glass is provided to some glazing to improve occupant privacy.
- Construction Materials:
  - » selecting locally sourced materials wherever viable;
  - » selecting recycled and recovered materials wherever viable, particularly sourced from the local area to build in a recognition of the local area and heritage;
  - » selecting materials with a comparatively low embodied energy/carbon profile e.g. timber in preference to steel, where practicable;
  - » selecting building materials with a recycled material content e.g. thermal insulation, reinforcement bar, fly ash in concrete, recycled content floor coverings, where viable; and
  - » using off site pre-fabrication techniques to reduce on site construction time, waste, and greenhouse gas emissions, wherever practicable.
- Landscaping and Biodiversity:
  - » strategic use of landscape and green walls in common terrace areas, to reduce the “heat island” effect at podium level, and to introduce the notion of biodiversity; and
  - » use of extensive green walls at ground and podium levels, to reduce the internal heat loads, improve common area air quality, and to promote the notion of biodiversity.

## 6. CONSTRUCTION MATTERS

A Construction Management Plan (‘CMP’) will be prepared by the applicant in due course, which will deal with traffic management and general construction issues during the building process. This will include vehicular access for residents/workers and visitors who use Cleo Lane. At this early stage, we do not foresee that access would need to be restricted within Cleo Lane when both the East Terrace and Hutt Street frontages are available for construction services/activities and the like.



In addition to the above, a dilapidation report will be prepared by the applicant to protect surrounding buildings during the construction.

It is standard practice for the SCAP to include conditions on the Development Plan Consent (if granted) that a Construction Management Plan and a dilapidation report be prepared and submitted prior to the issue of Development Approval.

## **6. PROCEDURAL MATTERS**

### **6.1 The Relevant Authority**

The State Commission Assessment Panel ('SCAP') must assume the role of the relevant authority for two reasons.

First, the land is located within the area of the Corporation of the City of Adelaide. Second, the proposed building will cost more than \$10 million to complete.

### **6.2 The Relevant Development Plan**

The relevant version of the Development Plan for procedural and assessment purposes was gazetted and subsequently consolidated on 7 June 2018.

The land, under this version of the Development Plan, falls within the confines of the Capital City Zone and abuts, on its eastern side, East Terrace Policy Area 29 of the City Living Zone.

### **6.3 Kind of Development**

According to Principles 38 and 39 of the Capital City Zone, the proposal involves a kind of development that is neither complying nor non-complying. It must, therefore, be assessed and subsequently determined on its merits by SCAP in its capacity as the relevant authority.

### **6.4 Category of Development**

According to Principle 40 of the Capital City Zone, the proposal involves a Category 2 kind of development for two reasons.

First, the land is located adjacent to the City Living Zone. Second, the proposed building will, once completed, exceed 22 metres in height.

## 7. ASSESSMENT

Our assessment of the proposal is set out below.

### 7.1 Desired Character

The Capital City Zone is envisaged to be the economic and cultural focus of the State including a range of employment, community, educational, tourism and entertainment facilities. It is anticipated that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy. The proposal will contribute to an increased population.

High-scale development is envisaged in the Zone with high street walls that frame the streets. However, an interesting pedestrian environment and human scale is encouraged at ground level through careful building articulation and fenestration, frequent openings in building façades, verandahs, balconies, awnings and other features that provide weather protection. The proposed building reflects a high-scale and the podium design and potential future works to Cleo Lane create both the interest and human scale that the desired character seeks to achieve – all in a manner that offers weather protection and significant public benefit to the local community.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment. We note that Hutt Street is identified as a secondary pedestrian area. In narrow streets and laneways, the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure. The design approach along all frontages is entirely consistent with the street presentation envisaged.

Non-residential land uses at ground level that generate high levels of pedestrian activity such as shops, cafés and restaurants is encouraged. At ground level, development will continue to provide visual interest after hours by being well lit and having no external shutters. Non-residential and/or residential land uses will face the street at the first floor level to contribute to street vibrancy. The proposed land uses at ground level and mezzanine level are consistent with the desired character.

It is important to note that the Development Plan was recently amended to provide a stronger focus on high design quality. The desired character encourages new development to be contextual, durable, inclusive, sustainable and amenable. In our opinion, the Pre-Lodgement Agreement reached is testament to the high design quality achieved. Specifically, the design:

- responds positively to its surroundings and the character of the area, taking advantage of the northern aspect over the Park Lands, the siting and scale of adjacent built form and the generous contribution to the public realm by increasing the width of Cleo Lane and (subject to a separate process) upgrading the physical appearance of the laneway at the proponent's expense;
- is fit for purpose, adaptable and long lasting being very conscious of the materials and finishes proposed and very mindful of existing development to the southeast with respect to overshadowing, overlooking and visual impact;
- integrates landscaping to provide high quality spaces for occupants of the building and the public which also assists in optimising security and safety both internally and into the public realm;
- integrates very high quality sustainable systems into the buildings to improve environmental performance and minimise energy consumption which reaches a new level for living in the City; and
- provides natural light and ventilation to all habitable spaces.

Importantly, the contemporary architecture proposed responds to the site's context and broader streetscape, while supporting optimal site development.

We note that the desired character seeks to reinforce the distinctive grid pattern of Adelaide through the creation of a series of attractive boulevards as shown on Concept Plan Figures CC/1 and 2. These boulevards are to provide a clear sense of arrival into the City and are to be characterised by buildings that are aligned to the street pattern, particularly at ground level. The site is located at the edge of the East Terrace boulevard and in our opinion, the height, scale and design of the building will assist in providing the clear sense of arrival that is sought by the Capital City Zone. The orientation of the development also maximises views to an important civic landscape (the Park Lands) whilst providing a distinct City edge which is explicitly envisaged for East Terrace.

In our opinion, Cleo Lane is a minor laneway. A sense of enclosure is envisaged for such laneways (i.e. a tall street wall compared to street width) and an intimate, welcoming and comfortable pedestrian environment. The height and scale of the building together with the design of the ground plane is totally consistent with this envisaged character.

In consideration of all the above, we are of the opinion that the proposal satisfies Objective 8 in that it represents development that contributes to the Desired Character of the Capital City Zone.

The proposal is adjacent to the City Living Zone and the East Terrace Policy Area 29. The proposal is consistent with the Desired Character for that City Living Zone which also envisages high amenity residential living environments, carefully executed high quality residential infill and an increase in residential densities by infill housing with high regard to its context.

The objectives of the City Living Zone expressly require future development in that Zone to have regard to potential impacts of building height and activities from land in adjoining zones.

The East Terrace Policy Area 29 Desired Character calls for reinforcement of the existing character of grand buildings set on attractive grounds to address the Park Lands. It also contemplates vertical massing and well articulated building facades. Lastly, the Policy Area Desired Character provides for the development of Catalyst Sites (within the Policy Area) which exemplify quality contemporary design that is generally of greater intensity than their surroundings carefully designed to manage the interface with residential development particularly relating to massing, proportions, overshadowing, noise and traffic. The proposal itself addresses these requirements, even though it is located outside this Policy Area.

The Policy Area allows for buildings of up to four stories or 14 metres. It does not set any height limit for catalyst sites (of over 1500 square metres which may be formed by one or more allotments). It provides an express priority (in Policy Area PDC 15) to the provisions for catalyst sites over the general policies for the Zone or Policy Area. The fact that within the adjacent Policy Area, the Development Plan expects larger and greater intensity development than presently exists is an important contextual factor in support of the proposal. The proposal has adopted the range of measures by its design, siting and orientation in an appropriate location to address these contextual requirements in the City Living Zone.

The proposal is located immediately south of the Park Lands Zone and Policy Area 20 Rundle and Rymill Parks (which is on the northern side of Bartels Road). Also within the Park Lands Zone on the eastern side of East Terrace is Policy Area 21 Eastern Parklands.

The desired character for the Park Lands Zone envisages a unique open space system creating a publicly accessible landscaped park setting for the built form of South Adelaide. The policies do not envisage the establishment of buildings except in very limited circumstances.

The Rundle and Rymill Parks Policy Area 20 includes desired character policies comprising an open park and garden scene, a boating lake, areas for informal recreation and various forms of public infrastructure including transport and associated structures and works. Similarly the desired character statement for the Eastern Parklands Policy Area 21 calls for formal and informal outdoor recreation activities with sporting grounds set amongst dense woodland plantings and the use of the Victoria Park for formal and informal recreation and sporting facilities.

The proposal does not include any development within the Park Lands Zone. The proposal is however consistent with the policies of that Zone because it is a design of a very high standard appropriately located at the significant junction of Bartels Road and Hutt Street overlooking and maximising the benefits of Rymill Park.

## 7.2 Height, Bulk and Scale

The site is subject to a height guideline of 22 metres within the Capital City Zone.

Zone PDC 21, and Concept Plan Figures CC/1 and 2 provide a specific height guideline framework and provide an opportunity to exceed the guideline height if a development can meet certain criteria.

The relevant version of PDC 21 is reproduced below with the most pertinent elements emphasised.

***PDC 21*** *Development should not exceed the maximum building height shown in Concept Plan Figures CC/1 and 2 **unless, notwithstanding its height**, it has regard to the **context** that forms the positive character of the locality and is **sympathetic** to the desired character of the Zone or Policy Area and the anticipated city form expressed in Concept Plan Figures CC/1 and 2, **and***

- (a) *if the development incorporates the retention, conservation and reuse of a building which is a listed heritage place or an existing built form and fabric that contributes positively to the character of the local area; **or***
- (b) *more than 15% of dwellings are affordable housing; **or***
- (c) ***only if:***
  - i. *at least three of the following are provided:*
    - (1) ***the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjacent Zone, Policy Area or building height area on Concept Plan Figures CC/1 and 2;***
    - (2) ***high quality open space that is universally accessible and is directly connected to, and well integrated with, public realm areas of the street;***
    - (3) ***high quality, safe and secure, universally accessible pedestrian linkages that connect through the development site;***
    - (4) ***no on site car parking is provided;***
    - (5) ***active uses are located on at least 75% of the public street frontages of the building, with any above ground car parking located behind;***
    - (6) ***a range of dwelling types that includes at least 10% of 3+ bedroom apartments;***
    - (7) ***the building is adjacent to the Park Lands;***

- (8) *the impact on adjacent properties is no greater than a building of the maximum height on Concept Plan Figures CC/1 and 2 in relation to **sunlight access and overlooking; and***
- ii. *at least three of the following sustainable design measures are provided:*
- (1) *a communal useable garden integrated with the design of the building that covers the majority of a rooftop area supported by services that ensure ongoing maintenance;*
  - (2) *living landscaped vertical surfaces of at least 50 square metres supported by services that ensure ongoing maintenance;*
  - (3) *passive heating and cooling design elements including solar shading integrated into the building;*
  - (4) *higher amenity through provision of private open space in excess of minimum requirements by 25% for at least 50% of dwellings;*
  - (5) *solar photovoltaic cells on the majority of the available roof area, supported by services that ensure ongoing maintenance.*

(emphasis added)

In consideration of the proper interpretation and application of the current terminology used, we provide the following detailed assessment against the excess height issue and its implications with respect to PDC 21.

The Development Plan policy is prefaced by a description of the envisaged city form which establishes that the City's structure will be reinforced by the Capital City Zone being the focus of high rise development in the City. This intent is reinforced in the Desired Character in that... "*High scale development is envisaged in the Zone with high street walls that frame the streets*".

Notwithstanding its height, the proposal has regard to the context that forms the positive character of the locality and is sympathetic to the desired character in that:

- it is of high design quality that achieves the contextual, durable, inclusive, sustainable and amenable precepts of the desired character;
- it is a high scale development which seeks to create an interesting pedestrian environment and human scale;
- it is located at an important road junction at the City Edge, overlooking the Park Lands and the proposed development defines and reinforces the townscape importance of this corner site;
- it is lower in height than existing and future (under construction) buildings to its west (as noted in the Section 4 – The Locality), noting that there is potential for taller buildings to be developed to the west and north-west, in the future, as anticipated by the Development Plan.
- it will further define the City Edge and maximise views to the Park Lands and Adelaide Hills;
- it is innovative by way of its environmentally sustainable design initiatives;
- it is of a contemporary design which responds to its context and the broader streetscape, while supporting optimal site development;
- it includes non-residential land uses at ground and mezzanine levels to assist in promoting an active and vibrant streetscape;

- although it is taller than the range of building heights in the nearby City Living Zone and East terrace Policy Area 29, that Policy Area expressly anticipates larger scale development (4 storeys generally, and unlimited height for possible Catalyst sites) which is appropriately located relative to the proposal having regard to East Terrace, Hutt Street and the Park Lands;
- the building to the immediate east is a substantial building in its own right; and
- the increase in height above the 22 metres anticipated does not have adverse impacts on adjoining dwellings or the overall city form in the locality as its design, appearance and siting are commensurate with its setting and surrounding development.

Significant analysis of the context (see Architectural Context Report undertaken by Tectvs as contained in Appendix 1) was undertaken to inform the design. In particular, it is important to note that the proposed development:

- includes a podium of a height which complements adjacent buildings, and which particularly respects the adjacent City Living Zone;
- provides an overall height which will complement the anticipated city form to the west;
- is located on a key corner site where the overall height and form of the building reinforces the grid layout and distinctive urban character of the locality;
- maintains a clear distinction between the Capital City and City Living Zones and the open landscape character of the Park Lands Zone;
- is of a height and scale which reflects and responds to the role of the streets it fronts;
- incorporates materials which are common in the locality including stone (particularly blue stone), brick, rendered cement and glass;
- features a curved built form which is a common element found in buildings in the locality; and
- includes an internal green wall extending from ground to mezzanine level which is intended to reflect the greenery of Rymill Park and blur the lines between this open area and the urban environment of Hutt Street/Pirie Street/East Terrace.

In consideration of all of the above we conclude that the proposed development has due regard to the context that forms the positive character of the locality and is sympathetic to the desired character.

With respect to PDC 21 (c) (i) the proposal meets the listed eligibility criteria in that:

- the development provides an orderly transition up to existing taller buildings in an adjacent building height area;
- high quality universally accessible open space, is directly connected to, and well integrated with, public realm areas of the street;
- the building is adjacent to the Park Lands;
- a range of dwelling types that includes more than 10% of 3 + bedroom apartments are provided;
- active uses are located on the public street frontages; and
- the impact on adjacent properties is no greater than a building of the maximum height on Concept Plan Figure CC/1 and 2 in relation to sunlight access and overlooking.

The proposal meets all of the eligible criteria for sustainable urban design provided for in PDC 21 (c) (ii) in that:

- a rooftop garden is proposed at level 3 which is supported by services to ensure ongoing maintenance. There is no available roof area at the top of the building as it is occupied by photovoltaic cells which is a key sustainable design measure in itself;
- a living landscape vertical surface (green wall) of at least 50 square metres supported by services that ensure ongoing maintenance is provided to the restaurant and space above;
- passive heating and cooling design elements, including an innovative shading device system (see Tectvs and D-Squared reports for details) are integrated into the building; and
- higher amenity is provided through provision of private open space in excess of the minimum requirements.

The express terms of PDC 21 are consistent with other Council wide policies dealing with building form and height.

For example:

- as noted above the Capital City Zone Desired Character provide that... “high scale development is envisaged in the Zone with high street walls that frame the streets”;
- Council Wide Objective 46 promotes the reinforcement of the city’s grid pattern of streets through inter alia, high rise development framing the parklands;
- Council Wide Objective 48 encourages development which incorporates a high level of design excellence in terms of scale, bulk, massing, materials, finishes, colours and architectural treatment;
- Council Wide PDC 169 provides that the height and scale of development should reflect and respond to the role of the street it fronts; and
- Council Wide PDC 191 recommends that new developments on major corner sites should define and reinforce the townscape importance of these sites with appropriately scaled buildings that:
  - » Establish an architectural form on the corner;
  - » Abut the street frontage; and
  - » Address all street frontages.

In this instance, we say that the present proposal respects all of the above policy intent.

In summary, we believe that the proposed development presents a design solution which exceeds expectations and delivers a high standard of architecture and landmark presence befitting this ‘gateway’ location.

### 7.3 Building Appearance and Design

With reference to Section 5.5 and Section 5.7 of this Statement, the key quantitative apartment guidelines relating to apartment sizes, balcony areas, storage and floor to ceiling heights are satisfied and need not be assessed here. All areas exceed the minimum guidelines demonstrating one way in which the development achieves a high quality design.

The Capital City Zone seeks a high standard of architectural design and finish appropriate to the City's role and image as the capital of the State (see Zone PDC 6). Zone PDC 7 seeks to achieve a high standard of external appearance through:

- the use of high quality materials and finishes;
- providing a high degree of visual interest;
- ensuring lower levels are well integrated with, and contribute to a vibrant public realm; and
- ensuring any ground and first floor level car parking elements are sleeved.

In our opinion, the proposed design and appearance of the development satisfies Zone PDC 7 in that:

- robust and durable materials such as masonry, natural stone, prefinished materials are used that will minimise staining, discolouring or deterioration;
- no surfaces are painted above ground level;
- all facades are highly articulated, and the southern boundary wall incorporates design features that are expressed across other facades; and
- the above-ground car parking levels are not visible and treated by an expression that relates to the tower element.

The design and appearance of the development has also been very cognisant of the ground plane and relationship/integration with both Hutt Street and Cleo Lane. All road frontages are attractive, active and pedestrian-oriented that adds interest and vitality to City streets and laneways in accordance with Zone PDC 8 and 9. The footpath width along East Terrace (and Hutt Street) will be increased as a result of the ground level setbacks to improve pedestrian comfort and safety. The Cleo Lane road width will also be increased to support two way vehicular movement and the ground level restaurant/café tenancy better utilises the street corner for outdoor dining experiences with a northern orientation. All frontages contribute to the comfort of pedestrians through the incorporation of a continuous shelter satisfying Zone PDC 10. With respect to Zone PDC 12 the podium height and design of the tower element is warranted in this particular instance to correspond with and complement the form of the existing adjacent apartment development to the east.

Overall, the façades of the building are strongly modelled and incorporate a vertical composition which reflects the proportions of existing frontages, and ensures that architectural detailing is consistent around corners and along all road frontages to provide a unified expression in accordance with Zone PDC 15.

Zone PDC 19 seeks a particular building form along East Terrace. It states:

*“Development along the terraces should contribute to a continuous built form to frame the City edge and activate the Park Lands.”*

#### 7.4 Parking, Access and Traffic

InfraPlan have prepared a Traffic Impact Statement for the proposed development. InfraPlan correctly note that the Development Plan does not prescribe a minimum car parking rate for dwellings or non-residential land uses located within the Capital City Zone. Notwithstanding, car parking spaces have been provided to each apartment as follows:

- 1 carparking space for 1 bedroom apartments;
- 1 carparking space for 2 bedroom apartments;
- 2 carparking spaces for 3 bedroom apartments; and
- 3 carparking spaces for each penthouse apartment.

InfraPlan also confirm in their response that there is sufficient on-street car parking available within close proximity of the subject site to accommodate visitor demands.

A total of 46 bicycle parking spaces for residents will be provided on Level 2, accessible via lifts, and 6 visitor cycle parking spaces will be provided on site. In accordance with Table Adel/6, a total of 53 bicycle parking spaces (46 for residents and 7 for visitors/customers) are required for the proposed development. InfraPlan do not consider the shortfall of one bicycle parking space significant, and confirm that it can be recovered by existing or future on-street bicycle parking spaces in the vicinity of the subject site. In our opinion, the proposal therefore satisfies Transport and Access PDC 234.

In addition to the above, InfraPlan have also confirmed the following:

- the widening of Cleo Lane provided by the 4.3 metre rear setback will facilitate two-way movement, and therefore improve the existing functionality of the laneway and access arrangements for existing and future residents;
- no change will be made to the left-in-left-out arrangement to/from Cleo Lane;
- the proposed development will have negligible impact on the surrounding road network in terms of trips generated. Specifically:
  - » Cleo Lane:
    - increase of 5 vehicles exiting in the AM peak hour and 4 entering during the PM peak hour;
    - vehicles exiting during the PM peak is estimated to be lower;
  - » Hutt Street:
    - Increase of 6 vehicles in the AM peak and 5 during the evening;
- existing access to at grade car parks from Cleo Lane will be replaced by two, two way, single lane ramps, with one accessible from Cleo Lane providing access to the upper parking levels, and the other accessible from Hutt Street providing access to the basement;
- use of the two single lane ramps will be controlled by a signalling system which will allow one-way, reversible movements. Guiding principles for designing such a signalling system are specified in the Traffic Impact Statement and shall be reviewed at the detailed design stage;
- a maximum wait time of less than 75 seconds (1.25 minutes) is estimated for vehicles entering the basement parking levels;

- a maximum wait time of less than 100 seconds (1.67 minutes) is estimated for vehicles entering the upper parking levels;
- there is a 1.9% chance that a vehicle would be required to wait for another vehicle and as such, no queuing would be required on Hutt Street or Cleo Lane. Notwithstanding this, there is sufficient queuing space for up to two vehicles on Hutt Street and one vehicle on Cleo Lane;
- the probability of two vehicles queuing in Cleo Lane is extremely low (less than 0.05%);
- waste is to be collected from a waste storage area on ground level outside of peak collection times (as specified in the Section 5.14) with the waste collection vehicle to reverse into Cleo Lane, and drive out in a forward direction (satisfying PDC 241);
- all bicycle parking provision shall be in compliance with AS2890.3 – Bicycle Parking; and
- the proposed carpark design was assessed and found to be in general compliance with Australian Standards. Any deviation from standards have been identified by InfraPlan and mitigation measures recommended to improve compliance (satisfying PDC 251 and PDC 261).

Overall, InfraPlan support the overall car parking, traffic and access arrangements and we are comfortable with the overall approach in the context of the relevant provisions of the Development Plan.

## 7.5 City Living Zone Interface

In our opinion, Zone PDC 23 and 25 are the key interface provisions that apply to the proposal.

With respect to these provisions we have formed the opinion that the proposal seeks to manage it's interface with the City Living Zone by:

- appropriately locating a higher building at the corner of Hutt Street and East Terrace. The adjacent eastern property contains a four storey wall and service yard adjacent to Cleo Lane. In addition, properties further south along Cleo Lane have garages, or in some cases two storey buildings sited on the Lane boundary. The scale and form of these 'laneway buildings' is such that limited views to the proposed building will be obtained from the small private open spaces to their rear (discussed further in Section 7.8.8);
- not resulting in any unreasonable overshadowing upon properties within the City Living Zone (discussed further in Section 7.8.7);
- creating two distinct tower elements which successfully breaks up the mass of the building to give the impression of two slender building forms;
- mitigating overlooking towards the City Living Zone through the orientation and design of the floor plans (discussed further in Section 7.8.8). We note that the existing office building to the south of the subject site would result in a higher degree of overlooking with upper level east facing windows looking directly into rear yards of East Terrace properties;
- all traffic associated with the proposal is concentrated towards the northern end of Cleo Lane which will be wider as a result of the development improving access and egress for all Cleo Lane properties contained within the City Living Zone; and
- the management of the interface between the proposal and the City Living Zone will ensure that the proposal does not detract from the amenity currently enjoyed by residents of the City Living Zone in the locality.

Whilst others may argue that the height of the development may not respect the low to medium scale context of the City Living Zone we consider in the particular circumstances of this proposal, the location of the site at the northern edge of the interface; the adjacency to the Park Lands; the fact that the site is only one of three remaining development sites in the Capital City Zone with a northern orientation to the Park Lands; the prominent corner site characteristics of the land; and, the improvement to the conditions in Cleo Lane for other users, accords with the overall intent and purpose of the Development Plan.

In our opinion, the proposed building height and scale would not be appropriate further south adjacent to the core of the City Living Zone.

## 7.6 Crime Prevention

The following provisions are considered relevant in assessing the proposed development's ability to alleviate crime.

### *Environmental*

**PDC 82** *Development should promote the safety and security of the community in the public realm and within development. Development should:*

- (a) *promote natural surveillance of the public realm, including open space, car parks, pedestrian routes, service lanes, public transport stops and residential areas, through the design and location of physical features, electrical and mechanical devices, activities and people to maximise visibility by:*
- i. orientating windows, doors and building entrances towards the street, open spaces, car parks, pedestrian routes and public transport stops;*
  - ii. avoiding high walls, blank facades, carports and landscaping that obscures direct views to public areas;*
  - iii. arranging living areas, windows, pedestrian paths and balconies to overlook recreation areas, entrances and car parks;*
  - iv. positioning recreational and public space areas so they are bound by roads on at least two road frontages or overlooked by development;*
  - v. creating a complementary mix of day and night-time activities, such as residential, commercial, recreational and community uses, that extend the duration and level of intensity of public activity;*
  - vi. locating public toilets, telephones and other public facilities with direct access and good visibility from well-trafficked public spaces;*
  - vii. ensuring that rear service areas and access lanes are either secured or exposed to surveillance; and*
  - viii. ensuring the surveillance of isolated locations through the use of audio monitors, emergency telephones or alarms, video cameras or staff eg by surveillance of lift and toilet areas within car parks.*

- (b) *provide access control by facilitating communication, escape and path finding within development through legible design by:*
- i. incorporating clear directional devices;*
  - ii. avoiding opportunities for concealment near well travelled routes;*
  - iii. closing off or locking areas during off-peak hours, such as stairwells, to concentrate access/exit points to a particular route;*
  - iv. use of devices such as stainless steel mirrors where a passage has a bend;*
  - v. locating main entrances and exits at the front of a site and in view of a street;*
  - vi. providing open space and pedestrian routes which are clearly defined and have clear and direct sightlines for the users; and*
  - vii. locating elevators and stairwells where they can be viewed by a maximum number of people, near the edge of buildings where there is a glass wall at the entrance.*
- (c) *promote territoriality or sense of ownership through physical features that express ownership and control over the environment and provide a clear delineation of public and private space by:*
- i. clear delineation of boundaries marking public, private and semi-private space, such as by paving, lighting, walls and planting;*
  - ii. dividing large development sites into territorial zones to create a sense of ownership of common space by smaller groups of dwellings; and*
  - iii. locating main entrances and exits at the front of a site and in view of a street.*
- (d) *provide awareness through design of what is around and what is ahead so that legitimate users and observers can make an accurate assessment of the safety of a locality and site and plan their behaviour accordingly by:*
- i. avoiding blind sharp corners, pillars, tall solid fences and a sudden change in grade of pathways, stairs or corridors so that movement can be predicted;*
  - ii. using devices such as convex security mirrors or reflective surfaces where lines of sight are impeded;*
  - iii. ensuring barriers along pathways such as landscaping, fencing and walls are permeable;*
  - iv. planting shrubs that have a mature height less than one metre and trees with a canopy that begins at two metres;*

- v. *adequate and consistent lighting of open spaces, building entrances, parking and pedestrian areas to avoid the creation of shadowed areas; and*
- vi. *use of robust and durable design features to discourage vandalism.*

**PDC 83** *Residential development should be designed to overlook streets, public and communal open space to allow casual surveillance.*

The Development Plan encourages buildings which are designed to reduce opportunities for crime. In our opinion, the proposed development achieves the intent of the relevant crime prevention provisions in that:

- significant glazing and lighting to the Ground Floor Level will ensure visibility to/from the street at all times;
- inclusion of an active use at Ground Level, which may also extend into the evening hours will provide activity adjacent to road frontages and the Park Lands;
- promoting natural surveillance of the public realm (Hutt Street, East Terrace and Cleo Lane) plus the Park Lands from upper level balconies and windows, communal terrace and roof top garden;
- enabling direct sightlines between Hutt Street and the apartment entry;
- avoiding opportunities for concealment;
- providing secure and controlled entrances to the residential levels and car park levels by key card or remote control;
- controlling visitor access via an intercom system to promote territoriality and a sense of ownership through the clear delineation between public and private areas;
- the use of robust and durable design features to discourage vandalism;
- built form and signage clearly defining private and public areas;
- increasing the width of Cleo Lane which will provide a safer and more accessible environment for all users of the lane;
- increasing the width of the East Terrace footpath to provide a safer and more comfortable pedestrian environment and experience;
- ensuring waste collection occurs via Cleo Lane outside of peak periods (7:00am to 9:00am, and 3:00pm to 6:00pm). We note that the waste collection vehicle will reverse into Cleo Lane from East Terrace, and park briefly within the designated parking area which will still allow other vehicles to use Cleo Lane.

## 7.7 Living Culture

The proposed development does not integrate public art into the design of the new building site. However, it is considered that the inclusion of a green wall over the ground and mezzanine level has some artistic merit and will improve the overall enjoyment of passers-by in the locality.

## 7.8 Landscaping

As outlined in Landscaping PDC 207, landscaping should be selected to conserve water, form an integral part of the development, and be used to foster human scale, define spaces, and generally enhance visual amenity.

The proposed development has achieved this through the inclusion of a green wall over the Ground and Mezzanine Levels, a roof garden on Level 3, and an internal garden to the residential entry. The landscaping will contribute to additional amenity, and will be supported by services to ensure ongoing maintenance.

The proponent's offer to upgrade Cleo Lane with landscaping will also contribute in a positive manner to the adjacent City Living Zone which, in its existing state, would be best described as a service lane.

## 7.9 Environmental

### 7.9.1 Waste

The relevant provisions relating to waste encourage development to store waste in dedicated areas for on-site collection and the sorting of recyclable materials and refuse. In addition, odours associated with waste should be minimised.

As detailed in Section 5.14, a Waste Management Plan has been prepared by InfraPlan, and is included in Appendix 4. We have formed the opinion that the proposed waste arrangements will achieve the relevant provisions of the Development Plan in that:

- a dedicated bin storage room will be provided at Ground Level;
- general waste, recyclables, and organic waste are to be separately stored in each apartment and the bin storage room; and
- the waste collection vehicle will reverse into Cleo Lane, and temporarily park within the waste collection area provided by the 4.3 metre setback from the eastern boundary of the subject site whilst waste bins are emptied.

The bin storage room has been designed to mitigate odour, and located a sufficient distance from other sensitive land uses to ensure they will not be impacted by any smells associated with the waste. Further, the frequent collection of waste is also anticipated to prevent odours building.

In relation to construction waste, a Construction Environment Management Plan will be prepared in due course to finalise these arrangements. A standard condition of consent typically formalises such an arrangement.

Respecting the above, we have formed the opinion that the waste arrangements are appropriate for the subject site.

### 7.9.2 Services

With reference to Section 5.17 of this report, we have formed the opinion that the proposed development has made adequate provision for the supply of water, gas and electricity, and for the satisfactory disposal and potential re-use of sewage and waste water in accordance with PDC 132 and PDC 135.

We also note that all service structures, plant and equipment are designed to be an integral part of the development and are suitably screened from public spaces or streets satisfying PDC 133.

### 7.9.3 Energy Efficiency

The energy efficiency provisions of the Development Plan encourage development to:

- provide adequate thermal comfort for occupants and minimise the need for energy use for heating, cooling and lighting (PDC 106);
- promote naturally ventilated and day lit buildings to minimise the need for mechanical ventilation and lighting systems (PDC 107); and
- reduce energy through appropriate building and window orientation, adequate thermal mass including night time purging to cool thermal mass, insulation, maximising natural ventilation, appropriate material selection and use of innovative technologies (PDC 108, PDC 109 and PDC 114).

We do not intend to repeat the extensive features listed under Section 5.18, however the following matters reinforce the environmental performance of the building:

- use of high performance double glazing with integrated and adjustable interstitial blinds, access to daylight, and natural ventilation to all apartments and corridors to reduce energy demands;
- solar sensors will be included in the façade, and will automatically control the interstitial blind systems. Occupants will have the ability to also manually override the automated control of the blinds (if they wish);
- electro-chromic glass has been incorporated in strategic locations to provide additional privacy and solar load reduction;
- designing and certifying the apartments to achieve an energy performance at least 30% better than current Building Code minimum NatHERS rating of 6 Stars average, representing a significant and unprecedented dwelling average NatHERS Rating of 8 Stars in the City of Adelaide;
- designing the tenancy and common areas to achieve an energy performance at least 30% better than a deemed to satisfy compliant space in accordance with the NCC/BCA Section J, JV3 methodology;
- offering all apartment purchasers, the option of an electric vehicle charge points at their car park space, in order to promote the de-carbonisation of Adelaide’s transport network. Dependent upon the final size of PV array installed, a number of these points can be supplied with 100% renewable energy;
- air conditioning systems within the apartments will be zoned to functional areas (e.g. living rooms, bedrooms), and provided with automatic and manual controls. They will be inverter controlled and rated to the highest available Energy Star rating, and include the option to operate in fan mode providing low energy air circulation;
- provision of a “kill switch” to each apartment, which allows a one touch isolation of all lighting and air conditioning power when the apartment is vacant;

- provision of a 39kW roof mounted solar photovoltaic array connected via the inset network so that it can benefit all residents and tenants in the development, but is sized to adequately provide renewable energy equivalent to 100% of the common area power needs, including car park ventilation;
- daylight control to lighting systems in common areas and use of energy efficient, LED lighting fittings;
- use of light coloured external finishes (in particular roof coverings) to reflect heat, reduce solar gain, and reduce the “heat island effect”;
- use of solar gas boosted hot water systems, gas hobs, and European Energy Label A category ovens for cooking throughout in order to reduce peak electricity demands, reduce the overall development carbon footprint, and provide an economical amenity for apartment owners;
- provision of a building energy management system with smart metering to automatically record and monitor the building's resource use and establish trends and profiles to assist with the ongoing control of energy use (this information will be made available on-line);
- providing apartment owners with retractable clothes racks in their apartments, to minimise electric clothes drier use which will also minimise the incidence of clothes drying on exposed balconies; and
- providing retail and commercial tenancy space air conditioning systems with an economy cycle control allowing 100% outside air to be used for free cooling purposes when external weather conditions allow.

The energy efficiency of the development reinforces the high design quality of the building which exceeds the expectations of the Development Plan.

#### 7.9.4 Wind

A Wind Impact Assessment was undertaken by DR Partners which is included in Appendix 6. DR Partners has considered the interaction between the prevailing winds and the building morphology of the area.

With respect to westerly winds, the Hutt Street footpath is shielded by the proposed canopy along East Terrace and Hutt Street. There are also a number of several medium rise buildings and buildings are under construction that further mitigate the impact at lower levels.

In relation to northerly winds (including north-easterly and north-westerly), DR Partners note that the open character of the Park Lands and will tend to funnel down Hutt street however downwash from the proposed tower will be disrupted by the indented balconies, protruding surface features and the street level canopy which will also offer pedestrians protection.

In regard to Cleo Lane, winds are shielded at low level by surrounding buildings and downwash on the eastern façade is disrupted by the indented balconies, protruding surface features and the potential future works within Cleo Lane.

Overall, given the level of pedestrian activity and the minor to negligible wind impact, we have formed the opinion that the development achieves the relevant provisions of the Development Plan relating to wind impact.

### 7.9.5 Noise

An acoustic assessment has been undertaken by Sonus which is included in Appendix 8. The assessment considers:

- the noise from traffic and street activity on surrounding roads into the development; and
- the noise emanating from car parking, mechanical plant and waste collection associated with the proposed development to other noise sensitive land uses.

The proposed development includes a restaurant at ground level. The assessment of noise associated with the restaurant has been excluded as the operator is unknown at this particular stage and whether the proposed operation has any potential to impact noise sensitive land uses in the vicinity.

The assessment has been based on noise logging conducted at a location representative of the existing noise environment at the site between the 27th and 28th of November 2017.

Sonus has identified that the key noise issue for the site is associated with the impact of traffic at the intersection of Hutt Street, East Terrace, Bartels Road and Pirie Street upon the amenity of the development. Accordingly, Sonus recommends that particular features of the building construction will adequately protect occupants against the intrusion of traffic noise.

In relation to other matters, Sonus has advised that:

- waste collection should not occur after 10.00pm or before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday;
- the location for the mechanical plant provides shielding and a good separation distance to surrounding dwellings;
- the assessment criteria associated with the mechanical plant is expected to be practically achieved without significant acoustic treatment; and
- car park noise levels will not be noticeably different to the much greater number of vehicles on East Terrace.

Further noise attenuation treatments will be included as necessary as the proposal progresses through the detailed design stage in order to ensure compliance with the Environmental Protection (Noise) Policy 2007.

Having regard to the above, the relevant provisions relating to noise are satisfied.

### 7.9.6 Stormwater

DR Partners has consulted the Adelaide City Council in relation to stormwater management. A copy of their correspondence is provided in Appendix 7. In summary, Council has advised that since the impervious area of the site remains unaltered that no on-site detention of stormwater is required.

Major flood events (1 in 100 year ARI event) will be catered for by overland flow paths discharging to the surrounding streets. Floor levels will be set above back of existing footpath levels in accordance with council requirements.

Notwithstanding, the proposal will re-use roof water for the purposes of irrigation of landscaping and green walls which will ensure their long term sustainability. The community strata will be responsible for the maintenance and operation of the rainwater tank and system.

#### 7.9.7 Overshadowing

Council Wide PDC 174 encourages development in a non-residential Zone that is adjacent to land in the City Living Zone, Adelaide Historic (Conservation) Zone or North Adelaide Historic (Conservation) Zone to minimise overshadowing on sensitive uses by ensuring:

- north-facing windows to habitable rooms of existing dwellings in the City Living Zone, Adelaide Historic (Conservation) Zone or North Adelaide Historic (Conservation) Zone receive at least 3 hours of direct sunlight over a portion of their surface between 9.00am and 3.00pm on 21 June;
- ground level open space of existing residential buildings in the City Living Zone, Adelaide Historic (Conservation) Zone or North Adelaide Historic (Conservation) Zone receive direct sunlight for a minimum of 2 hours between 9.00am and 3.00pm on 21 June to at least the smaller of the following:
  - » half of the existing ground level open space;
  - » 35 square metres of the existing ground level open space (with at least one of the area's dimensions measuring 2.5 metres).

The shadow diagrams prepared by Tectvs demonstrate that the proposed development will satisfy PDC 174. Specifically, properties on the eastern side of Cleo Lane will only be overshadowed from between 1:00pm and 2:00pm.

Furthermore, the shadow diagrams presented during the design review process demonstrated that the impact of the proposed development compared to a building of 22m in height was negligible in the context of PDC 174.

#### 7.9.8 Overlooking

Council Wide PDC 66 encourages medium to high scale residential or serviced apartment development to be designed and sited to minimise the potential overlooking of habitable rooms such as bedrooms and living areas of adjacent development.

Tectvs have undertaken a thorough assessment of the potential overlooking impacts associated with the proposed development. Each apartment floor plan has been designed so that the potential will be minimised. Further, the east facing dwellings between Level 3 and Level 7 will feature curved concrete beams of additional width (in comparison to the levels above) to further mitigate opportunities for overlooking into the private areas of dwellings fronting East Terrace.

We also consider it important to recognise that:

- the adjacent residential flat building does not contain west facing habitable room windows;
- habitable room windows of other dwellings to the south are located greater than 15 metres (measured horizontally) from the east facing balconies; and
- there are existing structures or trees located in rear yards of dwellings backing onto Cleo Lane that would screen any views that may occur; and

- the open space area located on the western side of the adjacent apartment building is a common service area and not 'private' as such.

Further to the above, habitable room windows and balconies are set-back from boundaries with adjacent sites of at least three metres to provide an adequate level of amenity and privacy and to not restrict the reasonable development of adjacent sites in accordance with Council PDC 67.

Whilst the communal roof garden and courtyard associated with Apartment 305 is located on the southern boundary it is important to note that this space would otherwise be the car park roof deck. In our opinion, this space is unlikely to restrict the reasonable development potential of the adjacent site. The design of the garden space offers privacy screening and landscaping along the boundary.

Overall, we are satisfied that the design of the development minimises the potential for overlooking to an acceptable degree, particularly to existing dwellings contained within the adjacent City Living Zone.

### **7.10 Affordable Housing**

The Affordable Housing Overlay applies to the proposal. The Overlay is not mandatory, and given the intent to deliver high quality owner occupier apartments at a price point well beyond the affordable housing price threshold, affordable housing will not be provided in this particular development.

## 8. CONCLUSION

We have concluded from our assessment of the proposal it represents both planning and design excellence. In support of our conclusion, we wish to highlight that:

- a Pre-Lodgement Agreement has been reached with the Government Architect reinforcing the high design quality of the development;
- the proposal satisfies the criteria to qualify for the height proposed;
- apartment sizes, balcony areas, storage and floor to ceiling heights exceed the minimum guidelines;
- apartments will be designed and certified to achieve an energy performance at least 30% better than current Building Code minimum NatHERS rating of 6 Stars average, representing a significant and unprecedented dwelling average NatHERS Rating of 8 Stars in the City of Adelaide;
- overall car parking, traffic and access and waste collection arrangements are acceptable;
- the location of the site relative to dwellings contained within the City Living Zone is such that no detrimental interface issues result from the development;
- the conditions within Cleo Lane from a traffic and access perspective will improve with the development;
- the amenity in Cleo Lane will improve if adjacent land owners and Council support the proponent to upgrade the laneway;
- the development will provide a safe environment;
- the development has been designed in a way that will not result in any unreasonable overlooking, overshadowing, wind, noise or traffic impacts; and
- roof water will be re-used for irrigation of landscaping and green walls which will ensure their long term sustainability

Accordingly, we have formed the opinion that Development Plan Consent should be granted.



**APPENDIX 1. ARCHITECTURAL CONTEXT REPORT**



APPENDIX 2. SIGNED PLA AGREEMENT DOCUMENTS



### APPENDIX 3. TRAFFIC IMPACT STATEMENT



## APPENDIX 4. WASTE MANAGEMENT PLAN



**APPENDIX 5. SUSTAINABILITY STRATEGY**



APPENDIX 6. WIND REPORT



APPENDIX 7. STORMWATER PLAN

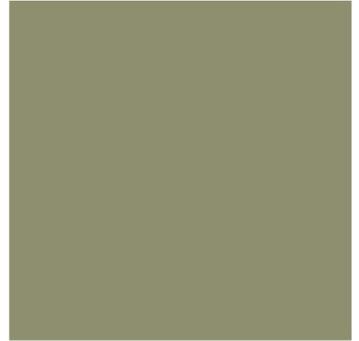
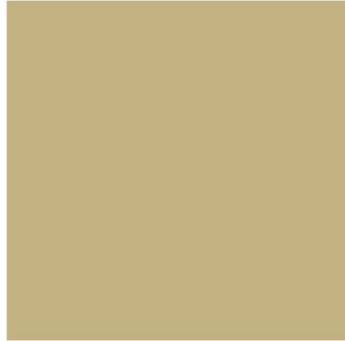


APPENDIX 8. ACOUSTIC ASSESSMENT



**APPENDIX 9. BUILDING SERVICES REPORT**

# infraPlan



Traffic Impact Statement  
Rymill Apartments  
2-6 Hutt Street, Adelaide

September, 2019

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# 1 Introduction

InfraPlan has been engaged by Maras Group to prepare a Traffic Impact Statement (TIS) for the proposed Rymill Park Apartments – mixed-use, residential + retail development located at the south-eastern corner of East Terrace and Hutt Street intersection. These plans have been updated since the initial proposal from 2016 and this traffic impact statement updated accordingly.

A location map is included as Figure 1 (overleaf)

In the preparation of this report, we have undertaken the following tasks:

- Design advice and input to the traffic related elements of the proposed development, including entry/exit points for all traffic movements;
- Technical assessment of the layout and operation of the proposed carpark,
- Technical assessment of the capacity of the access/egress points located off Cleo Lane;
- Detailed engineering analysis of the likely traffic generation of the proposed development and its impact on the surrounding road network, and
- Recommendation of any changes to the proposed carpark layout, access/egress points to ensure adequate performance of the surrounding road and traffic network.

We have referred to the following documents during this assessment:

- City of Adelaide Development Plan – consolidated June 2017
- Department of Planning, Transport and Infrastructure, SA (DPTI) – Trip Generation Rates for Assessment of Development Proposals
- Roads and Maritime Services, NSW (RMS) – formerly known as Roads and Traffic Authority (RTA) - Guide to Traffic Generating Developments (herein referred to as the RTA Guide)
- Australian Standards AS2890.1-2004 Off-Street Car Parking
- Australian Standards AS2890.6 Off-street Car Parking for People with Disabilities.

The drawing set issued by Tectvs in September 2019 were reviewed to provide the advice contained within this report.

## 2 Existing Conditions

### 2.1 Local Context

The subject site is illustrated below, and bound by East Terrace to the north, Hutt Street to the west, Cleo Lane to the east and another property to the south. Adjacent land uses include offices, retail and commercial activity, and medium to high density residential apartments/housing.

The existing site currently houses commercial tenancies served by six at-grade car parks (reserved for tenants) accessed from Cleo Lane. Pedestrian access to the existing property is from Hutt Street and East Terrace.



*Figure 1: Location Map – proposed Rymill Apartments – Mixed use development*

The Adelaide Development Plan defines Bartels Road, Pirie Street as part of the “...Primary Bicycle Network Route...” The City of Adelaide’s *Smart Move Strategy* indicates that Bartels Road currently functions as an east-west ‘Regional Link’ and is envisioned as a future ‘District Link’, providing greater priority for pedestrians, cyclists and public transport users. The Bartels Road carriageway comprises 2 travel lanes in each direction, plus on-street parking (both parallel; for both cars and motorcycles) and a full-time exclusive bicycle lane.

Site location within the Capital City Zone is included as **Appendix A**.

The location of the site within the CBD is well positioned for access by public transport, cycling, and by private car or taxi, as discussed below.

## 2.2 Site Access

As mentioned previously, the development site has frontage along both East Terrace and Hutt Street. An at-grade, undercover carpark for 6 vehicles is accessible from Cleo Lane.

Under existing conditions, Cleo Lane operates as a left-in-left-out laneway, providing vehicular access to properties located along its length. Cleo Lane is approximately 3.0m wide which is not wide enough to support simultaneous two-way traffic movement. Property owners (along the eastern side of Cleo Lane) have set back buildings by up to 3.0m to allow for vehicular movement into/out of their properties (garage). However, these set backs are not continuous and Cleo Lane therefore functions as a single lane laneway.

Cleo Lane operates as a left-in-left-out laneway forcing arriving vehicles to either change their travel route to arrive from the east or make a U-turn on Bartels Road (east of East Terrace) to access Cleo Lane.

Similarly, traffic exiting Cleo Lane is forced to turn left and pass through traffic lights at the East Terrace/Pirie Street/Hutt Street intersection.

## 2.3 On-street Parking

The Hutt Street site frontage comprises of 2 travel lanes in each direction. Sufficient on-street parking exists along Hutt Street south of Pirie Street/East Terrace within a walking distance of 400m (5-6 minutes) from the development site. Hutt Street has 90 degree on-street parking on the east side, and a mix of 60 degree and 90 degree on-street parking on the west side. A bicycle lane exists on the east side of Hutt Street, but not on the west side as it terminates at Tucker Street.

On-street parking is provided on Pirie Street, Hutt Street and Bartels Road in the vicinity of the site, as summarised below.

- Hutt Street (eastern side) – 1P and 2P (ticket), 8am – 6pm Monday to Friday and 8am – 12 noon Saturday.
- Hutt Street (western side) – 1P (ticket), 8am – 6pm Monday to Friday and 8am – 12 noon Saturday.
- Bartels Road (both sides) – 3P (ticket), 8am – 6pm Monday to Friday and 8am – 12 noon Saturday; 10P (ticket), 8am – 6pm Monday to Friday.
- Pirie Street (both sides) – 1P (ticket), 9am – 6pm Monday to Friday and 2P (ticket) 8am – 12 noon Saturday.

### 2.3.1 Public Transport

The proposed development site is situated at the corner of Hutt Street and Bartels Road/East Terrace, both being major public transport routes with more than 15 bus routes using these streets.

- Stop 1 on Bartels Road – north side is located less than 50m from the development site with Stop 1 on Bartels Road – south side being 120m away from the subject site.
- Stop V1 on Hutt Street – west side is located just across the street from the development site. Stop F1 on Hutt Street – east side is approximately 230m from the subject site.
- Grenfell Street has been identified as a High Concentration Public Transport Route by the Adelaide City Development Plan, servicing between 300 and 500 buses per day. Bus stops I1 & R1 on Grenfell Street are approximately 350 to 400m from the site, which is within a walking distance of 5 to 7 minutes from the site.
- Pirie Street is not a transport corridor and no bus stops are located along Pirie Street.
- Bus routes which pass along either Bartels Road, East Terrace or Hutt Street in the vicinity of the site include destinations such as City and North Adelaide (98A), Newton, West Lakes & Largs Bay (155, 157), Tasmore & Beaumont (147), and Klemzig, Paradise, Campbelltown, Modbury and north-eastern suburbs (O-Bahn services via Grenfell Street).

### 2.3.2 Walking

The Adelaide Development Plan defines Hutt Street (between Pirie Street/East Terrace and South Terrace) as a Secondary Pedestrian Area.

Hutt Street has generously proportioned footpaths on both sides of the carriageway, with paved surfaces.

Pirie Street/ East Terrace and Bartels Road, in general have wide footpaths with either paved or sealed surfaces. Cleo Lane is too narrow to accommodate a footpath.

Businesses located along Hutt Street have frontage access to pedestrian footpaths and residences along East Terrace have access to pedestrian footpaths along East Terrace. There was no observed desire line of pedestrian movements along Cleo Lane (not a through road) and given the width of footpaths on Hutt Street and East Terrace these movements can be catered for by existing pedestrian footpaths.

---

## 2.4 Existing Traffic Conditions

### 2.4.1 Hutt Street, East Terrace Signalised Intersection

East Terrace, Pirie Street, Hutt Street and Bartels Road are all under the care and control of the City of Adelaide. It is important to establish the current and future traffic carrying capacity of these streets and the surrounding local area to determine the impact of the proposed development.

Table 1: Local Street Network Details

Street/Road	Classification	Operations
East Terrace (EW) /Bartels Road	Secondary City Access	Two-way, four lanes with on-street parking and bicycle lanes on both sides
Pirie Street	Secondary City Access	Two-way, two lanes with on-street parking and bicycle lanes on both sides
Hutt Street / East Terrace (NS)	Primary City Access	Two-way, four lanes with on-street parking and bicycle lanes on both sides; turn lanes at key intersections
Cleo Lane	Local Access (private lane)	Two-way, single lane; primary function to provide vehicular access to properties along it; no through road

Intersections provide a node for two or more traffic streams to either cross or change direction safely. The capacity of an intersection is dependent on numerous parameters such as number of approaches, number of lanes on each approach, left/right turn treatments, cyclist and pedestrian movements, signal timing etc.

It is important to also assess current (and future) intersection capacities in order to determine the likely traffic impacts of the proposed development, in particular the intersection of Pirie Street/East Terrace and Hutt Street/East Terrace.

Most recent traffic counts (March 2015) reflecting traffic movement through East Terrace/Pirie Street/Hutt Street intersection were sourced from the City of Adelaide.

A summary of traffic movement data sourced from the CoA is included in **Figure 2**.



Figure 2: Traffic Data Summary – Peak Hour and Weekday Daily Average

As can be seen from the above figure, East Terrace (EW)/Bartels Road was observed to carry an average of 23,000 vehicles/day (both directions) and Hutt Street was observed to carry an average 24,400 vehicles/day (both directions).

Weekday morning and afternoon peak hour traffic on East Terrace (EW) was observed to be 647 vehicles/hr and 445 vehicles/hr respectively. Site observations have indicated that queues on the Eastern Approach (East Terrace/Bartels Road) to the signalised intersection extend beyond 150m east of the signalised intersection. This results in queuing that may sometimes conflict with the egress from Cleo Lane which is located approximately 25m from the subject intersection.

### **Intersection Performance**

Level of service (LOS) is a measure of effectiveness for intersection operations. It is categorised by letter designations ranging from “A,” which is very good, to “F,” which reflects very long delays.

Austrroads Guide to Traffic Management Part 3 states, *“Level of service is a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A level of service definition generally describes these conditions in terms of factors such as speed and travel time, freedom to manoeuvre, traffic interruptions, comfort and convenience, and safety.”*

The Highway Capacity Manual (published by Transportation Research Board, 2000) methodology defines intersection LOS by seconds of average vehicle delay at signalised intersections and seconds of average vehicle delay for the worst approach at one-way and two-way stop-controlled intersections.

SIDRA® intersection software developed by Akcelik Associates (Aust) is widely used by traffic engineers for evaluating intersection performance. This tool has been utilised to assess the current and future performance of the Pirie St /East Tce / Bartels Rd / Hutt St intersection.

*Table 2: Intersection Performance – Existing*

<b>Intersection</b>	<b>Intersection control</b>	<b>LOS (average delay) – AM Peak</b>	<b>LOS (average delay) – PM Peak</b>
Pirie St /East Tce / Bartels Rd /Hutt St	Signalised 120 sec cycle, five-phase	E (75 sec)	E (71 sec)

The subject intersection is part of a co-ordinated corridor (east west) and assessing it as a standalone would provide for conservative results. In reality, the subject intersection is envisaged to operate at a better level of service than estimated as above.

Sidra intersection modelling outputs are included in **Appendix B**.

## 2.4.2 Cleo Lane

A site survey at the junction of Cleo Lane and East Terrace was undertaken on Tuesday the 15<sup>th</sup> of May and Wednesday the 16<sup>th</sup> of May, 2018.

The survey was undertaken during the AM and PM peak hours of 8.00-9.00AM and 5.00-6.00PM and both days were sunny and fine. The results of this survey are collated in the Table 3 and Table 4. Numbers highlighted in red are vehicles associated with the car park of #2 Hutt Street while the remainder were either residents or visitors to residential properties abutting the laneway. For vehicles exiting the laneway, the delay (time between stopping at the junction and entering East Terrace) was measured and is listed in parenthesis after each exiting vehicle.

Table 3: Traffic count results, 15th May 2018

	AM				PM			
	8.00	8.15	8.30	8.45	5.00	5.15	5.30	5.45
<b>In</b>		1				1		2
<b>Out</b>			1 (15)			1 (0)		1 (0)
<b>Total</b>	2				5			

Table 4: Traffic count results, 16th May 2018

	AM				PM			
	8.00	8.15	8.30	8.45	5.00	5.15	5.30	5.45
<b>In</b>	1			1		1		1
<b>Out</b>	1 (5)	1 (0)	1 (10)		1 (0)			1 (15) 1 (0)
<b>Total</b>	5				5			

The average delay to vehicles exiting the laneway was 5 seconds while worst recorded was 15 seconds. The primary source of delay was waiting for the green time for traffic along East Terrace turning left onto Hutt St to end, however once this did vehicles could enter. This happened in all but one instance (8.30 on the 15<sup>th</sup> of May), where an exiting vehicle was partially obstructed by a vehicle along East Terrace for around 5 seconds.

In addition to these observations, the number of car parks occupied at #2 Hutt Street was recorded and presented in Table 5. This shows that of the six parking bays available at #2 Hutt Street, only 3 bays were observed to be occupied.

Table 5: Car parks occupied at #2 Hutt Street

Date & Time	Car Parks Occupied at Start	Car Parks Occupied at End	Change (Trips)
15 <sup>th</sup> 8-9AM	0	1	1
15 <sup>th</sup> 5-6PM	3	1	2
16 <sup>th</sup> 8-9AM	2	3	1
16 <sup>th</sup> 5-6PM	3	1	2

## 3 Subject Development

### 3.1 Development Details

The proposed development will replace the existing commercial (office) tenancies with a mixed-use commercial/residential development. The proposed mixed-use development will have the following

- 220 m<sup>2</sup> restaurant/café including open terrace seating on mezzanine level
- 2 levels of underground (basement) car parking (28 parking spaces)
- 2 levels of above-ground car parking (28 parking spaces)
- 12 levels of residences – total 38 dwelling units

Detailed breakdown of types of dwellings is included as **Table 6** below:

*Table 6: Dwelling Unit Details*

	No. of Beds	Total Units	Total Bedrooms
1 bed	1	4	4
2 bed	2	21	42
3 bed	3	12	36
Penthouse	4	1	4
		<b>38</b>	<b>86</b>

An accessway servicing the basement portion of the car park will be accessed via Hutt Street while an accessway servicing level 1 and level 2 will be accessed via Cleo Lane. These are both intended to be two-way single lane accessways that will be controlled by a sophisticated signalling system (further detailed in section 6.4).

### 3.2 Vehicular Access –Hutt Street

The basement levels of the development will be serviced by a proposed new crossover approximately 5.6m in width from Hutt Street as can be seen in Figure 3.

Hutt Street is identified as an existing Regional Link and a future District Link in *Smart Move: The City of Adelaide’s Transport and Movement Strategy 2012-22*. This definition does not strictly fall within a Local or Arterial road as defined by AS2890.1.

Given the unique character of Hutt Street and the constraints of the site, the project team worked with the City of Adelaide to devise a site-specific vehicle crossover that would retain the existing tree and satisfy the two-way single lane access control as vehicle queue calculations. The end result was considered appropriate by all parties and while the crossover width to the kerb line is approximately 4.0m wide, the retention of the tree creates a protected roadway area that acts as a wider and separated crossover accessway that exceeds the requirement of Table 3.2 of AS2890.1.

This access will require the removal of approximately 5x on-street parking spaces but will provide 1x new space for possible use as a loading zone and 2x new motorcycle parking spaces. The reduction of spaces is considered to be reasonable given the relatively low demand for on-street parking in the immediate vicinity.

The existing tree in Hutt Street can be retained and would act as a divider for entering and exiting traffic. This also provides space for waiting vehicles as required by the two-way single lane system which will be discussed further in section 6.4.

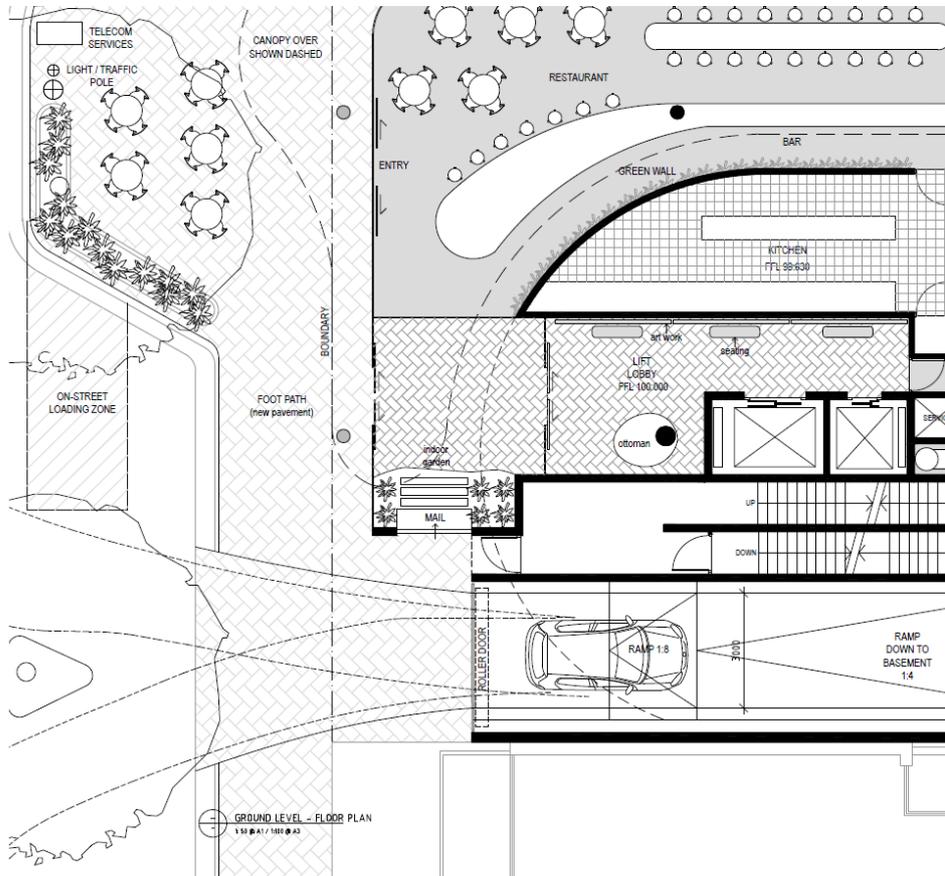


Figure 3: Proposed Hutt Street access arrangements

### 3.3 Vehicular Access –Cleo Lane

The development proposal includes a setback of 3m on Cleo Lane on the western side along the property boundary. The proposal setback would allow for a simultaneous two-way traffic movement on Cleo Lane along the property boundary– for approximately 20m from East Terrace.

As mentioned previously Cleo Lane is a no-through road as the southern end is privately owned restricting through movement. Under existing conditions Cleo Lane is approximately 3.0m wide with two-way traffic movement.

The proposed widening of Cleo Lane at its approach to East Terrace (EW) would allow for simultaneous entry and exit movements into/out of Cleo Lane. The proposed widening would also provide a passing opportunity to vehicles destined/originating from properties served by Cleo Lane if a vehicle is waiting to enter the proposed Rymill Park Apartments Car park. The upper levels of car parking will be serviced from Cleo Lane.

It is noted that a stobie pole will be required for relocation to facilitate widening of Cleo Lane.



Figure 4: Stobie pole for relocation at junction of East Tce (EW) and Cleo Lane

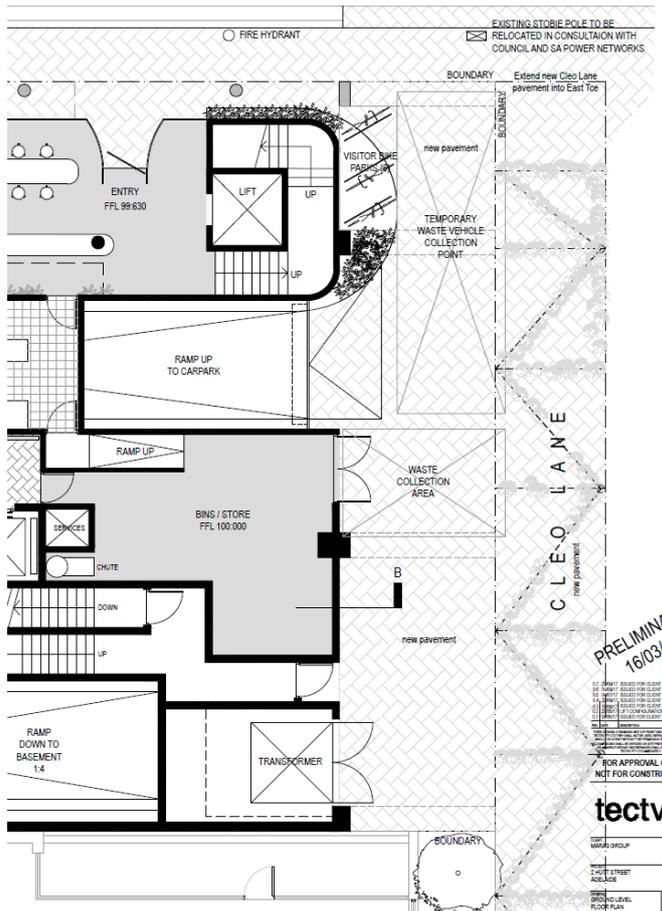


Figure 5: Proposed Cleo Lane Access Arrangement

### 3.4 Waste Collection

The bin storage area located on Ground Level will be accessible from Cleo Lane. It is understood that a private contractor will be engaged for collection and disposal/recycling of waste. Waste collection trucks will be required to reverse into Cleo Lane from East Terrace for waste collection as seen in Figure 6.

Servicing of the property utilising a Medium Rigid Vehicle (MRV) in Cleo Lane has been developed in consideration of the tight operation of sites within the central business district. The Standard AS2890.2 is typically used in assessment of industrial and commercial properties, and not residential properties in a CBD environment. A reverse-in MRV movement is common at development sites across the CBD given the narrow laneways and accessways at new developments.

Access to the above ground carpark will be temporarily restricted, but vehicles will be able to enter and exit Cleo Lane using the remaining space. Waste collection vehicle will be undertaken outside of peak times to ensure minimal disruption to residents and the road network.

Please refer to separate report on Waste Management.

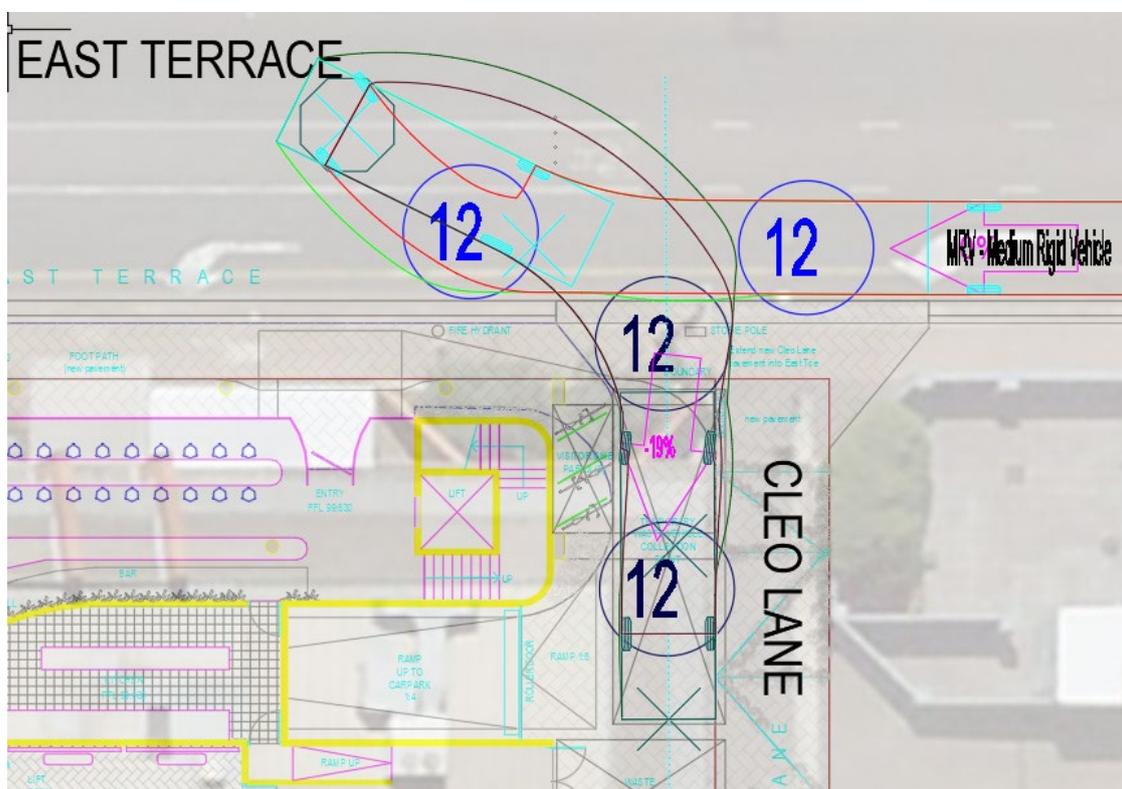


Figure 6: Example of reverse in waste collection manoeuvre to occur outside of peak times

### 3.5 Emergency Access

Emergency vehicles - Ambulance & Metropolitan Fire Service (MFS) will be able to access the development from East Terrace or Hutt St.

Two fire escape exits are proposed leading to Hutt Street (along the southern boundary) and to Cleo Lane.

## 4 Parking Demand

### 4.1 Car Parking Requirements – Residents

It is worth noting that Table Adel/7 of the Adelaide City Development Plan (ACDP) does not state a minimum parking provision for *Medium to High Scale Residential or Service Apartment* developments located within the Capital City zone.

However, the developer has allowed for a minimum parking provision for apartment units. A total 56 parking spaces are proposed in a four level (2 basements + 2 above ground) carpark using the following allocation (indicative only):

- 1 carpark for 1 bedroom units
- 1 carpark per 2 bedroom units
- 2 carparks per 3 bedroom units
- 3 carparks per penthouse

### 4.2 Car Parking Requirements – Ground Floor Tenancy

ACDP (Table Adel/7) does not state a minimum parking requirement for non-residential developments located within the Capital City zone. As such no parking is provided on-site for the proposed ground floor tenancy.

### 4.3 Car Parking Requirements – Visitors

ACDP (Table Adel/7) does not specify the minimum parking provision for visitors for *Medium to High Scale Residential or Service Apartment* developments located within the Capital City zone. As such no visitor parking is provided on-site.

The City of Adelaide provides excellent connectivity for cyclists, pedestrians and public transport that many visitors may choose to utilise. Where private vehicles are used instead of these alternatives, there is ample on-street parking (1P & 2P, ticketed and ½ P free) available within the immediate vicinity of the development site (on both sides of Hutt Street).

On-street (ticketed) parking is also available on East Terrace/Bartels Road and Pirie Street within a couple of hundred metres from the development site. Visitors to the proposed development (residences and ground floor tenancy) will be able to use the available on-street parking in the close vicinity.

### 4.4 Bicycle parking

All bicycle parking provision shall be designed in accordance with Australian Standard *AS2890.3 – Bicycle Parking*.

#### 4.4.1 Residential Component

**Table Adel/6** of the Adelaide City Development Plan (ACDP) provides rates for bicycle parking provision for various land uses summarised below:

All Low, Medium and High Scale Residential Developments –

- 1 space for every dwelling/apartment with a total floor area less than 150 square metres
- 2 spaces for every dwelling/apartment with a total floor area greater than 150 square metres
- 1 visitor space for every 10 dwellings

The proposed residential development with a total of 30 apartments less than 150 m<sup>2</sup> in area and eight apartments greater than 150m<sup>2</sup> would require a total of 46 bicycle parking spaces for residents and 4 bicycle parking spaces for visitors.

Residents will be provided bicycle parking area on level 2 which is accessible via Lifts. Six bicycle parking spaces accessible for visitor use will be provided on the ground floor and will be accessible from East Terrace (EW).

#### 4.4.2 Ground Level Tenancies

A café/restaurant/bar type tenancy (220 m<sup>2</sup>) is proposed on the Ground Level.

