

## CES Pirie Hotel (SA) Pty Ltd

Demolition of all buildings on site, including a Local Heritage (Townscape) Place and construction of a twenty-eight (28) storey hotel building, with ballroom, meeting rooms, and ancillary car parking.

### 51 Pirie Street, Adelaide

020/A016/19

#### TABLE OF CONTENTS

	<b>PAGE NO</b>
<b>AGENDA REPORT</b>	1-25
<b>ATTACHMENTS</b>	
1: PLANS	26-38
2: DEVELOPMENT APPLICATION FORM	39
3: APPLICATION DOCUMENTS	
a. Planning Report – GHD Woodhead	40-53
b. Heritage Impact Assessment – DASH Architects	54-72
c. Waste Management – Rawtec	73-87
d. Sustainability Management Plan – Lucid Consulting	88-101
e. Stormwater Management – Wallbridge Gilbert Aztec	102-121
f. Vertical Transportation – Lucid Consulting	122-133
g. Acoustic Report – Sonus	134-146
h. Environmental Wind Assessment – Arup	147-166
i. Traffic Assessment Report – Wallbridge Gilbert Aztec	167-187
4: AGENCY COMMENTS	
a. Adelaide Airport Limited	188
b. Government Architect	189-191
5: COUNCIL COMMENTS and TECHNICAL ADVICE	192-196
6: ADDITIONAL INFORMATION	197-208
7: SITE PHOTOGRAPHS	209-214
8: DEVELOPMENT PLAN PROVISIONS	215-231



**OVERVIEW**

<b>Application No</b>	020/A016/19
<b>Unique ID/KNET ID</b>	2019/03094/01
<b>Applicant</b>	CES Pirie Hotel (SA) Pty Ltd
<b>Proposal</b>	Demolition of all buildings on site, including a Local Heritage (Townscape) Place and construction of a twenty-eight (28) storey hotel building, with ballroom, meeting rooms, and ancillary car parking.
<b>Subject Land</b>	51 Pirie Street, Adelaide
<b>Zone/Policy Area</b>	Capital City Zone / Central Business Policy Area 13
<b>Relevant Authority</b>	State Commission Assessment Panel
<b>Lodgement Date</b>	4 March 2019
<b>Council</b>	City of Adelaide
<b>Development Plan</b>	Adelaide (City), consolidated 7 June 2018
<b>Type of Development</b>	Merit
<b>Public Notification</b>	Category 1
<b>Referral Agencies</b>	<ul style="list-style-type: none"> <li>• Government Architect</li> <li>• Secretary of the Commonwealth Department of Transport and Regional Services (Adelaide Airport Limited)</li> <li>• Council (non-mandatory)</li> </ul>
<b>Report Author</b>	Will Gormly, Senior Planning Officer
<b>RECOMMENDATION</b>	Development Plan Consent, subject to conditions

**EXECUTIVE SUMMARY**

This application was lodged on 4 March 2019. The application proposes the construction of a 28-storey five-star hotel building, which comprises a mix of hotel accommodation, a sky bar and restaurant, ball room, meeting rooms, pool, gym, and ancillary car parking at 51 Pirie Street, Adelaide.

The application proposes the total demolition of a Local Heritage (Townscape) Place – the former Bank of South Australia, in addition to the 1980s addition to the entire eastern portion of the Local Heritage Place to its eastern Gawler Place boundary.

The application is subject to mandatory referrals to the Government Architect, and the Commonwealth Secretary for the Department of Transport and Regional Services through Adelaide Airport Limited. The application was forwarded to the City of Adelaide for their technical comments.

Referral agencies and the City of Adelaide are generally supportive of the proposal, with the land use, building height, design, and public realm interface concerns being mostly met. Council does however not support the demolition of the Local Heritage (Townscape) place as it is at variance with the Development Plan.

The application was subject to the pre-lodgement process. Through the process, there was clear evolution between the inception meeting, and the lodged application. The Government Architect commends the proponent team in their willingness to engage with the process – particularly the Design Review.

The proposed development raises key planning concerns with regards to the total demolition of a Local Heritage (Townscape) Place, the interface between pedestrians and vehicles (particularly with respect to the crossovers required to provide a drop-off area and

servicing on the site which is accessed from Gawler Place), and the un-sleeved car parking on upper levels of the building.

Notwithstanding the above, overall, the proposed development is considered to address the other key planning, design, and technical issues and has sufficient merit to warrant a deviation from the Development Plan for the matters raised above and is considered suitable for Development Plan Consent, subject to planning conditions recommended at the end of this report.

## **ASSESSMENT REPORT**

### **1. BACKGROUND**

#### **1.1 Pre-Lodgement Process**

The proponent engaged with the case managed pre-lodgement service offered by the Department of Planning, Transport and Infrastructure. The process saw four pre-lodgement panel meetings, and four design review panel sessions. The concept and design iteration has changed substantially since the project inception to the lodged application.

In the referral response, the Government Architect commends the proponent for engaging in the pre-lodgement/case management process, of which has led to improvements of the proposed built form and the way in which it interacts with the public realm.

### **2. DESCRIPTION OF PROPOSAL**

Application details are contained in the ATTACHMENTS.

The nature of development includes the demolition of a Local Heritage Place together with all other built elements on the land and the construction of a twenty-eight storey hotel building with ballroom, meeting rooms, and ancillary car parking.

A summary of the proposal is as follows:

<b>Land Use Description</b>	Construction of a twenty-eight (28) storey hotel building, with ballroom, meeting rooms, and ancillary car parking	
<b>Building Height</b>	28 storeys (113.8 metres to top of lift overrun)	
<b>Description of levels</b>	<i>Basement</i>	Plant, linen room, laundry, bike store
	<i>Ground</i>	Hotel lobby, dignitary drop-off, delivery access
	<i>Level 1</i>	Guest retreat area
	<i>Level 2-4</i>	Car parking at 15 car parks per level
	<i>Level 5</i>	Pool plant, employee restaurant, showers, lockers
	<i>Level 6</i>	Swimming pool and gym facilities
	<i>Level 7</i>	Ball room, pre-function room with kitchen, storeroom, cloakroom, and toilets
	<i>Level 8</i>	Administration area, bridal room, offices
	<i>Level 9</i>	Meeting rooms, pre-event space, kitchen, toilets
	<i>Level 10</i>	Plant
	<i>Level 11 to 25</i>	Mix of hotel accommodation from 30 to 66 square metres per suite
	<i>Level 26</i>	Mix of hotel accommodation from 29 to 68 square metres per suite, executive club with library, boardroom, kitchen, and toilets

	<i>Level 27</i>	Sky bar, dining area, open kitchen, cold store, toilets
	<i>Level 28</i>	Roof – lift overrun and plant
<b>Apartment floor area (excluding balconies)</b>	Standard Twin	30sqm
	Standard King Guest	30sqm
	Deluxe Twin	38sqm
	Deluxe King Guest	38sqm
	Executive Suite Guest	68sqm
<b>Site Access</b>	Vehicle access to/from Gawler Place for dignitary drop-off and deliveries via two new crossovers. Pedestrian access to/from Gawler Place and Pirie Street.	
<b>Car and Bicycle Parking</b>	45 car parking spaces – on levels 2-4, with ramp access from Pirie Street. 24 bicycle parks – in basement, with access via lift	
<b>Encroachments</b>	Nil	
<b>Staging</b>	Staging not proposed	

### 3. SITE AND LOCALITY

#### 3.1 Site Description

The site consists of one allotment, legally described as follows:

Lot No	Plan	Street	Suburb	Hundred	Title
1	DP 13090	Pirie Street	Adelaide	Adelaide	CT 5292/63

The subject site is located at the south-western corner of the intersection of Gawler Place and Pirie Street. It has a frontage to Gawler Place to its eastern boundary of 36.81 metres, and 34.88 metres to its northern boundary to Pirie Street.

The site is currently occupied entirely by built form – the 1927-built Local Heritage listed former State Bank of South Australia, and a 1980s addition built directly to its east.

The subject site, and its surroundings, is flat.

#### 3.2 Locality

The locality is characterised by an array of varying land uses which include car park, office, retail, café, hotel, and restaurant. Built form varies greatly, with building heights ranging from two storeys through to twenty-four storeys.

Pirie Street, the east-west road directly to the subject site's north boundary, carries one lane of traffic in each direction; each with a dedicated on-street bicycle path. Perpendicular to this, and to the site's east boundary, is the north-south running Gawler Place. Comparatively, Gawler Place sees far fewer traffic movements, owing to its one-way movement carrying vehicles and bicycles only in a northerly aspect.

Immediately to the south of the subject site is an at-grade car park associated which is ancillary to 45 Pirie Street. Beyond this is a ramp which carries vehicles to the basement of this same building.

To the west is 45 Pirie Street, as described above. This irregular shaped building has a moderate setback to Pirie Street, and is further rotated 45 degrees across the site. As a result, a substantial amount of the western boundary wall of the subject site is visible – particularly where the terraced built form recedes above its seventh floor.

To the east, and over Gawler Place, is 63 Pirie Street. This building has had its plaza space recently remodelled; removing the awning structure at the foyer of the building. This building has a chamfer to every floor of its north-western corner – which provides a generous urban area at its base.

Directly north of the site is 50 Pirie Street; a 13-storey building. This building is regular in shape, and features a void area at its ground level – offering a setback from its Gawler Place boundary. Similarly, the building at 64-70 Pirie Street, to the north-east of the subject site, does not build hard against its Gawler Place boundary. Because of this, the immediate locality does not have a strong ‘hard edge’ built form definition; and offers somewhat of an open feeling at this intersection. This is further experienced at the City of Adelaide administration offices, and the directly opposite Telstra Building.



**Figure 1 – Location Map**

#### **4. COUNCIL COMMENTS or TECHNICAL ADVICE**

##### **4.1 City of Adelaide**

The referral response from the City of Adelaide is contained in the attachments.

Council made comments under a number of headings. Notable comments are extracted here for ease of reference. These are broken down in headings and in a summarised form below:

**Traffic/Transport** No objections, noting the recommendations for the movement of waste vehicles in both the Rawtec and WGA reports are supported. City of Adelaide will not alter on-street parking to provide exclusive use for the hotel.

<b>Waste</b>	Satisfied that the final waste management plan will meet the operational requirements for the development.
<b>Heritage</b>	Demolition of heritage should be considered against the provisions of the Development Plan. It is noted that the demolition of the listed building fabric is not consistent with the clear intent of the Plan.
<b>Public Realm</b>	Activation of ground level of the building is supported. Any changes to public realm are subject to City of Adelaide processes. Material for public space would be determined by CoA and subject to further design development to achieve landlord consent for public realm treatment. It should be noted that the black granite is unlikely to be supported.
<b>Encroachments</b>	Plans do not show the canopy in detail, however a calibrated measurement places it at between 4.7 and 5.5m above ground, which does not achieve the requirements of Council's current Encroachment Policy. A review of this policy is underway which may remove the requirements around installed height.

At the time of finalising this report, a response had not yet been provided by their 'Infrastructure' section – with Council noting that any changes to council infrastructure (street lighting, footpath treatment, stormwater management) will form part of the ongoing discussions relating to the changes to the public realm.

Council make three recommendations for conditions, which include that ground level floor entry matches the existing footpath level; lighting is installed to the underside of the verandah in accordance with Council requirements; and that clear sight lines for users of the car park are provided to ensure safety for pedestrians along the Gawler Place footpath.

I concur with the adoption of these conditions for any consent given to this application.

## 5. STATUTORY REFERRAL BODY COMMENTS

Referral responses are contained in the ATTACHMENTS.

### 5.1 Government Architect

The Government Architect is a mandatory referral in accordance with Schedule 8 of the Development Regulations 2008. The SCAP must have regard to this advice.

In the referral response, the Government Architect (GA) acknowledges the willingness with which the project team engaged with the Design Review process through the pre-lodgement. The proposal underwent four design reviews, over which period the design outcome had progressed significantly. The GA offers in-principle support for the proposal including building height, architectural expression, ecologically sustainable design, removal of the local heritage façade, and is generally summarised by:

- Day and night time activation at ground level supported, including the glazed operable walls that provide physical and visual permeability to Pirie Street.
- Adelaide Black Granite paving treatment from building interior to kerb is considered high quality and supported.
- Ambition for proposed public realm improvements and unified treatment at the ground plane with the broader urban environment is acknowledged.

- Base of building with its highly transparent glazing and slender columns is supported.
- Detailing of canopy framing, flashings, gutters and downpipes need development.
- A sense of address is provided through the glazed triangular vestibule off Gawler Place.
- Conflicts between vehicles and highly pedestrianised environment at Gawler Place is acknowledged as a risk and concern.
- The concealing of servicing activities on Gawler Place is supported.
- Building façade and overall external architecture is supported, with the project team's commitment to this commended.
- Recommendation to consider concealment of car parking infrastructure, plant, and services.

## 5.2 Adelaide Airport

The proposed building height of 158.8 metres AHD penetrates the Obstacle Limitation Surface for Adelaide Airport by approximately 38 metres, which requires approval from the Department of Infrastructure, Regional Development and Cities. In the referral letter from Adelaide Airport Limited, they note approval will be required for the building, which will include crane operations and any lighting of the building required for shielding from aircraft flight paths.

Adelaide Airport Limited confirm that no Airspace Study is required for either the building or craning at this height.

The referral agency imposes no conditions, but includes advisory notes for attachment. A copy of this referral letter is contained in the attachments.

## 6. PUBLIC NOTIFICATION

The application is a Category 1 development pursuant to Principle of Development Control 40(a) of the Capital City Zone, as it is not a listed Category 2 form of development.

Accordingly, no public notification was required.

## 7. POLICY OVERVIEW

The subject site is within the Capital City Zone and the Central Business Policy Area 13 as described within the Adelaide (City) Development Plan Consolidated 7 June 2018.

Relevant planning policies are contained in the appendices attached, and summarised below.



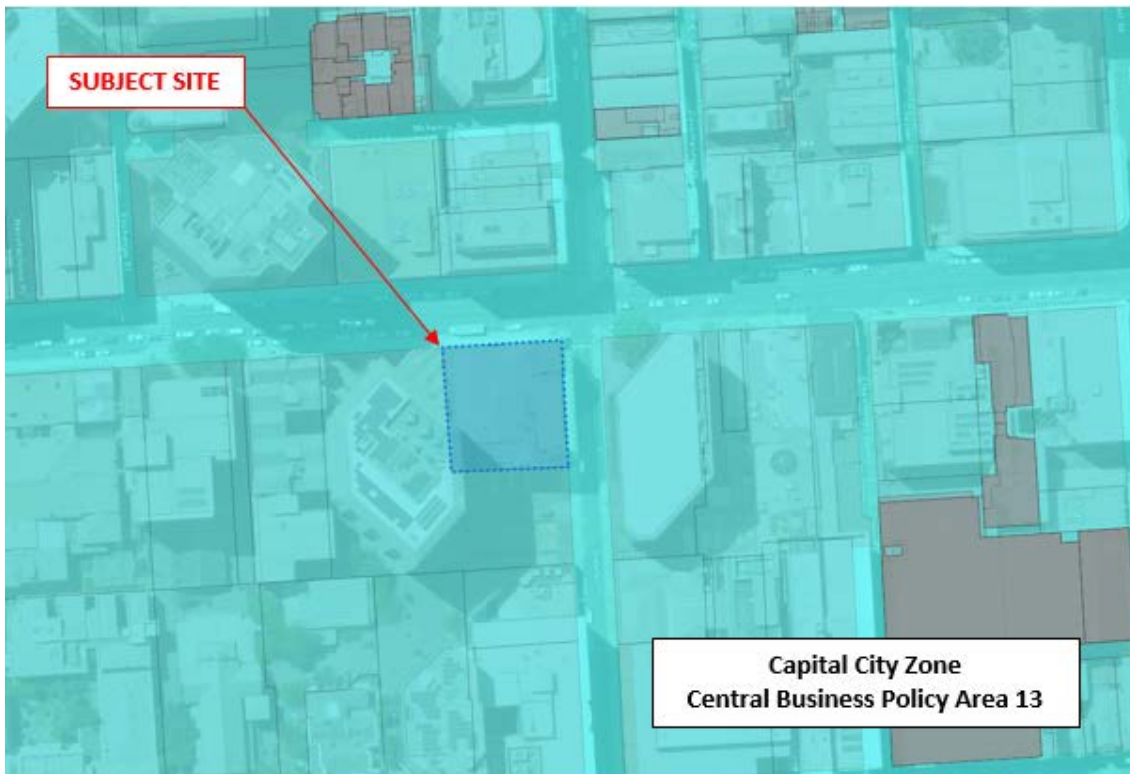


Figure 2 – Zoning Map

### 7.1 Central Business Policy Area 13

The Policy Area is the State’s pre-eminent economic, governance and cultural hub and will be supported by educational, hospitality, and entertainment activities and increased opportunities for residential, student and tourist accommodation.

Buildings will exhibit innovative design approaches and produce stylish and evocative architecture, including tall and imposing buildings that provide a hard edge to the street and are of the highest design quality.

Complementary and harmonious buildings in individual streets will create localised character and legible differences between streets, founded on the existing activity focus, building and settlement patterns and street widths.

Development of a high standard of design and external appearance is anticipated in a way that successfully integrates with the public realm. To enable an activated street level, residential uses (or similar) should be located above ground level.

### 7.2 Capital City Zone

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.

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.

### **7.3 Council Wide**

Council Wide provisions provide guidance on the desire for increased levels of activity and interest at ground level; a high standard of design; appropriate bulk and scale of buildings and positive contribution to streetscapes including interfaces with places of heritage significance.

Multi-level car parks and short stay public use of ancillary car parking spaces are discouraged at ground floor street frontages within the Primary Pedestrian Area.

### **7.4 Overlays**

#### **7.4.1 Noise and Air Emissions**

This site is located within the designated area for the Noise and Air Emissions Overlay, and as such requires assessment against *Minister's Specification SA 78B for Construction Requirements for the Control of External Sound*.

#### **7.4.2 Adelaide City Airport Building Heights**

Prescribed height limits are specified for the subject site, under the Adelaide (City) Airport Building Heights Map Adel/1 (Overlay 5).

Referral to the Department of Transport and Regional Services through Adelaide Airport Limited is required where a development would exceed the Obstacle Limitation Surface contours shown on Overlay 5. The referral confirms the OLS penetration of approximately 38 metres, which they state will require approval by the Department of Infrastructure, Regional Development and Cities; in line with the *Airports Act 1996* and the *Airports (Protection of Airspace) Regulations 1996*. Crane operations associated with construction, if approved by the Department of Infrastructure, Regional Development and Cities, will also be subject to a separate application.

A copy of the referral response is contained in the attachments.

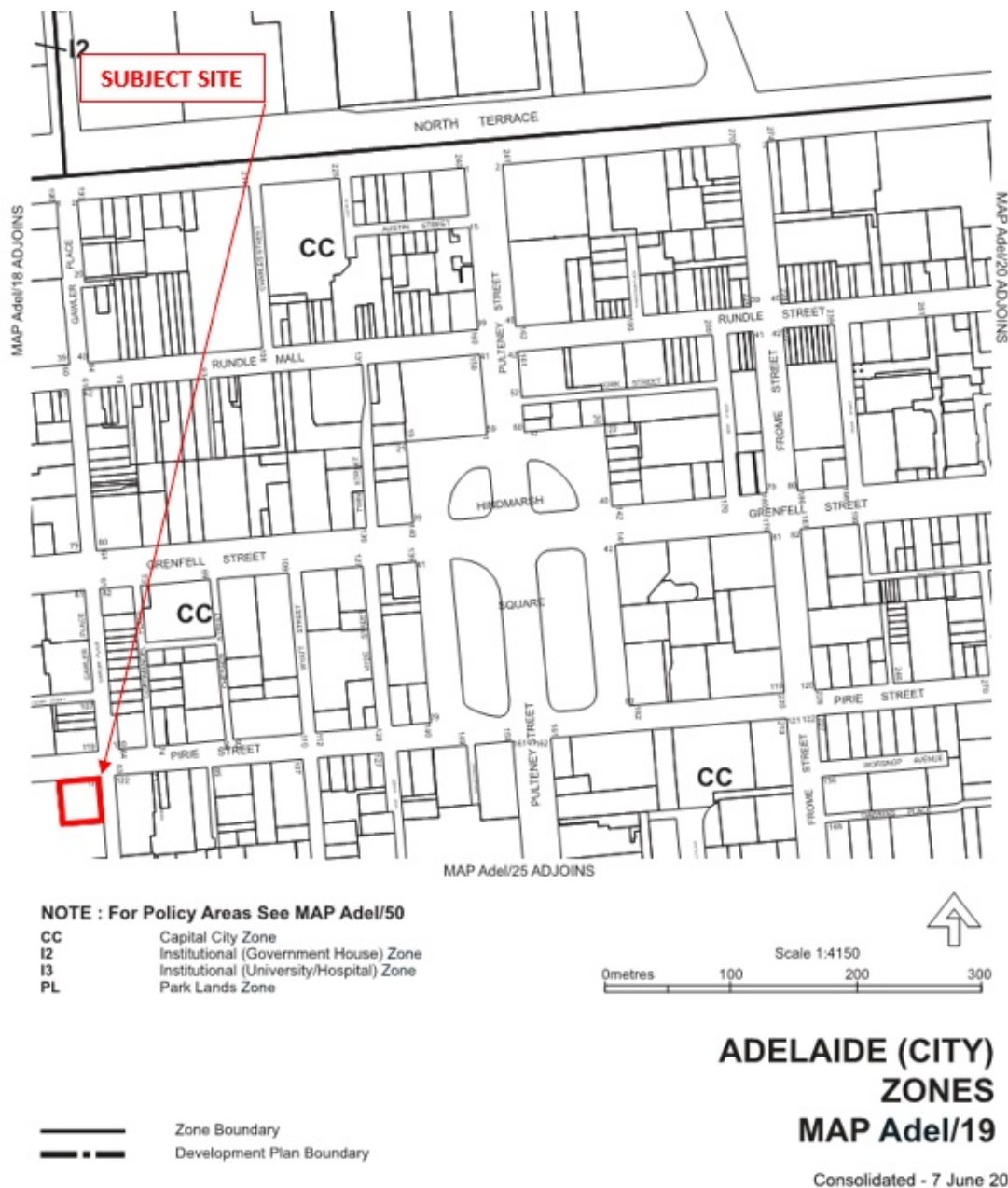


Figure 3 – Zone MAP Adel/19

## 8. PLANNING ASSESSMENT

The application has been assessed against the relevant provisions of the Adelaide (City) Development Plan with a consolidation date of 7 June 2018. These provisions are contained in the appendices attached.

### 8.1 Quantitative Provisions

	Development Plan Guideline	Proposed	Guideline Achieved	Comment
Land Use	Highest concentration of office, retail, mixed	Hotel and ancillary use.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	

	business, cultural, public administration, hospitality, educational and tourist activities.			
<b>Building Height</b>	No prescribed height limit.	113.8m to top of lift overrun.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	
<b>Car Parking</b>	No requirement for on-site car parking.	45 spaces (15 each on level 2, 3 and 4).	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	Not for 'public' use – ancillary to hotel only.
<b>Bicycle Parking</b>	No requirement for bicycle parking for 'hotel' land use.	24 spaces for employees.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	In basement.
<b>Boundary Setbacks</b>	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.	Built to boundary, except: <ul style="list-style-type: none"> <li>• 4.6m on eastern elevation and 1.3m at northern elevation at ground and level 1.</li> <li>• 4.3m on levels 2 to 28 on southern elevation.</li> <li>• Approx. 3m on levels 10 to 28 on western elevation.</li> </ul>	YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/>	Discussed below
<b>Private Open Space</b>	No requirement for private open space for 'hotel' land use.	Nil, to any hotel room.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	

## 8.2 Land Use and Character

Development in the Central Business Policy Area should contribute to its role and function as the State's premier business district, having the highest concentration of office, retail, business, educational, hospitality and tourist activities with increased opportunities for residential accommodation.

The proposed hotel and ancillary land uses contribute positively to the Desired Character of the Policy Area, introducing envisaged forms of development and an increased – although transient – residential population which, in turn, will provide additional tourist activities.

## 8.3 Building Height

The subject site is located entirely within the portion of the Capital City Zone where no building height limit is prescribed. Notwithstanding the policy position, statutory requirements around the safe operation of airspace exists, and as such, a referral to the Secretary of the Commonwealth Department of Transport and Regional Services (Adelaide Airport Limited) was required, as the building height penetrates the Obstacle Limitation Surface (OLS) as indicated on MAP Adel/1 (Overlay 5) of the Development Plan.

Standing at 28 storeys and 113.8m to its highest point (architectural screen feature and top of lift overrun), the proposed building is not considered to be an isolated features in its context of tall buildings – namely the 'Telstra' building at approximately 104 metres, 'Grenfell Centre' or the informally named 'black stump' at approximately 103 metres, and 'Westpac House' at 132 metres. The building directly adjoins a 70 metre building to its west, however the proposed building is not considered to dominate it in any case.

The desired character of the Capital City Zone calls for minor streets having a sense of enclosure through buildings with a tall street wall compared to street width, and a sense of enclosure, with the Central Business Policy area particularly calling for no upper level setbacks. The proposal achieves these policies accordingly, with its lack of podium and upper level setback, and tall street walls at both its Pirie Street and Gawler Place elevations.

In her referral letter, the Government Architect supports the height of the singular building, given its inner city location.

The building interfaces well with adjoining and adjacent buildings, is not at tension with any elements which would suggest a lower building height is necessary, and has policy aspects which support a building of this height in this location.

#### **8.4 Design and Appearance**

Buildings in the Central Business Policy Area will exhibit innovative design approaches and produce stylish and evocative architecture of the highest design quality including tall and imposing buildings that provide a hard edge to the street. Development should be of a high standard of architectural design and finish to produce a variety of design outcomes of enduring appeal and contemporary juxtapositions providing new settings for heritage places.

The proposed development has, to the credit of the proponent – and now applicant – undergone a number of design changes through the pre-lodgement service offered by the Department. The proponent made changes through its evolution, and this has resulted in positive outcomes for many aspects of the proposal submitted. The Government Architect is generally supportive of the development.

Above its predominantly clear glazed ground and first levels, which are set back from its Gawler Place and Pirie Street frontages, the building is enveloped in a diamond shaped architectural screening from the top of level 1, all the way to the top of its 28 level. The screening, whilst offering a quality contemporary architectural response to the locality, aids in providing physical shading from the glazing – which adds to its environmental response.

The proposal incorporates 3 levels of un-sleeved, above ground car parking (levels 2 to 4). While this is not desirable as it reduces the level of activation on lower levels and has a visual impact on the streetscape, it is considered that the un-sleeved car parking is acceptable given the high quality design of the built form, the activation on the ground level and level 1 which has an active and direct relationship to Pirie Street.

The proposal is expected to result in a quality addition to the built form of Adelaide city, whilst satisfying the policy provisions of the Zone and Policy Area, by providing contemporary built form with high quality architectural design, and hard streetscape edges to its upper levels. Provision of a final schedule of external materials will assist the Panel in reaching a determination to the appropriateness of the materials proposed, and this should form a condition to any consent granted in order to ensure that the quality of material finishes is suitable for the location, and that the level of quality is not diminished through post-consent evolution.

##### **8.4.1 Public Realm**

Principle of Development Control 3 of the Central Business Policy Area 13 seeks that residential development (or similar) should be located above ground level in order to enable an activated street level.

The proposal locates all of its hotel suites above ground level, with the ground floor plane comprising, at its street edges, a lobby and lobby lounge, arrival and departure area, and reception. Non-active edges include the areas associated with the fire booster, fire exit, gas meter, and loading and car parking access areas. These, however, are generally consolidated and grouped away from the Pirie Street/Gawler Place corner, and as such afford the greatest level of activation – notwithstanding the functional necessity of the inclusion of these non-active edges.

Whilst the Desired Character of the Policy Area seeks buildings provide a hard edge to the street, the proposed setbacks at the ground level of both the northern and eastern elevations are considered appropriate as they provide a higher amount of amenity to visitors, as the threshold between public and private spaces begins to break down. In this particular locality, it is considered that the Desired Character is not degraded or compromised by the setbacks proposed of this building given the pattern of surrounding buildings which do not provide hard street edges – and further offsetting of this by offering private space back to the public as a transitional area for its visitors. The positioning of the lobby/lounge with seating area directly behind an operable wall to Pirie Street will allow the space between public realm and private hotel space to blend.

The applicant indicates a commitment to work with the City of Adelaide to further enhance the connection between the proposed building and its two street frontages, which include the suggested removal of on-street parking to facilitate a drop-off area. Council note that these processes are to occur separately to the development assessment process.

#### **8.4.2 Occupant Amenity**

Being specifically designed for hotel accommodation, the proposed development does not have specific quantitative requirements which would apply to residential development, including private open space, storage, and other amenity requirements.

The Adelaide (City) Development Plan does not provide guidance to any minimum level of amenity for a hotel development. Notwithstanding, the guest rooms are designed in such a way that is anticipated to meet the operational requirements, in addition to achieving a level of amenity that results in good natural light to every room, a mix of room types, and an efficient layout which capitalises on the rectangular footprint, and generally central and consolidated core. The floor-to-floor dimensions of the three levels of car parking, at 3100mm, indicates that these spaces have the potential to be adaptable in the future, should the development demand it.

A generous ground floor lobby, large swimming pool and gymnasium on level 6, and 'skybar' and dining room on level 27 provide additional and high quality amenity to visitors and guests of the hotel.

#### **8.4.3 Building Setbacks**

The Central Business Policy Area seeks tall and imposing buildings that provide a hard edge to the street. The Policy Area is silent on buildings requiring any upper level setbacks. Principle of Development Control 178 of Council Wide provisions seek that buildings in 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.

Whilst the proposal does not build to its boundary at the ground and first levels of its Gawler Place or Pirie Street elevations, the level of activation it provides in lieu of building a hard edge is supported. The space, particularly on Gawler Place, provides built form relief at this locality, where it also affords pedestrian shelter to the building's entrance, a vehicle space for dignitary drop-off, and also allows sub-ground access to the buried electricity transformers within the property boundary. The setback along Pirie Street further fragments the 'hard edge', where the active uses at this edge – separated by operable walls – begin to blend with the public realm. These are not seen as detrimental to the policy position.

Further, the articulation the building is afforded by varying its setbacks provides additional interest and relief. It is considered that the lower level setbacks at its street frontages are appropriate, as it introduces public benefit to the location.

The setbacks from the western boundary on levels 10 and above are in the order of approximately 1.8 metres to the building wall face. This setback allows natural light to penetrate the hotel suites which are located from 11 and above, particularly where 45 Pirie (the adjoining property to the west) stands in line with approximately level 17 of the proposed building.

## 8.5 Heritage

The proposal seeks the total demolition of the Local Heritage (Townscape) Place on the subject site, in order to facilitate the new construction. The listing is for the former State Bank of South Australia, which was constructed in 1927. Since the time of its original construction, a number of developments have occurred on the land which have diminished the integrity of its original heritage value. This includes the substantial redevelopment in the 1980s which stripped all internal finishes, and expanded the built form to the east with a brutal concrete express-form addition which directly adjoins what remains of the Local Heritage Place. In this redevelopment, the original windows were replaced, original balconies infilled, ground floor window sills lowered, and original signage removed. Accordingly, this has resulted in only the Pirie Street façade being representative of the era of construction.

Objectives 43 and 44 of the City Wide Heritage and Conservation section of the Development Plan seek development that retains the heritage value and setting of a heritage place and its built form contribution to the locality; and the continued use or adaptive reuse of the land, buildings and structures comprising a heritage place. Principles of Development Control 137, 138, and 139 of the same section further seek any development affecting a heritage place should facilitate its continued use that are complementary to the heritage place; should not be demolished unless it can be demonstrated that the place has become so diminished in integrity that the remaining fabric is no longer capable of adequately representing its heritage value as a local heritage place; and that development of a Local Heritage Place (Townscape) should occur behind retention depths of 6 metres.

A Heritage Impact Assessment, authored by Jason Schulz of DASH Architects, details the elements of heritage importance, and begins to justify the total demolition of the Local Heritage Place (Townscape). The Heritage Impact Assessment did not provide a thorough justification for the demolition of all heritage fabric on the site. Whilst acknowledging that the proposal is at odds with the Development Plan provisions which generally encourage retention of places with heritage value, the author of the report suggests that, given the erosion of original heritage value of the building through its alterations over the years, its removal is necessary to facilitate the proposed development.

The City of Adelaide are not supportive of the demolition of the Local Heritage Place (Townscape) place. They iterate that the Heritage Impact Assessment prepared by

DASH Architects rightly calls for the retention of the Local Heritage Place (Townscape) through Development Plan provisions, and that the demolition of this listed building fabric is therefore not consistent with the clear intent of the Development Plan.

The applicant provided a response to Council's concerns with the demolition of the listed fabric, indicating that the approach for ground level activation and high quality approach to development the public realm would not be achievable without the removal of the façade. The applicant notes the removal of the façade enables future activation of the street frontage and provides for a high quality entry to the hotel.

The applicant states the existing building on site has a ground floor level considerably higher than the footpath level on both Gawler Place and Pirie Street. This is considered a physical impediment to permeability between outside and inside, and the associated street edge activation. The configuration of the programming at ground level, as it progressed during the pre-lodgement process, has resulted in hotel guest drop-off on Gawler Place. The applicant states that the balance of configuration of this ground level, as presented in this application, requires Pirie Street to operate as the primary entrance, and that the retention of the heritage façade would not accommodate this, given the level differences and lack of permeability – and, subsequently, activation. They deem the necessary penetrations in the 'lowest tier heritage listed fragment' an unreasonable approach when considering the quality of replacement, with its highest opportunity for civic benefit ultimately requiring its demolition.

Whilst the proposal is certainly at odds with a number of heritage policies of the Development Plan, the discussion of retention – when measured against any benefit of new development that requires its demolition – shall be given consideration. Conversely, when considering the erosion of heritage value through numerous 'improvements' on the land; prior to its heritage listing as adopted in the Development Plan as a Local Heritage (Townscape); which has resulted in a largely adulterated version of its original self through the adaptation of various commercial uses and commercial demands, the argument mounts towards its total demolition which would allow for the development to occur in its proposed form. The benefits of the proposal and activation of this prominent corner site is considered to outweigh the benefits of the retention of this particular heritage building, noting that only the retention to a depth of 6 metres to the front façade is required by planning policy.

It is recommended that demolition of the local heritage place should not be allowed as a standalone stage of Development Approval. Should the SCAP agree, the applicant shall be advised of this in an Advisory note attached to any consent of this application.

## **8.6 Traffic Impact, Access and Parking**

### **8.6.1 Site Access and Safety**

Principle of Development Control 224 and 226 of Council Wide Transport and Access – Access Movement seeks that development should provide safe, convenient and comfortable movement; and means of access to land by increasing the permeability of the pedestrian network. The applicant has commissioned Wallbridge Gilbert Aztec (WGA) to undertake a traffic assessment report of the proposal. The report details the on-street parking, pedestrian interface, public transport connectivity, parking demand, trip generation, sight distance requirements, on and off-street parking layout, and loading bay arrangement.

Vehicle access to the building is proposed via a crossover at the southern edge of the site from Gawler Place. This crossover facilitates the on-site function of vehicle ramp to parking at upper levels and the ground floor receiving dock, in addition to the dignitary drop-off located on the land. A secondary crossover to



the north of the crossover described above carries vehicles from the drop-off area back onto Gawler Place; all in a forward motion.

The WGA report acknowledges that implementing pedestrian crossovers on roads can result in safety concerns. They further acknowledge that this is particularly undesirable given the pedestrian-heavy site of Gawler Place. Crash statistics at five Adelaide CBD hotels has been provided, which indicate zero pedestrian related collisions. They justify that the record of this supports the arrangement proposed at 51 Pirie Street. They do not justify, however, the number of crossovers at each, the vehicle speeds, vehicle counts, or other site-specific matters that may influence these figures. In any case, I consider that the good long-views and relatively low speed setting of this intersection attribute that two crossovers will not present any additional safety concerns.

Waste collection movements are further outlined in the Rawtec waste management report, which conclude that an 8.8 metre truck is able to reverse into the loading area for collection purposes. Rawtec, WGA and the City of Adelaide met, and agreed that waste collection should be restricted to 'off-peak' times. A condition to any consent shall be attached which will control this. A number of other waste-related conditions are proposed to ensure the safe collection, which will be outlined later in this report with sub-heading 'Waste Management'.

### **8.6.2 Vehicle Parking**

There is no requirement for the provision of on-site car parking spaces for development within the Capital City Zone.

A total of 45 car parking spaces are proposed over three levels – 15 per level, at levels 2, 3, and 4. The applicant confirms that these 45 spaces are to be used wholly in association with the hotel use, and will not be used for any other purpose. The WGA traffic assessment report further reiterates this.

The location and design of this on-site car parking over levels 2-4 is such that they are not sleeved. It is anticipated, however, that the façade modelling and height above ground level that the car parking will be sufficiently obscured when viewed from the ground, and from other buildings by way of physical barriers which prevent this light from penetrating beyond.

An on-site dignitary drop-off parking area is also provided, which is parallel to the on-street parking area described below, but separated by the footpath along Gawler Place. The dignitary area will accommodate a 7.0m limousine.

The on-street layout, whilst not forming part of this application as it is outside of the area of the 'subject site', is subject to discussions with the City of Adelaide as custodians of this land. Notwithstanding, the report details that two on-street spaces are required to be 'No Parking' zones. In their referral comments, Council indicate that they will not alter on-street parking arrangements to provide for these spaces to be for the exclusive use of the hotel.

### **8.6.3 Traffic Impact**

Wallbridge Gilbert Aztec's assessment of traffic generation concede that the development will generate up to 19 pick-up/drop-off movements per hour. This is an estimation based on real data collected from both Peppers Waymouth Hotel (202 rooms) and the Stamford Plaza Hotel (335 rooms) between 9am and 10am on a 'typical weekday'. The proposed hotel comprises 294 rooms.

WGA summarise that pedestrian sight distance requirements are met, that operational processes would be required to manage vehicles queuing beyond the allocated on-street parking spaces in demand times, the loading bay provides for sufficient space for an 8.8 metre medium rigid truck, and that, overall, the proposal is not expected to cause any significant adverse parking or traffic impacts in the surrounding area.

Council are satisfied with the traffic impacts, and have no objections to this development, adding that the recommendations for the movements of vehicles in the WGA report is supported.

## 8.7 Environmental Factors

Development Plan policy seeks development in the council area should be designed to ensure public safety and security are maintained, essential services are provided without unreasonable disruption or disturbance to the community, micro-climatic impacts are minimised, and that new built form is compatible with the long term sustainability of the environment.

### 8.7.1 Crime Prevention

Policy seeks that development should promote community safety and security in the public realm and within development, through the promotion of natural surveillance through a number of design measures. These include the orientation of windows and doors to the street, avoiding high and blank walls, positioning public areas so they are bound by roads on at least two frontages, creating a mix of night time and day time activities, and ensuring service areas are either secured or exposed to surveillance.

The proposal achieves many crime prevention measures. In particular:

- Both the Gawler Place and Pirie Street frontages adopt a vast amount of glazing at both the ground level and level 1, which affords direct connection with the public realm – through its door openings, and unobscured glazed wall elements.
- A high level of night time and day time activity is expected on the site, given the 24-hour servicing of the reception desk at ground floor.
- Service and other back of house is secured by tilt-up doors.
- The programming of the ground space, locating its lobby, reception, and bar area allows for both night time and day time activities.
- Solid, inactive walls are minimised only to the service area at the southern end of the Gawler Place elevation, with the balance of the ground level being glazed.

The proposal is considered to sufficiently satisfy those provisions of the Development Plan which directly relate to Crime Prevention Through Urban Design under the Council Wide – Environmental section.

### 8.7.2 Noise Emissions

The application is accompanied by a report prepared by Sonus, titled 'Planning Stage Noise Assessment'. The report considers the external noise intrusion into the rooms from traffic in the CBD; the external noise intrusion from mechanical services plant servicing adjacent commercial buildings; and environmental noise from plant and equipment servicing the development to adjacent commercial buildings.

It should be noted that the closest form of residential land use is well in excess of 100 metres from the site, and is well shielded by other buildings which obscure it.

The assessment concludes that the development requires further detail in terms of plant equipment selection to determine its environmental noise impact; and that the external noise intrusion would require specific glazing which is expected through the design development stage.

A standard condition requiring acoustic attenuation is proposed to be attached to any consent given to this application to ensure building occupants and adjacent noise-sensitive uses are not unreasonably disturbed by noise generated through the operation of the development.

### **8.7.3 Waste Management**

The application is accompanied by a waste management plan prepared by Rawtec. The report details the recommended services, including estimated waste and recycling volumes, bin sizes and collection details, waste storage area, and collection requirements. The recommendations of the report align with the *SA Better Practice Guide – Waste Management in Residential or Mixed-Use Developments*.

The proposal is serviced by a dedicated waste area, located at the south-western corner of the building, and accessed through the receiving dock. The report recommends a total of eight 660L waste bins, three 660L 'comingled' recycling bins, nine 660L organic bins, three 660L cardboard recycling bins, two 240L paper recycling bins and one 240L confidential paper recycling bin.

Hotel guests will dispose of their waste and recycling in bins provided in their rooms. Waste and recycling from kitchen will be collected in smaller bins, then loaded into the 660L bins in the kitchen waste rooms, then on to the general bin room for collection once full.

Rawtec are satisfied that the bin room – and its access – are sufficient to service the development.

A waste collection contractor will reverse from Gawler Place into the hotel loading area, who will then collect bins from the waste room and empty them on site. The collection vehicle will then exit the development in a forward direction. The number of collections has been estimated at twenty per week.

The report makes a number of recommendations to ensure the safety of pedestrians, including: the fitment of 360 degree reversing cameras and automatic braking; collection outside of high traffic times (i.e. before 6am and after 7pm); the utilisation of a spotter for the reversing manoeuvre.

Council administration has reviewed the proposed waste management arrangement, and are satisfied that, based on ongoing discussions with Rawtec, the final waste management plan will meet the operational requirements for the development.

### **8.7.4 Energy Efficiency**

Buildings within the Council area should provide adequate thermal comfort and minimise the need for energy use for heating, cooling and lighting through design measures specified in the Council Wide Environmental - Energy section of the Development Plan.

The applicant has provided a Sustainability Management Plan prepared by LCA which accompanied the development application. The report covers a range of topics, and summarises the following initiatives as being incorporated into the design to reduce energy and water consumption; reduce the ecological footprint of the building and its occupants; and improve thermal comfort and air quality:

- An efficient building envelope with high performance insulation
- Glazing units utilising free heating by the sun during winter, while minimising solar heat gains during summer
- Massing efficiency by way of identical floor plates from levels 5 to 27, incorporating identically placed insulation between these floors
- Thermal mass of its concrete slab and column construction
- Provision of shading to glazing of guest rooms through the architectural 'lattice' screen element
- Provision of LED lighting throughout the development
- Mechanical plant which exceeds minimum energy performance standards
- Future roof mounted solar PV system

#### **8.7.5 Wind Analysis**

Development should be designed and sited to minimise micro-climatic impact on adjacent land or buildings, including detrimental effects of wind patterns. The applicant has engaged Arup to provide an environmental wind assessment to determine the suitability of the proposed building with respect to its wind impacts.

The report predicts wind conditions on the ground plane; in and around the site based on local wind climate, topography, and building form. The report states that the height of the building, being considerably higher than surrounding buildings, would be expected to have an impact on the local wind conditions, however the width of Gawler Place, being relatively narrow, would suppress any accelerated flows.

The report concludes that the wind conditions around the site on pedestrian level would not be expected to change significantly compared with the current wind condition. The greatest increase would be expected to be for local winds along Gawler Place between the proposed building and 63 Pirie Street for winds from the north or south quadrants, where channelled flow would be expected between these buildings. This flow would be expected to be slightly faster, but more constant with less turbulence.

Arup state that, from a wind comfort perspective, the wind conditions at the majority of locations around the development site would be expected to be classified as suitable for pedestrian standing with the area to the east of the development along Gawler Place being classified as suitable for pedestrian walking. The wind conditions in these areas meet the intended use of the space, and the locations within the proposed development would pass the safety criterion.

The report concludes that numerical or physical modelling of the development would be required, which they state as best conducted during detailed design. A condition will be attached to any consent given to this application to satisfy the SCAP of the impacts of wind.

### 8.7.6 Stormwater Management

Development Plan policy encourages stormwater management systems designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters and protect downstream receiving waters from high level of flow.

The applicant has engaged Wallbridge Gilbert Aztec (WGA) to provide a stormwater management plan with respect to the proposal.

The stormwater management plan outlines that the adoption of the same methodology as the existing building will occur for the new building, where only roof runoff management is required. All roof runoff will be collected by downpipes and discharged to the water table on Pirie Street and Gawler Place via steel box drain and traditional gravity feed rainwater system. Given the flow rates, 5 separate box drains are required across the footpath. Management of these will be in conjunction with consultation with the City of Adelaide.

### 8.7.7 Site Contamination

Policy in the Environmental – Contaminated Sites section of Council Wide provisions of the Development Plan recommend that where there is evidence or reasonable suspicion that land 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 applicant provides no evidence to suggest the site is suitable for development as a hotel with ancillary mixed uses. A condition is proposed to be attached to any consent given to this application that a statement from a suitably qualified environmental engineer demonstrate suitability of the site for its intended use be provided prior to the commencement of construction.

## 8.8 Signage

At the time of assessment, the hotel operator had not been announced. Accordingly, an assessment against components which would comprise signage have not been made, as this level of detail had not been provided.

In particular, the drawing which depicts signage on its western elevation below the plant level will be amended by way of a future application, at the time of the lodging of details of building signage.

## 9. CONCLUSION

The proposed development raises the following key planning concerns:

- Total demolition of a Local Heritage (Townscape) Place;
- Interface between pedestrians and vehicles, particularly with respect to the crossovers required to provide a drop-off area and servicing on the site which is accessed from Gawler Place, and;
- Un-sleeved car parking on upper levels of the building.

The applicant provided a Heritage Impact Assessment which accompanied the application documentation. This assessment did not provide a thorough justification for the demolition of all heritage fabric on the site. It made only an assessment of the place itself, and listed the changes made over the years which have eroded its original heritage qualities (since its original construction). Council are not supportive of the demolition of this Local Heritage (Townscape) Place, as it is clearly at odds with the provisions of the Development Plan

which would seek its retention, and where possible, its integration with any new development. The applicant responded to the concerns raised by Council with respect to the demolition, with their response detailing reasons for demolition to include:

- The need to totally demolish to allow for future activation of the street frontages;
- Providing a new, high quality entrance for the hotel;
- The lowest-tier of heritage listing applied to the building;
- The amount of heritage fabric remaining (the front façade only);
- The finished floor levels of the building which presents significant access issues;
- Further fragmentation of the Local Heritage (Townscape) Place if integration with any new build is considered;
- The support of the Government Architect to provide a high quality public realm outcome.

To gain support, the reasons for demolition of a Local Heritage (Townscape) Place must be greater than those for retention. In reviewing the reasons provided for the demolition, I consider it an appropriate approach to consider the demolition, given that the retention of the façade – the portion listed – will present significant challenges for any future development of the site.

The introduction of two crossovers to Gawler Place for accessing the site presents concerns to pedestrian and vehicle management; particularly important for this highly pedestrianised inner central business district location. The programming of spaces beyond the property boundary includes a servicing area (loading, waste management, and upper level car parking) towards the southern end of the Gawler Place boundary, and a dignitary drop-off area located to the north of this. Justification to the management of the pedestrian-vehicle impacts are noted to include out-of-hours waste collection, a spotter to increase safety when reversing manoeuvres are undertaken, and the frequency of use of the dignitary drop-off – where on-street drop-off using parking bays is more likely. Council note that they will not alter on-street parking to provide exclusive use for the hotel, so these spaces will be shared – and used as a ‘first in’ arrangement.

Locating car parking on the site, with the outcomes being negatively compounded by the positioning this un-sleeved (and inactive) at primary frontages, goes against planning policy. Whilst there are 45 spaces which are strictly for uses relating only to the hotel, the vehicle movements will also impact the pedestrian environment of this location. In addition, the location of car parking over three levels is proposed, with no opportunity for any true activation at these levels to the building’s primary frontages of Gawler Place and Pirie Street. The applicant provides screening which will mitigate light-spill from occurring from vehicle headlights into adjacent spaces, and the architecture of the building is consistent between the glazing and architectural screening on these levels as it is with the upper levels with hotel rooms, which should lessen the visual impact of the use beyond the edge treatment. I am generally satisfied with how this will appear, but note that there are concerns with the outcome of this design inclusion – however this is not a critical or fatal aspect of the proposal.

It is concluded that the proposed development should be granted 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 7 June 2018.
- 3) RESOLVE to grant Development Plan Consent to the proposal by CES Pirie Hotel (SA) Pty Ltd for the demolition of all buildings on the site, including a Local Heritage (Townscape) Place and construction of a twenty-eight (28) storey hotel building, with ballroom, meeting rooms, and ancillary car parking at 51 Pirie Street, Adelaide, subject to the following conditions of consent.

#### PLANNING CONDITIONS

1. The development herein granted Development Plan Consent shall be undertaken and completed in accordance with the stamped plans and documentation, except where varied by conditions below.
2. Prior to Development Approval being issued for the first stage (should staged development be proposed), 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.
3. Prior to Development Approval for the super structure works (should staged development be proposed), a wind modelling assessment that includes numerical or physical modelling of the development shall be undertaken by a qualified engineer, and submitted to the satisfaction of the State Commission Assessment Panel. Any recommendations for changes to the built form shall be approved by the SCAP.
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 to the reasonable satisfaction of the State Commission Assessment Panel prior to the occupation and use of the development.
5. Clear sight lines for users of the car park entry shall be provided to ensure pedestrian safety along the Gawler Place footpath and shall be provided at all times in accordance with Australian Standard AS/NZS 2890.1:2004 Off-street Car Parking.
6. All bicycle parking spaces shall be designed and constructed in accordance with Australian Standard AS/NZS 2890.1:2015.
7. The finished floor level of any ground floor entry points including the car park entry and exit points shall match that of the existing footpath unless otherwise agreed to by the State Commission Assessment Panel.
8. All external lighting on the subject land shall be designed and constructed to conform to Australian Standard AS/NZS 4282-1997.
9. Lighting shall be installed to the verandah at street level on Pirie Street in accordance with the City of Adelaide council's guideline titled 'Under Verandah/Awning Lighting Guidelines' at all times to the reasonable satisfaction of the council and prior to the occupation or use of the Development. Such lighting shall always be operational during the hours of darkness to the reasonable satisfaction of Council.
10. Air conditioning, air extraction and other plant material including ducting shall be sited and acoustically screened such that no unreasonable nuisance or loss of amenity is caused to users of properties in the locality, to the reasonable satisfaction of the State Commission Assessment Panel.

## ADVISORY NOTES

- a. You are advised that the State Commission Assessment Panel does not support the granting of staged consent for the demolition of the Local Heritage (Townscape) Place in isolation. The Development Approval for its demolition shall be incorporated with substructure works (at a minimum) to provide greater comfort that the building will not be demolished without the new development commencing.
- b. This Development Plan Consent will expire after twelve 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.
- c. The applicant is also advised that any act or work authorised or required by this Notification must be substantially commenced within one year of the final Development Approval issued by Council and substantially completed within three years of the date of final Development Approval issued by Council, unless that Development Approval is extended by the Council.
- d. Development Approval will not be granted until Building Rules Consent and an Encroachment Consent have been obtained. A separate application must be submitted for such consents. No building work or change of classification is permitted until the Development Approval has been obtained.
- e. The application will require approval in accordance with the Airports Act 1996 and the Airports (Protection of Airspace) Regulations 1996 and therefore will be forwarded to the Department of Infrastructure and Regional Development for their approval. If the development is approved by the Department of Infrastructure, Regional Development and Cities, any associated lighting would also need to conform to the airport lighting restrictions and shielded from aircraft flight paths. Crane operations associated with construction, if approved, will also be subject to a separate application. Should you require any additional information, please contact Brett Eaton, Airside Operations Manager, Adelaide Airport Limited on 08 8308 9245.
- f. An Encroachment Permit will be separately issued for the proposed encroachment into the public realm when Development Approval is granted. In particular, your attention is drawn to the following:
  - An annual fee may be charged in line with the Encroachment Policy.
  - Permit renewals are issued on an annual basis for those encroachments that attract a fee.
  - Unauthorised encroachments will be required to be removed.
- g. Any activity in the public realm, whether it be on the road or footpath, requires a City Works Permit. 48 hours' notice is required before commencement of any activity. The City Works Guidelines detailing the requirements for various activities, a complete list of fees and charges and an application form can all be found on Council's website at [www.cityofadelaide.com.au](http://www.cityofadelaide.com.au). When applying for a City Works Permit you will be required to supply the following information with the completed application form:
  - A Traffic Management Plan (a map which details the location of the works, street, property line, hoarding/mesh, lighting, pedestrian signs, spotters, distances etc);
  - Description of equipment to be used;
  - A copy of your Public Liability Certificate (minimum cover of \$20 million required);
  - Copies of consultation with any affected stakeholders including businesses or residents.



- h. Any work relating to crossing places will be undertaken by council and the cost of the work will be charged to the applicant. A separate application for the crossing places is required and the applicant can obtain a form from Customer Service at 25 Pirie Street, Adelaide or by telephone on 8203 7236. A quotation for the work will be provided by council prior to the work being undertaken.
- i. The applicant is encouraged to contact the City of Adelaide as early as possible to commence a collaborative design process with respect to the proposed changes in the public realm.
- j. Signage does not form part of this development application. No advertising display or signage shall be erected or displayed on the subject land without any required Development Approval being obtained first.
- k. 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).
- l. The applicant, or any person with the benefit of this consent, must ensure that any consent/permit from other authorities or third parties that may be required to undertake the development, have been granted by that authority prior to the commencement of the development.
- m. The applicant is reminded of their obligations under the *Local Nuisance and Litter Control Act 2016* and the *Environment Protection Act 1993*, with regard to the appropriate management of environmental impacts and matters of local nuisance. For further information about appropriate management of construction sites, please contact the City of Adelaide on 8203 7203.



