

Wright Developments SA Pty Ltd, c/- Mohyla Architects

18-storey building with partial retention of existing Hotel building and addition of a rooftop terrace; 15 levels of offices; two 2-storey penthouses; a ground-floor retail tenancy and basement car parking

74-88 Wright Street, Adelaide

020/A059/17

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OVERVIEW

Application No	020/A059/17
Unique ID/KNET ID	12090482 / 2107/21124/01
Applicant	Wright Developments SA Pty Ltd
Proposal	18-storey building comprising partial retention and reuse of existing hotel building and addition of a rooftop terrace; atrium providing a pedestrian link between Compton Street and Wright Street; 15 levels of offices; two 2-storey penthouses; a ground-floor retail tenancy; and basement car parking
Subject Land	74-88 Wright Street, Adelaide 5000
Zone/Policy Area	Capital City Zone. No applicable Policy Area.
Relevant Authority	State Commission Assessment Panel
Lodgement Date	19 September 2017
Council	City of Adelaide
Development Plan	Adelaide (City) Development Plan, Consolidated 20 June 2017
Type of Development	Merit
Public Notification	Category 1
Referral Agencies	Government Architect, Secretary for Commonwealth Department of Infrastructure and Regional Development
Report Author	Andrew Caspar, Consultant Planner
RECOMMENDATION	Development Plan Consent subject to conditions

EXECUTIVE SUMMARY

The application is for the construction of an 18-storey mixed use building comprising 15 levels of offices; two, 2-storey penthouses; a ground-floor retail tenancy and basement car parking. The former Wright Street Hotel, a Local Heritage (Townscape) Place, will be partially retained and integrated with the new building to be re-used as a hotel, and will be provided with a new roof terrace. An atrium will serve as a pedestrian link between Compton Street and Wright Street.

The application is a merit, Category 1 form of development which is subject to mandatory referrals to the Government Architect and the Commonwealth Secretary for the Department of Infrastructure and Regional Development.

The proposal has been subject to several Design Review and Design Workshops during the pre-lodgement phase and as a result a number of design changes and refinements were made, including a reduction in the overall height from 77 metres originally proposed to the height of 68 metres proposed in the application plans.

Within the immediate locality single or double-storey built form predominates, and the new tower element of the proposed development does represent a significant departure from this existing character and a significantly taller built form than the maximum of 43 metres envisaged in the Capital City Zone. However a number of developments currently under construction, or approved, for nearby sites mean that the character of the area is evolving to include significantly taller built form. The Development Plan, including the recent Capital City Policy Review (Design Quality) Ministerial Amendment, provides support for development which exceeds the prescribed maximum height where it embodies high-quality design and specified sustainability measures.

Overall the proposed development is considered to satisfy the criteria for exceeding the specified maximum height under the Capital City Zone, and to successfully address other key planning, design and technical issues. It is therefore considered suitable for Development Plan Consent subject to planning conditions recommended in this report.

ASSESSMENT REPORT

1. BACKGROUND

1.1 Strategic Context

The site is within the Capital City Zone, but outside any specified Policy Area. The Objectives and the Desired Character for the Capital City Zone encourage a wide range of commercial, community and residential land uses, a high scale of development with an activated pedestrian environment, and an emphasis on high quality contemporary architecture. Envisaged land uses within the Capital City Zone include Office, Hotel and Residential flat building.

The site is subject to a prescribed maximum height limit of 43 metres, but following the commencement of the Capital City Policy Review (Design Quality) Ministerial amendment to the Adelaide (City) Development Plan in May 2017, discretion exists for the approval of development which exceeds a prescribed mandatory height in specific circumstances. Approval to exceed a prescribed maximum height will be appropriate for a development which reinforces the anticipated city form and includes specified design and sustainability measures.

Mandatory height limits and resulting conditions arising from Adelaide Airport operations are also applicable and must be complied with.

1.2 Pre-Lodgement Process

Extensive discussion occurred between the applicant and the Associate Government Architect in relation to the proposed development before lodgement of the application. The proposal was presented at two Design Review sessions, one Desktop Review session and three Design Workshops. The design response progressed through these stages.

A Pre-Lodgement Agreement was not concluded in relation to the proposed development.

The issues raised by the Associate Government Architect and the design changes and other responses made by the applicant are outlined in section 5.1, below.

2. DESCRIPTION OF PROPOSAL

Application details are contained in **Attachment 1**.

The proposal is for the construction of a single building of basement, ground and 17 upper floors, with predominantly office use but also including a hotel, retail tenancy and 2 penthouse apartment dwellings.

The building will comprise a podium of 2 levels with the existing hotel building frontages retained and the new tower rising outside of the footprint of the existing building. The roof of the existing hotel building will be demolished and the space will serve as a roof terrace accessible both from the existing hotel building, from the new office building and from the atrium that will connect them at ground floor level.

The principal frontages of the new building (to Wright Street and Compton Street) will be double-glazed, clear curtain walls with an integrated horizontal blind system, described further in section 8.6.3 below. At rooftop level, a black powdercoated shade structure with a "Vergola" aluminium roofing system will extend above the proposed apartments.

To the eastern and northern elevations of the new building, the glazed frontages will be articulated through the use of off-form precast concrete panels of white cement. Those to the northern elevation will have a recess pattern.

The ground-floor frontages of the new building to Wright Street and Compton Street will feature black powdercoated steel-framed glazing, with black aluminium louvres and

smooth-faced sandstone surrounds. Entry to the atrium will be by way of vertical glass lift-up door, with black powder-coated security grille to the car park entry.

Within the atrium, in the office entry foyer and on the terraces, planting including green walls and planter boxes and beds will provide landscaping to public access and circulation areas. A summary of the proposal is as follows:

Land Use Description	Office; Hotel; Retail; Dwelling
Building Height	68 metres above ground level (to rooftop)
Description of levels	Basement: Car park, Store, Plant and equipment rooms Ground Floor: Hotel, Bar, Atrium, Toilets, Office Entry Foyer and Lift Lobby, Bin Store, Bicycle Store, End-of-trip facilities, Retail tenancy. Levels 1 and 2: Hotel including function room, roof terrace and balcony. Levels 1 to 15: Office tenancies Levels 16 and 17: 2 penthouse apartments with outdoor terraces and balconies
Floor areas	Leasable office space – 10,324m ² Hotel – 438m ² Retail Tenancy – 110m ² Apartment 1 – 492m ² Apartment 2 – 482m ²
Private open space	209m ² and 237m ² to apartments
Site Access	Pedestrian access – Wright Street and Compton Street Vehicle access – Wright Street Bicycle room access – Wright Street and Market Street (via right-of-way) Bin store – Market Street (via right-of-way)
Car and Bicycle Parking	20 car parking spaces at Basement level 61 bicycle parking spaces in secure store at Ground level
Encroachments	Existing hotel building balcony encroachment to Wright Street; new building awnings encroachment to Wright Street

3. SITE AND LOCALITY

3.1 Site Description

The site consists of 5 allotments, described as follows:

Lot No	Street	Suburb	Hundred	Title
A17 FP104104	82-88 Wright Street	Adelaide	Adelaide	CT 5141/97
A18 FP104105	82-88 Wright Street	Adelaide	Adelaide	CT 5141/93
A22 FP104109	82-88 Wright Street	Adelaide	Adelaide	CT 5141/909
A3 DP48354	74 Wright Street	Adelaide	Adelaide	CT 6019/847
A4 DP 48354	76-80 Wright Street	Adelaide	Adelaide	CT 5478/388

The subject site is located at 74-88 Wright Street, Adelaide, on the northern side of Wright Street approximately 240 metres west of King William Street and 230 metres east of Morphett Street. The subject site is rectangular in shape with frontages to Wright Street (48 metres) and Compton Street (30 metres).

The total site area is approximately 1,440m². The subject site is flat and does not feature any significant vegetation.

The site enjoys a right of way over a private laneway which opens to Market Street, north of the site.

Existing improvements on the site comprise the prominent 2-storey hotel building to the corner of Wright Street and Compton Street, and single-storey, later brick additions to the north and east of the main hotel building. As of the date of this report, the hotel has ceased to trade. The easternmost part of the site, with a vehicle crossover to Wright Street, is currently used for outdoor, at-grade car parking.

The site is recorded as a Local Heritage Place (Townscape) in respect of the hotel building under its former name, the Old Queens Arms Hotel. The consequences of this designation are further considered in section 8.4 of this report.

3.2 Locality

Within the locality, Wright Street is identified by Council as a Local Street, and is part of the Adelaide (City) Primary Pedestrian Area in Map Adel/1 (Overlay 2A). Both Compton Street and Market Street serve as important links for pedestrians and vehicles to shops, services and car parking associated with the Central Market precinct. Compton Street is identified as a north-south bicycle route.



North of the site, a number of small-scale, one- or two-storey office and warehouse premises accommodate a range of commercial activity.

Immediately to the east of the site is an office building (formerly the Deaf and Dumb Mission) which is recorded as a Local Heritage Place (Townscape). Further east, development comprises buildings generally of buildings of 2 storeys used for office or retail purposes.

West of the site, buildings of diverse architectural style and age, but generally of no more than 2 or 3 storeys in height, accommodate a range of commercial and retail land uses on the northern side of Wright Street to its intersection with Whitmore Square.

On the south side of Wright Street, directly opposite the site, is a 2-storey building used as the Adelaide Youth Court. The former shop 89 Wright Street, on the corner of Russell Street, is listed as a Local Heritage Place (Townscape).

Further south, a residential precinct comprising predominantly one- and two-storey townhouses, with one recent 5-storey apartment building, has frontages to Norman Street and Russell Street.

The wider locality, taking in southern parts of the Capital City Zone between King William Street and Morphett Street, has seen substantial development either undertaken or approved in recent years. At Whitmore Square and Wright Street, the Bohem Apartment buildings, nearing completion, reaches 76 metres to roof level in an area with a prescribed maximum building height of 53 metres under the Capital City Zone.

To the north-east of the site, and separated from it by the narrow private laneway, the site at 23-29 Market Street is the subject of Development Plan Consent issued by the State Commission Assessment Panel (SCAP) on 7 September 2017 for the construction of a building of 17 storeys with a height to roof level of 58 metres for hotel, apartment, retail and ancillary uses.

Other substantial development approved includes an 18 storey mixed use (commercial and residential) building at 126 Wright Street, some 120 metres west of the site and reaching a height of 57 metres to rooftop. East of King William Street, but within 500 metres of the site, approval has been granted for buildings of 103 metres (Kodo Apartments, Angas Street) and 114 metres (Echelon Apartments and Offices, King William Street).

Upon completion these approved developments will substantially change the built form edge presented to the northern side of Wright Street from exclusively low-rise, to one interspersed with towers of up to 18 storeys. In addition, looking along Wright Street both to the east and west, the skyline will feature buildings of the same or somewhat greater height.

4. STATUTORY REFERRAL BODY COMMENTS

Copies of agency referral responses are provided in **Attachment 4**.

4.1 Associate Government Architect

The Government Architect or the Associate Government Architect is a mandatory referral in accordance with Item 24 – Certain Development in the City of Adelaide of the table in Schedule 8 to the Development Regulations 2008. The Commission must have *regard* to this advice.

The proposal was formally referred to the Associate Government Architect on 20 September 2017 following pre-lodgement processes as outlined in section 1.2 of this report.

The Associate Government Architect's referral response of 19 October 2017 raises the following issues:

- The proposed building height of 68 metres is "challenging" on the site because of "the narrowness of Wright Street and the adjacency to the Local heritage places". However, as part of pre-lodgement processes the building height was reduced from the 77 metres originally proposed.
- The Associate Government Architect's support for any building height beyond 43 metres is contingent on the proposal achieving a high quality design outcome, particularly in terms of scale, materiality and contextual response to the Local heritage places, streetscape and fine-grain character of the area.
- The "shadowline" detailing to the interface of the new building with both the hotel and the Local Heritage Place to the east, and the setbacks above podium level, are supported and acknowledged to address the scale and context of Wright and Compton Streets, and the Local heritage places. The vertical separation between the hotel building and the new built form above is also supported.

- While the new roof terrace will offer additional activation, the Associate Government Architect's view is that the hotel should remain as a three-dimensional building including roof and chimneys.
- The proposed "88" embossed street number to the Wright Street frontage is seen as being "inconsistent with the design approach to sensibly regard the scale and fine grain character of the adjoining heritage buildings". Development of a signage strategy that "[is] an integral part of the overall architectural expression" is recommended.
- The Associate Government Architect supports the provision of wrap-around balconies to the south-west and north-east corners, at mid-building levels, as creating three-dimensional articulation, breaking down the overall built form and responding to the scale of the existing streetscape context. The three-level sky garden to the Wright Street frontage, and the projection of the built elements at higher levels, are also supported.
- The general direction of the architectural expression of "sculpturally modelled forms" and "high quality pre-finished materials" is supported, but ongoing support is contingent on the resolution of design details to ensure full delivery of the original design intent.
- The configuration of the two penthouse apartments is supported as affording functional and generous layouts, with outlook, access to natural light and ventilation to all habitable rooms.
- Active ground-floor uses including the publicly-accessible courtyard and the glazed lift structure to the north-east corner of the hotel building are supported, subject to detailing to ensure that the design intent of allowing visibility of the heritage walls is realised.
- The proposed internal green walls are also supported, subject to resolution of the design, and having regard to ESD objectives in regard to species selections, artificial lighting and maintenance. Active engagement of a landscape architect is recommended in this regard.
- Vehicular access using the existing crossover from Wright Street (widened as proposed) is supported.

The Associate Government Architect recommends that SCAP consider the following particular aspects of the proposal:

- A high quality of external materials for building and landscaped areas supported by provision of a materials sample board.
- Retention of original roof form and chimneys of the hotel building.
- Review of the signage strategy.
- Further development of landscaped areas and green walls to ensure they can be sustained and maintained as envisaged.

Applicant's Response

By letter of 3 November 2017 the applicant responded to the Associate Government Architect's comments (together with those of Council) in the following terms:

- The heritage value of the roof form and chimneys of the existing hotel building is limited. They are not prominent, nor do they significantly contribute towards the historic character of the locality.
- Development on land adjoining to the east and north of the site in the form envisaged for the locality would obscure any views of the roof form and chimneys.

- The heritage value of the hotel will be maintained through “integration of its fabric within the Wright Street and Compton Street contexts”, together with expression of the eastern wall within the proposed courtyard, and the proposed roof terrace.
- The proposed conditions in relation to materials and finishes, landscaping areas, a signage strategy, and maintenance and design of the green walls, are all accepted.

4.2 Commonwealth Secretary for the Department of Infrastructure and Regional Development

The Commonwealth Secretary for the Department of Transport and Regional Services (the Secretary) is a mandatory referral in accordance with Item 9 – Airports of the table in Schedule 8 to the *Development Regulations 2008*, because the Development Plan contains a map entitled Airport Building Heights and the proposed development would exceed the height prescribed in that map for the subject site.

The Department of Transport and Regional Services has been superseded by the Department of Infrastructure and Regional Development. The Secretary may direct SCAP to refuse the application, or to impose such conditions as the Secretary thinks fit if the application is approved.

The Planning Report accompanying the application notes that the ground level at the site is known to be 43.5 metres; the proposed building height of 68 metres above ground level results in a roof level height of 111.56 metres (AHD), which exceeds the 90 metre (AHD) building height specified for the site.

The application was referred to Adelaide Airport on 20 September 2017. On 22 September 2017, a reply on behalf of the Airport noted that the proposed development will penetrate the Obstacle Limitation Surfaces (OLS) associated with aircraft operations at the Airport by approximately 21 metres.

The Airport therefore stated its intention to forward the application to the Department of Infrastructure and Regional Development. As at the date of this report, no response has been received from the Department.

5. COUNCIL COMMENTS

Council provided written comment on the application on 30 October 2017. A copy of Council’s comment is provided in **Attachment 5**, and is summarised below:

- Waste Management – the proposed Waste Management Plan is seen as generally workable, with some considerations for greater efficiency raised.
- Traffic – no fundamental traffic or transport-related issues arise, however Council suggested a number of design and operational matters be considered. Again, these are reflected in the proposed Planning Conditions.
- Encroachments – the proposed building canopies meet Council’s current Encroachment Policy. While street trees to Wright Street will be retained, any required pruning should be in consultation with Council.
- Building Height – Council notes that the development is significantly over the maximum building height of 43 metres prescribed for the site within the Capital City Zone, and that development which exceeds the prescribed maximum building height and is adjacent to the Main Street (Adelaide) Zone (as is the site) “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”. Council’s view is that the setback above podium level is insufficient, and the building too high, to maintain “the more intimate pedestrian scale sought along Wright Street”.
- Local Heritage – Council considers that the proposal would “significantly diminish” the heritage value of the site as a Local Heritage Place (Townscape).

Specifically, demolition of the roof including 6 chimneys is said to be contrary to PDCs 136, 138 and 139. The proposed development will retain only a “heritage wallpaper” to Wright Street and Compton Street with a new building behind, and “no appreciable retention of the 3-dimensional hotel building”. Development will occur within the nominated 6-metre retention depth meaning that “the ability to understand the original form and extent of the hotel will be lost”. The proposal is therefore considered by Council to be incompatible with the retention of the heritage value of the Local Heritage Place.

- Council considers that the proposed development “reasonably addresses” the Local Heritage Place (Townscape) on the adjoining site immediately to the east.

Applicant’s response

By letter of 3 November 2017 the applicant responded to Council’s comments (together with those of the Associate Government Architect) in the following terms:

- Collection of the hotel’s waste from Compton Street can be accommodated within existing on-street designated loading zones. Collection of waste from the office building (and the ground floor commercial tenancy) “can be facilitated by the waste collection vehicle reversing into the existing right of way to the north of the [site]”.
- The applicant accepts a condition that additional details will be provided on the design and management of the traffic management system to control one-way vehicle movement to and from the building.
- The applicant also accepts conditions in relation to traffic control and line marking; traffic and parking signage; ramp grade compliance with AS/NZ 2890.1-2004; and “bicycle friendly” operation of the door to the bike storage area.
- The proposed development meets the requirements of the Capital City Zone to justify a height in excess of the specified maximum, specifically by including sustainable design measures in accordance with PDC 21.
- The variety of setbacks to above-podium building levels satisfies PDC 12 of the Capital City Zone, which refers to setbacks “in the order of 3-6 metres” that achieve a range of built form and streetscape objectives.
- The retained heritage fabric will accommodate continuing use as a hotel, including in particular the eastern façade which might otherwise be concealed.

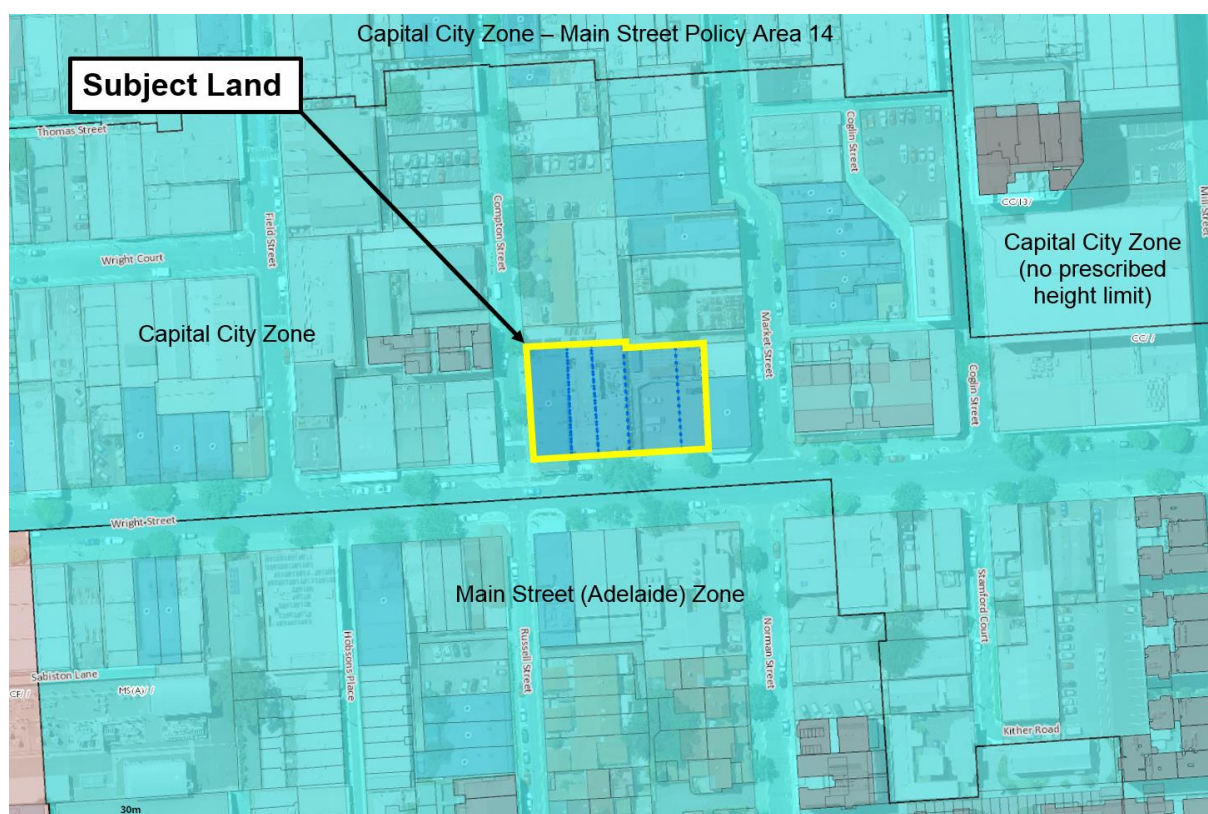
6. PUBLIC NOTIFICATION

Principle of Development Control 40 of the Capital City Zone provides that all forms of development other than those assigned to Category 2 are Category 1 (public notification not required) forms of development.

As the proposed development is not assigned to Category 2, it is a Category 1 development and no public notification was required.

7. POLICY OVERVIEW

The subject site is within the Capital City Zone as shown below in Figure 2 and as described within the Adelaide (City) Development Plan Consolidated 20 June 2017. No Policy Area applies to the subject site.



Relevant planning policies are contained in **Attachment 7** and summarised below.

7.1 Zone

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

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

A 43 metre height limit is identified for the subject site, although the zone does provide for development in excess of this height where it demonstrates a number of design criteria relating to open space improved amenity and sustainability. New development is to achieve high design quality by being contextual, durable, inclusive, sustainable and amenable.

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

Non-residential land uses at ground-floor level such as shops, cafés and restaurants are encouraged. Office, Hotel, Shop and Dwelling are envisaged forms of development within the Capital City Zone.

7.2 Council Wide

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

Housing Choice

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

Medium to High Scale Residential/Serviced Apartment

While only 2 levels of the proposed development will be used as apartments, the nature of the building as having 4 or more levels gives the apartments the character of medium to high-scale residential development.

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

Principles of Development Control seek to enhance the amenity of residential apartment developments. The policies also speak to legibility and safety in the design of buildings, particularly in regard to easily identifiable building entrances oriented towards the street, as well as entrances to individual dwellings located as close as practical to lift and/or lobby access and avoiding the creation of potential areas for entrapment.

Built Form and Townscape

See section 8.3, below.

Heritage

See section 8.4, below.

Transport and Access

See section 8.5, below.

Environmental

See section 8.6, below.

7.3 Overlays

7.3.1 Affordable Housing

While the site is subject to the affordable housing overlay, as the proposed development comprises only 2 dwellings the minimum 15 percent affordable housing requirement does not apply.

7.3.2 Adelaide Airport Building Heights

Prescribed height limits are specified for the subject site under the Adelaide (City) Airport Building Heights Map Adel/1 (Overlay 5). Refer to section 5.2 above for further detail.

8. PLANNING ASSESSMENT

The State Commission Assessment Panel is the relevant authority as per Schedule 10(4)(1) of the *Development Regulations 2008*.

The application has been assessed against the relevant provisions of the Adelaide (City) Development Plan Consolidated 20 June 2017.

8.1 Quantitative Provisions

	Development Plan Guideline	Proposed	Guideline Achieved	Comment
Building Height	Maximum 43 metres	68 metres (to rooftop level)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> PARTIAL <input type="checkbox"/>	Eligible for additional height in accordance with Capital City Zone – see section 8.3.1.
Land Use	Envisaged forms of development within the Capital City Zone include Office, Hotel, Shop and Dwelling.	Office Hotel Shop Dwelling	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	
Car Parking	No requirement for provision of car parking within the Capital City Zone.	20 car parking spaces at basement level	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	
Bicycle Parking	68 bicycle parking spaces	61 bicycle parking spaces in ground floor secure store	YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/>	Refer to section 8.5 for further discussion
Front Setback	Built to street frontage with above-podium setback of 3-6 metres	Setbacks to Wright Street of between 1.5 metres and 6.5 metres are proposed.	YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/>	Seen as appropriate as part of articulation of building mass. See section 8.3.3 for discussion.
Private Open Space	3+ bedroom apartments – 15m ² per apartment	209m ² and 237m ² to apartments as terrace/balconies	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	

8.2 Land Use and Character

The proposed development contributes to the Desired Character of the Capital City Zone by introducing envisaged forms of development, which will contribute to an increased working and residential population with a resulting increase in the vibrancy and level of activity in this part of Adelaide's CBD. While the height of the building will create a tall street wall and sense of enclosure to the northern side of Wright Street, the retention of the existing hotel frontages to Wright Street and Compton Street, and active building entrances and shop frontages, will contribute to an active, comfortable, human-scaled pedestrian environment along the building's street frontages.

8.3 Built Form and Townscape

8.3.1 Height

Within the Capital City Zone, PDC 21 provides that development should not exceed the maximum building height shown in the relevant Concept Plan. Concept Plan Figure CC/1 shows a maximum building height of 43 metres applying to the subject site. The plans accompanying the Application show a maximum building height above street level of 68 metres to roof level.

PDC 21 provides that development may exceed the specified maximum building height if:

- it is demonstrated that the development reinforces the anticipated city form in Concept Plan Figures CC/1 and 2; and

- at least two features from a list of 8 specified in paragraph (b) are provided; and
- all of the following sustainable design measures are provided:
 - a rooftop garden with ongoing maintenance;
 - a greenroof or greenwalls/façades with ongoing maintenance;
 - innovative external shading devices on all of the western side of a street-facing façade; and
 - higher amenity through the provision of private open space in excess of minimum requirements, access to natural light, and ventilation to all habitable spaces and common circulation areas.

In addition, PDC 16 provides that development that exceeds the applicable maximum building height, 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 desired future character, and responds to the conditions and special qualities of a locality including pedestrian and cyclist amenity, activation, sustainability and public realm and streetscape contribution.

Using the PDC 21 criteria, there is justification for the proposed development to exceed the 43 metre maximum height specified for the subject site because:

- The proposed development will reinforce the anticipated city form in Concept Plan Figure CC/1.

While the site is within an area with a maximum prescribed height of 43 metres, it is on the edge of that area and within 200-300 metres of areas with no prescribed maximum height (to the east) or a prescribed maximum height of 53 metres (to the west). Within the latter area, on the corner of Wright Street and Whitmore Square, the Bohem Apartments are nearing completion to a roof height of 76 metres.

Other approved development at Market Street and on Wright Street, close to the site, will link areas of taller built form on King William Street with those on Morphett Street.

In the Main Street (Adelaide) Zone on the southern side of Wright Street, while building height is generally limited to 22 metres, that limitation does not apply to a site greater than 1,500m². This means that taller built form may in time be developed within the Main Street (Adelaide) Zone, as demonstrated by the previously-approved New Mayfield project on Sturt Street. This may include the large Youth Court site directly opposite the site.

- At least two of the features specified in paragraph (b) of PDC 21 are provided, namely the retention, conservation and reuse of the Local Heritage (Townscape) listed hotel building, and the provision of residential, office and other actively occupied uses located on all street frontages of the building.
- A rooftop garden is provided in the form of the roof terrace to the hotel building and podium level of the new office building.
- Green walls are provided to the northern wall of the atrium and the eastern wall of the office foyer. Details have been provided as to the establishment and ongoing maintenance of the green walls and the roof garden, although further detail should be provided as a condition of approval.

- A full-height curtain wall glazing system to the western (and northern) elevations of the new building, with an automated louvre system between layers of glass that will enable adjustment in accordance with external factors and occupant preference, will provide an innovative form of shading.
- Substantial areas of private open space are provided to each of the apartments within the proposed development, and the proposed atrium and roof terraces will provide additional outdoor and semi-outdoor areas for occupants of the office space and members of the general public.

It is considered that the PDC 16 requirement for a design which demonstrates a sufficiently high standard of design outcome in relation to the relevant qualitative policy provisions is achieved by the proposed development.

In this instance, and given that the required PDC 21 criteria have been satisfied, the proposed height of the building at 68 metres (exceeding the 43 metres prescribed for the site in the Development Plan) is appropriate, subject to compliance with conditions in relation to Adelaide Airport operations (see section 5.2, above).

8.3.2 Bulk and Scale

While recognising that the Capital City Zone will accommodate intense urban development, the Development Plan also notes that the height, scale and massing of buildings should reinforce the desired character, built form, public environment and scale of the streetscape (Built Form and Townscape, PDC 170). The design should have regard to matters including avoiding massive unbroken façades, breaking up the building façade into distinct elements and including attractive planting, seating and pedestrian shelter.

While representing a significant increase in the scale of development in its immediate environs, the proposed development is consistent with the desired character for the Capital City Zone. The visual bulk of the proposed development has been reduced through a number of design initiatives including vertical and horizontal articulation of the façades of the new building and variation in materials to minimise sheer and unbroken expanses of wall. Activation of the building at ground level, the rooftop terrace at the top of the podium and balconies at other levels will further contribute to visual interest and variety. At ground and first-floor levels, the proposed development will present an interface to Wright Street that does not significantly differ in scale and character from the existing streetscape.

8.3.3 Setbacks

Within the Capital City Zone, buildings are to be built to the street edge to reinforce the grid pattern, create a continuity of frontage and provide definition and enclosure to the public realms, whilst contributing to the interest, vitality and security of the pedestrian environment (Built Form and Townscape, PDC 179). However the podium/street wall height, and upper level setback (in the order of 3-6 metres) should relate to the scale and context of adjoining built form; provide a human scale at street level; create a well-defined and continuity of frontage; and otherwise contribute to pedestrian comfort and interest (Capital City Zone, PDC 12).

It is considered that the proposed development provides an appropriate interface with its primary (Wright Street) frontage by preserving the existing Wright Street hotel frontage and extending a podium of similar height and scale to the new building eastwards along Wright Street. Minimal ground-floor setbacks will allow for activated and well-defined pedestrian pathways along Wright Street and Compton Street.

Above the podium, upper levels are set back at varying distances. Setbacks to Compton Street above podium level are at least 3.5 metres. While setbacks of the office levels to Wright Street vary between 1.5 metres and 3 metres, this variation is seen as consistent with the objective of minimising the apparent bulk and scale of the building, and avoiding unbroken façades. Setbacks to Wright Street increase to at least 6.5 metres at levels 16 and 17.

No minimum side or rear boundary setbacks are applicable to the site, although higher levels are set back from both the northern and eastern site boundaries to accommodate articulation to these façades.

8.3.4 Articulation and Modelling

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

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

The division of the building between podium level, rooftop terrace, office floors and upper residential floors will contribute to visual articulation of the building in the vertical dimension. The use of automated louvres within glazed panels to the prominent western façade of the building will further contribute to visual interest and articulation when viewed from the street.

8.3.5 Materials, colours and finishes

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

It is noted that there is a wide range of materials and finishes present within the locality. As such the materials proposed within the development are generally considered to be appropriate for this location. There is some potential for the pre-cast concrete panels to the eastern and northern elevations of the new building to present large, blank surfaces from some vantage points, so further detail of material and patterning to these elevations should be provided.

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

8.4 Heritage

Objective 43 (Heritage and Conservation) requires development that retains the heritage value and setting of a heritage place and its built form contribution to the locality. Objective 44 seeks to encourage continued use or adaptive reuse of the land, buildings and structures comprising a heritage place. PDC136 requires that development of a heritage place should conserve the elements of heritage value as identified in the relevant Tables. PDC137 requires that development affecting a heritage place (including a Local Heritage Place (Townscape)), 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.

Under PDC139, development of Local Heritage Places (Townscape) should occur behind retention depths of 6 metres in non-residential Zones.

A Heritage Impact Assessment dated 15 September 2017 by DASH Architects accompanied the application. It finds that:

- The heritage value of the Local Heritage Place (Townscape) on the site, and those in its vicinity, derives from the townscape character contribution that is made by building elements that are visible from the street.
- Within the Capital City Zone, where intensive development is envisaged, the Development Plan anticipates that contemporary juxtapositions will provide new settings for heritage places.
- Development should establish compatibility with Local Heritage (Townscape) Places through innovative contemporary design with regards to materials, finishes and other built form qualities.
- The proposed development is considered to “significantly exceed” the expectations of the Development Plan in relation to Local Heritage (Townscape) Places. It establishes compatibility with the Local Heritage (Townscape) Place on the site, and others nearby, through innovative contemporary design, appropriate setbacks, and measures to “integrate and celebrate” the existing hotel building.
- The existing roof and chimneys are considered to make “negligible contribution” to the townscape character. The impacts of their demolition will be minor, but will facilitate use of the hotel roof spaces as the podium terrace, a key activator of the street frontage and a contributor to the ongoing use and relevance of the heritage place.

It is noted that in Council’s view demolition of these elements, and development within the 6-metre retention depth as proposed, will significantly diminish the heritage value of the building. The Associate Government Architect has also recommended that SCAP consider retention of the original roof form and chimneys of the hotel building.

In a Heritage Response to Council Feedback dated 3 November 2017, DASH Architects stated that:

- While the chimney and roof structures can be viewed from some vantage points, the relative heritage importance of these elements are low, and in turn the heritage impacts of their removal are marginal. This process of assessing relative heritage importance is said to be supported by authority including the Full Court of the Supreme Court in *DAC v A&V Contractors Pty Ltd*. Council has not undertaken this assessment of relative importance, says DASH, and has wrongly assumed that all impacts are equally unacceptable.
- The proposal will retain significantly more of the fabric of the heritage building than is strictly required under the Development Plan.
- While the interior of the hotel will not be retained, the heritage listing of Townscape places does not extend to their interiors. The proposed development will however retain the overall form of the hotel (including the eastern and northern façades) and, through the provision of the large atrium, allow the former to be better appreciated.
- With the exception of the roof and chimneys, the extent of the proposed demolition will retain all identified elements of heritage value, and also considerably more of the built form (for example the eastern façade) which under other forms of development contemplated by the Development Plan might otherwise have been permanently obscured.

While the views of Council and the Associate Government Architect in favour of retention of the roof form (including the chimneys) are noted, it is considered

that demolition of the roof (including the chimneys) and the interior of the hotel building will not substantially diminish the identified heritage contribution of the building to the townscape. As noted, the existing roof form is only partially visible from ground level. While some vantage points in Wright Street, west of the site, are afforded views of some of the chimneys, from other directions they are either blocked by existing development, or would be blocked by development of a reasonably modest scale which might be expected on sites adjoining or close to the site.

The street frontages are of much greater importance in the contribution of the building to the townscape. Retention of the existing street frontages, including the parapet, will maintain the hotel as the defining built form element of the Wright Street and Compton Street corner. The renovation of the eastern wall and its visibility from the proposed atrium will further contribute to an appreciation of the heritage values of the hotel built form.

Re-establishment of hotel use on the site, which has previously ceased, will meet objectives of the Development Plan which seek continued or adaptive use of the land, buildings and structures comprising a heritage place. The rooftop terrace, which will replace the existing roof and chimney structures, is likely to be an important element of this continued and adaptive use. On balance, the proposed development will further relevant heritage objectives, including Objective 44, justifying the loss of the relatively minor contribution that the rooftop and chimney structures make to the overall heritage impact of the building on the townscape.

8.5 Traffic Impact, Access and Parking

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

A letter from Frank Siow & Associates to the applicant's architects, dated 18 September 2017 accompanies the application, outlining a traffic and parking assessment undertaken in relation to the proposed development. It reports that:

- While there is no car parking requirement specified in the Development Plan for the commercial land uses proposed for the site, the Development Plan does not preclude the proposed provision of parking for 20 vehicles within the basement car park.
- The Development Plan requires the provision of 68 bicycle spaces for land uses proposed as part of the development. While the proposed 61 spaces therefore represents a shortfall, it is expected that residents of the apartments would prefer to store any bicycles in their own apartments. The size and configuration of the apartments would enable them to do so. The resulting shortfall of 3 bicycle parking spaces is seen to be minor and insubstantial.
- The proposed parking layout and ramp design will allow convenient access to and from the car parking spaces and will be able to comply with AS/NZS 2890.1-2004 (general parking) and AS/NZS 2890.6-2009 (disabled parking).
- Traffic generation from the basement car parking would be low, with no material impact on pedestrian movements or traffic flows on Wright Street.

- Servicing of the proposed development, including the hotel, would make use of existing loading zones in Compton Street which are in close proximity to entrances for the hotel and the new office building. Waste removal will be in accordance with a Waste Management Plan to be prepared for the development.

8.6 Environmental Factors

8.6.1 Crime Prevention

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

The Planning Report submitted in support of the application notes that the proposed development has been designed to minimise ground-level recesses which might serve as hiding places. Glazing and active uses to Wright Street and Compton Street frontages, and land uses which promote daytime and after-hours activities, will facilitate passive surveillance of the public realm. The office building will include secure access to the foyer.

It is also noted that the introduction of a substantial number of new workers will increase the volume of daytime and early evening activities in Wright Street and its surrounds.

8.6.2 Waste Management

PDC 101 (Environmental – Waste Management) requires a dedicated area for on-site collection and sorting of recyclable materials and refuse to be provided within all new development. Development greater than 2,000 square metres total floor area should manage waste by containing a dedicated area for 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 (PDC 103).

A Waste Management Plan prepared by Colby Industries and dated 27 August 2017 accompanied the application. It recommends a waste system for routine collection comprising:

- for the hotel, waste and recycling storage located back-of-house, with collection from Compton Street;
- for the office building, a shared waste and recycling storage room located at ground level, with collection from Market Street via the existing right-of-way to the northern boundary of the site. The storage room will include provision for confidential waste bins and a temporary bin wash area;
- for the retail tenancy, waste and recycling storage in-tenancy, with collection from Market Street via the existing right-of-way;
- for the apartments, separate waste and recycling storage at ground level, with one bin set (general waste, recycling waste and food waste) per apartment. Collection from Market Street via the existing right-of-way;
- for general public area waste, bins will be included in the office tenancies' waste and recycling storage room.

The locations of these waste storage areas has been designed to minimise the transfer distance to proposed collection points.

Up to 3 routine collections per day at Compton Street will service the hotel, with 2 routine collections per day, 5 days per week, to the Market Street collection point to serve the office and residential components of the proposed development. Collection timing will comply with the Environment Protection (Noise) Policy 2007 and the requirements of the *Local Nuisance and Litter Control Act 2016*.

Hard waste collection would be by private, at call-contractors organised independently by apartment and office tenants.

8.6.3 Energy Efficiency

Buildings should provide adequate thermal comfort and minimise the need for energy use for heating, cooling and lighting through design measures specified in Environmental – Energy Efficiency PDCs 106 to 108.

No Sustainability Management Plan or specialist Ecologically Sustainable Development (ESD) report accompanies the application.

The Planning Report submitted with the application does however highlight the following ESD elements integrated into the design of the proposed development:

- The full-height curtain wall glazing system to the northern and western elevations, comprising an automated louvre system between layers of glass, which adjusts to external factors and occupant preference. This is said to allow maximum natural light transmission while providing an efficient response to solar heat gain and reflectivity.
- An active chilled beam system which uses recessed ceiling housings to diffuse warm and cool air to meet the thermal zoning and occupant loads of each floor plate.
- Building orientation which maximises north and south-facing façades, but protects east and west-facing façades from summer and winter exposure.
- Maximising opportunities for natural light and ventilation, using LED opportunities and including harvesting and re-use of rainwater for irrigation and cooling towers.

Overall these measures are considered to provide adequate regard to Development Plan policy encouraging energy efficiency and sustainable development outcomes in general.

8.6.4 Wind Analysis

Development should be designed and sited to minimise micro-climactic impact on adjacent land or buildings, including effects of patterns of wind (Environmental – Micro-climate and Sunlight PDC 119).

A Desktop Pedestrian Level Wind Assessment prepared by Global Wind Technology Services and dated 18 September 2017 accompanies the Application. Its findings are that:

- Some localised increases in ground-level wind conditions may occur as a result of the proposed development. In some circumstances conditions may approach the limit for relevant criteria.
- Recommendations are made including an increase in the canopy width above the Compton Street atrium entrance; minimum balustrade heights of 1.6 metres on the level 2, 7, 10 and 13 terraces; vegetation to a height of 1.6 metres on the level 10 terrace; and precautions to secure or remove lightweight items from balconies and terraces during high wind events.

These recommendations are reflected in the proposed conditions of Development Plan Consent, which will ensure the development will adhere to the relevant Environmental policy provisions.

8.6.5 Overshadowing impacts

Development should be designed and sited to minimise micro-climactic impact on adjacent land or buildings, including effects of patterns of daylight, sunlight and shadow (Environmental – Micro-climate and Sunlight PDC 119).

Following receipt of the application, shadow diagrams were requested and received from the applicant. They show that during the winter solstice, the proposed new building will cast shadow over some areas to the south, south-west and south-east of the site not shadowed by existing or proposed development. It is likely that some of these areas include dwellings with private open space areas. The additional shadowing impact of the proposed development at the summer solstice and at the autumn and spring equinoxes is minor.

Additional shadowing impacts during the winter solstice from the proposed development are not materially different in kind or degree from shadowing impacts of buildings already approved in the locality, including those at 23-29 Market Street and 126 Wright Street. They are also not unreasonable in the context of a development within the Capital City Zone which meets the criteria for exceeding the specified maximum height, as does the proposed development.

8.6.6 Site Contamination

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

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

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

8.7 Signage

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

Within the application, one signage elements, a large “88” in front of the main (Wright Street) entry to the office building, is described. The application notes that smaller, more discreet and integrated signage to the exterior of the existing hotel building, and the Compton Street entry, will be the subject of a separate application.

It is noted that the Associate Government Architect views the proposed “88” signage elements as inconsistent with the design approach and the scale and fine-grain character of adjoining heritage buildings, and recommends the development of a signage strategy that is an integral part of the overall architectural expression. It is also noted that in the applicant’s response letter of 3 November 2017, a condition in relation to the development of such a signage strategy was accepted.

It is therefore recommended that the approval should not include any signage elements, and that all signage should be the subject of a separate application for Development Plan Consent.

9. CONCLUSION

The proposed development raises the following key planning issues:

- The height of the building, at 68 metres (to rooftop), exceeds the maximum height of 43 metres for the site prescribed in the Capital City Zone. While the Capital City Policy Review (Design Quality) Ministerial Amendment to the Development Plan, introduced in May 2017, introduces discretion for the approval of development which exceeds a prescribed mandatory height limit in specific circumstances, it is conditional on a development reinforcing the anticipated city form and incorporating specified design and sustainability measures.
- Building massing and articulation and the visual impact of the building, including concrete precast panels proposed to the northern and eastern elevations.
- The impact of the proposed development on the existing hotel building, which is a Local Heritage Place (Townscape), including specifically the demolition of the roof and 6 chimneys.

In other respects, including land use, setbacks from site boundaries, micro-climactic (wind) impacts, the incorporation of sustainable design features, waste management and bicycle parking, the proposed development complies with all applicable policies, or compliance can be assured through the use of appropriate conditions.

The height of the building gives rise to a referral requirement in respect of Adelaide Airport operations. Adelaide Airport has referred the application to Secretary for the Commonwealth Department of Infrastructure and Regional Development, but no response has been received as at the date of this report. Any development on the site will as a matter of law need to comply with the conditions and requirements imposed by the Secretary in respect of the operations of Adelaide Airport.

Subject to compliance with those aviation-related requirements, it is considered the building height of the proposed new development is justified by its design and its relationship to its locality. In Wright Street, and the wider locality, a number of buildings nearing completion or approved for construction are of a similar height, or taller than, the proposed new building. In addition, the development of buildings of unspecified height (but higher than the 22 metre maximum prescribed height) is contemplated on sites greater than 1,500m² in the Main Street (Adelaide) Zone to the south of the site.

These factors indicate that the character of the precinct which includes the site is evolving from an exclusively low-rise nature, to one interspersed with towers of up to 18 storeys, and a backdrop of even taller towers on the skyline to the east and west. The recent Ministerial amendment and other provisions of the Development Plan provide support for this evolution where the required high design standards are achieved.

The proposed development meets the criteria for exceeding the maximum prescribed height, including by reinforcing the anticipated city form; by including the retention, conservation and reuse of the Local Heritage (Townscape) listed hotel building and the provision of active ground-floor uses; and through the provision of a rooftop garden, green walls, innovative shading to western and northern elevations, and other specified sustainable design elements.

The design of the building has been the subject of a design review and detailed comment by the Associate Government Architect, as well as by the City of Adelaide. Those agencies have expressed concern about the heritage impact of the proposed development on the existing hotel building, and particularly the demolition of the existing roof and chimneys.

While these views are noted, it is considered that the demolition of the roof and chimneys will not substantially diminish the heritage contribution of the building to the

townscape. The street frontages, as well as the eastern wall of the existing building, will be retained and are considered to be of much greater significance in the overall heritage contribution of the building. Re-establishment of the hotel use on the site, to which the proposed rooftop terrace is expected to make a significant contribution, is seen as justifying the loss of the relatively minor contribution that the rooftop and chimneys make to the townscape.

While some concern remains about whether the precast concrete panels to the eastern and northern elevations will present too massive and unbroken a façade, these concerns will be addressed through a condition requiring further detail of materials to be provided to the satisfaction of SCAP in consultation with the Associate Government Architect, including detail of the patterning of the pre-cast panels.

On balance, the proposed development will make a significant contribution to the desired character of an underutilised site in the Capital City Zone. It will substantially increase the working population of this precinct and as a result its daytime vibrancy. It will activate the presently unused Wright Street frontage with the re-commencement of hotel operations, the main office building entry, a new shop frontage and entrance to the new atrium space. These activities will provide significant opportunities for active and passive surveillance of the public realm during day and night-time hours and will substantially enhance public safety.

It is concluded that the proposed development should be approved in the form shown in the plan set and other materials accompanying the application, and 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 20 June 2017.
- 3) RESOLVE to grant Development Plan Consent to the proposal by Wright Developments SA Pty Ltd, c/- Mohyla Architects for an 18-storey building with partial retention of existing hotel building and addition of a rooftop terrace at 74-88 Wright Street, Adelaide, subject to the following conditions of consent.

PLANNING CONDITIONS

1. That except where minor amendments may be required by other relevant Acts, or by conditions imposed by this application, the development shall be established in strict accordance with the details and following plans submitted in Development Application No 020/A053/17.

Architectural Plans by Mohyla Architects:

Drawing Title	Drawing No.	Revision	Date
Drawing Register	SD00	-	15 September 2017
Locality Plan	SD01	-	15 September 2017
Existing Site Plan	SD02	-	15 September 2017
Existing Streetscape	SD03	-	15 September 2017
Floor Plans (Basement, Ground, Level 1)	SD04	-	15 September 2017

Drawing Title	Drawing No.	Revision	Date
Floor Plans (Levels 2, 3, 4, 5 and 6)	SD05	-	15 September 2017
Floor Plans (Levels 7, 8 and 9, 10, 11 and 12)	SD06	-	15 September 2017
Floor Plans (Levels 13, 14 and 15, 16, 17)	SD07	-	15 September 2017
Elevations (South and West)	SD08	-	15 September 2017
Elevations (North and East)	SD09	-	15 September 2017
Sections	SD10	-	15 September 2017
Concept Diagrams	SD11	-	15 September 2017
Cityscape Context	SD12	-	15 September 2017
Materials and Finishes	SD13	-	15 September 2017
Environmental	SD14	-	15 September 2017
Podium Integration	SD15	-	15 September 2017
Streetscape	SD16	-	15 September 2017
Streetscape/Human Scale	SD17	-	15 September 2017
Perspectives	SD18	-	15 September 2017

Reports and correspondence:

- Planning Report – Masterplan Town + Country Planners, September 2017
- Heritage Impact Assessment – DASH Architects, September 2017
- Heritage Response to Council Feedback – DASH Architects, November 2017
- Traffic and Parking Assessment – Frank Siow & Associates, September 2017
- Waste Management Plan – Colby Industries, August 2017
- Engineering Services Concept Design Report – System Solutions Engineering, September 2017
- Desktop Pedestrian Level Wind Assessment – Global Wind Technology Services, September 2017

External Materials

2. Prior to Development Approval being issued for superstructure works, the applicant shall submit, in consultation with the Associate Government Architect, and to the reasonable satisfaction of the State Commission Assessment Panel, a final detailed schedule of materials including detail of patterning to the pre-cast panels to the eastern and northern elevations of the building.

Driveway and parking areas

3. All vehicle driveways and vehicle entry and manoeuvring areas shall be designed and constructed in accordance with Australian Standards AS2890.1:2004 and AS2890.6:2009) and be constructed, drained and paved with bitumen, concrete or paving bricks in accordance with sound engineering practice and appropriately line marked to the reasonable satisfaction of the State Commission Assessment Panel prior to the occupation or use of the development. Traffic and parking signage and line marking must meet the requirements of AS2890.1-2004 and the AS1742 series as applicable.
4. All bicycle parking spaces shall be designed and constructed in accordance with Australian Standard 2890.3-2015. Doors to bicycle storage areas should avoid the use of heavy swing doors and where possible should be automated.
5. Prior to Development Approval being issued for superstructure works, the applicant shall submit, to the reasonable satisfaction of the State Commission Assessment Panel, additional details documenting the design and management of the traffic

management system intended to control one-way movement of vehicles to and from the building.

Structure

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

Soil Contamination

7. Prior to Development Approval being issued for superstructure works, the applicant shall arrange for 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) to be submitted to the State Commission Assessment Panel.

Acoustics

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

Wind Impacts

9. The wind impact attenuation measures recommended in the Desktop Pedestrian Level Wind Assessment dated September 2017 by Global Wind Technology Services shall be fully incorporated into the building rules documentation to the reasonable satisfaction of the State Commission Assessment Panel. Such wind impact attenuation measures shall be made operational prior to the occupation or use of the development.

Lighting

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

Signage

11. No signage forms part of this development plan consent. No advertising display or signage shall be erected or displayed upon the subject land (including the proposed "88" embossed number to the Wright Street frontage) without any required Development Approval first being obtained.

Infrastructure

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

Landscaping

13. Prior to Development Approval being issued for superstructure works, and to the reasonable satisfaction of the State Commission Assessment Panel, the applicant shall submit a detailed landscaping plan for the atrium, rooftop terraces, balconies and green walls identifying planting medium depths, irrigation methods, maintenance schedules and methods, and other features of the landscaping scheme to demonstrate viability of all plantings. The updated detailed landscaping plan shall be reflected, as necessary, in all other relevant plans and drawings (including, for example, sectional drawings).

14. Landscaping shown on the approved plans (including without limitation the green walls and the rooftop garden) shall be established prior to the occupation of the development and shall be maintained and nurtured at all times with any diseased or dying plants to be replaced.
15. A watering system shall be installed at the time landscaping is established, and operated so that all plants receive sufficient water to ensure their survival and growth.

Stormwater

16. A final detailed Stormwater Management Plan shall be submitted, in consultation with the City of Adelaide and to the satisfaction of the State Commission Assessment Panel. The details of the plan shall be incorporated within the Building Rules Consent documentation, submitted for Development Approval, and be implemented prior to occupation or use of the development.
17. All stormwater design and construction shall be in accordance with Australian Standard AS/NZS 3500.3:2015 (Part 3) to ensure that stormwater does not adversely affect any adjoining property or public road.

Construction Management

18. A Waste Management Plan that details the proposed waste minimisation and resource recovery practices during construction shall be prepared and implemented.
19. A Construction Environment Management Plan (CEMP) shall be prepared and implemented in accordance with current industry standards – including the EPA publications “Handbook for Pollution Avoidance on Commercial and Residential Building Sites – Second Edition” and, where applicable, “Environmental Management of On-site Remediation” – to minimise environmental harm and disturbance during construction.

A copy of the CEMP shall be provided to the State Commission Assessment Panel prior to the commencement of site works.

EPA information sheets, guidelines documents, codes of practice, technical bulletins etc. can be accessed on the following website: <http://www.epa.sa.gov.au>

ADVISORY NOTES

- a. This Development Plan Consent will expire after 12 months from the date of this Notification, unless final Development Approval from Council has been received within that period or this Consent has been extended by the State Commission Assessment Panel.
- b. The applicant is also advised that any act or work authorised or required by this Notification must be substantially commenced within 1 year of the final Development Approval issued by Council and substantially completed within 3 years of the date of final Development Approval issued by Council, unless that Development Approval is extended by the Council.
- c. The applicant has a right of appeal against the conditions which have been imposed on this Development Plan Consent. Such an appeal must be lodged at the Environment, Resources and Development Court within two months from the day of receiving this notice or such longer time as the Court may allow. The applicant is asked to contact the Court if wishing to appeal. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide (telephone number 8204 0289).
- d. The applicant shall ensure there is no objection from any of the public utilities in respect of underground or overhead services and any alterations that may be required are to be at the applicant's expense.

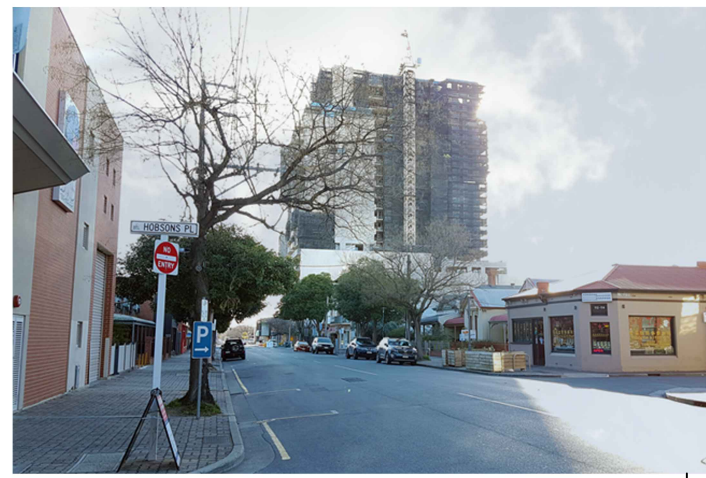
- e. As work is being undertaken on or near the subject land boundary, the applicant should ensure that the boundaries are clearly defined, by a Licensed Surveyor, prior to the commencement of any building work.
- f. Any proposed works within the public realm adjacent to the site, including the installation of street furniture, planting of street trees, roadway modifications or changes to temporary parking controls shall be undertaken in consultation with the City of Adelaide. Improvements to the adjacent public realm outside of the identified subject land are not part of this planning consent.
- g. Approval for the proposed building height and construction methodology is required from the Secretary for the Commonwealth Department of Infrastructure and Regional Development, in accordance with the Airports Act 1996 and the Airports (Protection of Airspace) Regulations 1996.
- h. Any further proposed addition to the structure, including aerials, masts and vent/exhaust stacks, must be subject to a separate assessment by the Commonwealth Department of Infrastructure and Regional Development. Crane operations associated with construction shall be the subject of a separate application. Adelaide Airport Limited requires 48 days prior notice of any crane operations during the construction.

Andrew Caspar
Consultant Planner

DRAWING REGISTER

- SD00 - DRAWING REGISTER
- SD01 - LOCALITY PLAN
- SD02 - EXISTING SITE PLAN
- SD03 - EXISTING STREETScape
- SD04 - FLOOR PLANS (G,B,1)
- SD05 - FLOOR PLANS (2-6)
- SD06 - FLOOR PLANS (7-12)
- SD07 - FLOOR PLANS (13-17)
- SD08 - ELEVATIONS (S/W)
- SD09 - ELEVATIONS (N/E)
- SD10 - SECTIONS
- SD11 - CONCEPT DIAGRAMs
- SD12 - CITYSCAPE CONTEXT
- SD13 - MATERIALS & FINISHES
- SD14 - ENVIRONMENTAL
- SD15 - PODIUM INTEGRATION
- SD16 - STREETScape
- SD17 - STREETScape/ HUMAN SCALE
- SD18 - PERSPECTIVES

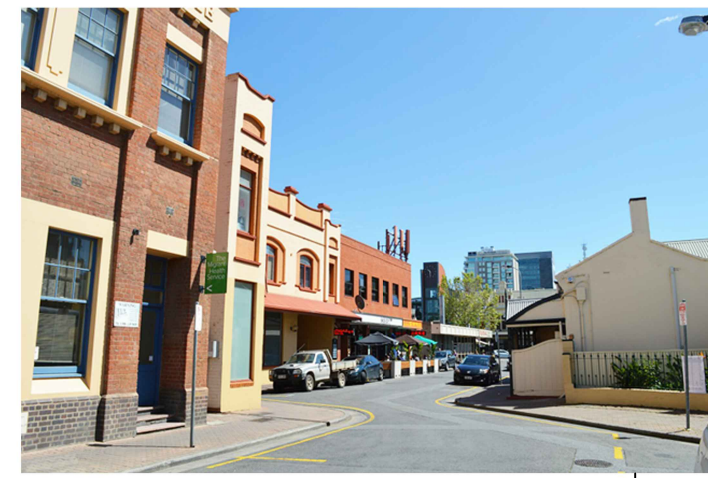




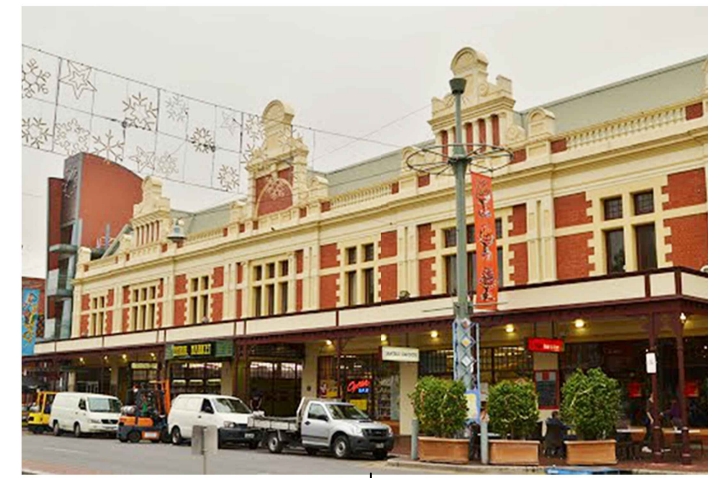
WRIGHT STREET, LOOKING WEST
BOHEM APARTMENTS UNDER CONSTRUCTION



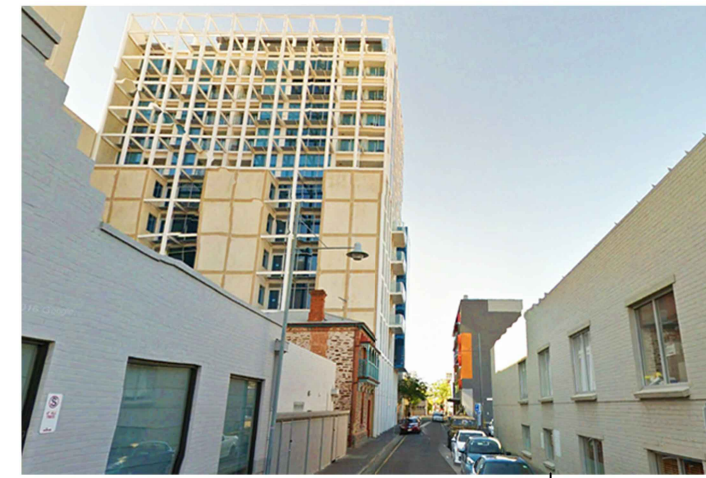
COMPTON STREET



MARKET STREET, LOOKING NORTH



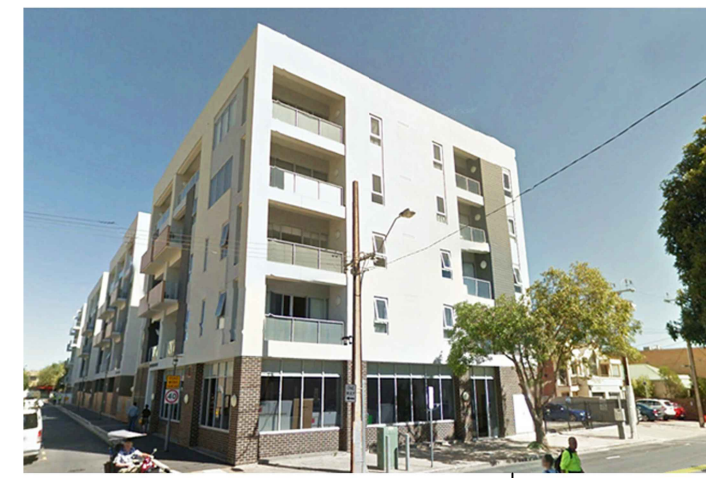
CENTRAL MARKET



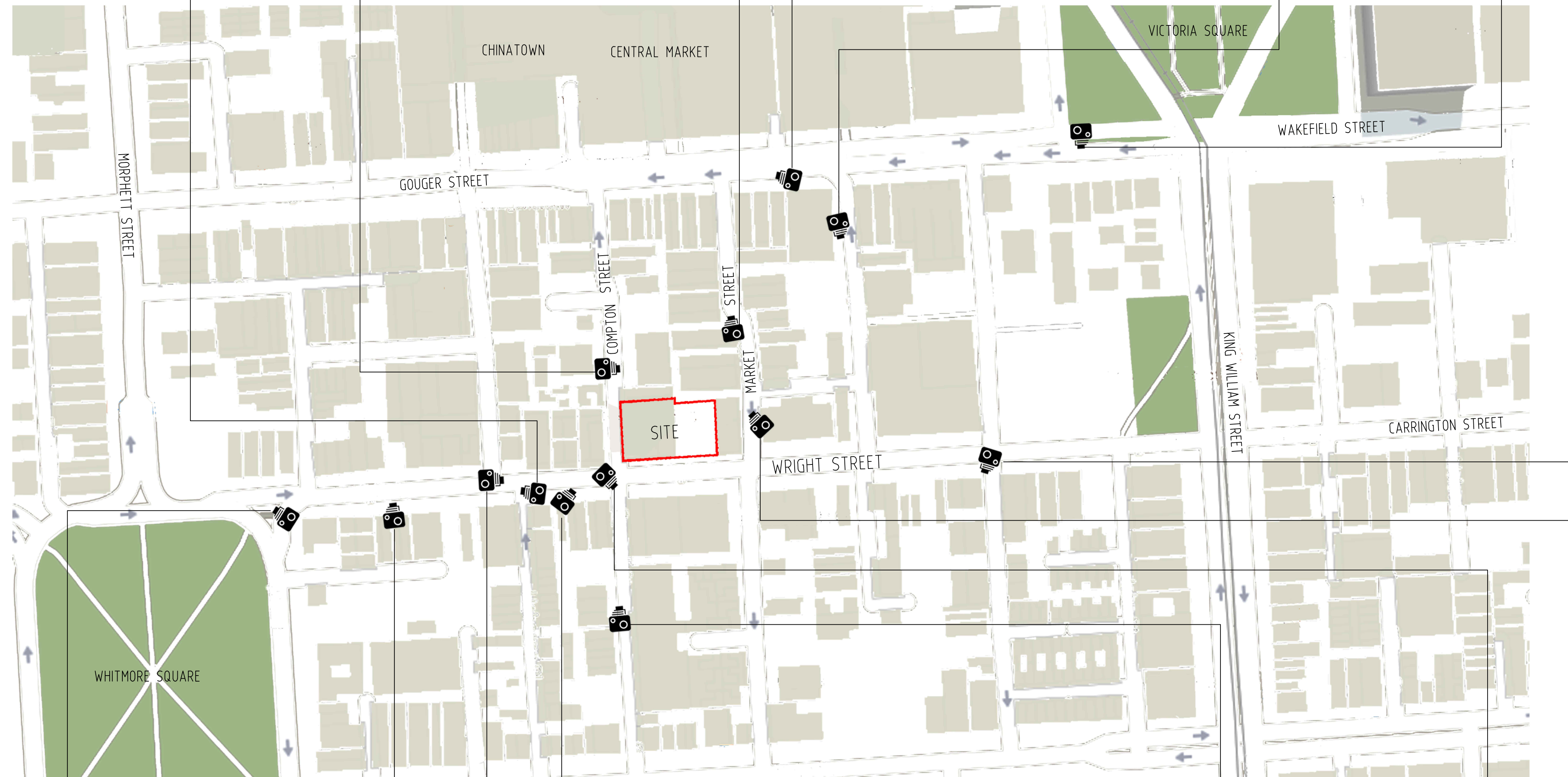
COGLIN STREET, LOOKING SOUTH



SUPREME COURT



FREW STREET APARTMENTS



AERIAL VIEW, LOOKING SOUTH-WEST



AERIAL VIEW, LOOKING NORTH-EAST



AERIAL VIEW, LOOKING SOUTH-EAST



BOHEM APARTMENTS & ADJACENT COTTAGES



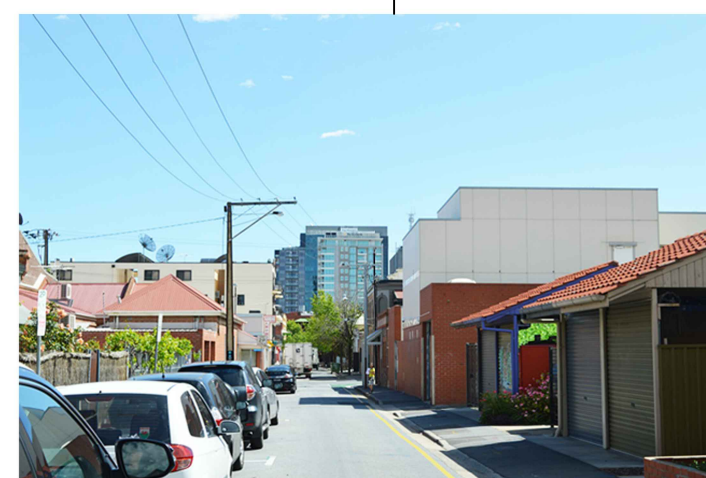
216 WRIGHT STREET APARTMENTS SITE



WRIGHT STREET, LOOKING EAST



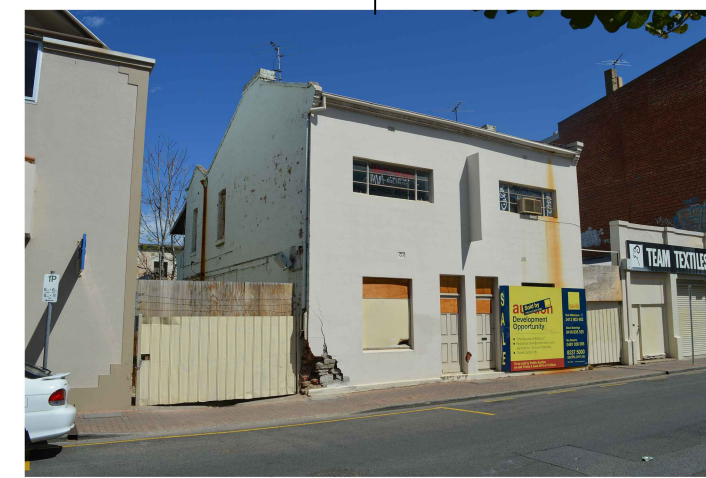
WRIGHT STREET & SITE, LOOKING EAST



VIEW TO COMPTON STREET, LOOKING NORTH



YOUTH COURT



PRIMEFIELD PROPERTIES SITE - MARKET ST



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■ project management
■ facility management
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ABN: 34 899 591 341

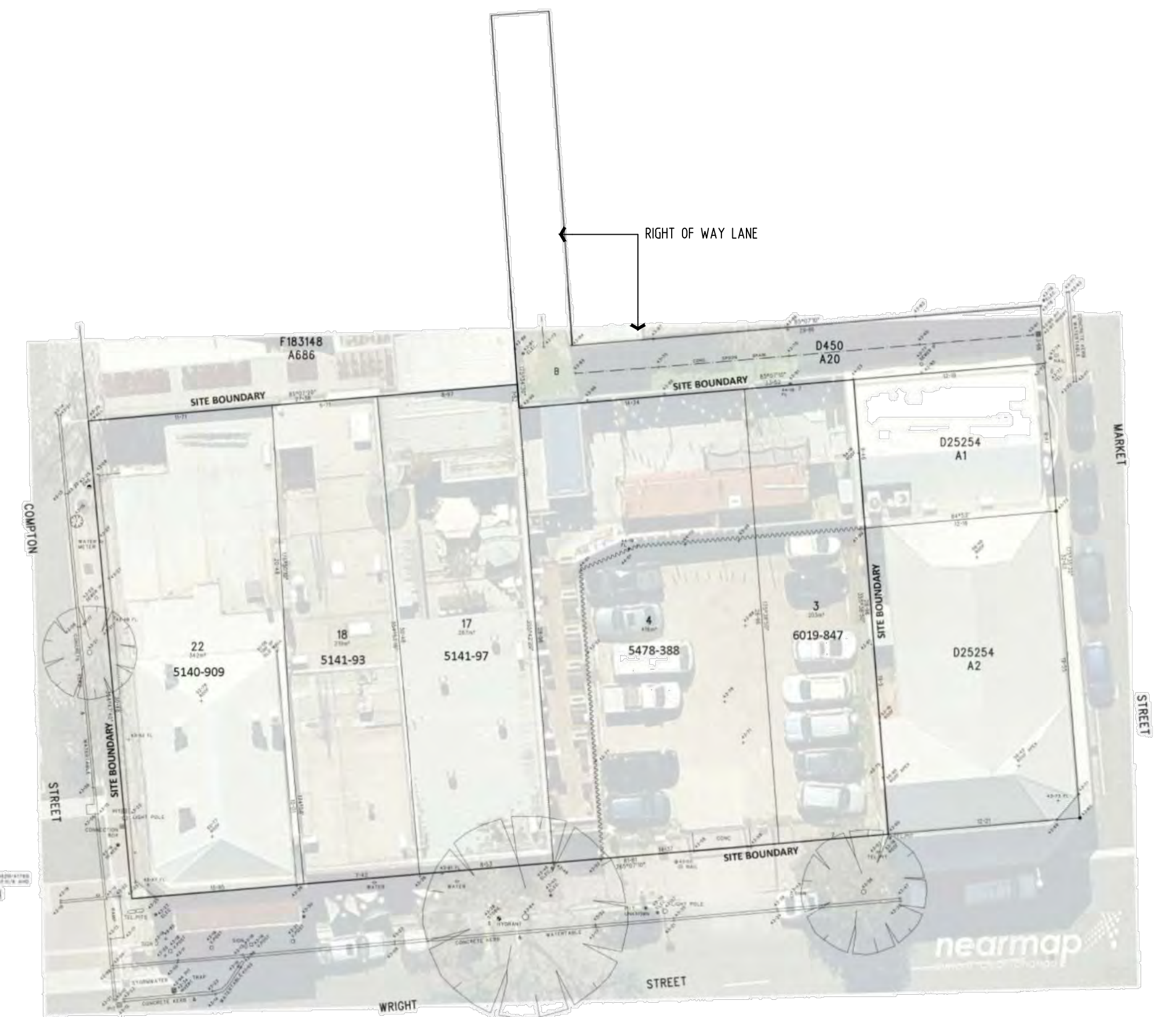
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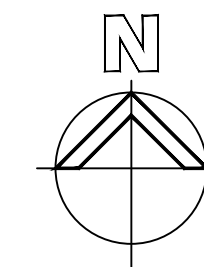
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scale
NTS
date
SEPT 17