**Table Adel/6** of the Adelaide City Development Plan (ACDP) provides rates for bicycle parking provision for various land uses summarised below:

Café/Restaurant –

- 1 space per 20 employees – for employees
- 1 space per 50 seats – for customers/visitors

The proposed café/restaurant with (up to 100 seats) is estimated to require 3 bicycle parking spaces.

It is envisaged this will share the 6 spaces accessible for visitor use from East Terrace (EW). It is noted there is a shortfall of one space, however there is nearby bicycle parking available on-street on the south west corner of the Hutt Street and Pirie Street intersection and opportunity for further on-street bicycle spaces to be provided with the setback from the property boundary that this development offers.

## 5 Traffic Impact Assessment

### 5.1 Trip generation – Existing Land Uses

The Department of Planning, Transport and Infrastructure publication “Trip generation rates for the assessment of development proposals”, September 2013 provides ready to use trip generation rates for selected land uses. Trip generation rates provided for *Office and Commercial* in the DPTI publication are provided at 15.85 daily trips and 2.02 peak hour trips /100m<sup>2</sup>, however they are listed as requiring further investigation.

For this reason, data provided by the RMS Guide to Traffic Generating Developments (Updated traffic surveys 2013) is used, with updated rates for Office blocks being:

- Morning Peak Hour Trips = 1.6 trips/100m<sup>2</sup>
- Evening Peak Hour Trips = 1.2 trips/100m<sup>2</sup>
- Daily Trips = 11 trips/100m<sup>2</sup>

As mentioned previously, the existing building has two floors of commercial/office tenancies. With a total leasable area more than 600m<sup>2</sup>, the existing site is estimated to generate traffic movements as listed below in Table 7.

*Table 7: Existing development traffic generation estimate*

Time	Trips
Daily	66
Morning Peak	10
Evening Peak	7

These values are higher than those observed during on-site observation of Cleo Lane and as such, not all trips associated with the existing develop utilised parking spaces accessible from Cleo Lane and likely use on-street parking along Hutt Street or Pirie Street.

**The existing land uses of the subject site were estimated to generate in the order of 10 trips during morning peak, 7 trips during evening peak hours and up to 66 trips per day.**

**Where peak hour trips were not accommodated on site via Cleo Lane, they are assumed to use on-street parking along Hutt Street and/or Pirie Street.**

## 5.2 Trip generation – Proposed Development

Given the city location of the proposed development, its high density nature and its close proximity (walking distance) to workplaces, dining and entertainment, we considered several options to estimate the vehicle trips that it would generate.

The RMS Guide to Traffic Generating Developments (Updated traffic surveys 2013) was initially sourced for rates applicable to high-density residential developments, refer Figure 7.

### High density residential flat dwellings

Ten surveys were conducted in 2012, eight within Sydney, and one each in the Hunter and Illawarra. All developments were (i) close to public transport, (ii) greater than six storeys and (iii) almost exclusively residential in nature. The weekday trip generation rates were as follows:

Weekday Rates	Sydney Average	Sydney Range	Regional Average	Regional Range
AM peak (1 hour) vehicle trips per unit	0.19	0.07-0.32	0.53	0.39-0.67
AM peak (1 hour) vehicle trips per car space	0.15	0.09-0.29	0.35	0.32-0.37
AM peak (1 hour) vehicle trips per bedroom	0.09	0.03-0.13	0.21	0.20-0.22
PM peak (1 hour) vehicle trips per unit	0.15	0.06-0.41	0.32	0.22-0.42
PM peak (1 hour) vehicle trips per car space	0.12	0.05-0.28	0.26	0.11-0.40
PM peak (1 hour) vehicle trips per bedroom	0.07	0.03-0.17	0.15	0.07-0.22
Daily vehicle trips per unit	1.52	0.77-3.14	4.58	4.37-4.78
Daily vehicle trips per car space	1.34	0.56-2.16	3.22	2.26-4.18
Daily vehicle trips per bedroom	0.72	0.35-1.29	1.93	1.59-2.26

Figure 7: extract from RMS traffic generating guidelines

Given that these survey values are recorded for Sydney based properties, they were multiplied by a factor of 1.5 to apply to this site in the Adelaide CBD, refer Figure 8.

Land Use	Weekday Daily	Weekday AM Peak	Weekday PM Peak	Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
	Trips / Dwelling Unit or Car Space					
38 dwelling units	2.28	.29	.22	87	11	9
56 parking spaces	2.02	.22	.18	113	12	10

Figure 8: Trip Generation Estimate

Using the higher estimate (based on the number of parking spaces provided), the proposed development is estimated to generate 12 trips during morning peak hour and 10 trips during afternoon peak hour.

While no splits for in/out were readily available, InfraPlan have assumed the following splits

- Morning peak hour – 80% departing, 20% arriving
- Afternoon peak hour – 20% departing, 80% arriving

This translates into

- 10 vehicles departing, 2 arriving during morning peak hour
- 2 vehicles departing, 8 arriving during afternoon peak hour.

It is important to note that the proposed carpark will be split into basement and above ground carparks with equal capacity and accessing different roadways. In other words, 28 carparks in the basement (accessed via Hutt Street) and 28 carparks in above ground parking levels (accessed via Cleo Lane). This split of trips is shown in Table 8.

Table 8: Arrival Departure Pattern – proposed development

Parking Level	AM Peak Hour			PM Peak Hour		
	Arriving	Leaving	Total	Arriving	Leaving	Total
Basement Carpark (Hutt Street)	1	5	6	4	1	5
Above Ground Carpark (Cleo Lane)	1	5	6	4	1	5
<b>Total</b>	<b>2</b>	<b>10</b>	<b>12</b>	<b>8</b>	<b>2</b>	<b>10</b>

### 5.3 Trip Distribution

As per the 2011 census, more than half (55%) of the residents in Adelaide CBD are reported to work within the CBD. Consistent with census data, the proposed residential development is envisaged to have the majority of residents working within the Adelaide CBD.

We note that Census data reported a rate of 34% of residents in the area drive to work, which if applied to the peak hour which would equate to 19 trips. Even if this percentage of residents did drive to work, it is unlikely that they would all be within the 1 hour peak, but would instead be spread over at least a two- to three-hour window. This aligns with the estimated 12-10 peak hour trips.

Assuming a 60-40 split for vehicular trips (60% out of CBD, 40% within CBD), the proposed development was estimated to have:

- 5 trips during morning peak hour to/from Adelaide CBD
- 7 trips during morning peak hour to/from outside Adelaide CBD
- 4 trips during afternoon peak hour to/from Adelaide CBD and
- 6 trips during afternoon peak hour to/from outside Adelaide CBD

### 5.4 Net change in Trip Generation

In consideration of the upper level car parks, the earlier traffic count demonstrated a relatively low use of the laneway as presented in Table 3 and Table 4. Table 10 below presents:

- the current average of movements during the peak hour,
- the average of movements without trips associated with the existing building at #2 Hutt Street,
- the average number of trips added by the proposed development at #2 Hutt, and
- the resultant average trips with the proposed development.

Table 9: Trip calculations for Cleo Lane with proposed development

	Current		Without #2 Hutt		Proposed at #2 Hutt		Total Proposed	
	AM	PM	AM	PM	AM	PM	AM	PM
<b>In</b>	2	3	1	3	1	4	2	7
<b>Out</b>	2	3	2	1	5	1	7	2
<b>Total</b>	4	6	3	4	6	5	9	9

This shows an increase of 5 vehicles exiting Cleo Lane in the AM peak hour and 4 entering during the PM peak hour. In movements will be the same as current conditions for the AM peak and out movements during the PM peak will be lower.

The basement carpark will generate an additional 6 trips in the morning peak and 5 in the evening along Hutt Street.

In terms of daily trips generated and assuming a 50/50 split in daily trips between the upper and basement level car park, the proposed development would increase the number of trips by approximately 47 per day. This would equate to a potential total of 24 additional daily trips along Hutt Street and Cleo Lane. This is anticipated to have a negligible impact on the adjacent signalised intersection, Hutt Street and Cleo Lane.

**Summary**

**The proposed development is estimated to increase the number of trips along Cleo Lane by up to 5 vehicles in the AM peak and 3 vehicles in the PM peak.**

**There is negligible impact proposed in terms of trip generation to Hutt Street or the adjacent signalised intersection.**

**5.5 Local Area Traffic Impacts**

As explained above, the proposed development was estimated reduce the number of trips during the morning and afternoon peak hour. However, the arrival/departure pattern will be reversed compared to existing traffic. As such, traffic generated by the development will be departing (leaving the site) during the morning peak hour and arriving in the afternoon peak hour.

While there is an increase, it is important to note the widening of Cleo Lane that is proposed as part of this development which will allow for clear two-way traffic. Based on this and other data presented in the Traffic Impact Statement, traffic associated with the proposed development at #2 Hutt Street will not unduly affect traffic conditions along Cleo Lane.

It is important to note that the departing trips in the morning peak hour will be exiting from Cleo Lane onto East Terrace. These trips will be left-out only thus merging with traffic in the left-turn lane on East Terrace, approaching the signalised intersection at East Terrace/Pirie St/Hutt Street. If an exiting vehicle intends to cross over into the through lane, it will depend on the courtesy of other motorists travelling along East Terrace (EW)/Bartels Road to allow an exiting vehicle to cross over into the through lane. This is not dissimilar to a number of locations within Adelaide CBD.

Trip generation along Hutt Street will be negligible in the context of the existing use and capacity of the roadway. Therefore, no additional SIDRA intersection assessment was undertaken.

***In summary, the proposed development is estimated to result in negligible new trip generation during peak hours and therefore negligible impacts to the surrounding road network are envisaged.***

## 6 Compliance with Standards

The proposed carpark was assessed as *User Class 1A – Residential, Domestic and Employee Parking* for compliance with relevant Australian Standards and Guidelines.

The proposed Rymill Apartments are a multi storey residential complex in a central business district setting and a prominent example of space limitations coupled with low traffic volumes. The car park design is limited by the small site footprint and therefore the design of the carpark ramps has required a site-specific design approach. We have scrutinised the Standard (AS2890.1: Off-Street Parking) and applied extensive design solutions to ensure a functional design that complies with the intent of the Standard but does not comply in a simplistic reading of Australian Standard (Section 2.5, Design for Circulation Roadway and Ramps).

We note that the Adelaide City Development Plan supports this innovative approach and states that designing in accordance with AS2890.1 is ‘one way’ of meeting the as per the following extracts:

*“While a Design Technique represents a carefully considered option, it is not the only option of satisfying the associated Principle of Development Control. If a solution other than that reflected in the Design Technique is utilised, the standards or measures contained in the Design Technique are intended to guide the level, quality or outcomes to be achieved. In such cases, alternative solutions should provide an outcome as good as or better than the Design Technique in order to satisfy the associated Principle of Development Control. In some cases, using design solutions not conforming to the relevant Design Technique may involve an acceptable or beneficial trade-off against other relevant provisions of the Development Plan, or may be warranted due to the nature, condition, shape, dimensions or orientation of the subject site”.*

**45.1** *Car parking spaces, access ways and driveways located and dimensioned in accordance with Australian Standard 2890.1: ‘Parking Facilities - Off-Street Car Parking’*

The design technique adopted that deviates from the Standard is explained in detail in Section 6.3.

### 6.1 Car park access

#### 6.1.1 Hutt Street Access

Access to the basement level car parks will be provided from Hutt Street. This has been designed around existing infrastructure in the street and given the high number of pedestrians using Hutt Street, provides appropriate sightlines for pedestrians. The proposed single lane ramp access will be 3.6m wide (wall to wall) which is deemed compliant with AS2890.1 requirements for a single lane driveway/access point.

#### 6.1.2 Cleo Lane Access

Cleo Lane will be widened to support a two-lane, two-way traffic movement. Access to the upper level car parks will be provided from Cleo Lane. The proposed single lane ramp access will be 3.6m wide (wall to wall) which is deemed compliant with AS2890.1 requirements for a single lane driveway/access point.

The subject single lane ramp access will also be provided with a 4.0m kerb radius at ground level to facilitate efficient maneuvering of an exiting vehicle such that there is no disruption to southbound traffic (or a vehicle waiting to enter the subject carpark).

## 6.2 Car parking bays

The car park was assessed as User Class 1A (Table 1.1, AS2890.1), comprising residential parking only. Class 1A requires the following minimum dimensions for the provision of 90° parking bays:

- 2.4m wide x 5.4m long – standard car bays
- 2.3m wide x 5.0m long – small car bays
- 5.8m wide aisles

The proposed carpark will have two basement parking levels and two above ground parking levels, each utilising 90° parking. The number of parks on each level is as follows:

- |               |             |          |                         |
|---------------|-------------|----------|-------------------------|
| • Basement 2: | 10 standard | 5 small  |                         |
| • Basement 1: | 10 standard | 3 small  |                         |
| • Level 1:    | 9 standard  | 2 small  | 2 accessible (unmarked) |
| • Level 2:    | 13 standard | 2 small  |                         |
| • Total:      | 42 standard | 12 small | 2 accessible (unmarked) |

Each car park complies with AS2890 except for the north east spaces provided where there is less than a 1.0m gap for overhang and maneuvering as required for a blind aisle. However, these were tested using a B85 vehicle and are functionally accessible for both forward and reversing movements, without use of the ramp opposite (which can be used as a turning area). This is demonstrated in Appendix D, Figure 9 (a) & (b).

Table 7 of the Adelaide City Development Plan specifies that for 15 spaces provided, 1 space should function as a car space suitable for use by people with disabilities and other people with small children and prams. Additionally, every second space provided with people with special needs shall be reserved for the exclusive use of people with disabilities (i.e. 1 in 30 spaces).

Based on the parking provision of 56 vehicles, the car park should provide 2x accessible (unmarked) and 1x accessible (marked for exclusive use). The current layout of the car park does not explicitly provide for accessible parking spaces.

Given that there is no minimum parking requirement for this development, it being primarily residential in use and subsequently only for private use, it is considered reasonable that no accessible parking bays are provided. If required by a tenant of the building in future, existing parking bays can be converted (at the loss of one parking space) to provide for accessible use with a shared space as in the figure below.

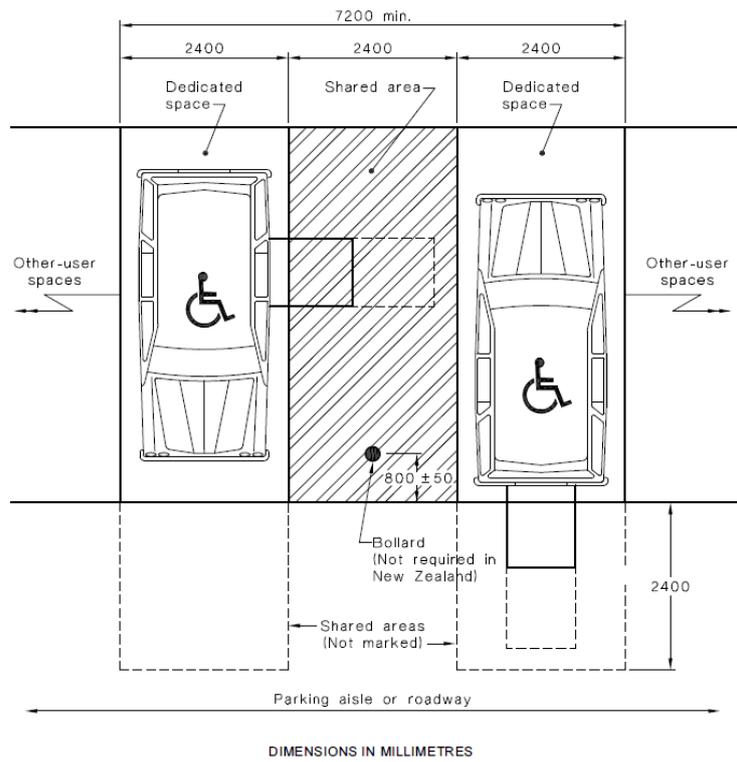


Figure 9: Example of exclusive accessible provision if required in future

## 6.3 Car Park Ramp System

The car park is proposed to have single lane, reversible ramp systems with access and egress controlled by signalling systems.

As discussed in Section 6, the design of the carpark ramps is a site-specific design approach that responds to the small site footprint. Although deviating from the simple reading of AS2890.1: Off-Street Parking, the variations have been developed based on a ‘functional’ design solution that satisfies the *intent* of the Standard as demonstrated by the vehicle swept paths simulated in AutoCAD/AutoTrack and included in Appendix D.

### Design Vehicle

The Standard (AS2890.1) requires a B99 vehicle (the 99<sup>th</sup> percentile vehicle of the Australian Fleet) to be the design vehicle for the car park. This represents a 2004 Ford Transit Van (refer Figure 8), which is not a common vehicle, especially in a domestic residential car park.

We note an extract from Provision B2.2 of AS2890.1, ‘*Design dimensions based on the B99 vehicle are required at all locations where failure of a vehicle to be able to physically fit into the facility would occasion intolerable congestion and possible hazard. Such locations shall include all access driveways, ramps and circulation roadways, unless there are special circumstances of severe space limitation coupled with relatively low traffic volumes in which case the B85 vehicle dimensions may be used.*’ This provision is applicable for this project.

A B99 turning template specifies a 6.7m turning radius (1976 Ford Falcon), some 14% larger than the radius of most modern vehicles today. Indeed, a more relevant modern example of a B99 vehicle may be a Toyota Series 200 Land Cruiser (refer Figure 8). It is important to note that while both a Ford Transit Van and Land Cruiser match the dimensions of the B99 vehicle, they have a far smaller turning circle than the specified B99 in the Standard (11.9m and 11.8m kerb to kerb turning circle respectively).

This equates to a 5.95m turning radius for the Transit Van and 5.9m radius for the Land Cruiser, compared to the 6.7m turning radius specified for a B99. For this reason, computer simulated turning movements are considered to be conservative. A B85 vehicle is considered realistic for this type of development and has previously been applied successfully to other apartment buildings by Infracplan.



Ford Transit Van



Toyota Series 200 Land Cruiser

Figure 10: Typical B99 Vehicles

The functional design technique solution relies on the B85 vehicle being the appropriate design vehicle for most areas of the car park with clearance in accordance with the Standard. A B99 vehicle was used as a ‘checking vehicle’ and is able to manoeuvre throughout the accessways connecting other levels of the car park (as demonstrated by the turn path simulations) but with clearances slightly less than that required in the Standard.

The ground floor and mezzanine to level 1 ramp is the most critical location for the car park due to the ramp length, grade and lack of manoeuvring space if entrapment were to occur. Therefore, the B99 vehicle was used as the design vehicle along this ramp to demonstrate that the clearance to the walls can be met as prescribed in the Standard.

The design vehicle for each section of car park is listed in Table 11, and the turn paths are illustrated in Appendix D.

*Table 10: Design vehicle by level*

Level	Design Vehicle
Basement 2	B85
Basement 1	B85
Ground Floor	B99
Mezzanine	B99
Level 1	B85
Level 2	B85

### **Ramp Design**

The design vehicles described above have been applied to the short sections of the ramps between the car parking levels where there is a transition from the curved ramp to the straight section of the circulation roadway. A summary of the resulting geometric deviations from the Standard are listed in Table 12.

*Table 11: Curved ramp: requirements and provision*

Curved Ramp	Standard requirement	Proposed design
Roadway width	3.6m	3.3m
Clearance to obstruction (inside radius)	300mm	300mm (reducing to 220mm at transition point)
Clearance to obstruction (outside radius)	500mm	500mm (with 2m long transition from 300mm to 500mm)
Outside radius	7.6m	7.6m (with 4.0m radius at transition)
Inside radius	4.0m	4.0m

The vehicle swept path simulations in accordance with the Standard’s requirements as set out in Appendix B3 of AS2890.1 are included in Appendix D of this report.

As such, the design of accessways within the car park is considered to be in accordance with the intent of the Standard as well as the Adelaide City Development Plan.

## Ramp Grades

Changes of grade in the car park is primarily provided along straight sections of ramps. Details of ramps slopes proposed are summarised below:

	Floor to Floor Height	Transition Ramp at bottom end	Ramp Main Section	Transition ramp at top end
Basement 2 to Basement 1	2.85m	2.5m @ 1 in 8 (12.5%) slope	8.8m @ 1 in 4 (25%) slope	2m @ 1 in 8 (12.5%) slope
Basement 1 to Ground Level	2.85m	2.5m @ 1 in 8 (12.5%) slope	8.8m @ 1 in 4 (25%) slope	2.3m @ 1 in 8 (12.5%) slope
Ground Level to Mezzanine Level	3.8m	2.5m @ 1 in 10 (10%) slope	14m @ 1 in 4 (25%) slope	2m @ 1 in 8 (12.5%) slope
Mezzanine to Parking Level 1	2.7m	2m @ 1 in 10 (10%) slope	11.5m @ 1 in 5 (20%) slope	2m @ 1 in 10 (10%) slope
Parking Level 1 to Parking Level 2	2.7m	2m @ 1 in 10 (10%) slope	11.5m @ 1 in 5 (20%) slope	2m @ 1 in 10 (10%) slope

The grade change in the proposed ramp system has appropriate change of grade with no change greater than 1/8 and each grade change transition being greater than 2.0m in length. The proposed ramp system was deemed to comply with AS2890.1-2004 and AS2890.06-2009 requirements.

## 6.4 Circulation and Access Control

### 6.4.1 Circulation

As mentioned previously, a single lane reversible ramp system is proposed that would result in the following circulation pattern:

Circulation Pattern	Entering	Exiting
Basement 2 to Basement 1	Anti-clockwise	Clockwise
Basement 1 to Ground Level	Anti-clockwise	Clockwise
Ground Level to Mezzanine Level	Anti-clockwise	Clockwise
Mezzanine to Parking Level 1	Anti-clockwise	Clockwise
Parking Level 1 to Parking Level 2	Anti-clockwise	Clockwise

### 6.4.2 Access Control System

The proposed carpark will require a signal system to control access, circulation on each parking level and egress from the carpark.

The calculations and probability analysis for the system operation are considered to be sound on the basis that it is built around a series of worst-case scenarios. The ramp capacity is calculated on a vehicle heading from the ground to the far level (the longest possible travel time). With a relatively even distribution of car parks number across all levels, it is unlikely that all users in any one peak hour would be accessing the far level. Additionally, it includes a 30s park time and that no additional ramp use occurs (i.e. after a vehicle begins from level 1 to 2, another vehicle could enter).

This method of calculations and probability analysis has been demonstrated successfully in another development at 50 Flinders Street. This is a building of primarily office use (higher peak volumes than a

residential) and the single signal controlled accessway services approximately 70 car parks (3x the number that any individual ramp for Rymill Park needs to service). There have been no significant delays reported since implementation of the system.

The following guiding principles are proposed for the access control signal system.

1. The proposed carpark will be reserved only for residents of the proposed development
2. Each vehicle will be provided with a remote access key (remote control)
3. Entering vehicles will get priority over exiting vehicles.
4. A set of Green & Red lights will be installed at both ramps – to Upper and Basement parking levels
5. Only one vehicle will be allowed to use a ramp system at any given time with the following exemptions:
  - a) In case of multiple entering vehicles, a predefined gap will be introduced between two vehicles to allow the leading vehicle to travel and park in the designated car park;
  - b) In case of multiple exiting vehicles (with no entering vehicle) a predefined gap will be introduced between two vehicles to allow for safe exit;
  - c) In case an “Entry Call” is registered in between two successive Exit Calls, an exiting vehicle which has already entered the ramp system will be allowed to exit safely and following Exit Calls will be delayed with priority given to the entering vehicle;
6. One-way circulation is proposed – thus no passing of vehicles on any parking level;
7. Sensors/detection loops will be required on both ends of ramps on each parking level to detect vehicle movement.

#### **Exiting Traffic**

1. An exiting resident, upon exiting from the lift on their parking level, will register an “Exit Call” using their remote access key;
2. Once a “Green” signal is displayed the motorist will be able exit from their parking bay and start travel towards Ground Level;
3. Priority will be given to entering vehicles to minimise impact on traffic movements in Cleo Lane or Hutt Street. In a scenario where an entering vehicle has already entered the ramp system, an exiting vehicle shall be made to wait until the entering vehicle has reached its parking level and completed their parking manoeuvre.

#### **Entering Traffic**

1. An arriving vehicle will have a “Green” signal at all times except when an exiting vehicle has already registered an “Exit Call”;
2. In such a scenario (Red light for arriving vehicle), the arriving vehicle will register an “Entry Call” by using their remote access key;
3. An arriving vehicle can wait in Cleo Lane or Hutt Street allowing the exiting vehicle to exit safely;
4. An *Out of Turn Exit Manoeuvre* would be where a motorist pulls out of the parking bay after registering an “exit” call but before getting the “Green” signal to exit, while another vehicle is using the ramp system. There is sufficient space for such an out of turn vehicle to pull out of the travel path of the other vehicle using the ramp system.

With a two-way aisle width provided, there is sufficient room for two vehicles to pass or wait as required by the system. These principles provide a basic framework for the proposed single lane, reversible ramp

system to function efficiently. The proposed access control system will be refined at the detailed design stage.

### 6.4.3 Signal Cycle Calculations

The following assumptions were made when estimating travel times between various parking levels.

- Vehicle Travel Speed
  - On Ramp = 8 km/hr
  - On parking level = 10 km/hr
- Ramp length (GL to Level 1) = 60m (approx.)
- Ramp length = 30m (approx.)
- Parking floor length = 30m (approx.)
- Time to park/retrieve vehicle = 30 seconds

Using the above information, the following time estimates were prepared:

Table 12: Car park movement time estimates

Entering →				Entering →			
	GL	B1	B2		GL	UL1	UL2
GL		52	74	GL		63	96
B1	52		52	UL1	63		63
Exiting ↑	B2	74	52	Exiting ↑	UL2	96	63

Refer to **Appendix C** for detailed calculations.

An entering/exiting vehicle to/from basement parking levels was estimated to require less than 75 seconds (1.25 minutes) to complete the manoeuvre. Thus, in a worst-case scenario, the maximum duration an entering vehicle (travelling to basement parking levels) will be required to wait on Cleo Lane was estimated to be less than 75 seconds (1.25 minutes).

An entering/exiting vehicle to/from the Upper Parking Levels is estimated to require less than 100 seconds (1.67 minutes) to complete the manoeuvre. Thus, in a worst-case scenario, the maximum duration an entering vehicle (travelling to Upper Levels) will be required to wait on Cleo Lane was estimated to be 100 seconds (1.67 minutes).

Sensors installed at either end of the ramps on all levels will be used to determine if vehicles (entering/exiting) have cleared the ramp system. A minimum clearance gap will be included between all entry and exit calls.

#### Queuing

Using Steady State queuing in accordance with Austroads Part 2 – Traffic Theory, the queuing space requirement is calculated as described below.

- Signal Duration = 100 seconds (worst case – upper levels)
- Service Rate = 36 vehicles/hour (3600/100)
- PM Peak Hour arrival rate = 5 vehicles (refer Table 9)

Based on these figures there would be a 1.9% chance that a vehicle would be required to wait for another vehicle at any given time. Thus, no queuing space would be required even in a conservative scenario as the number of entering vehicles is significantly less than the system service rate for vehicles travelling to/from upper level parking.

The access arrangements on Hutt Street allow for a waiting space for potentially up to two vehicles on-street without impacting on moving traffic and allowing for vehicles to exit the facility and wait for traffic.

The proposed widening of Cleo Lane will allow for two-way movements. In case a vehicle is waiting to enter the proposed development car park, other local vehicles will be able to pass the waiting vehicle safely. This is not possible under exiting conditions with Cleo Lane only one lane wide.

It should be noted that the service rate mentioned above is calculated using 100 seconds per movement. Once an “entry” call is registered by an arriving vehicle; all exit calls will be superseded. Furthermore, the probability of two vehicles arriving is extremely low (less than 0.05%). Therefore, queuing is unlikely to occur on Cleo Lane.

## 6.5 Columns

Indicative column dimensions and locations provided by tectvs have been assessed and found to be in general compliance with AS2890.1 requirements.

It is recommended that column locations (in detailed design stage) be designed in accordance with the design envelope as per AS 2890.1:2004 requirements.

## 6.6 Headroom

It is understood that a floor to floor height of a minimum 2.7m is proposed for all parking levels, above ground and basement. The proposed ramp system was assessed to have a minimum 2.3m vertical clearance in accordance with AS2890.1-2004 requirements.

It is recommended that the proposed car park shall have a minimum vertical clearance of:

- 2.2m between the floor and any overhead obstruction (if lower than ceiling) for all parking spaces excluding accessible parking bays.
- 2.5m between the floor and any overhead obstruction (if lower than ceiling) for all car parks for people with disabilities.

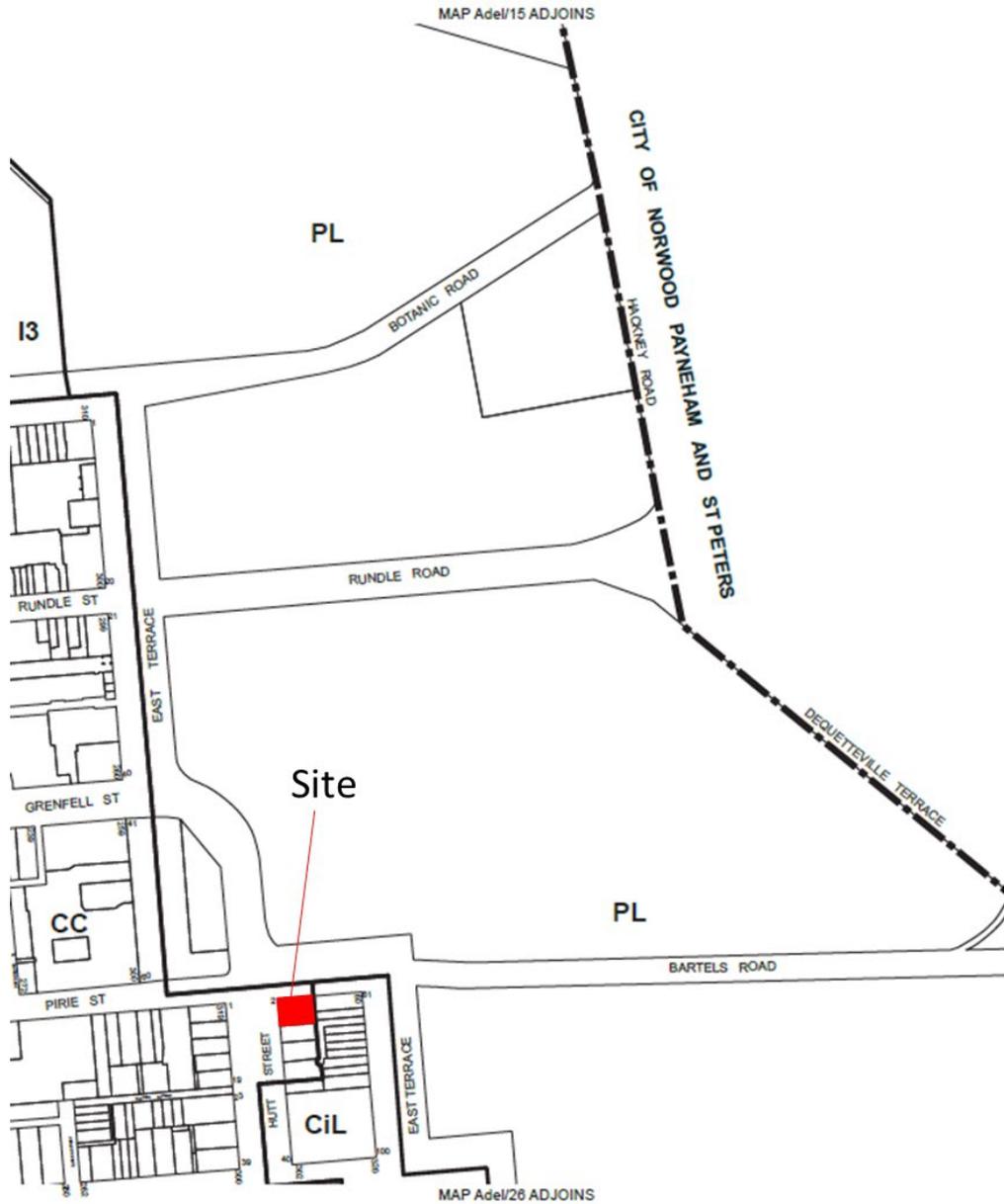
## 7 Summary and Conclusion

The proposed mixed-use (residential + retail) development has been assessed for accessibility, parking provision and traffic impact on the surrounding street network. A summary of the findings of this assessment is presented below.

1. The subject development will replace existing commercial tenancies with a mixed use residential and commercial development;
2. The development proposal includes a building setback of 3.0m along Cleo Lane to facilitate two-way traffic movement along the property boundary;
3. The proposed building setback on Cleo Lane is envisaged to improve access for other residences having parking access from Cleo Lane;
4. No changes are proposed to traffic movements at the existing Cleo Lane access, which will continue to operate as left-in-left-out only;
5. The proposed development will have negligible impact on the surrounding road network in terms of trips generated with only minor increases on Cleo Lane and Hutt Street;
6. The subject development will eliminate six at-grade off-street carparks accessible from Cleo Lane;
7. A total 56 parking spaces are proposed in two sections – basement and above ground parking levels;
8. No visitor parking is proposed on-site, visitors can use existing on-street carparks along Hutt Street, Pirie Street and Bartels Road;
9. Existing access to at grade carparks from Cleo Lane will be replaced by a two-way, single lane ramp providing access to the upper parking levels;
10. A new crossover will be created along Hutt Street to offer access to a two-way, single lane ramp to the basement car parking levels;
11. The new crossover will require removal of approximately 5x on-street parking spaces but will provide 1x new space for possible use as a loading zone and 2x new motorcycle parking spaces
12. The proposed single lane ramps will require a signalling system to allow for and control one-way, reversible movements. Guiding principles for designing such a signalling system are provided in this report and shall be reviewed at the detailed design stage;
13. A total of 53 bicycle parking spaces (46 for residents and 7 for visitors/customers) are required for the proposed development with 38 dwelling units and ground floor tenancy;
14. 46 bicycle parking spaces for residents will be provided on Level 2, accessible via lifts. 6 visitor cycle parking spaces will be provided on site with the one shortfall to use existing or future on-street bicycle parking spaces in the vicinity;
15. All bicycle parking provision shall be in compliance with *AS2890.3 – Bicycle Parking*
16. The proposed carpark design was assessed and found to be in general compliance with Australian Standards. Any site-specific design techniques that deviate from the Standards have been identified in detail;
17. A waste storage area is proposed on ground level with vehicular access from Cleo Lane. Please refer to the separate Waste Management Report for details on the proposed Waste Management System.

**Based on the issues investigated, it is considered that the proposed development is supported from a transport and parking perspective.**

## Appendix A: Relevant Development Plan Zone Maps



NOTE : For Policy Areas See MAP Adel/51

- CiL City Living Zone
- I3 Institutional (University/Hospital) Zone
- CC Capital City Zone
- PL Park Lands Zone



- Zone Boundary
- Development Plan Boundary

### ADELAIDE (CITY) ZONES MAP Adel/20

Consolidated - 24 September 2015

## Appendix B: SIDRA Intersection Outputs

### MOVEMENT SUMMARY

#### Site: East Tce - Hutt St - Pirie St\_2015 AM Peak

East Tce - Hutt St - Pirie St\_2015 AM Peak

Signals - Fixed Time Isolated Cycle Time = 100 seconds (User-Given Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles												
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
South: Hutt St												
1	L2	135	1.6	0.375	21.7	LOS C	8.8	62.6	0.67	0.66	30.7	
2	T1	500	2.9	0.375	17.0	LOS B	10.5	75.1	0.67	0.60	27.2	
3	R2	427	1.5	0.288	25.7	LOS C	6.9	49.2	0.71	0.75	34.2	
Approach		1062	2.2	0.375	21.1	LOS C	10.5	75.1	0.68	0.67	31.3	
East: East Tce/Bartels Rd												
4	L2	681	0.8	1.090	160.3	LOS F	70.2	494.4	1.00	1.37	11.5	
5	T1	325	0.0	0.565	33.2	LOS C	13.5	94.3	0.90	0.79	34.4	
6	R2	237	4.9	1.117	179.8	LOS F	24.6	179.2	1.00	1.47	10.8	
Approach		1243	1.4	1.117	130.7	LOS F	70.2	494.4	0.97	1.24	14.3	
North: East Tce												
7	L2	144	5.1	0.118	6.4	LOS A	1.3	9.5	0.26	0.58	48.5	
8	T1	523	2.6	0.990	84.4	LOS F	18.4	131.6	1.00	1.31	10.0	
9	R2	38	2.8	0.352	56.8	LOS E	1.9	13.7	0.99	0.73	18.4	
Approach		705	3.1	0.990	66.9	LOS E	18.4	131.6	0.85	1.13	14.7	
West: Pirie St												
10	L2	25	8.3	0.370	48.9	LOS D	4.1	29.5	0.96	0.75	20.9	
11	T1	156	0.7	0.370	44.3	LOS D	4.2	29.8	0.96	0.75	30.5	
12	R2	35	6.1	0.201	48.4	LOS D	1.6	11.7	0.93	0.73	19.7	
Approach		216	2.4	0.370	45.5	LOS D	4.2	29.8	0.95	0.75	28.0	
All Vehicles		3226	2.1	1.117	75.0	LOS E	70.2	494.4	0.85	0.99	17.7	

Level of Service (LOS) Method: Delay (HCM 2000).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Movement Performance - Pedestrians										
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped		
P1	South Full Crossing	53	36.2	LOS D	0.1	0.1	0.85	0.85		
P2	East Full Crossing	53	44.3	LOS E	0.1	0.1	0.94	0.94		
P3	North Full Crossing	53	44.3	LOS E	0.1	0.1	0.94	0.94		
P4	West Full Crossing	53	18.6	LOS B	0.1	0.1	0.61	0.61		
All Pedestrians		211	35.9	LOS D			0.84	0.84		

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

## MOVEMENT SUMMARY

### Site: East Tce - Hutt St - Pirie St\_2015 PAM Peak

East Tce - Hutt St - Pirie St\_2015 PM Peak

Signals - Fixed Time Isolated Cycle Time = 80 seconds (Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Hutt St											
1	L2	52	0.0	0.280	18.9	LOS B	5.0	35.5	0.66	0.60	33.1
2	T1	401	2.1	0.280	14.3	LOS B	5.9	42.1	0.66	0.57	29.4
3	R2	1009	0.2	1.057	137.5	LOS F	42.5	297.8	1.00	1.48	12.9
Approach		1462	0.7	1.057	99.5	LOS F	42.5	297.8	0.89	1.20	14.3
East: East Tce/Bartels Rd											
4	L2	468	0.4	0.643	26.6	LOS C	14.9	104.8	0.86	0.84	34.3
5	T1	168	0.6	0.320	26.4	LOS C	5.3	37.3	0.84	0.72	37.3
6	R2	117	8.1	0.901	57.6	LOS E	5.5	41.5	1.00	1.03	24.0
Approach		754	1.7	0.901	31.4	LOS C	14.9	104.8	0.88	0.84	32.9
North: East Tce											
7	L2	272	4.3	0.445	23.6	LOS C	7.7	56.2	0.82	0.77	36.0
8	T1	443	1.7	0.849	44.1	LOS D	9.8	69.5	1.00	1.02	16.2
9	R2	19	0.0	0.138	44.2	LOS D	0.7	5.1	0.96	0.69	21.4
Approach		734	2.6	0.849	36.5	LOS D	9.8	69.5	0.93	0.92	23.8
West: Pirie St											
10	L2	40	2.6	1.039	110.2	LOS F	18.0	126.1	1.00	1.51	12.0
11	T1	466	0.0	1.039	105.7	LOS F	18.1	126.5	1.00	1.51	18.7
12	R2	67	0.0	0.502	46.1	LOS D	2.7	19.2	1.00	0.76	20.3
Approach		574	0.2	1.039	99.0	LOS F	18.1	126.5	1.00	1.42	18.4
All Vehicles		3523	1.2	1.057	71.7	LOS E	42.5	297.8	0.92	1.10	19.1

Level of Service (LOS) Method: Delay (HCM 2000).

Vehicle movement LOS values are based on average delay per movement

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	53	33.4	LOS D	0.1	0.1	0.91	0.91	
P2	East Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P3	North Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P4	West Full Crossing	53	17.6	LOS B	0.1	0.1	0.66	0.66	
All Pedestrians		211	29.9	LOS C			0.86	0.86	

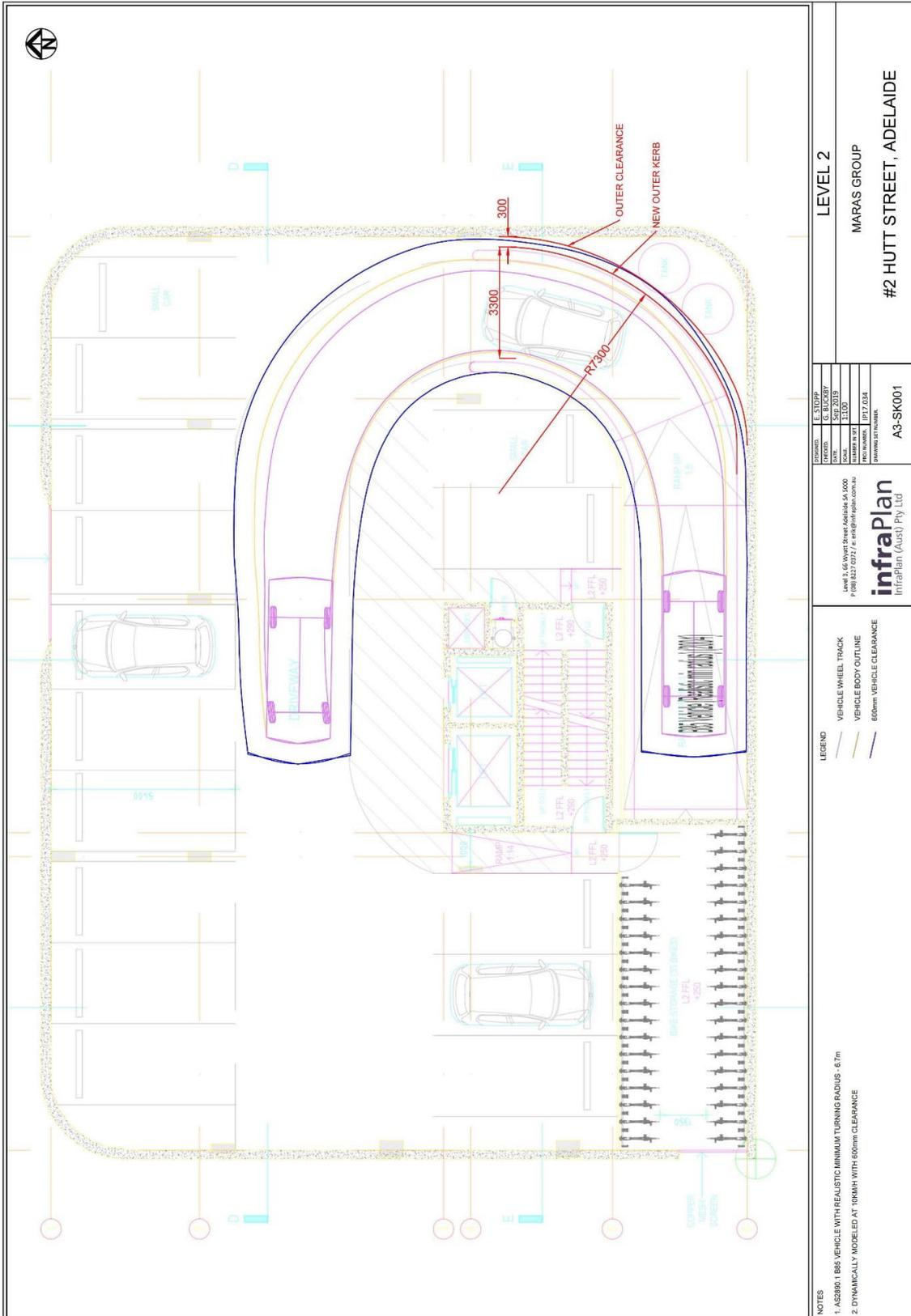
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

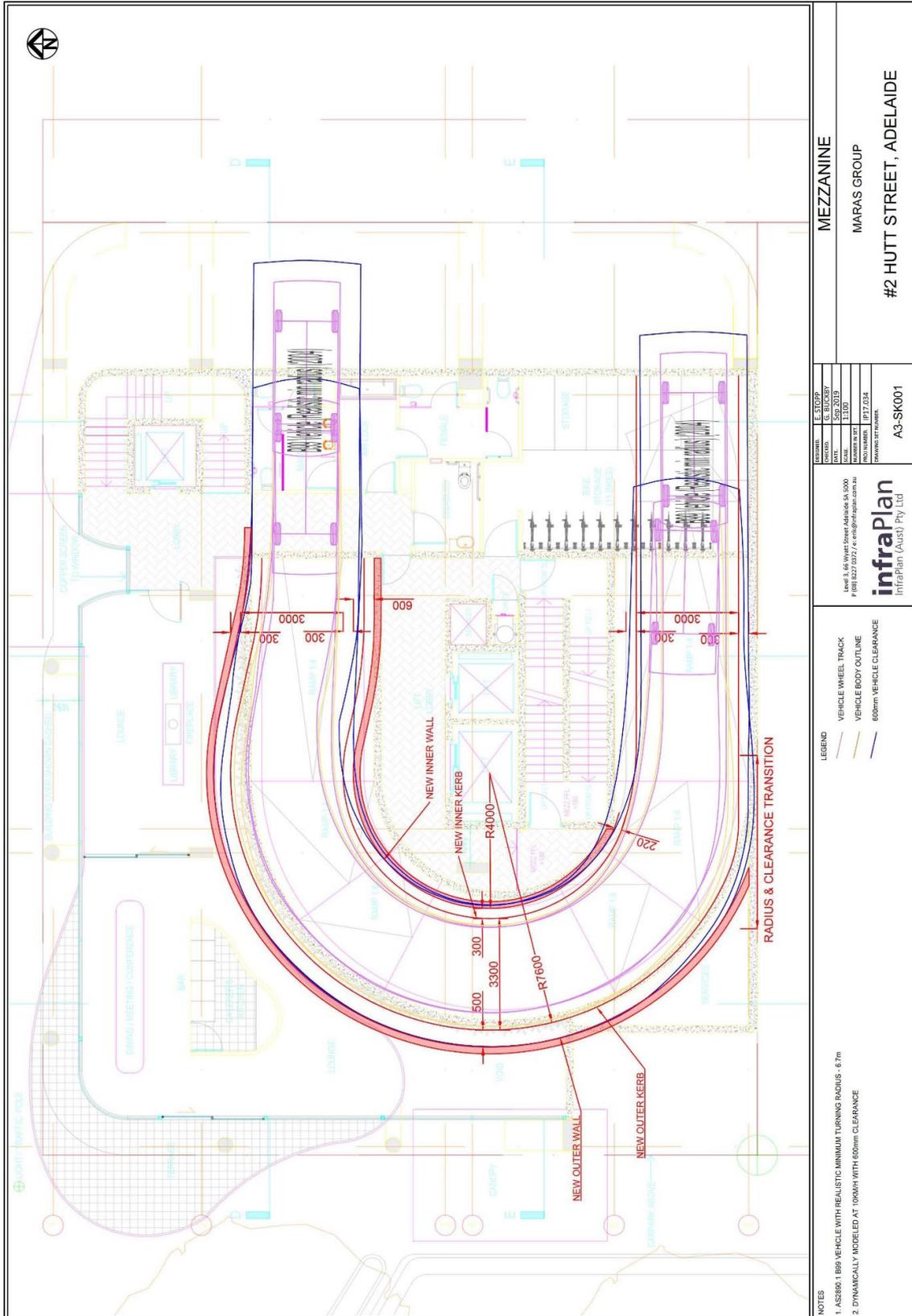
Pedestrian movement LOS values are based on average delay per pedestrian movement.

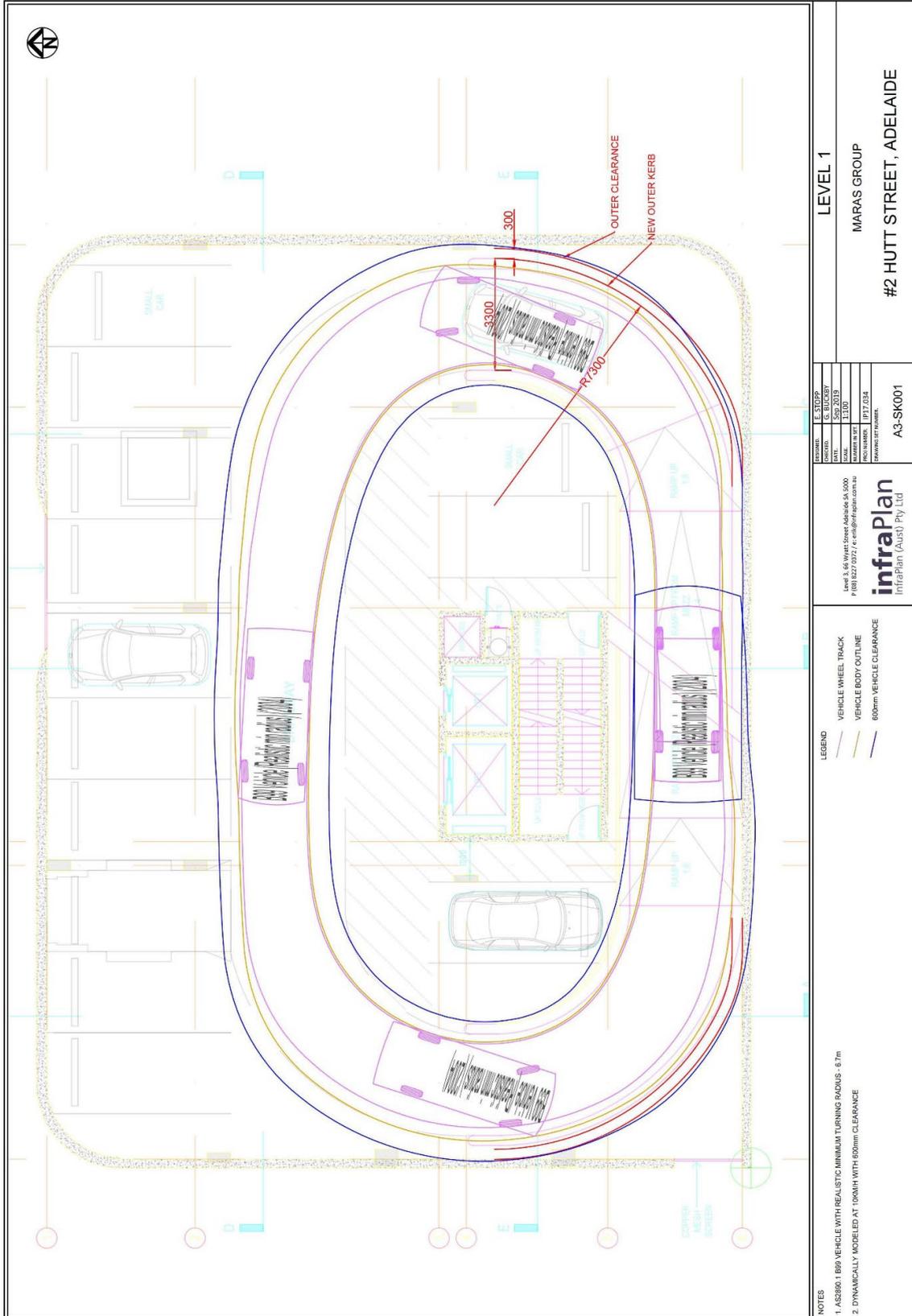
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



## Appendix D: AutoTrack Turn Path & Design Envelopes







**NOTES**  
1. AS2890.1 B99 VEHICLE WITH REALISTIC MINIMUM TURNING RADIUS - 6.7m  
2. DYNAMICALLY MODELED AT 100KM/H WITH 60mm CLEARANCE

**LEGEND**

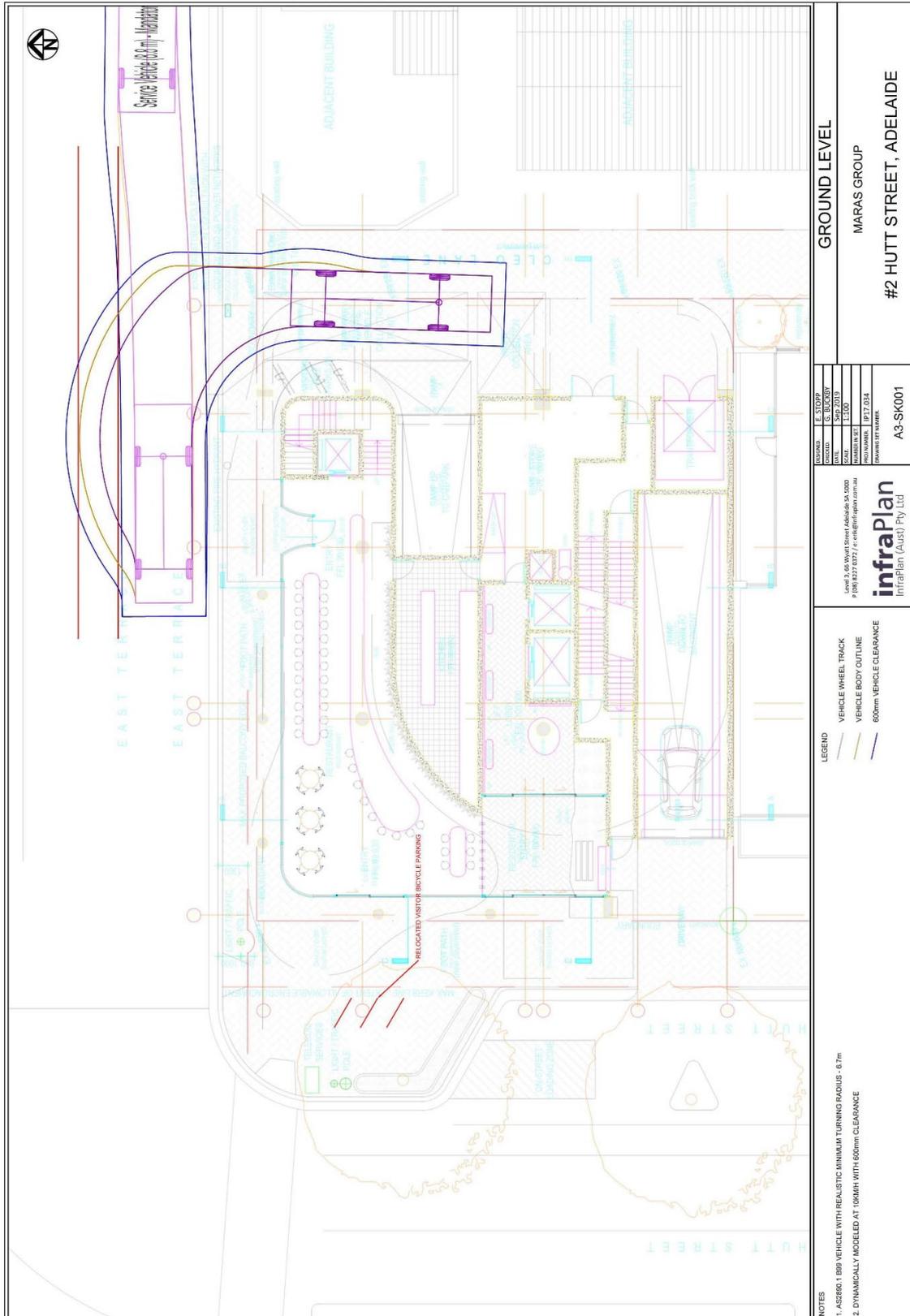
	VEHICLE WHEEL TRACK
	VEHICLE BODY OUTLINE
	600mm VEHICLE CLEARANCE

Level 1 of 15 - Vehicle Wheel Tracks & 600mm Clearance  
IP17.034 2-6 Hutt St - Mixed-use Development R5

**infraPlan**  
InfraPlan (Aust) Pty Ltd

REVISION	E. STOPS
DATE	5 SEP 2019
DRAWN BY	TLID
CHECKED BY	IP17.034
PROJECT NUMBER	IP17.034
DRAWING SET NUMBER	A3-SK001

**LEVEL 1**  
MARAS GROUP  
#2 HUTT STREET, ADELAIDE



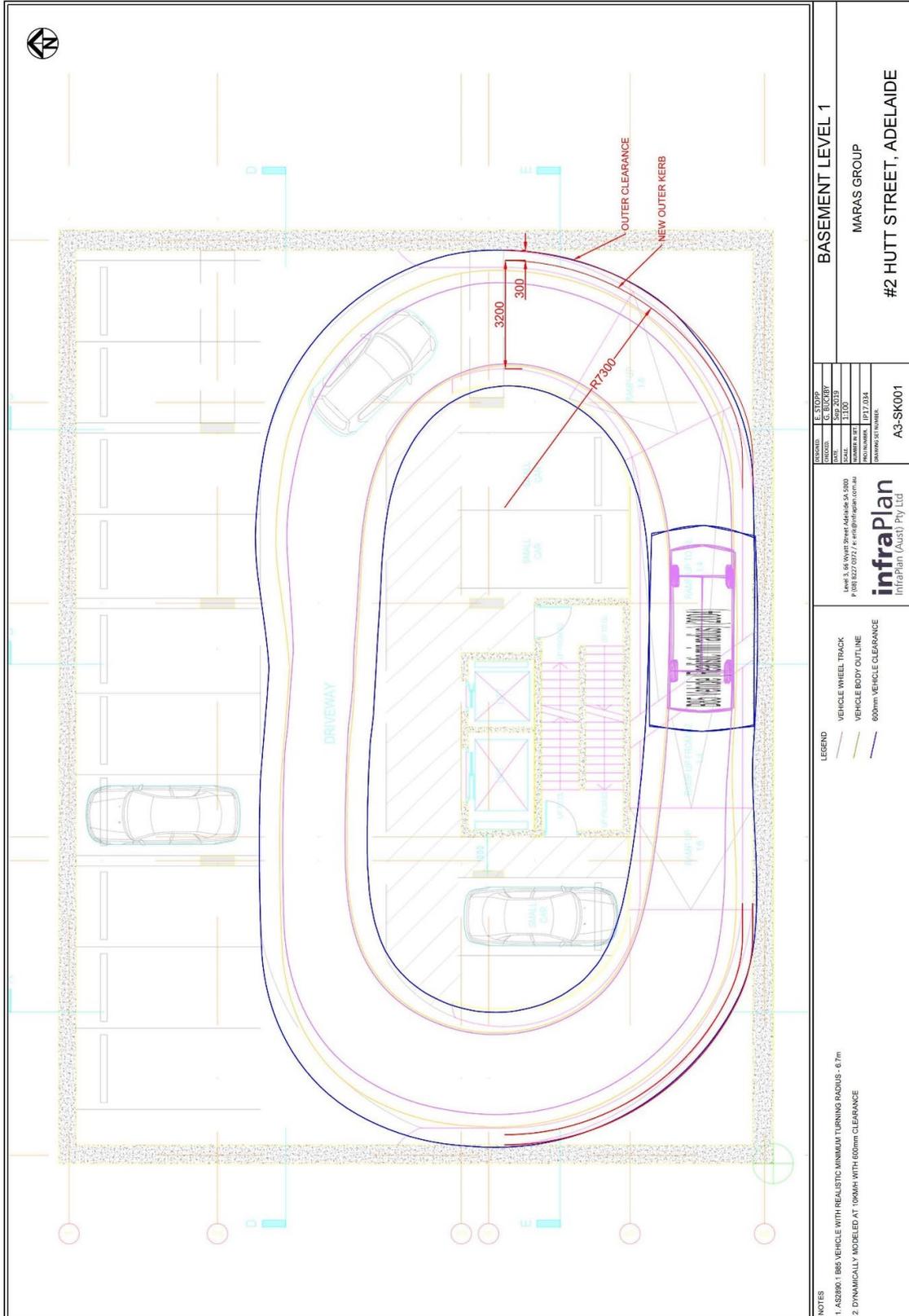
NOTES  
1. ASS8601 899 VEHICLE WITH REALISTIC MINIMUM TURNING RADIUS - 6.7m  
2. DYNAMICALLY MODELED AT 10KM/H WITH 600mm CLEARANCE

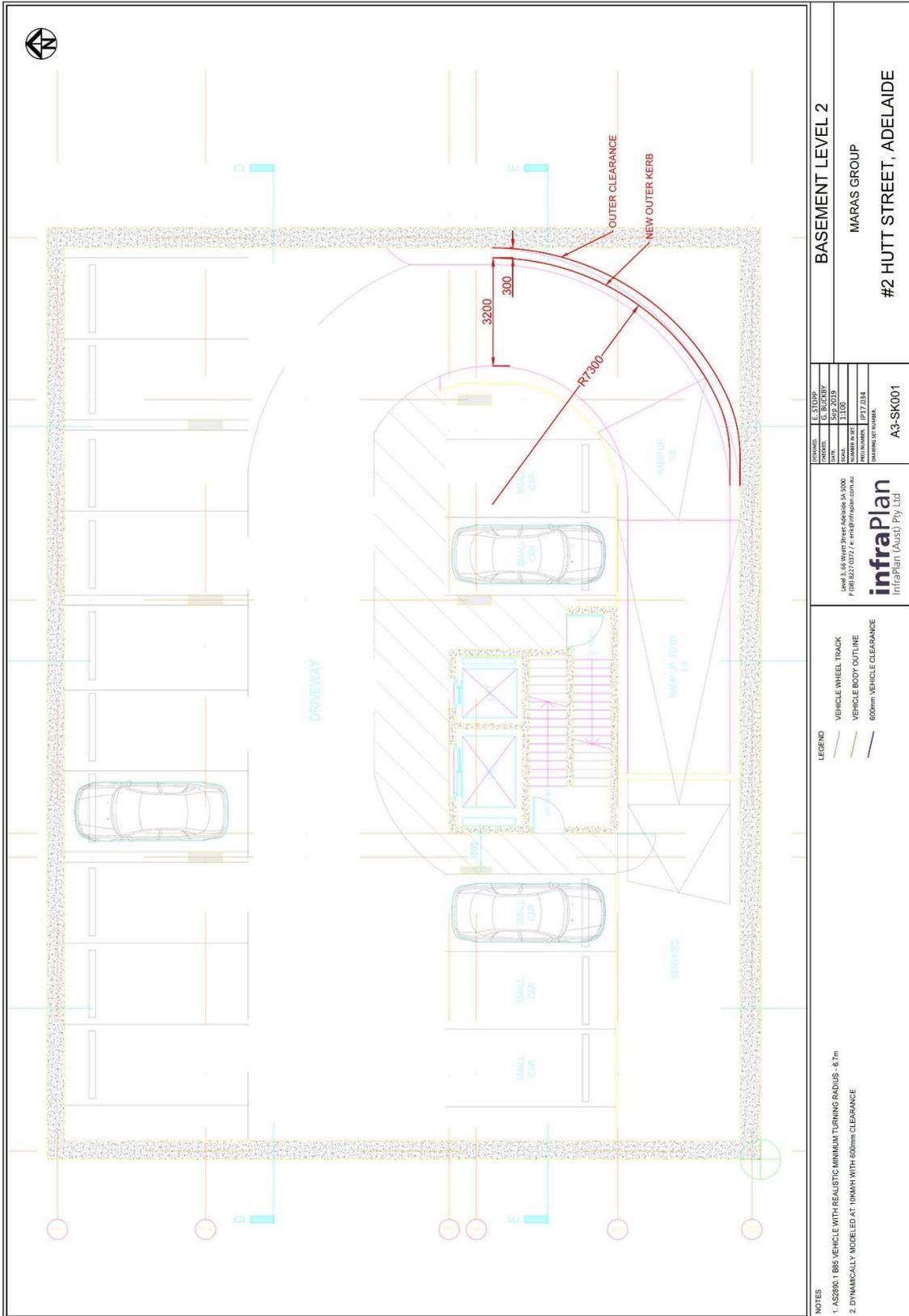
LEGEND  
 - - - VEHICLE WHEEL TRACK  
 — VEHICLE BODY OUTLINE  
 — 600mm VEHICLE CLEARANCE

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GROUND LEVEL  
MARAS GROUP  
#2 HUTT STREET, ADELAIDE  
A3-SK001





NOTES  
1. A32890.1 BBS VEHICLE WITH REALISTIC MINIMUM TURNING RADIUS - 6.7m  
2. DYNAMICALLY MOBBED AT TRIMAH WITH 600mm CLEARANCE

LEGEND

Level 3, 05 West Street, Adelaide SA 5000  
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DATE:	17/09/2019
SCALE:	1:100
PROJECT NO.:	IP17.034
PROJECT NAME:	A3-SK001

**BASEMENT LEVEL 2**  
MARAS GROUP  
#2 HUTT STREET, ADELAIDE

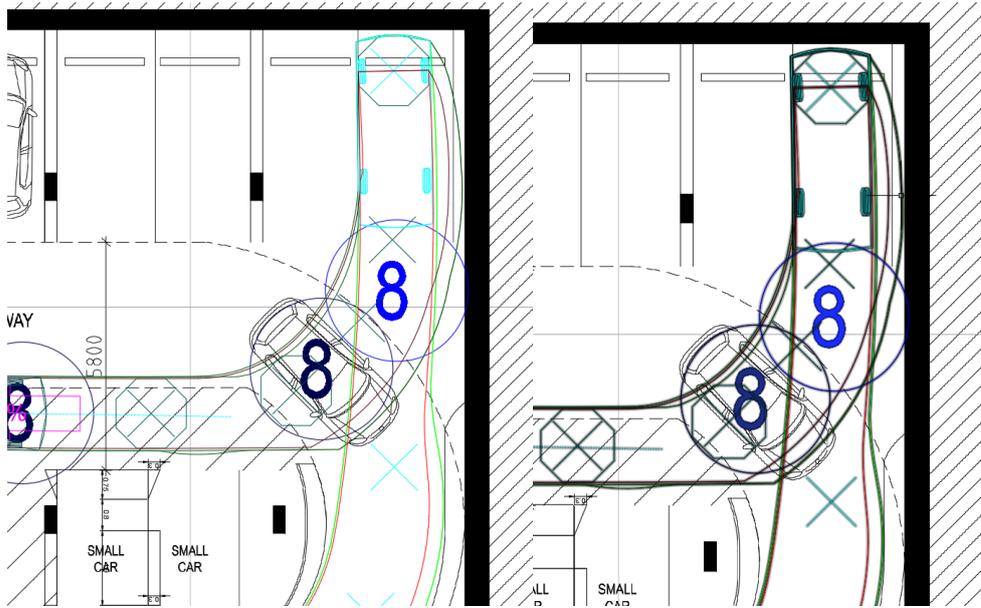


Figure 11 (a) & (b) - Front and reverse out, reverse in and front out (B2, B1, 1)

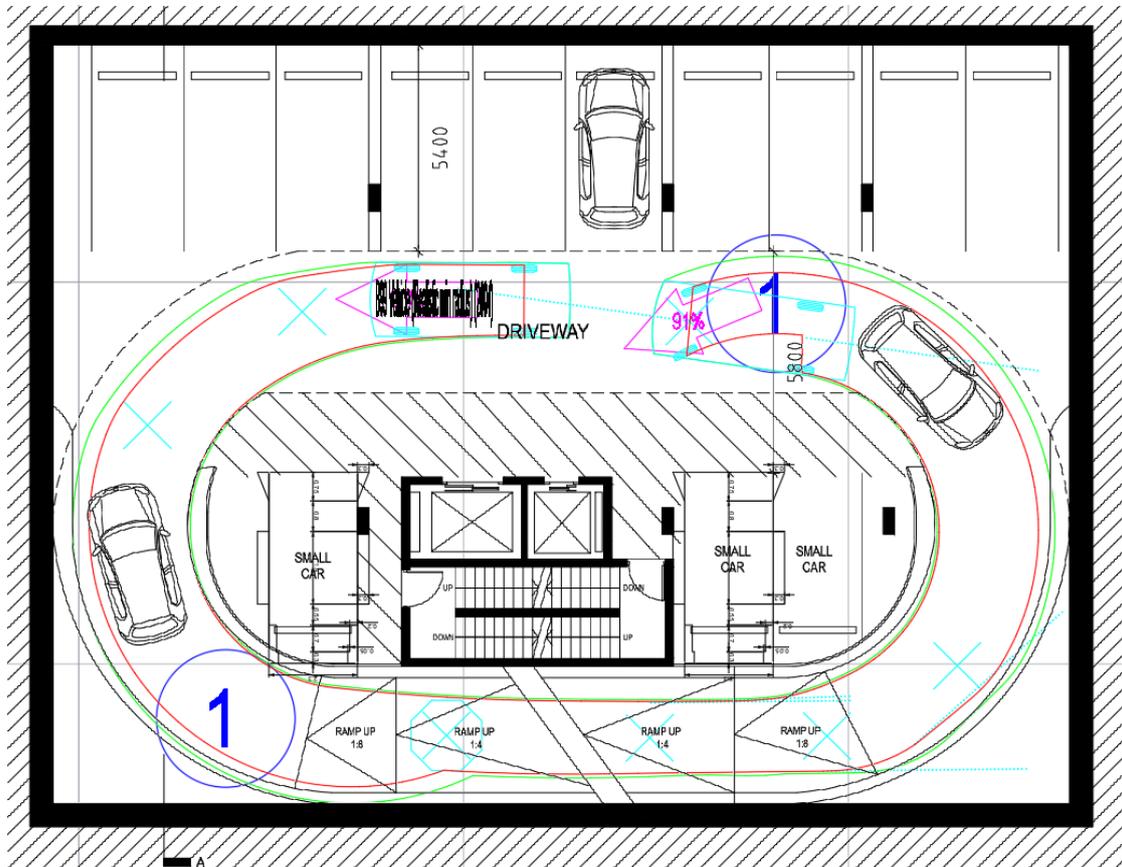


Figure 12: B99 vehicle turning movement on ramp (all levels)

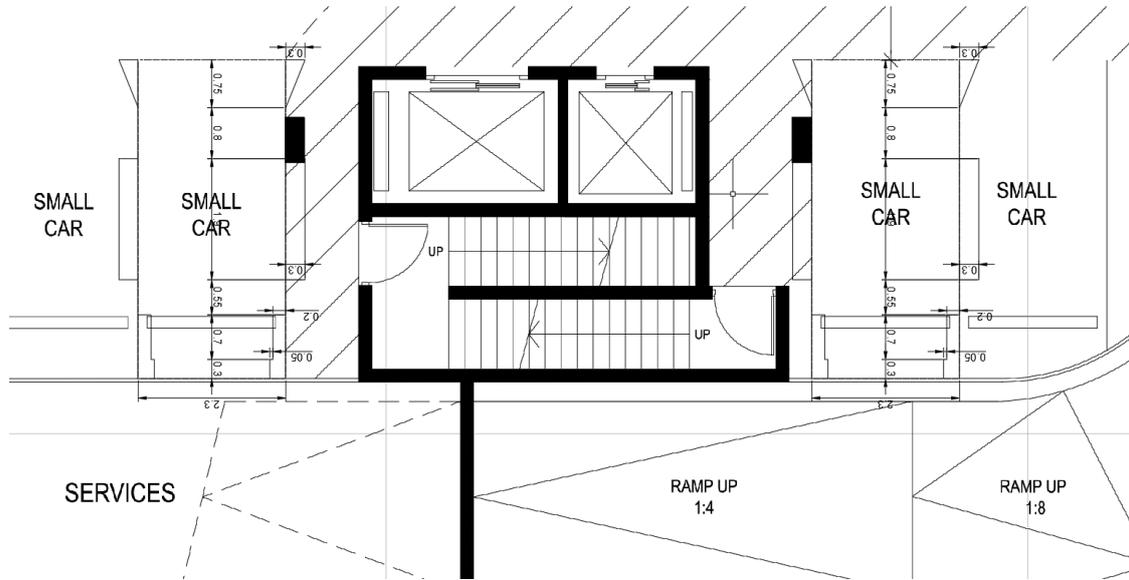


Figure 13: Small car design vehicle envelope (B2)

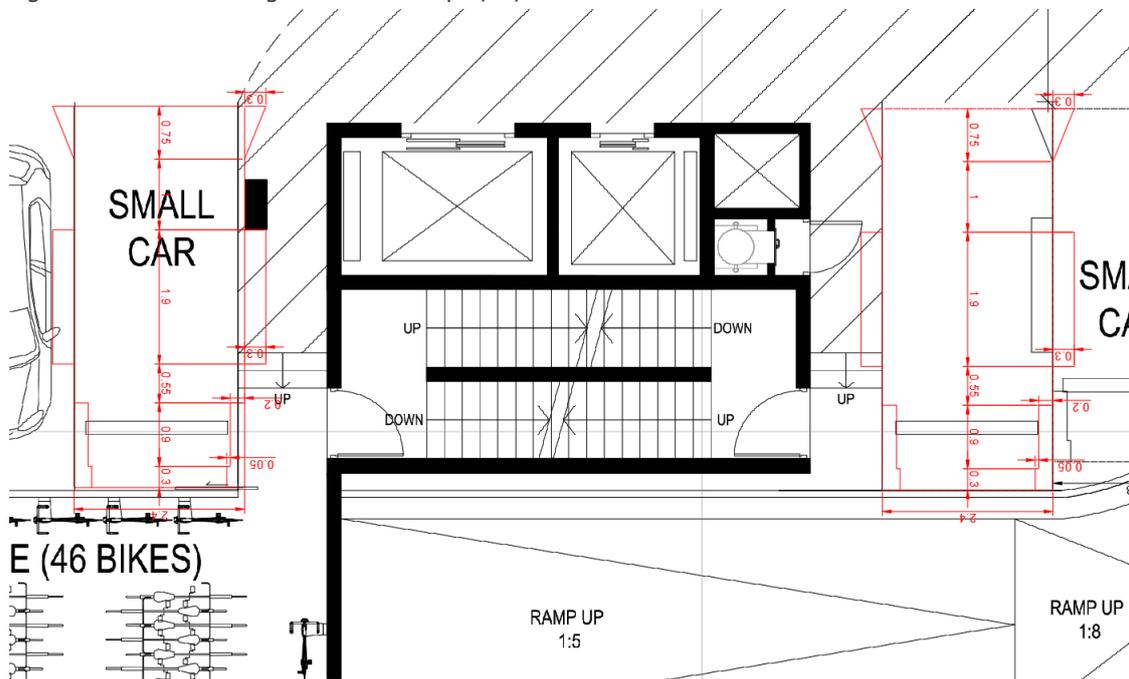


Figure 14: Design car envelope: note lower level stair less at 125mm above ground with car door height around 200mm (1, 2)



# infraPlan

policy - strategy - planning - infrastructure - transport - environment

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## Rymill Park Apartments 2-6 Hutt Street

## Waste Management Preliminary Draft Report

April 2018



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# 1 Development Details

InfraPlan has been engaged by Maras Group to prepare a waste management plan for the proposed mixed-use residential + commercial development at 2 Hutt Street, Adelaide.