Will Gormly  
**Senior Planning Officer**  
**PLANNING AND LAND USE SERVICES**  
**DEPARTMENT OF PLANNING, TRANSPORT and INFRASTRUCTURE**

**51 PIRIE STREET**

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**| 51 PIRIE STREET HOTEL**



02. FOOD AND BEVERAGE OUTLETS AND RELATED SUPPORT AREAS				
NUMBER	NAME	AREA	DEPARTMENT	Count
GROUND FLOOR				
1601	LOBBY LOUNGE DRINKING / SEATING	60 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
1621	BACK-UP PANTRY	25 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
1625	HUB BAR COUNTER	21 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
1631	ARRIVAL/DEPARTURE AREA	25 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2497	MARKET	22 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
LEVEL 1				
668	LEVEL 1 GUEST RETREAT	97 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
LEVEL 26				
1671	EXECUTIVE CLUB BOARDROOM	24 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
1672	EXECUTIVE CLUB MALE RESTROOM	14 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
1673	EXECUTIVE CLUB FEMALE RESTROOM	16 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2299	EXECUTIVE CLUB	139 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2501	WC DDA	5 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2505	EXECUTIVE CLUB LIBRARY	23 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2506	BACK-UP KITCHEN	24 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
LEVEL 27				
1820	BAR COUNTER / SEATING	31 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
1821	MALE WC	22 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
1822	FEMALE WC	22 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
1823	WC DDA	6 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2261	SKYBAR	172 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2510	KITCHEN AND CHEFS STATION	98 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2511	DINING	200 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2513	BACK-UP PANTRY	23 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2527	OPEN KITCHEN AND DISPLAY COUNTERS	89 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
2530	HOST STATION / ENTRY AREA	15 m <sup>2</sup>	FOOD & BEVERAGE OUTLETS AND RELATED SUPPORT AREAS	1
23		1173 m <sup>2</sup>		

03. EVENT FACILITIES				
NUMBER	NAME	AREA	DEPARTMENT	Count
LEVEL 7 - BALLROOM				
1709	EVENT KITCHEN	100 m <sup>2</sup>	EVENT FACILITIES	1
1711	GRAND BALLROOM PRE-FUNCTION	138 m <sup>2</sup>	EVENT FACILITIES	1
1713	MALE WC	30 m <sup>2</sup>	EVENT FACILITIES	1
1714	FEMALE WC	26 m <sup>2</sup>	EVENT FACILITIES	1
1715	WC DDA	10 m <sup>2</sup>	EVENT FACILITIES	1
1716	CLOAKROOM	20 m <sup>2</sup>	EVENT FACILITIES	1
1717	GRAND BALLROOM PRE-FUNCTION	110 m <sup>2</sup>	EVENT FACILITIES	1
2272	FURNITURE AND EQUIPMENT STOREROOM	36 m <sup>2</sup>	EVENT FACILITIES	1
2549	BALLROOM	377 m <sup>2</sup>	EVENT FACILITIES	1
LEVEL 8 - ADMINISTRATION				
1720	STORE	51 m <sup>2</sup>	EVENT FACILITIES	1
1728	BRIDAL WC	7 m <sup>2</sup>	EVENT FACILITIES	1
1729	VIP/BRIDAL	31 m <sup>2</sup>	EVENT FACILITIES	1
2066	AV STORE	19 m <sup>2</sup>	EVENT FACILITIES	1
2498	STORE	53 m <sup>2</sup>	EVENT FACILITIES	1
LEVEL 9 - MEETING				
1737	MEETING ROOM A	142 m <sup>2</sup>	EVENT FACILITIES	1
1740	MEETING ROOM B	88 m <sup>2</sup>	EVENT FACILITIES	1
1741	MEETING ROOM B	88 m <sup>2</sup>	EVENT FACILITIES	1
1742	BACK-UP KITCHEN	55 m <sup>2</sup>	EVENT FACILITIES	1
1744	STORE	55 m <sup>2</sup>	EVENT FACILITIES	1
1745	FEMALE WC	34 m <sup>2</sup>	EVENT FACILITIES	1
1746	MALE WC	20 m <sup>2</sup>	EVENT FACILITIES	1
1747	WC DDA	4 m <sup>2</sup>	EVENT FACILITIES	1
1748	PRE-EVENT	98 m <sup>2</sup>	EVENT FACILITIES	1
2288	MEETING ROOM A	147 m <sup>2</sup>	EVENT FACILITIES	1
2520	PRE-EVENT	119 m <sup>2</sup>	EVENT FACILITIES	1
25		1844 m <sup>2</sup>		

04. LOBBY AND PUBLIC AREAS				
NUMBER	NAME	AREA	DEPARTMENT	Count
GROUND FLOOR				
24	LOBBY	146 m <sup>2</sup>	LOBBY & PUBLIC AREAS	1
197	DDA	8 m <sup>2</sup>	LOBBY & PUBLIC AREAS	1
238	FEMALE	25 m <sup>2</sup>	LOBBY & PUBLIC AREAS	1
298	MALE	22 m <sup>2</sup>	LOBBY & PUBLIC AREAS	1
385	LUGGAGE STORAGE	19 m <sup>2</sup>	LOBBY & PUBLIC AREAS	1
1608	RECEPTION	34 m <sup>2</sup>	LOBBY & PUBLIC AREAS	1
1613	SAFETY DEPOSIT BOX ROOM	5 m <sup>2</sup>	LOBBY & PUBLIC AREAS	1
2521	OFFICE	25 m <sup>2</sup>	LOBBY & PUBLIC AREAS	1
6		283 m <sup>2</sup>		

05. FITNESS AND RECREATIONAL FACILITIES				
NUMBER	NAME	AREA	DEPARTMENT	Count
LEVEL 6				
1656	FEMALE CHANGE	57 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
1657	MALE CHANGE	54 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
1659	GYMNASIUM	162 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
1662	POOL DECK	392 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
1675	DDA CHANGE	19 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
1682	YOGA	37 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
1703	GYM MALE POWDER ROOM	32 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
1704	GYM FEMALE POWDER ROOM	28 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
2500	POOL EQUIPMENT STORE	33 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
2543	REFRESHMENT COUNTER	8 m <sup>2</sup>	FITNESS AND RECREATIONAL FACILITIES	1
10		753 m <sup>2</sup>		

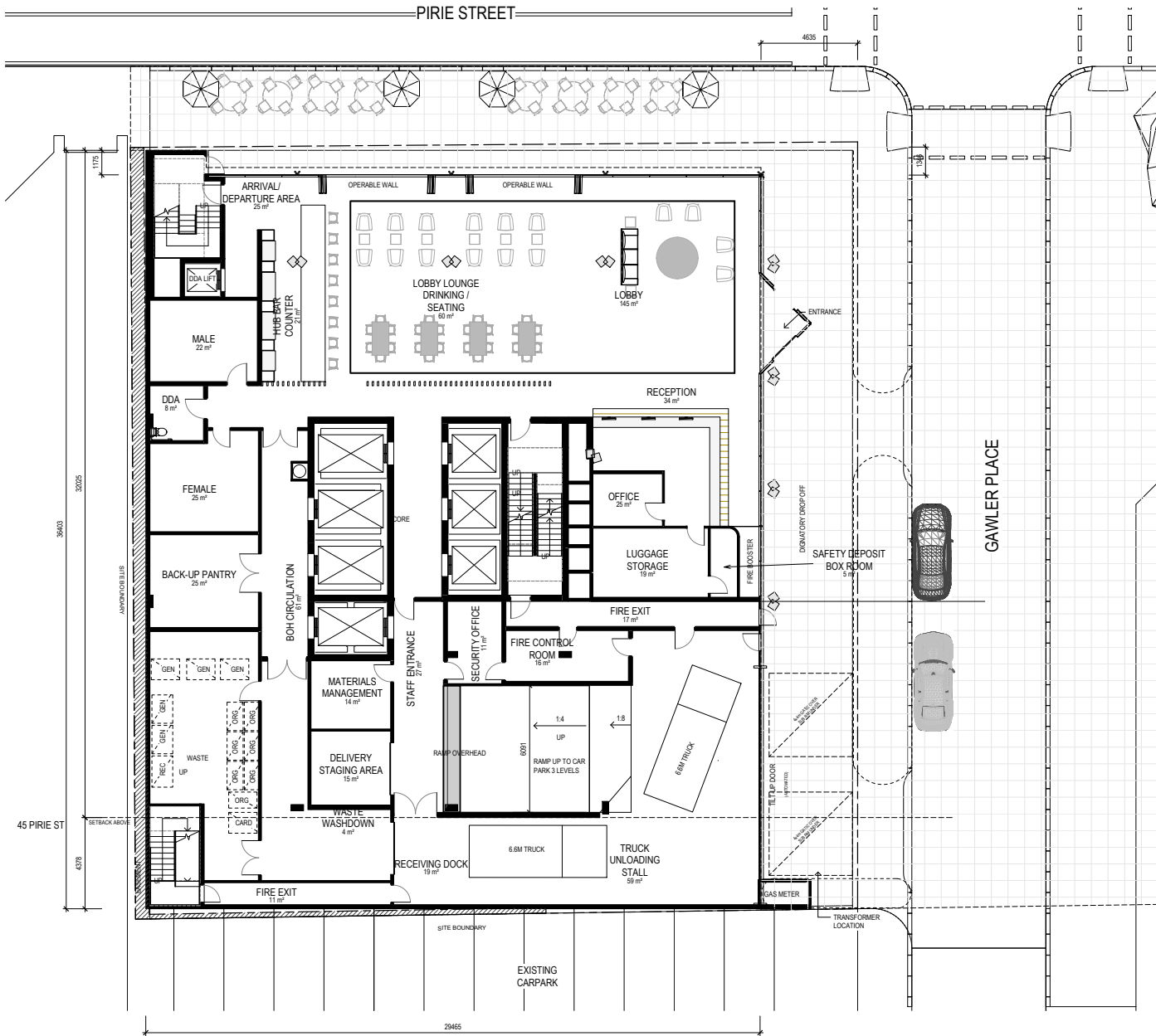
06. ADMINISTRATIVE OFFICES				
NUMBER	NAME	AREA	DEPARTMENT	Count
LEVEL 8 - ADMINISTRATION				
1721	COMPUTER / PABX EQUIPMENT ROOM	67 m <sup>2</sup>	ADMINISTRATIVE OFFICES	1
2287	OPEN OFFICE	201 m <sup>2</sup>	ADMINISTRATIVE OFFICES	1
2		267 m <sup>2</sup>		

07. B.O.H SUPPORT SERVICES				
NUMBER	NAME	AREA	DEPARTMENT	Count
LIFT PIT				
1634	LIFT PIT	104 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
BASEMENT				
1642	MSB ROOM	44 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1643	NBN ROOM	11 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1644	FURNITURE AND UPHOLSTERY STOREROOM	21 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1646	OPERATING EQUIPMENT STOREROOM	51 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1647	ENGINEERING STOREROOM	23 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1665	TRANSFORMER LOCATION	75 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2250	PLANT	340 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2263	MISC STORE	14 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2270	EMERGENCY LAUNDRY	21 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2274	SOILED LINEN SORTING AND CHUTE ROOM	37 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2284	CLEAN LINEN STORE	21 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2285	HOUSEKEEPING STORE	47 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2534	FLOWER PREP	18 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2538	ENGINEERING OFFICE	14 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2539	ENGINEERING TRADE SHOP	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
GROUND FLOOR				
227	WASTE	56 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
240	DELIVERIES	111 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1624	SECURITY OFFICE	11 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1627	MATERIALS MANAGEMENT	14 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1632	FIRE CONTROL ROOM	19 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1633	WASTE WASH-DOWN	4 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1636	DELIVERY STAGING AREA	15 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2533	RECEIVING DOCK	19 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2541	TRUCK UNLOADING STALL	59 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 5				
1694	POOL PLANT	161 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2264	EMERGENCY LAUNDRY AND UNIFORM STORE	85 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 6				
2267	POOL LINEN TOWEL STORE	53 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 10 - PLANT				
1762	HYDRAULIC PLANT	910 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2320	MECHANICAL PLANT	520 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 11				
1798	HOUSEKEEPING	28 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1799	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2398	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 12				
1800	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1889	HOUSEKEEPING	28 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1920	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 13				
1915	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1916	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2039	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 14				
1940	HOUSEKEEPING	28 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1941	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2044	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 15				
1964	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1966	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2057	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 16				
1889	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
1990	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2054	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 17				
2013	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2014	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2058	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 18				
2063	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2064	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1

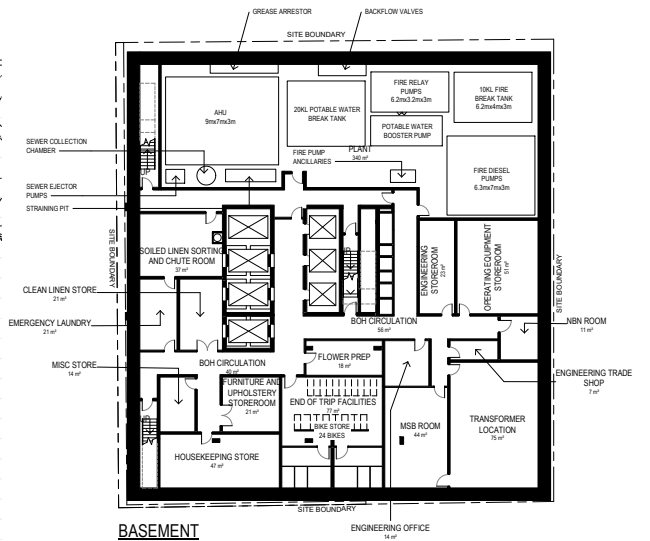
07. B.O.H SUPPORT SERVICES				
NUMBER	NAME	AREA	DEPARTMENT	Count
LEVEL 19				
2091	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2175	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2176	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2238	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 20				
2203	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2204	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2245	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 21				
2247	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2276	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2277	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 22				
2249	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2325	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2329	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 23				
2253	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2388	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2389	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 24				
2265	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2447	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2448	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 25				
2295	STORE	6 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2494	HOUSEKEEPING	27 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2495	STORE	7 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 26				
2480	HOUSEKEEPING	24 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 27				
2535	FOOD AND BEVERAGE STORE	66 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2536	MEAT/POULTRY/FISH PREP STATION	40 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
2537	COLD STORE	34 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
LEVEL 28 ROOF				
2540	PLANT	355 m <sup>2</sup>	B.O.H SUPPORT SERVICES	1
80		3384 m <sup>2</sup>		

08. EMPLOYEE FACILITIES				
NUMBER	NAME	AREA	DEPARTMENT	Count
BASEMENT				
1645	END OF TRIP FACILITIES	77 m <sup>2</sup>	EMPLOYEE FACILITIES	1
LEVEL 5				
1688	EMPLOYEE RESTAURANT	112 m <sup>2</sup>	EMPLOYEE FACILITIES	1
1695	MALE EMPLOYEE WC/SHOWER/LOCKERS	111 m <sup>2</sup>	EMPLOYEE FACILITIES	1
1696	FEMALE EMPLOYEE WC/SHOWER/LOCKERS	111 m <sup>2</sup>	EMPLOYEE FACILITIES	1
1698	EMPLOYEE RESTAURANT SERVING LINE	25 m <sup>2</sup>	EMPLOYEE FACILITIES	1
2265	EMPLOYEE LOUNGE	32 m <sup>2</sup>	EMPLOYEE FACILITIES	1
2266	MEDICAL CENTRE	10 m <sup>2</sup>	EMPLOYEE FACILITIES	1
LEVEL 8 - ADMINISTRATION				
2282	WC STAFF FEMALE	17 m <sup>2</sup>	EMPLOYEE FACILITIES	1
2522	WC STAFF MALE	18 m <sup>2</sup>	EMPLOYEE FACILITIES	1
9		512 m <sup>2</sup>		

09. HOTEL PARKING FACILITIES				
NUMBER	NAME	AREA	DEPARTMENT	Count
LEVEL 1				
2251	CAR PARK	562 m <sup>2</sup>	HOTEL PARKING FACILITIES	1
LEVEL 3				
1649	CAR PARK	886 m <sup>2</sup>	HOTEL PARKING FACILITIES	1
LEVEL 4				
1882	CAR PARK	886 m <sup>2</sup>	HOTEL PARKING FACILITIES	1
3		2334 m <sup>2</sup>		



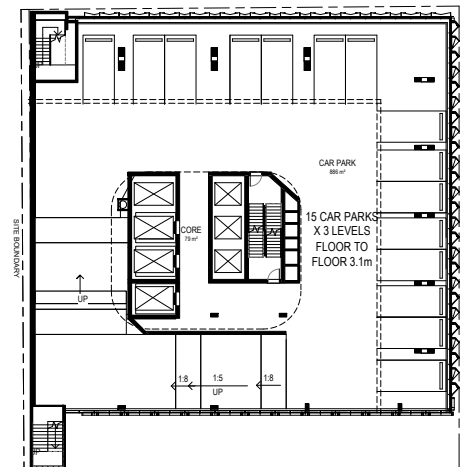
GROUND FLOOR  
SCALE 1:100



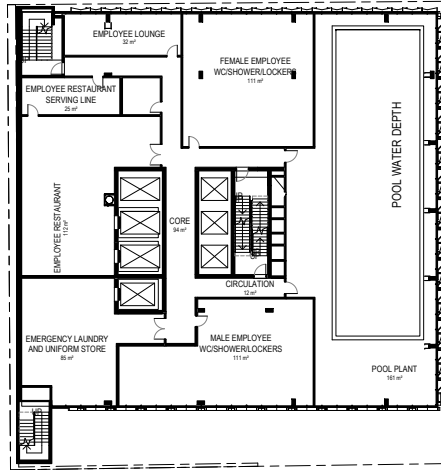
BASEMENT  
SCALE 1:200



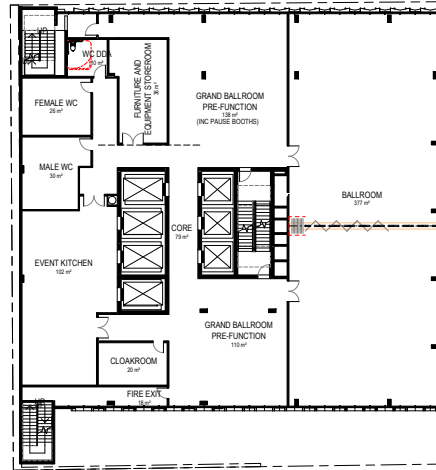
LEVEL 1  
SCALE 1:200



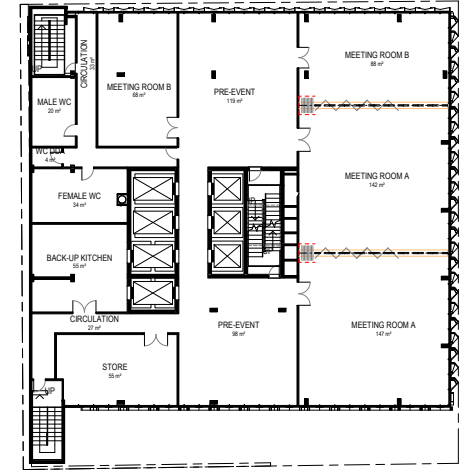
LEVEL 2-4  
SCALE 1:200



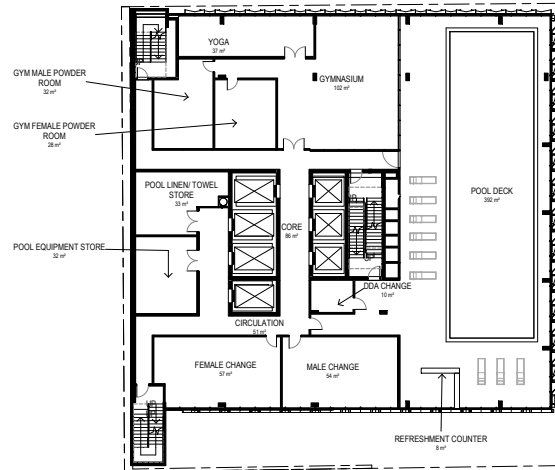
**LEVEL 5 - POOL PLANT**  
SCALE 1:200



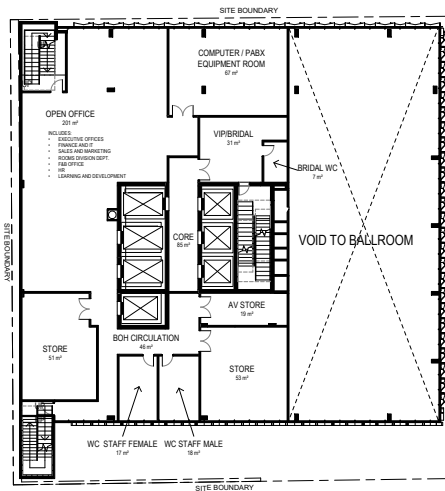
**LEVEL 7 - BALLROOM**  
SCALE 1:200



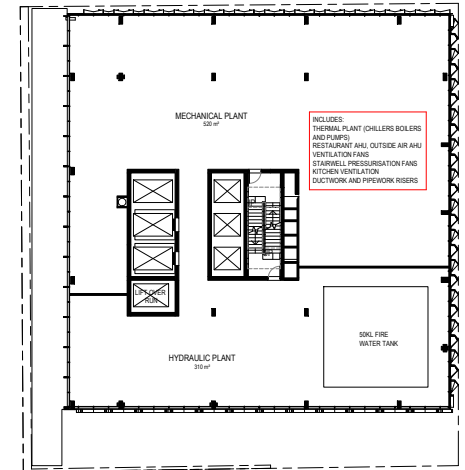
**LEVEL 9 - MEETING ROOMS**  
SCALE 1:200



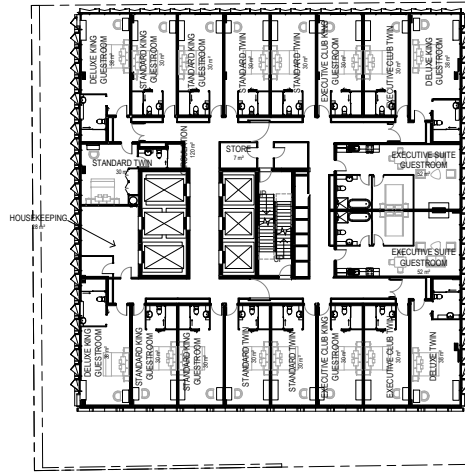
**LEVEL 6 - POOL AND GYM**  
SCALE 1:200



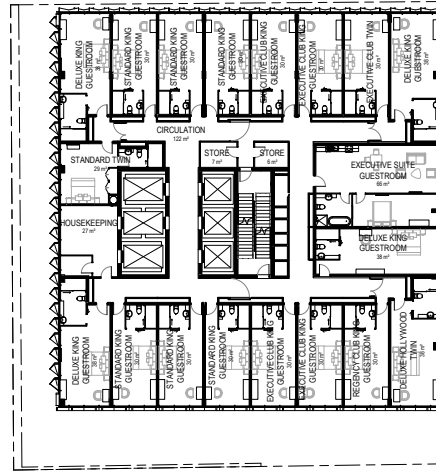
**LEVEL 8 - ADMINISTRATION**  
SCALE 1:200



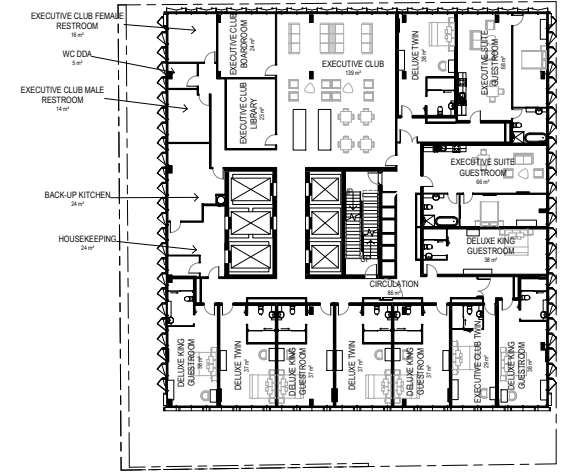
**LEVEL 10 PLANT**  
SCALE 1:200



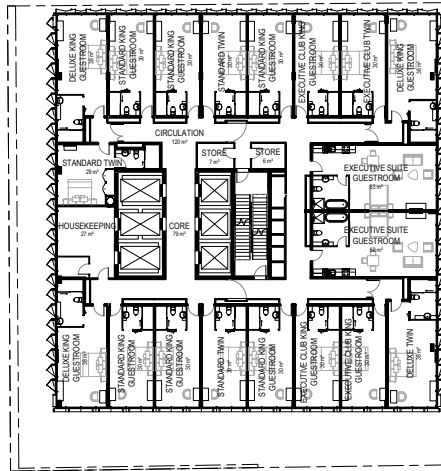
LEVEL 11-22  
SCALE 1: 200



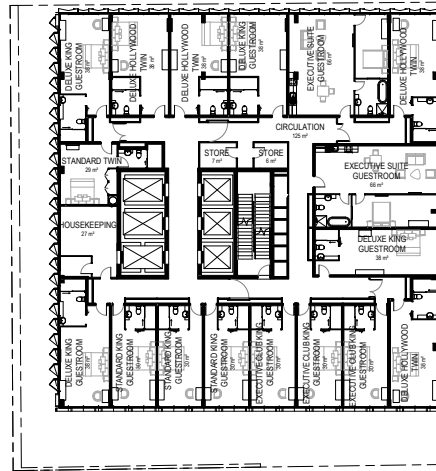
LEVEL 24  
SCALE 1: 200



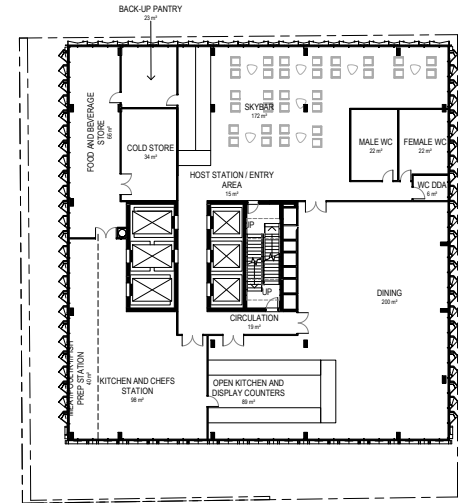
LEVEL 26  
SCALE 1: 200



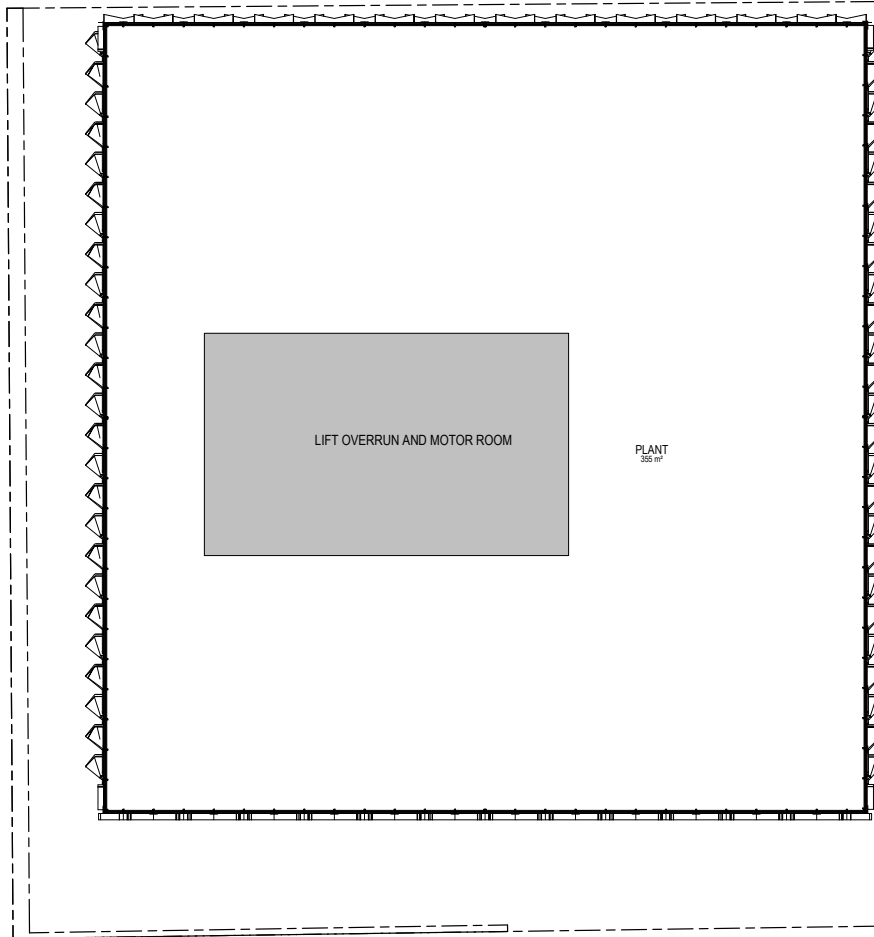
LEVEL 23  
SCALE 1: 200



LEVEL 25  
SCALE 1: 200

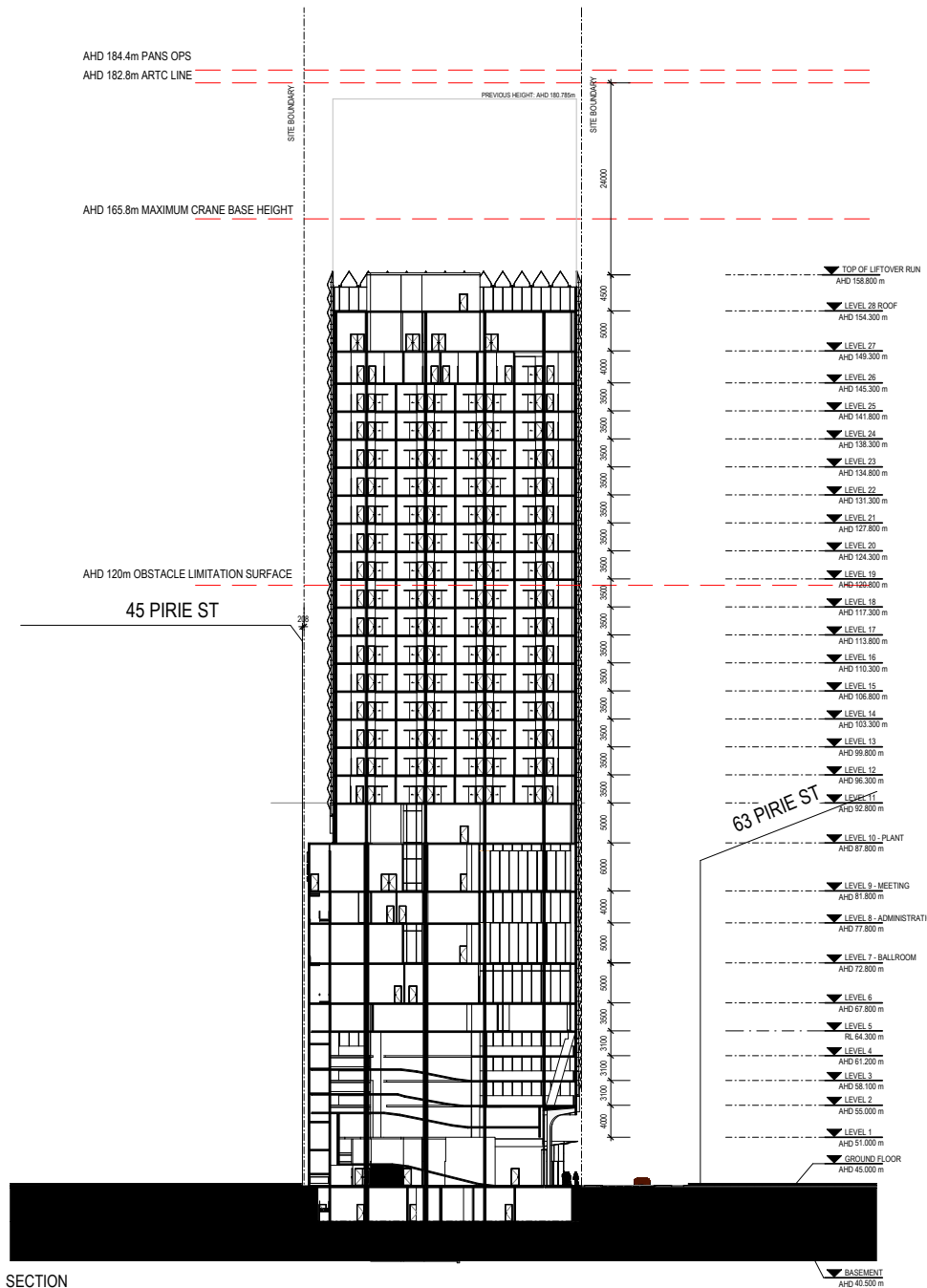


LEVEL 27  
SCALE 1: 200

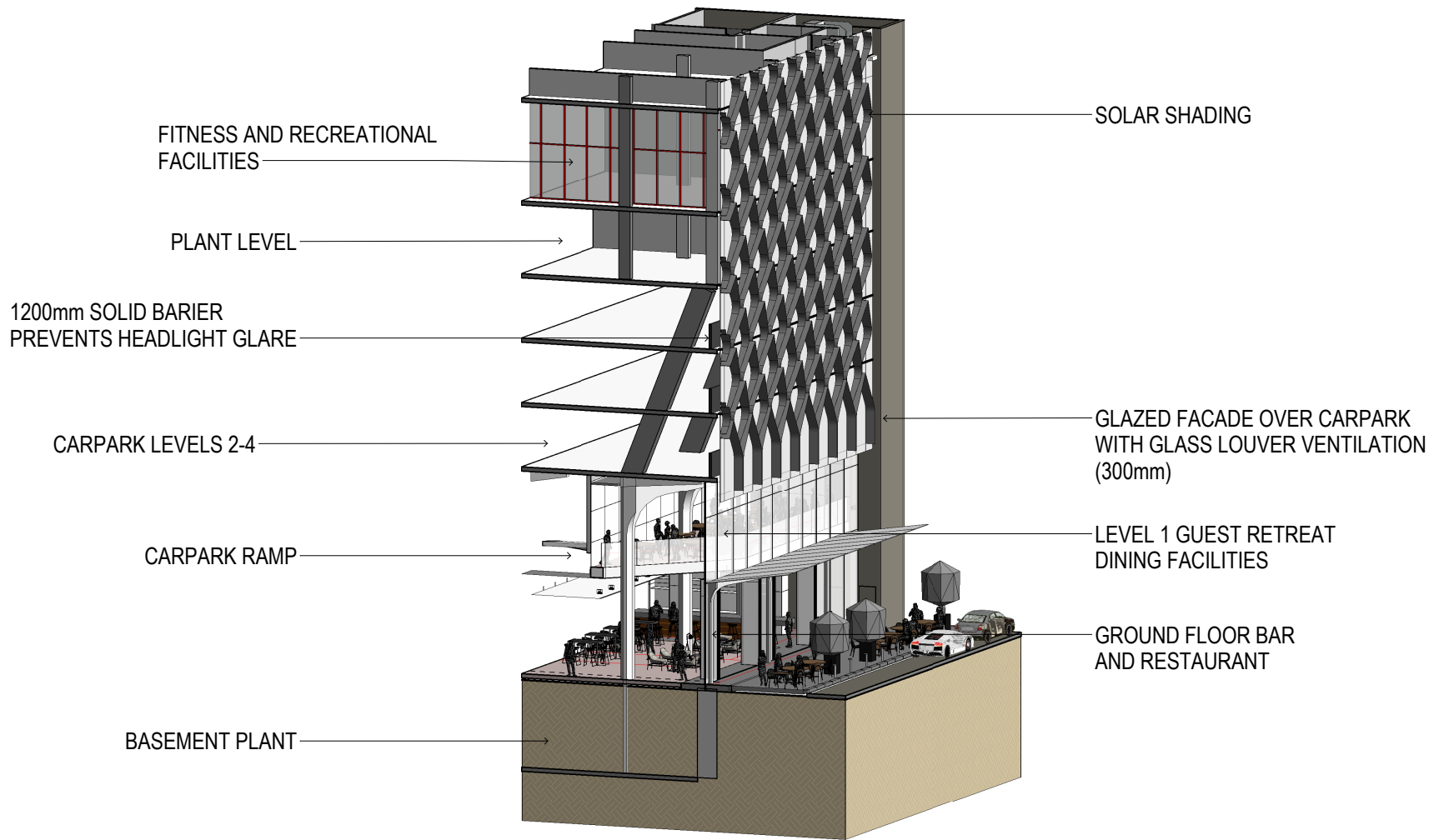


LEVEL 28  
SCALE 1:100





SECTION  
SCALE 1 : 300



FITNESS AND RECREATIONAL FACILITIES

PLANT LEVEL

1200mm SOLID BARRIER PREVENTS HEADLIGHT GLARE

CARPARK LEVELS 2-4

CARPARK RAMP

BASEMENT PLANT

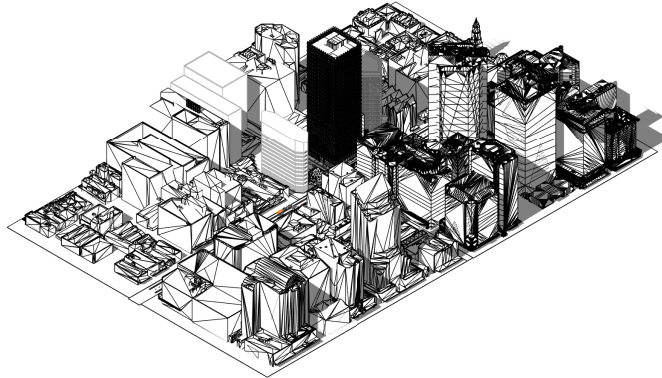
SOLAR SHADING

GLAZED FACADE OVER CARPARK WITH GLASS LOUVER VENTILATION (300mm)

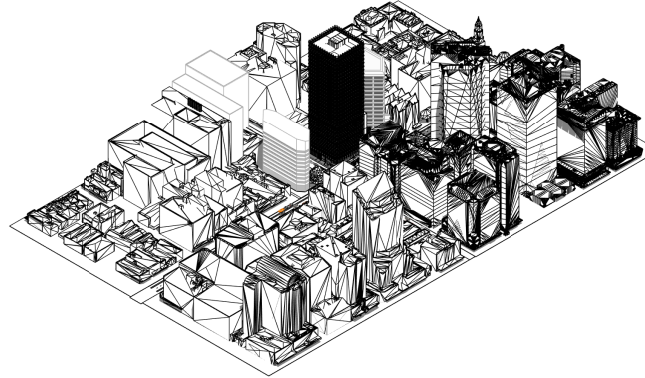
LEVEL 1 GUEST RETREAT DINING FACILITIES

GROUND FLOOR BAR AND RESTAURANT

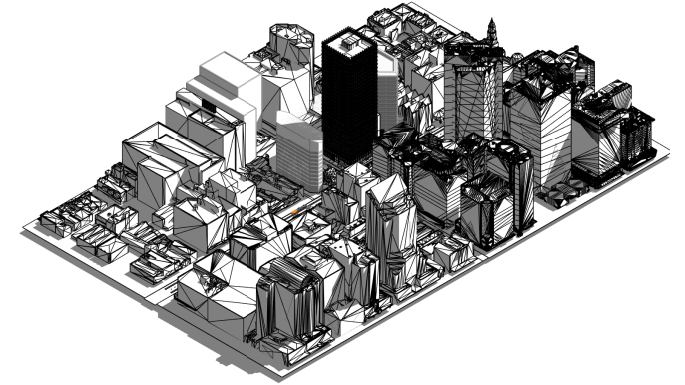
**\*\* CARPARK SECTION**  
SCALE



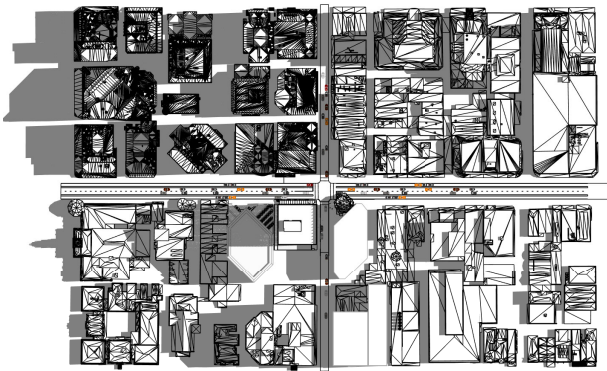
ISO 9AM



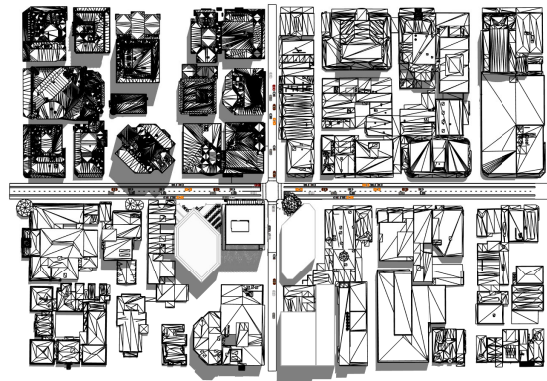
ISO 12PM



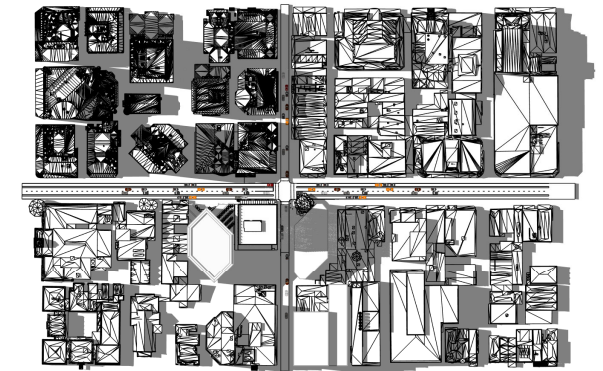
ISO 3PM



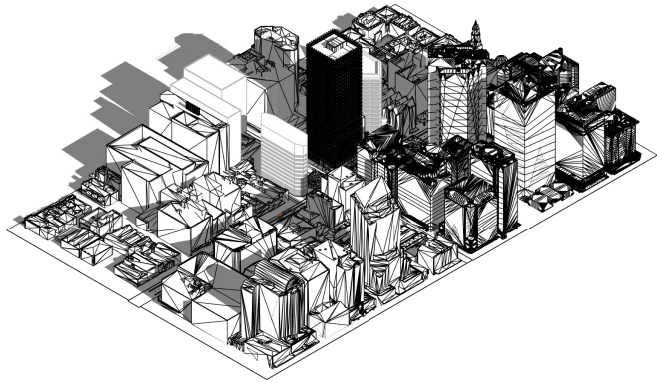
PLAN - 9AM



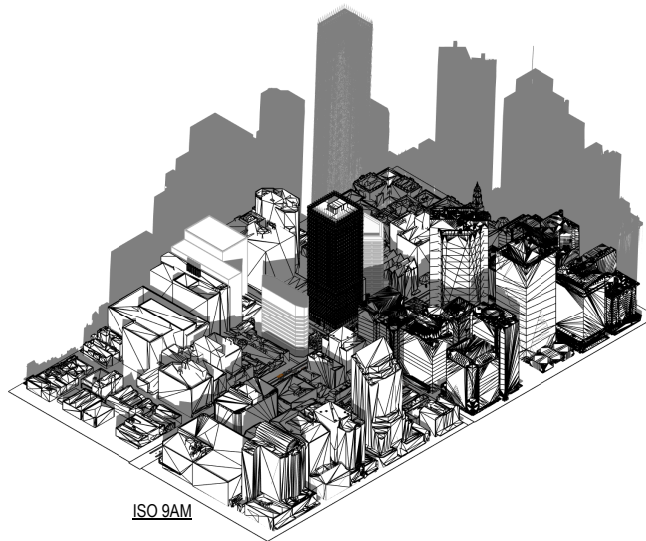
PLAN - 12PM



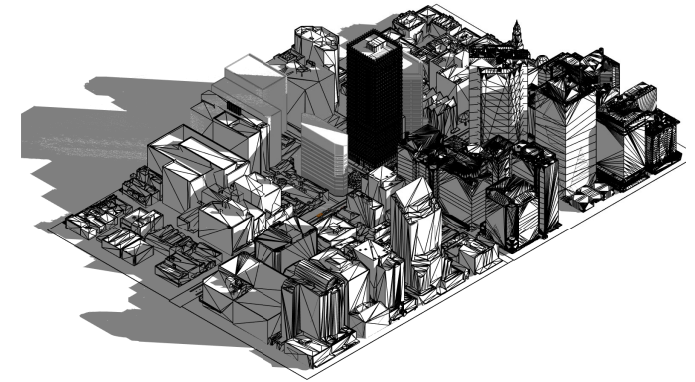
PLAN - 3PM



ISO 12PM



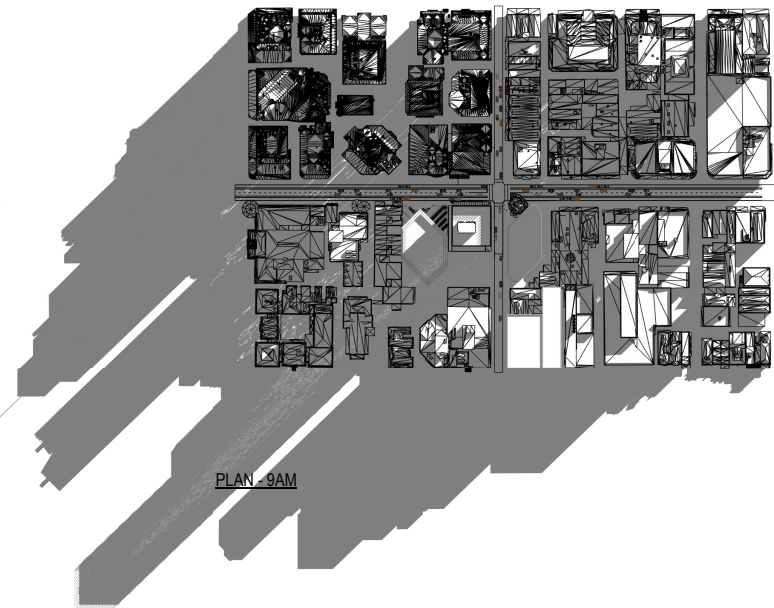
ISO 9AM



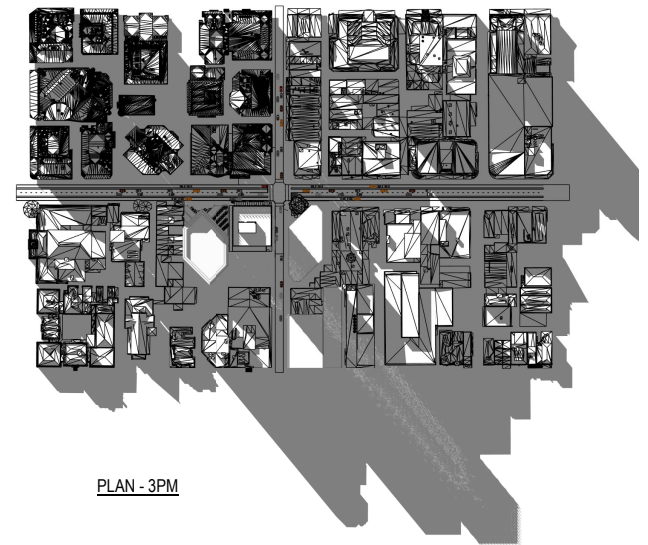
ISO 3PM



PLAN - 12PM



PLAN - 9AM



PLAN - 3PM

AHD 184.4 PANS OPS

AHD 182.8 ARTC LINE

- TOP OF LFTOVER RUN  
AHD 158.800 m
- LEVEL 28 ROOF  
AHD 154.300 m
- LEVEL 27  
AHD 149.300 m
- LEVEL 26  
AHD 145.300 m
- LEVEL 25  
AHD 141.800 m
- LEVEL 24  
AHD 138.300 m
- LEVEL 23  
AHD 134.800 m
- LEVEL 22  
AHD 131.300 m
- LEVEL 21  
AHD 127.800 m
- LEVEL 20  
AHD 124.300 m
- LEVEL 19  
AHD 120.800 m
- LEVEL 18  
AHD 117.300 m
- LEVEL 17  
AHD 113.800 m
- LEVEL 16  
AHD 110.300 m
- LEVEL 15  
AHD 106.800 m
- LEVEL 14  
AHD 103.300 m
- LEVEL 13  
AHD 99.800 m
- LEVEL 12  
AHD 96.300 m
- LEVEL 11  
AHD 92.800 m
- LEVEL 10 - PLANT  
AHD 87.800 m
- LEVEL 9 - MEETING  
AHD 81.800 m
- LEVEL 8 - ADMINISTRATION  
AHD 77.800 m
- LEVEL 7 - BALLROOM  
AHD 72.800 m
- LEVEL 6  
AHD 67.800 m
- LEVEL 5  
AHD 64.300 m RL
- LEVEL 4  
AHD 61.200 m
- LEVEL 3  
AHD 58.100 m
- LEVEL 2  
AHD 55.000 m
- LEVEL 1  
AHD 51.000 m
- GROUND FLOOR  
AHD 45.000 m

PIRIE STREET

45 PIRIE ST

AHD 45

45 PIRIE ST

GAWLER PLACE

- TOP OF LFTOVER RUN  
AHD 158.800 m
- LEVEL 28 ROOF  
AHD 154.300 m
- LEVEL 27  
AHD 149.300 m
- LEVEL 26  
AHD 145.300 m
- LEVEL 25  
AHD 141.800 m
- LEVEL 24  
AHD 138.300 m
- LEVEL 23  
AHD 134.800 m
- LEVEL 22  
AHD 131.300 m
- LEVEL 21  
AHD 127.800 m
- LEVEL 20  
AHD 124.300 m
- LEVEL 19  
AHD 120.800 m
- LEVEL 18  
AHD 117.300 m
- LEVEL 17  
AHD 113.800 m
- LEVEL 16  
AHD 110.300 m
- LEVEL 15  
AHD 106.800 m
- LEVEL 14  
AHD 103.300 m
- LEVEL 13  
AHD 99.800 m
- LEVEL 12  
AHD 96.300 m
- LEVEL 11  
AHD 92.800 m
- LEVEL 10 - PLANT  
AHD 87.800 m
- LEVEL 9 - MEETING  
AHD 81.800 m
- LEVEL 8 - ADMINISTRATION  
AHD 77.800 m
- LEVEL 7 - BALLROOM  
AHD 72.800 m
- LEVEL 6  
AHD 67.800 m
- LEVEL 5  
AHD 64.300 m RL
- LEVEL 4  
AHD 61.200 m
- LEVEL 3  
AHD 58.100 m
- LEVEL 2  
AHD 55.000 m
- LEVEL 1  
AHD 51.000 m
- GROUND FLOOR  
AHD 45.000 m

WEST ELEVATION  
SCALE 1 : 300

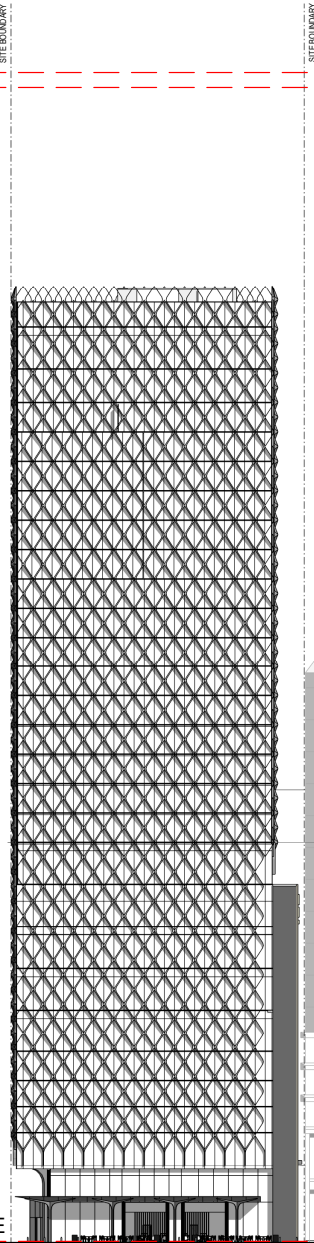
SOUTH ELEVATION  
SCALE 1 : 300

AHD 184.4 PANS OPS

AHD 182.8 ARTC LINE

- TOP OF LIFTOVER RUIN  
158.800 m AHD
- LEVEL 28 ROOF  
154.300 m AHD
- LEVEL 27  
149.300 m AHD
- LEVEL 26  
145.300 m AHD
- LEVEL 25  
141.800 m AHD
- LEVEL 24  
138.300 m AHD
- LEVEL 23  
134.800 m AHD
- LEVEL 22  
131.300 m AHD
- LEVEL 21  
127.800 m AHD
- LEVEL 20  
124.300 m AHD
- LEVEL 19  
120.800 m AHD
- LEVEL 18  
117.300 m AHD
- LEVEL 17  
113.800 m AHD
- LEVEL 16  
110.300 m AHD
- LEVEL 15  
106.800 m AHD
- LEVEL 14  
103.300 m AHD
- LEVEL 13  
99.800 m AHD
- LEVEL 12  
96.300 m AHD
- LEVEL 11  
92.800 m AHD
- LEVEL 10 - PLANT  
87.800 m AHD
- LEVEL 9 - MEETING  
81.800 m AHD
- LEVEL 8 - ADMINISTRATION  
77.800 m AHD
- LEVEL 7 - BALLROOM  
72.800 m AHD
- LEVEL 6  
67.800 m AHD
- LEVEL 5  
64.300 m RL
- LEVEL 4  
61.200 m AHD
- LEVEL 3  
58.100 m AHD
- LEVEL 2  
55.000 m AHD
- LEVEL 1  
51.000 m AHD
- GROUND FLOOR  
45.000 m AHD

NORTH ELEVATION  
SCALE 1:300

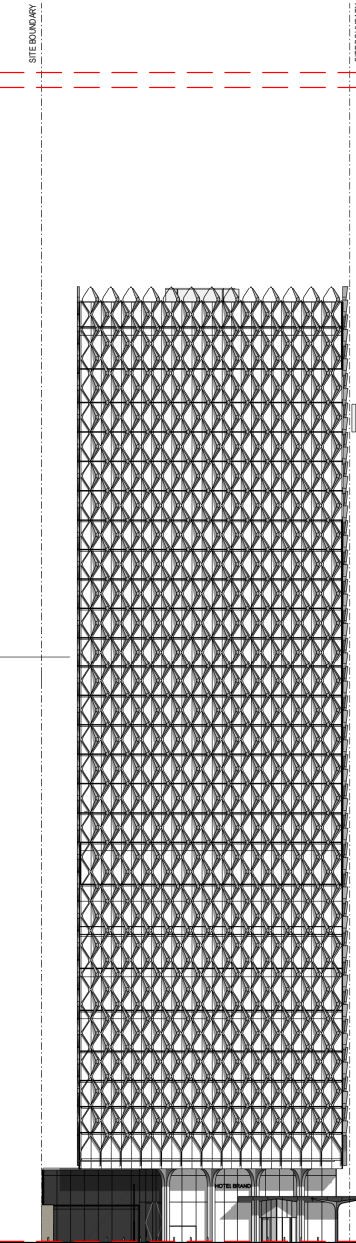


45 PIRIE ST

GAWLER PLACE

AHD 45

45 PIRIE ST



PIRIE STREET

- LEVEL 28 ROOF  
AHD 154.300 m
- LEVEL 27  
AHD 149.300 m
- LEVEL 26  
AHD 145.300 m
- LEVEL 25  
AHD 141.800 m
- LEVEL 24  
AHD 138.300 m
- LEVEL 23  
AHD 134.800 m
- LEVEL 22  
AHD 131.300 m
- LEVEL 21  
AHD 127.800 m
- LEVEL 20  
AHD 124.300 m
- LEVEL 19  
AHD 120.800 m
- LEVEL 18  
AHD 117.300 m
- LEVEL 17  
AHD 113.800 m
- LEVEL 16  
AHD 110.300 m
- LEVEL 15  
AHD 106.800 m
- LEVEL 14  
AHD 103.300 m
- LEVEL 13  
AHD 99.800 m
- LEVEL 12  
AHD 96.300 m
- LEVEL 11  
AHD 92.800 m
- LEVEL 10 - PLANT  
AHD 87.800 m
- LEVEL 9 - MEETING  
AHD 81.800 m
- LEVEL 8 - ADMINISTRATION  
AHD 77.800 m
- LEVEL 7 - BALLROOM  
AHD 72.800 m
- LEVEL 6  
AHD 67.800 m
- LEVEL 5  
RL 64.300 m
- LEVEL 4  
AHD 61.200 m
- LEVEL 3  
AHD 58.100 m
- LEVEL 2  
AHD 55.000 m
- LEVEL 1  
AHD 51.000 m
- GROUND FLOOR  
AHD 45.000 m

EAST ELEVATION  
SCALE 1:300

## DEVELOPMENT APPLICATION FORM

PLEASE USE BLOCK LETTERS

**COUNCIL:** ADELAIDE CITY COUNCIL

**APPLICANT:** CES PIRIE HOTEL (SA) PTY LTD

Postal Address: LEVEL 1, 190 FULLARTON ROAD  
DULWICH SA 5065

**Owner:** CES PIRIE HOTEL (SA) PTY LTD

Postal Address: LEVEL 1, 190 FULLARTON ROAD  
DULWICH SA 5065

**BUILDER:** \_\_\_\_\_

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

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

**FOR OFFICE USE**

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

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

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

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

**CONTACT PERSON FOR FURTHER INFORMATION**

Name: MICHAEL HEGARTY

Telephone: +61 8 8111 6548 [work] +61 4 57539525 [Ah]

Fax: \_\_\_\_\_ [work] \_\_\_\_\_ [Ah]

**EXISTING USE:** OFFICE AND RETAIL

	Decision required	Fees	Receipt No	Date
Planning:	_____	_____	_____	_____
Building:	_____	_____	_____	_____
Land Division:	_____	_____	_____	_____
Additional:	_____	_____	_____	_____
<b>Development Approval</b>				

**DESCRIPTION OF PROPOSED DEVELOPMENT:** 5 STAR HOTEL

**LOCATION OF PROPOSED DEVELOPMENT:** 51 PIRIE STREET ADELAIDE SA, 5000

House No: 51 Lot No: \_\_\_\_\_ Street: PIRIE Town/Suburb: ADELAIDE

Section No [full/part] \_\_\_\_\_ Hundred: \_\_\_\_\_ Volume: \_\_\_\_\_ Folio: \_\_\_\_\_

Section No [full/part] \_\_\_\_\_ Hundred: \_\_\_\_\_ Volume: \_\_\_\_\_ Folio: \_\_\_\_\_

**LAND DIVISION:**

Site Area [m<sup>2</sup>] 1369 m<sup>2</sup> Reserve Area [m<sup>2</sup>] \_\_\_\_\_ No of existing allotments 1

Number of additional allotments [excluding road and reserve]: \_\_\_\_\_ Lease: YES  NO

**BUILDING RULES CLASSIFICATION SOUGHT:** CLASS 3, 5, 7a, 9b Present classification: CLASS 5 & 6

If Class 5,6,78 or 9 classification is sought, state the proposed number of employees: 474 Male: 237 Female: 237

If Class 9a classification is sought, state the number o persons for whom accommodation is provided: \_\_\_\_\_

If Class 9b classification is sought, state the proposed number of occupants of the various spaces at the premises: 500

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

**HAS THE CONSTRUCTION INDUSTRY TRAINING FUND ACT 2008 LEVY BEEN PAID?** YES  NO

**DEVELOPMENT COST** [do not include any fit-out costs]: \$ 85,000,000

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

SIGNATURE: Michael Hegarty Dated: 22/02/2019

# 51 Pirie Street



51 Pirie Street

20 February 2019 | 3318952 for CES PIRIE HOTEL (SA) PTY LTD

**GHDWOODHEAD**



# Contents

# Page

Executive Summary	01	4.6 Vertical Transport	08
Design Statement	02	4.7 Acoustics	08
1 Description of Site	03	4.8 Wind	08
1.1 Location	03	5 Current Design Proposal	09
1.2 Titles & Nature of Land Use	04	Appendix A: Titles	11
2 General Locality & Planning Context	05		
2.1 Planning Approach	05		
2.2 Desired Character Approach	05		
3 Key Development Plan Elements	06		
3.1 Principles of Development Control	06		
3.2 Building Height	06		
3.3 Local Heritage Place	06		
3.4 Central Business Policy Area 13	06		
4 Specialist Reports	08		
4.1 Heritage	08		
4.2 Traffic	08		
4.3 Waste Management	08		
4.4 ESD	08		
4.5 Stormwater	08		

# Executive Summary

This is a proposal for a new 28 storey five star international hotel at 51 Pirie Street. Located in a part of the city requiring stimulus and seeks to address the under supply of high quality hotel accommodation for business travellers within the central CBD. Its presence will ensure a 24/7 invigoration of its surrounding area. The site occupies 1369 m<sup>2</sup> on the corner of Pirie Street and Gawler Place and contains a Local Heritage Place, as indicated on Map Adel/50 attached. The heritage listing refers to the front 600 mm of the existing facade fronting Pirie Street which was retained when the rest of the building was demolished during the 1980's. The site was then redeveloped as a six level building for Bank SA offices and for other retail use, and is now vacant.