88 WRIGHT
76 - 88 WRIGHT STREET ADELAIDE SA 5000
WRIGHT DEVELOPMENTS SA PTY LTD

drawing
LOCALITY PLAN



- BOUNDARY
- BUILDING FOOTPRINT
- - - STREET PARKING
- - - LOADING ZONE
- BICYCLE LANE
- ← ROAD DIRECTION
- ← PEDESTRIAN ACCESS
- ▨ PEDESTRIAN CROSSING
- RAIN GARDEN
- BIKE RACK
- SEAT/BENCH
- STREET BIN



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EXISTING SITE PLAN



WRIGHT STREET ELEVATION - LOOKING NORTH



HOTEL WRIGHT STREET - LOOKING NORTH



EXISTING CARPARK & DRIVEWAY



EDMUND BARTON CHAMBERS



EXISTING CARPARK & EDMUND BARTON RIGHT BUILDING ADJACENT
SANDSTONE, RED BRICK & RENDER



COMPTON STREET - LOOKING NORTH



RIGHT OF WAY LANE - LOOKING EAST TO MARKET STREET
ILLEGALLY BLOCKED



YOUTH COURT
BLUESTONE & RED BRICK



FUTURE DEVELOPMENT SITE - LOOKING EAST
WRIGHT ST & MARKET ST



MARKET STREET - EAST SIDE



EDMUND BARTON CHAMBERS
SANDSTONE & RENDER



WRIGHT STREET - LOOKING EAST TOWARDS SITE



HERITAGE HOTEL
BLUESTONE & RENDER



RAIN GARDEN



MARKET STREET - WEST SIDE
RED BRICK & RENDER



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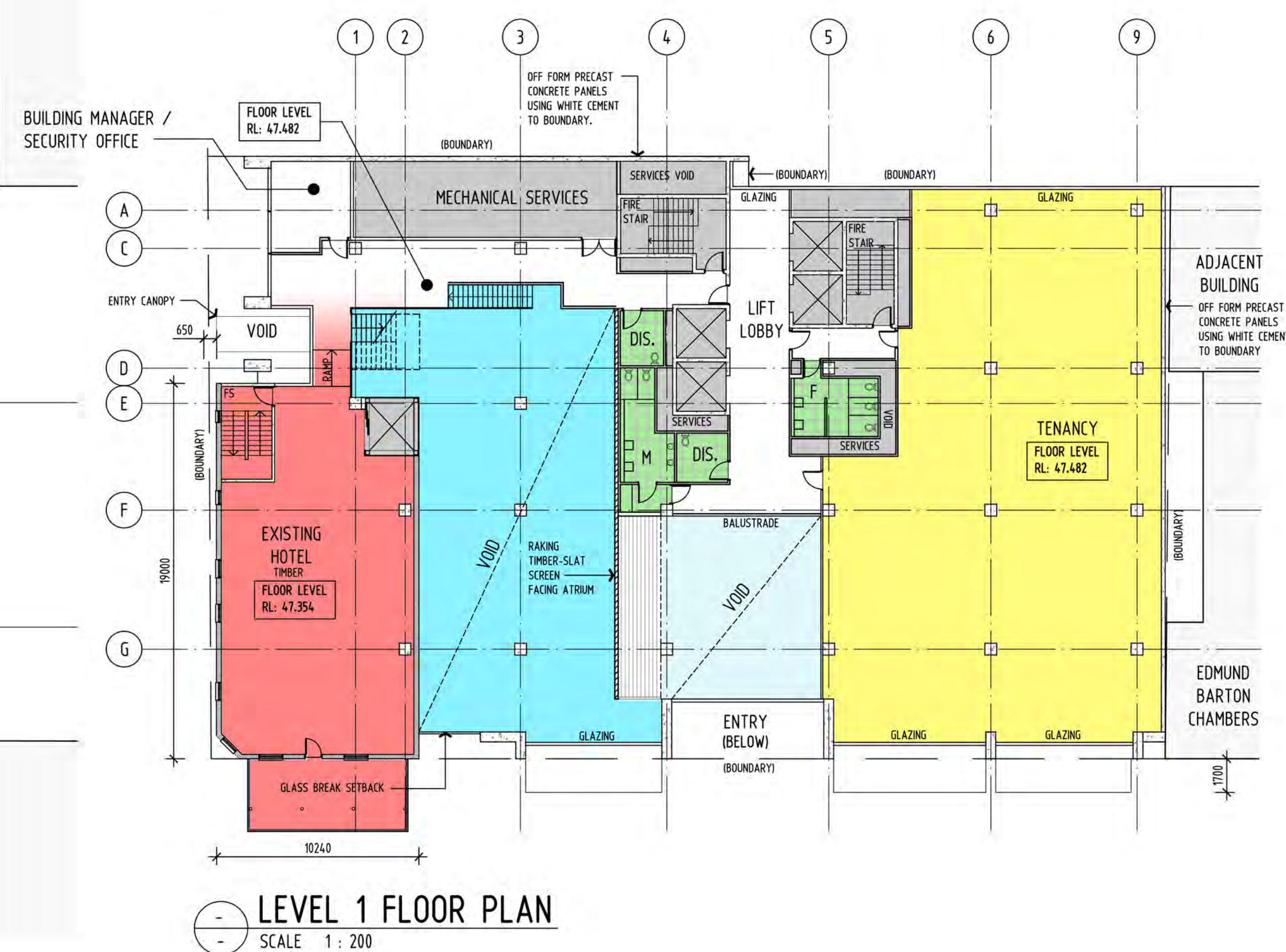
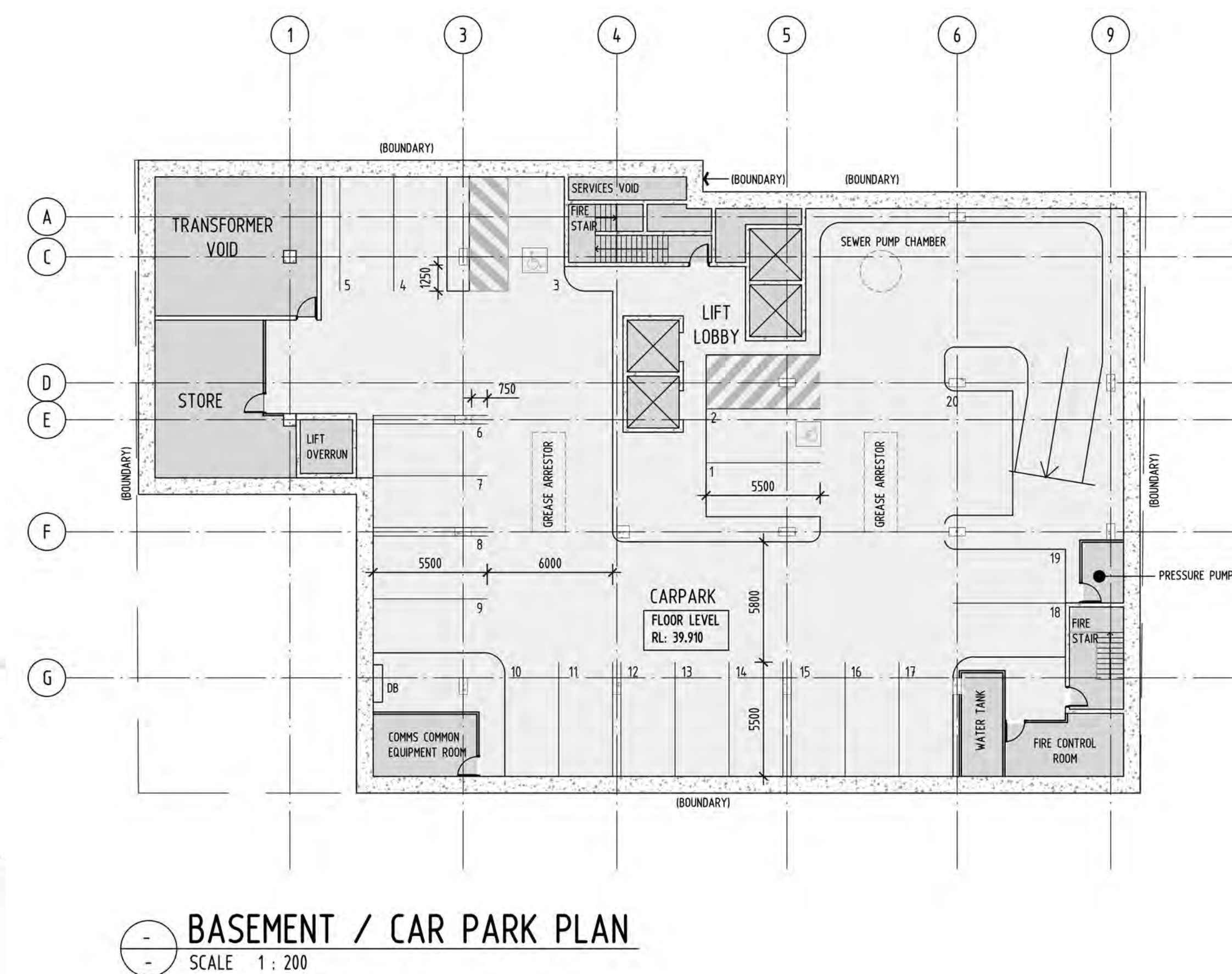
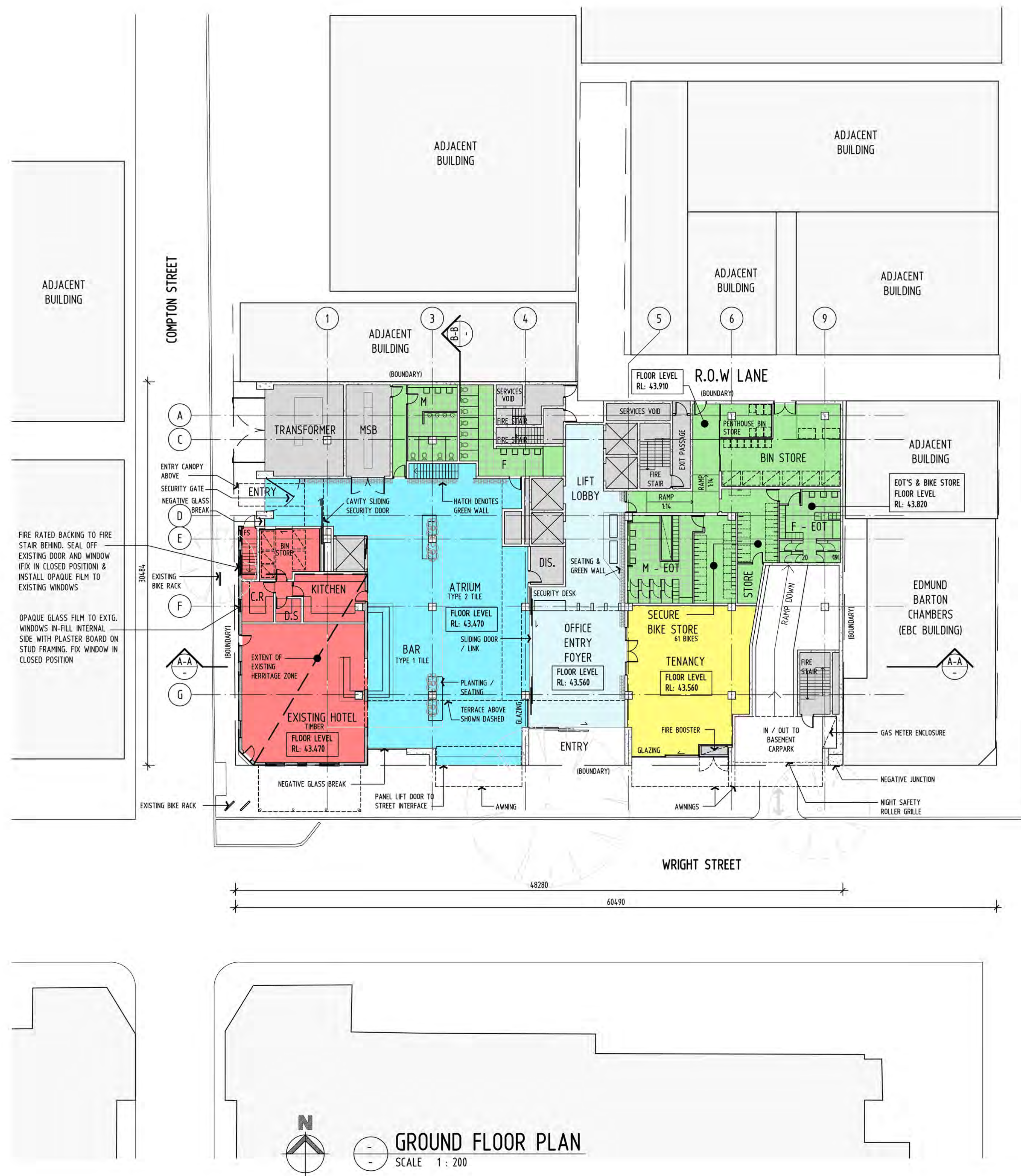
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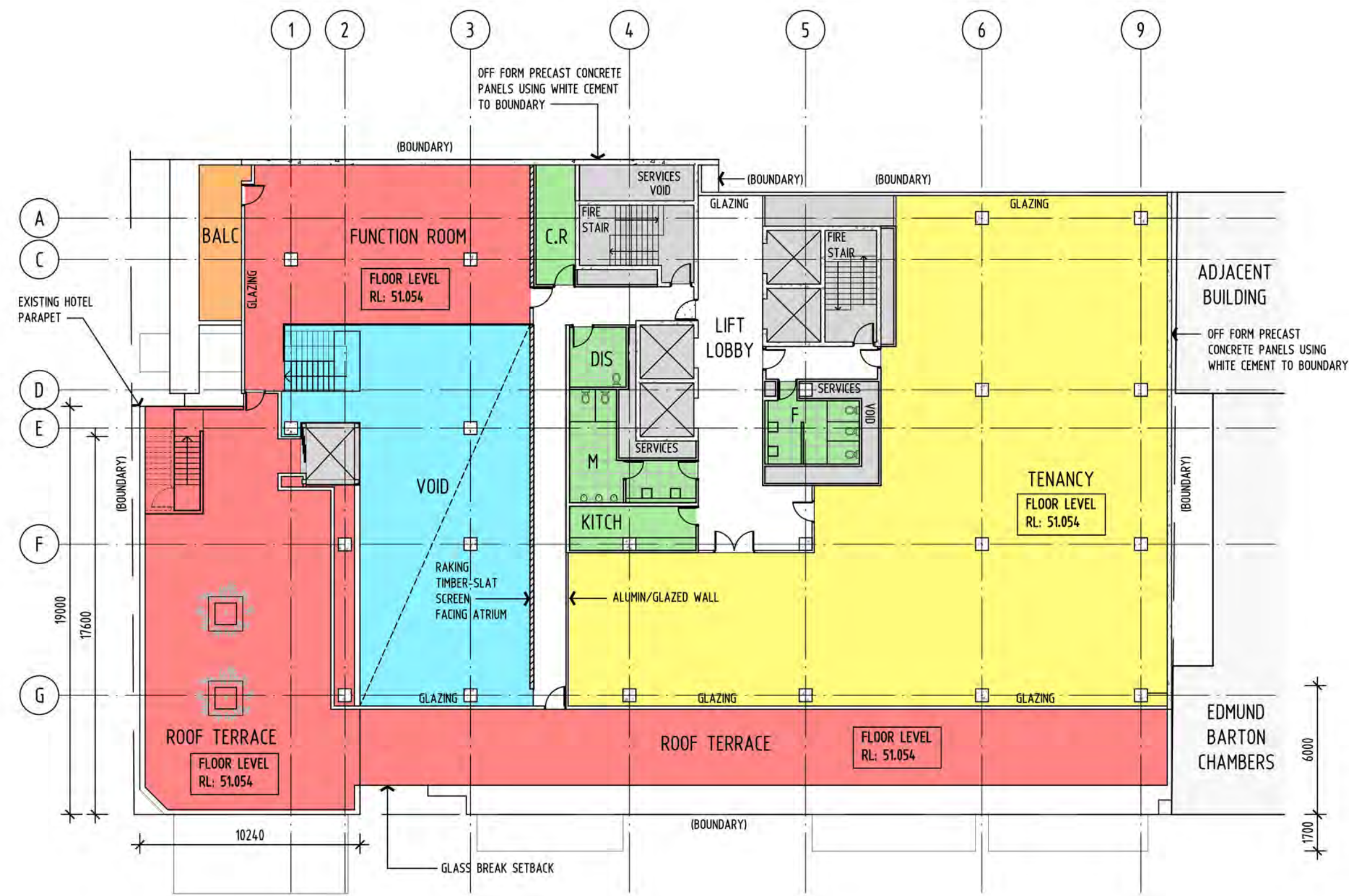
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76 - 88 WRIGHT STREET ADELAIDE SA 5000
WRIGHT DEVELOPMENTS SA PTY LTD

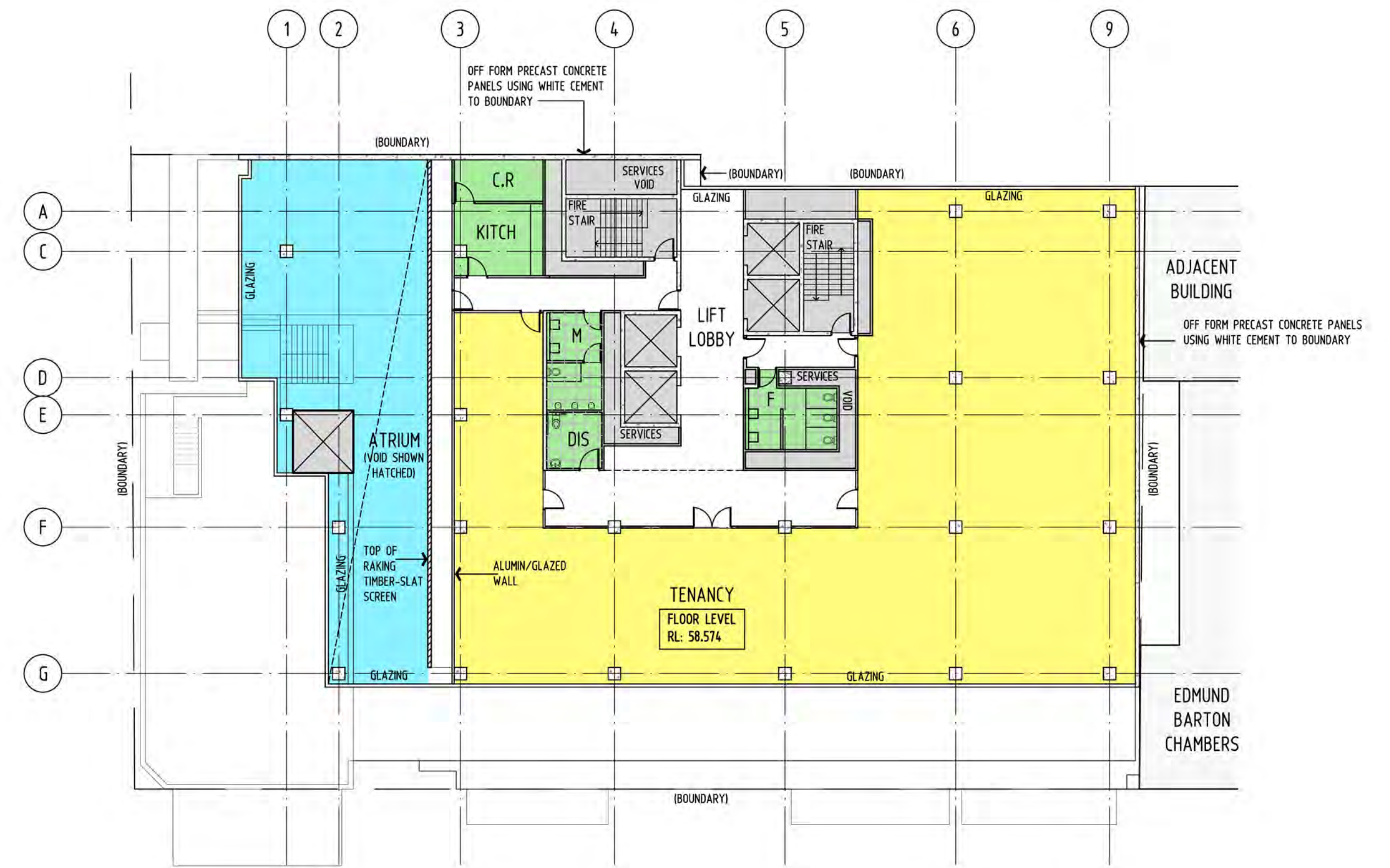
EXISTING STREETSCAPE

drawing

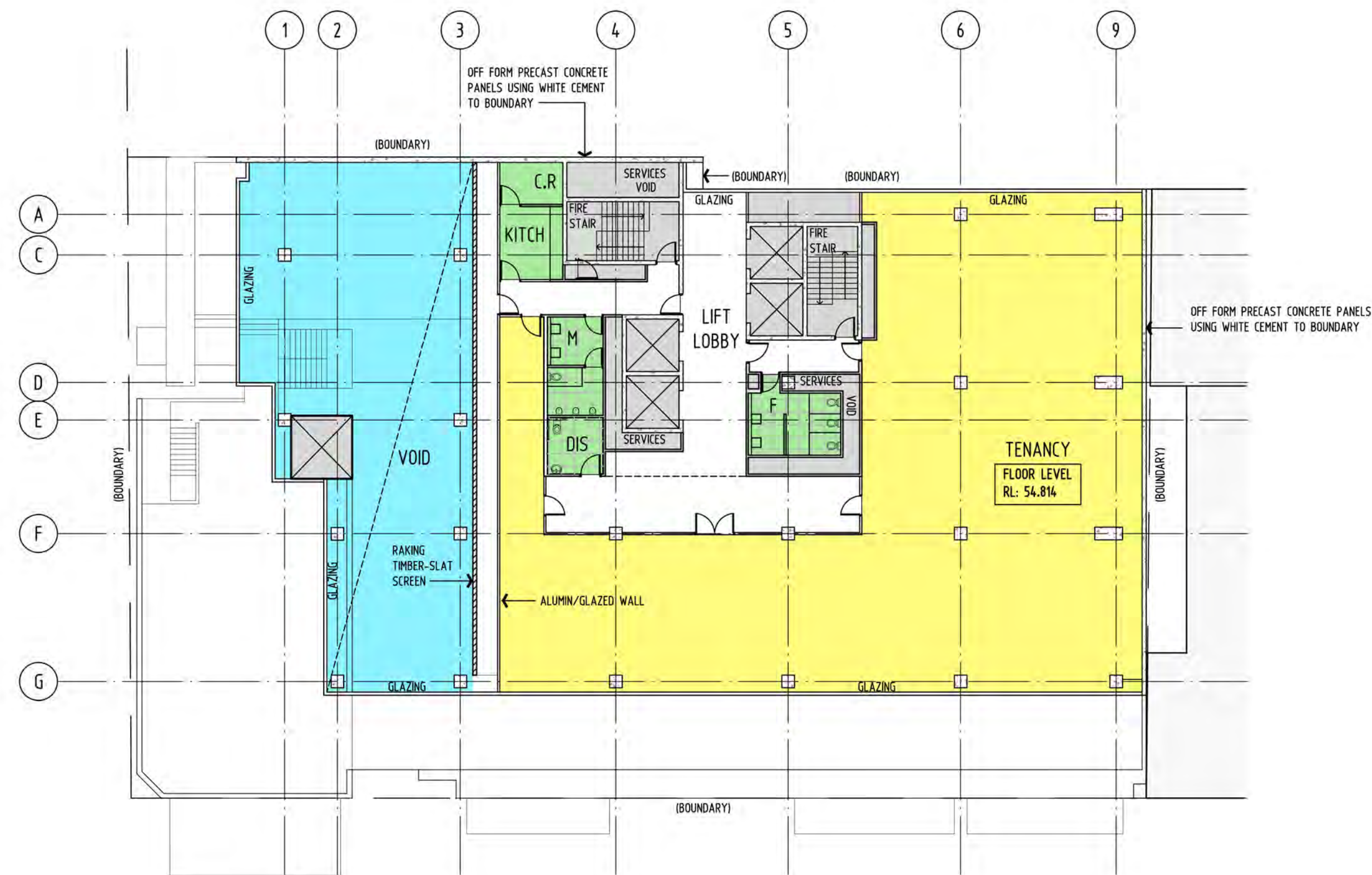




LEVEL 2 FLOOR PLAN
SCALE 1 : 200



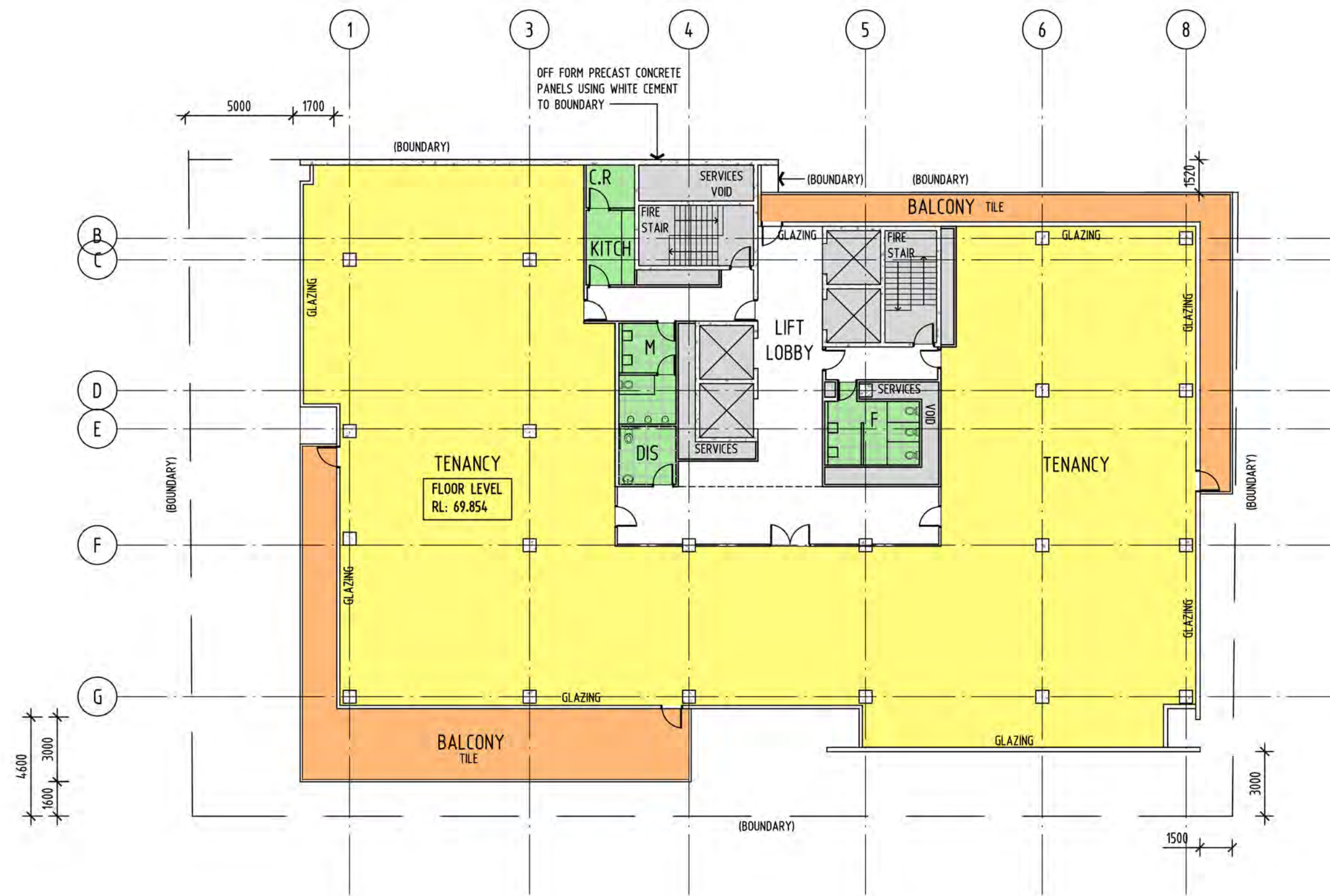
LEVEL 4 FLOOR PLAN
SCALE 1 : 200



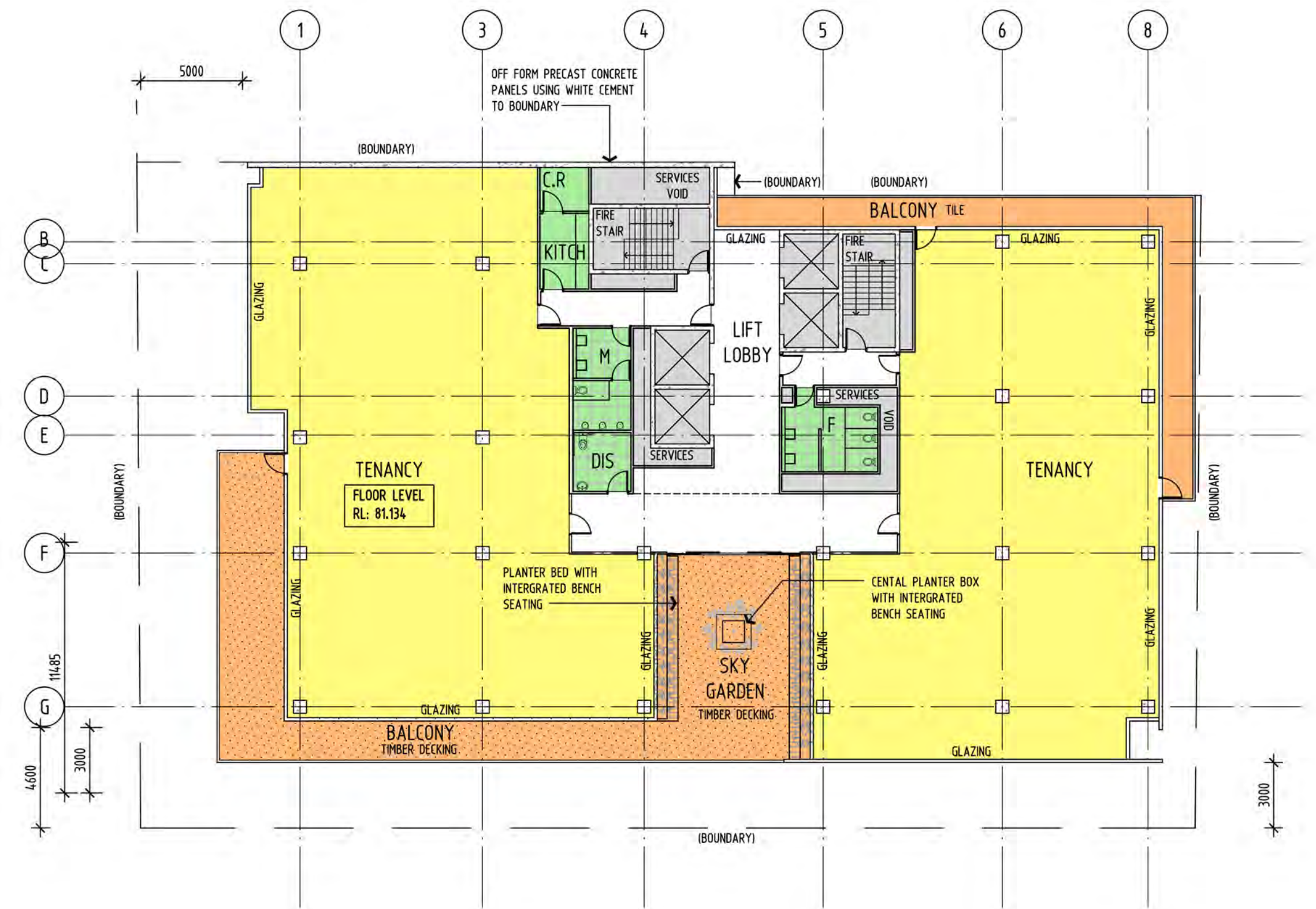
LEVEL 3 FLOOR PLAN
SCALE 1 : 200



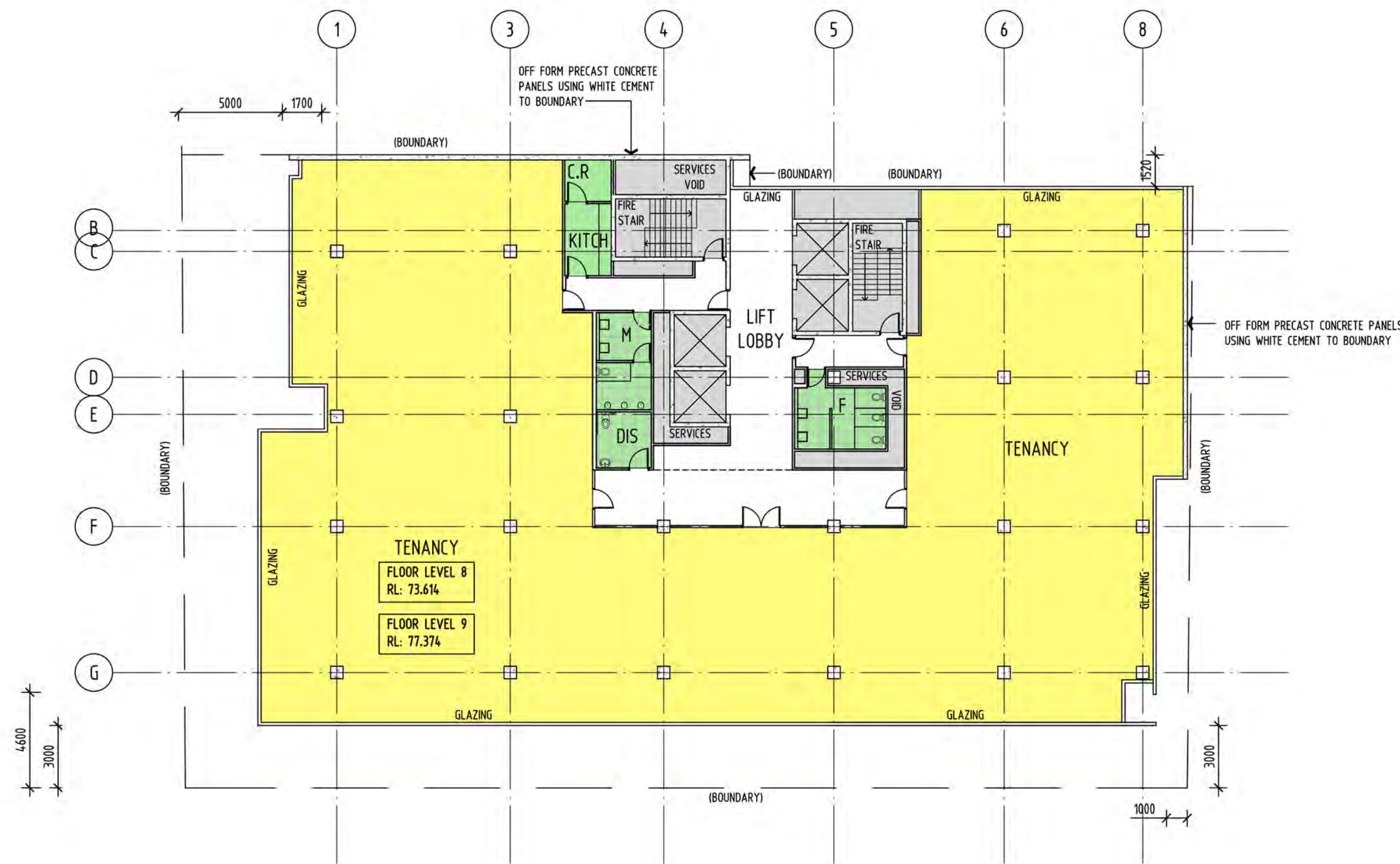
LEVEL 5 & 6 FLOOR PLAN
SCALE 1 : 200



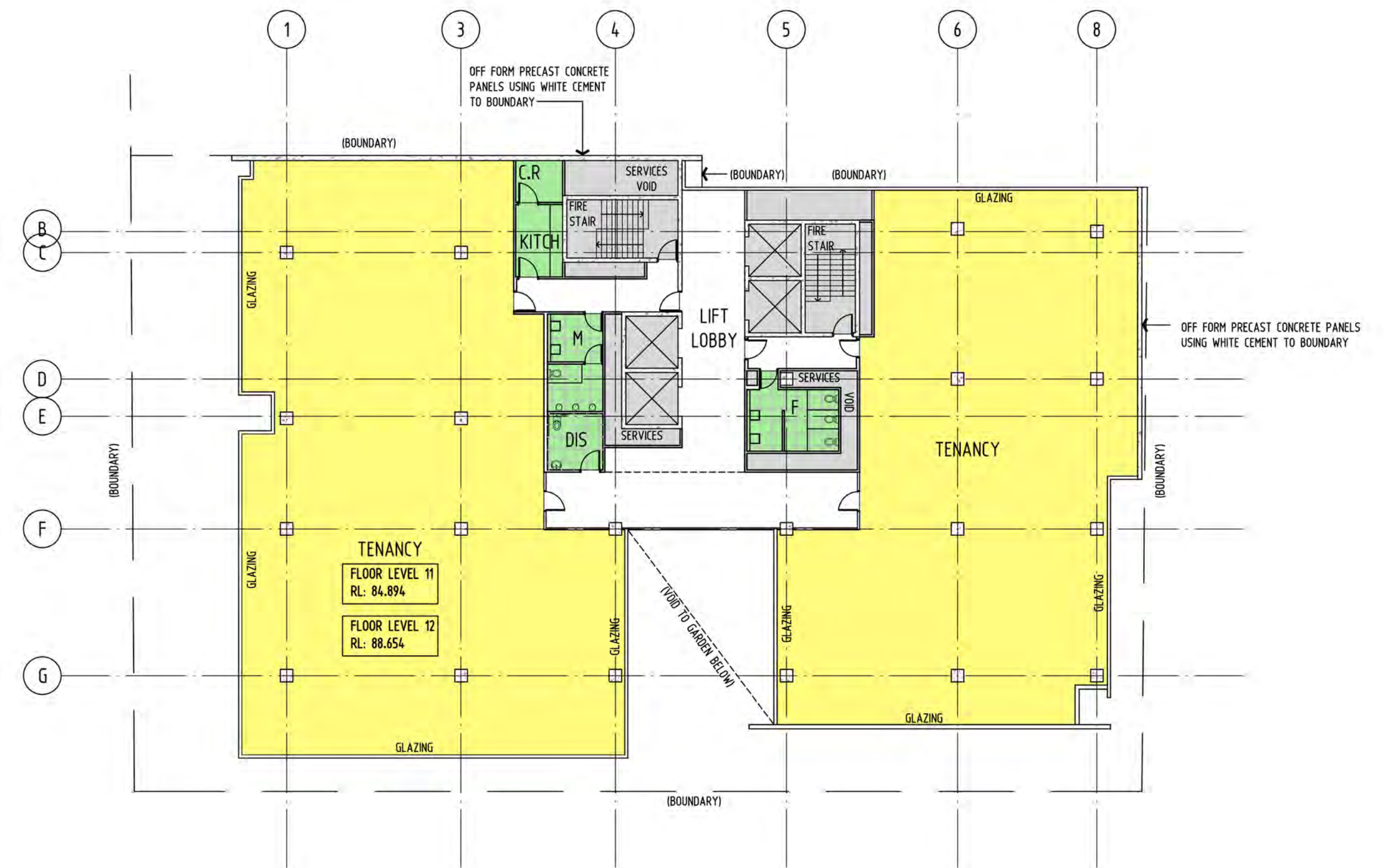
LEVEL 7 FLOOR PLAN
SCALE 1 : 200



LEVEL 10 FLOOR PLAN
SCALE 1 : 200



LEVEL 8 & 9 FLOOR PLAN
SCALE 1 : 200



LEVEL 11 & 12 FLOOR PLAN
SCALE 1 : 200



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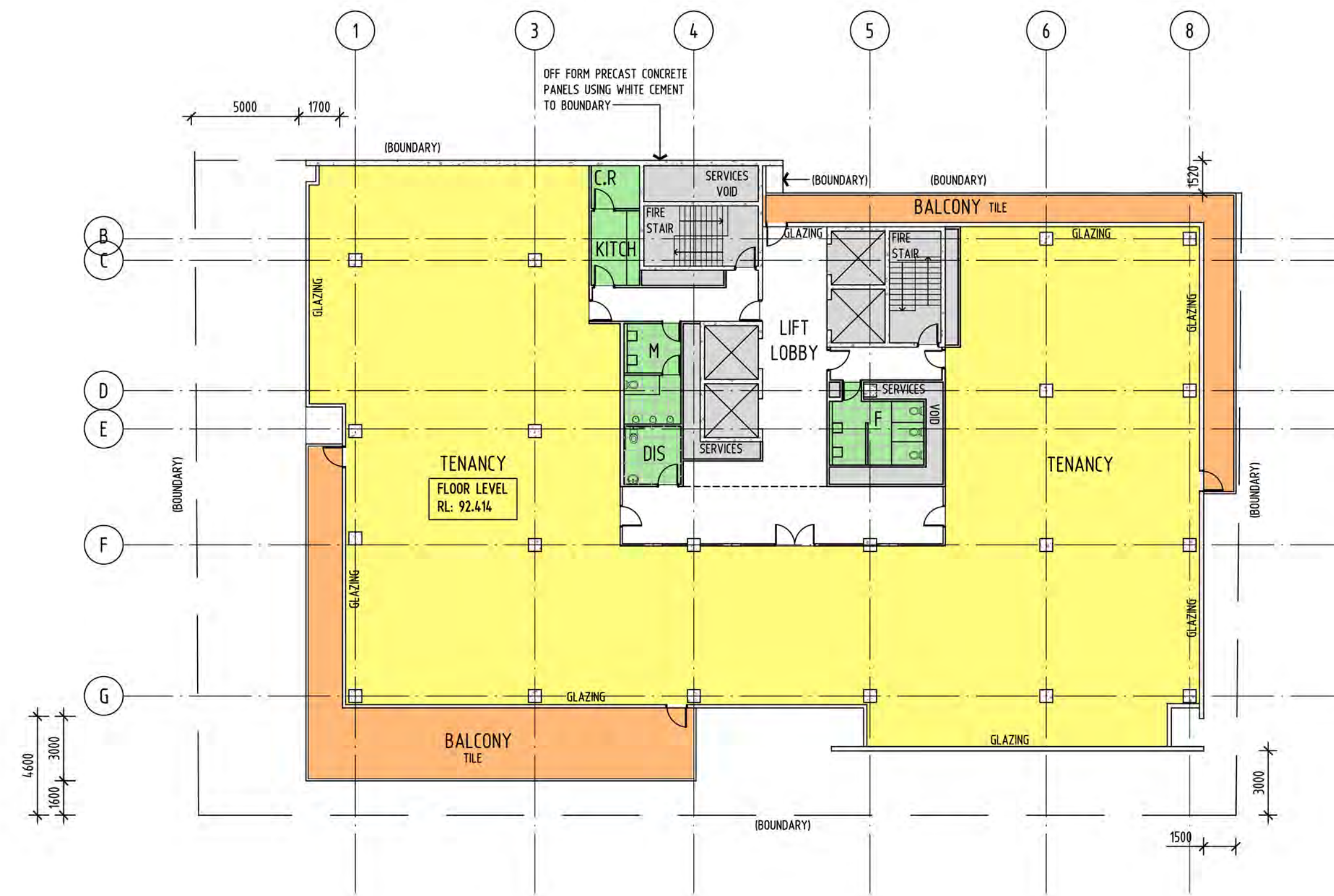
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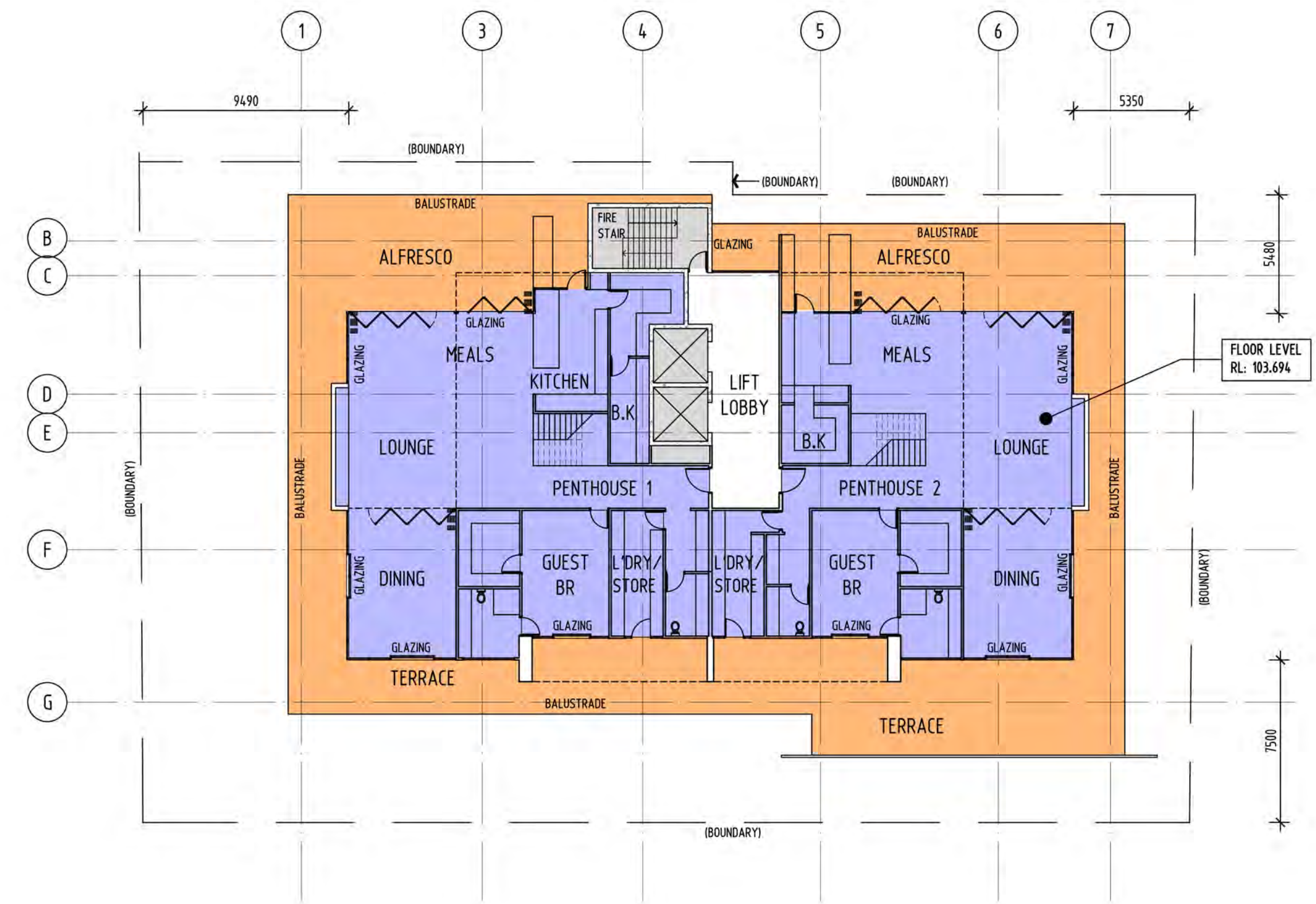
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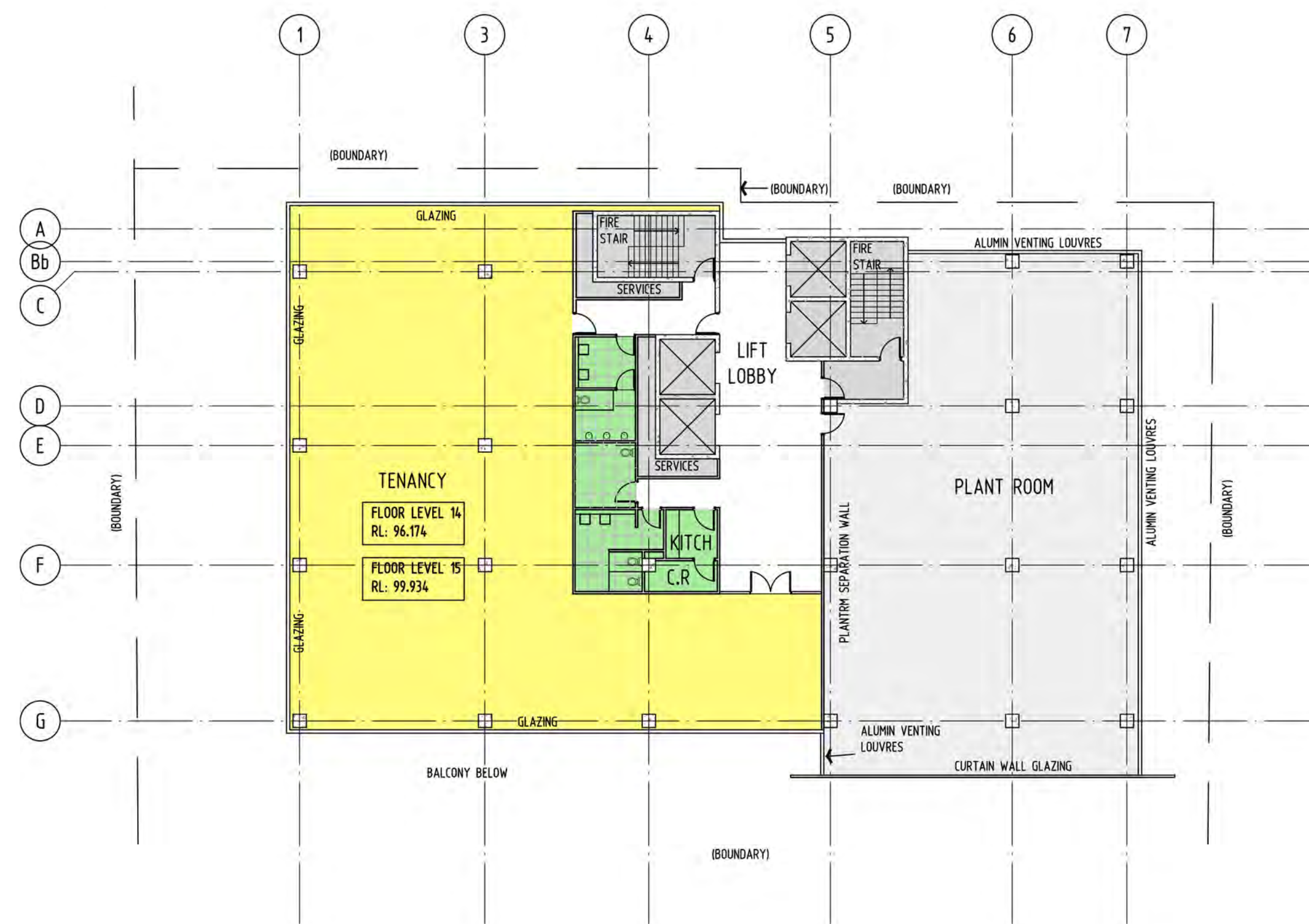
FLOOR PLANS



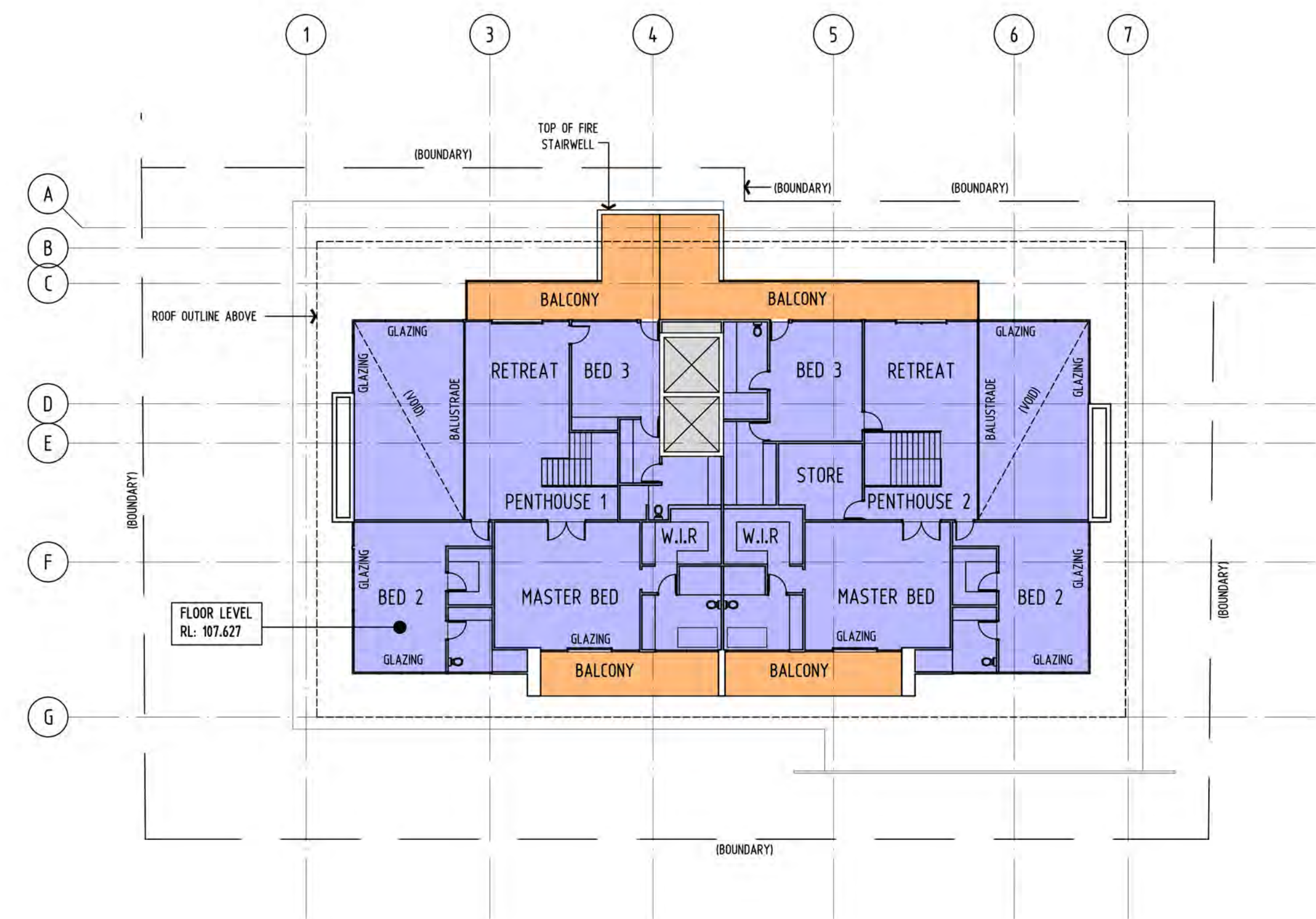
LEVEL 13 FLOOR PLAN
SCALE 1 : 200



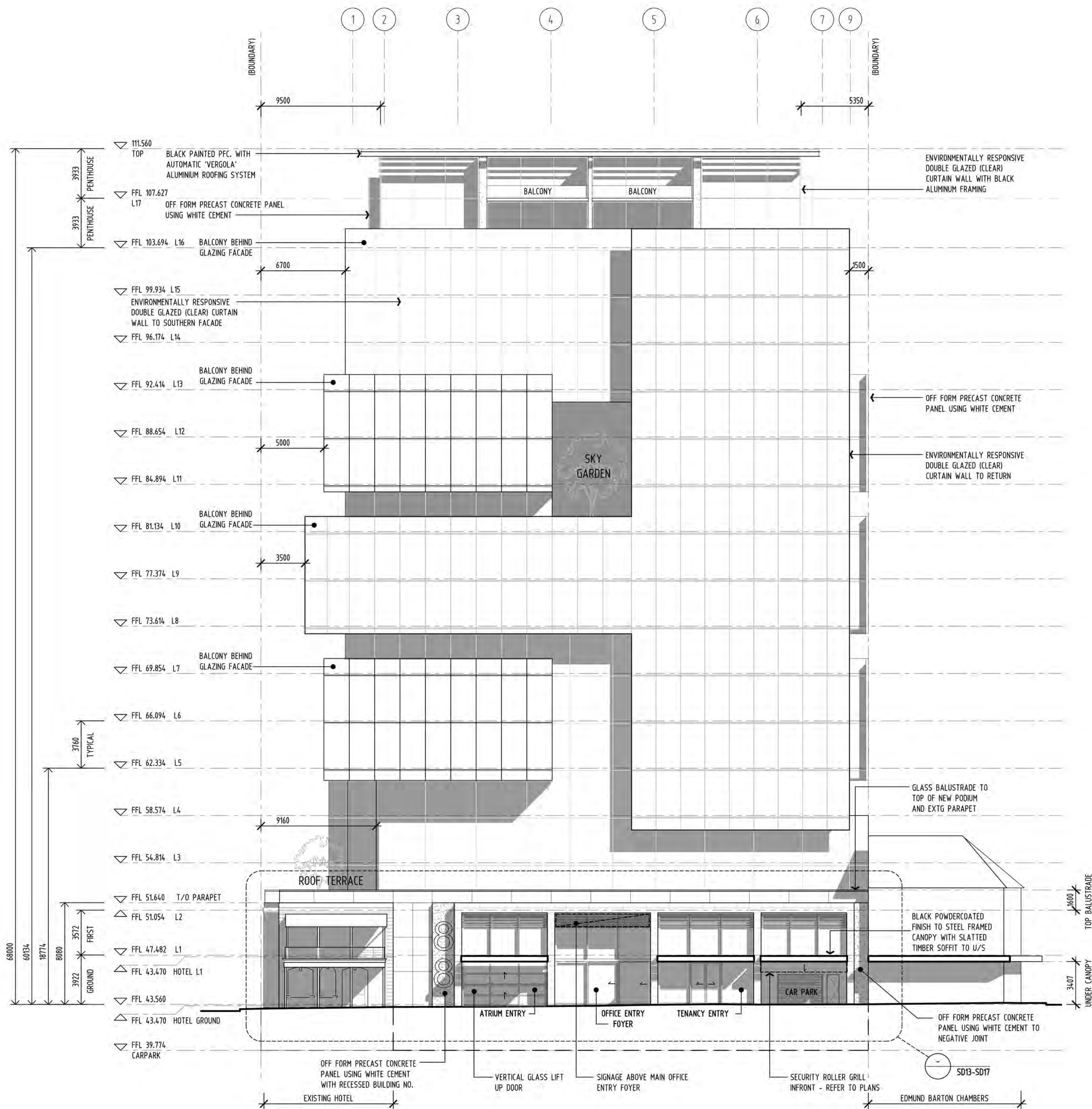
LEVEL 16 - PENTHOUSE PLAN
SCALE 1 : 200



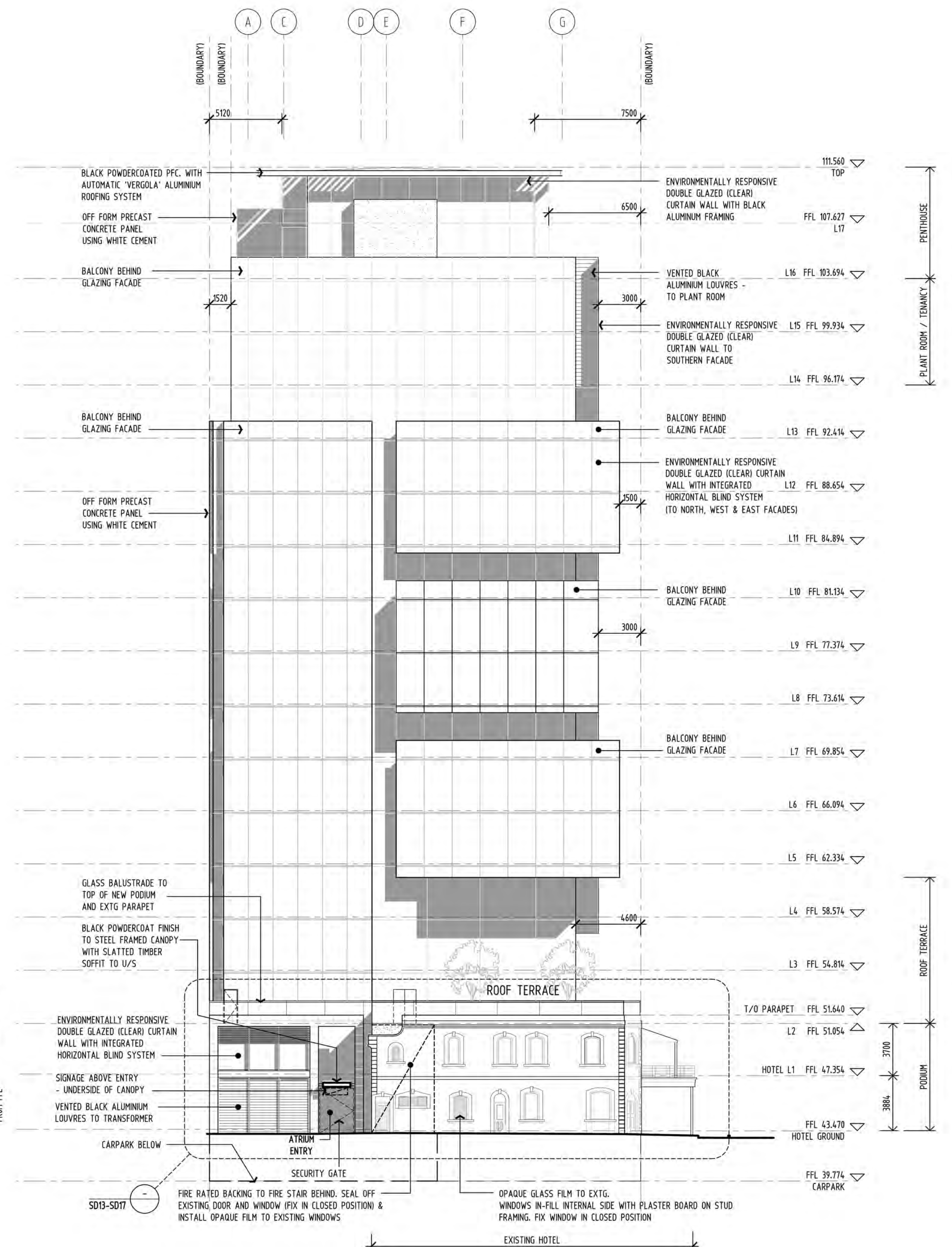
LEVEL 14 & 15 - PLANT / TENANCY
SCALE 1 : 200