The proposed development includes a total 38 apartments and ground floor tenancies. Development details considered in preparing this report are provided below:

- Land Use:** Residential + Commercial
- Site Area:** 578 m<sup>2</sup>
- No. of Dwellings:** 38
- Dwellings per hectare:** 660 dwellings per ha

The proposed development is considered as a *high density residential development* with a dwelling density greater than 75 dwellings per hectare (ha).

The proposed development would have a 220 m<sup>2</sup> retail and café/restaurant tenancies on the ground floor accessible from Hutt Street and East Terrace. A total of 56 carparks are proposed in 2 discrete car parks, with upper levels accessible via Cleo Lane and basement levels accessible via Hutt Street.



Figure 1: Location Map – proposed Rymill Apartments – Mixed use development

## 2 Type of Waste System

For the purpose of developing a waste management plan InfraPlan have referred to the “*Better Practice Guide Waste Management for Residential and Mixed Use Developments*” published by Zero Waste SA (ZWSA) in 2014.

The proposed development will be a high density development (10 or more dwellings). Thus, using ZWSA guidelines, a **Complex Waste Management System** is recommended for the proposed development.

To further promote tenant awareness of recyclable waste streams, the developer intends to provide an integrated bin system that will provide segregated compartments for the sorting of co-mingled recycling, non-recyclable waste & organic food waste streams.

Figure 2 below shows a typical bin system for all the units.



Figure 2: Hafele HAILO Trio Integrated Bin System (Typical)

It is understood that a private waste operator will be engaged to collect & dispose of all co-mingled recycling, non-recyclable and organic food waste generated on site.

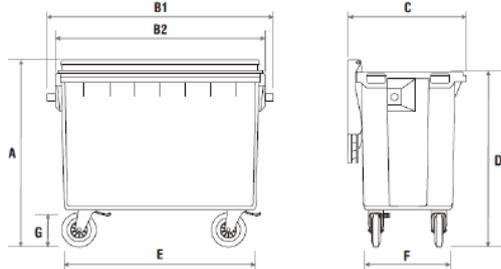
## 3 Waste System Sizing

### 3.1 Bin sizes

The following waste bins have been proposed for use at the subject development.



**Table 1 - Waste Bin Sizes**

Capacity	Dimensions																							
1,100 Litres	1,360 L x 1,090 W x 1,390 H	 <table border="1" data-bbox="1168 412 1334 629"> <thead> <tr> <th colspan="2">660 Litre</th> </tr> </thead> <tbody> <tr> <td>Weight (approx)</td> <td>45kg</td> </tr> <tr> <td>Volume</td> <td>660ltr</td> </tr> <tr> <td>A</td> <td>1200mm</td> </tr> <tr> <td>B1</td> <td>1360mm</td> </tr> <tr> <td>B2</td> <td>1225mm</td> </tr> <tr> <td>C</td> <td>770mm</td> </tr> <tr> <td>D</td> <td>1120mm</td> </tr> <tr> <td>E</td> <td>1095mm</td> </tr> <tr> <td>F</td> <td>630mm</td> </tr> <tr> <td>G</td> <td>200mm</td> </tr> </tbody> </table>	660 Litre		Weight (approx)	45kg	Volume	660ltr	A	1200mm	B1	1360mm	B2	1225mm	C	770mm	D	1120mm	E	1095mm	F	630mm	G	200mm
660 Litre																								
Weight (approx)	45kg																							
Volume	660ltr																							
A	1200mm																							
B1	1360mm																							
B2	1225mm																							
C	770mm																							
D	1120mm																							
E	1095mm																							
F	630mm																							
G	200mm																							
660 Litres	1,360 L x 770 W x 1,200 H																							
240 Litres	730 L x 580 W x 1,060 H																							
		 <p>General Waste      Co-mingled Recyclables      Food/Organics</p>																						

### 3.2 Projected Waste Generation and Storage provision

Ready to use *Waste Resource Generation Rates (WRGRs)* by land use type provided in Table C.2 of ZWSA guide were used to estimate waste generation from the proposed development.

The projected waste generation volumes from residential portion of the proposed development are presented in Table 2 and the café portion in Table 3 below.

**Table 2 - Waste generation – Residential**

WASTE STREAM (collection frequency)	ZWSA Waste Generation Rates [L/bedroom/week]	No of Bedrooms	Projected Weekly Waste Generation	Residential component	Total Waste Storage Capacity Provided
Non-recyclable waste to landfill (weekly)	30 L	86	2,580 L/week	2 x 1,100 L 1 x 660 L	2,860 L
Co-mingled recycling (weekly)	25 L	86	2,150 L/week	2 x 1,100 L	2,200 L
Organic [food] waste (weekly)	10 L	86	860 L/week	1 x 660 L 1 x 240 L	900 L

**Table 3 - Waste generation: Commercial – Café/Restaurant tenancy (220m<sup>2</sup>)**

WASTE STREAM (collection frequency)	ZWSA Waste Generation Rates [L/10m <sup>2</sup> /day]	Projected Weekly Waste Generation	Total Waste Storage required	Café component	Total Waste Storage Capacity Provided
Non-recyclable waste to landfill (twice weekly)	30 L	4,620 L/week	2,310 L	2 x 1,100 L 1 x 240 L	2,440 L
Co-mingled recycling (twice weekly)	20 L	3,080 L/week	1,540 L	1 x 1,100 L 2 x 240 L	1,580 L
Organic [food] waste (twice weekly)	40 L	6,160 L/week	3,080 L	3 x 1,100 L	3,300 L

This results in a total number of bins as presented in Table 4.

**Table 4 - Total number of bins required**

Number and Type of Bins Required	1,100L	660L	240L
Landfill	2x Residential 2x Commercial	1x Residential	1x Commercial
Recycling	2x Residential 1x Commercial		2x Commercial
Organic	3x Commercial	1x Residential	1x Residential
<b>TOTAL</b>	<b>10</b>	<b>2</b>	<b>4</b>

### 3.3 Hard Waste and e-waste

As per ZWSA guide, a total 29 m<sup>3</sup> area (38 dwellings x 0.77 m<sup>3</sup>/dwelling) would be required to store hard waste for the proposed development. However, the City of Adelaide offers free, at-call hard waste collection service to residents. Considering that up to 12 at-call services (1 per month) can be availed by residents of the proposed development, a total 2.4 m<sup>3</sup> area would be required to store hard waste generated by the proposed development.

A 1.4m<sup>2</sup> area (approx.) is proposed within the bin storage area for storing *hard waste* and *e-waste*. The proposed bin storage area has a 3.5m floor to ceiling height. Thus, allowing for hard and e-waste to be stacked to a height of 1.8m, a total of up to 2.5m<sup>3</sup> of space will be available to store hard waste within the bin storage area. This would reduce and possibly eliminate any unwanted furniture/bulk waste/e-waste items ending up kerbside.

## 4 Bin Storage Location

The bin storage area has been located centrally, adjacent to the lift lobby to ensure it can be readily accessed by residents/tenants. The storage area is located on the ground level with a 3.5m floor to ceiling height allowing for natural ventilation, it is however sheltered from the weather by the building above.

The bin storage area will be hard paved/concrete floor to facilitate easy maneuvering/wheeling of bins within and out of the storage area.

## 5 Bin Chute with Diverter system

The proposed development will have an integrated waste chute system. Access to the waste chute is proposed from the stair well on each floor. The proposed chute system will have an automated diverter that will segregate general waste and recyclable waste.

Key principles of the diverter system are listed below:

- Resident selects type of waste to be deposited – e.g. general waste or recyclable
- Put the waste in chute using door
- Waste is deposited in selected (general or recyclable) bin in the ground level bin storage area
- Tenants will be required to deposit large cardboard boxes/other recyclable items (larger than chute opening) in the ground level bin storage area.

The proposed system will require initial monitoring to determine the frequency for replacing filled bins by empty bins under the chute. An automated bin rotation system can also be installed subject to a detailed assessment at the detailed design stage.

Residents will be required to deposit organic waste on the ground level. Organic bins will be accessible from a door located in the lift lobby.

Café/restaurant will share the bin storage area with residents but will be provided with separate bins. Waste generated from the café/restaurant can be transferred using a direct access to the bin storage area.

Refer to Figure 3 (overleaf) for a typical chute diverter system.

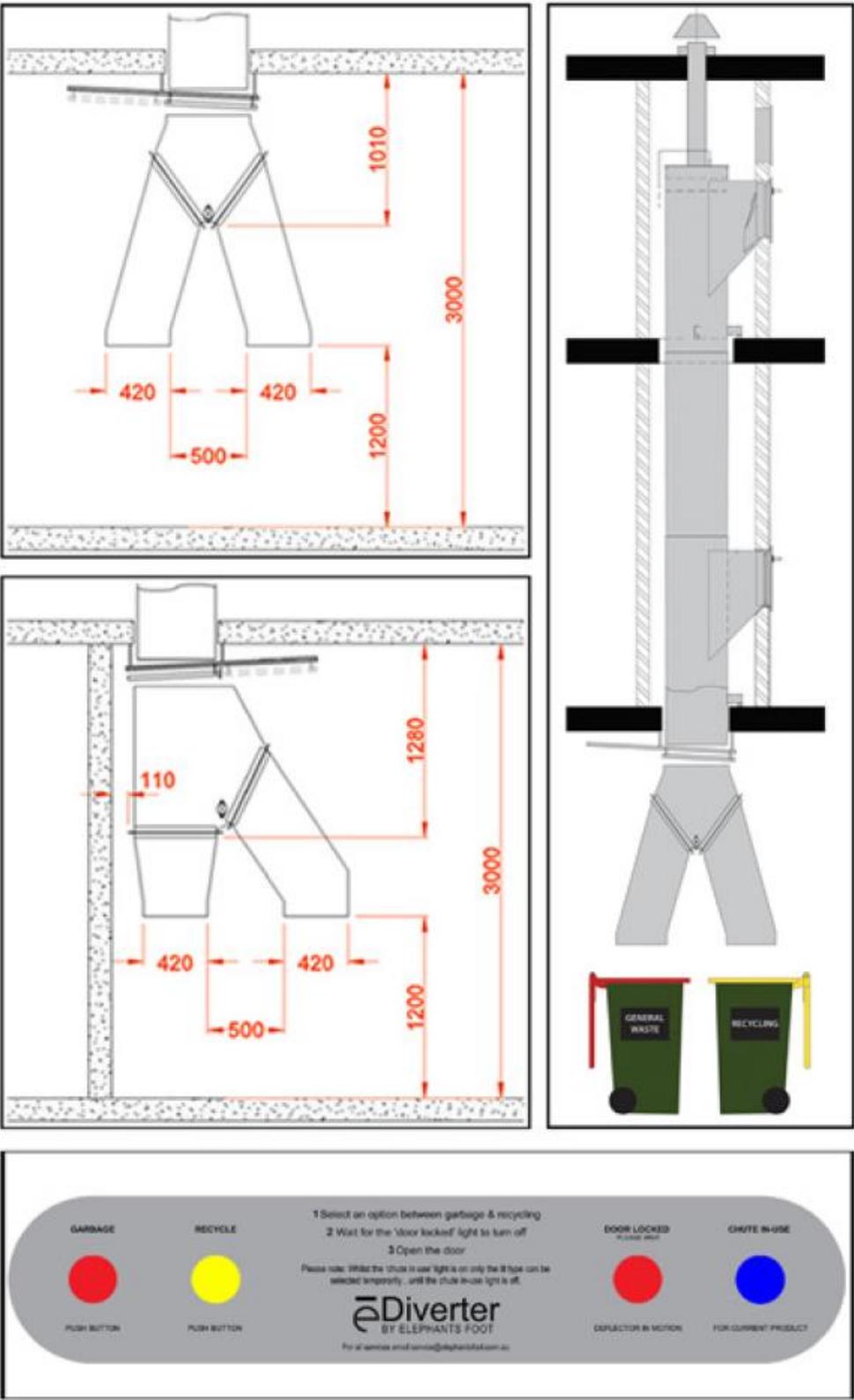


Figure 3: Typical waste chute diverter system (source: eDiverter system by Elephant’s Foot)

## 6 Bin Presentation and collection time

### 6.1 Bin Presentation Area

A private contractor will be engaged to collect waste generated from the proposed development for both residential and commercial components (café/restaurant).

The proposed widening of Cleo Lane will enable a two-way traffic movement. The private operator vehicle will reverse into Cleo Lane from East Terrace and exit in a forward motion.

The private contractor will be required to wheel out filled bins from the bin storage area and wheel empty bins back into the bin storage area.

### 6.2 Collection Times

It is recommended that waste collection should be done outside peak periods (7-9am, 3-6pm) to minimise impact to traffic on the surrounding road network.

Please refer to **Figure 4** for a plan of the bin storage area and collection point.

## 7 Waste Collection Frequency and Method

### 7.1 Residential Waste

As mentioned previously, a private waste operator will be engaged to collect all waste streams: co-mingled recyclable, non-recyclable general waste and organic waste streams from the proposed development.

The three waste streams (General, Co-mingled Recyclables and Organics) from the residential component will be collected on a weekly basis.

On the day of collection, the private waste operator will wheel out filled bins for collection and wheel empty bins back in the bin storage area.

### 7.2 Café/Restaurant

Waste generated by the café/restaurant is proposed for twice a week collection.

Details of collection day will be finalised based on discussions between the café/restaurant tenancy and waste collector.

On the day of collection, the private waste operator will wheel out filled bins for collection and wheel empty bins back in the bin storage area.

### 7.3 Hard waste and e-waste

The City of Adelaide offers up to 12 free services (1 per month) to collect hard and e-waste from large residential developments. Residents/tenants of the proposed development can avail this free service by storing waste in the bin storage area or arrange for a private hard waste collection service.

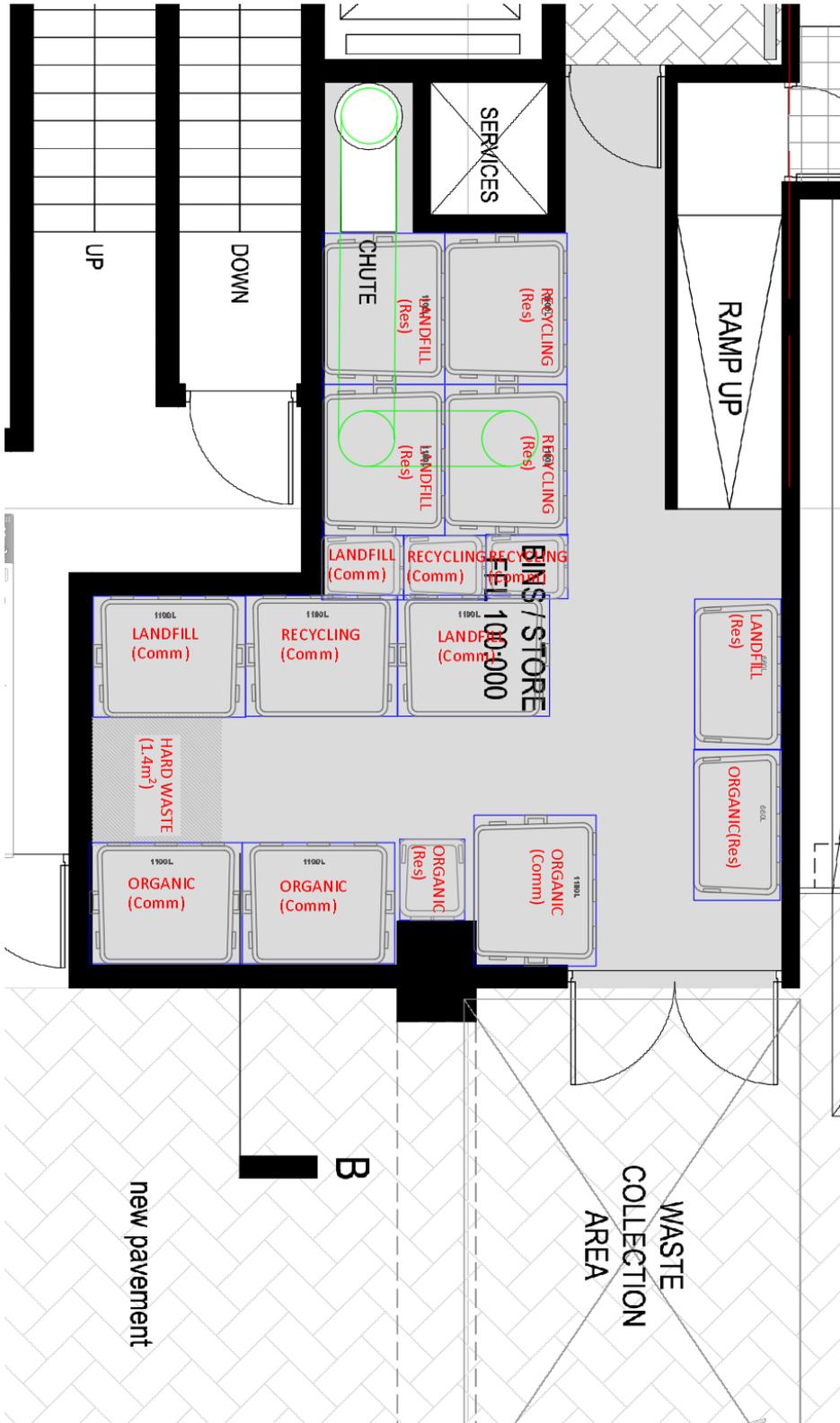


Figure 4: Bin Storage and Waste collection area

## 8 Conclusions

Based on the calculations and methodology presented in this report in relation to waste generation and collection at the proposed high density residential development at 2 Hutt Street in Adelaide, the following can be concluded:

- Waste generation for the proposed residential and retail development was estimated using Zero Waste SA guidelines.
- Using ZWSA guide, a Complex Waste Management System is recommended for the proposed high density mixed-use development
- A private waste collection operator will be engaged to collect waste generated from the proposed development
- Separate waste storage bins will be provided for residents and café/restaurant tenancy on the ground level.
- Residential waste is proposed for weekly collection; café/restaurant tenancy is proposed to have twice a week waste collection.
- Sufficient waste storage capacity for each of the three waste streams has been provisioned on-site to meet estimated waste generation demand.
- Sufficient Hard waste and e-waste storage area is provisioned within the bin storage area.
- Residents will be able to avail up to 12 per year, at call, free hard waste and e-waste service offered by ACC.
- The bin storage area will be centrally located near the lift lobby.
- A bin cleaning area has been provisioned within the bin storage area.
- In case a fully automatic system is not installed, a community attendant will be required to periodically monitor bin capacity under bin chutes and replace filled bins with empty bins.
- The attendant will also be responsible for upkeep of the bin storage area.
- Waste collection vehicles will have to reverse into Cleo Lane, temporarily blocking access to/from upper parking levels. It is recommended that bin collection times be strictly adhered to by the operator and be communicated to residents to minimise impacts to residents using upper parking levels.

The proposed number of bins are deemed sufficient for the proposed development for the stated collection frequency by private operator.

If you have any questions regarding the waste management plan presented in this report please contact us at 8227 0372 to discuss further.

Yours sincerely,



Erik Stopp  
Senior Transport Engineer  
InfraPlan (Aust) Pty. Ltd



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ESD and Sustainability Consultants  
Master Planning  
Resource Management  
Strategic Advice  
Governance  
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# Rymill Place

2 Hutt Street, Adelaide

# Sustainability Strategy

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green building council australia  
MEMBER 2016-2017



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Document Control

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Issue	Date	Change	Checked	Approved
1	24/7/17	First Draft issue	PD	DD
2	8/8/17	Updated following design development	PD	DD
3	18/9/17	Updated following adjustment of external shading element and addition of electro-chromic glass	PD	DD
4	31/10/17	Updated with roof PV layout and capacity review	PD	DD



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## 1 Introduction

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This report proposes the Sustainability Vision - the overriding principles which will be applied to the Rymill Place Development, and the Sustainability Strategies which will be employed to reduce the development's impact on the environment in both construction and operation.

This report is based on:

- a review of the building design and proposal summary prepared by Tectvs Architects;
- the commitments made at planning stage by the Client; and
- the results of computer building simulation modelling of a number of design options undertaken by dsquared.

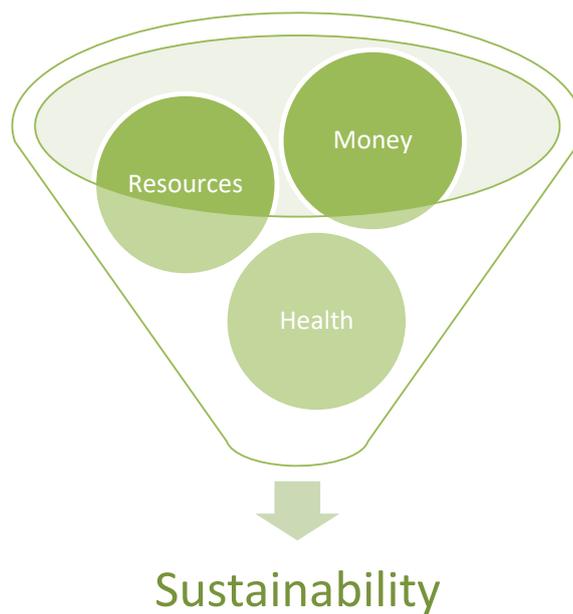
*The report has been prepared Paul Davy, a Director of consultancy firm dsquared. Paul has over 30 years' experience in the UK, Europe, Asia and Australia as an engineering, ESD, and sustainability consultant. Paul holds IEng and MCIBSE Accreditation, is a Green Star Certified Assessor, a Green Building Council of Australia Teaching Faculty Member, an Ambassador for the Living Futures Institute of Australia, and a member of the South Australian Government ODASA Design Review Panel.*

## 2 Sustainability Guiding Principles

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These are the Sustainability Guiding Principles for the Project:

- *That the development is attractive to residents, visitors and the surrounding community*
- *That the buildings are designed in accordance with best practice in sustainable development*
- *That the development encourages sustainable living within a high-quality environment*
- *That the development provides a positive social return on investment*
- *That the development promotes the notion of biodiversity at podium and street level*
- ***That the development delivers on the triple bottom line of sustainability:  
Environmental, Economic, and Social***





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### 3 Sustainability Initiatives

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#### 3.1 Community and Social Sustainability

The following Community and Social Sustainability initiatives are included:

1. Connecting the building with the local environment and allowing the building to respond to the seasons.
2. Providing access to views from within the building to outside, from external vantage points to the environment, and into the building from outside to provide transparency and a visual connection between residents and the community and environment.
3. Provide easily accessible communal areas to both residents and visitors to the building.
4. Provide overt green walls and landscaping at podium and street levels to connect the indoor space with the outside and to promote the notion of urban biodiversity.

#### 3.2 Water

The following Water initiatives are included:

1. Selecting water efficient fittings of a minimum 6 Star WELS rating for taps, 4 Star for WCs and 3 Star for showers.
2. Selecting appropriate landscape planting to minimise irrigation water use.
3. Providing rainwater storage and re-use systems for landscape and green wall irrigation.
4. Providing the firefighting systems with a test water recycling facility.

#### 3.3 Transport

The following Transport initiatives are included:

1. Providing bicycle storage facilities for apartment residents and visitors, with a minimum of one secure rack provided per apartment. Additional racks will be provided for visitors at ground floor level.
2. Providing end of trip facilities for the retail and commercial tenants, including secure bicycle racks and locker space.
3. All apartment purchasers will be offered the option of the provision of an electric vehicle charge point at their car park space, in order to promote the de-carbonisation of Adelaide's transport network. Dependent upon the final size of PV array installed, a number of these points can be supplied with 100% renewable energy.



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### 3.4 Energy

The building and systems design has been subject to optioneering using computer building simulation modelling techniques. The façade design has, in particular, been the subject of design option studies. The options considered and the results of the modelling undertaken are included in Section 4 of this report.

The following finalised Energy initiatives are included:

1. Active facade design - the use of high performance double glazing with integrated and adjustable interstitial blinds, access to daylight, and natural ventilation of the apartments to reduce energy demands. Electro-chromic glass has been incorporated in strategic locations to provide additional privacy and solar load reduction. The façade will include solar sensors and automated control of the interstitial blind systems to provide an active façade. Occupants will have the ability to manually override the automated control of the blinds as required to suit their own requirements.
2. All common areas at Ground level and above will be naturally ventilated and provided with daylight access.
3. Electricity will be supplied via an inset (embedded) network, so that residents can benefit from the option of reduced electricity supply rates, and the ability to share renewable energy from the building solar PV array.
4. Daylight control to lighting systems in common areas.
5. Selection of energy efficient lighting fittings. All lighting will be LED.
6. Zoning the apartment air conditioning systems into functional areas (e.g. living rooms, bedrooms) and providing automatic and manual controls. All apartment air conditioning units will be inverter controlled and rated to the highest available Energy Star rating. All units can be operated in fan mode providing low energy air circulation.
7. Providing a kill switch to each apartment allowing a one touch isolation of all lighting and air conditioning power when the apartment is vacant.
8. Providing a 39kW roof mounted solar photovoltaic array. The array will be connected via the inset network so that it can benefit all residents and tenants in the development, but is sized to adequately provide renewable energy equivalent to 100% of the common area power needs, including car park ventilation.
9. Designing and certifying the apartments to achieve an energy performance at least 30% better than current Building Code minimum NatHERS rating of 6 Stars average, representing a dwelling average NatHERS Rating of 8 Stars.
10. Designing the tenancy and common areas to achieve an energy performance at least 30% better than a deemed to satisfy compliant space in accordance with the NCC/BCA Section J, JV3 methodology.
11. Using light coloured external finishes (in particular roof coverings) to reflect heat, reduce solar gain, and reduce the heat island effect.
12. Using solar gas boosted hot water systems, gas hobs, and European Energy Label A category ovens for cooking throughout in order to reduce peak electricity demands, reduce the overall development carbon footprint, and provide an economical amenity for apartment owners.



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13. Providing a building energy management system with smart metering to automatically record and monitor the building's resource use and establish trends and profiles to assist with the ongoing control of energy use. This information will be made available on-line.
14. As far as practicable, designing the car park levels to be naturally ventilated. In areas where access to natural ventilation is not possible, the car parking will be mechanically ventilated but with a system designed using an engineered approach, with variable speed drives and carbon monoxide automatic control, to reduce fan energy use by 80% when compared to a conventional system.
15. Providing apartment owners with retractable clothes racks in their apartments, to minimise electric clothes drier use. These facilities will also minimise the incidence of clothes drying on exposed balconies.
16. Providing retail and commercial tenancy space air conditioning systems with an economy cycle control allowing 100% outside air to be used for free cooling purposes when external weather conditions allow.

### 3.5 Waste

The following Waste initiatives are included:

1. Construction waste will be minimised through efficient design techniques including standardisation and wherever practicable off site pre-fabrication.
2. All Construction waste will be managed via the implementation of an approved Environmental Management Plan.
3. A minimum of 90% of all construction waste will be diverted from landfill. All Construction waste will be sorted and binned on site to facilitate ease of recycling.
4. Each apartment kitchen will be designed to accommodate split bins for general, recycling, and compost waste.
5. The building will incorporate ventilated and weather proof storage facilities for the collection and disposal of general, recyclable, organic waste, bulky waste, and e-waste, which will be separated on site to facilitate ease of disposal for recycling.
6. A Waste chute will be provided for general waste and recycling waste movement for all apartment levels.

### 3.6 Indoor Environment Quality

The following Indoor Environment Quality initiatives are included:

1. Using paints, sealants, adhesives, carpets, coverings and furniture which have low off-gassing properties (low VOC, low formaldehyde).
2. Maximising access to daylight to all residential areas whilst minimising glare.
3. All dwellings will be fully naturally ventilated.
4. All common areas at ground level and above will be fully naturally cross ventilated.
5. Electro-chromic glass is provided to some glazing to improve occupant privacy.



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### 3.7 Construction

The following Construction initiatives are included:

1. Selecting locally sourced materials wherever viable.
2. Selecting recycled and recovered materials wherever viable, particularly sourced from the local area in order to build in a recognition of the local area and heritage.
3. Selecting materials with a comparatively low embodied energy/carbon profile e.g. timber in preference to steel, where practicable.
4. Selecting building materials with a recycled material content e.g. thermal insulation, reinforcement bar, fly ash in concrete, recycled content floor coverings, where viable.
5. Using off site pre-fabrication techniques to reduce on site construction time, waste, and greenhouse gas emissions, wherever practicable.

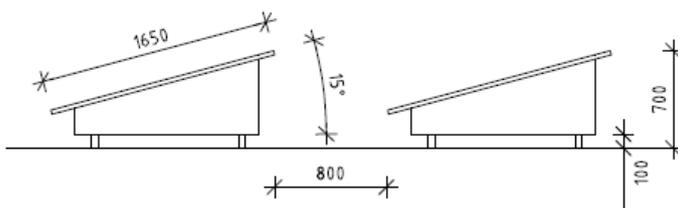
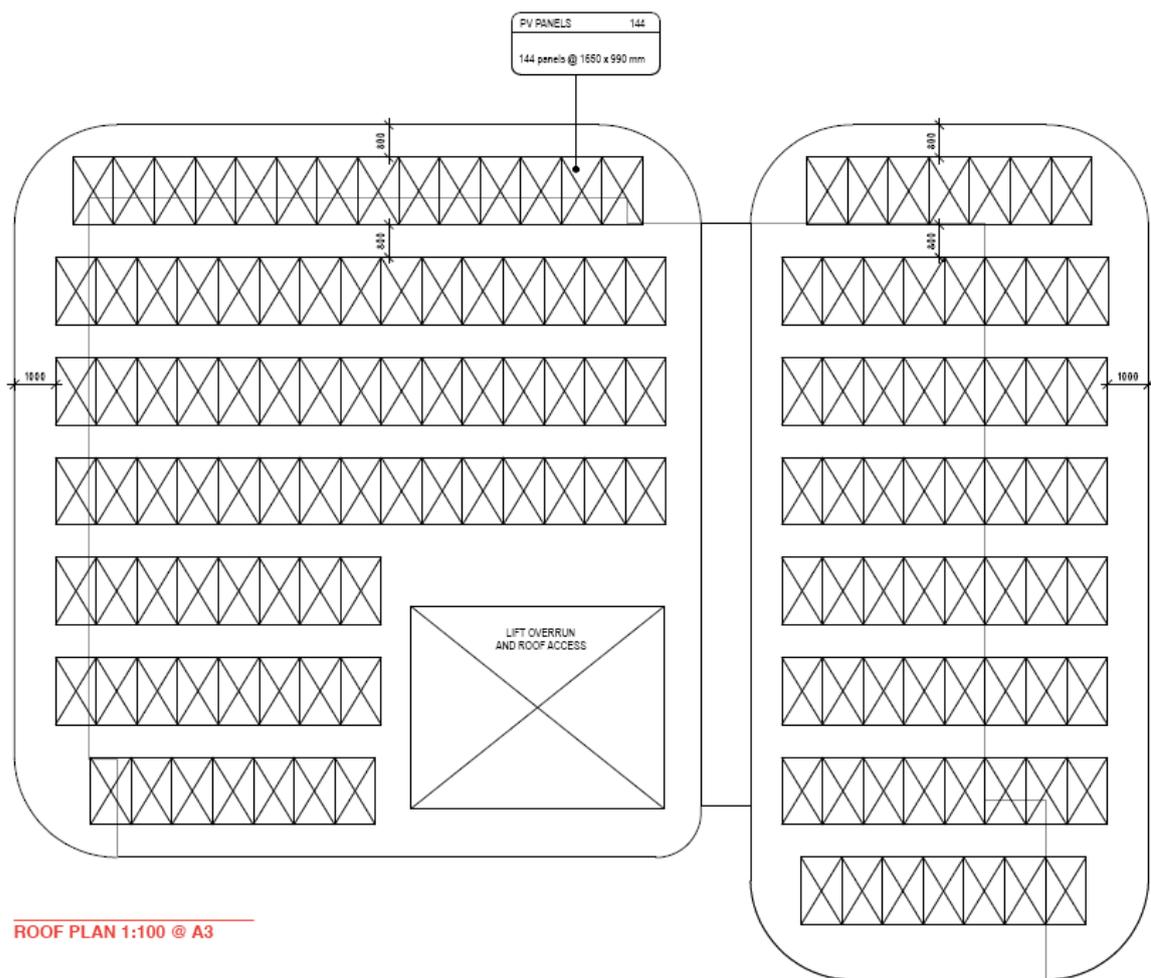
### 3.8 Landscape and Biodiversity

The following landscape and biodiversity initiatives are included:

1. The strategic use of landscape and green walls in common terrace areas, to reduce the heat island effect at podium level, and to introduce the notion of biodiversity.
2. The use of extensive green walls at ground and podium levels, to reduce the internal heat loads, improve common area air quality, and to promote the notion of biodiversity.

4 Solar PV Design Development

The solar PV system has been subject to design development with the panel mounting angles, spacing, and general arrangement co-ordinated to maximise the potential renewable energy yield. This has resulted in the proposed deployment of a 144-panel array, with each panel having a plated capacity of 270W. The combined rated system capacity is therefore 39kW.





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## 5 Façade Design Development

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### 5.1 Introduction

The purpose of this section of the report is to summarise the results of the computer building simulation work that has been undertaken to inform the design development of the building façade.

### 5.2 Methodology

A typical mid-tower, west facing apartment has been modelled for the purposes of façade design development. The west elevation is considered to be subject to the most significant heat loads and so has been used to determine a worst-case scenario.

The building has been constructed as a dynamic model using IES Virtual Environments Software, which is a globally recognised leading software programme and BESTEST Certified. In addition, the apartments have been built using FirstRate 5 software, in order to generate a NaTHERS predicted rating for code compliance purposes.

The modelling has been undertaken following our third party verified quality management system, verified under the Green Building Council of Australia Recognised Provider programme.

Multiple façade design approaches have been modelled, in order to determine the relative merits of each façade design approach, and the modelling re-run until an optimal solution has been established.

### 5.3 Criteria

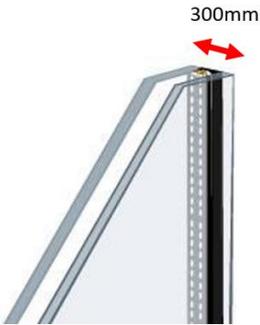
The following criteria has been applied to determine the options for modelling:

1. The glass reflectance needs to be “low” to avoid a reflective or mirror appearance (*reflectance therefore needs to be less than 20%*), and generally clear/neutral in colour (*to provide a residential rather than commercial building aesthetic*).
2. The materials and design approach used can be innovative, but needs to be practicable using Adelaide-based trades.
3. The materials and design approach needs to be affordable so that the project remains commercially viable.
4. In order to deliver the building aesthetic required by the Client and Tectvs, the inclusion of protruding horizontal or vertical shade systems is prohibited. The solution is required to maintain a “sheer” façade aesthetic.
5. The finalised solution “meets ODASA requirements”. This is considered to be achieved if the finalised solution introduces an element of innovation to manage the load on west facing elevations.
6. The resultant NaTHERS rating is 7.0 Stars or higher (with 6.0 Stars average being the BCA minimum code compliance required).

#### 5.4 Initial Options Modelling

The following options have been modelled:

Option	Description
<p>1</p> 	<p>As a reference case, with high performance single glazing only. Viridian Enviroshield ITO Neutral 54 (#4), 10.76mm thick. 6% reflectance. SHGC 0.44.</p> <ul style="list-style-type: none"> <li>- Does not meet ODASA requirements</li> <li>- Thermal load: 117.7 MJ/sqm</li> <li>- NaTHERS: 5.2 Stars (<i>does not comply with BCA</i>)</li> </ul>
<p>2</p> 	<p>High performance insulated double glazing system. Chevron Cardinal (Neat) 6mm LoE<sup>3</sup>-366, 12mm air gap, 6mm clear. 11% reflectance. SHGC 0.27.</p> <ul style="list-style-type: none"> <li>- Does not meet ODASA requirements</li> <li>- Thermal load: 72.4 MJ/sqm</li> <li>- NaTHERS: 6.9 Stars (<i>15% better than BCA</i>)</li> </ul>
<p>3</p> 	<p>High performance insulated double glazing system. Chevron Cardinal (Neat) 6mm LoE<sup>3</sup>-366, 12mm argon gap, 6mm clear. 11% reflectance. SHGC 0.27.</p> <ul style="list-style-type: none"> <li>- Does not meet ODASA requirements</li> <li>- Thermal load: 68.7 MJ/sqm</li> <li>- NaTHERS: 7.1 Stars (<i>18% better than BCA</i>)</li> </ul>
<p>4</p> 	<p>High performance insulated double glazing system. Chevron Cardinal (Neat) 6mm LoE<sup>3</sup>-366, 12mm air gap, 6mm clear. 11% reflectance. SHGC 0.27.</p> <p>Integrated adjustable interstitial venetian blind. <i>Note: the final system selection will have a deeper air gap to accommodate the blind system. A 12mm air gap has been modelled as a conservative scenario.</i></p> <ul style="list-style-type: none"> <li>- Can be presented as an integrated, innovative solution – meeting ODASA requirements</li> <li>- Thermal load: 51.4 MJ/sqm</li> <li>- NaTHERS: 7.8 Stars (<i>30% better than BCA</i>)</li> </ul>

Option	Description
<p>5</p> 	<p>High performance insulated double glazing system. Chevron Cardinal (Neat) 6mm LoE<sup>3</sup>-366, 12mm air gap, 6mm clear. 11% reflectance. SHGC 0.27.</p> <p>300mm deep reveal (<i>which could be a “lost” reveal between panes, to maintain the sheer appearance of the elevation</i>).</p> <ul style="list-style-type: none"> <li>- Does not meet ODASA requirements</li> <li>- Thermal load: 71.8 MJ/sqm</li> <li>- NaTHERS: 6.9 Stars (<i>15% better than BCA</i>)</li> </ul>
<p>6</p> 	<p>High performance insulated double glazing system. Chevron Cardinal (Neat) 6mm LoE<sup>3</sup>-366, 12mm air gap, 6mm clear. 11% reflectance. SHGC 0.27.</p> <p>Additional layer of 10.76mm laminated glass with a 50% frit (or alternatively a solar PV glass) to form a veil.</p> <ul style="list-style-type: none"> <li>- Meets with ODASA requirements</li> <li>- Thermal load: 61.7 MJ/sqm</li> <li>- NaTHERS: 7.3 Stars (<i>22% better than BCA</i>)</li> <li>- PV option generates 30,000 kWhr annually (30 T CO<sub>2</sub>)</li> </ul>
<p>7</p> 	<p>High performance insulated double glazing system. Chevron Cardinal (Neat) 6mm LoE<sup>3</sup>-366, 12mm air gap, 6mm clear. 11% reflectance. SHGC 0.27.</p> <p>Introduce a 5° angle to the elevation (<i>either as a whole or with serrations</i>).</p> <ul style="list-style-type: none"> <li>- Potentially ODASA compliant as it is an alternative façade design and there are other Adelaide precedents (<i>e.g. University of Adelaide IPAS building</i>)</li> <li>- Thermal load: 71.1 MJ/sqm</li> <li>- NaTHERS: 6.9 Stars (<i>15% better than BCA</i>)</li> </ul>

Option	Description
<p>8</p> 	<p>High performance insulated double glazing system. Chevron Cardinal (Neat) 6mm LoE<sup>3</sup>-366, 12mm air gap, 6mm clear. 11% reflectance. SHGC 0.27.</p> <p>Apply an external green shading system. <i>This is assumed to be providing up to 50% shading to maintain occupant views to outside.</i></p> <ul style="list-style-type: none"> <li>- Meets with ODASA requirements</li> <li>- Thermal load: 62.9 MJ/sqm</li> <li>- NaTHERS: 7.3 Stars (22% better than BCA)</li> </ul>

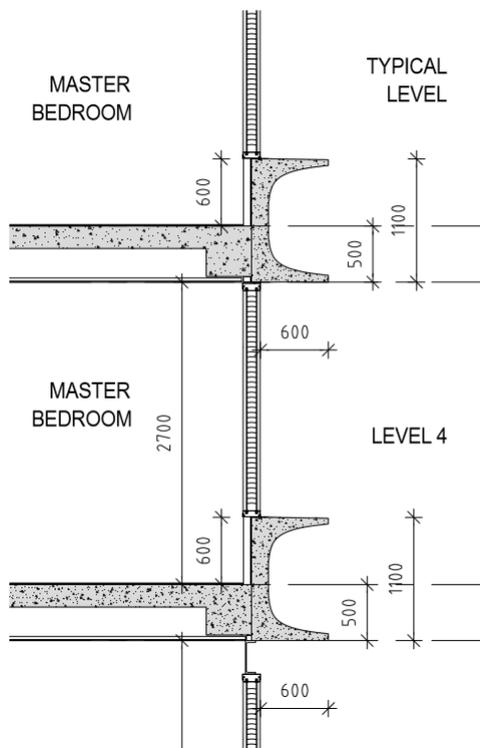
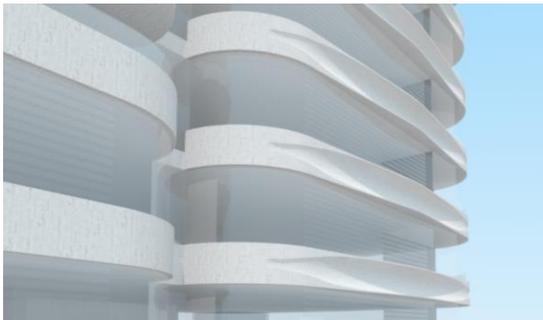
### 5.5 Comparison

The comparative performance results are as follows:

Option		ODASA Compliant	Thermal Load (MJ/sqm)	NaTHERS Rating (Stars)	% better than BCA
1	Single glazing	No	117.7	5.2	(none)
2	Double glazing – air filled	No	72.4	6.9	15%
3	Double glazing – argon filled	No	68.7	7.1	18%
<b>4</b>	<b>Double glazing – interstitial blinds</b>	<b>Yes</b>	<b>51.4</b>	<b>7.8</b>	<b>30%</b>
5	Double glazing – 300mm deep reveal	No	71.8	6.9	15%
6	Double glazing – external frit veil or PV glass	Yes	61.7	7.3	22%
7	Double glazing – serrated elevation	Yes	71.1	6.9	15%
8	Double glazing – green shading	Yes	62.9	7.3	22%

### 5.6 Option Design Development

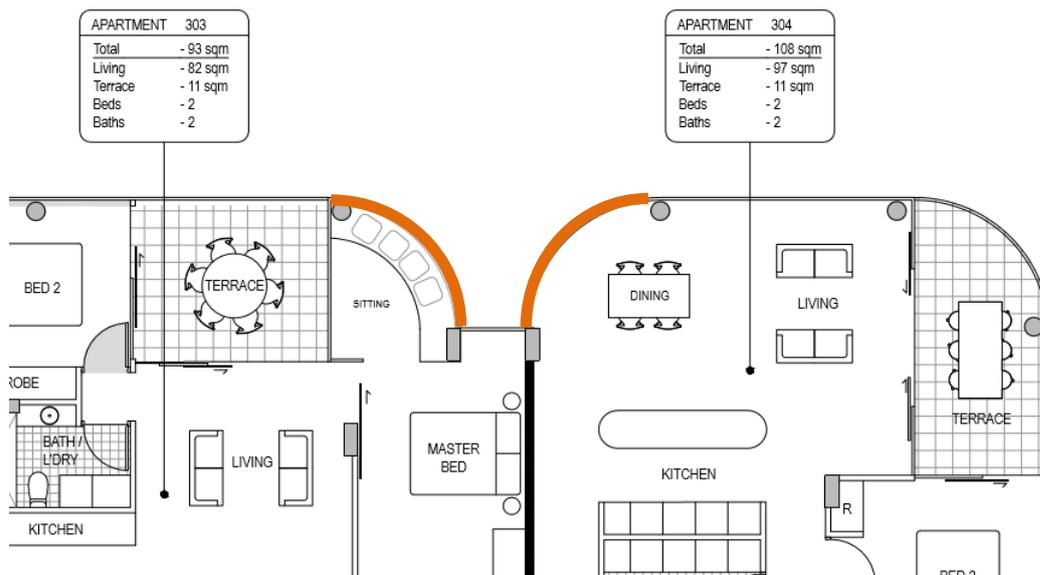
Option 7 – “high performance double glazing with interstitial blinds”, has been selected as the preferred option for design development and was presented to the ODASA Design Review Panel for review. This review identified an opportunity to optimise the design approach by utilising the proposed concrete form as an external shading device. This has now been documented as follows:



The modelled NaTHERS result is an annual average thermal load of 45.9 MJ/sqm, achieving an 8 Star NaTHERS rating which is 33% better than the minimum code requirement.

### 5.7 Electro-chromic glass

During design development, the deployment of electro-chromic glass has been identified for glazed areas which face each other from different apartment owners, in order to provide visual privacy. Electro-chromic glass is normally obscure but can be made clear when a small electric current is passed through it.



Example location



Electro-chromic glass can also provide a reduction in solar heat gain but this benefit has not been included in the modelling undertaken.



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## 5.8 Conclusion

The façade design which includes a high performance double glazing system including an interstitial blind system provides the highest level of thermal performance, offering a solution which maximises daylight access and views, and an average NaTHERS rating of 8 Stars, which is 33% better than BCA code minimum compliance.

This level of performance is better than façade veil systems, serrated façade designs, and the deployment of green shading. *The biodiversity benefit of green shading is recognised by the Client, and instead extensive landscaping and green walls are proposed to be included in the podium and street level spaces, where they can be adequately shaded and maintained.*

This level of performance is also better than façade solar PV glass systems. *The greenhouse gas emissions (carbon) reduction benefit of a solar PV façade system is recognised by the Client, and instead a large scale (40kW) solar PV array will be installed at roof level. Whilst being smaller in physical size than a façade glazing array, the roof array efficiency will be significantly higher resulting in an annual generation capacity in the order of 64,000kWhr (64 T CO<sub>2</sub>) which is more than double the façade system generation rate.*

In conclusion, it is proposed that the façade design comprises:

- a high performance insulated double glazing system, with a fully adjustable interstitial venetian blind. Glazing system to be Chevron Cardinal (Neat) or equal approved, comprising 6mm LoE<sup>3</sup>-366, 12mm air gap minimum (*or deeper to accommodate the blind system*), 6mm clear. 11% reflectance. SHGC 0.27.
- The use of electro-chromic glass in select locations for apartment owner privacy.

5.9 Precedents

Precedent for the use of sheer high-performance facades with interstitial blinds, in order to adequately suppress thermal loads whilst maximising daylight access and views include:

		<p><b>200 George Street, Sydney</b></p> <p>New high-rise development with a sheer double-glazed façade and interstitial blinds.</p> <p>The blinds are automatically controlled in conjunction with façade mounted solar incidence sensors.</p> <p>The resultant workplace fitout for Ernst &amp; Young is targeting a 6 Star Green Star rating and a WELL Building rating.</p>
		<p><b>1 Bligh, Sydney</b></p> <p>High-rise development completed in 2014, including a sheer double-glazed system with integrated interstitial blinds.</p> <p>Certified 6 Star Green Star As-Built.</p>

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Adelaide SA 5000



Tectvs Pty Ltd  
167 Flinders St  
ADELAIDE SA 5000

30<sup>th</sup> November 2017

Dear Heather,

**PROPOSED RESIDENTIAL DEVELOPMENT, 2 HUTT ST  
RESULTANT WIND EFFECTS AT STREET LEVEL**

This report is in relation to the proposed development at the corner of East Tce and Hutt St and presents an opinion on the likely impact of the proposed development on the wind environment on the critical areas within and around the proposed development. The impact of wind activity is examined for wind from the north, south, east and west. The analysis of the wind effects relating to the proposal was carried out in the context of local wind climate, building morphology and land topography.

The conclusions of this report are drawn from experience in this field, and based upon examination of the architectural drawings which have been prepared by Tectvs. No wind tunnel testing has been undertaken. As such, this report addresses only the general wind effects and any localised effects that are identifiable by visual inspection. Any recommendations in this report are made only in principle and are based upon our experience in the study of wind environment effects around buildings.

***Wind Climate of the Adelaide Region***

The Adelaide region is subject to varied winds from different directions at different times of the day and at different times of the year. These variables are measured at the Adelaide Airport and the data is presented in the form of Wind Roses. The wind roses are included as appendix A. It is clear that the critical wind directions are North Northeast in the mornings and the Southwest in the afternoon.



**Wind Effects on People**

The acceptability of wind in any area is dependent upon its use. The following table describes the effects of various wind intensities on people (Penwarden, 1975)

Type of Winds	Beaufort Number	Gust Speed (m/s)	Effects	Applicability
Calm, light air	1	0 - 1.5	Calm, no noticeable wind	Generally acceptable for Stationary, long exposure activities such as in outdoor restaurants, landscaped gardens and open air theatres.
Light breeze	2	1.6 - 3.3	Wind felt on face	
Gentle breeze	3	3.4 - 5.4	Hair is disturbed, Clothing flaps	
Moderate breeze	4	5.5 - 7.9	Raises dust, dry soil and loose paper - Hair disarranged	Generally acceptable for walking & stationary, short exposure activities such as window shopping, standing or sitting in plazas.
Fresh breeze	5	8.0 - 10.7	Force of wind felt on body	Acceptable as a main pedestrian thoroughfare
Strong breeze	6	10.8 - 13.8	Umbrellas used with difficulty, Hair blown straight, Difficult to walk steadily, Wind noise on ears unpleasant.	Acceptable for areas where there is little pedestrian activity or for fast walking.
Near Gale	7	13.9 - 17.1	Inconvenience felt when walking.	
Gale	8	17.2 - 20.7	Generally impedes progress, Great difficulty with balance.	Unacceptable as a public accessway.
Strong gale	9	20.8 - 24.4	People blown over by gusts.	Completely unacceptable.

The criteria for acceptance of wind conditions for various activities is shown in the table below:

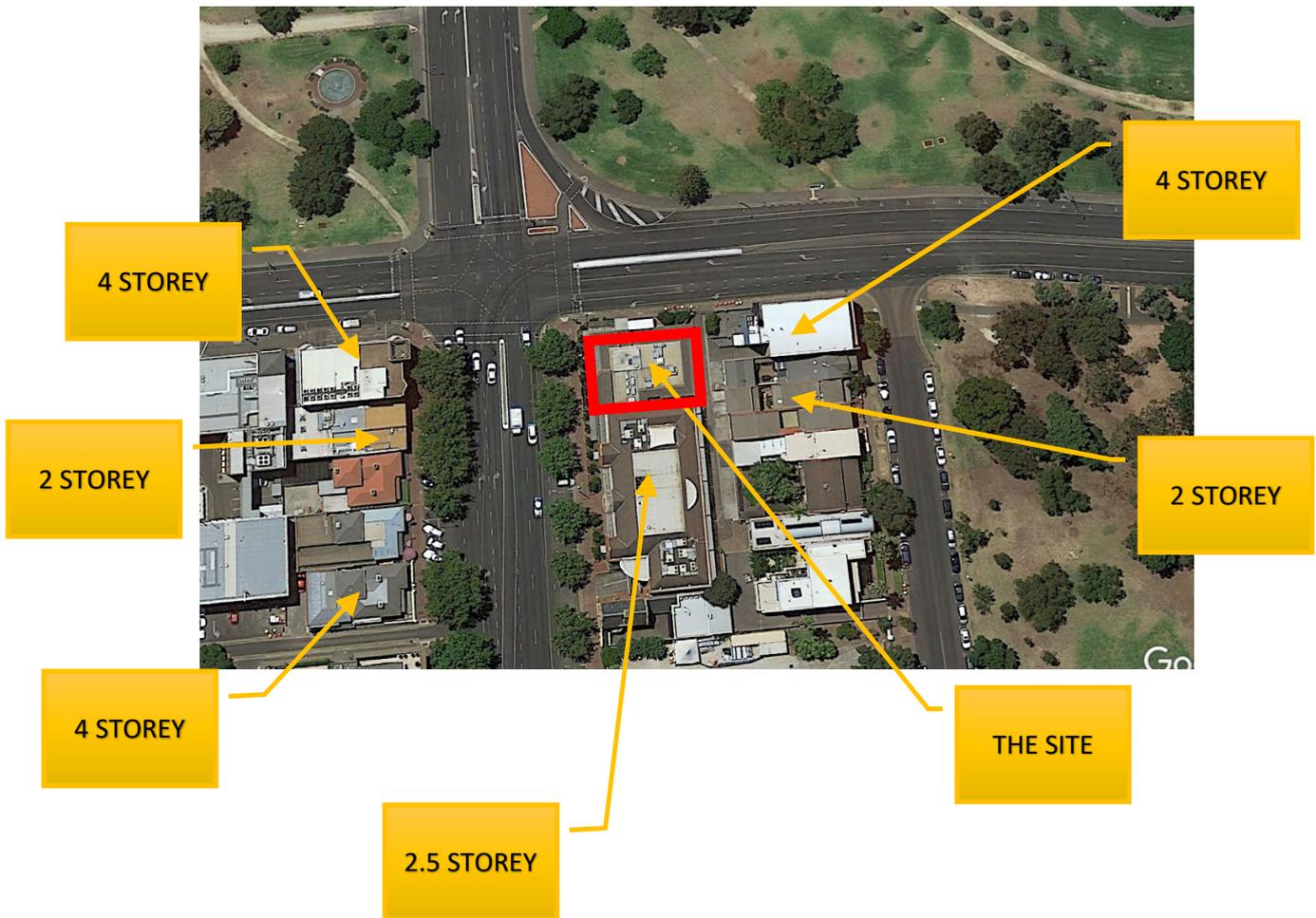
Comfort Criteria	Beaufort Scale Equivalent
Safety	9 – Strong Gale
Walking	5 – Fresh Breeze
Standing	4-5 – Moderate to Fresh Breeze
Sitting	<4 – Moderate Breeze



**Description of the proposed Development and Surrounds**

The proposed development consists of a 19 storey apartment building. The building footprint is approximately 27.5 x 21 metres and covers the site to the street boundaries on the east, north and west sides and against an existing two level office building to the north. The tower is immediately bounded by existing buildings in the range of 2 to 5 storeys There is a 4 storey apartment

The surrounding topography is gently sloping to the northeast – Rymill Park Lake.



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### **Assessment and Discussion**

The interaction between the prevailing winds and the building morphology has been considered.

#### *Hutt St Footpaths*

For westerly winds Hutt St footpaths benefit from shielding provided by the proposed veranda on the west of the building. Upwind in the south western quadrant are several medium rise buildings. Winds from the south westerly quadrant are shielded at low levels by several existing buildings up to 4 storeys, and will be further softened by buildings currently under construction in the near vicinity. Northerly wind is open to the parklands and will tend to funnel down Hutt street. Downwash from the proposed tower is disrupted by indented balconies and protruding surface features and a street level veranda is proposed to protect pedestrians.

#### *East Tce Footpath*

North-easterly quadrant and north-westerly quadrant winds are not shielded, flowing in from the parklands. Downwash on this northern façade is disrupted by indented balconies and protruding surface features and a street level veranda is proposed to protect pedestrians.

#### *Cleo Lane*

North-easterly quadrant winds are not shielded, flowing in from the parklands. South easterly quadrant winds are shielded at low level. Downwash on the eastern façade is disrupted by indented balconies and protruding surface features and a street level pergola structure is proposed to protect pedestrians.

### **Summary**

The site is situated within a local pedestrian movement zone as defined in the City of Adelaide Smart Move Strategy. The main pedestrian activity considered to be people walking from parked cars into the city during the working week or alternatively to the parklands on weekends.

Wind impact from the proposed development is assessed as negligible to minor to pedestrian traffic on Rundle St and East Tce.

The relevant provisions of the City of Adelaide Development plan, consolidated on 2 April 2015. are as follows:

**PDC 119** Development should be designed and sited to minimise micro-climatic and solar access impact on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow.

**PDC 125** Development that is over 21 metres in building height and is to be built at or on the street frontage should minimise wind tunnel effect.

**Design Techniques** (these are ONE WAY of meeting the above Principle)

**125.1** Methods to reduce the potential for a wind tunnel effect may include:

- (a) a podium built at the base of a tall tower and aligned with the street to deflect wind away from the street;
- (b) substantial verandahs around a building to deflect downward travelling wind flows; and/or
- (c) placing one building windward of another building.

The development has been designed incorporating both methods (a) and (b).

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Given the level of pedestrian activity, and minor to negligible wind impact the development is considered to be in keeping with these provisions in that it will create minimal wind tunnel effects, and have minimal detrimental effect on pedestrians.

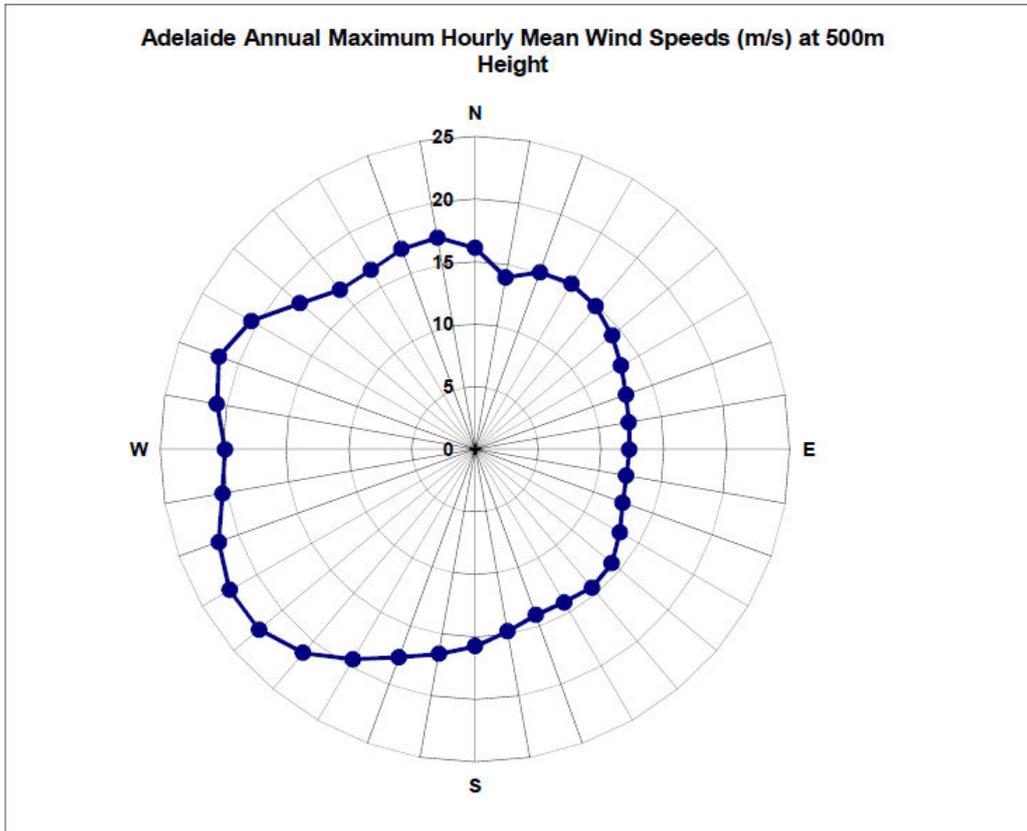
Regards,

A handwritten signature in blue ink, appearing to read 'Jon Rudd', written in a cursive style.

Jon Rudd  
Partner



**APPENDIX A –**



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**APPENDIX B**

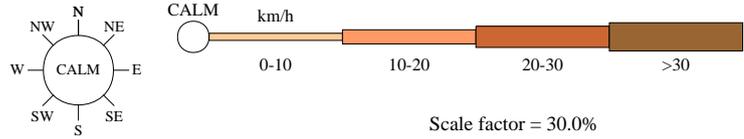
**WIND ROSES**

# WIND FREQUENCY ANALYSIS (in km/h)

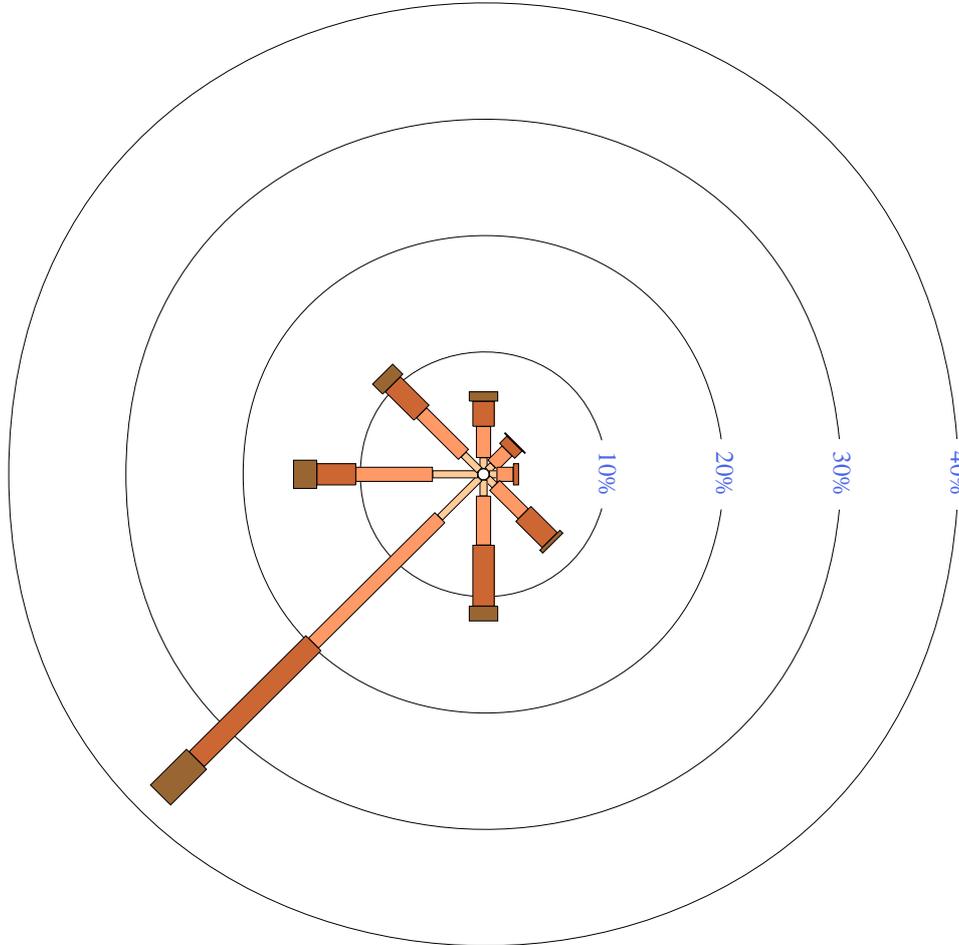
ADELAIDE AIRPORT STATION NUMBER 023034

Latitude: -34.95 ° Longitude: 138.52 °

3 pm Autumn  
4598 Total Observations (1955 to 2004)



Calm 2%



Wind directions are divided into eight compass directions. Calm has no direction.

An asterisk (\*) indicates that calm is less than 1% .

An observed wind speed which falls precisely on the boundary between two divisions (eg 10km/h) will be included in the lower range (eg 1-10 km/h). Only quality controlled data have been used.