The site is contained within the Adelaide City Council Development Plan consolidated on 7 June 2018, and falls under the Capital City Zone provisions as shown in the Development Plan - Building Heights Concept Plan Figure CC/1 (see attached). The Concept Plan indicates that there is no prescribed height limit over the allotment. In addition, the site is contained within the Central Business Policy Area 13 - refer to Figure 4.

The surrounding area is characterised by a mix of contemporary commercial buildings of varying heights and uniquely includes a number of buildings with a 45 degree angle to the city grid. Pirie Street forms part of the city's movement network with high volumes of pedestrian, bike, vehicle and servicing activity, and is also identified in the Development Plan as a Core Pedestrian Area. Gawler Place is a north-south link that runs from Wakefield Street to North Terrace. This section of Gawler Place has a high level of pedestrian activity as it connects city workers to Rundle Mall, and is the subject of future upgrade works envisaged by Adelaide City Council. The site to the south contains an at-grade car park, underground diesel storage, car park ramp and access to the delivery bay of 45 Pirie Street.

The submitted design proposes the complete demolition of the site, including the heritage facade. This is to be redeveloped into a new 294 room 5 star international hotel consisting of twenty eight (28) levels (ground plus twenty seven (27) levels and one (1) level of basement below ground.

The current scheme is characterised by a prismatic veil which is configured to passively respond to the solar performance requirements of each facade. This veil makes a strong architectural statement and imbues the building with a legible form which is the generator for the other built elements integrated into the design. The resultant building will be unique within the city skyline and add greatly to its precinct.

At the ground and first floor levels, the high quality public realm will provide fine grain interest that will activate Pirie Street by creating a mini public plaza that presents an opportunity to link with the adjacent street scape and connect to a series of public spaces along the southern side of Pirie Street (albeit the current development application is limited within the site boundary).

The overall height of the building is 113.8 metres above the ground level which lies at 45 metres AHD (24m below the ARTC RADAR contour of 182.8m AHD and 25.6m below the PANS-OPS contour of 184.4m AHD).

The development will contain the following:

- Basement - including plant, transformer, linen room, operating equipment storeroom, emergency laundry and uniform store, lifts, fire exit and stairs, and bike store for 24 bikes
- Ground - including '5 Star International Hotel' lobby lounge, lobby and reception providing active frontages to Pirie and Gawler Place, with Dignitary drop-off at Gawler Place, including truck deliveries access and ramp up to level two (2) car parks at the south/eastern rear end of the site,
- Level 1- includes a Guest Retreat area long Pirie Street providing active frontage with lifts and stair access to the level 1 frontage,
- Levels 2 to 4 - contains 15 car parks/level with 3 levels of car parking. Floor to ceiling depth will be at 3.1m (which will enable the car park floors to be retrofitted in the future, if need be - note, the ramps are also able to be removed). The carpark facade will be screened from street view with additional 1.2 metre high elements to shield car head light glare.
- Level 5 - contains the pool plant Employee restaurant and wc/showers and lockers,
- Level 6 - contains Pool and Gym Facilities
- Level 7 - contains a Grand Ball Room and pre-function room with event kitchen, furniture, storeroom, cloakroom and toilets,
- Level 8 - contains Administration, VIP Bridal, computer / PABX equipment room and office pantry
- Levels 9 - contains four (4) different types/sizes of Meeting rooms, pre-event space and back-up kitchen and rest room facilities.
- Level 10 - contains plant room,
- Level 11 to 22 contains 7 types of Accommodation ranging from 30 sqm, 38 sqm and 66 sqm, including Deluxe Twin Rooms, Deluxe King Guest Room, Executive Club King Guest Room, Executive Suite Guest Room, Standard Twin and Standard King Guest Rooms, with nineteen (19) rooms per floor,
- Level 23 - contains a mix of Accommodation, including Deluxe King Guest Room, Standard Twin, Executive Club King Guest Room, Executive Suite Guest Room and Deluxe Twin, with room sizes/areas as per above,
- Level 24 - contains a mix of Accommodation, including Deluxe King Guest Room, Standard Twin, Executive Club King Guest Room, Executive Suite Guest Room and Deluxe Twin, with room sizes/areas as per above,
- Level 25 - contains a mix of Accommodation, including Deluxe King Guest Room, Standard Twin, Executive Club King Guest Room, Executive Suite Guest Room and Deluxe Twin, with room sizes/areas as per above,
- Level 27 - contains a Sky Bar - large Dining area with Open Kitchen and Display counters, Kitchen and Chefs Station, Food and Beverage store, meat/poultry/fish prep station and toilets,
- Level 28 - contains the roof, lift overrun and motor room.

# Design Statement

The submitted Design has responded to advice and recommendations from the SA Government Architect, the DPTI Case Manager/Senior Planners and planning reviews, multiple ODASA Design Reviews and input from DPTI, Adelaide City Council and Adelaide Airport. The critical issues discussed were as follows:

- The delivery of a world class 5 Star Hotel to the Adelaide CBD;
- Creating a generous and activated urban realm;
- The limitations resulting from the Local Heritage facade including disjointed ground floor from public realm, lack of permeability and ongoing vacancy on site;
- Car parking management strategy;
- Waste, traffic and access along the Gawler Place frontage;
- The overall building height;
- An agreed aspiration to deliver a singular architectural form of high quality.

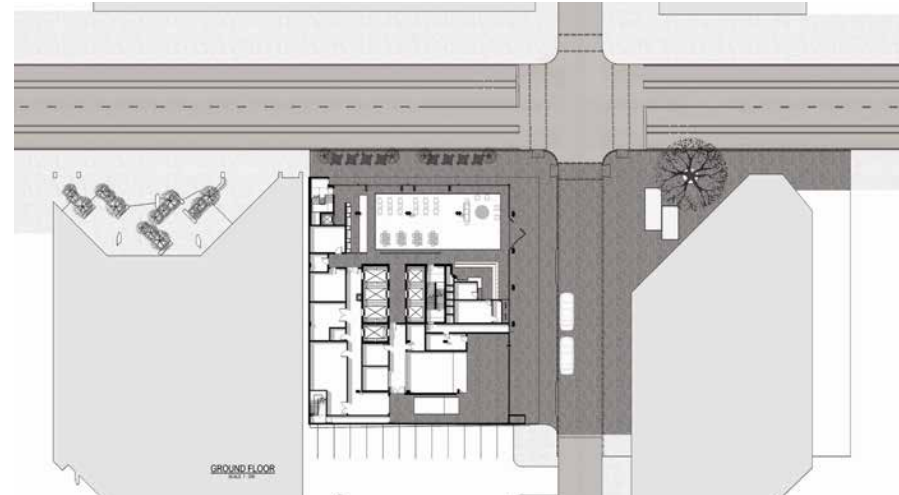
Over the course of the Design Review process, the Architectural design has responded by:

- Reducing the overall height from thirty three (33) levels to the proposed new height of twenty eight (28) levels. (Note: the site is within the Capital City Zone with no prescribed height limit and the site falls under the 120 metre AHD Obstacle Limitation Surface (OLS) contour on Map Adel/1(Overlay 5) attached). The proposal is now at a maximum overall height of AHD 158.8m with 158.8m being the top of the lift overrun. The top of the roof is now 24 metres below the ARTC line and 25.6 metres below the PANS-OPS contour. The crane height will remain at 17 metres, which will be accommodated within the overall 24 metre gap between the top of the building and the ARTC contour.
- Reducing number of levels of car parking from 6 to 3 (i.e. from 6 x 17 cars/level (102 cars in total) to 3 x 15 cars = 45 cars in total. A reduction in 57 car spaces overall.
- The development of a high quality, singular architectural form that creates fine grain activation at both the ground level urban realm and first floor. In addition, the urban realm materiality is simplified and presents the opportunity to extend the high quality public realm treatment to incorporate Gawler Place roadway (with a suitably engineered road surface treatment) at the intersection of Pirie Street and extend the same paving treatment to the east towards 63 Pirie Street plaza area. It already has a higher quality treatment within its site boundary, albeit the current development application is for the area within the site boundary.
- The current proposal requires the demolition of the existing local heritage building fronting Pirie Street.

On the Eastern side of the site is the Concierge and entry point for hotel visitors as well as off-street dignitary drop off. Access to the car parking floors (for valet only) is via a vehicle ramp, from Gawler Place. Access to this ramp and adjacent delivery bay are controlled by hotel staff. The Lift Lobby and the formal Hotel Reception are also located on the ground level. Pedestrian access is via Pirie Street and Gawler Place.

The proposal will contribute significantly to the public domain of the Gawler Place and Pirie Street frontages with activated façade and physical connectivity with the urban fabric. In addition, the staffed Concierge and reception, high level lighting and CCTV cameras aid security during the night time hours in response to CPTED requirements.

The tower will be a significant new feature in the Adelaide sky line and clearly visible from many vantage points around the city. The resultant architectural expression has been in response to the clients desire that it be a development exhibiting high quality appropriate for a major 5 star hotel.



# 1. Description of Site

## 1.1 LOCATION

The site is located at 51 Pirie Street, in the heart of the Adelaide CBD, at the corner of Gawler Place with 34 metre frontages and is within 200 metres of King William Street to the west and Grenfell Street to the north.

The site is strategically located within walking distance to the Town Hall and Tram Stop along King William Street, the Adelaide City Council, the Post Office, Victoria Square and the Flinders University. The site also enjoys strong pedestrian connections to the south west via the Pilgrim Church site and Adelaide City Council north south pedestrian connections.

The surrounding area is characterised by a mix of contemporary commercial buildings of varying heights and uniquely includes a number of buildings with a 45 degree angle to the city grid. Pirie Street forms part of the city's movement network with high volumes of pedestrian, bike, vehicle and servicing activity, and is also identified in the Development Plan as a Core Pedestrian Area. Gawler Place is north-south link that runs from Wakefield Street to North Terrace. This section of Gawler Place has a high level of pedestrian activity. It connects city workers to Rundle Mall, and is subject to future upgrade works (as envisaged by Adelaide City Council in the longer term). The site currently contains a Local (Townscape) Heritage Place identified in the Development Plan as a former Bank. The Heritage Place was substantially redeveloped in the 1980s, with approximately 600mm of the heritage facade retained and a concrete building constructed behind and to the east of the site. To the south is an at-grade car park, diesel storage, car park ramp and access to the delivery bay of 45 Flinders Street.

### 1.1.1 Adelaide City Council Development Plan

The site is within the Adelaide City Council Development Plan consolidated on 7 June 2018, and falls under the Capital City Zone provisions as shown in the Development Plan - Building Heights Concept Plan Figure CC/1 (see attached). The Concept Plan indicates that there is no prescribed height limit over the allotment. Refer to Figure 1 below for location of subject site within Concept Plan Figure CC/1. It is also contained within the Central Business 13 Policy Area and contains a Local Heritage Place - the remaining six (6) level facade along Pirie Street.

### 1.1.2 Building Height Limit

Concept Plan Figure CC/1 prescribes no Height Limit for the proposed 51 Pirie Street site.

Adelaide Air Port advice from Brett Eaton indicates the following with regard to maximum allowable height;

- The Airport building heights Obstacle Limitation Surface (OLS) is 120 metres AHD. The hotel ground level is 45 m AHD. Therefore the maximum building height less ground level is 75 metres with regard to the OLS.
- However, with regard to the PANS-OPS contours available from Adelaide Airport, the contour level is at 184.4 metres AHD. The potential is to build up to a height of 139.4 metres. However, the overall height has been reduced to 113.8 metres maximum. A reduction of 25.6m overall from previous design reiterations.
- The proposal is now at a maximum overall height of AHD 158.8m to the top of the lift overrun. That is; the top of the roof is now 24 m below the ARTC line and 25.6 m below the PANS-OPS contour. The top of the building is below the 184.4 m AHD PANS-OPS contour, and the ARTC Radar Operations contour of 182.8 m AHD.

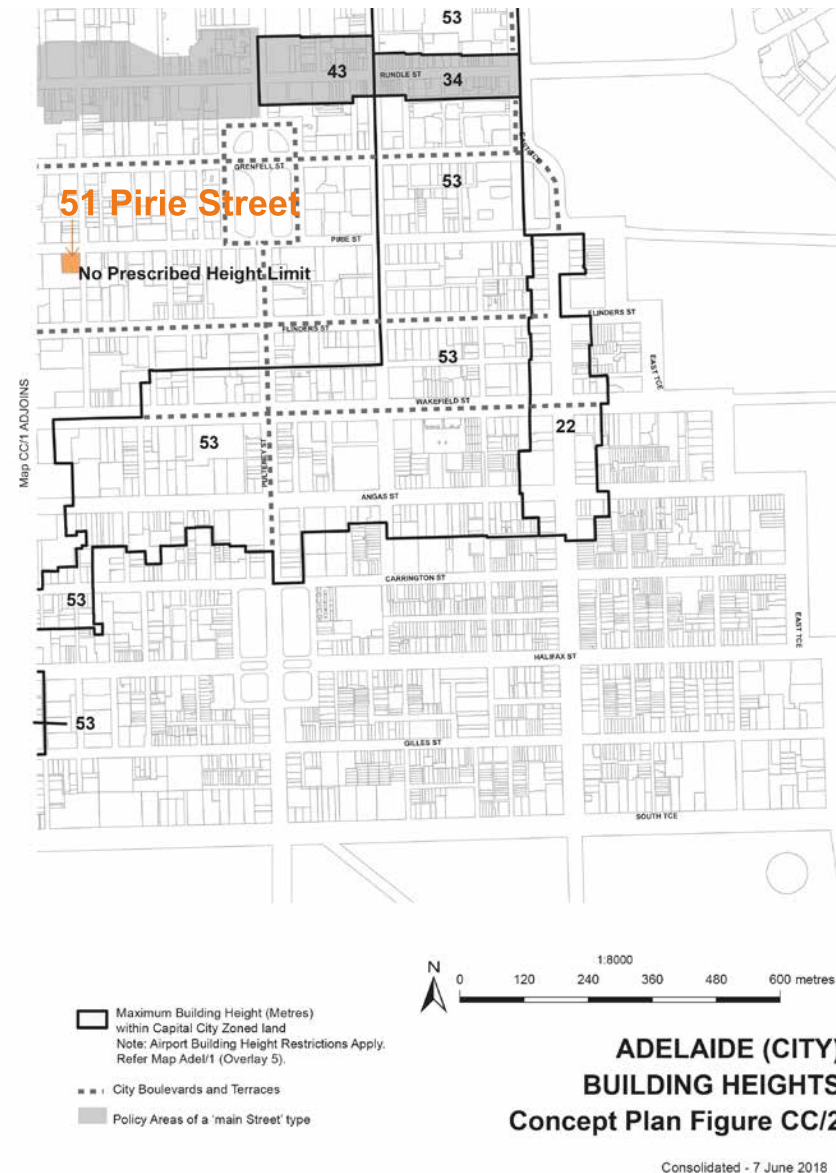


FIGURE 1: CONCEPT PLAN CC/1

# 1. Description of Site

## 1.2 TITLES AND NATURE OF LAND USE

The site is contained within the Certificate of Title - Volume 5292 Folio 63 (Refer to Appendix A below). The Description of land is as follows:

Allotment 1 Deposited Plan 13090 in Area Named Adelaide Hundred of Adelaide. It subject to rights of support over the land marked B and C (T 5195611 and T 5246613).

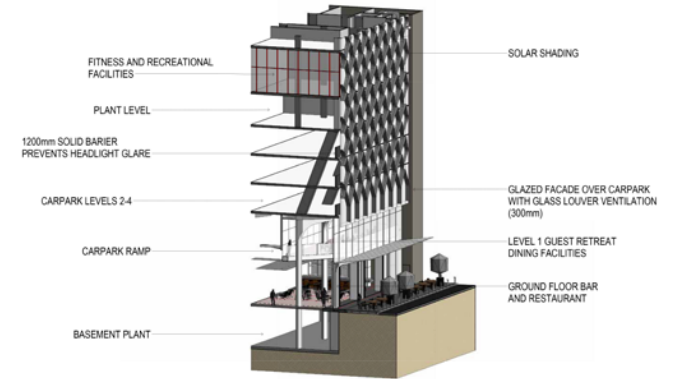
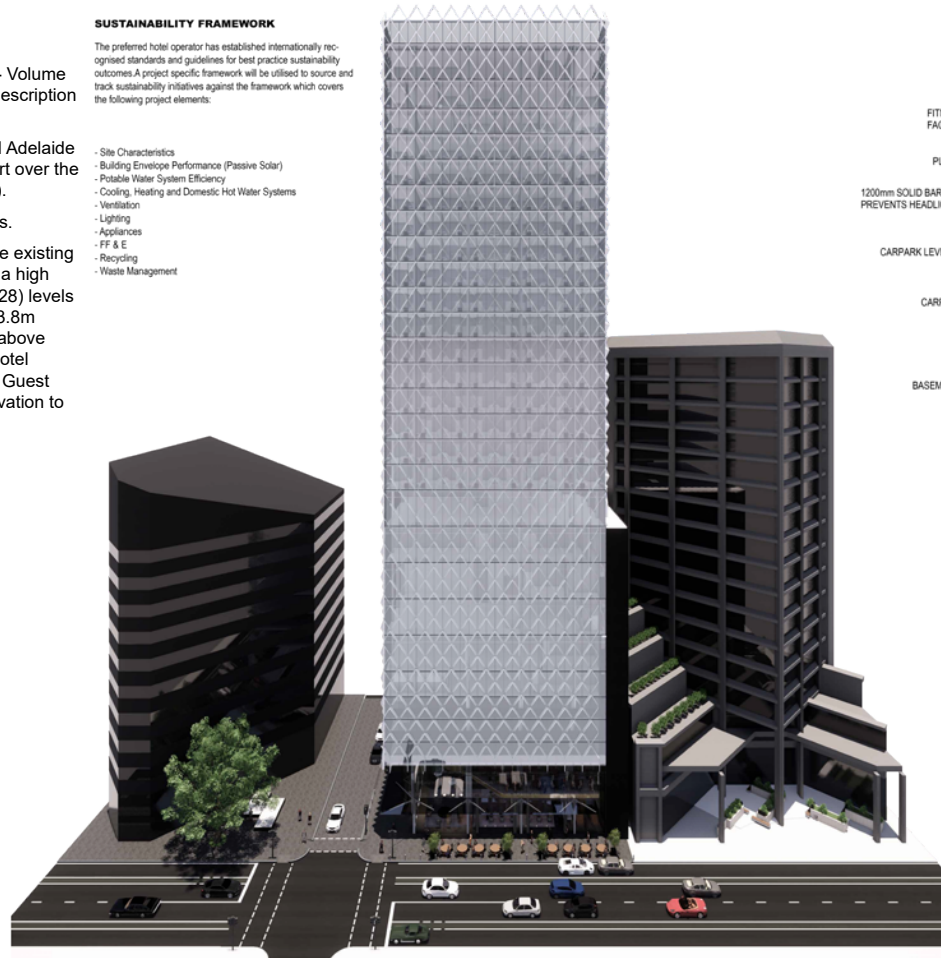
The site is currently used for commercial purposes.

The concept design proposes the demolition of the existing local heritage facade and in its place provides for a high quality architectural proposition with twenty nine (28) levels of mixed use hotel tower (294 guest rooms) at 113.8m in height. It includes 3 levels parking (45 cars) of above ground parking (15 per level). Ground floor has hotel lounge and lobbies with reception with additional Guest Retreat on level 1 - which provides additional activation to the street.

### SUSTAINABILITY FRAMEWORK

The preferred hotel operator has established internationally recognised standards and guidelines for best practice sustainability outcomes. A project specific framework will be utilised to source and track sustainability initiatives against the framework which covers the following project elements:

- Site Characteristics
- Building Envelope Performance (Passive Solar)
- Potable Water System Efficiency
- Cooling, Heating and Domestic Hot Water Systems
- Ventilation
- Lighting
- Appliances
- FF & E
- Recycling
- Waste Management



### RENEWABLE ENERGY

Review the feasibility of a roof-mounted Solar PV system

### BUILDING CONSTRUCTION

- High performance building envelope; wall, floor and roof insulation R-values to meet best practice guidelines
- Energy efficient massing (minimal exposed ceilings and floors)
- High performance glazing selected with consideration of building-specific features and climatic conditions
- Thermal mass provided through heavyweight construction material

### SHADING

External architectural feature shading (J. office) to protect glazing on the North-East and West facades, reducing afternoon solar heat gains in summer.

### WASTE MANAGEMENT

- Variable speed drives and carbon monoxide sensors to control carpark exhaust fans to ramp up and down during peak and non-peak periods respectively.
- Electric Vehicle Charging Stations in car park to encourage uptake of sustainable transport options

### INSIDE THE CARPARK

- Variable speed drives and carbon monoxide sensors to control carpark exhaust fans to ramp up and down during peak and non-peak periods respectively.
- Electric Vehicle Charging Stations in car park to encourage uptake of sustainable transport options

### MECHANICAL SYSTEMS

- High efficiency, hydronic central plant
- Heat recovery ventilation throughout guest rooms
- Economy cycle / carbon dioxide monitoring to common areas to increase mechanical system efficiency (free cooling, reduction in outdoor air intake in periods of low occupation)

### INSIDE THE BUILDING

- Low VOC paints used throughout the building
- Master shutdown switches provided to each hotel room unit allowing the lighting, air-conditioning and exhaust fans to be switched off when the unit is unoccupied
- High levels of daylight provided to all hotel rooms
- LED lighting to be used throughout and motion sensors for lighting control within common areas
- Water efficient fixtures and fittings (WELS)

### CYCLING FACILITIES

Secure bicycle storage area for employee and visitor and end of trip facilities for employees

**GHDWOODHEAD** 51 PIRIE ST

## 2. General Locality & Planning Context

### 2.1 PLANNING APPROACH

The following extract from the Desired Character statement for the Capital City Zone provides a key context for the assessment of the above key planning issues.

### 2.2 DESIRED CHARACTER APPROACH

The Capital City 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.

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:

- 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.
- Durable – by being fit for purpose, adaptable and long lasting, and carefully considers the existing development around it.
- 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.
- Sustainable – by integrating sustainable systems into new buildings and the surrounding landscape design to improve environmental performance and minimise energy consumption.
- Amenable – by providing natural light and ventilation to habitable spaces.

#### OBJECTIVES

Objective 1: The principal focus for the economic, social and political life of metropolitan Adelaide and the State.

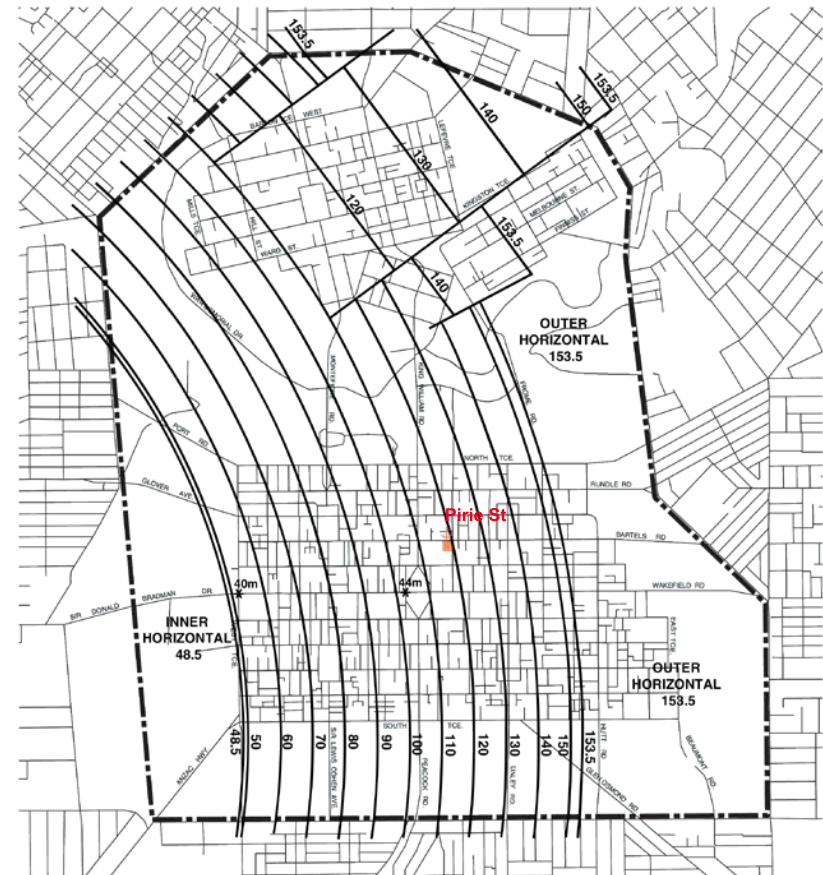
Objective 2: A vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living.

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.



Referral to the Department of Transport and Regional Services through Adelaide Airport Limited is required where a development would exceed the Obstacle Limitation Surface (OLS) contours on this map.

- 100 OLS Values in Australian Height Datum (AHD)
- OLS Contour Boundary
- \* 40m Indicative ground level in AHD. Note: Ground level varies throughout the Council area and accurate ground level in AHD would need to be confirmed
- Development Plan Boundary

Scale 1:26,000  
0metres 500 1000

### ADELAIDE (CITY) AIRPORT BUILDING HEIGHTS MAP Adel/1 (Overlay 5)

Note: Approval is required under the Commonwealth Airports Act 1996 for structures and the like that penetrate prescribed air space (as defined in the Airports Act 1996)

FIGURE 2: AIRPORT BUILDING HEIGHTS MAP ADEL/1 (OVERLAY 5)

# 3. Key Development Plan Elements

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.

## 3.1 PRINCIPLES OF DEVELOPMENT CONTROL - DESIGN & APPEARANCE

The following Principles of Development Control are noted in the ACC Development Plan that have guided the overall design process:

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, pre-finished 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 ... 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

## 3.2 BUILDING HEIGHT RATIONAL

Given the site is within a 'no prescribed height limit' zone, the overall height of building has had consideration to the following planning and Adelaide Airport guidelines:

- Airport Building Heights Map Adel/1 (Overlay 5) (see Figure 4 above) which indicates a OLS (Obstacle Limitation Surface) of 120 m AHD,
- Airport Building Heights PANS OPS (Plane Operations) contours, which located the site below the 184 m AHD contour, and
- The ARTC Radar Operations contour of 182.8 m AHD for Adelaide, which cannot be penetrated. This, then, is the upper limit which determines the overall height of the building. However, the final design has provided for a lesser maximum height for the building, including all lift cores, penetrations, lighting rods and plumes, now in the order of twenty nine (29) levels or 158.8 m AHD, or a total height of 113.8. m (assuming the ground level is at 45 m AHD).

## 3.3 LOCAL HERITAGE PLACE

The site contains a Local Heritage Place item (the Facade) - refer to Figure 4 - Policy Areas below).

## 3.4 CENTRAL BUSINESS POLICY AREA 13

The site is located within the Central Business - Policy Area 13 - refer to Figure 4 - Policy Areas below).

The Objectives and Principles of Development Control that follow apply to the Policy Area as shown on Maps Adel/49, 50, 55 and 56. They are additional to those expressed for the Zone and, in cases of apparent conflict, take precedence over the Zone provisions. In the assessment of development, the greatest weight is to be applied to satisfying the Desired Character for the Policy Area.

### DESIRED CHARACTER

The Central Business Policy Area is the pre-eminent economic, governance and cultural hub for the State. This role will be supported by educational, hospitality and entertainment activities and increased opportunities for residential, student and tourist accommodation.

Buildings will exhibit innovative design approaches and produce stylish and evocative architecture, including tall and imposing buildings that provide a hard edge to the street and are of the highest design quality. A wide variety of design outcomes of enduring appeal are expected. Complementary and harmonious buildings in individual streets will create localised character and legible differences between streets, founded on the existing activity focus, building and settlement patterns, and street widths.

Objective 1: A concentration of employment, governance, entertainment and residential land uses that form the heart of the City and central place for the State.

Objective 2: Development of a high standard of design and external appearance that integrates with the public realm.

Objective 3: Development that contributes to the Desired Character of the Policy Area.

### PRINCIPLES OF DEVELOPMENT CONTROL

1 Development should contribute to the area's role and function as the State's premier business district, having the highest concentration of office, retail, mixed business, cultural, public administration, hospitality, educational and tourist activities.

2 Buildings should be of a height that ensures airport operational safety is not adversely affected.

3 To enable an activated street level, residential development or similar should be located above round floor level.

### DESIGN RESPONSE

It is acknowledged that Policy Area 13 envisions hospitality and entertainment activities and increased opportunities for residential, student and tourist accommodation. In essence, this proposal does just that by introducing a 5 Star Brand Hotel which will bring residential and tourism uses within the CBD. The fine grain and human scale Local Heritage facade will be replaced by the fine grain singular architectural form providing human activity on the street with outdoor dining and activation both on the ground level and level one (1).

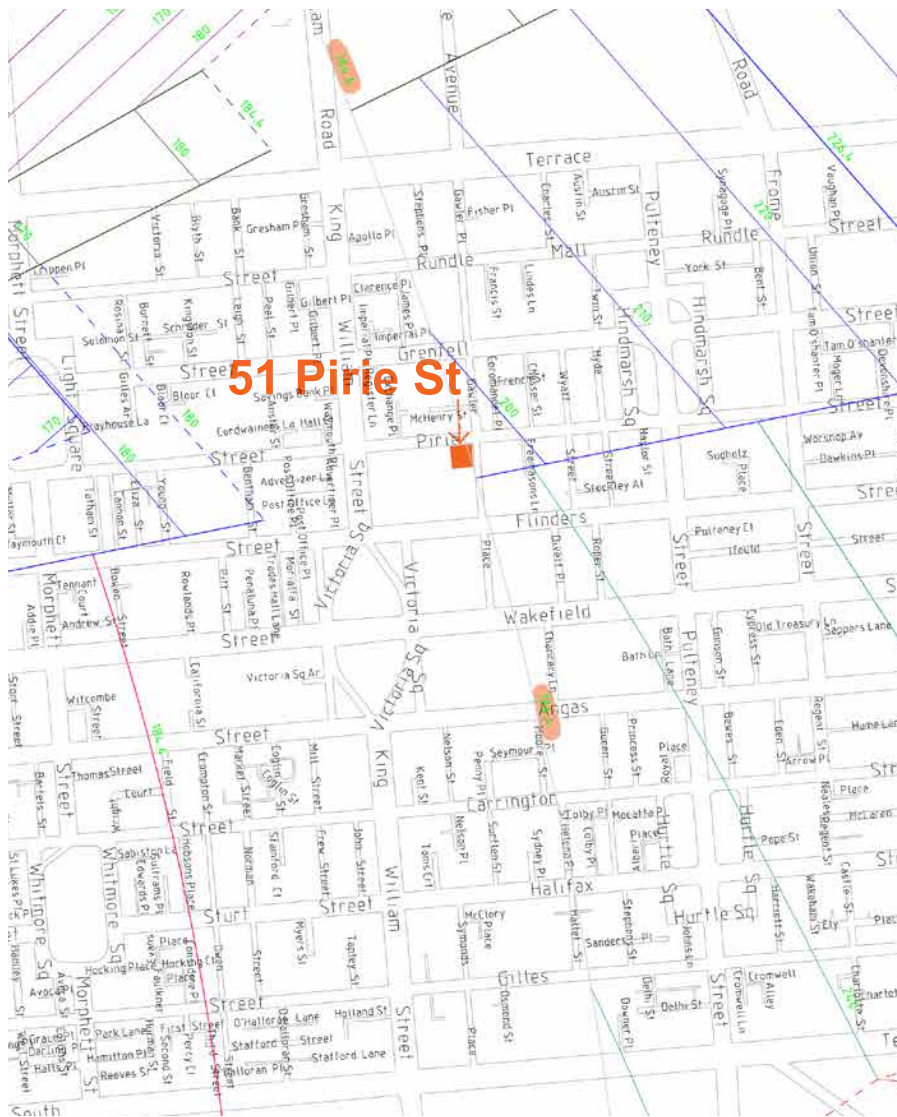


FIGURE 3: AIRPORT BUILDING HEIGHTS PANS-OPS CONTOURS



FIGURE 4: POLICY AREAS MAP ADEL/50



## 4. Specialist Reports

### 4.1 HERITAGE

Refer to the Heritage Impact Assessment DA183586 Issue 18.02.2019 by DASH Architects.

### 4.2 TRAFFIC

Refer to the Traffic Assessment Report by Wallbridge Gilbert Aztec dated 15 February 2019.

### 4.3 WASTE MANAGEMENT

Refer to the Waste Management Plan Issued 15.02.2019 by RAWTEC.

### 4.4 ESD

Refer to the Sustainability Management Plan by LUCID issued in Feb. 2019.

### 4.5 STORMWATER

Refer to the Stormwater Management Plan prepared by Wallbridge Gilbert Aztec dated 01 February 2019.

### 4.6 VERTICAL TRANSPORT

Refer to the Vertical Transportation Report by LUCID Consulting Australia dated February 2019.

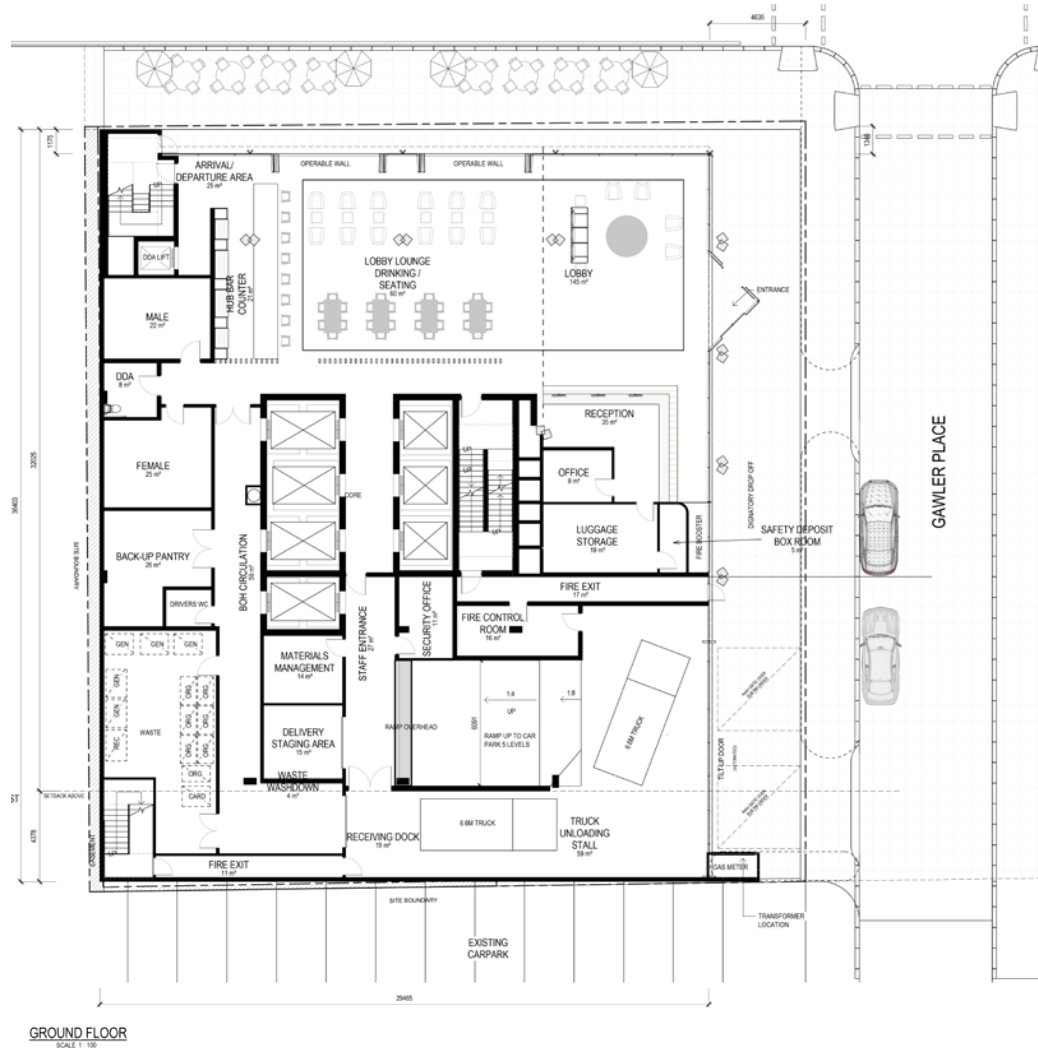
### 4.7 ACOUSTICS

Refer to the Acoustics Report by Sonus dated Feb. 2019.

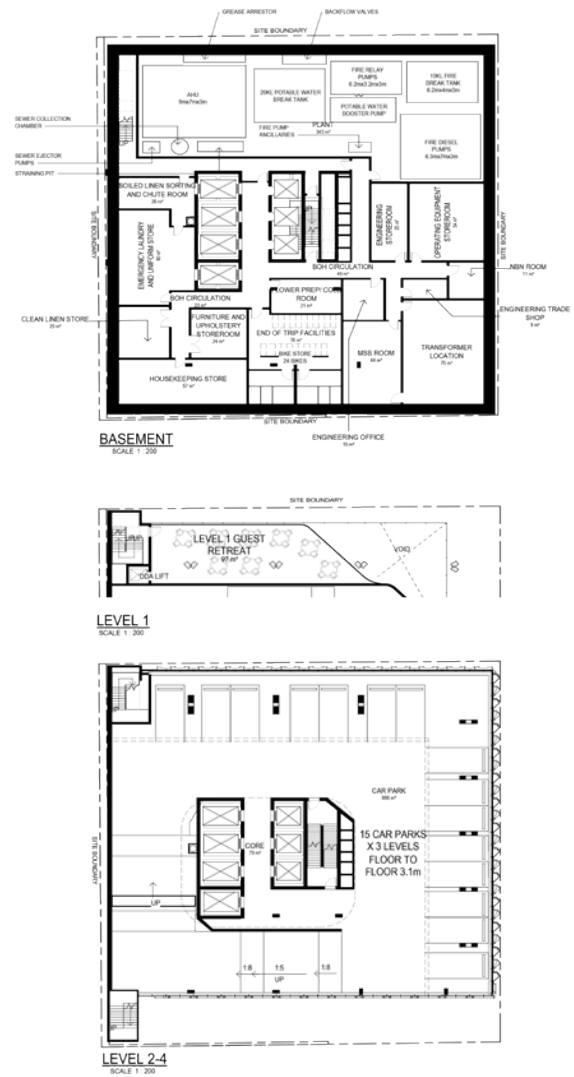
### 4.8 WIND

Refer to the Environmental Wind Assessment Report by ARUP dated 18 February 2019.

# 5. Current Design Proposal



**FIGURE 5: GROUND FLOOR PLAN - PIRIE STREET & GAWLER PLACE**



**FIGURE 6: BASEMENT, LEVEL 1, 2-4 FLOOR PLAN**



**GHDWOODHEAD** 51 PIRIE ST

FIGURE 18: VIEWS OF INTERIOR & EXTERIOR FINE GRAIN GROUND LEVEL ACTIVATION

# APPENDIX A: TITLES

The current titles are included here. There are a number of easements shown on the current titles. These relate to easement B and C which relate to 'right of support'.



Product Register Search  
 Date/Time 17/06/2015 11:40AM  
 Customer Reference  
 Order ID 20150617004252  
 Cost \$26.50

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



Registrar-General

## Certificate of Title - Volume 5292 Folio 63

Parent Title(s) CT 4233/179  
 Dealing(s) CONVERTED TITLE  
 Creating Title  
 Title Issued 08/09/1995  
 Edition 15  
 Edition Issued 09/02/2015



### Estate Type

FEE SIMPLE

### Registered Proprietor

PIRIE INVESTMENTS (AUST) PTY. LTD.  
 OF 1ST FLOOR/190 FULLARTON ROAD DULWICH SA 5065

### Description of Land

ALLOTMENT 1 DEPOSITED PLAN 13090  
 IN THE AREA NAMED ADELAIDE  
 HUNDRED OF ADELAIDE

### Easements

SUBJECT TO RIGHT(S) OF SUPPORT OVER THE LAND MARKED B AND C (T 5195611 AND T 5246613 RESPECTIVELY)

### Schedule of Dealings

Dealing Number	Description
11777342	LEASE TO WCP SUPPLIES PTY. LTD. COMMENCING ON 1/9/2011 AND EXPIRING ON 31/8/2016 OF PORTION (OFFICE B1 IN FP 48041)
12318338	MORTGAGE TO UNITED OVERSEAS BANK LTD. (ACN: 060 785 284)

### Notations

Dealings Affecting Title

NIL

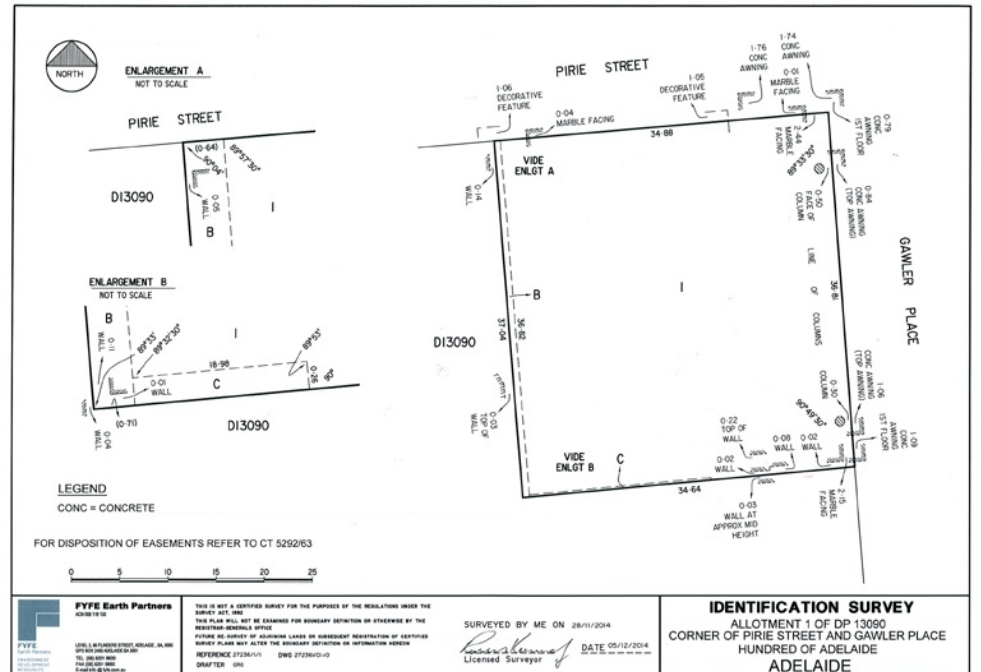


FIGURE 19: CERTIFICATE OF TITLE



# GHDWOODHEAD

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Document Status:

Rev No.	Author	Reviewer		Approved for Issue		
	Name	Name	Signature	Name	Signature	Date
0	N Rebuli	M.Hegarty	M.Hegarty	M.Hegarty		18.09.2018
1	MRSeparovic	M.Hegarty	M.Hegarty	M.Hegarty		12.12.2018
2	MRSeparovic	M.Hegarty	M.Hegarty	M.Hegarty		20.01.2019
3	MRSeparovic	M.Hegarty	M.Hegarty	M.Hegarty		20.02.2019
4	M.Cruz	M.Hegarty	M.Hegarty	M.Hegarty		22.02.2019

# 51 Pirie Street, Adelaide

## Heritage Impact Assessment

DA183586 Issue A

22.02.19

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### 1.0 Introduction

DASH Architects is one of South Australia's leading architectural practices specialising in the provision of professional heritage services. The Practice's expertise includes:

- Heritage and character assessments;
- The conservation and preservation of places of heritage significance;
- Conservation and management policy development;
- The provision of expert witness services to the Environment Resources and Development Court; and
- Heritage advisory services.

In addition to this, the Practice's director Jason Schulz (author of this report) is a past member of the Local Heritage Advisory Committee, and a current member of the South Australian Heritage Council.

DASH Architects has been engaged by CES Pirie Street (SA) Pty Ltd to provide heritage advice with regard to the proposed redevelopment of 51 Pirie Street, Adelaide (The Subject Site).

### 2.0 Subject Site

The Site is located within the Capital City Zone, Central Business Policy Area.

While there are several State and Local Heritage places within the vicinity of the Subject Site, the only heritage place considered to be materially affected by the proposed development is on the Site itself, namely (as described by the Adelaide (City) Development Plan, Table Adel/3):

Heritage Category

Local Heritage Place (Townscape)

Property Address

51 Pirie Street, Adelaide

Description of Place

Bank

Certificate of Title

CT 4233/179

*dash*architects

L2, 141-149 Ifould Street

Adelaide SA 5000

t 8223 1655

adelaide@dasharchitects.com.au

www.dasharchitects.com.au

ABN 82 059 685 059

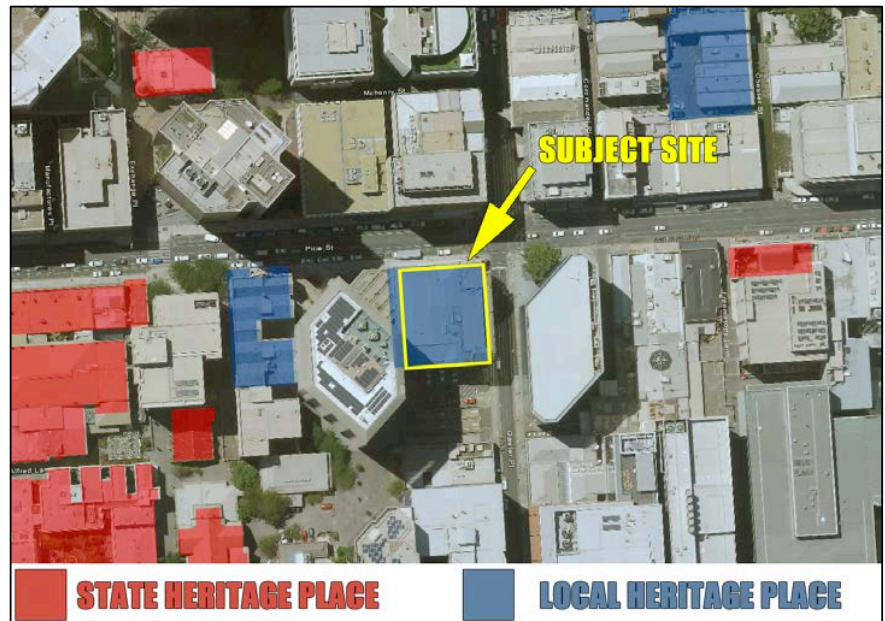


Figure 1: Locality Plan, showing Subject Site and nearby heritage places. Base image source: Location SA.

**NOTE:** The Extent of listing as indicated in the Location SA mapping above is not accurate, as discussed in more detail in Section 4.0 below. Also refer Figure 7.

The Local Heritage Place (LHP) on the Subject Site was constructed in 1927 to accommodate the State Bank of South Australia. Somewhat unusually for a Bank, the building design and construction was relatively restrained, particularly when compared to the nearby Epworth Building that was built that same year.

The LHP was substantially redeveloped in the 1980s, with all internal finish stripped, and the building expanded to the east (refer Figure 4 and Figure 5) This redevelopment effectively resulted in the only the Pirie Street façade remaining representative of the era of construction. This too underwent modification during the redevelopment, with the following changes notable in a comparison with early photographs of the building:

- Original windows replaced;
- Original balconies infilled;
- Most ground floor window sills have been lowered; and
- Signage removed.



Figure 2: LHP on the Subject Site looking South Eastward.

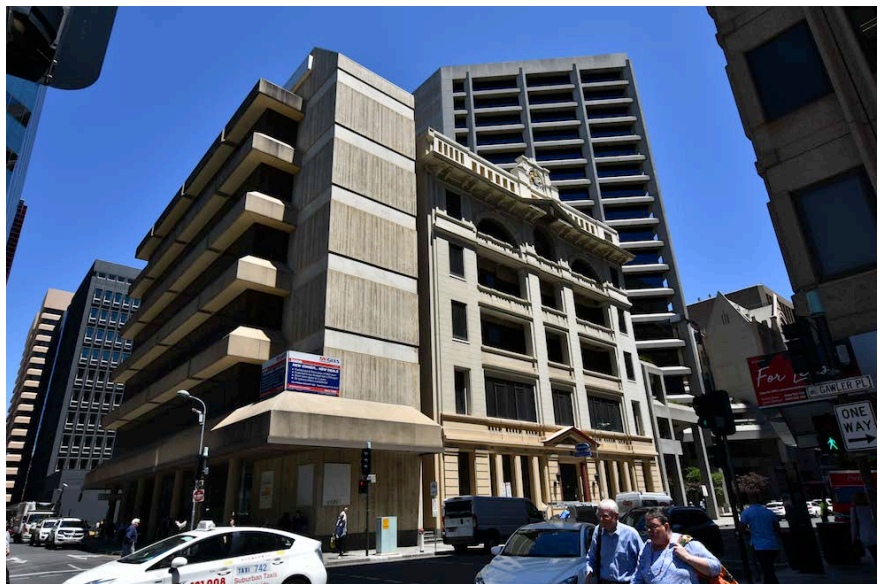


Figure 3: LHP on the Subject Site looking South Westward, showing c1980s addition to eastern land portion.