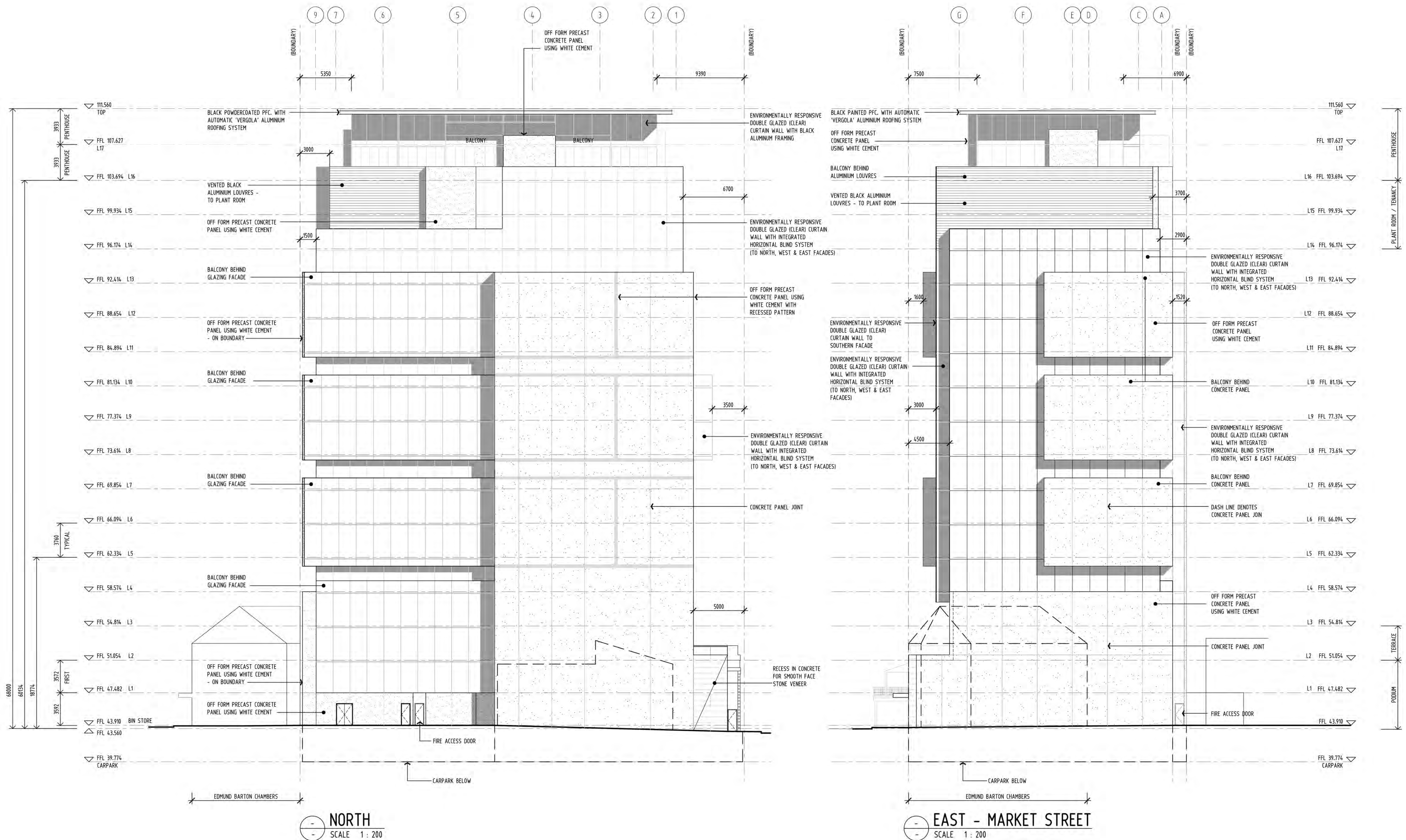
LEVEL 17 - PENTHOUSE PLAN
SCALE 1 : 200



SOUTH - WRIGHT STREET
SCALE 1 : 200



WEST - COMPTON STREET
SCALE 1 : 200



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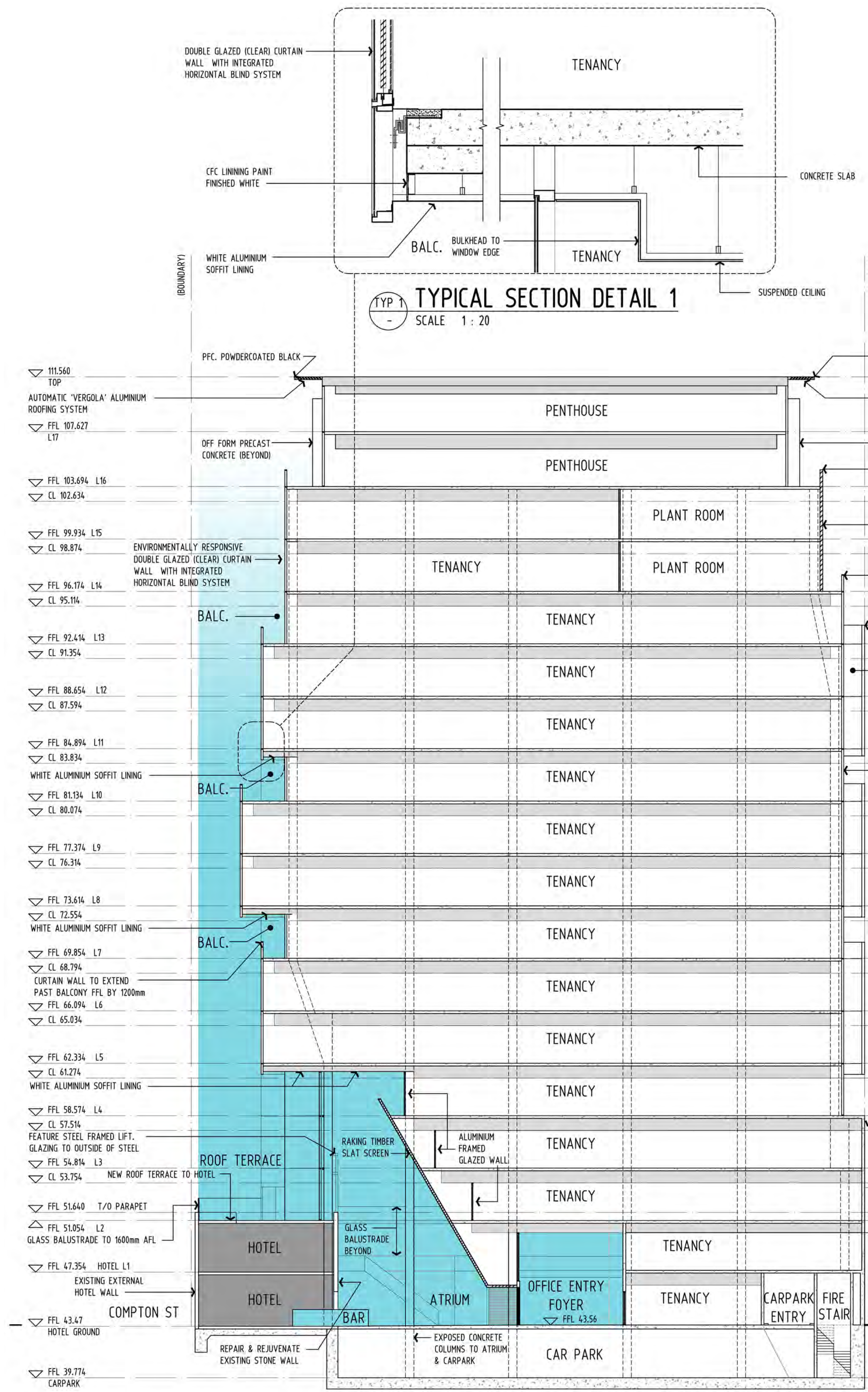
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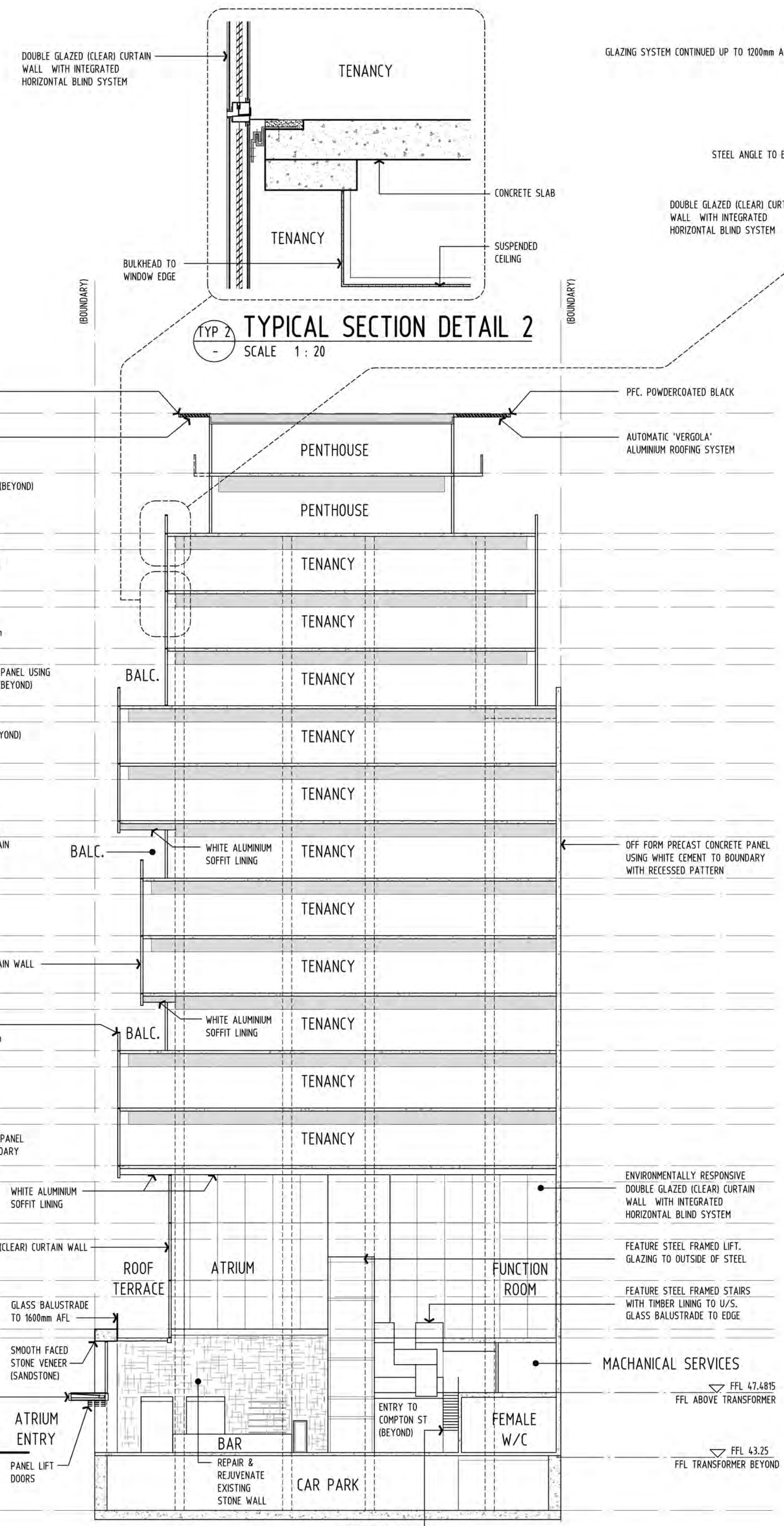
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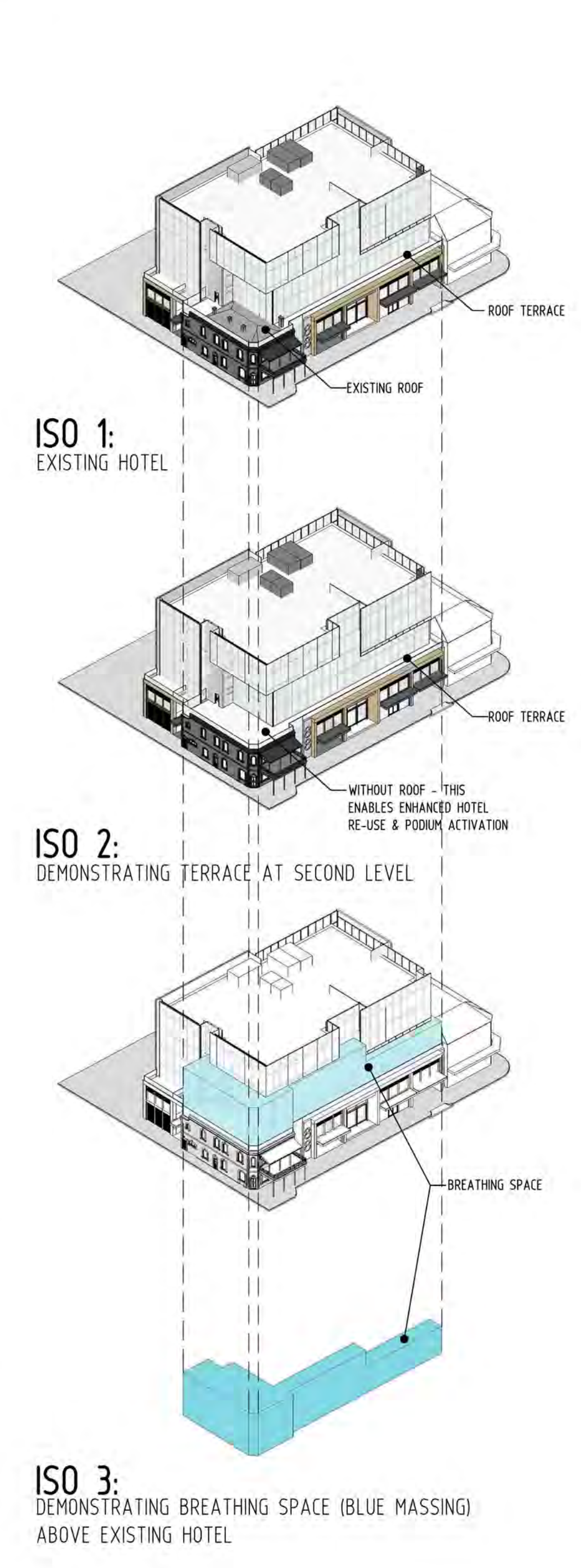
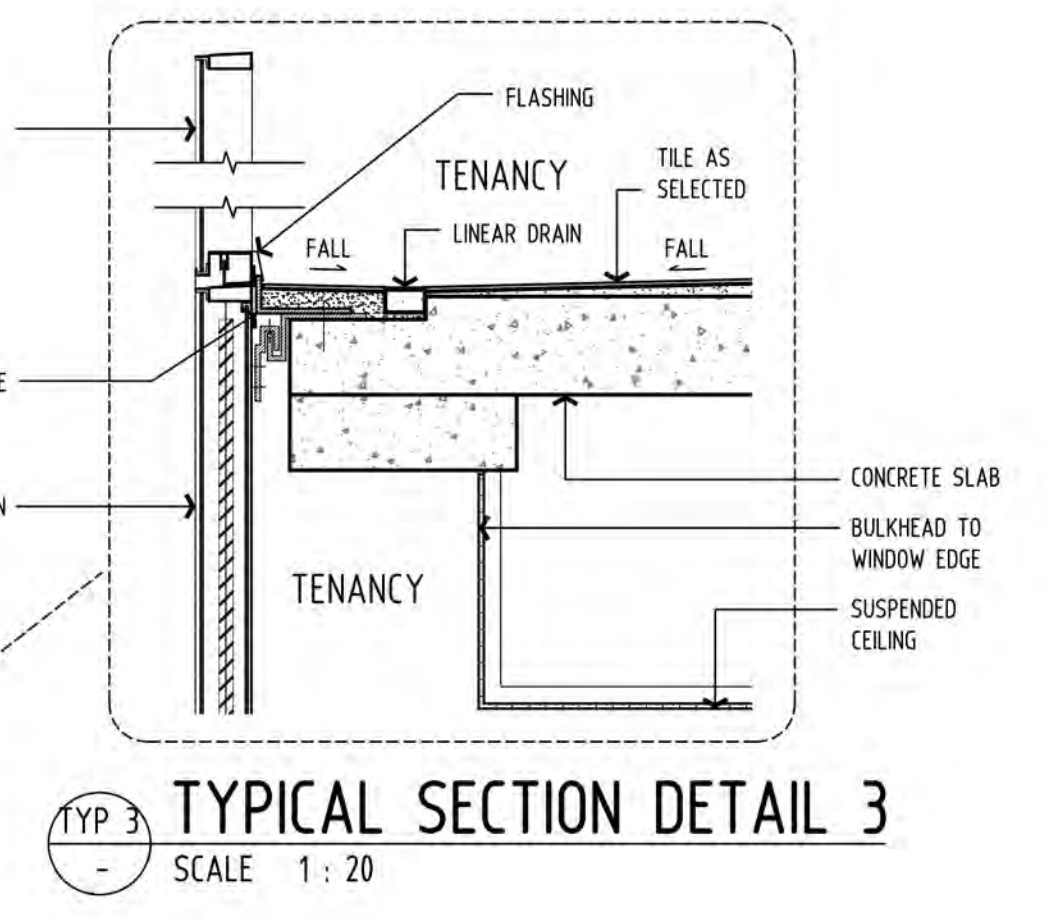
drawing
ELEVATIONS



SECTION A-A
SCALE 1 : 200



SECTION B-B
SCALE 1 : 200



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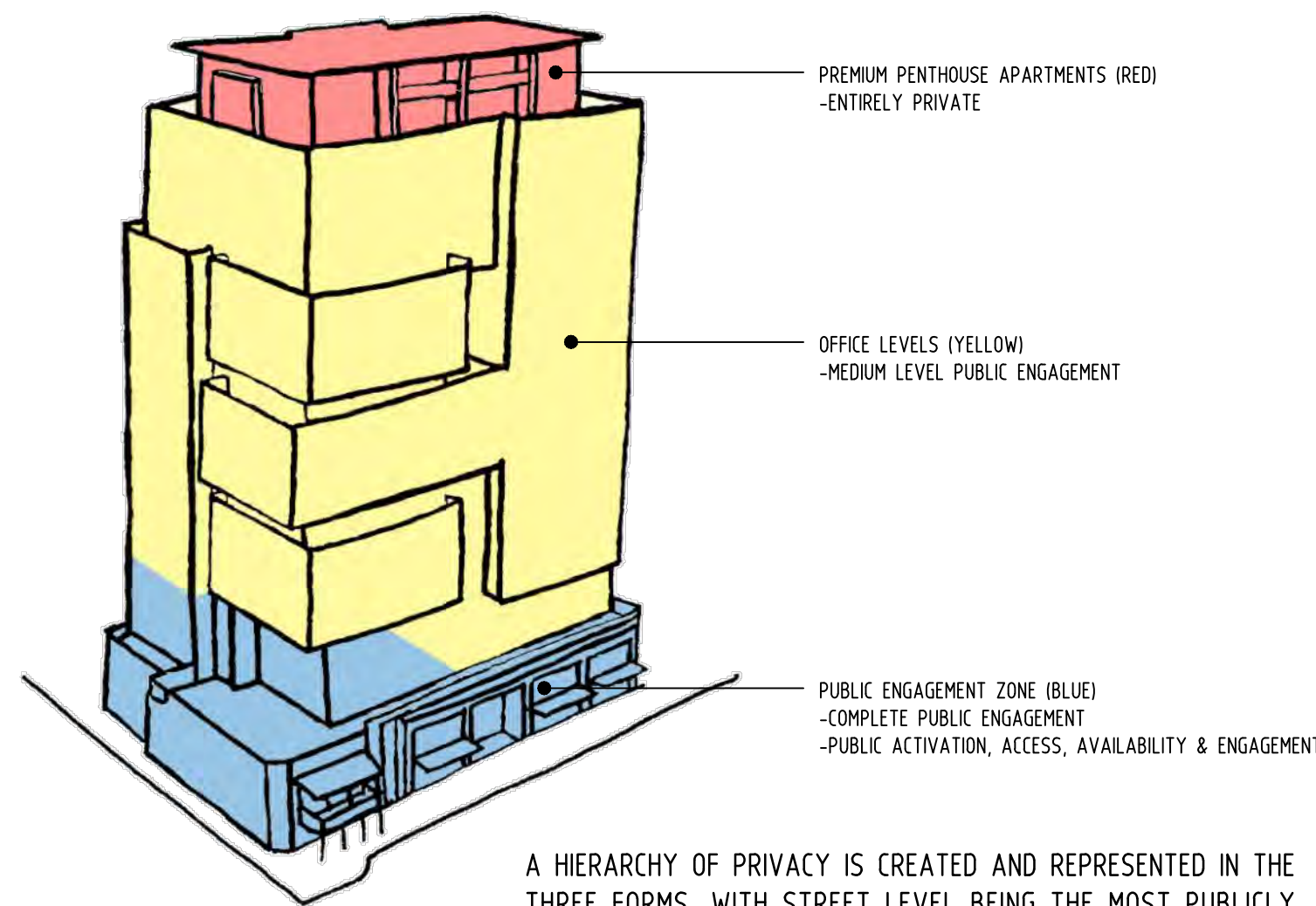
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drawing
SECTIONS

ALLOCATION OF USE DIAGRAM

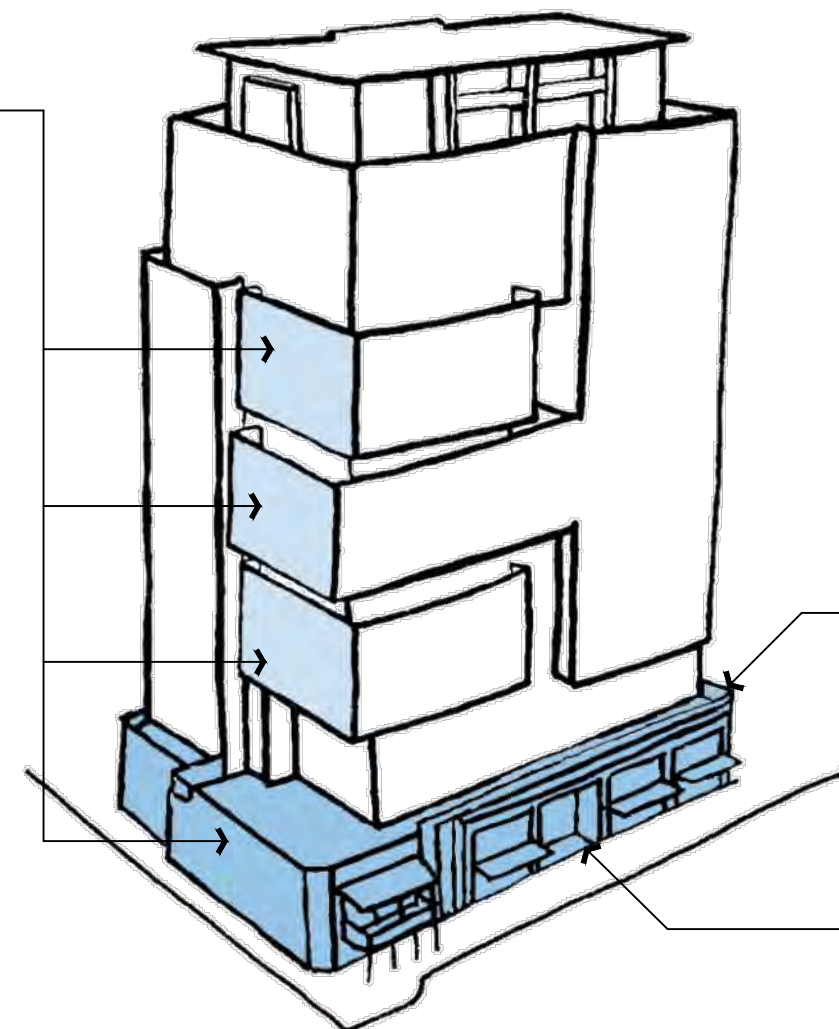


A HIERARCHY OF PRIVACY IS CREATED AND REPRESENTED IN THE THREE FORMS, WITH STREET LEVEL BEING THE MOST PUBLICLY ACCESSIBLE AND THE PENTHOUSE BEING THE MOST PRIVATE

FORM & ARTICULATION DEVELOPMENT DIAGRAMS

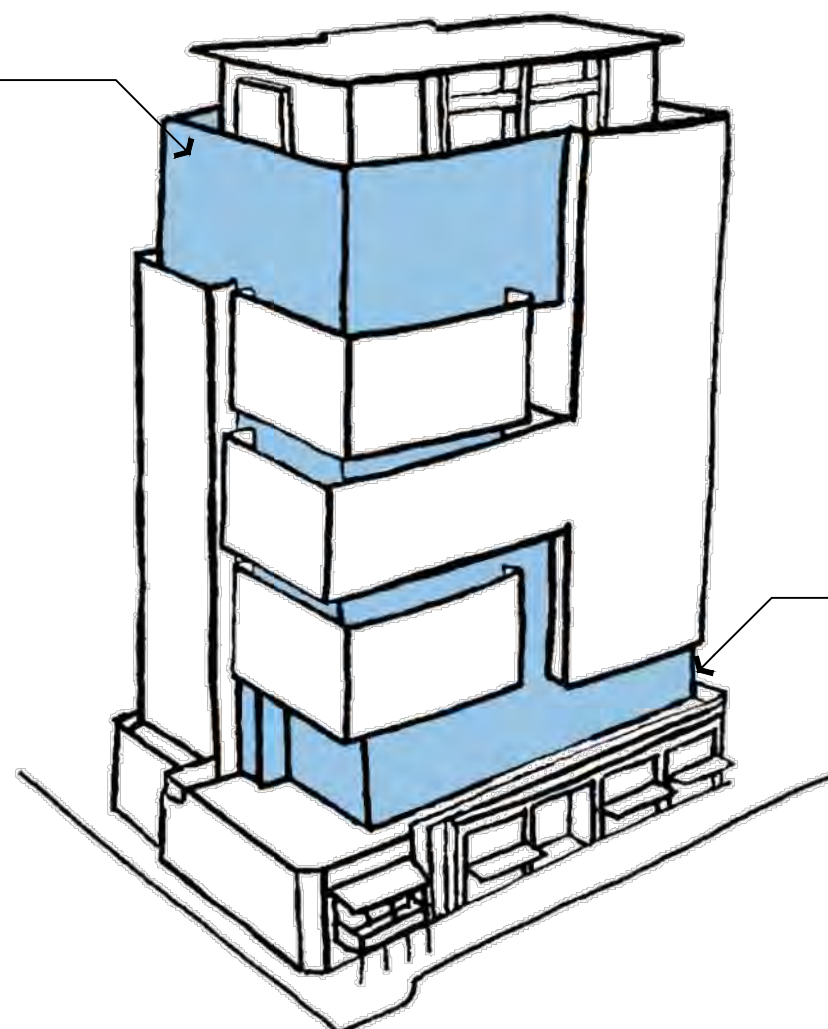
SOUTH-WEST

THE ARTICULATED ELEMENTS FORM AND LOCATION REPLICATE THE PROPORTION & SCALE OF THE STREET CONTEXT & HERITAGE BUILDING



PODIUM ELEMENT & HERITAGE BUILDING PROPORTIONS

15 STOREY CORE ELEMENT TO UNIFY THE DESIGN & TO PROVIDE A CITY SCALE CONTEXT

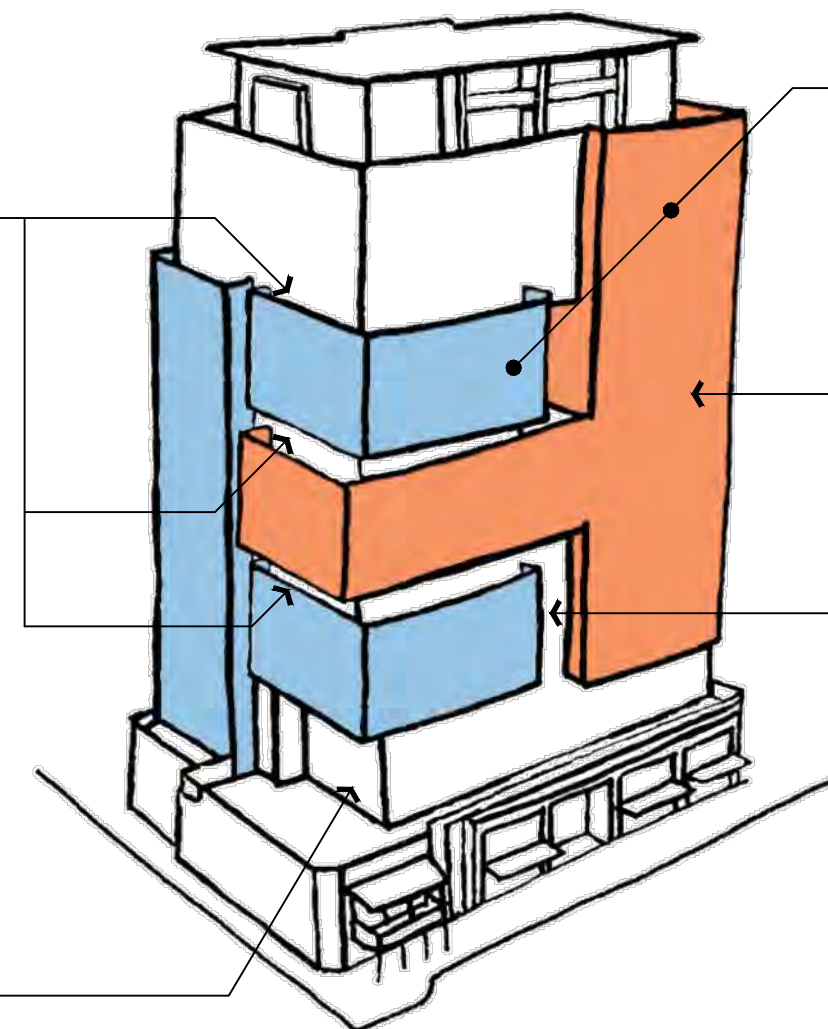


CORE ELEMENT

HORIZONTAL SPACING OF ARTICULATION ELEMENTS BREAKS UP THE FACADE & PROVIDES RELIEF AS HEIGHT INCREASES

CORE ELEMENT SETBACK TO REINFORCE PODIUM SEPARATION

NEGATIVE PROPORTION SEPARATION ABOVE THE HERITAGE HOTEL TO CREATE "BREATHING SPACE"



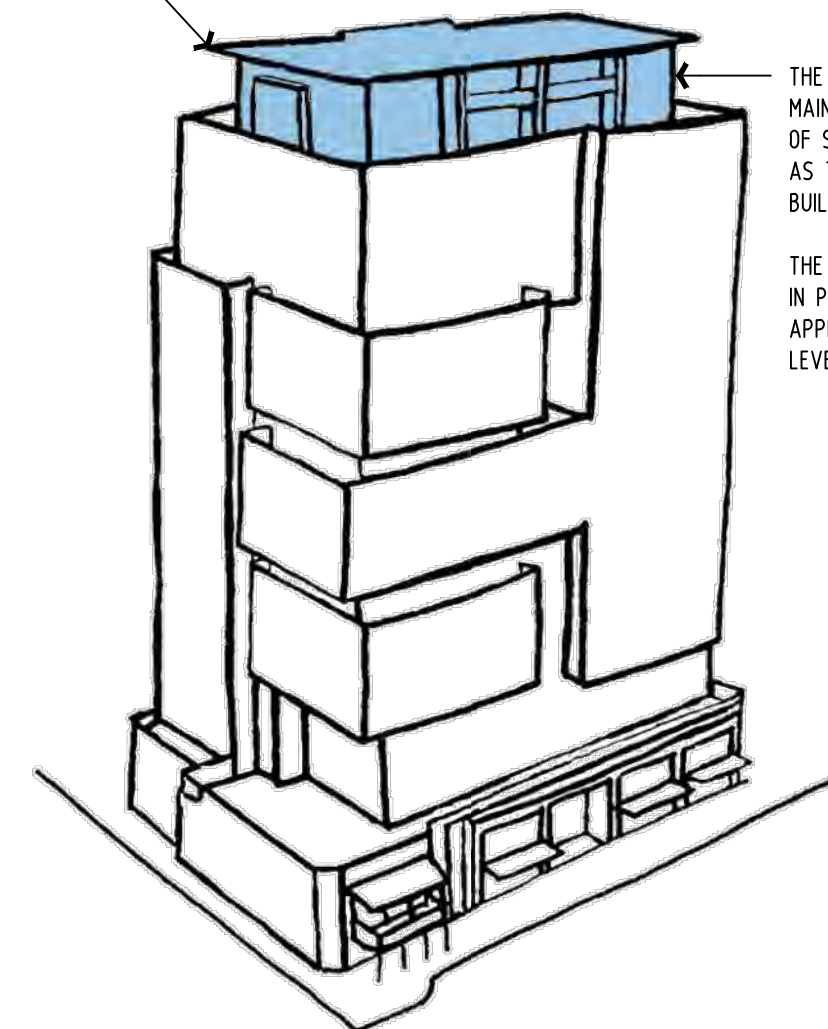
FACADE ARTICULATION ELEMENTS

LIGHT, SHADE & ENVIRONMENTALLY RESPONSIVE ELEMENTS INCORPORATED INTO ROOF SOLUTION

TWO DISTINCT PLANES FOR FACADE ELEMENTS

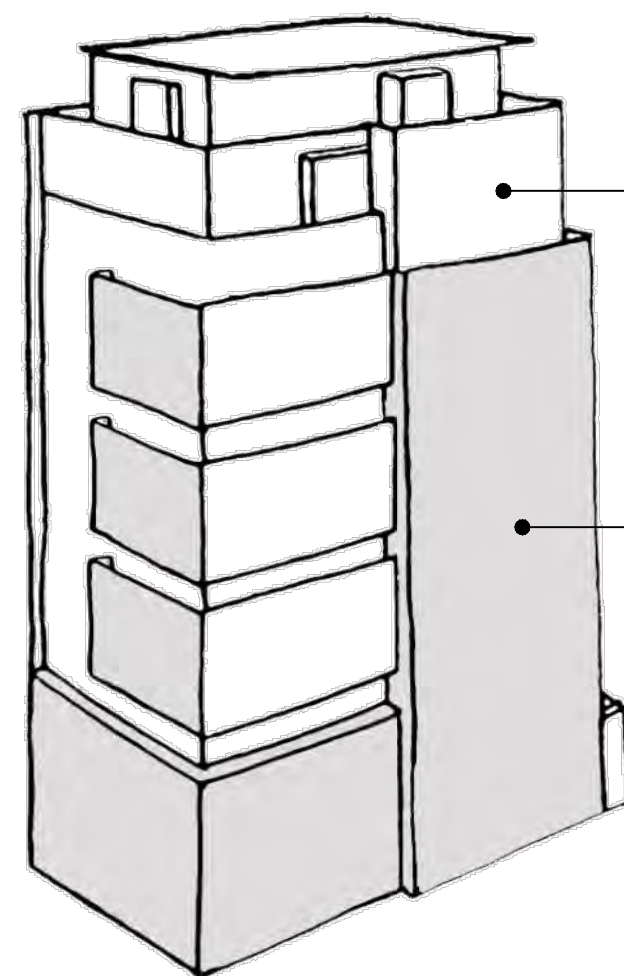
FACADE ELEMENT REINFORCES VERTICALITY & PROVIDES A CONNECTION TO THE ADJACENT BROKEN DOWN FORM

VERTICAL SPACING BREAKS DOWN THE OVERALL APPARENT WIDTH



PENTHOUSE ELEMENT

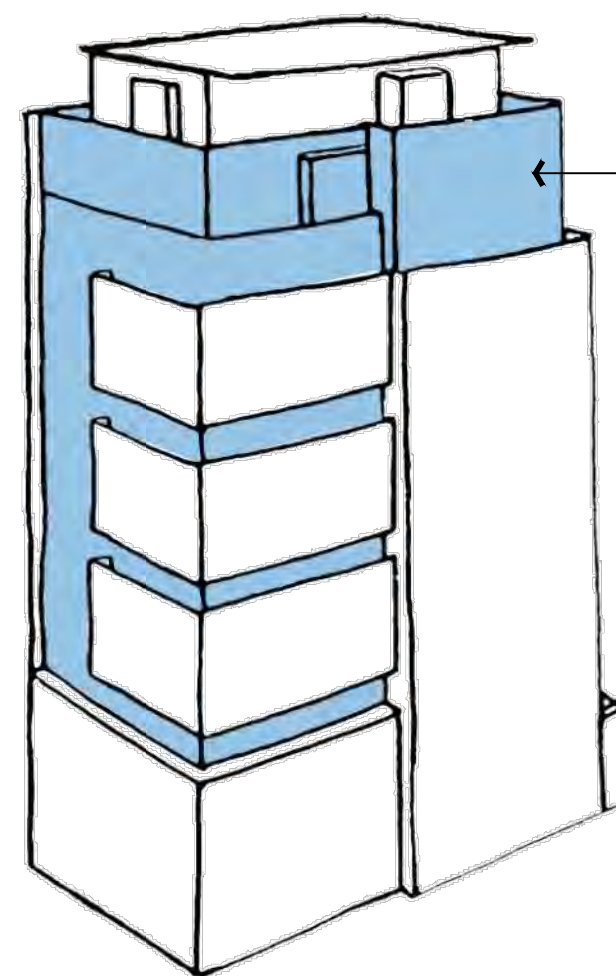
NORTH-EAST



MATERIAL RESPONSE TO BOUNDARY THRESHOLD

GLASS ELEMENTS

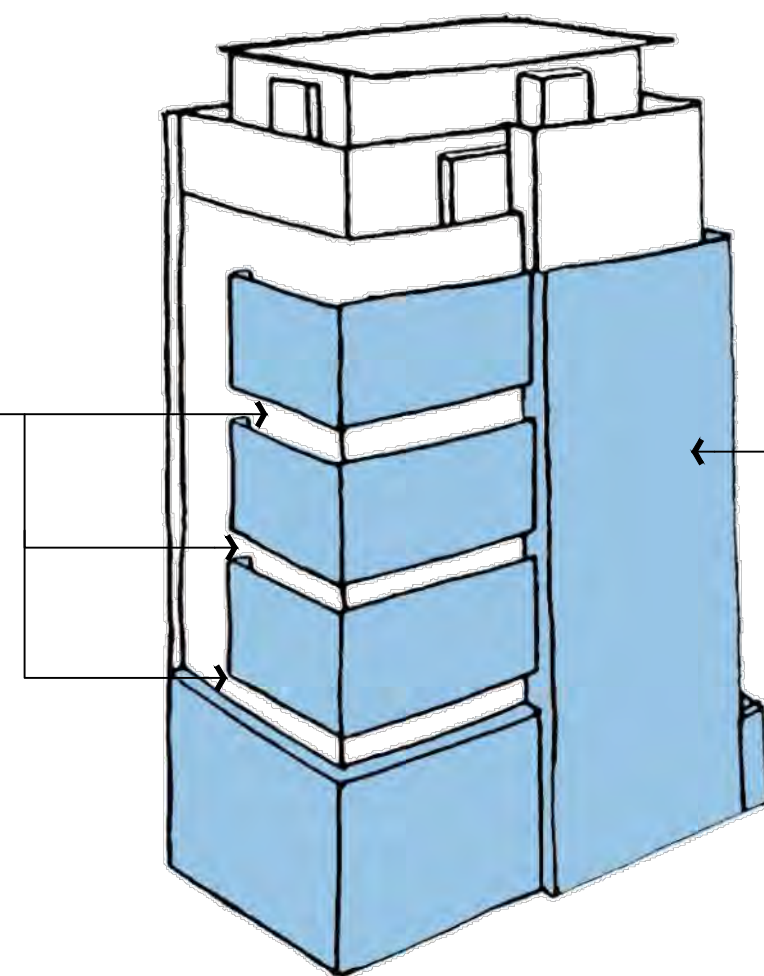
CONCRETE ELEMENTS



CORE ELEMENT

CORE ELEMENT SETBACK AIDS IN PROVIDING A DIMINISHED APPEARANCE FROM STREET LEVEL

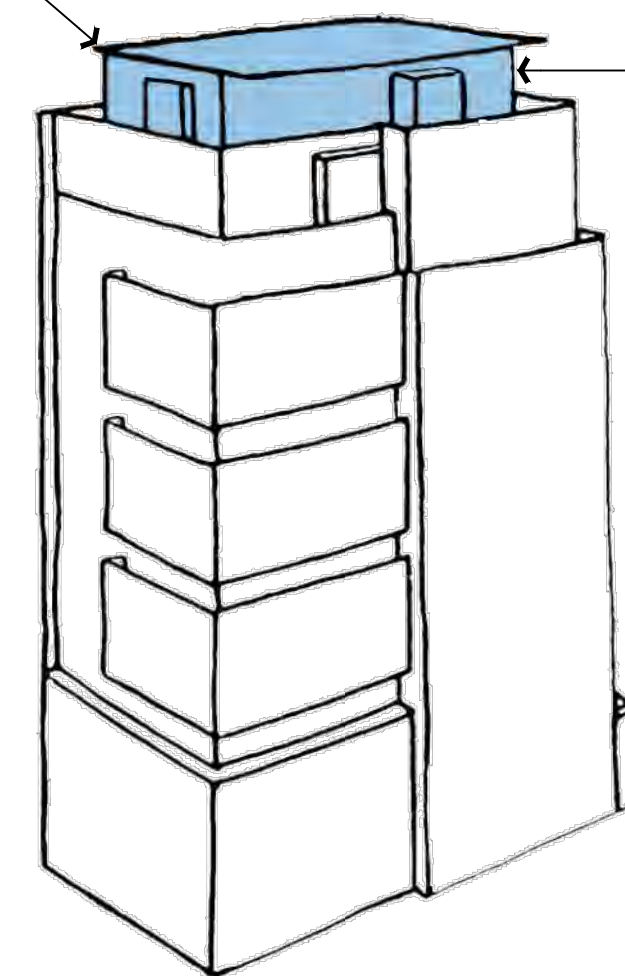
HORIZONTAL SPACING OF ARTICULATION ELEMENTS BREAKS UP THE FACADE AND PROVIDES RELIEF AS HEIGHT INCREASES



FACADE ARTICULATION ELEMENT

LIGHT, SHADE & ENVIRONMENTALLY RESPONSIVE ELEMENTS INCORPORATED INTO ROOF SOLUTION

FACADE ELEMENT REINFORCES VERTICALITY



PENTHOUSE ELEMENT

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interior design
project management
facility management
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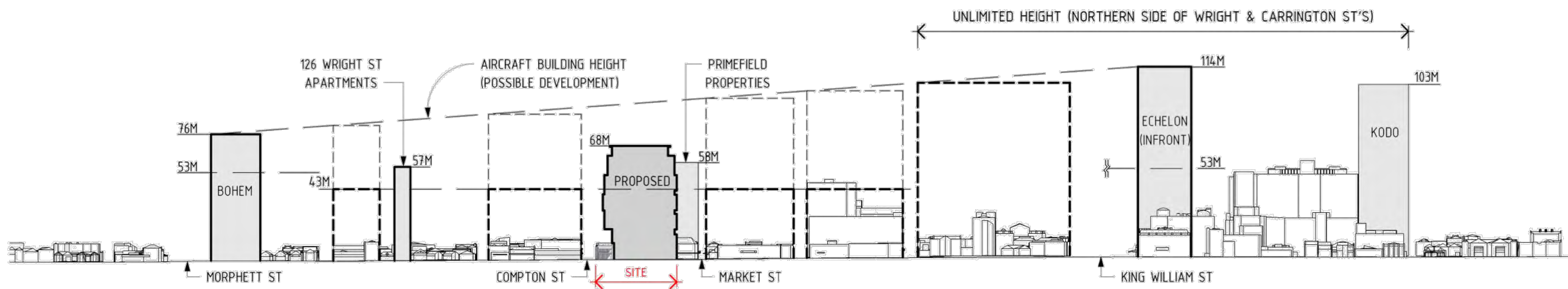
CONCEPT DIAGRAMS



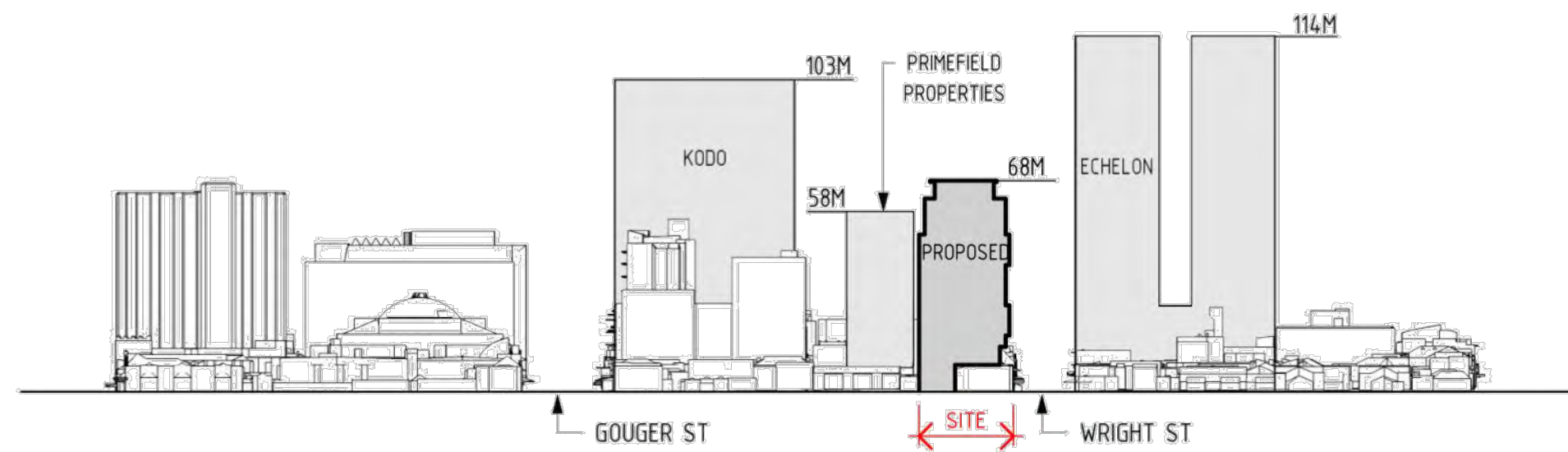
GROTE STREET / MORPHETT STREET - LOOKING SOUTH / EAST



WHITMORE SQUARE - LOOKING NORTH / EAST



WRIGHT / CARRINGTON STREET - STREETSCAPE ELEVATION



COMPTON STREET - STREETSCAPE ELEVATION



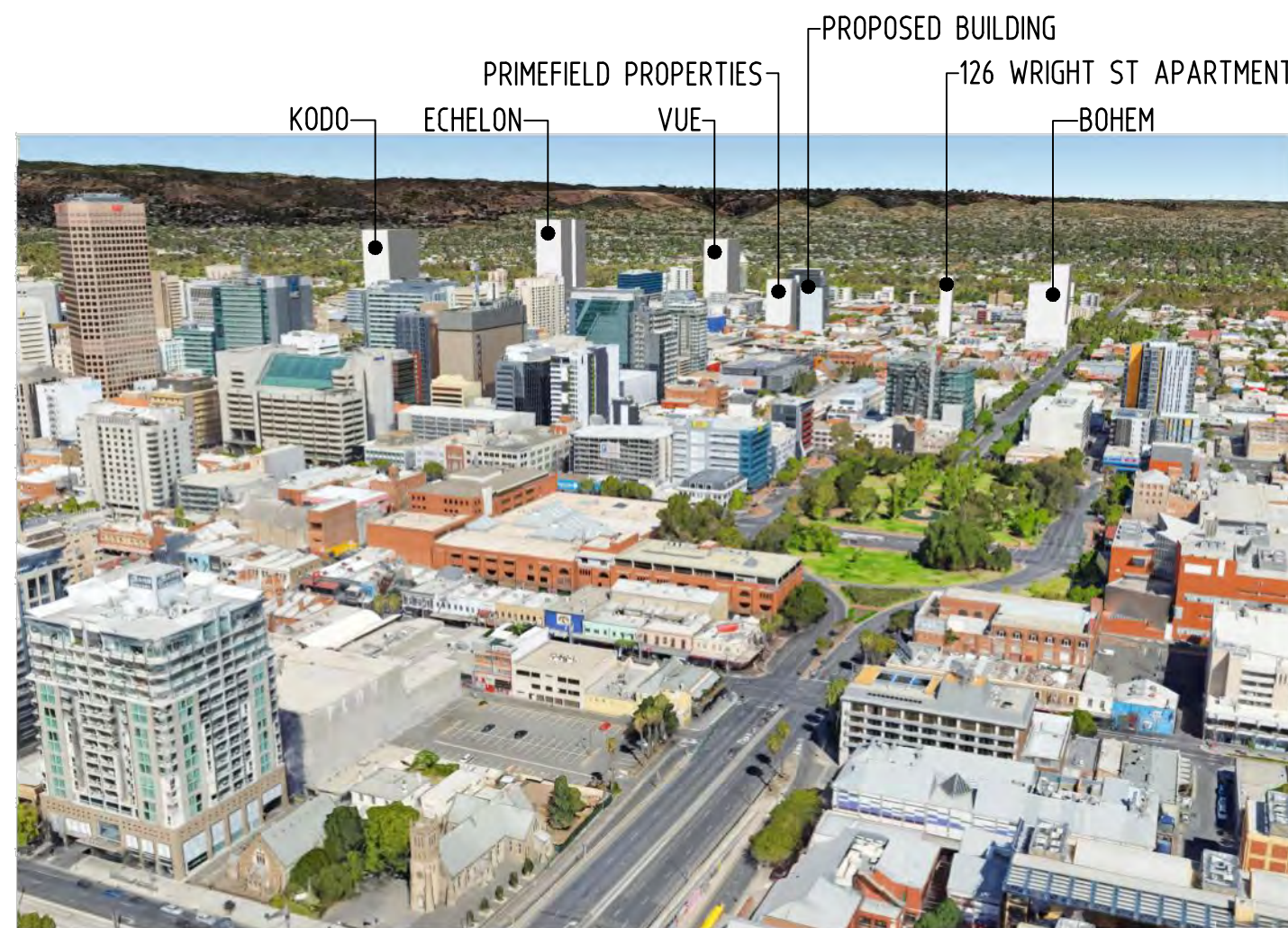
LIGHT SQUARE - LOOKING SOUTH / EAST



WAKEFIELD STREET - LOOKING SOUTH / WEST



SOUTH TERRACE - LOOKING NORTH / WEST



NORTH TERRACE - LOOKING SOUTH / EAST

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drawing
CITYSCAPE CONTEXT



COMPTON STREET (NW)



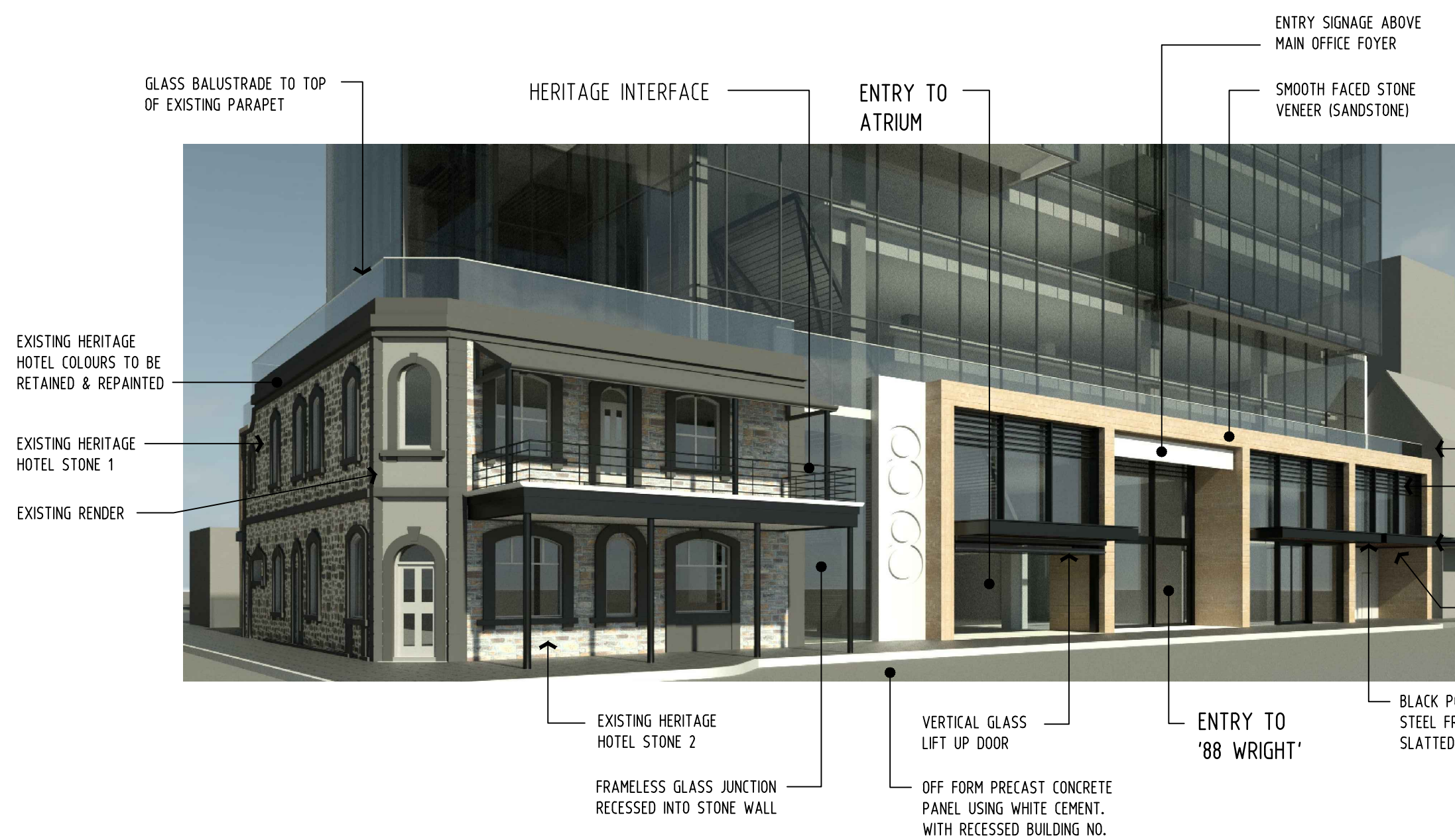
WRIGHT STREET (SW)



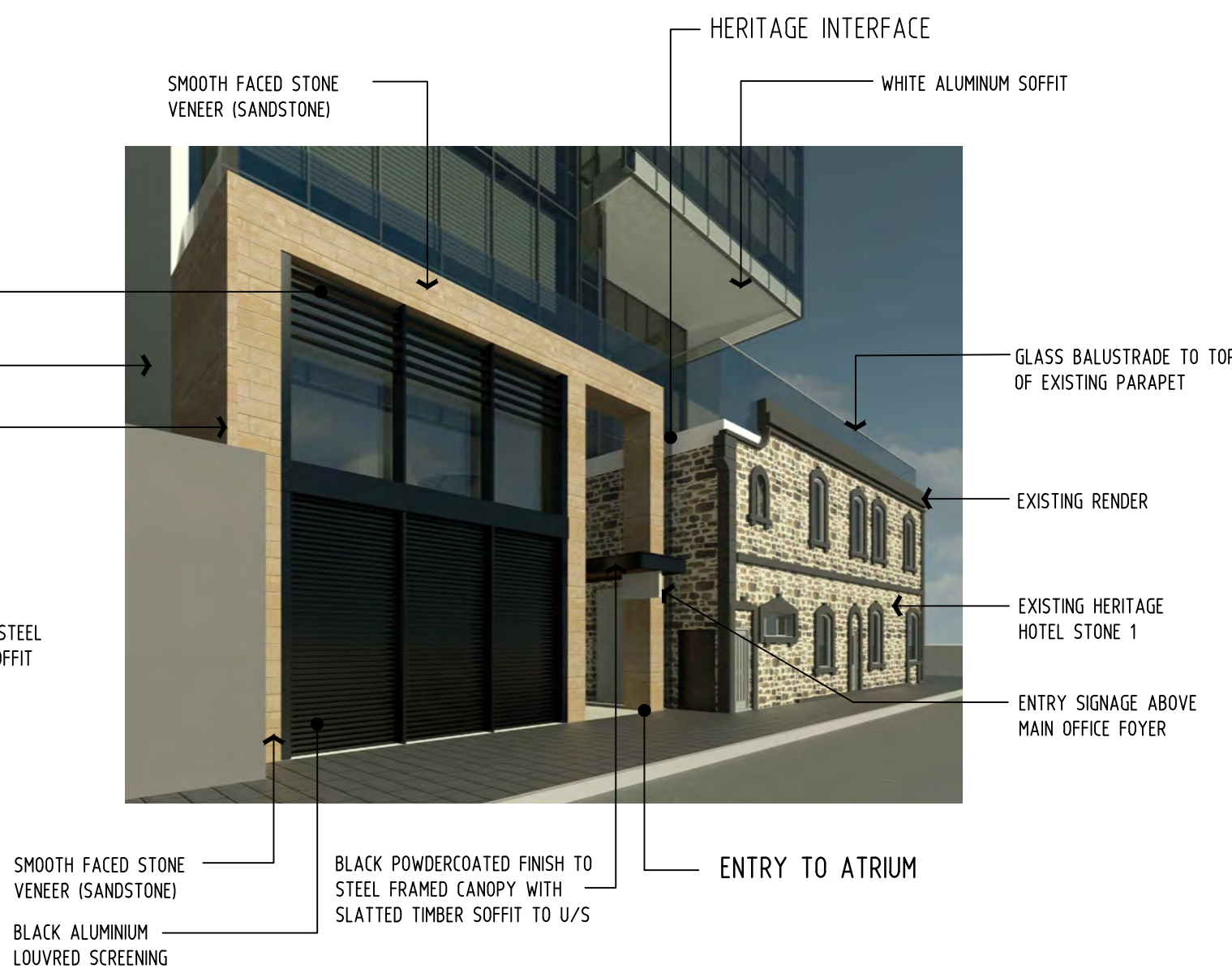
WRIGHT STREET (SE)



MARKET STREET (NE)

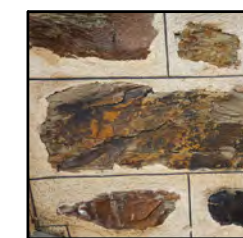


PODIUM WRIGHT STREET

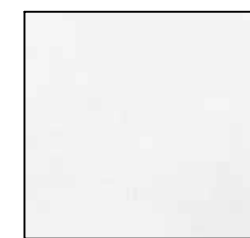


PODIUM COMPTON STREET

MATERIALS LEGEND



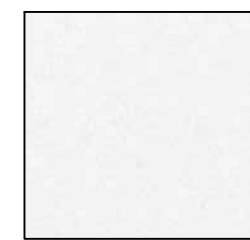
EXISTING HERITAGE STONE 1



OFF FORM PRECAST CONCRETE USING WHITE CEMENT



EXISTING HERITAGE STONE 2



ALUCOBOND ALUMINIUM SOFFIT (LIGHT GREY)



SMOOTH FACED FACADE STONE (SANDSTONE)



BLACK ALUMINIUM



TIMBER SLATTED SOFFIT

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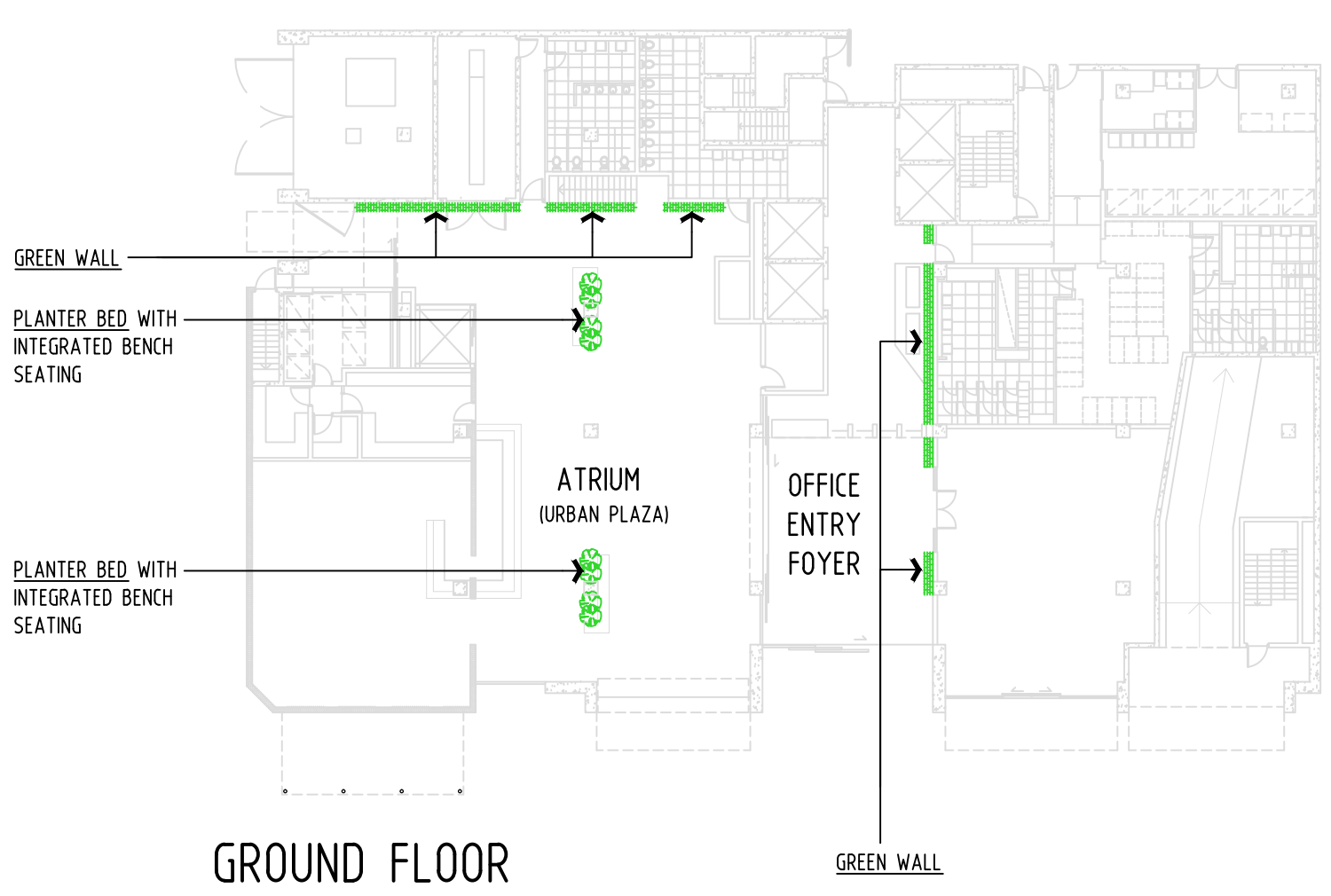
76 - 88 WRIGHT STREET ADELAIDE SA 5000

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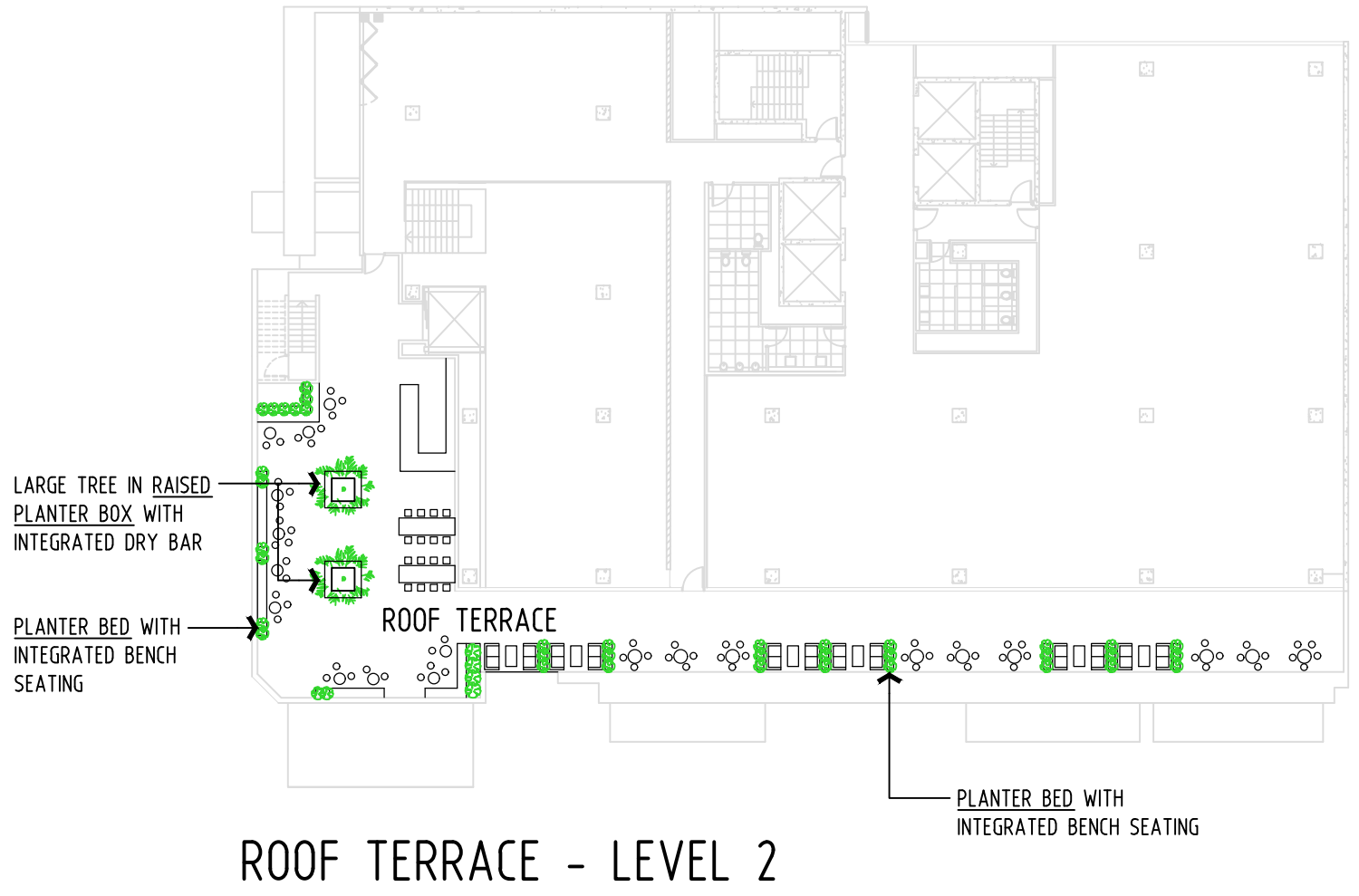
drawing

MATERIALS AND FINISHES

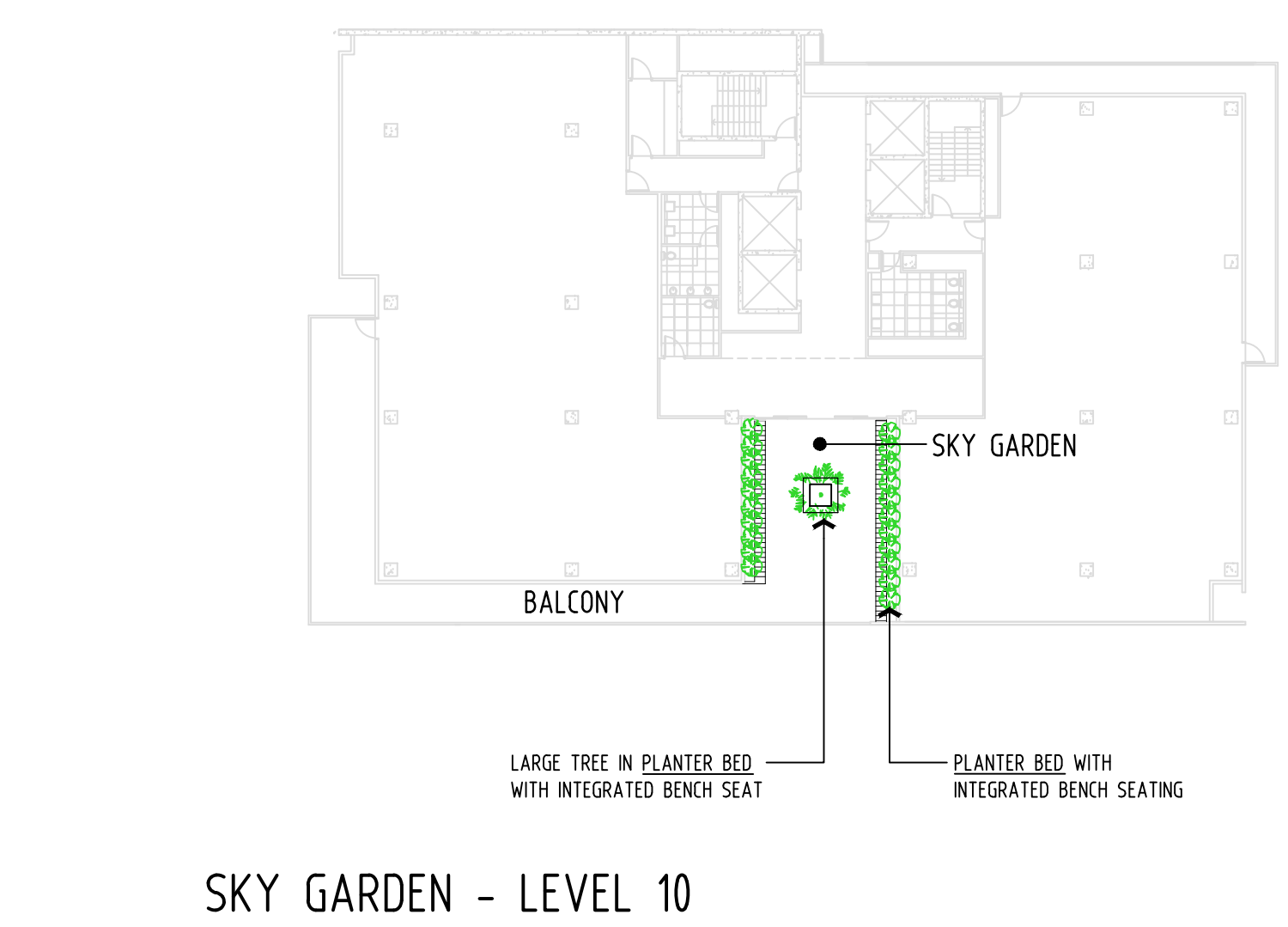
GREEN SPACE LOCATION DIAGRAMS & PERSPECTIVES



ATRIUM / URBAN PLAZA - GROUND FLOOR

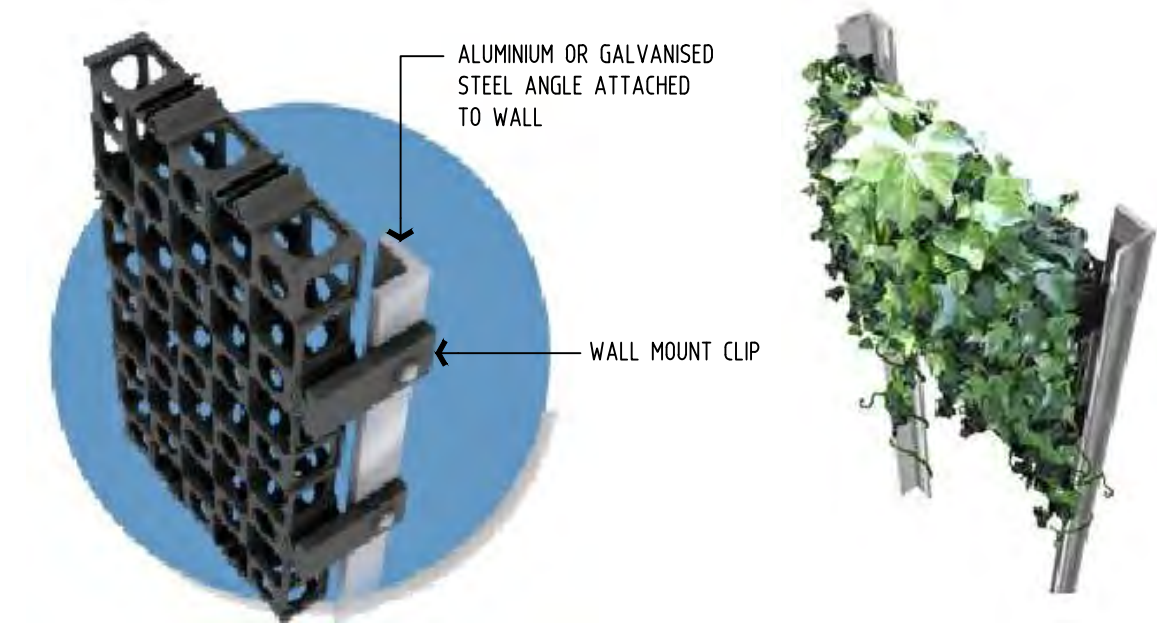


ROOF TERRACE - LEVEL 2

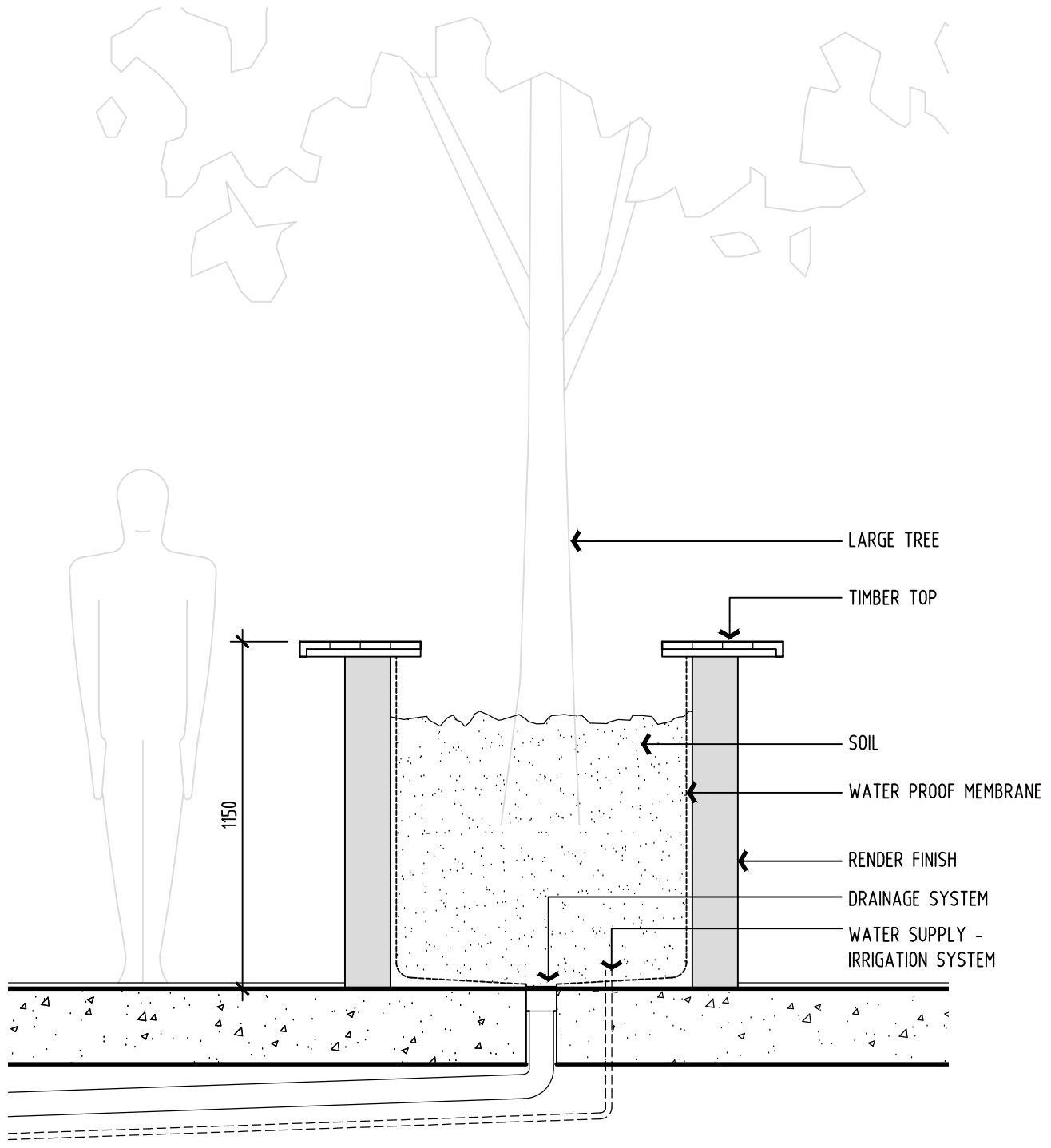


SKY GARDEN - LEVEL 10

PLANTING DETAILS

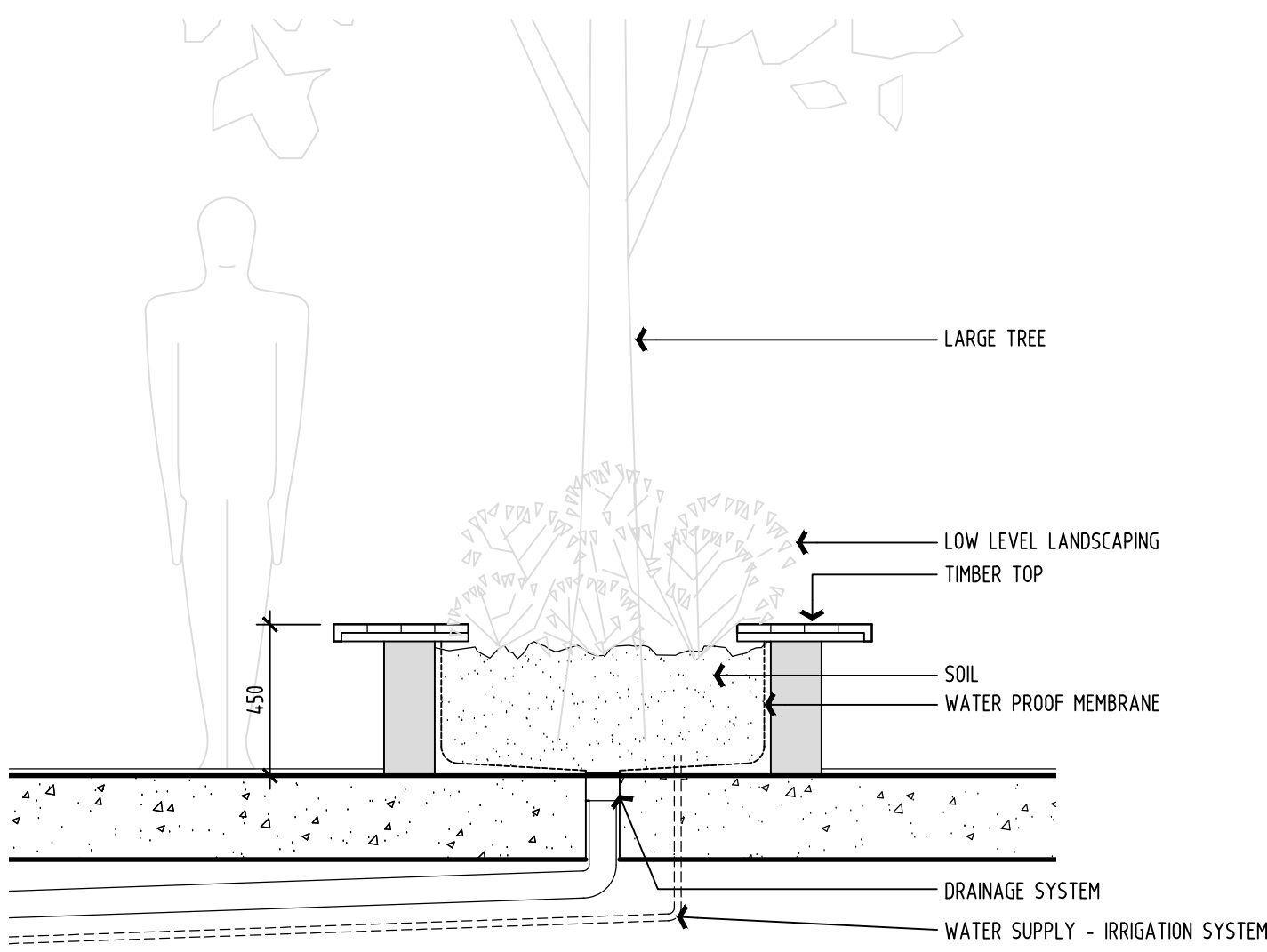


GREEN WALL



RAISED PLANTER BOX

LARGE TREE IN RAISED PLANTER BOX WITH INTEGRATED DRY BAR



PLANTER BED

PLANTER BED WITH INTEGRATED BENCH SEATING

LARGE TREE IN PLANTER BED WITH INTEGRATED BENCH SEAT

GLAZING SYSTEM



ENVIRONMENTALLY RESPONSIVE DOUBLE GLAZED FACADE SYSTEM

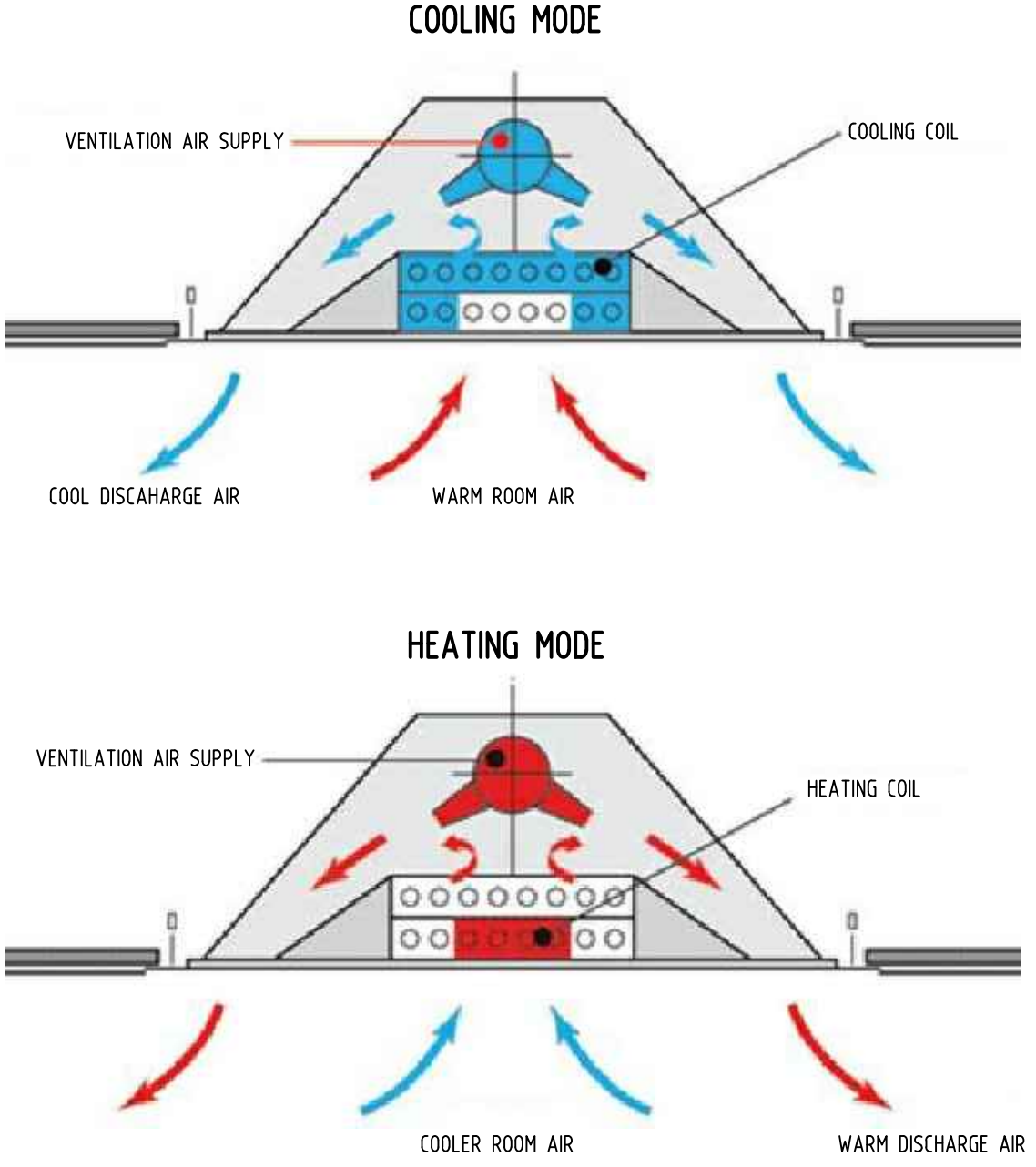
TO BE USED TO EAST, WEST AND PART OF THE NORTHERN FACADES:

THE DOUBLE LAYER OF GLASS HAS A SEALED CAVITY IN BETWEEN THE FIRST AND SECOND GLASS. THE CAVITY HOLDS A BUILT-IN AUTOMATED LOUVRE SYSTEM WHICH ADJUSTS TO EXTERNAL FACTORS AND OCCUPANT PREFERENCE, AND WITH THE COMBINED VERTICAL SHADING ELEMENTS IT CREATES SHADE FROM THE SUN AT ALL TIMES: DIRECT SUN WILL NEVER ENTER THE BUILDING. FINALLY, THE CAVITY IS PRESSURIZED TO ENSURE THAT DUST OR OTHER PARTICLES DOESN'T ENTER THE BUILDING, CREATING A HEALTHY AND CLEAN ENVIRONMENT FOR ITS OCCUPANTS. BEHIND THE CAVITY, THE DOUBLE GLASS IS TO INCREASE THE THERMAL PROPERTIES TO PROVIDE A COMFORTABLE THERMAL PROVISION THROUGHOUT THE BUILDING. THE RESULT IS A BUILDING THAT ENCAPSULATES THE OCCUPANT, BUT ALSO ENHANCES THE INTERIOR AND EXTERIOR ENVIRONMENTS.