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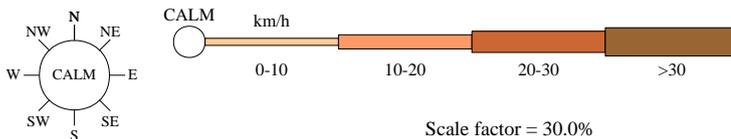
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# WIND FREQUENCY ANALYSIS (in km/h)

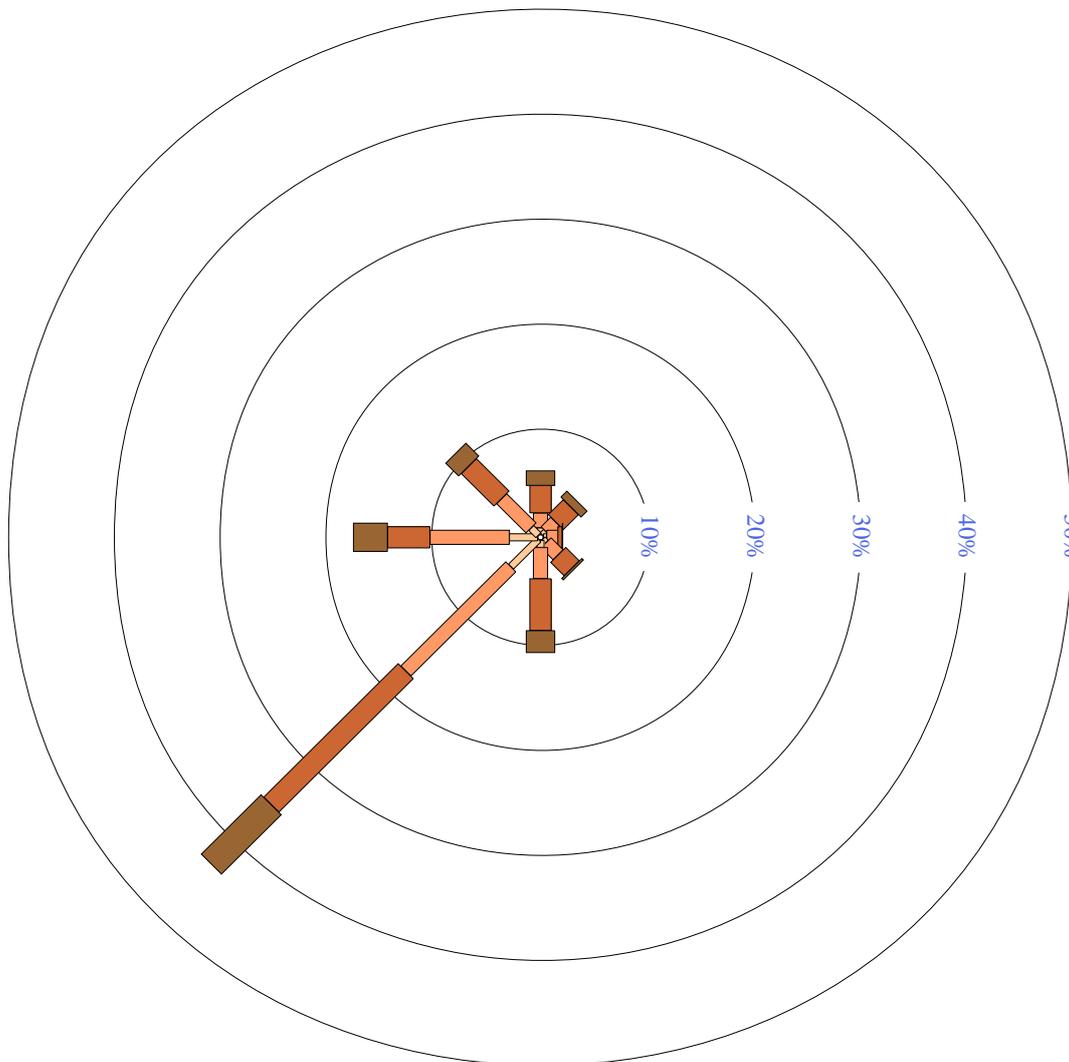
ADELAIDE AIRPORT STATION NUMBER 023034

Latitude: -34.95 ° Longitude: 138.52 °

3 pm Spring  
4424 Total Observations (1955 to 2004)



Calm 1%



Wind directions are divided into eight compass directions. Calm has no direction.

An asterisk (\*) indicates that calm is less than 1% .

An observed wind speed which falls precisely on the boundary between two divisions (eg 10km/h) will be included in the lower range (eg 1-10 km/h). Only quality controlled data have been used.



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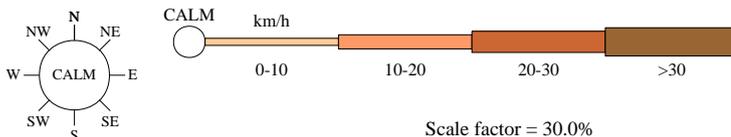
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# WIND FREQUENCY ANALYSIS (in km/h)

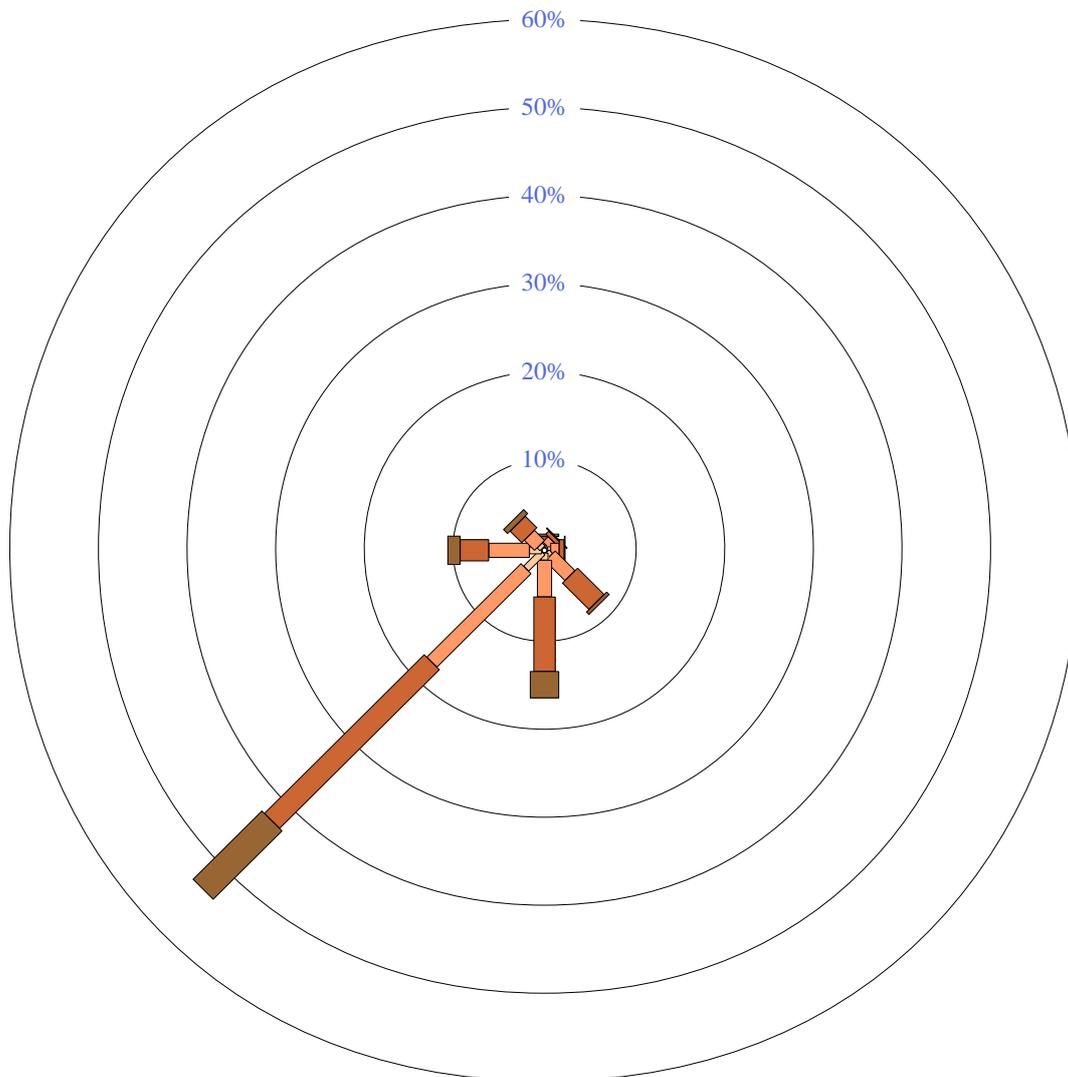
ADELAIDE AIRPORT STATION NUMBER 023034

Latitude: -34.95 ° Longitude: 138.52 °

3 pm Summer  
4348 Total Observations (1955 to 2004)



Calm 1%



Wind directions are divided into eight compass directions. Calm has no direction.

An asterisk (\*) indicates that calm is less than 1% .

An observed wind speed which falls precisely on the boundary between two divisions (eg 10km/h) will be included in the lower range (eg 1-10 km/h). Only quality controlled data have been used.



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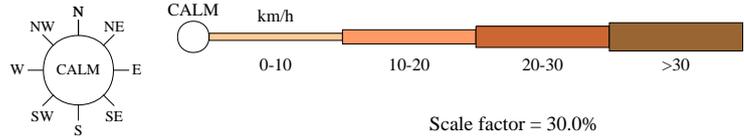
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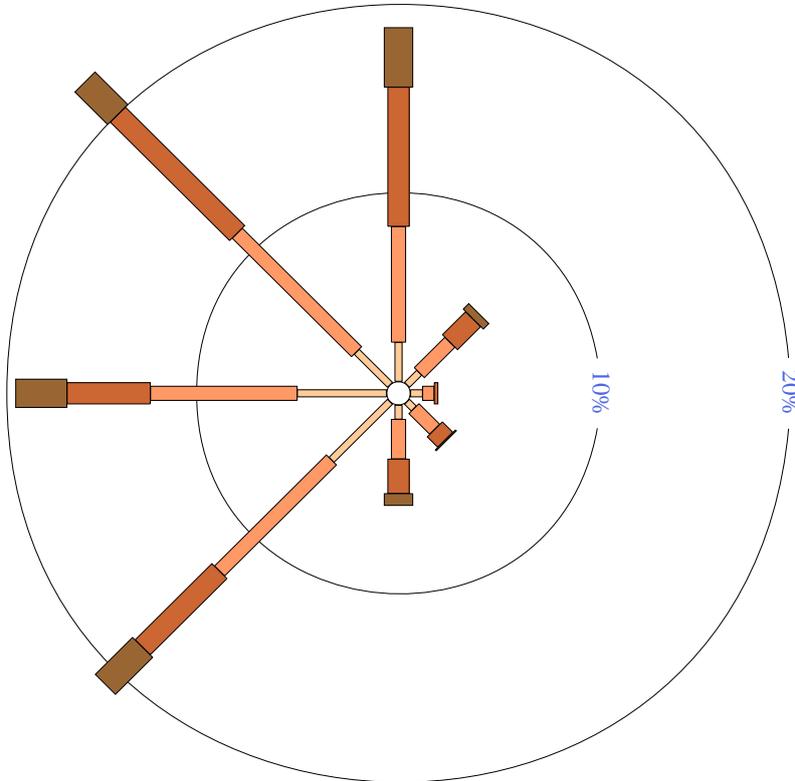
**WIND FREQUENCY ANALYSIS (in km/h)**  
**ADELAIDE AIRPORT STATION NUMBER 023034**

Latitude: -34.95 ° Longitude: 138.52 °

3 pm Winter  
 4507 Total Observations (1955 to 2004)



Calm 3%



Wind directions are divided into eight compass directions. Calm has no direction.

An asterisk (\*) indicates that calm is less than 1% .

An observed wind speed which falls precisely on the boundary between two divisions (eg 10km/h) will be included in the lower range (eg 1-10 km/h). Only quality controlled data have been used.



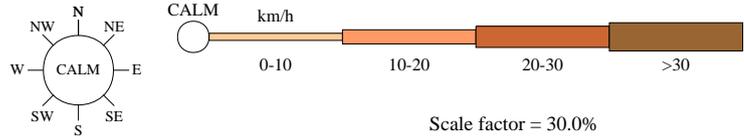
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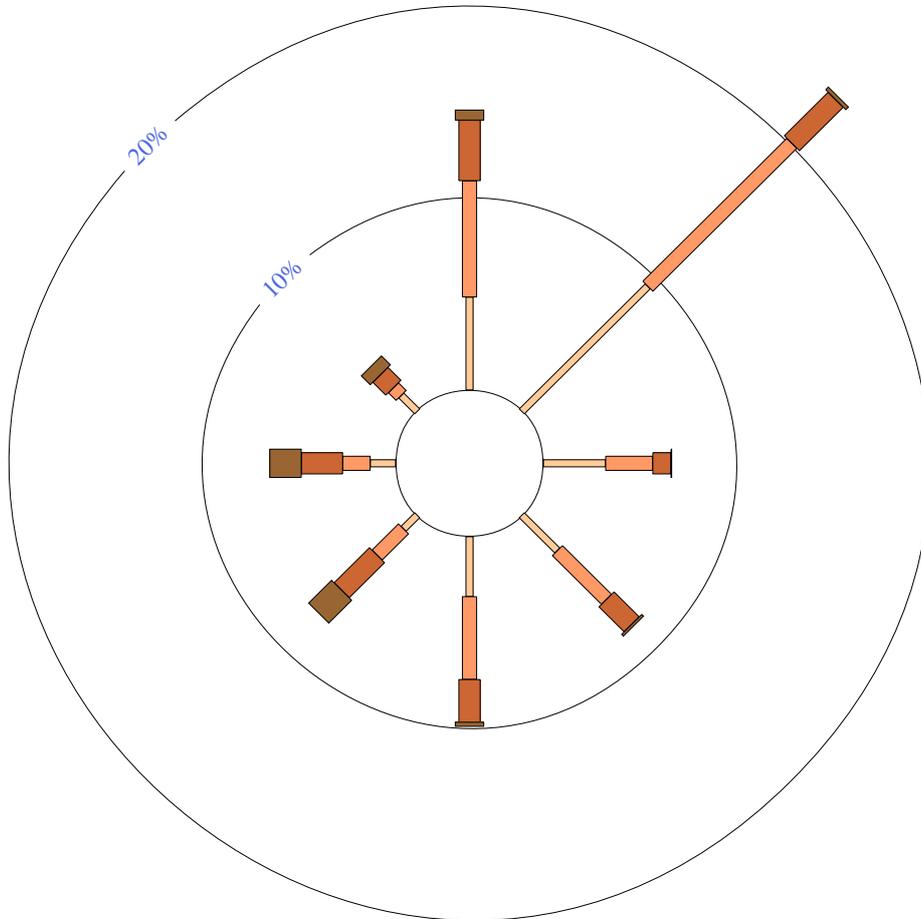
**WIND FREQUENCY ANALYSIS (in km/h)**  
**ADELAIDE AIRPORT STATION NUMBER 023034**

Latitude: -34.95 ° Longitude: 138.52 °

9 am Autumn  
 4594 Total Observations (1955 to 2004)



Calm 19%



Wind directions are divided into eight compass directions. Calm has no direction.

An asterisk (\*) indicates that calm is less than 1% .

An observed wind speed which falls precisely on the boundary between two divisions (eg 10km/h) will be included in the lower range (eg 1-10 km/h). Only quality controlled data have been used.



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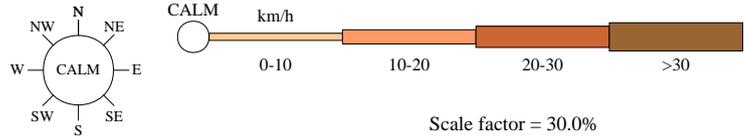
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# WIND FREQUENCY ANALYSIS (in km/h)

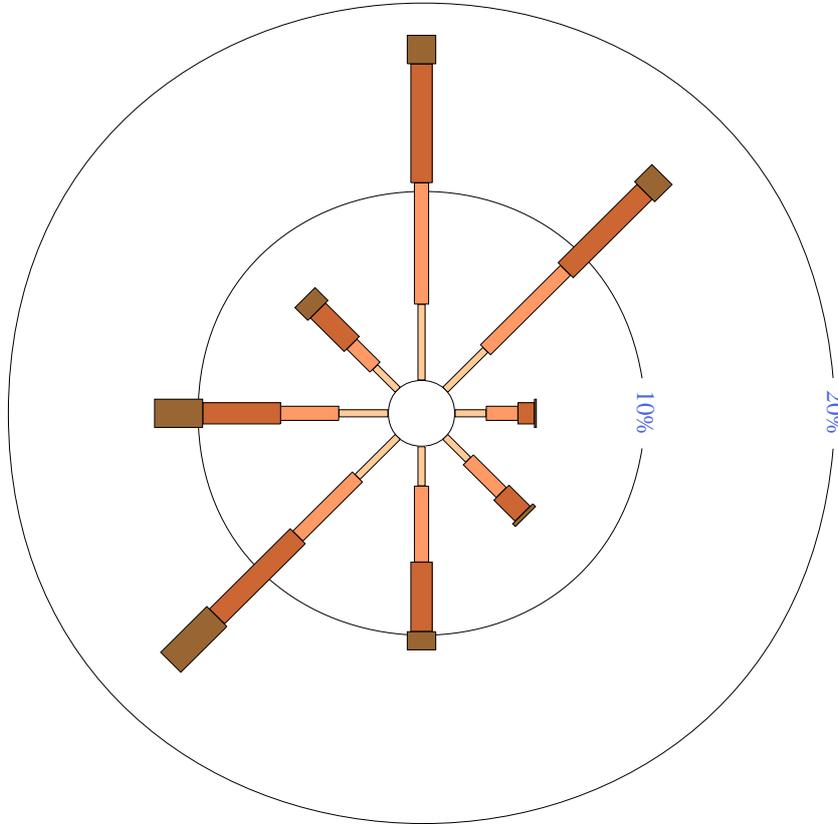
ADELAIDE AIRPORT STATION NUMBER 023034

Latitude: -34.95 ° Longitude: 138.52 °

9 am Spring  
4423 Total Observations (1955 to 2004)



Calm 9%



Wind directions are divided into eight compass directions. Calm has no direction.

An asterisk (\*) indicates that calm is less than 1% .

An observed wind speed which falls precisely on the boundary between two divisions (eg 10km/h) will be included in the lower range (eg 1-10 km/h). Only quality controlled data have been used.



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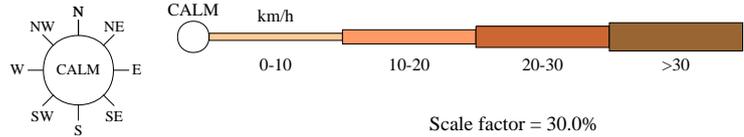
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# WIND FREQUENCY ANALYSIS (in km/h)

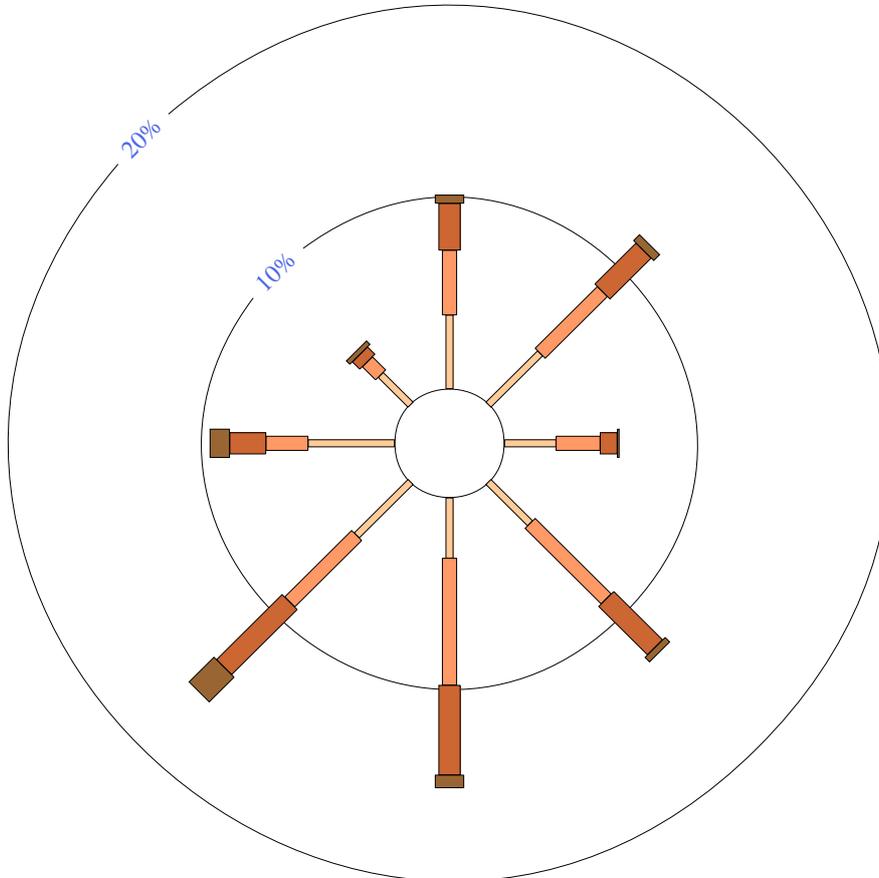
ADELAIDE AIRPORT STATION NUMBER 023034

Latitude: -34.95 ° Longitude: 138.52 °

9 am Summer  
4346 Total Observations (1955 to 2004)



Calm 14%



Wind directions are divided into eight compass directions. Calm has no direction.

An asterisk (\*) indicates that calm is less than 1% .

An observed wind speed which falls precisely on the boundary between two divisions (eg 10km/h) will be included in the lower range (eg 1-10 km/h). Only quality controlled data have been used.



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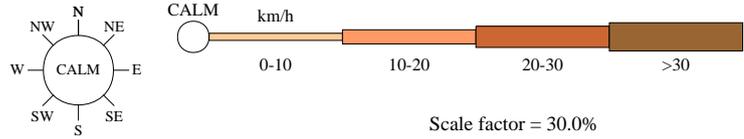
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# WIND FREQUENCY ANALYSIS (in km/h)

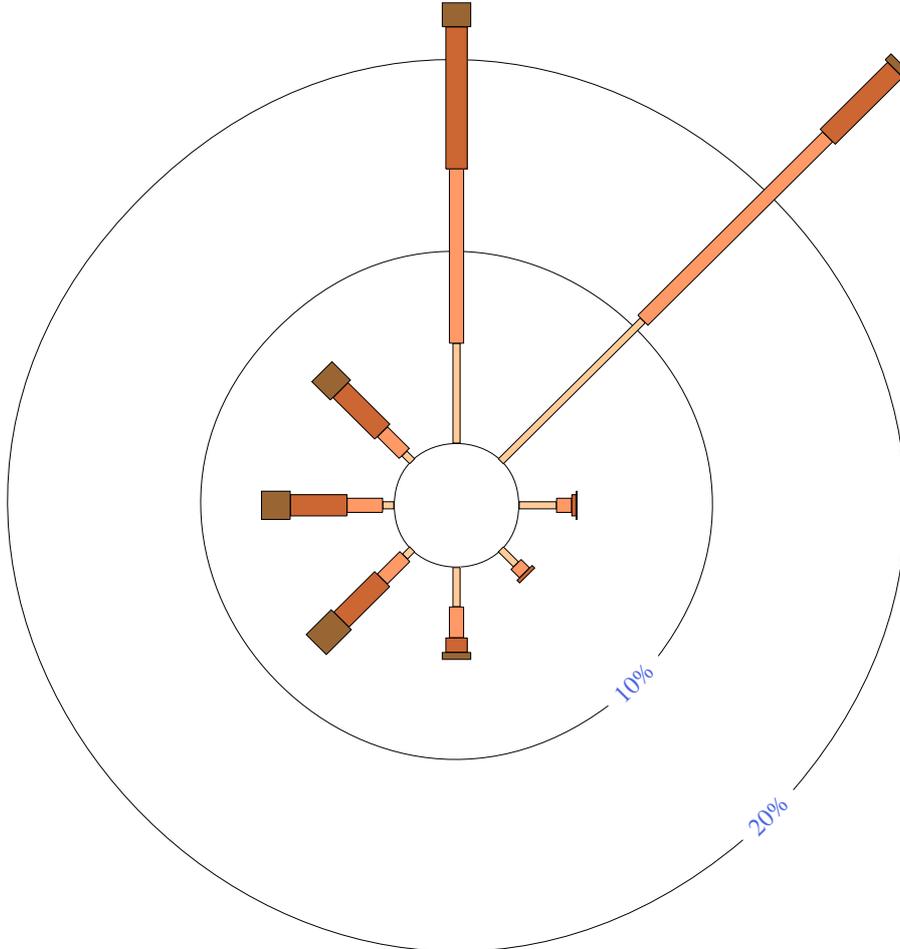
ADELAIDE AIRPORT STATION NUMBER 023034

Latitude: -34.95 ° Longitude: 138.52 °

9 am Winter  
4502 Total Observations (1955 to 2004)



Calm 16%



Wind directions are divided into eight compass directions. Calm has no direction.

An asterisk (\*) indicates that calm is less than 1% .

An observed wind speed which falls precisely on the boundary between two divisions (eg 10km/h) will be included in the lower range (eg 1-10 km/h). Only quality controlled data have been used.



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Tectvs Pty Ltd  
167 Flinders St  
ADELAIDE SA 5000

30<sup>th</sup> November 2017

Dear Heather,

**PROPOSED DEVELOPMENT 2 HUTT ST ADELAIDE  
STORMWATER**

This report discusses the existing site conditions, the proposed development and the council requirements for handling and treatment of stormwater flows resulting from the development of the site.

**Existing site details:**

- Area 578 sqm
- Total Impervious 578 sqm
- Landscaped areas minor sqm

The site falls to the north east corner - approxi.

Discharge to the street drainage system is via:

- steel crossovers to the street kerbs to the north (East Tce)

**Proposed development:**

The proposed development consists of apartments, retail tenancies and associated carparking.

- Area 578 sqm
- Total Impervious 578 sqm
- Landscaped area minor – in planter boxes

**Stormwater System:**

Council has advised that since the impervious proportion of the site remains unaltered that no on site detention of stormwater is required. Refer attached email.

Major flood events (1 in 100 year ARI event) will be catered for by overland flow paths discharging to the surrounding streets. Floor levels on will be set above back of existing footpath levels in accordance with council requirements.

This proposal is consistent with the natural grade on the site.

Refer to the attached sketch drawings SK1 for a schematic stormwater management plan.

Regards,

Jon Rudd  
Partner

N (APPROX)  
↑

EAST TCE

PROPOSAL - RETAIN 2x KOV.B  
DISCHARGE POINTS LOCATE  
APPROXIMATELY AS EXISTING.

EXISTING gip

EXISTING STEEL BOX DRAIN DISCHARGE POINTS

2 HUTT ST

EXISTING SOA

75-804

CLEED LANE

STEEL BOX DRAIN



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2 HUTT ST STORMWATER SCHEMATIC

Drg SW-01

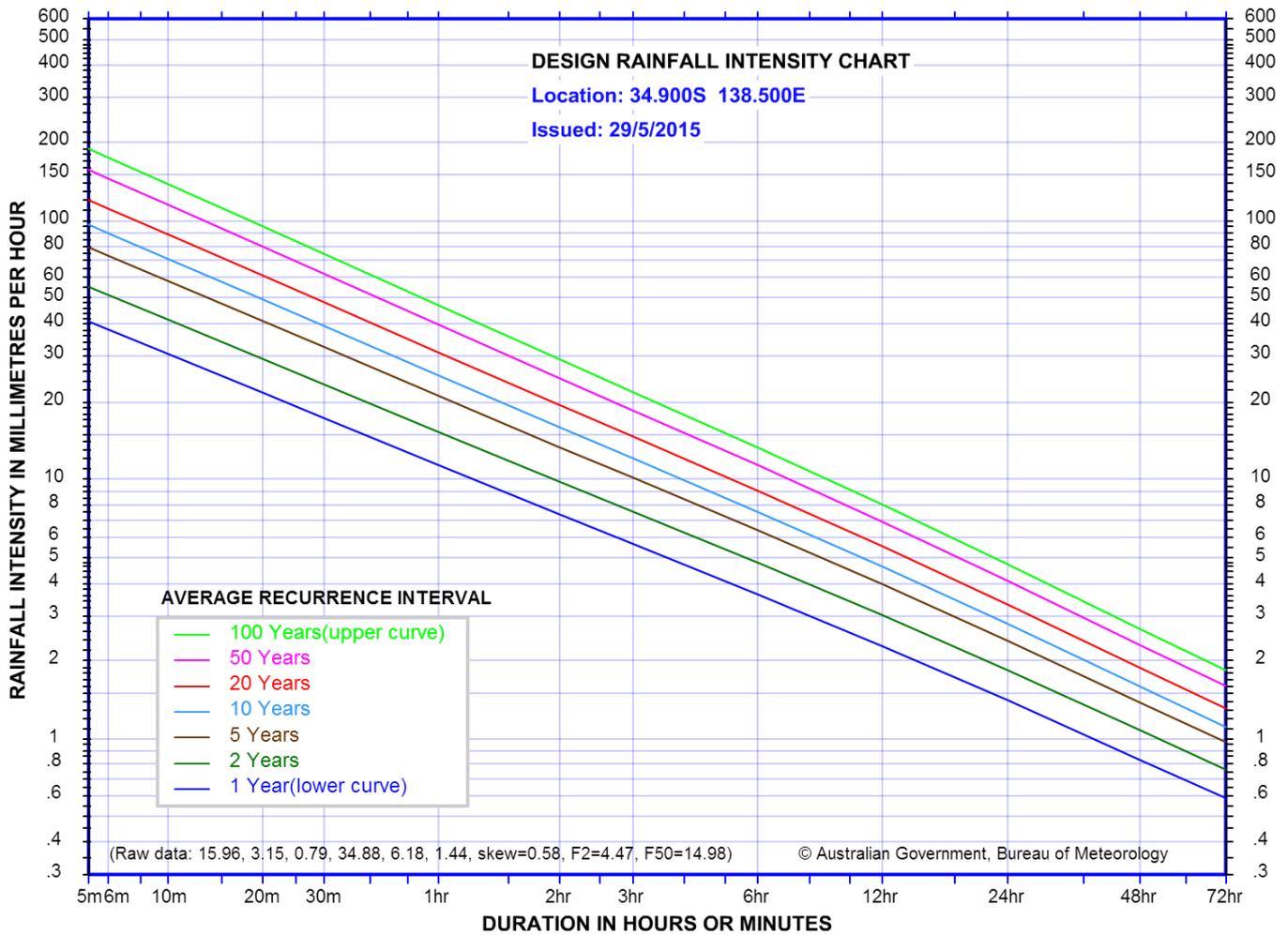
Project: RYMILL APARTMENTS Subject: DISHWASHER RATESDate: NOV. 17 Page      of     CHOOSE KORB DISHWASHER RATES.

SPLIT INTO TO 2 POINTS.

$$\text{AREA} = 578/2$$

20 yr AM - 5 min TEL. 5m storm.

$$\rightarrow q = \frac{1.0 \times 289 \times 120}{3600} = 9.6 \text{ l/s.} \rightarrow \text{acceptable.}$$





### DOCUMENTATION ISSUE REGISTER

REVISION	DESCRIPTION	DATE ISSUED	ENGINEER	REVIEWED
A	Planning Approval Issue	13/12/2017	PC	NAH

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## **1 INTRODUCTION**

---

### **1.1 BUILDING DESCRIPTION**

The subject development site is located on the prominent corner of Hutt Street and East Terrace and abuts Cleo Lane at the eastern rear of the building.

The project involves the construction of a 16 storey plus 2 basement carpark levels residential apartment development comprising the following;

- Basement 1 and 2 levels to house 28 motor vehicles
- Ground/Mezzanine Restaurant and Bar facility with approx. 60 person seating capacity and associated kitchen and ablution areas.
- Ground Floor Entry/Lift Lobby, Bin Store and access to Basement and upper level carpark ramps.
- Levels 1 and 2 – two levels of carpark to house 28 motor vehicles and Bike Storage for 46 bicycles.
- Levels 3 and 4 – 5 off mix of one and two and three-bedroom apartments per level – 10 apartments total.
- Levels 5 – 9 inclusive - 4 off mix of two and three-bedroom apartments per level – 20 apartments total.
- Levels 10 – 12 inclusive – 2 off three-bedroom apartments per level – total 6 sub-penthouses.
- Level 13 – 1 off three-bedroom sub penthouse with a large outdoor terrace including a small lap pool plus the building Fire Tank/Pump Room and Penthouse and Sub Penthouse Pool Plant in the south-eastern corner of the floor.
- Level 14 – 1 off three-bedroom plus Study Penthouse with a large outdoor terrace including a small lap pool.

In summary the development will comprise a total of 38 high quality residential apartments.

## 2 UTILITIES

---

### 2.1 SA POWER NETWORKS ELECTRICAL SUPPLY

Discussions with SA Power Networks (SAPN) has resolved that a dedicated on-site transformer will be required to service the development. Subject to final estimated maximum demand calculations, the transformer will be 500kva rated.

SAPN underground high voltage infrastructure traverses directly past the Hutt Street side of the site. To provide a suitable service connection point to the site, it is proposed to provide a high voltage cut-in and extend a high voltage feed to an on-site transformer positioned at the rear of the building, accessed from the site rear service driveway adjoining Cleo Lane.

It is noted that there is an existing SAPN power pole positioned off East Terrace which requires relocation to provide clear access to the building rear service driveway. Preliminary discussions have been undertaken with SAPN with respect to repositioning the power pole to the east such that the street light over entrance to Cleo Lane can be reinstated on the new pole. The relocation works will also include re-feeding a light pole on the opposite side of East terrace and reconnection of existing low voltage supplies fed from this pole.

ACC will be consulted in relation to providing an alternative street lighting arrangement to illuminate the entrance to Cleo Lane.



*Figure 1 - Details of existing SAPN High Voltage Infrastructure*

### 2.2 COMMUNICATIONS

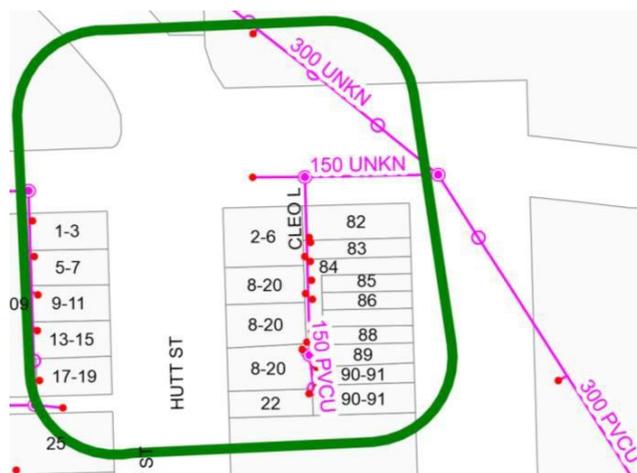
NBN Co have confirmed that their roll-out will have extended to this site by the anticipated completion date. Should timing not be feasible the site has access to Telstra copper communications infrastructure.

## 2.3 SA WATER CORPORATION

### 2.3.1 SEWER INFRASTRUCTURE

The site has access to a 150mm PVC sewer main in both East Terrace and Cleo Lane at the rear.

The fixture loading unit assessment for this development indicates that a single 150mm sewer connection will be sufficient to service the site. The final number of connections may however be dictated by the internal drainage arrangement and will be resolved during detail design.



*Figure 2 - Details of existing SA Water Corp Sewer Mains*

### 2.3.2 DOMESTIC COLD WATER INFRASTRUCTURE

The subject development site is afforded access to SA Water Corporation towns mains on all three street frontages (150mm diameter in Hutt Street and 100mm in both East Terrace and Cleo Lane). Given that the building is more than 8 storeys height, to meet the Water Supply Code of Australia (WSA 03-2011) version 3.1 requirements, SA Water will require that the development is serviced by a minimum of a 200mm towns mains.

Review of the SA Water Corporation Map indicates the presence of a 400mm trunk mains in Bartels Road which provides the feed to the 100mm towns water mains which traverses past the subject development site. Given that the mains upgrade will be derived from the 400mm trunk main, it is expected that the 200mm towns mains will extend as a minimum just past the eastern boundary of the development site. Domestic Cold Water and Fire Services connections will therefore be positioned towards the eastern end of the site.

The fixture loading unit assessment for this development indicates that a 50mm water meter will be required to service the planned development. The water meter will be housed in a cast iron footpath box by SAWC in the footpath off East Terrace. The water meter will be positioned towards the eastern end of the site to suit connection to the proposed upgraded towns mains.

The incoming water main extending from the proposed new 50mm water meter will extend to 2 x 5000 litre capacity break tanks and associated domestic cold water pressure pump assembly, which will be utilised to service all upper levels of building above the carpark levels. Ground and Mezzanine Floors will be fed directly off the towns mains.

A 150mm fire services connection is proposed to be derived from the proposed upgraded towns main in East Terrace to serve the building's combined hydrant and sprinkler systems comprising an on-site booster assembly, attack hydrants in the stairwells, fire tanks and pumps and automatic sprinkler system.



*Figure 3 - Details of existing SA Water Corp Water Mains*

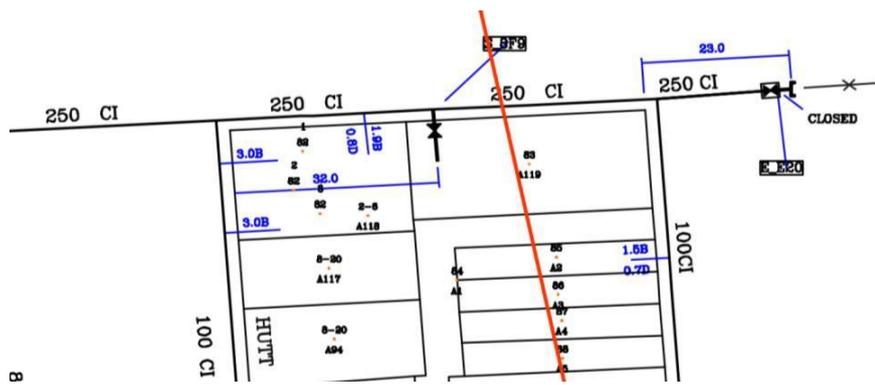
## 2.4 APA GROUP NATURAL GAS INFRASTRUCTURE

The site has access to a 250mm low pressure gas mains in East Terrace and a 100mm low pressure gas mains in Hut Street, both positioned directly adjacent the development site.

Careful consideration has been given to positioning visible infrastructure e.g. fire booster assembly and gas meters such that it does not impact on the aesthetics of the prominent Hutt – East Terrace corner frontage.

Accordingly, the gas meter enclosure will be recessed (flush with façade) positioned at the rear of the building within a fire rated enclosure under the Ground – Mezzanine stairs.

The enclosure will house the gas meters for the Restaurant and Apartment Gas Hot Plates and Bulk Hot Water system.



*Figure 4 - Details of existing APA Natural Gas Mains*

### **3 BUILDING SERVICES**

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#### **3.1 ELECTRICAL & COMMUNICATION SERVICES**

- Connection to on-site transformer low voltage fuse rack and provision of consumers mains to site Main Switchboard comprising building main circuit breaker, master (parent) meter and essential services distribution section. Main Switchboard located within a fire rated Switchboard Room on Ground Floor a rear of the building with dedicated external access.
- Electrical distribution system including fire rated mains to Main Distribution Switchboard located on the carpark Level 2, comprising metering panel comprising embedded (child) meters for the individual apartments, metered sub-mains to each apartment and common area sub-mains.
- Essential services power distribution comprising fire rated sub mains to serve the lifts, stairwell pressurisation and associated air relief fans and fire pump power supplies.
- Apartment and ground floor tenancy circuit boards.
- Lighting, power, communications and MATV/PAY TV installation to each apartment.
- Programmable lighting control system and motion sensor control to common area lighting.
- Common area power distribution system to serve common area and stairwell lighting, carpark lighting and exhaust/fresh air fans and miscellaneous equipment.
- Exit and emergency lighting system complying with the requirements of AS2293.
- Electronic security and access control systems.
- NBN fibre optic network infrastructure servicing the apartments
- Reticulated MATV and PAY TV backbone cabling reticulation to each apartment and Ground Floor tenancy.
- Audio intercom system to each apartment with master intercom station at Ground Floor Main Entry for visitor controlled access to each apartment.
- Energy efficient lighting (LED)
- 39KW PV roof mounted solar array with connection to the building power reticulation system after the Main ( master ) meter.

#### **3.2 FIRE SERVICES**

- Connection to SA Water Corporation towns mains in East Terrace and establishment of a 150mm fire services connection to the site.

- Incoming fire service connection to extend to SAMFS booster recessed into building façade under the Ground-Mezzanine stairs.
- Fire Pump Room on Ground Floor comprising 2 x diesel fire pumps and Fire Services Storage Tanks (approx. 50,000 litres effective capacity) located in a Fire Pump Room located in south-eastern corner of the building on Level 13.
- Diesel Fire Pump located in Basement Hydraulic Services Room to provide a reliable make-up water supply to the Fire Tanks.
- Fire hydrants located within the fire isolated scissor stairs, providing coverage to all areas of the building. Ground coverage provided via connection to booster assembly.
- Automatic fire sprinkler system to serve the entire building. Sprinkler control valve assemblies (one per level) to be located on each residential apartment level in the nominated fire stair. Separate sprinkler control valve assemblies to be provided for the basement carpark levels, upper carpark levels and ground/mezzanine floor. Latter sprinkler control valve assemblies to be positioned in a separate sprinkler control valve enclosure in the Basement Fire Pump Room and be towns main fed. Residential sprinkler valve sets to be fed off the boosted (Fire Pump boosted) system.
- Smoke detection system throughout the building for activation of the smoke control systems and early activation of the occupant warning systems.
- Fire hose reels on ground, mezzanine and all carpark levels and portable fire extinguishers throughout.
- Interfaces with other services for control of building fire mode operations.

### **3.3 HYDRAULIC SERVICES**

- Connection to SA Water Corporation Authority water and sewer infrastructure
- Connection to APA Group Authority gas infrastructure including gas meter enclosure
- Sanitary drainage system comprising multiple sewer stacks and associated relief vents within vertical plumbing ducts within the apartments which will be combined at high level in Level 2 carpark, roll over to sewer stacks within the carpark and continue to Ground floor level offsetting where required to suit the Mezzanine floor plan layout prior to rolling over and combining at high level in Ground floor and dropping at rear of building into the basement where the main sewer drains will connect to the SA Water Corporation connection point (s) in Cleo Lane.
- Waste points to serve miscellaneous equipment including Fire Pump Room, central hot water plant, Bin Room and L13 and L14 swimming pool backwash.
- Domestic Cold Water Break Tanks and associated Pressure Pump Assembly for connection to the building's cold water reticulation system. The Pressure Pump Assembly will comprise 3 x 50% duty pumps. Lower levels of the building up to Level 2 carpark shall be direct towns mains fed.

- Central gas fired storage hot water plant for supply of hot water to the apartments.
- Dedicated electric continuous flow hot water unit to serve the common ablutions on Mezzanine level.
- Cold water supply make-up feed to the L13 Fire Services Storage Tanks.
- Hot and cold reticulation to all apartments comprising hot and cold water risers with sub water meters to apartments. Sub-meters to form part of the building's embedded metering system.
- Hot and cold water supplies to serve the Restaurant/Bar tenancy fed from the building hot and cold water supply with sub meters to each feed.
- Natural gas supply to apartment cooktops and L13 and L14 lap pool heating systems.
- Grease arrestor and trade waste pumping chamber to serve the Ground Floor Kitchen and Mezzanine Catering Kitchen.

### **3.4 MECHANICAL SERVICES**

- Individual reverse cycle ducted air conditioning systems to serve each apartment comprising energy efficient inverter type systems. Associated condensing units will be grouped on each apartment level within an external screened enclosure accessible from the service core.
- Energy efficient variable refrigerant volume type reverse cycle ducted air conditioning systems to serve the Restaurant and Bar areas on Ground and Mezzanine levels. Associated condensing unit will be positioned in a plant area at the rear of the building on Mezzanine level.
- Carpark levels exhaust and fresh air ventilation systems
- Cooking canopy exhaust duct provisions with pre-treatment systems prior to discharge as required.
- Ducted rangehood exhaust system to each apartment with discharge directed to the façade adjacent the apartment served.
- Ducted bathroom and laundry exhaust system to each apartment with discharge directed to the facade adjacent the apartment served.
- Miscellaneous exhaust systems to serve common ablution area, Fire Pump Room and Bin Room.
- Stairwell pressurisation system (1 per stairwell) comprising roof mounted exhaust fan/ductwork assemblies with connection to builder's shaft comprising supply grilles in stairwell at every 2<sup>nd</sup> level.

- Mechanical air relief system forming part of the stairwell pressurisation system comprising 4 x in-line axial fans in the ceiling space of the common residential passage (2 each side of lift shaft) with discharge directed to wall discharge louvres located on the southern side of the building. A similar arrangement will be provided to the Mezzanine level with connection to a wall discharge louvre on the northern side of the building.

### **3.5 VERTICAL TRANSPORTATION SERVICES**

- The building will be provided with 2 off motor-room-less type variable frequency drive passenger lifts to serve all levels of the building. One of the lifts will be sized to accommodate a stretcher in accordance with BCA requirements.

2 Hutt Street

Acoustic Assessment

S5470C2

December 2017

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**Document Title** : 2 Hutt Street, Adelaide  
Acoustic Assessment

**Document Reference** : S5470C2

**Date** : December 2017

**Author** : Chris Turnbull, MAAS

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## 1 INTRODUCTION

A noise assessment has been conducted for the proposed apartment development at 2 Hutt Street, Adelaide.

The proposed development comprises basement car parking, a restaurant occupying the ground level, resident lounge on the mezzanine, car parking at levels one and two and residential apartments from level three to level fourteen.

The assessment considers:

- The noise from traffic and street activity on surrounding roads into the development; and,
- The noise from car parking, mechanical plant and rubbish collection from the proposed development to other noise sensitive land uses.

The proposed development includes a restaurant at ground level. The assessment of noise from this area will be made at the time of liquor licence application, when the operator is known, if the proposed operation has any potential to impact noise sensitive land uses in the vicinity.

The assessment has been based on:

- Tectvs drawings "C01" to "C019" (inclusive) and "C08b", with Project number "28061" and dated November 2017; and,
- Noise logging conducted at a location representative of the existing noise environment at the site between 27 and 28 November 2017.

The key noise issue for the site is the impact of traffic at the intersection of Hutt Street, East Terrace, Bartels Road and Pirie Street on the amenity of the development. The assessment ensures that the proposed building construction will adequately protect against the intrusion of noise from the traffic in the vicinity.

In addition, a preliminary assessment of the environmental noise from car parking, mechanical plant operating and rubbish collection at the proposed development has been conducted.

## 2 DEVELOPMENT PLAN

The subject site is located within a Capital City Zone of the City of Adelaide Development Plan (consolidated 20 June 2017). The Development Plan has been reviewed and particular regard has been given to the following Council Wide provisions:

### **OBJECTIVES**

- Objective 9: High-quality student accommodation that creates an affordable, safe, healthy and comfortable living environment.*
- Objective 22: Medium to high scale residential (including student accommodation) or serviced apartment development that:*
- (a) has a high standard of amenity and environmental performance;*
  - ...*
- Objective 26: Development that does not unreasonably interfere with the desired character of the locality by generating unduly annoying or disturbing noise.*
- Objective 27: Noise sensitive development designed to protect its occupants from existing noise sources and from noise sources contemplated within the relevant Zone or Policy Area and that does not unreasonably interfere with the operation of non-residential uses contemplated within the relevant Zone or Policy Area.*

### **PRINCIPLES OF DEVELOPMENT CONTROL**

68. *Medium to high scale residential or serviced apartment development close to high noise sources (e.g. major roads, established places of entertainment and centres of activity) should be designed to locate noise sensitive rooms and private open space away from noise sources, or be protected by appropriate shielding techniques.*
89. *Development with potential to emit significant noise (including licensed entertainment premises and licensed premises) should incorporate appropriate noise attenuation measures in to their design to prevent noise from causing unreasonable interference with the amenity and desired character of the locality, as contemplated in the relevant Zone and Policy Area.*
90. *Development of licensed premises or licensed entertainment premises or similar in or adjacent to a City Living Zone, the Adelaide Historic (Conservation) Zone or the North Adelaide Historic (Conservation) Zone should include noise attenuation measures to achieve the following when assessed at the nearest existing or envisaged future noise sensitive development:*
- (a) the music noise (L10, 15 min) is:*
    - (i) less than 8 dB above the level of background noise<sup>2</sup> (L90,15 min) in any octave band of the sound spectrum; and*
    - (ii) less than 5 dB(A) above the level of background noise (LA 90,15 min) for the overall (sum of all octave bands) A-weighted level.*
93. *Mechanical plant or equipment should be designed, sited and screened to minimise noise impact on adjacent premises or properties. The noise level associated with the combined operation of plant and equipment such as air conditioning, ventilation and refrigeration*

*systems when assessed at the nearest existing or envisaged noise sensitive location in or adjacent to the site should not exceed*

*(a) 55 dB(A) during daytime (7.00am to 10.00pm) and 45 dB(A) during night time (10.00pm to 7.00am) when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.*

...

94. *To ensure minimal disturbance to residents:*

*(a) ancillary activities such as deliveries, collection, movement of private waste bins, goods, empty bottles and the like should not occur:*

*(i) after 10.00pm; and*

*(ii) before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday.*

*(b) typical activity within any car park area including vehicles being started, doors closing and vehicles moving away from the premises should not result in sleep disturbance when proposed for use after 10.00pm as defined by the limits recommended by the World Health Organisation.*

95. *Noise sensitive development should incorporate adequate noise attenuation measures into their design and construction to provide occupants with reasonable amenity when exposed to noise sources such as major transport corridors (road, rail, tram and aircraft), commercial centres, entertainment premises and the like, and from activities and land uses contemplated in the relevant Zone and Policy Area provisions.*

96. *Noise sensitive development in mixed use areas should not unreasonably interfere with the operation of surrounding non-residential uses that generate noise levels that are commensurate with the envisaged amenity of the locality.*

97. *Noise sensitive development adjacent to noise sources should include noise attenuation measures to achieve the following:*

*(a) satisfaction of the sleep disturbance criteria in the bedrooms or sleeping areas of the development as defined by the limits recommended by the World Health Organisation;*

*(b) the maximum satisfactory levels in any habitable room for development near major roads, as provided in the Australian/New Zealand Standard AS/NZS 2107:2000 - 'Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors'; and*

*(c) noise level in any bedroom, when exposed to music noise ( $L_{10}$ ) from existing entertainment premises, being:*

*(i) less than 8 dB above the level of background noise ( $L_{90,15 \text{ min}}$ ) in any octave band of the sound spectrum; and*

*(ii) less than 5 dB(A) above the level of background noise ( $L_{A90,15 \text{ min}}$ ) for the overall (sum of all octave bands) A-weighted levels.*

*Background noise within the habitable room can be taken to be that expected in a typical residential/apartment development of the type proposed, that is inclusive of internal noise sources such as air conditioning systems, refrigerators and the like as deemed appropriate.*

### 3 TRAFFIC NOISE

#### 3.1 Criteria

The noise source with the greatest potential to impact upon the development is road traffic.

In relation to the appropriate criteria for the intrusion of noise into a housing development, the assessment considers the relevant provisions of the Adelaide City Council Development Plan which refer to the recommendations of the Australian Standard *AS 2107:2000 – Acoustics – Recommended design sound levels and reverberation times for building interiors*<sup>1</sup> and the World Health Organisation Guidelines with respect to sleep disturbance; and include music noise criteria based on the EPA Music Noise Guidelines. The assessment also considers the Minister's Specification *SA 78B Construction requirements for the control of external sound* to provide a contemporary approach.

##### 3.1.1 World Health Organisation Guidelines

Council Wide Principle of Development Control (CWPDC) 97(a) refers to the objective recommendations of the World Health Organisation for sleep disturbance.

The World Health Organisation (WHO) has developed guidelines for community noise in specific environments. To protect against the potential onset of sleep disturbance effects in bedrooms, the WHO suggests a long term goal noise level of 30 dB(A)  $L_{eq}$ .

##### 3.1.2 Australian Standard AS 2107

CWPDC 97(b) makes particular mention of Australian Standard *AS 2107:2000 – Acoustics – Recommended design sound levels and reverberation times for building interiors* (AS 2107).

AS 2107 provides recommended internal noise levels for different types of building occupancies and activities. Table 1 details the recommended internal noise levels for different types of occupancies in a residential building environment.

---

<sup>1</sup> AS 2107 was updated in 2016. The 2016 version of AS 2107 has been used for this assessment.

**Table 1: Recommended noise levels of AS2107.**

Type of Occupancy/Activity	Recommended Design Sound Levels (dB(A))
Sleeping areas	35 to 40
Living areas	35 to 45
Work Areas	35 to 45

3.1.3 Minister’s Specification SA 78B

The intent of Minister’s Specification SA 78B Construction requirements for the control of external sound (SA 78B) is to protect the occupants of residential buildings from the sound intrusion of transport corridors and from mixed use activity. To this end, SA 78B establishes internal noise levels or “performance requirements”.

The objective assessment criteria applied to the development for internal noise levels are detailed in Table 2, which have been extracted from SA 78B.

**Table 1: Noise criteria provided by SA 78B for transport corridors.**

Type of room	Internal Sound Criteria		Applicable time period
	Average for total number of rooms	Maximum for individual room	
Bedroom	30 dB(A) $L_{Aeq, 9hr}$ (transport) 30 dB(A) $L_{Aeq, 15min}$ (people)	35 dB(A) $L_{Aeq, 9hr}$ (transport) 35 dB(A) $L_{Aeq, 15min}$ (people)	Night (10pm to 7am)
Other habitable room	35 dB(A) $L_{Aeq, 15hr}$	40 dB(A) $L_{Aeq, 15hr}$	Day (7am to 10pm)

For a particular site, the need to comply with SA 78B is established by “designation” in the Development Plan. The subject site has not been designated in the Development Plan and therefore SA 78B does not strictly apply but has been considered to provide the most contemporary approach. For the consideration of music noise ingress, SA 78B refers to the relevant council or Environment Protection Authority for appropriate requirements.

#### 3.1.4 Summary of Assessment Criteria for Noise Ingress

Based on the above, the following criteria are adopted for external noise intrusion into the proposed apartment development:

- an average noise level ( $L_{Aeq}$ ) of 30 dB(A) across the total number of bedrooms and a maximum of 35 dB(A) for any bedroom; and,
- an average noise level of 35 dB(A) across the total number of living/lounge/kitchen areas and a maximum of 40 dB(A) in any living/lounge/kitchen area;

### 3.2 Assessment

#### 3.2.1 Noise from Traffic

An assessment has been made of the acoustic treatment required to achieve the SA78B criteria and therefore ensure there are no unreasonable impacts on the amenity of the apartments from traffic. The assessment has been based on continuous noise monitoring conducted at the site, from Monday 27 to Tuesday 28 November 2017.

A logger was positioned in a location considered representative of the proposed apartments on the opposite side of the intersection. The  $L_{eq,9hr}$  and  $L_{eq,15hr}$  for night and day periods respectively have then been used to predict the noise into the habitable rooms of the apartment building.

The facades of the proposed development predominantly consist of glazing, masonry and small areas of lightweight construction. In order to achieve the criteria of the Minister's Specification, all apartment facade glazing, (including any sliding doors) should be As follows;

- Bedrooms of either;
  - Single glazing of minimum 10.38mm thick laminated glass; or,
  - Double glazing consisting of one layer of 6mm thick glass and one layer of 6.38mm thick laminated glass separated by a minimum cavity of 25mm
- Kitchen/Living/Lounge areas of either;
  - Single Glazing consisting of 12.5mm thick VLam Hush glass; or,
  - Double glazing consisting of two layers of 10.38mm thick laminated glass separated by a minimum cavity of 25mm

All windows and doors should be fitted with seals, which achieve an airtight seal when closed.

As a minimum the roof and any lightweight wall elements shall be constructed as follows;

**Roof**

- Sheet metal roofing;
- 50mm glass fibre insulation within the ceiling cavity;
- 10mm thick standard plasterboard.

**Walls**

- Outer cladding of minimum 9mm thick fibre cement sheet, or equivalent;
- 50mm glass fibre insulation within the ceiling cavity;
- 13mm thick fire rated plasterboard (density 10.5kg/m<sup>2</sup>).

## 4 NOISE FROM THE DEVELOPMENT

Potential noise sources at the proposed development are plant and equipment associated with the mechanical services system and the collection of rubbish.

### 4.1 Mechanical Plant

Objective criteria have been considered for the design of the mechanical services system in order to prevent adverse impacts at the existing and approved surrounding dwellings.

CWPDC 93 of the City of Adelaide Development Plan provides the relevant objective criteria for noise from mechanical plant and equipment at the development, which are as follows:

- 55 dB(A)  $L_{Aeq}$  during the daytime (7am to 10pm); and,
- 45 dB(A)  $L_{Aeq}$  during the night-time (10pm to 7am).

The criteria are to be achieved with the noise measured and adjusted at the nearest existing and approved noise-sensitive land use in accordance with the *Environment Protection (Noise) Policy 2007*.

The designated location for mechanical plant on the southern facade of the residential levels and at the larger "Plant" area at level 13 provides shielding and a good separation distance to surrounding dwellings. As final equipment selections are not available at the Development Application stage of a project, a preliminary assessment has been conducted to determine whether the established noise criteria can be practicably achieved during the detailed design stage.

As the layouts progress through the detailed design phase of the project, any necessary acoustic treatments will be incorporated into the design documentation to ensure compliance with the project criteria recommended above.

Notwithstanding, the assessment criteria are expected to be practicably achieved without any significant acoustic treatment

#### 4.2 Car Park Activity

Council-wide Principle 94(b) makes reference to the noise from night-time (10pm to 7am) car park activity achieving the sleep disturbance recommendations of the World Health Organisation (WHO).

It is normal practice when considering internal noise levels from an external source to assume that windows may be partially open. This allows for people to open windows on warm nights. Based on the windows of the surrounding residences being partially open, the WHO suggests that to achieve the internal levels described earlier in this report, the equivalent ( $L_{eq}$ ) and maximum ( $L_{max}$ ) noise levels outside a bedroom window should be limited to 45 dB(A) and 60 dB(A) respectively.

Notwithstanding the objective criteria provided above, given the proximity to East Terrace and the high number of higher speed vehicle movements on the public road network, it is considered that the noise from vehicle movements and general carpark activity cannot unreasonably impact on the adjacent apartments where the noise levels are in the range of existing movements on the public roadway.

Noise measurements have been conducted adjacent the closest noise sensitive receiver to the carpark, being the western facade of the townhouse with a balcony overlooking Cleo Lane, immediately east of the proposed development. The measurements indicate that the maximum noise level from vehicle movements along East Terrace will be in the range of 60 dB(A) to 68 dB(A).

Predictions of the maximum noise level from vehicle movements into the carpark indicate that noise levels from the proposed arrangement will also be within the range of 60 to 68 dB(A). Therefore the noise level will not be noticeably different to the much greater number of vehicles on East Terrace.

### 4.3 Rubbish Collection

Council-wide Principle 94 of the City of Adelaide Development Plan deals with waste collection and deliveries by effectively limiting the hours to the least sensitive portions of the day. The Development Plan requires that deliveries and waste collection only occur between the hours of 9am and 7pm on a Sunday or public holiday, and between 7am and 10pm on any other day. In the circumstance where the development incorporates an arrangement which can satisfy the onerous requirements of the *Environment Protection (Noise) Policy 2007*, then it is considered that the times may be extended without adversely impacting on the amenity of the surrounding area.

In accordance with the development plan, specifically Council Wide Principle of Development Control 94, waste collection should not occur during the following times:

- after 10.00pm; and,
- before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday.

File No:  
2019/12848/01

Ref No:  
14526256

## Pre-lodgement Agreement

ODASA Pre-lodgement No: PLA 2019/12797/01

Pursuant to Section 37AA of the Development Act, this Agreement obviates the need for a statutory referral to the South Australian Government Architect during the State Commission Assessment Panel process. The State Commission Assessment Panel refers all applicable development proposals to the South Australian Government Architect, for review and comments on design merit. The Agreement must be lodged with the development application, and the application lodged within three months of the Agreement being signed.

The Agreement between the **South Australian Government Architect** and **Rymill Park Apartments Pty Ltd & Rymill Park Unit Trust** (the Proponent), signed on **27 September 2019** pertains to the development proposal for **2 Hutt Street, Adelaide** described in the drawings listed in the schedule below, reviewed by the South Australian Government Architect on 27 September 2019. The drawings form part of the Agreement.

This Agreement is not an approval to proceed with the proposal. Development Approval from the State Commission Assessment Panel must be obtained prior to commencing work.

### Development description

The proposal is for a 53.9 metre tall mixed use building that comprises two levels of below ground car parking, ground floor restaurant and apartment entry foyer, mezzanine level dining and lounge area for residential use, two levels of above ground car parking and 12 residential floors. The site is located on the corner of Hutt Street and East Terrace, Adelaide.

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File No:  
2019/12848/01

Ref No:  
14526256

## Drawing Schedule

Floor Plan Details	Drawing Number	Rev	Scale	Format	Issue Date
<b>Tectvs</b>					
Title Page	28061 P-00	1.3	NTS	A3	20/9/2019
Site Plan	28061 P-01	1.3	1:200	A3	20/9/2019
Basement 2 Floor Plan	28061 P-02	1.2	1:100	A3	20/9/2019
Basement 1 Floor Plan	28061 P-03	1.2	1:100	A3	20/9/2019
Ground Floor Plan	28061 P-04	1.3	1:100	A3	20/9/2019
Mezzanine Floor Plan	28061 P-05	1.2	1:100	A3	20/9/2019
Level 1 Floor Plan	28061 P-06	1.2	1:100	A3	20/9/2019
Level 2 Floor Plan	28061 P-07	1.2	1:100	A3	20/9/2019
Level 3 Floor Plan	28061 P-08	1.1	1:100	A3	20/9/2019
Level 4 Floor Plan	28061 P-09	1.1	1:100	A3	20/9/2019
Level 5 -7 Floor Plan	28061 P-10	1.1	1:100	A3	20/9/2019
Level 8 - 9 Floor Plan	28061 P-10-A	1.1			
Level 10-12 Floor Plan	28061 P-11	1.1	1:100	A3	20/9/2019
Level 13 Floor Plan	28061 P-12	1.0	1:100	A3	20/9/2019
Level 14 Floor Plan	28061 P-13	1.0	1:100	A3	20/9/2019
Roof Plan and Section	28061 P-14	1.1	1:100	A3	20/9/2019
Ceiling Plans	28061 P-15	1.2	1:200	A3	20/9/2019
Sections	28061 P-16	1.2	1:400	A3	20/9/2019
Elevations	28061 P-17	1.2	1:500	A3	20/9/2019
Elevations	28061 P-18	1.2	1:500	A3	20/9/2019
Visualisations – Perspective 1	28061 P-19	1.0	NTS	A3	20/9/2019
Visualisations - Perspective 1 (showing changes)	28061 P-19-A	1.1	NTS	A3	20/9/2019
Visualisations – Perspective 2	28061 P-20	1.1	NTS	A3	20/9/2019
Visualisations – Perspective 3	28061 P-21	1.2	NTS	A3	20/9/2019
Visualisations – Perspective 4	28061 P-22	1.2	NTS	A3	20/9/2019
Public Realm	28061 P-23	1.1	NTS	A3	20/9/2019
Greening Strategy	28061 P-24	1.1	NTS	A3	20/9/2019
Landscape Design	28061 P-25	1.1	NTS	A3	20/9/2019
Landscape Design	28061 P-26	1.1	NTS	A3	20/9/2019
Materials	28061 P-27	1.1	NTS	A3	20/9/2019
Materials Board	28061 P-28	1.0	NTS	A3	20/9/2019
Hutt Street Entry Study	28061 P-29	1.0	NTS	A3	20/9/2019
Eastern Facade Beam Study	28061 P-30	1.0	NTS	A3	20/9/2019

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File No:  
2019/12848/01

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### Advisory Notes

The project was presented to the Design Review panel on five occasions and participated in one Desktop Review session, over which period the applicant responded to the advice provided. I acknowledge the willingness with which the project team has engaged with Design Review. I also acknowledge the change in the design team that occurred subsequent to the third Design Review session, and commend the efforts made to revisit and examine the contextual analysis and inherited design as well as the progression of technical discussions and quality and clarity of the presentation material.

I support the project team's aspiration to deliver a high quality residential focused development in this part of the city and the emphasis on design quality and environmental performance. My support for a development of the proposed scale is contingent on the delivery of the high quality design outcome presented. The site's key location within the City of Adelaide presents a rare opportunity and I am of the opinion that any development on this site has a responsibility to deliver a high benchmark for design.

I support the ground floor configuration that activates the north and west frontages and the provision of separate entrances for public and private uses. The ground floor includes a restaurant with a dedicated entrance off East Terrace and double height green wall feature that covers the expressed curved car park ramp, which I support.

The Hutt Street residential entry lobby is well-defined and provides a good sense of address. The proposal achieves clear site lines between the entrance and the secure lift lobby and provides security for the residents by way of the secure airlock. I support the inclusion of an indoor garden, seating and artwork within the lift lobby and encourage further consideration of the placement and integration of furniture as the project progresses. I acknowledge the intent for an apartment building entrance canopy that seeks to establish a relationship with the restaurant entrance. However, I am yet to be convinced by the signage element and anticipate further resolution of signage as part of a separate Development Application.

Vehicle access is proposed off Cleo Lane and Hutt Street. The Hutt Street vehicle entrance, which accesses the two levels of basement car parking, is set back approximately 2.5 metres from the western facade. The garage door, fire door and wall lining above are all clad with metal routed panelling, with the view to achieving a uniform recessive expression. I support this approach, as the proposed design responds to the established expression of the base of the building and mitigates the visual impact of the garage door.

Cleo Lane accommodates vehicle access to above ground car parking, waste collection, a bin store and the site's transformer. Given the shared nature of Cleo Lane, I welcome the project team's intent to engage with adjacent landowners to achieve a mutually agreeable outcome for the shared space. I also support the proposed upgrades, including the proposed amenity planting and resurfacing of Cleo Lane with high quality paving (granite or similar) that complements the city's established public realm material palette, and the intent to continue this paving finish into East Terrace. In my view, the consideration given to the amenity of the laneway and transition between the private laneway and public realm will reinforce the development's sense of place and contextual relationship.

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Adelaide SA 5000

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File No:  
2019/12848/01

Ref No:  
14526256

New footpath paving is proposed along East Terrace and Hutt Street and I urge collaboration with Council to achieve an integrated outcome for all new paving treatments. The existing established street trees along Hutt Street provide valuable shade and amenity and assist in integrating the proposed development into the streetscape. I anticipate ongoing protection and maintenance of the street trees, and support utilising the street tree canopy for outdoor seating.

The mezzanine level includes a lounge with meeting/dining/conference facilities for resident's use. The mezzanine ceiling includes recessed patterning, which offers visual interest while effectively managing the interface with the highly textured podium cladding. Access to the mezzanine level is via the restaurant entry off East Terrace, which I support as it offers flexibility for potential adaptive reuse. A large cantilevered curvilinear terrace extends over the Hutt Street corner, capturing Park Land views and northern light, which I anticipate will be desirable to residents and result in streetscape activation. In my view, the shape of the corner canopy also strengthens the sculptural qualities of the design.

I commend the decision to provide two levels of car parking below ground and support the reduction of above ground car parking to two levels. I also support the car park floor to floor dimensions that allow for potential adaptive reuse. The above ground car parking extends to all boundaries and is enclosed with precast concrete panels featuring three dimensional articulation and copper mesh inserts. I support the approach to the enclosure of the above ground car park levels, as in my view the solid treatment contributes to a podium expression, grounds the built form and integrates appropriately with the architectural expression of the residential floors above. I support the textured vertical articulation of the precast concrete panels that transition to a sculptural expression on the north east corner and east facade. In my view, this contributes to the building's unique identity. I also support the variation in the height of the podium parapet, which increases by one metre at its eastern end, and the introduction of a 600mm deep horizontal projection to address overlooking issues.

The residential floors are configured to include five apartments on levels three and four, four apartments on levels five to nine, two apartments on levels 10 to 12, a sub penthouse on level 13 and penthouse on level 14. Acknowledging the market testing that has been undertaken, I support the proposed mix and layouts of the apartments that are generous and offer a high level of amenity. I also support the provision of 2.7 metre ceiling heights typically and light and ventilation access to habitable rooms.

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The proposed building height is 53.9 metres, with a marginal set down of the eastern building element. I consider the site to be prominent with landmark characteristics afforded by its Park Lands setting and elevated position. As such, in principle I support an approach for a building that exceeds the 22 metre height limit envisaged by the Development Plan. Given development of this scale will become a significant backdrop to the Park Lands and will be viewed from all angles, my support for the height from a design perspective is contingent on a continued commitment and delivery of the high quality design outcome presented, particularly in relation to the refined architectural expression, choice materiality, apartment amenity, sustainability initiatives and servicing strategy as well as public realm contribution.

The architectural expression is characterised by two building elements with curved corners defined by a distinct recess. I support the approach for a



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robust and simple expression that presents a slender built form that is articulated into two elements, as this assists in managing the development's mass and scale. I also support the horizontal emphasis resulting from the expressed Glass Reinforced Concrete beams, which are modelled to include lips that taper and vary the facade depth. I acknowledge the technical modelling undertaken to achieve the optimal depth of the beam lips to achieve effective sun shading and support the resulting refined built form articulation. The eastern elevation includes 600mm deep beams on levels four to seven and shallow modelled beams on levels eight to ten, which are fully contained within the site boundary. A 300mm deep ledge has also been introduced on level four to address overlooking to adjoining residences to the east, which I support.

The solid southern boundary wall is articulated with a negative band above the podium and textured vertical expression that relates to the profile of the northern podium facade and tapers towards the top of the building. The top of the solid south facade is also curved, which further refines its appearance. I support the resulting architectural expression, including the vertical emphasis and cohesive relationship with the overall building expression. I anticipate refinement of the connection of the precast units in the next stages of detailed design development. I also recommend the negative band be expressed using an integral rather than an applied finish.

The penthouse roofs reference the proportions and materiality of the expressed concrete beams, however are flush rather than modelled. I acknowledge the studies undertaken by the design team that explore alternative roof profiles. In my view, however an opportunity exists to further refine the penthouse roof forms to assist in mitigating the height of the development. I also urge further consideration of the layout of the PV panels with the view to reducing the visual impact of the roof line. The visual impact of required fall protection should also be assessed during the next stages of detailed design development.

The development proposes a high quality interstitial blind system that sits within the double glazed windows and curved electrochromic privacy glass. My support for this scheme is contingent on delivery of these high quality fixtures and finishes.

The proposed development includes a number of Ecologically Sustainable Development (ESD) initiatives being developed in association with a specialist ESD consultant. I strongly support the depth of investigations and modelling undertaken regarding the performance of the building at this early stage of design development. I also support the inclusion of ESD initiatives such as a rooftop solar photo-voltaic array, electric vehicle charging and rainwater harvesting. My support for the development is contingent on maximising the thermal performance of the building and continued commitment and delivery of the ESD ambition that exceeds the minimum quantitative requirements.