Figure 4: Former State Bank of South Australia, c1928. Source: SLSA, B\_5187



Figure 5: Former State Bank of South Australia, c1928. Source: SLSA, B\_4716

## 3.0 Proposed Development

The application seeks to develop the Subject Site with a new 28 storey hotel tower that includes:

- Basement level services / back of house;
- Ground floor reception opening to Pirie Street and Gawler Place, with loading areas / carpark access, and back of house, to the southern side;
- 3 levels of carparking;
- Fitness and recreation facilities, function rooms and staff facilities between levels 4 and 10; and
- Hotel accommodation from levels 11 upward.

The proposal seeks to demolish the Local Heritage Place on the site to accommodate this development.

The design team participated in the Pre-Lodgement Panel (PLP) and Design Review Panel (DRP) application pathway, details of which will be discussed, where relevant, later in this assessment.



Figure 6: Artist's render of proposed development Source: GHD Woodhead

## 4.0 Development Plan Provisions (Heritage)

Development Plan provisions considered most relevant to this HIA include:

### City Wide Heritage and Conservation

**Obj 43** Development that retains the heritage value and setting of a heritage place and its built form contribution to the locality.

**Obj 44** Continued use or adaptive reuse of the land, buildings and structures comprising a heritage place.

**PDC 136** Development of a heritage place should conserve the elements of heritage value as identified in the relevant Tables.

**PDC 137** Development affecting a... Local heritage place (Townscape) (Table Adel/3), including:

- a) adaptation to a new use;
- b) additional construction;
- c) part demolition;
- d) alterations; or
- e) conservation works;

should facilitate its continued or adaptive use, and utilise materials, finishes, setbacks, scale and other built form qualities that are complementary to the heritage place.

**PDC 138** A local heritage place (as identified in Tables Adel/2, 3 or 4)... should not be demolished unless it can be demonstrated that the place, or those Elements of Heritage Value that are proposed to be demolished, have become so distressed in condition or diminished in integrity that the remaining fabric is no longer capable of adequately representing its heritage value as a local heritage place.

**PDC 139** Development of Local Heritage Places (Townscape) should occur behind retention depths (as established from the street facade of the heritage place) of 6 metres in non-residential Zones and Policy Areas... or as otherwise indicated in the heritage Tables in respect of frontages and side wall returns.

**PDC 140** Development on land adjacent to a heritage place in non-residential Zones or Policy Areas should incorporate design elements, including where it comprises an innovative contemporary design, that: (a) utilise materials, finishes, and other built form qualities that complement the adjacent heritage place; and (b) is located no closer to the primary street frontage than the adjacent heritage place.

**PDC 142** Development that abuts the built form/fabric of a heritage place should be carefully integrated, generally being located behind or at the side of the heritage place and without necessarily replicating historic detailing, so as to retain the heritage value of the heritage place.

### Zone Provisions

This Zone is the economic and cultural focus of the State... High-scale development is envisaged in the Zone with high street walls that frame the streets.

...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.

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.

**PDC 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.

Guidance on the extent of listing of LHP(Townscape) items is provided in City Wide (Heritage and Conservation) PDC 139, that notes development *should occur behind a retention depth of 6 metres for non-residential areas* (as applicable in this instance). This suggests that fabric behind this retention depth can be demolished and redeveloped.

While of no statutory status, further guidance on LHP(Townscape) items can be found on the Adelaide City Council's website, which notes:

*Local Heritage Place (Townscape) is a place that positively contributes to the townscape character of the area and the listed portion generally comprises the frontage, roof and side wall returns of the place that are visible from the street.*<sup>1</sup>

The extent of heritage listing of LHP is considered to be as illustrated in Figure 8 below, based on:

- Alterations of the LHP noted in Section 2.0;
- the extent of the building visible from the street; and
- the extent to which those visible portions contribute towards the townscape character of the area.

Given this, the Development Plan generally seeks the rendered masonry portion of the Pirie Street façade to be retained, and new development to be set back 6m. The Zone provisions recognise the Site to be located in the primary economic and cultural focus of the State, with intensive development providing juxtaposed new settings to heritage places. While this is somewhat

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<sup>1</sup> <http://www.cityofadelaide.com.au/planning-development/city-heritage/heritage-listings/>

at odds with the noted 6m setback, Zone PDC 11 recognises this may not always be achieved where a heritage place is to be accommodated.



Figure 7: Actual extent of heritage listing. Author's annotations (yellow) over Location SA base image.

## 5.0 Heritage Impact Assessment

This Heritage Impact Assessment will be undertaken in two parts as follows:

- Part 1: Assess the impact of the proposed development on the affected heritage places against the relevant heritage provisions of Council's Development Plan; and
- Part 2: Provide assessment to assist the relative weighting of heritage provisions in terms of the overall merits of the application.

### 5.1 Part 1: Development Plan Assessment

The application seeks to demolish the Local Heritage Place (Townscape) place on the site. This is at odds with the provisions outlined in Section 4.0 that seek the rendered masonry Pirie Street façade to be retained and reused in any redevelopment of the site (Obj 43, 44; PDC 136, 137, and 138).

Additional provisions that speak to establishing a complementary, albeit contemporary setting for the existing LHP will not be relevant in the absence of the heritage place that is sought to be demolished.

## 5.2 Part 2: Weighting of Heritage Assessment

### 5.2.1 Overview to Weighting

While it is acknowledged that in broad terms the Development Plan generally seeks the Local Heritage Place to be retained, it is important to consider these provisions within the context of the overall assessment of the planning application.

This approach has been reinforced on several occasions by Courts who have advised that Development Plan provisions should not be read in isolation, and that no provisions therein are considered mandatory. Instead, Development Plan provisions are guidelines that are applied to the specifics and unique circumstances of individual applications.

The Full Court of the Supreme Court judgement for Development Assessment Commission v A&V Contractors Pty Ltd noted:

*Objectives and principles are generally stated on a council wide and zone basis, by reference to particular classes of developments, and on occasion by reference to particular sites. Moreover, the objectives and principles are directed towards a wide range of planning objectives. Therefore, there will necessarily be a degree of tension between the provisions of development plans. Some principles and objectives may militate for a development and others militate against it. Nonetheless, a proposed development must be assessed against all of the provisions of a development plan which, on their terms, apply to that development...*

*... planning authorities do not apply the objectives and principles of development plans in a vacuum. First, as I earlier observed, there will often be tension between those objectives and principles. Most of the objectives and principles, as a matter of construction, apply as general rules and not as inviolable prescriptions; they are guidelines within which an expert planning judgment must be made. Most obviously, the particular factual circumstances of a proposed development will inform that planning judgment, and, in particular, affect which of the principles and objectives will predominate.*

Further guidance on this matter was provided by the Full Court of the Supreme Court in *Lakshmanan & Anor v City of Norwood, Payneham and St Peters & Anor*, a trial that DASH Architects provided expert heritage advice to with regards to the proposed demolition of a Local Heritage Place. In this case, the demolition was proposed due to flood risk and matters of the practicality of ongoing habitation of the dwelling. When considering the merits of any proposed demolition the judgement noted:

*It is well accepted that principles of development control are guidelines. An application for development must be assessed against those principles...*

*...The degree of flooding risk which will constitute good reason to approve demolition will necessarily be higher the greater the heritage value of the place which is the subject of the development application...*

*An inquiry into the heritage value of a Local Heritage Place is not conducted by way of collateral challenge to the designation of the place by the Development Plan. To the contrary, the inquiry is undertaken for the purpose of determining **the weight to be given to that listing**. The inquiry is not much different to the assessment of the weight to be given to other competing principles of a Development Plan. In the case of a Local Heritage Place, **an assessment of its relative heritage importance is necessary to determine whether to depart from the principles which protect it**. The selection of a Local Heritage Place is necessarily a process of fact and degree. The listing itself is not challenged by inquiring where a particular place falls in the range of all Local Heritage Places which have qualified for listing.*

That is to say, the **relative heritage importance** (that is where a place falls in the range of all Local Heritage places), is necessary to determine the weight to be given to the listing, and whether to depart from the principles which protect it.

## 5.2.2 Background to Heritage Listing

51 Pirie Street, Adelaide, is identified as a Local Heritage Place (Townscape) place within the Adelaide (City) Development Plan. Understanding the basis and reasoning behind its heritage listing is relevant when considering its *relative heritage importance*, and in turn informing the weighting to be applied to the relevant heritage provisions within Council's Development Plan.

The process and basis for Townscape listings was protracted (taking more than a decade) and highly politicised, making an accurate understanding of the basis for listing difficult.

Unlike Local Heritage places that were identified, assessed and listed for their individual heritage value, the origins of Townscape places were a schedule of building groups and streetscapes that contributed towards the City's distinctive character. The process commenced in 1982 with a Heritage Study prepared for Council by Christine Johnson and Rod Elphinstone. This report identified the southern Pirie Street streetscape between King William Street and Gawler Place as reflecting "*significant aspects of the history and development of the City of Adelaide*".

The Streetscape schedule evolved into a Character Schedule, that then in turn into a Townscape schedule. Identification of groups of buildings were dropped, due to concerns regarding the rigour of assessments, in lieu of the identification of individual buildings that had otherwise not warranted individual local heritage listing.



This revised list of buildings manifested in a Townscape exhibition (1991) of buildings that were considered to contribute towards townscapes of “*architectural and historical significance within the City of Adelaide*”. Council engaged McDougall and Vines to assess objections to the exhibited properties. Their Townscape Assessment report of July 1992 notes:

*A designated townscape consists of a group of buildings which, when viewed from the street, have a consistency or cohesion. This cohesion is the result of similarity of one or more of the following features:*

- *Age of buildings;*
- *Architectural style;*
- *Scale of development;*
- *Setback and siting of development;*
- *Subdivision pattern;*
- *External details - such as roof forms, verandahs, balconies, doors and windows, materials, colours and finishes.*

*...Townscape listing is not about remarkable or individually significant buildings – it is about groups of buildings and whole areas as well as special conjunctions of topography and streets which together comprise character areas of special coherence and conformity.*

This summary appears to imply a shift back towards *groups of buildings* that contribute towards overall historic streetscapes, rather than individual places.

After more than a decade of work by Council, and factional infighting over the process and outcome, the State Government stepped in and established a committee to progress an outcome. On legal advice that protections afforded to Townscape places had little difference to those of heritage places it was recommended that the character schedule and heritage lists be merged, resulting in the current Local Heritage Places (Townscape).

An information bulletin currently published by Council notes, with regard to Townscape places:

*These places were identified in a Townscape Survey undertaken between 1988 and 1990 and listed in the early 1990s. The heritage values of these places relate to those parts of the building that can be seen from the street (i.e. the front façade and side walls of the building).*

As noted in Section 4.0, Council’s website also notes for LHP (Townscape) items:

*Local Heritage Place (Townscape) is a place that positively contributes to the townscape character of the area and the listed portion generally comprises the frontage, roof and side wall returns of the place that are visible from the street.<sup>2</sup>*

In summary, Townscape places are individual places that contribute to a *consistent and cohesive townscape of architectural and historical significance within the City of Adelaide*.

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<sup>2</sup> <http://www.cityofadelaide.com.au/planning-development/city-heritage/heritage-listings/>

### 5.2.3 Townscape Analysis

The 1982 Heritage Survey identified 51 Pirie Street for its contribution to the southern Pirie Street streetscape between King William and Gawler Place. This streetscape is approximately 190m in length and comprises the following heritage places:

Place	Heritage Status	Address	Approx Frontage	Integrity
Adelaide Town Hall Complex	State Heritage	1 - 17 Pirie Street	55m frontage	High
Queens Chambers	State Heritage	19 Pirie Street	10m frontage	High
Epworth Building	Local Heritage place – City Significant	31-35 Pirie Street	20m frontage	High
Former Bank (Subject Site)	Local Heritage place – Townscape	51 Pirie Street	24m frontage	Moderate



Figure 8: Streetscape analysis.



Figure 9: Pirie Street streetscape looking westward from Gawler Place.

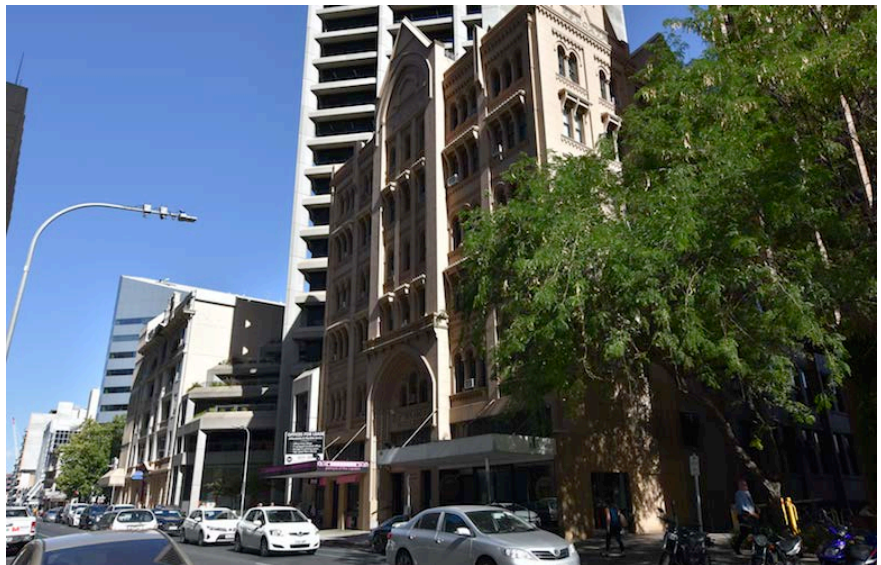


Figure 10: Pirie Street streetscape looking eastward with Epworth Building (centre right) and 51 Pirie Street (left).



Figure 11: Western end of Pirie Street with Queens Chambers (left) and Town Hall Complex (right).

Based upon an initial assessment of the relevant Pirie Street streetscape, DASH Architects makes the following assessment of its contribution to the *consistent and cohesive townscape of architectural and historical significance within the City of Adelaide*:

- The southern side of Pirie Street between King William Street and Gawler Place has a moderate degree of historic character, with heritage places comprising approximately 60% of the streetscape (refer Figure 8);
- While Queens Chambers is a storey lower than the Town Hall Complex, the two buildings share a comparable architectural style and visual articulation. These heritage places form a visually dominant 'book end' to the western end of Pirie Street and collectively comprise a consistent 35% of the relevant street frontage. Both buildings retain high integrity;
- At 6-7 storeys in height, the Epworth Building is a prominent feature in the relevant streetscape. Of Gothic design, unusual for Adelaide, and located approximately centrally to the relevant streetscape, the building makes a strong and positive contribution to the historic character of the locality. The building retains high integrity;
- 51 Pirie Street is located at the eastern end of the relevant streetscape. While it has a slightly wider frontage than the Epworth Building, it stands lower (5 storeys) and is notably less ornate. The building stands in a moderate state of integrity, having undergone the following modifications:
  - Original windows replaced;
  - Original balconies infilled;
  - Most ground floor window sills have been lowered; and
  - Signage removed.
- While the title of the Subject Site extends to the intersection of Pirie Street and Gawler Place, the LHP does not actually address this corner, with a later addition to the eastern side of the site forming this interface;

- Of the four heritage buildings within the relevant streetscape, 51 Pirie Street is the least significant, being heritage listed only for its character contribution (unlike the other places that are listed for their individual heritage significance);
- Of the four heritage buildings, 51 Pirie Street makes the least contribution to the historic character of the streetscape; and
- Of the four heritage buildings, 51 Pirie Street is of the lowest integrity.

## 5.2.4 Relative Heritage Importance

Based on the above DASH considers the *relative heritage importance* of 51 Pirie Street to be as follows:

<b>Relative Heritage Importance</b>	
When compared to other heritage places within the relevant streetscape	<b>Moderate to low</b>
When considering the relative streetscape contribution	<b>Moderate</b>

## 5.2.5 Design Considerations

The design team have advised the following reasons for the proposed demolition of the heritage place on the site:

- The existing LHP is of diminished integrity;
- The existing LHP makes only a moderate contribution to the historic streetscape character of the locality;
- The retention of the LHP restricts options to activate the public realm to Pirie Street, with the current proposal providing an expansive transparent interface between the hotel lobby and the street (Figure 12);
- The proposal provides a setback of the Pirie Street façade, behind the current property boundary, to increase the amenity of the Pirie Street public realm. This would not be possible if the LHP façade was retained;
- The removal of the LHP greatly assists achieving the Zone objectives that seek the Site to be developed in an intensive manner, with high street walls that frame the streets, within a locality considered to be the economic and cultural focus of the State; and
- The current proposal will result in a high quality, cohesive design that will not only be an architectural landmark, but also significantly improves streetscape and public realm quality, compared to the present LHP (Figure 12, Figure 13).



Figure 12: Artist's render of Pirie Street interface. Source: GHD Woodhead.



Figure 13: Current Pirie Street interface.

As noted in Section 3.0, the design team participated in the Pre-Lodgement Panel (PLP) and Design Review Panel (DRP) application pathway. The DRP process, through the Office of Design and Architecture South Australia (ODASA).

The intent of the DRP process is to:

*Design Review is an independent evaluation process in which a panel of built environment experts review the design quality of development proposals. It is a reliable method of promoting good design in South Australia and improving the quality of design outcomes in the built environment.<sup>3</sup>*

While not bound to an assessment of the application against specific provisions of Council's Development Plan, the DRP do consider the broader design quality merits of a proposal to, as noted, promote good design and improve design outcomes in the built environment.

The Government Architect noted in her summary letter following the final design review on the proposal (dated 11 February 2019):

*...I am of the opinion that development of this scale in this part of the city has a responsibility to deliver a high benchmark for good design, particularly in terms of the public realm contribution. In my view, the removal of the Local heritage facade must also be justified by achieving a high level of activation and providing a generous contribution to the streetscape, which I consider is being achieved by the proposal...*

*The site currently contains a Local (Townscape) heritage place identified in the Development Plan as a former Bank. The heritage place was substantially redeveloped in the 1980s, with approximately 600mm of the heritage facade retained and a concrete building constructed behind and to the east...*

*I support the ambition for the proposed public realm improvements and approach for a unified treatment that integrates the ground plane with the broader urban environment...*

*The base of the building is characterised by a double height highly glazed frontage with sculptural columns that transition from inside to outside the building envelope. The matching smaller scale canopy columns create a family of elements, which together contribute to the streetscape character and ground the singular expression of the tower. I support the expression of the base of the building, including the highly transparent glazing and slender sculptural columns...*

*The building facade is characterised by a variable shrouding element that unifies the development and creates a singular architectural expression... I support the concept for the building facade and commend the project team's commitment to this innovative technique and high quality materiality.*

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<sup>3</sup> <https://www.odasa.sa.gov.au/design-review/>

*I am encouraged by development opportunities presented by the site and the project team's ambition to deliver a high quality outcome...*

On this basis it would appear that the Government Architect is supportive of the proposal for demolition of the LHP, due to its compromised integrity, and its removal facilitating the development of the site with a high quality outcome that contributes positively to the public realm.

## 6.0 Summary

The proposal for 51 Pirie Street, Adelaide seeks to demolish an existing Local Heritage Place (Townscape) item on the site to develop a new 28 storey hotel complex. The existing heritage place currently stands in a compromised state of integrity, with all but the Pirie Street masonry façade having been modified.

Council's Development Plan generally seeks Local Heritage Places to be retained and reused in any redevelopment of the site (Obj 43, 44; PDC 136, 137, and 138). The proposed demolition of the LHP is inconsistent with this.

The LHP had been identified in Council's Development Plan as Townscape Item for its contribution to a *consistent and cohesive townscape of architectural and historical significance within the City of Adelaide*.

While the Subject LHP is of some historic character, this HIA considers its contribution to the *historic townscape* to be only moderate to low. This *relative heritage importance* is a consideration when determining the weighting to be given the relevant heritage provisions of Council's Development Plan.

The project team participated in the Design Review process through the Office of Design and Architecture South Australia. The Government Architect's final comment on the proposal was that she considered the demolition of the LHP justified given the *high level of activation and providing a generous contribution to the streetscape* of the proposal.

Balancing the overall merits of a proposal is the role of the Relevant Approval Authority, not this Heritage Impact Assessment. Notwithstanding this, the conclusion of the Government Architect appears to have considerable justification. The existing heritage place on the Subject Site was identified as a Townscape item due to its contribution to the streetscape and public realm quality (albeit with regards to historic character contribution). The Government Architect considers the current proposal will make a greater contribution to the streetscape and public realm quality than the existing LHP, and therefore, on balance, its demolition was considered justified.



# CES - 51 Pirie Street, Adelaide

Waste Management Plan



## Document verification

Date	Version	Title	Prepared by	Approved by
15/02/19	V1	51 Pirie Street waste management plan - DRAFT	Kristian Le Gallou & Jarvis Webb	Jarvis Webb
21/02/19	V1.1	51 Pirie Street waste management plan	Kristian Le Gallou & Jarvis Webb	Jarvis Webb

## Important notes

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# Document summary

This waste management plan (WMP) has been developed at the planning stage of the development. The client, project managers, project architects, and traffic consultant have been consulted and consideration given to the relevant policy requirements (Appendix 1).

The proposed waste management system (WMS) is outlined in this document. This a high-level view and includes a preliminary design that demonstrates waste can be successfully managed at the site. If land uses and waste management arrangements for the development are altered during detailed design work, this WMP may need to be updated.

<b>Document summary .....</b>	<b>2</b>
<b>1. Development summary .....</b>	<b>3</b>
1.1. Land use and occupancy.....	3
1.2. Recommended services.....	4
<b>2. Waste management analysis .....</b>	<b>5</b>
2.1. Estimated waste and recycling volumes .....	5
2.2. Bin size and collection details .....	6
2.3. Waste storage area .....	7
<b>3. Waste management system.....</b>	<b>9</b>
<b>4. Collection requirements.....</b>	<b>10</b>
4.1. Vehicle movements per week.....	10
4.2. Collection vehicle .....	10
<b>Appendix 1 - Policies .....</b>	<b>11</b>
<b>Appendix 2 - Additional waste management and design considerations .....</b>	<b>12</b>



# 1. Development summary

Project	51 Pirie Street, Adelaide
Client	CES
Architect	GHD Woodhead
Traffic Engineer	WGA

## 1.1. Land use and occupancy

Table 1 outlines the proposed building and land uses of the development. This is based on the most recent architectural plans. The waste resource generation categories are based on the land use outlined in the plans.

*Table 1 Land use and occupancy overview*

Level	Name	Size		WRGR <sup>1</sup>
<b>Ground</b>	Reception	25	m <sup>2</sup>	Offices/Consulting
	Hub bar	124	m <sup>2</sup>	Hotel/Motel Bar areas
<b>Level 2-4</b>	Car park	-	-	NA
<b>Level 5</b>	Employee restaurant	132	m <sup>2</sup>	Hotel/Motel Bar and dining areas
<b>Level 6</b>	Gym	130	m <sup>2</sup>	Gym
<b>Level 7</b>	Pre-function	240	m <sup>2</sup>	Hotel/Motel Bar areas
	Ballroom	377	m <sup>2</sup>	Hotel/Motel Bar and dining areas
	Event kitchen	102	m <sup>2</sup>	Hotel/Motel Bar and dining areas
<b>Level 7</b>	Pre-function	249	m <sup>2</sup>	Hotel/Motel Bar areas
	VIP/Bridal	81	m <sup>2</sup>	Hotel/Motel Bar and dining areas
	Servery	54	m <sup>2</sup>	Hotel/Motel Bar and dining areas
	Boardroom	50	m <sup>2</sup>	Office/Consulting
<b>Level 8</b>	Open office	267	m <sup>2</sup>	Offices/Consulting
	VIP Bridal	31	m <sup>2</sup>	Hotel/Motel Bar areas
<b>Level 9</b>	Pre-event	217	m <sup>2</sup>	Hotel/Motel Bar areas
	Meeting rooms	443	m <sup>2</sup>	Office/Consulting
	Back-up kitchen	55	m <sup>2</sup>	Hotel/Motel Bar and dining areas
<b>Level 11-25</b>	Hotel rooms	283	beds	Hotel rooms
<b>Level 26</b>	Hotel rooms	550	m <sup>2</sup>	Gym
	Executive club	210	m <sup>2</sup>	Hotel/Motel Bar and dining areas
<b>Level 27</b>	Sky bar	208	m <sup>2</sup>	Hotel/Motel Bar areas
	Sky bar dining	550	m <sup>2</sup>	Hotel/Motel Bar and dining areas
<b>Level 28</b>	Plant	-	-	NA

NA = Not applicable as not expected to generate significant quantities of waste

<sup>1</sup> Land use categories based on the Waste Resource Generation Rates (WRGRs) in the SA Better Practice Guide – Waste Management in Residential or Mixed Use Developments (Green Industries SA, 2014) or other industry sources.

## 1.2. Recommended services

For the development to achieve effective waste and recycling management it's recommended the services outlined in Table 2 be provided.

Table 2 Recommended waste management services

Required/recommended waste and recycling collection services								
Development land uses	Hotel rooms	Sky bar & Employee kitchen	Hub bar, Sky bar, Prefunction/event areas + Executive club	Reception/ Office	Meeting rooms	Ballroom + Kitchen	Gym	
Routine collection (rear lift)	General waste	X	X	X	X	X	X	X
	Comingled recycling	X	X	X	X	X	X	X
	Organics recycling	X	X	X	X	X	X	X
	Cardboard recycling	NS	X	X	NS	NS	X	NS
	Paper recycling	NS	NS	NS	X	X	NS	NS
	Confidential paper recycling	NS	NS	NS	X	X	NS	NS
On-call or external drop-off	Hard waste	X	X	X	X	X	X	X
	E-waste	X	X	X	X	X	X	X
	CFL/Lighting	X	X	X	X	X	X	X
	Printer Cartridges	X	X	X	X	X	X	X
	Batteries	X	X	X	X	X	X	X

X = Required/Desired  
NS = Not serviced as separate service not required

These recommendations align with the *SA Better Practice Guide - Waste Management in Residential or Mixed-Use Developments* (Green Industries SA, 2014). The volumes and regular service provision of the following streams have not been estimated however they should still be considered in the overall development:

- Electronic waste (batteries, printer cartridges, lighting)
  - E-waste would be temporarily stored within the development where it is generated (e.g. offices). It would then be taken to an appropriate receive facility (e.g. recycling depot or participating retailer) or collected by a certified collection contractor.
- Hard Waste (e.g. hotel equipment, furniture, mattresses)
  - Hard waste would be temporarily stored within the development (e.g. store room) and managed via a pull-in/pull-out collection service during retrofitting or maintenance activities. This would be arranged by the building management in conjunction with building services, to ensure that collection via the on-property loading area is undertaken at an appropriate time.



## 2. Waste management analysis

### 2.1. Estimated waste and recycling volumes

Table 3 below outlines the estimated volumes of waste and recycling produced within the development per stream each week.

Table 3 Estimated waste volumes produced by the development<sup>2</sup>

Estimated waste generation volumes (litres per week)									
Development land use	Hotel rooms	Sky bar & Employee kitchen	Hub bar, Sky bar, Prefunction/event areas + Executive club	Reception/ Office	Meeting rooms	Ballroom + Kitchen	Gym	Total	
WRGR classification	<i>Hotel or Motel (Accommodation)</i>	<i>Hotel or Motel (Combined Bar &amp; Dining Areas)</i>	<i>Hotel or Motel (Bar Areas)</i>	<i>Offices or Consulting Rooms</i>	<i>Offices or Consulting Rooms</i>	<i>Hotel or Motel (Combined Bar &amp; Dining Areas)</i>	<i>Gym</i>		
Waste stream	General waste	10,300	14,300	2,400	400	200	3,200	40	<b>30,800</b>
	Comingled recycling	6,200	1,200	600	200	80	300	40	<b>8,600</b>
	Organics recycling	3,100	19,100	100	70	30	4,300	7	<b>26,700</b>
	Cardboard recycling	NE	3,600	1,800	NE	NE	800	NE	<b>6,200</b>
	Paper recycling	NE	NE	NE	200	100	NE	NE	<b>300</b>
	Confidential paper recycling	NE	NE	NE	30	10	NE	NE	<b>40</b>
<b>Total site volume</b>	<b>19,600</b>	<b>38,200</b>	<b>4,900</b>	<b>900</b>	<b>400</b>	<b>8,600</b>	<b>90</b>	<b>72,600</b>	

<sup>2</sup> Estimates are based on the proposed land use data provided by the client and architect, client expectations and waste management policies (Outlined in Appendix 1) relevant to the developments' land uses. The metrics used are based on those found in The SA Better Guide Practice Guide - Waste Management for Residential and Mixed-Use Developments and developed by Rawtec based on industry knowledge and experience.

## 2.2. Bin size and collection details

Table 4 below provides estimates of the number of bins and collections per week required to service the development. These figures are based on the total volumes of waste and recycling for the development and the assumption that all waste and recycling would be collected by one service provider.

*Table 4 Estimated bin requirements and collections per week*

	Waste room		
	Bin size (L)	Number of bins required	Collections per week
General waste	660	8	6
Comingled recycling	660	3	5
Organics recycling	660	9	5
Cardboard recycling	660	3	4
Paper recycling	240	2	On call
Confidential paper recycling	240	1	On call
<b>Total</b>		<b>26</b>	<b>20</b>

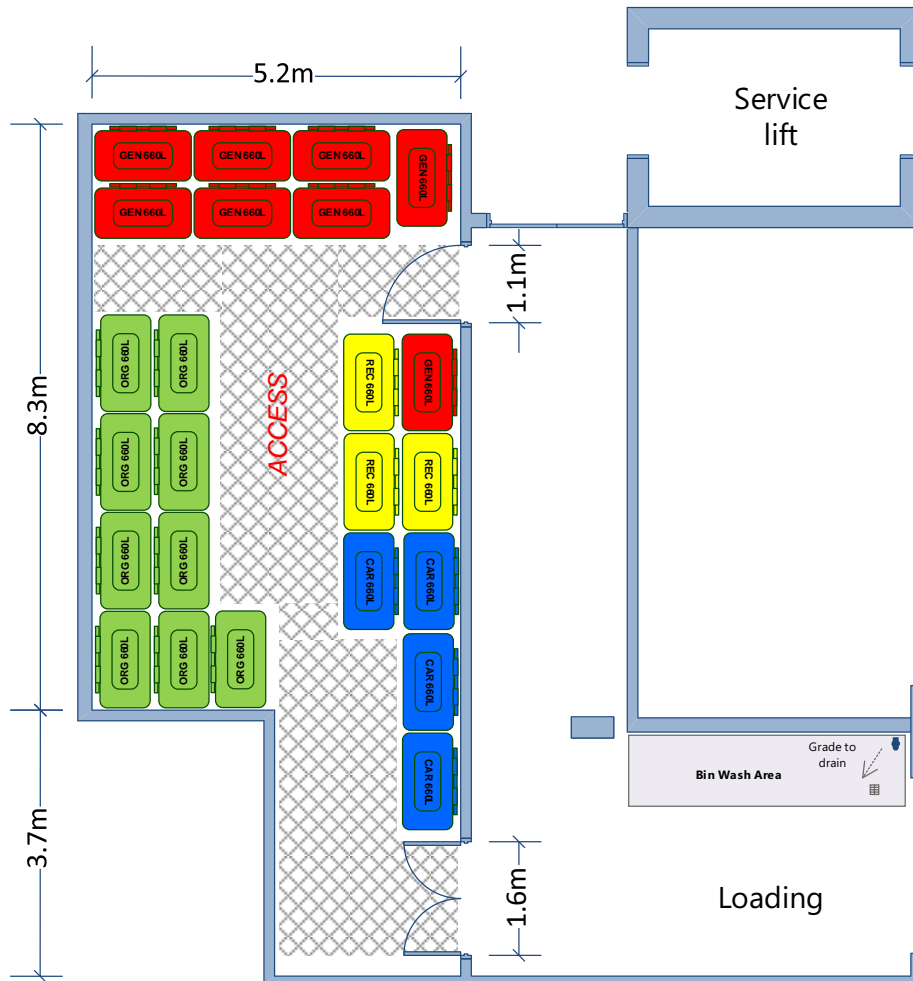
\*Totals have been rounded and may not equate



### 2.3. Waste storage areas

Figure 1 outlines the ground floor waste room. It is anticipated that all waste from the cleaning of the hotel rooms will be brought to this level by cleaning staff. Bins from the kitchen waste rooms will also be transferred to this room once they are full. Empty bins can then be taken back up to the kitchen waste rooms for use. A hard waste area has been provided to temporarily store furniture and E-waste prior to its collection/drop-off. Additional design advice and other considerations have been included in Appendix 2.

Figure 1 Indicative ground floor waste storage area



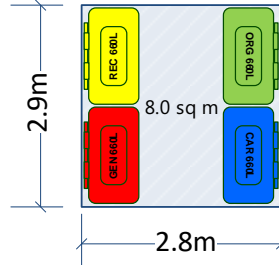
LEGEND	
GEN	= General waste
REC	= Comingled recycling
ORG	= Organics
CAR	= Cardboard recycling

**Note:** These bin sizes are for **illustration purpose only** and are based on the standard MASTEC Australia bin sizes (<http://www.mastec.com.au>). Bin sizes and shapes may differ depending on manufacturer, collection contractor or local waste authority. Please allow extra room (e.g. >10%) for differences in bin sizes, bin access, opening and closing and manoeuvring etc.



Figure 2 outlines an indicative drawing of the kitchen waste storage area for the development. This is an example configuration outlining the estimated size and layout for each kitchen. Full 660 litre bulk bins from the kitchens will be transferred via the service lifts to the ground floor waste room ready for collection. Previously emptied 660 litre bins will then be transferred via the service lifts and stored for use in the kitchen waste rooms.

Figure 2 Indicative kitchen waste storage area



#### LEGEND

GEN = General waste  
 REC = Comingled recycling  
 ORG = Organics  
 CAR = Cardboard recycling

**Note:** These bin sizes are for **illustration purpose only** and are based on the standard MASTEC Australia bin sizes (<http://www.mastec.com.au>). Bin sizes and shapes may differ depending on manufacturer, collection contractor or local waste authority. Please allow extra room (e.g. >10%) for differences in bin sizes, bin access, opening and closing and manoeuvring etc.



### 3. Waste management system

A Waste management system has been developed to effectively manage the waste generated at the development. The WMS outlined in Table 5 addresses each land use within the development and considers the appropriate policies for waste management (Appendix 1).

*Table 5 Waste management system for the development*

Proposed waste management system		
<b>Waste/recycling services</b>	<ul style="list-style-type: none"> <li>• General waste</li> <li>• Comingle recycling</li> <li>• Organics recycling</li> </ul>	<ul style="list-style-type: none"> <li>• Cardboard recycling</li> <li>• Paper recycling</li> <li>• Confidential paper recycling</li> </ul>
WMS step	WMS notes	
<b>1. User storage</b>	<ul style="list-style-type: none"> <li>• Hotel guests will dispose of their waste and recycling in bins provided in their rooms.               <ul style="list-style-type: none"> <li>– It is recommended at minimum that a general waste and recycling bin be provided with clear signage.</li> </ul> </li> <li>• Waste and recycling from kitchens will be collected in 40-80 litre bins and then transferred into the 660 litre bulk bins in the kitchen waste rooms when required:               <ul style="list-style-type: none"> <li>– General waste will be collected using black bin liners</li> <li>– Organics will be collected using compostable bin liners</li> <li>– Comingled recycling will be collected loose</li> <li>– Cardboard will be collected loose.</li> </ul> </li> <li>• Levels with significant administration facilities are recommended to have a 240 litre paper recycling and 240 litre confidential paper recycling bin in the printing/utility room.</li> </ul>	
<b>2. Transfer pathways and bin transfer</b>	<ul style="list-style-type: none"> <li>• Full 660 litre bulk bins from the kitchens will be transferred via the service lifts to the ground floor waste room ready for collection. Previously emptied 660 litre bins will then be transferred via the service lifts and stored for use in the kitchen waste rooms.</li> <li>• Waste and recycling from hotel rooms will be transferred by the cleaners via the service lifts to the ground floor waste room.</li> <li>• Transfer routes must be at least 1.25m wide, free of obstructions and steps and a slope of no more than 1:10.</li> </ul>	
<b>3. Aggregation &amp; storage</b>	<ul style="list-style-type: none"> <li>• Cleaners will place waste and recycling from the hotel rooms directly into the appropriate 660 litre bulk bin.</li> <li>• Bulk bins awaiting collection will be stored in the ground floor waste room.</li> </ul>	
<b>4. Bin collection</b>	<ul style="list-style-type: none"> <li>• The waste collection contractor will reverse from Gawler street in the hotel loading area.</li> <li>• The contractor will collect bins from the waste room and empty them at the rear of the collection vehicle and then return them to the waste room.</li> <li>• The collection vehicle will then exit the development in a forward direction.</li> </ul>	



## 4. Collection requirements

### 4.1. Vehicle movements per week

The number of collection vehicle movements has been estimated at 20 per week. This is based on the estimated waste and recycling volumes and service frequency as outlined in Table 4. This also assumes that collection will take place by the same waste collection contractor for all services.

### 4.2. Collection vehicle

Based on discussions with City of Adelaide, the collection vehicle will reverse into the development's loading area from Gawler Street, and then exit the development in a forward direction. To ensure the safety of pedestrians it is recommended that the waste collection vehicles:

- Are fitted with 360 degree reversing cameras and automatic braking for rear obstructions/pedestrians.
- Collect waste and recycling out of peak times to avoid high traffic and pedestrian times (e.g. before 6am/after 7pm).
- Utilise a spotter provided by the hotel/contractor for the reversing vehicle.

Approximate truck dimensions are provided to help the Traffic Consultant's analysis (Table 6). Please note:

- Collection vehicle dimensions and operating requirements vary between waste collection contractors.
- Rawtec does not offer assurance that the collection zone can accommodate waste collection vehicles.
- The Traffic Consultant must independently confirm there is sufficient space for the collection vehicle and that it can enter and exit the development safely.
- The client must ensure the preferred waste collection contractor can service the development before collection can begin.

*Table 6 Truck dimensions for consideration*

Collection vehicle dimensions <sup>3</sup>		
Vehicle type	Rear Lift	Pan-tech/Flat Bed
Collection type	Collection of bins up to 1100 L	At call waste streams
Dimensions	Up to 4m (h) x 2.5m (w) x minimum 8.8m - up to 10m (l)	Up to 4.5m (h) x 2.5m (w) x 8.8m (l)
Rear loading space required	2m	-
Operational vehicle height	Up to 4m	Up to 4.5m
Vehicle turning circle	18-25m	10m

<sup>3</sup> Vehicle width dimensions are based on Australian MRV standard specifications - AS 2890.2-2002. Vehicle length and heights are based on common collection vehicles currently operating in the SA market. However, it should be noted that waste and recycling collection vehicles are custom designed and may differ from these specifications.

## Appendix 1 - Policies

This WMP has been prepared in consideration of the following policies, design and operational requirements:

- The South Australian Environment Protection (Waste to Resources) Policy 2010 (W2REPP) (Government of South Australia, 2011):
  - Waste is subject to resource recovery processes, which can include source separation, before disposal to landfill.
- South Australian Better Practice Guide – Waste Management in Residential or Mixed-Use Developments (Green Industries SA (previously Zero Waste SA), 2014):
  - Identifies need for areas to store waste and recyclable materials. They must be appropriate to the size and type of development, screened from public, minimises disturbance to residents and provides access to service vehicles.
- Adelaide (City) Development Plan (Department of Planning, Transport & Infrastructure, 2017).
  - OBJ 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.
  - PDC 101: A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new developments.
  - PDC 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.
  - PDC 103: Developments greater than 2,000 square metres of total floor area should manage waste by:
    - Containing a dedicated area for the collection and sorting of construction waste and recyclable building materials;
    - On-site storage and management of waste;
    - Disposal of non-recyclable waste; and
    - Incorporating waste water and stormwater re-use including the treatment and re-use of grey water.



## Appendix 2 - Additional waste management and design considerations

This table provides additional considerations and advice for the development. This information is based on the SA Better Practice Guide Waste Management for Residential and Mixed-Use Developments.

Area	Consideration
Bin/chute rooms	<ul style="list-style-type: none"> <li>• Access to bin/chute rooms by mobility impaired persons must be considered.</li> <li>• Allocating chutes in closed waste rooms on each floor may prevent odours or spillage issues compared to providing access directly from a hallway.</li> </ul>
Bin design, colours and signage	<ul style="list-style-type: none"> <li>• Bins and signage should conform to the Australian Standard for Mobile Waste Containers (AS 4213).</li> </ul>
Bin transfer routes	<ul style="list-style-type: none"> <li>• The Better Practice Guide recommends transfer routes be at least 1.25m wide, free of obstructions and steps and a slope of no more than 1:10.</li> <li>• These should not pass through living areas or dwellings.</li> </ul>
Bin washing	<ul style="list-style-type: none"> <li>• A bin washing station must: <ul style="list-style-type: none"> <li>– Slope to a drain leading to the sewer</li> <li>– Have a tap and a hose with mains supply</li> <li>– Be at least 2m x 2m</li> <li>– Be slip resistant to prevent slippage during washing.</li> </ul> </li> <li>• Note: <ul style="list-style-type: none"> <li>– Line marking and bunding is not required around the bin wash area.</li> <li>– Bins can be stored on top of the bin wash area in the waste room. During washing, other bins can be placed outside the waste collection room while bins are washed in the waste room. Alternatively, the bin wash area can be installed outside the waste room. It may also be possible for the waste contractor to be contracted to provide this service (either on-site or off-site).</li> </ul> </li> </ul>
Detailed design and construction	<ul style="list-style-type: none"> <li>• This WMP provides a high-level overview of waste management at the development. Appropriate design and construction advice should be sought during the detailed design phase to ensure equipment, infrastructure and building services can fulfil the functions proposed.</li> </ul>
Education and training	<ul style="list-style-type: none"> <li>• The developer should consider providing education and training for staff and guests in the building's WMS to ensure appropriate waste management practices.</li> </ul>
Hard waste	<ul style="list-style-type: none"> <li>• An aggregation point for hard waste should be provided that is easy to access for collection vehicles. <ul style="list-style-type: none"> <li>– This streamlines collection logistics. If stored in individual locations the building services manager, tenant and collection contractor will need to be present for collection. This may increase costs.</li> </ul> </li> </ul>



Area	Consideration
Health and amenity	<ul style="list-style-type: none"> <li>• The Better Practice Guide stipulates effective WMS design should:               <ul style="list-style-type: none"> <li>– Minimise and mitigate odour and noise</li> <li>– Consider and preserve visual amenity for residents/tenants, neighbours and the public</li> <li>– Prevent waste spreading beyond the defined location</li> <li>– Specify washable services enabling periodic cleaning</li> <li>– Provide adequate ventilation.</li> </ul> </li> </ul>
Lid within a lid bin	<ul style="list-style-type: none"> <li>• Bulk bins (e.g. 1100 litre) with a 'lid within a lid' system can be used to make waste and recycling disposal easier for services, tenants/residents.               <ul style="list-style-type: none"> <li>– A smaller, lighter lid reduces the weight and risk for people disposing of materials.</li> <li>– The larger lid can be locked, stopping oversize items being put into the bin.</li> </ul> </li> </ul>
Peak periods	<ul style="list-style-type: none"> <li>• Peak periods during the year (e.g. Easter, Public Holidays, Christmas) can increase waste generation rates. Additional collections may need to be scheduled in these circumstances.</li> </ul>
Waste collection timing	<ul style="list-style-type: none"> <li>• Waste collection timing and frequency should be scheduled to minimise the impact of noise and traffic on residents, neighbours and the public.</li> </ul>
Waste storage area	<ul style="list-style-type: none"> <li>• A secure storage area should be provided to prevent interference with the bins and equipment from the public.</li> </ul>
Waste streams	<ul style="list-style-type: none"> <li>• The SA Better Practice Guide indicates that organics (food and/or garden) is a required/expected service for residents in South Australia.</li> <li>• It is beneficial for disposal points of all three streams (general waste, comingled recycling and food organics) located together.</li> </ul>





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# HOTEL DEVELOPMENT 51 PIRIE STREET, ADELAIDE

## SUSTAINABILITY MANAGEMENT PLAN

Project No: LCE9672



# CONTENTS

1	INTRODUCTION	3
1.1	OBJECTIVES	3
1.2	PROJECT OVERVIEW	3
1.3	SUMMARY OF KEY ESD INITIATIVES	4
1.4	SUSTAINABILITY FRAMEWORK & GOVERNANCE	5
2	SUSTAINABILITY INITIATIVES	6
2.1	EFFICIENT BUILDING THERMAL ENVELOPE	6
2.2	THERMAL MASS	7
2.3	PROVISION OF SHADING	7
2.4	ENERGY EFFICIENT SERVICES DESIGN	8
2.5	INDOOR ENVIRONMENT QUALITY	8
2.6	WATER EFFICIENCY	9
2.7	RENEWABLE ENERGY	10
2.8	SUSTAINABLE TRANSPORT	10
2.9	OPERATIONAL AND CONSTRUCTION WASTE	11
	APPENDIX A	12
	APPENDIX B	14

## 1 INTRODUCTION

### 1.1 OBJECTIVES

This report has been prepared to support the development planning submission by outlining the sustainability strategy for the development. This report outlines the Ecologically Sustainable Design (ESD) framework and initiatives that are proposed for the development, and details each of the primary ESD features.

The intent of each initiative is to add value to the project by improving the environmental performance of the development. Collectively, these initiatives will: -

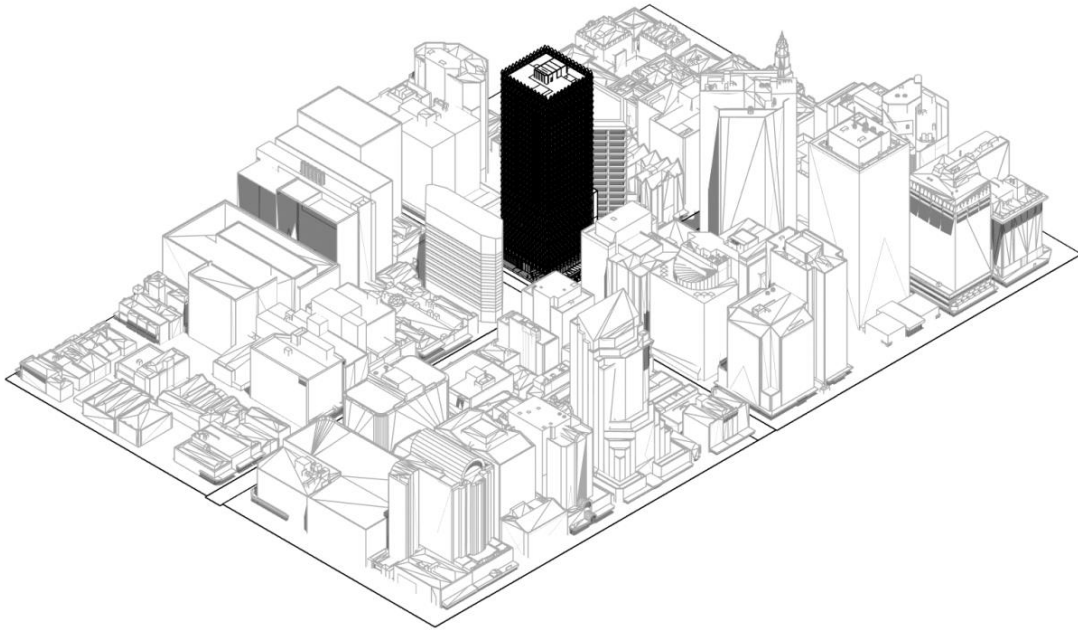
- Reduce energy and water consumption;
- Reduce the ecological footprint of the building and its occupants;
- Improve thermal comfort and air quality within the building; and
- Improve occupant well-being.

### 1.2 PROJECT OVERVIEW

The proposed hotel development at 51 Pirie Street (Adelaide) is a predominantly Class 3 building under the National Construction Code which comprises:

<b>Basement</b>	End of trip facilities, housekeeping storage and building services
<b>Ground Floor</b>	Entry lobby and reception, offices and luggage store, lounge and market area, pantry, waste collection and loading/receiving dock
<b>Level 1</b>	Guest retreat mezzanine area and carparking
<b>Levels 2-4</b>	carparking levels
<b>Level 5</b>	Employee areas, including restaurant and WC/Shower rooms with lockers, and pool plant
<b>Level 6</b>	Pool and pool storage, gym, yoga room, change rooms, medical centre, employee lounge and training area
<b>Level 7</b>	Ballroom and pre-function area, cloakroom, furniture storeroom and event kitchen
<b>Level 8</b>	Administration and office areas and bridal/VIP area
<b>Level 9</b>	Meeting rooms (x5) and pre-event areas and kitchen
<b>Level 10</b>	Mechanical and hydraulic plant and fire water tank
<b>Levels 11-25</b>	Guest rooms and housekeeping
<b>Level 26</b>	Guest rooms, housekeeping and the 'executive club' areas, including boardroom, lounge, library and kitchen.
<b>Level 27</b>	Sky bar and dining areas, kitchen, food and beverage store
<b>Level 28</b>	Roof plant

The following figure shows the site's location.



**Figure 1: Isometric image showing location of proposed building (Image courtesy of GHD WOODHEAD)**

### **1.3 SUMMARY OF KEY ESD INITIATIVES**

The following initiatives have been adopted and incorporated into the design of the building to satisfy the above objectives and comply with the hotel operator sustainability brief:

- High performance building envelope; wall, floor and roof insulation R-values to meet best practice guidelines
- Glazing selected with consideration of building-specific features and climatic conditions to meet or exceed minimum NCC requirements
- Energy efficient massing (minimal exposed ceilings and floors)
- External feature shading (Lattice) to protect glazing on the North/East and West facades, reducing afternoon solar heat gains in summer
- Engineered and tailored design of each façade shading detail to optimise passive solar performance for each orientation
- Master shutdown switches provided to each guest room allowing the lighting, air-conditioning and exhaust fans to be switched off when the unit is unoccupied
- Thermal mass provided through heavyweight construction material
- High levels of daylight provided to all hotel rooms
- LED lighting to be implemented throughout
- Motion sensors for lighting control within common areas
- Variable speed drives and carbon monoxide sensors to control carpark exhaust fans to ramp up and down during peak and non-peak periods respectively.
- Electric vehicle charging stations in car park to encourage uptake of sustainable transport options
- High efficiency, hydronic central plant

- Heat recovery ventilation throughout guest rooms
- Economy cycle / carbon dioxide monitoring to common areas to increase mechanical system efficiency (free cooling, reduction of outside air in periods of low occupation)
- Water efficient fixtures and fittings (refer to Section 2.6 for proposed WELS ratings)
- End of trip facilities for employees
- Secure bicycle storage area for employees and visitors
- Low VOC paints used throughout the building
- Renewable energy - review the feasibility of a roof mounted Solar PV system
- Operational waste segregation and recycling
- Promotion of recycling construction waste in lieu of landfill disposal

**1.4 SUSTAINABILITY FRAMEWORK & GOVERNANCE**

The preferred hotel operator has an established, internationally recognised set of standards and guidelines for best practice sustainability outcomes.

A project specific framework must be implemented to source and track sustainability initiatives against the framework which covers the following project elements:-

- Site Characteristics
- Building Envelope Performance (Passive Solar)
- Potable Water System Efficiency
- Cooling, Heating and Domestic Hot Water Systems
- Ventilation
- Lighting
- Appliances
- FF & E
- Recycling
- Waste Management

Complies = Yes / No / NA (Not Applicable) / EXG (Exception Granted)					
Area / System	Item	Description	Requirement	Complies	Comments
<b>1.7 Lighting</b>					
Site, Exterior and Interior Lighting	Light Sources	Site, exterior and interior lighting shall be energy efficient, and primarily consist of -approved LED light sources. Halogen and other low efficacy lighting sources are not allowed.	Lighting performance and efficiencies shall follow the mandated requirements of the latest version of ASHRAE 90.1 (or country-specific code/standard where applicable) and the recommendations of the Illuminating Engineering Society's Design Guide for Hotel Lighting.		
	Total Lighting Power	The total power for lighting shall not exceed a minimum of 10% less than the prevailing energy code or recognized standard for the location of the project.	Total lighting power shall not exceed a minimum of 10% less than the baseline maximum allowed by the latest version of ASHRAE 90.1 or the country-specific energy code/standard applicable to the project.		

**Figure 2: Excerpt of hotel operator sustainability framework (Source: Hotel operator brief)**

## 2 SUSTAINABILITY INITIATIVES

### 2.1 EFFICIENT BUILDING THERMAL ENVELOPE

#### High performance insulation

An efficient building envelope is a highly robust feature as its benefits will remain constant throughout the life of the building, and are also largely independent of the behaviour of the occupants. For this development, the performance of wall, floor and ceiling/roof insulation is to meet best practice guidelines with consideration to relevant items of objective 30 'Energy Efficiency', of the Adelaide City Council's Development Plan, refer to appendix A.

#### Glazing Performance

Specification of glazing units will consider the optimal thermal requirements of each space, the orientation of the glazing itself, and the Adelaide climate. As a result, accommodation units will benefit from free heating provided by the sun during winter while minimising solar heat gains during summer.

#### Energy efficient massing

The massing has been optimised such that all floorplate boundaries of Levels 5 to 27 are identical, which minimises the area of exposed floors and ceilings within guest rooms and throughout the building. Insulation will be applied to all guest rooms and common areas where ceilings/floors are exposed to non-conditioned or external spaces above/below.



**Figure 3: The building's footprint remains consistent on the majority of floors, resulting in minimal exposed floors and ceilings throughout the building.**

## 2.2 THERMAL MASS

The building has been designed with concrete slabs and columns for the core structure. As a result, the building has a high level of thermal mass, which combined with tailored shading system assists in passively maintaining comfortable temperatures within the accommodation units for longer periods. This is achieved by:

1. In summer, delaying the peak temperature that occurs throughout the day (hence the space is more comfortable for a longer period during the morning), and reducing the overall peak temperature
2. In winter, absorbing heat throughout the day which reduces the requirement for heating at night time.

## 2.3 PROVISION OF SHADING

Windows on all facades to guest rooms and hotel common areas are provided with an external architectural shading screen or 'lattice', as shown in the images below. This architectural feature element will provide shading to the glazing, protecting the window horizontally and vertically, which will reduce the impact of low incident sun angles on the East and West in the morning and afternoon respectively. This shading strategy, coupled with high performance glazing, will reduce solar gains and cooling loads in summer and increase occupant comfort.

The final configuration will be 'engineered' for each facade orientation, utilising sophisticated sun-cast and solar energy modelling software.