THIS GLAZING SYSTEM ACTS AS AN ENVIRONMENTALLY RESPONSIBLE SKIN.

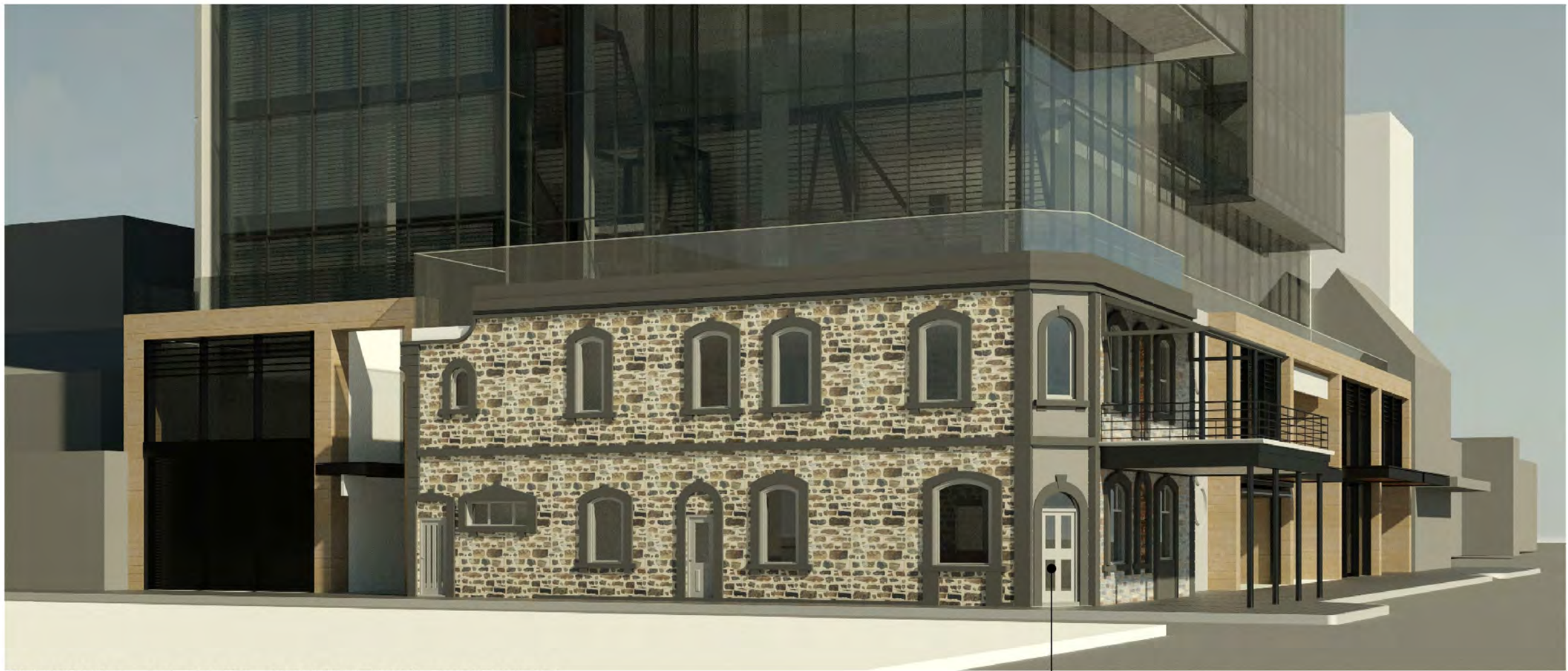
ACTIVE CHILLED BEAM SYSTEM

IT IS PROPOSED TO UTILISE ACTIVE CHILLED BEAM SYSTEMS TO SERVE A MAJORITY OF THE BUILDING TO MAXIMISE THE NET LETTABLE AREA ON EACH FLOOR. THE ACTIVE CHILLED BEAM SYSTEM WILL UTILISE INDIVIDUAL HOUSINGS RECESSED INTO THE CEILING AND CONSISTING OF AIR DIFFUSION, HEATING AND COOLING COILS. THE HOUSINGS WILL BE ARRANGED ACROSS EACH FLOOR PLATE TO SUIT THE THERMAL ZONING AND OCCUPANT LOAD OF THE FLOOR. A COMBINATION OF TWO PIPE AND FOUR PIPE HOUSINGS WILL BE USED TO MATCH THE VARYING LOADS OF THE FLOOR THUS ALLOWING FOR TIGHTER CONTROL AND BETTER OCCUPANT COMFORT. THE ARRANGEMENT OF FOUR PIPE HOUSING ALLOWS FOR ADJACENT SPACES TO BE HEATED OR COOLED SIMULTANEOUSLY WHICH ADDRESSES THE VARIABLE LOAD PROFILE OF THE FLOOR AND SEASONAL VARIANCES. A PRIMARY AIR STREAM OF OUTSIDE AIR WILL BE TAKEN FROM THE MAIN OUTSIDE AIR RISER (RUNNING THROUGH THE CORE OF THE BUILDING) AND DUCTED TO EACH OF THE HOUSINGS. THE PRIMARY AIR STREAM PASSES THROUGH NOZZLES AND INDUCES AIR FROM THE SPACE UP THROUGH THE COOLING / HEATING COIL. THE MIXING OF AIR STREAMS MINIMISES ENERGY CONSUMPTION AND ALSO ENSURES ADEQUATE AIR MOVEMENT WITHIN THE SPACE SO THE AIR DIFFUSION PERFORMANCE INDEX (ADPI) IS MAXIMISED AT ALL TIMES. MAINTAINING A GOOD ADPI IS IMPORTANT IN MAINTAINING GOOD OCCUPANT COMFORT. THE BELOW DIAGRAMS ILLUSTRATE A SECTION THROUGH A TYPICAL FOUR PIPE ACTIVE CHILLED BEAM IN COOLING AND HEATING MODES.





PODIUM ALONG WRIGHT STREET

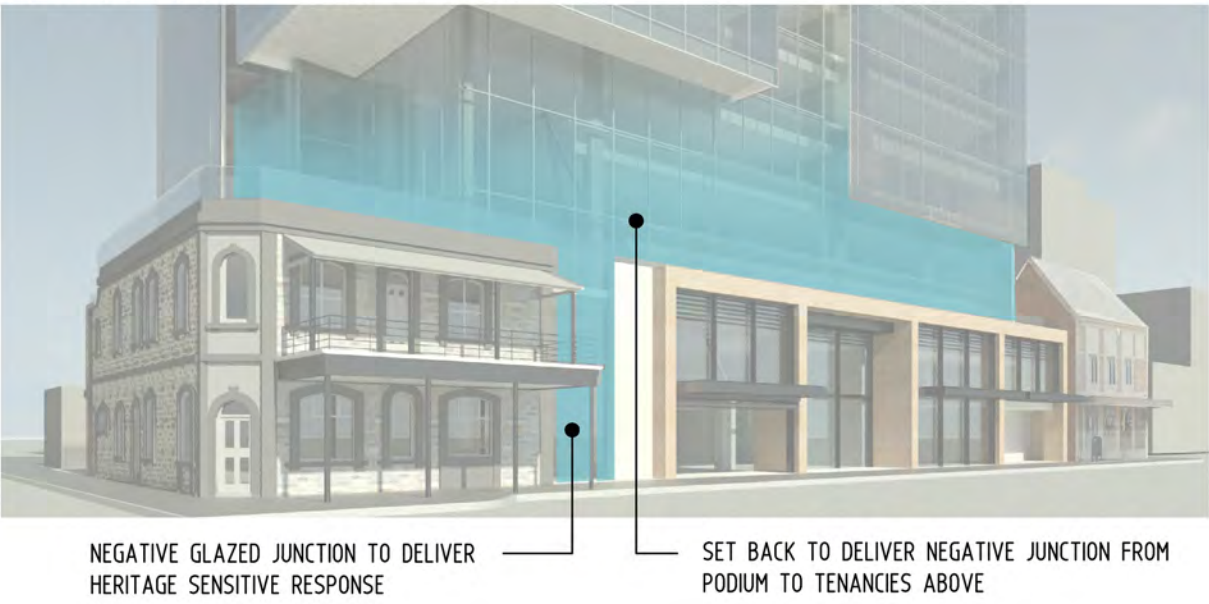


PODIUM ALONG COMPTON STREET

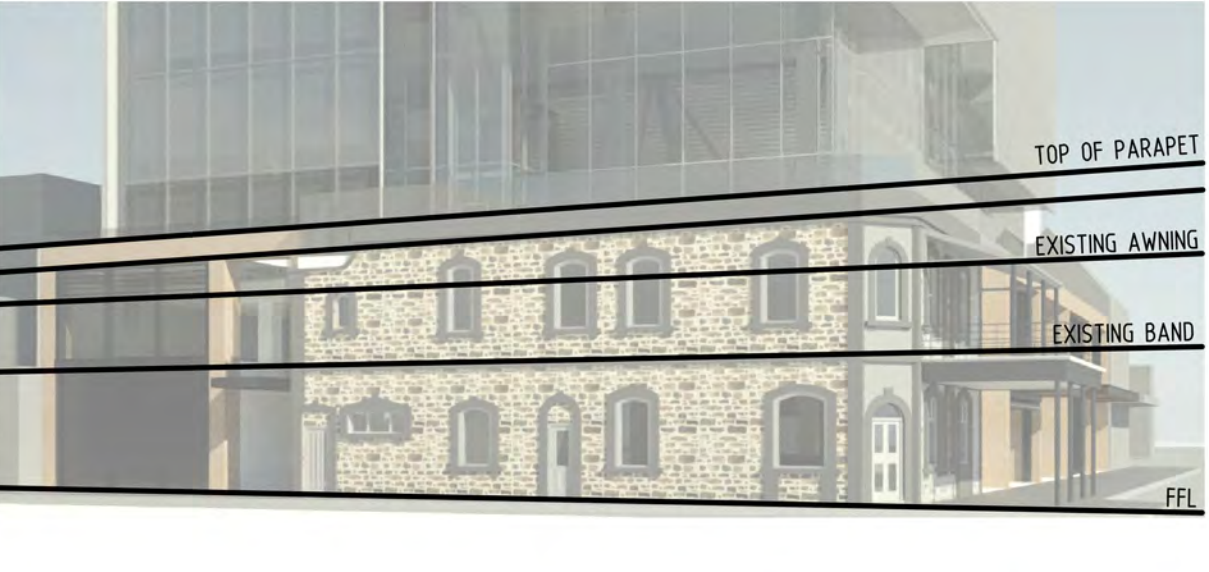
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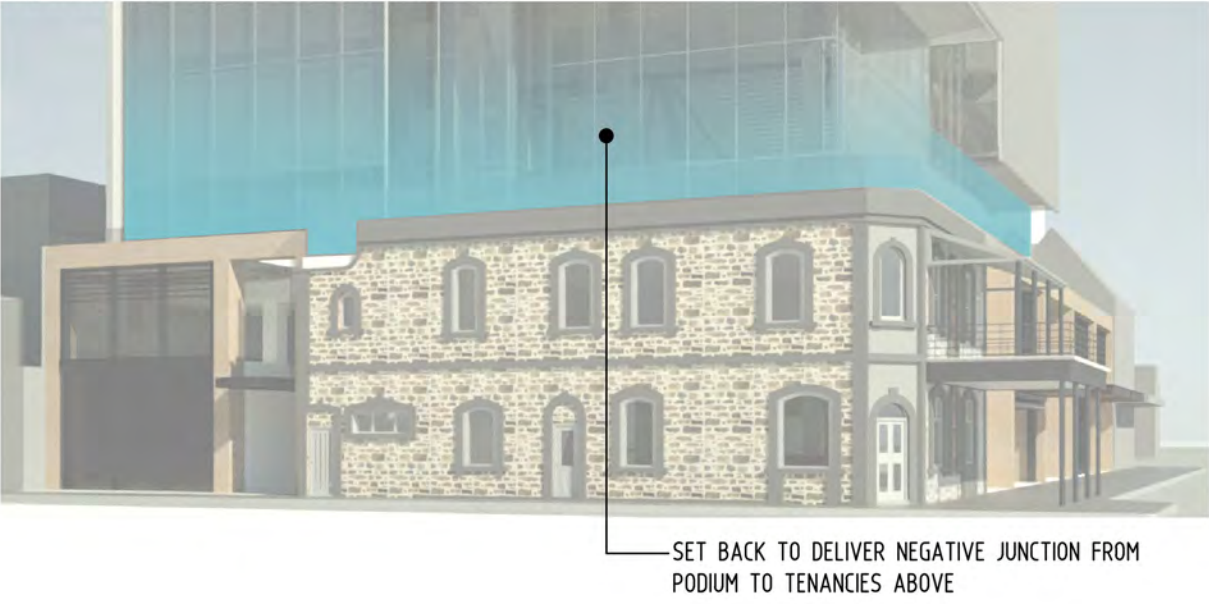
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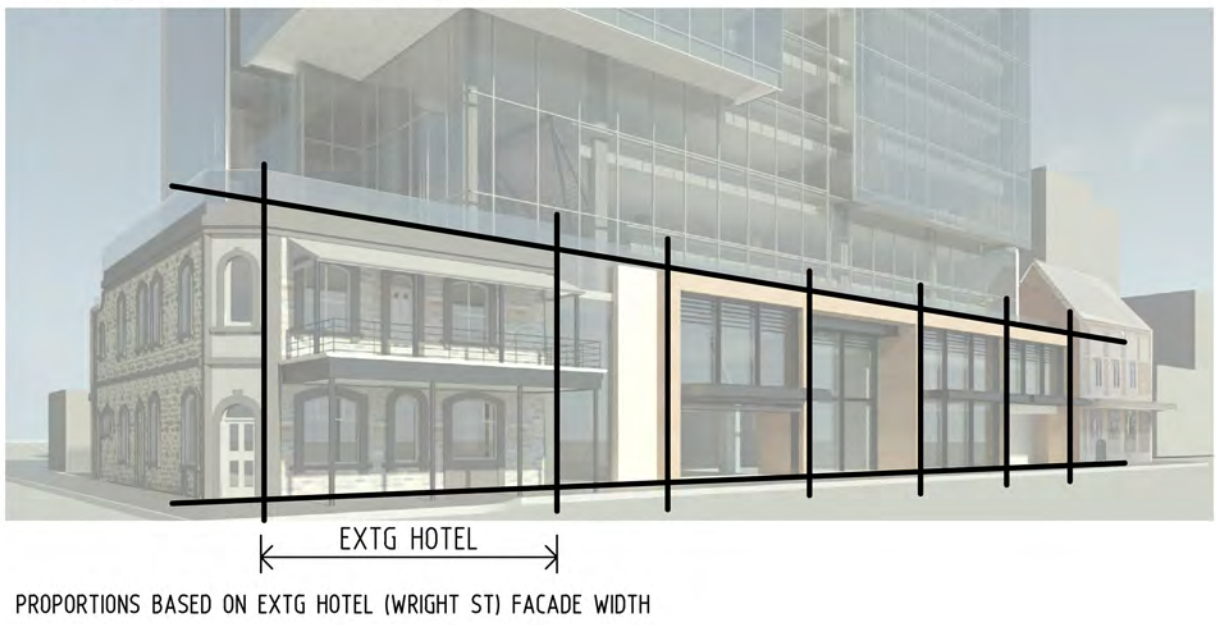
HEIGHTS



NEGATIVE JUNCTION



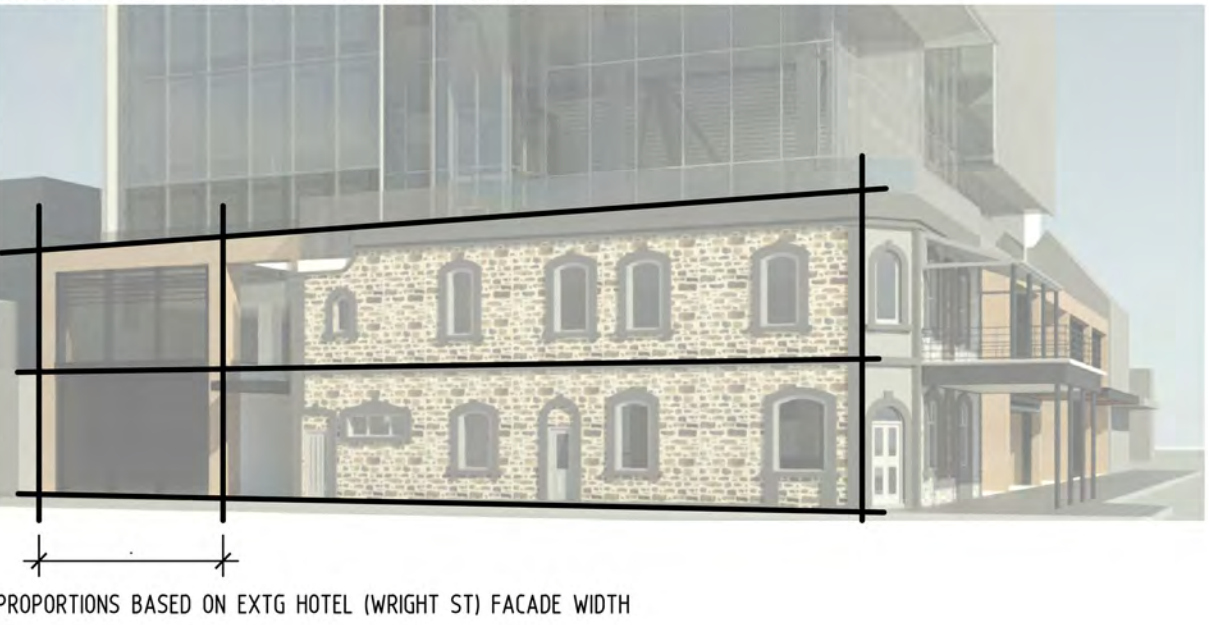
SCALE PROPORTIONS



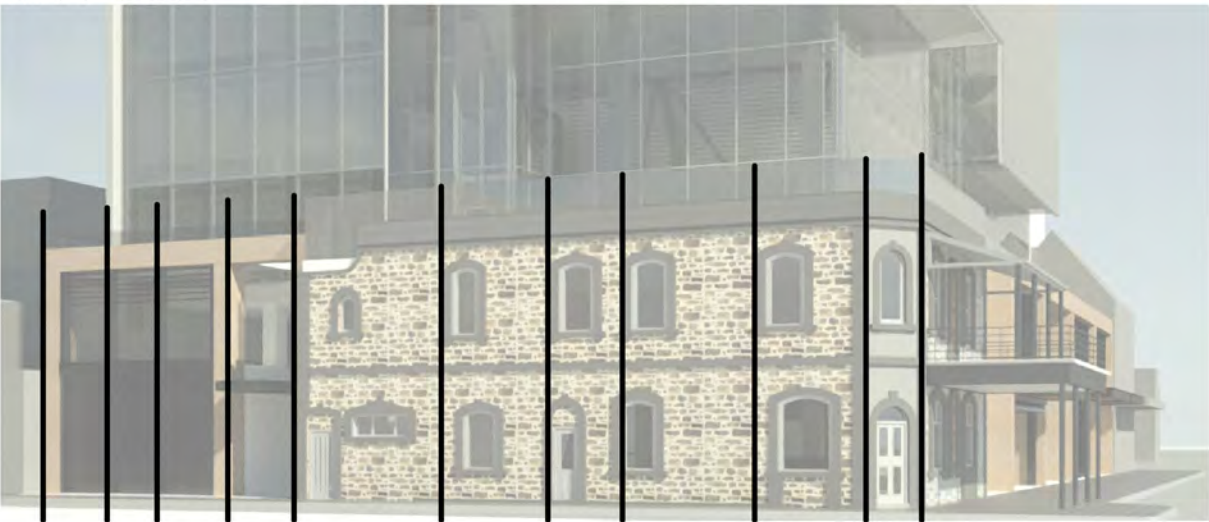
RHYTHM



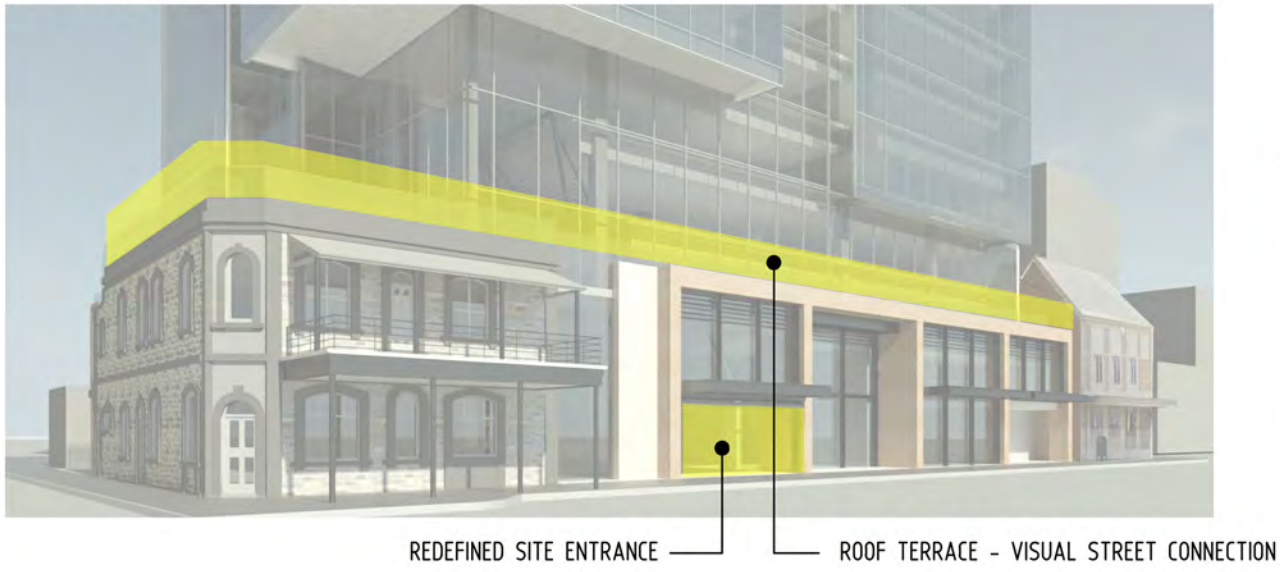
SCALE PROPORTIONS



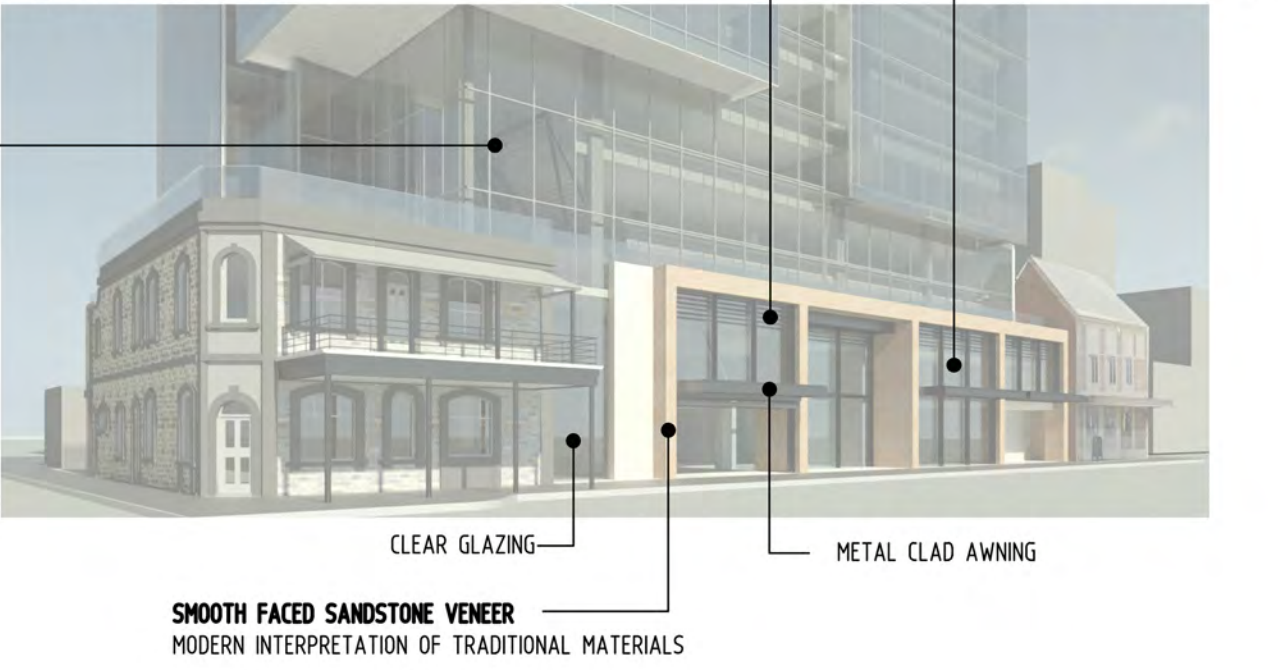
RHYTHM



STREETSCAPE ACTIVATION



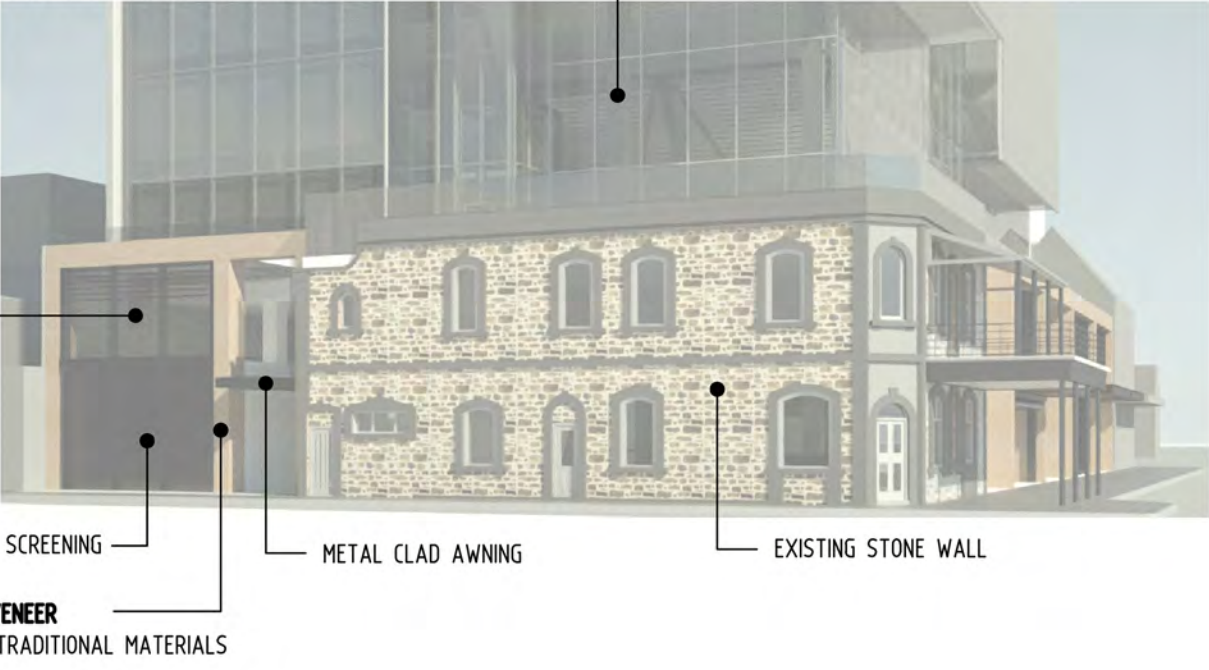
MATERIALITY



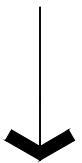
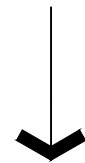
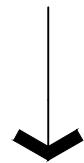
STREETSCAPE ACTIVATION



MATERIALITY



CURRENT



PROPOSED



WRIGHT STREET - LOOKING EAST



WRIGHT STREET - LOOKING WEST



WRIGHT STREET - PODIUM ENTRY



WRIGHT STREET - LOOKING NORTH



■ architecture
■ interior design
■ project management
■ facility management
Mohyla Architects Interior Designers
ABN: 34 899 591 341

ADELAIDE
27 Regent Street (North)
ADELAIDE S.A. 5000
Tel: 08 - 8232 0140
Fax: 08 - 8232 1137
Email: architects@mohyla.com.au
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NO.	DATE	DETAILS
-	15/09/17	ISSUED TO SCAP

drawing number
W076 SD16
scale NTS
date SEPT 17

88 WRIGHT
76 - 88 WRIGHT STREET ADELAIDE SA 5000
WRIGHT DEVELOPMENTS SA PTY LTD

drawing
STREETSCAPE



ATRIUM



ATRIUM



COMPTON STREET - LOOKING SOUTH



WRIGHT STREET - LOOKING WEST



C1 - COMPTON STREET ENTRY



W1 - WRIGHT STREET ATRIUM ENTRY



W2 - '88 WRIGHT' MAIN ENTRY



W3 - CARPARK ENTRY



COMPTON STREET (NW)



WRIGHT STREET (SW)



WRIGHT STREET (SE)



MARKET STREET (NE)



WRIGHT STREET



ROOF TERRACE (LEVEL 2)



SKY GARDEN (LEVEL 10)



ATRIUM



ATRIUM



■ architecture
 ■ interior design
 ■ project management
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NO.	DATE	DETAILS
-	15/09/17	ISSUED TO SCAP

drawing number
 W076 SD18
 scale NTS
 date SEPT 17

88 WRIGHT
 76 - 88 WRIGHT STREET ADELAIDE SA 5000
 WRIGHT DEVELOPMENTS SA PTY LTD

drawing
PERSPECTIVES



Subject land – view from south west



Subject land – view from south east



City of Adelaide stormwater infrastructure adjacent subject land



Subject land – view from south east



Subject land – view from south



Subject land (car park portion) and private laneway beyond corrugated fence



Wright Street – view to east from subject land



Wright Street – view to west from subject land



Youth Court Facility at 75 Wright Street (opposite subject land)



Compton Street – west of subject land



Market Street – east of subject land



Private Laneway off Market Street (proposed waste collection point)



Russell Street – opposite subject land



Norman Street – east of subject land, south side of Wright Street



Wright Street – view from east of subject land



Cogle Street – east of subject land, north side of Wright Street



Car Park facility at 24-32 Coglein Street



Stamford Court – east of subject land, south side of Wright Street

DEVELOPMENT APPLICATION FORM

COUNCIL: ADELAIDE CITY COUNCIL

APPLICANT: WRIGHT DEVELOPMENTS SA PTY LTD

Postal Address: C/- MOHYLA ARCHITECTS
27 REGENT STREET NORTH, ADELAIDE SA 5000

OWNER: WRIGHT DEVELOPMENTS SA PTY LTD

Postal Address: C/- SOTHERTONS
42 HURTLE SQUARE, ADELAIDE SA 5000

BUILDER: TBA

Postal Address: _____

Licence No: _____

CONTACT PERSON FOR FURTHER INFORMATION:

Name: GREG VINCENT - MASTERPLAN SA PTY LTD

Telephone: 8193 5600

Email: _____

Mobile: 0413 832 60

EXISTING USE:

HOTEL AND PRIVATE CAR PARK

FOR OFFICE USE

Development No: _____

Previous Development No: _____

Assessment No: _____

☐ **Complying**

☐ **Non-complying**

☐ **Notification Cat 2**

☐ **Notification Cat 3**

☐ **Referrals/Concurrence**

☐ **DA Commission**

Application forwarded to DA

Commission/Council on: _____

Decision: _____

Type: _____

Date: _____

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

DESCRIPTION OF PROPOSED DEVELOPMENT:

CONSTRUCTION OF AN 18-STOREY BUILDING WITH BASEMENT CAR PARKING WHICH ACCOMMODATES: THE RETENTION AND REUSE OF THE ORIGINAL FABRIC OF THE FORMER HOTEL WRIGHT STREET AS A HOTEL AT GROUND AND FIRST FLOORS WITH A ROOF TOP TERRACE; AN ATRIUM PROVIDING A PEDESTRIAN LINK BETWEEN COMPTON STREET AND WRIGHT STREET AND BEING LICENSED AS PART OF THE HOTEL USE; A RETAIL TENANCY AT GROUND FLOOR; FIFTEEN (15) LEVELS OF OFFICES; AND TWO (2), TWO STOREY PENTHOUSES OCCUPYING LEVELS 16 AND 17.

LOCATION OF PROPOSED DEVELOPMENT:

House No: 76-88 Lot No: _____ Street: WRIGHT STREET Town/Suburb: ADELAIDE SA

Section No (full/part): LOT 17 IN FP 104104 Hundred: ADELAIDE Volume: 5141 Folio: 97

Section No (full/part): LOT 18 IN FP 104105 Hundred: ADELAIDE Volume: 5141 Folio: 93

Section No (full/part): LOT 22 IN FP 104109 Hundred: ADELAIDE Volume: 5141 Folio: 909

Section No (full/part): LOT 3 IN DP 48354 Hundred: ADELAIDE Volume: 6019 Folio: 847

Section No (full/part): LOT 4 IN DP 48354 Hundred: ADELAIDE Volume: 5478 Folio: 388

BUILDING RULES CLASSIFICATION SOUGHT:

If Class 5, 6, 7, 8 or 9 classification is sought, state the proposed number of employees:

Female: _____ Male: _____

DOES EITHER SCHEDULE 21 OR 22 OF THE DEVELOPMENT REGULATIONS 2008 APPLY?

YES: ☐ NO: ☒

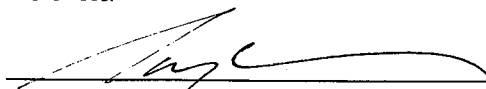
HAS THE CONSTRUCTION INDUSTRY TRAINING FUND ACT 1993 LEVY BEEN PAID?

YES: ☐ NO: ☒

DEVELOPMENT COST (Do not include any fit-out costs): \$57 million

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

SIGNATURE:



Dated: 15 SEPTEMBER 2017

FOR AND ON BEHALF OF WRIGHT DEVELOPMENTS SA PTY LTD

DEVELOPMENT REGULATIONS 2008

Form of Declaration

(Schedule 5, Clause 2A)

To: **STATE COMMISSION ASSESSMENT PANEL**

From: **WRIGHT DEVELOPMENTS SA PTY LTD**

Date of Application: **15 SEPTEMBER 2017**

Location of Proposed Development:

House Number:	76-88	Lot Numbers:	17, 18, 22, 3 and 4
Street:	WRIGHT STREET	Town/Suburb:	ADELAIDE SA 5000
Section No (full/part):		Hundred:	ADELAIDE
Volume:	5141	Folio:	97
Volume:	5141	Folio:	93
Volume:	5141	Folio:	909
Volume:	6019	Folio:	847
Volume:	5478	Folio:	388

Nature of Proposed Development:

CONSTRUCTION OF AN 18-STOREY BUILDING WITH BASEMENT CAR PARKING WHICH ACCOMMODATES:

- **THE RETENTION AND REUSE OF THE ORIGINAL FABRIC OF THE FORMER HOTEL WRIGHT STREET AS A HOTEL AT GROUND AND FIRST FLOORS WITH A ROOF TOP TERRACE;**
- **AN ATRIUM PROVIDING A PEDESTRIAN LINK BETWEEN COMPTON STREET AND WRIGHT STREET AND BEING LICENSED AS PART OF THE HOTEL USE;**
- **A RETAIL TENANCY AT GROUND FLOOR;**
- **FIFTEEN (15) LEVELS OF OFFICES; AND**
- **TWO (2), TWO STOREY PENTHOUSES OCCUPYING LEVELS 16 AND 17.**

I, Greg Vincent being a person acting on behalf of the applicant for the development described above, declare that the proposed development will involve the construction of a building which would, if constructed in accordance with the plans submitted, not be contrary to the regulations prescribed for the purposes of Section 86 of the *Electricity Act 1996*. I make this declaration under Clause 2A(1) of Schedule 5 of the *Development Regulations 2008*.

15 SEPTEMBER 2017

Date


Signed

Note 1

This declaration is only relevant to those development applications seeking authorisation for a form of development that involves the construction of a building (there is a definition of 'building' contained in Section 4(1) of the *Development Act 1993*), other than where the development is limited to:

- an internal alteration of a building; or
- an alteration to the walls of a building but not so as to alter the shape of the building.

Note 2

The requirements of Section 86 of the *Electricity Act 1996* do not apply in relation to:

- a fence that is less than 2.0 m in height; or
- a service line installed specifically to supply electricity to the building or structure by the operator of the transmission or distribution network from which the electricity is being supplied.

Note 3

Section 86 of the *Electricity Act 1996* refers to the erection of buildings in proximity to powerlines. The regulations under this Act prescribe minimum safe clearance distances that must be complied with.

Note 4

The majority of applications will not have any powerline issues, as normal residential setbacks often cause the building to comply with the prescribed powerline clearance distances. Buildings/renovations located far away from powerlines, for example towards the back of properties, will usually comply.

Particular care needs to be taken where high voltage powerlines exist; where the development:

- is on a major road;
- commercial/industrial in nature; or
- built to the property boundary.

Note 5

Information brochures 'Powerline Clearance Guide' and 'Building Safely Near Powerlines' have been prepared by the Technical Regulator to assist applicants and other interested persons. Copies of these brochures are available from Council and the Office of the Technical Regulator. The brochures and other relevant information can also be found at www.technicalregulator.sa.gov.au

Note 6

In cases where applicants have obtained a written approval from the Technical Regulator to build the development specified above in its current form within the prescribed clearance distances, the applicant is able to sign the form.



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 6019 Folio 847

Parent Title(s) CT 5478/387
Dealing(s) SC 11038601
Creating Title
Title Issued 01/10/2008
Edition 5
Edition Issued 04/01/2016

REAL PROPERTY ACT, 1886



Estate Type

FEE SIMPLE

Registered Proprietor

WRIGHT DEVELOPMENTS SA PTY. LTD. (ACN: 604 462 286)
OF CARE SOTHERTONS 42 HURTLE SQUARE ADELAIDE SA 5000

Description of Land

ALLOTMENT 3 DEPOSITED PLAN 48354
IN THE AREA NAMED ADELAIDE
HUNDRED OF ADELAIDE

Easements

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED B

Schedule of Dealings

NIL

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL

Notations on Plan



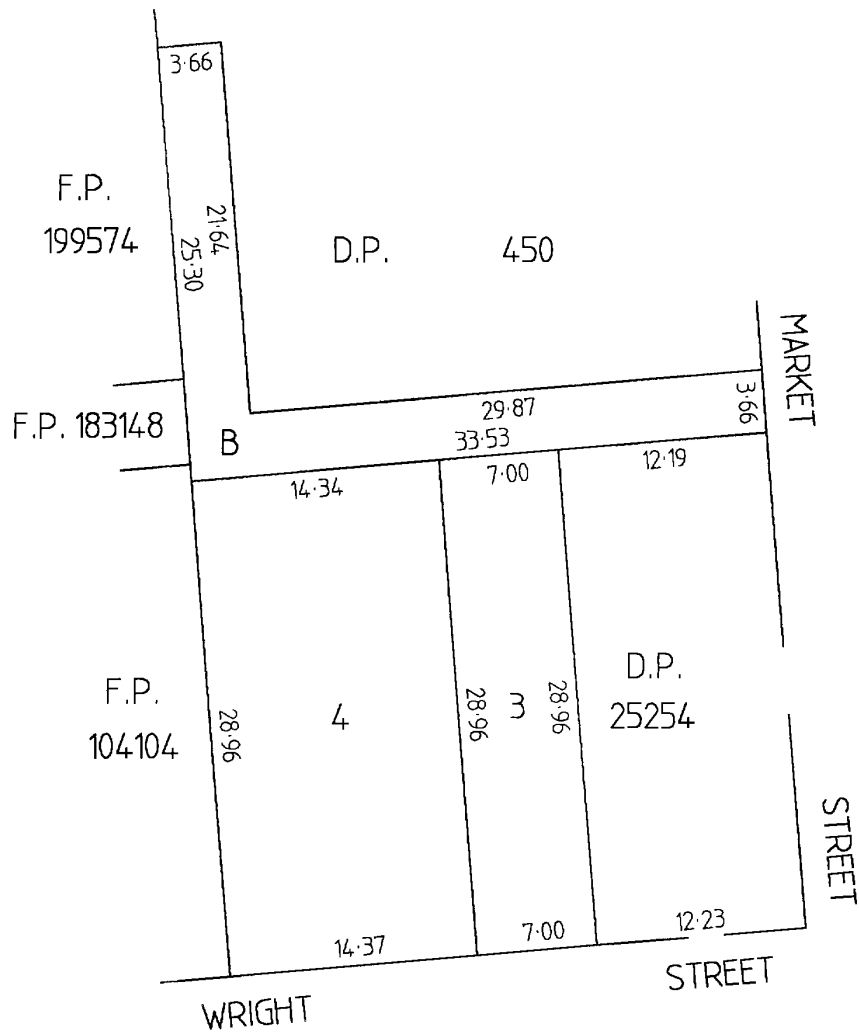
NIL

Registrar-General's Notes

NIL

Administrative Interests

NIL



0 4 8 12 16 Metres



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 5478 Folio 388

Parent Title(s) CT 5395/321
Dealing(s) RTU 8345706
Creating Title
Title Issued 02/12/1997
Edition 5
Edition Issued 04/01/2016

REAL PROPERTY ACT, 1886



Estate Type

FEE SIMPLE

Registered Proprietor

WRIGHT DEVELOPMENTS SA PTY. LTD. (ACN: 604 462 286)
OF CARE SOTHERTONS 42 HURTLE SQUARE ADELAIDE SA 5000

Description of Land

ALLOTMENT 4 DEPOSITED PLAN 48354
IN THE AREA NAMED ADELAIDE
HUNDRED OF ADELAIDE

Easements

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED B

Schedule of Dealings

NIL

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL

Notations on Plan



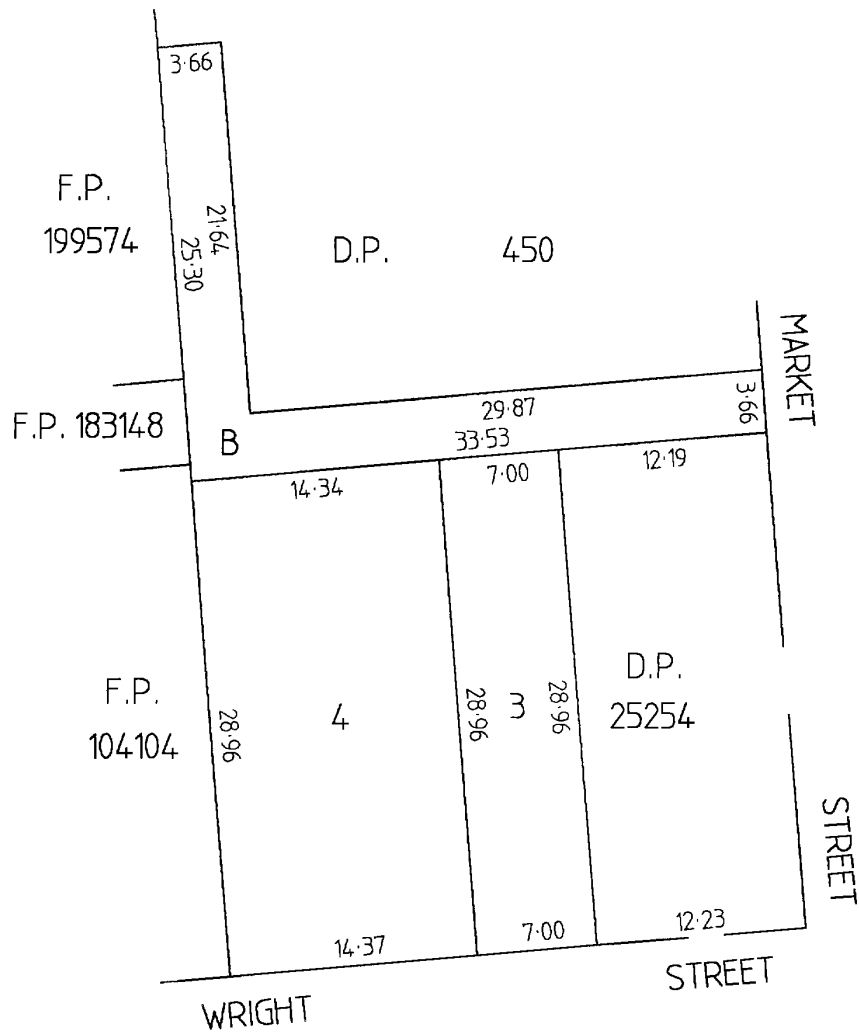
NIL

Registrar-General's Notes

NIL

Administrative Interests

NIL



0 4 8 12 16 Metres

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 5141 Folio 97

Parent Title(s) CT 3590/105
Dealing(s) Creating Title CONVERTED TITLE
Title Issued 02/09/1993
Edition 10
Edition Issued 04/01/2016

REAL PROPERTY ACT, 1886



Estate Type

FEE SIMPLE

Registered Proprietor

WRIGHT DEVELOPMENTS SA PTY. LTD. (ACN: 604 462 286)
OF CARE SOTHERTONS 42 HURTLE SQUARE ADELAIDE SA 5000

Description of Land

ALLOTMENT 17 FILED PLAN 104104
IN THE AREA NAMED ADELAIDE
HUNDRED OF ADELAIDE

Easements

NIL

Schedule of Dealings

Dealing Number	Description
11551661	LEASE TO LAWRIE HOTELS PTY. LTD. AND PETTIGREW FAMILY HOTELS PTY. LTD. COMMENCING ON 7/2/2011 AND EXPIRING ON 6/2/2021 AS JOINT TENANTS

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL



Notations on Plan

NIL

Registrar-General's Notes

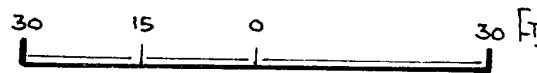
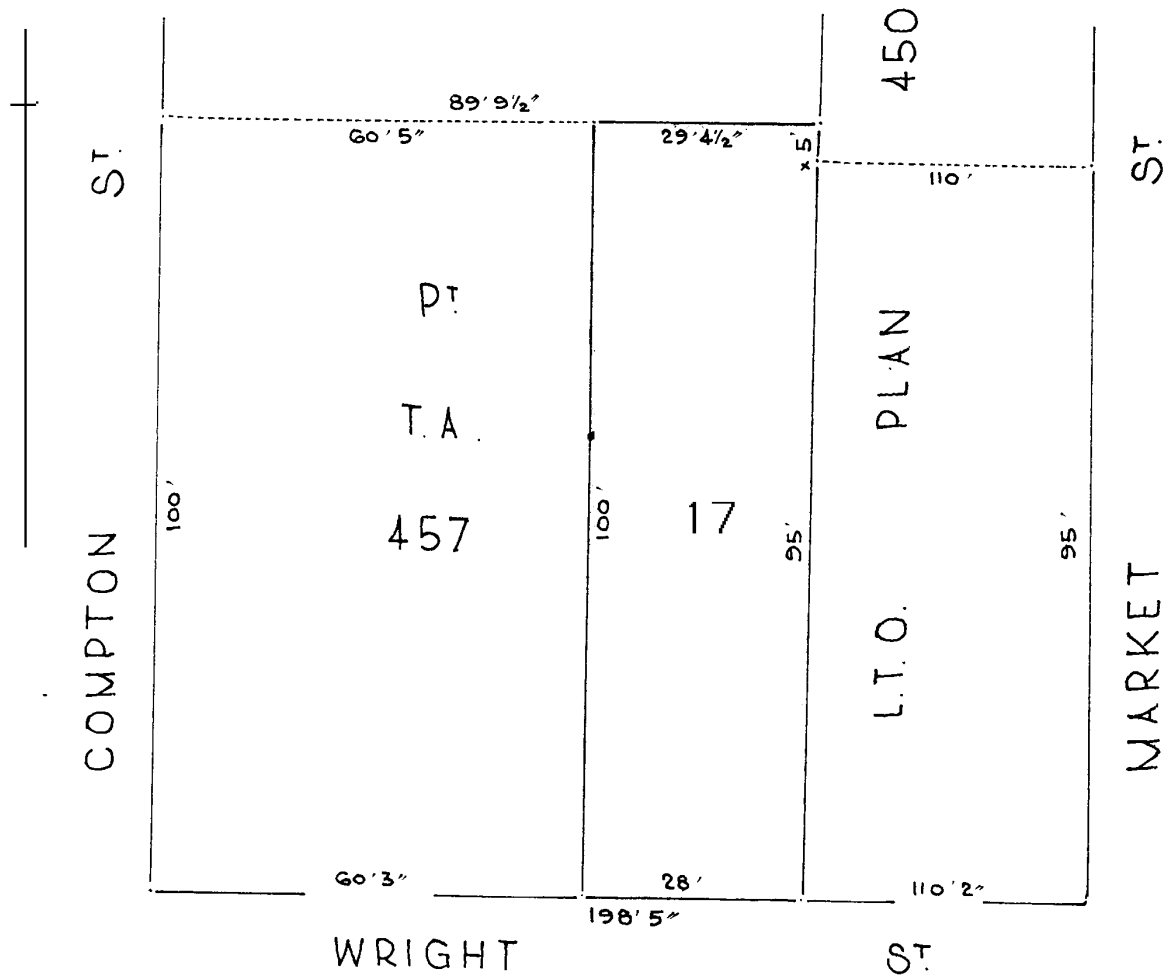
NIL

Administrative Interests

NIL



This plan is scanned from Certificate of Title 3590/105



DISTANCES ARE IN FEET AND INCHES FOR METRIC CONVERSION	
1 FOOT	= 0.3048 metres
1 INCH	= 0.0254 metres

Note: Subject to all lawfully existing plans of division



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 5141 Folio 93

Parent Title(s)	CT 3590/106
Dealing(s) Creating Title	CONVERTED TITLE
Title Issued	02/09/1993
Edition	10
Edition Issued	04/01/2016

REAL PROPERTY ACT, 1886



Estate Type

FEE SIMPLE

Registered Proprietor

WRIGHT DEVELOPMENTS SA PTY. LTD. (ACN: 604 462 286)
OF CARE SOTHERTONS 42 HURTLE SQUARE ADELAIDE SA 5000

Description of Land

ALLOTMENT 18 FILED PLAN 104105
IN THE AREA NAMED ADELAIDE
HUNDRED OF ADELAIDE

Easements

NIL

Schedule of Dealings

Dealing Number	Description
11551661	LEASE TO LAWRIE HOTELS PTY. LTD. AND PETTIGREW FAMILY HOTELS PTY. LTD. COMMENCING ON 7/2/2011 AND EXPIRING ON 6/2/2021 AS JOINT TENANTS

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL



Notations on Plan

NIL

Registrar-General's Notes

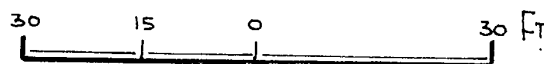
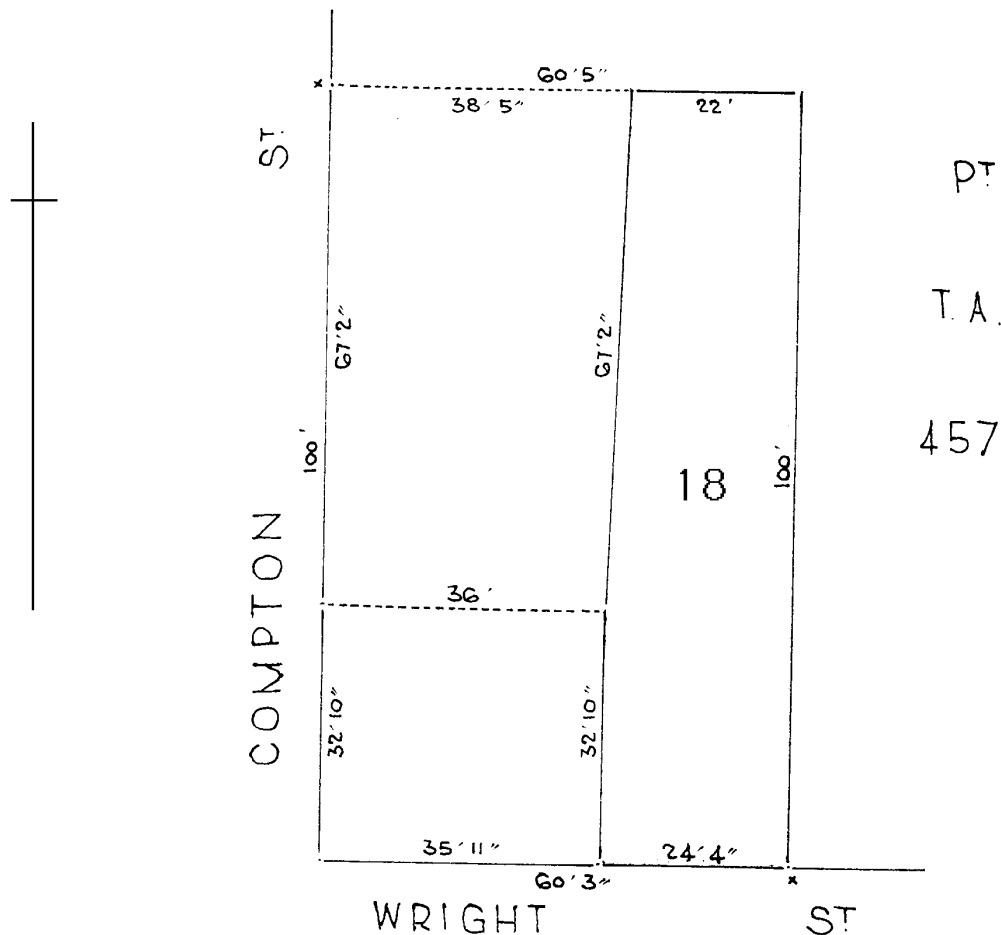
NIL

Administrative Interests

NIL



This plan is scanned from Certificate of Title 3590/106



DISTANCES ARE IN FEET AND INCHES
FOR METRIC CONVERSION
1 FOOT = 0.3048 metres
1 INCH = 0.0254 metres

Note: Subject to all lawfully existing plans of division



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 5140 Folio 909

Parent Title(s)	CT 4254/652
Dealing(s) Creating Title	CONVERTED TITLE
Title Issued	02/09/1993
Edition	10
Edition Issued	04/01/2016

REAL PROPERTY ACT, 1886



Estate Type

FEE SIMPLE

Registered Proprietor

WRIGHT DEVELOPMENTS SA PTY. LTD. (ACN: 604 462 286)
OF CARE SOTHERTONS 42 HURTLE SQUARE ADELAIDE SA 5000

Description of Land

ALLOTMENT 22 FILED PLAN 104109
IN THE AREA NAMED ADELAIDE
HUNDRED OF ADELAIDE

Easements

NIL

Schedule of Dealings

Dealing Number	Description
11551661	LEASE TO LAWRIE HOTELS PTY. LTD. AND PETTIGREW FAMILY HOTELS PTY. LTD. COMMENCING ON 7/2/2011 AND EXPIRING ON 6/2/2021 AS JOINT TENANTS

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL



Notations on Plan

NIL

Registrar-General's Notes

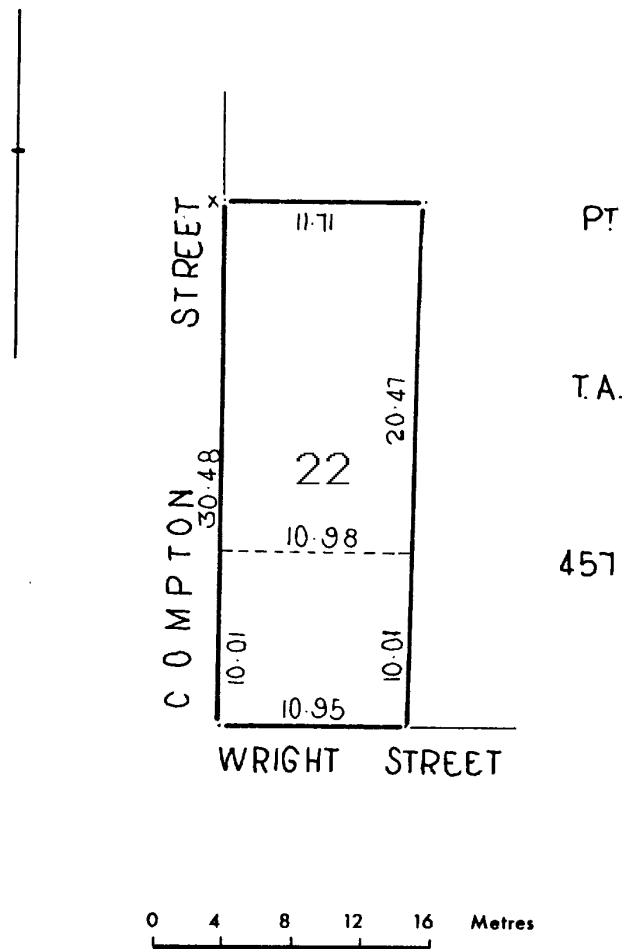
NIL

Administrative Interests

NIL



This plan is scanned from Certificate of Title 4254/652



Note: Subject to all lawfully existing plans of division



DEVELOPMENT APPLICATION REPORT

**Client
Address**

Wright Developments SA Pty Ltd
76-88 Wright Street, Adelaide

Proposal

Construction of an 18 story office building with basement carparking:

- incorporating the retention and reuse of the former Hotel Wright Street as a hotel
- two-storey penthouses occupying levels 16 and 17

Prepared by

MasterPlan in collaboration with
Mohyla Architects Interior Designers

SEPTEMBER 2017





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Appendix A	-	Certificates of Title
Appendix B	-	Compendium of Architectural Drawings
Appendix C	-	Heritage Impact Assessment
Appendix D	-	Traffic Impact Assessment
Appendix E	-	Waste Management Plan
Appendix F	-	Engineering Services Report
Appendix G	-	Desktop Pedestrian Level Wind Report (Under Separate Cover)



1.0 INTRODUCTION

MasterPlan SA Pty Ltd has been engaged by Wright Developments SA Pty Ltd to assist with the preparation of a development application for the construction of a multi-storey office development together with penthouse dwellings at the upper levels at 76-88 Wright Street, Adelaide.

This Planning Report has been prepared in collaboration with Mohyla Architects Interior Designers (Mohyla Architects) and contains a description of the subject land, the locality and the proposed development, the design philosophy informing the architecture of the Building, a Design Statement by the architect explaining the design, as well as our assessment of the proposed development against the relevant provisions of the Adelaide (City) Development Plan.

This Development Application Report is supported by:

- the relevant Certificates of Title at **Appendix A**;
- the compendium of Architectural Drawings prepared by Mohyla Architects at **Appendix B**;
- the Heritage Impact Assessment undertaken by DASH Architects at **Appendix C**;
- the Traffic Impact Assessment undertaken by Frank Siow and Associates at **Appendix D**;
- the Waste Management Plan prepared by Colby Industries at **Appendix E**;
- the Engineering Services Report prepared by Systems Solutions at **Appendix F**; and
- the Wind Report prepared by BESTEC at **Appendix G**.

We have concluded from our detailed and balanced assessment of the proposed development that it sufficiently accords with the relevant provisions of the Adelaide (City) Development Plan for the reasons set out herein.



2.0 BACKGROUND AND PRE-LODGEMENT DISCUSSIONS

The Applicant, Wright Developments SA Pty Ltd ('Wright Developments'), voluntarily participated in the Development Assessment Commission's (the Commission's) Pre-lodgement Panel (PLP) Process, including the Design Review Panel (DRP) Process with the Office for Design and Architecture South Australia (ODASA).

The proposed development has been informed by the feedback received from key stakeholders during these processes, including commentary from:

- DPTI Planning Staff;
- Adelaide City Council's Waste Management Officers;
- Adelaide City Council's Traffic Engineers;
- Adelaide City Council's Heritage Consultant;
- Adelaide City Council's Planning Officers; and
- ODASA Design Review Panels and Workshops on five separate occasions.

Wright Developments, through their project team, sought and obtained feedback from the key stakeholders which was then incorporated into the proposed development at the following ODASA meetings:

- Design Review #1 Wednesday, 9 November 2016;
- Design Review #2 Wednesday, 17 May 2017;
- Design Workshop #1 Wednesday, 25 May 2017;
- Design Workshop #2 Wednesday, 30 May 2017;
- Desktop Review #1, 5 July 2017; and
- Design Workshop #3 Wednesday, 2 August 2017.

The critical elements identified by DPTI Staff and ODASA through the PLP and DRP process included:

- building height, noting that the proposal exceeds the 43 metre height guideline but is subject to 'over height' development plan provisions allowing for buildings to exceed the height guideline within the context of the 'City Form';
- heritage integration and provision of 'breathing space' around the heritage place to maintain the heritage value;
- setbacks above a defined podium to enable a sensitive response to the existing scale and context of Wright Street and Compton Street; and
- architectural expression, particularly of the tower element (upper levels) to ensure that it responds to the height, and the vertical and horizontal elements of the heritage place.



Throughout the pre-lodgement process general stakeholder support of the following elements in the design were noted:

- the general land use to accommodate offices;
- the retention of the Local Heritage building and adaptive re-use as part of the overall development (subject to design and integration);
- the incorporation of an Urban Plaza within an Atrium at ground level;
- the active and open ground floor plan to the street; and
- vehicle access from Wright Street and the incorporation of basement private car parking.

As a result of the Pre-lodgement Panel and Design Review feedback the design of the proposed development inevitably evolved and incorporated the following changes which received general support:

- introduction of a defined podium with setbacks at the upper levels. The Podium introduced the opportunity for an open plaza at Level 2 integrating the rooftop of the former Wright Street Hotel with open space at the podium level fronting Wright Street and Compton Street;
- setbacks to the northern and eastern elevations enabling improved natural light access to the floor plates;
- reduction in the overall building height from 77 metres to 68 metres;
- enlargement of the 'breathing space' around and above the Local Heritage Place (former Hotel Wright Street);
- refinement of the ground floor Urban Plaza, materiality and integration with the Local Heritage Place;
- evolution of the architectural expression of the upper levels of the building resulting in a more sculptural form;
- incorporation of break out spaces at the upper levels of the building; and
- refinement of the ecological sustainable development elements in the building including innovative shading to the western, northern and eastern façades and introduction of upper level landscape elements.

The Applicant's willingness to diverge from that traditional design path comes at a significant financial cost, both in terms of added constructional cost and reduced lettable floor area. It does, by default, reinforce the Applicant's genuine commitment to the project and desire to 'lead by example' in the creation of a superior building for Adelaide.