The proposal's landscape concept includes the Cleo Lane upgrade, internal double height green wall, level three south facing communal terrace and indoor garden in the apartment entry. I consider the proposed greening strategy to be an appropriate response to the Park Lands aspect. I support the engagement of a landscape architect and urge ongoing collaboration as design development progresses to achieve integrated and successful delivery of the landscape elements. I support the inclusion of the internal green wall, however I understand delivery and maintenance of specimens of

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# OFFICE FOR DESIGN + ARCHITECTURE SA

File No:  
2019/12848/01

Ref No:  
14526256

the envisaged lush character is highly specialised and technical. I anticipate resolution of the green wall in the next stages of detailed design development, cognisant of the ESD ambitions.

While I am not of the view that the level three terrace is a rooftop garden, I do acknowledge the benefits of this space including accessibility, micro climate, maintenance and contribution to managing urban heat island effects at street level. I also acknowledge the roof area is dedicated to photo voltaic panels. I support the residential amenity afforded by the communal dining area and outdoor seating and anticipate resolution of fall protection during the next stages of detailed design development. An internal dry garden is proposed within the residential entry lobby, which I support. I anticipate all plant selections for the development have been informed by solar access and maintenance requirements and all landscape elements will be supported by services that ensure successful delivery of the envisaged concept.

To ensure the most successful design outcome is achieved the State Commission Assessment Panel may like to consider conditions or reserved matters to protect the following elements of the proposal, as design details are produced in due course:

- Collaboration with Council to achieve an integrated outcome for all new paving treatments
- Refinement of the penthouse roof forms to assist in mitigating the height of the development and further consideration of the layout of the photo-voltaic panels with the view to reducing the visual impact of the roof line
- Final samples of selected materials

While the Government Architect has considered the design aspects of the proposed development, the detailed assessment of whether the development plan policy is met is deferred to the State Commission Assessment Panel.

Pre-lodgement Agreement No: PLA 2019/12797/01 **2 Hutt Street, Adelaide**

Signature   
Kirsteen Mackay  
South Australian Government Architect

Date 27/09/19

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Signature   
**The Proponent**  
Milly Nott  
Future Urban Group  
Ground Floor, 89 King William Street  
Adelaide, SA, 5000

Date 27 SEPTEMBER 2019



Government  
of South Australia

Representing  
Rymill Park Apartments Pty Ltd & Rymill Park Unit Trust



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ABN 20 903 762 572

**Enquiries:** Seb Grose 8203 7195  
**CoA Ref:** S10/35/2019  
**SCAP Ref:** 020/A053/19

29 October 2019

State Commission Assessment Panel  
By email: [janaki.benson@sa.gov.au](mailto:janaki.benson@sa.gov.au)  
Cc: [scapadmin@sa.gov.au](mailto:scapadmin@sa.gov.au)

**Attention: State Commission Assessment Panel**

Dear Sir/Madam

**Application:** S10/35/2019  
**Applicant:** RYMILL PARK APARTMENTS P/L and RYMILL PARK APARTMENTS UNIT TRUST  
**Address:** 2-6 Hutt Street, ADELAIDE SA 5000  
**Description:** Construction of a sixteen (16) storey mixed use building

Council has the following comments to make on the above application:

**TECHNICAL COMMENTS**

**ROADS / FOOTPATHS  
ENGINEERING**

- Any disused driveway inverts resulting from the development are to be reinstated to equivalent footpath levels to Council standards and specifications.
- Any damage caused to Council road, footpath and kerbing infrastructure during development will be the responsibility of the developer to rectify to a standard that equals or improves the pre-development condition.
- Existing crossovers and new crossovers have been proposed. All new or alterations to existing crossovers require Council approval outside of the application process and also need to be to Council standards and specifications via City Works Guidelines.



- Existing boundary (back of path) levels must not be modified. Finished floor levels must be based around retaining the existing back of path levels subject to the following:
  - If the level difference between top of kerb and back of path is less than 50 mm; and
  - If the existing cross fall(s) exceed 4% (1:25) .
- If any of the above conditions exist for any footpath infrastructure adjacent the perimeter of the site boundary then please contact the Lead Asset Consultant Streets prior to setting finished floor levels.

#### **TORRENS & STORM WATER**

- Stormwater runoff from the proposal must be contained within the property boundaries, collected and discharged to the East Terrace road reserve. Stormwater discharge to East Terrace should utilize the two existing stormwater footpath crossovers in East Terrace.
- Considering Cleo Lane is subject to existing rights of way to adjacent property owners, stormwater runoff from the proposed development should not be discharged to this lane.
- Any proposed collection of ground seepage water from the basement carparking levels (1 and 2) must not be discharged to the property stormwater system. Any collected ground seepage water from the basement levels must be discharged to either sewer or the proposed property recycled water system.
- Collected seepage water from proposed landscaped areas must not be discharged to the property stormwater system. Any collected landscaping seepage water must be discharged to either sewer or the property recycled water system.
- Any collected splash water from proposed swimming pools on levels 13 and 14 must **not** be discharged to the property stormwater system. Any collected splash water from the proposed rooftop swimming pools must be discharged to either sewer or the property recycled water system.

**LIGHTING /  
ELECTRICAL / CCTV**

- Any collected surface water from levels 1 and 2 (carparking) must not be discharged to the property stormwater system. Any collected surface water from the carparking levels must be discharged to either sewer or the property recycled water system.
- The proposed entrance levels to the basement carparking levels must be designed with a significant freeboard to 1% AEP flood levels in East Terrace taken to be equivalent top of kerb level in East Terrace.
- The proposed development works may impact on public lighting near the site. Public lighting installed on Hutt Street is owned and maintained by Council and consists of street lighting columns/luminaires with associated underground cabling and pits. The public lighting on Bartels Road is owned and maintained by SA Power Networks and consists of stobie pole mounted lighting with associated overhead electrical cabling spanning between columns.
- If temporary hoarding or site works require modification of existing Council and/or SA Power Network's public lighting (including associated infrastructure such as cabling etc) shall meet Council requirements and all costs borne directly by the developer.
- All modifications requiring temporary removal, relocation, provision of lighting, reinstatement of existing Council and/or SA Power Network's public lighting shall meet Council requirements and all costs borne directly by the developer.
- Any damage to Council infrastructure, including damage to public lighting and u/g ducting etc caused by projects works or loading of site crane onto pathways will be repaired to meet Council requirements and at the cost of the developer.
- Lighting under the proposed canopies shall meet Council's under veranda requirements shall be installed.
- Obtrusive Lighting – Lighting design and installation to be fully compliant with Australian Standard - AS 4282 - 1997 Control of the Obtrusive Effects of Outdoor Lighting. Sign off by consultant required to confirm compliance. In addition, provide relevant lighting calculation grid detailing property boundary lines for Council review and records.

## STREET TREES

- The existing street trees in Hutt Street **must** be retained due to their high amenity value and importance to the Hutt Street streetscape.

## TRAFFIC / TRANSPORT

- The traffic design does not meet the minimum requirements under AS2890.1:2004, with associated fundamental risks to safe operation and usability of the proposed development.
- The report argues the requirement of AS2890.1 to use a B99 vehicle for certain manoeuvres is unnecessary as they have identified two larger vehicles with turning radii similar to, though still larger than that of a B85. Whilst turning radii for some 4WD vehicles have improved, vehicles like the Toyota Camry have a turning circle of 12.2 - 12.4m depending on the model, which is significantly wider than the B85 turning radius used to assess the car park. The B99 therefore remains a relevant vehicle as required by the Standard.
- The report notes that functional design of the car park relies on the B85 being the design vehicle and that minimum clearances would not be available to a larger vehicle. This is not only in contradiction of the requirements of AS2890.1 (which requires the use of the B99 design vehicle), but also means the car park as proposed is unusable for a considerable range of motor vehicles.
- The widths of car parks as proposed, would not be suitable for many vehicles. The widths of 4WD vehicles has been increasing beyond that nominated for the B99. For example a Land Rover Discovery (and even with the example of the Toyota Land Cruiser 200 series provided in the traffic report) the vehicle would only just fit within the nominated space and would not be able to open a door sufficiently to get in/out with a vehicle parked adjacent.
- The note in AS2890.1 table 1.1 to Class 1A use includes, *'The modelling of vehicle manoeuvring into Class 1A spaces shows however, that many drivers may have difficulty driving into and out of such spaces, especially those with vehicles larger than the B85 vehicle. Furthermore, they may have difficulty entering and leaving the vehicle in the narrower spaces.'* It should be noted that the Class 1A parking proposed requires 3-point entry and exit into 90 degree parking spaces.

- Larger sedans, vans and 4WD's would not be able to safely manoeuvre within the car park and would have great difficulty using the parking spaces proposed for the above reasons.
- The report refers to red and green lights at ramps, but for exiting movement it speaks to drivers needing to wait before exiting their parking bay. How will a driver see when it is green if they are parked facing the wall?
- Confirmation is required that adequate height clearance is available for waste collection.

## **WASTE**

- The proposed plans and waste management report identify that a requirement to have spare bins underneath the chute system when bins are being emptied can be satisfied.
- This can be accommodated as a procedure by rotating the bins at the time of emptying by the engaged contractor.
- The proposal is supported.

## **PLANNING RELATED COMMENTS**

Council Administration has not undertaken a thorough planning assessment of the proposal but makes the following comments in relation to the proposed development:

### **ENCROACHMENTS**

- A balcony is proposed at mezzanine level over the Hutt Street and East Terrace footpaths which meets Council's Encroachment Policy adopted on 26 March 2019.
- Sunshades are proposed to extend from levels 4 to 14 over both Hutt Street and East Terrace. These will extend a maximum of 600mm over both streets which meets Council's Encroachment Policy.

Yours faithfully

Seb Grose

**SENIOR PLANNER – DEVELOPMENT ASSESSMENT**

## Benson, Janaki (DPTI)

---

**From:** Michael Constantine <mc@constantine.legal>  
**Sent:** Friday, 1 November 2019 2:15 PM  
**To:** DPTI:scapreps  
**Cc:** adelaide@parliament.gov.au; DEW:Minister Speirs; DPTI:Minister Knoll; DPC:Premier; AGD:Attorney-General; Steve.Georganas.MP@aph.gov.au; admin@nationaltrustsa.org.au; kconlon@internode.on.net  
**Subject:** Representation in respect of DA 020/A053/19  
**Attachments:** Rymill\_DA\_Representation\_01111019.pdf; Rymill House Trademark - AU Trade Mark Register Extract (2).pdf; Rymill House Trademark - AU Trade Mark Register Extract.pdf; Rymill Park Apartments Trademark - AU Trade Mark Register Extract.pdf; Rymill Park Trademark - AU Trade Mark Register Extract.pdf; Rymill Place Trademark - AU Trade Mark Register Extract.pdf; Rymill Trademark - AU Trade Mark Register Extract.pdf

**Importance:** High

Dear SCAP,

Please find attached Representation letter in respect of DA 020/A053/19 on behalf of Dr Luke & Mrs Kali Constantine of Rymill, 93-100 East Terrace, Adelaide together with Rymill Mark extracts from the Australian Register of Trade Marks.

Kind regards,

**Michael Constantine**  
National Principal  
M +61 413 008 992  
E mc@constantine.legal  
T 1800 CL CALL (252 255)  
F 1800 CL A FAX (252 329)

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Dr L M & Mrs K A H Constantine  
Rymill  
93 - 100 East Terrace  
Adelaide SA 5000

**BY EMAIL to: scapreps@sa.gov.au**

The Secretary  
State Commission Assessment Panel (**SCAP**)  
GPO Box 1815  
ADELAIDE SA 5001

Dear Presiding Member,

**Representation in respect of DA 020/A053/19  
Notification of Trademarks**

We write to raise concerns about the Applicant's submission for the proposed demolition of existing office building and construction of 16 level mixed use building with basement and associated car parking situated at 2-6 Hutt Street, Adelaide (the **Proposal**).

We became aware of the Proposal as an adjacent landowner and from articles in the Advertiser and Messenger newspapers on 31 October 2019 together with notification from other adjacent property owners and friends.

For over 20 years, Dr Luke Constantine and Mrs Kali Hunter Constantine have been the owners and residents of the iconic South Australian State heritage listed property situated at 93-100 East Terrace, Adelaide, known throughout South Australia and Australia as "Rymill" and "Rymill House".

The Constantine family (together with its related entities) has established and developed the reputation and goodwill of the "Rymill" brand over many years in homage to its distinct history and heritage.

Mrs Hunter Constantine is the director of Kali Hunter Enterprises Pty Ltd (ACN 106 733 546) situated at 93-100 East Terrace, Adelaide which is the owner of the following Australian registered trademarks set out below (the **Rymill Marks**):

<b>Word/Phrase</b>	<b>Australian Registered Trademark Number</b>	<b>Class of Goods &amp; Services in respect of which mark is registered</b>
Rymill	1900306	16, 35, 36, 37, 41, 42, 43, 45
Rymill House	986812 1900307	41 16, 35, 36, 37, 41, 42, 43, 45
Rymill Apartments	1900310	35, 36, 37, 42, 43
Rymill Park	1900309	35, 36, 37, 42, 43
Rymill Park Apartments	1900311	35, 36, 37, 42, 43
Rymill Place	1900312	35, 36, 37, 42, 43

We enclose the trademark registrations extracts from the Australian Register of Trade Marks in respect of the Rymill Marks.

We understand the Applicant intends to, among other things:

- 1) name the building/development "Rymill" and/or use the word "Rymill" as part of its name; and
- 2) in connection with the above, seek consent to conduct certain activities and uses as part of the development.

We notify SCAP of our concern that if the Applicant were to engage in any of the above, it may infringe upon one or more of the Rymill Marks, given that such proposals would likely involve the provision of goods or services which are the same as, or closely related goods or services to, the goods and services in respect of which the Rymill Marks are registered.

This may also have the effect of being misleading, causing confusion to consumers, and imposing significant damage to the business and goodwill of the Rymill Marks.

In this context, we also raise broader concerns for the protection of the name of other heritage places whether privately held or Government owned/managed.

Accordingly, we kindly request that SCAP consider, among other conditions, the following in assessing the Proposal:

- 1) imposition of a condition on any development application consent (including in respect of any variation) that no part of the name of the building may include the word "Rymill";
- 2) imposition of a condition on any development application consent (including in respect of any variation) that no part of any signage (in any form) on the building may include the word "Rymill"; and
- 3) imposition of a condition on any development application consent (including in respect of any variation) that no part of any advertising and promotional material (including online) in respect of the development may include the word "Rymill".

We further request SCAP:

- 1) notify us of the date of the SCAP meeting in respect of the Proposal;
- 2) provide opportunity to attend the SCAP meeting in assessment of the Proposal; and
- 3) provide opportunity for a nominated representative to speak at the hearing of the SCAP meeting in assessment of the Proposal.

We look forward to hearing from you.

Yours sincerely,

Dr L M Constantine & Mrs K A H Constantine

cc  
Steven Marshall MP, Premier of South Australia  
Stephan Knoll MP, Minister for Planning  
David Speirs MP, Minister for Environment and Water  
Hon. Vicki Chapman MP, Attorney General of South Australia  
Rachel Sanderson MP, Member for Adelaide  
Steve Georganas MP, Federal Member for Adelaide  
Keith Conlon, Chairperson, South Australian Heritage Council  
Deborah Morgan, President National Trust of SA



**Australian Government**  
**IP Australia**

## Trade mark 986812

**Words** RYMILL HOUSE

**Image**

**RYMILL**  
**HOUSE**

### Image description

**Status** Registered: Registered/Protected

**Priority date** 02 Feb 2004 (Filing)

**Class** 41

**Kind** Fancy

### Dates

**Renewal due** 02 Feb 2024

**Registration advertised** 07 Oct 2004

**Entered on Register** 20 Sep 2004

**Acceptance advertised** 10 Jun 2004

**Acceptance** 26 May 2004

**Filing** 02 Feb 2004

### Owner

**Kali Hunter Enterprises Pty Ltd**  
100 East Terrace ADELAIDE, SA, 5000  
AUSTRALIA

### Address for service

**Kali Hunter Enterprises Pty Ltd**  
PO Box 2510 KENT TOWN, SA, 5067  
AUSTRALIA

### Goods & Services

**Class 41:** Education; providing of training, entertainment, sporting and cultural activities

**Indexing constituents**

**Word**

RYMILL HOUSE

**Image**



**Australian Government**  
**IP Australia**

## Trade mark 1900307

<b>Words</b>	RYMILL HOUSE
<b>Image</b>	
<b>Image description</b>	
<b>Status</b>	Registered: Registered/Protected
<b>Priority date</b>	15 Jan 2018 (Filing)
<b>Classes</b>	16, 35, 36, 37, 41, 42, 43, 45
<b>Kind</b>	Word

### Dates

<b>Renewal due</b>	15 Jan 2028
<b>Registration advertised</b>	23 Aug 2018
<b>Entered on Register</b>	15 Aug 2018
<b>Acceptance advertised</b>	07 Jun 2018
<b>Acceptance</b>	16 Mar 2018
<b>Filing</b>	15 Jan 2018

### Owner

**Kali Hunter Enterprises Pty Ltd**  
 100 East Tce ADELAIDE, SA, 5000  
 AUSTRALIA

### Address for service

**KALI HUNTER ENTERPRISES PTY LTD**  
 100 EAST TERRACE ADELAIDE, SA, 5000  
 AUSTRALIA

### Goods & Services

**Class 16:** Paper, cardboard; books, publications and printed matter; photographs; stationery; instructional and teaching materials

**Class 35:** Business management of hotels; Organisation of housing and real estate displays and exhibitions for promotion or advertising purposes including online advertising; Provision of advertising space including for online advertising; Rental of advertising space including online advertising space

**Class 36:** Advisory services relating to real estate ownership; Advisory services relating to real estate valuations; Apartment house management; Brokerage of real estate; Capital investment in real estate; Consultation services relating to real estate; Financial evaluation (insurance, banking, real estate); Financing of real estate developments; Insurance services relating to real estate; Leasing of real estate; Management of real estate; Property leasing (real estate property only); Property sales services relating to real estate development; Providing information, including online, about insurance, financial and monetary affairs and real estate affairs; Provision of information in relation to real estate; Provision of information relating to property (real estate); Provision of information relating to real estate; Real estate administration; Real estate advisory services; Real estate consultancy; Real estate financing; Real estate investment; Real estate investment advice; Real estate investment management; Real estate investment services; Real estate management; Real estate services; Real estate services relating to property development; Real estate services relating to real estate development; Research services relating to real estate; Subdivision of real estate (real estate services); Administration of investment funds; Investing of funds; Investment management of funds; Investment of funds; Management of capital investment funds; Management of funds; Monitoring of investment funds

**Class 37:** Building and construction of real estate subdivisions and developments; Real estate development (building and construction services); Advisory services relating to property development building and construction services; Building of commercial properties; Building of industrial properties; building of residential properties; Development of property (building and construction services); Property development (building and construction services); Real estate development and construction of residential property, and commercial property including hotels, resorts and function centres

**Class 41:** Education, providing of training; entertainment; sporting, cultural events; Organising charitable fundraising events being the provision of entertainment, sporting and cultural services; Charitable services namely, academic mentoring; Charitable services namely, education and training

**Class 42:** Designing and planning of real estate subdivisions and developments; Real estate planning; Real estate surveys

**Class 43:** Services for providing food and drink; Temporary accommodation; Provision of hotel accommodation services; resort hotel services; restaurant services; food and drink services including cafes, coffee shops, bistros and bars; catering; the provision of function and conference facilities; providing of food and lodging

**Class 45:** Charitable services, namely personal or spiritual mentoring for mental health support

## Indexing constituents

### Word

RYMILL HOUSE

### Image



**Australian Government**  
**IP Australia**

## Trade mark 1900311

<b>Words</b>	RYMILL PARK APARTMENTS
<b>Image</b>	
<b>Image description</b>	
<b>Status</b>	Registered: Registered/Protected
<b>Priority date</b>	15 Jan 2018 (Filing)
<b>Classes</b>	35, 36, 37, 42, 43
<b>Kind</b>	Word

### Dates

<b>Renewal due</b>	15 Jan 2028
<b>Registration advertised</b>	23 Aug 2018
<b>Entered on Register</b>	15 Aug 2018
<b>Acceptance advertised</b>	07 Jun 2018
<b>Acceptance</b>	16 Mar 2018
<b>Filing</b>	15 Jan 2018

### Owner

**Kali Hunter Enterprises Pty Ltd**  
 100 East Tce ADELAIDE, SA, 5000  
 AUSTRALIA

### Address for service

**KALI HUNTER ENTERPRISES PTY LTD**  
 100 EAST TERRACE ADELAIDE, SA, 5000  
 AUSTRALIA

### Goods & Services

**Class 35:** Business management of hotels; Organisation of housing and real estate displays and exhibitions for promotion or advertising purposes including online advertising; Provision of advertising space including for online advertising; Rental of advertising space including online advertising space

**Class 36:** Advisory services relating to real estate ownership; Advisory services relating to real estate valuations; Apartment house management; Brokerage of real estate; Capital investment in real estate; Consultation services relating to real estate; Financial evaluation (insurance, banking, real

estate); Financing of real estate developments; Insurance services relating to real estate; Leasing of real estate; Management of real estate; Property leasing (real estate property only); Property sales services relating to real estate development; Providing information, including online, about insurance, financial and monetary affairs and real estate affairs; Provision of information in relation to real estate; Provision of information relating to property (real estate); Provision of information relating to real estate; Real estate administration; Real estate advisory services; Real estate consultancy; Real estate financing; Real estate investment; Real estate investment advice; Real estate investment management; Real estate investment services; Real estate management; Real estate services; Real estate services relating to property development; Real estate services relating to real estate development; Research services relating to real estate; Subdivision of real estate (real estate services); Administration of investment funds; Investing of funds; Investment management of funds; Investment of funds; Management of capital investment funds; Management of funds; Monitoring of investment funds

**Class 37:** Building and construction of real estate subdivisions and developments; Real estate development (building and construction services); Advisory services relating to property development building and construction services; Building of commercial properties; Building of industrial properties; building of residential properties; Development of property (building and construction services); Property development (building and construction services); Real estate development and construction of residential property, and commercial property including hotels, resorts and function centres

**Class 42:** Designing and planning of real estate subdivisions and developments; Real estate planning; Real estate surveys

**Class 43:** Services for providing food and drink; Temporary accommodation; Provision of hotel accommodation services; resort hotel services; restaurant services; food and drink services including cafes, coffee shops, bistros and bars; catering; the provision of function and conference facilities; providing of food and lodging

## Indexing constituents

### Word

RYMILL PARK APARTMENTS

### Image



**Australian Government**  
**IP Australia**

## Trade mark 1900309

<b>Words</b>	RYMILL PARK
<b>Image</b>	
<b>Image description</b>	
<b>Status</b>	Registered: Registered/Protected
<b>Priority date</b>	15 Jan 2018 (Filing)
<b>Classes</b>	35, 36, 37, 42, 43
<b>Kind</b>	Word

### Dates

<b>Renewal due</b>	15 Jan 2028
<b>Registration advertised</b>	23 Aug 2018
<b>Entered on Register</b>	15 Aug 2018
<b>Acceptance advertised</b>	07 Jun 2018
<b>Acceptance</b>	16 Mar 2018
<b>Filing</b>	15 Jan 2018

### Owner

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**Class 43:** Temporary accommodation; Provision of hotel accommodation services; resort hotel services; the provision of function and conference facilities; providing of lodging

## Indexing constituents

### Word

RYMILL PARK

### Image



**Australian Government**  
**IP Australia**

## Trade mark 1900312

<b>Words</b>	RYMILL PLACE
<b>Image</b>	
<b>Image description</b>	
<b>Status</b>	Registered: Registered/Protected
<b>Priority date</b>	15 Jan 2018 (Filing)
<b>Classes</b>	35, 36, 37, 42, 43
<b>Kind</b>	Word

### Dates

<b>Renewal due</b>	15 Jan 2028
<b>Registration advertised</b>	23 Aug 2018
<b>Entered on Register</b>	15 Aug 2018
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<b>Filing</b>	15 Jan 2018

### Owner

**Kali Hunter Enterprises Pty Ltd**  
 100 East Tce ADELAIDE, SA, 5000  
 AUSTRALIA

### Address for service

**KALI HUNTER ENTERPRISES PTY LTD**  
 100 EAST TERRACE ADELAIDE, SA, 5000  
 AUSTRALIA

### Goods & Services

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**Class 43:** Services for providing food and drink; Temporary accommodation; Provision of hotel accommodation services; resort hotel services; restaurant services; food and drink services including cafes, coffee shops, bistros and bars; catering; the provision of function and conference facilities; providing of food and lodging

## Indexing constituents

### Word

RYMILL PLACE

### Image



**Australian Government**  
**IP Australia**

## Trade mark 1900306

<b>Words</b>	RYMILL
<b>Image</b>	
<b>Image description</b>	
<b>Status</b>	Registered: Registered/Protected
<b>Priority date</b>	15 Jan 2018 (Filing)
<b>Classes</b>	16, 35, 36, 37, 41, 42, 43, 45
<b>Kind</b>	Word

### Dates

<b>Renewal due</b>	15 Jan 2028
<b>Registration advertised</b>	23 Aug 2018
<b>Entered on Register</b>	15 Aug 2018
<b>Acceptance advertised</b>	07 Jun 2018
<b>Acceptance</b>	15 Mar 2018
<b>Filing</b>	15 Jan 2018

### Owner

**Kali Hunter Enterprises Pty Ltd**  
 100 East Tce ADELAIDE, SA, 5000  
 AUSTRALIA

### Address for service

**KALI HUNTER ENTERPRISES PTY LTD**  
 100 EAST TERRACE ADELAIDE, SA, 5000  
 AUSTRALIA

### Goods & Services

**Class 16:** Paper, cardboard; books, publications and printed matter; photographs; stationery; instructional and teaching materials

**Class 35:** Business management of hotels; Organisation of housing and real estate displays and exhibitions for promotion or advertising purposes including online advertising; Provision of advertising space including for online advertising; Rental of advertising space including online advertising space

**Class 36:** Advisory services relating to real estate ownership; Advisory services relating to real estate valuations; Apartment house management; Brokerage of real estate; Capital investment in real estate; Consultation services relating to real estate; Financial evaluation (insurance, banking, real estate); Financing of real estate developments; Insurance services relating to real estate; Leasing of real estate; Management of real estate; Property leasing (real estate property only); Property sales services relating to real estate development; Providing information, including online, about insurance, financial and monetary affairs and real estate affairs; Provision of information in relation to real estate; Provision of information relating to property (real estate); Provision of information relating to real estate; Real estate administration; Real estate advisory services; Real estate consultancy; Real estate financing; Real estate investment; Real estate investment advice; Real estate investment management; Real estate investment services; Real estate management; Real estate services; Real estate services relating to property development; Real estate services relating to real estate development; Research services relating to real estate; Subdivision of real estate (real estate services); Administration of investment funds; Investing of funds; Investment management of funds; Investment of funds; Management of capital investment funds; Management of funds; Monitoring of investment funds

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**Class 41:** Education, providing of training; entertainment; sporting, cultural events; Organising charitable fundraising events being the provision of entertainment, sporting and cultural services; Charitable services namely, academic mentoring; Charitable services namely, education and training

**Class 42:** Designing and planning of real estate subdivisions and developments; Real estate planning; Real estate surveys

**Class 43:** Services for providing food and drink; Temporary accommodation; Provision of hotel accommodation services; resort hotel services; restaurant services; food and drink services including cafes, coffee shops, bistros and bars; catering; the provision of function and conference facilities; providing of food and lodging

**Class 45:** Charitable services, namely personal or spiritual mentoring for mental health support

## Indexing constituents

### Word

RYMILL

### Image

**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Rymill Park Apartments Unit Trust C/ Future Urban  
**Development Number:** 020/A053/19  
**Nature of Development:** Demolition of existing office building a construction of 16 level mixed use building with basement and associated car parking  
**Development Type:** Merit / Category 2  
**Zone / Policy Area:** Capital City Zone  
**Subject Land:** 2-6 Hutt Street, Adelaide  
**Contact Officer:** Janaki Benson  
**Phone Number:** 08 343 2339  
**Close Date:** 01 November 2019

My Name: Edward Deland My phone number: 7132 0188

Primary method(s) of contact: Email: enquiries@oneface.com.au  
Postal Address: 9 Hutt Street Adelaide Postcode: 5000

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

My interests are: (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

The address of the property affected is: 9 Hutt Street Adelaide Postcode 5000

My interests are: (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

The specific aspects of the application to which I make comment on are: Tradespeople occupying parking spaces on Hutt Street. This limits availability for our patients and negatively impact our business.

I: (please tick one)  
 wish to be heard in support of my submission  
 do not wish to be heard in support of my submission (Please tick one)

By: (please tick one)  
 appearing personally  
 being represented by the following person (Please tick one)

Signature: [Handwritten Signature]  
Date: 28/10/19

**Benson, Janaki (DPTI)**

---

**From:** Lynette Hill <lyn@fornax.net>  
**Sent:** Wednesday, 30 October 2019 9:40 PM  
**To:** DPTI:scapreps  
**Cc:** Benson, Janaki (DPTI)  
**Subject:** Rymill Park Apartments Development Number 020/A053/19  
**Attachments:** Submission Cover Sheet 001.jpg; Second Submission.doc

Dear Secretary,

re: Development Number 020/A053/19

Attached are comments with regard to the proposed development of the Rymill Park Apartments at 2-6 Hutt Street, Adelaide.

Regards

Lynette Hill

DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2

**Applicant:** Rymill Park Apartments Unit Trust C/ Future Urban  
**Development Number:** 020/A053/19  
**Nature of Development:** Demolition of existing office building a construction of 16 level mixed use building with basement and associated car parking  
**Development Type:** Merit / Category 2  
**Zone / Policy Area:** Capital City Zone  
**Subject Land:** 2-6 Hutt Street, Adelaide  
**Contact Officer:** Janaki Benson  
**Phone Number:** 08 343 2339  
**Close Date:** 01 November 2019

My Name: LYNETTE HILL My phone number: \_\_\_\_\_

**Primary method(s) of contact:** Email: \_\_\_\_\_  
Postal Address: 5 WARREN CRESCENT Postcode: 5041  
PANDRAMA SA

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

- My interests are:** (please tick one)
- owner of local property
  - occupier of local property
  - a representative of a company/other organisation affected by the proposal
  - a private citizen

**The address of the property affected is:**  
87 EAST TERRACE ADELAIDE SA Postcode 5000

- My interests are:** (please tick one)
- I support the development
  - I support the development with some concerns
  - I oppose the development

**The specific aspects of the application to which I make comment on are:**  
PLEASE REFER TO ATTACHMENT

- I:** (please tick one)
- wish to be heard in support of my submission
  - do not wish to be heard in support of my submission (Please tick one)

- By:** (please tick one)
- appearing personally
  - being represented by the following person (Please tick one)

**Signature:** L Hill  
**Date:** 30/10/19

We refer to correspondence received in respect of Application Number 020/A053/19 [your reference 2019/12797/01].

In previously granting approval for the proposed development the State Commission Assessment Panel acknowledged that height of the building did not comply with regulations, but overlooked this non-compliance on the grounds that the proposed building was of a high standard.

We do not agree that the non-conformance of the building height with regulations ought to be simply disregarded as being of little consequence!

The excessive height of the proposed structure is the most significant reason why most adjoining property owners have opposed the application! If the height of the proposed structure was reduced to a level consistent with nearby buildings it would probably eliminate most, if not all, of the other concerns raised in submissions against the proposal. Reducing the scale of the construction would reduce the number of occupants, and thus reduce the volume of traffic flow in Cleo Lane, and have advantageous outcomes with respect to waste, noise, etc. We consider the high standard of the proposed structure to be of lesser importance in assessing the merit of the building. The applicant, who it is reported as being experienced in the construction industry and particularly in this section of the city must have been fully aware of the height restriction for this area. The reason for height restriction is clearly to protect the aesthetics of the immediate area. Is it not possible for the applicant to locate the proposed structure in a part of the city where it would comply with the height regulations of that area, be consistent with other structures in that same area, and thereby complement the city skyline? All other property owners in the vicinity of this Hutt Street, Bartels Road, East Tce area have complied with the height regulation. Why should one applicant be permitted to not comply?

To quote from the application document (page 5)

“Dwellings between Rymill House and the subject site are predominately two to three storeys in height; however, a four-storey residential flat building exists to the east of the subject site.”

On page 6 of the application document it is stated that;

“Two significant developments were also recently approved by the Development Assessment Commission (as it was known at the time) on Pirie Street with heights of approximately 60 metres and 80 metres (293-297 Pirie Street and 262-266 Pirie Street, respectively). Construction of 293-297 Pirie Street is near completion. This development is located at the south-western edge of the Park Lands. To the north of this development at the intersection of East Terrace and Rundle Street (292-300 Rundle Street) is a 60 metre high building that was also recently approved (through the Environment, Resources and Development Court).”

and on page 24;

“With respect to PDC 21 (c) (i) the proposal meets the listed eligibility criteria in that:

- the development provides an orderly transition up to existing taller buildings in an adjacent building height area”

Whilst we do not have access to contour maps, or know the distance between the two Pirie Street buildings and the Hutt Street site, we find it hard to believe that the top of the proposed 53.9 metre [**plus** the lift overrun and solar panels] building would be underneath a line drawn from the top of adjacent buildings [even the four storey residential flat building] to the Pirie Street buildings. If this is correct, then the proposed building **simply does not provide an orderly transition up to existing taller buildings as claimed.**

Would the Panel please investigate this matter and report the findings to all landowners affected by the proposed building? Again, we would contend that the over-height aspect [that is, the scale] of the application is probably the most contentious feature of the application, and that compliance with the 22 metre limit would reduce the scale of all other concerns; that is traffic, overshadowing, over-looking, visual impact, etc to a point where neighbours would be more accepting of the proposal.

From page 20 of the application document;

“Specifically, the design:

- responds positively to its surroundings and the character of the area, taking advantage of the northern aspect over the Park Lands, the siting and scale of adjacent built form and the generous contribution to the public realm by increasing the width of Cleo Lane and (subject to a separate process) upgrading the physical appearance of the laneway at the proponent’s expense;
- is fit for purpose, adaptable and long lasting being very conscious of the materials and finishes proposed and very mindful of existing development to the southeast with respect to overshadowing, overlooking and visual impact”

Firstly, we do not believe there is a “generous contribution to the public realm by increasing the width of Cleo Lane”! It is a private laneway, a no through road, and it is used for access to garages and the back doors of buildings. Current users are able to adequately navigate their way in and out of Cleo Lane. Increasing the width of a section of Cleo Lane is not proposed for the benefit of the general public – it is for the benefit of occupants of the proposed building, and for the collection of waste! It is not an area where pedestrians would go for a leisurely stroll.

Secondly, in our opinion the design does not “respond positively to its surroundings”. The proposed building is totally out of character with two and three storey buildings, and it is not “very mindful .... with respect to overshadowing, overlooking and visual impact”.

It is worthy to note that on page 21 of the document the applicant acknowledges that regulations “expressly require” regard for the impact of building height on other properties.

“The objectives of the City Living Zone expressly require future development in that Zone to have regard to potential impacts of building height and activities from land in adjoining zones.”

and on page 24

“• the increase in height above the 22 metres anticipated does not have adverse impacts on adjoining dwellings or the overall city form in the locality as its design, appearance and siting are commensurate with its setting and surrounding development.”

We totally disagree with that statement!

From page 36 of the application document;

Tectvs have undertaken a thorough assessment of the potential overlooking impacts associated with the proposed development. Each apartment floor plan has been designed so that the potential will be minimised. Further, the east facing dwellings between Level 3 and Level 7 will feature curved concrete beams of additional width (in comparison to the levels above) to further mitigate opportunities for overlooking into the private areas of dwellings fronting East Terrace.

Notice here the words “potential will be minimised” and “mitigate opportunities for overlooking”. The word “eliminate” is missing from the statement!

Also from page 20 of the application document;

“The proposed building reflects a high-scale and the podium design and potential future works to Cleo Lane create both the interest and human scale that the desired character seeks to achieve – all in a manner that offers weather protection and significant public benefit to the local community.”

Of what “significant benefit” is the building to the local community? Does the document contain details of these benefits? What weather protection does the building provide? Looking at the tectvs Design Response Proposal – Greening Strategy [page 93 of the combined document] we see no verandah over the public footpath that would afford weather protection.

In our opinion the application contains many exaggerated and unsubstantiated claims such as these which attempt to suggest that the building would be of great merit to the city, and of benefit to the community. In fact these claims are an attempt to divert attention away from the the significant non-compliance of the structure in terms of its over-height scale. The purpose of the building is to provide housing with a great view of the parklands for a limited number of residents, regardless of the effects on neighbours. Surely the Panel must be aware that these over-height constructions are opposed not just in this instance, but in other areas of Adelaide, and in other States as well.

There are other aspects of the building application where there is mention of possible solutions to address some of the concerns that have been raised previously. Given the time that has elapsed since the submission of the first application one might have thought that these matters would have been resolved and that a commitment could have been included in this application.

For example, on page 7 of the application;

“It is intended that the future tenant/operator of the restaurant space will be more akin to a coffee/dessert bar than a restaurant in a traditional sense. As such, no grease traps or exhausts associated with frying and the like will be required”

and on page 35;

“The proposed development includes a restaurant at ground level. The assessment of noise associated with the restaurant has been excluded as the operator is unknown at this particular stage and whether the proposed operation has any potential to impact noise sensitive land uses in the vicinity.”

Should the SCAP approve the application will there be any restrictions imposed on the applicant to ensure that nearby residents are legally protected from odours and noise?

And on page 13;

“The waste collection vehicle will reverse into Cleo Lane from East Terrace, and park briefly within the waste collection area while the private contractor wheels out the filled bins from the bin storage area, loads the waste, then returns the empty bins. Infraplan have confirmed in their Traffic Impact Statement that a vehicle entering or existing Cleo Lane will be able to pass the parked waste vehicle.

The proposed loading zone on Hutt Street is adequately sized to accommodate the manoeuvring and parking of a smaller type of waste collection vehicle which is currently not readily available. When these vehicles become more available, the opportunity exists for all waste to be collected on Hutt Street.”

Again, should the SCAP approve the application will there be any restrictions imposed on the applicant to ensure that smaller waste collection vehicles must be used when they are available?

And on page 14;

“Servicing of the property utilising a Medium Rigid Vehicle (MRV) in Cleo Lane has been developed in consideration of the tight operation of sites within the central business district. The Standard AS2890.2 is typically used in assessment of industrial and commercial properties, and not residential properties in a CBD environment. A reverse-in MRV movement is common at development sites across the CBD given the narrow laneways and accessways at new developments.”

It is disappointing that questions raised when the very first application was made for this development seem to have never been answered by either the SCAP or the applicant. At that time the legality of the reverse-in manoeuvre was questioned. Did anyone ever contact SAPOL for their view on this movement? If so, what was the response? The practice may be “common at development sites across the CBD”, but is it ***legal?*** Because a practice is common does not mean that it should be condoned! Collisions involving waste collection vehicles are not uncommon. Page 14 of the InfraPlan report appears to show the MRV crossing both a bicycle lane and the left turn lane from Bartels Rd into Hutt Street. We are still concerned that there seems to be a high risk for a bicycle / MRV collision. We believe that special reference should be made to sections 147 and 170 of the Australian Road Rules.

And on page 12;

“A potential clear zone approximately 6 metres wide in the southern most lane of East Terrace adjacent to Cleo Lane is also being sought from the Adelaide City Council to enable Cleo Lane residents to enter traffic during peak morning periods with ease, avoiding any potential for queuing.”

What is the current status of this proposal?

In summary, we remain opposed to the proposed development.

## Benson, Janaki (DPTI)

---

**From:** Ashik Ibrahim <aibrahim@ezralegal.com.au>  
**Sent:** Friday, 1 November 2019 12:58 PM  
**To:** DPTI:scapreps  
**Cc:** Michael Fabbro  
**Subject:** 2-6 Hutt Street, Adelaide (Development Number: 020/A053/19)  
**Attachments:** 0. Representation on Application Form.pdf; 1. Letter of Ezra Legal.pdf; 2. Letter of Melissa Mellen.pdf; 3. Letter of Graham Burns.pdf

To the Secretary, State Commission Assessment Panel

Please find **attached** the Representation on Application (Category 2) in respect of Development 020/A053/19 on behalf of Raymond Joseph Khabbaz and RJK (SA) Pty Ltd (As Trustee of the RJK Property Trust). The Representation is comprised of four attachments:

0. Representation on Application Form
1. Letter of Ezra Legal dated 1 November 2019
2. Report of Melissa Mellen
3. Letter of Graham Burns

I confirm the same is being sent by post to The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide SA 5001.

Yours faithfully,

**Ashik Ibrahim**

Solicitor

**Ezra Legal.**  
we're here to help

49 Wright Street, Adelaide SA 5000. GPO Box 519 Adelaide SA 5001.

**Tel:** 08 8231 6100 **Fax:** 08 8231 6300 **Email:** aibrahim@ezralegal.com.au

**Website:** www.ezralegal.com.au

Liability limited by a scheme approved under Professional Standards Legislation

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We do not warrant that this email is free from viruses or other programs which may affect your computer system, you should virus check all incoming emails to ensure maximum system integrity.

**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Rymill Park Apartments Unit Trust C/- Future Urban Group  
**Development Number:** 020/A053/19  
**Nature of Development:** Demolition of existing office building a construction of 16 level mixed use building with basement and associated car parking  
**Development Type:** Merit / Category 2  
**Zone / Policy Area:** Capital City Zone  
**Subject Land:** 2-6 Hutt Street, Adelaide  
**Contact Officer:** Janaki Benson  
**Phone Number:** 8343 2339  
**Close Date:** 1 November 2019

My Name: Mr Raymond Joseph Khabbaz      My phone number: 0418 814 055

**Primary method(s) of contact:** Email: aibrahim@ezralegal.com.au

Postal 49 Wright Street  
Address: ADELAIDE SA      Postcode: 5000

**You may be contacted via your nominated PRIMARY METHOD(S) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

**My interests are:**       owner of local property  
(please tick one)      occupier of local property  
a representative of a company/other organisation affected by this proposal  
a private citizen

**The address of the property affected is:**  
83 East Terrace, Adelaide SA      Postcode 5000

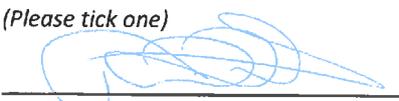
**My interests are:**      I support the development  
(please tick one)      I support the development with some concerns  
                                  I oppose the development

The specific aspects of the application to which I make comment are:

**PLEASE REFER TO ALL ENCLOSED DOCUMENTS**

I:       wish to be heard in support of my submission  
                                 do not wish to be heard in support of my submission  
                                 (Please tick one)

By:       appearing personally  
                                  being represented by the following person: Ashik Ibrahim  
                                 (Please tick one)

**Signature:**   
**Date:** 31 October 2018

**Return Address: The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
Email: [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)**

OUR REF: MAF/AJI (180255)  
YOUR REF:

1 November 2019

The Secretary  
State Commission Assessment Panel  
GPO Box 1815  
Adelaide SA 5001

**By email and post: [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)**

Copy to:

*Mr James Levinson  
Botten Levinson Lawyers  
Level 1, Darling Building  
28 Franklin Street  
ADELAIDE SA 5000*

Dear Sir,

**2-6 Hutt Street, Adelaide (Development Number: 020/A053/19)**

1. We act for and are instructed to respond as part of Mr Raymond Khabbaz's representation as an occupant of adjacent in respect of the proposed development.
2. We also act for and are instructed to respond as part of RJK (SA) Pty Ltd's (as Trustee of the RJK Property Trust), representation as the owner of that adjacent land at 83 East Terrace Adelaide.
3. We also act for those parties as Plaintiffs in Supreme Court of South Australia action 1046 of 2018 (**Supreme Court proceedings**). The applicants in this development application are the Third and Fourth Defendants in the Supreme Court proceedings. The State Planning Commission (SPC) and the Minister for Planning are the First and Second Defendants respectively.
4. This letter and its **enclosures** is our clients' representation in relation to the development application. This representation has three parts, all of which are relied upon. The first, this letter deals with certain legal issues. The second is an enclosed expert traffic advice prepared by Melissa Mellen of MFY Pty Ltd. The third part is an enclosed expert planning advice prepared by Graham Burns of MasterPlan SA Pty Ltd.

## **Background**

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5. Mr Khabbaz is the occupier of the dwelling at 83 East Terrace, Adelaide SA 5000, which adjoins the eastern boundary of the proposed development land. Mr Khabbaz and his wife have enjoyed the past 12 years living on East Terrace and intend spending many more years during their retirement within this premium residential area of the city.

## **Relationship of this DA with past applications and consents.**

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6. It appears that the development which is the subject of this application is relevantly the same as the development which has already been granted development plan consent by the SCAP (DA 020/A081/17) (**First Consent**) and is the subject of the Supreme Court proceedings.
7. Recently, however, correspondence seeking to cancel that consent was copied to us. We have not been told whether that has occurred nor, if so, on what conditions (if any). Such application for cancellation is a tacit admission that our clients' challenge – the Supreme Court proceedings – are well-founded.
8. Further, there is an extant development application (DA 020/A080/18) (**Second Application**) by the same applicant for a substantively identical development which we understand the applicant has 'put on hold'.
9. We have written to the applicant's solicitors inviting withdrawal of the Second Application, so that neither our clients nor SCAP are being forced to consider the same application repeatedly. At the time of writing we have had no response to this request.
10. It would seem, however, that our clients' representation in relation to the Second Application has prompted the applicant, in this present application, to take some small steps to improve traffic issues, and made substantially more effort to justify traffic non-conformances with Australian Standards. We take that as an implicit admission that (a) the First Consent should never have been granted consent, on the merits, and (b) that the Second Application should not be granted consent, on the merits. We return further below to why this application *also* should be refused, on the merits.
11. The application appears to continue to be asserted that Cleo Lane is to be substantially widened by in the future providing a right of way to other residents of the lane. However, as in the prior applications, this does not appear to form part of the application. It therefore cannot be relied upon by the SCAP at all.
12. Further, if such 'widening' did form part of the application it clearly would involve a change of use of the subject land for the purpose of public access and a thoroughfare. This would have the consequence that the nature of the development has (again) been

invalidly assessed and that public notification of the development (again) does not accord with the legislative requirements.<sup>1</sup>

13. Further, it is not clear how such an arrangement would be acceptable from a traffic management perspective given that it may result in a “lane” where some but not all motorists could legally use its apparent breadth.

#### **Development is Seriously at Variance**

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14. In any event for the reasons addressed in Mr Burn’s planning report the proposed development is seriously at variance with the Development Plan.
15. It is inconceivable that a development which exceeds 53 metres in height is other than seriously at variance with the Plan, which seeks to ensure that development “is sympathetic to ... the anticipated city form expressed in Concept Plan Figures CC/1 and 2”. ‘Sympathetic’ in this context means, ‘designed in a sensitive or appropriate way’. This development is in no way sensitive to, or appropriate when judged against, the Concept Plan. It would be a gargantuan outlier, standing far taller than all other buildings around it, including many in the area westward which anticipates buildings of about this height (unlike the area in which the building is in fact proposed).
16. The Concept Plan provides that this land is in a small and carefully targeted area of land where the maximum height is substantially less than half of 53 m. There is plainly a “serious” or “substantial” variance from the Plan.
17. If it is thought (for reasons that are not clear at all) that buildings exceeding 53 metres in height should be permitted in this location, (because as the Applicant contends) some buildings have been constructed well away from the proposed location in areas where a much higher maximum or no limit applies, then the Plan should be amended yet again. The Plan continues to be unable accommodate this development. Any other view remains completely untenable.
18. PDC 21 cannot assist the Applicant. The proposal is clearly not sympathetic to the Concept Plan. It directly contradicts and undermines it and treats the subject land as if it were in other policy areas permitting 53 metre high development. It cannot be sympathetic to the Concept Plan by directly contradicting it.
19. The Concept Plan envisages development at a maximum of 22 metres in this location which increases to 53 metres and higher to the West. It defies any rational analysis to

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<sup>1</sup> *Pioneer Concrete (Qld) Pty Ltd v Brisbane City Council* (1980) 145 CLR 485.

contend that a development of 53 metres height in the eastern most part of the 22 metre maximum area is sympathetic to the Concept Plan.

20. For the same reasons, the proposed development fails to have “regard to ... the positive character of the locality”. The positive character of the locality is driven by the low-rise transition from the City Living Zone in the east to the higher scale area west of Hutt St. This area, sandwiched between those two areas, is deliberately intended as an area of careful transition. The proposed development is entirely antithetical to this positive character and would destroy it locally.
21. Further Mr Burns is plainly correct in identifying that the other qualifying provisions of PDC 21 are not met.
22. Even if that were not the case, the fact that the maximum heights limits may be extended in certain circumstances does not mean they can be disregarded or ignored. The provisions of PDC 21 cannot be used so as to treat the subject land as if it were included in areas designated for a 53 metre high building (or higher).
23. The Plan simply cannot be construed as if compliance with the various limbs and sub-limbs of PDC 21 could somehow justify a development which is 53 metres high in a 22 m maximum area. Whilst some additional height might be allowed where PDC 21 was met (say, generously, 25% for a maximum of 27.5 m), a development which is of an entirely different scale such as this, is not within the Plan’s contemplation. The Plan explicitly directs development of this scale elsewhere.
24. The substantial and serious variance is therefore both qualitative (buildings of this scale not envisaged) and quantitative.

## Merits of the Development

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25. The above submissions plainly demonstrate that the proposal cannot merit approval.
26. As mentioned, an expert report is **enclosed** within this letter prepared by Graham Burns in respect of the question of whether the proposed development is seriously at variance. It is relied upon in its entirety as a part of this representation and its conclusions about the merits of the proposed development should also be taken into account by the SCAP if it considers this application.
27. While a level of dispensation may be appropriate in certain cases, this is not a case in which dispensation is sought but where the proposed development is blatantly ignoring height restrictions and is in essence redrawing the Concept Plan for the City.
28. For completeness, we note that the content of PDC 21 is currently uncertain as it is likely to be the subject of judicial review in the Supreme Court proceedings.
29. The approach of the Applicant, to draw upon buildings either under construction or approved in areas with much more generous height limits, is a fundamentally incorrect approach and cannot be used as an example to enable the proposed development to go ahead. As Commissioner Rumsby said in *Gregory v Charles Sturt* [2018] SAERDC 37 at [95]:

*The respondents' rationale for the design approach taken is, in essence, to draw from the longstanding discordant coastal reserve setbacks on the subject land and at 183 Military Road, and to apply a building height from the Bucknall Court properties, essentially approved under a different policy regime. ... The respondents' approach ignores clear, and clearly applicable, policies which are relevant and not made redundant by the circumstances of the land or its locality.*
30. Further there are significant traffic issues that are posed by the purported development that raise safety concerns and will result in traffic disturbances to both Cleo Lane and Hutt Street that cannot be avoided unless there is a fundamental redesign.
31. The 'tweaking around the edges' which is apparent when comparing this application with the Second Application, is not a fundamental redesign and accordingly it is unsurprising that it still fails to comply with important traffic safety issues.
32. As mentioned previously, a Traffic Impact Assessment Report by Melissa Mellen has been **enclosed** and its findings, arguments, and conclusions are relied upon in their entirety.

33. It demonstrates unequivocally that the information provided to the SCAP regarding Cleo Lane is inaccurate and vindicates our clients concerns.
34. The proposal involves unacceptable impacts including safety impacts relating to Cleo lane.
35. The proposal does not comply with relevant standards. The Applicants intentions regarding the widening of Cleo land are ambiguous and unenforceable and in any event such a proposal creates further difficulties adverted to in that report.
36. The confusion surrounding the asserted increase in the width of Cleo lane is entirely unacceptable and the proposal should not be approved for this reason as well.
37. Further, the scale of the building compounds the effect of traffic in Cleo Lane because of the numbers of residences accommodated.
38. Mr Khabbaz maintains that the obvious solution to this traffic problem to maintain some level of residential amenity is to have all entrances and exits to the development from Hutt Street.
39. In relation to the Second Application, we submitted that it was evident that design refinements would be required in relation to the Hutt St access and internal vehicle movements as the current access/egress arrangements were deficient. It is therefore of serious concern that there has been no improvement to the Hutt St access and (worse) use of Cleo Lane continues to be proposed.
40. Cleo Lane is a right of way that was plainly never designed to accommodate a development of this scale.
41. Our client also relies on all the matters raised by him in his prior representations written and verbal.

#### **Conclusion**

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42. If the First Consent has not been cancelled, the procedure adopted by the Applicant is not authorised by the Act and the SCAP has no power to determine the application.
43. It may be that any determination of the application should await the determination of whether PDC 21 of the Development Plan has been validly amended by the City of Adelaide Minor Amendments DPA.
44. Further, the proposed development is seriously at variance with the Development Plan and cannot be approved.

45. For the same reason and other matters raised by our clients the proposal would not merit approval

46. We respectfully submit that the SCAP should seek legal advice and independent planning advice before proceeding any further.

Our clients reserves all of their rights to challenge any further approval granted by the SCAP.

Each of our clients seek to address the Panel verbally if this application is heard by it.

Yours faithfully

**EZRA LEGAL**

Per:



**Ashik Ibrahim**

**Solicitor**

E-mail: [aibrahim@ezralegal.com.au](mailto:aibrahim@ezralegal.com.au)

Enc: *Category 2 Representation Form, Traffic Impact Assessment Report by Melissa Mellen, Development Plan Assessment Report by Graham Burns*

MLM/18-0243

1 November 2019

Mr Ashik Ibrahim

Ezra Legal  
GPO Box 519  
ADELAIDE SA 5001

Dear Ashik,

**DA 020/A053/19  
RYMILL APARTMENTS – TRAFFIC AND ACCESS REVIEW**

Thank you for your instructions in relation to the above matter. You have sought my view in relation to the traffic, access and safety implications associated with the proposed development.

In November 2018 I provided advice in relation to an earlier version of the subject proposal for which you requested that I consider the safety issues that could arise in relation to the (then) proposed development. You have now sought my view in relation to the amended proposal, as it relates to traffic and safety matters.

In forming my view in relation to the amended proposal, I have reviewed the amended plans prepared by Tectvs (issued on 20.9.19) and the updated traffic assessment completed by InfraPlan in relation to the proposal. I have also assessed the compliance of the amended proposal in relation to relevant Australian Standards and design guidelines and had swept path diagrams prepared to inform my review of the amended plans.

The proposed development which is located on the corner of Hutt Street and East Terrace is for a multi-level mixed use development which will include a 220 m<sup>2</sup> café/restaurant at the mezzanine level and apartments on upper levels. Parking in 56 spaces is proposed over four levels, with two upper levels to be accessed via Cleo Lane and two basement levels to be accessed via Hutt Street.

The modified design has adopted a functional design solution in order to address the deficiencies in the previous plan. While many of these criteria have now been resolved with amended design (such as clearance and swept path criteria), there are still a number of fundamental issues that would not be resolved if the proposal was constructed based on the current design. Of note is that is that an assessment of the practical access considerations identifies access constraints, irrespective of compliance with Australian/New Zealand Standard, *Parking Facilities Part 1: Off-street car parking (AS/NZS 2890.1:2004)* or otherwise.



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The proposal includes a signalised ramp system, where signals will be used to provide for a single direction of traffic flow at any one time. AS/NZS 2890.1:2004 does not provide advice in respect to such a scenario and its operation is based on engineering judgement. The intent of the width requirements in AS/NZS 2890.1:2004 is to provide for safe access and minimise conflict with traffic on the adjacent road. Specifically AS/NZS 2890.1:2004 specifies the following advice:

### 3.4 QUEUEING AREAS

*At an entry point, the queuing area to be provided between the vehicular control point and the property boundary shall be sufficient to allow a free influx of traffic which will not adversely affect traffic or pedestrian flows in the frontage road. No parking space manoeuvres shall be allowed to take place within the queuing area.*

*The size of the queuing area may be determined from consideration of the following:*

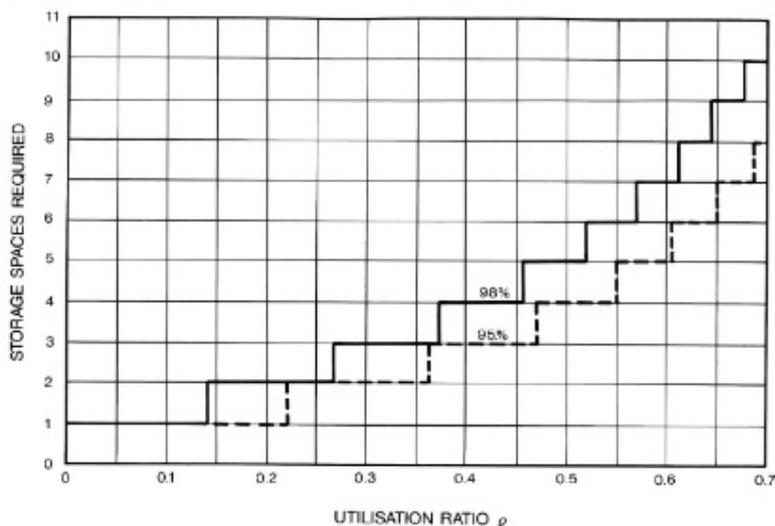
- (a) *Traffic volume of surrounding streets.*
- (b) *The number of parking spaces in the car park.*
- (c) *Anticipated peak entry/exit flow.*
- (d) *Rate of entry/exit at control points.*
- (e) *Hourly parking accumulation and turnover.*
- (f) *Freedom of movement beyond the control point.*

The queuing analysis completed by Infraplan has identified that there is not likely to be queuing on the road due to the low probability of a vehicle arriving when another vehicle is in the system.

However, due to the proposed operations and the need for drivers to access their designated parking spaces prior to another vehicle being able to enter the car park (due to the continuous one-lane operation between levels), there is potential for queuing to occur.

Austrroads "Guide to Traffic Management – Part 3: Traffic Studies and Analysis" provides the following Figure as a tool to access potential queuing.

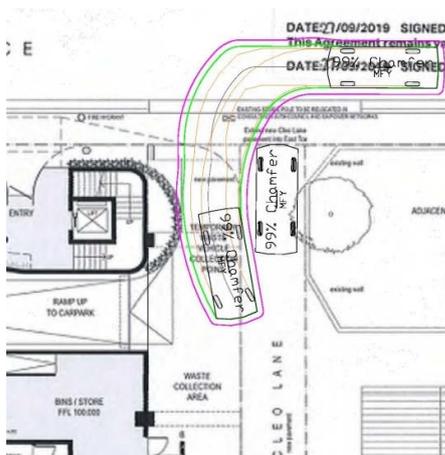
**Figure 6.5: Unsignalised intersection vehicle storage requirements**



Adopting the data provided in the InfraPlan report would give a  $p = 0.13$  (five vehicles divided by a capacity of 36 vehicles). On this basis, there would be a queue of one vehicle on Cleo Lane and Hutt Street at the 95<sup>th</sup> percentile probability level.

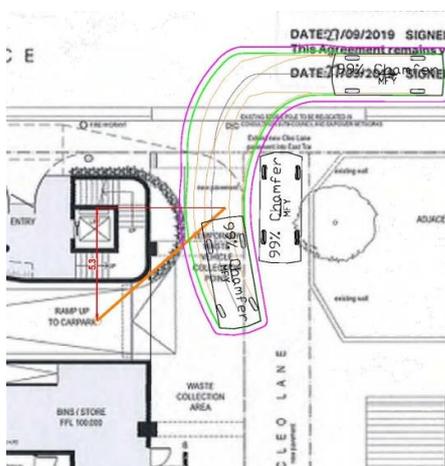
While the amended design has provided for such a queue in Hutt Street, queuing of vehicles in Cleo Lane would result in the following potential issues

- drivers attempting to pass a queued vehicle within the widened section would be driving on private land, as illustrated in Figure 1.



**Figure 1: Drivers attempting to pass a queued vehicle**

- there would be restricted sightlines between drivers exiting the car park (on a green signal) and a driver passing a queued vehicle in Cleo Lane, thus resulting in a conflict risk, as illustrated in Figure 2.



**Figure 2: Sightline restriction for driver exiting ramp**

- a propped vehicle would be immediately adjacent the intersection with East Terrace, thus causing a potential crash risk with drivers wanting to enter Cleo Lane.

- When designing ramps it is important to provide transitions to ensure vehicles can negotiate the vertical profile of the ramps. AS/NZS 2890.1:2004 provides the following advice in respect to transitions:

**2.5.3 Circulation roadway and ramp grades**

Limiting requirements for grades on circulation road ways and ramps shall be as follows: ...

- (d) Changes of grade – To prevent vehicles scraping or bottoming, changes in grade in excess of-
- (i) 12.5 percent algebraically (1 in 8) for summit grade changes; or
  - (ii) 15 percent algebraically (1 in 6.7) for sag grade changes;
- require introduction of a grade transition between the main grade lines as illustrated in Figure 2.10.

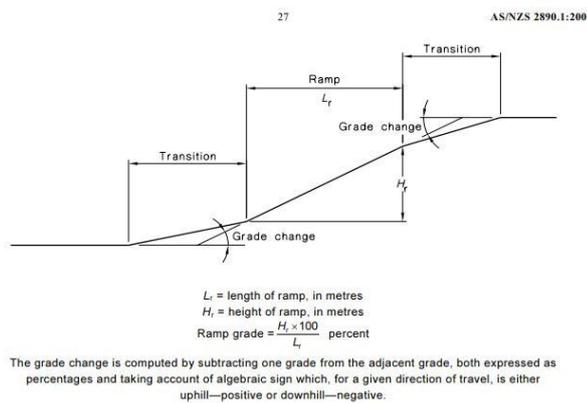
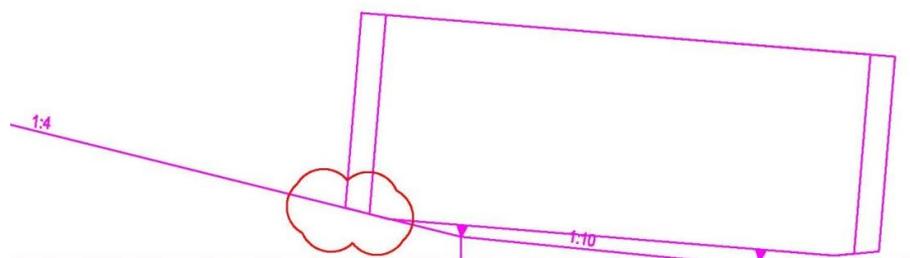


FIGURE 2.10 CHANGES OF GRADE ON RAMPS

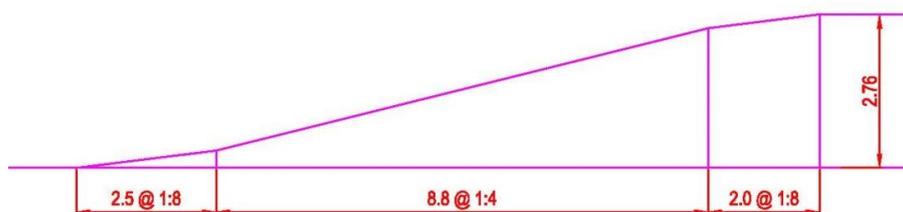
Section 6.3 of the InfraPlan report documents the ramp grades but does not include a functional assessment as to whether such ramp profiles will provide for functional access. Figure 3 identifies the vertical clearance profile on the proposed ramps for a B99 vehicle (noting that sports cars have a lower clearance).



**Figure 3: Vertical clearance profile on the proposed ramps for a B99 vehicle**

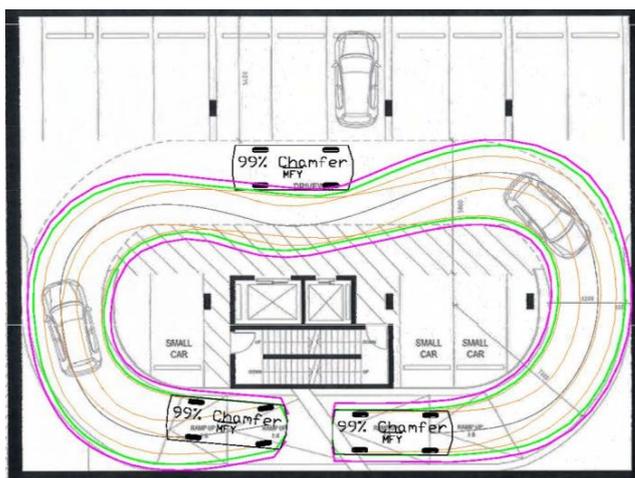
It can be seen on the above figure that the vertical profile constraints on the ramps have not been resolved in the amended design and there will be access constraints for the car park.

It was also noted that the length of two of the ramps prescribed in the InfraPlan report would not reach the floor to floor heights nominated. Specifically, the level differences nominated between Basement 1 and Basement 2 and between Basement 1 and Ground do not correlate with the grade change that would be achieved by the proposed ramps. As an example, the floor to floor height between Basement 1 and Basement 2 is nominated as 2.85 m (InfraPlan report, Page 26), whereas the specified ramp grades would only achieve a change in level of 2.76 m as illustrated in Figure 4.



**Figure 4: length of two of the ramps prescribed in the InfraPlan report**

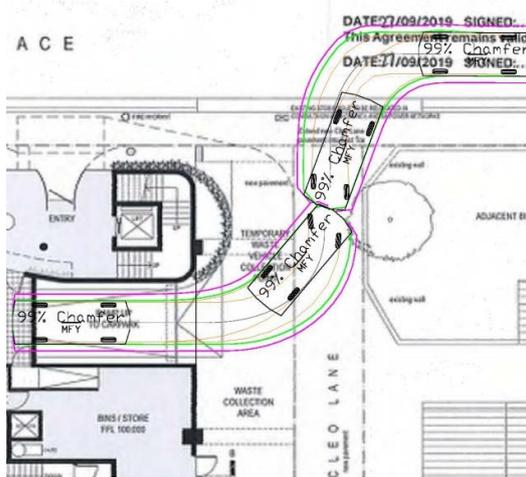
- The Infraplan report suggests that drivers will be able to pass within the car park aisles. However, the turning radii of vehicles accessing the ramp mean that there will be inadequate area for drivers to pass on the aisles, as illustrated in Figure 5.



**Figure 5: Stored vehicle in aisle obstructing access for turning vehicles**

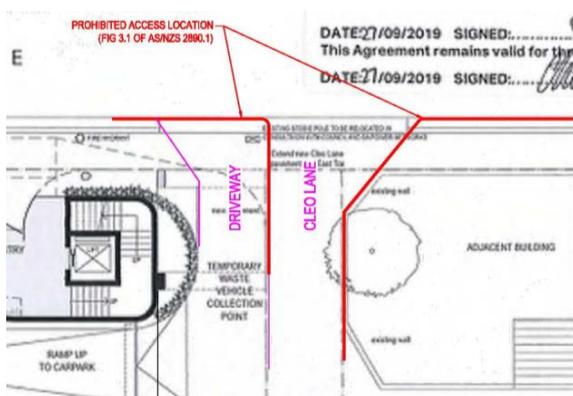
Further, the above figure also illustrates that a driver in the aisle wanting to exit must store well back from the ramp in order to not restrict an entering driver (and would then need to move forward to allow the entering driver to access the ramp to the next level or the adjacent spaces). This would mean that drivers exiting many of the spaces would be required to reverse along the aisle to permit drivers to enter.

- While the development still implies that it includes widening of Cleo Lane, the proposal only seeks to provide a driveway adjacent Cleo Lane (there is no formal position specified in the InfraPlan report in relation to creating rights-of-way). Drivers using Cleo Lane who are not related to the subject site would not lawfully be able to use the widened portion (driveway) on the subject land, unless rights-of-way are to be created. This would mean that a driver exiting Cleo Lane would need to exit via the existing lane which would result in a potential conflict with a driver entering the lane from the subject site (who would be expecting the driver to be in the widened portion), as illustrated in Figure 6.



**Figure 6: Conflict of Access if no right-of-way established**

The “widening” of Cleo Lane may be perceived to create a safer environment whereas it would actually create a driveway immediately adjacent the lane. This has not been resolved in the proposal and is contrary to Figure 3.1 of AS/NZS 2890.1:2004, as illustrated in Figure 7.

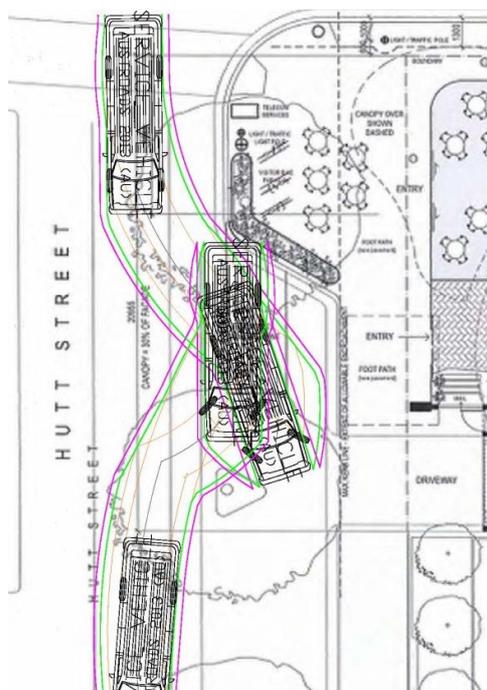


**Figure 7: Proposed driveway non-compliant with AS/NZS2890.1**

The arrangement will be confusing for drivers who will either not understand that they should not drive on private land or will potentially create risk when entering drivers expect exiting drivers to use the private access. This is why the Australian Standard provides the following recommendation

All accesses to off-street car parks from frontage roads shall be formed in such a way as to be clearly recognized by road users as either an access driveway or as an intersection.

- The proposal will rely on loading in Hutt Street. If such an arrangement was considered acceptable by Council (given that it would require a parking zone to be implemented and loss of a number of on-street spaces), it would only accommodate a small rigid vehicle. It is anticipated that the café would require deliveries by a medium rigid vehicle (MRV) which would obstruct the access, as illustrated in Figure 8.



**Figure 8: Swept path of MRV accessing the loading zone**

The amended InfraPlan report has not provided details as to how loading will occur for the café nor the implication of the loading vehicle obstructing the access.