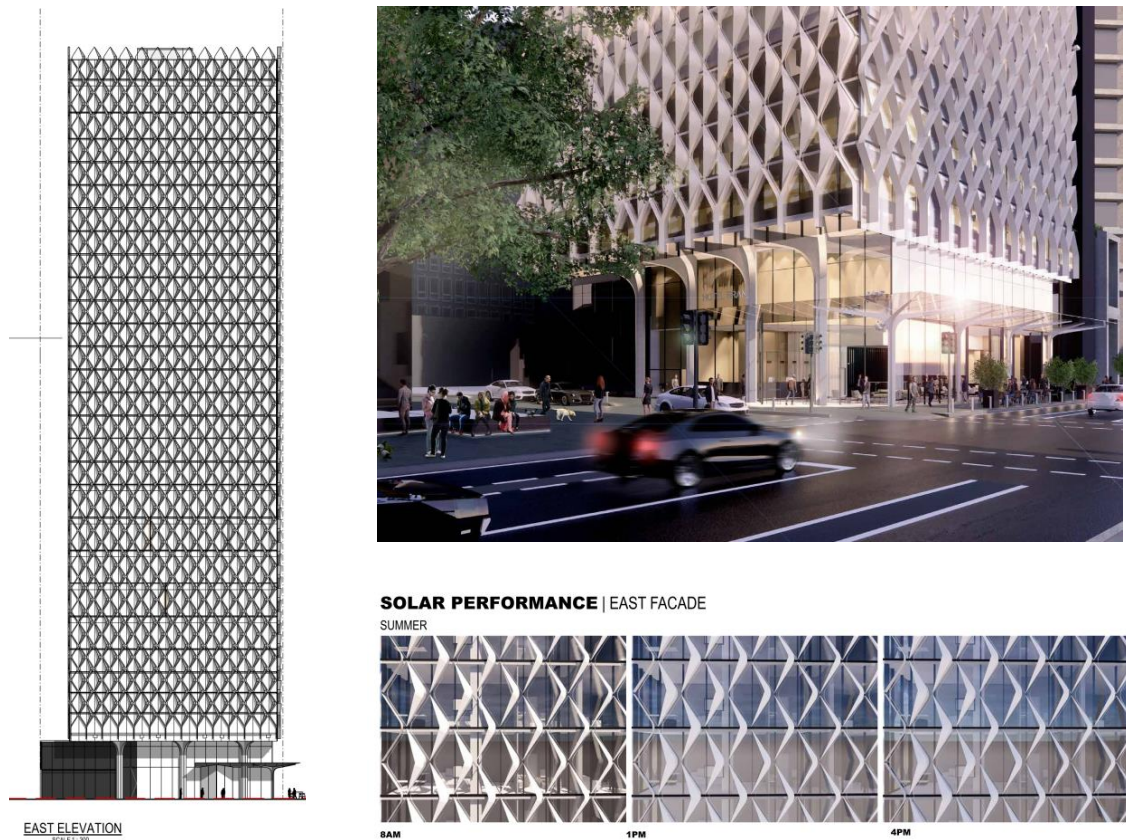


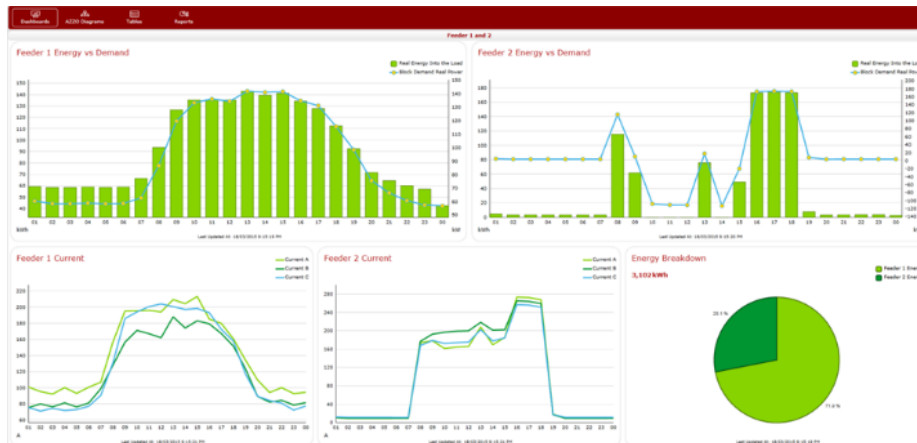
Figure 4: Architectural feature shading 'lattice' and solar study excerpt (Images courtesy of GHD WOODHEAD)

## 2.4 ENERGY EFFICIENT SERVICES DESIGN

Selection of energy efficient practices will be integrated into electrical and mechanical services, such as high efficiency LED lighting throughout the development and mechanical plant that exceeds Minimum Energy Performance Standards (MEPS), utilising a high efficiency, hydronic central plant and heat recovery ventilation throughout guest rooms.

To further reduce operational costs and carbon emissions, the feasibility of carbon dioxide monitoring for outside air reduction where possible and economy cycle operation for free cooling where available will be assessed during the design phase.

Lighting in common areas as well as mechanical plant operation will be controlled automatically via motion sensors and time schedules to ensure services only operate when required. Similarly, master shutdown switches provided to each guest room ensures the lighting, air-conditioning and exhaust



fans are switched off when the unit is unoccupied.

**Figure 5: Energy management dashboard example**

## 2.5 INDOOR ENVIRONMENT QUALITY

Painted surfaces throughout the building will be achieved using low VOC (volatile organic compounds) paints, reducing off-gassing and improving air quality within interior spaces of the building, particularly guest rooms.

The development will provide excellent levels of daylight to the guest rooms and common areas due to the highly glazed facade. All glass will achieve a high visual light transmittance. Higher daylight levels will improve visual comfort and reduce energy usage for lighting.



Figure 6: Highly glazed façade maximises daylight to guest rooms and areas (Image courtesy of GHD WOODHEAD)

## 2.6 WATER EFFICIENCY

Selection of fittings and fixtures is paramount for achieving a water efficient building. All fixtures and fittings shall be selected as low-flow where possible. The following minimum WELS ratings are proposed:-

- Taps with a WELS rating of not less than 5 Stars (6.0 L/min)
- Shower heads with a WELS rating of not less than 3 Stars (9.0 L/min)
- Water closets with a WELS rating of not less than 4 Stars (3.5 L/flush, dual flush)

The following table demonstrates the potential water savings expected to be achieved per person (targeting >30%) resulting from the use of these low-flow fittings.

Equipment	Benchmark Hotel		Pirie St Hotel Guest Room		
	Flow Rate	Daily Consumption	WELS	Flow Rate	Daily Consumption
Taps	9.0 L/min	48 L	5 Star	6.0 L/min	32 L
WC's	8.0 L/flush	48 L	4 Star	3.5 L/flush	21 L
Showers	15.0 L/min	135 L	3 Star	9.0 L/min	81 L
Total	-	231 L	-	-	134 L



## 2.7 RENEWABLE ENERGY

The feasibility of a roof mounted Solar PV system will be assessed for the site, including size of the system and determining its environmental and economic value.

Renewable energy generation systems on site in the form of a solar photovoltaic (PV) array can provide a further opportunity to reduce operational costs and carbon emissions.

Solar photovoltaic (PV) panels connected to the building’s electrical infrastructure convert solar radiation into electricity, which can then be consumed directly within the building, offsetting electricity that would otherwise be imported from the grid.

Electricity generated by the PV system that is not consumed immediately within the building would be exported to the grid. However, given likely electrical demand of this development, it is anticipated that the quantity of exported electricity will be minimal.



Figure 7: Electric vehicle and charging station

## 2.8 SUSTAINABLE TRANSPORT

A secure bicycle storage area will be provided to employees and visitors to facilitate and encourage low-carbon forms of transportation and the location will be secure, with a convenient entry. End of trip facilities will also be provided for staff in the basement, refer to the figure below.



Figure 8: Proposed location of employee end of trip facilities in the basement

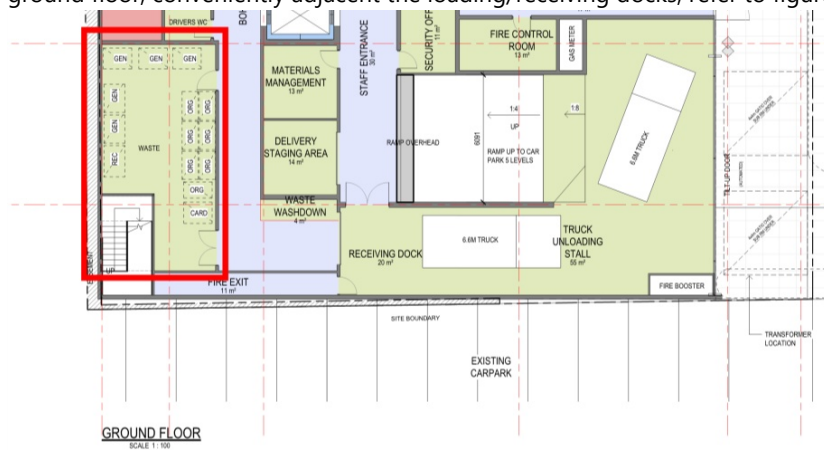
In addition, it is proposed to include dedicated electric vehicle parking spaces with charging stations within the carparking levels in line with objective 71 of the City of Adelaide’s Development Plan, supporting a ‘shift’ towards ‘sustainable transport modes’, refer to appendix A.

These sustainable transport initiatives contribute towards achieving the Adelaide City Council's target to achieving a balance between transport options, by providing electric vehicle charging infrastructure and world class cycling infrastructure with a view to reducing city carbon emissions by 35% by 2020 (from 2006-07 baseline). This is presented in the Council's "Smart Move Transport and Movement Strategy Interim Action Plan 2016-2018"; refer to Appendix B

## 2.9 OPERATIONAL AND CONSTRUCTION WASTE

Throughout the construction process, the recycling of general construction waste will be promoted in lieu of landfill disposal. Recycling construction materials saves energy as it reduces the consumption of natural resources, it also has economic benefits as recycling or reusing materials reduces associated disposal and transportation costs.

Operational waste will be segregated into individual waste streams, including general, recycling, organics and paper, to facilitate optimum resource recovery and reduce contamination in recycling streams that leads to the disposal of recyclables into landfill. A dedicated waste storage area is provided on the ground floor, conveniently adjacent the loading/receiving docks, refer to figure below.



**Figure 9: Proposed location of waste storage area on ground floor**

## APPENDIX A – EXTRACTS FROM ADELAIDE CITY COUNCIL'S DEVELOPMENT PLAN

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### 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.
- Design Technique** (this is ONE WAY of meeting the above Principle)
- 237.1** In relation to Principle 237(a):
- (a) avoid unnecessary vehicular crossing points, particularly with potential reversing movements from motor vehicles; and
  - (b) utilise the shortest, most direct route for cycles to reach the destination bicycle parking
- 
- 237.2** In relation to Principle 237(c), a minimum clearance of 2 metres for new, permanent structures.
- 238** To facilitate and encourage the use of bicycles and walking as a means of travel to and from the place of work, commercial and institutional development should provide on-site shower and changing facilities.

(Extract from p.75-77)

**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.

**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.

**(Extract from p.45-46)**

**Car Parking**

**OBJECTIVES**

**Objective 71:** To meet community expectation for parking supply while supporting a shift toward active and sustainable transport modes.

**(Extract from p.78)**

**APPENDIX B – EXTRACTS FROM ADELAIDE CITY COUNCIL’S “SMART MOVE” STRATEGY**

**Balancing transport options**

*The City of Adelaide will seek to balance the full range of transport options including public transport, pedestrians, motor vehicles, cyclists and two-wheeled vehicles. Actions will focus on meeting the needs of multiple movement forms and will not disadvantage a particular transport type. In particular, infrastructure will be installed to minimise impacts on car parking, public safety, accessibility and traffic flow, with every effort made to mitigate unavoidable impacts.*

Sourced directly from the City of Adelaide’s Strategic Plan 2016-2020, which states a desired future for Adelaide to be the easy movement of people into, out of and around the city. Achieving a better balance between the full suite of transport options including vehicles, public transport, cycling and walking is vital to a prosperous city. Achieving this balance between various modes of transport is a key refinement outlined by this Smart Move Interim Action Plan 2016-18.

**(Extract from p.14)**



**Cycling**

**North-south bikeway (6)**

Design and implement the Frome Street, Frome Road and Lefevre Terrace bikeway route, including reconstruction of the existing Frome Bikeway to accommodate four lanes of traffic during peak periods in collaboration with DPTI.

**East-west bikeway (7)**

Assess east-west bikeway route options; and select, design and implement a preferred route in collaboration with DPTI.

**Public bike share scheme study**

Undertake a feasibility study to research, identify and assess point to point public bike share options, whilst continuing to operate the Adelaide Free Bike scheme.

**Bikeways network implementation plan**

Research, plan and prioritise a City of Adelaide Bikeways Network to guide future bikeway projects.

**End of trip bike facilities**

Install racks and/or on-street bike parking nodes where demand is high and impact on car parking and pedestrians is low.

**Cycling education and promotion**

Promote and encourage safe cycling via a range of activities and events, including annual cordon counts.

**(Extract from p.19)**



**Green Travel**

**Electric vehicle incentives**

Install electric vehicle charging points, both on-street and off-street, and identify and implement incentives to encourage increased electric vehicle purchase and use, including investigating the viability of a community electric vehicle bulk purchase scheme.

**Sustainable travel behaviour change**

Continue to work with DPTI to implement sustainable travel behaviour change programs, including for council staff.

**Car share expansion**

Review existing car share schemes and operators, and develop a policy position to support sustainable growth of the industry.

**Increase council’s electric vehicle purchasing**

Continue to implement procurement plans for Council owned passenger vehicles to be low or zero emission, and investigate opportunities for electric heavy vehicle use.

**(Extract from p.20)**

**4. Cycling**

Strategic Plan 2016-2020 Alignment:

- Create world class infrastructure by adopting a three year rolling capital works program for the City and Park Lands to ensure all new and existing infrastructure are delivered and maintained to high quality standards, incorporating universal access, technology, heritage, arts and green elements.
- City carbon emissions will be reduced by 35% from the 2006-07 baseline by 2020, on the way to an 80% real reduction by 2040.
- Plan and deliver priority walking and cycling routes throughout and beyond the city and Park Lands, including the provision of East-West and North-South cycleways and connections.
- Plan and seek partnerships for major city infrastructure projects, including cycling corridors, major transport routes, laneways and city squares.

**(Extract from p.32-33)**

# WGA

WALLBRIDGE GILBERT  
AZTEC

CEL Australia

## 51 Pirie Street

### STORMWATER MANAGEMENT PLAN

Project No. 150093

Doc No. WGA150093-RP-CV-0001

Rev. B

21 February 2019

# WGA

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### Revision History

Rev	Date	Issue	Originator	Checker	Approver
A	01 February 19	Council Approval	ASF	CH	
B	21 February 19	Council Approval	ASF	CH	

# CONTENTS

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<b>1 Introduction.....</b>	<b>1</b>
1.1 Background.....	1
1.2 Scope of the Assessment .....	1
1.2.1 Documentation .....	1
<b>2 Detailed Report.....</b>	<b>2</b>
2.1 Development Description .....	2
2.2 Catchment Description.....	2
2.3 Existing Stormwater Drainage .....	2
2.4 Council Requirements.....	2
2.5 Stormwater Management Methodology .....	3
2.6 Summary.....	3

## **Appendices**

**Appendix A** Architectural Site Plan

**Appendix B** Aerial Photography

**Appendix C** Survey

**Appendix D** Existing Council Stormwater Drainage

**Appendix E** Calculations

**Appendix F** Stormwater Management Plan





# 1 INTRODUCTION

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## 1.1 BACKGROUND

WGA was engaged by CEL Australia to prepare a Stormwater Management Plan for a proposed multi-storey building on Pirie Street. It is understood the proposed development is to be a hotel facility. The building will have up to twenty-nine suspended levels and a basement.

This report is intended to conceptually outline the stormwater management design for the proposed development and detail the stormwater management methodology. A final detailed design should be carried out to provide construction documentation and incorporate the stormwater design principles outlined in this report. The final documentation is considered to be beyond the scope of this report.

## 1.2 SCOPE OF THE ASSESSMENT

The preparation of the plan comprises the scope of services listed below:

- Site visit
- Liaise with the City of Adelaide (Council) to determine appropriate stormwater requirements for the site
- Prepare a Stormwater Management Plan detailing the proposed method of collection and the disposal of site generated stormwater runoff
- Prepare a preliminary sketch plan showing possible site drainage infrastructure and based on Council and client requirements

### 1.2.1 Documentation

The client has provided preliminary Architectural plans for the development.



# 2 DETAILED REPORT

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## 2.1 DEVELOPMENT DESCRIPTION

The proposed development is located at 51 Pirie Street, Adelaide. The site is currently occupied by a commercial building which is to be demolished prior to development. The proposed development involves the construction of a multi-storey hotel facility. Refer to Appendix A for GHD Woodhead Architect's site plan for the proposed development.

## 2.2 CATCHMENT DESCRIPTION

The proposed site footprint covers approximately 1300m<sup>2</sup> and is currently occupied by developed land, an aerial photograph of the site is shown in Appendix B.

An existing site survey indicates that Pirie Street falls from east to west across the front of site and Gawler Place falls from South to North adjacent the building. Refer to Appendix C for a copy of the site survey.

## 2.3 EXISTING STORMWATER DRAINAGE

Roof runoff is collected by downpipes and is disposed from the site via steel box drains across the footpath into either Pirie Street or Gawler Place. There are three outlets on Pirie Street and two on Gawler Place.

Based on information provided by council, the site runoff is ultimately collected by a 675mm pipe that runs east to west, located in the centre of Pirie St.

Refer to Appendix D for existing council stormwater drainage location.

## 2.4 COUNCIL REQUIREMENTS

The City of Adelaide has provided guidance in regards to storm water management design, which was utilised in the development of this stormwater management plan. These are summarised below:

1. Stormwater runoff from the proposed development must be contained within the property boundaries, collected and discharged to Pirie Street and Gawler Place.
2. Council place limitations on the flow rate allowed to be discharged through a single drain outlet to 15 L/s and the minimum spacing between outlets to be 5m. No stormwater detention is required.
3. Council encourages the development to minimize the number of stormwater property connection wherever possible.
4. Minimum finished floor level shall be no lower than the existing level of the site boundary

## **2.5 STORMWATER MANAGEMENT METHODOLOGY**

Based on Council's requirements, the following stormwater management methodology is proposed,

Stormwater management will follow the same methodology as the current building as the new building will encompass the entire site and will only require management of roof runoff. All roof runoff will be collected by downpipes and discharged to the watertable on Pirie Street and Gawler Place via steel box drain and traditional gravity feed rainwater system.

The flow rate calculated for a 100-year ARI storm event is approximately 70 L/s. Adelaide City Council outlines the maximum allowable flowrate out of a single drain to be 15 L/s, therefore 5 separate box drains are required across the footpath. The location of these drains will be determined during the detailed design phase of the project.

Refer to Appendix D and Appendix E for a copy of all stormwater calculations and preliminary Stormwater Management Plan.

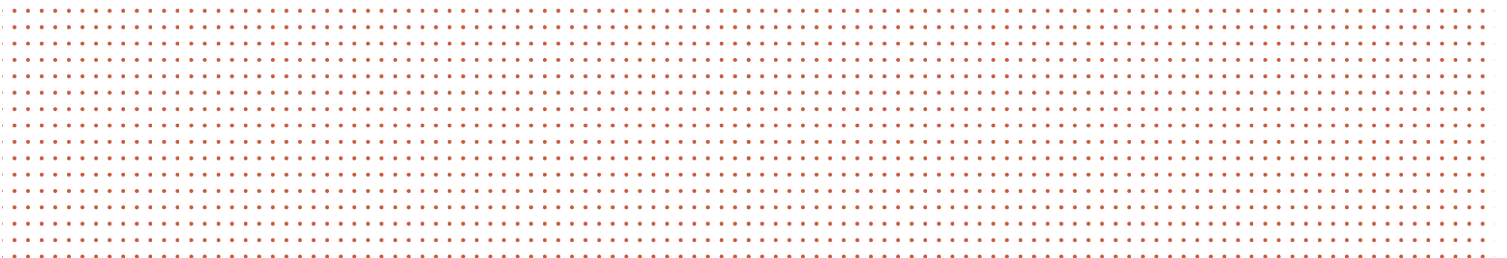
## **2.6 SUMMARY**

The Preliminary sketch plan contained within this report has been prepared to demonstrate the philosophy behind proposed management of the stormwater runoff from this development. The information provided is preliminary and will be subject to detailed design and documentation.

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# APPENDIX A

## ARCHITECTURAL SITE PLAN

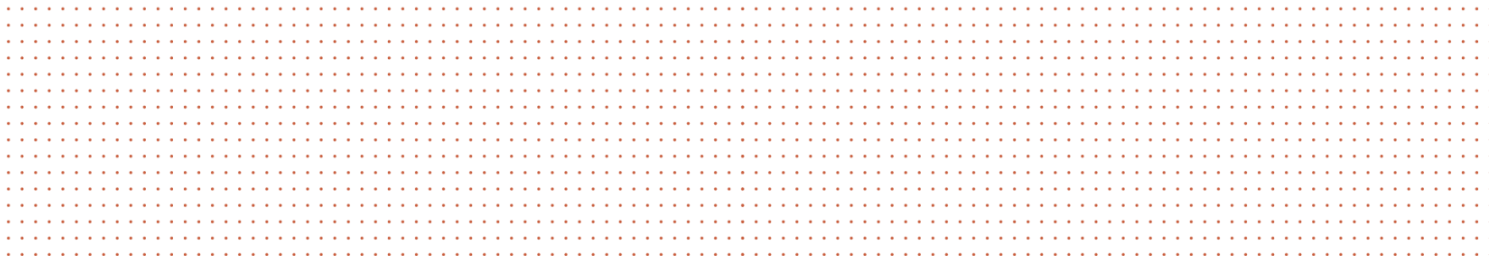


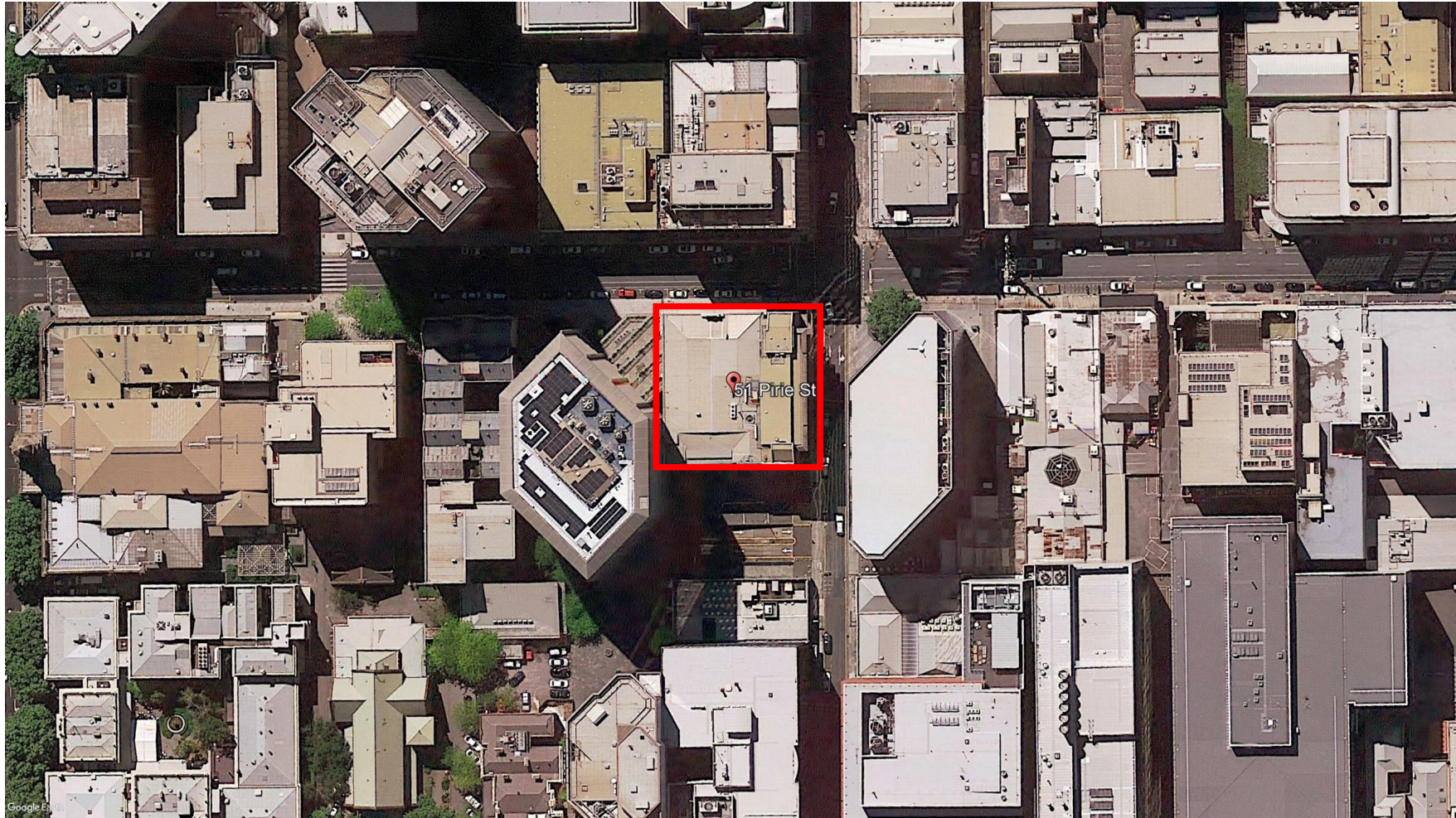


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# APPENDIX B

## AERIAL PHOTOGRAPHY



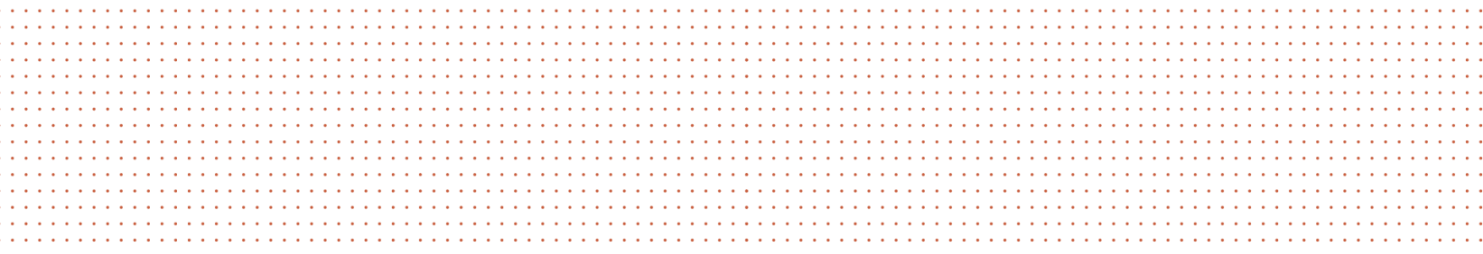


**Aerial Photo - 2019**

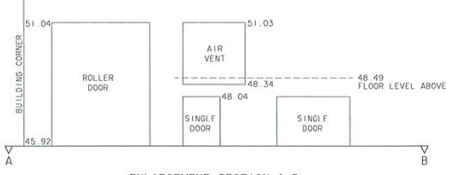
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# APPENDIX C

## SURVEY







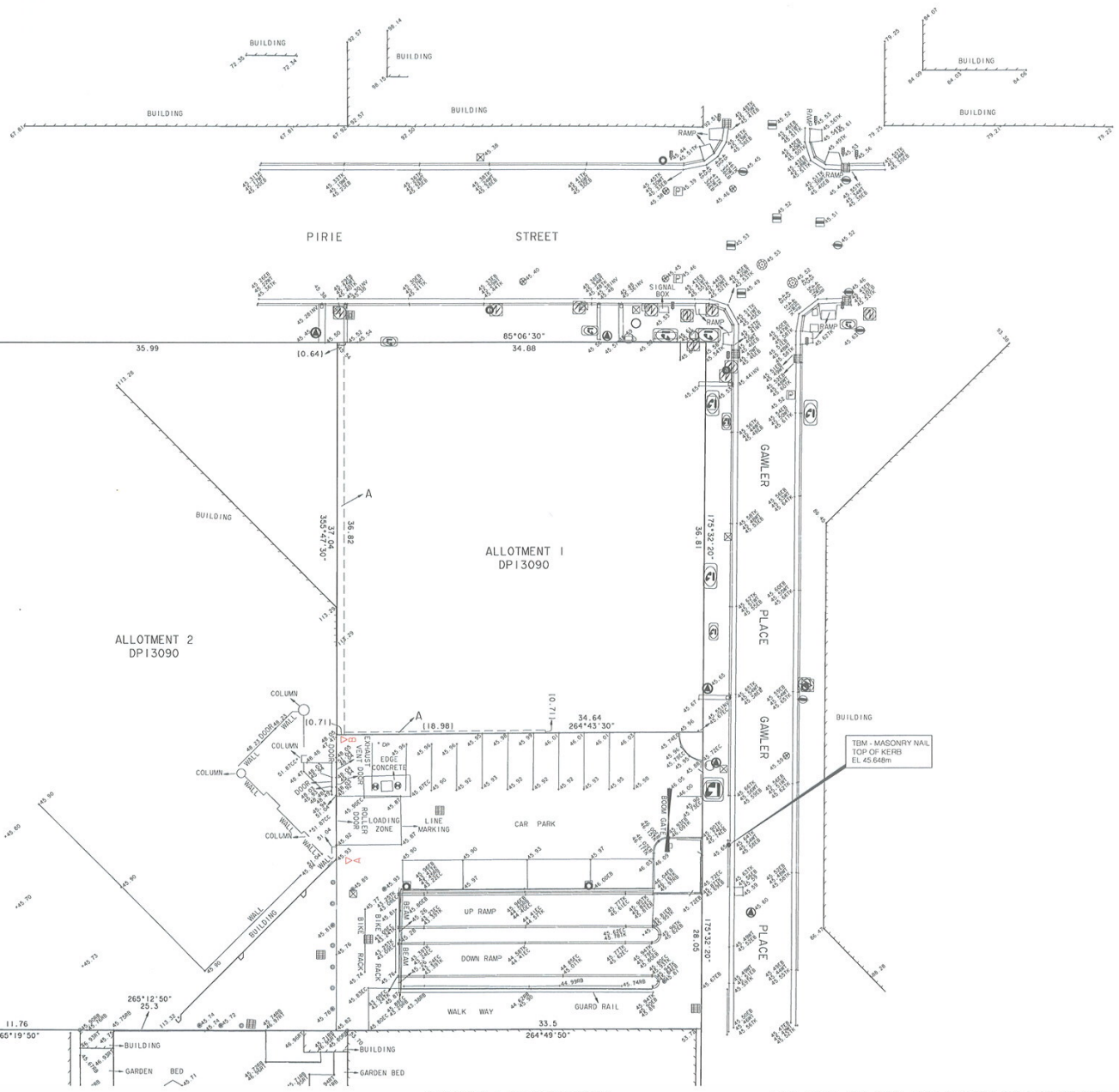
**EASEMENT NOTE:**  
 ALLOTMENT 1 IN D13090 SUBJECT TO AN EASEMENT MARKED A FOR RIGHTS OF SUPPORT APPURTENANT TO ALLOTMENT 2 VIDE D13090 FOR DETAILS

- LEGEND**
- ETSA INSPECTION COVER
  - FIRE PLUG
  - GAS IP
  - GRATE
  - HYDRANT
  - JUNCTION BOX
  - SEWER MANHOLE
  - WATER METER
  - SEWER I.P.
  - SEWER I.O.
  - STREET LIGHT
  - SIGN POST
  - STOP VALVE
  - STORM WATER OUTLET
  - INSPECTION COVER
  - TELSTRA PIT (MEDIUM)
  - TELSTRA PIT (LARGE)
  - TRAFFIC LIGHT
  - FENCE
- 45.38EB INDICATES EDGE OF BITUMEN LEVEL  
 45.55TK INDICATES TOP OF KERB LEVEL  
 45.28INV INDICATES INVERT LEVEL  
 51.87CC INDICATES CONCRETE CEILING LEVEL  
 46.76RB INDICATES RETAINING WALL BOTTOM LEVEL  
 46.93RT INDICATES RETAINING WALL TOP LEVEL

The little boundaries shown hereon were not marked at the time of survey

**BOUNDARY DATA CERTIFIED CORRECT**

*[Signature]*  
 LICENSED SURVEYOR  
 DATE 17.8.2010



VIDE SHEET 2 FOR CONTINUATION

VIDE DETAIL AND LEVEL PLAN 191710 FOR BASEMENT DETAILS

**ORIGINAL SIZE AT**

**FYFE** LICENSED & ENGINEERING SURVEYORS  
 LAND & PROPERTY DEVELOPMENT  
 GEOGRAPHIC INFORMATION MANAGEMENT  
 PETROLEUM INFRASTRUCTURE SURVEY & DESIGN

**FYFE Pty Ltd**  
 A/CN: 608 116 130  
 143 FULLARTON ROAD ROSE PARK SA 8067  
 PHONE (08) 8364 1000  
 FAX (08) 8364 0004  
 EMAIL info@fyfe.com.au  
 Brisbane (07) 3208 8600  
 Melbourne (03) 8675 6665  
 Ballara (07) 4646 8377

**PLAN DETAILS**

COUNCIL: ADELAIDE CITY COUNCIL  
 MAP SHEET: 6628-42-J  
 CT REFS: 526063  
 527/807

0 5 10 15 20  
 SCALE 1: 200

LEVEL DATUM: AHD DATA FILE/S: 19171-2-1-PLC.SDR  
 LEVEL AUTHORITY: PSM 6628/42/07 EL 45.556 (26 AUGUST 1999) INSTRUCTION: 19171-2-1  
 CO-ORD DATUM: ARBITRARY

NO.	ISSUED FOR INFORMATION	DXG	JUB	DATE
0	ISSUED FOR INFORMATION	DXG <td>JUB</td> <td>16/08/10</td>	JUB	16/08/10
A	PRELIMINARY ISSUE	DXG <td>JUB</td> <td>13/08/10</td>	JUB	13/08/10
NO.	REVISION	STAFF	CHECK	DATE

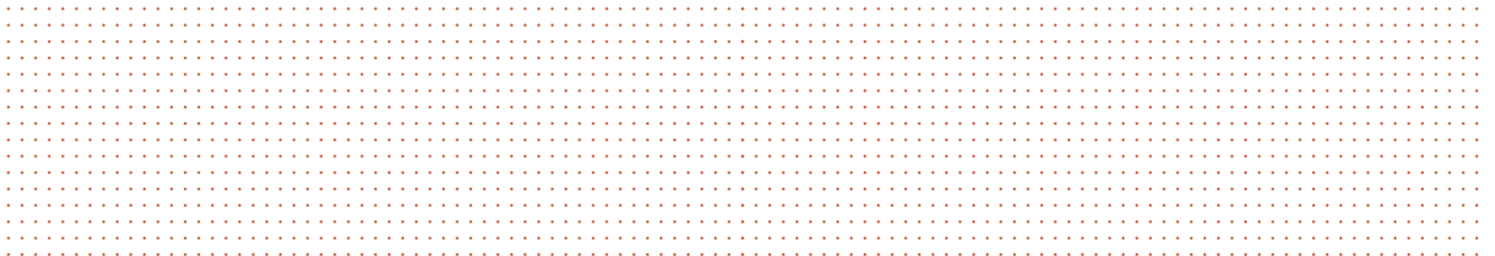
**CHARTER HALL GROUP**  
 DETAIL AND LEVEL SURVEY - GROUND FLOOR STREET LEVEL  
 ALLOTMENT 1 AND 2 IN D13090  
 PIRIE STREET  
 HUNDRED OF ADELAIDE  
 ADELAIDE

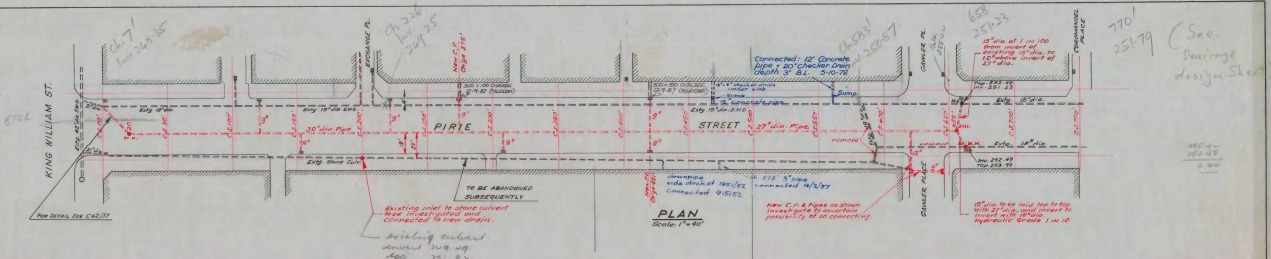
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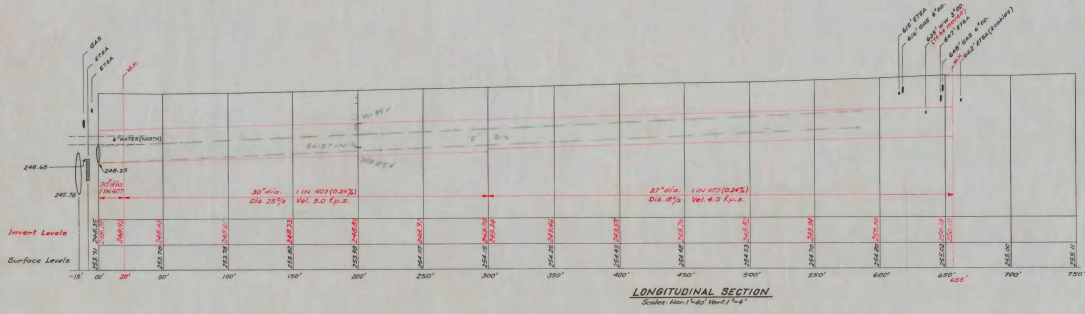
# APPENDIX D

## EXISTING COUNCIL STORMWATER DRAINAGE





- NOTES:**
1. New Pipe to be junctioned with existing 27" dia. at an angle of 90° on north side.
  2. All existing pipes north side are to be connected to the new drain as well as to the existing drain.



**CITY OF ADELAIDE**  
**PIRE ST., KING WILLIAM ST. TO GAWLER PL.**  
**UNDERGROUND DRAIN**

*L. B. 189*  
 City Engineer & Surveyor  
 12.7.62.

Scales as shown	CE DRG No.	DRG. NO.
Drawn by S.	F.B. 51	C62/32
Checked R.B.S.	L.B. 189	
Printed		

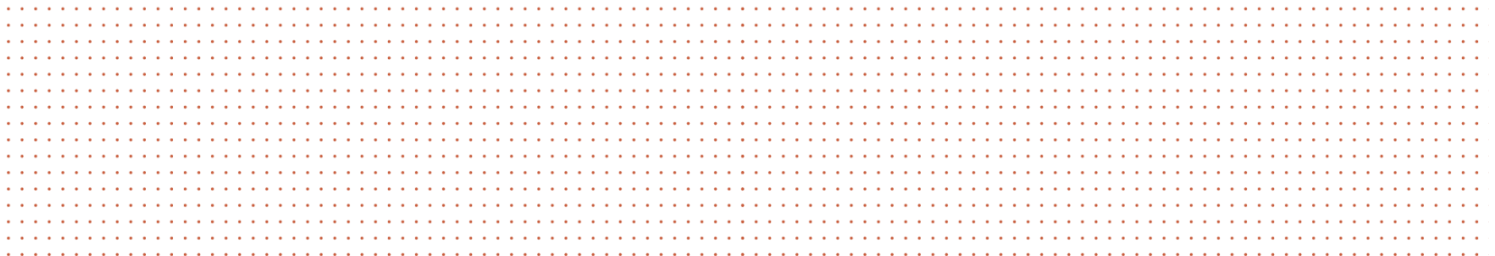
Elevation Level & A.P.D. (-100-230) x 3048  
 REFER ALSO TO  
 DRAWINGS NO. 80-42/80, 80-43/80-17, C 62/32.  
 DATUM: F.M. SOUTH-EAST CORNER KING WILLIAM  
 & GREENFELL STREET. R.L. 292.53



---

# APPENDIX E

## CALCULATIONS



51 Pirie St - Stormwater Design Calculs

Design Flows

Area  $\approx 1300 \text{ m}^2$ ,  $c = 0.9$

100-yr ARI, 3 min  $\Rightarrow I_{100} = 211 \text{ mm/hr}$  (Refer IFD Table)

$\therefore Q_{100} = 68.575 \text{ L/s}$

Max outlet flow = 15 L/s  $\Rightarrow \frac{68.575}{15} = 4.6 \text{ outlets}$

$\therefore 5 \text{ outlets required}$

## Location

**Label:** Not provided

**Latitude:** 34° 55 ' 33 "  
[Nearest grid cell: 34.9375 (S)]

**Longitude:** 138° 36 ' 06 "  
[Nearest grid cell: 138.6125 (E)]



## IFD Design Rainfall Intensity (mm/h)

Issued: 30 January 2019

Rainfall intensity for Durations, Exceedance per Year (EY), and Annual Exceedance Probabilities (AEP).  
[FAQ for New ARR probability terminology](#)

Table

Chart

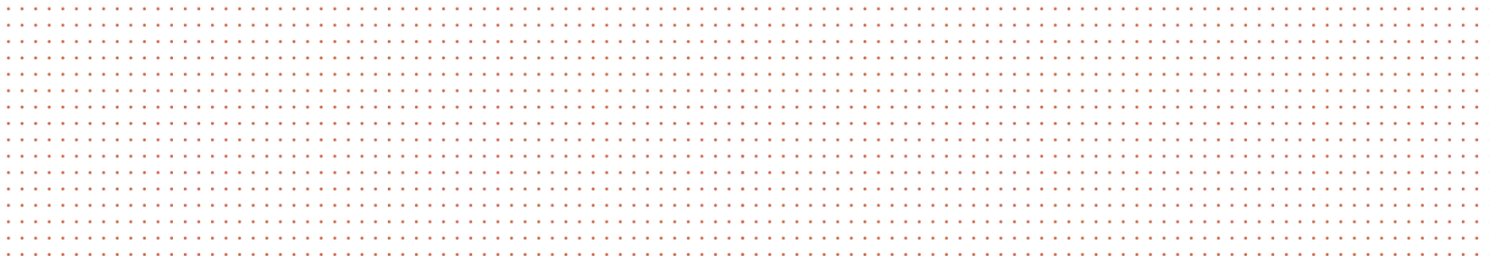
Unit: mm/h ▼

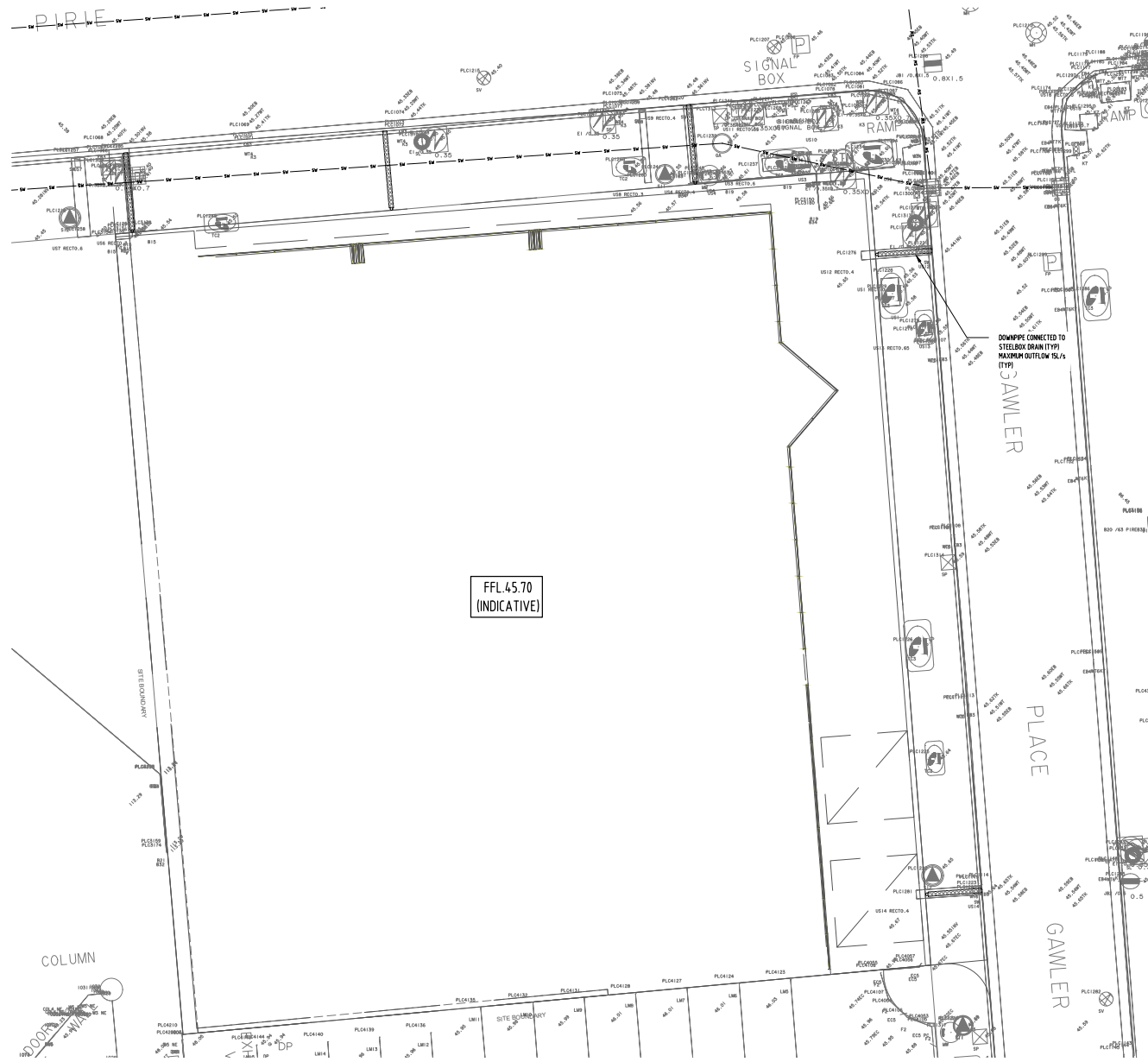
Duration	Annual Exceedance Probability (AEP)						
	63.2%	50%#	20%*	10%	5%	2%	1%
1 min	77.9	88.6	126	154	185	230	268
2 min	68.5	77.6	110	134	162	202	237
3 min	61.0	69.2	97.8	120	144	180	211
4 min	55.2	62.7	88.7	109	130	163	190
5 min	50.5	57.5	81.4	99.8	120	149	174
10 min	36.6	41.7	59.3	72.7	87.1	108	126
15 min	29.5	33.6	47.8	58.6	70.2	87.3	102
20 min	25.0	28.5	40.5	49.7	59.6	74.1	86.4
25 min	22.0	25.0	35.5	43.5	52.2	64.9	75.8
30 min	19.7	22.4	31.7	38.9	46.7	58.1	67.8
45 min	15.3	17.4	24.6	30.1	36.1	45.0	52.5
1 hour	12.7	14.4	20.4	25.0	29.9	37.2	43.5
1.5 hour	9.80	11.1	15.6	19.1	22.8	28.4	33.1
2 hour	8.12	9.18	12.9	15.7	18.7	23.3	27.1
3 hour	6.21	7.01	9.77	11.9	14.2	17.5	20.3
4.5 hour	4.74	5.35	7.41	8.98	10.7	13.1	15.1
6 hour	3.91	4.40	6.08	7.34	8.68	10.6	12.2
9 hour	2.97	3.34	4.58	5.51	6.48	7.86	9.01
12 hour	2.43	2.73	3.74	4.47	5.24	6.33	7.22
18 hour	1.83	2.05	2.79	3.32	3.87	4.64	5.25

---

# APPENDIX F

## STORMWATER MANAGEMENT PLAN





FFL 45.70  
(INDICATIVE)

- LEGEND:**
- EXISTING LEVELS
  - EXISTING CONTOURS
  - EXISTING STORMWATER
  - DOWNPIPE CONNECTION
  - STEEL BOX DRAIN

- NOTES:**
1. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE ARCHITECT'S DRAWINGS, OTHER CONSULTANTS DRAWINGS & THE SPECIFICATION.
  2. ALL UPVC STORMWATER PIPES ARE TO BE SEWER CLASS 'SM'.
  3. ALL RL STORMWATER PIPES ARE TO BE CLASS '7' WITH BEARING TYPE 'HS2' UNDO.
  4. ALL EXISTING SERVICES ARE TO BE LOCATED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK.
  5. CONTRACTOR TO CONFIRM INVERTS OF ALL EXISTING PIPES & SUMPS PRIOR TO CONNECTING & LAYING OF ALL NEW PIPEWORK.
  6. WALLBRIDGE GILBERT AZTEC ARE NOT RESPONSIBLE FOR DIMENSIONAL SET OUT AND THESE DRAWINGS ARE BASED ON BACKSIGHTS PROVIDED BY OTHER PARTIES. WE ACCEPT NO RESPONSIBILITY FOR ERRORS AND OMISSIONS RELATED TO DIMENSIONAL SET-OUT.

**STORMWATER OUTLET NOTE:**  
LOCATION AND NUMBER OF OUTLETS TO STREET KERB AND GUTTER SHALL BE DETERMINED DURING DETAILED DESIGN AND COORDINATED WITH NEW DOWNPIPE LOCATIONS TO BE SHOWN ON ARCHITECTURAL AND HYDRAULIC DRAWINGS. LOCATION SHOWN ON THIS DRAWING ARE INDICATIVE ONLY.



When sheet printed full size, the scale bar is 100mm.  
0 50 100mm

PRELIMINARY ISSUE  
NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DRAFT	ENG.	CHKD.
A	01/2/19	PRELIMINARY ISSUE	ASF	C. HILL	

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51 PIRIE ST  
PIRIE ST, GAWLER PLACE  
ADELAIDE, 5000  
**STORMWATER MANAGEMENT PLAN**

A1 DRAWING NUMBER  
Product Number  
Design ASF Drawn ASF WAD150093 Sheet No. CC-0001 Rev.

1/2019/150093 - 150001/150093 - 51 Pirie Street/5150093 - CC0000 - DWG - A - 31/1/2019 5:09 PM - AFJ/AD



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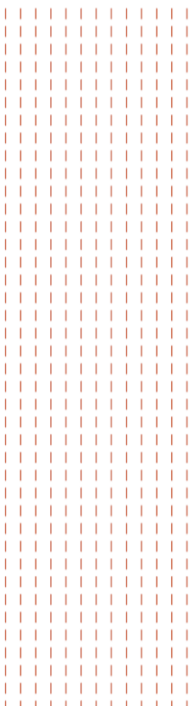
Phone: 08 8644 0432

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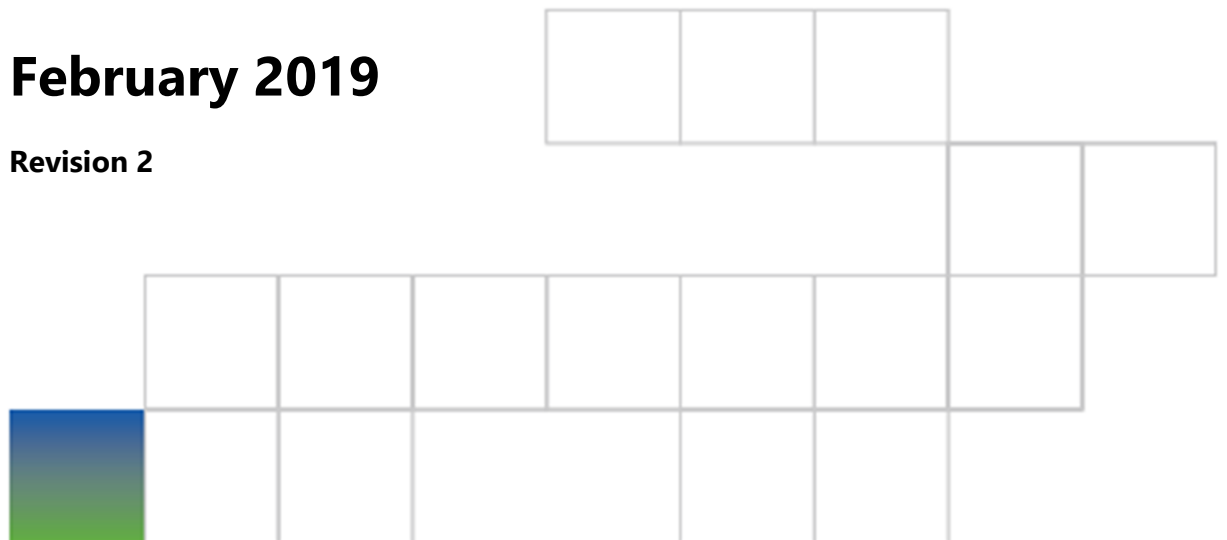
**HOTEL DEVELOPMENT**  
**51 PIRIE STREET, ADELAIDE**

Project No: LCE9672

**Vertical Transportation Report**

**February 2019**

**Revision 2**



**DOCUMENT ISSUE REGISTER**

<b>Revision</b>	<b>Description</b>	<b>Date Issued</b>	<b>Author</b>	<b>Reviewed</b>
0	Draft Issue	11/02/19	LF	PC
1	Final Issue	21/02/19	LF	PC
2	Final Issue	21/02/19	LF	PC

## CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>3</b>
<b>2</b>	<b>STANDARDS.....</b>	<b>4</b>
<b>3</b>	<b>DESIGN GUIDELINES .....</b>	<b>5</b>
<b>4</b>	<b>BUILDING SUMMARY .....</b>	<b>6</b>
<b>5</b>	<b>TRAFFIC STUDY – RESULTS .....</b>	<b>7</b>
<b>6</b>	<b>ANALYSIS OF RESULTS AND RECOMMENDATIONS .....</b>	<b>10</b>
6.1	GUEST LIFTS.....	10
6.2	SERVICE LIFTS.....	10
<b>7</b>	<b>SPATIAL REQUIREMENTS.....</b>	<b>11</b>

## 1 INTRODUCTION

The proposed development at 51 Pirie Street, Adelaide is a 5-star, 300 suite hotel generally configured as follows:

FLOOR	USE
Basement	Plant and BOH stores
Ground	Lobby
Level 1	Guest retreat and carpark ramp (valet)
Level 2-4	Carpark (valet)
Level 5	Staff restaurant/amenities and Plant
Level 6	Common areas (inc. Pool, Gym, Yoga)
Level 7	Ballroom
Level 8	BOH
Level 9	Conference facilities
Level 10	Plant
Level 11-25	Hotel Suites
Level 26	Hotel Suites and Executive Club
Level 27	Skybar
Level 28	Roof Plant

A traffic management study has been undertaken to provide an assessment of the simulated performance of the proposed Vertical Transportation System. The study also considers the briefed requirements of the Hotel Operator's Technical Standards and highlights areas where deviations are proposed.