3.0 SUBJECT LAND AND LOCALITY

3.1 Subject Land

3.1.1 *The Site*

The subject land consists of the amalgamation of five allotments and is located at 76-88 Wright Street, Adelaide. The subject land is predominantly rectangular in shape and has a total area of approximately 1,446 square metres, with street frontages to Wright Street and Compton Street.

The majority of the subject land is occupied by the former Hotel Wright Street and an adjacent car parking area. The original portion of the Hotel, which is located adjacent the intersection of Wright Street and Compton Street, is listed within the Council's Development Plan as a Local Heritage Place.

The eastern portion of the subject land is occupied by an open private car park. The car parking area is accessed via Wright Street. The car parking area is unsealed and accommodates 24 car parking spaces.

3.1.2 *Certificates of Titles*

The land can be more formally described as:

- Allotment 17 in Filed Plan 104104 in the area named Adelaide, Hundred of Adelaide;
- Allotment 18 in Filed Plan 104105 in the area named Adelaide, Hundred of Adelaide;
- Allotment 22 in Filed Plan 104109 in the area named Adelaide, Hundred of Adelaide;
- Allotment 3 in Deposited Plan 48354 in the area named Adelaide, Hundred of Adelaide;
- and
- Allotment 4 in Deposited Plan 48354 in the area named Adelaide, Hundred of Adelaide.

Copies of the relevant Certificates of Title are contained in **Appendix A**.

The Subject land enjoys a free and unrestricted 'Right of Way' over the land abutting the northern boundary of the site, which enables both pedestrian cyclist and vehicular access via Market Street.



Figure 1: Subject land and CT references

3.1.3 Site Photos



Figure 2: The former Hotel Wright Street



Figure 3: The flat roof Hotel addition fronting Wright Street



Figure 4: The flat roof Hotel addition fronting Compton Street



Figure 5: The car parking area adjacent the hotel

3.1.4 State of Existing Development

The original portion of the Hotel Wright Street is two-storey in form, with face stone external walls, a corrugated iron pitched roof which is predominantly obscured by parapets, stone chimneys and a verandah and balcony, which extend over the Wright Street footpath. This portion of the Hotel (former known as the Queens Arms Hotel and, more recently, the Wright Street Hotel) is a Local Heritage item which has undergone multiple alterations over time that have diminished the heritage value of the retained elements.

The Hotel has several more recent extensions, circa 1950's and 60's, which do not form part of the Local Heritage Place. These extensions are essentially flat roof lean-to additions as illustrated in **Figures 4** and **Figure 5** above.

The eastern portion of the subject land is occupied by a private car parking area. The car parking area is accessed via Wright Street. The car parking area is unsealed and accommodates 24 car parking spaces.

Access to the land is currently provided via two vehicle crossovers. The first crossover to Wright Street is located on the eastern portion of the land and provides access to the car parking area. The second crossover is located on Compton Street, between the Hotel and the adjoining vacant commercial building.

The land is relatively flat and is devoid of any mature vegetation. Four mature, non-regulated, street trees are located adjacent to the subject land, two within the Wright Street verge and two within the Compton Street verge.



The subject land is located within the Capital City Zone, as identified within the Adelaide (City) Development Plan. The Capital City Zone extends north, east, and west of the subject land, with the Main Street (Adelaide) Zone located to the south of the subject land, on the southern side of Wright Street.

3.2 Urban Context

3.2.1 Nature of the Locality

The immediate locality is characterised by a range of land uses and built form. The subject land is located opposite the Adelaide Youth Court, which is a large contemporary two-storey building. There are several legal offices within the locality, due to the close proximity to the Adelaide Youth Courts and the nearby Courts precinct.

Other land uses within the locality include shops, restaurants, small warehouses, a motor repair station and several residential buildings including a four-storey residential flat building at 29-31 Compton Street and row dwellings within Market Street.

Edmund Barton Chambers (72-74 Wright Street, former Deaf and Dumb Church and Institute) directly adjoins the subject site to its east boundary, and fronts both Wright Street and, to a greater extent, Market Street. While this building is listed as a Local Heritage place, it has been substantially altered over time, including removal of a turret to its south-east corner; modification of upper level windows on south and east facades to remove gothic head treatments; removal/bricking up of upper level windows; extending lower level window sills and changing stepped rendered quoins; alteration of plinth; modification of door head to corner entry door; removal of filigree metal trims to roof ridge and re-roofing; addition of a footpath canopy to the south and east facades.

On 7 September 2017, the State Commission Assessment Panel (SCAP) granted Development Plan Consent to an application for the construction of a 17-level mixed use building (measuring 58 metres in height) comprising tourist accommodation, residential apartments, a rooftop garden and bar area, ground floor cafe and ancillary car parking, at 27-29 Market Street. This site is separated from the northern boundary of the subject land by an existing free and unrestricted "Right Way".

Wright Street is characterised by a range of architectural styles and built form. Wright Street runs between King William Street in the east and West Terrace on the western fringe of the city. Wright Street is bisected by the northern end of Whitmore Square. Whilst Wright Street is one of the City of Adelaide's main grid roads, it effectively serves as a minor collector road for the local area.

Compton Street is a one-way road, with traffic flowing north from Wright Street to Gouger Street. It is characterised by a range of built form and land uses, including a 4-storey residential flat building, warehouses and shops.



Market Street is a one-way road, with traffic flowing south from Gouger Street to Wright Street. Market Street is also characterised by a range of built form and land uses, including local heritage listed row dwellings, restaurants and other commercial buildings.

The broader locality also has a varied character and includes renown food and cultural areas including Gouger Street, Chinatown and the Adelaide Central Markets. The Courts precinct and Victoria Square are nearby, as is a large area of public open space in the form of Whitmore Square to the west of the subject land.

3.2.2 Locality Plan

A Location Plan and a Site Context Plan, prepared by Mohyla Architects, are contained in **Appendix C**.

3.2.3 Site Connectivity

Public Transport is available nearby, with several bus services originating in Victoria Square and the nearest tram stops located on King William Street, approximately 250 metres from the site.

Bicycle Connectivity

Compton Street forms part of a north-south 'active' cross-city link, which has been identified as a priority link in the City of Adelaide's "Smart Move – Transport and Movement Strategy", forming part of the City of Adelaide's Bikeways network. Compton Street allows for two-way bicycle movements.

Pedestrian Connectivity

Compton Street provides pedestrian connectivity between Wright Street and Gouger Street. Nearby Market Street has also been identified as a proposed pedestrian link within the Adelaide City Council Development Plan and provides pedestrian connectivity between Wright Street and Gouger Street.

3.2.4 Public Realm

Wright Street includes a range of street trees, verge plantings and street furniture. The original portion of the hotel includes a balcony and verandah which provides shelter to an outdoor dining area associated with the Hotel, which contributes to a high level of streetscape amenity.

Mature street trees, bike racks and small garden areas within the carriageway, adjacent to the intersection of Wright Street and Compton Street add further interest and amenity.

Compton Street has a more intimate feel and forms part of the City of Adelaide's Bikeway's network. A raised and paved pedestrian crossing has been constructed at the Wright Street intersection, which clearly delineates a priority for pedestrians. High architectural street lamps add to the intimate feel of the street.

The public realm infrastructure is illustrated in **Figures 2, 3 and 4** above.



3.2.5 Heritage

The locality displays a mixed character. There are several character buildings located nearby, including Local Heritage listed buildings at 84, 89 and 103 Wright Street; and at 17, 19, 20, 21, 22, 24b, 26, 28 and 30 Market Street.

Despite the large number of Local Heritage Places located nearby, there is no predominant established character or architectural style within the locality. The locality is an area in transition, with lower scale predominantly commercial land uses steadily being supplemented with higher scale Capital City type development, as envisaged within the Zone.

3.2.6 Streetscape

Within the immediate locality, Wright Street is characterised by a range of single and two-storey buildings, with varying architectural forms. Within the adjacent side streets, a larger range of building heights exists, with buildings of up to six-storey in height (Norman Street). As discussed above, a 17-storey mixed use development has recently been approved on the adjacent land at 27-29 Market Street.

The subject land is located approximately midway between two other significant multi-storey buildings, including the 21-storey Bohem Apartments, which are currently under construction at 304-320 Morphett Street (corner of Wright Street) and the 31-storey Echelon Building, which has been approved at 322-336 King William Street (corner of Carrington Street).

Other significant developments within the broader locality include:

- the approved Mayfield Apartments at 43-69 Sturt Street, which will include a 16-storey and a 17-storey tower;
- an approved 17 storey building at 126 Wright Street;
- an existing 13-storey office building at 16 Coglein Street;
- an existing 10-storey car parking facility at 24 Coglein Street;
- Vue on KWS at 411 King William Street; and
- Kodo on Angas Street.



4.0 DESIGN RESPONSE

4.1 Design Philosophy

4.1.1 General Overview

The current skyline of Adelaide is noticeably changing. The previously accepted (and controlled) built form was one where the centre of the city accommodated the tallest buildings, with remaining development diminishing in height, in four directions, to the green belt of the surrounding Parklands. This resulted in the subject site being located amongst low level buildings and structures, with a relatively consistent streetscape profile.

However, changes to the Development Plan have resulted in zoning and height changes wherein there are an increasing number of tall buildings appearing throughout the city's boundaries. This has also had an impact upon the retention and integration of heritage listed buildings. While conflicts may periodically exist between multi-levels of Government and the community, progress and change are inevitable. Indeed, a visual survey of the overall city as it currently stands will identify a myriad of development encompassing multiple decades: with the exception of the limited number of 'first build' developments still existing across the city, most other 'original' buildings have already succumbed to re-development. The streetscape of Wright and Compton Streets, and other nearby streets and laneways also reflect this change in built form.

Other new high-rise developments have either been approved, are under construction, or have been constructed in the vicinity of the subject site. They include:

- 'Echelon' (at 114 metres high at the south-east corner of King William and Carrington Streets);
- 'Bohem' (at 76 metres high at the north-east corner of Morphett and Carrington Streets); and
- 'Kodo' (at 103 metres high on Angas Street).

It should be noted that each of these buildings have exceeded the height guidelines for their respective sites. Despite one proposition that, due to their zoning, they have no impact on the subject site, it is argued that this is contrary to the reality of the situation. That is, a person viewing the streetscape of Wright Street (or Carrington Street to the east) from street level will be influenced visually by the buildings located nearby. The proposition that another site's particular zoning/height somehow negates its physical and visual impact is tenuous.

However, it is possible to design a building with a low-scale component to streetscapes which reflects and respects the existing character and heritage of Adelaide: a character that the community celebrates and values, while engaging with a new architectural response to the changing needs of use, density, access, amenity and the new urban environment.



The subject site is located within a zone bordering Gouger, Sturt and King William Streets and Whitmore Square. The area encompasses the Legal and Courts Precincts, Central Market, retail, commercial and hotel facilities, light industry and some residential development.

The subject site is currently comprised of five titles which will be amalgamated. Currently the site accommodates a Local Heritage Hotel with an unassuming mid twentieth century addition, and an open-air private car park.

The vision for the proposed re-development of the site is to establish an infill development that is a responsive to the attributes of the area and to the intent of the Development Plan, respects and integrates the historic Hotel and delivers a level of design that sets a precedent for future development in the locality.

The architect's brief for the proposed development was to provide for an eighteen-level building, comprising a private basement car park, an 'Urban Plaza', retention and rejuvenation of the existing Local Heritage Hotel, spacious ground floor foyer and retail tenancy, eleven floors of office space, plant room and services, and two penthouses at the top of the building.

4.1.2 Design Objectives

The design philosophy and intent for the proposed development is to create a highly activated building, which responds to both its streetscape context and its location in the broader city plan.

Emphasis has been placed upon provision of:

1. High quality design and environmental solutions.
2. Open space and green space opportunities at multiple levels for various users.
3. Articulated facades to provide both a visual relationship with the scale and proportion of existing built form and constructional elements, and sculptural design expression through the composition of uses, materiality, shading, shelter, and exposure.
4. Encouragement of public engagement through activation opportunities within the development.
5. Activation of surrounding streets and laneways.
6. Provision for mixed uses.
7. Retention and rejuvenation of the existing Local Heritage listed Hotel.

The incorporation of spacious public and private common areas, a rejuvenated heritage hotel, a podium terrace space which services both hotel patrons and office occupants, an Urban Plaza, roof decks and balconies that allow exceptional engagement and activation opportunities, and optional environmental experiences for commercial and residential tenants, all combine to create a unique working, social and living environment.



The proposed development seeks to set a positive precedent for the type and quality of future development in the locality: a precedent based on high design quality, retention of existing historic built form, user amenity, social interaction and environmental response as opposed to a purely cost-driven solution.

4.1.3 *Design Approach*

At the project's inception, the design team recognized that a proposal for an eighteen-level building on a largely vacant and/or under-developed site on Wright Street would pose significant challenges with regard to the objectives of the Development Plan in this locality particularly in respect of overall design, height and local amenity. The fundamental design objective, therefore, was one which met the client brief, legislative requirements, and broader community expectations.

Various design consultants have been engaged to work collaboratively on this project and meet the desired outcome. They include:

- Principal Design Architect;
- Heritage Architect;
- Urban Planner;
- Structural/Civil Engineer;
- Building Services Engineer;
- Traffic Engineer;
- Waste Management Consultant;
- Quantity Surveyor/Cost Consultant; and
- Surveyor.

As a part of the establishment and implementation of a design philosophy for the project, several key goals were identified and addressed:

1. Identify Desired Outcomes and Challenges:
 - height;
 - scale;
 - occupancy and mixed uses;
 - spatial requirements;
 - orientation;
 - core location;
 - heritage engagement;
 - streetscape;



- horizontal and vertical access;
 - internal and external activation;
 - environmental factors;
 - user and building security;
 - building service factors; and
 - building form.
2. Define Active and Passive Relationships:
- pedestrian access comprising various users;
 - vehicular access comprising service vehicles and private users;
 - integration of and/or respect towards existing heritage built form (Hotel and Edmund Barton Chambers);
 - Main Street (Wright street), side streets (Compton and Market Streets) and laneways (right-of-way to the north of the site);
 - integration and/or separation of mixed uses; and
 - correlation with existing streetscape and proposed future development.
3. Reconcile Parameters:
- review desired outcomes, challenges and relationships;
 - assess, review results and prioritize requirements;
 - formulate design options;
 - refine design solutions.

4.1.4 Design Context

The design philosophy for the proposed development was impacted by the context of the site's locality, both at a macro and micro level.

Site Specific Context:

Consideration of the site specific context required consideration of the following parameters:

- land use options;
- site address and orientation;
- maintenance, rejuvenation and physical integration of the existing Local Heritage Hotel;
- enhancement of pedestrian zone creating desirable pedestrian pathways to and through the site, increased pedestrian access opportunities, 'way finding' and destination options;
- creation of bicycle use and on-site access opportunities; and
- maintenance of existing on-site car parking facility.



Local Context:

The following built form elements were identified as having relevance to the site in regards to its local context:

- several heritage buildings in the surrounding area, but two have the greatest impact upon the site (existing Hotel and Edmund Barton Chambers (adjacent site));
- many of the surrounding buildings are masonry (red brick, bluestone, sandstone construction) with sandstone or neutral toned pointing and quoins;
- streetscape has adjacent buildings of three to four levels which form a clear horizontal precedent for the lower level podium of the proposed development. Higher buildings are also located in the near vicinity;
- facades generally accentuate verticality, with tall windows, providing further horizontal articulation via plinths, porticos, verandahs, sills and parapets;
- proposed development of bicycle and pedestrian links through Compton and Market Streets are planned by the Adelaide City Council; and
- there are many identifiable and viable development sites adjacent to and/or near the subject site.

City-scape Context:

The following factors were considered important contributors influencing the development of the site in a City Scape context:

- other multi-storey developments, both approved and/or currently under construction, are located nearby and in adjacent zones. These projects are either comparable in height (eg: Primefield Properties in Market Street) or higher than this project ('Echelon', corner King William/Carrington Streets; 'Boehm', corner Wright/Morphett Streets; 'Kodo', Angas Street/Victoria Square); and
- the subject site is 'book-ended' by development of greater bulk and scale and the proposed development establishes a lower 'mid-way' point in overall height, thereby creating a 'wave' effect.

4.1.5 Form and Scale

This eighteen-level, 68 metre high building will be viewed in its sculptural form from surrounding viewpoints, taking advantage of its location within the city's CBD area and exposure to four directions.

The office tower and penthouses will take advantage of north and south orientation, as well as east and west aspects in respective situations. Private balconies and/or breakout areas at various heights will add further to occupant amenity and the overall form and scale of the building.



The overall form has developed from integrating the rhythm's, proportions and materiality reflective of the existing streetscape both in regards to heritage and built form, as well as surrounding/neighbouring current and future developments. The incorporation of a podium to the base of the proposed building reflects and reinforces the predominant streetscape height of three to five storey buildings along Wright Street, whilst the integration and connection to Local Heritage Places at the western and eastern ends solidifies the streetscape and "grounds" the building in its location.

The large set back at the podium level is a response to creating a clear visual separation between the built form at street level, and the office building above.

The office levels above the podium utilise articulated glazed protruding and retracting forms that are of a scale and proportion already apparent in the streetscape, and which provide articulation to the facades of the building, resulting in the scale and bulk of the tower building producing a diminishing visual effect as the height increases.

The varying heights, juxtaposition of form and materiality displayed between the podium and office tower components of the development simultaneously reinforce linkages to the streetscape while differentiating between uses, new and old built forms, historical and modern construction techniques. This delivers a uniform and elegant sculptural form at a city scale, responsive to its location, site and amenity.

The final two levels of the building are designed to provide premium quality penthouses which take in panoramic vistas of the city. The incorporation of balconies and outdoor living spaces provide additional setbacks to the building's façade thereby further diminishing its overall visual bulk and scale.

4.2 Design Statement

4.2.1 Design Mix

The proposed development comprises a mix of development including:

- private car park (basement);
- hotel/licensed premises (over three levels; ground, first and second/podium);
- Urban Plaza (ground level, extending to second level as part of Atrium);
- Atrium (over five levels extending from the ground floor);
- retail tenancy (ground level);
- offices (levels 1 to 15); and
- penthouse residences (levels 16 to 17).



4.2.2 *Heritage Integration and Adaptive Re-use*

It is understood that recent applications have successfully applied to demolish local heritage places to facilitate new development. However, it has always been the applicant's intention to retain the historic portion of the existing Hotel and integrate same into the overall development. While much of the exterior (south and west sides) remain intact, there have been significant modifications, including extensive demolition, to the interior of the building.

The applicant recognises the historical and aesthetic benefits of retaining the exterior walls of the building while utilising the premises to provide additional facilities to the development, thereby retaining an existing use, reinforcing both its commercial viability and contribution to the public realm.

External ground level access to the Hotel will be from Wright and Compton Streets, via entrances to the internal Urban Plaza and Atrium. Access from upper levels of the proposed new tower will be via the lifts to ground level or the second level roof terrace of the top of the podium. While new work will obviously surround the retained portion of the Hotel, its historic wall fabric will be retained and restored. It is intended to clearly differentiate new work from old, thereby preserving historical references and avoiding inappropriate imitation. Likewise, physical connections to the proposed new tower building will be facilitated by 'negative' joints and contrasting yet sympathetic materials.

The Hotel is more visible as part of the integrated composition of the whole development, and greater exposure of the external walls. It is also envisaged that the Hotel's retention will create additional 'human scale' to the Urban Plaza, Atrium and Podium, while also providing an opportunity for users to reflect upon the site's history.

It is proposed to convert the roof area to an outdoor terrace, extending the Hotel's facilities and incorporating landscaping.

In regards to proximity of external tower structure to both the retained portion of the existing Hotel and Edmund Barton Chambers, a number of setbacks and recesses have been created to facilitate physical separation distances between same. The tower is setback 9.1 metres from the western boundary and 4.6 metres from the south boundary of the site respectively. This results in the new building being located to the outside perimeter of the Hotel. The tower then cantilevers above the Hotel on the southern elevation, corresponding with approximately the top of Level 4 (five storeys above ground), providing a vertical separation from ground level of approximately 18.8 metres.

The western end of Edmund Barton Chambers is a simple, yet high, gable ended wall, devoid of openings. The lower portion of the new building is situated on the eastern boundary (to a height just above the roof line of Edmund Barton Chambers (abutting its gable wall)), with the remainder of the tower setback 1.5 metres from this boundary above this point. In addition, a negative joint is provided on the southern (Wright Street) elevation, between the Podium of the proposed new building and Edmund Barton Chambers. As a result, this primary setback provides visual vertical and horizontal separation to Edmund Barton Chambers.



Horizontal elements to the podium, and southern and western entranceways and canopies of the new building, align with key horizontal elements of the existing Hotel on its western and southern elevations, and the southern canopy of Edmund Barton Chambers which, despite not having any heritage value in itself, is a strong visual element.

4.2.3 The Urban Plaza

The Urban Plaza proposes active uses for a variety of users: Hotel patrons; general public links between Wright and Compton Streets; Office Tower occupants. The Urban Plaza is publicly accessible from Compton Street at the north-western corner of the site, and from Wright Street, between the Hotel and the Office Tower Entry. The Hotel services the Urban Plaza directly, and bench seating and rest areas will also be provided for general use.

The two primary intended outcomes of the Urban Plaza is to create a 'flow through' path for pedestrians between Compton and Wright Streets, and a usable common space for building occupants and visitors. It is envisaged that the social interaction encouraged between occupants and visitors will activate the space and contribute to the building's functionality while 'giving back' to the community at large. In addition, the resultant social and environmental attractiveness of the space will assist in the continued use and success of the historic Hotel.

4.2.4 Activation and Street front

The Wright and Compton Street ground level pedestrian entrances to the Urban Plaza and the Office building provide a link between the streets and connectivity to the new building and historic Hotel respectively.

Public and visitor access to the Urban Plaza and the Hotel creates an environment which promotes and facilitates social interaction between public and private realms. This is achieved via the accessible entranceways from Compton and Wright Street which provide an opportunity for the public to be enticed inside the building. It is envisaged that while some people may simply choose to traverse the Urban Plaza as a 'short cut' between the two streets, others will choose to stay to use the Hotel facilities, meet other people or rest a while. It is anticipated that some people may engage in a number, or indeed all, of these activities over time. Public and private use of the Urban Plaza will, in turn, activate use of the adjoining streets and laneways.

It is proposed to incorporate a number of bike parks within the Urban Plaza for use by Hotel patrons and/or public visitors to the communal space. This will be another activation solution and is related to, and a consequence of, the future redevelopment of Compton Street in favour of a dedicated bikeway. Existing bike park 'racks' are already located at the intersection of Wright and Compton Streets, adjacent the Hotel.



Accessibility of the Urban Plaza will be controlled, out of hours, by a security gate to the Compton Street entrance, and a glazed panel-lift door to the Wright Street entrance. However, the incorporation of materials such as glazing to the panel lift door and ground level facade windows, will allow passers-by to view the illuminated Urban Plaza and Atrium from the outside, enticing them to return at another time to explore and use the space. Access to the private basement car park will be controlled through a roller security grille, located at the eastern end of the Wright Street facade.

The Wright and Compton Street facades of the podium project out towards, or are in alignment with, the respective site boundaries. These projections, together with additional cantilevered steel canopies to the Wright Street entrances (office and Urban Plaza) provide weather protection for building entrances and pedestrian users of the adjoining footpaths alike. The projecting wall elements of the Podium will be finished with stone veneer facings, and glazed windows are provided to infill sections. In addition, fixed glazing is proposed to the connection between the solid projections of the Podium, and the stone walls of the historic Hotel, creating a negative joint, to provide both physical connectivity and visual separation between new and existing construction. This will help preserve the integrity of the historic Hotel while integrating the new build.

The proposed materials and configuration of the podium facade element provide a contemporary interpretation of, and correlation with, the existing Hotel and Edmund Barton Chambers to the eastern boundary. Likewise, the corresponding material treatment of the Compton Street entranceway to the Urban Plaza, and its two-level scale, proportion and configuration, provides a cohesive visual relationship with adjoining existing buildings on Compton Street, north of the site. This provides a level of unity between new and old through materiality, rhythm and proportion while also maintaining relative human scale.

The design of the podium addressing Wright Street incorporates horizontal elements which visually correlate with horizontal elements of the balcony of the historic Hotel and canopy of Edmund Barton Chambers respectively. In addition, the glazed balustrade to the roof terrace at the top of the Podium, aligns with the top of the masonry parapet of the existing Hotel adjacent, providing further visual linkages between new and old fabric.

The roof terrace to the podium and the proposed new roof terrace to the Hotel provide an opportunity for user connectivity to the streets below. The two-level elevation above street level affords Hotel patrons and office occupants alike a close physical relationship to the streets below, just as it will provide a link between pedestrians on the footpath and Podium and deck users above. Use of the Hotel roof deck and Urban Plaza outside of office hours will also contribute to street activation at night and on weekends.

4.2.5 Sense of Arrival and Address

It is proposed to incorporate a large “88” number to the front of the ground level entry to the office tower. This will identify the building’s street location and commercial entrance. It is intended to provide smaller, more discreet and integrated signage to the exterior of the existing Hotel and the Compton Street entranceway which will be the subject of a separate application.



It is envisaged that the design treatment of the street facades of the podium, together with appropriate signage, will combine to identify the building's location on the streets, guide users and visitors to the most appropriate entrance (i.e. Office, Urban Plaza, Hotel, Penthouses) and facilitate a sense of arrival.

Internally, the office entry foyer will have its own identity and directional signage, to assist visitors to find their required destination. A physical link to the adjoining Urban Plaza and Atrium is also proposed. Changes in materiality and lighting together with dedicated signage will differentiate the interior of the office entry foyer and the Urban Plaza.

4.2.6 Laneway Activation and Connectivity

The laneway to the north of the building has a free and unrestricted right-of-way in favour of the development site. It is proposed that access to this laneway serve several purposes. First it will provide for egress from the building's two primary fire escape stairways. Secondly it will provide access for refuse collection (penthouses and offices). Thirdly it will provide access to 'end of trip' ('EOT') facilities.

It is also intended that office and penthouse occupants be able to use the access-way connecting the ground floor lift lobby to the rear northern laneway as a pedestrian link to the east of the site, facilitating connectivity between the building and Market Street, the Central Market and 'Legal Precinct' beyond.

The provision, from level one upwards, of glazed windows to the eastern portion of the north façade provides visual connectivity to the rear northern laneway and beyond.

4.2.7 Atrium and Podium Top

The Atrium, which is located on the west side of the building, extends vertically over five levels of the building commencing at ground level. Its primary function is to enclose the ground floor Urban Plaza, resulting in the Plaza being usable throughout the year and in all weather conditions. The Atrium allows natural light to penetrate the building on the south side and, to a lesser extent, the west side. The provision of natural light will enhance user amenity of the area, assist internal plantings, and reduce reliance on artificial lighting during daylight hours.

The internal eastern side of the Atrium will be 'framed' by a slatted timber and steel screen. The lower portion of the screen, which is positioned on the eastern side of the Urban Plaza, is vertical while the remainder of the screen is angled upwards towards the west, finishing between the fourth and fifth levels. Physical access will be provided from the office entry foyer and adjacent tenancy space at ground level via a sliding door/link. The passageway/link connecting the office tower tenancies to the podium terrace and Hotel roof top terrace on the second level, and office tower tenancies on the fourth and fifth levels of the building will be afforded filtered views of the Atrium through the slatted timber Atrium ceiling feature. Access will be provided to the eastern side of the slatted screen, via office tenancies, to facilitate cleaning.



The top of the podium, at level two, incorporates a terrace in front of the south facade of the office tower. The podium terrace will have landscaped plantings, and is accessible directly, via secure access, from the second level tenancy and a common passageway linked to the office tower lift lobby at this floor. It will provide a breakout space for office users, but Hotel patrons will be prevented from accessing offices. The podium terrace is directly linked to the proposed roof top terrace of the Hotel. The integration of Office and Hotel uses of the podium terrace will ensure greater use of the space, and day and night activation.

4.2.8 Tower Orientation and Separation

The office tower is predominantly orientated towards the south, responding to its Wright Street primary address. However, as a result of varying building setbacks, orientation to take advantage of natural light and/or sunlight, ventilation, and views has been provided to the west, north and east facades. Some portions of solid walling are incorporated on the north, and to a lesser extent, the east facades to accommodate positioning of parts of the building on adjoining boundaries and in response to potential future development of those said sites. The main lift and service core of the office tower is located to the north of the floor plates, and positioned centrally, to maximise the opportunity for external glazing to lettable tenancy areas, and the penthouses on the top two levels.

The design and incorporation of receding and projecting elements of the office tower and podium provides a physical and visual separation between the new building and the integrated historic Hotel and adjoining Edmund Barton Chambers to the east of the site. In particular, the vertical separation of the office tower above the historic Hotel assists in maintaining the Hotel's identity and position within the immediate and surrounding streetscape. The separation between 'new and old' is reflected and reinforced internally by the creation of the Urban Plaza and Atrium. However, physical connections and links between the new office tower building and the historic Hotel are also provided, enhancing use options within the building, creating activation opportunities and generally providing for more attractive workplace and recreation environments.

4.2.9 Urban Scale

While the proposed re-development of the site comprises a new office tower, the incorporation of the two level podium, retention of the historic Hotel and multiple varying setbacks and protruding elements to facade treatments, results in development at street level which is sympathetic to, and reflective of, the existing urban context and current built form.

The utilisation of stone facings to horizontal and vertical elements of the podium and western entry to the Urban Plaza provides a correlation with existing adjoining masonry buildings.



4.2.10 CPTED

Crime Prevention Through Environmental Design ('CPTED') has been considered in relation to public and private (occupant/visitor) safety. The ground level spaces provide for clear sight lines with no concealed areas. The Compton and Wright Street entrances to the Urban Plaza will be fitted with a security gate and panel lift door respectively, providing out-of-hours security to the building. The entry to the car park will be fitted with a security grille, which will provide security to the car park at all times of the day and night. Secure and controlled private entry will be provided to the offices and penthouses alike.

It is also intended to provide photo-voltaic external lighting around the perimeter of the building to Wright and Compton Street facades and, in particular, at all building entrances, including the northern fire exits and rear entry door. In addition, CCTV will be installed to entranceways, public areas, the car park and lift lobbies. The Penthouses will have their own dedicated security systems. Lighting of primary entrances will also create identifiable points of entry to the building. Access to office tenancies will be by a controlled access system.

Active street frontages to Wright and Compton Streets, together with usable balconies, will provide for and encourage passive surveillance. Glazed windows to the eastern portion of the north facade, from level one upwards, also provides an opportunity for passive surveillance of pedestrians using the rear northern laneway.

It is envisaged that the Urban Plaza, by its very nature and relationship to business activities such as the Hotel's operation, and use by office tenants, will provide for a safe activity area open to broad surveillance.

Way-finding measures will be incorporated into the design of the building and its public spaces to manage user behaviour. These measures include: provision of an easily identifiable street number to the Wright Street facade; clear signage within the public spaces of the ground floor level, all Hotel levels and facilities, office tower entry foyer and lift lobbies; podium roof terrace; pedestrian links between the office tower and the Urban Plaza and/or hotel; and the balcony garden on the tenth level; visible sight lines through and within the Urban Plaza and Atrium; and enhancement of travel path identification through the Urban Plaza by integrated use of tile patterns and materiality.



5.0 THE PROPOSED DEVELOPMENT

Wright Developments Pty Ltd seeks Development Plan Consent from the State Commission Assessment Panel to construct an 18-storey building with basement car parking which accommodates:

- the retention and reuse of the original fabric of the former Hotel Wright Street as a hotel at ground and first floors with a roof top terrace;
- an Atrium providing a pedestrian link between Compton Street and Wright Street and being licensed as part of the hotel use to allow for the activation of the space;
- a retail tenancy at ground floor together with the main office entry foyer, building services, bicycle parking for 61 bicycles and associated end of trip facilities for cyclists;
- fifteen levels of offices with a total net lettable floor area of 10,324 square metres;
- two, two-storey penthouses occupying Levels 16 and 17, and
- 20 private car parking spaces in the basement for the use by tenants of the building and the residents of the two dwellings on Levels 16 and 17.

The proposed development is more fully illustrated across the compendium of architectural drawings at **Appendix B**. The compendium to which we refer has been prepared by Mohyla Architects and includes those drawings listed in Table 1.

Table 1 – Compendium of Architectural Drawings

DRAWING SHEET	TITLE	SCALE	DATE
SD00	Drawing Register	NTS	Sept 17
SD01	Locality Plan	NTS	Sept 17
SD02	Existing Site Plan	NTS	Sept 17
SD03	Existing Streetscape	NTS	Sept 17
SD04	Floor Plans (B, G, 1)	1:200 @ A1	Sept 17
SD05	Floor Plans (2-6)	1:200 @ A1	Sept 17
SD06	Floor Plans (7-12)	1:200 @ A1	Sept 17
SD07	Floor Plans (13-17)	1:200 @ A1	Sept 17
SD08	Elevations (S/W)	1:200 @ A1	Sept 17
SD09	Elevations (N/E)	1:200 @ A1	Sept 17
SD10	Sections	1:200 @ A1	Sept 17
SD11	Concept Diagrams	NTS	Sept 17



DRAWING SHEET	TITLE	SCALE	DATE
SD12	Cityscape Context	NTS	Sept 17
SD13	Materials and Finishes	NTS	Sept 17
SD14	Environmental	NTS	Sept 17
SD15	Podium Integration	NTS	Sept 17
SD16	Streetscape Perspectives	NTS	Sept 17
SD17	Streetscape Human Scale Perspectives	NTS	Sept 17
SD18	Perspectives	NTS	Sept 17

The particulars of the proposed development are also described below under the following sections.

5.1 Land Use

The proposed development accommodates the primary use as an office building of 10,324 square metres over 15 levels in accordance with the definition of office listed in Schedule 1 of the *Development Regulations, 2008*.

"office means any building used for administration or the practice of a profession, but does not include consulting rooms or premises where materials or goods are stored for sale or manufacture."

In addition to the primary use as an office, the development will incorporate a mix of additional land uses including a hotel in the retained heritage listed fabric of the former Hotel Wright Street, commercial tenancy at ground floor and two dwellings over two storeys on Levels 16 and 17.

The hotel use extends over three levels from the ground floor to the roof top terrace at Level 2 and fulfils the definition of hotel listed in the *Development Regulations 2008*.

"hotel means premises licensed, or proposed to be licensed, as a hotel under the Liquor Licensing Act 1985, but does not include a motel."

The ground floor of the hotel use extends into the adjacent ground floor area of the five-storey high Atrium.

The proposed commercial tenancy on the ground floor has a frontage to Wright Street and connectivity to the office entrance foyer and is suitable to accommodate a range of commercial uses including shop, consulting room, restaurant or the like.



Car parking in the basement is subservient and ancillary to the uses within the building and will be allocated between the two dwellings (four parking spaces), commercial tenancy, offices and hotel staff depending upon demand.

5.2 Floor Configuration

The following table provides a breakdown of the land uses and area schedule throughout the building:

Table 2 – Areas

BUILDING LEVEL	FUNCTION /LAND USE	AREA (M ²)
Basement	Car parking	24 car parks
	Services	242
Ground Floor	Office entrance foyer	137
	Hotel	171
	Atrium	314
	Commercial tenancy	110
	Services/bin storage/EOT Facilities	211
	Amenities	280
	Basement car park access	NA
Level 1	Hotel	171
	Office	420
	Atrium	Void
	Building management and security/amenities	49
Level 2	Hotel (Function Room)	96
	Office	425
	Function Room Balcony	14.6
	Roof top terrace/podium terrace	145 (Hotel Roof Top) 120 (Podium)
	Atrium	Void
	Common facilities and services	
Level 3	Office	463



BUILDING LEVEL	FUNCTION /LAND USE	AREA (M ²)
	Common facilities and services	
	Atrium	Void
Level 4	Office	502
	Common facilities and services	
	Atrium	Void
Level 5 - 6	Office	849 x 2 floors
	Common facilities and services	
Level 7	Office	726
	Common facilities and services	
	Balcony	79 + 45
Level 8-9	Office	857 x 2 floors
	Common facilities and services	
Level 10	Office	679
	Common facilities and services	
	Balcony (Including 'Sky Garden')	139
Level 11-12	Office	793 x 2 floors
	Common facilities and services	
Level 13	Office	726
	Common facilities and services	
	Balcony	79 + 45
Level 14-15	Office	373 x 2 floors
	Common facilities and services	308 x 2 floors
Level 16	Dwelling 1 (outdoor terrace)	252 (169)
	Dwelling 2 (outdoor terrace)	228 (187)
	Common facilities and services	
Level 17	Dwelling 1 (and balconies)	240 (40)
	Dwelling 2 (and balconies)	254 (50)



5.3 Built Form and Building Composition

The proposed building has a height of 18 storeys measuring 68 metres above ground level.

The built form expresses a podium (base), tower (middle) and top to the building responding to the contextual setting of the development site.

5.3.1 Basement

The basement accommodates 20 private car park spaces, two of which are for vehicles with disability permits (located adjacent lifts). Four car park spaces are to be assigned to the penthouses, with the remainder assigned to other building tenants. The car park is not intended to be a public access facility.

The private basement car park is to be accessed via Wright Street, at a location corresponding with the existing cross-over to the current open-air car park. The positioning of the car park entrance on Wright Street prioritises pedestrian amenity on Compton and Market Streets. The entrance will be fitted with a roller grille (electronic operation) to provide security to the car park and its users.

Two fire escape stairs are provided: one to the northern side (exiting to rear right-of-way laneway); and one to the south-east corner (exiting to Wright Street, adjacent the car park entrance).

Building services facilities located in the basement include:

- communication equipment room (south-west corner);
- fire control room and water tank storage (south-east corner);
- void below transformer (north-west corner); and
- a store and hotel lift overrun (western side, north of Hotel).

The basement covers all of the site, save and except for the building footprint of the retained heritage fabric of the Wright Street Hotel.

5.3.2 Ground Floor Entry/Urban Plaza/Atrium

The ground floor of the proposed development incorporates both new build and retention of the historic portion of the existing Hotel.

The Urban Plaza proposes active and passive uses for a variety of users including but not limited to:

- Hotel patrons;
- general public using the pedestrian link between Wright and Compton Streets; and
- office tower and penthouse occupants.



The Urban Plaza is publicly accessible during the opening hours of the Hotel from Compton Street at the north-western corner of the site, and from Wright Street, between the Hotel and the Office Tower Entry creating a bustling thoroughfare through the site. Hotel services spill directly out into the licensed Urban Plaza, where bench seating and rest areas will also be provided for general use. The area acts as a 'flow through' path for pedestrians between Compton and Wright Streets, drawing people inside, rather than around the building.

Bicycle racks are provided within the Urban Plaza for use by Hotel patrons and/or public visitors to the communal space.

The Urban Plaza incorporates a third vertical dimension through its enclosure by a five level Atrium. This Atrium is designed to allow natural light to penetrate the building on its south and west sides, with natural ventilation entering via the public entrances.

The Atrium, together with the Urban Plaza, will accommodate landscape plantings, 'green walls', and natural and textured surfaces. The overall effect of the space will be one which facilitates interaction between users of the building encouraging community engagement, interaction, activation, collaboration, integration and social cohesion in an inviting and welcoming unification of private and public realms.

The previously concealed eastern and northern original stonework facades of the Hotel will be exposed to the Urban Plaza within the confines of the Atrium which frame the Hotel and make it a focal point. The exposure of these walls and the physical separation from the office tower entry provided by the Urban Plaza, celebrates the Hotel's identity and creates some 'breathing space' around the historic building. A new glass lift will be provided to the north-east corner of the Hotel so patrons/public and staff can access the first floor of the Hotel and its roof top terrace respectively. A publicly-accessible stair link is also provided to these levels of the Hotel.

The ground floor also provides a shared-use entry foyer to Wright Street, with access to the lift lobby for office tower tenancies and secure access to the penthouses. The office tower entry foyer links with the Urban Plaza and Atrium sharing its space during office hours, and further encouraging the 'cross-block' link between Compton and Wright Streets. The foyer will be locked after hours, with tower occupants being able to gain access with electronic security 'keys'. The physical and visual link between the spaces encourages social interaction and develops a 'sense of place' for occupants of and visitors to the offices.

A store for the building's transformer is located in the north-west corner of the podium, accessible from Compton Street. End-of-trip ('EOT') facilities comprising secure storage for 61 bicycles, and separate male and female shower/change, toilet and locker facilities are located to the rear north-east portion of the ground floor with bike access via the rear right-of-way lane. Direct pedestrian access is provided from the EOT area to the main office tower lift lobby building services requirements, lift core and fire stairs, Hotel toilets and the like are accommodated at various locations throughout the ground floor level. A bin/refuse store for the offices, and a separate refuse store for the penthouses, is located in the north-east corner, with service vehicles entering the right-of-way adjacent this portion of the site.



5.3.3 Heritage Hotel

The Local Heritage portion of the Hotel will be retained and restored. Public access areas will be located at various levels, namely ground, first and second floor levels. Ground level access will comprise the southern portion of the building itself and the Urban Plaza/Atrium. Bar facilities will be extended out into the Urban Plaza integrating the Hotel use with the adjacent fusion of public and private realm.

The ground floor of the Hotel will incorporate a commercial kitchen, cold and dry stores and waste/refuse storage. New separate male and female toilet facilities will be provided to the northern boundary, and a uni-sex disabled toilet located adjacent the tower lift core, will all be accessible from the Urban Plaza/Atrium. A dual-access lift, accessed from the Urban Plaza, will be installed to provide vertical access to the other levels of the Hotel facility.

Additional Hotel facilities and function space will be provided on the first floor level. The proposed second level portion of the Hotel will provide for a landscaped roof top terrace. The proposed new roof top terrace will replace the existing concealed roof structure and redundant chimneys. There will be a physical connection between the roof top terrace and the terrace which forms the top of the new tower building's podium, which is also accessible by tower occupants.



Figure 6: Rooftop Terrace and Podium Terrace

The three levels of the Hotel will be re-developed and activated, improving on its past degree of use and its future viability, not only as a business opportunity, but also as a contributory component of the city's built form and social fabric.



5.3.4 Podium

The podium of the new building encompasses the ground floor footprint of the site and extends upwards for two levels, to a height of almost 7.5 metres. The tower portion of the building above is variously setback, in a staggered configuration, from the perimeter edges of the podium. That is, tower setbacks of differing distances are provided in both the horizontal and vertical planes. This minimizes the visual impact of the perceived bulk and scale of the building on the site itself; in relation to adjoining or related local heritage buildings; and in relation to Wright and Compton Streets respectively. Negative joints creating 'shadowlines' are provided on the south and west facades between the podium and the integrated Hotel, as well as Edmund Barton Chambers, on the southern (Wright Street) facade.

The Wright Street podium entrance to the proposed new building incorporates both vertical and horizontal elements, with an emphasis on the latter. This helps to strengthen the visual dominance of the two-storey podium with respect to the rest of the new building. Horizontal elements in the form of the overhangs and beams and pedestrian canopies have been positioned to reference horizontal features of both the Hotel and Edmund Barton Chambers, while also providing weather protection to building entrances.

The Compton Street podium entrance to the building also incorporates vertical and horizontal elements, with an emphasis on the former. Due to the narrowness of the entryway, this helps to strengthen visual identity while not detracting from surrounding built features such as the Hotel. As is the case with the treatment of the southern facade of the podium, horizontal elements on the western facade correspond with horizontal features of the Hotel.

A terrace is provided to the top of the podium on the southern side and it is physically connected to the new roof top terrace of the Hotel. This terrace will be accessible to Hotel patrons and other building occupants alike. Building occupant access is provided via a secure link to the western side of the lift core, along a passageway which overlooks the Atrium and Urban Plaza below. Secure access to the roof terrace from the adjacent Tenancy at Level 2 is also available.

The Hotel, Urban Plaza and Atrium are located within the podium, traversing a number of levels. Other ground floor uses within the podium have been described above in Section 5.3.2.

The first floor of the podium accommodates the second levels of the Hotel and Atrium, the two-storey void to the office entry foyer, building services requirements, lift core, fire stairs and toilets, and a Tenancy space to the eastern side. A physical pedestrian link is provided to the north-western corner which facilitates access from the office tower lift lobby to the Hotel, and Urban Plaza below. A building manager/security office is located in the north-west corner, adjacent the mechanical services room.

The second floor of the building accommodates the roof terrace to the top of the podium and Hotel roof deck (refer above), continuation of the Atrium, lift core, fire stairs and toilets, and a tenancy space to the east and part south sides. An additional function room, serviced by the Hotel and accessible via same and/or the office tower lift lobby, is located in the north-west corner of the building.



5.3.5 Tower

The tower portion of the building, extending from the third level (above podium) to the fifteenth level (below penthouses), accommodates office tenancies. These levels of the new building are setback from boundary lines, at varying distances and locations, on all four facades of the building, with greatest emphasis being placed relative to Wright and Compton Streets. The overall built form of the building has been deliberately 'broken down' in an attempt to respond to both the proportions of the Local Heritage places and the existing streetscape context more generally. Some portions of the building recede from the dominant facade element, while others project forward. This creates:

- visual interest;
- an opportunity for elevational change as a result of ever-changing sun and shadow patterns;
- a reduction in perceived bulk and scale of the building;
- a sensitive response to surrounding built form and structures;
- varying use opportunities for building occupants by provision of indoor and outdoor spaces (balconies, terraces); and
- a move away from the somewhat more traditional design approach of office buildings resulting in bland 'glass box' architecture.

The services core of the office tower accommodates:

- four passenger lifts with lift lobby;
- male, female and disabled toilet facilities;
- two fire escape stairs;
- Cleaner's Store and Tea Room facilities; and
- service ducts.

The lift lobby is provided with natural light and external views by way of glazed windows at the northern end. Toilet facilities are generally accessible from lift lobbies and tenancy spaces, providing greater flexibility and access options for occupants.

The plant room is split over two levels (fourteenth and fifteenth), and is located on the eastern side of the building. The north and east sides of the plant rooms incorporate metal louvres for ventilation, while the south side is glazed, thereby continuing the building's facade treatment and allowing natural light into the space reducing the need for total artificial illumination.

Particular features of the Office Tower include:

- a roof terrace at the third level;
- 'wrap-around' corner balconies (with wall-wetting sprinklers) to the south-west and north-east corners of the building on the seventh, tenth and thirteenth levels; and



- commencing at the tenth level, a three storey high recessed and landscaped Sky Garden, positioned in the middle of the southern facade.



Figure 7: Sky Garden

The features also help to reduce the perceived bulk and scale of the Office Tower while simultaneously providing tenancies with outdoor space, 'break-out' areas, an opportunity for fresh air and ventilation, sunlight and/or daylight, and extensive views. It is intended that all office tower occupants will have access to the terrace at the podium level and the sky garden on the tenth level. It is intended that the sky garden will offer the opportunity for building occupants to retreat to a quiet, tranquil 'break out' area. Appropriate landscaping, including seating will be provided.

The integration of varying setbacks to the facades of the office tower, and building overall, results in the building 'becoming lighter' as its height extends. These setbacks, together with elements that protrude outwards, help the building to respond to the finer grain detail and character of the surrounding streets and buildings.

The north and east facades incorporate portions of solid walling, aligning with boundary lines. These sections of walling are broken down visually, either by disconnected yet related 'panels' utilised on the eastern facade, or more extensive planes of walling incorporating negative/shadowline joints up to the thirteenth level on the northern facade. In regards to the 'panels' on the eastern facade, they have been modelled to broadly reflect the scale of the Hotel. In addition, the protruding elements that these panels create 'wrap around' the north-east corner of the building morphing into glazed panels of the same height. This design approach is replicated with comparable protruding glazed elements to the south and west facades, 'wrapping around' the south west corner of the building. The protruding elements predominantly cease at the thirteenth level, with further reductions to higher levels, particularly the penthouses, thereby reducing any perceived visual bulk and scale of the building and diminishing the impact of its overall height.



5.3.6 Penthouses

The two penthouses occupy the two upper most levels of the building and form an architectural top to the building, setback from the main façade.

The walls of the Penthouses are setback from the walls of the main building below which, in turn, are progressively setback from respective boundary lines of the site. The result is that the Penthouse to boundary setbacks are:

- 9.5m from western boundary;
- 4.7m from the northern boundary;
- 5.35m from the eastern boundary; and
- 7.5m from the southern boundary.

The intent of this design solution is to minimize or de-emphasise the height of the building, relative to ground level. The roofs of the Penthouses cantilever out beyond wall lines to provide sun and/or weather protection to the residences and private outdoor spaces.

The dwellings are accessed by two of the four lifts within the buildings core opening to a lift lobby at Level 16 and occupants will utilise secure coded electronic access 'keys'. The lobby has access to natural light to the northern end opening to a glazed wall with a northerly outlook towards Gouger Street.

Each dwelling comprises of four bedrooms, five bathrooms, and open plan kitchen meals and living room and a separate dining room which can be opened by concertina doors to the open plan living room.

The lower level of each Penthouse will accommodate the entry, lounge, dining, meals area, kitchen, butler's kitchen, laundry, study, powder room, store and balconies (one with outdoor cooking/dining/entertainment area). The upper level of each Penthouse will be accessed by private internal stairs and accommodate: four bedrooms each with walk-in robe and ensuite (one to be a 'master suite'), and a void in the floor to overlook the living area on the lower floor.

The habitable rooms of the dwellings on Level 16 open to expansive decks providing the occupants of the dwellings private open space for Dwellings 1 and 2 of 169 square metres and 187 square metres respectively. Additional balconies off the master bedroom and bedrooms 3 and 4 provide an additional area of open space of 40 square metres and 59 square respectively for each dwelling.

The primary area of open space and the open plan room have a northerly aspect to take advantage of the passive environmental benefits of direct northern sunlight. Smaller balconies are also provided off each of the four bedrooms on Level 17.



5.4 Materials and Finishes

The external materials selections for the proposed project are as set out below.

Local Heritage Hotel

- Retention and repair of existing face stonework to all four retained facades of the Hotel.
- Retention and repair of existing rendered finishes to all four retained facades of the Hotel.
- Retention, repair and repainting of existing timber window and door frames, verandah construction; paint colours to match existing.
- Glass balustrade to Hotel roof deck (positioned behind existing masonry parapet).

Podium

- Windows: clear double-glazed curtain walling with powder-coated aluminium window frames.
- Junction between Hotel and podium, and podium and Edmund Barton Chambers (south facade): Masonry wall panel: off-form precast concrete panel using white cement; frameless clear glass fixed panel separating western precast concrete panel and Hotel.
- Horizontal and vertical masonry elements (podium entry to south and west facades): smooth faced sandstone veneer; clear glass vertical lift door set in black powder-coated aluminium frame.
- Black powder-coat finish to steel framed canopies with timber slatted soffits (south and west sides).
- Black powder-coat finish to car park entry security grille.
- Black powder-coat finish to Transformer Store aluminium ventilation louvres (west side).
- Black powder-coat finish to high-level aluminium louvres (south and west sides).
- Clear glass balustrade to outer edge of Podium Roof Terrace.

Office Tower

- Windows: clear double-glazed curtain walling with integrated horizontal blind system (east, north and west facades) set in black powder-coated aluminium window frames.
- Balcony balustrades to Levels 4, 7, 10, 13 to be generally formed by continuation of curtain wall system, or off-form precast concrete panels where applicable.
- Masonry walls (north, west and east facades): off-form precast concrete panels using white cement.
- Plant Room louvre vents in black powder-coated aluminium (east and north facades).
- Soffits: white pre-finished aluminium facings (uninsulated).



Penthouses

- Masonry walls (all facades): off-form precast concrete panels using white cement.
- Windows: clear double-glazed curtain walling with integrated horizontal blind system (east, north and west facades) set in black powder-coated aluminium window frames.
- Balcony balustrades to Level 16 to be generally formed by continuation of curtain wall system, or powder-coated louvre vents or off-form precast concrete panels where applicable; clear glass balustrading to balconies to Level 17.
- Roof: pre-finished 'Colorbond' metal decking with matching associated trims and flashings.
- Steel pergola roof: black powder-coated steel with aluminium 'Vergola' aluminium roofing system.

5.5 Heritage Integration

The former Wright Street Hotel is a designated local heritage place and has been integrated into the design of the building.

The development incorporates a podium reflecting the scale and height of the two-storey local heritage place to define the base of the building.

The original building footprint has been retained in the design which defines and anchors the corner at Wright and Compton Streets with the new build incorporating a five-storey high Atrium allowing the eastern wall of the heritage place to be visually exposed both within the Atrium and when viewed from the adjacent footpath on Wright Street.



Figure 8: Podium Integration

The eastern wall is to be restored with the ground level of the hotel spilling into the Atrium through existing openings in the wall.



Where the new building abuts the heritage fabric, the design utilises negative (recessed) glass joints to expose and minimise the impact on the heritage fabric.



Figure 9: Heritage Detailing

A new steel and glass lift is to be introduced to the north-eastern corner of the hotel building providing disability impaired access to the first floor and the newly created roof terrace.

The roof and chimneys which sit behind the hotel's existing parapet are to be removed and replaced with roof top terrace which integrates with:

- the podium terrace extending along the Wright Street frontage of the building at the defined podium level; and
- and additional hotel floor area (function room) at Level 2 to the north-west corner of the building.

Toilets and amenities for the hotel are to be constructed at ground level adjacent the northern boundary of the site and separate from the Local Heritage Place to minimise impact on the heritage fabric. A new kitchen and separate bin store for the hotel to be constructed at ground level within the outer walls of the heritage place.

The structure for the new office building includes two columns to be constructed on the inner face of the Hotel's eastern wall, providing structural support for the hotel and to allow the new building to cantilever over the hotel at Level 5 and above.

Critical to the integration of the Heritage Place in the final design is the activation of the hotel at all three building levels and the vertical separation and 'breathing space' above the hotel building.



5.6 Transport and Access

5.6.1 Pedestrian Access

The proposed development provides an open ground floor plan allowing free flowing pedestrian access from Wright Street and Compton Street through the Atrium, office foyer and commercial tenancy.

The Atrium provides for pedestrian access from Compton Street through a cavity sliding door and a glazed panel lift door to Wright Street, with internal sliding glass doors to the office entry foyer.

The office entry foyer has a formal entry from Wright Street servicing the lift core which is also the principal entry for the two upper level penthouses (access also available from rear laneway).

The ground floor commercial tenancy has a separate designated entry from Wright Street and also includes doors direct to the office entry foyer.

Pedestrian access to the upper level office floors and penthouses through the entry foyer requires security access to the lift core.

5.6.2 Bicycle Access and Parking

Access to the on-site bicycle storage and end of trip facilities on the ground floor is provided via an access point to the right-of-way at the rear of the site.

On-site secure storage for 61 bicycles is located on the ground floor together with separate male and female end of trip facilities for cyclists. The end of trip facilities include toilets, showers and lockers conveniently located adjacent and connected to the bike storage area.

5.6.3 Vehicle Access and Parking

Vehicle access is obtained from Wright Street with a single width ramp down to the basement, which accommodates 20 on site car parking spaces.

Signalised access notifying of ramp use will control vehicle movements to and from the basement, with priority given to vehicles entering the site.

The parking spaces will be allocated to tenants of the building based on demand but will remain ancillary and subservient to the use of the building. Four of the parking spaces will be allocated specifically to the two penthouse dwellings (two per dwelling).



5.6.4 Service Vehicle Access

An existing loading bay on Compton Street adjacent the Hotel will continue to be used for service vehicles associated with the Hotel use for the delivery of food and beverages as well as waste collection.

The right-of-way to the north of the site will allow for waste collection vehicles to collect waste from the bin storage area located on the ground floor at the rear of the site abutting the right-of-way. It is expected the waste collection vehicles will temporarily park in Market Street and collect the bins from the bin storage area.

5.7 Building Services and Structure

Building services have been spatially identified throughout the building including:

- an electricity transformer located with a frontage to Compton Street adjacent the northern boundary of the site and setback from the Compton Street alignment by 2.5 metres;
- the main electricity switch board located behind the transformer accessed from within the Atrium Urban Plaza;
- a fire control room, pressure pump and fire booster tank located in the basement;
- a communications and equipment room located within the basement; and
- a plant room for air conditioning, cooling towers and related plant is integrated across part of Level 14 and Level 15 of the building.

5.8 Waste Management

Waste will be separately managed within three separate bin storage areas on the ground floor of the building. The bin storage areas for the office and commercial tenancies, and the residential penthouses, are located within separate, but abutting rooms, adjacent to the rear right of way.

The office and commercial tenancies are proposed to be serviced by contracted cleaners, who would empty the localised bins (separate general waste, paper recycling, plastic recycling, cartridges and batteries) to the relevant common skips within the ground level bin storage room.

Waste from the residential penthouse apartments would be transferred by the tenants (or their cleaners) to the dedicated residential bin store at ground level.

A separate dedicated waste storage room for the Hotel is located adjacent Compton Street, within the rear of the Hotel building. This waste storage room will accommodate local waste, recycling and food waste bins. Provision will also be included for recycled deposit containers, coffee grinds and cooking oil.



Full skips will be collected by private waste contractors daily. Waste from the commercial and residential bin storage areas will be collected via the rear right of way by a collection vehicle that will be parked in Market Street. Waste from the Hotel bin storage area will be collected by a collection vehicle that will be parked within Compton Street.

5.9 Ecological Sustainable Development

A range of environmentally sustainable design solutions have been integrated into the design of the building. Ecologically sustainable design solutions utilised include:

- an Innovative curtain wall glazing system – the full height glazing will allow maximum natural light transmission, while the environmentally responsive double glazed curtain wall design system will provide an efficient response to solar heat gain and reflectivity. The cavity between the layers of glass in the northern and western elevations holds a built in automated louvre system that adjusts to external factors and occupant preference;
- active chilled beam system – the active chilled beam system will utilise individual housings recessed into the ceiling and consisting of air diffusion, heating and cooling coils. The housings will be arranged across each floor plate to suit the thermal zoning and occupant load of the floor;
- orientation – the orientation of the building allows for solar access, while heat gain from the west and east will be managed through automated blinds with a double glazed system that will mitigate glare and unwanted solar heat gain;
- green Atrium and terraces – green walls and planter boxes will be used within the proposed building Atrium and upon roof terraces and sky garden to provide semi-outdoor green spaces at, and above, ground level;
- ventilation – natural ventilation will be provided throughout the building via the active chiller beam system and operable windows and doors to terraces and balconies;
- lighting – all lighting within the building will utilise environmentally friendly LED lights;
- rainwater – will be harvested to provide water for irrigation and the cooling towers; and
- location – the building is located conveniently to dedicated pedestrian and cycling links promoting the use of alternate transport methods.

5.10 Staging

The proponents request the flexibility to seek Building Rules Consent for the building in four consecutive stages. The staging of the proposed development may be as follows:

- Stage 1: Demolition.
- Stage 2: Substructure construction.
- Stage 3: Superstructure construction.
- Stage 4: Architectural fit-out and external façades.



6.0 DEVELOPMENT PLAN ASSESSMENT

The relevant version of the Adelaide (City) Development Plan for procedural and assessment purposes was consolidated on Tuesday, 20 June 2017.

The subject land, under this version of the Adelaide (City) Development Plan, is situated entirely within the Capital City Zone. The land is not located within any Policy Area. The subject land abuts a zone boundary with the Main Street (Adelaide) Zone, which is located on the southern side of Wright Street.

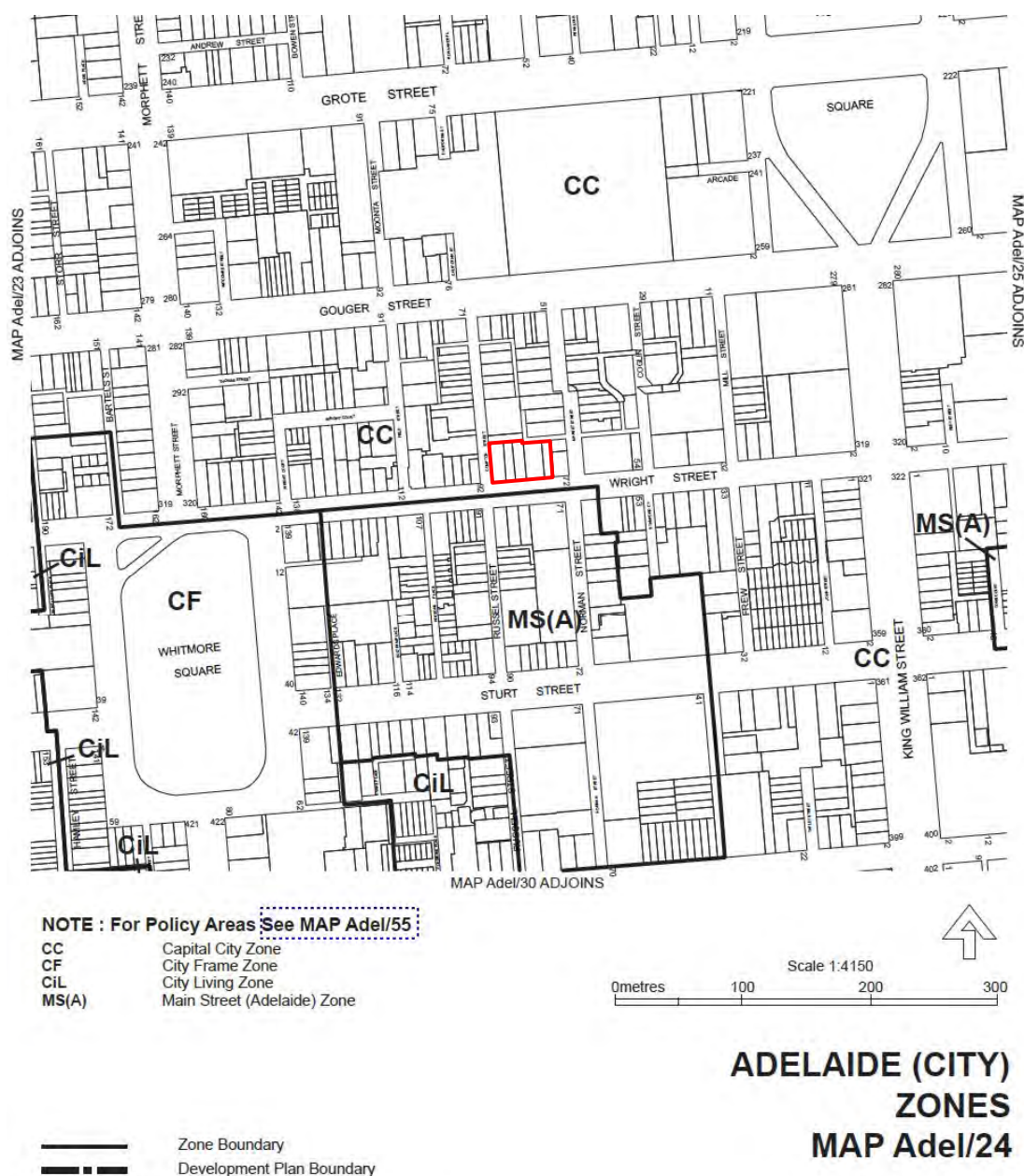


Figure 10: Zone Map Adel/24



6.1 Procedural Matters

6.1.1 Nature of Development

The proposed development is an 18-storey building with a predominant use for offices and includes ground floor hotel and commercial tenancies. As a mixed use development, it is not listed as either complying or non-complying within the Capital City Zone.

We respectfully suggest that the development proposed on the subject land should therefore be assessed for *Consent on Merit*.

6.1.2 Category of Development

Principle of Development Control (PDC) 40 of the Capital City Zone assigns all forms of development as Category 1 development for the purposes of Public Notification, except where it is assigned to Category 2 development. Category 2 development is stated to include “any development where the site of the development is adjacent to land in the City Living Zone or Adelaide Historic (Conservation) Zone and it exceeds 22 metres in building height”. Whilst the proposed development is to have a maximum building height of 68 metres above ground to the top of building, the subject land is not adjacent to land within the City Living Zone or Adelaide Historic (Conservation) Zone.

The application must therefore be assigned as a Category 1 development, for the purposes of public notification.

6.1.3 The Relevant Authority

The proposed development has a development cost \$57 million. According to Schedule 10 of the *Development Regulations 2008*, the Commission is determined as the relevant authority in this matter because the proposal involves development in the area of the Corporation of the City of Adelaide that is set to cost the proponent more than \$10 million to complete.

4B—City of Adelaide—developments over \$10m

- (1) *Development in the area of The Corporation of the City of Adelaide where the total amount to be applied to any work, when all stages of the development are completed, exceeds \$10 000 000.*



6.1.4 Statutory Referrals

Under clause 24 of Schedule 8 of the *Development Regulations 2008*, development in the City of Adelaide, where the Development Assessment Commission is determined as the relevant authority, requires referral to the Government Architect or Associate Government Architect in the Office of Design and Architecture SA.

As identified in Section 2.0 of this Planning Report, the applicant has partaken in the voluntary design review process with the Government Architect and the Associate Government Architect has provide direct input into the design of the proposed development through additional design workshops.

Cluse 9 of Schedule 8, requires referral to Commonwealth Secretary for the Department of Transport and Regional Services, if development exceeds the height as shown on a map entitled Airport Building Heights in the relevant Development Plan. The Adelaide City Development Plan includes an Airport Building Height Map at Map Adel/1 (Overlay 5). The subject land is located at the 90 metre (AHD) OLS building height contour where the ground level is known to be 43.5 metres.

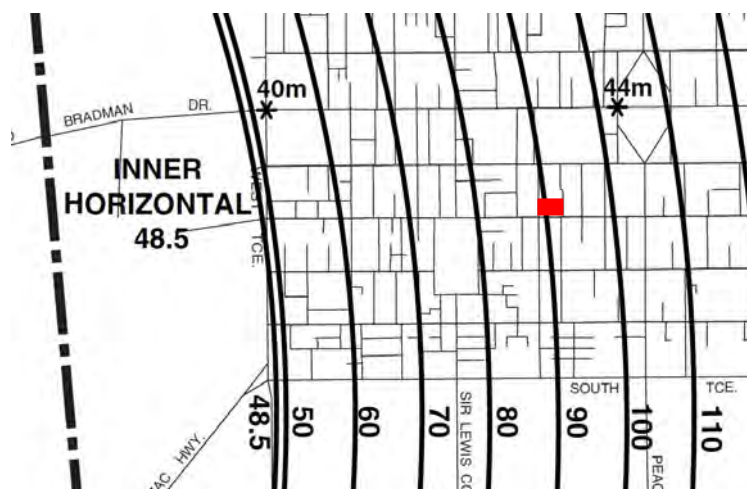


Figure 11: Airport Building Height Map Adel/1 (Overlay 5) Extract

Accordingly, any building that exceeds 46.5 metres in height on the subject land requires referral to through Adelaide Airport Limited being the responsible agent to the Commonwealth Secretary for the Department of Transport and Regional Services. The proposed buildings height of 68 metres therefore requires referral.



6.2 Land Use

The Capital City Zone provides for an envisages a range of land use to reinforce and increase the Cities vibrancy as expressed in the Desired Character Statement for the zone. The type and nature of land use envisaged within the Zone are reinforced through Zone Objectives 1 and 2 and Zone Principles of Development Control (PDC) 1 and 2

Capital City Zone - Desired Character Statement (extract)

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.

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.

Capital City Zone – 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.

Capital City Zone – PDC's

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 6
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.**

Zone PDC 1 lists, offices, hotels, dwellings, restaurants and shops, all as envisaged land uses within the zone whether individual or any combination of the above, where these land uses are defined under the *Development Regulation 2008* as:

“office means any building used for administration or the practice of a profession, but does not include consulting rooms or premises where materials or goods are stored for sale or manufacture;

hotel means premises licensed, or proposed to be licensed, as a hotel under the Liquor Licensing Act 1985, but does not include a motel;

dwelling means a building or part of a building used as a self-contained residence;

shop means—

- (a) premises used primarily for the sale by retail, rental or display of goods, foodstuffs, merchandise or materials; or*
- (b) a restaurant; or*
- (c) a bulky goods outlet or a retail showroom; or (d) a personal service establishment, but does not include—*
- (e) a hotel; or*
- (f) a motor repair station; or*
- (g) a petrol filling station; or*
- (h) a plant nursery where there is no sale by retail; or*
- (i) a timber yard; or*
- (j) service trade premises; or*
- (k) service industry;*

restaurant means land used primarily for the consumption of meals on the site;”



The proposed development incorporates a combination of the afore mentioned uses which will:

- provide for and reinforce the economic focus of the state through the development of approximately 10,000 square meters of additional premium Office floor area within the Capital City Zone generating significant day time activity;
- allow for the vibrancy of the active ground floor uses in the form of the proposed hotel and commercial tenancy to interact with both Wright Street and Compton Street generating pedestrian activity;
- provide for evening activity through the three levels of the proposed hotel allowing for both street activation and passive surveillance of the street from the roof top terrace at Level 2; and
- provide for additional residential population albeit it limited to the two luxury dwellings over Levels 16 and 17.

The location is highly suited to the proposed mix of land uses being a primarily commercial section of Wright Street, where the hotel activities will provide for afterhours activation of a primarily day time businesses. There are limited residential dwellings within the immediate locality that would be impacted upon by afterhours activity generated by the hotel, which has a long standing and historical use established on the site.

6.3 Built Form

The Desired Character of the Capital City Zone, clearly envisages the redevelopment of under developed areas of the City and contemplates a change from the existing low scale form and character that may exist. Accordingly, while the existing character and scale of a locality should be considered, a greater emphasis and weight on the desired character is required in the assessment of development within the Capital City Zone.

Capital City Zone - Desired Character Statement (extract)

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.

.....

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.

The Desired Character Statement for the Capital City Zone expresses a clear intent for the built form and character of the zone to provide for “High Scale” development with “high street walls to frame the street”, while creating an “interesting pedestrian environment and human scale” at the lower levels.

The contextual assessment requires a design response that considers the built form surroundings, those which are likely to remain due to their heritage protection but also the consideration of the development potential of sites which are afforded no heritage protection and accordingly what could reasonably be development on the land having regard to the current Development Plan provisions, not just the state of existing development on these sites.

Objectives 4, 5, 6 and 7 of the Capital City Zone reinforce the desired built form Character envisaged to be created.

Capital City Zone – Objectives

- 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.**



Of particular note is the focus on:

- the pedestrian environment;
- innovative design approaches and contemporary architecture;
- reinforcing the Cities grid layout; and
- the development of large site to their full potential

The corresponding PDC's guiding built form within the Capital City Zone have a strong weighting towards the delivery of a high standard of architectural design as identified in PDC's 6, 7, 8, 9, 11 and 15 listed below.

Capital City Zone – PDC's

- 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.**
- 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.**
- 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.**



In assessing the proposed development within the context of the site, it is noted that there are a number of heritage listed places that influence the contextual setting of the proposed building most notably, the former Hotel Wright Street, Edward Barton Chambers and the former shop at 89 Wright Street. These buildings have a strong influence on the design of the development at the lower levels where the building has it's greatest contribution to the pedestrian environment and relationship to human scale exhibited with the podium over the lower two levels.