- Refuse collection for the site is proposed via the new driveway adjacent Cleo Lane. Access to this area will require the truck to be reversed into the site. Australian Standard, *Parking Facilities Part 2: Off-street Commercial vehicle facilities (AS 2890.2-2002)* provides the following advice in relation to vehicles reversing into the site:

### **3.2.3 Regular service – Major Road**

*Requirements and recommendations for providing for regular service from a major road are as follows:*

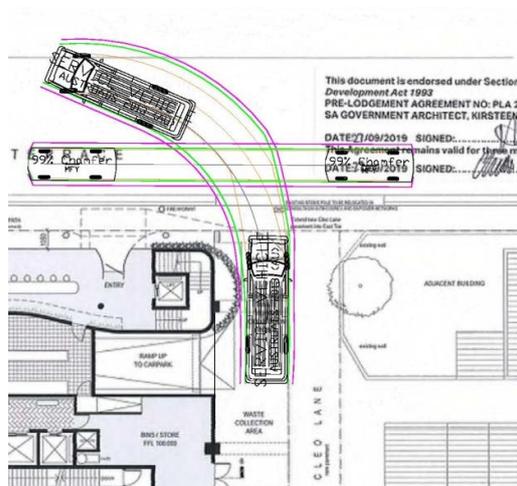
- A service are unobstructed by other vehicles or on-site activities shall be provided.*
- All manoeuvring associated with parking, loading and unloading shall be able to be confined to the service area.*
- Both entry and exit at the property boundary shall be in a forward direction.*
- Circulation roadways shall be provided to connect the access driveway with the service area.*
- Wherever practicable, separate entry and exit access driveways should be provided*

### 3.2.4 Regular service – Minor road

Requirements and recommendations for providing for regular service from a major road are as follows:

- (a) Manoeuvring on-street, if permitted by the relevant authority, shall be strictly limited to one reverse movement either onto or off the street, and furthermore, shall be subject to consideration of both safety and obstruction to other on-street traffic.
- (b) The swept path of the maximum size design vehicle using the facility may be allowed to occupy the entire width (less specified clearances) of two-way access driveway when the vehicle is entering or leaving the minor road.

East Terrace has a daily traffic volume of approximately 23,000 vehicles per day (vpd) adjacent the subject site. It is not a low volume road. Further, the reversing manoeuvre would require use of two lanes and will create a hazardous situation. Figure 9 illustrates how a driver in the kerbside lane could conflict with the truck being reversed into the site.



**Figure 9: Conflict between the driver in kerbside lane and truck reversing into the site**

The InfraPlan turn path confirms that two lanes would be required to facilitate the truck access. The waste collection is anticipated to have a demand for drivers which for the reversing of trucks for the waste collection will create a crash risk on East Terrace.

- The parked refuse vehicle will obstruct the Cleo Lane access when collecting refuse. This truck could be parked for approximately three minutes while collecting and emptying three bins, which would mean that drivers wishing to enter would obstruct Cleo Lane for this period and drivers needing to exit the car park could not do so. Such a situation is highly undesirable.

Should the reversing manoeuvre be acceptable to Council, the design should, at the very least, provide for the truck to turn from the kerbside lane and not obstruct sightlines for drivers in Cleo Lane.

In summary, there are a number of traffic related design deficiencies which have not been resolved on the amended plans.



Of particular note is the potential impact on the public realm and adjacent Cleo Lane. The proposal relies on queueing on the road network, including Cleo Lane and while the volumes will be low, drivers will be required to queue on occasion for nearly two minutes (and longer when a refuse vehicle is on-site). This will result in an increased risk for drivers.

Further, the proposal relies on an artificial widening of Cleo Lane but unless such widening is formalised there will be increased risks for drivers using this facility who are not associated with the subject land. Accordingly, I am of the view that the proposal, as currently documents, would result in safety issues on the adjacent road network.

Yours sincerely,  
**MFY PTY LTD**

A handwritten signature in black ink, appearing to read 'Melissa Mellen'.

**MELISSA MELLE**  
Director

31 October 2019

Mr Ashik Ibrahim  
Solicitor  
Ezra Legal  
GPO Box 519  
ADELAIDE SA 5001

Email: [aibrahim@ezralegal.com.au](mailto:aibrahim@ezralegal.com.au)

Dear Mr Ibrahim

**Re: Proposed High Rise Mixed Use Development at 2 Hutt Street Adelaide**

We refer to your request for advice concerning a proposal by Rymill Park Apartments Unit Trust to develop 2-6 Hutt Street, Adelaide.

The proposed development comprises the demolition of an existing office building and the construction of a 16 level mixed-use building (including mezzanine) containing a ground-floor restaurant, and 38 apartment-style dwellings with associated common areas, car-parking and servicing facilities. We note that the development has been classified as Category 2 and is currently undergoing a two-week notification period which closes on 1 November 2019.

The State Commission Assessment Panel (SCAP) is the relevant planning authority. The proposal has been assigned development number DA 020/A053/19.

The application is the second iteration of an application previously submitted over this site (DA 020/A080/18).

We note that the following variations have been made to the proposed development:

- reconfiguration of an internal wall on the ground floor and mezzanine levels to provide a larger turning circle for vehicles accessing the upper-level car-park deck;
  - this wall reconfiguration reduces the restaurant area on the ground floor, but increases the size of the associated kitchen (under the vehicular ramp);
  - a corresponding floor area reduction for the lounge and dining area on the mezzanine level, resulting in the removal of the 'caterers' kitchen';
- relocation of visitor bicycle parking spaces from the eastern access (near Cleo Lane) to the footpath of Hutt Street.



We note that the relevant Development Plan for the purposes of the proposed development is the City of Adelaide Development Plan, consolidated version dated 25 July 2019. This version of the Development Plan has been amended in a number of important respects – see below.

In forming our opinions in this matter, we have reviewed the plans of the proposed development by Tectvs Architects, and the associated planning report prepared for the applicant by Future Urban Group. We are also familiar with the site and locality, having taken the opportunity to revisit the site and surrounding locality as part of this review.

The most important aspect of the proposal which is relevant to our review continues to be the height of the building. In this regard the building will have a total height from ground level of 53.9 metres (excluding the height of the lift over-run).

The proposed development is in the Capital City Zone (but under no policy area), as shown on Zones Map Adel/20 of the Development Plan.

Included in the Capital City Zone is Building Heights Concept Plan Figure CC/2, which indicates that the development site has a maximum building height of 22 metres. To all intent and purposes, the 22-metre building height limit applies to those properties in the Capital City Zone on both sides of Hutt Street, between Pirie Street (to the north) and Hume Street, south of Angas Street (to the south).

**The proposed development will be approximately two-and-a-half times taller than the maximum building height prescribed in the Development Plan for this site.**

Principle of Development Control (PDC) 21 of the Capital City Zone states that development should not exceed the maximum building height shown on Concept Plan Figures CC/1 and CC/2 unless certain requirements are met. The core component of PDC 21 states:

*Development should not exceed the maximum building height shown in Concept Plan Figures CC/1 and 2 unless, notwithstanding its height, it has regard to the context that forms the positive character of the locality and is sympathetic to the desired character of the Zone or Policy Area and the anticipated city form expressed in Concept Plan Figures CC/1 and 2 [our underlining].*

The development site is at the eastern-most edge of the Capital City Zone, where it adjoins the City Living Zone to the east and the Park Lands Zone to the north.

Concept Plan Figure CC/2 applies to the site of the proposed development. It clearly indicates that the area of the Capital City Zone fronting Hutt Street, in a corridor running generally from Angas Street in the south and north to Pirie Street, will contain buildings with a *maximum* building height of 22 metres. Building height increases to 53 metres to the west of this 22-metre building height area, and higher again in the central core of the CBD where no prescribed height limits apply. The proposal is clearly and very substantially at odds with the city form prescribed by these maximum building heights.



The provisions of the City Living Zone and the associated East Terrace Policy Area 29 are highly relevant to a review of acceptable building height, because the Capital City Zone and East Terrace Policy Area is *adjacent* to the site. It logically follows that development in the adjacent City Living Zone contributes to the *context* of the site.

Architecturally, the building is well designed and contemporary and we raise no concern or criticism of the structure's external appearance in this regard. The Development Plan, however, emphasises the need for CBD buildings to relate to, and fit into, the surrounding townscape context. This requirement is expressed by the graduated building height approach depicted on Concept Plan Figures CC/1 and CC/2, and reinforced throughout the Development Plan, especially in the Desired Character for the Capital City Zone which calls for:

**"New development [to] achieve high design quality by being:**

- (a) contextual – so that it responds to its surroundings, recognises and carefully considers the adjacent built form, and positively contributes to the character of the immediate area"**

The Desired Character Statement goes on to advise that "*contemporary architecture [will respond] to site context and broader streetscape*" while development which "*adds height, bulk and massing of new built form should be given due consideration in the wider context of the proposed development*".

While the building has been well designed and exhibits a contemporary appearance, it does not "*respond to [the] building's context*" (Zone Objective 5) nor does it achieve "*a cohesive scale of development that responds to its context*". (Zone Objective 7).

The maximum building height in Policy Area 29 of the City Living Zone is four-storeys, or 14 metres. The only relevant exception is where a site in Policy Area 29 exceeds 1,500 square metres. These sites are referred to in the Development Plan as "catalyst sites". We note that development between East Terrace and Cleo Lane (being that part of the City Living Zone and Policy Area 29 closest to the development site) comprises two, three and four-storey housing. To the best of our knowledge there are no catalyst sites in the locality of the adjacent City Living Zone.

The desired character sought for Policy Area 29 of the City Living Zone is set out in the Desired Character statement. The entirety of this Desired Character is reproduced below:

**The Policy Area will be developed in a manner which reinforces the existing character of grand buildings set on attractive, landscaped grounds in a Park Lands edge setting. Development will continue to provide a high level of amenity and with a mix of residential dwelling types and styles, including the continued development of residential flat buildings which are complementary in design to the many State and Local Heritage Places. Wakefield Street will continue to provide a mix of uses, either wholly residential or non-residential land uses on lower levels with residential at upper levels.**



**Development will continue to provide for substantial, high quality landscaped open spaces in order to frame East Terrace and provide a distinct edge to the City. Private properties will be defined by formal fencing which allows for views to, and an appreciation of, the distinctive garden setting and spacious character at-ground underpinned by the rhythm of front and side boundary setbacks.**

**Buildings will be massed vertically or comprise narrow frontage elements with generous front and side setbacks with building façades that are well articulated with finer details that contribute positively to the public realm and residential character.**

**Vehicle movement will be primarily for local and visitor traffic, although East Terrace will continue to act as a strong pedestrian and cyclist link between the City and the Park Lands.**

**Catalyst sites provide opportunities for integrated developments on large sites that respond to the development's context and provide opportunities to increase the residential population of the City. Such sites will generally be developed for housing but may include a small amount of non-residential development such as cafés, restaurants or small-scale shops that create a greater level of activity fronting the Park Lands. Non-residential developments that provide additional community services and facilities may also occur.**

**Developments on catalyst sites will exemplify quality contemporary design that is generally of greater intensity than their surroundings. However, development will be designed to carefully manage the interface with any residential development, particularly with regard to massing; proportions; overshadowing; and traffic and noise-related impacts.**

The style, age, condition and configuration of existing development in the part of Policy Area 29 closest to the development site is such that catalyst sites would be very difficult to assemble. While we cannot entirely rule out this possibility, we believe it is unlikely that a site of 1,500 square metres could be created and redeveloped as a catalyst site.

The development site has a northerly outlook across the Park Lands. Having regard to the provisions of the Park Lands Zone in the Development Plan, there is furthermore no possibility of the Park Lands being developed with a building which would match the height of the proposed development.

The locality to the west of the development site is in the Capital City Zone. Apart from allotments with frontages to the western side of Hutt Street, where a 22-metre maximum building height also applies, the maximum building height for other parts of the Capital City Zone is specified as 53 metres.

In context therefore, the proposal exceeds the maximum building height specified for all surrounding properties, namely:

- 22 metres for properties to the south and west in the Capital City Zone;
- 14 metres or four storeys for properties to the east in the City Living Zone; and
- minimal building height in the Park Lands Zone to the north where no development in the form of multi-storey buildings is envisaged.

The Development Plan encourages a transition of building height in situations where a development site adjoins a different Zone or Policy Area. Council-wide Objective 47(d) and Principles 173 and 270, and Capital City Zone Principle 21(b)(i)(1) are especially relevant to this issue and are reproduced below:



**Objective 47 Buildings should be designed to:**

....

**(d) provide for a transition of building heights between Zone and Policy Areas where building height guidelines differ;**

**PDC 173 Development in a non-residential Zone that abuts land in a City Living Zone .... should provide a transition between high intensity development and the lower intensity development in the adjacent zone by focussing taller elements away from the common zone boundary.**

**PDC 270 Development located either abutting, straddling or within 20 metres of a Zone or Policy Area boundary should provide for a transition and reasonable gradation from the character desired from one to the other.**

Capital City Zone Principle 21 (c)(i)(1), referenced earlier in this letter, specifies that where a building in the zone does exceed the maximum building height shown in Concept Plan Figures CC/1 and CC/2, three of the eight listed criteria must be met, including:

**(1) the development provides an orderly transition to an existing taller building or prescribed maximum building height in one adjoining Zone or Policy Area or building height area on Concept Plan Figures CC/1 and 2;**

We acknowledge that Criteria 1 is one of eight listed, and that only three of the eight criteria must be met. Nonetheless, it is evident that the proposal does not satisfy this criteria.

It does not follow that a building can be built to any height in the Capital City Zone by satisfying Capital City Zone Principle 21, apart from the area shown on Concept Plan Figures CC/1 and CC/2 as "No Prescribed Height Limit". If that were so, it would render the Development Plan directionless when it comes to determining appropriate building heights throughout this Zone. Such an approach would also ignore other provisions of the Development Plan, including those provisions which require buildings to be designed to provide for a transition and reasonable gradation between one Zone or Policy Area to another Zone or Policy Area.

We are not convinced that the development satisfies "at least three" of the eight features specified in Capital City Zone Principle 21(c)(i); this is despite the applicant's Planning Report claiming that six "features" are satisfied.

In this regard it is useful to repeat what the applicant's Planning Report asserts about the proposal satisfying these "features":

- *the development provides an orderly transition up to existing taller buildings in an adjacent building height area (Feature 1);*
- *high quality universally accessible open space, is directly connected to, and well-integrated with, public realm areas of the street (Feature 2);*



- *active uses are located on the public street frontages (Feature 5);*
- *a range of dwelling types that includes more than 10% of 3+ bedrooms apartments are provided (Feature 6);*
- *the building is adjacent to the Park Lands (Feature 7);*
- *the impact on adjacent properties is no greater than a building of the maximum height on Concept Plan Figure CC/1 and 2 in relation to sunlight access and overlooking (Feature 8).*

Our response to these assertions is as follows:

Feature 1: The proposal does not satisfy Feature 1 for the reasons previously explained in this letter. With an overall height in the order of two and a half times greater than the allowable maximum building height, it is evident that the building does not *"provide an orderly transition up to an existing taller building or prescribed minimum building height in an adjoining Zone or Policy Area"*.

Feature 2: The building contains what might be a high-quality universally accessible open space on Level 3. However, this space is not directly connected to, nor is it well integrated with, the public realm areas of the street as specified. Indeed, it is not connected to or integrated with the street public realm at all. Therefore, we do not accept that the development satisfies this feature.

Feature 5: The development has a restaurant on the ground floor level, which is located on the public street frontages of Hutt Street and East Terrace. However, the length of frontages which comprise active uses do not equate to the minimum requirement of 75 percent. By our calculations, the active frontages comprise in the order of only approximately 60 percent. Therefore, this feature is not satisfied.

Feature 6: We accept that a range of dwelling types are provided, including at least 10 percent of dwellings containing three bedrooms. Feature 6 is therefore satisfied.

Feature 7: The building is situated directly opposite the Park Lands. We therefore accept that the development satisfies this feature.

Feature 8: We believe that the proposal will generate a greater impact on surrounding properties in relation to solar access and overlooking, compared to a building at the prescribed maximum height (of 22 metres). Indeed, it would be difficult to argue otherwise. Feature 8 is therefore not satisfied.

We have reviewed the shadow diagrams included within the application package and note that the proposed development will cast extensive shadows over the adjacent eastern properties between the



hours of 1:00 pm and 5:00 pm (inclusive). Therefore, it is quite clear that a building two-and-a-half times lower than the proposed would significantly reduce this negative impact and improve solar access to those properties at the eastern end of the identified shadow impact.

Regarding overlooking, the applicant's Planning Report states:

*'We note that the existing office building to the south of the subject site would result in a higher degree of overlooking [as well as the] upper level east facing windows looking directly into rear yards of East Terrace properties;*

While we cannot state definitively that a building at the prescribed maximum height will remove this overlooking impact, we expect that a building of reduced height will overlook the surrounding properties to a lesser degree.

Therefore, we do not accept that the proposal satisfies Feature 8.

We believe that only two out of eight "features" listed in Zone Principle 21(c)(i) are satisfied.

Capital City Zone Principle 21(c)(ii) mandates that "*at least three of the [five] sustainable design measures*" must be provided in developments which exceed the maximum height provisions of the Capital City Zone. On our assessment of the proposal, only two of the five sustainable design measures are met, even though the applicant's Planning Report asserts that five (5) Measures are satisfied by:

- *a roof top garden ..... at Level 3 which is supported by services to ensure ongoing maintenance. There is no available roof area at the top of the building as it is occupied by photovoltaic cells which is a key sustainable design measure in itself (Measures 1 and 5);*
- *a living landscape vertical surface (green wall) of at least 50 square metres supported by services that ensure ongoing maintenance is provided to the restaurant and space above (Measure 2);*
- *passive heating and cooling design elements, including an innovative shading device system (see Tectvs and D-Squared Reports for details) are integrated into the building (Measure 3); and*
- *higher amenity is provided through provision of private open space in excess of the minimum requirements (Measure 4).*

Measure 1: The applicant's Planning Report argues that the proposal has a 'roof top garden' located on Level 3. The report then asserts that the garden is located on this level as the roof top level does not have the available area for such a provision. Furthermore, the garden, which could be more accurately described as a communal terrace, is approximately 38 square metres in area, and encompasses less than five (5) percent of the total floor area



of Level 3. We do not accept that this communal terrace on Level 3 satisfies the roof top garden intention of Measure 1.

Measure 2: The development does not contain any green wall façades which will assist in softening the visual built form of the structure or providing environmental benefits for the building as a whole. The applicant's Planning Report states that the development has a green wall; however, the landscaping is located inside the structure; and thus, does not conform to the clear intent of Measure 2. Therefore, we do not accept the proposal satisfies Measure 2.

Measure 3: We acknowledge that the development incorporates shading devices which appear to be both effective and innovative.

Measure 4: We acknowledge that the proposal includes private open space for each dwelling. However, the development does not satisfy the sustainable design measure, as much fewer than 50 percent of the dwellings contain an excess (by 25 percent) of the minimum prescribed areas, as stated. Therefore, the proposal does not satisfy Measure 4.

Measure 5: We acknowledge that most of the roof top area will encompass photovoltaic cells, which conforms to Measure 5.

On our assessment, only Measures 3 and 5 of the five sustainable design measures listed in Zone Principle 21(c)(ii) will be satisfied. Capital City Zone Principle 21 (c)(ii) is therefore not satisfied.

### **Conclusion**

We remain of the opinion that the proposal is seriously at variance with the Development Plan, being significantly higher than the maximum building height prescribed for this part of the Capital City Zone. The proposal also makes no attempt to address the transition requirements of the Development Plan arising from the development site being adjacent to a different zone.

Furthermore, the proposal fails to satisfy at least three of the eight "features" listed in Zone Principle 21(c)(i) and it also fails to satisfy at least three of the five "sustainable design measures" listed in Zone Principle 21(c)(ii).

Yours faithfully

**Graham Burns**  
MasterPlan SA Pty Ltd

REPRESENTATION ON APPLICATION - CATEGORY 2

Applicant: Rymill Park Apartments Unit Trust C/ Future Urban

Development Number: 020/A053/19

Nature of Development: Demolition of existing office building a construction of 16 level mixed use building with basement and associated car parking

Development Type: Merit / Category 2

Zone / Policy Area: Capital City Zone

Subject Land: 2-6 Hutt Street, Adelaide

Contact Officer: Janaki Benson

Phone Number: 08 343 2339

Close Date: 01 November 2019

My Name: Anthony Gibb

My phone number: 0419298592

Primary method(s) of contact: Email: agibb@351kalifax.com

Postal Address: 351 KALIFAX ST ADELAIDE 5000

You may be contacted via your nominated PRIMARY METHOD(S) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

My interests are: (please tick one)

- owner of local property
- occupier of local property
- a representative of a company/other organisation affected by the proposal
- a private citizen

The address of the property affected is:

85 EAST ICE ADELAIDE Postcode 5000

My interests are: (please tick one)

- I support the development
- I support the development with some concerns
- I oppose the development

The specific aspects of the application to which I make comment on are:

IT IS NON-COMPLIANT WITH GUIDELINES FOR CITY PRINCE. IT IS TOO HIGH (THICE GUIDANCE) IT HAS INADEQUATE ACCESS FROM CEDO CANAL.

I:

- wish to be heard in support of my submission
- do not wish to be heard in support of my submission (please tick one)

By:

- appearing personally
- being represented by the following person (please tick one)

Signature:

Date: 21/10/19

351 Halifax Street  
Adelaide  
SA 5000  
30 October 2019

Mr J. Benson  
Inner Metro Development Assessment  
Development Division  
Department of Planning, Transport and Infrastructure  
Level 5 50 Flinders Street  
Adelaide  
SA 5000

**Development Application 020/A053/19**

Dear Sir,

We have considered the application and see no reason to change our strong objections to the proposed development. Our principal objection is that a building of 53.9m is 31.9m higher than the recommended guideline for the Capital City Zone. It is 250% higher than the recommended height for this Zone. It is too big for the site and causes problems for surrounding residents. The developer is trying to pack too many people into a too small site, a site to which access is already difficult because of its location on the corner of one of the busiest intersections in the CBD.

Our objections are that the proposed development will

- breach, by a factor of nearly 2½ times, the guidelines for the Capital City zone;
- be quite inappropriate in such close proximity to the City Living Zone;
- cause unacceptable congestion, noise and disruption in Cleo Lane;
- cause substantial solar shading of our property;
- overlook bedrooms on the Western side of our property;
- create noise and odours that will adversely affect our property;
- make parking in the City Living Zone more difficult;
- reduce the amenity of existing residents of the area
- establish a precedent for other equally objectionable developments in the Capital City Zone along Hutt Street and
- reduce the value of our property.

The proposed development is an ambit claim. It is not in any sense guided by the City's development guidelines but positively flaunts its disregard of the guidelines. Were the proposal for a five story development, compliant with the guidelines, we would not welcome the enlarged footprint for the site but we would have no grounds for objection on that score. As it stands, we object most strongly. We expect the State Commission Assessment Panel to treat this proposal with the same contempt as the developer has shown for planning guidelines and for the amenity of his neighbours in East Terrace and Hutt Street.

The changed car-park entry on Hutt Street merely moves one unsatisfactory solution from Cleo Lane to another unsatisfactory solution on Hutt Street. Widening Cleo Lane confers no benefit on the existing users of the Lane.

This proposal sneers at the developers of the City Plan, their knowledge, experience, skill, vision and ability to see beyond the immediate superficial attraction of a big development to the wider and long-term impact of such a non-compliant building on the amenity and harmony of the outskirts of the Adelaide City structure.

In addition, we would like to point out that issuing a 250 page document with a consultation period of 10 working days and expecting an informed response from persons who are not professional planners or architects is unreasonable and unfair and we wish our objections on this point to be raised with your supervisor.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'J Gibb' followed by a stylized flourish.

A. and J.Gibb

## Response to 020/A053/19 Proposal

### Introduction

This is a detailed response to the proposed development of 2 – 6 Hutt Street, Adelaide as presented in the above Application. The proposed development is deficient in the following respects. The proposed development will

- breach, by a factor of nearly 2½ times, the guidelines for the Capital City zone;
- be quite inappropriate in such close proximity to the City Living Zone;
- will cause unacceptable congestion, noise and disruption in Cleo Lane and in Hutt Street;
- cause substantial solar shading of our property;
- overlook bedrooms on the Western side of our property;
- create noise and odours that will adversely affect our property;
- make parking in the City Living zone more difficult;
- reduce the amenity of existing residents of the area
- establish a precedent for other equally objectionable developments in the Capital City Zone along Hutt Street and
- reduce the value of our property.

### Breach of development height guidelines

The Capital City Zone ends at the western side of Cleo Lane. Our property at 85 East Terrace is in the City Living Zone. The prescribed height limit for the Capital City Zone is 22m, and there is a recommendation that buildings in this zone are to be stepped in height with the lowest step on the Eastern edge of the zone. Buildings near the City Living zone must be lower than 22m and near the recommended height of 14m in that zone. The proposed development is on the Eastern edge of the Capital City zone. It proposes a height that is more than double the recommendation. There is no attempt to step down from 22m to recognise the impact the proposed development will have on the amenity of adjacent residents in the City living zone. The proposed development appears to hold the provisions of the Building Height Concept Plan in contempt.

The visual impact of a 54.9m high building compared with a 22m high building is obvious. If the proposed development had architectural merit, there might be an argument for allowing it to approach the mandated height in the Capital City zone. As the proposed development stands, the proposed building appears only to exist to maximise occupancy and exploit the location. The proposed development makes pious references Harry Seidler buildings in the Design Response. It is difficult to see the connection.

Section 6.3 of the proposed development claims that the proposed development is neither complying nor non-complying. This seems an odd claim to make when the proposed development clearly fails to comply with the height guidelines. It is non-compliant.

### Congestion in Cleo Lane and access to 85 East Terrace

Cleo Lane is a small access lane that currently serves buildings to its East and West. It is only 3.05m wide and traffic enters and exits by turning left onto and off East Terrace. There is no access to East

Terrace to the South of Cleo Lane as existing buildings along the lane have no right of way over this exit. The proposed development offers to widen Cleo Lane by setting the building back by 3m to make Cleo Lane two-way for 20m. The addition of at least 38 new apartments, contributing traffic to an already congested access, will completely swamp any benefit from the setback. The need to park garbage vehicles in the Lane daily to collect waste from the proposed development will further reduce any benefit from the widening.

The traffic analysis in the proposed development suggests that the new building will add 2 additional trips at peak hour in the morning and three in the afternoon (7.4). This is barely credible.

The traffic analysis by Infracoplan suggests that the proposed development will generate about 47 extra trips per day. Given that the 10 existing dwellings along Cleo Lane were measured to make 66 trips per day, it seems unlikely that the addition of 38 new dwellings on Cleo Lane will only generate an additional 47 trips per day. Simple proportion would suggest that if 10 dwellings cause 66 trips per day 48 dwellings (10 current plus 38 new from the proposed development) will give rise to 317 trips per day. The traffic analysis needs to be revisited and the proposed load on Cleo Lane needs to be re-assessed. As presented, it is not credible. Higher traffic loads in Cleo Lane would guarantee congestion and reduce the amenity of existing users of Cleo Lane.

Furthermore, the one-way design of the ramps to access the proposed development parking will guarantee that arriving residents will be queued in Cleo Lane for significant periods of the day. This will, in turn create congestion on Bartels Road and on Hutt Street.

### **Solar Shading of 85 East Terrace**

The DP now provides information on solar shading. An edifice 53.9m high and 27m wide will seriously reduce the amount of sunlight available at 85 East Terrace at any time of year. Figures 1 and 2 below show that the proposed development will, on the 21<sup>st</sup> of June 2018, cast a shadow over 85 East Terrace commencing at 12:51pm and remaining until dusk. The statement in Section 7.7.1 Overshadowing that a building of 54m would have negligible extra impact over a building of 22m is manifest nonsense. The shadow cast will extend more than twice as far down East Terrace. It will affect properties much further down East Terrace.

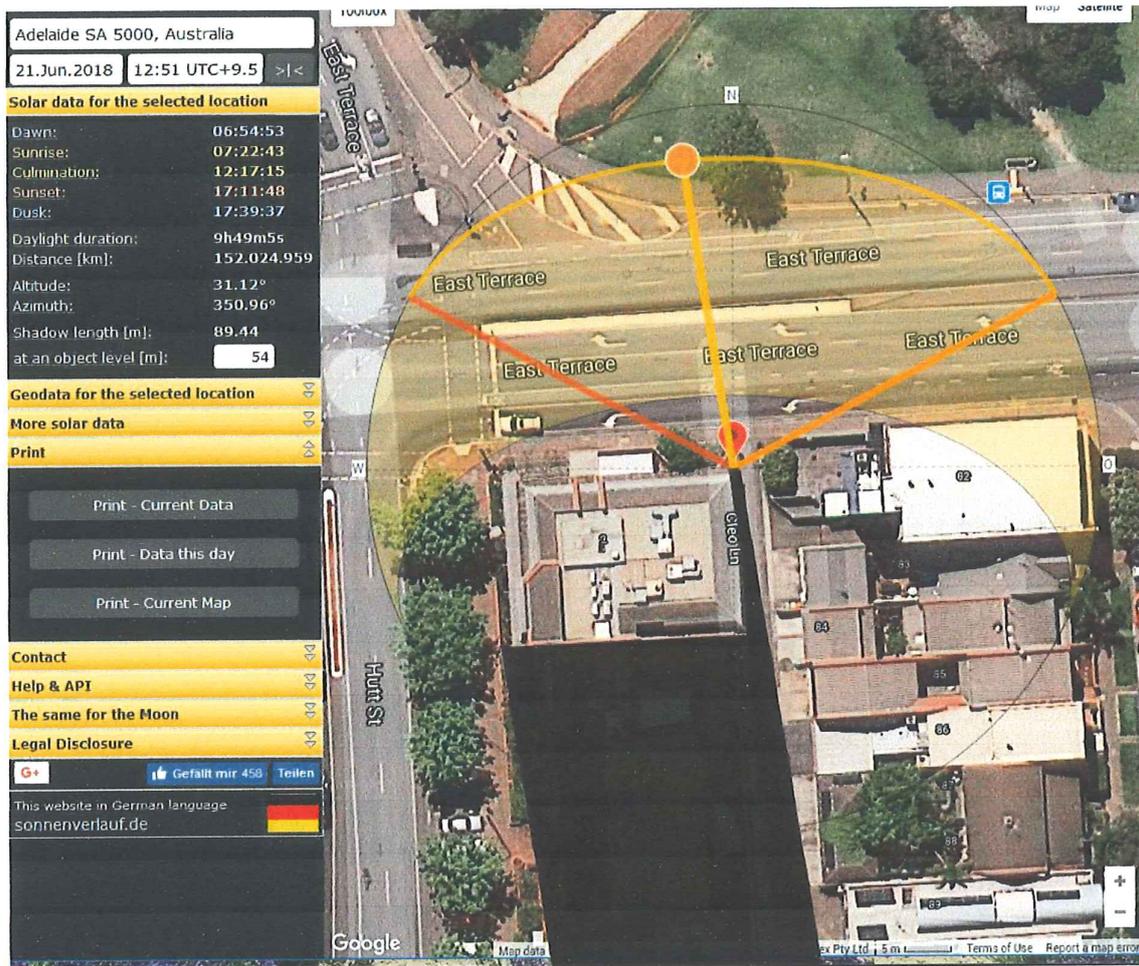


Figure 1 - Edge of shadow at 12:51 on 21 June 2019

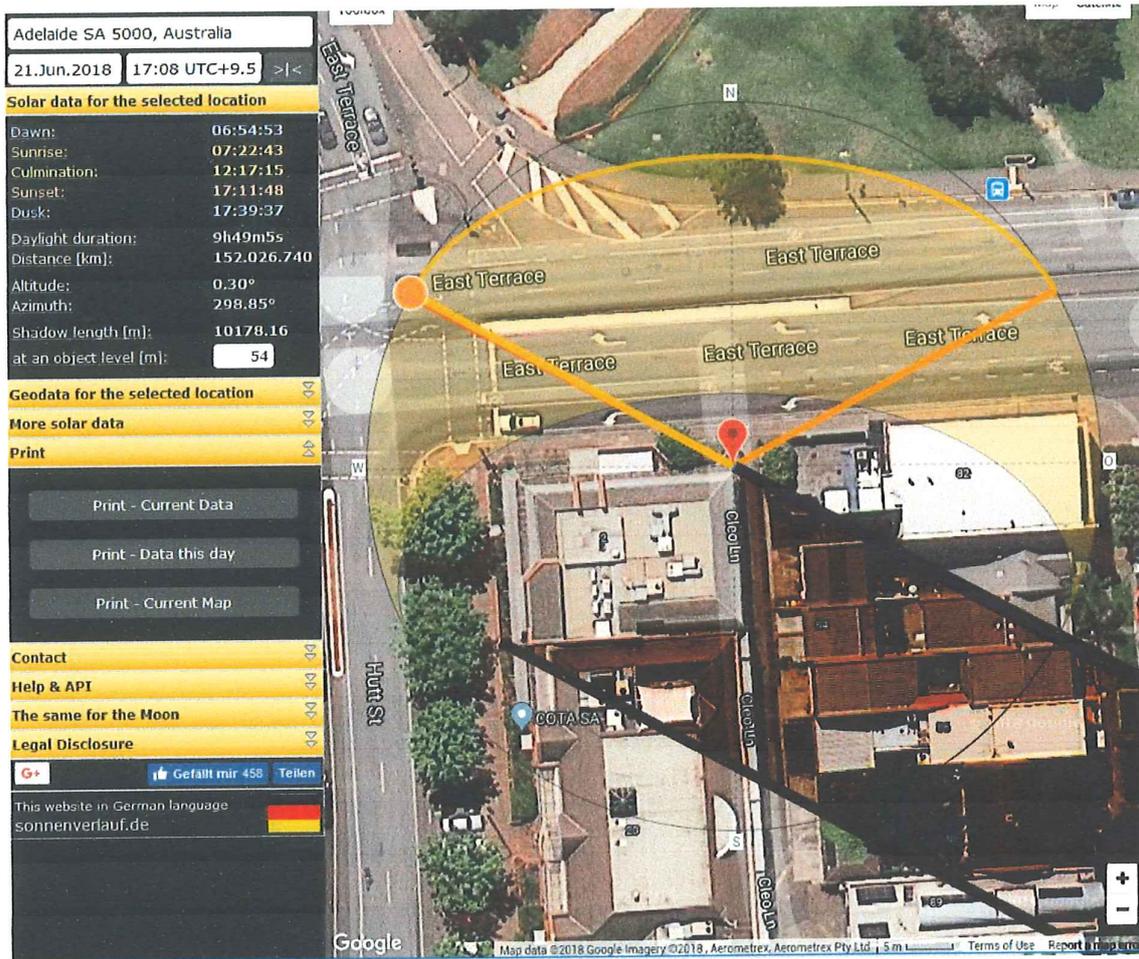


Figure 2 - Edge of shadow at dusk on 21 June 2019

## Overlook of 85 East Terrace

In section 7.7.1 Overlooking the proposed development states :-

The greatest potential for overlooking may occur from east facing balconies however it is important to recognise the following:

- the adjacent residential flat building does not contain west facing habitable room windows;
- habitable room windows of other dwellings to the south are located greater than 15m (measured horizontally) from the east facing balconies; and
- there are existing structures or trees located in rear yards of dwellings backing onto Cleo Lane that would screen any views that may occur.

We also note that the open space area located to the western side of the adjacent apartment building is a common service area and not 'private' as such.

85 East Terrace has two bedrooms facing west which are completely exposed to overlook from the proposed development. These are well within the 15m separation from the proposed development. Other existing buildings along the lane have windows facing West. Many apartments in the proposed development have terraces facing East with the potential to reduce privacy in the dwellings on East Terrace. The rooftop garden on L3 will also have the ability to overlook the west facing bedrooms of 85 East Terrace.

## **Noise and smell from proposed restaurant**

The proposed development makes various promises about containment of noise and odours from the proposed restaurant. Such promises are only as good as the management of the strata community corporation and the day-to-day practices of the proposed restaurant. Provision of labour to manage waste storage and collection is very dependent on the ability of the corporation to finance such activities. Beyond the first year, there is no guarantee that such services will be maintained. Their absence will mostly affect the other residents along Cleo Lane and not the residents of the proposed development.

Kitchen odours will vent either directly or indirectly into Cleo Lane to the discomfort of East Terrace residents.

There are many examples in the City of Adelaide of unacceptable noise levels from restaurant activities adversely affecting neighbours. These include the emptying of used bottles into recycling bins, loud departures by restaurant patrons late at night and noise from car movements by restaurant patrons.

Putting a restaurant so close to existing properties on East Terrace will reduce the amenity of the residents of those properties.

## **Wind and weather**

The prevailing winds bearing rain in Adelaide come from the South West. The proposed building will offer no protection from weather arriving from this direction and the obstruction provided by the proposed development is likely to direct more rain and wind into the western side of the East Terrace residents. Likewise the building will offer no protection from hot Northerly winds in the summer and again, is likely, by obstructing such winds, to direct them onto and over the residents of East Terrace.

## **Waste storage and collection**

Waste storage and collection facilities are proposed to centre on Cleo Lane, with temporary storage of trash, recyclable and organic waste in a bin room adjacent to Cleo Lane. This bin room will need to be ventilated and this can only be done by expelling the smell of garbage into Cleo Lane. The resulting smell of stale garbage, no matter how often the garbage is removed will adversely affect 85 East Terrace. Garbage trucks in Cleo Lane are unlikely to improve the aroma around the collection point. Proposed coverage of Cleo Lane with a pergola and climber is likely to trap this smell in Cleo Lane. It is noted that the proposed development will not be fitted with grease traps because the proposed restaurant will be little more than a coffee shop. 58 residences are likely to generate sufficient grease to justify inclusion of a grease trap.

## **Parking**

Car parking in East Terrace in front of 85 East Terrace is limited in availability and duration time. The existing parks are in high demand from City visitors who leave their cars there for short periods during the day. Visitors to 85 East Terrace have to compete for parking in East Terrace now. So will visitors to the proposed development. East Terrace resident visitors will be disadvantaged by the competition for parking from City visitors and residents in and visitors to the proposed development.

It is highly probable that illegal parking in the lane by visitors to the proposed building and to its restaurant may further increase congestion in Cleo Lane.

### **Benefit to the local community**

Section 7.1 includes the statement that:-

The proposed building reflects a high-scale and the podium design and potential future works to Cleo Lane create both the interest and human scale that the desired character seeks to achieve – all in a manner that offers weather protection and significant public benefit to the local community.

The local community affected by this proposed development will suffer solar shading of their properties. They will experience traffic congestion. They will be overlooked. They will lose privacy. They will experience heightened rain and wind effects rather than weather protection. They will be subject to noise and smells from the proposed restaurant. They already live in an area that has interest and human scale. It is very difficult to see any benefits to the local community from the proposed development.

### **Value of 85 East Terrace**

The proposed development will have an immediate and negative impact on the value of 85 East Terrace and on our ability to enjoy it in future. This cannot be quantified yet and the proposed development offers no redress for this. A claim has been made that the development will increase the land value of 85 East Terrace, but this could only be achieved if an equally inconsiderate development were to be proposed for that site.

### **Conclusion**

We are strongly opposed to the proposed development. To make it even marginally acceptable the following changes need to be made.

- The height of the proposed building must be reduced to 22m with an appropriate step down so that it is less than 22m at the boundary of the City Living zone.
- The plan for a restaurant in the proposed development needs to be changed and the restaurant replaced by suitable office space.
- The entrance to the proposed development must be moved completely to Hutt Street to minimise the traffic and congestion impacts on Cleo Lane.
- The proposed development must include provision for preserving the privacy of the west facing rooms on East terrace properties.
- Any guarantees offered regarding the proposed green walls, the rooftop garden, the management of waste and the scheduling of waste collection are ultimately at the discretion of the community corporation. The proposed development must guarantee in writing such offers so that adjacent residents have legal recourse to ensure that the services are maintained.

The proposed development threatens severely to reduce the amenity of existing residents on East Terrace and provides no discernable benefit to such residents. It is not supported.

This response includes two attachments that respond to specific statements in the “assessment” of the proposal from Future Urban.

## Appendix 1 Response to Para 5 of Future Urban assessment

Our assessment of the Future Urban “assessment” is set out below. Future Urban’s highlights are in red and our comments are in blue.

It is intended that the future tenant/operator of the restaurant space will be more akin to a coffee/dessert bar than a restaurant in a traditional sense. As such, no grease traps or exhausts associated with frying and the like will be required. (Future Urban assessment para 5.3)

It is clearly a form of high density residential development.

Tables 5.1 to 5.6 claim that the Development Plan Requirements have been met when the Proposed Development includes Levels 6 to 14 which clearly exceed Plan guidance.

Para 5.6 Rooftop garden (with seating) is 37m<sup>2</sup> about 6m by 6m – not much garden! – Level 3 not much rooftop!

At ground level the proposed building will be setback 1.05 metres from Hutt Street and East Terrace and 4.3 metres from Cleo Lane. The building will be sited on the southern boundary.

Levels 1 and 2 will be built to the boundaries on all sides. (Underground!)

### Para 5.8

The proposed building will be 53.9 metres in height (excluding the lift overrun and solar panels).

Lift overrun and solar panels will take it even further.

### Para 5.12

A 5.6 metre crossover from Hutt Street will provide access to the ramp leading to the basement car parking. To accommodate this crossover, approximately five on street car parking spaces are proposed to be replaced by a loading zone space and two motorcycle spaces. The street tree directly to the west of the proposed crossover is to be retained and will act as a divider for entering and exiting traffic.

It is intended that residents who currently access their properties via Cleo Lane will be provided with formal rights of way over that portion of the subject land which has been offered by the applicant to increase the width of the lane to facilitate two-way traffic movement. This will be offered as part of a separate and future process. (or not as the case may be.)

A right of way under the proposed development (if delivered as promised above) will be of no use to residents of East Terrace using Cleo Lane. They already have all the access they need to use the Lane for entry and exit to their properties. This is a benefit to the apartment dwellers disguised as a benefit to East Terrace dwellers.

The proposed building will contain 56 line-marked spaces, including 44 ‘standard’ spaces and 12 ‘small’ spaces.

### Para 5.14

a diverter, allowing residents to allocate their waste as either ‘general’ or ‘recycling’. Waste will then travel down to the bin storage room on ground level, and distributed into each waste stream bin accordingly.

(The chute will be contaminated with organic waste which will contaminate the recycling and add to odours in Cleo Lane.)

Waste is proposed to be collected via Cleo Lane between 9:00am and 6:00pm. (Not waste will be collected.) There are too many proposals in the application which cannot be guaranteed to surrounding residents. These proposals are vulnerable to future Strata Corporation decisions and are not formalised so that surrounding properties can ensure they are delivered and enforced.

The waste collection vehicle will reverse into Cleo Lane from East Terrace.

(How likely is that given the volume of traffic on East Tce?)

The proposed loading zone on Hutt Street is adequately sized to accommodate the manoeuvring and parking of a smaller type of waste collection vehicle which is currently not readily available. When these vehicles become more available, the opportunity exists for all waste to be collected on Hutt Street.

(More pie in the sky!)

### **Para 5.15**

It is also the intent of the applicant to improve the amenity of Cleo Lane by including additional landscaping and a green canopy over this space, however at this stage the design is only conceptual and will be pursued through a separate process with adjacent land owners and the Council.

(This is a cheap operation of little benefit to East Terrace residents and even so there is no enforceable commitment to it from the developer!)

### **Para 5.18**

electro-chromic glass has been incorporated in strategic locations

(What is strategic? Level 14 only?)

### **Para 6.3**

According to Principles 38 and 39 of the Capital City Zone, the proposal involves a kind of development that is neither complying nor non-complying. It must, therefore, be assessed and subsequently determined on its merits by SCAP in its capacity as the relevant authority.

(It is either complying or non-complying, - in this case the proposed development is non-complying.)

## Appendix 2 Response to Para 7 of Future Urban assessment

### 7.1 Desired Character

The Capital City Zone is envisaged to be the economic and cultural focus of the State including a range of employment, community, educational, tourism and entertainment facilities. It is anticipated that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy. The proposal will contribute to an increased population.

High-scale development is envisaged in the Zone with high street walls that frame the streets. However, an interesting pedestrian environment and human scale is encouraged at ground level through careful building articulation and fenestration, frequent openings in building façades, verandahs, balconies, awnings and other features that provide weather protection. The proposed building reflects a high-scale and the podium design and potential future works to Cleo Lane create both the interest and human scale that the desired character seeks to achieve – all in a manner that offers weather protection and significant public benefit to the local community.

The existing building includes a parking area that could be considered to widen Cleo Lane by 4 metres so the proposed widening of Cleo Lane delivers nothing much to the area's amenity.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment. We note that Hutt Street is identified as a secondary pedestrian area. In narrow streets and laneways, the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure.

What does this mean and how does the proposed building contribute?

The design approach along all frontages is entirely consistent with the street presentation envisaged. Non-residential land uses at ground level that generate high levels of pedestrian activity such as shops, cafés and restaurants is encouraged. At ground level, development will continue to provide visual interest after hours by being well lit and having no external shutters. Non-residential and/or residential land uses will face the street at the first floor level to contribute to street vibrancy. The proposed land uses at ground level and mezzanine level are consistent with the desired character.

This is a totally unjustified claim and can be refuted on the same basis. The proposed land uses at ground level and mezzanine level are not consistent with the desired character.

It is important to note that the Development Plan was recently amended to provide a stronger focus on high design quality. The desired character encourages new development to be contextual, durable, inclusive, sustainable and amenable. In our opinion, the Pre-Lodgement Agreement reached is testament to the high design quality achieved. Specifically, the design:

- responds positively to its surroundings and the character of the area, taking advantage of the northern aspect over the Park Lands, the siting and scale of adjacent built form and the generous contribution to the public realm by increasing the width of Cleo Lane and (subject to a separate process) upgrading the physical appearance of the laneway at the proponent's expense;
- is fit for purpose, adaptable and long lasting being very conscious of the materials and finishes proposed and very mindful of existing development to the southeast with respect to overshadowing, overlooking and visual impact;

- integrates landscaping to provide high quality spaces for occupants of the building and the public which also assists in optimising security and safety both internally and into the public realm;
- integrates very high quality sustainable systems into the buildings to improve environmental performance and minimise energy consumption which reaches a new level for living in the City; and
- provides natural light and ventilation to all habitable spaces.

The design does not interact with the surrounding area and selfishly exploits the aspect over the Park lands. It shows no consideration for buildings to the south-east and severely reduces their amenity.

Importantly, the contemporary architecture proposed responds to the site's context and broader streetscape, while supporting optimal site development.

The proposed development does not respond to the site's context and stands out like a sore thumb.

We note that the desired character seeks to reinforce the distinctive grid pattern of Adelaide through the creation of a series of attractive boulevards as shown on Concept Plan Figures CC/1 and 2. These boulevards are to provide a clear sense of arrival into the City and are to be characterised by buildings that are aligned to the street pattern, particularly at ground level. The site is located at the edge of the East Terrace boulevard and in our opinion, the height, scale and design of the building will assist in providing the clear sense of arrival that is sought by the Capital City Zone. The orientation of the development also maximises views to an important civic landscape (the Park Lands) whilst providing a distinct City edge which is explicitly envisaged for East Terrace.

It completely ignores the requirement for a transition in height in this area which would limit its height to 22m maximum and a lower height (between 22m and 14m) on the East boundary.

In our opinion, Cleo Lane is a minor laneway. A sense of enclosure is envisaged for such laneways (i.e. a tall street wall compared to street width) and an intimate, welcoming and comfortable pedestrian environment. The height and scale of the building together with the design of the ground plane is totally consistent with this envisaged character.

In consideration of all the above, we are of the opinion that the proposal satisfies Objective 8 in that it represents development that contributes to the Desired Character of the Capital City Zone. The proposal is adjacent to the City Living Zone and the East Terrace Policy Area 29. The proposal is consistent with the Desired Character for that City Living Zone which also envisages high amenity residential living environments, carefully executed high quality residential infill and an increase in residential densities by infill housing with high regard to its context.

The objectives of the City Living Zone expressly require future development in that Zone to have regard to potential impacts of building height and activities from land in adjoining zones. The East Terrace Policy Area 29 Desired Character calls for reinforcement of the existing character of grand buildings set on attractive grounds to address the Park Lands. It also contemplates vertical massing and well articulated building facades. Lastly, the Policy Area Desired Character provides for the development of Catalyst Sites (within the Policy Area) which exemplify quality contemporary design that is generally of greater intensity than their surroundings carefully designed to manage the interface with residential development particularly relating to massing, proportions, overshadowing, noise and traffic. The proposal itself addresses these requirements, even though it is located outside this Policy Area.

The proposed development offers a very small increase in the public area at ground level and offers no attractive garden at that level.

The Policy Area allows for buildings of up to four stories or 14 metres. It does not set any height limit for catalyst sites (of over 1500 square metres which may be formed by one or more allotments). It provides an express priority (in Policy Area PDC 15) to the provisions for catalyst sites over the general policies for the Zone or Policy Area. The fact that within the adjacent Policy Area, the Development Plan expects larger and greater intensity development than presently exists is an important contextual factor in support of the proposal. The proposal has adopted the range of measures by its design, siting and orientation in an appropriate location to address these contextual requirements in the City Living Zone.

It is not a Catalyst site as the area proposed for the development is not 1500m<sup>2</sup>. It is 569m<sup>2</sup>.

The proposal is located immediately south of the Park Lands Zone and Policy Area 20 Rundle and Rymill Parks (which is on the northern side of Bartels Road). Also within the Park Lands Zone on the eastern side of East Terrace is Policy Area 21 Eastern Parklands.

The desired character for the Park Lands Zone envisages a unique open space system creating a publicly accessible landscaped park setting for the built form of South Adelaide. The policies do not envisage the establishment of buildings except in very limited circumstances.

The Rundle and Rymill Parks Policy Area 20 includes desired character policies comprising an open park and garden scene, a boating lake, areas for informal recreation and various forms of public infrastructure including transport and associated structures and works. Similarly the desired character statement for the Eastern Parklands Policy Area 21 calls for formal and informal outdoor recreation activities with sporting grounds set amongst dense woodland plantings and the use of the Victoria Park for formal and informal recreation and sporting facilities.

The proposal does not include any development within the Park Lands Zone. The proposal is however consistent with the policies of that Zone because it is a design of a very high standard appropriately located at the significant junction of Bartels Road and Hutt Street overlooking and maximising the benefits of Rymill Park.

It is not at all consistent with the policy for the Park Lands Zone. Just making these exaggerated claims does not make them true.

## 7.2 Height, Bulk and Scale

An essential element of our objection to the proposed development is its blatant breach of the height guidelines for the area. The following analysis from Future Urban attempts to justify this breach. Future Urban's emphases are highlighted in red.

The site is subject to a height guideline of 22 metres within the Capital City Zone. Zone PDC 21, and Concept Plan Figures CC/1 and 2 provide a specific height guideline framework and provide an opportunity to exceed the guideline height if a development can meet certain criteria. The relevant version of PDC 21 is reproduced below with the most pertinent elements emphasised.

*PDC 21 Development should not exceed the maximum building height shown in Concept Plan Figures CC/1 and 2 unless, **notwithstanding its height**, it has regard to the context that forms the positive character of the locality and is **sympathetic** to the desired character of the Zone or Policy Area and the anticipated city form expressed in Concept Plan Figures CC/1 and 2, **and***

- if the development incorporates the retention, conservation and reuse of a building which is a listed heritage place or an existing built form and fabric that contributes positively to the character of the local area; **or***

- more than 15% of dwellings are affordable housing; or
- only if:
  - i. at least three of the following are provided:
    - the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjacent Zone, Policy Area or building height area on Concept Plan Figures CC/1 and 2;
    - high quality open space that is universally accessible and is directly connected to, and well integrated with, public realm areas of the street;
    - high quality, safe and secure, universally accessible pedestrian linkages that connect through the development site;
    - no on site car parking is provided;
    - active uses are located on at least 75% of the public street frontages of the building, with any above ground car parking located behind;
    - a range of dwelling types that includes at least 10% of 3+ bedroom apartments;
    - the building is adjacent to the Park Lands;
    - the impact on adjacent properties is no greater than a building of the maximum height on Concept Plan Figures CC/1 and 2 in relation to sunlight access and overlooking ; and
  - ii. at least three of the following sustainable design measures are provided:
    - a communal useable garden integrated with the design of the building that covers the majority of a rooftop area supported by services that ensure ongoing maintenance;
    - living landscaped vertical surfaces of at least 50 square metres supported by services that ensure ongoing maintenance;
    - passive heating and cooling design elements including solar shading integrated into the building ;
    - higher amenity through provision of private open space in excess of minimum requirements by 25% for at least 50% of dwellings;
    - solar photovoltaic cells on the majority of the available roof area, supported by services that ensure ongoing maintenance.

(emphasis added)

The points highlighted by Future Urban in the passage above are assessed below.

In consideration of the proper interpretation and application of the current terminology used, we provide the following detailed assessment against the excess height issue and its implications with respect to PDC 21.

The Development Plan policy is prefaced by a description of the envisaged city form which establishes that the City's structure will be reinforced by the Capital City Zone being the focus of high rise development in the City. This intent is reinforced in the Desired Character in that... "High scale development is envisaged in the Zone with high street walls that frame the streets".

The plan envisages the high rise development is tapered down from the Capital City zone to deliver low rise development in the City Living zone. This has been ignored by the proposed development.

Notwithstanding its height, the proposal has regard to the context that forms the positive character of the locality and is sympathetic to the desired character in that:

- it is of high design quality that achieves the contextual, durable, inclusive, sustainable and amenable precepts of the desired character;
  - It is a building of undistinguished design and blatant overdevelopment designed to extract maximum profit from exploitation of the site.

- it is a high scale development which seeks to create an interesting pedestrian environment and human scale;  
The development does little or nothing for the pedestrian environment on the corner site. The proposed cafe is a marginally viable business proposition and there is a distinct possibility that it will share the fate of other such ventures further South on Hutt Street where restaurants and cafes are closing almost on a monthly basis. Derelict, empty spaces on a City approach are not a good look for the city.
  - it is located at an important road junction at the City Edge, overlooking the Park Lands and the proposed development defines and reinforces the townscape importance of this corner site;  
“defines and reinforces the townscape importance” is undiluted gobbledegook with no apparent meaning. It is agreed that it is an important site and deserves a better, compliant development.
  - it is lower in height than existing and future (under construction) buildings to its west (as noted in the Section 4 – The Locality), noting that there is potential for taller buildings to be developed to the west and north-west, in the future, as anticipated by the Development Plan.  
It is not lower than existing and future buildings to its West (40m on Hutt Street).
  - it will further define the City Edge and maximise views to the Park Lands and Adelaide Hills;  
More gobbledegook. Maximise for whom? It will block views to the Park Lands from the South.
  - it is innovative by way of its environmentally sustainable design initiatives;  
Rubbish!
  - it is of a contemporary design which responds to its context and the broader streetscape, while supporting optimal site development;  
It is of a pedestrian design which does nothing for its context while extracting maximal site development. There is nothing optimal about squeezing an extra 20 – 30 apartments onto the site.
  - it includes non-residential land uses at ground and mezzanine levels to assist in promoting an active and vibrant streetscape;  
A cafe on this site has problematic viability when cafes and restaurants in more lively areas of Hutt Street are going out of business on a monthly basis.
  - although it is taller than the range of building heights in the nearby City Living Zone and East terrace Policy Area 29, that Policy Area expressly anticipates larger scale development (4 storeys generally, and unlimited height for possible Catalyst sites) which is appropriately located relative to the proposal having regard to East Terrace, Hutt Street and the Park Lands;  
It is certainly taller than buildings nearby, exceeding guidance by a factor of 150%. These are mostly two stories high. It is not proposed for a Catalyst site.
  - the building to the immediate east is a substantial building in its own right; and  
The building to the East is three stories high and fully compliant with current development guidelines.
  - the increase in height above the 22 metres anticipated does not have adverse impacts on adjoining dwellings or the overall city form in the locality as its design, appearance and siting are commensurate with its setting and surrounding development.  
It does have adverse effects as 100% of the neighbours have previously objected to the last version of this development because of adverse effects on their properties.
- Significant analysis of the context (see Architectural Context Report undertaken by Tectvs as contained in Appendix 1) was undertaken to inform the design. In particular, it is important to note that the proposed development:
- includes a podium of a height which complements adjacent buildings, and which particularly respects the adjacent City Living Zone;  
The proposed development ignores adjacent buildings and shows no respect for buildings in the City Living Zone.

- provides an overall height which will complement the anticipated city form to the west;  
The height of the proposed development confronts the desired city form as outlined in the City Plan.
- is located on a key corner site where the overall height and form of the building reinforces the grid layout and distinctive urban character of the locality;  
It may reinforce the City grid at the expense of abusing the urban character of the locality.
- maintains a clear distinction between the Capital City and City Living Zones and the open landscape character of the Park Lands Zone;  
This is not true. It blurs the distinction between the Capital City and City Living zones by jamming an overlarge, ordinary building into an area where the guidelines specifically attempt to control the height of developments. There are already far too many overlarge buildings being erected in Adelaide.
- is of a height and scale which reflects and responds to the role of the streets it fronts;  
Nonsense! It confronts and intimidates the surrounding streets. It is a bully building.
- incorporates materials which are common in the locality including stone (particularly blue stone), brick, rendered cement and glass;
- features a curved built form which is a common element found in buildings in the locality; and includes an internal green wall extending from ground to mezzanine level which is intended to reflect the greenery of Rymill Park and blur the lines between this open area and the urban environment of Hutt Street/Pirie Street/East Terrace.

In consideration of all of the above we conclude that the proposed development has due regard to the context that forms the positive character of the locality and is sympathetic to the desired character.

With respect to PDC 21 (c) (i) the proposal meets the listed eligibility criteria in that:

- the development provides an orderly transition up to existing taller buildings in an adjacent building height area;  
Not true. It stands out as distinct from its surrounds.
- high quality universally accessible open space, is directly connected to, and well integrated with, public realm areas of the street;  
A very small increase in the area of area of open space at ground level (roughly estimated as 80m<sup>2</sup>) offered as part compensation for an additional 10 floors of accommodation equalling approximately 5600m<sup>2</sup>. This is a very good tradeoff for the proposer, not so good for the City Plan and the surrounding neighbours.
- the building is adjacent to the Park Lands;  
Who knew?
- a range of dwelling types that includes more than 10% of 3 + bedroom apartments are provided; active uses are located on the public street frontages; and
- the impact on adjacent properties is no greater than a building of the maximum height on Concept Plan Figure CC/1 and 2 in relation to sunlight access and overlooking.  
Not true. The shadows cast extend much further down East Terrace than a smaller building's shadows.

The proposal meets all of the eligible criteria for sustainable urban design provided for in PDC 21 (c) (ii) in that:

- a rooftop garden is proposed at level 3 which is supported by services to ensure ongoing maintenance. There is no available roof area at the top of the building as it is occupied by photovoltaic cells which is a key sustainable design measure in itself;  
Level 3 is not rooftop!
- a living landscape vertical surface (green wall) of at least 50 square metres supported by services that ensure ongoing maintenance is provided to the restaurant and space above;

- passive heating and cooling design elements, including an innovative shading device system (see Tectvs and D-Squared reports for details) are integrated into the building; and
- higher amenity is provided through provision of private open space in excess of the minimum requirements.  
This is no amenity to neighbouring properties.
- The express terms of PDC 21 are consistent with other Council wide policies dealing with building form and height.  
Apart from being 150% higher than guidance for this site.

For example:

- as noted above the Capital City Zone Desired Character provide that... “high scale development is envisaged in the Zone with high street walls that frame the streets”;  
The street frontages to Hutt Street and East Terrace are open as entrances to the apartments and the restaurant. There are no high walls on these two sides. The frontage to Cleo Lane is a waste collection point.
- Council Wide Objective 46 promotes the reinforcement of the city’s grid pattern of streets through inter alia, high rise development framing the parklands;
- Council Wide Objective 48 encourages development which incorporates a high level of design excellence in terms of scale, bulk, massing, materials, finishes, colours and architectural treatment;
- Council Wide PDC 169 provides that the height and scale of development should reflect and respond to the role of the street it fronts; and  
The streets surrounding the site have some of the heaviest passing traffic volumes in the city. The proposed development will not in any sense respond to this fact or do anything to remediate it. It will make congestion on Bartels Road and Hutt Street worse.
- Council Wide PDC 191 recommends that new developments on major corner sites should define and reinforce the townscape importance of these sites with appropriately scaled buildings that:
  - Establish an architectural form on the corner;
  - Abut the street frontage; and
  - Address all street frontages.  
The scaling of the proposed development does nothing but attempt to exploit elements of the design guidance.

In this instance, we say that the present proposal respects all of the above policy intent. In summary, we believe that the proposed development presents a design solution which exceeds expectations and delivers a high standard of architecture and landmark presence befitting this ‘gateway’ location.

The potential neighbours to this proposed development do not agree with this statement.

### 7.3 Building Appearance and Design

With reference to Section 5.5 and Section 5.7 of this Statement, the key quantitative apartment guidelines relating to apartment sizes, balcony areas, storage and floor to ceiling heights are satisfied and need not be assessed here. All areas exceed the minimum guidelines demonstrating one way in which the development achieves a high quality design.

The Capital City Zone seeks a high standard of architectural design and finish appropriate to the City’s role and image as the capital of the State (see Zone PDC 6). Zone PDC 7 seeks to achieve a high standard of external appearance through:

- the use of high quality materials and finishes;
  - providing a high degree of visual interest;
  - ensuring lower levels are well integrated with, and contribute to a vibrant public realm;
- and

- ensuring any ground and first floor level car parking elements are sleeved.

In our opinion, the proposed design and appearance of the development satisfies Zone PDC 7 in that:

- robust and durable materials such as masonry, natural stone, prefinished materials are used that will minimise staining, discolouring or deterioration;
- no surfaces are painted above ground level;
- all facades are highly articulated, and the southern boundary wall incorporates design features that are expressed across other facades; and
- the above-ground car parking levels are not visible and treated by an expression that relates to the tower element.

The design and appearance of the development has also been very cognisant of the ground plane and relationship/integration with both Hutt Street and Cleo Lane. All road frontages are attractive, active and pedestrian-oriented that adds interest and vitality to City streets and laneways in accordance with Zone PDC 8 and 9. The footpath width along East Terrace (and Hutt Street) will be increased as a result of the ground level setbacks to improve pedestrian comfort and safety. The Cleo Lane road width will also be increased to support two way vehicular movement and the ground level restaurant/café tenancy better utilises the street corner for outdoor dining experiences with a northern orientation. All frontages contribute to the comfort of pedestrians through the incorporation of a continuous shelter satisfying Zone PDC 10. With respect to Zone PDC 12 the podium height and design of the tower element is warranted in this particular instance to correspond with and complement the form of the existing adjacent apartment development to the east.

The volume of traffic along East Terrace and Hutt St brings into question the viability of a proposed restaurant on the site. The proposed outside seating may prove unattractive to restaurant patrons with cars passing at speed within metres.

Overall, the façades of the building are strongly modelled and incorporate a vertical composition which reflects the proportions of existing frontages, and ensures that architectural detailing is consistent around corners and along all road frontages to provide a unified expression in accordance with Zone PDC 15.

Zone PDC 19 seeks a particular building form along East Terrace. It states:  
*“Development along the terraces should contribute to a continuous built form to frame the City edge and activate the Park Lands.”*

## 7.4 Parking, Access and Traffic

InfraPlan have prepared a Traffic Impact Statement for the proposed development. InfraPlan correctly note that the Development Plan does not prescribe a minimum car parking rate for dwellings or non-residential land uses located within the Capital City Zone. Notwithstanding, car parking spaces have been provided to each apartment as follows:

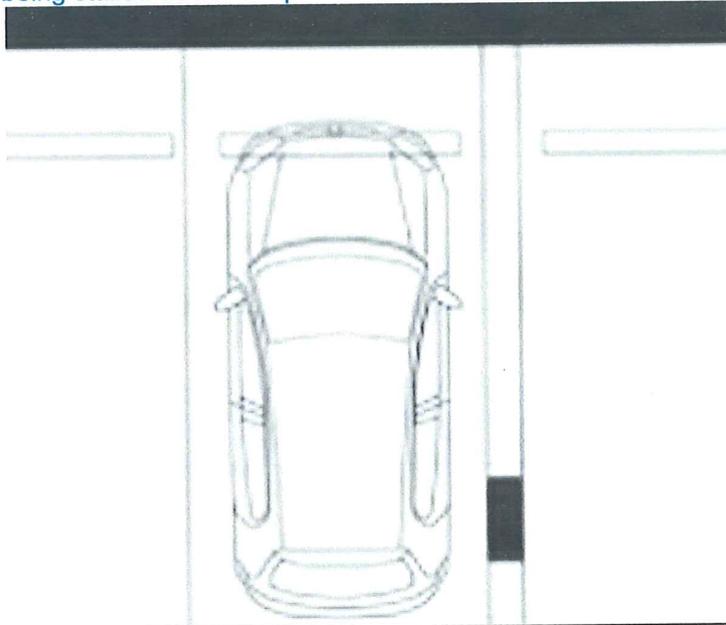
- 1 carparking space for 1 bedroom apartments;
- 1 carparking space for 2 bedroom apartments;
- 2 carparking spaces for 3 bedroom apartments; and
- 3 carparking spaces for each penthouse apartment.

InfraPlan also confirm in their response that there is sufficient on-street car parking available within close proximity of the subject site to accommodate visitor demands.

If the plans are accurate, each car parking space is barely wider than the width of a car with little space to open car doors and enter and exit the cars.. Adequate clearance around each car would reduce the number of car parks in the proposed development.

It should be noted also that potential failure of the ramp signalling system will have immediate consequences for traffic flow into and out of the car parking levels and will flow on to cause

congestion on East Terrace and Hutt Street. The developer should be questioned about ensuring that the signalling system is robust and has effective soft failure modes to prevent cars being stalled on the ramps.



A total of 46 bicycle parking spaces for residents will be provided on Level 2, accessible via lifts, and 6 visitor cycle parking spaces will be provided on site. In accordance with Table Adel/6, a total of 53 bicycle parking spaces (46 for residents and 7 for visitors/customers) are required for the proposed development. InfraPlan do not consider the shortfall of one bicycle parking space significant, and confirm that it can be recovered by existing or future on-street bicycle parking spaces in the vicinity of the subject site.

In our opinion, the proposal therefore satisfies Transport and Access PDC 234.

In addition to the above, InfraPlan have also confirmed the following:

- the widening of Cleo Lane provided by the 4.3 metre rear setback will facilitate two-way movement, and therefore improve the existing functionality of the laneway and access arrangements for existing and future residents;
- no change will be made to the left-in-left-out arrangement to/from Cleo Lane; Except that the proposed private waste contractor will be expected to back into Cleo Lane from East Terrace to collect waste.
- the proposed development will have negligible impact on the surrounding road network in terms of trips generated.
- 
- Specifically:
  - Cleo Lane:
    - increase of 5 vehicles exiting in the AM peak hour and 4 entering during the PM peak hour;
    - vehicles exiting during the PM peak is estimated to be lower;
  - Hutt Street:
    - Increase of 6 vehicles in the AM peak and 5 during the evening;
- existing access to at grade carpark from Cleo Lane will be replaced by two, two way, single lane ramps, with one accessible from Cleo Lane providing access to the upper parking levels, and the other accessible from Hutt Street providing access to the basement;
- use of the two single lane ramps will be controlled by a signalling system which will allow one-way, reversible movements. Guiding principles for designing such a signalling

system are specified in the Traffic Impact Statement and shall be reviewed at the detailed design stage;

- a maximum wait time of less than 75 seconds (1.25 minutes) is estimated for vehicles entering the basement parking levels;
- a maximum wait time of less than 100 seconds (1.67 minutes) is estimated for vehicles entering the upper parking levels;
- there is a 1.9% chance that a vehicle would be required to wait for another vehicle and as such, no queuing would be required on Hutt Street or Cleo Lane. Notwithstanding this, there is sufficient queuing space for up to two vehicles on Hutt Street and one vehicle on Cleo Lane;
- the probability of two vehicles queuing in Cleo Lane is extremely low (less than 0.05%);
- waste is to be collected from a waste storage area on ground level outside of peak collection times (as specified in the Section 5.14) with the waste collection vehicle to reverse into Cleo Lane, and drive out in a forward direction (satisfying PDC 241);
- all bicycle parking provision shall be in compliance with AS2890.3 – Bicycle Parking; and
- the proposed carpark design was assessed and found to be in general compliance with Australian Standards. Any deviation from standards have been identified by InfraPlan and mitigation measures recommended to improve compliance (satisfying PDC 251 and PDC 261).

Overall, InfraPlan support the overall car parking, traffic and access arrangements and we are comfortable with the overall approach in the context of the relevant provisions of the Development Plan.

## 7.5 City Living Zone Interface

In our opinion, Zone PDC 23 and 25 are the key interface provisions that apply to the proposal. With respect to these provisions we have formed the opinion that the proposal seeks to manage its interface with the City Living Zone by:

- appropriately locating a higher building at the corner of Hutt Street and East Terrace. The adjacent eastern property contains a four storey wall and service yard adjacent to Cleo Lane. In addition, properties further south along Cleo Lane have garages, or in some cases two storey buildings sited on the Lane boundary. The scale and form of these 'laneway buildings' is such that limited views to the proposed building will be obtained from the small private open spaces to their rear (discussed further in Section 7.8.8);
- not resulting in any unreasonable overshadowing upon properties within the City Living Zone (discussed further in Section 7.8.7);
- creating two distinct tower elements which successfully breaks up the mass of the building to give the impression of two slender building forms;
- mitigating overlooking towards the City Living Zone through the orientation and design of the floor plans (discussed further in Section 7.8.8). We note that the existing office building to the south of the subject site would result in a higher degree of overlooking with upper level east facing windows looking directly into rear yards of East Terrace properties;
- all traffic associated with the proposal is concentrated towards the northern end of Cleo Lane which will be wider as a result of the development improving access and egress for all Cleo Lane properties contained within the City Living Zone; and
- the management of the interface between the proposal and the City Living Zone will ensure that the proposal does not detract from the amenity currently enjoyed by residents of the City Living Zone in the locality.