The following configuration is proposed and will be assessed:

- Four (4) x 21 passenger/1600kg lifts operating as dedicated guest lifts
- One (1) x 26 passenger/2000kg lift operating as a shared guest/service lift
- One (1) x 26 passenger/2000kg lift operating as a dedicated service lift to all floors
- One (1) x 26 passenger/2000kg lift operating as a dedicated service lift up to Level 9

## **2 STANDARDS**

---

The Vertical Transportation installation shall comply with the requirements of the WorkCover Authority, Australian Standards, NCC and other applicable Authority requirements. In particular the vertical transportation system shall comply with current editions including addenda of:-

- AS 1735 Parts 1 to 15 inclusive – Lifts, Escalators and Moving Walks, including full compliance of installations with part 12 of AS 1735.
- AS 3000 - SAA Wiring Rules and requirements of all regulatory authorities having jurisdiction over the work.
- National Construction Code (NCC).
- CIBSE Guide D: 2015 - Transportation Systems in Buildings.

### 3 DESIGN GUIDELINES

The following table outlines the design criteria adopted for the traffic management study as per the requirements of the Hotel Operator's Technical Standards.

<b>DESIGN CRITERIA</b>	<b>PROPOSED CRITERIA – GUEST LIFTS</b>
Population	1.75 people/Hotel Suite
Car Capacity	1600 kg
Platform Size	1600mm (W) x 2100mm (D)
Entrance Size (mm)	1100mm (W) x 2100mm (H)
Door Type	Centre Opening
Car Height (mm)	2800mm (H)
Car Speed	Option 1 - 4.0 m/s Option 2 - 5.0 m/s
Occupancy	100%
Traffic Flow	2-Way (50% incoming/ 50% outgoing) Afternoon peak – guest check-in
Arrival Rate	12% minimum
Door Open Time	2.0 s
Door Close Time	2.5 s
Passenger Transfer Time	1.5 s
Average Waiting Time	<30 seconds
Average Interval	<40 seconds

<b>DESIGN CRITERIA</b>	<b>PROPOSED CRITERIA – SERVICE LIFTS</b>
Car Capacity	2000 kg
Platform Size	1500mm (W) x 2700mm (D)
Entrance Size (mm)	1400mm (W) x 2100mm (H)
Door Type	Side Opening
Car Height (mm)	3000mm (H)
Car Speed	4.0 m/s

#### 4 BUILDING SUMMARY

The traffic studies for the main guest lifts have been based on the following building features:

FLOOR	FLOOR HEIGHT	PROPERTIES	POPULATION	ENTRANCE LEVEL
B	4000mm	Plant	Nil	No
G	6000mm	Lobby	Nil	Yes – 100%
L1	4000mm	Guest retreat and carpark ramp (valet)	Nil – served by separate lift	No
L2-L4	3100mm	Carpark (valet)	Nil – not considered in Peak Study	No
L5	3500mm	Staff restaurant/amenities and Plant	Nil – not considered in Peak Study	No
L6	5000mm	Common areas (inc. Pool, Gym, Yoga)	Nil – not considered in Peak Study	No
L7	5000mm	Ballroom	~500 people – refer comments	No
L8	5000mm	BOH	Nil – not considered in Peak Study	No
L9	5000mm	Conference facilities	~300 people – refer comments	No
L10	5000mm	Plant	Nil	No
L11-24	3500mm	Hotel Suites	19 suites – 33.25 people/floor	No
L25	3500mm	Hotel Suites	17 suites – 29.75 people	No
L26	4000mm	Hotel Suites and Executive Club	11 suites – 19.25 people	No
L27	5000mm	Skybar	Nil – not considered in Peak Study	No
<b>Total</b>	<b>109.3m</b>		<b>~515 people (guests only)</b>	<b>100%</b>



## 5 TRAFFIC STUDY – RESULTS

A traffic analysis has been conducted based upon the design criteria outlined in Sections 3 and 4 utilising ELEVATE Lift Traffic Simulation Software developed by Peters Research.

The simulations are based upon an hourly profile for a hotels typical peak two-way traffic as highlighted within the Hotel Operator’s Technical Standards. The peak handling capacity of the hourly profile is approximately 12.5%, aligning with the requirements of the Hotel Operator’s Technical Standards and representing a suitable measure of Vertical Transportation performance for this development.

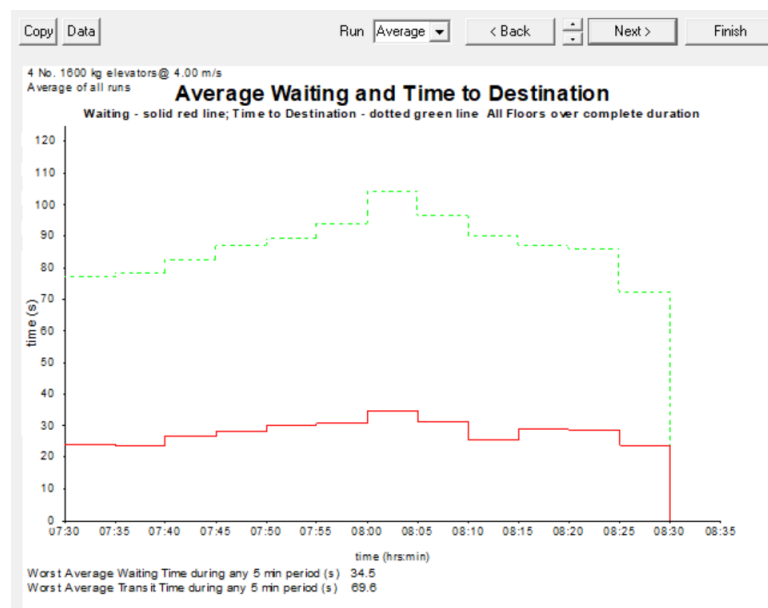
The traffic analysis has considered the hotel guests entering and leaving the building during an afternoon ‘check-in’ peak initially to form a basis of performance and further commentary is then provided to address other areas within the building such as the ballroom and conference rooms.

The following four (4) configurations have been assessed:

- Simulation 1 - Four (4) lifts @ 4.0 m/s
- Simulation 2 - Four (4) lifts @ 5.0 m/s
- Simulation 3 - Five (5) lifts @ 4.0 m/s
- Simulation 4 - Five (5) lifts @ 5.0 m/s

### **Simulation 1 – Four (4) lifts @ 4.0 m/s**

	<b>Design Criteria (s)</b>	<b>Results (s)</b>	<b>Compliant (Yes/No)</b>
<b>Average Waiting time</b>	<30	34.5	No
<b>Average Interval</b>	<40	51.5	No



**Figure 1 – Average Waiting Time Graph – Simulation 1**

**Simulation 2 – Four (4) lifts @ 5.0 m/s**

	Design Criteria (s)	Results (s)	Compliant (Yes/No)
<b>Average Waiting time</b>	<30	33.7	No
<b>Average Interval</b>	<40	44.1	No

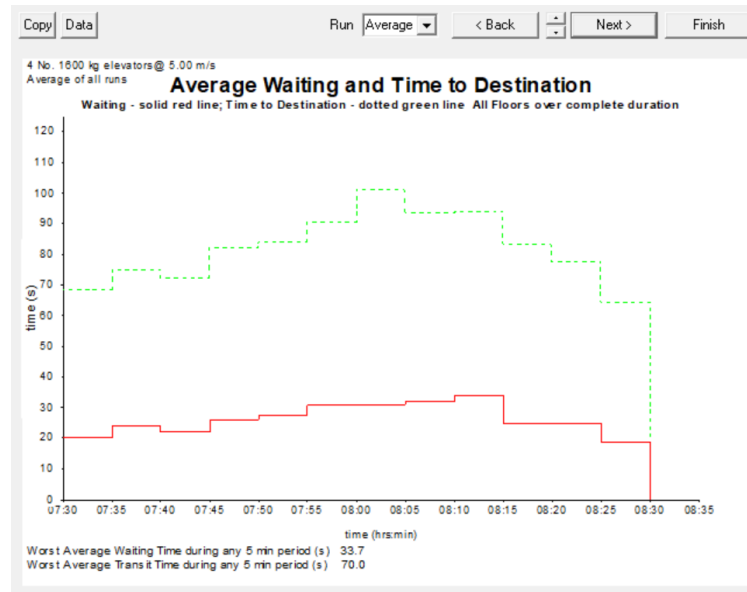


Figure 2 – Average Waiting Time Graph – Simulation 2

**Simulation 3 – Five (5) lifts @ 4.0 m/s**

	Design Criteria (s)	Results (s)	Compliant (Yes/No)
<b>Average Waiting time</b>	<30	28.5	Yes
<b>Average Interval</b>	<40	32.3	Yes

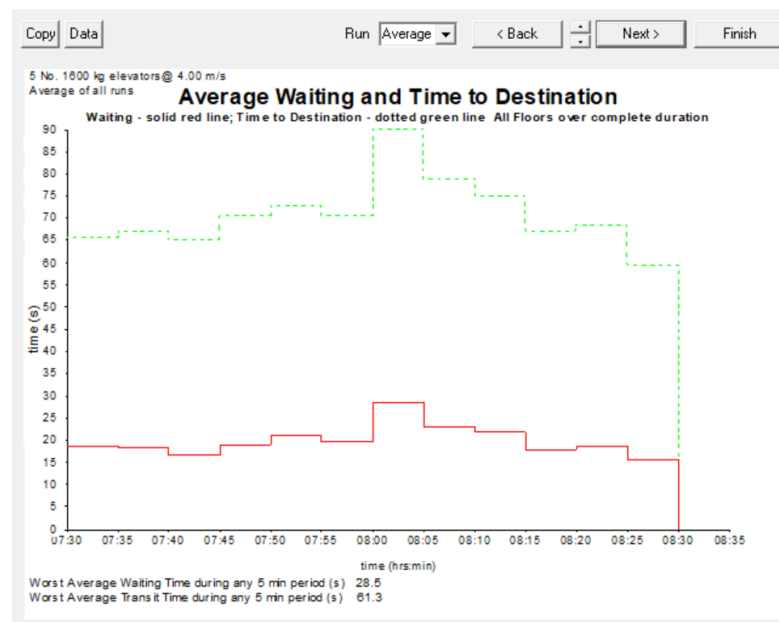
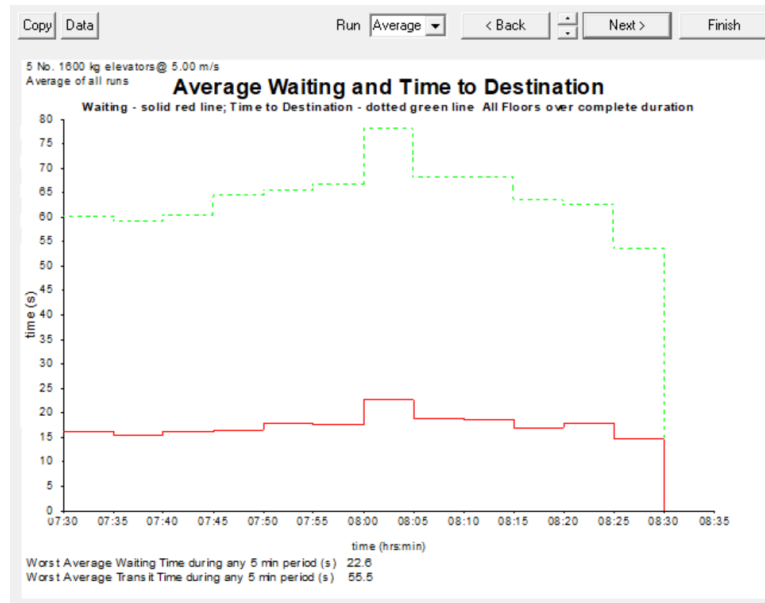


Figure 3 – Average Waiting Time Graph – Simulation 3

**Simulation 4 – Five (5) lifts @ 5.0 m/s**

	Design Criteria (s)	Results (s)	Compliant (Yes/No)
<b>Average Waiting time</b>	<30	22.6	Yes
<b>Average Interval</b>	<40	28.0	Yes



**Figure 4 – Average Waiting Time Graph – Simulation 4**

## **6 ANALYSIS OF RESULTS AND RECOMMENDATIONS**

---

### **6.1 GUEST LIFTS**

The results of the traffic study indicate that five (5) guests lifts are required to provide vertical transportation performance in accordance with the requirements of the Hotel Operator's Technical Standards for Waiting Time and Interval aligning with the results in simulation 3 and 4.

These findings align with the guidelines set out in CIBSE Guide D which recommends one (1) lift per 100 guests.

In addition, the Hotel Operator's Technical Standards nominates that 3-4 guest lifts are required for a 300 room development up to 15 storeys. As this development is 27 storeys, the additional guest lift proposed is therefore justified.

Whilst four (4) lifts (simulation 1 and 2) is only marginally non-compliant with the target design criteria, there are areas within the building which will put additional load on the vertical transportation system during certain periods such as the Level 7 Ballroom, Level 9 Conference Rooms and Level 27 Skybar. When factoring these areas and the subsequent load, this further supports the recommendation of five (5) guest lifts for the development. The fifth lift is proposed to be a shared guest/service lift and will require approval by the Hotel Operator.

During periods where the Ballroom, Conference Rooms and/or Skybar are experiencing high down peak loads (eg. the end of an event), it is proposed that 1-2 guest lifts be prioritised to these floors to assist in the discharge of guests in a timely manner.

It is recommended that the higher speed of 5.0 m/s (simulation 4) be adopted for the guest lifts in order to maximise the performance and level of service which can be extracted for the number of lifts proposed.

### **6.2 SERVICE LIFTS**

From a servicing perspective, the proposed arrangement is as follows:

- One (1) x 26 passenger/2000kg lift operating as a dedicated service lift up to Level 9
- One (1) x 26 passenger/2000kg lift operating as a dedicated service lift to all floors
- One (1) x 26 passenger/2000kg lift operating as a shared guest/service lift to all floors (ie. 5<sup>th</sup> guest lift)

It is proposed that the lift serving up to Level 9 will have a speed of 1.75 m/s and the lifts serving all floors will have a speed of 4.0 m/s.

The dedicated service lift up to Level 9 will be primarily used for servicing the Ballroom, Conference Rooms and associated BOH areas.

The dedicated service lift to all floors will be primarily used for servicing the suite floors for housekeeping and/or room service.

The shared guest/service lift (ie. 5<sup>th</sup> guest lift) will be primarily used outside of peak traffic periods to supplement the Servicing Vertical Transportation System at the discretion of the Hotel Operator.

## 7 SPATIAL REQUIREMENTS

The following section details the minimum spatial requirements for each type of lift proposed.

<b>LIFT 1-4 (GUEST LIFTS)</b>	
Number of Lifts	4
Rated Capacity	21 passenger / 1600kg
Speed	5.0 m/s
Car Configuration	Single Entry
Lift Platform Size	1600mm (W) x 2100mm (D)
Door Opening	1100mm (W) x 2300mm (H) – centre opening
Shaft Size (per lift)	2650mm (W) x 2580mm (D)
Pit Depth	5000mm
Overrun	6100mm
Machine Room	Yes – 3000mm (H)

<b>LIFT 5 (GUEST/SERVICE LIFT) and LIFT 6 (SERVICE LIFT)</b>	
Number of Lifts	2
Rated Capacity	26 passenger / 2000kg
Speed	4.0 m/s
Car Configuration	Through Entry
Lift Platform Size	1500mm (W) x 2700mm (D)
Door Opening	1400mm (W) x 2300 (H) – side opening
Shaft Size (per lift)	2650mm (W) x 3520mm (D)
Pit Depth	5000mm
Overrun	6350mm
Machine Room	Yes – 3000mm (H)

<b>LIFT 7 (SERVICE LIFT UP TO LEVEL 9)</b>	
Number of Lifts	1
Rated Capacity	26 passenger / 2000kg
Speed	1.75 m/s
Car Configuration	Through Entry
Lift Platform Size	1500mm (W) x 2700mm (D)
Door Opening	1400mm (W) x 2300 (H) – side opening
Shaft Size (per lift)	2550mm (W) x 3430mm (D)
Pit Depth	2000mm
Overrun	5000mm
Machine Room	No

51 Pirie Street

Planning Stage Noise Assessment

February 2019

S5821C3

sonus.

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**Document Title** : 51 Pirie Street  
Planning Stage Noise Assessment

**Document Reference** : S5821C3

**Date** : February 2019

**Author** : Jason Turner, MAAS

**Reviewer** : Chris Turnbull, MAAS

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## INTRODUCTION

A planning stage noise assessment has been made for the development at 51 Pirie Street, Adelaide.

The proposed development comprises basement services and back of house, ground floor services, waste management, materials handling, back of house, reception, lobby and guest retreat, car parking from levels one to four, a pool and gymnasium and associated services across levels five and six, function areas on level seven, offices on level eight, meeting rooms on level nine, thermal and air handling plant on level ten, guestrooms on levels eleven through twenty-five, guestrooms and executive club on level twenty-six, a bar and dining space on level twenty-seven, and rooftop plant on level twenty-eight.

Fundamentally, from an acoustic perspective, the building is well positioned in that it is removed from the direct influence of major road corridors and is not adjacent noise sensitive or noise generating land uses.

Due to the location of the site, the key acoustic issues for the planning stage of the development are:

1. External noise intrusion into the guestrooms from traffic in the Central Business District (CBD);
2. External noise intrusion from mechanical services plant serving adjacent commercial buildings; and
3. Environmental noise from plant and equipment serving the development to adjacent commercial buildings.

These issues are addressed in this planning stage assessment.

The location of the site and the project requirement for the development to be designed in accordance with an operator's brief also results in other acoustic items, such as music coming into and emanating from the development, rubbish collection, deliveries, car parking and mechanical services operation, being inaudible and therefore innocuous within the nearest known noise sensitive location, being the Treasury Hotel, on the corner of Flinders and King William Streets.

The assessment of the key acoustic issues for the development has been based on:

- *GHD Woodhead* drawing set for "51 PIRIE STREET", reference "33-18952", including drawings "SK022" through "SK109"; and,
- Continuous noise monitoring conducted at the site on two facades between Tuesday 4 to Wednesday 13 February 2019; and,
- An inspection of the site and the surrounding areas on Tuesday 4 February 2019.



## CRITERIA

### Development Plan

The proposed development and all nearby land uses are located in the *Central Business District Policy Area* within the *Capital City Zone* of the City of Adelaide Development Plan<sup>1</sup> (the Development Plan). The Development Plan includes specific acoustic provisions for developments of this nature. The relevant Objectives and Principles of Development Control are as follows:

### **Council Wide – City Living**

*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.*

*PDC 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.*

*PDC 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.*

---

<sup>1</sup> Consolidated 7 June 2018.

*PDC 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.*

### **Environmental Noise Criteria**

Objective 26 of the Council Wide provisions requires the development to not unreasonably interfere with the desired character of the (CBD) locality.

The Level 10 plant will be in close proximity to existing commercial buildings. In the absence of specific design information relating to the mechanical services plant and equipment at the planning stage of the project, a condition of consent to be achieved during the design stage of the project which would ensure there are no adverse impacts at the closest commercial receivers would be similar to the following:

*The mechanical services plant and equipment shall be designed to achieve the greater of the following criteria at the closest commercial use:*

- the maximum satisfactory levels inside the commercial building as provided in the Australian/New Zealand Standard AS/NZS 2107:2000 - 'Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors';*
- A noise level external to the building which does not exceed the lowest equivalent ( $L_{Aeq,15min}$ ) measured noise levels in the existing environment;*
- A noise level external to the building which does not exceed the relevant goal noise level in the Environment Protection (Noise) Policy 2007.*

### External Noise Intrusion Criteria

PDC 97(a) and PDC 97(b) reference the World Health Organisation Guidelines (the WHO Guidelines) and AS2107:2000 (the Standard) respectively, to provide appropriate internal noise level criteria within habitable rooms and sleeping areas.

The Standard recommends satisfactory internal noise levels for *Sleeping areas — Hotels and motels near major roads* of 35 to 40 dB(A). The WHO Guidelines recommends an internal noise level of 30 dB(A) within sleeping areas of dwellings.

To assist in determining the appropriate design criterion for guest rooms, reference is made to the *Minister's Specification SA 78B Construction requirements for the control of external sound (SA78B)*. SA78B is the State Government's contemporary approach to protect the occupants of residential buildings from the sound intrusion of transport (being both road and rail) corridors and from mixed use activity. To this end, SA 78B establishes internal noise levels, the maximum of which is 35 dB(A) in a bedroom.

Based on the above and considering the nature of the development, a design criterion of 35 dB(A) within a guest room during the night period has been utilised in this assessment.

**ASSESSMENT**

**Environmental Noise**

As is common at the planning stage of the project, mechanical services plant and equipment has not been designed, selected or procured.

Notwithstanding this, the Level 10 plant comprising chillers, boilers, air handling units and fans will be in close proximity to existing commercial buildings. In the absence of specific design information relating to the mechanical services plant and equipment at the planning stage of the project, a condition of consent to be achieved during the design stage of the project has been recommended to ensure there are no adverse impacts at the closest commercial receivers.

Based on the expected noise levels from the mechanical services plant and equipment to be designed and located on Level 10 of the development, it is expected that the facade of the wall on Level 10 closest to the building at 45 Pirie Street will need to be solid and airtight and/or incorporate acoustic louvres (in lieu of standard weatherproof louvres).

The recommended condition of consent will ensure the extent of treatment is confirmed based on actual equipment selections; however, it is considered the extent will be reasonable and practicable.

**External Noise Intrusion**

Continuous traffic noise level monitoring was conducted at the subject site from 4-13 February 2019. The following noise levels were recorded at the north (level 5) and the south (level 4) facades of the existing building:

**Table 2: Measured average ( $L_{eq}$ ) noise levels, dB(A).**

Noise Level	Total	Octave band centre frequency						
		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz
Pirie Street facade North (day) – $L_{eq,15hrs}$	65	43	52	54	58	60	59	54
Pirie Street facade North (night) – $L_{eq,9hrs}$	57	35	44	48	51	53	51	43
Rear facade South (day) – $L_{eq,15hrs}$	59	39	46	49	52	54	53	49
Rear facade South (night) – $L_{eq,9hrs}$	56	33	40	44	48	51	50	46

The above noise levels have been used to calibrate a 3 dimensional noise model the proposed development which enables the influence of distant road corridors to be taken into account at the upper levels of the development. The model (ISO 9613-2:1996 noise propagation model “*Acoustics – Attenuation of sound during propagation outdoors*” (ISO 9613), in the SoundPlan noise modelling software) provides external noise levels at every room on every level on each façade.

In addition, an allowance needs to be made for mechanical plant on the rooftops of buildings which are overlooked by the development and in close proximity, as is the case with rooftop plant at 45 Pirie Street.

To account for the influence of rooftop plant (which was above and therefore shielded from the measurement location), indicative sound power level data have been included in the model. The data are subject to specific measurements of the units on the roof at 45 Pirie Street during the detailed design and/or construction stage of the development, when access can be readily arranged and/or when the building is at a height to confirm. The assumed units comprise two cooling towers, each with a sound power level (SWL) of 96 dB(A), a large exhaust fan (89 dB(A) SWL), and three condensing units (79 dB(A) SWL). The noise data for the units has been based on previously procured noise data for plant at similar developments and it is further assumed that the plant operates concurrently at capacity through the night period.

The predicted noise levels at the façade, and the façade constructions were used to predict the internal noise levels within each of the exposed rooms to ensure compliance with the 35 dB(A) design criterion during the night (before 7am or after 10pm).

Based on the above and full height glazing on levels 11 through 26, the following façade constructions are recommended:

- 6.38mm thick laminated glass or equivalent for the extent shown in **YELLOW** in the following figures.
- 10.38mm thick laminated glass for the extent shown in **GREEN** in the following figures; and,
- 12.5mm thick *Vlam Hush* glass or equivalent for the extent shown in **PINK** in the following figures.

The recommended glazing selections are expected to be refined during the design development stage of the project, when the actual noise levels from the rooftop plant at 45 Pirie Street will be known and when the integration of thermal glazing requirements is made.

Figure 1: Recommended acoustic treatments - Levels 11 to 15.



Figure 2: Recommended acoustic treatments - Levels 16 to 21.

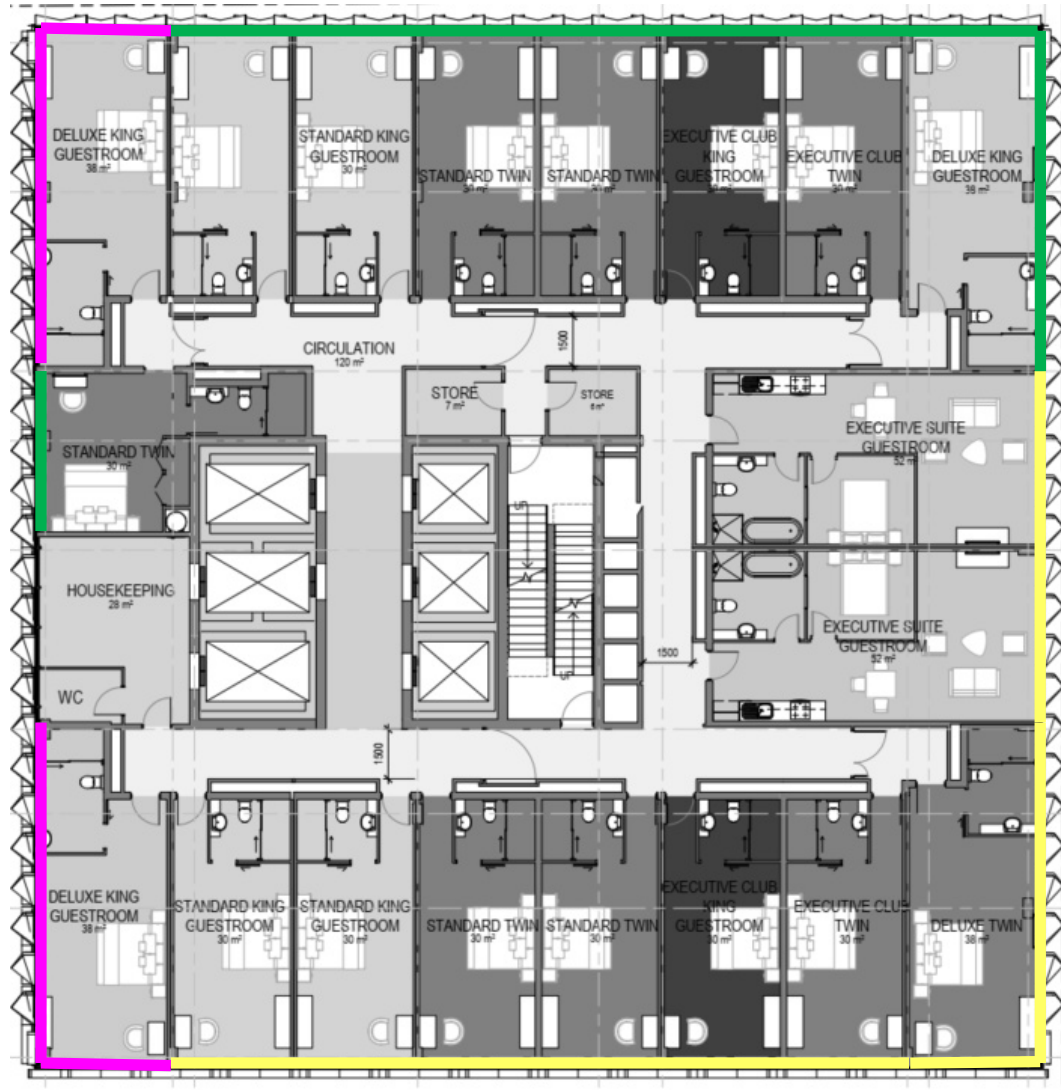


Figure 3: Recommended acoustic treatments - Levels 22 to 25.

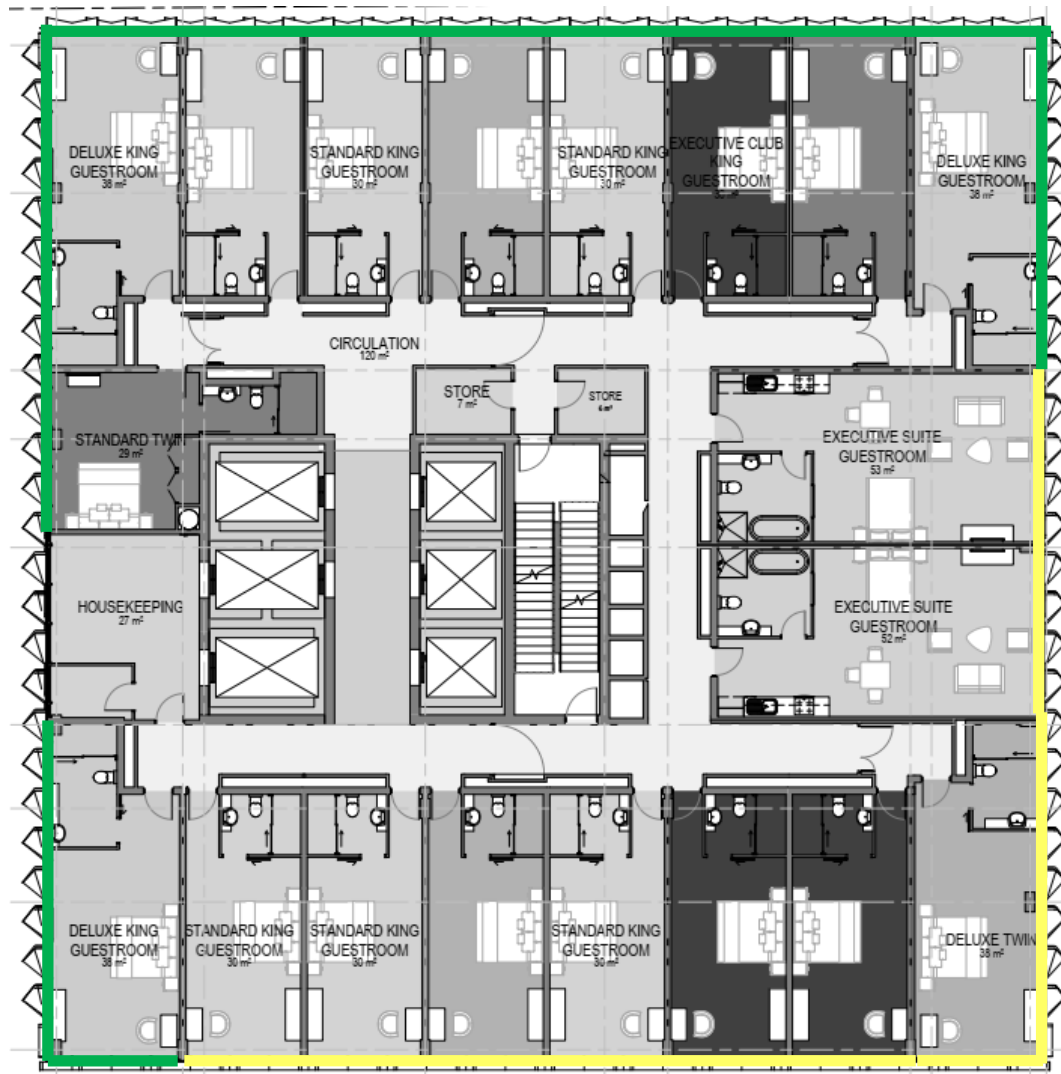




Figure 4: Recommended acoustic treatments – Level 26.



APPENDIX A: Site locality



GHD Woodhead  
**51 Pirie Street, Adelaide**  
Environmental Wind Assessment

Wind

Rev.01 | 18 February 2019

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 265820-00

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**ARUP**

# Document Verification

# ARUP

<b>Job title</b>		51 Pirie Street, Adelaide		<b>Job number</b>	
				265820-00	
<b>Document title</b>		Environmental Wind Assessment		<b>File reference</b>	
<b>Document ref</b>		Wind			
<b>Revision</b>	<b>Date</b>	<b>Filename</b>	51 Pirie Street_Arup_REP_20190213		
Initial release	13 Feb 2019	<b>Description</b>	First draft		
			Prepared by	Checked by	Approved by
		Name	Sina Hassanli	Graeme Wood	Graeme Wood
Rev.01	18 Feb 2019	<b>Filename</b>	51 Pirie Street_Arup_REP_20190218		
		<b>Description</b>	Minor update		
			Prepared by	Checked by	Approved by
		Name	Graeme Wood	Graeme Wood	Graeme Wood
		<b>Filename</b>			
		<b>Description</b>			
			Prepared by	Checked by	Approved by
		Name			
		<b>Filename</b>			
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		Name			
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## Executive summary

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Arup have been commissioned by GHD Woodhead to provide an experience-based impact assessment of the proposed development at 51 Pirie Street, Adelaide on the wind conditions in and around the site for pedestrian comfort and safety.

Arup have provided qualitative advice for the impact of the proposed development on pedestrian wind comfort. From a wind comfort perspective, the wind conditions at the majority of locations around the site would remain similar to the existing condition and would be expected to be classified as suitable for pedestrian standing activities with the exception of area to the east of the development, which would be classified as suitable for pedestrian walking activities. These conditions would be considered suitable for the intended use of the space. All locations in and around the proposed development would be expected to meet the safety criterion.

To quantify the qualitative advice provided in this report, numerical or physical modelling of the development would be required, which is best conducted during detailed design.

## Contents

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	Page	
<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>Wind assessment</b>	<b>3</b>
	2.1 Local wind climate	3
	2.2 Specific wind controls	3
	2.3 Site description	4
	2.4 Predicted wind conditions on ground plane	6
<b>3</b>	<b>Summary</b>	<b>7</b>
<b>4</b>	<b>References</b>	<b>8</b>

## Tables

Table 1 Pedestrian comfort criteria for various activities.....	3
Table 2 Summary of wind effects on pedestrians .....	14

## Figures

Figure 1: Site location plan view (T), 3d close-up view from north-west with indicative massing of the proposed developed (source: Google Earth Pro) .....	4
Figure 2: North elevation (TL), East elevation (TR), and Floor plans: Ground floor (ML), Level 1 (MR), Level 2 (BL), and Levels 11-21 (BR).....	5
Figure 3: Wind rose showing probability of time of wind direction and speed .....	9
Figure 4 Schematic wind flow around tall isolated building .....	10
Figure 5 Schematic flow pattern around building with podium .....	11
Figure 6 Schematic flow pattern around building with awning .....	11
Figure 7 Schematic of flow patterns around isolated building with undercroft .....	12
Figure 8 Schematic of flow patterns around isolated building with ground articulation .....	12
Figure 9 Schematic of flow pattern interference from surrounding buildings .....	12
Figure 10 Schematic of flow patterns through a grid and random street layout.....	13
Figure 11 Probabilistic comparison between wind criteria based on mean wind speed .....	16
Figure 12: Auckland Utility Plan (2016) wind categories.....	16
Figure 13 Probabilistic comparison between wind criteria based on 3 s gust wind speed .....	17

## Disclaimer

This assessment of the site environmental wind conditions is presented based on engineering judgement. In addition, experience from more detailed simulations have been used to refine recommendations. No detailed simulation, physical or computational study has been made to develop the recommendations presented in this report.

# 1 Introduction

---

GHD Woodhead have engaged Arup to provide a qualitative environmental wind assessment for the proposed development at 51 Pirie Street, Adelaide. This report outlines the assessment for wind engineering services related to pedestrian wind comfort and safety on the ground level in and around the development. To quantify the qualitative advice provided in this report, numerical or physical modelling would be required.

## 2 Wind assessment

---

### 2.1 Local wind climate

Weather data recorded at Adelaide Airport by the Bureau of Meteorology have been analysed for this project. The analysis is summarised in Appendix 1. The prevailing wind directions in this region is from the north-east and south-west, with strong winds from the west quadrant. A general description on flow patterns around buildings is given in Appendix 2.

### 2.2 Specific wind controls

Wind comfort is generally measured in terms of wind speed and rate of change of wind speed with distance or time, where higher wind speeds and gradients are considered less comfortable. Air speed has a large impact on thermal comfort and are generally welcome during hot summer conditions. This assessment is focused on wind speed in terms of mechanical comfort.

There have been many wind comfort criteria proposed, and a general discussion is presented in Appendix 3. The Adelaide (City) Development Plan has no specific wind assessment controls or criteria. The wind controls used in this wind assessment are based on the work of Lawson (1990) as described in Figure 11 and Table 1. These have both a comfort and safety component and tend to better describe the usage of the space from a comfort perspective. Converting the wind climate to the site location, the mean wind speed exceeded 5% of the time would be approximately 4 m/s at pedestrian level. With reference to Table 1, this wind speed is on the boundary of pedestrian sitting and standing conditions and from our knowledge of the environs would be considered realistic.

Table 1 Pedestrian comfort criteria for various activities

**Comfort (max. of mean or GEM wind speed exceeded 5% of the time)**

---

<2 m/s	Dining
2-4 m/s	Sitting
4-6 m/s	Standing
6-8 m/s	Walking
8-10 m/s	Objective walking or cycling
>10 m/s	Uncomfortable

---

**Safety (max. of mean or GEM wind speed exceeded 0.022% of the time)**

---

<15 m/s	General access
<20 m/s	Able-bodied people (less mobile or cyclists not expected)

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## 2.3 Site description

The proposed development at 51 Pirie Street, Adelaide is located in the heart of Adelaide city on the north-west corner of the block bounded by Flinders, King William, and Pirie Streets, and Gawler Place, Adelaide, Figure 1. The site is surrounded by mid- to high-rise buildings to a radius of approximately 500 m in all directions and low- to medium-rise buildings further from the site. The topography of surroundings is essentially flat from the wind perspective.

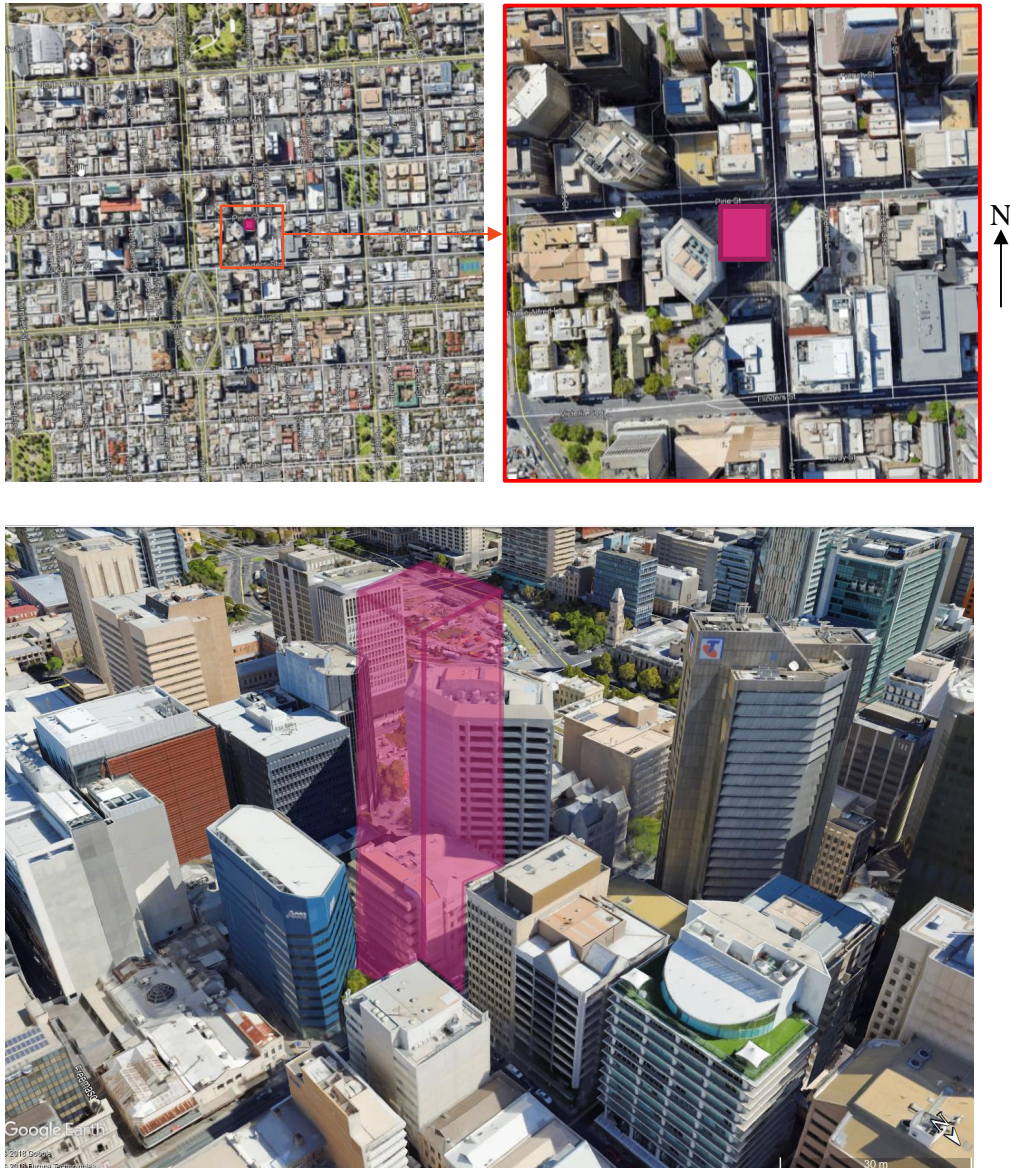


Figure 1: Site location plan view (T), 3d close-up view from north-west with indicative massing of the proposed developed (source: Google Earth Pro)

The proposed mixed-used development is of a prismatic shape rising to approximately 115 m above the ground level, Figure 2. The tower is significantly taller than the immediate surrounding buildings. There is a two-story colonnade to the east of the proposed design, a tower setback of approximately 4.4 m from



south façade on Level 3, and tower setback of approximately 3 m from the west façade on Level 10.



Figure 2: North elevation (TL), East elevation (TR), and Floor plans: Ground floor (ML), Level 1 (MR), Level 2 (BL), and Levels 11-21 (BR).

## 2.4 Predicted wind conditions on ground plane

This section of the report outlines the predicted wind conditions in and around the site based on local wind climate, topography, and building form. The street grid pattern of Adelaide CBD is at an angle to the prevailing wind directions and therefore does not encourage significant channelled flow along Pirie Street and Gawler Place. The height of the proposed development is considerably higher than surrounding buildings, and would therefore be expected to have an impact on the local wind conditions.

Being located in the middle of the city, the lower levels of the proposed development are largely shielded by the density of the upwind mid- to high-rise buildings. These upstream buildings lift the general approach flow over the roof of the buildings, cause recirculation in the wake, and develop the channelling effect along the streetscapes. The proximity of the proposed building to the immediate neighbouring buildings to the east and west are important as from a wind perspective these will act as a compound shape. The width of Gawler Place if relatively narrow relative to the width of the tower and therefore would suppress any accelerated flow to the east and divert the flow around the greater compound shape.

### Winds from the north-east

Winds from the north-east cross the massing of the city before reaching the site. The higher incident winds would impinge on the corner of the exposed upper section of the tower. This incident angle encourages horizontal flow around the building rather than inducing significant downwash. Hence the wind conditions at ground level would not be expected to change significantly.

Winds more from the north would be channelled along Gawler Place by the upwind buildings. Being normal to the façade, the exposed upper section of the tower would induce downwash. The downwash would be suppressed by the proximity of the building to the east side of Gawler Place and would be expected to slightly increase the pressure driven flow between the buildings, with a significant portion of the downwash passing over the roof of the neighbouring building. The two-storey colonnade along the east of the building would encourage more flow into this space, however the low level awning would offer some protection to pedestrians from the downwash flow reaching ground level. The majority of the flow at ground level is expected to be horizontal and therefore the canopy would do little from a wind perspective, but would offer protection from wind driven rain, and incident solar. Wind conditions at ground level are expected to be faster, but less turbulent than current conditions.

### Winds from the south-west

The proposed development is more exposed to winds from south-west due to large open space at Victoria Square and the relatively small number of mid-rise buildings upwind from the site. Similarly to winds from the north-east, the incident winds will impinge on the corner of the tower encouraging the flow to travel horizontally around the tower and over the roof of 45 and 63 Pirie Street.

The wind conditions at pedestrian level around the site would be expected to be similar to the existing conditions.

Incident winds more from the south would be channelled along Gawler Place. Similar to winds from the north, the exposed upper section of the tower would induce downwash. The proximity of the neighbouring buildings would reduce the amount of downwash impinging on the car park to the south of the site, with a significant portion passing over the roofs of 45 and 63 Pirie Street. The resulting flow along Gawler Place would be expected to be slightly greater than the existing conditions.

### Winds from the west

Winds from the west tend to be the strongest in Adelaide. These would impinge on the west façade inducing some downwash. The downwash would be redirected by the roof of 45 Pirie Street, which is acting like a podium to the tower, with a high-level component being directed along Pirie Street. The wind conditions further to the east would be expected to slightly increase.

### Summary

The proposed development is located at Adelaide CBD with surrounding mid- to high-rise buildings in all directions. The building is taller than the neighbouring buildings and exposed to higher level incident flow. The wind conditions around the site on pedestrian level would not be expected to change significantly compared with the current wind condition. The greatest increase would be expected to be for local winds along Gawler Place between the proposed building and 63 Pirie Street for winds from the north or south quadrants, where channelled flow would be expected between these buildings. This flow would be expected to be slightly faster, but more constant with less turbulence.

Qualitatively, integrating the expected directional wind conditions around the site with the wind climate, it is considered that wind conditions at the majority of locations around site would be classified as suitable for pedestrian standing and walking. These conditions are suitable for the intended use of the space. Wind conditions at all locations are expected to pass the safety criteria.

## 3 Summary

---

Arup have provided qualitative advice for the impact of the proposed development on the pedestrian level wind conditions. From a wind comfort perspective, the wind conditions at the majority of locations around the development would be expected to be classified as suitable for pedestrian standing with the area to the east of the development along Gawler Place being classified as suitable for pedestrian walking. Wind conditions in these areas meet the intended use of the space.

It is considered that all locations within the proposed development would pass the safety criterion.

To quantify the qualitative advice provided in this report, numerical or physical modelling of the development would be required, which is best conducted during detailed design.

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## Appendix 1: Wind climate

The wind frequency and direction information measured by the Bureau of Meteorology anemometer at a standard height of 10 m at Adelaide Airport has been used in this analysis, Figure 3. The arms of the wind rose point in the direction from where the wind is coming from. The station is located about 8 km to the west-south-west of the site.

Hot and cold winds tend to come from the south quadrant and north-west quadrants, respectively. Typically, mornings tend to have winds from north-west and evenings from south-east.

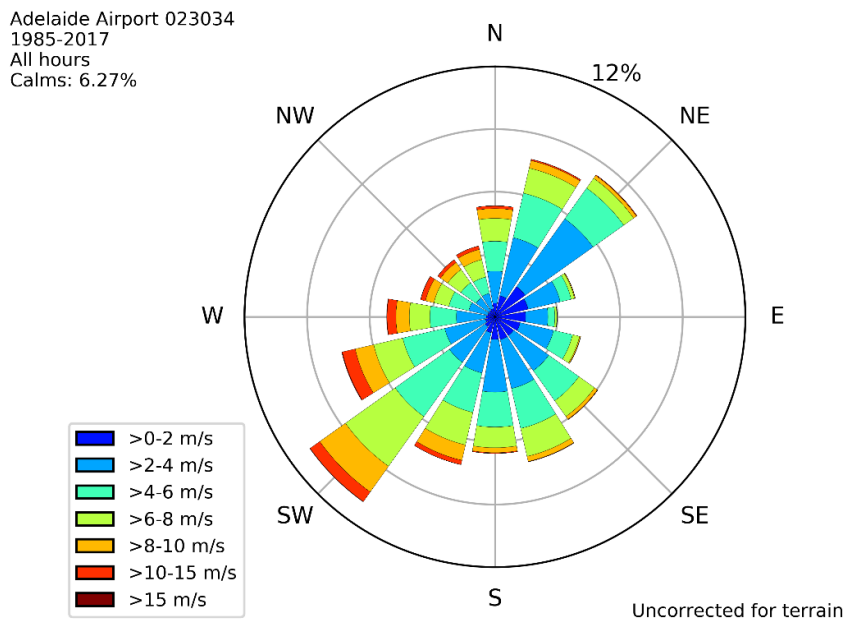


Figure 3: Wind rose showing probability of time of wind direction and speed

## Appendix 2: Wind flow mechanisms

An urban environment generates a complex wind flow pattern around closely spaced structures, hence it is exceptionally difficult to generalise the flow mechanisms and impact of specific buildings as the flow is generated by the entire surrounds. However, it is best to start with an understanding of the basic flow mechanisms around an isolated structure.

### Isolated building

When the wind hits an isolated building, the wind is decelerated on the windward face generating an area of high pressure, Figure 4, with the highest pressure at the stagnation point at about two thirds of the height of the building. The higher pressure bubble extends a distance from the building face of about half the building height or width, whichever is lower. The flow is then accelerated down and around the windward corners to areas of lower pressure, Figure 4. This flow mechanism is called **downwash** and causes the windiest conditions at ground level on the windward corners and along the sides of the building.

Rounding the building corners or chamfering the edges reduces downwash by encouraging the flow to go around the building at higher levels. However, concave curving of the windward face can increase the amount of downwash. Depending on the orientation and isolation of the building, uncomfortable downwash can be experienced on buildings of greater than about 6 storeys.

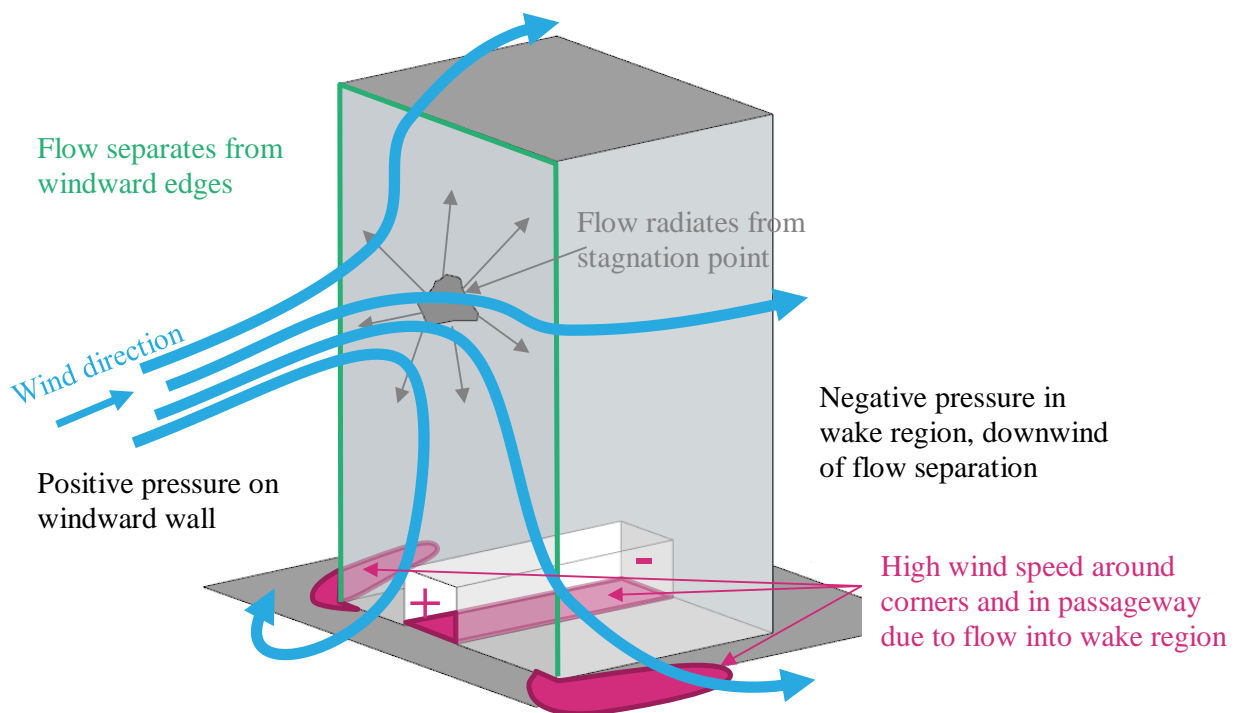


Figure 4 Schematic wind flow around tall isolated building

Techniques to mitigate the effects of downwash winds at ground level include the provision of horizontal elements, the most effective being a podium to divert the downward flow away from pavements and building entrances, but this will generate windy conditions on the podium roof, Figure 5. Generally, the lower the podium roof and deeper the setback from the podium edge to the tower improves the ground level wind conditions. The provision of an 8 m setback on an isolated building is generally sufficient to improve ground level conditions, but is highly dependent on the building isolation, orientation to prevailing wind directions, shape and width of the building, and any plan form changes at higher level.

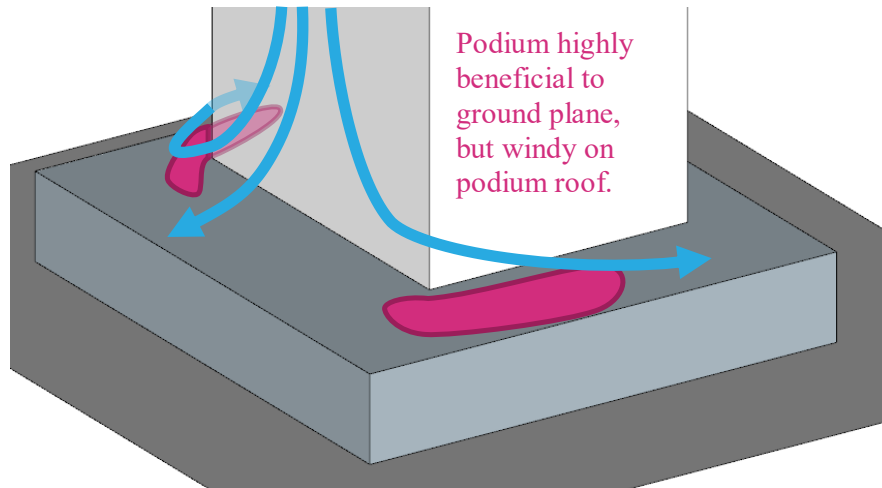


Figure 5 Schematic flow pattern around building with podium

Awnings along street frontages perform a similar function as a podium, and generally the larger the horizontal projection from the façade, the more effective it will be in diverting downwash flow, Figure 6. Awnings become less effective if they are not continuous along the entire façade, or on wide buildings as the positive pressure bubble extends beyond the awning resulting in horizontal flow under the awning.