A significant portion of Wright Street remains undeveloped and has a presents the opportunity to be developed establishing a new built form character for this area of the city creating and defining the interface between the high scale envisaged in the Capital City Zone and the medium scale development in the adjacent Main Street Zone.

The proposed development will contribute to the desired character of the Capital City Zone establishing the high street walls defining the zone from other portions of the city while the lower levels of the building generate activity and reinforce the pedestrian human scale context established by the heritage buildings.

The architectural design of the building has been influenced through the feedback from the Office of Design and Architecture and represents a high quality building incorporating architecture that is both contemporary and innovative noting in particular the incorporation and integration of the former Hotel Wright Street into the design of the overall building. It is the inherent design philosophy which incorporates and celebrates the built form of former Hotel Wright Street into the design of the building which is reflected in the architectural expression of the base (podium) and the modelling of façade in the design of the tower.

6.3.1 Building Height

The Capital City Zones PDC's 16, 21, 22 and 25 provide the guiding principles in respect to the assessment of the proposals height.

Zone PDC 16 establishes the premises that any specified quantitative building height may be exceeded. This is further reinforced through Zone PDC's 21, 22 and 25 that establish both criteria where it is considered acceptable to exceed the specified quantitative height nominated on Concept Plan Figures CC/1 and 2 and the design requirements that are then required to be met if a development exceeds the quantitative building height guideline.

Capital City Zone – PDC's

- | | |
|-----------|---|
| 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. |
| 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.

- 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.

The site of the proposed development is located within the area identified on Concept Plan Figure CC/1 with a maximum height guideline of 43 metres, noting that this sits between an area of 'No Prescribed Height Limit' to the east on the northern side of Wright Street and areas with a '53 metre' maximum height guideline to the west on the northern side of Whitmore Square and to the east of Norman Street to the south of Wright Street.

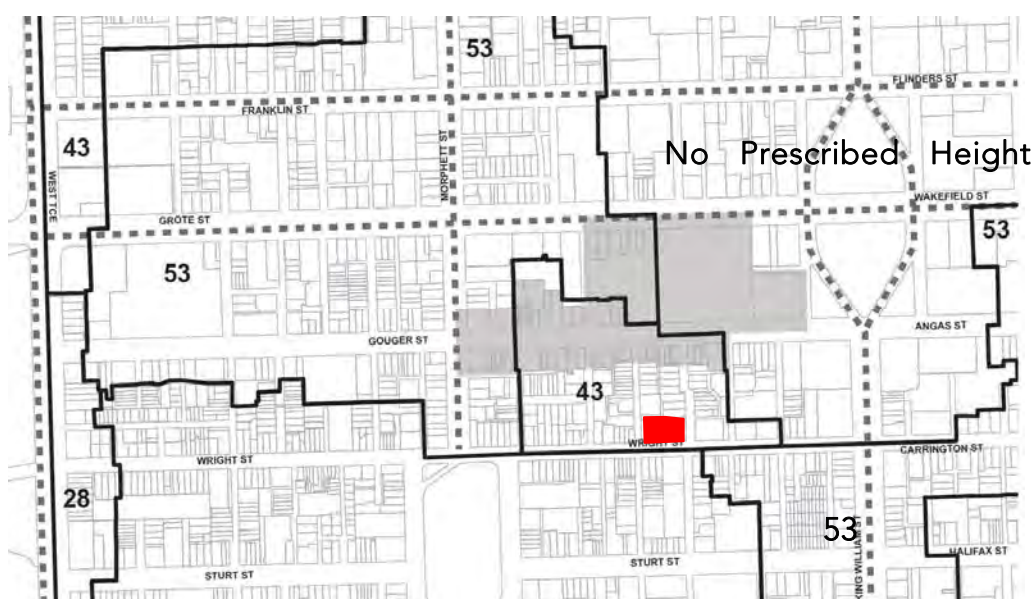


Figure 12: Concept Plan Figure CC/1



While the site of the proposed development is within the nominated area with a 43 metre maximum building height, the proposed development fulfils clause Zone PDC 21 to allow for the building to exceed the maximum height guideline that it in our opinion satisfies in the intent of the overall city form as illustrated in Concept Plan Figure CC/1 and meets a minimum of three of the criteria to warrant over height assessment in clause (b)(i) noting that the proposed development:

- incorporates the retention, conservation and reuse of a building which is a listed heritage place, being the former Hotel Wright Street as an integral part of the development (subclause 2);
- incorporates high quality universally accessible open space that is directly connected to, and well-integrated with public realm areas of the street in the form of the Urban Plaza at ground level providing a pedestrian link between Compton Street and Wright Street while creating a setting for the Heritage Place to be visible and activated on all four elevations. In addition, the roof top terrace of the Hotel and adjoining podium terrace also provide integrated open space at Level 2 (subclause 3); and
- exhibits actively occupied uses located on all of the street facing sides of the building, with the only car parking provided within the basement level (sub clause 6).

The anticipated city form in Concept Plan Figures CC/1 and 2 illustrated a mapping of building heights reflecting particular characteristics of the city with the highest (unlimited prescribed building height) around the City Central Business Policy Area with a ring of 53 metres building height for the majority of the balance of the Capital City Zone. Areas of lower building height guidelines for localities with specific character have nominated quantitative heights including 22 metres along Hutt Street, 34 metres along Rundle Street, 43 Metres along Rundle Mall, 43 and 28 metres along West Terrace responding principally to airport building height requirements and 43 metres around the Gouger Street precinct extending to Wright Street.

Where there are lower building heights, the Development Plan typically reinforces the reasoning for the lower building height through a clear expression and justification in the Desired Character. The Desired Character for the Capital City Zone makes no specific reference to Wright Street and or the justification for a lower building height. One interpretation of the lower building heights along Wright Street is its interface with the adjacent Main Street Zone to the south. While this may be the case, it is not clearly expressed in the policies of the Development Plan and appears more-so to be a hangover from previous Development Plan policy referencing the low scale character of Gouger Street and Market Street rather than a specific prior to the adoption of the Capital City Zone provisions.

Notwithstanding the above, the 'over height provisions' apply to the subject land and have been applied to other developments within the broader locality including but not limited to 'Bohem', which exceeded the maximum height of 53 metres adjacent the City Frame Zone by some 23 metres and the recently approved building at 27-29 Market Street directly to the north of the subject site with frontage to a minor street with a building height of 58 metres exceeding the 43 metres height guideline by 15 metres and the 56.8 metres high (18 Storey) building at 126 Wright Street.



Having regard to the size of the site at 76-88 Wright Street the proposed height of 68 metres, with the upper two levels or 8.0 metres of building significantly setback from the balance of the building mass, the resultant main building mass of 60 metres is consistent with the building heights of the two recently approved 'over height' buildings within the 43 metre building height guideline area of the Capital City Zone. It will also be generally consistent with the dip or 'J' curve of building heights established by the 43 metre height precinct defining anticipated City Form by this lower building height area between the development of 'Bohem' to the west and the future development of the development sites to the east along Wright Street within the area of "no prescribed height limit".

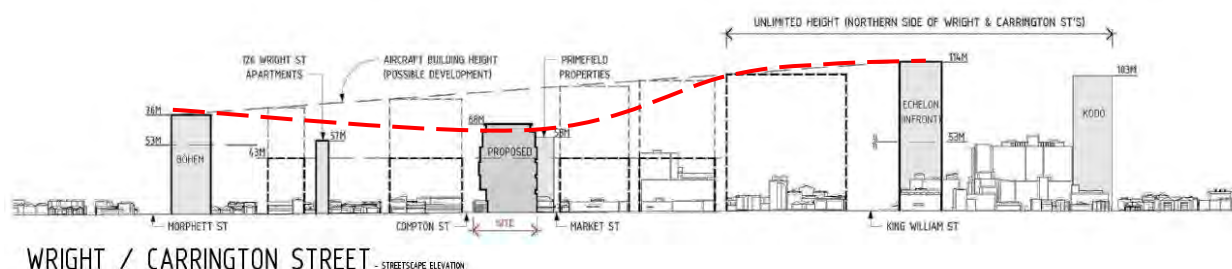


Figure 13: City Form Streetscape Cross Section

The proposed building also incorporates the all of the required sustainable design measures to warrant acceptance of exceeding the building height guideline by:

- incorporating a rooftop terrace over the existing hotel with integrated planting in raised planter boxes including two semi mature trees;
- incorporating a sky garden at Level 10 servicing the office tenancies with integrated planting in raised planter boxes including a semi mature tree;
- incorporating significant roof top terraces at Level 16 providing the private open space for the respective dwellings;
- incorporating a greenwall within the Urban Plaza Atrium supported by services that ensure ongoing maintenance generating the ambience within and softening the hard edge of the Urban Plaza;
- providing innovative external shading devices on all of the western, northern and eastern side of a street facing façade, through the environmentally responsive double glazed façade system with integrated automated louvre system within the cavity of the double glazing; and
- the provision of higher amenity through provision of a significantly greater area of private open space than the quantitative minimum requirement, and access to natural light and ventilation to all habitable spaces and common circulation areas.

Zone PDC 25 and Council wide PDC 167 provide further design requirements for buildings that exceed the maximum building height guidelines seeking to minimise impacts on sensitive uses in adjoining zones and demonstrating a higher standard of design outcome and contribution to the public realm and streetscape.



Council Wide – PDC's

- 167 Where development significantly exceeds quantitative policy provisions, it should demonstrate a significantly higher standard of design outcome in relation to qualitative policy provisions including pedestrian and cyclist amenity, activation, sustainability and public realm and streetscape contribution.**

In respect to the building design, it should be firstly note that while the site is located adjacent the Main Street Zone to the South, it is not located adjacent to any sensitive land uses that would be impacted upon by the buildings additional height. Notwithstanding that the building is unlikely to impact on any specific sensitive land uses the design incorporates and number of specific architectural techniques to minimise any perceive impact of the height within the location, including but not limited to:

- the clear expression of a podium of human scale responding to the contextual setting's scale and height of the adjacent heritage places;
- the incorporation of varied additional setbacks across the façade promoting a variation in light and shadow to create visual interest and depth to the façade;
- the variously setback planes on the façade, reference the height, scale and horizontal massing of the heritage places, while introducing vertical proportioning more central to the site; and
- the additional setbacks to the dwellings on Levels 16 and 17 to diminish their visual appearance when viewed within the immediate public realm.

Overall the building is broken down into visually definable and distinct elements by height, with:

- the podium having a clearly defined height of 8.0 metres referencing the scale of the local heritage context;
- the towers façade broken into planes with height references of 50 metres to the uppermost point of protruding plane, 60.5 metres to the recessed façade; and
- the well setback dwellings over the upper floor levels to the maximum height of 68 metres.

At ground level the configuration of the ground floor, with the full integration of the hotel, the Urban Plaza, office entry foyer and ground floor commercial tenancy demonstrate a significantly higher standard of design outcome in relation to qualitative pedestrian and cycling policy outcomes given the buildings location between a designated north-south cycling link and a designated north-south pedestrian link. The incorporation of ground level end of trip facilities for cyclists associated with the occupants of the office space and linkages to the Urban Plaza from Wright Street and Compton Street enhance the streetscape activation to two primary streets fulfilling and satisfying Council-wide PDC 167.

In terms of aircraft safety Council-wide PDC 172 seeks to ensure that buildings and structures do not adversely affect the long term operational safety and commercial requirements of Adelaide International Airport.



- 172 Buildings and structures should not adversely affect by way of their height and location the long-term operational, safety and commercial requirements of Adelaide International Airport. Buildings and structures which exceed the heights shown in Map Adel/1 (Overlay 5) and which penetrate the Obstacle Limitation Surfaces (OLS) should be designed, marked or lit to ensure the safe operation of aircraft within the airspace around the Adelaide International Airport.**

The proposed development at 68 metres in height above ground level penetrates the obstacle limitation surface as illustrated on Map Adel/1 (Overlay 5) however it is noted that at 68 metres the height of the proposed building is lower than other buildings currently under construction noting that 'Bohem' to the west has a height of 76 metres, Echelon on King William Street has been approved with a height of 114 metres and KODO has a height of 103 metres.

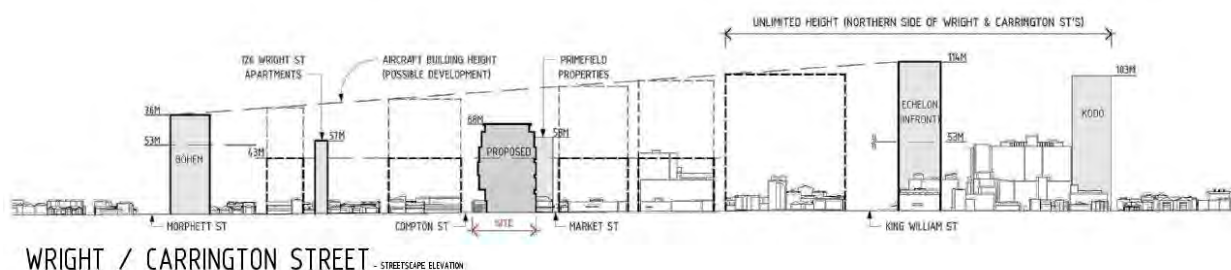


Figure 14: Airport Building Height Streetscape Cross Section

Accordingly, we submit that the proposed building will not adversely affect the long term operational safety or commercial requirements of the airport.

We therefore conclude that while the building exceeds the maximum building height guideline for the location, the proposed development meets the criteria to warrant consideration of the 'over height' provisions and exhibits a design that demonstrates a high quality architectural outcome in terms of composition and architectural expressions at all levels of the building to warrant approval for the proposed height.

6.3.2 Setbacks

Zone PDC's 10, 11, 12 and Council-wide PDC 179 provide guidance for the envisaged setbacks of buildings within the Capital City Zone and more specifically applying to the subject land.

- 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.**

Council Wide – PDC's

- 179 Buildings within the Capital City Zone should be built to the street edge to reinforce the grid pattern, create a continuity of frontage and provide definition and enclosure to the public realm whilst contributing to the interest, vitality and security of the pedestrian environment.**

The proposed development reinforced the city grid with the built form proposed parallel to the adjacent rectilinear street network and built to the street alignment at the ground floor and podium building levels.

The nil setback at ground level is consistent with the desired character and in responding the contextual setting of the street within the immediately locality reinforcing the street wall and active frontage of the building and the built form and massing of the adjacent heritage places. The nil setback facilitates the opportunity for pedestrian protection in the form of the proposed canopies taking design levels from the adjacent heritage places.

At the upper levels, above the podium the tower is setback at varying distances, with a clearly defined podium above level two of 4.6 metres to Wright Street for Levels 2 and 3 and 9.16 metres to Compton Street for Levels 2, 3, and 4 achieving Zone PDC 12.



The varying planes in the elevation of the tower include:

- setbacks of 3.5 metres, 5.0 metres and 6.7 metres to Compton Street articulating the façade and defining a series of horizontal and vertical building elements in the architectural expression;
- setbacks of 1.5 metres and 3.0 metres from Wright Street;
- 1.5 metres and Nil setback from the eastern boundary; and
- nil and 1.5 metres from the northern boundary.

The dwellings at Level 16 and 17 are setback 9.5 metres from Compton Street, 6.5 and 7.5 metres from Wright Street, 5.1 and 6.9 metres from the northern boundary and 5.6 metres from the eastern boundary of the site.

The varying setback fulfils the performance requirement of the relevant setback provisions in that the proposed building:

- relates to the scale and context of adjoining built form through the podium with nil setback and a clearly defined negative joint and setback of Levels 2, 3 and in part 4 above the podium. The scale of the negative joint responds to the scale relationship and height of the podium;
- provides a human scale at street level through the podium with canopies for pedestrian protection;
- creates a well-defined and continuity of frontage between the two adjacent heritage places bookending the building while sympathetically abutting to the heritage fabric with negative masonry and glazed joints;
- gives emphasis and definition to street corners to clearly define the street grid through the retention of the original heritage fabric of the former Hotel Wright Street at the podium while referencing the scale and height of the hotel in the rectilinear projecting façade elements in the tower above the recessed 'breathing space' above the hotel roof top terrace;
- contributes to the interest, vitality and security of the pedestrian environment through the incorporation of glazed active frontages to the building either side of the retained heritage fabric;
- maintains a sense of openness to the sky for pedestrians and brings daylight to the street through the significantly recessed upper levels (16 and 17), the articulation of the façade and the proportional setbacks from Compton Street to minimise the horizontal mass of the building to Wright Street; and
- achieves pedestrian comfort by minimising micro climatic impacts through the setback at the podium level and incorporation of pedestrian protection of Canopies to compliment the canopy and balcony on the former Hotel Wright Street.



6.3.3 Building Composition

The quality in the design of a building is expressed not only in the materials and finishes but also through the careful consideration of the composition and proportions of the building. Zone PDC's 6 and 7 and Council wide PDC 180 and 182 are particularly relevant in the assessment of the building's composition.

Capital City Zone – PDC's

- 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.

Council Wide PDC's

- 180** Development should respect the composition and proportion of architectural elements of building facades that form an important pattern which contributes to the streetscape's distinctive character in a manner consistent with the desired character of a locality by:
- (a) establishing visual links with neighbouring buildings by reflecting and reinforcing the prevailing pattern of visual sub-division in building facades where a pattern of vertical and/or horizontal sub-divisions is evident and desirable, for example, there may be strong horizontal lines of verandahs, masonry courses, podia or openings, or there may be vertical proportions in the divisions of facades or windows; and
 - (b) clearly defining ground, middle and roof top levels.
- 182** Building facades fronting street frontages, access ways, driveways or public spaces should be composed with an appropriate scale, rhythm and proportion which responds to the use of the building, the desired character of the locality and the modelling and proportions of adjacent buildings.

The architectural form of the proposed development has been designed having regard to the size and dimensions together with the contributing positive built form elements of the locality.



The site has a wide frontage to Wright Street and relatively narrow depth along Compton Street, with the height and mass of the former Hotel Wright Street building defining the design and composition of the lower levels of the building.

The proposed development expresses a clearly defined base, taking design cues from the height scale and mass of the original fabric of the former Hotel Wright Street.

The office tower component of the building exhibits the middle of the building with varying planes in the architectural elevations breaking the façade into horizontal and vertical elements that respond and transition the buildings strong masonry base through the central part of the building in a visually lighter weight expression using a combination of curtain wall glazing and masonry panels around all four elevations of the building.

The two dwellings at Levels 16 and 17 form the top of the building recessed from the main façade to provide a diminishing visual element with flat roof cap clean of services and infrastructure.

To achieve the clean roof form, all plant and equipment is incorporated over approximately half of the levels at Levels 14 and 15 enabling the building to screen all plant and equipment within the floor plates of the building, albeit resulting in an overall increased building height to the roof level.

There are several reasons why this design response has been proposed:

- the design treatment of these sections of solid walling provide visual interest and articulation once the building is constructed;
- they take into account the very real possibility that future development on adjoining sites (corresponding with their position) may obscure and/or otherwise impact on the building's facades;
- fire safety treatment of building on a boundary line; and,
- in part, relationship to areas housing building plant, equipment and other services.

Having regard to the width and depth of the site, the overall height of the building responds directly to the proportional composition of the building, with the southern and northern facades appropriately articulated to minimise the visual width through the separate expression of integrated vertical and horizontal building planes.



6.4 Environmental Considerations

6.4.1 Heritage and Conservation

The site of the proposed development incorporates a Local Heritage Place (former Hotel Wright Street) and abuts a Local Heritage place to the east (Edmund Barton Chambers).

The design of the proposed development has been undertaken within the context of these heritage items under the guidance and assessment of DASH Architects who have provided a Heritage Impact Statement contained in **Appendix C**.

The Heritage Impact Assessment addresses the following Council-wide Objectives and Principles of Development Control relevant to the assessment of properties adjacent a heritage place.

OBJECTIVES

- 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

- 136** Development of a heritage place should conserve the elements of heritage value as identified in the relevant Tables.
- 137** 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.
- 138** A local heritage place (as identified in Tables Adel/2, 3 or 4) or the Elements of Heritage Value (as identified in Table Adel/2) 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.



- 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, and 4 metres in the City Living Zone or the Adelaide Historic (Conservation) Zone or as otherwise indicated in the heritage Tables in respect of frontages and side wall returns.**
- 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.**
- 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.**

The incorporation and integration of the former Hotel Wright Street is integral to the overall design of the proposed development and seeks to ensure that the floor plate of the original hotel fabric is conserved and restored for the adaptive reuse of the building as part of a larger development while also allowing for the reinstatement of the hotel use.

The assessment by DASH Architects identifies and considers the extent of the listing of the Heritage Place, together with those elements of the heritage fabric that make a historic contribution to the townscape, being the reason behind the listing of the building.

In considering the extent of the fabric that contributes to the townscape, DASH Architects have had regard to the retention depth identified for local heritage places in a non-residential zone.

In their assessment, the fabric that provides the greatest contributes to the townscape character of the area is limited to the “western (Compton Street) and southern (Wright Street) facades and the prominent Wright Street balcony.” DASH further consider that the buildings chimneys and roof form , while partially visible are neither prominent nor make a significant contribution to the townscape or overall, historic character of the locality. Nor does the eastern façade, given the envisaged future development of land to the east of the existing building in a manner that would conceal this façade have a significant contribution to the townscape values of the building. Accordingly when viewed from the east neither does the chimneys or roof, form part of the value of the heritage place.

While it is understood that one interpretation of the relevant conservation provisions for local heritage places supports the retention of the existing roof, its contribution as a visual element that contributes to the heritage value and/or significance to the Heritage Place is considered questionable. First, its visual significance is negligible from Compton and Market Streets, and limited when viewed from Wright Street. In addition, the two street frontage elevations of the building (facing Compton and Wright Streets), incorporate parapet walls, thereby inherently disguising and obscuring the roof behind. It is therefore argued, that the original design intention attributable to the building was one wherein the roof structure played a subordinate



role in the building's presentation to the street. Therefore, it is further argued that the benefits of reconfiguring the roof to form a usable roof terrace, far outweighs the obtuse benefits of retaining a minor, and arguably insignificant, visual element.

The design of the proposed development, incorporating and integrating the original hotel fabric pays careful homage to the heights, scale and proportions of the original hotel. The podium height and associated pedestrian canopies carefully reflect the horizontal building elements including height of the hotel and its prominent Wright Street balcony.

Within the podium the development of the Urban Plaza adjacent the eastern façade of the original hotel fabric provides an open space that exposes the original two storey high eastern façade of the hotel which otherwise would be concealed. Accordingly, the composition of spaces and use within the podium celebrate the whole of the original fabric in a manner that extends behind the protection measures incorporated in the Development Plan policies and demonstrates significant architectural design quality through the retention of the original building footprint as a whole.

The tower and its respective setbacks above and adjacent the hotel establishes 'breathing space' around the heritage place so as to frame the heritage place in its prominent corner location. Despite the upper floor levels encroaching over the air space above heritage place, the three storey void above the hotel references the proportions and mass of the retained portions of the hotel in regards to the length of the wall along Compton Street, width of the Hotel's frontage to Wright Street and overall height of the building.

The proportions of the hotel fabric are referenced throughout the façade of the tower in the protruding façade elements exhibiting horizontal building elements that define the south western corner of the building.

The integration of the hotel fabric into the overall development extends beyond simply the building fabric but to also ensure that the use of the hotel can integrate over three levels, particularly through the development of a roof top terrace that has seamless integration to the terrace across the extent of the Wright Street façade at the Podium level.

The Hotel's roof and Heritage Impact Assessment concludes that:

- the heritage value of the building is derived from the building elements that are visible from the street and while partially visible the chimneys and existing roof do not make a legible contribution to the townscape;
- the demolition of the chimneys and roof are minor and facilitate the use of the hotel roof space as a key activator of the podium terrace which outweighs the loss of these relatively minor visual elements; and
- the quantitative retention depths expressed in the Development Plan have ambiguously also been interpreted as setback guidelines.

Notwithstanding the ambiguous interpretation of the retention depth policies in the Development Plan the proposed new building which integrates the Heritage fabric incorporates generous 'breathing space' above and surrounding the heritage place.



Accordingly, it is considered that the proposed development fulfils the intent of the relevant Heritage and Conservation provisions of the Development Plan.

6.4.2 *Crime Prevention Through Urban Design*

Inherent in design is the need to ensure that development provides for a safe secure and crime resistant environment as envisaged in the relevant Council-wide CPTED objectives and principles.

OBJECTIVES

Objective 24: A safe and secure, crime resistant environment that:

- (a) ensures that land uses are integrated and designed to facilitate natural surveillance;
- (b) promotes building and site security; and
- (c) promotes visibility through the incorporation of clear lines of sight and appropriate lighting.

PRINCIPLES OF DEVELOPMENT CONTROL

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

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



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

The internal and external design of the proposed development considers the fundamental principles of CPTED and therefore satisfies the afore-quoted Development Plan provisions through the following design and operation techniques:

- minimising recesses of the façade at ground level to avoid hiding places;
- maximising glazing and active uses at ground level to both the Wright Street and Compton Street street frontages;
- providing for land uses that promote day time and afterhours activity;
- creating upper levels, (noting the roof top terrace of the hotel) that facilitate passive surveillance of the adjacent public realm;



- activating the rear 'Right of Way' to provide for cyclist access to the ground level bicycle parking area and end of trip facilities, providing servicing access to an otherwise unused laneway;
- providing under canopy lighting to the pedestrian canopies along Wright Street; and
- incorporating internal security to the foyer of the office tower with security gates and a staffed security desk.

The full extent of active and passive design measures which address CPTED principles are detailed in section 4.2.12 of this report.

Accordingly we submit that the proposed development satisfies the afore-listed Development Plan provisions that seek to provide appropriate protection and safety to the public.

6.4.3 Waste Management

Council Wide PDCs 101 and 103 provide guidance with respect to the management of waste. Together, they recommend that:

- 101 A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new development.**
- 103 Development greater than 2000 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.**

Full details of the waste management solutions to be implemented throughout the proposed development are contained within the Waste Management Plan, prepared by Colby Industries, at **Appendix E**.

In summary, the proposed development includes the following key components in relation to waste management:

- waste will be separately managed within three separate Bin Storage Areas on the ground floor of the building, with separate rooms for the commercial and office tenancies, the residential tenancies and the Hotel facilities;
- the office and commercial tenancies are proposed to be serviced by contracted cleaners, who would empty the localised bins (separate general waste, paper recycling, plastic recycling, cartridges and batteries) to the relevant common skips within the ground level bin storage room;
- waste from the residential apartments would be transferred by the tenants (or their cleaners) to the dedicated residential bin storage area at ground level;



- the hotel will have its own dedicated waste storage room located adjacent Compton Street, within the rear of the Hotel building. This waste storage room will accommodate local waste, recycling and food waste bins. Provision is also included for recycled deposit containers, coffee grinds and cooking oil; and
- full skips will be collected by private waste contractors daily. Waste from the commercial and residential bin storage areas will be collected via the rear right of way by a collection vehicle that will be parking in Market Street. Waste from the hotel bin storage area will be collected by the collection vehicle that will be parked within Compton Street.

The Colby Industries Waste Management Plan provides detailed analysis regarding the volume of waste that would likely be generated by the development and the relevant regulatory requirements contained within the *South Australian Environment Protection (Waste to Resources) Policy 2010*; the *Adelaide (City) Development Plan* and the *South Australian Better Practice Guide – Waste Management in Residential or Mixed-Use Developments* (prepared by Zero Waste SA, 2014).

The report concludes that the proposed Waste Management Plan will enable all waste to be appropriately disposed of from the site, in accordance with the management practices prescribed within the relevant policies, described above.

As such, the proposed development is considered to be consistent with Council Wide PDCs 101 and 103.

6.4.4 Stormwater Management

Council Wide PDCs 128, 129, 130 and 131 provide guidance with respect to the management of stormwater. Together, they recommend that:

- | | |
|------------|--|
| 128 | Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site. |
| 129 | Development should incorporate appropriate measures to minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria and litter and other contaminants to the stormwater system and may incorporate systems for treatment or use on site. |
| 130 | Development should not cause deleterious effect on the quality or hydrology of groundwater. |
| 131 | Development should manage stormwater to ensure that the design capacity of existing or planned downstream systems are not exceeded, and other property or environments are not adversely affected as a result of any concentrated stormwater discharge from the site. |

The proposed development will not increase the amount of runoff generated by the development which it is set to replace noting;

- the existing stormwater infrastructure surrounding the subject land is unlikely to experience increased post-development flows;



- on-site detention to reduce peak flows before entering the existing stormwater infrastructure surrounding the subject land is not required; and
- it will not be necessary to treat any of the runoff generated by the proposed development.

With this in mind, the proposed development is considered to satisfy Council Wide PDCs 128, 129, 130 and 131.

6.4.5 *Environmentally Sustainable Design*

Council Wide Objective 30 and Council Wide PDC 108 combine to call for environmentally sustainable development. Together, they recommend that:

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.**

108 **Energy reductions should, where possible, be achieved by the following:**

- (a) **appropriate orientation of the building by:**
 - (i) **maximising north/south facing facades;**
 - (ii) **designing and locating the building so the north facade receives good direct solar radiation;**
 - (iii) **minimising east/west facades to protect the building from summer sun and winter winds;**
 - (iv) **narrow floor plates to maximise the amount of floor area receiving good daylight; and/or**
 - (v) **minimising the ratio of wall surface to floor area.**
- (b) **window orientation and shading;**
- (c) **adequate thermal mass including night time purging to cool thermal mass;**
- (d) **appropriate insulation by:**
 - (i) **insulating windows, walls, floors and roofs; and**
 - (ii) **sealing of external openings to minimise infiltration.**
- (e) **maximising natural ventilation including the provision of openable windows;**
- (f) **appropriate selection of materials, colours and finishes; and**
- (g) **introduction of efficient energy use technologies such as geo-exchange and embedded, distributed energy generation systems such as cogeneration*, wind power, fuel cells and solar photovoltaic panels that supplement the energy needs of the building and in some cases, export surplus energy to the electricity grid.**



The proposed development is considered to satisfy Council Wide Objective 30 and Council Wide PDC 108 in the following way:

- the development is compatible with the long-term sustainability of the environment, minimises consumption of non-renewable resources and utilises alternative energy generation systems by utilising a range of ecologically sustainable design solutions including an innovative curtain wall glazing system, an active chilled beam system, utilising natural light and ventilation, by establishing a green Atrium and terraces, use of LED lighting, and by harvesting and re-using rainwater for irrigation and cooling towers. The proposed development is therefore consistent with Council Wide Objective 30;
- the orientation of the building has been designed to maximise north/south facing facades, so the north facade receives good direct solar radiation, minimising east/west facades to protect the building from summer sun and winter winds, narrowing the floor plates to maximise the amount of floor area receiving good daylight, and by minimising the ratio of wall surface to floor area (Council Wide PDC 108 (a));
- the proposed curtain wall glazing system and the active chilled beam systems are innovative systems designed to regulate the temperature and ventilation to the building, in accordance with Council Wide PDC 108 (b), (c), (d), (e) and (f); and
- the introduction of efficient energy use technologies as described above, in accordance with Council Wide PDC 108 (g).

There is also the ability to introduce further infrastructure in the future, including roof mounted solar photovoltaic panels and fuel cells, which would supplement the energy needs of the building, with the ability to export surplus energy to the electricity grid.

6.5 Residential Design

While the proposed use of the building is predominantly office, the building includes several mixed uses including the development of two five-bedroom, two-storey dwellings over Levels 16 and 17.

In terms of the design of the dwellings and an assessment against the relevant residential design provisions of the Development Plan I note that:

- the location of the dwellings on the upper two floors and setback from the boundaries of the site maximise opportunities to facilitate natural light and ventilation in accordance with Council-wide PDC 50;
- the floor to ceiling heights of 2.7 metres, together with the use of floor to ceiling glass and internal upper level voids maximise the penetration of natural light in accordance with Council-wide PDC 52. In addition to the natural light penetration to the dwellings and the habitable rooms, the lift lobby at Level 16 opens to a full height panel of glazing in the northern elevation facilitating natural light to the lobby and promoting a visual outlook north across the city;



- the two upper levels containing the dwellings are well setback from the boundaries of the site, being 5.48 metres from the northern boundary, 5.35 metres from the eastern boundary, 7.5 metres from the southern boundary and 9.49 metres from the western boundary, which together with only two dwellings and the central core enables access to direct ventilation and natural light in accordance with Council-wide PDC 53;
- all habitable rooms are located less than 8.0 metres from a window providing natural light and ventilation in accordance with Council-wide PDC 54;
- a roof top terrace at Level 16 encircles the dwellings, with the primary private outdoor open space located on the northern side of the building directly adjacent the open plan living/dining kitchen area being the main recipients of the passive environmental benefits of unrestricted access to northern sunlight in accordance with Council-wide PDC 56 and 57;
- each dwelling is open to three side of the building and incorporates operable walls and an internal void of the open plan living area facilitating a high degree for the opportunity of cross ventilation to be achieved in accordance with Council-wide PDC 58;
- each of the dwellings is provided well in excess of the minimum 15 square metres of private open space with a minimum dimension in excess of 2.0 metres, required for a three (plus) bedroom dwelling with each dwelling afforded 169 and 187 square metres at Level 16 adjacent the principal living rooms in accordance with Council-wide PDC 59, 60 and 61;
- the size of the terraces facilitates the development of 'roof top' gardens above the office floor space located below in accordance with Council-wide PDC 65;
- at Level 16 and 17 there is minimal potential for overlooking of adjacent properties with the dwellings taking advantage of the long distant views in accordance with Council-wide PDC 66;
- all of the habitable room windows are well setback in excess of 3.0 metres from the boundary of the site, albeit the roof terrace at Level 16 encroaches to within 1.5 metres of the northern boundary and 1.5 metres of the eastern boundary. Despite the balconies not being setback 3.0 metres from the boundary of adjoining land, this still maintains adequate level of privacy and does not restrict the reasonable development of adjacent sites, in that the northern boundary abuts a 3.0+ metre wide Right of Way and the eastern boundary abuts a two storey high Local Heritage place. Accordingly, it is considered that the proposed development in accordance with Council-wide PDC 67;
- the proposed dwellings are separated at Level 16 by the lift lobby and services core, while the dwellings at Level 17 are designed with a configuration that minimises transmission of noise by abutting the en-suites and walk in robes in accordance with Council-wide PDC 69;
- the proposed four bedroom dwellings have internal floor areas of 492 and 482 square metres well exceeding the minimum internal floor area guidelines of 110 square metres in accordance with Council-wide PDC 70;



- all living rooms have an exceptional and unparalleled outlook of the city skyline and beyond in accordance with Council-wide PDC 73;
- while there are no on-site parking requirements for dwellings with the Capital City Zone outside of defined policy areas, the proposed development allocates two car parking spaces for each of the dwellings from the available 20 spaces in the basement. Accordingly, the proposed development satisfies Council-wide PDC 75; and
- having regard to the size of the dwellings, combined with the extent of internal storage in the form of substantial Walk in robes and the laundry/store, it is considered that sufficient storage is provided to meet the needs of the occupants in accordance with PDC 81.

The proposed dwellings are considered to meet or exceed the design requirements for residential development expressed in the Development Plan demonstrating a high standard of amenity and environmental performance with floor plan configurations that are well designed and functional.

6.6 Access, Parking and Traffic

6.6.1 Pedestrian Access

The proposed development provides an open ground floor plan allowing free flowing pedestrian access and permeability from Wright Street and Compton Street through the Atrium, office foyer and commercial tenancy.

The proposed building's pedestrian access and permeability complements the adjacent formal city pedestrian links, in the form of the north-south 'active' cross-city link through Compton Street (part of the Adelaide City Council "*Smart Move – Transport and Movement Strategy*" for bicycles and pedestrians; and the nearby pedestrian link proposed through Market Street. The proposed pedestrian connectivity with the adjacent pedestrian network is consistent with Council Wide PDCs 27, 28, 226 and 227.

Capital City Zone PDC's

- 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).**

Council Wide – Objectives

- Objective 61:** **Development that promotes the comfort, enjoyment and security of pedestrians by providing shelter and reducing conflict with motor vehicles.**
- Objective 62:** **Development that contributes to the quality of the public realm as a safe, secure and attractive environment for pedestrian movement and social interaction.**



Objective 63: Safe and convenient design of and access to buildings and public spaces, particularly for people with disabilities.

Council Wide – PDC's

- 226** Development should reflect the significance of the paths and increase the permeability of the pedestrian network identified within Map Adel/1 (Overlay 2) by ensuring:
- (a) pedestrians are not disrupted or inconvenienced by badly designed or located vehicle access ramps in footpaths or streets; and
 - (b) vehicle and service entry points are kept to a minimum to avoid adverse impact on pedestrian amenity.
- 227** Within the Core, Primary and Secondary Pedestrian Areas identified within Map Adel/1 (Overlays 2, 2A and 3), development should be designed to support the establishment and maintenance of continuous footpaths so that pedestrian flow is free and uninterrupted. Pedestrian access should be provided at ground level mid-block between all streets.
- 232** Access for people with disabilities should be provided to and within all buildings to which members of the public have access in accordance with the relevant Australian Standards. Such access should be provided through the principal entrance, subject to heritage considerations and for exemptions under the relevant legislation.

The proposed Atrium will provide a publicly accessible area of shelter with access from Wright Street and Compton Street, in accordance with Council Wide Objective 61.

All pedestrian access to the proposed development will comply with the relevant Australian Standards for people with disabilities, to ensure that the development is inclusive and accessible for all.

6.6.2 Vehicular Access

Council Wide Objective 70 and Council-wide PDCs 240 and 241 provide guidance with respect to access, as well as the loading and unloading of goods. Together, they recommend that:

Objective 70: Adequate off-street facilities for loading and unloading of courier, delivery and service vehicles and access for emergency vehicles.

- 241** Development should be designed so that vehicle access points for parking, servicing or deliveries, and pedestrian access to a site, are located to minimise traffic hazards and vehicle queuing on public roads. Access should be safe, convenient and suitable for the development on the site, and should be obtained from minor streets and lanes unless otherwise stated in the provisions for the relevant Zone or Policy Area and provided residential amenity is not unreasonably affected.
- 242** Facilities for the loading and unloading of courier, delivery and service vehicles and access for emergency vehicles should be provided on-site as appropriate to the size and nature of the development. Such facilities should be screened from public view and designed, where possible, so that vehicles may enter and leave in a forward direction.



Vehicle access is proposed to be obtained from Wright Street, with a single width ramp down to the basement, which accommodates 20 on site car parking spaces. Signalised access notifying of ramp use will control vehicle movements to and from the basement, with priority given to vehicles entering the site.

In terms of commercial vehicles, an existing loading bay on Compton Street adjacent the hotel will continue to be used for service vehicles associated with the hotel use for the delivery of food and beverages as well as waste collection.

The right-of-way to the north of the site will allow for waste collection vehicles to collect waste from the bin storage area located on the ground floor at the rear of the site abutting the right-of-way. It is expected the waste collection vehicles will temporarily park in Market Street and collect the bins from the bin storage area.

A Traffic and Parking Assessment has been undertaken by Frank Siow & Associates. A copy of the Traffic and Parking Assessment is contained in **Appendix D**.

A summary of Frank Siow's comments relating to vehicular access are provided below:

- the proposed parking layout and ramp design would allow convenient access to and from the parking spaces. The proposed car park layout would be able to be designed to comply with AS/NZS 2890.1-2004 (general parking) and AS/NZS 2890.6-2009 (disabled parking);
- the traffic generated by the basement car park proposed development would be very low. The impact on pedestrian movements or traffic flows on Wright Street would similarly be expected to be very low;
- servicing of the subject development, including the existing hotel, would utilise the existing loading zones in Compton Street. These loading zones are located in close proximity to the service entrance of the existing hotel and the entrance to the multi-level building. We understand that bin servicing would be based on an appropriate waste management plan prepared by others in consultation with Council; and
- on the basis of the above assessment, we are of the opinion that the proposed development can be supported from a traffic perspective.

Based on the expert advice provided by Frank Siow & Associates, we consider that the proposed development will provide adequate off-street facilities for loading and unloading of courier, delivery and service vehicles and access for emergency vehicles, consistent with Council Wide Objective 70. Further, the development has been designed so that vehicle access points for parking, servicing or deliveries, and pedestrian access to the site, are located to minimise traffic hazards and vehicle queuing on public roads.

Convenient vehicular manoeuvring is proposed and vehicular access is considered to be safe, convenient and suitable for the development on the site, consistent with Council Wide PDC 241.



6.6.3 Car Parking

PDC 29 of the Capital City Zone provides guidance with respect to the provision of on-site car parking. It recommends that:

29 Car parking should be provided in accordance with Table Adel/7.

According to Table Adel/7 of the Adelaide (City) Development Plan, there is no minimum statutory car parking requirement for non-residential land uses within the Capital City Zone. However, a maximum rate of three spaces per dwelling is prescribed for medium-high scale residential apartments within the primary pedestrian area.

Council Wide – PDC's

251 Car parking areas should be located and designed to:

- (a) ensure safe and convenient pedestrian movement and traffic circulation through and within the car parking area;
- (b) include adequate provision for manoeuvring and individually accessible car standing areas;
- (c) enable, where practical, vehicles to enter and leave the site in a forward direction;
- (d) minimise interruption to the pattern of built form along street frontages;
- (e) provide for access off minor streets and for the screening from public view of such car parking areas by buildings on the site wherever possible;
- (f) minimise adverse impacts on adjoining residential properties in relation to noise and access and egress;
- (g) minimise loss of existing on-street parking spaces arising through crossovers and access;
- (h) incorporate secure bicycle parking spaces and facilitate convenient, safe and comfortable access to these spaces by cyclists; and
- (i) provide landscaping, such as semi-mature trees, to shade parked vehicles and reduce the visual impact of the car parking area while maintaining direct sight lines and informal visual surveillance.

The proposed development includes 20 on-site car parking spaces, which will be located at basement level. The car parking spaces will be allocated to tenants of the building based on demand but will remain ancillary and subservient to the use of the building.

Four of the parking spaces will be allocated specifically to the two proposed penthouse dwellings (two per dwelling), which is less than the maximum number of spaces prescribed by Table Adel/7.



A summary of Frank Siow's comments relating to on-site car parking are provided below:

- there is no car parking requirement specified in the Development Plan for the commercial land uses relevant to the subject site;
- parking for 20 vehicles is proposed within the basement car park. The Development Plan does not preclude the provision of this parking within the Capital City Zone;
- the proposed basement car park would be for reserved users only; and
- on the basis of the above assessment, we are of the opinion that the proposed development can be supported from a car parking perspective.

Based on the expert advice provided by Frank Siow & Associates, we consider that the proposed development will provide adequate off-street car parking facilities, consistent with the rates prescribed within Table Adel/7.

6.6.4 Bicycle Parking

Council Wide PDC 234 provides guidance with respect to the provision of on-site bicycle parking. It recommends that:

Council Wide – PDC's

- 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.**

Table Adel/6 prescribes minimum rates of bicycle parking as follows:

- low to high scale residential – two per dwelling (exceeding 150 square metres of floor area);
- offices (staff) – one space per 200 square metres of gross leasable floor area; and
- offices (visitors) - two spaces, plus one per 1,000 square metres of gross leasable floor area.

No rates are prescribed for Hotels within Table Adel/6.

The proposed development includes the provision of sixty-one (61) bicycle parking racks located within a secure bicycle parking facility on the ground level of the building.

Council Wide PDC 235 provides guidance regarding the design of bicycle parking facilities. Council Wide PDC 235 states:

- 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.**

The design and location of the bicycle parking facility satisfies all of the clauses (a) to (i) recommended in PDC 235. Access to the on-site bicycle storage and end of trip facilities on the ground floor is provided via an access point to the 'Right of Way' at the rear of the site. The end of trip facilities include toilets, showers and lockers conveniently located adjacent and connected to the bike storage area.

A summary of Frank Siow's comments relating to on-site bicycle parking are provided below:

- for the new commercial land use (10,224 square metres of floor area), the bicycle parking requirement would be 51 spaces for employees and 12 spaces for visitors, i.e. a total of 63 spaces;
- for the two penthouses, four bicycle parking spaces would be required for the residents of the apartments and one bicycle parking space for their visitors;
- in total, the bicycle parking requirement for the development would be 68 spaces;
- 61 bicycle parking spaces would be provided within the Bike Store area on the ground floor. The bicycle parking shortfall would therefore be seven spaces. We consider such a parking shortfall to be very minor;
- it is not uncommon for residents to store their bicycles within their apartments. As the proposed penthouses would accommodate their own resident bicycle parking requirements, this would further reduce the overall bicycle parking shortfall to three spaces;
- to encourage cycling as a mode of transport, end of trip facilities are proposed to be provided, including shower facilities, toilets and lockers; and
- having regard to the above assessment, we are satisfied that the bicycle parking provision would be adequate for the development, notwithstanding that there would be a very minor bicycle parking shortfall arising of three spaces.

Based on the expert advice provided by Frank Siow & Associates, we consider that the proposed development will provide adequate off-street bicycle parking facilities, consistent with the rates prescribed within Table Adel/6.

We also note that there are further opportunities for bike racks to be located within the Council verge, adjacent to the development and/or within the proposed building Atrium on the subject land, should any additional demand for bicycle parking be created in the future.



6.7 Services

Council Wide Objective 41 and Council Wide PDCs 132, 133 and 135 provide guidance with respect to the provision of services. Together, they recommend that:

- Objective 41: Provision of services and infrastructure that are appropriate for the intended development and the desired character of the Zone or Policy Area.**
- 132 Provision should be made for utility services to the site of a development, including provision for the supply of water, gas and electricity and for the satisfactory disposal and potential re-use of sewage and waste water, drainage and storm water from the site of the development.**
- 133 Service structures, plant and equipment within a site should be designed to be an integral part of the development and should be suitably screened from public spaces or streets.**
- 135 Development should only occur where it has access to adequate utilities and services, including:**
- (a) electricity supply;**
 - (b) water supply;**
 - (c) drainage and stormwater systems;**
 - (d) effluent disposal systems;**
 - (e) formed all-weather public roads;**
 - (f) telecommunications services; and**
 - (g) gas services.**

Whilst the Engineering Services Report at **Appendix F** lists all of the mechanical, electrical, vertical transportation, hydraulic and fire protection services that will be provided as part of the proposed development, it is relevant for the SCAP to note that:

- the building will have adequate access to the existing electricity, water, sewerage, gas and communications infrastructure along Wright Street; and
- all necessary services impacting on the ground level street frontage have been identified and located to minimise their impact on street level activation and to ensure that they integrate with the architecture of the building.

The all necessary plant associated with the provision of services to the building, where not located at ground level for service authority access has been located either within the basement, or across half of both Levels 14 and 15. The plant room area on Levels 14 and 15 is integrated into the architecture of the building with the southern façade maintaining the curtain wall glazing while the eastern and part of the northern elevation of the building to these floors is screened with vented black aluminium louvres to allow for the necessary ventilation to the plant rooms which in our opinion satisfies Council-wide principle of Development Control 33.



7.0 CONCLUSION

We conclude that the proposed development to construct an 18-storey building with basement car parking which accommodates:

- the retention and reuse of the original fabric of the former Hotel Wright Street as a hotel at ground and first floors with a roof top terrace;
- an Atrium providing a pedestrian link between Compton Street and Wright Street and being licensed as part of the hotel use to allow for the activation of the space;
- a retail tenancy at ground floor together with the main office entry foyer, building services, bicycle parking for 61 bicycles and associated end of trip facilities for cyclists;
- fifteen levels of offices with a total net lettable floor area of 10,324 square metres;
- two, two-storey penthouses occupying Levels 16 and 17, and
- 20 private car parking spaces in the basement for the use by tenants of the building and the residents of the two dwellings on Levels 16 and 17,

sufficiently complies with the relevant Capital City Zone and Council-wide provisions of the Adelaide (City) Council Development Plan.

In particular, the proposed development:

- establishes a combination of land uses that is expressly envisaged within the Zone and that provides activation during the day time and after hours;
- establishes a building that exhibits design excellence and will make apposite contribution to the Wright Street streetscape;
- is of a height and scale that is compatible to the envisaged City Form noting that the building fulfils the 'overheight' Development Plan provisions;
- reinforces and enhances the active street frontage along Wright Street;
- incorporates and integrates the heritage fabric of the former Hotel Wright Street in a manner that facilitates the meaningful adaptive re-use of the building and celebrates through the retention and exposure of the eastern and northern facades the original building footprint and external walls of the Hotel;
- provides for the careful and detailed expression of built form of the podium to respect and compliment the adjacent heritage places in terms of scale, form and materiality; provides for a small amount of on-site car parking in the basement with access obtained in a safe and convenient manner from Wright Street;
- integrates with the pedestrian and cycling network established through the City of Adelaide as part of the north-south movement strategy;
- incorporates construction methodology that retains the existing fabric of significance from the former Hotel Wright Street while facilitating the construction of the balance of the site to its full potential; and



- provides for the necessary services and operation functions without detriment to the locality.

Accordingly, the proposal meets the land use, design and functional expectations of the Development Plan.

We conclude that the proposed development is not seriously at variance with the provisions of the Development Plan, and we therefore invite the State Commission Assessment Panel to accept that the proposal meets the provisions of the Development Plan in a manner sufficient to warrant that Development Plan Consent be granted.

Greg Vincent MPIA
B/A in Planning

191 September 2017

APPENDIX A

Certificates of Title

APPENDIX B

Compendium of Architectural Drawings

APPENDIX C

Heritage Impact Assessment

APPENDIX D

Traffic Impact Assessment

APPENDIX E

Waste Management Plan

APPENDIX F

Engineering Services Report

APPENDIX G

Desktop Pedestrian Level Wind Report

DASH (Danvers Schulz Holland) Architects was founded in 1964 and has since established itself as one of South Australia's leading practices in the provision of specialist heritage services.

DASH Architects has been at the forefront of the development of a sustainable paradigm for the conservation of cultural heritage within Australia. This approach is based on contemporary values and traditions, and recognises the importance of both tangible and intangible cultural significance within our community.

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Hotel Wright Street Redevelopment

Heritage Impact Assessment

DA163337 Issue A

15.09.17

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 Wright Developments SA Pty Ltd to provide heritage advice with regards to the proposed redevelopment of the Hotel Wright Street, Adelaide. This advice has extended to include:

- Identification of key heritage issues associated with the application;
- Provision of advice during the design development process on key heritage issues; and
- Preparation of this Heritage Impact Assessment.

This Heritage Impact Assessment (HIA) considers the impact of the proposed development on the Local Heritage Place (Townscape) (LHP(T)) item located on the site, and two adjacent LHP(T) items.

This HIA is based on the following documentation prepared by Mohyla Architects Interior Designers ('Mohyla Architects') (uncontrolled issue):

- SD00: Drawing Register, Sept 17
- SD01: Locality Plan, Sept 17
- SD02: Existing Site Plan, Sept 17
- SD03: Existing Streetscape Plan, Sept 17
- SD04: Floor Plans (G, B, 1), Sept 17
- SD05: Floor Plans (2-6), Sept 17
- SD06: Floor Plans (7-12), Sept 17
- SD07: Floor Plans (13-17), Sept 17
- SD08: Elevations (S/W), Sept 17
- SD09: Elevations (N/E), Sept 17
- SD10: Sections, Sept 17

- SD11: Concept Diagrams, Sept 17
- SD12: Cityscape Context, Sept 17
- SD13: Materials & Finishes, Sept 17
- SD14: Environmental, Sept 17
- SD15: Podium Integration, Sept 17
- SD16: Streetscape, Sept 17
- SD17: Streetscape / Human Scale, Sept 17
- SD18: Perspectives, Sept 17

Disclaimer: This HIA has been based on the information scheduled above. Any changes to these scheduled items may result in differing heritage impacts to those considered and assessed in the below report. It is recommended that the above issue dates and revision numbers be confirmed to those lodged for Development Plan Consent when considering the findings and recommendations of this report.

2.0 Subject Site / Locality

The proposed development is located on the corner of Wright Street and Compton Street in the City of Adelaide, consisting of five allotments between 76-88 Wright Street, Adelaide.

The site is located within the Capital City Zone. The western most title of 82-88 Wright Street contains the LHP(T) listed Hotel Wright Street (Old Queens Arms Hotel, 88 Wright Street). The site immediately to the east of 74 Wright Street contains the LHP(T) listed Former Deaf and Dumb Church and Institute (72-74 Wright Street), while the site opposite the Hotel Wright Street accommodates the LHP(T) listed Former Shop (89 Wright Street).



Image 1. Locality Plan. Base image source: location.sa.gov.au



Image 2. Local Heritage Place(Townscape) Hotel Wright Street (Former Queens Arms Hotel, 88 Wright Street).



Image 3. Local Heritage Place (Townscape) Former Deaf and Dumb Church and Institute, (72-74 Wright Street).



Image 4. Local Heritage Place (Townscape) Former Shop, (89 Wright Street).

Other Local Heritage places within the locality are not considered to be impacted upon by the proposed development.

3.0 Proposed Development

The proposal seeks to construct a new 18 storey mixed use development on the site, which in broad terms includes:

- One level of basement carparking;
- A two storey podium along Wright and Compton Streets, which integrates the Local Heritage listed Hotel Wright Street;
- A 14 storey office component over the noted podium; and
- Two storey penthouse accommodation.



Image 5. Concept Render. Source: Mohyla Architects

The proposal for the site has undergone significant design development prior to lodgment in its present form. The project has participated in several Pre-Lodgment Panel (PLP) and Design Review Panel (DRP) sessions, the latter of which has significantly influenced the final design outcome.

In particular, I understand the DRP sessions have strongly influenced the overall form of the upper tower, and the manner by which it relates to the Local Heritage listed Hotel Wright Street. While I have not been party to most

of the Design Review sessions, I understand this includes the overall articulation of the building form as a series of extruded elements that relate to the scale of the heritage place, and proposed setbacks.

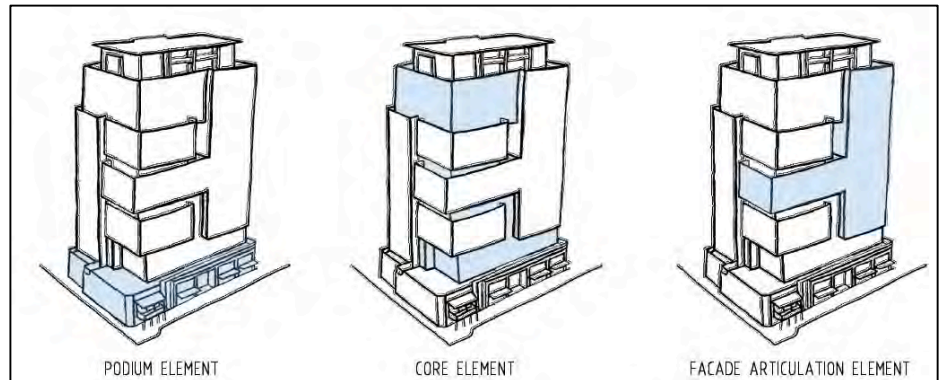


Image 6. Concept Diagrams. Source: Mohyla Architects

4.0 City of Adelaide Development Plan

The following Development Plan (consolidated 30 May 2017) extracts are considered most relevant when assessing the heritage impact of the proposed development:

Heritage and Conservation

Obj 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.

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) or the Elements of Heritage Value (as identified in Table Adel/2) 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, and 4 metres in the City Living Zone or the Adelaide Historic (Conservation) Zone 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.

Capital City Zone

Desired Character

...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.

4.1 Extent of Heritage Listing (Townscape)

Unlike Table Adel/2 (Local Heritage Places), Table Adel/3 (Local Heritage Places (Townscape)) provides no description of the Elements of Heritage Value for the identified places, instead providing a generic summary only. For the case of the heritage place on the subject site this is simply “*Old Queens Arms Hotel*”.

Guidance on the extent of listing of LHP(T) items is to be found elsewhere, namely 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.

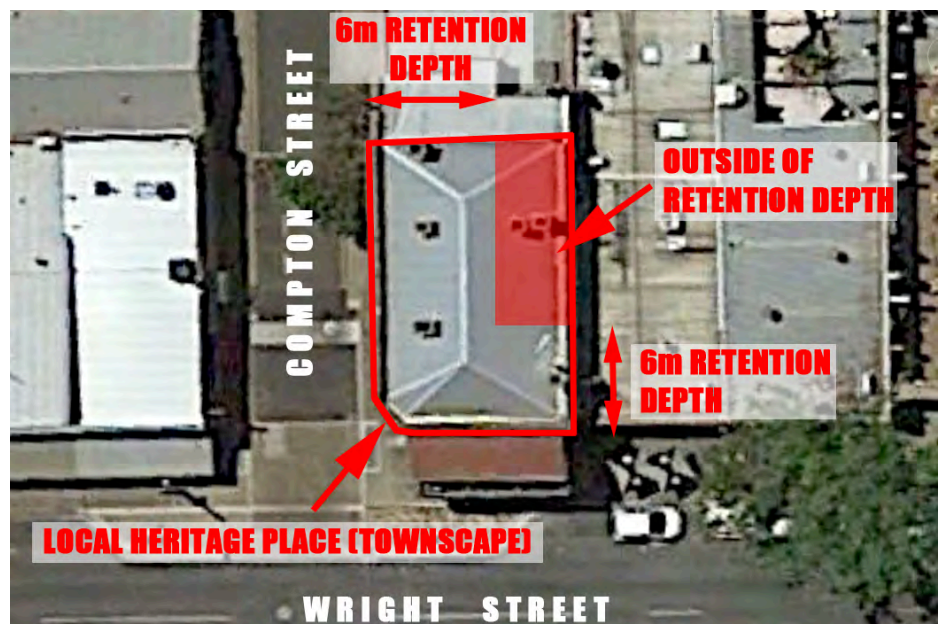


Image 7. Local Heritage Place(Townscape) Hotel Wright Street PDC 139 retention depths.

While of no statutory status, further guidance on LHP(T) items can be found on the Adelaide City Council's website, that 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.*¹

That is to say, the *heritage value* of a Townscape place is its *contribution to the townscape character of the area*, and is limited to building features *visible from the street*. In this context, PDC139's retention depths relate to the setback of proposed development only, rather than Extent of Listing.

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

When considering the streetscape contribution of a place I am drawn to the terminology of the Macro, Middle, and Micro scale of a city². The Hotel Wright Street (former Old Queens Arms Hotel) is the only place physically impacted by the proposed works. Being only two storeys in height, the building makes limited contribution to the macro character of the city. Instead, its primary character contribution is to the Micro and Middle scale of the precinct, and in particular of Wright and Compton Streets.

In its Middle scale contribution, the Hotel Wright Street forms part of the broader streetscape, which is of a prevailing two storey scale. Its balcony is a notably prominent element from these broader views, while the façade materials and articulation contribute towards a historic remnant 'flavour' to the precinct, along with other identified Local Heritage places. While the building's chimneys and roof form are partially visible from these Middle scale views (refer Image 8 below), they are neither prominent, nor significantly contribute towards the overall historic character of the locality.

The Hotel's greatest contribution towards the *townscape character of the area* is when viewed within its Micro context (ie within the immediate vicinity of the building). Located on the corner of Wright and Compton Streets, the LHP(T) has a local visual prominence. Fabric *visible from the street* within this primary Micro context is limited to the western (Compton St) and southern (Wright St) building facades, and prominent Wright Street balcony.

While the Hotel's eastern wall is currently partially visible from the street (upper portion), the Development Plan envisages the adjoining land to be redeveloped in such a manner as to conceal this façade. As a result I do not consider the current eastern façade, or views of the roof or chimneys from this side to form part of the *heritage value* of the place (refer Images 11 and 12 below).

This is similarly the case for views of the roof and chimneys from the northern end of Compton Street, where envisaged development will readily conceal their view (refer Images 13 and 14 below).



Image 8. Macro views of Hotel Wright Street roof and chimneys revealed with views from further away, but streetscape contribution diminishes with distance. Hotel Wright Street indicated with red arrow.

² Adelaide Fine Grain, A Strategy for Strengthening The Fine Grain of The Adelaide City Centre, 6 Degrees.



Image 9. Micro views of Hotel Wright Street within general vicinity of place, where streetscape contribution is greatest



Image 10. Micro views of Hotel Wright Street within general vicinity of place, where streetscape contribution is greatest



Image 11.Views of Hotel Wright Street from the east



Image 12.Views of Hotel Wright Street from the east, showing extent of fabric concealment through envisaged adjacent development.



Image 13. Views of Hotel Wright Street from the north along Compton Street.



Image 14. Views of Hotel Wright Street from the north along Compton Street, showing extent of fabric concealment through envisaged adjacent development.

5.0 Architectural Statement

The project designers, Mohyla Architects, have provided the following statement on the design response to the heritage building affected by the proposal:

Form and Scale

... The overall form has developed from integrating the rhythm's, proportions and materiality reflective of the existing streetscape both in regards to heritage and built form, as well as surrounding/neighbouring current and future developments. The incorporation of a podium to the base of the proposed building reflects and reinforces the predominant streetscape height of three to five storey buildings along Wright Street, whilst the integration and connection to Local Heritage Places at the western and eastern ends solidifies the streetscape and "grounds" the building in its location. The large set back at the podium level is a response to creating a clear visual separation between the built form at street level, and the office building above.

The office levels above the podium utilise articulated glazed protruding and retracting forms that are of a scale and proportion already apparent in the streetscape, and which provide articulation to the facades of the building, resulting in the scale and bulk of the tower building producing a diminishing visual effect as the height increase.

The varying heights, juxtapositions of form and materiality displayed between the podium and office tower components of the development simultaneously reinforce linkages to the streetscape while differentiating between uses, new and old built forms, historical and modern construction techniques. This delivers a uniform and elegant sculptural form at a city scale...

Heritage Integration

It is understood that recent applications have successfully applied to demolish Local Heritage places to facilitate new development. However, it has always been the Applicant's intention to retain the historic portion of the existing Hotel and integrate same into the overall development. While much of the exterior (south and west sides) remain intact, there have been significant modifications, including excessive demolition, to the interior of the building.

The Applicant recognises the historical and aesthetic benefits of retaining the exterior walls of the building while utilising the premises to provide additional facilities to the development, thereby retaining an existing use, reinforcing both its commercial viability and its contribution to the public realm.

External ground level access to the Hotel will be from Wright and Compton Streets, via entrances to the internal Urban Plaza and Atrium... While new work will obviously surround the retained portion of the Hotel, its historic wall fabric will be retained and restored. It is

intended to clearly differentiate new work from old, thereby preserving historical references and avoiding inappropriate imitation. Likewise, physical connections to the proposed new tower building will be facilitated by 'negative' joints and contrasting, yet sympathetic materials.

The Hotel is more visible as a part of the integrated composition of the whole development, and greater exposure of the external walls. It is also envisaged that the Hotel's retention will create additional 'human scale' to the Urban Plaza, Atrium and Podium, while also providing an opportunity for users to reflect upon the site's history.

It is proposed to convert the roof area to an outdoor terrace, extending the Hotel's facilities and incorporating landscaping.

In regards to proximity of external tower structure to both the retained portion of the existing Hotel and Edmund Barton Chambers, a number of setbacks and recesses have been created to facilitate physical separation distances between same. The tower is setback 9.1m from the western boundary and 4.6m from the south boundary of the site respectively. This results in the new building being located to the outside perimeter of the Hotel. The tower then cantilevers above the Hotel on the southern elevation, corresponding with approximately the top of level 4 (5 storeys above ground), providing a vertical separation from ground level of approximately 18.8m.

The western end of Edmund Barton Chambers is a simple, yet high, gable ended wall, devoid of openings. The lower portion of the new building is situated on the eastern boundary (to a height just above the roof line of Edmund Barton Chambers (abutting its gable wall), with the remainder of the tower setback 1.5m from this boundary above this point. In addition, a negative joint is provided on the southern (Wright Street) elevation, between the Podium of the proposed new building and Edmund Barton Chambers. As a result, this primary setback provides visual vertical and horizontal separation to Edmund Barton Chambers.

Horizontal elements to the podium, and southern and western entranceways and canopies of the new building, align with key horizontal elements of the existing Hotel on its western and southern elevations, and the southern canopy of Edmund Barton Chambers which despite not having any heritage value in itself, is a strong visual element.

The Urban Plaza

The Urban Plaza proposes active uses for a variety of users: Hotel patrons; general public links between Wright and Compton Streets; Office Tower occupants. The Urban Plaza is publically accessible from Compton Street at the north-western corner of the site, and from Wright Street, between the Hotel and the Office Tower Entry. The Hotel services the Urban Plaza directly, and bench seating and rest areas will also be provided for general use.

The two primary intended outcomes of the Urban Plaza is to create a 'flow through' path for pedestrians between Compton and Wright Streets, and a usable common space for building occupants and visitors. It is envisaged that the social interaction encouraged between occupants and visitors will activate the space and contribute to the building's functionality while 'giving back' to the community at large. In addition, the resultant social and environmental attractiveness of the space will assist in the continued use and success of the historic Hotel.

Activation and Streetfront

The Wright and Compton Street ground level pedestrian entrances to the Urban Plaza and the Office building provide a link between the streets and connectivity to the new building and historic Hotel respectively...

The Wright and Compton Street facades of the Podium project out towards, or are in alignment with, the respective site boundaries. These projections, together with additional cantilevered steel canopies to the Wright Street entrances (Office and Urban Plaza) provide weather protection for building entrances and pedestrian users of the adjoining footpaths alike. The projecting wall elements of the Podium will be finished with stone veneer facings, and glazed windows are provided to infill sections. In addition, fixed glazing is proposed to the connection between the solid projections of the Podium, and the stone walls of the historic Hotel, creating a negative joint, to provide both physical connectivity and visual separation between new and existing construction. This will help preserve the integrity of the historic Hotel while integrating the new build. The proposed materials and configuration of the Podium facade element provide a contemporary interpretation of, and correlation with, the existing Hotel and Edmund Barton Chambers to the eastern boundary. Likewise, the corresponding material treatment of the Compton Street entranceway to the Urban Plaza, and its two-level scale, proportion and configuration, provides a cohesive visual relationship with adjoining existing buildings on Compton Street, north of the site. This provides a level of unity between new and old through materiality, rhythm and proportion while also maintaining relative human scale.

The design of the Podium addressing Wright Street incorporates horizontal elements which visually correlate with horizontal elements of the balcony of the historic Hotel and canopy of Edmund Barton Chambers respectively. In addition, the glazed balustrade to the roof terrace at the top of the Podium, aligns with the top of the masonry parapet of the existing Hotel adjacent, providing further visual linkages between new and old fabric.

The roof terrace to the Podium and the proposed new roof terrace to the Hotel provide an opportunity for user connectivity to the streets below. The two-level elevation above street level affords Hotel patrons and Office occupants alike a close physical relationship to the streets

below, just as it will provide a link between pedestrians on the footpath and Podium and deck users above. Use of the Hotel roof deck and Urban Plaza outside of office hours will also contribute to street activation at night and on weekends.

6.0 Historic Photos

The following early photos of the locality were sourced, and provide an understanding of historic context and setting of the heritage places within the vicinity of the proposed development.



Image 15. Former Deaf and Dumb Church and Institute, c1895. Source: SLSA, PRG-631-2-1844



Image 16. Former Deaf and Dumb Church and Institute, c1897. Source: SLSA, PRG- -631-2-217



Image 17. Former Deaf and Dumb Church and Institute, c1960. Source: SLSA, B_14334



Image 18. Former Old Queen's Arms Hotel, c1941. Source: SLSA, B_10563

When reviewing these above images I make the following observations:

The Former Deaf and Dumb Church and Institute

- The former Deaf and Dumb Church and Institute building has always been slightly at odds with the scale of early development within the locality, having a more 'cathedral' like scale and setting;
- The building has been substantially altered in recent years' removing the gothic window heads, leadlight windows, and corner cupola. These changes have significantly altered the appearance and proportion of the building, and stripped back its 'cathedral' like qualities.

The Old Queen's Arms Hotel (Hotel Wright Street)

- The Hotel Wright Street maintains generally good external integrity (at least when compared to the c1941 form);
- The roof and chimneys of the building are not a notable visual element to the overall form of the building.



Image 19. Former Deaf and Dumb Church and Institute, 2017 (current Edmund Barton Chambers)

7.0 Heritage Impact Assessment

I have considered the heritage impacts associated with this application under the following headings, which align with the stated Heritage and Conservation Objectives of Council's Development Plan:

7.1 Obj 42: Conservation of Heritage Places and Retention of their Heritage Value

Relevant Principles of Development Control include:

- *PDC 136: Development of a heritage place should conserve the elements of heritage value as identified in the relevant Tables;*
- *PDC 138: A local heritage place (as identified in Tables Adel/2, 3 or 4) or the Elements of Heritage Value (as identified in Table Adel/2) 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, and 4 metres in the City Living Zone or the Adelaide Historic (Conservation) Zone or as otherwise indicated in the heritage Tables in respect of frontages and side wall returns.*

88 Wright Street has been identified as a Local Heritage Place (Townscape) item within Council's Development Plan. Unlike other Local Heritage tables within Council's Development Plan, Table Adel/3 provides limited *Description of the Place*, simply noting "Old Queens Arms Hotel".

As noted, LHP(T) places have been identified due to their *positive contribution to the townscape character of the area*. That is to say, their *historic character* is their *heritage value*. Further, Adelaide City Council's website goes on to note that this character is derived generally from fabric visible from the street (ie *the listed portion generally comprises the frontage, roof and side wall returns of the place that are visible from the street*³).

PDC 139 also provides a retention depth of 6m from street frontages (refer Image 7).

Notwithstanding the Development Plan envisaged the demolition of a LHP(T) beyond this 6m retention depth, the application proposes to retain all of the heritage place, including eastern (side) and northern (rear) facades. These façades will be set within the proposed "Urban Plaza", that provides a generous spacious setback of the heritage place within the overall proposal, providing a clear legibility of the original overall form of the heritage place. This additional retention and generous "Urban Plaza" is a significant 'value add' to the heritage management of the proposal.

The application does seek to demolish the existing roof and chimneys to enable the roof level to be integrated into the podium's roof terrace level. As noted, the Hotel Wright Street's greatest contribution towards the *townscape character of the area* is when viewed within its Micro context (ie within the immediate vicinity of the building). From these views the roof and chimneys are not visible (refer discussion Section 4.1). These features are visible from Middle Scale views (refer Image 8), however they are neither prominent, nor significantly contribute towards the overall historic character of the locality.

In addition, the proposal will also see the heritage building undergo an overall rejuvenation and refurbishment. This work will see the *element of heritage value conserved*, in accord with PDC 136 and Obj 42.