Whilst others may argue that the height of the development may not respect the low to medium scale context of the City Living Zone we consider in the particular circumstances of this proposal, the location of the site at the northern edge of the interface; the adjacency to the Park Lands; the fact that the site is only one of three remaining development sites in the Capital City Zone with a northern orientation to the Park Lands; the prominent corner site characteristics of the land; and,

the improvement to the conditions in Cleo Lane for other users, accords with the overall intent and purpose of the Development Plan.

Others would certainly argue, with a great deal of reason and justification, that the proposed development does not respect the low scale and Plan-compliant context of the City Living Zone.

In our opinion, the proposed building height and scale would not be appropriate further south adjacent to the core of the City Living Zone.

In our opinion the proposed building height and scale are inappropriate to this site and would be better suited much further from the City Living Zone and into the Capital City Zone where height and scale would be within guidance.

## 7.6 Crime Prevention

The following provisions are considered relevant in assessing the proposed development's ability to alleviate crime.

### Environmental

*PDC 82 Development should promote the safety and security of the community in the public realm and within development. Development should:*

*(a) promote natural surveillance of the public realm, including open space, car parks, pedestrian routes, service lanes, public transport stops and residential areas, through the design and location of physical features, electrical and mechanical devices, activities and people to maximise visibility by:*

- o orientating windows, doors and building entrances towards the street, open spaces, car parks, pedestrian routes and public transport stops;*
- o avoiding high walls, blank facades, carports and landscaping that obscures direct views to public areas;*
- o arranging living areas, windows, pedestrian paths and balconies to overlook recreation areas, entrances and car parks;*
- o positioning recreational and public space areas so they are bound by roads on at least two road frontages or overlooked by development;*
- o creating a complementary mix of day and night-time activities, such as residential, commercial, recreational and community uses, that extend*
- o the duration and level of intensity of public activity;*
- o locating public toilets, telephones and other public facilities with direct access and good visibility from well-trafficked public spaces;*
- o ensuring that rear service areas and access lanes are either secured or exposed to surveillance; and*
- o ensuring the surveillance of isolated locations through the use of audio monitors, emergency telephones or alarms, video cameras or staff eg by surveillance of lift and toilet areas within car parks.*

*(b) provide access control by facilitating communication, escape and path finding within development through legible design by:*

- o incorporating clear directional devices;*
- o avoiding opportunities for concealment near well travelled routes;*
- o closing off or locking areas during off-peak hours, such as stairwells, to*
- o concentrate access/exit points to a particular route;*
- o use of devices such as stainless steel mirrors where a passage has a*
- o bend;*
- o locating main entrances and exits at the front of a site and in view of a*
- o street;*
- o providing open space and pedestrian routes which are clearly defined*
- o and have clear and direct sightlines for the users; and*
- o locating elevators and stairwells where they can be viewed by a*

- maximum number of people, near the edge of buildings where there is a glass wall at the entrance.
- *glass wall at the entrance.*
- (c) *promote territoriality or sense of ownership through physical features that express ownership and control over the environment and provide a clear delineation of public and private space by:*
  - *clear delineation of boundaries marking public, private and semi-private space, such as by paving, lighting, walls and planting;*
  - *dividing large development sites into territorial zones to create a sense of ownership of common space by smaller groups of dwellings; and*
  - *locating main entrances and exits at the front of a site and in view of a street.*
  -
- (d) *provide awareness through design of what is around and what is ahead so that*
  - *legitimate users and observers can make an accurate assessment of the safety of a locality and site and plan their behaviour accordingly by:*
    - *avoiding blind sharp corners, pillars, tall solid fences and a sudden change in grade of pathways, stairs or corridors so that movement can be predicted;*
    - *using devices such as convex security mirrors or reflective surfaces where lines of sight are impeded;*
    - *ensuring barriers along pathways such as landscaping, fencing and walls are permeable;*
    - *planting shrubs that have a mature height less than one metre and trees with a canopy that begins at two metres;*
    - *adequate and consistent lighting of open spaces, building entrances, parking and pedestrian areas to avoid the creation of shadowed areas; and*
    - *use of robust and durable design features to discourage vandalism.*
    -

*PDC 83 Residential development should be designed to overlook streets, public and communal open space to allow casual surveillance.*

The Development Plan encourages buildings which are designed to reduce opportunities for crime. In our opinion, the proposed development achieves the intent of the relevant crime prevention provisions in that:

- significant glazing and lighting to the Ground Floor Level will ensure visibility to/from the street at all times;
- inclusion of an active use at Ground Level, which may also extend into the evening hours will provide activity adjacent to road frontages and the Park Lands;
- promoting natural surveillance of the public realm (Hutt Street, East Terrace and Cleo Lane) plus the Park Lands from upper level balconies and windows, communal terrace and roof top garden;
- enabling direct sightlines between Hutt Street and the apartment entry;
- avoiding opportunities for concealment;
- providing secure and controlled entrances to the residential levels and car park levels by key card or remote control;
- controlling visitor access via an intercom system to promote territoriality and a sense of ownership through the clear delineation between public and private areas;
- the use of robust and durable design features to discourage vandalism;
- built form and signage clearly defining private and public areas;
- increasing the width of Cleo Lane which will provide a safer and more accessible environment for all users of the lane;
- increasing the width of the East Terrace footpath to provide a safer and more comfortable pedestrian environment and experience;
- ensuring waste collection occurs via Cleo Lane outside of peak periods (7:00am to 9:00am, and 3:00pm to 6:00pm). We note that the waste collection vehicle will reverse into Cleo Lane from East Terrace, and park briefly within the designated parking area which will still allow other vehicles to use Cleo Lane.

## 7.7 Living Culture

The proposed development does not integrate public art into the design of the new building site. However, it is considered that the inclusion of a green wall over the ground and mezzanine level has some artistic merit and will improve the overall enjoyment of passers-by in the locality.

## 7.8 Landscaping

As outlined in Landscaping PDC 207, landscaping should be selected to conserve water, form an integral part of the development, and be used to foster human scale, define spaces, and generally enhance visual amenity.

The proposed development has achieved this through the inclusion of a green wall over the Ground and Mezzanine Levels, a roof garden on Level 3, and an internal garden to the residential entry. The landscaping will contribute to additional amenity, and will be supported by services to ensure ongoing maintenance.

The proponent's offer to upgrade Cleo Lane with landscaping will also contribute in a positive manner to the adjacent City Living Zone which, in its existing state, would be best described as a service lane.

There have been no complaints from East Terrace residents about the adequacy of Cleo Lane to service their needs.

## 7.9 Environmental

### 7.9.1 Waste

The relevant provisions relating to waste encourage development to store waste in dedicated areas for on-site collection and the sorting of recyclable materials and refuse. In addition, odours associated with waste should be minimised.

As detailed in Section 5.14, a Waste Management Plan has been prepared by InfraPlan, and is included in Appendix 4. We have formed the opinion that the proposed waste arrangements will achieve the relevant provisions of the Development Plan in that:

- a dedicated bin storage room will be provided at Ground Level;
- general waste, recyclables, and organic waste are to be separately stored in each apartment and the bin storage room; and
- the waste collection vehicle will reverse into Cleo Lane, and temporarily park within the waste collection area provided by the 4.3 metre setback from the eastern boundary of the subject site whilst waste bins are emptied.

The bin storage room has been designed to mitigate odour, and located a sufficient distance from other sensitive land uses to ensure they will not be impacted by any smells associated with the waste. Further, the frequent collection of waste is also anticipated to prevent odours building.

In relation to construction waste, a Construction Environment Management Plan will be prepared in due course to finalise these arrangements. A standard condition of consent typically formalises such an arrangement.

Respecting the above, we have formed the opinion that the waste arrangements are appropriate for the subject site.

## 7.9.2 Services

With reference to Section 5.17 of this report, we have formed the opinion that the proposed development has made adequate provision for the supply of water, gas and electricity, and for the satisfactory disposal and potential re-use of sewage and waste water in accordance with PDC 132 and PDC 135.

We also note that all service structures, plant and equipment are designed to be an integral part of the development and are suitably screened from public spaces or streets satisfying PDC 133.

## 7.9.3 Energy Efficiency

The energy efficiency provisions of the Development Plan encourage development to:

- provide adequate thermal comfort for occupants and minimise the need for energy use for heating, cooling and lighting (PDC 106);
- promote naturally ventilated and day lit buildings to minimise the need for mechanical ventilation and lighting systems (PDC 107); and
- reduce energy through appropriate building and window orientation, adequate thermal mass including night time purging to cool thermal mass, insulation, maximising natural ventilation, appropriate material selection and use of innovative technologies (PDC 108, PDC 109 and PDC 114).

We do not intend to repeat the extensive features listed under Section 5.18, however the following matters reinforce the environmental performance of the building:

- use of high performance double glazing with integrated and adjustable interstitial blinds, access to daylight, and natural ventilation to all apartments and corridors to reduce energy demands;
- solar sensors will be included in the façade, and will automatically control the interstitial blind systems. Occupants will have the ability to also manually override the automated control of the blinds (if they wish);
- electro-chromic glass has been incorporated in strategic locations to provide additional privacy and solar load reduction;
- designing and certifying the apartments to achieve an energy performance at least 30% better than current Building Code minimum NatHERS rating of 6 Stars average, representing a significant and unprecedented dwelling average NatHERS Rating of 8 Stars in the City of Adelaide;
- designing the tenancy and common areas to achieve an energy performance at least 30% better than a deemed to satisfy compliant space in accordance with the NCC/BCA Section J, JV3 methodology;
- offering all apartment purchasers, the option of an electric vehicle charge points at their car park space, in order to promote the de-carbonisation of Adelaide's transport network. Dependent upon the final size of PV array installed, a number of these points can be supplied with 100% renewable energy;
- air conditioning systems within the apartments will be zoned to functional areas (e.g. living rooms, bedrooms), and provided with automatic and manual controls. They will be inverter controlled and rated to the highest available Energy Star rating, and include the option to operate in fan mode providing low energy air circulation;
- provision of a "kill switch" to each apartment, which allows a one touch isolation of all lighting and air conditioning power when the apartment is vacant;
- provision of a 39kW roof mounted solar photovoltaic array connected via the inset network so that it can benefit all residents and tenants in the development, but is sized to adequately provide renewable energy equivalent to 100% of the common area power needs, including car park ventilation;
- daylight control to lighting systems in common areas and use of energy efficient, LED lighting fittings;
- use of light coloured external finishes (in particular roof coverings) to reflect heat, reduce solar gain, and reduce the "heat island effect";

- use of solar gas boosted hot water systems, gas hobs, and European Energy Label A category ovens for cooking throughout in order to reduce peak electricity demands, reduce the overall development carbon footprint, and provide an economical amenity for apartment owners;
- provision of a building energy management system with smart metering to automatically record and monitor the building's resource use and establish trends and profiles to assist with the ongoing control of energy use (this information will be made available on-line);
- providing apartment owners with retractable clothes racks in their apartments, to minimise electric clothes drier use which will also minimise the incidence of clothes drying on exposed balconies; and
- providing retail and commercial tenancy space air conditioning systems with an economy cycle control allowing 100% outside air to be used for free cooling purposes when external weather conditions allow.

The energy efficiency of the development reinforces the high design quality of the building which exceeds the expectations of the Development Plan.

#### 7.9.4 Wind

A Wind Impact Assessment was undertaken by DR Partners which is included in Appendix 6. DR Partners has considered the interaction between the prevailing winds and the building morphology of the area.

With respect to westerly winds, the Hutt Street footpath is shielded by the proposed canopy along East Terrace and Hutt Street. There are also a number of several medium rise buildings and buildings are under construction that further mitigate the impact at lower levels.

In relation to northerly winds (including north-easterly and north-westerly), DR Partners note that the open character of the Park Lands and will tend to funnel down Hutt street however downwash from the proposed tower will be disrupted by the indented balconies, protruding surface features and the street level canopy which will also offer pedestrians protection.

The bulk of the proposed development will force all winds to pass it at a higher velocity than they would were it not present. The surrounding City Living Zone residents will experience such higher winds if the development proceeds.

In regard to Cleo Lane, winds are shielded at low level by surrounding buildings and downwash on the eastern façade is disrupted by the indented balconies, protruding surface features and the potential future works within Cleo Lane.

Overall, given the level of pedestrian activity and the minor to negligible wind impact, we have formed the opinion that the development achieves the relevant provisions of the Development Plan relating to wind impact.

#### 7.9.5 Noise

An acoustic assessment has been undertaken by Sonus which is included in Appendix 8. The assessment considers:

- the noise from traffic and street activity on surrounding roads into the development; and
- the noise emanating from car parking, mechanical plant and waste collection associated with the proposed development to other noise sensitive land uses.

The proposed development includes a restaurant at ground level. The assessment of noise associated with the restaurant has been excluded as the operator is unknown at this particular stage and whether the proposed operation has any potential to impact noise sensitive land uses in the vicinity. The assessment has been based on noise logging conducted at a location representative of the existing noise environment at the site between the 27th and 28th of November 2017.

In other words the developer can give no assurance that, when and if the cafe is operational, the noise level will not exceed acceptable levels in properties in East Terrace.

Sonus has identified that the key noise issue for the site is associated with the impact of traffic at the intersection of Hutt Street, East Terrace, Bartels Road and Pirie Street upon the amenity of the development. Accordingly, Sonus recommends that particular features of the building construction will adequately protect occupants against the intrusion of traffic noise.

What will protect residents of East Terrace from noise generated by occupants of the proposed building?

In relation to other matters, Sonus has advised that:

- waste collection should not occur after 10.00pm or before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday;
- the location for the mechanical plant provides shielding and a good separation distance to surrounding dwellings;
- the assessment criteria associated with the mechanical plant is expected to be practically achieved without significant acoustic treatment; and
- car park noise levels will not be noticeably different to the much greater number of vehicles on East Terrace.

Further noise attenuation treatments will be included as necessary as the proposal progresses through the detailed design stage in order to ensure compliance with the Environmental Protection (Noise) Policy 2007.

Having regard to the above, the relevant provisions relating to noise are satisfied.

To the complete satisfaction of the developer.

#### **7.9.6 Stormwater**

DR Partners has consulted the Adelaide City Council in relation to stormwater management. A copy of their correspondence is provided in Appendix 7. In summary, Council has advised that since the impervious area of the site remains unaltered that no on-site detention of stormwater is required. Major flood events (1 in 100 year ARI event) will be catered for by overland flow paths discharging to the surrounding streets. Floor levels will be set above back of existing footpath levels in accordance with council requirements.

Notwithstanding, the proposal will re-use roof water for the purposes of irrigation of landscaping and green walls which will ensure their long term sustainability. The community strata will be responsible for the maintenance and operation of the rainwater tank and system.

#### **7.9.7 Overshadowing**

Council Wide PDC 174 encourages development in a non-residential Zone that is adjacent to land in the City Living Zone, Adelaide Historic (Conservation) Zone or North Adelaide Historic (Conservation) Zone to minimise overshadowing on sensitive uses by ensuring:

- north-facing windows to habitable rooms of existing dwellings in the City Living Zone, Adelaide Historic (Conservation) Zone or North Adelaide Historic (Conservation) Zone receive at least 3 hours of direct sunlight over a portion of their surface between 9.00am and 3.00pm on 21 June;
- ground level open space of existing residential buildings in the City Living Zone, Adelaide Historic (Conservation) Zone or North Adelaide Historic (Conservation) Zone receive direct sunlight for a minimum of 2 hours between 9.00am and 3.00pm on 21 June to at least the smaller of the following:
- » half of the existing ground level open space;

- » 35 square metres of the existing ground level open space (with at least one of the area's dimensions measuring 2.5 metres).

The shadow diagrams prepared by Tectvs demonstrate that the proposed development will satisfy PDC 174. Specifically, properties on the eastern side of Cleo Lane will only be overshadowed from between 1:00pm and 2:00pm.

This is not true. See figures 1 and 2 below.

Furthermore, the shadow diagrams presented during the design review process demonstrated that the impact of the proposed development compared to a building of 22m in height was negligible in the context of PDC 174.

The effect of solar shading has been calculated independently. An edifice 53.9m high and 27m wide will seriously reduce the amount of sunlight available at 85 East Terrace at any time of year. Figures 1 and 2 below show that the proposed development will, on the 21st of June 2019, cast a shadow over 85 East Terrace commencing at 12:51pm and remaining until dusk.

The statement in Section 7.9.7 Overshadowing that a building of 54m would have negligible extra impact over a building of 22m is manifest nonsense. The shadow cast will extend more than twice as far down East Terrace. It will affect properties much further down East Terrace.

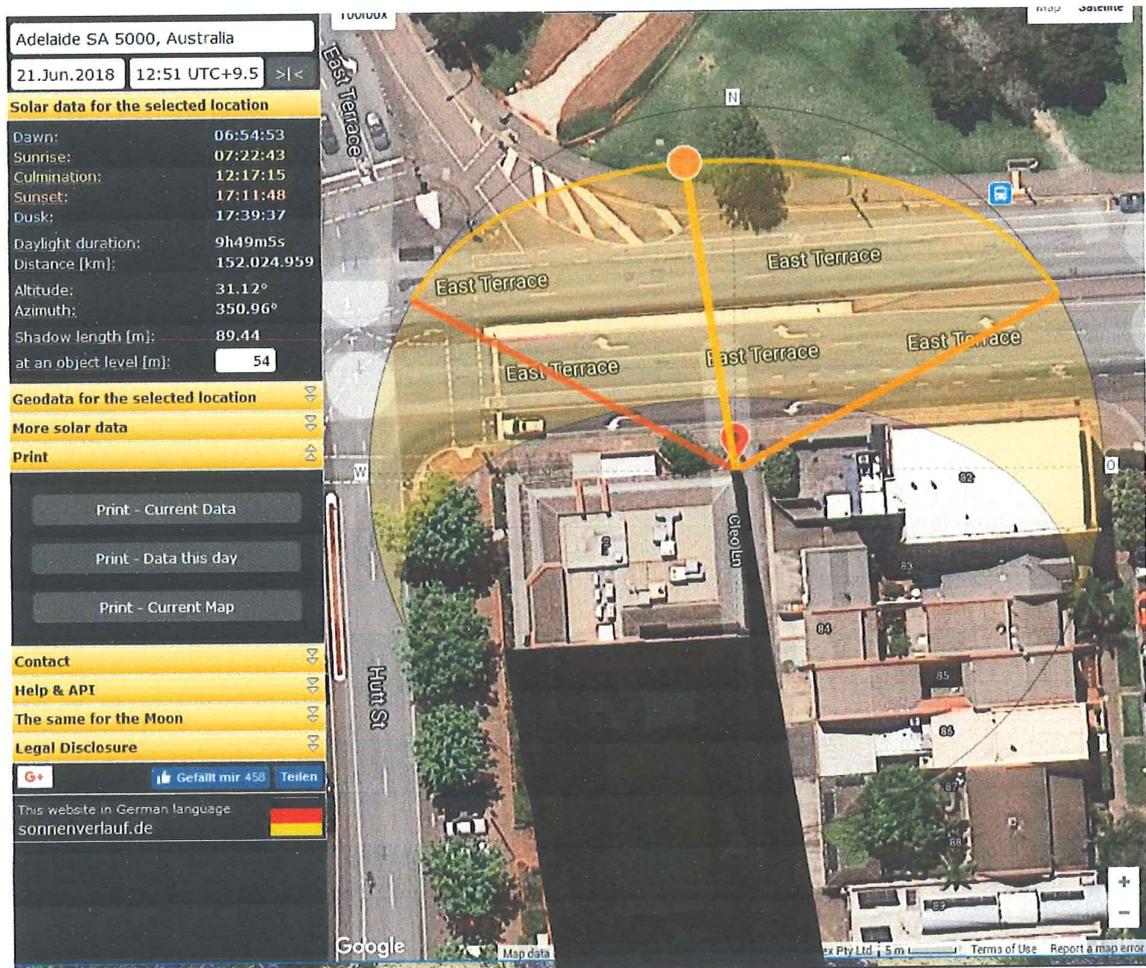


Figure 1 - Edge of shadow at 12:51 on 21 June 2019

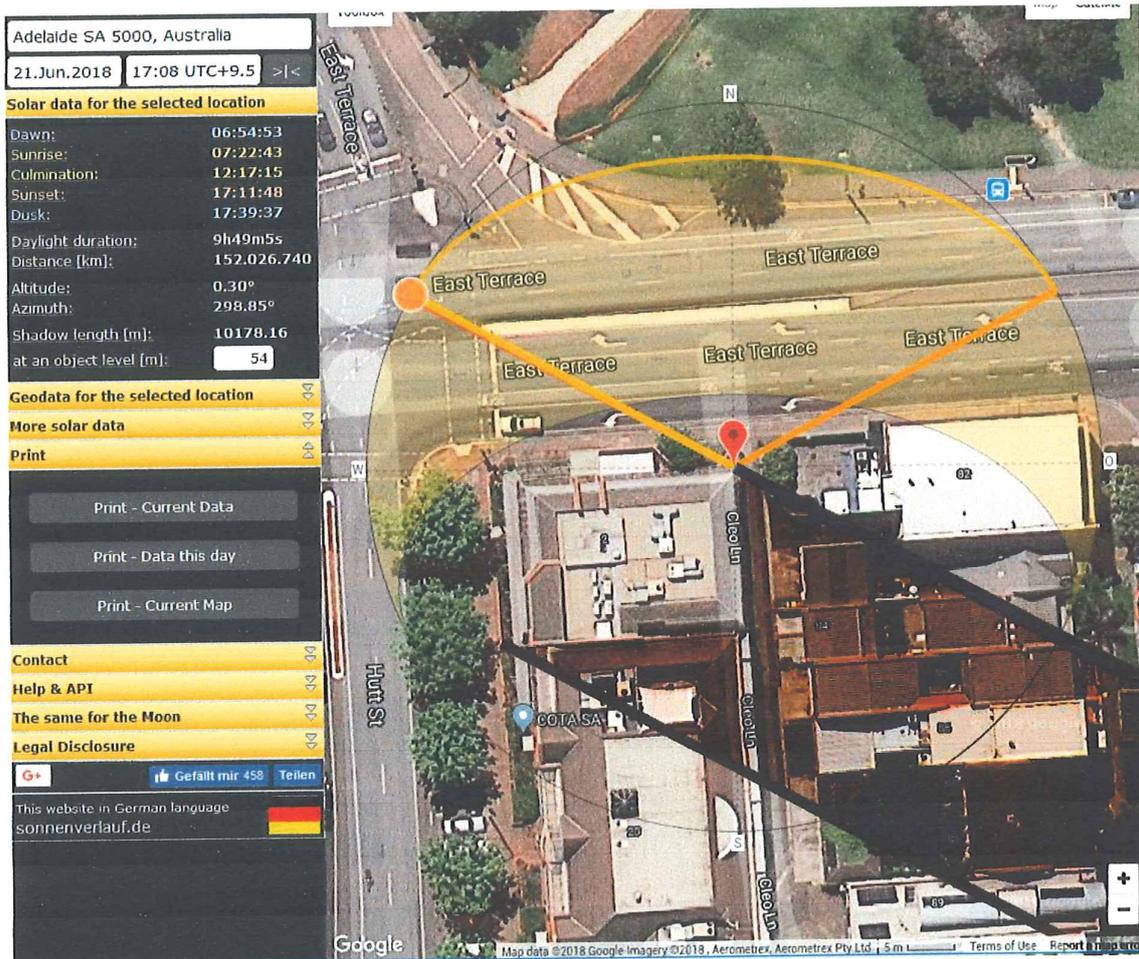


Figure 2 - Edge of shadow at dusk on 21 June 2019

### 7.9.8 Overlooking

Council Wide PDC 66 encourages medium to high scale residential or serviced apartment development to be designed and sited to minimise the potential overlooking of habitable rooms such as bedrooms and living areas of adjacent development.

Tectvs have undertaken a thorough assessment of the potential overlooking impacts associated with the proposed development. Each apartment floor plan has been designed so that the potential will be minimised. Further, the east facing dwellings between Level 3 and Level 7 will feature curved concrete beams of additional width (in comparison to the levels above) to further mitigate opportunities for overlooking into the private areas of dwellings fronting East Terrace.

We also consider it important to recognise that:

- the adjacent residential flat building does not contain west facing habitable room windows;
- habitable room windows of other dwellings to the south are located greater than 15 metres (measured horizontally) from the east facing balconies;
- there are existing structures or trees located in rear yards of dwellings backing onto Cleo Lane that would screen any views that may occur; and  
[There is no tree in the backyard of 85 East Terrace.](#)
- the open space area located on the western side of the adjacent apartment building is a common service area and not 'private' as such.

Further to the above, habitable room windows and balconies are set-back from boundaries with adjacent sites of at least three metres to provide an adequate level of amenity and privacy and to not restrict the reasonable development of adjacent sites in accordance with Council PDC 67.

Whilst the communal roof garden and courtyard associated with Apartment 305 is located on the southern boundary it is important to note that this space would otherwise be the car park roof deck. In our opinion, this space is unlikely to restrict the reasonable development potential of the adjacent site. The design of the garden space offers privacy screening and landscaping along the boundary. Overall, we are satisfied that the design of the development minimises the potential for overlooking to an acceptable degree, particularly to existing dwellings contained within the adjacent City Living Zone.

Good that Future Urban is satisfied. East Terrace residents are not!

### **7.10 Affordable Housing**

The Affordable Housing Overlay applies to the proposal. The Overlay is not mandatory, and given the intent to deliver high quality owner occupier apartments at a price point well beyond the affordable housing price threshold, affordable housing will not be provided in this particular development.

South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2

RECEIVED

29 OCT 2019

**Applicant:** Rymill Park Apartments Unit Trust C/ Future Urban  
**Development Number:** 020/A053/19  
**Nature of Development:** Demolition of existing office building a construction of 16 level mixed use building with basement and associated car parking  
**Development Type:** Merit / Category 2  
**Zone / Policy Area:** Capital City Zone  
**Subject Land:** 2-6 Hutt Street, Adelaide  
**Contact Officer:** Janaki Benson  
**Phone Number:** 08 343 2339  
**Close Date:** 01 November 2019

My Name: Nicholas Presswell My phone number: \_\_\_\_\_

Primary method(s) of contact: Email: npresswell@ozemail.com.au  
Postal Address: \_\_\_\_\_ Postcode: \_\_\_\_\_

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

- My interests are: (please tick one)
- owner of local property
  - occupier of local property
  - a representative of a company/other organisation affected by the proposal
  - a private citizen

The address of the property affected is: 86, East Terrace Adelaide Postcode 5000

- My interests are: (please tick one)
- I support the development
  - I support the development with some concerns
  - I oppose the development

The specific aspects of the application to which I make comment on are: \_\_\_\_\_

\* Traffic Congestion entering & leaving Cleo Lane  
\* Rubbish Pick up services.  
\* Height will result in overshadowing of our property & Partlands.

- I:  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

- By:  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

Signature: [Handwritten Signature]

Date: 28/10/2019.

South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2

RECEIVED

30 OCT 2019

**Applicant:** Rymill Park Apartments Unit Trust C/ Future Urban  
**Development Number:** 020/A053/19  
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**Zone / Policy Area:** Capital City Zone  
**Subject Land:** 2-6 Hutt Street, Adelaide  
**Contact Officer:** Janaki Benson  
**Phone Number:** 08 343 2339  
**Close Date:** 01 November 2019

My Name: Susan Parker My phone number: 0418852885

Primary method(s) of contact: Email: sparker@ozemail.com.au  
Postal Address: \_\_\_\_\_ Postcode: \_\_\_\_\_

You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

My interests are:  owner of local property  
(please tick one)  occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

The address of the property affected is: 86 East Terrace Adelaide Postcode 5000

My interests are:  I support the development  
(please tick one)  I support the development with some concerns  
 I oppose the development

The specific aspects of the application to which I make comment on are: 1. Proposed height of 14 levels above ground, subsequent overshadowing.  
2. Entry and exit to Cleo Lane - resultant congestion and traffic hazard in East Terrace. 3. Garbage collection noise and hazard.  
4. Loss of privacy

I:  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

By:  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

Signature: Susan Parker  
Date: 28/10/19

Our ref: JAL/218203

5 December 2019

Ms Janaki Benson  
State Commission Assessment Panel  
Level 5  
50 Flinders Street  
ADELAIDE SA 5000

**By email: [scapadmin@sa.gov.au](mailto:scapadmin@sa.gov.au)**

Dear Janaki

**Response to representations  
Rymill Park Apartments Pty Ltd - Mixed use development  
DA 020/A053/19: Property address: 2 - 6 Hutt Street, ADELAIDE**

This firm acts for Rymill Park Apartments Pty Ltd with respect to the above development application and this response to the representations is made on our client's behalf.

**Precedent, value and other irrelevant matters**

The contentions about precedent and impact on value are unsubstantiated and in any event are irrelevant to a planning assessment.

**Relevant construction impacts dealt with by CEMP**

The issue of construction impacts caused by the building of the development (rather than the development itself) can be managed by the preparation and implementation of an appropriate Construction Environment Management Plan which can and should appropriately be imposed as a condition.

Other related impacts are regulated by other legislation and are not relevant to the planning assessment of this proposal.

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

### **Trade marks irrelevant to assessment**

The representation by Michael Constantine of Constantine Legal on behalf of his parents Dr Luke & Mrs Kali Constantine deal with the asserted impact of the possible name of the development on the "Rymill Marks" rather than the development itself. The submission is entirely irrelevant to the planning assessment of this application and to that extent is misconceived.

In any event, the Constantines do not appear to be proper category 2 representors as they are not owners nor occupiers of "adjacent land" to the development. Rymill House, situated at 93-100 East Terrace, is separated from the development by a private gated driveway (which is not a road or a thoroughfare) and other private land such that it is not adjacent for the purposes of the definition.

### **Traffic & Parking**

*Signalised ramp system satisfies AS/NZS 2890.1:2004.*

It is correct to observe that the Australian Standard does not provide specific guidance on this particular design. The Standard was written in 2004, before 2-way, single lane ramps were a common inclusion in CBD developments. Like many such designs that are not expressly envisaged by the Standard, an assessment is based on engineering judgement. The 2-way, single-lane ramp for 50 Flinders Street, Adelaide was designed using the same engineering judgement as deployed for this development. That ramp system is operating successfully.

The City of Adelaide (the relevant road authority) has also accepted this scenario at this site

*Limited queuing probability*

The probability "p=0.13" from Austroads Part 3 equates to a maximum queue of 1 vehicle. However, there is no '0' queuing possibility on this graph such that even with a real life '0' utilisation ratio, the queue length is still shown as 1 vehicle. The design calculations (using conservative estimates) indicate that there is a 1.9% chance that a vehicle would be required to wait for another vehicle at any given time (see page 28 of the InfraPlan TIS). This is such an insignificant probability that it is almost irrelevant.

*No queuing on Cleo Lane to intrude into private land*

As discussed below, the offer to grant rights of way over the widened lane avoids any concern about the tenure of that area.

*Sight lines acceptable*

The representors' scenario shows 3 vehicles at one time (1 waiting, 1 arriving and 1 exiting) which, based on the queueing analysis, is an extremely unlikely scenario and an unrealistic design criteria. The turn paths illustrated by MFY are all B99 vehicles (eg, Ford Transit Van / Toyota Land Cruiser) which are not common vehicles, particularly occurring all at once as illustrated. Even if this very unlikely circumstance were to occur, the speed that the vehicles are travelling would be so low that there is a similarly very low probability of any collision.

Likewise, the speed at which a vehicle will enter Cleo Lane provides sufficient sight distance to see a vehicle in Cleo Lane, ‘propped’ even closely adjacent to East Terrace. For a domestic property access as is relevant here, the sight line requirement is based on the posted speed limit or 85th percentile speed limit of the frontage road. Given that the subject vehicle would have just entered the Lane from East Terrace and the exiting vehicle is required to stop (under the T-junction rule) and therefore would be almost stationary while looking for oncoming vehicles, most vehicle speeds would be around the 10km/h mark. At this speed, measures such as sight distance have a diminished importance given the almost exponential reduction of the impact of braking distance, reaction time and consequence should in the unlikely event of a collision.

The minimum value put forward by AS2890.1 is based on a 40km/h speed limit. This conservative approach does not consider the specific site conditions, therefore requiring a sight distance that is plainly not applicable in this situation. The calculation itself stems from the Approach Sight Distance calculation detailed in *Austrroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections*. Using this formula with a speed of 10km/h results in a sight distance requirement of 5m in each direction which can be met with the current proposal.

The low speed and low consequence in conjunction with the very low vehicle numbers of Cleo Lane mean that the sightline provisions of the proposal are appropriate.

#### *Ramp profile suitable and reaches floor levels*

The reference to the 1:10 slope was an error in the InfraPlan report. All grade changes and transitions comply with AS2890 and the ramps do meet the relevant floor heights. Amended drawings are attached to clearly demonstrate these two items are addressed.

#### *Suitable turn paths*

The turn paths show that there is sufficient space for turning, see Figure 1 and Figure 2 Attached.

#### *Adequate loading for café deliveries*

This development occurs in an inner-city environment with many other cafes and restaurants that do not have loading bays large enough for Medium Rigid Vehicles directly in front of their sites. If an MRV is required it will deliver outside of business hours and either straddle 2 parking bays or park elsewhere and wheel the goods via a trolley.

#### *Safe access and egress for service and waste vehicles*

East Tce is designated as a Secondary Access Road in the Adelaide (City) Development Plan. Clause 3.2.3 from AS2890.2 however refers to Regular Service – Major Road. This clause is more relevant for large developments on arterial roads and therefore has no direct application to this proposal.

Refuse collection will occur early in the morning when the traffic volumes are minimal (similar to a minor road). The low frequency of waste removal is more in-line with an occasional service not a regular service. The speed limit is 50km/h, not 60km/h (or

more) as would apply to major roads. The appropriate Clause of the Standard is in fact is 3.2.2 Occasional Service. This Clause provides that:

*Reverse manoeuvres at the property boundary, if permitted by the relevant authority shall be limited to one only, either on entering or departing, and shall be subject to consideration of both safety and obstruction to other on-street traffic.*

The requirements of the relevant clause are therefore met.

In addition, PDC 248 provides that "Buildings located along primary and secondary access roads should be sited to avoid the need for vehicles to reverse on to the road (unless the dimensions of the site make this impractical)". The dimensions of this site make this impractical, similar to many other inner-city developments.

### **Widening of Cleo Lane**

The applicant proposes that Cleo Lane will be widened in that the proposal will be set back from the property boundary and the laneway paving extended to enable use of the wider laneway area. The materials, grading and any necessary line marking can occur in a manner that ensures that drivers are able to safely use and navigate the lane way.

In addition, the applicant proposes to offer a right of way to the other land owners who enjoy rights over the lane. If those other land owners decline to accept the grant of a right of way, that is a matter for them. The physical layout of the widened lane will mean that even regardless of the rights of way, access over the wider area will in a practical sense be readily available.

The future widening of Cleo Lane is plainly not a change in the use of the land. The lane will remain used as a laneway. The widened area on the development site is part of the proposed development for which consent is now sought.

The widening of Cleo Lane as provided by in the development will facilitate two-way movement, and therefore improve the existing functionality of the laneway and access arrangements for existing and future residents.

We note that the Government Architect has also expressed support for the high quality upgrade commenting *"the consideration given to the amenity of the laneway and transition between the private laneway and public realm with reinforce the development's sense of place and contextual relationship"*.

### **Appropriate height**

Several representations are based on the erroneous presumption that the height guideline in Concept Plan Figure CC/2 is a fixed maximum height for the Zone.

This is a misinterpretation of the Development Plan. No provision of the development plan is mandatory and it is an error to construe a development plan like a statute.

In any event, Council Wide PDC 167 and Capital City Zone PDC 16 and 21 all expressly provide a policy framework for buildings taller than the Concept Plan guideline. The effect of these provisions is that the height nominated in the Concept

Plan is a default height which is intended to promote high quality design (and other factors) set out in detail in those PDC. The other factors which the policy regime seeks to promote by allowing buildings to be taller than the default height include pedestrian and cyclist amenity, activation, sustainability, public realm and streetscape contribution, site configuration, retention of heritage places, affordable housing, open space, reduced car parking, multi bedroom apartments, proximity to the parklands, roof top gardens, landscaped vertical surfaces, passive heating and cooling, private open space and solar voltaic cells.

The policy structure of the development plan (both Council wide and in this Zone) is carefully structured so that the default height in the Concept Plan is used as an incentive to draw out that range of other factors in the design of taller buildings. The Development Plan, by its terms and its overall policy architecture is expressly expecting that taller buildings will occur precisely so that these other factors can be incentivised and achieved.

The application documents detail how the proposal satisfies the terms of PDC 21 in particular and I will not repeat that detail here. The development is designed to provide high quality residential focus with landmark characteristics afforded by its Park Lands setting. The location is likewise appropriate for this scale given that the zone expressly contemplates high scale development with potential for anticipated taller buildings to be developed to the west and north-west.

With respect to PDC 21 (c)(i) the proposal at least meets 5 of the 8 criteria (and only 3 are required) namely paragraphs (1) and (5)-(8) as follows:

- (a) the development provides an orderly transition up to existing taller buildings in adjacent Zone, Policy Area or building height area being that to the west of Hutt St (which provision does not require a transition "down" to any lower building height areas etc);
- (b) active uses are located on at least 75% of the public street frontages of the building (not the site frontage) including the restaurant bar and main entry area;
- (c) a range of dwelling types includes more than 10% of 3+ bedroom apartments;
- (d) the development is adjacent to the parklands;
- (e) the impact on adjacent properties is no greater than a building of the maximum height on CC/1 and CC/2 in relation to sunlight access and overlooking.

With respect to PDC 21 (c)(ii) the proposal meets all of the eligible zone criteria for sustainable urban design (and only 3 are required) in that:

- (a) there is a communal useable garden covering the majority of a rooftop area proposed for level 3 (noting that the policy does not require that the roof be at the highest point of the building);
- (b) a living landscape vertical surface (green wall) of at least 50m<sup>2</sup> supported by services that ensure ongoing maintenance is provided (again, the policy does not require that this be external to the building);

- (c) passive heating and cooling design elements including innovate shading system (see Tectvs and D-Squared reports);
- (d) higher amenity is provided through the provision of private open space in excess of the minimum requirements;
- (e) roof mounted solar photovoltaic cells sized to provide renewable energy equivalent to 100% of the common area power needs including car park ventilation;

In the circumstances of this proposal and its high quality design and response to the public realm the incentives built into the policy architecture are at work to deliver the range of design factors expressly sought by the Development Plan.

### **Consistent with context**

The Development Plan refers also to the context of development. Relevant contextual features which support this proposal are that -

- (a) it is situated on a prominent corner site framing the entry to the City along Bartels Road and into Pirie Street and along Hutt St/East Terrace. The site is well suited because of its siting at this junction of roads to accommodate a substantial and high quality building such as is proposed;
- (b) it is situated adjacent Rymill Park and the east Park Lands where it is appropriate for substantial buildings to maximise the outlook and opportunity that the amenity of such park land features provide;
- (c) It is close to the hospitality and shopping precincts of Rundle Street and Hutt Street and is well suited to accommodate larger numbers of dwellings;
- (d) It is close to high frequency public transport, pedestrian and cycling infrastructure;
- (e) It is near to a zone contemplating tall buildings (west of Hutt St);
- (f) The other adjacent Zones all accommodate catalyst sites where more substantial and taller buildings are promoted. Such catalyst sites policies may well be invoked in future by the amalgamation of smaller residential lots (which is the very economic incentive the catalyst site policies attempt to achieve) such that the more modest (and arguably under developed) sites directly fronting East Terrace immediately east of the development may appropriately be developed at greater height and density to also take advantage of their location.

### **High Standard of Design**

The zone, being the economic and cultural focus of the state, calls for development to be of high quality and be consistent with the desired character for the zone being the focus of high rise development in the City. The development conforms to the desired character and high standard of design in that it:

- a) Achieves the "contextual", "durable", "inclusive", "sustainable" and "amenable" objects of the desired character statement (p187 and PDC 5);
- b) Achieves the high standard of architectural design and finish appropriate to the City's role and image as the capital of the State (PDC 6);
- c) Incorporates high quality materials and finishes and a high degree of visual interest (PDC 7);
- d) Provides street level activation including a restaurant and double height green wall feature in promoting an active and vibrant streetscape (PDC 8 and 9);
- e) Complements adjacent buildings particularly the adjacent apartment development to the east (PDC 12);
- f) Overlooks the Park Lands and defines and reinforces the townscape importance of this corner site (PDC 12(d));
- g) Has a strongly modelled façade, reflective of the proportions of the frontages to the site with a consistent theme of architectural detailing providing a unified expression (PDC 15);
- h) The increase in height does not have adverse impacts on adjoining dwellings or the overall city form in the locality as its design, appearance and siting are commensurate with the setting and surround development (PDC 16).

The development has evolved through five design review panel sessions with the emphasis on a high quality residential development, high design quality and environment performance to which is strongly supported by the Government Architect.

#### **Prior Development Plan Consent and application irrelevant**

A previous development plan consent issued for the site has been cancelled. Another application has been lodged but is not presently being pursued. Neither are in any way relevant to the assessment of this current application which must be judged on its own merits.

#### **Access to sunlight maintained**

As shown on the shadow diagrams, dwellings to the east receive full sun at the Winter Solstice for 3 hours up until midday and then varying degrees of sunlight as the sun moves west. The buildings to the south receive sunlight from 9-11 am and then again from 1.00-3.00pm at the Winter Solstice.

### **Appropriate privacy treatments**

As shown on the Section Drawing B, the proposal incorporates appropriate privacy treatments to mitigate adverse overlooking impacts on the privacy of nearby dwellings. These treatments include ledges and recessed window panes and balustrades to all levels up to level 7, privacy glass, interstitial blinds, and screens to prevent occupants being able to view private areas nearby.

### **Appropriate waste management measures**

The proposal provides a waste management plan that properly deals with the location of the storage and the means of waste management in a manner that will prevent odour and other impacts on neighbours. In addition, in the event that any such impacts were to arise due to non-compliance with the waste management plan, other legislation<sup>1</sup> regulates such impacts on a day to day basis.

### **Clearly not "seriously at variance"**

The representation by Mr Khabaz refers to a report prepared by Mr Graham Burns of Masterplan who asserts that the proposed development is seriously at variance with the Development Plan. That contention is clearly not made out. The test for a proposal to be "seriously at variance" firstly *"requires an examination on what is the essential thrust and objective of the Development Plan... so far as they apply to the land the subject of the intended development and its locality."*<sup>2</sup>

As stated by Justice DeBelle in the Supreme Court decision of *Mar Mina*, the degree of departure from the Development Plan must not be merely trifling, it must be *"an important or grave departure in either quantity or degree."*<sup>3</sup>

Given that the Development Plan expressly provides (eg Zone PDC 16 and 21) for the height guideline to be amended to achieve a range of other design aspirations, this proposal cannot in the circumstances be "seriously at variance" with that very policy regime.

The representors have previously included a planning report by Mr Damian Dawson of Planning Chambers Pty Ltd in its representations on a very similar proposal. Mr Dawson's report did not conclude that the proposed development is seriously at variance with the Development Plan.

In the circumstances where two experienced and qualified town planners, both of which having been engaged by the representors for the sole purpose of opposing the proposed development it is clear that the representors are mistaken when they say *"it is inconceivable that a development which exceeds 53 metres in height is other than seriously at variance with the Plan"*.

Plainly the representors own and original planning consultant, Mr Dawson did not conceive of the proposed development being seriously at variance with the development plan. The Panel should draw from the representor's need to find an

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<sup>1</sup> The *Environment Protection Act* and the *Local Nuisance and Litter Control Act* in particular.

<sup>2</sup> *Mar Mina (SA) Pty Ltd v City of Marion & Anor* [2008] SASC 120 at [40] (**Mar Mina**).

<sup>3</sup> *Ibid* at [33]; see also *Hayes v DAC (No 4)* (1997) 95 LGERA 7, 25 (**Hayes**).

additional planning consultant to express a view that the proposed development is seriously at variance a strong inference that the proposed development is in fact not seriously at variance.

In any event the representation betrays a misunderstanding of the Development Plan given Council Wide Principle of Development Control 167 and Capital City Zone Principles of Development Control 16 and 21 all clearly contemplate circumstances in which the maximum building height demonstrated in Concept Plan Figure CC/2 may be exceeded. The Concept Plan CC/2 is not a statute and should not be construed as being mandatory.

Further, the attempt to draw the inference that the circumstances dealt with in *Gregory v Charles Sturt [2018] SAERDC 37* is analogous with the development of this matter is fundamentally incorrect and ill-founded.

There is no equivalent provision in the Charles Sturt Development Plan<sup>4</sup> similar to Council Wide Principle of Development Control 167 and Capital City Zone Principle of Development Control 16<sup>5</sup> or 21 providing for circumstances where buildings with high quality design standards may exceed the height limits in the relevant concept plans. Notwithstanding, the proposed development is clearly of a high quality design standard and the departure from Concept Plan CC/2 is justified according to the Development Plan. This view is again jointly shared by the Government Architect.

## **Conclusion**

The proposed development is deserving of approval. Our client requests an opportunity to appear at the SCAP meeting when this application is considered to answer any questions from the members and respond the representations. Please advise of the date and time of the relevant meeting.

Please contact me if you have any questions about this matter.

Yours faithfully



**James Levinson**

**BOTTEN LEVINSON**

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Email: jal@bllawyers.com.au

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<sup>4</sup> Port Adelaide Enfield Council Development Plan

<sup>5</sup> Adelaide (City) Development Plan

**Project** Rymill Apartments, Hutt Street  
**Client:** The Maras Group  
**Date:** November 29, 2019  
**Subject:** Vehicle Swept Path Simulation - Passing Area within Aisles

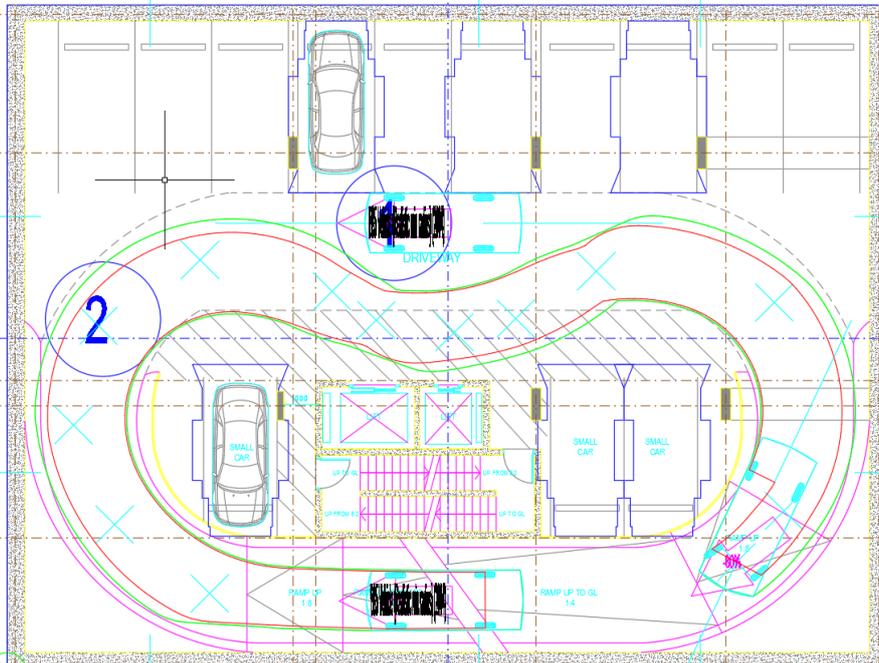


Figure 1: B85 vehicle passing B85 vehicle

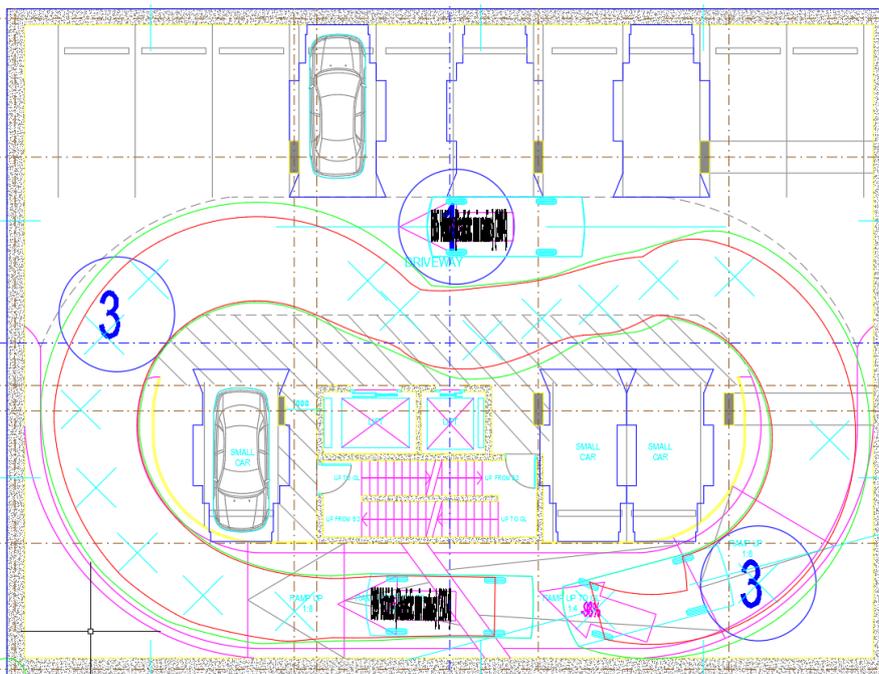
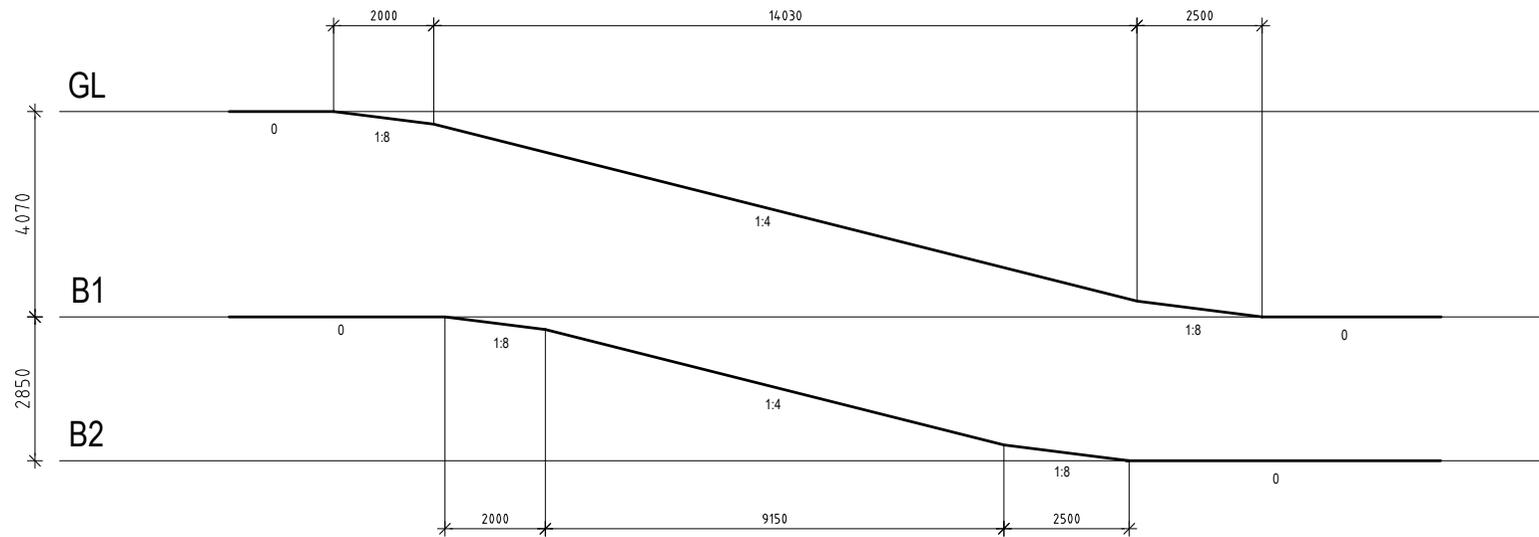
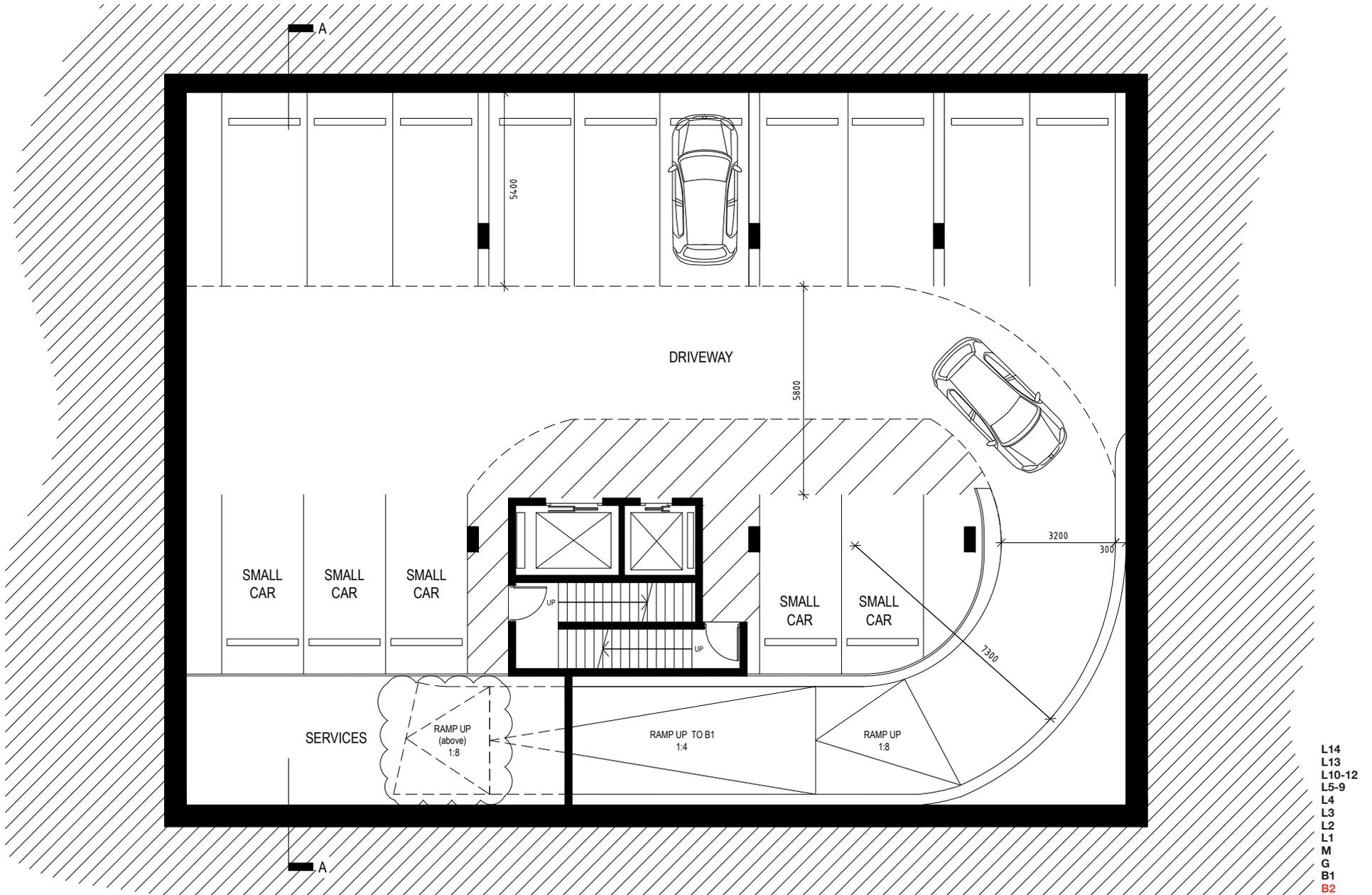


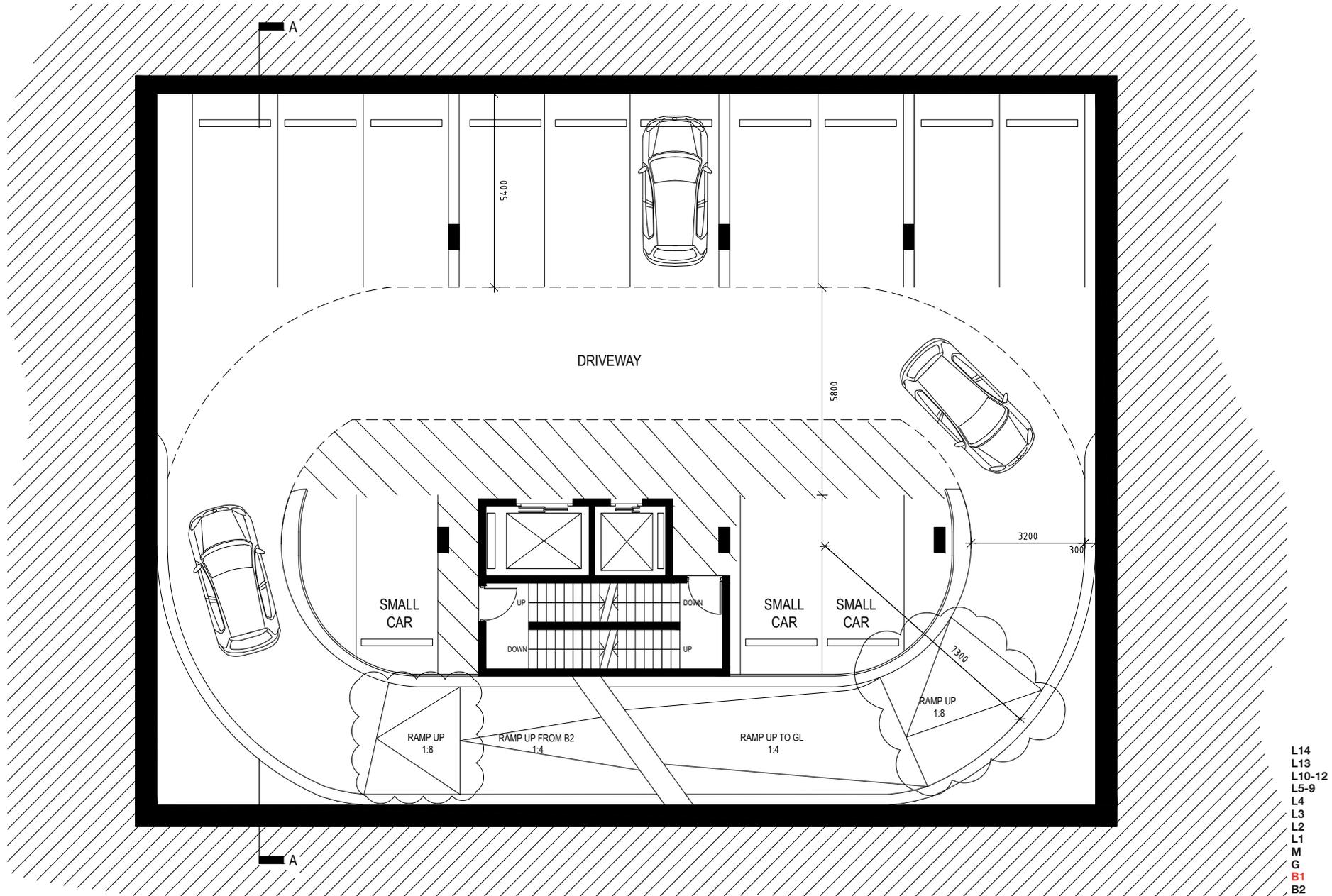
Figure 2: B99 vehicle passing B85 vehicle



RAMP SECTION  
 BASEMENT 2 - BASEMENT 1 - GROUND LEVEL  
 1:100 @ A3



Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Basement 2 Plan	P-02	20-09-2018	v1-2

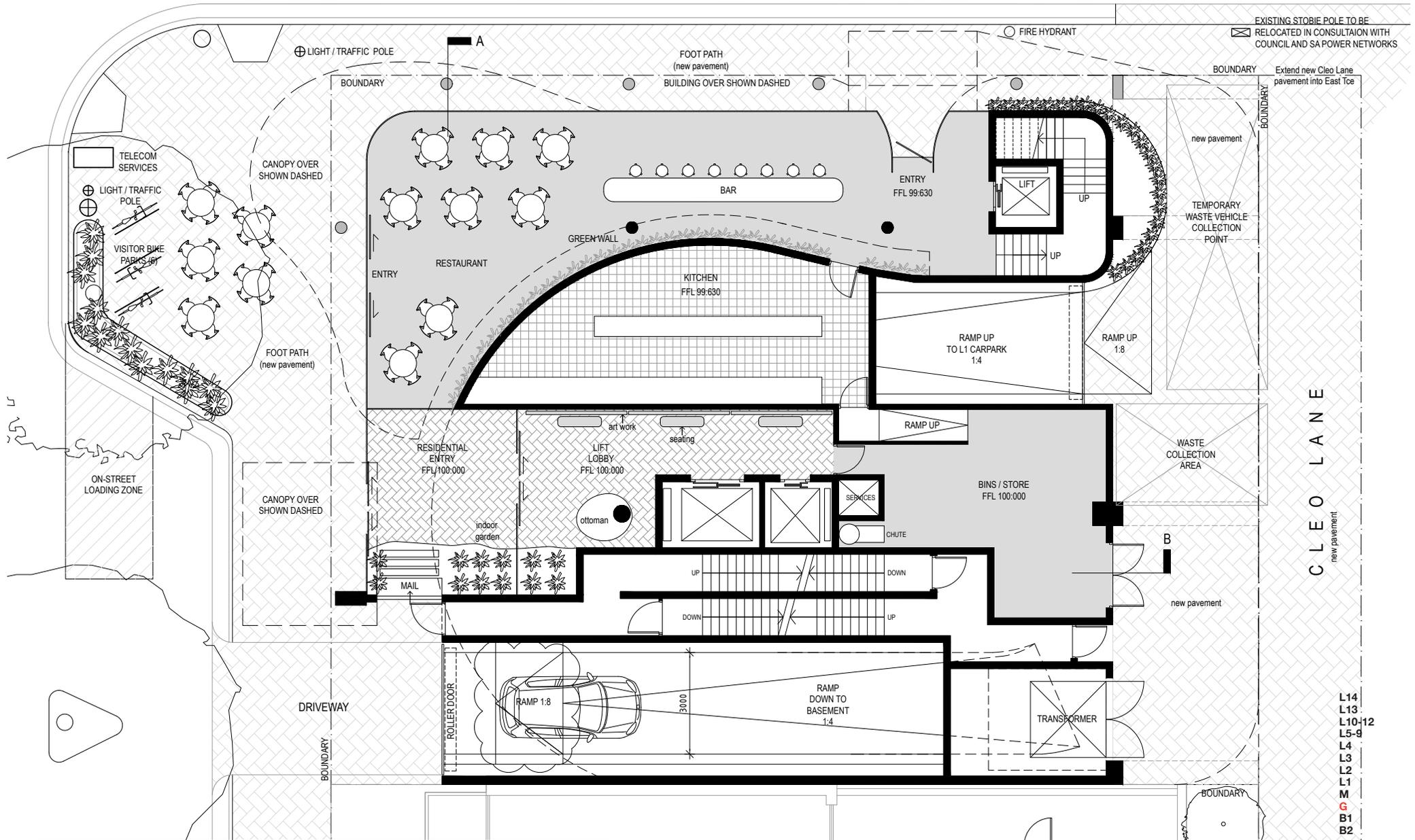


- L14
- L13
- L10-12
- L5-9
- L4
- L3
- L2
- L1
- M
- G
- B1**
- B2

Project 28061 - 2 Hutt Street	Page Name Basement 1 Plan	Number P-03	Issue Date 20-09-2019	Rev No. v1-2
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## EAST TERRACE



EXISTING STOBIE POLE TO BE RELOCATED IN CONSULTATION WITH COUNCIL AND SA POWER NETWORKS

Extend new Cleo Lane pavement into East Terrace

CLEO LANE  
new pavement

- L14
- L13
- L10-12
- L5-9
- L4
- L3
- L2
- L1
- M
- G
- B1
- B2

Project	Page Name	Number	Issue Date	Rev No.
28061 - 2 Hutt Street	Ground Floor Plan	P-04	20-09-2019	v1-3

## **CAPITAL CITY ZONE**

### **Introduction**

The Desired Character, Objectives and Principles of Development Control that follow apply in the whole of the Capital City Zone shown on Maps Adel/17 to 20, 23 to 26 and 29 to 31. They are additional to those expressed for the whole of the Council area and in cases of apparent conflict, take precedence over the more general provisions. In the assessment of development, the greatest weight is to be applied to satisfying the Desired Character for the Zone.

### **DESIRED CHARACTER**

This Zone is the economic and cultural focus of the State and includes a range of employment, community, educational, tourism and entertainment facilities. It is anticipated that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy.

The Zone will be active during the day, evening and late night. Licensed entertainment premises, nightclubs and bars are encouraged throughout the Zone, particularly where they are located above or below ground floor level to maintain street level activation during the day and evening.

High-scale development is envisaged in the Zone with high street walls that frame the streets. However an interesting pedestrian environment and human scale will be created at ground floor levels through careful building articulation and fenestration, frequent openings in building façades, verandahs, balconies, awnings and other features that provide weather protection.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment. In narrow streets and laneways the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure. In the Central Business Policy Areas, upper level setbacks are not envisaged.

Non-residential land uses at ground floor level that generate high levels of pedestrian activity such as shops, cafés and restaurants will occur throughout the Zone. Within the Central Business Policy Area, residential land uses at ground level are discouraged. At ground level, development will continue to provide visual interest after hours by being well lit and having no external shutters. Non-residential and / or residential land uses will face the street at the first floor level to contribute to street vibrancy.

New development will achieve high design quality by being:

(a) **Contextual** – so that it responds to its surroundings, recognises and carefully considers the adjacent built form, and positively contributes to the character of the immediate area.

(b) **Durable** – by being fit for purpose, adaptable and long lasting, and carefully considers the existing development around it.

(c) **Inclusive** – by integrating landscape design to optimize pedestrian and cyclist usability, privacy, and equitable access, and also promote the provision of quality spaces integrated with the public realm that can be used for access and recreation and help optimize security and safety both internally and into the public realm, for occupants and visitors alike.

(d) **Sustainable** – by integrating sustainable systems into new buildings and the surrounding landscape design to improve environmental performance and minimise energy consumption.

(e) **Amenable** – by providing natural light and ventilation to habitable spaces.

Contemporary juxtapositions will provide new settings for heritage places. Innovative design is expected in areas of identified street character with an emphasis on contemporary architecture that responds to site context and broader streetscape, while supporting optimal site development. The addition of height, bulk and massing of new form should be given due consideration in the wider context of the proposed development.

There will also be a rich display of art that is accessible to the public and contextually relevant.

### **Adelaide's pattern of streets and squares**

The distinctive grid pattern of Adelaide will be reinforced through the creation of a series of attractive boulevards as shown on Concept Plan Figures CC/1 and 2. These boulevards will provide a clear sense of arrival into the City and be characterised by buildings that are aligned to the street pattern, particularly at ground level.

Views to important civic landmarks, the Park Lands and the Adelaide Hills will be retained as an important part of the City's charm and character.

The City's boulevards, terraces and Squares will be developed as follows:

(a) North Terrace will be reinforced as an important pedestrian promenade and cultural boulevard that provides an important northern edge to the City square mile.

(b) King William Street will be enhanced as the City's principal north-south boulevard and will be reinforced as the City's commercial spine.

(c) Grote Street-Wakefield Street will be enhanced as the City's principal east-west boulevard and will be developed to provide a strong frame that presents a sense of enclosure to the street.

(d) East Terrace will be characterised by buildings that maximise views through to the Park Lands and provide a distinct City edge.

(e) West Terrace will be reinforced as the western 'gateway' to the City centre and will form an imposing frontage to the western City edge. Buildings will be constructed to the front and side boundaries, and designed to maximise views through to the Park Lands. Corner sites at the junctions of West Terrace and the major east-west streets will be developed as strongly defined visual gateways to the City. This will provide an imposing frontage to the western edge of the City, which comprises a mixture of commercial, showroom and residential development.

(f) Pulteney and Morphett streets are key north-south boulevards. A sense of activation and enclosure of these streets will be enhanced through mixed use development with a strong built form edge. Pulteney Street will include residential, office and institutional uses, and retail activities. These boulevards will become important tree-lined commercial corridors.

(g) Currie, Grenfell, Franklin and Flinders streets, as wider east-west boulevards provide important entry points to the City. Currie and Grenfell streets will become a key focus for pedestrians, cycling and public

transport. These streets also provide long views to the hills as their closing vistas and these view corridors should remain uncluttered.

(h) Victoria, Hindmarsh and Light Squares will have a continuous edge of medium to high-scale development that frames the Squares and increases ground level activity.

The Zone also includes a number of Main Street areas, encompassing Rundle Mall, Rundle Street, Hindley Street and Gouger Street, which are envisaged to have a wide range of retail, commercial and community uses that generate high levels of activity. These areas will have an intimately scaled built form with narrow and frequent building frontages. These areas are shown on Concept Plan Figures CC/1 and 2.

Development fronting North Terrace, King William Street, Wakefield Street, Grote Street, the Squares, and in the Main Street Policy Area, will reflect their importance through highly contextual design that reflects and responds to their setting and role.