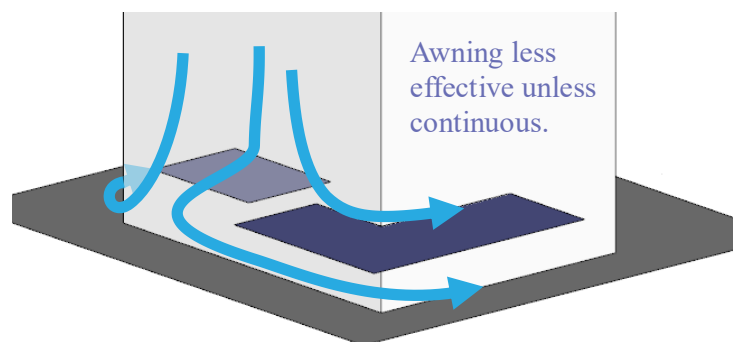


Figure 6 Schematic flow pattern around building with awning

It should be noted that colonnades at the base of a building with no podium generally create augmented windy conditions at the corners due to an increase in the pressure differential, Figure 7. Similarly, open through-site links through a building cause wind issues as the environment tries to equilibrate the pressure generated at the entrances to the link, Figure 4. If the link is blocked, wind conditions will be calm unless there is a flow path through the building, Figure 8. This area is in a region of high pressure and therefore there is the potential for

internal flow issues. A ground level recessed corner has a similar effect as an undercroft, resulting in windier conditions, Figure 8.

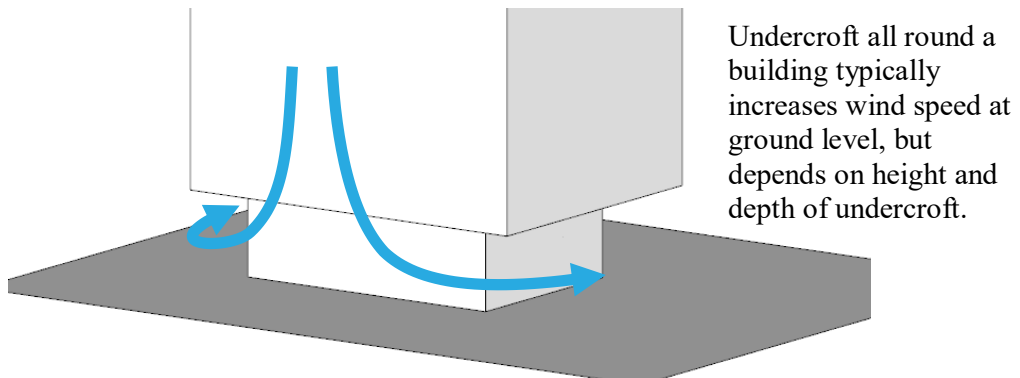


Figure 7 Schematic of flow patterns around isolated building with undercroft

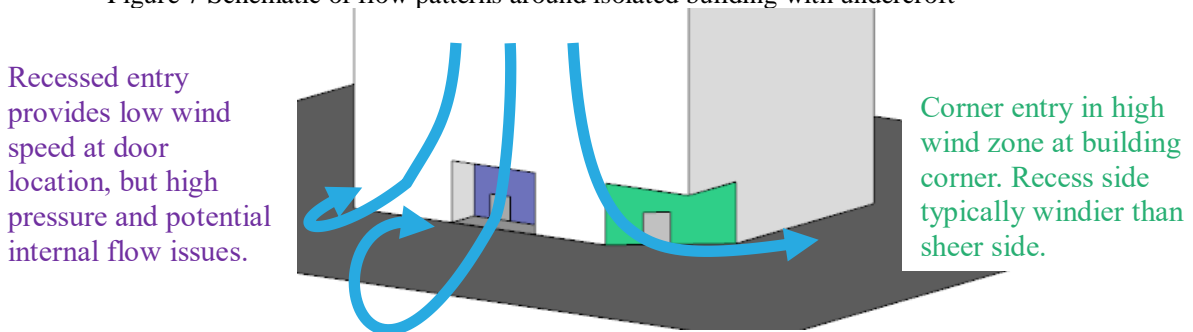


Figure 8 Schematic of flow patterns around isolated building with ground articulation

### Multiple buildings

When a building is located in a city environment, depending on upwind buildings, the interference effects may be positive or negative, Figure 9. If the building is taller, more of the wind impacting on the exposed section of the building is likely to be drawn to ground level by the increase in height of the stagnation point, and the additional negative pressure induced at the base. If the upwind buildings are of similar height then the pressure around the building will be more uniform hence downwash is typically reduced with the flow passing over the buildings.

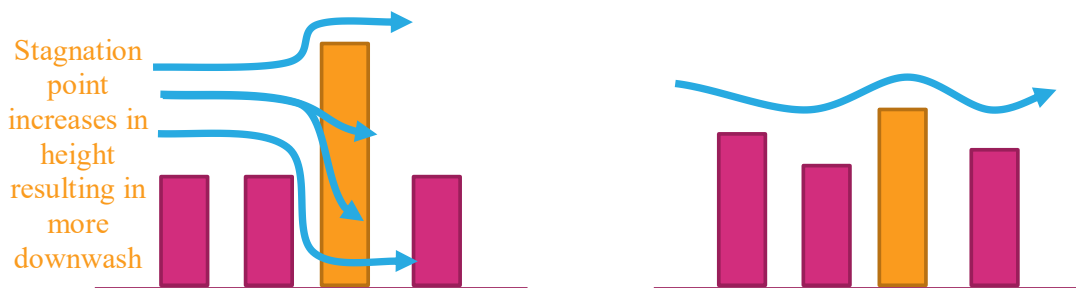


Figure 9 Schematic of flow pattern interference from surrounding buildings

The above discussion becomes more complex when three-dimensional effects are considered, both with orientation and staggering of buildings, and incident wind direction, Figure 10.



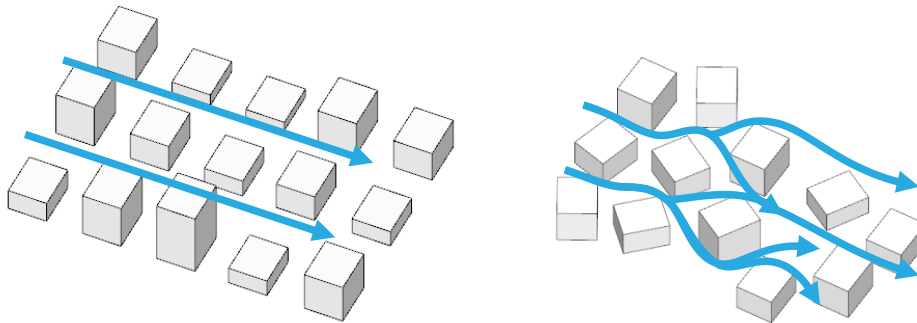


Figure 10 Schematic of flow patterns through a grid and random street layout

Channelling occurs when the wind is accelerated between two buildings, or along straight streets with buildings on either side, Figure 10(L), particularly on the edge of built-up areas where the approaching flow is diverted around the city massing and channelled along the fringe by a relatively continuous wall of building facades. This is generally the primary mechanism driving the wind conditions for this perimeter of a built-up area, particularly on corners, which are exposed to multiple wind directions. The perimeter edge zone in a built-up area is typically about two blocks deep. Downwash is more important flow mechanism for the edge zone of a built-up area with buildings of similar height.

As the city expands, the central section of the city typically becomes calmer, particularly if the grid pattern of the streets is discontinued, Figure 10(R). When buildings are located on the corner of a central city block, the geometry becomes slightly more important with respect to the local wind environment.

## Appendix 3: Wind speed criteria

### General discussion

Primary controls that are used in the assessment of how wind affects pedestrians are the wind speed, and rate of change of wind speed. A description of the effect of a specific wind speed on pedestrians is provided in Table 2. It should be noted that the turbulence, or rate of change of wind speed, will affect human response to wind and the descriptions are more associated with response to mean wind speed.

Table 2 Summary of wind effects on pedestrians

Description	Speed (m/s)	Effects
Calm, light air	0–2	Human perception to wind speed at about 0.2 m/s. Napkins blown away and newspapers flutter at about 1 m/s.
Light breeze	2–3	Wind felt on face. Light clothing disturbed. Cappuccino froth blown off at about 2.5 m/s.
Gentle breeze	3–5	Wind extends light flag. Hair is disturbed. Clothing flaps.
Moderate breeze	5–8	Raises dust, dry soil. Hair disarranged. Sand on beach saltates at about 5 m/s. Full paper coffee cup blown over at about 5.5 m/s.
Fresh breeze	8–11	Force felt on body. Limit of agreeable wind on land. Umbrellas used with difficulty. Wind sock fully extended at about 8 m/s.
Strong breeze	11–14	Hair blown straight. Difficult to walk steadily. Wind noise on ears unpleasant. Windborne snow above head height (blizzard).
Near gale	14–17	Inconvenience felt when walking.
Gale	17–21	Generally impedes progress. Difficulty with balance in gusts.
Strong gale	21–24	People blown over by gusts.

Local wind effects can be assessed with respect to a number of environmental wind speed criteria established by various researchers. These have all generally been developed around a 3 s gust, or 1 hour mean wind speed. During strong events, a pedestrian would react to a significantly shorter duration gust than a 3 s, and historic weather data is normally presented as a 10 minute mean.

Despite the apparent differences in numerical values and assumptions made in their development, it has been found that when these are compared on a probabilistic basis, there is some agreement between the various criteria. However, a number of studies have shown that over a wider range of flow conditions, such as smooth flow across water bodies, to turbulent flow in city centres, there is less general agreement among. The downside of these criteria is that they have seldom been benchmarked, or confirmed through long-term measurements in the field, particularly for comfort conditions. The wind criteria

were all developed in temperate climates and are unfortunately not the only environmental factor that affects pedestrian comfort.

For assessing the effects of wind on pedestrians, neither the random peak gust wind speed (3 s or otherwise), nor the mean wind speed in isolation are adequate. The gust wind speed gives a measure of the extreme nature of the wind, but the mean wind speed indicates the longer duration impact on pedestrians. The extreme gust wind speed is considered to be suitable for safety considerations, but not necessarily for serviceability comfort issues such as outdoor dining. This is because the instantaneous gust velocity does not always correlate well with mean wind speed, and is not necessarily representative of the parent distribution. Hence, the perceived ‘windiness’ of a location can either be dictated by strong steady flows, or gusty turbulent flow with a smaller mean wind speed.

To measure the effect of turbulent wind conditions on pedestrians, a statistical procedure is required to combine the effects of both mean and gust. This has been conducted by various researchers to develop an equivalent mean wind speed to represent the perceived effect of a gust event. This is called the ‘gust equivalent mean’ or ‘effective wind speed’ and the relationship between the mean and 3 s gust wind speed is defined within the criteria, but two typical conversions are:

$$U_{GEM} = \frac{(U_{mean} + 3 \cdot \sigma_u)}{1.85} \quad \text{and} \quad U_{GEM} = \frac{1.3 \cdot (U_{mean} + 2 \cdot \sigma_u)}{1.85}$$

It is evident that a standard description of the relationship between the mean and impact of the gust would vary considerably depending on the approach turbulence, and use of the space.

A comparison between the mean and 3 s gust wind speed criteria from a probabilistic basis are presented in Figure 11 and Figure 13. The grey lines are typical results from modelling and show how the various criteria would classify a single location. City of Auckland has control mechanisms for accessing usability of spaces from a wind perspective as illustrated in Figure 11 with definitions of the intended use of the space categories defined in Figure 12.

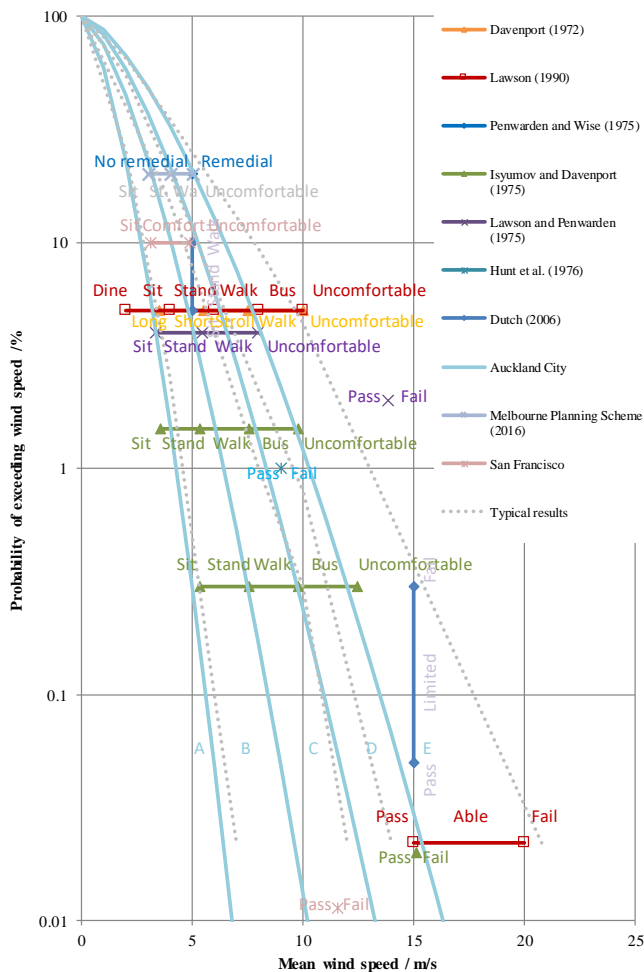


Figure 11 Probabilistic comparison between wind criteria based on mean wind speed










































Category A	Areas of pedestrian use or adjacent dwellings containing significant formal elements and features intended to encourage longer term recreational or relaxation use i.e. public open space and adjacent outdoor living space
Category B	Areas of pedestrian use or adjacent dwellings containing minor elements and features intended to encourage short term recreation or relaxation, including adjacent private residential properties
Category C	Areas of formed footpath or open space pedestrian linkages, used primarily for pedestrian transit and devoid of significant or repeated recreational or relaxational features, such as footpaths not covered in categories A or B above
Category D	Areas of road, carriage way, or vehicular routes, used primarily for vehicular transit and open storage, such as roads generally where devoid of any features or form which would include the spaces in categories A - C above.
Category E	Category E represents conditions which are dangerous to the elderly and infants and of considerable cumulative discomfort to others, including residents in adjacent sites. Category E


Figure 12: Auckland Utility Plan (2016) wind categories



## Appendix 4: Reference documents

In preparing the assessment, the following documents have been referenced to understand the building massing and features.

-  33-18952-23-01-19.pdf
-  33-18952-Sheet - SK022 - BASEMENT.dwg
-  33-18952-Sheet - SK022 - BASEMENT-Floor Plan - BASEMENT.dwg
-  33-18952-Sheet - SK023 - GROUND FLOOR.dwg
-  33-18952-Sheet - SK023 - GROUND FLOOR-Floor Plan - GROUND FLOOR.dwg
-  33-18952-Sheet - SK024 - LEVEL 1.dwg
-  33-18952-Sheet - SK024 - LEVEL 1-Floor Plan - LEVEL 1.dwg
-  33-18952-Sheet - SK025 - LEVEL 2-4.dwg
-  33-18952-Sheet - SK025 - LEVEL 2-4-Floor Plan - LEVEL 3.dwg
-  33-18952-Sheet - SK026 - LEVEL 5.dwg
-  33-18952-Sheet - SK026 - LEVEL 5-Floor Plan - LEVEL 5 - POOL PLANT.dwg
-  33-18952-Sheet - SK027 - LEVEL 6.dwg
-  33-18952-Sheet - SK027 - LEVEL 6-Floor Plan - LEVEL 6 - POOL AND GYM.dwg
-  33-18952-Sheet - SK028 - LEVEL 7.dwg
-  33-18952-Sheet - SK028 - LEVEL 7-Floor Plan - LEVEL 7 - BALLROOM.dwg
-  33-18952-Sheet - SK029 - LEVEL 8.dwg
-  33-18952-Sheet - SK029 - LEVEL 8-Floor Plan - LEVEL 8 - ADMINISTRATION.dwg
-  33-18952-Sheet - SK030 - LEVEL 9.dwg
-  33-18952-Sheet - SK030 - LEVEL 9-Floor Plan - LEVEL 9 - MEETING.dwg
-  33-18952-Sheet - SK031 - LEVEL 10.dwg
-  33-18952-Sheet - SK031 - LEVEL 10-Floor Plan - LEVEL 10 - PLANT.dwg
-  33-18952-Sheet - SK032 - LEVEL 11-21.dwg
-  33-18952-Sheet - SK032 - LEVEL 11-21-Floor Plan - LEVEL 11.dwg
-  33-18952-Sheet - SK033 - LEVEL 22.dwg
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-  33-18952-Sheet - SK039 - LEVEL 28.dwg
-  33-18952-Sheet - SK039 - LEVEL 28-Floor Plan - LEVEL 28.dwg
-  33-18952-Sheet - SK042 - BUILDING SECTION.dwg
-  33-18952-Sheet - SK042 - BUILDING SECTION-Section - SECTION B.dwg
-  33-18952-Sheet - SK108 - South + West Elevation.dwg
-  33-18952-Sheet - SK109 - NORTH + EAST ELEVATION.dwg

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# WGA

WALLBRIDGE GILBERT  
AZTEC

CEL Australia

## 51 Pirie Street

**TRAFFIC ASSESSMENT REPORT**

Project No. 150093

Doc No. WGA150093-RP-TT-0001[C]

Rev. C

21 February 2019

# WGA

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### Revision History

Rev	Date	Issue	Originator	Checker	Approver
A	29/1/18	Draft Report	NM	HSB	HSB
B	15/2/19	Planning Issue	NM	HSB	HSB
C	21/2/19	Revised Issue	NM	HSB	HSB



# CONTENTS

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<b>1 Introduction.....</b>	<b>1</b>
1.1 Background .....	1
1.2 Purpose of the Assessment .....	2
<b>2 Existing Conditions.....</b>	<b>3</b>
2.1 Road Network .....	3
2.2 On-Street Parking .....	3
2.3 Pedestrians .....	4
2.4 Public Transport .....	5
<b>3 Parking Assessment and Trip Generation.....</b>	<b>6</b>
3.1 Parking Demand .....	6
3.2 Expected Trip Generation .....	6
3.3 Safety .....	8
3.4 Sight Distance Requirements.....	8
<b>4 Parking Arrangements.....</b>	<b>12</b>
4.1 On-Street Parking Layout.....	12
4.2 Off-Street Parking Layout.....	12
4.3 Loading Bay Area.....	12
<b>5 Summary and Conclusions .....</b>	<b>14</b>

## Appendices

**Appendix A** Vehicle Turn Path Diagrams

# 1 INTRODUCTION

## 1.1 BACKGROUND

WGA has been engaged by CEL Australia to undertake a traffic impact assessment on the proposed development at 51 Pirie Street, Adelaide. The hotel is understood to consist of a total of 294 rooms and 3 levels of car parking.

Figure 1 shows the locality plan of the site and the immediately surrounding road network.



Figure 1: Locality Plan

Access and egress to the site is proposed via Gawler Place with an indented parking arrangement in addition to a ramp to car parking as shown in Figure 2.

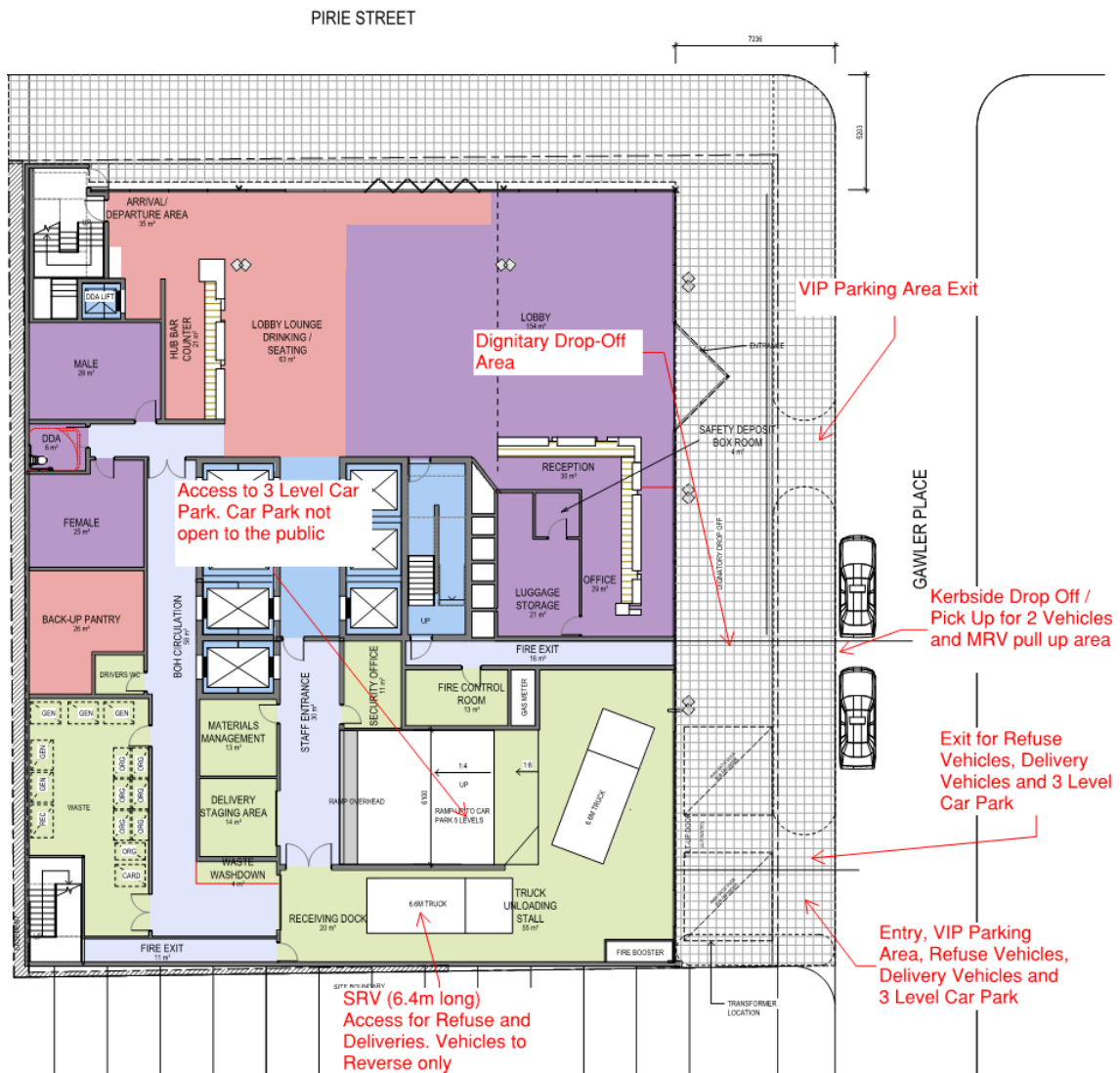


Figure 2: Access and Egress Arrangement

## 1.2 PURPOSE OF THE ASSESSMENT

This assessment will include discussion on:

- Existing arrangement
- Expected trip and parking arrangement
- The proposal
- Performance of proposal
- Outstanding issues

# 2 EXISTING CONDITIONS

## 2.1 ROAD NETWORK

The site is bordered by Gawler Place to the east and Pirie Street to the north. Gawler Place is a two-lane, one-way arterial road. In addition to forming a north-south link running in the Capital City Zone, this specific section is identified as an existing pedestrian link as it connects city workers to Rundle Mall. Pirie Street to the north of the site forms part of the city's movement network and hosts high volumes of pedestrian, bike, vehicle and servicing activity. It is identified as a Core Pedestrian Area in the DPTI's 2018 Adelaide (City) Development Plan.

The site's proximity to two traffic sensitive arterial roads and its strategic impact on city planning warrant the need for this traffic assessment.

## 2.2 ON-STREET PARKING

Currently, there is two spaces of 15-minute parking and one 10-minute loading zone parking during standard business hours on Gawler Place as shown in Figure 3.

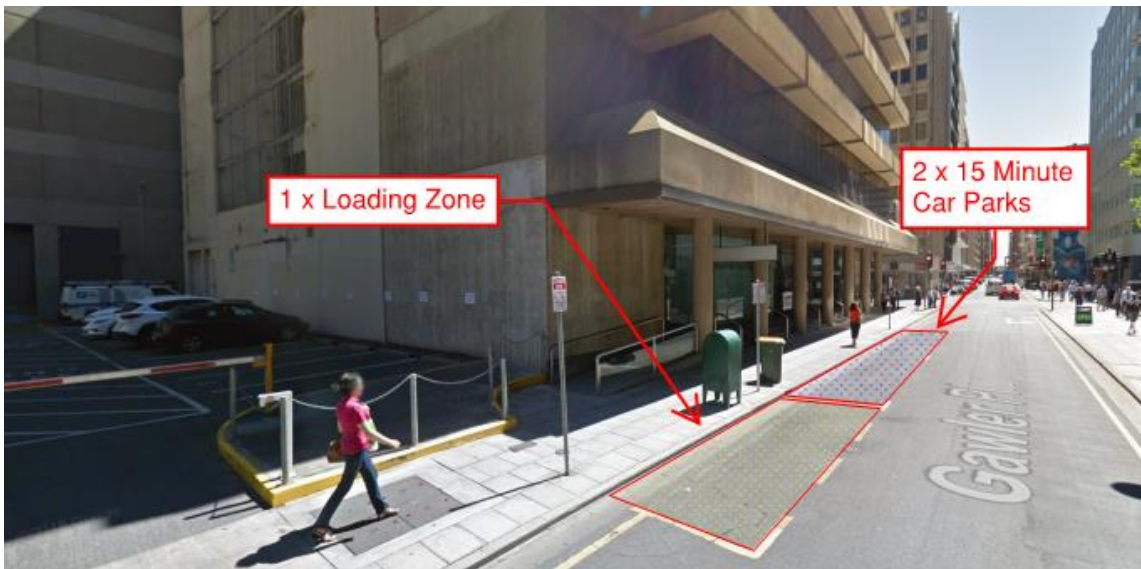


Figure 3: Current Gawler Place On-Street Parking

There is also an existing reserved car park adjacent to the site that is to remain according to current plans. This does not serve as public parking.

As for the Pirie Street side of the lot, there is one space of 15-minute parking outside of the Adelaide GPO (9am-4:30pm weekdays and 9am-12pm Saturday) and an extended 10-minute loading zone during business hours (8am-5pm weekdays).

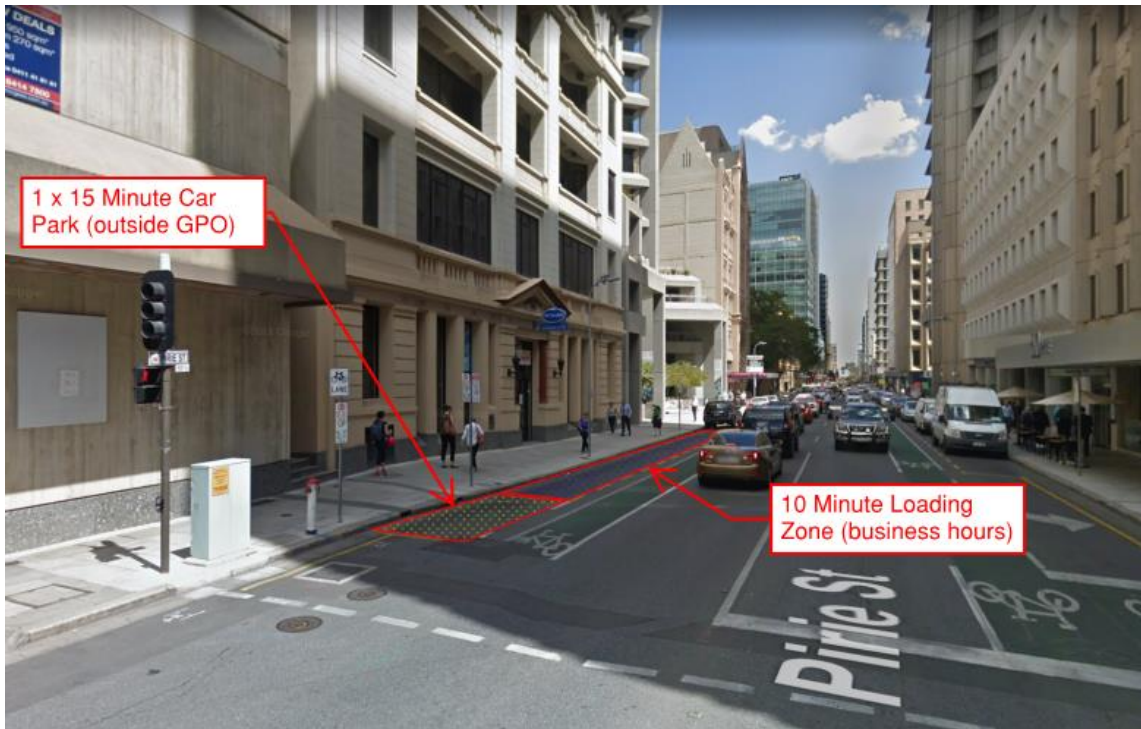


Figure 4: Current Pirie Street On-Street Parking

## 2.3 PEDESTRIANS

There is a high level of pedestrian activity in the vicinity of the site. There are pedestrian actuated crossings on both Pirie Street and Gawler Place.

A pedestrian survey was undertaken at two sites in the Adelaide CBD to determine the expected pedestrian demand that may conflict with the proposed access/egress arrangement. The survey was taken on a typical weekday for a 30-minute period. The first location, 150 North Terrace, is the location of the Stamford Plaza Hotel, a 335-room hotel. The second location, 120 Gawler Place, diagonally opposes 51 Pirie Street and provides similar expected pedestrian volumes as the development site. The volumes are shown below in Table 1.

Table 1: Observed Pedestrian Volumes

Pedestrian Counts	Half-hour Counts		Half-hour Total	One-Hour Estimate
150 North Terrace	<b>Eastbound</b>	<b>Westbound</b>	292	584
	156	136		
120 Gawler Place	<b>Northbound</b>	<b>Southbound</b>	149	298
	73	76		

## 2.4 PUBLIC TRANSPORT

Whilst the two adjacent streets do not currently host public transport routes Gawler Place is subject to future development in the Adelaide (City) Development Plan. With the new hotel's parking on Gawler Place, development of this lot should consider this plan and align its access & egress plan with the city's strategy.

The local public transport plan is visualised below in Figure 5.

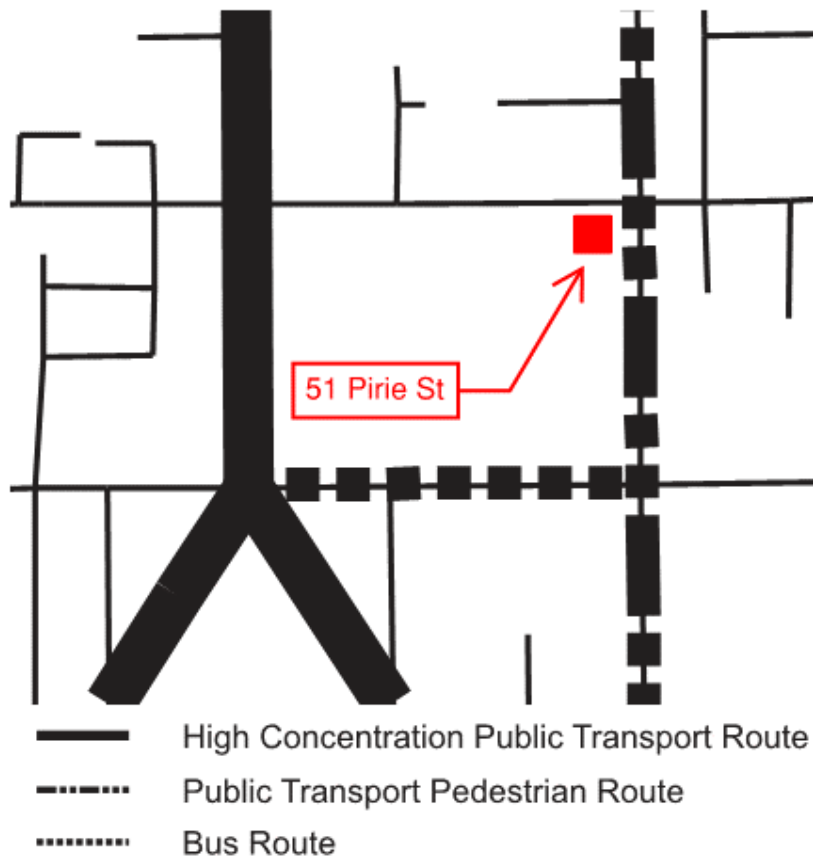


Figure 5: DPTI Public Transport Network Plan

# 3 PARKING ASSESSMENT AND TRIP GENERATION

---

## 3.1 PARKING DEMAND

Through discussions with the City of Adelaide (CoA) the provision of two on-street drop off and pick up spaces was considered adequate. These spaces would need to be sign posted by the CoA prior to the opening of the hotel.

Off street parking for nominally 45 spaces will be provided over three levels. This parking will be used for:

1. Employee parking (nominally 10 spaces)
2. Parking of guest's vehicles by the hotel's valet parking staff (nominally 35 spaces)

Additional parking demand beyond the 45 on site space capacity will be through nearby parking stations.

Delivery and refuse parking is allocated one parking space which would be managed through the timing of deliveries and refuse collection.

The dignitary drop-off parking area accommodates two passenger vehicles which is considered adequate for a low use operation. The dignitary drop-off area can also be managed as hotel staff will have advanced notice of arrivals to the dignitary drop-off area.

## 3.2 EXPECTED TRIP GENERATION

To determine the trip generation for this site, site surveys were conducted at the Peppers Waymouth Hotel (202) rooms and the Stamford Plaza Hotel (335 rooms). These hotels were selected due to their proximity to 51 Pirie Street and the relatively high volumes of pedestrian traffic.

The location of the two sites are shown below in Figure 6.

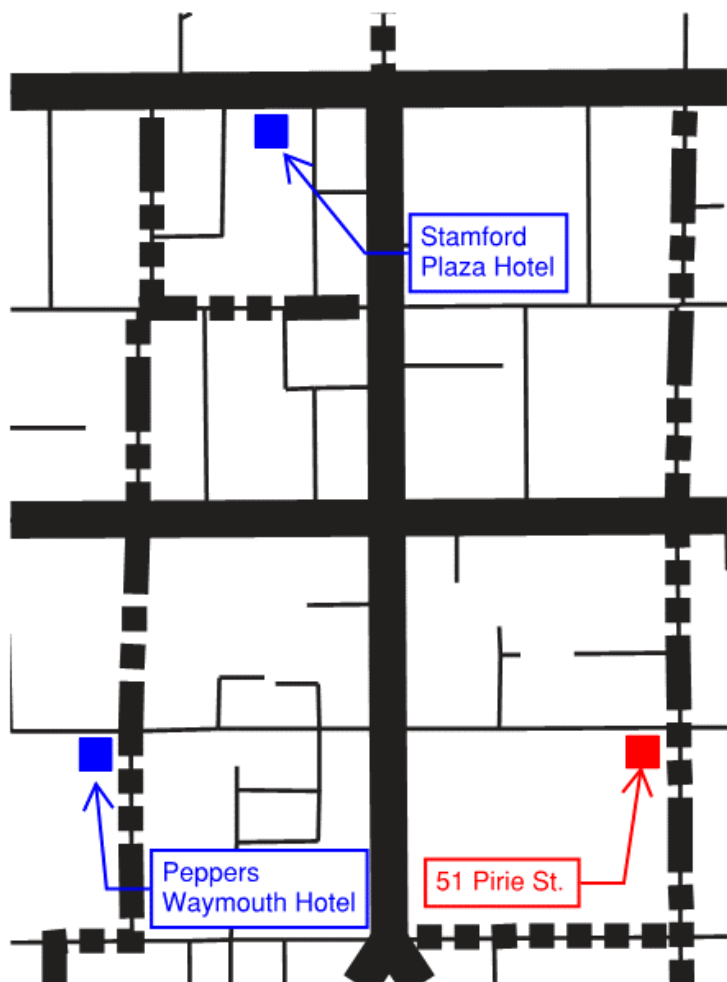


Figure 6: Site Survey Locations



Figure 6: Peppers Waymouth Hotel Drop Off / Pick Up Area



For the Peppers Waymouth Hotel, the site survey was conducted between 9am and 10am on a typical weekday and revealed a total of 6 pick-ups/drop offs.

For the Stamford Plaza Hotel, the observations were recorded between 9am and 10am on a typical weekday and revealed a total of 21 pick-ups/drop offs.

Scaling these results to suit 51 Pirie St, the expected number of pick-ups/drop offs would be 19 vehicles per hour.

### 3.3 SAFETY

Implementing pedestrian crossings can result in safety concerns. This is particularly undesirable given the pedestrian-heavy site of Gawler Place. To support the proposed access/egress arrangement, a collection of crash statistics at five hotels in the Adelaide CBD was collected below in Table 5.

Table 2: Crash Statistics (2013 - 2017)

Name	Location	Total No. Crashes Recorded	Pedestrian Related Crashes
Ibis Hotel	122 Grenfell St, SA 5000	0	0
Peppers Waymouth Hotel	55 Waymouth St, SA 5000	0	0
Hilton Adelaide	233 Victoria Square, SA 5000	2	0
Stamford Plaza Hotel	150 North Terrace, SA 5000	0	0
Mercure Grosvenor Adelaide	125 North Terrace, SA 5000	0	0
The Playford Hotel	120 North Terrace, SA 5000	0	0

In the past five years no pedestrian related crashes have occurred. This safe record supports the arrangement proposed at 51 Pirie Street.

### 3.4 SIGHT DISTANCE REQUIREMENTS

AS2890.1 Parking Facilities Part 1: Off-Street car parking, Figure 3.2, specifies a desirable sight distance for an access driveway of 70m based on a frontage road speed of 50km/h, as outlined in Figure 10.

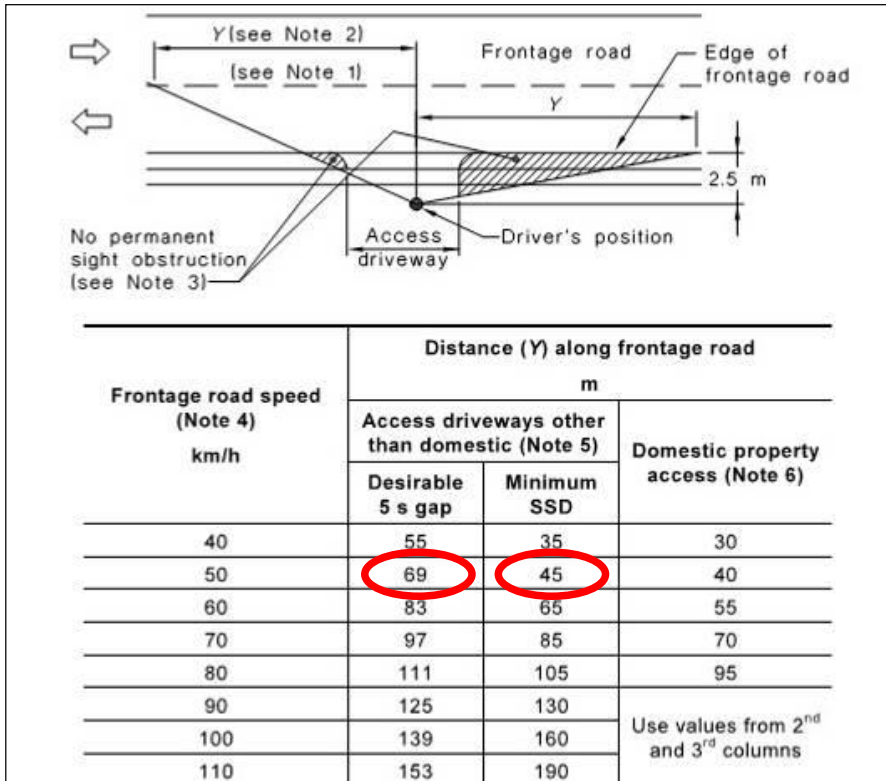


Figure 7: Sight Distance Requirements

The 50km/h traffic speed is based on the posted speed limit on Gawler Street. Figure 8 shows the sight lines for the proposed access in accordance with AS2890.1.

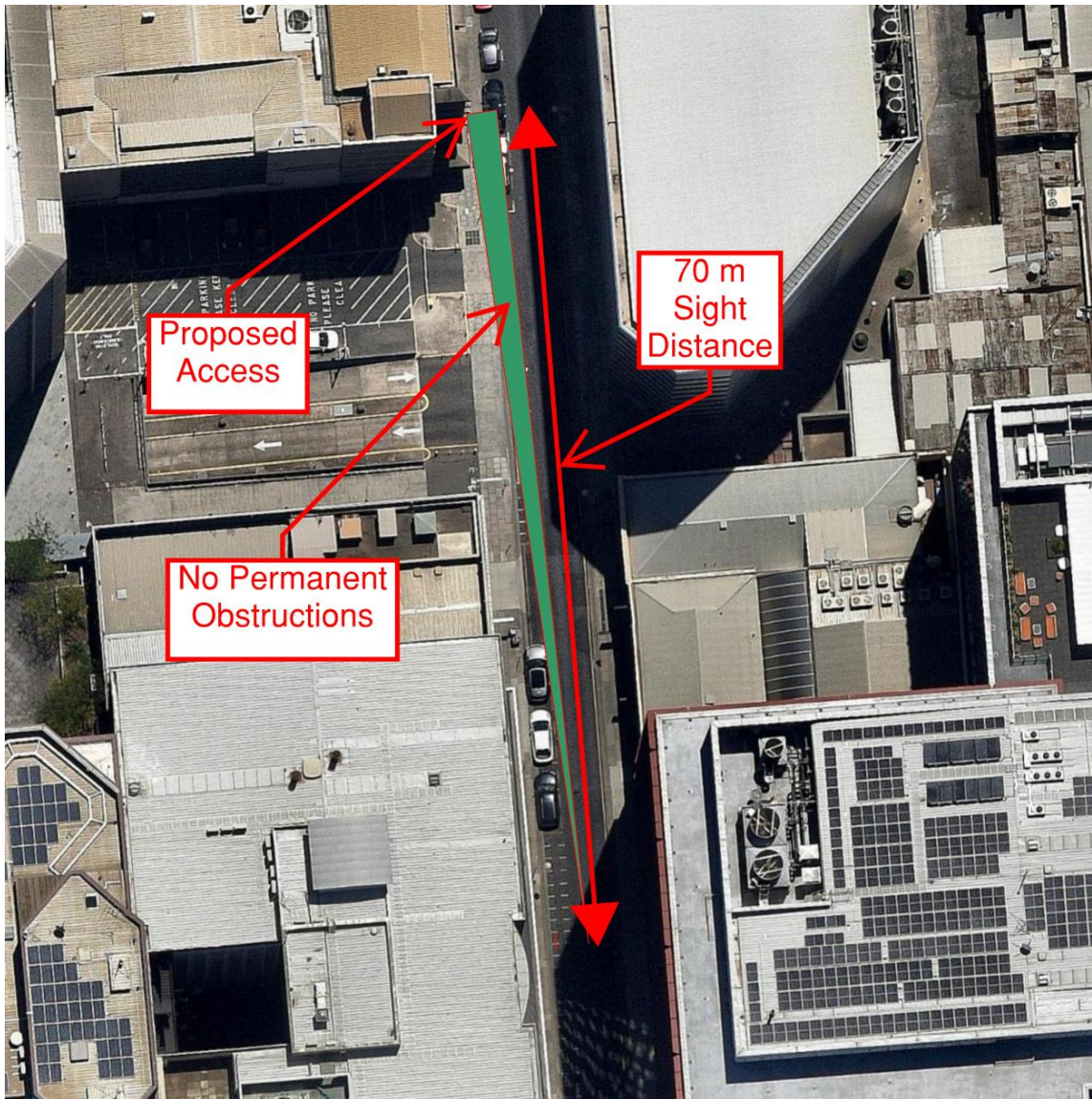


Figure 8: Assessment of Sight Lines

In order to achieve adequate sight lines for pedestrian safety, AS2890.1 recommends that 'sight triangles' are included at access driveways in order to maximise visibility. Figure 9 illustrates the areas required to be kept clear of obstructions to visibility. The proposed access meets the requirements of minimum sightlines to pedestrians.

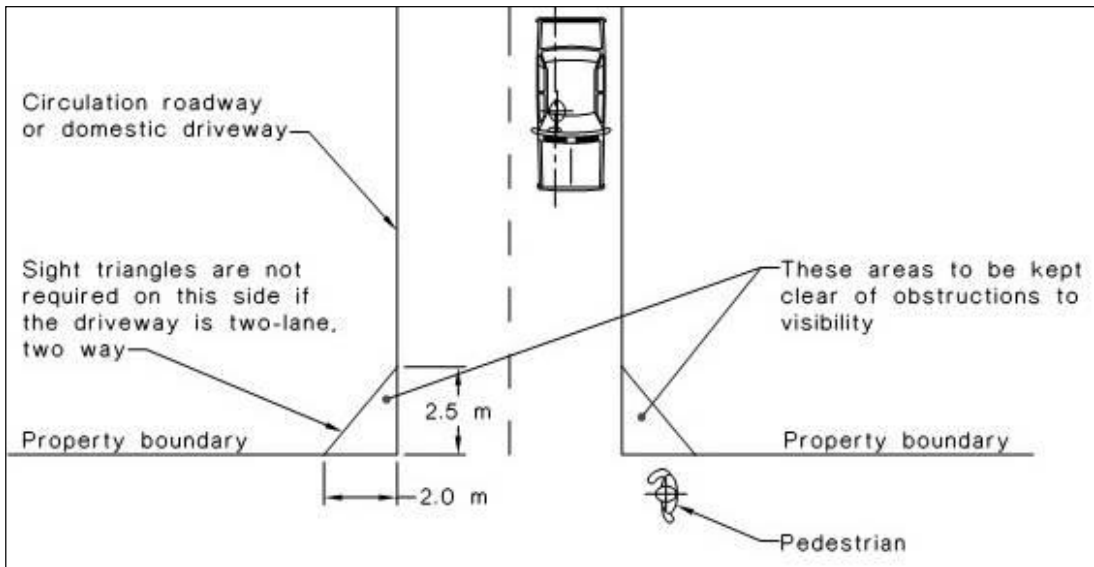


Figure 9: Minimum Sightlines for Pedestrian Safety

# 4 PARKING ARRANGEMENTS

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## 4.1 ON-STREET PARKING LAYOUT

On street car parking will be provided on Gawler Place to accommodate the drop off and picking up of guests to the hotel. Through discussions with the CoA the provision of two on street parking spaces was considered adequate for this development.

The two on street spaces would be signed as No Parking zones, however, stopping of vehicles is permitted under the Australian Road Rules. Based on observation of nearby hotels we anticipate vehicles will occupy the no parking zones for typically 4 to 5 minutes, or 12 vehicles per hour. As indicated in Section 3, we anticipate a peak arrival demand of nominally 19 vehicles per hour. The theoretical capacity of the two parks is estimated to be in the order of 24 vehicles per hour based on 12 vehicles per hour per space.

Vehicles will, however, tend to arrive at varying intervals, and critical to the availability of on street parking is the need for vehicles to be moved on as soon as possible. Operational processes would need to be in place to limit the risk of vehicles queuing beyond the allocated two spaces during high demand periods. Operational processes may include the ability to organise and assign employees from nearby areas to parking duties when the need arises. The level of employees would also need to be flexible and align to the actual demand being experienced.

## 4.2 OFF-STREET PARKING LAYOUT

The three levels of off street car parking has been designed based on AS2890.1 Parking Facilities – Part 1: Off Street Car Parking. User Class 1 was identified as the most relevant class of parking for this facility. The proposed parking aligns to employee, residential and commuter parking, as access to the car park will be restricted to employees associated with the hotel and provide valet services. No access to the general public is intended.

A dignitary drop-off parking area will also be provided and will be parallel to the on street parking area, and as outlined in Figure 2. Turn paths for a 7.0m long limousine are included in Appendix A and demonstrate this vehicle can enter and exit the assigned parking area.

## 4.3 LOADING BAY AREA

The loading area and refuse collection will occur in the south west corner of the development. Access will be via a left in movement from Gawler Place. The loading and refuse collection will be restricted to Small Rigid Vehicles (SRV) and Medium Rigid Vehicles (MRV).

The SRV vehicle will enter and exit in a forward direction through the previous of an internal reversing area located in the south eastern corner of the development. The internal reversing area is located clear of any pedestrian thoroughfares. Access to the 3-level parking area will be restricted during the reversing process, however, as this access is for employees only we considered this can be managed safely.

WGA consulted with waste management consultants, Rawtec, and met with CoA on 8<sup>th</sup> February 2019 to discuss access for MRV vehicles. It was determined that a standard 8.8m MRV could reverse into the loading area from the on street parking spaces. Given the access utilises the on street parking and the turn path crosses a pedestrian thoroughfare, it was agreed the access for MRV vehicles is restricted to off-peak times.

The above engagement is also referenced in the Rawtec waste management report:

*“Based on discussions with City of Adelaide, the collection vehicle will reverse into the development’s loading area from Gawler Street, and then exit the development in a forward direction. To ensure the safety of pedestrians it is recommended that the waste collection vehicles:*

- *Are fitted with 360 degree reversing cameras and automatic braking for rear obstructions/pedestrians.*
- *Collect waste and recycling out of peak times to avoid high traffic and pedestrian times (e.g. before 6am/after 7pm).*
- *Utilise a spotter provided by the hotel/contractor for the reversing vehicle.”*

Turn paths for the SRV and MRV vehicles are enclosed in Appendix A.

# 5 SUMMARY AND CONCLUSIONS

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The key aspects of this Traffic Assessment are:

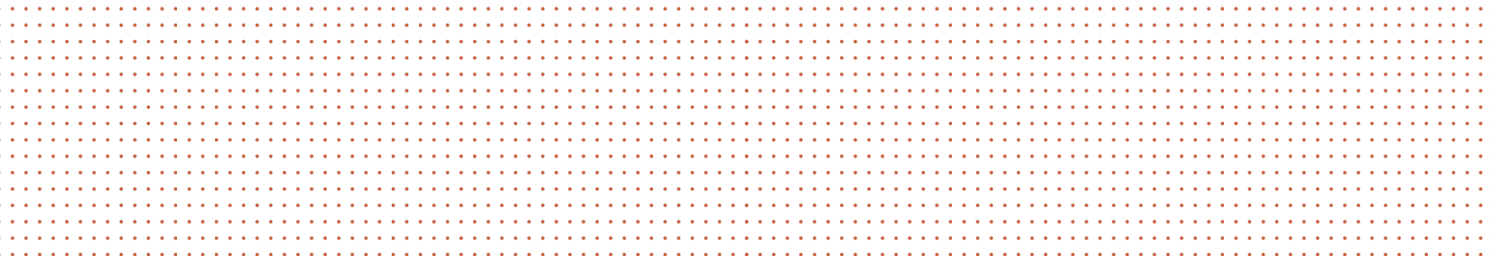
- The assessment related to the development of a new hotel at 51 Pirie Street, Adelaide.
- The development will consist of 300 rooms, 45 off street car parks for employee and valet parking purposes, 2 on site VIP parking spaces and 2 on-street parking spaces for guest drop off and pick up purposes
- Vehicular entry and exit to the site is proposed be via Gawler Place, and will comprise of:
  - Access to the 45 off street car parks
  - Access to the dignitary drop-off parking area
  - Deliveries and refuse collection
- Pedestrian sight distance at King William Street meets requirements to the north and to the south.
- Available vehicle sight distance is greater than the requirement of 70m. Street furniture and light poles are located within the area to be kept clear; however, it is considered that this does not pose a significant obstruction to sight lines.
- The Gawler Place footpath across the proposed access is designated by the CoA as a high pedestrian priority area. Peak hour pedestrian counts revealed an estimated peak hour two-way pedestrian flow in excess of 300 pedestrians/hr. Sight lines that exceed the requirements of AS2890.1 are provided.
- When compared to similar sites it is expected that the site will generate approximately 19 vehicles per hour.
- Turn path analyses have been undertaken to confirm that:
  - The VIP parking area can accommodate a limousine vehicle (7.47m long)
  - A SRV (6.4m long rigid truck) can turnaround within the site
  - A MRV (8.8m long rigid truck) can reverse into the site from Gawler Place

Overall, the proposal is not expected to cause any significant adverse parking or traffic impacts in the surrounding area.