As the roof and chimneys make only a marginal contribution to the historic townscape character, I consider them to be of only marginal *heritage value*. On this basis their proposed removal presents only a minor shortfall against PDC 136 and 138. This shortfall, in my opinion, is more than offset however by the value-added retention of the eastern and northern facades, their setting of the place within the proposed Urban Plaza, and general overall restoration and refurbishment of the heritage place.

³ <http://www.cityofadelaide.com.au/planning-development/city-heritage/heritage-listings/>

7.2 Obj 43: Retention of the Heritage Value and Setting of a Heritage Place and its Built Form Contribution to the Locality

Relevant Principles of Development Control include:

- *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, and 4 metres in the City Living Zone or the Adelaide Historic (Conservation) Zone 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.*
- **Capital City Zone**
Desired Character
...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.*

The proposal seeks to provide a *new setting* to the heritage place through a variety of design mechanisms, including:

- Establishment of a strong podium;
- Providing a generous 'breathing space' around the heritage place;
- Incorporating setbacks in accord with Development Plan intent;
- Drawing reference for the tower design from the scale and setting of the heritage places and general streetscape; and
- Mitigating the overall height of the proposal through a variety of design mechanisms.

I will consider each of these separately.

7.2.1 Podium Design

The architect's design statement notes:

The incorporation of a podium to the base of the proposed building reflects and reinforces the predominant streetscape height of three to five storey buildings along Wright Street, whilst the integration and connection to Local Heritage Places at the western and eastern ends solidifies the streetscape and "grounds" the building in its location. The large set back at the podium level is a response to creating a clear visual separation between the built form at street level, and the office building above...

Horizontal elements to the podium, and southern and western entranceways and canopies of the new building, align with key horizontal elements of the existing Hotel on its western and southern elevations, and the southern canopy of Edmund Barton Chambers which despite not having any heritage value in itself, is a strong visual element...

The Wright and Compton Street facades of the Podium project out towards, or are in alignment with, the respective site boundaries. These projections, together with additional cantilevered steel canopies to the Wright Street entrances (Office and Urban Plaza) provide weather protection for building entrances and pedestrian users of the adjoining footpaths alike. The projecting wall elements of the Podium will be finished with stone veneer facings, and glazed windows are provided to infill sections. In addition, fixed glazing is proposed to the connection between the solid projections of the Podium, and the stone walls of the historic Hotel, creating a negative joint, to provide both physical connectivity and visual separation between new and existing construction. This will help preserve the integrity of the historic Hotel while integrating the new build. The proposed materials and configuration of the Podium facade element provide a contemporary interpretation of, and correlation with, the existing Hotel and Edmund Barton Chambers to the eastern boundary. Likewise, the corresponding material treatment of the Compton Street entranceway to the Urban Plaza, and its two-level scale, proportion and configuration, provides a cohesive visual relationship with adjoining existing buildings on Compton Street, north of the site. This provides a level of unity between new and old through materiality, rhythm and

proportion while also maintaining relative human scale.

The design of the Podium addressing Wright Street incorporates horizontal elements which visually correlate with horizontal elements of the balcony of the historic Hotel and canopy of Edmund Barton Chambers respectively. In addition, the glazed balustrade to the roof terrace at the top of the Podium, aligns with the top of the masonry parapet of the existing Hotel adjacent, providing further visual linkages between new and old fabric...



Image 20.Podium render (Wright Street). Source: Mohyla Architects, sheet SD15



Image 21.Podium render (Compton Street). Source: Mohyla Architects, sheet SD15

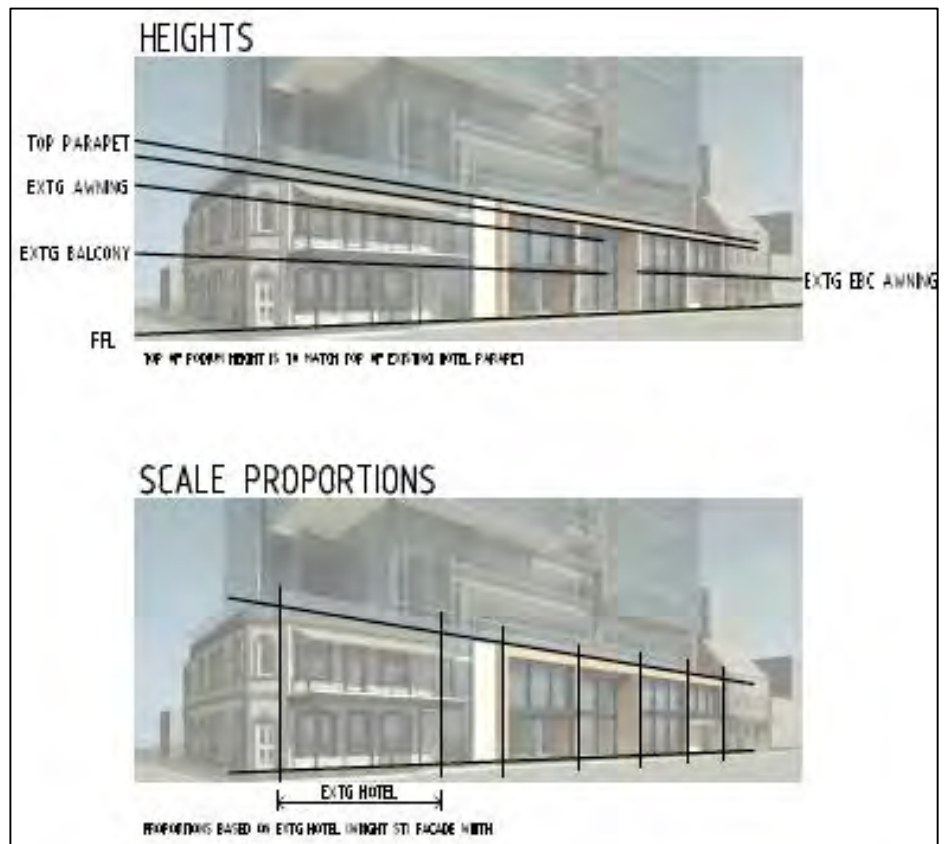


Image 22. Podium influences. Source: Mohyla Architects, sheet SD15

I consider the proposed approach to the podium design to be entirely appropriate. It establishes a visual scale to the base of the building that both aligns with the scale of the Hotel Wright Street, and the broader streetscape scale generally.

Despite being an amalgamated title, the podium design establishes a rhythm to the street frontage that is again consistent with the prevailing character of the locality.

The proposed use of a stone veneer to the primary podium form provides a 'visual grain' that both differentiates the podium from the upper levels of the proposal, while being generally compatible with the scale and materiality of the immediate surrounding streetscape.

I consider this approach to the form and materiality of the podium to be *complementary to the adjacent heritage places*.

Careful consideration has also been given to the interface of the podium with the two adjoining LHP(T)s, namely No 88 Wright Street (Hotel Wright Street) and No 72-74 Wright Street (former Deaf and Dumb Church and Institute / Edmund Barton Chambers). Both of these heritage places are of a differing scale. As noted, the former Deaf and Dumb Church and Institute has 'cathedral' like proportions that has historically differentiated it from the scale

of surrounding development. This difference is intrinsic to its *contribution to the townscape character of the area*.

The podium design appropriately maintains this scale differential to the former Deaf and Dumb Church and Institute by aligning its height to the Hotel Wright Street. Its interface with the former is managed by a simple, but in my opinion effective, negative joint (aligning fabric behind the heritage place in accord with PDC 142).

The former Church and Institute is clearly on a separate site, and has been treated as such accordingly. The design approach maintains the historic differentiation in scale of the Church and Institute building, and in doing so maintains its historic *contribution to the townscape character of the area*.

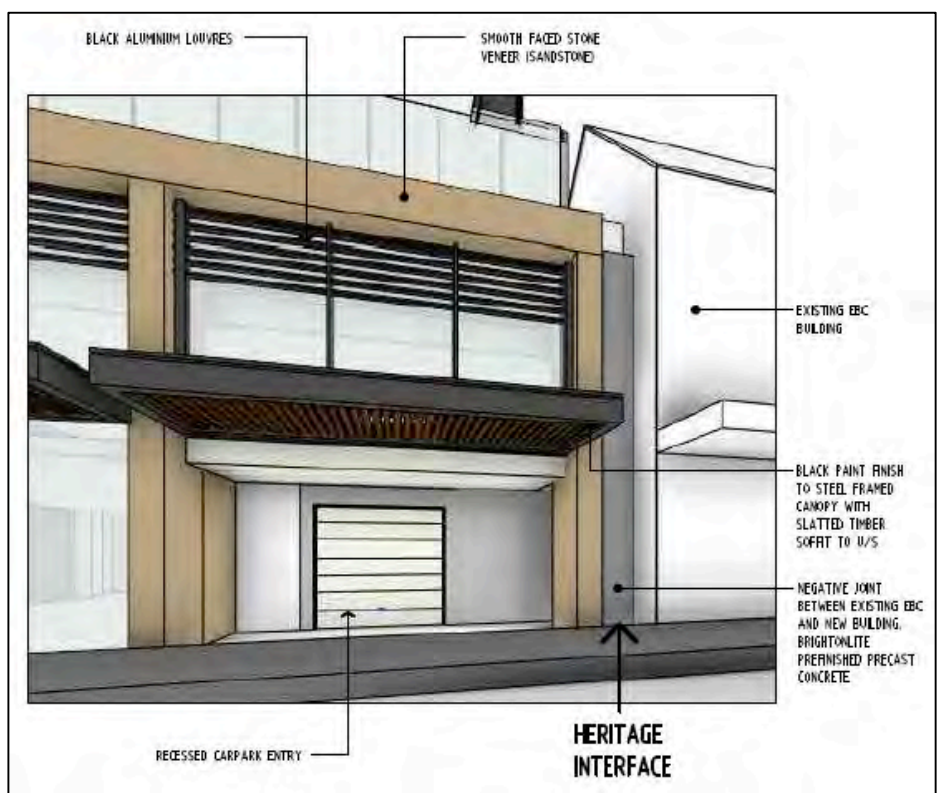


Image 23. Podium interface with 72-74 Wright Street LHP(T). Source: Mohyla Architects, sheet SD17

The podium interface with the Hotel Wright Street is more inclusive, which is appropriate given the heritage place is an integral part of the overall building complex. The interface is also influenced by the Urban Plaza concept, that envelopes the heritage place in three dimensions, providing a 'buffer' and curtilage to the place within the context of the overall proposal.

At street level, the hotel anchors the corner of the site. A large frameless glass façade provides a very generous interface that reinforces the large Urban Plaza volume behind. The Atrium entry and “88” building address flanks this interface, and provides a well considered building entrance that both shows deference to the heritage place, while reinforcing its role and character contribution to the streetscape.



Image 24. Podium interface with 88 Wright Street LHP(T). Source: Mohyla Architects, sheet SD17

7.2.2 ‘Breathing Space’ / Setbacks

The Development Plan provides relative well defined setback requirements for the development of Local Heritage Places (Townscape). These are:

- *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*

In addition to this, the Capital City Zone PDC 11 envisages buildings *to include a podium/street wall height and upper level setback (in the order of 3-6m).*

As noted in Section 4.1, the Development Plan envisages that the portions of the LHP(T) behind these setbacks can be demolished and form part of the new build (refer Image 7). There is some ambiguity in PDC 139 as to whether the *retention depth* is a setback (for development over) or a guide to the extent of retention of heritage place only. In my experience this provision is often applied as the latter, however the specific use of the words *retention depth* does give credence to the former interpretation. Had the writers of the Development Plan wanted upper development to be setback from the boundary, they could have readily written such, as they have in many other provision.

Notwithstanding this ambiguity, any such setback provision sought by PDC 139 would apply to development over the heritage place only, rather than the entire site.

The setbacks of the proposal have been developed in close consultation with ODASA.

The proposal provides a generous setback over the LHP(T) in excess of the 6m noted ambiguously by PDC 139. This is illustrated in the below image where the transparent red volume is the noted 6m setback from both street frontages.



Image 25. Setback above LHP(T), with transparent red volume representing 6m setback from street frontage. Source: Sketchup model provided by Mohyla Architects

This generous setback over the LHP(T) results in the majority of the proposed development being primarily legible as development on adjacent land, rather than on the land of the heritage place itself.

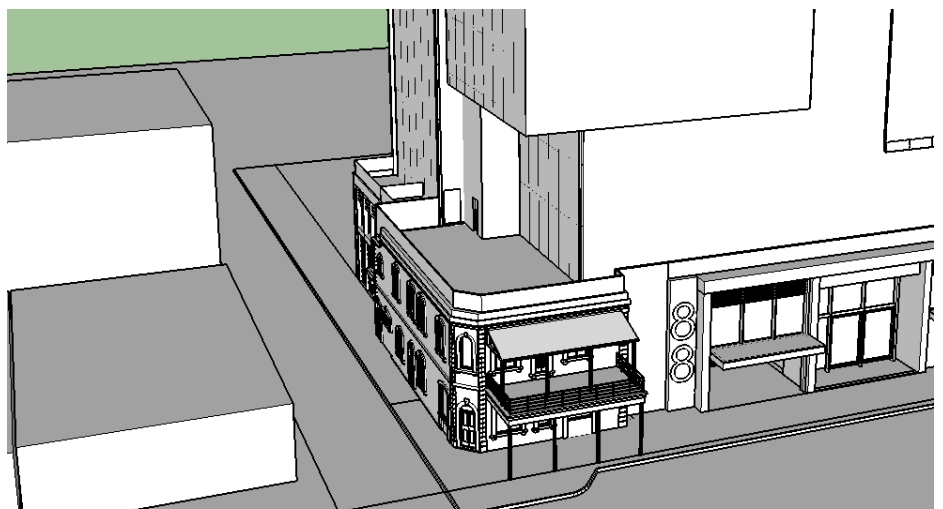


Image 26. Setback from LHP(T), with majority of site development being legible as development on land adjacent the LHP(T), rather than on the land of the heritage place. Source: Sketchup model provided by Mohyla Architects

Contributing to this sense of 'breathing space' around the LHP(T) is the generous Urban Plaza, that provides a three dimensional buffer for the heritage place. This offering, in excess of anything sought by the Development Plan, provides a generous legibility to the depth and context of the heritage rarely afforded by development of this nature.



Image 27. Atrium 'breathing space' around the LHP(T). Source: Mohyla Architects, sheet SD17.

7.2.3 Tower Design

The architect's noted in their design statement:

The office levels above the podium utilise articulated glazed protruding and retracting forms that are of a scale and proportion already apparent in the streetscape, and which provide articulation to the facades of the building, resulting in the scale and bulk of the tower building producing a diminishing visual effect as the height increase.

The varying heights, juxtapositions of form and materiality displayed between the podium and office tower components of the development simultaneously reinforce linkages to the streetscape while differentiating between uses, new and old built forms, historical and modern construction techniques. This delivers a uniform and elegant sculptural form at a city scale...

I understand this design approach was developed in close consultation with ODASA, following their concerns with regards to an earlier design direction.

I will defer to ODASA with regards to the appropriateness of this approach over earlier proposals, however it would appear to have considerable merit with regards to managing the overall visual scale of the proposal, and its context within both Wright Street, and to the surrounding LHP(T)s

In addition to this, the upper most storeys of the tower have been set back, which also assist in mitigating the overall scale of the proposal within the streetscape.

7.2.4 Summary

In summary, the mechanism outlined above either aligns with, or exceeds the heritage provisions of the development plan and in doing so creates an appropriate *contemporary juxtaposition* between the new and old development that *provides a new setting the heritage place*.



Image 28. Streetscape view of proposed development. Source: Sketchup model provided by Mohyla Architects



Image 29. Streetscape view of proposed development. Source: Sketchup model provided by Mohyla Architects

7.3 Obj 44: Continued Use or Adaptive Reuse of the land, buildings and structures comprising a Heritage Place

The proposed development seeks to fully integrate, and celebrate the heritage place as part of the overall building offering. The hotel, that will remain a hospitality offering, is an integral component of the unique building entry, that incorporates a large atrium 'Urban Plaza' around the LHP(T). This entry has been fundamentally designed around the heritage place to ensure its relevance within the overall site development

This offering extends to the hotel roof top, where the heritage place will provide much needed activation to the podium level terrace (spaces that are commonly characterised by their otherwise lack of use).

For these reasons, the proposed development will see the *continued use and adaptive reuse* of the heritage place



Image 30. Hotel Wright Street Rooftop Terrace render. Source: Mohyla Architects

8.0 Summary

The land of the proposed development contains a Local Heritage Place (Townscape), while two other such heritage places are located within close proximity.

Local Heritage Places (Townscape) (LHP(T)) have been identified within Council's Development Plan as they are considered to *positively contribute to the townscape character of the area*. Thus, their *heritage value* is their townscape character contribution, which is derived from building elements that *are visible from the street*.

The Development Plan provides guidance as to how LHP(T)s should be developed to provide a balance between development envisaged within the locality, and the preservation of the townscape character contribution of the identified heritage places. For the case of the Capital City Zone, where the city's most intensive development is envisaged, the Development Plan anticipates *contemporary juxtapositions will provide new settings for heritage places*.

The heritage provisions of Council's Development Plan provide further guidance through seeking development to establish a *compatibility* with LHP(T)s through *innovative contemporary design* with regards to *materials, finishes and other built form qualities*. In addition to this, it provides quantitative *retention depths* that can ambiguously also be interpreted as setback guidelines.

These provisions set a minimum threshold that the Development Plan considers necessary to preserve the townscape character contribution of the identified LHP(T)s.

Based upon the assessment undertaken above I consider the proposed development to significantly exceed the expectations of the Development Plans relevant LHP(T) provisions.

In addition to establishing a *compatibility* with LHP(T)s through *innovative contemporary design* with regards to *materials, finishes and other built form qualities*, and setting back development over the LHP in excess of the ambiguous quantitative retention depths, the proposal also undertakes notable measures to integrate and celebrate the Local Heritage Place (Townscape) on the site. These include, amongst other measures, the full retention of the LHP(T), provision of an Urban Plaza that integrates the heritage place with the building entrance, and generous three dimensional atrium around the heritage place to provide a sense of 'breathing space'.

While the proposal does seek the removal of the LHP(T)'s existing roof and chimneys, I consider these to make a negligible contribution to the townscape character (for reasons outlined in the above assessment). Not only do I consider any impacts of this demolition to be minor (particularly in the context of the additional measures noted above), but it also facilitates the use of the Hotel roof space as a key activator to the podium terrace, a space that on other projects can remain notoriously underutilised. This roof terrace also significantly assists in maintaining the ongoing use, and relevance of the heritage place.

For these reasons, I consider the proposal to be consistent with the relevant heritage provisions of Adelaide City Council's Development Plan.

FRANK SIOW & ASSOCIATES

Traffic and Parking Consultants

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18 September 2017

Mr Joshua Carrabs
Mohyla Architects
27 Regent Street
ADELAIDE SA 5000

Dear Mr Carrabs,

76-88 WRIGHT STREET, ADELAIDE **PROPOSED MIXED USE DEVELOPMENT - TRAFFIC AND PARKING ASSESSMENT**

As requested, we have undertaken a traffic and parking assessment for the above development.

The proposal comprises of the following:

- Refurbishment of an existing hotel;
- Provision of a basement car park for 20 vehicles, including 2 disabled spaces;
- Commercial tenancies over Levels 1-15;
- Plant room on Levels 14-15; and
- Two penthouses on Levels 16-17.

The subject site is located within the Capital City Zone of the City of Adelaide. The subject site has frontages to Wright Street and Compton Street. It also has frontage to a right of way lane at the rear, which is accessed via Market Street.

The subject site is located within the Primary Pedestrian Area where a proposed north-south pedestrian link is identified for Market Street. Wright Street is a local street in the City Road Network. Compton Street is part of the north-south walking and cycling link in the Council's Smart Move Strategy 2012-2022 Interim Action Plan 2016-2018.

1.0 THE PROPOSAL

The subject site is currently occupied by an existing hotel and vacant land used for car parking.

The proposal seeks to redevelop the site by retaining and refurbishing the existing heritage hotel, demolishing the 'lean to' addition to the hotel and constructing a new high rise building with one level of basement parking.

The basement parking is intended for use by tenants of the development and residents of the two penthouses. Given that the parking is solely reserved parking, access to the basement car park is controlled by a security gate. While usually a two-way entrance is required to accommodate traffic flows from Wright Street, having regard to streetscape considerations and the desirability of enhancing

pedestrian activity on the adjacent footpaths, a single lane entrance is proposed at the Wright Street frontage for access to the basement car park to minimise the impact on these requirements.

2.0 PARKING ASSESSMENT

The Council's Development Plan Table Adel/7 does not specify minimum car parking rates within the Capital City Zone for a non-residential development on the subject site. The proposed basement car park of 20 spaces is intended to be reserved spaces only, ie not accessible to the public.

However, for the two penthouses, a **maximum** parking provision is stated in Table Adel/7:

Medium to High Scale Residential or Serviced Apartment - Within the Primary Pedestrian Area shown on Map Adel/1 (Overlay 2A):

- 1 space for each dwelling with a total floor area less than 75 square metres*
- 2 spaces for each dwelling with a total floor area between 75 square metres and 150 square metres*
- 3 spaces for each dwelling with a total floor area greater than 150 square metres*
- Multi-unit dwelling: 1 visitor space for each 6 dwellings*

As the proposed penthouses would be larger than 150m², the maximum permitted provision would be 3 spaces each dwelling. This maximum number would not be exceeded.

The Council's Development Plan also requires bicycle parking to be provided at the following rate:

Low to High scale residential

- 2 for every dwelling/apartment with a total floor area greater than 150m².
- 1 for every 10 dwellings (visitor component)

Offices

- 1 per 200 square metres of gross leasable floor area (employees).
- 2, plus 1 per 1000 square metres of gross leasable floor area (visitors).

The hotel is an existing land use. We note that there are existing bicycle rails already provided in Compton Street and Wright Street for the hotel patrons, therefore, in our opinion, the bicycle parking demand of this existing land use has already been catered for.



Photo showing existing bicycle rails outside the hotel

We understand that the penthouses would have provision for bicycle parking of the residents within the apartments.

For the new commercial land use (10,224m² floor area), the bicycle parking requirement would be 51 spaces for employees and 12 spaces for visitors, ie total of 63 spaces.

For the two penthouses, 4 bicycle parking spaces would be required for the residents of the apartments and 1 bicycle parking space for their visitors.

In total, the bicycle parking requirement for the development would be 68 spaces.

We understand that 61 bicycle parking spaces would be provided within the Bike Store area on the ground floor. The bicycle parking shortfall would therefore be 7 spaces. We consider such a parking shortfall to be very minor.

It is not uncommon for residents to park their bicycles within their apartments. As the proposed penthouses would accommodate its own resident bicycle parking requirements, this would further reduce the overall bicycle parking shortfall to 3 spaces.

To encourage cycling as a mode of transport, end of trip facilities would also be provided, including shower facilities, toilets and lockers.

Having regard to the above assessment, we are satisfied that the bicycle parking provision would be adequate for the development, notwithstanding that there would be a very minor bicycle parking shortfall arising of 3 spaces.

3.0 ACCESS CONSIDERATIONS

There is an existing single lane 4.4m width crossover in Wright Street for the current at-grade car park. This would be replaced by a single lane width crossover of lesser width (approximately 3.0m) in Wright Street for the basement car park.

Therefore, in terms of crossover impacts, there would not be any change to the existing situation, except that the new crossover would be narrower than the existing and would enhance the conditions for pedestrians using the footpath.

4.0 CAR PARK ENTRANCE LAYOUT

The proposed access to Wright Street has been designed with the following considerations:

- Single lane entrance (entry and exit) to minimise the impact on pedestrians and streetscape and also to minimise the loss of on-street parking for the new crossover. The single lane arrangement to the basement car park is similar to the current situation to the existing at-grade car park.
- Ensure that the pedestrian sight line triangles are met on the left and right of the exit vehicle to the Wright Street footpath, in compliance with the parking standard.
- Remote control activation system for the security gate to the basement car park.
- Traffic control system to assist in managing the entry and exit movements to minimise impacts on Wright Street. The default mode would be priority for the entry movement. For example, when an entering driver activates the security gate, a red signal would face the exiting driver at the basement level, ie the exiting driver would be required to wait to allow the entering vehicle in first.

In considering the suitability of the single entrance arrangement, regard needs to be given to the very low traffic movements that would be generated by a 20-space reserved car park. With the design considerations discussed above, the proposed access for the basement car park is considered to be appropriate and would provide convenient access for the reserved users of the car park.

Given the anticipated very low traffic movements, the potential impact on the Wright Street traffic flows should be minimal.

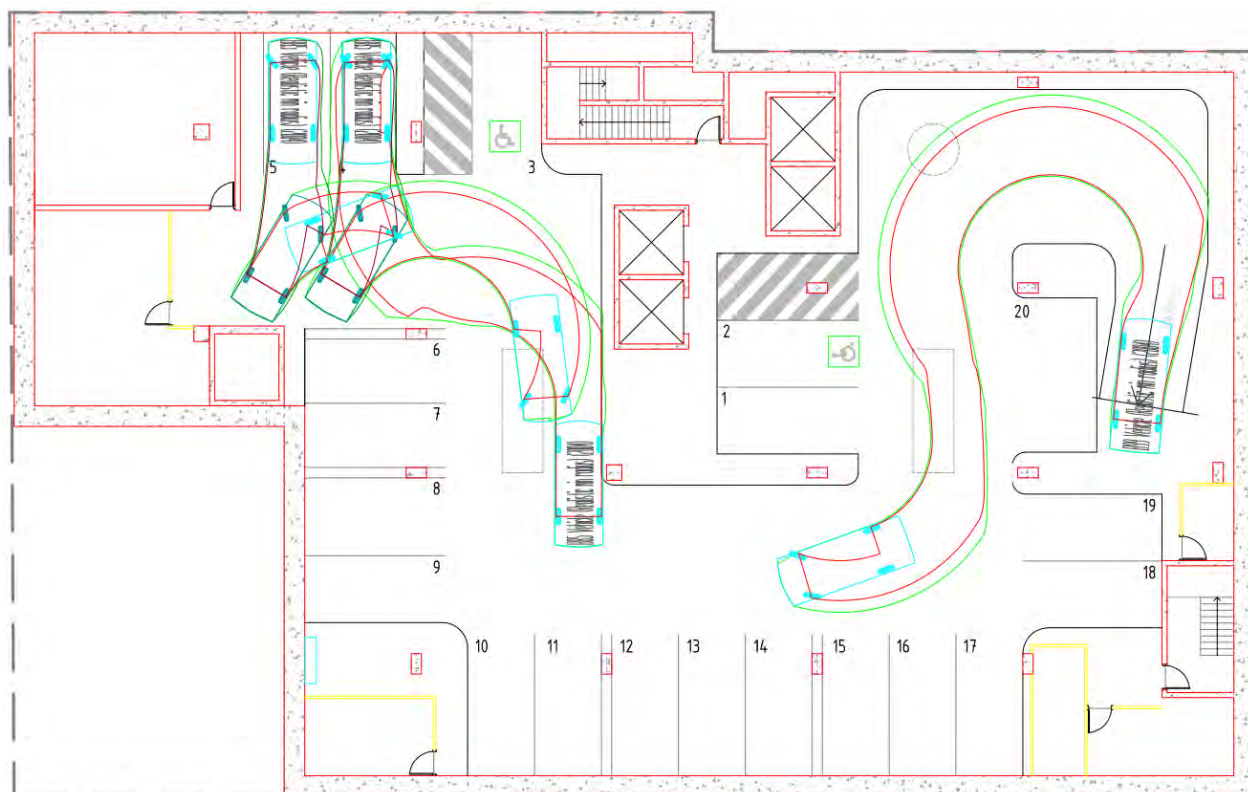
5.0 PARKING LAYOUT

The proposed parking space dimensions would generally be 2.6m minimum by 5.5m. Disabled parking space dimensions would be 2.4m minimum by 5.5m minimum. At the end of the aisleway adjacent to Space 6, a 1.0m aisleway extension would be provided. These dimensions would comply with or exceed the requirements of AS/NZS 2890.1-2004 and AS/NZS 2890.6-2009.

The proposed aisleway widths would be 5.8m minimum, which would comply with AS/NZS 2890.1-2004. The column spaces would be set back generally 0.75m from the start of spaces as required by AS/NZS 2890.1-2004.

The proposed ramp would be 3.0m wide with 0.3m clearances on both sides to walls as per the requirement of AS/NZS 2890.1-2004, ie total width of 3.6m.

Having regard to the site constraints, the proposal is for a single lane ramp with access control to manage the entry and exit movements. There would be adequate manoeuvring area at the bottom of the ramp for a B99 design car to conveniently turn (see turn path below).



B99 car turn path at the bottom of the ramp and turn paths for the end spaces

The current ramp design shows a 'flat area' of approximately 3m between the ramp and the boundary. The ramp grades could be further reviewed during the detailed design stage to more closely align with the requirements of the parking standard. We note that to drop 3.65m between existing footpath level and the basement car park level, the following ramp design would be achievable within the current layout:

- 5m 1 in 20 'flat' area at the top of the ramp; and
- Main ramp grade of say 1 in 4.3, with 2m transitions of 1 in 18 at the top and bottom of the main ramp.

At the Wright Street entrance, adequate pedestrian sight lines should be provided to the Wright Street footpath for exiting drivers, as per the requirement of AS/NZS 2890.1-2004.

Based on the above assessment, we are satisfied that convenient access would be provided for the reserved users of the proposed car park. All entry and exit movements can occur in a forward direction from Wright Street. The proposed car park layout would be able to be designed to comply with AS/NZS 2890.1-2004 (general parking) and AS/NZS 2890.6-2009 (disabled parking).

6.0 SERVICING

Compton Street is a one-way street in the northbound direction. There are two existing Loading Zones in the street immediately opposite the hotel. Market Street is a one-way street in the southbound direction with parking permitted on both sides.

The main servicing requirements would be generated by the existing hotel. This existing land use has relied on the loading zones that are currently present in Compton Street. This servicing condition would not be altered. It is proposed that the less frequent servicing requirements of the commercial land use would also similarly rely on the use of these existing loading zones.

With regard to bin servicing, we note that Colby Industries has prepared a Waste Management Plan that would deal with this issue and which would utilise Compton Street and Market Street. We note that the proposed main bin room would be located adjacent to the unrestricted right of way at the rear of the subject site in close proximity to Market Street.

We understand that refuse trucks would stop in Market Street adjacent to this right of way and the bins removed from the bin room by the driver for pick up during early morning periods to minimise impacts on pedestrians and parking in the street. The distance between the bin room and Market Street is only approximately 16m, which is a very short distance away. We are satisfied that by restricting bin pick up to early morning periods, there should be minimal impact arising for bin servicing for the development. The refuse truck would be able to stop temporarily on the kerbside without obstructing through traffic.

There would be an opportunity to consider a Loading Zone on the western side kerb in Market Street, immediately south of the right of way, where the refuse truck is expected to temporarily stop to pick up bins. This kerb space is currently zoned for car parking (1P 8am to 6pm). A Loading Zone, for example, that operates between 6am to 8am could be implemented by Council to ensure that two of the car parking spaces (equivalent to the length of a refuse truck) would be allocated to conveniently allow refuse pick up to occur. During these early morning periods, car parking demand should not be adversely affected by such a proposed Loading Zone.

There would be no change to the bin pick up for the existing hotel in Compton Street. Currently trucks service the hotel by using the loading zones that are present. This would continue to occur. A truck temporarily stopped in the loading zone for bin pick up would not obstruct through traffic in the street.

7.0 DEVELOPMENT PLAN

We consider that the following provisions of the Development Plan consolidated 20 June 2017 would be relevant for this assessment.

Transport and Access

Access and Movement

PRINCIPLES OF DEVELOPMENT CONTROL

224 *Development should provide safe, convenient and comfortable access and movement.*

The proposed access point in Wright Street would provide safe and convenient access for reserved users of the basement car park. Adequate sight distance would also be provided to pedestrians for the exit movements, in compliance with the requirements of AS/NZS 2890.1-2004.

227 *Within the Core, Primary and Secondary Pedestrian Areas identified within Map Adel/1 (Overlays 2, 2A and 3), development should be designed to support the establishment and maintenance of continuous footpaths so that pedestrian flow is free and uninterrupted. Pedestrian access should be provided at ground level mid-block between all streets.*

There would be no change to the number of crossovers in Wright Street for the subject development site, given that there is an existing at-grade car park present. However, the new crossover would be narrower than the existing crossover and therefore the proposed development would in fact enhance the continuous footpath conditions on Wright Street, compared to the current situation.

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.*

Bicycle parking for residents and office tenants would be provided on-site. There are existing bicycle rails in Compton Street and Wright Street outside the existing hotel that would cater for the bicycle parking demands of the hotel land use.

Car Parking

OBJECTIVES

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

Objective 72: *An adequate supply of short-stay and long-stay parking to support desired growth in City activities without detrimental affect on traffic and pedestrian flows.*

PRINCIPLES OF DEVELOPMENT CONTROL

251 *Car parking areas should be located and designed to:*

- (a) *ensure safe and convenient pedestrian movement and traffic circulation through and within the car parking area;*
- (b) *include adequate provision for manoeuvring and individually accessible car standing areas;*
- (c) *enable, where practical, vehicles to enter and leave the site in a forward direction;*
- (d) *minimise interruption to the pattern of built form along street frontages;*
- (e) *provide for access off minor streets and for the screening from public view of such car parking areas by buildings on the site wherever possible;*
- (g) *minimise loss of existing on-street parking spaces arising through crossovers and access;*
- (h) *incorporate secure bicycle parking spaces and facilitate convenient, safe and comfortable access to these spaces by cyclists;*

Safe and convenient access would be provided for the reserved users of the proposed car park. All vehicle movements would be in a forward direction. The proposed single lane entrance arrangement in Wright Street would ensure that loss of on-street parking is minimised.

252 *All development should provide car parking spaces for people with disabilities in accordance with the requirements in the Building Code of Australia (BCA). For classes of buildings not covered by the requirements of the BCA, the number of spaces should be provided in accordance with Table Adel/7 and such car parking spaces should comply with Australian Standard 2890.1: 'Parking Facilities - Off-street Car Parking'.*

Two disabled parking spaces are proposed. The disabled parking spaces have been designed to the requirements of AS/NZS 2890.6-2009.

CAPITAL CITY ZONE

Movement

29 *Car parking should be provided in accordance with Table Adel/7.*

There is no minimum parking provision specified in the Table for the commercial land uses. For dwellings, a maximum of 3 parking spaces is specified for the larger dwellings. This maximum provision for dwellings would not be exceeded.

30 *Multi-level car parks should locate vehicle access points away from the primary street frontage wherever possible and should not be located:*

- (b) where they conflict with existing or projected pedestrian movement and/or activity;*
- (c) where they would cause undue disruption to traffic flow;*

There would be no change to the number of crossovers in Wright Street for the subject development site, given that there is an existing at-grade car park present. However, the new crossover would be narrower than the existing crossover and therefore the proposed development would in fact enhance the continuous footpath conditions on Wright Street, compared to the current situation.

8.0 SUMMARY

The proposed development comprises of a mixed use development involving the refurbishment of an existing hotel, the development of a multi-level building for commercial tenancies, two penthouses at the top of the building and a basement car park.

There is no car parking requirement specified in the Development Plan for the commercial land uses relevant to the subject site. Parking for 20 vehicles is proposed within the basement car park. The Development Plan does not preclude the provision of this parking within the Capital City Zone. The proposed basement car park would be for reserved users only.

Bicycle parking and end of trip facilities would also be provided to encourage cycling as a mode of transport. Adequate bicycle parking would be provided for the development.

The proposed parking layout and ramp design would allow convenient access to and from the parking spaces. The proposed car park layout would be able to be designed to comply with AS/NZS 2890.1-2004 (general parking) and AS/NZS 2890.6-2009 (disabled parking).

The traffic generated by the basement car park proposed development would be very low. The impact on pedestrian movements or traffic flows on Wright Street would similarly be expected to be very low.

Servicing of the subject development, including the existing hotel, would utilise the existing loading zones in Compton Street. These loading zones are located in close proximity to the service entrance of the

existing hotel and the entrance to the multi-level building. We understand that bin servicing would be based on an appropriate waste management plan prepared by others in consultation with Council.

On the basis of the above assessment, we are of the opinion that the proposed development can be supported from a traffic and parking perspective.

Yours sincerely,

Frank Siow

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*Commercial mixed-use
development – 76-88 Wright St,
Adelaide*

Waste Management Plan

Prepared for: Mohyla Architects Interior Designers

FINAL

27 August 2017

- IMPORTANT NOTES -

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Document verification

Description	Waste Management Plan: Commercial mixed-use development – 76-88 Wright St, Adelaide		
Version	FINAL		
Issued	27/8/2017		
Verification	Prepared by	Checked by	Approved by
Name	C. Colby	Client	C Colby
Signature			

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1 Introduction

This document provides a Waste Management Plan (WMP) for the proposed commercial mixed-use development at 76-88 Wright St. The site for the Development (Development) is in the Adelaide City (Council) area. The Project Architect is Mohyla Architects Interior Designers and the Traffic Consultant is Frank Siow & Associates.

2 Development details

The Development is a multi-storey (17 levels + Basement Car Park) high-rise development to be located across several existing properties between Compton and Market Streets – see Figure 2-1 below. There is an existing Hotel on this site, which will be retained. The Development will comprise:

- The existing Hotel (at Ground and Level 1);
- Approximately 9,635m² (GFA) of commercial office space from Levels 1 to 15;
- Two 5-bedroom residential penthouses on Levels 16 and 17;
- Retail tenancy at Ground Level (facing onto Wright St);
- Public space on lower levels including lobby area, Atrium areas (Ground to Level 2), and Roof Deck (at Level 2).

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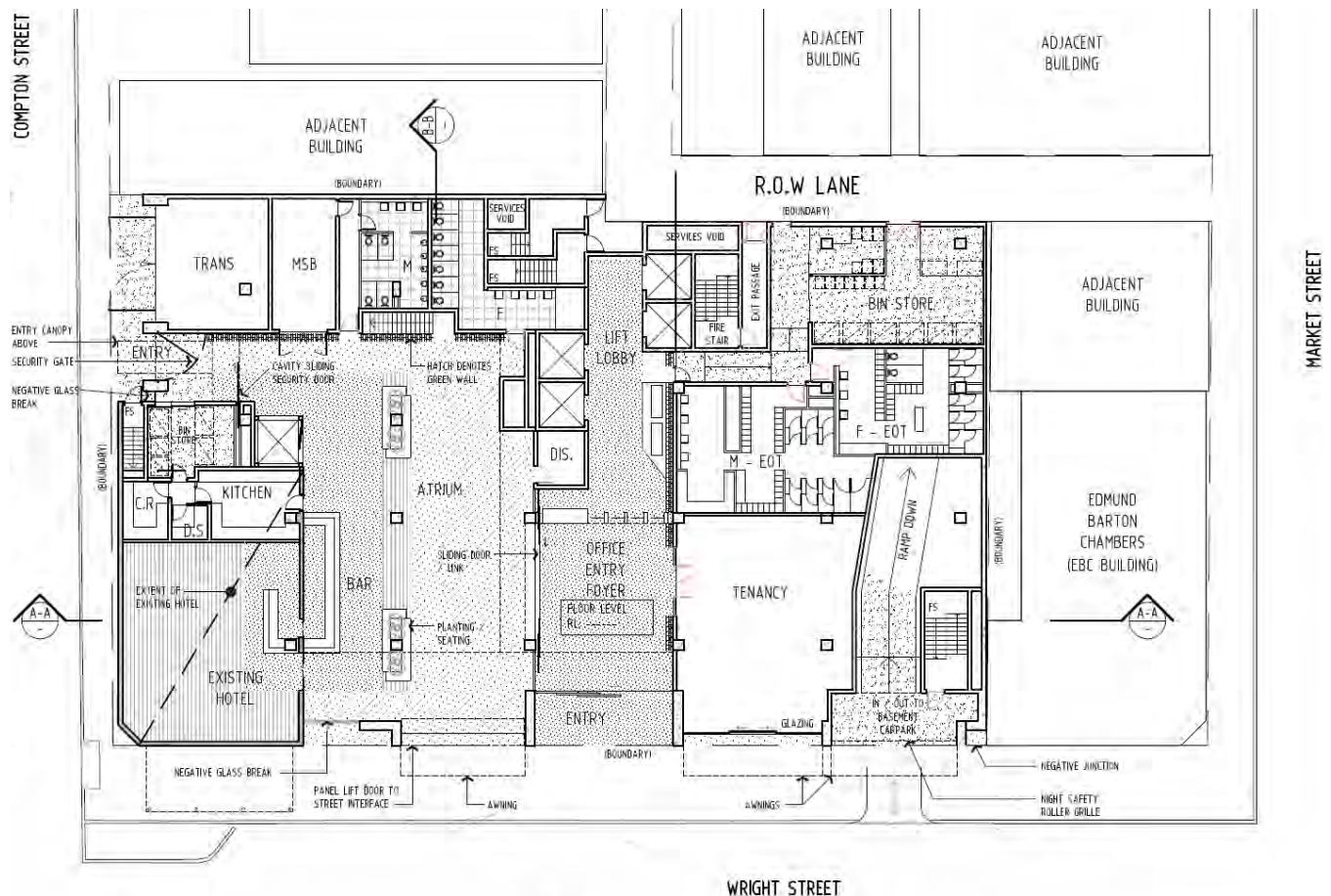


Figure 2-1: Ground-level plan for proposed multi-storey development at 76-88 Wright St; from plan (Ref: Desktop Review, Ground Level Plan, dated 05/07/17) provided by Project Architect

Table 2-1 below summarises the development metrics of the Development relevant to waste management including recommended Waste Resource Generation Rate (WRGR) classifications (used later for estimating waste volumes).

Table 2-1: Development metrics, including proposed WRGR Classification

Land Use	Type	Location	Description	Development Metric(s)		WRGR Classification [‡]
Residential		Levels 16 & 17	Penthouse Apartments	2	Dwellings	High Density Residential Dwelling
				10	Bedrooms	
Commercial	Hotel	Ground - Level 1 (including parts of Atrium areas)	Bar	220	m ² GFA	Hotel - Bar Area
			Dining (only)	125	m ² GFA	Hotel - Dining Area
			Bar & Dining (combined)	253	m ² GFA	Hotel – Bar & Dining Area (Amended) ^
			Office / Admin	40	m ² GFA	Offices or Consulting Rooms
	Office	Levels 1-15	Office	9635	m ² GFA	Offices or Consulting Rooms
	Retail tenant	Ground Level	Retail	160	m ² GFA	Dry Retail < 100m ²
Public/Shared Space	Lobby(ies) & Atrium (remainder)	Ground - Level 2	Public place	573	m ² GFA	Showrooms

[‡] Based on the State Guidelines (Zero Waste SA, 2014) or proprietary value otherwise determined from the Consultant's experience

[^] Amended Bar & Dining Area WRGR – average of Bar (only) and Dining (only) – from State Guidelines was applied (Zero Waste SA, 2014), to reasonably reflect lower waste generation expected in a 'shared' Bar & Dining area (as opposed to a Dining area only).

3 Design Assumptions

3.1 Stakeholder Consultation

Several meetings and discussions with the Project Architect and Traffic Consultant were undertaken to obtain their guidance and direction on how best to successfully integrate waste management into the Development. Their advice is outlined below and has been incorporated into the proposed waste system.

It may be necessary to subsequently confirm with Council the proposed waste collection arrangements for the waste system on Market and Compton Streets – see additional comments in Section 4.3.3.

3.2 Stakeholder Guidance

3.2.1 Project Architect

Collection services to the Development would be delivered by private waste contractors. The following services are expected for different land uses.

- **Penthouse residents** – A three-bin equivalent service is to be provided (general waste, recycling, food organics).
- **Commercial tenants** – Services to be selected to suit common market expectations for the type of commercial tenant.

Nominal locations and areas on building plans for waste storage had already been set aside.

No other specific guidance was provided.

3.3 Regulatory compliance & design requirements

Design and operation of the waste system in the Development is subject to:

- The South Australian Environment Protection (Waste to Resources) Policy 2010 (W2REPP) (Government of South Australia, 2011):
 - *Waste must subject to resource recovery processes, which can include source separation, before disposal to landfill.*
 - *A weekly collection of general waste from residential premises is expected.*
- Adelaide (City) Development Plan (Department of Planning, Transport & Infrastructure, 20 June 2017), which includes requirements for waste management in new developments, e.g.
 - *80 Site facilities ... (b) areas for the storage and collection of ... refuse and waste ... to enable the separation of recyclable materials as appropriate to the size and nature of the development and screened from public view*
 - *101 A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new development.*
 - *273 Provision for the movement of people and goods should ... include ... provision for service vehicles and the storage and removal of recyclables, waste goods ...*
- South Australian Better Practice Guide – Waste Management in Residential or Mixed-Use Developments (Zero Waste SA, 2014)
 - *Provides guidance on expected design and operation of waste management systems for medium to high density residential and mixed-use (including commercial) developments.*

The above have been considered in developing this WMP.

4 Waste System

4.1 Services

Table 4-1 below summarises the (waste and recycling) services that are recommended for the Development. All services would be delivered by a private (waste) contractors. A Council collection service is not sought (unless Council is willing to provide a kerbside or rear-lift collection for Penthouse residential apartments).

Table 4-1: Waste & recycling services to be provided for the Development

Service Type	Commercial					Public Place
	Residential	Hotel	Offices	Retail		
Routine (regularly scheduled)	<ul style="list-style-type: none">General WasteRecyclingFood Organics	<ul style="list-style-type: none">General WasteRecycling / CardboardFood OrganicsRecycled deposit containers (Option)	<ul style="list-style-type: none">General WasteRecycling / PaperConfidential paper (Option, if needed)	<ul style="list-style-type: none">General WasteRecycling / Paper	<ul style="list-style-type: none">General Waste	
On-call (as needed)	<ul style="list-style-type: none">Hard/E-waste					
		<ul style="list-style-type: none">Cooking Oil (Option, if needed)				
Maintenance (waste removed by contractor)	<ul style="list-style-type: none">Lighting (where applicable)Sanitary (for public/commercial ablutions if present)					
External (by resident/tenant off-site)	<ul style="list-style-type: none">LightingPrinter CartridgesBatteries					

4.2 Estimated waste volumes

Table 4-2 below provides estimates of waste volumes for Routine and other services at the Development (in line with above services for each land use activity). The estimated waste volumes are based on the development metrics in Table 2-1 and Waste Resource Generation Rates (WRGRs) published in the South Australian Better Practice Guide – Waste Management in Residential or Mixed-Use Developments (Zero Waste SA, 2014) (or State Guidelines).

Table 4-2: Estimated waste volumes in Litres per week (peak week estimate) ‡ for land use activities at the Development

Waste / Recycling Service	Residential	Commercial						Public place areas
		Existing Hotel				Office tenancies	Retail tenancy	
		Bar	Dining	Bar & Dining^	Office area			
General Waste	300	770	2630	3090	70	16860	500	1500
Recyclables	250	770	440	1770	60	14450	240	
Food Waste	100	40	3500	3540				
Hard waste	70	9.2	5.3	10.6	1.7	405	2.9	8.6
E-waste	13	1.5	0.9	1.8	0.3	67	1.0	2.9
Sanitary	NE	NE	NE	NE	NE	NE	NE	NE
Lighting waste	NE	NE	NE	NE	NE	NE	NE	NE
Printer Cartridges/Batteries	NE	NE	NE	NE	NE	NE	NE	NE
TOTAL	733	1591	6576	8412	132	31782	744	1511

‡ Based on the State Guidelines (Zero Waste SA, 2014)

[^] Amended Bar & Dining Area WRGR – average of Bar (only) and Dining (only) – from State Guidelines was applied (Zero Waste SA, 2014), to reasonably reflect lower waste generation expected in a 'shared' Bar & Dining area (as opposed to a Dining area only), based on Consultant's previous experience.

4.3 Routine services

4.3.1 Waste system storage

The waste system for Routine Services in the Development would include the following waste storages.

- **Existing Hotel** – Waste / recycling storage located back-of-house, Ground Level, collection from Compton St
- **Office Tenancies** – Shared waste/recycling storage room located at Ground Level, collection from Market St (via ROW lane)
 - *This storage rooms includes a temporary presentation area for some confidential bins (which tenants may use when they organise a collection).*
 - *Also located in this room is a temporary bin wash area as a multipurpose space which serves as bin storage area when not in use.*
- **Retail tenancy** – Waste/recycling storage in-tenancy, collection from Market St (via ROW lane)
- **Penthouses** – Separate waste/recycling storage at Ground Level, one bin set (general waste, recycling, food waste) per penthouse, collection from Market St (via ROW lane)
- **Public area waste** – Bins included in Office Tenancies' waste/recycling storage room.

Table 4-3 below recommends the bin storage to be provided in each of these areas (to give adequate storage for estimated waste / recycling volumes based on proposed collection frequencies).

Figure 4-1 overleaf shows where these waste storages would be located and how they could be arranged or configured to store the recommended bin storage. *Where relevant, these waste storages include spare area for other waste/recycling storage and/or presentation of optional or at-call services.*

The locations of these waste storage are designed to minimise the transfer distance from waste storages to proposed collection points, and where feasible, keep this distance < 30m. *The details of the location and arrangement of these waste storages should be confirmed when final decisions are made on building design and layout during detailed design.*

Table 4-3: Waste storages for Routine Services to the Development – Waste & recycling volumes, collection frequency, bin sizes and recommended number of bins needed; NE – Not estimated, TBD – To be determined, NS – Not specified

Waste storage area (by land use)	Services	Volume (estimated) (L/week)	Provider	Bin storage, Collected (up to, per event)			Collection Frequency
Penthouses (Residential)	General Waste	300	Commercial (Private)	2	240	MGB	Weekly
	Recyclables	250		2	240	MGB	
	Food Waste	100		2	140	MGB	
Hotel	General Waste	6560		1	1,100	Skip	Daily
	Recyclables	3040		1	660	Skip	
	Food Waste	7080		2	660	Skip	
Office tenancies *	General Waste	16860		4	1,100	Skip	Daily (5 days per week)
	Recyclables	14450		3	1,100	Skip	
Retail tenancy	General Waste	500		1	240	MGB	2-3 times per week
	Recyclables	240		1	240	MGB	Twice weekly
Public place waste	General Waste	1500		2	660	MGB	Twice weekly

* Office tenancies may also have confidential paper bins separately located in their stationery rooms

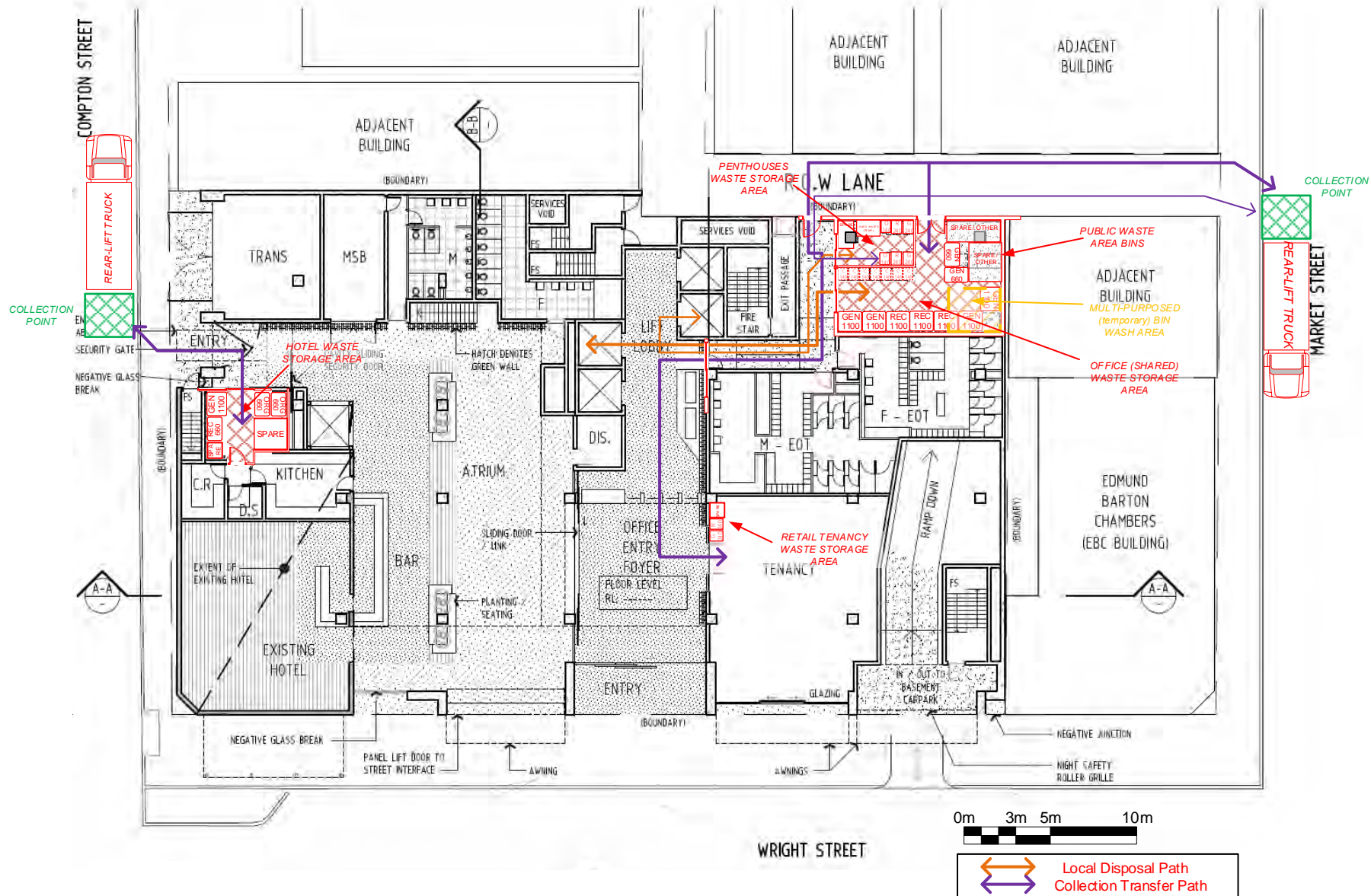


Figure 4-1: Locations and nominal configurations of waste storages in waste system for the Development, including collection points, and transfer pathways for disposal and collection at Ground Level; GEN – General waste; REC – Recycling; ORG – Organics; C – Confidential paper bins

4.3.2 Waste system operation

4.3.2.1 User storage

4.3.2.1.1 Residential (Penthouses)

Residents would be provided with kitchen bins as follows.

- a) General waste bin – at least 20L in size, with bin liner
- b) Commingled recycling waste bin – at least 30L in size
- c) Food organics bin – 6-8L kitchen caddy (or in-draw bin), with compostable bin liner

The bins should be equipped with handles allowing easy carriage by residents to the Ground-level waste disposal and storage area.

Figure 4-2 below gives some examples of kitchen bins previously suggested by Council (Adelaide City Council, 2016).



Figure 4-2: Examples of waste and recycling kitchen bins suggested by Council (Adelaide City Council, 2016)

4.3.2.1.2 Commercial tenants (Hotel, offices, retail)

Each commercial tenant would organise and operate their own user storage within their tenancies, which would be selected and designed at time of tenancy fit-out. This user storage would align to the waste and recycling services provided (per Table 4-1). As general examples, this may include:

- **Offices tenancies –**
 - Under-desk paper only-bins (20L)
 - Bin stations with general waste and recycling bins (20-60L)
 - Paper (60L) and confidential paper bin(s) (140/240L MGB) in stationery room
 - Printer cartridge box and battery tube in stationery room
- **Hotel –**
 - Suitable local waste, recycling and food waste bins in kitchen, bar and/or serving areas, able to be carried or wheeled to the waste storage area for emptying
 - This may include provision for recycled deposit containers, coffee grinds and/or cooking oil.
- **Retail –**
 - General waste and paper/recycling bins, sized as needed (e.g. 20L, 60-80L) to suit this tenancy's requirements

4.3.2.2 Local Disposal Transfer Pathway

4.3.2.2.1 Residential (Penthouses)

The local disposal pathway for residents would be from their apartment to their Ground Level waste storage room (see Figure 4-1) via lift and corridors.

4.3.2.2.2 Commercial tenants (Hotel, offices, retail)

Each commercial tenant would be responsible for transferring and disposing their own waste and recycling to bins provided in their respective waste storage areas. The following is expected to apply.

- **Office tenants** – These tenants would engage cleaners to empty their bins, with the cleaners transferring the waste and recycling to the shared waste storage (via Lifts and corridors) at Ground level for disposal.
 - *Some tenants may transfer their own confidential paper bins to the presentation area in this storage when a scheduled collection is expected to occur.*
- **Hotel** – This tenant would transfer their own waste from their user storage to their waste storage area for disposal.
- **Retail** – This tenant would transfer their own waste from their user storage to their (in-tenancy) waste storage area for disposal.

4.3.2.3 Collection Transfer Pathway

The collection services provided would be pull-in, pull-out: the waste contractor would park on Market and/or Compton Streets, remove and transfer the bins from the relevant waste storage, empty the bins, then return them to the waste storage. The proposed collection transfer pathways are included in Figure 4-1. The distance from waste storages to the loading zone at the collection point would be < 30m in all cases except for collection of MGBs from the retail tenancy.

4.3.3 Collection

4.3.3.1 Overview

The collection points for Routine Services would be on-street in Market and/or Compton Streets as illustrated in Figure 4-1. Based on previous inquiries with commercial waste contractors:

- These streets are likely to already be routinely used by rear-lift trucks to collect skip bins from other commercial premises in surrounding buildings and streets;
- There are daily waste collection services to the City by commercial waste contractors which can meet the Development's waste / recycling collection demands;
- The timing of these existing services is usually in early morning hours, e.g. 5-8AM, to minimise impact on pedestrian and traffic access.

Consequently, for the Development:

- Existing waste contractors already collecting along these streets would be identified and engaged, so there would be minimal additional impact on traffic caused by waste collection from the Development;
- Property Management would organise common contractors for each service (i.e. one contractor collecting all bins for that service) at the Development, again minimising collection events;
- Collections would be scheduled for early morning hours, to minimise impact on pedestrian and vehicular access and traffic movements along these streets;
- Loading zones would be negotiated with Council at the proposed collection points, so trucks can park to collect waste / recycling from the Development.

The suitability of the above collection arrangements from a traffic management perspective has been reviewed by the Traffic Consultant and will be presented in the Traffic Report accompanying the development application for the Development.

4.3.3.2 Type of truck

The type of truck used for Routine Services would be a rear-lift collection truck, which is standard in Metropolitan Adelaide for emptying waste and recycling skip and mobile garbage bins.

For other waste / recycling collections (e.g. confidential waste, hard waste) a pan-tech or flat-bed truck would commonly be used.

Appendix 1 to this report provides general specifications for these types of trucks (as usually used for commercial services in Metropolitan Adelaide).

These types of trucks should already access and drive along Market and/or Compton Streets to deliver waste and recycling collection services to nearby premises.

The Traffic Consultant in his Traffic Report will review waste collection truck access and parking in Market and/or Compton Streets for waste/recycling collection to the Development.

4.3.3.3 Collection frequency

Table 4-4 below summarises the expected collection timing and frequency for Routine Services to the Development at the two planned collection points on Market and/or Compton Streets.

- There would be up to 3 routine collections per day at Compton St, to service the Hotel; and
- There would be 2 routine collections per day, 5 days a week, at the Market St collection point, with a 3rd collection (for food organics from Penthouse apartments) on one of these days.

Table 4-4: Summary of collection frequency events arising from Development; refer Table 4-3 for number of bins per collection event

Scheduled Service	Bins Collected		Collection point	Collection event						
	Location	Frequency		M	T	W	Th	F	S	Su
General waste	Penthouses	Weekly	Market St	-	1	1	1	1	1	-
	Office tenancies	Daily (5 days/week)								
	Retail tenancy	3 per week								
	Hotel	Daily	Compton St	1	1	1	1	1	1	1
Recycling/Paper /Cardboard	Penthouses	Weekly	Market St	-	1	1	1	1	1	-
	Office tenancies	Daily (5 days/week)								
	Retail tenancy	Twice weekly								
	Hotel	Daily	Compton St	1	1	1	1	1	1	1
Organic waste	Penthouses	Weekly	Market St	-	-	-	1	-	-	-
	Hotel	Daily	Compton St	1	1	1	1	1	1	1
TOTAL (to site across both collection points)				3	4	4	5	4	4	3

4.3.3.4 Collection timing & duration

Collection timing would be early morning hours before 8AM, in line with current practice for existing commercial collections in this area. Scheduling of collection, however, should comply with the Environment Protection (Noise) Policy 2007 (South Australian Government, 2008) as well as the rubbish collection requirements of the Local Nuisance and Litter Control Act 2016 (South Australian Government, 2017) (commencing 1 July 2017).

Table 4-3 gives the (maximum) number of bins that could be collected during each Routine Service collection event.

- Collection event duration on Compton St would generally be 5 minutes per event.
- Collection event duration on Market St would usually be 5 to 15 minutes per event depending on how many bins were collected.

Final collection scheduling arrangements should be embedded into the waste collection contract agreement(s).

4.4 At-call collections

4.4.1 Hard waste

4.4.1.1 Residential (Penthouses)

Hard waste collection would be a private at-call service organised independently by Penthouse residents, with collection direct from their apartments or small storage area provided in their waste room at Ground Level. Property Management would include advice on organising these services in the residents' Property User Manual (refer Section 5.3). The collection truck would park (in the Loading Zone) on Market St.

Council's at-call hard waste collection service (<http://www.cityofadelaide.com.au/city-living/home-property-management/waste-disposal-recycling/hard-refuse/>) could be available to Penthouse residents. It is recommended that access to this service should be discussed by Property Management on behalf of residents with Council.

4.4.1.2 Commercial tenants (Hotel, offices, retail)

For commercial tenants, hard waste collection would be a private at-call service organised independently by each tenant, with collection direct from their tenancy. Property Management would include advice on organising these services in the commercial tenants' Property User Manual (refer Section 5.3). The collection truck would park (in the Loading Zone) on Compton St for collection from the Hotel and (in the Loading Zones) on Compton and/or Market Streets for collection from office tenancies or retail tenant. It is recommended that Property Management encourage commercial tenants to organise the scheduling of these services outside peak hours for traffic or pedestrian access in Compton and Market Streets. Property Management may work with commercial tenants to coordinate hard waste collections from the Development.

4.4.2 Other at-call services

These (e.g. feminine sanitary, printer cartridges, confidential paper) would be organised by residents or commercial tenants and operated as needed. Usually, these are provided by smaller collection trucks or vehicles. It is assumed that these trucks or vehicles would park (in the Loading Zones) on Compton and/or Market Streets during collection events. The frequency of these services may be 1-2 times per week. It is recommended that Property Management work with commercial tenants to coordinate these services, including use of a common contractor and scheduling these services outside peak hours for pedestrian and traffic access in Compton and Market Streets.

4.5 Maintenance services

These (e.g. lighting, repair work) would be organised by residents, tenants and/or Property Management depending on commercial arrangements in place for these services at the Development. The maintenance contractor would remove and dispose the waste using their own receptacles and vehicles.

4.6 Other (external) waste (off-site disposal)

Advice would be provided in the Property User Manual (refer Section 5.3) to residents and commercial tenants for off-site disposal of other waste items where not covered by the above services (e.g. lighting, printer cartridges).

4.7 Facility design

4.7.1 Detailed design

The Developer would obtain appropriate engineering advice and design data to finalize design specifications and spatial requirements during building detailed design, to ensure that the waste system can be installed and function and operate as proposed in this WMP. This should include the achieving following design and operating requirements or outcomes.

4.7.2 Bins

Bins should conform to the Australian Standard for Mobile Waste Containers (AS 4213), including bins colours.

4.7.3 Signage

Appropriate signage should be used to ensure correct disposal of waste and recyclable materials. These should align to the signage requirements in South Australian Better Practice Guide – Waste Management in Residential or Mixed-Use Developments (Zero Waste SA, 2014). Council may provide advice or supply signage for this purpose.

4.7.4 Vermin, hygiene & odour management (inc. ventilation)

An inspection and cleaning regime should be developed and implemented by Property Management to ensure that surfaces and floors around transfer pathways and waste storage areas are kept clean and hygienic and free of loose waste and recycling materials.

This would include:

- Surface clean and sanitizing waste storage areas every 2-3 months.
- Ensuring that any spillages can be reported by residents or tenants and cleaned up immediately and sanitized.

Commercial tenants would be obliged to undertake similar regimes for any in-tenancy part of their waste system as part of their tenancy agreements.

The waste rooms would be mechanically ventilated for control of odours. The ventilation would extract to atmosphere, to prevent odour build up. The extraction vent discharge location would be selected to avoid impact on residents, tenants and/or neighbours. The waste rooms should be air-conditioned to maintain them at moderate temperatures (<25°C) during hot weather conditions, to minimize odour generation by putrescible/sanitary matter.

4.7.5 Bin cleaning

An on-site bin wash area (multi-purposed with bin storage) has been proposed (in the office tenancy waste storage area – see Figure 4-1) for bin washing. *This area should have: graded waterproof floor; drain to sewer with basket screen; potable water supply with faucet and hose connection; 1Ø/240V power supply; walls lined to water proof; and temporary curtains or screens that can be erected during bin wash events.*

Property management would be responsible for managing access to a bin wash area. Property Management would be responsible for cleaning bins for the Residential waste storage area, and may also provide this service (e.g. on annual basis, emergency requests) to commercial tenants if requested.

Bin cleaning may be contracted out by Property Management and/or commercial tenants to an external provider (to perform using an on-site bin wash area or off-site by temporarily taking the bins away).

4.7.6 Access & security

Waste rooms would be accessible to tenants by key or fob. Access arrangements to waste rooms would be negotiated with the waste contractor for bin collection and emptying. CCTV is recommended for security purposes and facilitating appropriate and safe waste and recycling practices in waste storage rooms.

4.7.7 Transfer pathways

The following is provided as a guide for finalising sizing and designing transfer pathways during detailed design of the Development.

- *Disposal pathways –*
 - *Local disposal – less than 30m and free of steps, no grades greater than 1:15.*
 - *Collection – less than 30m with no steps or grades greater than 1:10*
- *Corridor widths –*
 - *240L MGBs or smaller bins / loads – min. 1,000 mm (min. 1,200mm preferred)*
 - *660L or larger skips and/or waste loads – min. 1,600mm*
- *Doors –*
 - *Local disposal access – 800mm*
 - *Transfer pathways– Appropriate to the size of bin to be transported, e.g.*
 - *240L MGB – min. 800mm*
 - *660L skip – 1,200mm*
 - *1,100L skip – min 1,500mm*
- *Floors – Hard surfaces where bins and skips are to be carted*
- *Lifts – All lifts should be sized to allow for bulky hard waste items.*

4.7.8 Grease trap waste

This liquid waste stream is not considered in this report, and if relevant to the Development, shall be addressed separately as part of Building Services assessment.

5 Operation and management

5.1 Management & Operating Responsibility

Property Management would be responsible for managing and operating the waste system (outside of user storage) for the site.

5.2 Communication strategy

Provision would be made to provide education and training in use of the waste system to residents and commercial tenants as follows. Council may aid with providing communication advice on waste management to residents for this purpose.

5.2.1 Residents

This would include:

- Waste management advice in residents' Building User Manual located in each apartment and townhouse;
- First-day training by Property Management when new occupant or tenant arrives (including expected or required waste and recycling management and disposal practices);
- Annual follow-up reminder/refreshers notices which may include results of audit/monitoring (if conducted).

5.2.2 Commercial Tenants

The commercial tenants would be provided with similar advice and training about expected waste management requirements. This would include what waste management provisions are included in their lease agreements and/or what they should include in their cleaning and commercial waste collection contracts.

5.2.3 Property Management staff

A separate training and education program for Property Management staff should be undertaken, to ensure that they can effectively perform waste management responsibilities.

5.3 Property User Manual

The Property User Manuals for residents and commercial tenants should include:

- Roles and responsibilities for tenants, Property Manager and collection contractors
- Instructions for correctly disposing of waste and recycling (including access and correct use of storage areas)
- Advice for disposal and /or recycling of other (non-Routine) waste materials (e.g. printer cartridges, lighting, etc.)
- Relevant health and safety advice
- Contact information for further information, questions and issues

5.4 Community/Strata title arrangements

Obligations for residents and/or property owners to comply with requirements for proper waste management (in line with this WMP) shall be written into the Community/Strata plan lodged with the Lands Titles Office.

5.5 Tenancy agreements

Obligations for residential or commercial tenants to comply with requirements for proper waste management would be written into the tenancy agreements with Property Owner and/or Management.

5.6 Emergency response plan

Property Management should develop an emergency response plan to manage waste or related issues at the Development, including for the following specific events.

- Collection service(s) not available

6 References

Adelaide City Council. (2016, September 27). *Guide to waste & recycling bins*.

Department of Planning, Transport & Infrastructure. (20 June 2017). *Development Plan - Adelaide (City)*.

Government of South Australia. (2011, November 24). Environment Protection (Waste to Resources) Policy 2010.

South Australian Government. (2008). *Environment Protection (Noise) Policy 2007 under the Environment Protection Act 1993, Version: 31.3.2008*. Retrieved from <http://www.legislation.sa.gov.au/>

South Australian Government. (2017). *Local Nuisance and Litter Control Act 2016*.

Zero Waste SA. (2014). South Australian Better Practice Guide – Waste Management in Residential or Mixed Use Developments.

Appendix 1: Collection vehicles

Table A1-1 below summarises the type and specifications of private contractor collection vehicles that could service the development. Collection vehicles available from a private waste contractor will vary in size and specifications, which will need to be established and confirmed before the waste contractor is engaged to ensure they are suitable to access and service the property. *Note: There are smaller collection vehicles available in the market but availability and services provided by these trucks are limited.*

Table A1-1: Types of collection vehicles and specifications: Routine services & Hard waste collection

	Type of Truck	Typical Specifications
Routine services	Private waste contractor – Rear-lift waste / recycling collection trucks [‡] (Rubbish, recycling & organics)	Length – 8.5-10m Width – 2.5m Operational height – 3.6-3.9m Travel height – 3.4-3.7m Turning circle – 15-20m
Hard waste/other collections	Private waste contractor – Pan-tech, skip or flat-bed trucks	Length – 7-10m Width – 2.5-2.6m Operational height – 3.5 -4m Travel height – 3.5 -4m Turning circle – 12-20m

[‡] These are for standard-sized trucks most commonly used in Metropolitan Adelaide. There are smaller trucks contractors can provide, but they are limited in availability and services they provide.

Project:
WRIGHT STREET DEVELOPMENT

Subject:
**ENGINEERING SERVICES
CONCEPT DESIGN REPORT**

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REVISIONS

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GENERAL

1 INTRODUCTION

The purpose of this document is to detail the engineering services concepts for the proposed building development, Wright Street Development, Adelaide.