Minor streets and laneways will have a sense of enclosure (a tall street wall compared to street width) and an intimate, welcoming and comfortable pedestrian environment with buildings sited and composed in a way that responds to the buildings' context. There will be a strong emphasis on ground level activation through frequent window openings, land uses that spill out onto the footpath, and control of wind impacts.

Development in minor streets and laneways with a high value character will respond to important character elements and provide a comfortable pedestrian environment, particularly in the following streets: Gray, Leigh, Union, Chesser, Coromandel, Tucker, Cardwell, Kenton, Market, Ruthven, Cannon, Tatham, Bentham streets, Murrays Lane and Wright Court.

A comprehensive, safe and convenient movement network throughout the City will develop, focusing on the provision of linkages on both public and private land between important destinations and public transport. A high quality system of bicycle or shared pedestrian and bicycle routes will be established within the Zone.

## **OBJECTIVES**

### **General**

**Objective 1:** The principal focus for the economic, social and political life of metropolitan Adelaide and the State.

**Objective 2:** A vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living.

**Objective 3:** Design and management of City living to ensure the compatibility of residential amenity with the essential commercial and leisure functions of the Zone.

**Objective 4:** City streets that provide a comfortable pedestrian environment.

**Objective 5:** Innovative design approaches and contemporary architecture that respond to a building's context.

**Objective 6:** Buildings that reinforce the gridded layout of Adelaide’s streets and respond to the underlying built-form framework of the City.

**Objective 7:** Large sites developed to their full potential while ensuring a cohesive scale of development and responding to a building’s context.

**Objective 8:** Development that contributes to the Desired Character of the Zone.

## **PRINCIPLES OF DEVELOPMENT CONTROL**

### **Land Use**

**1** The following types of development, or combinations thereof, are envisaged:

Affordable housing

Aged persons accommodation

Community centre

Consulting room

Convention centre

Dwelling

Educational establishment

Emergency services facility

Hospital

Hotel

Indoor recreation centre

Licensed entertainment premises

Library

Motel

Office

Pre-school

Personal service establishment

Place of worship

Serviced apartment

Restaurant

Residential flat building

Student accommodation

Shop or group of shops

Tourist accommodation

**2** Land uses that are typically closed during the day should be designed to maximise daytime and evening activation at street level and be compatible with surrounding land uses, in particular residential development.

**3** Low impact industries should be located outside the Central Business Policy Area and have minimal off-site impacts with respect to noise, air, water and waste emissions, traffic generation and movement.

**4** Development listed as non-complying is generally inappropriate.

#### **Form and Character**

**5** Development should be consistent with the Desired Character for the Zone.

#### **Design and Appearance**

**6** Development should be of a high standard of architectural design and finish which is appropriate to the City's role and image as the capital of the State.

**7** Buildings should achieve a high standard of external appearance by:

(a) the use of high quality materials and finishes. This may be achieved through the use of materials such as masonry, natural stone, prefinished materials that minimise staining, discolouring or deterioration, and avoiding painted surfaces particularly above ground level;

(b) providing a high degree of visual interest through articulation, avoiding any large blank facades, and incorporating design features within blank walls on side boundaries which have the potential to be built out;

(c) ensuring lower levels are well integrated with, and contribute to a vibrant public realm; and

(d) ensuring any ground and first floor level car parking elements are sleeved by residential or non-residential land uses (such as shops, offices and consulting rooms) to ensure an activated street frontage.

**8** Buildings should present an attractive pedestrian-oriented frontage that adds interest and vitality to City streets and laneways.

**9** The finished ground floor level of buildings should be at grade and/or level with the footpath to provide direct pedestrian access and street level activation.

**10** Providing footpath widths and street tree growth permit, development should contribute to the comfort of pedestrians through the incorporation of verandahs, balconies, awnings and/or canopies that provide pedestrian shelter.

**11** Buildings should be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a contextual response to a heritage place.

**12** Buildings should be designed to include a podium/street wall height and upper level setback (in the order of 3-6 metres) that:

(a) relates to the scale and context of adjoining built form;

(b) provides a human scale at street level;

(c) creates a well-defined and continuity of frontage;

(d) gives emphasis and definition to street corners to clearly define the street grid;

(e) contributes to the interest, vitality and security of the pedestrian environment;

(f) maintains a sense of openness to the sky for pedestrians and brings daylight to the street; and

(g) achieves pedestrian comfort by minimising micro climatic impacts (particularly shade/shelter, wind tunnelling and downward drafts);

other than (h) or (i):

(h) in the Central Business Policy Area;

(i) where a lesser (or zero) upper level setback and/or podium height is warranted to correspond with and complement the form of adjacent development, in which case alternative design solutions should be included to achieve a cohesive streetscape, provided parts (b) to (g) are still achieved.

**13** Buildings north of Rundle Mall, Rundle Street, Hindley Street and Gouger Street should have a built form that incorporates slender tower elements, spaces between buildings or other design techniques that enable sunlight access to the southern footpath.

**14** Buildings, advertisements, site landscaping, street planting and paving should have an integrated, coordinated appearance and should enhance the urban environment.

**15** Building façades should be strongly modelled, incorporate a vertical composition which reflects the proportions of existing frontages, and ensure that architectural detailing is consistent around corners and along minor streets and laneways.

**16** Development that exceeds the maximum building height shown in Concept Plan Figures CC/1 and 2, and meets the relevant quantitative provisions should demonstrate a significantly higher standard of design outcome in relation to qualitative policy provisions including site configuration that acknowledges and responds to the desired future character of an area but that also responds to adjacent conditions (including any special qualities of a locality), pedestrian and cyclist amenity, activation, sustainability, and public realm and streetscape contribution.

**Building Height 21** Development should not exceed the maximum building height shown in Concept Plan Figures

CC/1 and 2 unless, notwithstanding its height, it has regard to the context that forms the positive

character of the locality and is sympathetic to the desired character of the Zone or Policy Area and the anticipated city form expressed in Concept Plan Figures CC/1 and 2, and

(a) if the development incorporates the retention, conservation and reuse of a building which is a listed heritage place or an existing built form and fabric that contributes positively to the character of the local area; or (b) more than 15% of dwellings are affordable housing; or (c) only if: (i) at least three of the following are provided: (1) the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjacent Zone, Policy Area or building height area on Concept Plan Figures CC/1 and 2;

(2) high quality open space that is universally accessible and is directly connected to, and well integrated with, public realm areas of the street; (3) high quality, safe and secure, universally accessible pedestrian linkages that connect through the development site; (4) no on site car parking is provided; (5) active uses are located on at least 75% of the public street frontages of the building, with any above ground car parking located behind; (6) a range of dwelling types that includes at least 10% of 3+ bedroom apartments; (7) the building is adjacent to the Park Lands; (8) the impact on adjacent properties is no greater than a building of the maximum height on Concept Plan Figures CC/1 and 2 in relation to sunlight access and

overlooking; and (ii) at least three of the following sustainable design measures are provided: (1) a communal useable garden integrated with the design of the building that covers the majority of a rooftop area supported by services that ensure ongoing maintenance; (2) living landscaped vertical surfaces of at least 50 square metres supported by services that ensure ongoing maintenance; (3) passive heating and cooling design elements including solar shading integrated into the building; (4) higher amenity through provision of private open space in excess of minimum requirements by 25% for at least 50% of dwellings; (5) solar photovoltaic cells on the majority of the available roof area, supported by services that ensure ongoing maintenance.

**22** Development should have optimal height and floor space yields to take advantage of the premium City location and should have a building height no less than half the maximum shown on Concept Plan Figures CC/1 and 2, or 28 metres in the Central Business Policy Area, except where one or more of the following applies:

(a) a lower building height is necessary to achieve compliance with the Commonwealth Airports (Protection of Airspace) Regulations;

(b) the site is adjacent to the City Living Zone or the Adelaide Historic (Conservation) Zone and a lesser building height is required to manage the interface with low-rise residential development;

(c) the site is adjacent to a heritage place, or includes a heritage place;

(d) the development includes the construction of a building in the same, or substantially the same, position as a building which was demolished, as a result of significant damage caused by an event, within the previous 3 years where the new building has the same, or substantially the same, layout and external appearance as the previous building.

## **Interface**

**23** Development should manage the interface with the City Living Zone or the Adelaide Historic (Conservation) Zone in relation to building height, overshadowing, massing, building proportions and traffic impacts and should avoid land uses, or intensity of land uses, that adversely affect residential amenity.

**24** Development on all sites on the southern side of Gouger Street - Angas Street and adjacent to a northern boundary of the City Living Zone or the Adelaide Historic (Conservation) Zone should not exceed 22 metres in building height unless the Council Wide overshadowing Principles of Development Control are met.

**25** Parts of a development that exceed the prescribed maximum building height shown on Concept Plan Figures CC/1 and 2 that are directly adjacent to the City Living, Main Street (Adelaide) or the Adelaide Historic (Conservation) Zone boundaries should be designed to minimise visual impacts on sensitive uses in the adjoining zones and to maintain the established or desired future character of the area. This may be achieved through a number of techniques such as additional setback, avoiding tall sheer walls, centrally locating taller elements, providing variation of light and shadow through articulation to provide a sense of depth and create visual interest, and the like

#### **Movement**

**26** Pedestrian movement should be based on a network of pedestrian malls, arcades and lanes, linking the surrounding Zones and giving a variety of north-south and east-west links.

**27** Development should provide pedestrian linkages for safe and convenient movement with arcades and lanes clearly designated and well-lit to encourage pedestrian access to public transport and areas of activity. Blank surfaces, shutters and solid infills lining such routes should be avoided.

**28** Development should ensure existing through-site and on-street pedestrian links are maintained and new pedestrian links are developed in accordance with Map Adel/1 (Overlay 2A).

**29** Car parking should be provided in accordance with Table Adel/7.

**30** Multi-level car parks should locate vehicle access points away from the primary street frontage wherever possible and should not be located:

(a) within any of the following areas:

(i) the Core Pedestrian Area identified in Map Adel/1 (Overlays 2, 2A and 3)

(ii) on frontages to North Terrace, East Terrace, Rundle Street, Hindley Street, Currie Street, Waymouth Street (east of Light Square), Victoria Square or King William Street;

(b) where they conflict with existing or projected pedestrian movement and/or activity;

(c) where they would cause undue disruption to traffic flow; and

(d) where it involves creating new crossovers in North Terrace, Rundle Street, Hindley Street, Currie Street and Waymouth Street (east of Light Square), Grenfell Street and Pirie Street (west of Pulteney Street), Victoria Square, Light Square, Hindmarsh Square, Gawler Place and King William Street or access across primary City access and secondary City access roads identified in Map Adel/1 (Overlay 1).

**31** Multi-level, non-ancillary car parks are inappropriate within the Core Pedestrian Area as shown on Map Adel/1 (Overlays 2, 2A and 3).

**32** Vehicle parking spaces and multi-level vehicle parking structures within buildings should:

(a) enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages;

(b) complement the surrounding built form in terms of height, massing and scale; and

(c) incorporate façade treatments along major street frontages that are sufficiently enclosed and detailed to complement neighbouring buildings consistent with the Desired Character of the locality.

### **Advertising**

**33** Other than signs along Hindley Street, advertisements should use simple graphics and be restrained in their size, design and colour.

**34** In minor streets and laneways, a greater diversity of type, shape, numbers and design of advertisements are appropriate provided they are of a small-scale and located to present a consistent message band to pedestrians.

**35** There should be an overall consistency achieved by advertisements along individual street frontages.

**36** In Chesser Street, French Street and Coromandel Place advertisements should be small and preferably square and should not be located more than 3.7 metres above natural ground level or an abutting footpath or street. However, advertisements in these streets may be considered above 3.7 metres at locations near the intersections with major streets.

**37** Advertisements on the Currie Street frontages between Topham Mall and Gilbert Place and its north-south prolongation should be of a size, shape and location complementary to the desired townscape character, with particular regard to the following:

(a) On the southern side of Currie Street, advertisements should be fixed with their underside at a common height, except where the architectural detailing of building façades precludes it. At this 'canopy' level advertisements should be of a uniform size and fixed without the support of guy wires. Where architectural detailing permits, advertisements may mark the major entrances to buildings along the southern side of Currie Street with vertical projecting advertisements 1.5 metres high by 1.2 metres wide at, or marginally above, the existing canopy level. Painted wall or window signs should be restrained.

(b) On the northern side of Currie Street, advertisements should be of a uniform fixing height and consistent dimensions to match those prevailing in the area.

### **PROCEDURAL MATTERS**

#### **Complying Development**

**38** Complying developments are prescribed in Schedule 4 of the *Development Regulations 2008*.

In addition, the following forms of development are assigned as **complying**:

(a) Other than in relation to a State heritage place, Local heritage place (City Significance), or Local heritage place, work undertaken within a building which does not involve a change of use or affect the external appearance of the building;

(b) Temporary depot for Council for a period of no more than 3 months where it can be demonstrated that appropriate provision has been made for:

(i) dust control;

(ii) screening, including landscaping;

(iii) containment of litter and water; and

(iv) securing of the site.

(c) Change in the use of land from a non-residential use to an office, shop or consulting room (excluding any retail showroom, adult entertainment premises, adult products and services premises or licensed premises).

### **Non-complying Development**

**39** The following kinds of development are **non-complying**:

A change in use of land to any of the following:

Amusement machine centre

Advertisements involving any of the following:

(a) third party advertising except on Hindley Street, Rundle Mall or on allotments at the intersection of Rundle Street and Pulteney Street, or temporary advertisements on construction sites;

(b) advertisements located at roof level where the sky or another building forms the background when viewed from ground level;

(c) advertisements in the area bounded by West Terrace, Grote Street, Franklin Street and Gray Street;

(d) animation of advertisements along and adjacent to the North Terrace, King William Street and Victoria Square frontages.

Total demolition of a State Heritage Place (as identified in Table Adel/1).

Vehicle parking except:

(a) where it is ancillary to an approved or existing use;

(b) it is a multi-level car park located outside the Core Pedestrian Area as indicated on Map Adel/1 (Overlay 2, 2A and 3); or

(c) it is within an existing building located outside the Core Pedestrian Area as indicated on Map Adel/1 (Overlay 2, 2A and 3).

### **Public Notification**

**40** Categories of public notification are prescribed in Schedule 9 of the *Development Regulations 2008*.

In addition, the following forms of development, or any combination of (except where the development is non-complying), are assigned:

(a) **Category 1**, public notification not required:

All forms of development other than where it is assigned Category 2.

(b) **Category 2**, public notification required. Third parties do not have any appeal rights.

Any development where the site of the development is adjacent land to land in the City Living Zone or Adelaide Historic (Conservation) Zone and it exceeds 22 metres in building height.

*Note: For Category 3 development, public notification is required. Third parties may make written representations, appear before the relevant authority on the matter, and may appeal against a development consent. This includes any development not classified as either Category 1 or Category 2.*

## **COUNCIL WIDE**

### **Introduction**

The following Council Wide Objectives and Principles of Development Control apply across the area within the boundary of the Adelaide (City) Development Plan, as shown on Map Adel/1, unless otherwise stated. To determine all of the policies relevant to any kind of development, reference should be made to the Council Wide Objectives and Principles of Development Control as well as the Desired Character, Objectives and Principles of Development Control for the relevant Zone and Policy Area/s.

### **Living Culture**

#### **OBJECTIVES**

**Objective 1:** The City of Adelaide as the prime meeting place and cultural focus for the people of metropolitan Adelaide and the State.

**Objective 2:** The City of Adelaide as a major focus for tourism, conventions, leisure, entertainment, sport and recreation, education, cultural development and the arts.

**Objective 3:** Development that enhances the public environment and provides interest at street level.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**1** Development should, where appropriate, integrate public art into the design of new or refurbished building sites in a manner which is integrated with and commensurate in scale with, the new or refurbished buildings. For the purpose of enhancing the public environment, public art should:

(a) demonstrate artistic excellence and innovation in design;

(b) be made of high quality materials;

(c) enhance the setting of new development;

- (d) be integrated into the design of the building and the surrounding environment;
- (e) consider any existing public art works; and
- (f) not hinder sight lines or create entrapment spots.

**Design Techniques** (these are ONE WAY of meeting the above Principle)

**1.1 Design solutions may include:**

- (a) treating the building as a piece of art in itself;
- (b) locating art in publicly accessible locations such as near main entrances, lobbies and street frontages;
- (c) using water as a landscaping element including animating spaces with fountains, pools and waterfalls, for which the re-use of stormwater is encouraged;
- (d) designing paving so it becomes a piece of art in itself;
- (e) using lighting to enhance the architectural characteristics of a building; or
- (f) providing spaces within the development for accommodating temporary or outdoor gallery opportunities

## **City Living**

### **Housing Choice**

#### **OBJECTIVES**

**Objective 6:** A variety of housing options which supplement existing types of housing and suit the widely differing social, cultural and economic needs of all existing and future residents.

**Objective 7:** A range of long and short term residential opportunities to increase the number and range of dwellings available whilst protecting identified areas of special character and improving the quality of the residential environment.

**Objective 8:** A broad range of accommodation to meet the needs of low income, disadvantaged and groups with complex needs whilst ensuring integration with existing residential communities.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**5** Development should comprise of a range of housing types, tenures and cost, to meet the widely differing social and economic needs of residents.

**6** Development should provide a variety of accommodation to meet the needs of low income people, student housing, social housing, housing for single people, large and small families, people with disabilities and people with other complex needs These forms of housing should be distributed throughout the Council area to avoid over-concentration of similar types of housing in a particular area and should be of a scale and appearance that reinforces and achieves the desired character of the locality, as expressed in the relevant Zone and Policy Area.

**7** Residential development should be designed to be adaptable to meet people's needs throughout their lifespan to ensure that changes associated with old age, special access and mobility can be accommodated.

**Design Technique** (this is ONE WAY of meeting the above Principle)

**7.1** Buildings constructed in accordance with the requirements set out in Australian Standard AS 4299: 'Adaptable Housing'.

### **Medium to High Scale Residential/Serviced Apartment**

#### **OBJECTIVE**

**Objective 22:** Medium to high scale residential (including student accommodation) or serviced apartment development that:

- (a) has a high standard of amenity and environmental performance;
- (b) comprises functional internal layouts;
- (c) is adaptable to meet a variety of accommodation and living needs; and
- (d) includes well-designed and functional recreation and storage areas.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

##### **Building Entrances**

**48** Entrances to medium to high scale residential or serviced apartment development should:

- (a) be oriented towards the street;
- (b) be visible and easily identifiable from the street; and
- (c) provide shelter, a sense of personal address and transitional space around the entry.

**49** Entrances to individual dwellings or apartments within medium to high scale residential or serviced apartment development should:

- (a) be located as close as practical to the lift and/or lobby access and minimise the need for long access corridors;
- (b) be clearly identifiable; and

avoid the creation of potential areas for entrapment.

##### **Daylight, Sunlight and Ventilation**

**50** Medium to high scale residential or serviced apartment development should be designed to maximise opportunities to facilitate natural ventilation and capitalise on natural daylight and minimise the need for artificial lighting during daylight hours.

**51** Medium to high scale residential or serviced apartment development should be designed and located to maximise solar access to dwellings and communal open space on the norther facade.

**52** Ceiling heights that promote the use of taller windows, highlight windows, fan lights and light shelves should be utilised to facilitate access to natural light, improve daylight distribution and enhance air circulation, particularly in dwellings with limited light access and deep interiors.

**53** All new medium to high scale residential or serviced apartment development should have direct ventilation and natural light.

**54** The maximum distance of a habitable room such as a living, dining, bedroom or kitchen from a window providing natural light and ventilation to that room is 8 metres.

**55** Light wells should not be used as the primary source of daylight for living rooms to ensure a sufficient level of outlook and daylight.

**56** Medium to high scale residential or serviced apartment development should be designed to ensure living areas, private open space or communal open space, where such communal open space provides the primary area of private open space, are the main recipients of sunlight.

**57** Medium to high scale residential or serviced apartment development should locate living areas, private open space and communal open space, where such communal open space provides the primary area of private open space, where they will receive sunlight and, where possible, should maintain at least two hours of direct sunlight solar time on 22 June to:

(a) at least one habitable room window (excluding bathroom, toilet, laundry or storage room windows);

(b) to at least 20 percent of the private open space; and

(c) communal open space, where such communal open space provides the primary private open space for any adjacent residential development.

**58** Natural cross ventilation of habitable rooms should be achieved by the following methods:

(a) positioning window and door openings in different directions to encourage cross ventilation from cooling summer breezes;

(b) installing small low level windows on the windward side and larger raised openings on the leeward side to maximise airspeed in the room;

(c) installing higher level casement or sash windows, clerestory windows or operable fanlight windows to facilitate convective currents;

(d) selecting windows which the occupants can reconfigure to funnel breezes such as vertical louvred, casement windows and externally opening doors;

(e) ensuring the internal layout minimises interruptions to airflow;

(f) limiting building depth to allow for ease of cross ventilation; and/or

(g) draught proofing doors, windows and other openings.

## **Private Open Space**

**59** Medium to high scale residential development and serviced apartments should provide the following private open space:

- (a) studio (where there is no separate bedroom): no minimum requirement but some provision is desirable.
- (b) 1 bedroom dwelling/apartment: 8 square metres.
- (c) 2 bedroom dwelling/apartment: 11 square metres.
- (d) 3+ bedroom dwelling/apartment: 15 square metres.

A lesser amount of private open space may be considered appropriate in circumstances where the equivalent amount of open space is provided in a communal open space accessible to all occupants of the development.

Private open space for 2 or more bedroom dwellings/apartments may be divided into different areas whilst private open space for studios or 1 bedroom dwelling/apartments should be in a single area.

Areas used for parking of motor vehicles are not included as private open space.

*Note: In the City Living, Main Street and Institutional Zones, specific landscaped open space and private landscaped open space provisions apply.*

**60** Medium to high scale residential (other than student accommodation) or serviced apartment development should ensure direct access from living areas to private open space areas, which may take the form of balconies, terraces, decks or other elevated outdoor areas provided the amenity and visual privacy of adjacent properties is protected.

**61** Other than for student accommodation, private open space should have a minimum dimension of 2 metres and should be well proportioned to be functional and promote indoor/outdoor living.

**62** Balconies should be integrated into the overall architectural form and detail of the development and should:

- (a) utilise sun screens, pergolas, shutters and openable walls to control sunlight and wind;
- (b) be cantilevered, partially cantilevered and/or recessed in response to daylight, wind, acoustic and visual privacy;
- (c) be of a depth that ensures sunlight can enter the dwelling below; and
- (d) allow views and casual surveillance of the street while providing for safety and visual privacy.

**63** Secondary balconies, including Juliet balconies or operable walls with balustrades should be considered, subject to overlooking and privacy, for additional amenity and choice.

**64** For clothes drying, balconies off laundries or bathrooms and roof top areas should be screened from public view.

**65** The incorporation of roof top gardens is encouraged providing it does not result in unreasonable overlooking or loss of privacy.

#### **Visual Privacy**

**66** Medium to high scale residential or serviced apartment development should be designed and sited to minimise the potential overlooking of habitable rooms such as bedrooms and living areas of adjacent development.

**67** A habitable room window, balcony, roof garden, terrace or deck should be set-back from boundaries with adjacent sites at least three metres to provide an adequate level of amenity and privacy and to not restrict the reasonable development of adjacent sites.

#### **Noise and Internal Layout**

**68** Medium to high scale residential or serviced apartment development close to high noise sources (e.g. major roads, established places of entertainment and centres of activity) should be designed to locate noise sensitive rooms and private open space away from noise sources, or be protected by appropriate shielding techniques.

**69** Attached or abutting dwellings/apartments should be designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusions.

#### **Minimum Unit Sizes**

**70** Medium to high scale residential or serviced apartment development should provide a high quality living environment by ensuring the following minimum internal floor areas:

(a) studio (where there is no separate bedroom): 35 square metres.

(b) 1 bedroom dwelling/apartment: 50 square metres

(c) 2 bedroom dwelling/apartment: 65 square metres

(d) 3+ bedroom dwelling/apartment: 80 square metres plus an additional 15 square metres for every additional bedroom over 3 bedrooms.

*Note: Dwelling/apartment "unit size" includes internal storage areas but does not include balconies or car parking as part of the calculation.*

**71** Internal structural columns should correspond with the position of internal walls to ensure that the space within the dwelling/apartment is useable.

#### **Adaptability**

**72** Within medium to high scale residential or serviced apartment development, dwelling/apartment layouts should be adaptable to accommodate:

(a) a range of activities and privacy levels between different spaces;

(b) flexible room sizes and proportions;

(c) efficient circulation to optimise the functionality of floor space within rooms; and

(d) the future reuse of student accommodation as residential apartments through a design and layout that allows individual apartments to be reconfigured into a larger dwelling or other alternative use.

**Design Technique** (this is ONE WAY of meeting the above Principle)

**72.1** Design solutions may include:

- (a) windows in all habitable rooms and to the maximum number of non-habitable rooms;
- (b) adequate room sizes or open plan dwellings which provide a range of furniture layout options; and/or
- (c) dual master bedrooms that can support two independent adults living together or a live/work situation.

### **Outlook**

**73** All medium to high scale residential or serviced apartment development should be designed to ensure the living rooms have a satisfactory external outlook. Living rooms that do not have an outlook or the only source of outlook is through high level windows or a skylight are not considered to provide an appropriate level of amenity for the occupiers.

*Note: Outlook is a short range prospect and is distinct from a view which is more extensive and long range to particular objects or geographic features.*

**74** Light wells may be used as a source of daylight, ventilation, outlook and sunlight for medium to high scale residential or serviced apartment development provided that:

- (a) living rooms do not have lightwells as their only source of outlook;
- (b) lightwells up to 18 metres in height have a minimum horizontal dimension of 3 metres or 6 metres if overlooked by bedrooms; and
- (c) lightwells higher than 18 metres in height have a minimum horizontal dimension of 6 metres or 9 metres if overlooked by bedrooms.

### **On-Site Parking and Fencing**

#### **OBJECTIVE**

**Objective 23:** Safe and convenient on-site car parking for resident and visitor vehicles.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**75** To ensure an adequate provision of on-site parking, car parking should be provided for medium to high scale residential (other than student accommodation) or serviced apartment development in accordance with Table Adel/7.

**76** Garages and parking structures associated with medium to high scale residential or serviced apartment development should be located so that they do not visually dominate the street frontage.

**77** Car parking areas should be designed and located to:

- (a) be close and convenient to dwellings/apartments;

- (b) be lit at night;
- (c) be well ventilated if enclosed;
- (d) avoid headlight glare into windows; and
- (e) clearly define visitor parking.

**78** Where garages are located within a basement or undercroft:

- (a) the width of access driveways should be kept to a minimum and should not detract from the streetscape;
- (b) driveways should be designed to ensure safe and convenient access and egress;
- (c) access should be restricted to one driveway or one point of access and egress;
- (d) vehicles should be able to safely exit in a forward direction and should not compromise pedestrian safety or cause conflict with other vehicles; and
- (e) the height of the car park ceiling should not exceed one metre above the finished ground floor level to ensure minimal impact on the streetscape.

**79** Fencing and walls should:

- (a) be articulated and detailed to provide visual interest;
- (b) assist the development to address the street;
- (c) assist in the provision of safety and surveillance;
- (d) assist in highlighting entrances; and
- (e) enable visibility of buildings from and to the street.

**Storage Areas**

**80** Site facilities should be readily accessible to each dwelling/serviced apartment, complement the development and relevant desired character and should include:

- (a) a common mail box structure located close to the main pedestrian entrance;
- (b) areas for the storage and collection of goods, materials, refuse and waste including facilities to enable the separation of recyclable materials as appropriate to the size and nature of the development and screened from public view; and
- (c) external clothes drying areas for residential dwellings that do not incorporate ground level open space.

**81** Medium to high scale residential (other than student accommodation) or serviced apartment development should provide adequate and accessible storage facilities for the occupants at the following minimum rates:

- (a) studio: 6 cubic metres

- (b) 1 bedroom dwelling/apartment: 8 cubic metres
- (c) 2 bedroom dwelling/apartment: 10 cubic metres
- (d) 3+ bedroom dwelling/apartment: 12 cubic metres

50 percent of the storage space should be provided within the dwelling/apartment with the remainder provided in the basement or other communal areas.

## **Environmental**

### **Crime Prevention Through Urban Design**

#### **OBJECTIVES**

**Objective 24:** A safe and secure, crime resistant environment that:

- (a) ensures that land uses are integrated and designed to facilitate natural surveillance;
- (b) promotes building and site security; and
- (c) promotes visibility through the incorporation of clear lines of sight and appropriate lighting.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**82** Development should promote the safety and security of the community in the public realm and within development. Development should:

(a) promote natural surveillance of the public realm, including open space, car parks, pedestrian routes, service lanes, public transport stops and residential areas, through the design and location of physical features, electrical and mechanical devices, activities and people to maximise visibility by:

- (i) orientating windows, doors and building entrances towards the street, open spaces, car parks, pedestrian routes and public transport stops;
- (ii) avoiding high walls, blank facades, carports and landscaping that obscures direct views to public areas;
- (iii) arranging living areas, windows, pedestrian paths and balconies to overlook recreation areas, entrances and car parks;
- (iv) positioning recreational and public space areas so they are bound by roads on at least two road frontages or overlooked by development;
- (v) creating a complementary mix of day and night-time activities, such as residential, commercial, recreational and community uses, that extend the duration and level of intensity of public activity;
- (vi) locating public toilets, telephones and other public facilities with direct access and good visibility from well-trafficked public spaces;
- (vii) ensuring that rear service areas and access lanes are either secured or exposed to surveillance; and
- (viii) ensuring the surveillance of isolated locations through the use of audio monitors, emergency telephones or alarms, video cameras or staff eg by surveillance of lift and toilet areas within car parks.

(b) provide access control by facilitating communication, escape and path finding within development through legible design by:

- (i) incorporating clear directional devices;
- (ii) avoiding opportunities for concealment near well travelled routes;
- (iii) closing off or locking areas during off-peak hours, such as stairwells, to concentrate access/exit points to a particular route;
- (iv) use of devices such as stainless steel mirrors where a passage has a bend;
- (v) locating main entrances and exits at the front of a site and in view of a street;
- (vi) providing open space and pedestrian routes which are clearly defined and have clear and direct sightlines for the users; and
- (vii) locating elevators and stairwells where they can be viewed by a maximum number of people, near the edge of buildings where there is a glass wall at the entrance.

(c) promote territoriality or sense of ownership through physical features that express ownership and control over the environment and provide a clear delineation of public and private space by:

- (i) clear delineation of boundaries marking public, private and semi-private space, such as by paving, lighting, walls and planting;
- (ii) dividing large development sites into territorial zones to create a sense of ownership of common space by smaller groups of dwellings; and
- (iii) locating main entrances and exits at the front of a site and in view of a street.

(d) provide awareness through design of what is around and what is ahead so that legitimate users and observers can make an accurate assessment of the safety of a locality and site and plan their behaviour accordingly by:

- (i) avoiding blind sharp corners, pillars, tall solid fences and a sudden change in grade of pathways, stairs or corridors so that movement can be predicted;
- (ii) using devices such as convex security mirrors or reflective surfaces where lines of sight are impeded;
- (iii) ensuring barriers along pathways such as landscaping, fencing and walls are permeable;
- (iv) planting shrubs that have a mature height less than one metre and trees with a canopy that begins at two metres;
- (v) adequate and consistent lighting of open spaces, building entrances, parking and pedestrian areas to avoid the creation of shadowed areas; and
- (vi) use of robust and durable design features to discourage vandalism.

**83** Residential development should be designed to overlook streets, public and communal open space to allow casual surveillance.

**84** To maximise security and safety, buildings should be designed to minimise access between roofs, balconies and windows of adjacent buildings.

**85** Security features should be incorporated within the design of shop fronts to complement the design of the frontage and allow window shopping out of hours. If security grilles are provided, these should:

(a) be transparent and illuminated to complement the appearance of the frontage;

(b) provide for window shopping; and

(c) allow for the spill of light from the shop front onto the street.

Solid shutters with less than 75 percent permeability are not acceptable.

### **Operating Hours and Associated Activities of Licensed Premises**

#### **OBJECTIVE**

**Objective 25:** Operating hours of licensed premises or licensed entertainment premises, together with associated activities of such premises, established and operated so as to reinforce the desired character of the locality and appropriate behavioural activities.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**87** Licensed premises and licensed entertainment premises or similar should:

(a) be located, designed and operated in order to reinforce the desired character of a locality, as expressed in the relevant Zone or Policy Area;

(b) be located, designed and operated so as to not negatively impact on peoples orderly use and enjoyment of a locality, such as through disorderly behavioural activities and/or disorderly behavioural movement to and from such land uses; and

(c) incorporate best practice measures to effectively manage the behaviour of users moving to and from such land uses.

**88** Licensed premises and licensed entertainment premises or similar should operate with operating hours to reinforce the desired character of the locality.

### **Noise Emissions**

#### **OBJECTIVES**

**Objective 26:** Development that does not unreasonably interfere with the desired character of the locality by generating unduly annoying or disturbing noise.

**Objective 27:** Noise sensitive development designed to protect its occupants from existing noise sources and from noise sources contemplated within the relevant Zone or Policy Area and that does not unreasonably interfere with the operation of non-residential uses contemplated within the relevant Zone or Policy Area.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

## **Noise Sources**

**89** Development with potential to emit significant noise (including licensed entertainment premises and licensed premises) should incorporate appropriate noise attenuation measures in to their design to prevent noise from causing unreasonable interference with the amenity and desired character of the locality, as contemplated in the relevant Zone and Policy Area.

**90** Development of licensed premises or licensed entertainment premises or similar in or adjacent to a City Living Zone, the Adelaide Historic (Conservation) Zone or the North Adelaide Historic (Conservation) Zone should include noise attenuation measures to achieve the following when assessed at the nearest existing or envisaged future noise sensitive development:

(a) the music noise (L10, 15 min) is:

(i) less than 8 dB above the level of background noise<sup>2</sup> (L90,15 min) in any octave band of the sound spectrum; and

(ii) less than 5 dB(A) above the level of background noise (LA 90,15 min) for the overall (sum of all octave bands) A-weighted level.

**91** Development of licensed premises or licensed entertainment premises or similar in the Capital City, Main Street, Mixed Use and City Frame Zones should include noise attenuation measures to achieve the following when assessed at:

(a) the nearest existing noise sensitive location in or adjacent to that Zone:

(i) music noise (L10, 15 min) less than 8 dB above the level of background noise (L90,15 min) in any octave band of the sound spectrum; and

(ii) music noise (LA10, 15 min) less than 5 dB(A) above the level of background noise (LA90,15 min) for the overall (sum of all octave bands) A-weighted levels; or

(b) the nearest envisaged future noise sensitive location in or adjacent to that Zone:

(i) music noise (L10, 15 min) less than 8dB above the level of background noise (L90,15 min) in any octave band of the sound spectrum and music noise (L10, 15 min) less than 5dB(A) above the level of background noise (LA90,15 min) for the overall (sum of all octave bands) A-weighted levels; or

(ii) music noise (L10, 15 min) less than 60dB(Lin) in any octave band of the sound spectrum and the overall (LA10,15 min) noise level is less than 55 dB(A).

*Note: A report regarding noise associated with licensed premises or licensed entertainment premises or similar prepared by an acoustic engineer at the planning application stage should specify the noise attenuation measures and address other typical noise sources to ensure those sources do not result in unreasonable interference. These noise attenuation measures might include:*

*(a) installation of an in-house music system which has a limiting device that monitors and controls the volume of the system so that the maximum internal noise level certified by the acoustic engineer is not exceeded;*

*(b) treatment of openings, such as by airlocks and seals for doors, sealing of wall and roof vents and treatment of ventilation and air-conditioning paths;*

*(c) acoustic treatment of building elements, such as sealing and double glazing of windows or upgrading roof construction;*

*(d) no entertainment on or in any balcony or outdoor area;*

*(e) no loud speakers placed on or in the fascia of the premises, balcony or any adjacent outdoor area or footpath;*

*(f) external windows and doors are kept closed where relied upon for noise attenuation;*

*(g) locating and designing entrances and fencing to assist in keeping patrons away from noise sensitive areas; or*

*(h) locating car park, delivery and rubbish collection areas away from noise sensitive development and limiting times of activity to minimise noise impacts.*

**92** Speakers should not be placed on the fascias of premises or on the pavement adjacent to the premises to ensure development does not diminish the enjoyment of other land in the locality.

**93** Mechanical plant or equipment should be designed, sited and screened to minimise noise impact on adjacent premises or properties. The noise level associated with the combined operation of plant and equipment such as air conditioning, ventilation and refrigeration systems when assessed at the nearest existing or envisaged noise sensitive location in or adjacent to the site should not exceed

(a) 55 dB(A) during daytime (7.00am to 10.00pm) and 45 dB(A) during night time (10.00pm to 7.00am) when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

(b) 50 dB(A) during daytime (7.00am to 10.00pm) and 40 dB(A) during night time (10.00pm to 7.00am) in or adjacent to a City Living Zone, the Adelaide Historic (Conservation) Zone, the North Adelaide Historic (Conservation) Zone or the Park Lands Zone when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

**94** To ensure minimal disturbance to residents:

(a) ancillary activities such as deliveries, collection, movement of private waste bins, goods, empty bottles and the like should not occur:

(i) after 10.00pm; and

(ii) before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday.

(b) typical activity within any car park area including vehicles being started, doors closing and vehicles moving away from the premises should not result in sleep disturbance when proposed for use after 10.00pm as defined by the limits recommended by the World Health Organisation.

## **Noise Receivers**

**95** Noise sensitive development should incorporate adequate noise attenuation measures into their design and construction to provide occupants with reasonable amenity when exposed to noise sources such as major transport corridors (road, rail, tram and aircraft), commercial centres, entertainment premises and the like, and from activities and land uses contemplated in the relevant Zone and Policy Area provisions.

**96** Noise sensitive development in mixed use areas should not unreasonably interfere with the operation of surrounding non-residential uses that generate noise levels that are commensurate with the envisaged amenity of the locality.

**97** Noise sensitive development adjacent to noise sources should include noise attenuation measures to achieve the following:

(a) satisfaction of the sleep disturbance criteria in the bedrooms or sleeping areas of the development as defined by the limits recommended by the World Health Organisation;

(b) the maximum satisfactory levels in any habitable room for development near major roads, as provided in the Australian/New Zealand Standard AS/NZS 2107:2000 - 'Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors'; and

(c) noise level in any bedroom, when exposed to music noise (L10) from existing entertainment premises, being:

(i) less than 8 dB above the level of background noise (L90,15 min) in any octave band of the sound spectrum; and

(ii) less than 5 dB(A) above the level of background noise (LA90,15 min) for the overall (sum of all octave bands) A-weighted levels.

Background noise within the habitable room can be taken to be that expected in a typical residential/apartment development of the type proposed, that is inclusive of internal noise sources such as air conditioning systems, refrigerators and the like as deemed appropriate.

Unless otherwise demonstrated, the minimum background noise to be used will be:

<b>Octave Band Centre Frequency (Hz)</b>	<b>Minimum Background Noise Level (LA90, 15) dB (A)</b>
63	10
125	12
250	14
500	14
1000	12
2000	10
4000	8

on the basis of the windows being closed for the noise sensitive development and any existing entertainment premises complying with the relevant legislation relating to noise emission.

Note: The report prepared by a suitably qualified acoustic engineer at the planning application submission stage should identify existing noise sources, identify the appropriate level of sound attenuation required and specify the noise attenuation measures that will be applied to the proposal. The noise attenuation measures might include:

- (a) siting and orientating the building away from the noise source and/or providing an external area that limits noise levels to World Health Organisation recommendations for residential areas;
- (b) sensitive internal layout of rooms, by locating noise sensitive rooms such as bedrooms and secluded private open space areas away from the noise source;
- (c) locating and designing entrances to be sealed and to provide air lock entries to sensitive rooms;
- (d) window location and design through thicker glass or double glazing of windows in recognition of the noise source;
- (e) sloping of roof or flat roof/parapet design to assist in noise passing overhead rather than penetrating through the roof of the dwelling;
- (f) selecting appropriate construction materials, such as sound absorbing materials and materials that reduce sound transmission;
- (g) installing door seals;
- (h) creation of hybrid buildings that serve as a buffer between different uses, eg the location of offices between residential and entertainment uses, can be vertically or horizontally applied;
- (i) adequate separation between residential and noise generating uses;
- (j) acoustic separation of ducts, fans etc;
- (k) constructing shared walls and floors between dwellings/apartments in a way which minimises the transmission of noise; or
- (l) separating openings of adjacent dwellings/apartments by a distance of a least three metres.

**98** Attached dwellings/serviced apartments should be designed to minimise the transmission of sound between dwellings/serviced apartments and should particularly protect bedrooms from possible noise intrusion.

***Design Techniques (these are ONE WAY of meeting the above Principle)***

**98.1** *Appropriate stacking and horizontal location of rooms, eg bedrooms over bedrooms and bedrooms next to bedrooms.*

**98.2** *Bedrooms of any dwelling/serviced apartment:*

- (a) not sharing a wall with a living room\* or a garage of another dwelling; and*

*(b) not located above or below a living room\* of another abutting dwelling.*

**99** The number of dwellings/serviced apartments within a development sharing a common entry should be minimised to limit noise generation in internal access ways.

**Design Techniques** (these are ONE WAY of meeting the above Principle)

**99.1** Common entries servicing a maximum of 10 dwellings/serviced apartments on each floor level.

**99.2** Incorporation of acoustic core filled doors with airtight rubber seals for all entry doors into common access ways.

## **Waste Management**

### **OBJECTIVE**

**Objective 28:** Development which supports high local environmental quality, promotes waste minimisation, re-use and recycling, encourages waste water, grey water and stormwater re-use and does not generate unacceptable levels of air, liquid or solid pollution.

### **PRINCIPLES OF DEVELOPMENT CONTROL**

**101** A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new development.

**102** A dedicated area for the collection and sorting of construction waste and the recycling of building materials during construction as appropriate to the size and nature of the development should be provided and screened from public view.

**103** Development greater than 2 000 square metres of total floor area should manage waste by:

(a) containing a dedicated area for the collection and sorting of construction waste and recyclable building materials;

(b) on-site storage and management of waste;

(c) disposal of non-recyclable waste; and

(d) incorporating waste water and stormwater re-use including the treatment and re-use of grey water.

**104** Development should not result in emission of atmospheric, liquid or other pollutants, or cause unacceptable levels of smell and odour which would detrimentally affect the amenity of adjacent properties or its locality. Land uses such as restaurants, shops, cafés or other uses that generate smell and odour should:

(a) ensure extraction flues, ventilation and plant equipment are located in appropriate locations that will not detrimentally affect the amenity of adjacent occupiers in terms of noise, odours and the appearance of the equipment;

(b) ensure ventilation and extraction equipment and ducting have the capacity to clean and filter the air before being released into the atmosphere; and

(c) ensure the size of the ventilation and extraction equipment is suitable and has the capacity to adequately cater for the demand generated by the potential number of patrons.

#### **Contaminated Sites**

##### **OBJECTIVE**

**Objective 29:** A safe and healthy living and working environment.

##### **PRINCIPLES OF DEVELOPMENT CONTROL**

**105** Where there is evidence of, or reasonable suspicion that land, buildings and/or water, including underground water, may have been contaminated, or there is evidence of past potentially contaminating activity/ies, development should only occur where it is demonstrated that the land, buildings and/or water can be made suitable for its intended use prior to commencement of that use.

#### **Energy Efficiency**

##### **OBJECTIVE**

**Objective 30:** Development which is compatible with the long term sustainability of the environment, minimises consumption of non-renewable resources and utilises alternative energy generation systems.

##### **PRINCIPLES OF DEVELOPMENT CONTROL**

#### **All Development**

**106** Buildings should provide adequate thermal comfort for occupants and minimise the need for energy use for heating, cooling and lighting by:

(a) providing an internal day living area with a north-facing window, other than for minor additions\*, by:

(i) arranging and concentrating main activity areas of a building to the north for solar penetration; and

(ii) placing buildings on east-west allotments against or close to the southern boundary to maximise northern solar access and separation to other buildings to the north.

(b) efficient layout, such as zoning house layout to enable main living areas to be separately heated and cooled, other than for minor additions;

(c) locating, sizing and shading windows to reduce summer heat loads and permit entry of winter sun;

(d) allowing for natural cross ventilation to enable cooling breezes to reduce internal temperatures in summer;

(e) including thermal insulation of roof, walls, floors and ceilings and by draught proofing doors, windows and openings;

(f) ensuring light colours are applied to external surfaces that receive a high degree of sun exposure, but not to an extent that will cause glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles;

(g) providing an external clothes line for residential development; and

(h) use of landscaping.

**107** All development should be designed to promote naturally ventilated and day lit buildings to minimise the need for mechanical ventilation and lighting systems.

**108** Energy reductions should, where possible, be achieved by the following:

(a) appropriate orientation of the building by:

(i) maximising north/south facing facades;

(ii) designing and locating the building so the north facade receives good direct solar radiation;

(iii) minimising east/west facades to protect the building from summer sun and winter winds;

(iv) narrow floor plates to maximise the amount of floor area receiving good daylight; and/or

(v) minimising the ratio of wall surface to floor area.

(b) window orientation and shading;

(c) adequate thermal mass including night time purging to cool thermal mass;

(d) appropriate insulation by:

(i) insulating windows, walls, floors and roofs; and

(ii) sealing of external openings to minimise infiltration.

(e) maximising natural ventilation including the provision of openable windows;

(f) appropriate selection of materials, colours and finishes; and

(g) introduction of efficient energy use technologies such as geo-exchange and embedded, distributed energy generation systems such as cogeneration\*, wind power, fuel cells and solar photovoltaic panels that supplement the energy needs of the building and in some cases, export surplus energy to the electricity grid.

**109** Orientation and pitch of the roof should facilitate the efficient use of solar collectors and photovoltaic cells.

**110** Buildings, where practical, should be refurbished, adapted and reused to ensure an efficient use of resources.

**111** New buildings should be readily adaptable to future alternative uses.

**112** Selection of internal materials for all buildings should be made with regard to internal air quality and ensure low toxic emissions, particularly with respect to paint and joinery products.

### **Residential Development**

**113** New residential development and residential extensions should be designed to minimise energy consumption and limit greenhouse gas emissions.

**114** Development is encouraged to avoid heat loss by incorporating treatments, such as double glazing of windows along the southern elevation, or by minimizing the extent of windows facing south.

### **Micro-climate and Sunlight**

#### **OBJECTIVES**

**Objective 33:** Buildings which are designed and sited to be energy efficient and to minimise micro-climatic and solar access impacts on land or other buildings.

**Objective 34:** Protection from rain, wind and sun without causing detriment to heritage places, street trees or the integrity of the streetscape.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**119** Development should be designed and sited to minimise micro-climatic and solar access impact on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow.

**120** Development should be designed and sited to ensure an adequate level of daylight, minimise overshadowing of buildings, and public and private outdoor spaces, particularly during the lunch time hours.

**121** Development should not significantly reduce daylight to private open space, communal open space, where such communal open space provides the primary private open space, and habitable rooms in adjacent City Living Zone, Adelaide Historic (Conservation) Zone and North Adelaide Historic (Conservation) Zone.

**122** Glazing on building facades should not result in glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles.

**123** Buildings within the Core and Primary Pedestrian Areas identified in Map Adel/1 (Overlays 2, 2A and 3), unless specified otherwise within the relevant Zone or Policy Area, should be designed to provide weather protection for pedestrians against rain, wind and sun. The design of canopies, verandahs and awnings should be compatible with the style and character of the building and adjoining buildings, as well as the desired character, both in scale and detail.

**124** Weather protection should not be introduced where it would interfere with the integrity or heritage value of heritage places or unduly affect street trees.

**125** Development that is over 21 metres in building height and is to be built at or on the street frontage should minimise wind tunnel effect.

### **Stormwater Management**

#### **OBJECTIVES**

**Objective 35:** Development which maximises the use of stormwater.

**Objective 36:** Development designed and located to protect stormwater from pollution sources.

Surface water (inland, marine, estuarine) and ground water has the potential to be detrimentally affected by water run-off from development containing solid and liquid wastes. Minimising and possibly eliminating sources of pollution will reduce the potential for degrading water quality and enable increased use of stormwater for a range of applications with environmental, economic and social benefits.

**Objective 37:** Development designed and located to protect or enhance the environmental values of receiving waters.

**Objective 38:** Development designed and located to prevent erosion.

Development involving soil disturbance may result in erosion and subsequently sedimentation and pollutants entering receiving waters. Design techniques should be incorporated during both the construction and operation phases of development to minimise the transportation of sediment and pollutants off-site.

**Objective 39:** Development designed and located to prevent or minimise the risk of downstream flooding.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**126** Development of stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.

**128** Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site.

**129** Development should incorporate appropriate measures to minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria and litter and other contaminants to the stormwater system and may incorporate systems for treatment or use on site.

#### **Infrastructure**

#### **OBJECTIVES**

**Objective 40:** Minimisation of the visual impact of infrastructure facilities.

**Objective 41:** Provision of services and infrastructure that are appropriate for the intended development and the desired character of the Zone or Policy Area.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**132** Provision should be made for utility services to the site of a development, including provision for the supply of water, gas and electricity and for the satisfactory disposal and potential re-use of sewage and waste water, drainage and storm water from the site of the development.

**133** Service structures, plant and equipment within a site should be designed to be an integral part of the development and should be suitably screened from public spaces or streets.

**134** Infrastructure and utility services, including provision for the supply of water, gas and electricity should be put in common trenches or conduits.

**135** Development should only occur where it has access to adequate utilities and services, including:

- (a) electricity supply;
- (b) water supply;
- (c) drainage and stormwater systems;
- (d) effluent disposal systems;
- (e) formed all-weather public roads;
- (f) telecommunications services; and
- (g) gas services.

### **Built Form and Townscape**

#### **OBJECTIVES**

**Objective 46:** Reinforcement of the city's grid pattern of streets through:

- (a) high rise development framing city boulevards, the Squares and Park Lands
- (b) vibrant main streets of a more intimate scale that help bring the city to life
- (c) unique and interesting laneways that provide a sense of enclosure and intimacy.

**Objective 47:** Buildings should be designed to:

- (a) reinforce the desired character of the area as contemplated by the minimum and maximum building heights in the Zone and Policy Area provisions;
- (b) maintain a sense of openness to the sky and daylight to public spaces, open space areas and existing buildings;
- (c) contribute to pedestrian safety and comfort; and
- (d) provide for a transition of building heights between Zone and Policy Areas where building height guidelines differ.

**Objective 48:** Development which incorporates a high level of design excellence in terms of scale, bulk, massing, materials, finishes, colours and architectural treatment.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**167** Where development significantly exceeds quantitative policy provisions, it should demonstrate a significantly higher standard of design outcome in relation to qualitative policy provisions including pedestrian and cyclist amenity, activation, sustainability and public realm and streetscape contribution.

#### **Height, Bulk and Scale**

## **PRINCIPLES OF DEVELOPMENT CONTROL**

**168** Development should be of a high standard of design and should reinforce the grid layout and distinctive urban character of the City by maintaining a clear distinction between the following:

- (a) the intense urban development and built-form of the town acres in the Capital City, Main Street, Mixed Use, City Frame and City Living Zones;
- (b) the less intense and more informal groupings of buildings set within the landscaped environment of the Institutional Zones;
- (c) the historic character of the Adelaide and North Adelaide Historic (Conservation) Zones and groups of historic housing within the City Living Zone; and
- (d) the open landscape of the Park Lands Zone.

**169** The height and scale of development and the type of land use should reflect and respond to the role of the street it fronts as illustrated on Map Adel/1 (Overlay 1).

**170** The height, scale and massing of buildings should reinforce:

- (a) the desired character, built form, public environment and scale of the streetscape as contemplated within the Zone and Policy Area, and have regard to:
  - (i) maintaining consistent parapet lines, floor levels, height and massing with existing buildings consistent with the areas desired character;
  - (ii) reflecting the prevailing pattern of visual sub-division of neighbouring building frontages where frontages display a character pattern of vertical and horizontal sub-divisions; and
  - (iii) avoiding massive unbroken facades.
- (b) a comfortable proportion of human scale at street level by:
  - (i) building ground level to the street frontage where zero set-backs prevail;
  - (ii) breaking up the building facade into distinct elements;
  - (iii) incorporating art work and wall and window detailing; and
  - (iv) including attractive planting, seating and pedestrian shelter.

**171** Where possible, large sites should incorporate pedestrian links and combine them with publicly accessible open space.

**172** Buildings and structures should not adversely affect by way of their height and location the long-term operational, safety and commercial requirements of Adelaide International Airport. Buildings and structures which exceed the heights shown in Map Adel/1 (Overlay 5) and which penetrate the Obstacle Limitation Surfaces (OLS) should be designed, marked or lit to ensure the safe operation of aircraft within the airspace around the Adelaide International Airport.

**173** Development in a non-residential Zone that abuts land in a City Living Zone, the Adelaide Historic (Conservation) Zone or the North Adelaide Historic (Conservation) Zone, should provide a transition

between high intensity development and the lower intensity development in the adjacent Zone by focussing taller elements away from the common Zone boundary.

**174** Development in a non-residential Zone that is adjacent to land in the City Living Zone, Adelaide Historic (Conservation) Zone or North Adelaide Historic (Conservation) Zone should minimise overshadowing on sensitive uses by ensuring:

(a) north-facing windows to habitable rooms of existing dwellings in the City Living Zone, Adelaide Historic (Conservation) Zone or North Adelaide Historic (Conservation) Zone receive at least 3 hours of direct sunlight over a portion of their surface between 9.00am and 3.00pm on 21 June;

(b) ground level open space of existing residential buildings in the City Living Zone, Adelaide Historic (Conservation) Zone or North Adelaide Historic (Conservation) Zone receive direct sunlight for a minimum of 2 hours between 9.00am and 3.00pm on 21 June to at least the smaller of the following:

(i) half of the existing ground level open space;

(ii) 35 square metres of the existing ground level open space (with at least one of the area's dimensions measuring 2.5 metres).

#### **Landscaped Open Space**

**177** Landscaped open space should be provided on the site of a development to at least the extent specified in the Principles of Development Control for the relevant Zone or Policy Area for siting, amenity and screening purposes. Where the existing amount of landscaped open space provided is less than the amount specified in the relevant Zone or Policy Area, development should not further reduce this amount. Where landscaped open space is not required, the provision of landscaped pedestrian spaces, planter boxes and in-ground planting is appropriate.

#### **Building Set-backs**

**179** Buildings within the Capital City Zone should be built to the street edge to reinforce the grid pattern, create a continuity of frontage and provide definition and enclosure to the public realm whilst contributing to the interest, vitality and security of the pedestrian environment.

#### **Composition and Proportion**

**180** Development should respect the composition and proportion of architectural elements of building facades that form an important pattern which contributes to the streetscape's distinctive character in a manner consistent with the desired character of a locality by:

(a) establishing visual links with neighbouring buildings by reflecting and reinforcing the prevailing pattern of visual sub-division in building facades where a pattern of vertical and/or horizontal sub-divisions is evident and desirable, for example, there may be strong horizontal lines of verandahs, masonry courses, podia or openings, or there may be vertical proportions in the divisions of facades or windows; and

(b) clearly defining ground, middle and roof top levels.

**181** Where there is little or no established building pattern, new buildings should create new features which contribute to an areas desired character and the way the urban environment is understood by:

- (a) frontages creating clearly defined edges;
- (b) generating new compositions and points of interest;
- (c) introducing elements for future neighbouring buildings; and
- (d) emphasising the importance of the building according to the street hierarchy.

#### **Articulation and Modelling**

**182** Building facades fronting street frontages, access ways, driveways or public spaces should be composed with an appropriate scale, rhythm and proportion which responds to the use of the building, the desired character of the locality and the modelling and proportions of adjacent buildings.

**183** Balconies should be designed to give shelter to the street or public space at first floor levels.

**184** Balconies should:

- (a) respond to the street context and building orientation; and
- (b) incorporate balustrade detailing to reflect the balcony type and location and the materials and detail of the building facade.

**185** No part of any fully enclosed building should extend over property boundaries, including streets and public spaces, whether above a balcony at a lower level or not.

**186** Building services such as drainage pipes together with security grills/screens, ventilation louvres and car park entry doors, should be coordinated and integrated with the overall facade design.

#### **Materials, Colours and Finishes**

**187** The design, external materials, colours and finishes of buildings should have regard to their surrounding townscape context, built form and public environment, consistent with the desired character of the relevant Zone and Policy Area.

**188** Development should be finished with materials that are sympathetic to the design and setting of the new building and which incorporate recycled or low embodied energy materials. The form, colour, texture and quality of materials should be of high quality, durable and contribute to the desired character of the locality. Materials, colours and finishes should not necessarily imitate materials and colours of an existing streetscape

**189** Materials and finishes that are easily maintained and do not readily stain, discolour or deteriorate should be utilised.

**190** Development should avoid the use of large expanses of highly reflective materials and large areas of monotonous, sheer materials (such as polished granite and curtained wall glazing).

#### **Corner Sites**

**191** New development on major corner sites should define and reinforce the townscape importance of these sites with appropriately scaled buildings that:

- (a) establish an architectural form on the corner;

- (b) abut the street frontage; and
- (c) address all street frontages.

### **Sky and Roof Lines**

#### **OBJECTIVE**

**Objective 49:** Innovative and interesting skylines which contribute to the overall design and performance of the building.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**192** Where a prevailing pattern of roof form assists in establishing the desired character of the locality, new roof forms should be complementary to the shape, pitch, angle and materials of adjacent building roofs.

**193** Buildings should be designed to incorporate well designed roof tops that:

- (a) reinforce the desired character of the locality, as expressed in the relevant Zone or Policy Area;
- (b) enhance the skyline and local views;
- (c) contribute to the architectural quality of the building;
- (d) provide a compositional relationship between the upper-most levels and the lower portions of the building;
- (e) provide an expression of identity;
- (f) articulate the roof, breaking down its massing on large buildings to minimise apparent bulk;
- (g) respond to the orientation of the site; and
- (h) create minimal glare.

**194** Roof top plant and ancillary equipment that projects above the ceiling of the top storey should:

- (a) be designed to minimise the visual impact; and
- (b) be screened from view, including the potential view looking down or across from existing or possible higher buildings, or be included in a decorative roof form that is integrated into the design of the building.

**195** Roof design should facilitate future use for sustainable functions such as:

- (a) rainwater tanks for water conservation;
- (b) roof surfaces orientated, angled and of suitable material for photovoltaic applications; and/or
- (c) "green" roofs (ie roof top gardens structurally capable of supporting vegetation) or water features.

### **Active Street Frontages**

#### **OBJECTIVES**

**Objective 50:** Development that enhances the public environment and, where appropriate provides activity and interest at street level, reinforcing a locality's desired character.

**Objective 51:** Development designed to promote pedestrian activity and provide a high quality experience for City residents, workers and visitors by:

- (a) enlivening building edges;
- (b) creating welcoming, safe and vibrant spaces;
- (c) improving perceptions of public safety through passive surveillance; and
- (d) creating interesting and lively pedestrian environments.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**196** Development should be designed to create active street frontages that provide activity and interest to passing pedestrians and contribute to the liveliness, vitality and security of the public realm.

**197** Retail frontages should be designed to provide interest to passing pedestrians at street level and relief to building mass.

**199** Residential development should be designed to create interesting pedestrian environments and resident surveillance of any street, accessway and driveway.

#### **Demolition**

##### **OBJECTIVE**

**Objective 53:** Where demolition of an existing building is proposed, the replacement building is designed and sited to achieve the purposes of the relevant Zone and Policy Area and to provide for quality urban design.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**203** The demolition of any building should not occur unless Development Approval for a replacement development has been granted. Exceptions may only be granted:

- (a) for documented reasons of public health or safety agreed by the planning authority or alternatively agreed by a statutory order; or
- (b) where located within the Park Lands Zone.

Should the replacement development not commence within 12 months of the granting of Development Approval, then landscaping of the site should be undertaken.

#### **Landscaping**

##### **OBJECTIVE**

**Objective 55:** Water conserving landscaping that enhances the local landscape character and creates a pleasant, safe and attractive living environment.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**207** Landscaping should:

- (a) be selected and designed for water conservation;
- (b) form an integral part of the design of development; and
- (c) be used to foster human scale, define spaces, reinforce paths and edges, screen utility areas and enhance the visual amenity of the area.

**208** Landscaping should incorporate local indigenous species suited to the site and development, provided such landscaping is consistent with the desired character of the locality and any heritage place.

**209** Landscaping should be provided to all areas of communal space, driveways and shared car parking areas.

**210** Landscaping between the road and dwellings should be provided to screen and protect the dwellings from dust and visual impacts of the road.

## **Transport and Access**

### **Access and Movement**

#### **OBJECTIVE**

**Objective 60:** Access to and movement within the City that is easy, safe, comfortable and convenient with priority given to pedestrian and cyclist safety and access.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**224** Development should provide safe, convenient and comfortable access and movement.

**225** Vehicle access points along primary and secondary city access roads and local connector roads, as shown on Map Adel/1 (Overlay 1) should be restricted.

### **Pedestrian Access**

#### **OBJECTIVES**

**Objective 61:** Development that promotes the comfort, enjoyment and security of pedestrians by providing shelter and reducing conflict with motor vehicles.

**Objective 62:** Development that contributes to the quality of the public realm as a safe, secure and attractive environment for pedestrian movement and social interaction.

**Objective 63:** Safe and convenient design of and access to buildings and public spaces, particularly for people with disabilities.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**226** Development should reflect the significance of the paths and increase the permeability of the pedestrian network identified within Map Adel/1 (Overlay 2) by ensuring:

- (a) pedestrians are not disrupted or inconvenienced by badly designed or located vehicle access ramps in footpaths or streets; and

(b) vehicle and service entry points are kept to a minimum to avoid adverse impact on pedestrian amenity.

**227** Within the Core, Primary and Secondary Pedestrian Areas identified within Map Adel/1 (Overlays 2, 2A and 3), development should be designed to support the establishment and maintenance of continuous footpaths so that pedestrian flow is free and uninterrupted. Pedestrian access should be provided at ground level mid-block between all streets.

**228** Development should provide and maintain pedestrian shelter, access and through-site links in accordance with the walking routes identified within Map Adel/1 (Overlays 2, 2A and 3) and the provisions of the Zone or Policy Area in which it is located. Such facilities should be appropriately designed and detailed to enhance the pedestrian environment, have regard to the mobility needs of people with disabilities, and be safe, suitable and accessible.

**229** Corner buildings in the Central Business Policy Area of the Capital City Zone, buildings adjacent to street intersections and buildings along a high concentration public transport route or along public transport pedestrian routes identified within Map Adel/1 (Overlay 4) should provide weather protection for pedestrians in the form of verandahs, awnings or canopies. Where verandahs or awnings are provided which block street lighting, they should include additional lighting beneath the canopy.

**230** Permanent structures over a footpath should have a minimum clearance of 3.0 metres above the existing footpath level, except for advertisements which should have a minimum clearance of 2.5 metres and temporary structures and retractable canopies which should have a minimum clearance of 2.3 metres above the existing footpath level.

**231** Where posts are required to support permanent structures, they should be located at least 600 millimetres from the kerb line.

**232** Access for people with disabilities should be provided to and within all buildings to which members of the public have access in accordance with the relevant Australian Standards. Such access should be provided through the principal entrance, subject to heritage considerations and for exemptions under the relevant legislation.

### **Bicycle Access**

#### **OBJECTIVES**

**Objective 64:** Greater use of bicycles for travel to and within the City and the improvement of conditions, safety and facilities for cyclists.

**Objective 65:** Adequate supply of secure, short stay and long stay bicycle parking to support desired growth in City activities.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**233** Development should have regard to the bicycle routes identified within Map Adel/1 (Overlay 3) by:

(a) limiting vehicular access points; and

(b) ensuring that vehicles can enter and leave the site in a forward direction, thereby avoiding reverse manoeuvres.

**234** An adequate supply of on-site secure bicycle parking should be provided to meet the demand generated by the development within the site area of the development. Bicycle parking should be provided in accordance with the requirements set out in Table Adel/6.

**235** Onsite secure bicycle parking facilities for residents and employees (long stay) should be:

- (a) located in a prominent place;
- (b) located at ground floor level;
- (c) located undercover;
- (d) located where passive surveillance is possible, or covered by CCTV;
- (e) well lit and well signed;
- (f) close to well used entrances;
- (g) accessible by cycling along a safe, well lit route;
- (h) take the form of a secure cage with locking rails inside or individual bicycle lockers; and
- (i) in the case of a cage have an access key/pass common to the building access key/pass.

**236** Onsite secure bicycle parking facilities for short stay users (i.e. bicycle rails) should be:

- (a) directly associated with the main entrance;
- (b) located at ground floor level;
- (c) located undercover;
- (d) well lit and well signed;
- (e) located where passive surveillance is possible, or covered by CCTV; and
- (f) accessible by cycling along a safe, well lit route.

**237** Access to bicycle parking should be designed to:

- (a) minimise conflict with motor vehicles and pedestrians;
- (b) ensure the route is well signed and well lit including the use of road markings such as a bicycle logo if appropriate to help guide cyclists; and
- (c) ensure the route is unhindered by low roof heights.

### **Traffic and Vehicle Access**

#### **OBJECTIVES**

**Objective 68:** Development that supports a shift toward active and sustainable transport modes (i.e. public transport, cycling and walking).

**Objective 69:** An enhanced City environment and the maintenance of an appropriate hierarchy of roads to distribute traffic into the City to serve development in preference to through traffic.

**Objective 70:** Adequate off-street facilities for loading and unloading of courier, delivery and service vehicles and access for emergency vehicles.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**241** Development should be designed so that vehicle access points for parking, servicing or deliveries, and pedestrian access to a site, are located to minimise traffic hazards and vehicle queuing on public roads. Access should be safe, convenient and suitable for the development on the site, and should be obtained from minor streets and lanes unless otherwise stated in the provisions for the relevant Zone or Policy Area and provided residential amenity is not unreasonably affected

**242** Facilities for the loading and unloading of courier, delivery and service vehicles and access for emergency vehicles should be provided on-site as appropriate to the size and nature of the development. Such facilities should be screened from public view and designed, where possible, so that vehicles may enter and leave in a forward direction.

*Design Technique (this is ONE WAY of meeting the above Principle)*

**242.1** Commercial vehicle facilities in compliance with the requirements recommended in Australian Standard AS 2890:2: *Off-Street Parking - Part 2: Commercial Vehicle Facilities*.

**243** Where practicable, development sites should contain sufficient space for the location of construction equipment during the course of building construction, so that development does not rely on the use of Council road reserves to locate such equipment.

**244** Vehicular access to development located within the Core and Primary Pedestrian Areas identified in Map Adel/1 (Overlay 2A) should be limited and designed to minimise interruption to street frontages.

**245** Where vehicular access to a development is gained by an existing crossing in the Core Pedestrian Area identified in Map Adel/1 (Overlay 2A), there should be no increase in the number of parking spaces served by the crossing, nor any increase in the number of existing crossings serving that development.

**246** There is no minimum setback required from a rear access way where the access way is wider than 6.5 metres. Where the access way is less than 6.5 metres in width, a setback distance equal to the additional width required to make the access way 6.5 metres or more, is required to provide adequate manoeuvrability for vehicles.

**247** The number of access points on primary city access roads identified in Map Adel/1 (Overlay 1) should be limited to minimise traffic and pedestrian inconvenience, interference with public transport facilities and adverse effects on the environment.

**248** Buildings located along primary and secondary access roads should be sited to avoid the need for vehicles to reverse on to the road (unless the dimensions of the site make this impractical).

**249** Access roads within residential development should:

(a) provide convenient access for emergency vehicles, visitors and residents;

- (b) enable vehicles to enter and leave a site in a forward direction;
- (c) provide a comfortable and safe pedestrian environment; and
- (d) be well lit.

**250** Access roads within residential development for older people and people with disabilities should:

- (a) include platforms across roadways at pedestrian crossing points;
- (b) not have steep gradients; and
- (c) have level surface passenger loading areas.

### **Car Parking**

#### **OBJECTIVES**

**Objective 71:** To meet community expectation for parking supply while supporting a shift toward active and sustainable transport modes.

**Objective 72:** An adequate supply of short-stay and long-stay parking to support desired growth in City activities without detrimental affect on traffic and pedestrian flows.

#### **PRINCIPLES OF DEVELOPMENT CONTROL**

**251** Car parking areas should be located and designed to:

- (a) ensure safe and convenient pedestrian movement and traffic circulation through and within the car parking area;
- (b) include adequate provision for manoeuvring and individually accessible car standing areas;
- (c) enable, where practical, vehicles to enter and leave the site in a forward direction;
- (d) minimise interruption to the pattern of built form along street frontages;
- (e) provide for access off minor streets and for the screening from public view of such car parking areas by buildings on the site wherever possible;
- (f) minimise adverse impacts on adjoining residential properties in relation to noise and access and egress;
- (g) minimise loss of existing on-street parking spaces arising through crossovers and access;
- (h) incorporate secure bicycle parking spaces and facilitate convenient, safe and comfortable access to these spaces by cyclists; and
- (i) provide landscaping, such as semi-mature trees, to shade parked vehicles and reduce the visual impact of the car parking area while maintaining direct sight lines and informal visual surveillance.

**252** All development should provide car parking spaces for people with disabilities in accordance with the requirements in the Building Code of Australia (BCA). For classes of buildings not covered by the requirements of the BCA, the number of spaces should be provided in accordance with Table Adel/7 and

such car parking spaces should comply with Australian Standard 2890.1: 'Parking Facilities - Off-street Car Parking'.

**254** Off-street parking should:

- (a) be controlled in accordance with the provisions for the relevant Policy Area;
- (b) be located away from street frontages or designed as an integral part of buildings on the site. Provision of parking at basement level is encouraged; and
- (c) not include separate garages or carports in front of buildings within front set-backs.

**255** Garaging and parking structures (including the width of any support structure) provided on a public street frontage or on a laneway that functions as the dwellings primary frontage should be of a width less than 50 percent of the allotment width on that frontage.