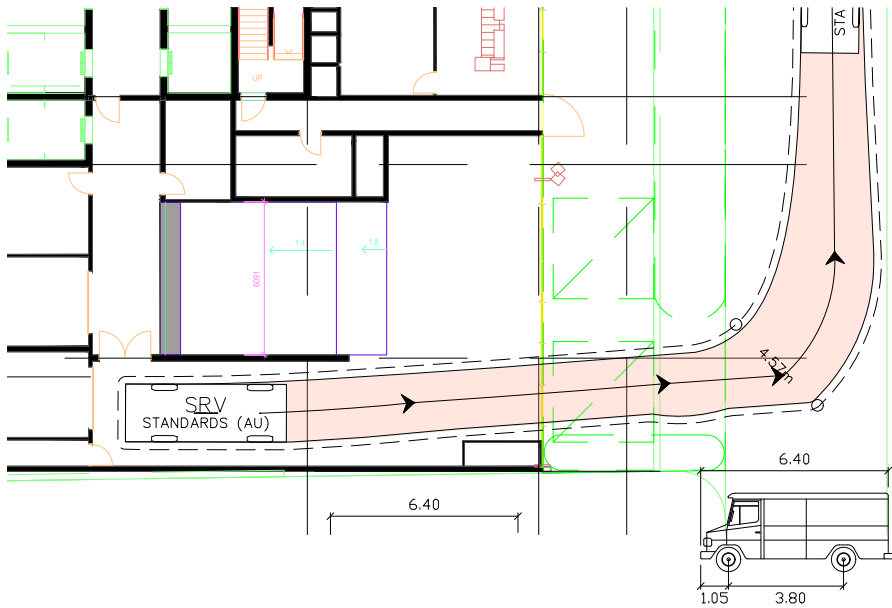
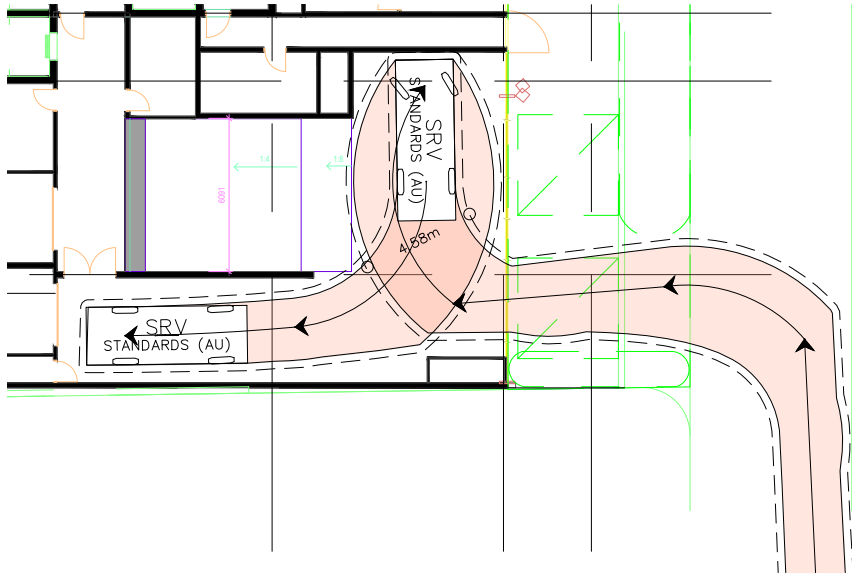
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# APPENDIX A

## VECHILE TURN PATH DIAGRAMS

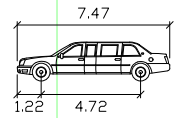
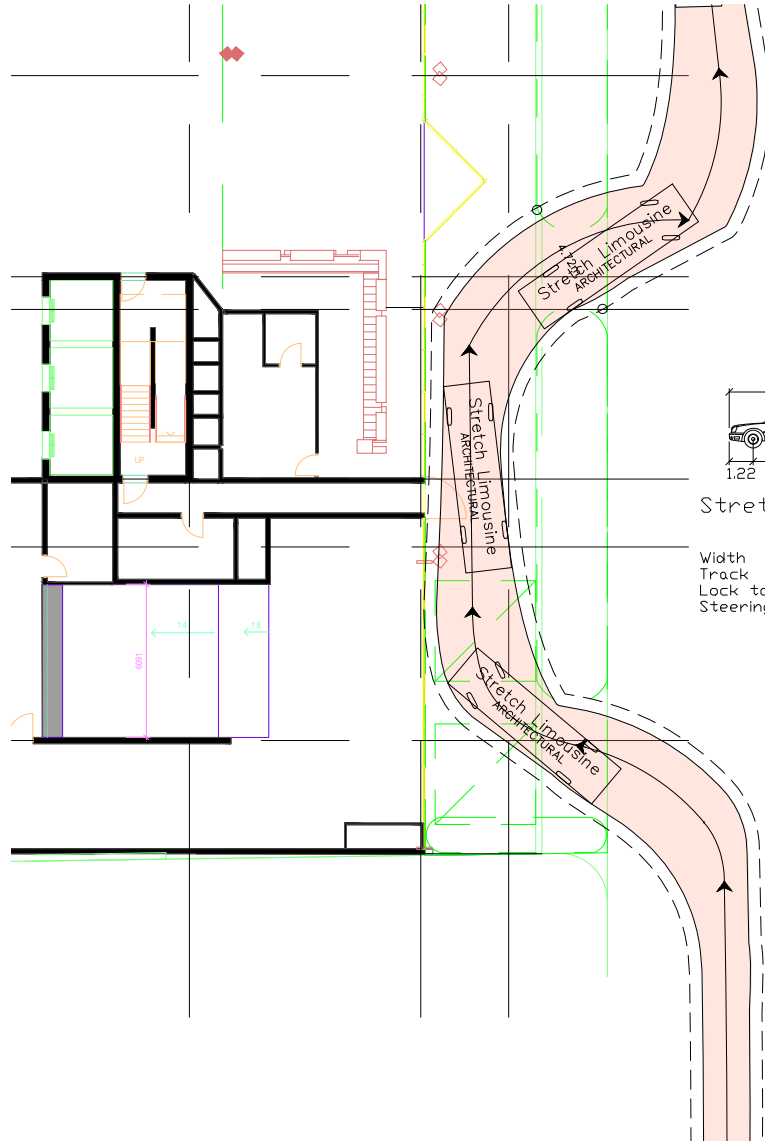






SRV

Width : 2.30 meters  
 Track : 2.30  
 Lock to Lock Time : 6.0  
 Steering Angle : 38.0



Stretch Limousine  
 meters  
 Width : 1.83  
 Track : 1.83  
 Lock to Lock Time : 6.0  
 Steering Angle : 31.1

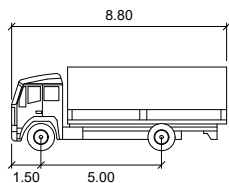
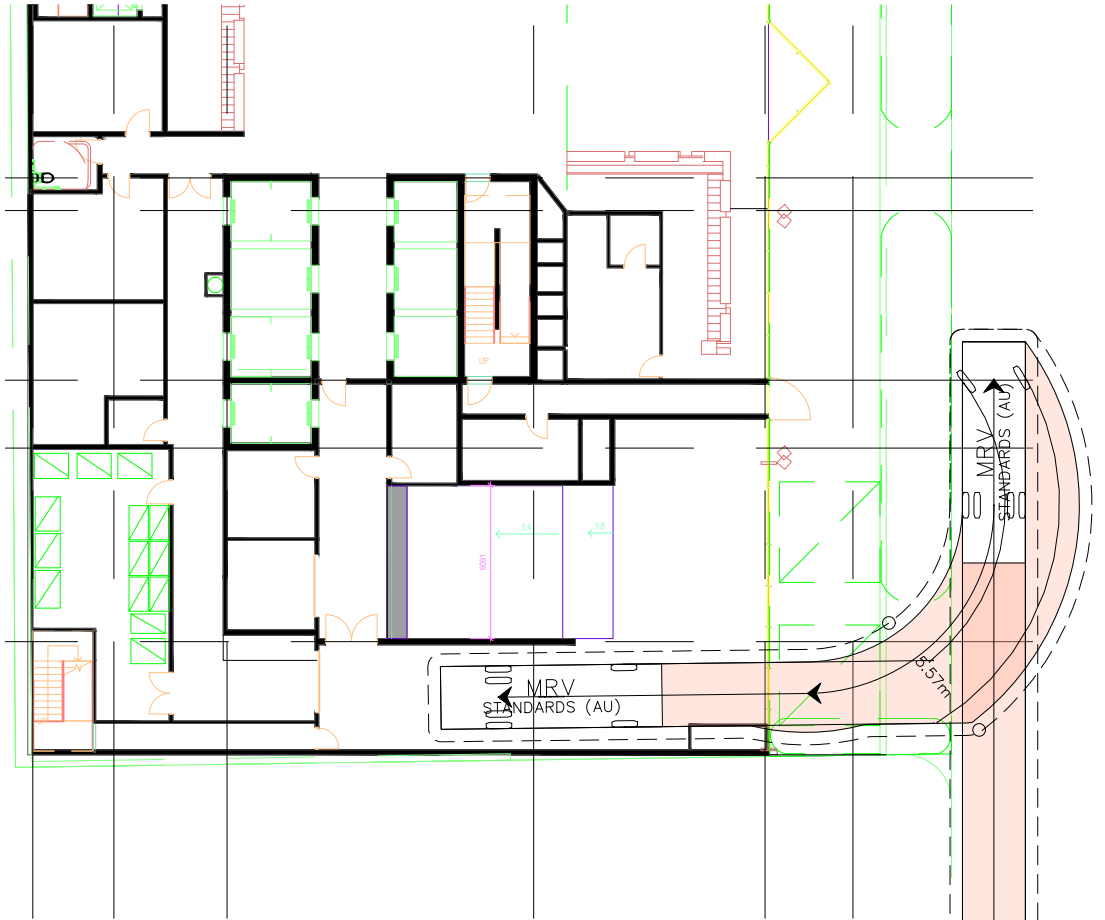
REV	DATE	DESCRIPTION	DRAFT	ENG	CHKD



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**51 PIRIE STREET**  
 TRAFFIC ASSESSMENT  
 6.4m SMALL SERVICE VEHICLE (SRV)  
**TURNPATH ANALYSIS**

A1 DOCUMENT NUMBER  
 Project Number Sheet No. Rev.



MRV

- Width : 8.80 meters
- Track : 2.50
- Lock to Lock Time : 6.0
- Steering Angle : 34.0

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When sheet printed full size, the scale bar is 100mm.  
 0 50 100mm

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REV.	DATE	DESCRIPTION	DRAFT	ENG.	CHKD

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51 PIRIE STREET  
 TRAFFIC ASSESSMENT  
 8.8m MEDIUM RIGID VEHICLE (MRV)  
 TURNPATH ANALYSIS

A1	DOCUMENT NUMBER	Sheet No.	Rev.
Design	Drawn	ADL150093SK13	A



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---

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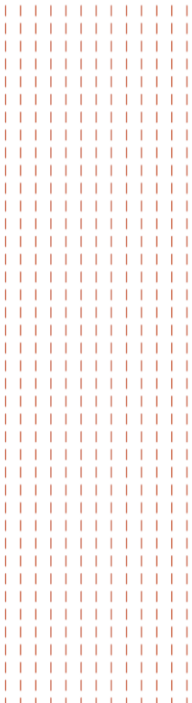
Phone: 08 8644 0432

**WALLBRIDGE GILBERT AZTEC**

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[Adelaide@wga.com.au](mailto:Adelaide@wga.com.au)

---



5 April 2019

Will Gormly  
Department of Planning, Transport & Infrastructure  
GPO Box 1815  
ADELAIDE SA 5001

Dear Will

**DEVELOPMENT NUMBER:** DA 020/A016/19  
**APPLICANT:** CES Pirie Hotel (SA) Pty Ltd  
**NATURE OF DEVELOPMENT:** Construction of 28-Storey Hotel  
**SUBJECT LAND:** 51 Pirie Street, ADELAIDE, SOUTH AUSTRALIA, 5000

The application has been assessed and the building at a proposed height of RL 158.800m AHD the application **will** penetrate the Adelaide Airport Obstacle Limitation surfaces (OLS) which is protected airspace for aircraft operations.

The application will require approval in accordance with the Airports Act 1996 and the Airports (Protection of Airspace) Regulations 1996 and therefore will be forwarded to the Department of Infrastructure and Regional Development for their approval.

The developments will penetrate the OLS by approximately 38 metres.

If the development is approved by the Department of Infrastructure, Regional Development and Cities any associated lighting would also need to conform to the airport lighting restrictions and shielded from aircraft flight paths.

Crane operations associated with construction, if approved, will also be subject to a separate application.

Should you require any additional information or wish to discuss this matter further please contact the undersigned on 8308 9245.

Yours sincerely,



Brett Eaton  
Airside Operations Manager



Adelaide Airport Limited  
1 James Schofield Drive  
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South Australia 5950

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ABN 78 075 176 653

File No:  
2014/11234/01

22 March 2019

Ref No:  
13799599

Mr Will Gormly  
Planning Officer  
Planning and Land Use Services  
Department of Planning, Transport and Infrastructure  
Level 5, 50 Flinders Street  
Adelaide, SA, 5000

Will.Gormly@sa.gov.au

## 51 Pirie Street, Adelaide

Further to the referral 020/A016/19 received 5 March 2019 pertaining to the development application at the above address and in my capacity as a statutory referral in the State Commission Assessment Panel, I am pleased to provide the following comments informed by the Design Review process for your consideration.

I acknowledge the willingness with which the project team has engaged with the Design Review process. The proposal was presented to the Design Review panel on four occasions, over which period the design outcome progressed significantly.

I support the aspiration to deliver a high quality hotel development in this location that activates the street with day and nighttime activity, and I commend the ambitious concept for the facade including its Ecologically Sustainable Design (ESD) credentials. I am of the opinion that development of this scale in this part of the city has a responsibility to deliver a high benchmark for good design, particularly in terms of the public realm contribution. In my view, the removal of the Local heritage facade must also be justified by achieving a high level of activation and providing a generous contribution to the streetscape, which I consider is being achieved by the proposal. My ongoing support, however, is contingent on a continued commitment to and delivery of the high quality public realm outcome, refined design and materiality presented.

The 1,369 square metre site is located on the corner of Pirie Street and Gawler Place in the Capital City Zone, which has no prescribed height limit. The surrounding area is characterised by a mix of contemporary commercial buildings of varying heights and uniquely includes a number of buildings with a 45 degree angle to the city grid. Pirie Street forms part of the city's movement network with high volumes of pedestrian, bicycle, vehicle and servicing activity, and is also identified in the Development Plan as a Core Pedestrian Area. Gawler Place is north-south link that runs from Wakefield Street to North Terrace. This section of Gawler Place has a high level of pedestrian activity as it connects city workers to Rundle Mall, and future upgrade works are envisaged by Adelaide City Council in the longer term. The site currently contains a Local (Townscape) heritage place identified in the Development Plan as a former Bank. The heritage place was substantially redeveloped in the 1980s, with approximately 600mm of the heritage facade retained and a concrete building constructed behind and to the east. The site to the south contains an at-grade car park, diesel storage, car park ramp and access to the delivery bay of 45 Flinders Street.

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Adelaide SA 5000

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File No:  
2014/11234/01

Ref No:  
13799599

The proposal is for a 28 storey, 113.8 metre tall singular building without a podium, which I support given the inner city location. On the ground floor level, the scheme includes an approximately 1.2 metre setback along Pirie Street and an approximately 4.6 metre setback along Gawler Place, which forms a porte-cochere for dignitary drop-off. I support the proposed ground floor setbacks that increase the width of the footpaths and contribute a portion of the site's ground plane footprint back to the public realm. I also support the inclusion of an approximately 4.4 metre setback from the southern boundary above ground floor level, which protects the amenity of south facing hotel rooms should development occur on the southern boundary.

The double height ground floor space is configured to include a lobby, bar and reception area, with a level one guest retreat overlooking the hotel lounge and Pirie Street. I support the resulting day and nighttime activation, and the inclusion of glazed operable walls that provide physical and visual permeability to Pirie Street. The scheme also proposes a high quality Adelaide Black Granite paving treatment that extends from the building interior to the kerb, with the potential to continue this treatment across Gawler Place to the adjacent 63 Pirie Street plaza. I support the ambition for the proposed public realm improvements and approach for a unified treatment that integrates the ground plane with the broader urban environment. I recommend ongoing consultation with the City of Adelaide regarding paving selection and integration with broader streetscape improvements. I understand bollards and mobile planters are also being explored, and I recommend further consideration of pedestrian safety strategies and storage for any unfixated items as design development progresses.

The base of the building is characterised by a double height highly glazed frontage with sculptural columns that transition from inside to outside the building envelope. The matching smaller scale canopy columns create a family of elements, which together contribute to the streetscape character and ground the singular expression of the tower. I support the expression of the base of the building, including the highly transparent glazing and slender sculptural columns. I also support the height of the glazed canopy at approximately six metres, as this complements the overall proportions of the tower. In my view, however, the success of the design is contingent on delivery of the clear glass, high quality finish to the column elements and careful detailing, particularly in regards to the canopy framing, flashings, gutters and downpipes, which I anticipate will occur through the next stage of design development. The entry to the hotel is via a glazed triangular vestibule element off Gawler Place, which in my view achieves a sense of address for hotel guests and function room visitors.

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A porte cochere is proposed off Gawler Place, which I understand will be used for dignitary guest drop-off and that typically short term drop-off will occur on-street on Gawler Place, with vehicle movements managed by hotel staff. The porte cochere and on-street drop-off arrangement results in potential conflicts between vehicles and the highly pedestrianised environment of Gawler Place. However, I acknowledge the hotel operator requirements for a porte cochere and the commitment to a management strategy to minimise this risk. Hotel servicing and access to the above ground car parking ramp also occurs off Gawler Place via a grey tinted glazed tilt up door. I support the rationalisation of the receiving dock and ramp, which minimises the conflict between service vehicles and pedestrians and conceals servicing activities from public view. I also support the integration of the tilt up door with the expression of the base of the building.



File No:  
2014/11234/01

Ref No:  
13799599

The development includes three levels of above ground car parking accommodating 45 parks. The car park levels are designed to be adaptable with 3.1 metre floor to floor dimensions and demountable ramps. I support the reduction in above ground car parking from six to three levels, the consideration given to future adaptive reuse and the provision of electric vehicle charging points. I also support inclusion of bicycle parking and end of trip facilities in the basement level.

Recreation, ballroom, administration and meeting room facilities are proposed on levels seven to nine. I support the inclusion of an additional lift to service these areas that are subject to concentrated high volumes of activity. I also support the rationalisation of the circulation and entry experience for guests on the ground floor level, including the large shared lobby area. Guest accommodation is proposed on levels 11 to 26, with each floor configured to include a range of room types, with a total number of rooms of 294. I support the mix and envisaged quality of the hotel rooms, as well as guest facilities that include a pool, gymnasium and rooftop restaurant. The back of house functions are consolidated throughout the hotel, which I anticipate are configured to meet the hotel's operational requirements.

The building facade is characterised by a variable shrouding element that unifies the development and creates a singular architectural expression. The aluminium facade shading hoods are applied consistently to each elevation and transition in three dimensions in response to specific environmental conditions and extend above the rooftop plant enclosure as a transitional gesture. I support the concept for the building facade and commend the project team's commitment to this innovative technique and high quality materiality. I also support the integration of the above ground car parking levels into the overall architectural expression and strategies to prevent headlight glare. I recommend ongoing consideration of the concealment of car parking infrastructure, plant and services as design development progresses. The egress stair in the north west corner of the site comprises a solid element to level nine and is to be clad with ceramic cladding tiles, which I support. This solid element will be highly prominent from the streetscape perspective and in my view requires careful detailing as design development progresses, particularly in regards to the junctions. The west facade of this solid element has been identified as a location for hotel signage, which I support.

To ensure the most successful design outcome is achieved the State Commission Assessment Panel may like to consider particular aspects of the project, which would benefit from protection as part of the planning permission, such as:

- Provision of a materials samples board and schedule to demonstrate selections

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Yours sincerely



Kirsteen Mackay  
South Australian Government Architect





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**Enquiries:** Matthew Field 8203 7023  
**CoA Ref:** S10/13/2019  
**SCAP Ref:** 020/A016/19

25 March 2019

045



State Commission Assessment Panel  
GPO Box 1815  
Adelaide SA 5001

**Attention: State Commission Assessment Panel**

Dear Sir/Madam

**Application:** S10/13/2019  
**Applicant:** CES PIRIE HOTEL (SA) P/L  
**Address:** 49-57 Pirie Street, ADELAIDE SA 5000  
**Description:** Construction of a 28 storey Hotel.

Council has the following comment(s) to make on the above application:

**TECHNICAL COMMENTS**

<b>SURVEY / LAND TENURE</b>	Technical comments relating to council infrastructure were not available at the time of preparing these comments.
<b>ROADS / FOOTPATHS ENGINEERING</b>	These comments will be forwarded to SCAP as soon as they are available.
<b>TORRENS &amp; STORM WATER</b>	
<b>LIGHTING / ELECTRICAL / CCTV</b>	
<b>TRAFFIC / TRANSPORT</b>	There are no traffic/transport related objections to this development, subject to the following matter/s being addressed: <ul style="list-style-type: none"><li>• The recommendations for the movement of the waste vehicles in both the Rawtec and WGA reports are supported.</li><li>• If public realm works are to be part of the application then further assessment will be required with respect to vehicle swept paths, stormwater requirements, paving contrast for visually impaired.</li></ul>





It is important that the applicant is advised of the following;

- No Parking zones in the City of Adelaide allow clearly signed delivery vehicles to park for a maximum of 30 minutes.
- City of Adelaide will not alter on-street parking to provide exclusive use for the hotel.

#### **WASTE**

Based on a review of the plans and ongoing discussions with the waste consultants, Administration is satisfied that the final waste management plan will meet the operational requirements for the development.

#### **HERITAGE**

Administration has reviewed the Heritage Impact Assessment (HIA) prepared for the applicant and the relevant design drawings.

The following comments relate only to the impact of the proposed development upon the Local Heritage Place (Townscape) and do not consider the merits of the overall proposal.

The "legal" interpretation offered by the author of the HIA is noted but the relevance of that case in relation to this application is questioned.

It is also noted, as a point of clarification, that the "Townscape" heritage listing of buildings pre-dates the Development Act 1993 which established Local Heritage Places and the criteria for their assessment. The creation of Local Heritage Places (Townscape) was a planning mechanism to "grandfather" over the earlier heritage list.

Notwithstanding the arguments within the HIA against the "townscape" merit of the listed building, a Local Heritage Place (Townscape) listing does have status within the Development Plan and the demolition of the listed place should be considered in that context.

As the HIA acknowledges (pages 7-8), there are numerous provisions within the relevant Development Plan which call for the retention of this Local Heritage Place (Townscape). Demolition of the listed building fabric is therefore not consistent with the clear intent of the Plan.

#### **PUBLIC REALM**

The activation of the ground level of the building is supported.

All public realm treatments are subject to further discussion and approval separate to the development approval process.

Any changes to public realm are subject to CoA processes, including consultation on loss of parking and due diligence with respect to stormwater and other above and underground services.

The material for public space would be determined by CoA and would be subject to further design development to achieve landlord consent for public realm treatment. It should be noted that the black granite is unlikely to be supported.

Should SCAP grant approval to the development, the applicant is encouraged to contact CoA as early as possible to commence a collaborative design process.

## 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:

### ACTIVE STREET FRONTAGES

The extent of active frontage the development provides to both the northern and eastern frontages is commended.

As stated above, the changes to the public realm require further discussions with CoA approval outside of the DA process.

### ENCROACHMENTS

The development incorporates the following encroachments:

- 2.7 m wide x 29.1 m long glazed cantilevered verandah to Pirie Street

The plans do not show the canopy in detail; however, based on a calibrated measurement using the building level dimensions, the clearance height appears to range between 4.7 and 5.5 m.

Based on the above, the proposed canopy does not achieve the requirements of councils current Encroachment Policy which requires a canopy height no greater than 3.7 m above the footpath level.

Council will be considering the revised encroachment Policy at its meeting on the 26 March 2019. The revised policy removes the upper height limit and replaces this with a performance based test. Should council endorse the new Policy, the applicant will need to demonstrate, prior to encroachment consent being granted that the verandah provides pedestrian comfort by providing shelter from sun and rain, to the reasonable satisfaction of Council. A lower canopy height may be required if adequate pedestrian shelter is not provided at the proposed height.

### ABOVE GROUND CARPARKING

The provision of un-sleeved above ground car parking is disappointing; however, it is acknowledged that the amount of car parking has been reduced and the car parking levels have been designed to allow for their future adaptation / conversion.

The provision of the active level one 'Guest Retreat' further minimises the visual impact of the above ground car parking.

## SUGGESTED CONDITIONS

- 1. The finished floor level of the ground floor level at the entry points to the development including the car park entry and exit points shall match the existing footpath unless otherwise agreed to by the Council in writing.**

*Reason:* The Corporation of the City of Adelaide WILL NOT adjust footpath levels to suit finished building levels. The existing footpath levels are to be retained and entrance levels of the development must meet the existing back of footpath.

- 2. Lighting shall be installed to the verandah at street level on Pirie Street in accordance with Council's guideline entitled "Under Verandah/Awning Lighting Guidelines" at all times to the reasonable satisfaction of the Council and prior to the occupation or use of the Development. Such lighting shall always be operational during the hours of darkness to the reasonable satisfaction of Council.**

*Reason:* To ensure the development does not create public areas with insufficient lighting.

- 3. Clear sight lines for users of the car park entry shall be provided to ensure pedestrian safety along the Gawler Place footpath and shall be provided at all times in accordance with in accordance with AS/NZS 2890.1:2004 Off-street Car Parking.**

*Reason:* To ensure that the Development meets the requirements of the relevant Australian Standards.

#### **SUGGESTED ADVICES**

1. Development Approval will not be granted until Building Rules Consent and an Encroachment Consent have been obtained. A separate application must be submitted for such consents. No building work or change of classification is permitted until the Development Approval has been obtained.
2. An Encroachment Permit will be separately issued for the proposed encroachment into the public realm when Development Approval is granted. In particular, your attention is drawn to the following:
  - An annual fee may be charged in line with the Encroachment Policy.
  - Permit renewals are issued on an annual basis for those encroachments that attract a fee.
  - Unauthorised encroachments will be required to be removed.
3. Any activity in the public realm, whether it be on the road or footpath, requires a City Works Permit. 48 hours' notice is required before commencement of any activity.

The City Works Guidelines detailing the requirements for various activities, a complete list of fees and charges and an application form can all be found on Council's website at [www.cityofadelaide.com.au](http://www.cityofadelaide.com.au)

When applying for a City Works Permit you will be required to supply the following information with the completed application form:

- A Traffic Management Plan (a map which details the location of the works, street, property line, hoarding/mesh, lighting, pedestrian signs, spotters, distances etc.);
- Description of equipment to be used;
- A copy of your Public Liability Insurance Certificate (minimum cover of \$20 Million required);
- Copies of consultation with any affected stakeholders including businesses or residents.

Please note: Upfront payment is required for all city works applications.

Applications can be received by Council via the following:

Email: cityworks@cityofadelaide.com.au

Fax: 8203 7674

In Person: 25 Pirie Street, Adelaide

4. There is no objection to the proposed vehicle crossing place/alterations to the existing vehicle crossing place(s), however the work will be undertaken by Council and the cost of the work will be charged to the applicant. A separate application for the crossing place(s) is required and the applicant can obtain a form from Customer Service, 25 Pirie Street, Adelaide, or telephone 8203 7236. A quotation for the work will be provided by Council prior to the work being undertaken.
5. Section 779 of the Local Government Act provides that where damage to Council footpath / kerbing / road pavement / verge occurs as a result of the development, the owner / applicant shall be responsible for the cost of Council repairing the damage.
6. Should SCAP resolve to grant approval to the development, the applicant is encouraged to contact CoA as early as possible to commence a collaborative design process with respect to the proposed changes in the public realm.

Yours faithfully

Per Rebecca Rutschack

**MANAGER - PLANNING ASSESSMENT**

## Gormly, Will (DPTI)

---

**From:** Michael Hegarty <Michael.Hegarty@ghd.com>  
**Sent:** Friday, 29 March 2019 11:53 AM  
**To:** Gormly, Will (DPTI); Mark Separovic  
**Cc:** robert@leegreen.com.au  
**Subject:** RE: 020/A016/19 - 51 Pirie Street

Thanks again Will

Just to clarify the item 11 on our tabulated response to the Government Architect's letter which is blank – this matter is addressed in the Heritage report from Dash and in my detailed responses earlier in the email. Also DASH will be in attendance at the SCAP presentation and I would ask that an invite be sent to Jason Schulz as well as those copied once you have confirmed a date and time.

Regards,

### Michael Hegarty

National Practice Leader | Australia  
Director of Architecture  
B.Arch (Hons) B.Sc(Env.Sc), RAIA, RIBA  
Registered Architect South Australia APBSA No.3432  
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### Connect



Please consider the environment before printing this email

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**From:** Gormly, Will (DPTI) <Will.Gormly@sa.gov.au>  
**Sent:** Friday, 29 March 2019 10:07 AM  
**To:** Michael Hegarty <Michael.Hegarty@ghd.com>; Marko Separovic <Marko.Separovic@ghd.com>  
**Cc:** Robert Lee (InTouch) <robert@leegreen.com.au>  
**Subject:** RE: 020/A016/19 - 51 Pirie Street

Hi Michael

Thank you for your prompt reply.

I'll take these considerations on board in my assessment.

I'll be in touch should I need anything further.

Regards,  
Will.

**Will Gormly**

Senior Planning Officer – City & Inner Metro Development Assessment

Planning and Land Use Services

Department of Planning, Transport and Infrastructure

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**From:** Michael Hegarty [<mailto:Michael.Hegarty@ghd.com>]

**Sent:** Thursday, 28 March 2019 5:09 PM

**To:** Mark Separovic <[Marko.Separovic@ghd.com](mailto:Marko.Separovic@ghd.com)>; Gormly, Will (DPTI) <[Will.Gormly@sa.gov.au](mailto:Will.Gormly@sa.gov.au)>

**Cc:** [robert@leegreen.com.au](mailto:robert@leegreen.com.au)

**Subject:** RE: 020/A016/19 - 51 Pirie Street

Hi Will,

Thank you for the opportunity to respond to these comments, which are largely very positive and supportive.

DPTI will know that Council’s Heritage advisor participated at the PLP meetings and was often in attendance at design review through the pre-lodgement process which was extensive and highly engaged. Adelaide City Council have added other commentary to those meetings which supported higher street level activation, drop-off restriction to Gawler Place only and other matters which cannot be achieved in any satisfactory manner by retaining the heritage façade fragment of the building already demolished in the 1980s. In those discussions and meetings the proposition was put forward and generally understood that in this particular instance, given that there is only a fragment remaining and that removal provides multiple benefits to the city, that on balance, the removal of the façade fragment provides a better outcome overall. We acknowledge that Council’s Heritage Advisor must continue to defend heritage and to that extent is concerned about the proposal, however the particular circumstances of this site, the low tier listing, the fact that the building has already gone and that façade-retention is a widely discredited approach to heritage since the 1980s, means that this outcome is, on balance, a best-for-city proposition for 51 Pirie Street.

I can confirm that our client has spoken at PLP and Design review to confirm that all on-site car parks are to be used wholly for the use of the occupants of the hotel. The parking strategy is for valet parking and a small number of executive level hotel staff parking spaces. The total number of parking spaces is a maximum of 45 and that none of the spaces are for use of the general public.

Please also find attached design responses below to Adelaide City Council’s Schedule 10 comments to SCAP dated 25 March 2019 and Government Architect’s comments to DPTI dated 22 March 2019 for 51 (49-57) Pirie Street (DA 20/A016/19):

**Table 1: Design Responses to Adelaide City Council’s Schedule 10 comments to SCAP dated 25 March 2019**

Item	Issue	AoC Comments	Design Responses
1	<b>SURVEY / LAND TENURE</b>	<i>Technical comments relating to council infrastructure were not available at the time of preparing these comments.</i>	Noted

2	<b>ROADS / FOOTPATHS ENGINEERING</b>	<i>These comments will be forwarded to SCAP as soon as they are available.</i>	Noted
3	<b>TORRENS &amp; STORM WATER</b>		
4	<b>LIGHTING / ELECTRICAL / CCTV</b>		
5	<b>TRAFFIC / TRANSPORT</b>	<p><i>There are no traffic/transport related objections to this development, subject to the following matter/s being addressed:</i></p> <ul style="list-style-type: none"> <li><i>The recommendations for the movement of the waste vehicles in both the Rawtec and WGA reports are supported.</i></li> <li><i>If public realm works are to be part of the application then further assessment will be required with respect to vehicle swept paths, stormwater requirements, paving contrast for visually impaired.</i></li> </ul> <p><i>It is important that the applicant is advised of the following;</i></p> <ul style="list-style-type: none"> <li><i>No Parking zones in the City of Adelaide allow clearly signed delivery vehicles to park for a maximum of 30 minutes.</i></li> <li><i>City of Adelaide will not alter on-street parking to provide exclusive use for the hotel.</i></li> </ul>	Noted that there is general support for the recommendations of the waste vehicles in both the Rawtec and WGA reports.
6	<b>WASTE</b>	<i>Based on a review of the plans and ongoing discussions with the waste consultants, Administration is satisfied that the final waste management plan will meet the operational requirements for the development.</i>	Noted that these is general support for the waste strategy by Rawtec.
7	<b>HERITAGE</b>	<p><i>Administration has reviewed the Heritage Impact Assessment (HIA) prepared for the applicant and the relevant design drawings. The following comments relate only to the impact of the proposed development upon the Local Heritage Place (Townscape) and do not consider the merits of the overall proposal. The "legal" interpretation offered by the author of the HIA is noted but the relevance of that case in relation to this application is questioned. It is also noted, as a point of clarification, that the "Townscape" heritage listing of buildings pre-dates the Development Act 1993 which established Local Heritage Places and the criteria for their assessment. The creation of Local Heritage Places (Townscape) was a planning mechanism to "grandfather" over the earlier heritage list. Notwithstanding the arguments within the HIA against the "townscape" merit of the listed building, a Local Heritage Place (Townscape) listing does have status within the Development Plan and the demolition of the listed place should be considered in that context. As the HIA acknowledges (pages 7-8), there are numerous provisions within the relevant</i></p>	Noted. See below Government Architect's comments (Item 2 – Heritage) regarding the removal of the Local Heritage Façade: <i>'In my view, the removal of the Local heritage facade must also be justified by achieving a high level of activation and providing a generous contribution to the streetscape, which I consider is being achieved by the proposal. My ongoing support, however, is contingent on a continued commitment to and delivery of the high quality public realm outcome, refined design and materiality presented'.</i>

*Development Plan which call for the retention of this Local Heritage Place (Townscape). Demolition of the listed building fabric is therefore not consistent with the clear intent of the Plan.*

In addition, there is general support for the approach to the ground level activation and high quality approach to developing the public realm, as per the comments below – Item 8 public Realm. The removal of the local Heritage façade enables the future activation of the street frontages and provides for a high quality entry for the new 5 Star International Hotel.

It is to be noted that the current building on the site was built in the 1980s and is not heritage listed other than a fragment of the façade of an earlier building, the rest of which has already been demolished. This façade was listed only as part of a raft of townscape and local heritage listings that was part of a political negotiation between government agencies and Adelaide City Council. Prior to that group-listing process, the façade was not considered worthy of heritage listing at any level by state or council heritage advisors, and its current heritage status is at the lowest tier.

The current building has a ground floor level considerably higher than the footpath on both Gawler Place and Pirie Street. This is a physical impediment to permeability between outside and inside and the associated street edge activation that is desired by planning policy. This policy and desired outcome was emphasised by various statutory agencies and ACC during the pre-lodgement process.

The pre-lodgement process also explored a variety of potential entrance locations (front door and sense of address) for the new hotel, of which car /taxi drop off is a fundamental



component. To this regard Adelaide City Council were very clear that they would permit passenger/hotel guest drop-off on Gawler Place only, and that their preference was for Pirie street to have greater emphasis on pedestrian and outdoor dining type activation. This in turn reinforced the need for a permeable and accessible interface between the hotel and Pirie Street, with the internal functionality of café bar nature being more appropriate than the main entrance. The main entrance being de-facto required to be collocated with hotel guest drop-off on Gawler Place. Any retention of the current heritage façade fragment does not facilitate that outcome. To create that permeability at ground floor would reduce the floor, windows and doors by c1200mm to meet the pavement, widen the openings to enable public access; would require considerable new openings and adjustment to first floor level to achieve the higher visual connection between hotel activity and the street; and leave car parking behind the upper level heritage façade fragment. This was not considered a reasonable approach to a lowest tier heritage listed fragment of an already demolished building, with huge compromises on the opportunity for civic benefit from a top tier hotel on this important city junction. The city benefits considerably from a coherent high quality architectural proposition on the site. The proposal as presented to SCAP also offers the city the public realm benefit of parts of the private site for public uses which cannot be achieved in parallel with any retention. This approach is echoed in the adjoining 45 Pirie

			street plaza and the nearby Adelaide City Council Offices. This is an entirely appropriate contextual response to this important civic precinct and provides a suitable sense of address for a major international branded 5 star hotel in the heart of the city.
8	<b>PUBLIC REALM</b>	<p><i>The activation of the ground level of the building is supported.</i></p> <p><i>All public realm treatments are subject to further discussion and approval separate to the development approval process.</i></p> <p><i>Any changes to public realm are subject to CoA processes, including consultation on loss of parking and due diligence with respect to stormwater and other above and underground services.</i></p> <p><i>The material for public space would be determined by CoA and would be subject to further design development to achieve landlord consent for public realm treatment. It should be noted that the black granite is unlikely to be supported.</i></p> <p><i>Should SCAP grant approval to the development, the applicant is encouraged to contact CoA as early as possible to commence a collaborative design process.</i></p>	Noted that there is general support for the ground level activation of the public realm. GHDW will work collaboratively with AoC in the design process to develop the public realm.
9	<b>ACTIVE STREET FRONTAGES</b>	<p><i>The extent of active frontage the development provides to both the northern and eastern frontages is commended.</i></p> <p><i>As stated above, the changes to the public realm require further discussions with CoA approval outside of the DA process.</i></p>	Noted that there is general support for the extent of active frontages. GHDW will work collaboratively with AoC to develop the public realm.
10	<b>ENCROACHMENTS</b>	<p><i>The development incorporates the following encroachments:</i></p> <p><i>2.7 m wide x 29.1 m long glazed cantilevered verandah to Pirie Street</i></p> <p><i>The plans do not show the canopy in detail; however, based on a calibrated measurement using the building level dimensions, the clearance height appears to range between 4.7 and 5.5 m.</i></p> <p><i>Based on the above, the proposed canopy does not achieve the requirements of councils current Encroachment Policy which requires a canopy height no greater than 3.7 m above the footpath level.</i></p> <p><i>Council will be considering the revised encroachment Policy at its meeting on the 26 March 2019. The revised policy removes the upper height limit and replaces this with a performance based test. Should council endorse the new Policy, the applicant will need to demonstrate, prior to encroachment consent being granted that the verandah provides pedestrian comfort by providing shelter from sun</i></p>	Noted. GHDW will work collaboratively with council to satisfy their Encroachment policy.

		<i>and rain, to the reasonable satisfaction of Council. A lower canopy height may be required if adequate pedestrian shelter is not provided at the proposed height.</i>	
11	<b>ABOVE GROUND CARPARKING</b>	<i>The provision of un-sleeved above ground car parking is disappointing; however, it is acknowledged that the amount of car parking has been reduced and the car parking levels have been designed to allow for their future adaptation / conversion.  The provision of the active level one 'Guest Retreat' further minimises the visual impact of the above ground car parking.</i>	Noted that although the inclusion of above ground car parking is 'disappointing' – it is acknowledged that the overall amount of car parking has been reduced and the car parking levels have been design for future adaptive re-use.
12	<b>Finished ground floor level</b>	<i>The finished floor level of the ground floor level at the entry points to the development including the car park entry and exit points shall match the existing footpath unless otherwise agreed to by the Council in writing</i>	Noted. The finished floor levels at the entry points shall match existing.
13	<b>Lighting</b>	<i>Lighting shall be installed to the verandah at street level on Pirie Street in accordance with Council's guideline entitled "Under Verandah/Awning Lighting Guidelines" at all times to the reasonable satisfaction of the Council and prior to the occupation or use of the Development. Such lighting shall always be operational during the hours of darkness to the reasonable satisfaction of Council</i>	Noted. The lighting design at veranda street level will comply with Council's guidelines.
14	<b>Car Park sight lines</b>	<i>Clear sight lines for users of the car park entry shall be provided to ensure pedestrian safety along the Gawler Place footpath and shall be provided at all times in accordance with in accordance with AS/NZS 2890.1:2004 Off-street Car Parking.</i>	Noted. Clear sight lines for car park users will be provided.

**Table 2: Design Responses to Government Architect's comments to DPTI dated 22 March 2019 for 51 (49-57) Pirie Street (DA 20/A016/19)**

<b>Item</b>	<b>Issue</b>	<b>Government Architect Comments</b>	<b>Design Responses</b>
1	<b>ESD</b>	<i>I support the aspiration to deliver a high quality hotel development in this location that activates the street with day and nighttime activity, and I commend the ambitious concept for the facade including its Ecologically Sustainable Design (ESQ) credentials. I am of the opinion that development of this scale in this part of the city has a responsibility to deliver a high benchmark for good design, particularly in terms of the public realm contribution</i>	Noted that there is general support for the aspiration to deliver a high quality development with the ambitious concept for the façade including its Ecologically sustainable Design credentials.
2	<b>HERTIAGE</b>	<i>In my view, the removal of the Local heritage facade must also be justified by achieving a high level of activation and providing a generous contribution to the streetscape, which I consider is being achieved by the proposal. My ongoing support, however, is contingent on a continued commitment to and delivery of the high quality public realm outcome, refined design and materiality presented.</i>	As per above – Item 7 – Public Realm: there is general support for the approach to the ground level activation and high quality approach to developing the public realm, as per

		<i>The site currently contains a Local (Townscape) heritage place identified in the Development Plan as a former Bank. The heritage place was substantially redeveloped in the 1980s, with approximately 600mm of the heritage facade retained and a concrete building constructed behind and to the east.</i>	the comments below – Item 8 public Realm. The removal of the local Heritage façade enables the future activation of the street frontages and provides for a high quality entry for the new 5 Star International Hotel.
3	<b>PODIUM</b>	<i>The proposal is for a 28 storey, 113.8 metre tall singular building without a podium, which I support given the inner city location.</i>	There is general support for a design proposal that is a singular building without a podium. It is noted that Council's Development Plan Council Wide policies promote the inclusion of a Podium at ground level.
4	<b>SET BACKS</b>	<i>On the ground floor level, the scheme includes an approximately 1.2 metre setback along Pirie Street and an approximately 4.6 metre setback along Gawler Place, which forms a porte-cochere for dignitary drop-off. I support the proposed ground floor setbacks that increase the width of the footpaths and contribute a portion of the site's ground plane footprint back to the public realm. I also support the inclusion of an approximately 4.4 metre setback from the southern boundary above ground floor level. which protects the amenity of south facing hotel rooms should development occur on the southern boundary.</i>	There is general support for the proposed setbacks along Pirie Street and an approx. Setback of 4.6 metres along Gawler Place – as they contribute to the enlargement of the public realm. It is noted that Council's Development Plan Council Wide policies promote the zero setbacks to allotment boundaries, especially at ground level.
5	<b>DAY &amp; NIGHT ACTIVATION</b>	<i>The double height ground floor space is configured to include a lobby, bar and reception area, with a level one guest retreat overlooking the hotel lounge and Pirie Street. I support the resulting day and nighttime activation, and the inclusion of glazed operable walls that provide physical and visual permeability to Pirie Street.</i>	There is general support for the day and night street activation along the street frontages. This is in line with Council Wide provisions regarding SCEPTED principles and providing high quality public realm which is safe day

			and night for pedestrians.
6	<b>PUBLIC REALM</b>	<i>The scheme also proposes a high quality Adelaide Black Granite paving treatment that extends from the building interior to the kerb, with the potential to continue this treatment across Gawler Place to the adjacent 63 Pirie Street plaza. I support the ambition for the proposed public realm improvements and approach for a unified treatment that integrates the ground plane with the broader urban environment. I recommend ongoing consultation with the City of Adelaide regarding paving selection and integration with broader streetscape improvements. I understand bollards and mobile planters are also being explored, and I recommend further consideration of pedestrian safety strategies and storage for any unfixed items as design development progresses.</i>	Noted that there is general support for the ground level activation of the public realm. GHDW will work collaboratively with AoC in the design process to develop the public realm, as per Item 8: Public Realm above.
7	<b>ENCROACHMENTS</b>	<i>The base of the building is characterised by a double height highly glazed frontage with sculptural columns that transition from inside to outside the building envelope. The matching smaller scale canopy columns create a family of elements, which together contribute to the streetscape character and ground the singular expression of the tower. I support the expression of the base of the building, including the highly transparent glazing and slender sculptural columns. I also support the height of the glazed canopy at approximately six metres, as this complements the overall proportions of the tower. In my view, however, the success of the design is contingent on delivery of the clear glass, high quality finish to the column elements and careful detailing, particularly in regards to the canopy framing, flashings, gutters and downpipes, which I anticipate will occur through the next stage of design development. The entry to the hotel is via a glazed triangular vestibule element off Gawler Place, which in my view achieves a sense of address for hotel guests and function room visitors.</i>	As per Item 10 – encroachments above – GHDW will work collaboratively with council to satisfy their Encroachment policy.
8	<b>PORTE COCHERE &amp; CAR PARKING</b>	<i>A porte cochere is proposed off Gawler Place, which I understand will be used for dignitary guest drop-off and that typically short term drop-off will occur on-street on Gawler Place, with vehicle movements managed by hotel staff. The porte cochere and on-street drop-off arrangement results in potential conflicts between vehicles and the highly pedestrianised environment of Gawler Place. However, I acknowledge the hotel operator requirements for a porte cochere and the commitment to a management strategy to minimise this risk. Hotel servicing and access to the above ground car parking ramp also occurs off Gawler Place via a grey tinted glazed tilt up door. I support the rationalisation of the receiving dock and ramp, which minimises the conflict between service vehicles and pedestrians and conceals servicing activities from public view. I also support the integration of the tilt up door with the expression of the base of the building.</i>  <i>The development includes three levels of above ground car parking accommodating 45 parks.</i>	As per Items 11 – Above ground Car Parking: that although the inclusion of above ground car parking is ‘disappointing’ – it is acknowledged that the overall amount of car parking has been reduced and the car parking levels have been design for future adaptive re-use. As per Item 5 – Traffic: that there is general support for the recommendations of

		<i>The car park levels are designed to be adaptable with 3.1 metre floor to floor dimensions and demountable ramps. I support the reduction in above ground car parking from six to three levels, the consideration given to future adaptive reuse and the provision of electric vehicle charging points. I also support inclusion of bicycle parking and end of trip facilities in the basement level.</i>	the waste vehicles in both the Rawtec and WGA reports.
9	<b>HOTEL FACILITIES</b>	<i>Recreation, ballroom, administration and meeting room facilities are proposed on levels seven to nine. I support the inclusion of an additional lift to service these areas that are subject to concentrated high volumes of activity. I also support the rationalisation of the circulation and entry experience for guests on the ground floor level, including the large shared lobby area. Guest accommodation is proposed on levels 11 to 26, with each floor configured to include a range of room types, with a total number of rooms of 294. I support the mix and envisaged quality of the hotel rooms, as well as guest facilities that include a pool, gymnasium and rooftop restaurant. The back of house functions are consolidated throughout the hotel, which I anticipate are configured to meet the hotel's operational requirements.</i>	There is general support for the general arrangement of the hotel rooms and design of the hotel facilities, including vertical transportation and circulation.
10	<b>FACADE – ARCHITECTURAL EXPRESSION</b>	<i>The building facade is characterised by a variable shrouding element that unifies the development and creates a singular architectural expression. The aluminium facade shading hoods are applied consistently to each elevation and transition in three dimensions in response to specific environmental conditions and extend above the rooftop plant enclosure as a transitional gesture. I support the concept for the building facade and commend the project team's commitment to this innovative technique and high quality materiality. I also support the integration of the above ground car parking levels into the overall architectural expression and strategies to prevent headlight glare. I recommend ongoing consideration of the concealment of car parking infrastructure, plant and services as design development progresses. The egress stair in the north west corner of the site comprises a solid element to level nine and is to be clad with ceramic cladding tiles, which I support. This solid element will be highly prominent from the streetscape perspective and in my view requires careful detailing as design development progresses, particularly in regards to the junctions. The west facade of this solid element has been identified as a location for hotel signage, which I support.</i>	There is general support for the architectural expression of the proposal.
11	<b>HERTIAGE</b>		

Regards,

## Michael Hegarty

National Practice Leader | Australia  
Director of Architecture  
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### Connect



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**From:** Gormly, Will (DPTI) <[Will.Gormly@sa.gov.au](mailto:Will.Gormly@sa.gov.au)>  
**Sent:** Wednesday, 27 March 2019 2:29 PM  
**To:** Michael Hegarty <[Michael.Hegarty@ghd.com](mailto:Michael.Hegarty@ghd.com)>; Marko Separovic <[Marko.Separovic@ghd.com](mailto:Marko.Separovic@ghd.com)>  
**Subject:** 020/A016/19 - 51 Pirie Street

Hi Michael and Mark

I've received comments back from both Council and Government Architect with respect to 51 Pirie Street (DA 020/A016/19).

Please see attached files. Please also note that the infrastructure section of Council's comments are not complete as they are still to be provided.

Council's Heritage advisor is concerned about the proposal, where it is proposed to demolish the entire remaining portion of Local Heritage fabric.

I note the report prepared by DASH lightly addresses the reasons for demolition, but are you able to provide me further detail which justifies the total demolition of this Local Heritage place?

Further, can you please confirm that all on-site car parks are to be used wholly for the use of the occupants of the hotel?

In addition to the above, you are welcome to provide a response to any of the sections in Council's comments or those of the Government Architect.

Regards,  
Will.

### Will Gormly

Senior Planning Officer – City & Inner Metro Development Assessment  
Planning and Land Use Services

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**51 Pirie Street – from diagonally opposite corner**



**Plaza of 63 Pirie Street**



**View from Gawler Place with Pirie Street in mid-ground**



**View of 51 Pirie Street from northern side of Pirie Street**



**View of existing setback of 51 Pirie Street to Gawler Place**



**View of existing setback of 50 Pirie Street to Gawler Place  
(building to north of subject site)**



**View of Local Heritage (Townscape) Place**  
**Photograph shows modern alterations to façade**



**Gawler Place (looking north)**  
**Subject site in centre**

## 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.

*The Squares (Victoria, Hindmarsh and Light)*

- 17 Outdoor eating and drinking facilities associated with cafés and restaurants are appropriate ground floor uses and should contribute to the vitality of the Squares and create a focus for leisure.
- 18 Buildings fronting the Squares should:
  - (a) provide a comfortable pedestrian and recreation environment by enabling direct sunlight to a minimum of 75 percent of the landscaped part of each Square at the September equinox;  
and
  - (b) reinforce the enclosure of the Squares with a continuous built-form with no upper level setbacks.

*The Terraces (North, East and West)*

- 19 Development along the terraces should contribute to a continuous built form to frame the City edge and activate the Park Lands.
- 20 Development along North Terrace should reinforce the predominant scale and 'City wall' character of the Terrace frontage.

## Building Height

- 21 Development should not exceed the maximum building height shown in Concept Plan [Figures CC/1 and 2](#) unless;
- (a) it is demonstrated that the development reinforces the anticipated city form in Concept Plan [Figures CC/1 and 2](#), and
  - (b) only if:
    - (i) at least two of the following features are provided:
      - (1) the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjoining Zone or Policy Area;
      - (2) the development incorporates the retention, conservation and reuse of a building which is a listed heritage place;
      - (3) high quality universally accessible open space that is directly connected to, and well integrated with, public realm areas of the street;
      - (4) universally accessible, safe and secure pedestrian linkages that connect through the development site as part of the cities pedestrian network on [Map Adel/1 \(Overlay 2A\)](#);
      - (5) on site car parking does not exceed a rate of 0.5 spaces per dwelling, car parking areas are adaptable to future uses or all car parking is provided underground;
      - (6) residential, office or any other actively occupied use is located on all of the street facing side of the building, with any above ground car parking located behind;
      - (7) a range of dwelling types that includes at least 10% of 3+ bedroom apartments;
      - (8) more than 15 per cent of dwellings as affordable housing.
    - (ii) plus all of the following sustainable design measures are provided:
      - (1) a rooftop garden covering a majority of the available roof area supported by services that ensure ongoing maintenance;
      - (2) a greenroof, or greenwalls / façades supported by services that ensure ongoing maintenance;
      - (3) innovative external shading devices on all of the western side of a street facing façade; and
      - (4) higher amenity 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.
- 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) and 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:
- enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages;
  - complement the surrounding built form in terms of height, massing and scale; and
  - 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:
- 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.
  - 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**:

- 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;
- 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.*

## **Central Business Policy Area 13**

### **Introduction**

The Objectives and Principles of Development Control that follow apply to the Policy Area as shown on [Maps Adel/49, 50, 55 and 56](#). They are additional to those expressed for the Zone and, in cases of apparent conflict, take precedence over the Zone provisions. In the assessment of development, the greatest weight is to be applied to satisfying the Desired Character for the Policy Area.

### **DESIRED CHARACTER**

The Central Business Policy Area is the pre-eminent economic, governance and cultural hub for the State. This role will be supported by educational, hospitality and entertainment activities and increased opportunities for residential, student and tourist accommodation.

Buildings will exhibit innovative design approaches and produce stylish and evocative architecture, including tall and imposing buildings that provide a hard edge to the street and are of the highest design quality. A wide variety of design outcomes of enduring appeal are expected. Complementary and harmonious buildings in individual streets will create localised character and legible differences between streets, founded on the existing activity focus, building and settlement patterns, and street widths.

### **OBJECTIVES**

- Objective 1:** A concentration of employment, governance, entertainment and residential land uses that form the heart of the City and central place for the State.
- Objective 2:** Development of a high standard of design and external appearance that integrates with the public realm.
- Objective 3:** Development that contributes to the Desired Character of the Policy Area.

### **PRINCIPLES OF DEVELOPMENT CONTROL**

#### **Land Use**

- 1 Development should contribute to the area's role and function as the State's premier business district, having the highest concentration of office, retail, mixed business, cultural, public administration, hospitality, educational and tourist activities.
- 2 Buildings should be of a height that ensures airport operational safety is not adversely affected.
- 3 To enable an activated street level, residential development or similar should be located above ground floor level.

## **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**

- 1 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.

## **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**

- 2** A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new development.
- 3** 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.
- 4** 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.
- 5** 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.

## **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**

- 6** 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.
- 7** 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.
- 8** 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.
- 9** Glazing on building facades should not result in glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles.
- 10** 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.
- 11** Weather protection should not be introduced where it would interfere with the integrity or heritage value of heritage places or unduly affect street trees.
- 12** 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.

## Heritage and Conservation

### OBJECTIVES

- Objective 42:** Acknowledge the diversity of Adelaide's cultural heritage from pre-European occupation to current time through the conservation of heritage places and retention of their heritage value.
- Objective 43:** Development that retains the heritage value and setting of a heritage place and its built form contribution to the locality.
- Objective 44:** Continued use or adaptive reuse of the land, buildings and structures comprising a heritage place.

### PRINCIPLES OF DEVELOPMENT CONTROL

#### General

- 13 Development of a heritage place should conserve the elements of heritage value as identified in the relevant Tables.
- 14 Development affecting a State heritage place ([Table Adel/1](#)), Local heritage place ([Table Adel/2](#)), Local heritage place (Townscape) ([Table Adel/3](#)) or Local heritage place (City Significance) ([Table Adel/4](#)), including:
  - (a) adaptation to a new use;
  - (b) additional construction;
  - (c) part demolition;
  - (d) alterations; or
  - (e) conservation works;

should facilitate its continued or adaptive use, and utilise materials, finishes, setbacks, scale and other built form qualities that are complementary to the heritage place.
- 15 Development that abuts the built form/fabric of a heritage place should be carefully integrated, generally being located behind or at the side of the heritage place and without necessarily replicating historic detailing, so as to retain the heritage value of the heritage place.

## 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.

## Height, Bulk and Scale

### PRINCIPLES OF DEVELOPMENT CONTROL

- 16** 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.
- 17** 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 \(Overlay 1\)](#).
- 18** 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.

## 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

- 19 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.
- 20 Retail frontages should be designed to provide interest to passing pedestrians at street level and relief to building mass.
- 21 Commercial buildings should be designed to ensure that ground floor facades are rich in detail so they are exciting to walk by, interesting to look at and to stand beside.

## 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

- 22 Development should provide safe, convenient and comfortable access and movement.
- 23 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.
- 24 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.

## 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

- 25** 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.
- 26** 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.
- 27** 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.
- 28** 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.
- 29** 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.