This document is intended to describe and detail the performance requirements and features for the proposed development. Once approved, it will form the basis for the design phases of the project.

2 PCA GRADE

While not expressly briefed we propose to use the Property Council of Australia (PCA) grading system as a guide to inform the minimum requirements of the engineering services. We have used PCA 'A' Grade as a minimum benchmark.

3 ENVIRONMENTALLY SUSTAINABLE DESIGN

As per the project brief the engineering services design will target benchmarks for 4.5 Star NABERS Energy as a minimum.

4 CODE COMPLIANCE

The building services shall be designed to comply with all relevant mandatory codes and standards including but not limited to the following:

- National Construction Code (NCC) of Australia
- Australian Standards
- Authorities requirements such as ETSA Utilities, SA Water, SAMFS, EPA, etc
- DDA (Disability Discrimination Act) requirements
- Adelaide City Council requirements
- Workplace Health and Safety (WHS) requirements

5 SKETCH PLANS

Sketch plans for the engineering services indicating spatial requirements are included in the appendix of this report.

MECHANICAL SERVICES

6 DESIGN CRITERIA

The mechanical services design shall incorporate the following design criteria:

Item	Design Criteria
External ambient conditions for air conditioning plant full load performance	Summer Conditions 38.0°C dry bulb maximum 21.5°C wet bulb maximum Full Solar Load Winter Conditions 4.9°C dry bulb minimum Zero Solar Load
Internal space conditions for air conditioning plant full load performance	22.5°C \pm 1.5°C 50% Relative Humidity (no specific control)
Occupancy	Office Area: 1 person per 10m ² Retail Area: 1 person per 5m ²
Internal heat loads	Lighting: 7.0 W/m ² Equipment: 12.0 W/m ² People: 70W sensible / 60W latent per person
Outside Air	Office Area: 10 L/s per person Retail Area: 10 L/s per person Supplementary Tenant Riser: 0.3 L/s.m ²
Exhaust Air	Tenant General Riser: 0.1 L/s.m ² Toilets: 10 L/s.m ²
Zoning	Perimeter: 85 m ² maximum Centre: 120 m ² maximum
Hours of operation	24 hour operation
After Hours	Minimum 2 zones per floor of maximum 600m ²
Condenser water loop	Tenant: 20 W/m ²
Cooling / Heating plant redundancy	50% peak cooling/heating load
Shaft Pressurisation	Stair Shaft: As calculated to achieve required pressure Lift Shaft: As calculated to achieve required pressure

7 SYSTEM DESCRIPTIONS

7.1 GENERAL

The mechanical services consists of interrelated systems which are proposed to meet the minimum target of NABERS 4.5 stars while providing commercial standard comfort conditions for the occupants. The following descriptions provide a broad outline of the proposed mechanical services systems consisting of:

- High efficiency water cooled chillers
- Cooling tower systems
- Condensing heating hot water boilers
- Air handling units and air diffusion
- Active chilled beam systems
- Stair pressurisation systems
- General exhaust air systems
- Carpark exhaust air system
- Zone pressurisation systems
- Smoke exhaust systems
- Atrium smoke exhaust
- Apartment air conditioning systems
- Water treatment
- Building Management Systems (BMS)

7.2 HIGH EFFICIENCY WATER COOLED CHILLERS

The concept proposal allows for a base building cooling load to meet the design criteria listed above. The cooling load would be met by the use of high efficiency water cooled chillers nominally of magnetic bearing type construction to limit noise and provide higher coefficients of performance (COP) at various load points.

Typical efficiencies for these types of chillers that can be expected are summarised below.

% Load	25%	50%	75%	100%
COP	11.15	12.82	8.91	6.48

We propose to install the chillers and cooling towers in a series-series counter-flow arrangement to maximise efficiencies across the operating range of the chillers. The chillers are to be located on plant room level (Level 14). Given the thermal plant accounts for a large proportion of the energy consumed by a building of this size and nature any increase in operating efficiency from the chillers will have a positive effect in achieving the required NABERS rating and beyond.

The plant room housing the chillers, boilers and pumping systems will require bunding and / or tanking to ensure potential leaks from equipment failure are contained within the plant room.

7.3 COOLING TOWER SYSTEMS

The cooling towers for the project provide the heat rejection for the chillers and also the tenancy condenser water loop.

The tenancy condenser water loop will be sized as per the design criteria and in line with PCA-A grade requirements. The condenser water loop will be reticulated through the building via a main riser with connection points located on each level. The connection point will be located at the riser for future connection by tenants for the installation of supplementary cooling equipment.

The cooling towers associated with the chillers are to be located on plant room level (Level 14). The plant room enclosure is to be louvred to ensure adequate ventilation. The cooling towers will be of closed circuit, forced draught type arranged for horizontal discharge so the penthouse above is not impacted.

We propose the cooling tower fans are variable speed driven (VSD) to reduce energy consumption at part load conditions, which in Adelaide constitute a large proportion of the operating time for a cooling tower.

7.4 CONDENSING HEATING HOT WATER BOILERS

Natural gas fired condensing boilers would be used to meet the heating load of the building. These boilers provide for high efficiencies and also modulation of capacity to suit the varying demand. We would expect this type of boiler to have an operating efficiency of at least 95%.

The boilers are to be located in the plant room on level 15 with exhaust gas flued to atmosphere. The boilers will require separation from the remainder of the building with the separating construction having an FRL as required by specification C1.1 (of NCC2016) but not less than 120/120/120.

7.5 AIR HANDLING UNITS AND AIR DIFFUSION

Our proposal is to utilise air handling units to serve large common space areas such as the atrium. The air handling units will be zoned according to thermal zones with supply air ducted to the area being served. The supply air diffusion will be designed to suit the area being served with a focus on maximising the air diffusion performance index (ADPI).

It is proposed to duct outside air through the core of the building with branch take offs for each floor. The quantity of outside air will be variable and dependent on ambient conditions. This will allow for the use of outside air economy cycle control through the BMS.

7.6 ACTIVE CHILLED BEAM SYSTEM

It is proposed to utilise active chilled beam systems to serve a majority of the building to maximise the net lettable area on each floor.

The active chilled beam system will utilise individual housings recessed into the ceiling and consisting of air diffusion, heating and cooling coils. The housings will be arranged across each floor plate to suit the thermal zoning and occupant load of the floor. A combination of two pipe and four pipe housings will be used to match the varying loads of the floor allowing for tighter control and better occupant comfort. The arrangement of four pipe housing allows for adjacent spaces to be heated or cooled simultaneously which addresses the variable load profile of the floor and seasonal variances. A primary air stream of outside air will be taken from the main outside air riser (running through the core of the building) and ducted to each of the housings. The primary air stream passes through nozzles and induces air from the space up through the cooling / heating coil. The mixing of air streams minimises energy consumption and also ensures adequate air movement within the space so the air diffusion performance index (ADPI) is maximised at all times.

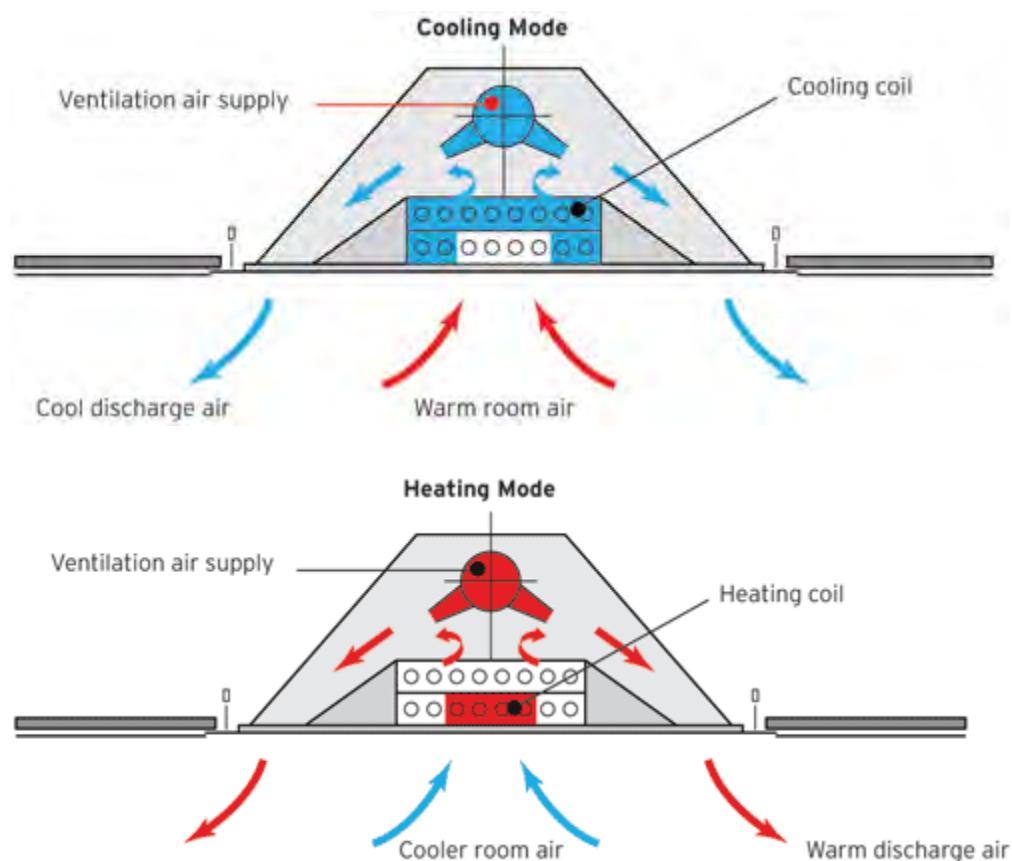


Figure 1: Typical active chilled beam housing

7.7 STAIR PRESSURISATION SYSTEMS

In accordance with Australian Standards the stairwells will include a pressurisation system. The fans will be located at plant room levels and activated by a signal from the fire indicator panel (FIP) pressurising the stairwells in the event of fire.

7.8 GENERAL EXHAUST AIR SYSTEMS

Tenant general exhaust and toilet exhaust systems will serve each floor. The risers will extend through the building and discharge to atmosphere. The exhaust systems will be sized to provide the requirements set out in the design criteria above.

7.9 CARPARK EXHAUST AIR SYSTEM

As the carpark is located below ground level there is no opportunity to utilise natural ventilation methods and therefore mechanical exhaust is required. The exhaust air riser will extend through the building and discharge to atmosphere. Carbon monoxide monitoring and alarming will be provided within the basement level carpark.

7.10 ZONE PRESSURISATION SYSTEMS

To achieve zone pressurisation in the event of fire we propose to utilise the outside air risers with branch take offs on each level. In the event of fire the air handling units on the floors above and below the fire affected floor will continue to operate providing outside air and pressurisation to the floors.

7.11 SMOKE EXHAUST SYSTEMS

In line with the zone pressurisation strategy, the smoke exhaust strategy will include smoke spill fans with a common riser through the building and branch take offs on each floor. In the event of fire these fans will be activated on the affected floor by a signal from the FIP and smoke will be discharged to atmosphere.

7.12 AIR INTAKES AND EXHAUST

The air conditioning, ventilation and heat rejection systems include outside air intakes and exhaust discharges. Further to mandatory requirements for separation between the intakes and exhaust points the prevailing wind conditions will affect how these points are orientated. The wind rose below indicates the predominant direction of wind in Adelaide is along the north-east to south-west axis. With this in mind intake and exit points will be orientated to avoid recirculation.

Location: ADELAIDE AIRPORT
Latitude: 34.95°S
Period: 9am Annual
Download: [PDE | Wind Frequency Data](#)

Longitude: 138.52°E
Start year: 1955

Site Number: 023034
Elevation: 2 metres (above sea level)
End year: 2016

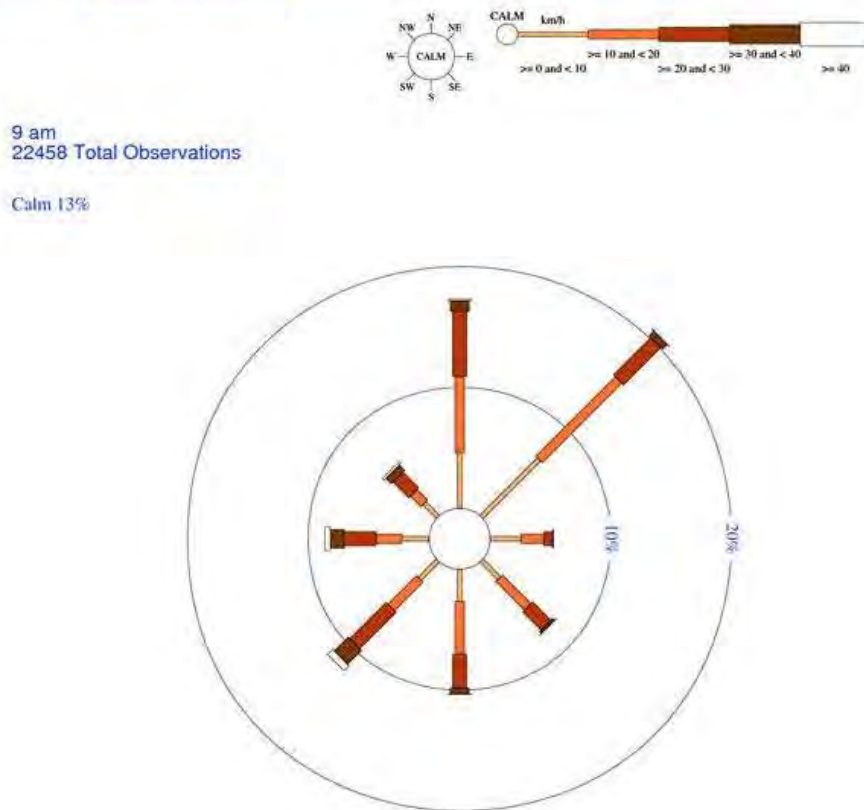


Figure 2: Adelaide Wind Rose (Bureau of Meteorology)

7.13 ATRIUM SMOKE EXHAUST

We note current plans include for an atrium rising through the lower part of the building. The principles of the atrium exhaust will be governed by AS/NZS1668.1:2015 Fire and Smoke Control in Buildings as for the rest of the building.

7.14 PENTHOUSE APARTMENT AIR CONDITIONING SYSTEMS

The apartment air conditioning systems will be provided with stand-alone systems independent of the base building chilled and heating hot water thermal plant. We propose the installation of air cooled, reverse cycle, direct expansion (DX) equipment to provide heating and cooling to the apartments. It is anticipated split type systems would be utilised.

7.15 WATER TREATMENT

Water treatments systems will be provided for the chilled, condenser and heating hot water systems in line with Australian Standards by way of periodic chemical dosing.

Incorporated in the reticulated chilled and heating hot water will be provision for expansion and de-aeration.

7.16 BUILDING MANAGEMENT SYSTEMS

A building management system (BMS) will be installed to govern the operation of the mechanical services. Control strategies will be developed to suit the type of equipment installed and to maximise operational efficiencies and energy use. It is proposed the BMS will be accessible through a front end computer with graphical interface pages located on site and also through a web based interface page.

The BMS will also monitor, trend and report energy usage of mechanical services plant allowing for billing to tenants for electrical and gas energy usage.

The BMS will be control equipment shall be powered from an essential power supply and also include an uninterruptible power supply (UPS) with 15 minutes of autonomy in the event of power failure.

Sub systems incorporated into the BMS will include:

- Air conditioning systems
- Tenant condenser water loop system
- Base building lighting control
- Base building access control
- Life Safety functions such as fire mode operation and control of fire dampers, pressurisation fans and smoke spill fans

The BMS will interface with (but not control) the following systems:

- Standby generator control system to receive notification standby power is in use
- Electrical metering
- Gas metering
- Water metering
- Fire Indicator Panel (FIP) control of life safety functions

7.17 NOISE ISSUES

The chillers, cooling towers and fans are predominantly associated with noise levels that may be problematic. This type of equipment will be located in the plant room on levels 14 and 15. This allows potential noise issues to be treated within the plant room to ensure potential noise impacts on adjacent spaces are mitigated.

ELECTRICAL SERVICES

8 DESIGN CRITERIA

The Electrical Services design shall incorporate the following general design criteria:

Item	Design Criteria
Substation Capacity	Peak estimated electrical demand, benchmarked to similar buildings
Tenancy Submain Capacity	70VA/m ²
Tenancy Subcircuit Quantity	6 double GPOs per circuit and individual pieces of equipment equipment on its own circuit
Voltage Drop	In accordance with AS3000
Power Factor	0.95 minimum
Office Lighting	To AS1680.2 as a minimum 320 lux, 0.7 uniformity at the horizontal plane, efficiency per NCC2016
General Lighting	To AS1680.1 and NCC2016
Lighting Colour Temperature	4000K

9 HIGH VOLTAGE INFRASTRUCTURE / SUBSTATION

A new 1500 KVA SAPN transformer shall be required to supply the new development. The new transformer shall be installed on the ground floor, so that it is accessible to SAPN. The transformer shall be located within a transformer room of the following minimum dimensions 6.25m (D) x 7.25m (W) x 4.0 m(H) as illustrated in the figure below. The transformer installation shall be designed to SAPN standards and in consultation with SAPN representatives.

10 LOW VOLTAGE INFRASTRUCTURE

The Electrical services will reticulate from a building Main Switch Board (MSB) to Distribution Boards (DB) strategically located throughout the building. Cabling will be installed on cable trays located within ceiling spaces and will rise through each floor within dedicated service risers.

The building MSB shall be located within a Main Switch Room located directly adjacent the High Voltage Transformer Room. Both the High Voltage Transformer Room and Main Switch Room are required to be fire rated to 3 hours.

Building power factor shall be maintained within the design criteria at all times (through equipment selection and/or dedicated power factor correction equipment).

We propose to adopt an individual metering strategy in lieu of a parent / child installation which while common in Adelaide is somewhat dated and not as flexible as individual metering. Tenant utility metering shall be provided on a per-floor basis generally, with future provision to split each floor into 2 separately-metered tenancies such that each tenancy can be supplied with its own metered DB. The retail metering will be designed in accordance with SAPN standards and enable independent selection of electricity retailer.

11 RISERS

Cable reticulation will rise through the building from the Main Switch Board through a dedicated cable riser on cable trays, using tee off boxes on each level to supply individual floors.

12 ELECTRICAL RETICULATION AND DISTRIBUTION

Power shall be reticulated throughout the building via rising mains to landlord and tenancy distribution boards at each floor. Two (2) tenancy distribution boards shall be provided at each office tenancy floor (notionally north and south). Tenancy distribution boards may share a rising sub-main, but shall not be sub-fed from one another. Tenant rising mains capacity shall be designed to PCA 'A Grade' requirements.

Submain cabling shall be standard Copper/XLPE/PVC type generally with fire rated type (including associated support) as required to comply with NCC2016 requirements. Copper busduct will be considered also.

All final distribution boards shall allow for spare pole capacity in accordance with the Design Criteria and the Main Switchboard shall make provision for at least 2 spare 250A frame size circuit breakers within the Landlord section of the switchboard and appropriate authority metering considerations within the Tenancy section of the switchboard for additional tenancy electrical load (e.g. computer rooms).

Power shall be provided for base building services, including but not limited to:

- Lifts
- FIP
- BMS
- Security System
- Mechanical Services Central Plant
- Hydraulic Services Equipment
- Fire Pumps
- Stormwater Pumps
- Automatic Doors
- Roller Doors
- Electric Hand Dryers
- Other general electrical equipment described herein

General power socket outlets (for maintenance, cleaning and other general use) shall be provided to service all Landlord areas including toilets, foyers, lift lobbies, plant rooms, control rooms, storage rooms and the like.

A separate tenancy distribution board, with independent retailer metering, shall be provided for each lower floor tenancy with general power (e.g. accessories) to lower floor tenancies provided as tenancy fitout.

13 ENERGY MANAGEMENT METERING

A proprietary Energy Management System (EMS) shall be provided for consolidation of metering data, including the ability to undertake trending and reporting in line with NABERS requirements. Digital meters shall be integrated within switchboards at appropriate locations as required to fulfil NABERS energy requirements and as appropriate for monitoring and apportionment of energy usage. Digital meters shall be of type and manufacture suitable for the metering application, and compatible with the Energy Management System.

All meters shall measure and record as a minimum:

- Ampers
- Volts

- kWh
- kVA
- THD
- Power Factor (kW)

Digital meters used for NABERS reporting of the incoming supply shall be Class 0.5 accuracy minimum. Separate metering of light and power shall be provided at each tenancy switchboard in accordance with NCC2016 criteria.

The Energy Management System shall allow for incorporation of third party water and gas meters. Allowance shall be made for the metering system supplier to customise the report generation and "dashboard" functionality of the front end metering software package, including reports tailored for NABERS monitoring and tracking against pre-set targets.

14 LIGHTING INCLUDING SPECIALIST LIGHTING

14.1 LIGHTING

Lighting will be designed to NCC2016 requirements for energy efficiency including the use of automated lighting control, daylight sensors and predominantly LED high efficiency fittings. General lighting shall be designed to meet AS1680 series requirements with luminaires to office tenancy areas to be LED type fittings selected with consideration to energy efficiency, optic performance, light spread, glare, vertical illumination on walls and other required elements. Luminaires shall *not* be louvred type with a 100% downward light component. Diffused or direct / indirect type are preferred for improved visual comfort and to avoid tenant complaints of "gloomy" lighting.

General down lights shall be LED type and not compact fluorescent downlights for base building with tenant parameters decided at the time of fit-out design.

External and public area lighting design shall consider security and CCTV requirements with carpark and plant area lighting utilizing weatherproof LED type fittings. General lighting to ground floor public areas shall be of a high quality, suitable for the application and selected in conjunction with the project architect. Lighting shall be integrated with feature ceiling elements (e.g. coffers) and other ceiling services in order to provide a modern and well-planned appearance.

General lighting shall be provided to lower level tenancies and be of a diffused linear LED type fitting installed within suspended ceiling.

External lighting shall be provided around the building perimeter at ground level and shall be resistant to trapping of insects. Lighting to external canopies shall be recessed, of high quality, and aesthetically consistent with the canopy finish.

14.2 LIGHTING CONTROL

All lighting shall be controlled by an integrated lighting control system such as DALI, Clipsal C-BUS, organic response or other type of logic control. Light fittings adjacent perimeter glazing shall have the capability be automatically dimmed based on available daylight.

Lighting to amenities areas shall be controlled by local occupancy detection and interfaced to the building BMS for control of floor toilet exhaust. Interface to the lift control system for automatic enabling of lobby / corridor lighting on arrival to floors after hours shall also be included. The lighting control system shall provide the capability of time/calendar schedule control with Landlord and Tenant sections kept independent of each other. The provision for expansion to suit Tenant fit-out requirements will be included. Each DALI "Universe" shall be loaded to 70% maximum for future flexibility.

15 EMERGENCY & EXIT LIGHTING SYSTEMS

Exit and emergency lighting shall be designed in accordance with AS2293 and NCC2016 requirements utilising LED fittings and be controlled from local Distribution Boards in conjunction with a central monitoring system. All Emergency and Exit luminaires shall be "single point" type incorporating local battery packs. Battery packs shall utilise Lithium Ion batteries in lieu of Lead-Acid type batteries.

A central exit and emergency lighting test and monitoring facility shall be provided, including reporting and identification of failed fittings. Design of the central monitoring system shall allow for landlord and tenant systems to be physically separated and operate as independent systems.

16 CAR PARK AND EXTERNAL LIGHTING

Carpark and external lighting will be selected as LED type fittings and controlled by PE / PIR / Timeclock as appropriate with layouts sympathetic to the residential properties adjacent.

17 EMERGENCY POWER

A diesel standby generator shall be provided within the building footprint. The standby generator shall provide standby power to selected electrical loads in the event of a mains power failure. The electrical loads are to include the following:

- Fire and life safety services – 100%
- House lights and power – 100%
- Lifts – 1 per rise
- Tenant supplementary loop – 100%
- Tenant light and power – Max. 20 amps per tenant
- Hydraulic services water supply pumping
- Communications / server rooms (main building and allowance for tenants)
- Security including CCTV, access control, intruder detection

Local diesel storage shall be provided for 12 hours generator operation at full load with a diesel fill point provided at ground level, with suitable access for a miniature tanker. The fuel transfer pumping system shall utilise dual pumps on separate electrical circuits for redundancy.

An automatic power transfer (changeover) and generator control system shall be provided to automatically initiate generator power and control transfer of power to selected loads. A break-before-make changeover system shall be utilised.

Generator power will be provided on dedicated electrical submains to a separate essential switchboard for each tenant and for landlord services. The use of load-shedding contactors shall be avoided generally. The capacity of any required electric heaters (e.g. for oil or jacket water) shall be minimised, and any such heaters shall be thermostatically controlled to minimise impact the on NABERS Energy rating.

The generator installation shall comply with EPA guidelines for noise and emissions and will require separation from the remainder of the building with the separating construction having an FRL as required by specification C1.1 (of NCC2016) but not less than 120/120/120.

18 LIGHTNING PROTECTION

A lightning protection system shall be provided in accordance with AS1768, or alternative solution certified by the supplier. Surge diversion shall be provided at the Main Switchboard and Main Distribution Frame. Materials utilised for the Lightning Protection Air Termination system shall be of a type that avoids issues with staining and corrosion of metallic roof elements e.g. bare copper to be avoided due to staining issues.

COMMUNICATIONS

1 DATA / COMMS INFRASTRUCTURE

A Main Distribution Frame (MDF) shall be provided within a dedicated MDF room. Copper lead-in cabling shall be provided, terminated at the Main Distribution Frame. The quantity of copper lines shall allow for base building requirements and an additional 10 lines per floor only.

General voice backbone cabling shall not be provided under the base building works. A cable route shall be provided including empty 450mm wide cable tray installed vertically within the telecommunications riser and shall include penetrations between floor levels (conduit sleeve or block-out) of sufficient size for cables to fill the cable tray complete with fire stopping method. The cable tray shall also be utilised for tenant incoming fibre services.

Copper backbone cabling would be provided for fitout if required to a location as required, noting that modern fitouts typically utilise fibre only. Fibre will be brought into the building at the main distribution room. Tenant connection will be part of the tenancy fitout.

Fixed copper lines shall be provided where required for base building services, including but not limited to:

- Lifts
- FIP
- BMS room
- Security System

Fixed copper lines shall utilise fire rated cabling and support where required by code. Space shall be provided within the MDF room for a minimum of four (4) racks of 600x600 footprint including space for circulation and maintenance access.

Four (4) 100mm empty conduit lead-ins shall be provided at a minimum of two (2) separate building entry points distributed around the building perimeter. 300mm wide cable tray or similar support/containment shall be provided from each entry point to the MDF room. Two (2) communications risers, connected to the MDF Room, shall be provided in accordance with PCA A Grade requirements.

2 SECURITY AND ACCESS CONTROL SYSTEMS

The security system will be nominated by the Client or specified by the consultant and will be utilising the structured cabling system for connection back to security panels in one of the strategically placed communications room.

Access control will be installed at entry points to the building, corridor areas and access to each tenancy. Access control will be connected via the structured cabling system back to the main communications room and shall utilise standard 125kHz proximity card readers. Tenants will provide their own access control system at the time of fit out.

The access control system shall incorporate a Personal Computer Workstation (PCWS) and all required software for the programming of access cards. The door access and security functionality shall not depend on the PCWS. The PCWS location is to be assigned during the design phase.

All security panels shall incorporate an integrated 4hr battery backup, and be powered from the emergency (generator-backed) power supply.

Electronic Access Control shall be provided at the following locations as a minimum:

- All perimeter access points
- Carpark entry
- All lifts
- MDF room
- BMS room
- Fire control room

Tenancy re-entry shall be provided from all fire isolated stairways, in accordance with NCC2016 requirements and the security system shall be configured to provide alarms via PSTN, SMS, email and IP signaling.

3 CCTV SYSTEMS

CCTV cameras will be a digital Internet Protocol (IP) type and installed throughout the new building adjacent main entry/exit points to the main corridors, car park areas and the stairs. The cameras will be connected via the structured cabling system. The CCTV System shall be of a make and type commonly utilised within commercial buildings in South Australia. CCTV coverage shall be provided to the following locations as a minimum:

- Building perimeter
- Carpark
- Bicycle storage
- Adjacent showers and change rooms
- Public reception / waiting areas
- Security equipment room
- MDF room
- Fire Control Room

The CCTV system shall incorporate a Digital Video Recorder (DVR) or a series of DVR's that are capable of appearing as one device to the end user. The DVR shall be capable of automatically modifying recording quality and frame rate, based on video and I/O events. The DVR shall be capable of storing a minimum of 30 days of recorded video for all cameras under typical conditions.

The DVR shall be capable of recording to the following standard as a minimum:

- 25 frames per second
- 4CIF resolution

- H.264 encoding

The CCTV System shall incorporate a Personal Computer Workstation (PCWS) and all required software for viewing of live and recorded video. The recording functionality shall not depend on the PCWS and the system shall provide a minimum of 8 spare input channels for future expansion. An Uninterruptible Power Supply (UPS) to provide 30 minutes operation on complete power failure will also be provided.

4 MATV SYSTEMS

A Master Antenna Television (MATV) backbone shall be provided to facilitate digital television reception in the building, including Foxtel. The backbone shall incorporate all receivers, head-end, distribution cabling, taps, splitters and multi- switches to allow a minimum of four (4) outlets per floor on average.

5 INTRUDER DETECTION SYSTEMS

Intruder detection will be installed in key areas and connected back to the main communications room via the structured cabling system.

HYDRAULIC SERVICES

6 DESIGN CRITERIA

Item	Design Criteria
Cold Water Reticulation	Minimum 200kPa outlet pressure. Maximum code stipulation 500kPa outlet pressure. Maximum system velocity 1.6m/s. A minimum 2 hour potable water design supply will be part of the hydraulic design.
Fixture Minimum WELS Rating	Tapware: 5 Star WELS rated. Showers: 3 Star WELS rated, with a maximum permissible flow rate of 7.5L/minute.
Hot Water Plant Capacity	Proposed location of the Gas Continuous flow plant Hot Water Plant is to be the roof plant area. Sized to 1 hour peak demand
Natural Gas Supply	Authority consumer meters to be provided at the property boundary with natural gas reticulated within the building to serve all equipment requiring gas.
Sewer Waste and Vent Systems	Main sewer connections shall be provided with suitable capacity based on the fixtures, fittings and equipment.

7 AUTHORITY SEWER CONNECTIONS

The new build deems lot consolidation of five lots allowing for five existing sewer connections for consideration, either for utilisation or redundancy. The hydraulic design will utilise two of the existing connections, one for the Hotel and one for the lower level retail tenancies. The main sewer connection for the high rise building will need to be new (150mm diameter) to comply with SA Water requirements for commercial buildings leaving three connections to be sealed beyond the boundary. All lot sewer connections are to be approved by SA Water.

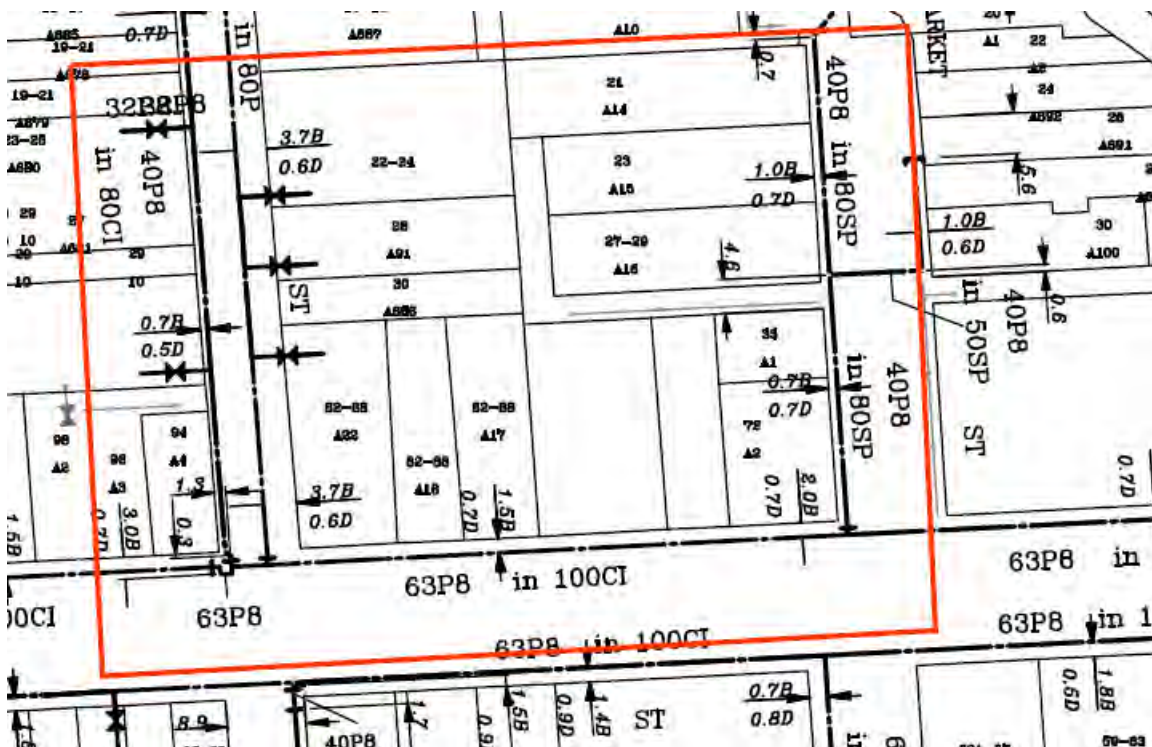
Trade waste provisions and treatment form part of the design brief. The preferred location of grease arrestors are in the rear lane adjacent to the building. A basement sewer pump may be required if plumbing fixtures or drains to sewer are included in basement design.

8 AUTHORITY WATER CONNECTIONS

Existing potable water services information shows the site has four existing lot water connections for consideration, either for utilisation or redundancy. The hydraulic design will allow for a two hour minimum water storage including the hotel, lower level retail tenancies, commercial tenancies and penthouse apartments. None of the existing water connections are or a sufficient size to provide the water flows required for the proposed site and as such shall be terminated with a new connection sized to suit the peak flow rate for the total building installed. All lot water connections are to be approved by SA Water.

Natural gas regulation will be provided within a dedicated enclosure at the property boundary within a ventilated enclosure housing all the meters. Natural gas will be reticulated within the building by way of Class B copper pipework to serve all equipment requiring natural gas supply terminated with a ball valve at each point of use. An allowance has been made for, but not limited to the following:

- The natural gas installation shall comply with AS5601 and include a system control shut off valves linked to the building's Fire Indicator Panel (FIP).



- Hotel
- Retail tenancies
- Penthouse apartments
- Mechanical services equipment

11 SEWER WASTE AND VENT SYSTEMS

The drainage design will incorporate all SA Water requirements and be approved by SA Water. The main sewer connections will be provided with suitable capacity based on fixtures, fittings and equipment within the building. Overflow relief gullies and reflux valves will be provided as required to protect the site from surcharging sewage.

Plumbing stacks will be provided adjacent fixed elements (e.g. columns, riser shafts) on the floor plans to provide provisional drainage coverage for tenancy fit out. Stack vents will be terminated to atmosphere through the highest roof level. Additional systems will be provided to cater for future connection of risers providing additional coverage if required as well as the discharge from Mechanical, Fire and Hydraulic plant and equipment. Lower level retail tenancies will be constructed as "warm shell" with a drainage shop riser provided in each tenancy space. Consideration will also be given to plumbing located over noise sensitive areas and acoustically wrapped where required.

Drainage materials will be installed to comply with the manufacturer's installation guidelines, Australian Standard AS/NZ 3500:2.2 and the Plumbing Code of Australia. Only approved or *WaterMark* fittings and pipework shall be installed and shall include the following provisions:

- Electrofused or butt welded high density polyethylene (HDPE)
- Polypropylene (PPR)
- Noise insulated pipework (mineral loaded polypropylene)

12 HOT AND COLD WATER RETICULATION SYSTEMS

A mains water connection and property connection service shall be provided to maintain storage tanks and dual duty standby pressure pump sets located in the level 5 plantroom. One tank and pressure pump set shall be dedicated to the Hotel and lower level retail tenancies with the second tank and pump set dedicated to the commercial tenancies and penthouses of the main building. The design will include an interconnection between the two storage tanks to provide redundancy in the event one tank is out of service. The tanks will be sized to provide two hours of supply in the event of an authority failure. Backflow prevention will be provided as required including but not limited to:

- Incoming supply (per OTR requirements)
- Zoned areas
- Individual fixtures (per AS3500)
- Fire protection services
- Mechanical services equipment
- Non-potable water services

The cold water system will incorporate stop valves, located in readily accessible locations to enable individual area isolation for maintenance purposes. Individual adjustable pressure limiting valves will be provided on the outlet of the control valves, in order to avoid excessive water pressure and usage to each zone. Cold water will be supplied to the following as a minimum:

- Core amenities
- Refuse room
- Mechanical services equipment
- Office tenancies – 20mm minimum supply
- Retail tenancies – 20mm minimum supply
- Hotel – 40mm minimum supply

Heated domestic water is to be provided by way of natural gas fired systems with warm water (45°C) reticulated to:

- Basins within general toilets
- Basins within access toilets
- Showers

A flow and return system will circulate heated water throughout the building to minimise system dead legs. The return system shall be balanced via a series of self-balancing valves controlled by timed flow

and return circulating pumps. The system will include dual pumps rated at 100% of design capacity each and operate on "duty/standby" principle. All heated water flow and return pipework shall be thermally insulated with a material rated to a minimum R1.2 value ($\text{m}^2\cdot\text{K}/\text{W}$). Anticipated heated water delivery time is to be less than 30 seconds of opening a tap with thermostatic mixing valves (TMV) provided to temper water serving basins and showers.

Pipework shall be Australian *WaterMark* approved and of the following minimum standard:

- Class B copper for pipe sizes greater than 25mm
- PN16 cross linked polyethylene for pipe sizes up to 25mm maximum
- Installed to comply with the manufacturer's installation guidelines and AS/NZ 3500:1.2.4

Sanitary fixtures and tapware will be of an appropriate commercial grade and fit for purpose (including Disability Access requirements) and of Enware/Clark/Caroma make or approved alternative. We propose urinals be of low water use type controlled by water saving flush units and incorporating inspection openings in locations deemed necessary and in accordance with code requirements.

13 EJECTOR SUMPS

Basement sewer pumps may be required for any fixtures installed below ground floor level.

14 GREASE TRAPS & DISPOSAL SYSTEMS

Trade Waste grease arrestors are to be sized and designed to suit the application. Provision has been made to locate two (2) arrestors below ground within the rear lane area with vents extending to atmosphere above the uppermost roof level. One dedicated 5kL for the hotel and one 5kL combined for the lower level retail tenancy. The approximate spatial requirements are 4800L x 1500W x 2500D nominal each. All trade systems and plant are subject to local authority approvals.

Current trade waste guidelines for commercial food preparation and service facilities (currently under review) recommend a 2.4kL arrestor for a single fast food outlet store or a 5kL arrestor for a single fast food outlet with a high throughput of meals. Which, we believe to be applicable to this project.

1 WATER SUPPLIES

The proposed provisions are in compliance with AS2118.6 – 2012 – Combined sprinkler and hydrant systems in multistorey buildings.

The building will be provided with a 150 diameter fire connection from the 200 diameter street water main in Wright Street.

The fire connection incorporated in the booster assembly is used as Fire Authority suction provision for the required system boost connections, which are located on ground floor, at Wright Street frontage.

SA Water information received for the street water main mentioned above is provided below for information.

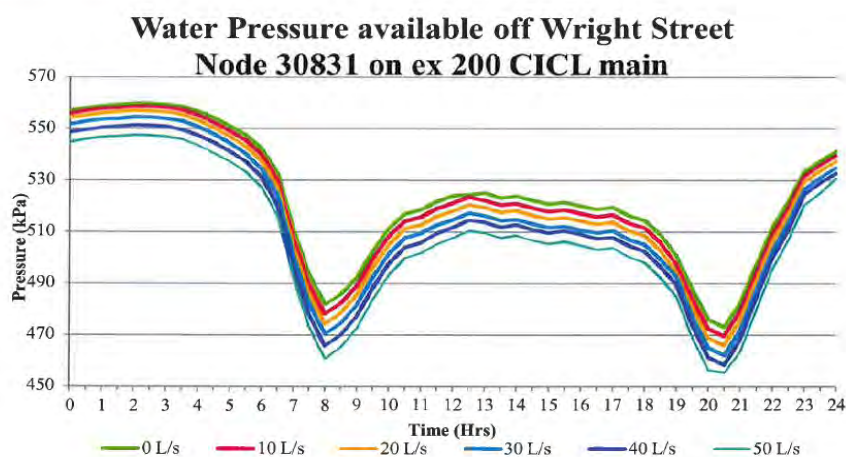


Figure 2 Available pressure at Node 30831 on ex. 200 CICL main, Wright Street, Adelaide

Figure 2: Water Pressure Test Results

SOUTH AUSTRALIAN WATER CORPORATION : FLOW AND PRESSURE SURVEY

ASSET MANAGEMENT TORRENSVILLE

LOCATION	WRIGHT STREET
SUBURB	ADELAIDE
MAIN-SIZE & TYPE	200mm GICL
ZONE SUPPLY EL	
TEST DATE	20/09/2016

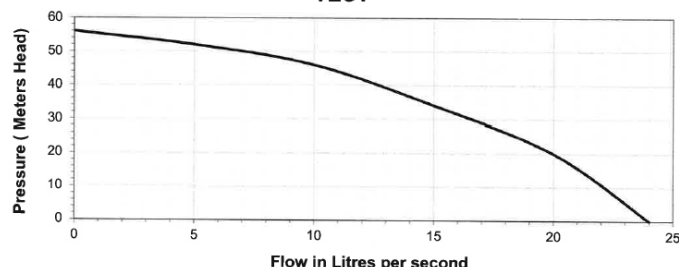
This advice and/or information is given for your private use only. The accuracy of the advice and/or information is not guaranteed and no responsibility is accepted by the Crown, the South Australian Water Corporation of their officers, agents of servants for any loss or damage caused by reliance upon this advice and/or information, as a result of any error, omission, misrepresenting therein whether caused by negligence or otherwise.

FP: 3388547

Temp 16c



FLOW AND PRESSURE SURVEY TEST



THE TEST WAS TAKEN USING A SINGLE McCROMETER FLOW METER, WITH THE PRESSURE AND FLOW TAKEN AT THE SAME POINT, USING A

ABOVE GROUND PILLAR HYDRANT

STATIC PRESSURE MH 55

RESULTS TAKEN FROM A McCROMETER METER

Flow rate in litres per second	Pressure in metres head
0	56
5	52
10	46
15	34
20	20
24	0

PLEASE NOTE:

WHEN INCORPORATING THESE TEST RESULTS IN THE DESIGN CALCULATIONS OF THE PRIVATE SERVICE PIPEWORK, ALLOWANCE SHOULD BE MADE FOR HYDRAULIC LOSSES BETWEEN THE POINTS AT WHICH THE TEST WAS CONDUCTED AND THE PROPERTY SERVICE LOCATION.

THE CORPORATION ENDEAVOURS TO MAINTAIN A SATISFACTORY PRESSURE IN THE MAINS AT ALL TIMES, UNDER SOME CIRCUMSTANCES THIS MAY NOT BE POSSIBLE, THEREFORE NO GUARANTEE CAN BE GIVEN.

AT A PRESSURE OF 200 kpa, THE FLOW WAS : 24 LITRES PER SECOND

CONTACT NAME : L.T.McGING 74241953
CARRIED OUT BY ALLWATER

Figure 3: Flow and Pressure Survey Test Results

In addition to the Fire Authority booster assembly on-site dual water supplies are proposed, comprising of storage tanks and fire pumps.

1.1 WATER STORAGE

Water storage is proposed for the combined demand of the fire hydrant and automatic sprinkler systems.

A rectangular steel panel tank with two compartments of 77kL effective capacity each is proposed to be located in the plantroom on level 14. The tanks will be filled from the fire connection and provided with a make-up float valve to maintain constant water volume.

There might be the option to provide a single 77kL tank should SA Water approve the application for inline fire pump connection directly from the street water main. The application will be made during design development phase, with relevant accompanying drawings.

1.2 FIRE PUMPS

An assembly comprising a duty and stand-by fire pump, one electric drive and one diesel drive, complete with an electric jockey pump to maintain constant high pressure in the system are proposed. Subject to site transformer final selection, the electric pump might be replaced with a diesel driven. The pumps are required to be automatic start with manual start/stop from the Fire Detection Control and Indicating Equipment (FDCIE). Refer also section 3 Fire Detection System.

The fire pumps will be a two stage construction and located in a dedicated pump room on level 14. Whilst the pump room is not required to be a fire resisting construction, the access to this room shall be directly from a fire isolated stair.

The statutory commissioning provisions required for the fire pumps will be configured such that the test drain is reticulated to the fire water storage tank.

In addition, a relay pump, centrifugal end suction type, diesel drive will be required for manual start by the Fire Authority, in conjunction with the booster assembly. This pump may be located in the carpark level or within the level 14 plantroom.

2 COMBINED SPRINKLER AND HYDRANT SYSTEM

The water supplies described above will be connected to pipework reticulated throughout the building with risers installed in the two fire isolated stairs. These mains rises will supply the hydrant valves and sprinkler control valves.

The system comprises two pressure zones and will incorporate isolations valves as required for compliance with AS2118.6, AS2118.1 and AS2419.1.

2.1 SPRINKLER SYSTEM

The building will be provided with automatic fire sprinkler protection in compliance with AS2118.6 and AS2118.1.

Each level will be provided with a sprinkler control valve located within one of the fire isolated stairs.

The design criteria selection is as following:

Floor level	Occupancy	Design criteria	Comments
Basement	Carpark	Ordinary Hazard II	n/a
Ground	Retail	Ordinary Hazard III	Exceeding the requirement for restaurant/café/food court and including tenancy such as clothes shops
Ground/Level 1	Hotel	Ordinary Hazard I	n/a
Level 1-15	Office	Light Hazard	Extended coverage sprinkler heads use
Level 14 & 15	Services Plantroom	Ordinary Hazard I	n/a
Level 16 & 17	Apartments	Light Hazard	Flat plate concealed sprinkler heads use

The commercial kitchen exhaust hoods associated with the Hotel occupancy are required to be protected with sprinklers for compliance with AS2118.1, however there are more effective fire suppression systems available, mentioned in section 5 Fire Suppression Systems – Exhaust Hoods below, as a recommendation for consideration.

2.2 HYDRANT SYSTEM

The building will be provided with hydrant coverage in compliance with AS2419.1, with hydrant valves located on each level within the two fire isolated stairs.

The design criteria is for two hydrant valves discharging simultaneous 10L/s each at 700kPa.

3 FIRE DETECTION SYSTEM

The building will be provided with a fire detection system as required for compliance with the Building Code of Australia (BCA) and AS1670.1.

A Fire Control Room constructed for compliance with the BCA clause E1.8 will house the Fire Detection Control and Indicating Equipment (FDCIE), formerly known under the acronym FIP. Addressable operation smoke detectors will be located throughout the commercial occupancy floors for fire detection and initiation of the emergency warning and smoke hazard management measures. Refer also to section 8 Building Services Interface.

Whilst on the residential occupancy floor (penthouse apartments) smoke detectors will be installed in the lift lobby/common corridor. The apartments are proposed to be provided with smoke alarms, a compliant option listed in the BCA.

4 EMERGENCY WARNING AND INTERCOM SYSTEM

The building will be provided with a system complying with AS1670.4 and comprising emergency warning speakers and warden intercom phones. The control panel will be located within the Fire Control Room.

The speakers will be distributed throughout the entire building with additional visual warning red strobes in areas of increased noise levels. Speakers will be located also within the penthouse apartments. The warden intercom phones will be located on each level with one handset adjacent one selected fire isolated stair.

The emergency warning will be configured as one zone per floor.

5 FIRE SUPPRESSION SYSTEMS - EXHAUST HOODS

The fire protection industry is in a continuous process of development with new systems/ products regularly released on the market. The legislative framework and upgrade of Australian Standards does sometimes lag behind, therefore current products tested and proven to perform better than conventional suppression, such as sprinklers, are recommended.

The fire protection of cooking equipment and associated exhaust hoods may be considered using a dual agent fixed fire suppression. One such system available on the market is 'PIRANHA', developed by ANSUL.

The dual agent comprises a two stage discharge - proprietary wet chemical agent followed by water utilising the same nozzles.

Whilst the cost is significantly higher than the use of conventional sprinkler protection, advantages such as faster flame knockdown and more rapid cooling of hot fuels and appliances to prevent re-ignition are worth considering.

6 FIRE HOSE REELS

The building will be provided with fire hose reels as required for compliance with the BCA and AS2441. Hose reels located adjacent fire isolated stair entry will be supplied from the combined fire main risers.

7 PORTABLE FIRE EXTINGUISHERS

The building will be provided with portable fire extinguishers as required for compliance with the BCA and AS2444.

The proposed extinguisher types will be suited for the building occupancy with a combination of dry chemical and carbon dioxide agent.

8 BUILDING SERVICES INTERFACE

The interface between the other services installed in the building will be as described below.

8.1 MECHANICAL SERVICES

The smoke hazard management measures provided in the building comprise stair pressurization and zone pressurization. The fans and dampers incorporated in these systems are required to be controlled in fire mode by the FDCIE for compliance with AS1668.1 and AS1670.1, inclusive of indication of status.

Whilst not a BCA requirement, the status of a fire system, such as fire detection, sprinkler activation, may be transmitted to the Building Management System, should this facility be required.

8.2 ELECTRICAL SERVICES

Elements of the fire services system are required to be provided with power supplies, such as:

- Electric drive main pumps supplied from the supply side of the main switches in accordance with AS3000, with fire resisting cabling
- General power supplied to FDCIE, Emergency Warning panel and within the fire pump room for jockey pump and control panels.

The emergency generator is not required to provide back-up to any of the fire services systems; the main fire pump has the diesel driven pump as a back-up and control panels are provided with back-up batteries.

The fans associated with the stair pressurization and zone pressurization, whilst not a BCA requirement, may be provided with alternative power from the emergency generator as a back-up provision.

9 LIFT DESIGN ASSUMPTIONS

9.1 BUILDING CLASS

Office buildings are generally classed as diversified or single purpose or some degree in between.

Diversified Building

A diversified or multi-tenant building is generally one in which no more than one tenant occupies more than a single floor and less than 25% of the buildings tenants are of the same Occupation.

Single Purpose Building

A single purpose building is where the one tenant occupies the majority or whole of building.

9.2 BUILDING POPULATION

Calculating the number of people requiring lift service varies between that of a Diversified and or Single tenant occupied building.

A summary of the building parameters together with other considerations and assumptions that have been taken into account to determine the building tenant population for this project are;

9.3 POPULATION DESIGN ASSUMPTIONS

The building is diversified, multi-tenant development.

- Building has a total of 20 openings served by lifts; B,G,1-11, Plant, 13 -17 and Residential 18
- NRA for typical office levels 1-17 is 1000m²
- NRA for office levels 1 – 17 is 12,700m²
- Building does not include a major access area above Ground level; such as Restaurant/ Café or a public access Government Department or similar that incurs high public access.
- Population density based on:
 - o Medium density of 12.5m²/person of total building office levels NRA (12,700m²)
 - o Total calculated building Population @12.5m² of NRA is 1017 persons

Less allowances for:

- 5% of population work flex time at any one time. (51 persons)
- 2.5% of population absent on leave at any one time.(25 persons)
- 8% of office area on levels 1-17 has an Executive density of 20 m² (50 persons)
- 5% of office area on levels 2-17 devoted to lift lobby, meeting rooms and general staff access (41 persons)

Based on the above the building population for lift design purposes is 850 persons

9.4 OTHER LIFT DESIGN ASSUMPTIONS

- Minimum lift door opening is 1100W x 2100H
- Lift Design based on a Motor Room Less (MRL) lift design, complying with AS 1735 Part 1 including Amendment 1 and EN81-1/A2 (2005) & AS 1735 Part 1.& EN81
- All lifts capable of carrying an ambulance stretcher (900 wide x 2060 long)
- Minimum of two (2) lifts serve Basement car park and Residential level.
- Building has no dedicated separate Goods lift serving all levels including the Plant level 12.

- Residential levels
- to incorporate separate lift lobby with direct access to stairs and no direct lift access into resident.
- Building has no loading dock for goods/fit out materials delivery

9.5 LIFT PERFORMANCE TERMINOLOGY

An explanation of lift performance terminology included in this report is:

UP Peak

Refers to a morning incoming lift traffic Peak during a five (5) minute period when people are entering the building to ascend to their desired floor within the building. The intensity of this peak is stated as a % of the building population arriving at the building and corresponds with WT by passengers for the lift. Passengers per trip is the total number of passenger carried in the lift in the up direction

Two Way Peak

Refers to other periods of the day when the lifts are moving passengers up and down the building, such as lunch time. These periods are not as severe as the incoming lift traffic peak nor is the total population of the building moving in and or out of the premises. In general Two (2) Way traffic patterns within a building can assume that some 55-65% of the total building population will require use of the lifts. Similarly as a multi-tenant environment, minimal inter-floor traffic will be experienced. Passengers per trip is the total number of passenger carried in the lift in both the up and down direction

WT (Wait Time) or WI (Waiting Interval)

A passenger wait time is measured in seconds from the time the passenger presses the call button at say the Ground floor and until a lift arrives and opens its doors in response to that call.

In some instances WT is expressed as the Average Waiting Time (AWT). This AWT makes allowance for the varying time passengers arrive at the building and wait for a lift. The average wait time AWT is the average of all individual wait times and is sometimes expressed as 90-95% of the calculated lift wait time WT.

RTT Round Trip Time

A lifts Round Trip Time is measured in seconds and is the time from when the lift doors close the lift traverses the building answering all calls and returns to the Ground Floor and opens the doors.

HC Handling Capacity

Refers to the number of passengers that can be carried by the lift group in a five (5) minute period and expressed as a % of the Building Population. It is assumed to be equal to the arrival rate for the "UP" peak five (5) minute design period.

Conventional Control

Where the intended user presses the landing call button and the lift control system determines the next available lift to respond and answer the call.

Hybrid Destination Control System (HDGS)

Where the intended user nominates the floor to which they wish to travel on entering the building and the lift control system (HDGS) directs the user to a specific lift.

10 LIFT TRAFFIC STUDIES

Lift traffic studies for an "UP" morning and a Two (2) Way lunch peak period based on the parameters referred herein are:

STUDY 1 - CONVENTIONAL LIFT CONTROL

Total building Levels: 20 Openings

Basement Car Park, Ground, Office levels 1-11, Plant, Office levels 13 – 17, Apartments level 18

Levels served by lifts in this study : Ground and Office Floors 1-17 only

Study 1 shows the anticipated lift performance for 4 lifts with a Conventional Lift Control.

Option April 26 / 2017		
Total building Levels	B, G 1-18	B, G 1-18
Total lift travel (meters)	75.0	75.0
Period Peak	UP	Two Way
Levels Served in study	G, 1-17 offices	G, 1-17 offices
Lift travel (meters)	68.0	68.0
Population	850	850
Passengers per trip	12	15
No Lifts	4	4
RRT (Seconds)	130	160
WT – (Seconds)	32.5	40.0
HC - %	13.0	13

STUDY 2 - HYBRID DESTINATION CONTROL

Total building Levels: 20 Openings

Levels served by lifts in this study: Ground and Office Floors 1-17 only

Study 2 shows the estimated lift performance for 4 lifts with a Hybrid Destination Control System (HDCS). Study 2 suggests that a HDCS control lift system would provide an approximate 20% improvement in lift performance during the UP Peak period to that of the Conventional Lift Control however the HDCS control has minimal effect on lift performance in the Two (2) Way (Lunch) Peak period

Option April 26 / 2017		
Total building Levels	B, G 1-18	B, G 1-18
Total lift travel (meters)	75.0	75.0
Period Peak	UP	Two Way
Levels Served in study	G, 1-17 offices	G, 1-17 offices
Lift travel (meters)	68.0	68.0
Population	850	850
Passengers per trip	10	15
No Lifts	4	4
RRT (Seconds)	102	152
WT – (Seconds)	25.5	38.0
HC - %	13.8	13

STUDY 3 - HYBRID DESTINATION CONTROL

Total building Levels: 20 Openings

Levels served by lifts in this study: Basement Ground and Office Floors 1-17 & level 18

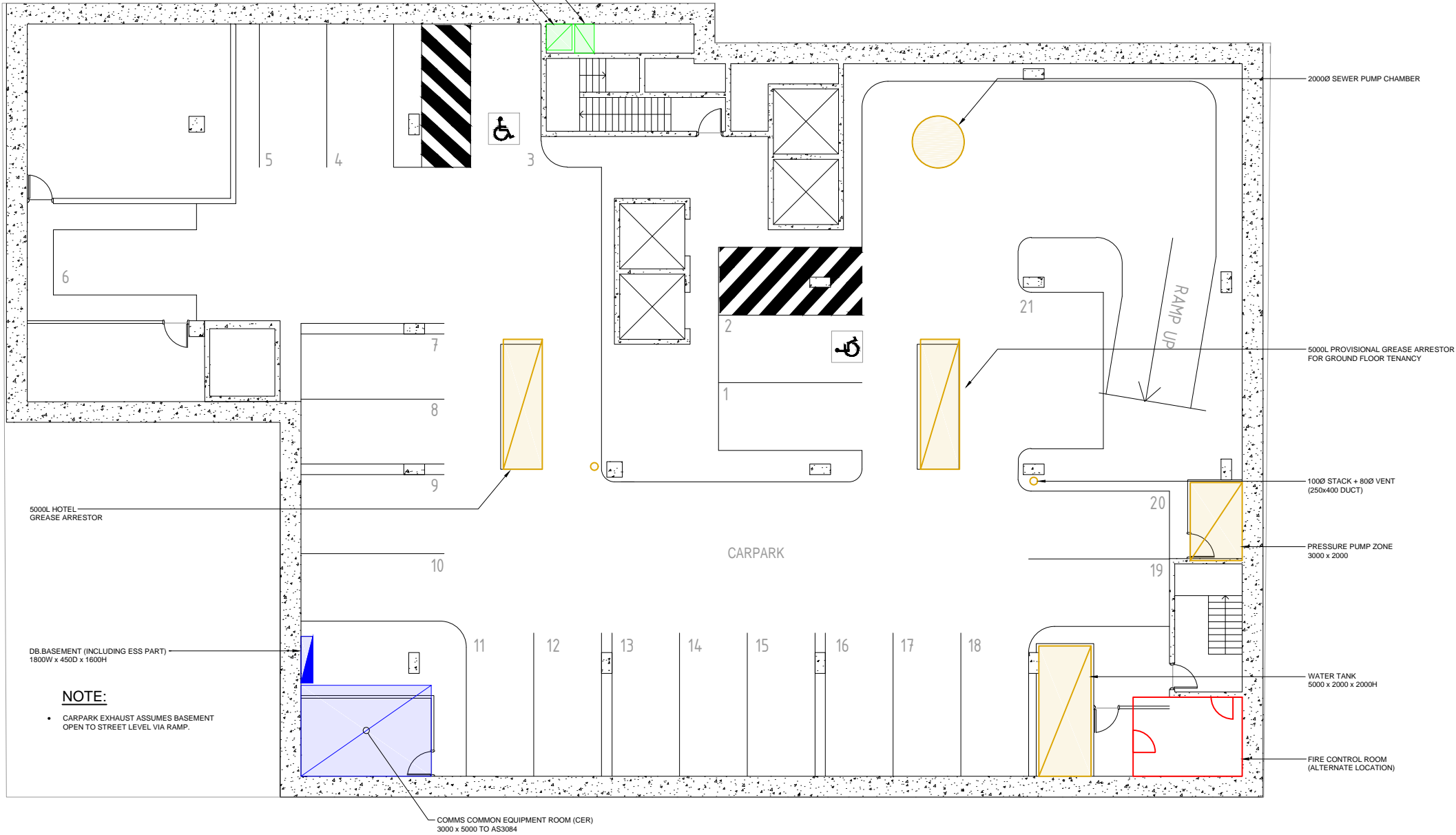
Study 3 shows the affect on lift performance in the event that the lifts serve an apartment or the car park level during the Up morning Peak and the Lunch Two Way operating periods for the lifts.

The study does not consider the effect of a possible mandatory stop should access to the hotel via a bridge at level 1 or 2 be incorporated.


Option April 26 / 2017		
Total building Levels	B, G 1-18	B, G 1-18
Total lift travel (meters)	75.0	75.0
Period Peak	UP	Two Way
Levels Served in study	B, G, 1-17 offices, 18	B, G, 1-17 offices, 18
Lift travel (meters)	75.0	75.0
Population	850	850
Passengers per trip	10	15
No Lifts	4	4
RRT (Seconds)	140	190
WT – (Seconds)	35.0	47.5
HC - %	10.0	11.1

STAIRWELL PRESSURISATION 0.8m²
CARPARK EXHAUST RISER 1.0m²

ELECTRICAL DETAILS
FIRE DETAILS
HYDRAULIC DETAILS
MECHANICAL DETAILS



REVISION	DESCRIPTION	DATE




SYSTEM SOLUTIONS ENGINEERING
1 level
75 Fullarton road, kent town
50 67 south australia
08 8333 1855 telephone
08 8333 1866 facsimile
610 0765 4971 abn

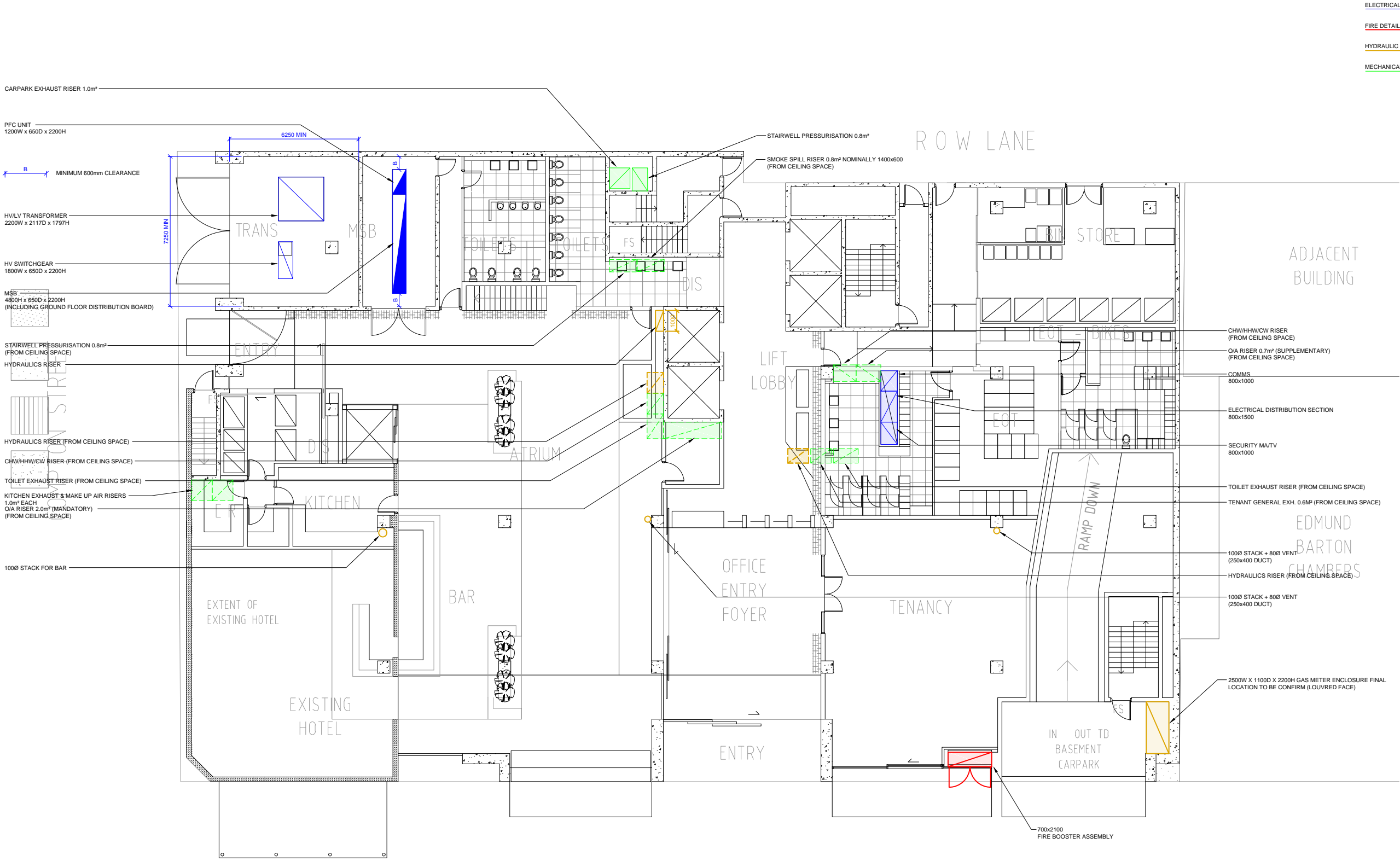
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PROJECT
WRIGHT STREET DEVELOPMENT

DRAWING
COMBINED SERVICES BASEMENT LAYOUT

SCALE 1:100@A1	DATE NOV 2016	No. IN SET 1 OF
DESIGNED BDJ	DRAWN KD	CHECKED -

	PROJECT No. SSE3057	DRAWING No. CS01
	PLOT DATE 7/9/2017 4:48:52 PM	REVISION P4 SHEET SIZE A1



ELECTRICAL DETAILS

FIRE DETAILS


HYDRAULIC DETAILS

MECHANICAL DETAILS

NOTES:

- MECHANICAL A/C - BULKHEAD/CEILING CONCEALED FAN COIL UNITS.
- FIRE CONTROL ROOM LOCATION TBC - REFER ATTACHED SKETCH OF ROOM.

REVISION	DESCRIPTION	DATE



SYSTEM SOLUTIONS ENGINEERING

1 level
75 Fullarton road, kent town
50 67 south australia
08 8333 1855 telephone
08 8333 1866 facsimile
610 0765 4971 abn

CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK OR MAKING ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED BEFORE MANUFACTURE. THIS DRAWING IS THE PROPERTY OF THE ENGINEERS AND IS SUBJECT TO RETURN ON REQUEST.

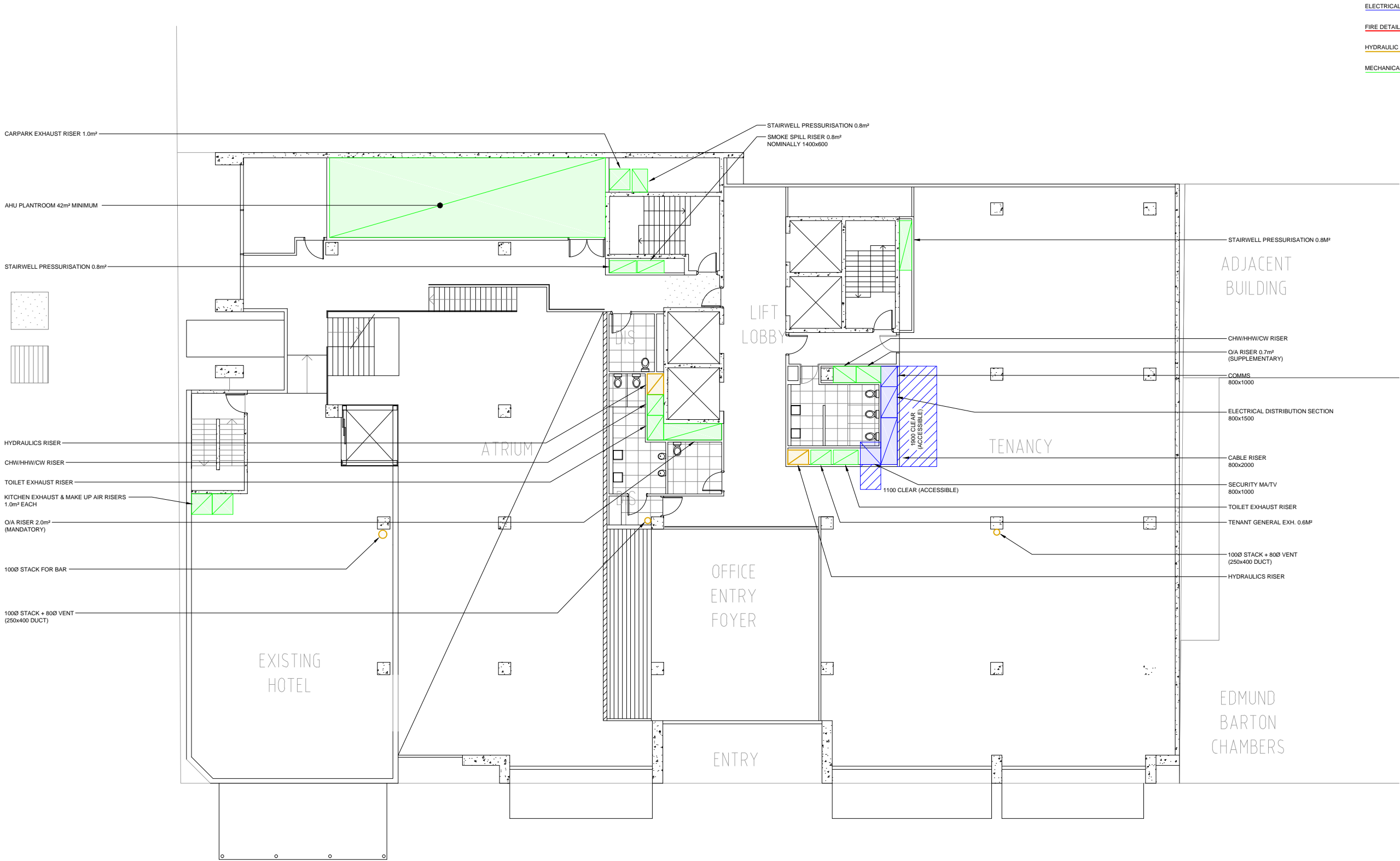
PROJECT
WRIGHT STREET DEVELOPMENT

DRAWING
COMBINED SERVICES GROUND FLOOR

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DESIGNED	BDJ	DRAWN	KD	CHECKED	-

PROJECT NO.	DRAWING NO.
SSE3057	CS02

PLOT DATE	REVISION	SHEET SIZE
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ELECTRICAL DETAILS

FIRE DETAILS

HYDRAULIC DETAILS

MECHANICAL DETAILS

REVISION	DESCRIPTION	DATE



SYSTEM SOLUTIONS ENGINEERING

1 level
75 Fullarton road, Kent town
50 67 south australia
08 8333 1855 telephone
08 8333 1866 facsimile
610 0765 4971 abn

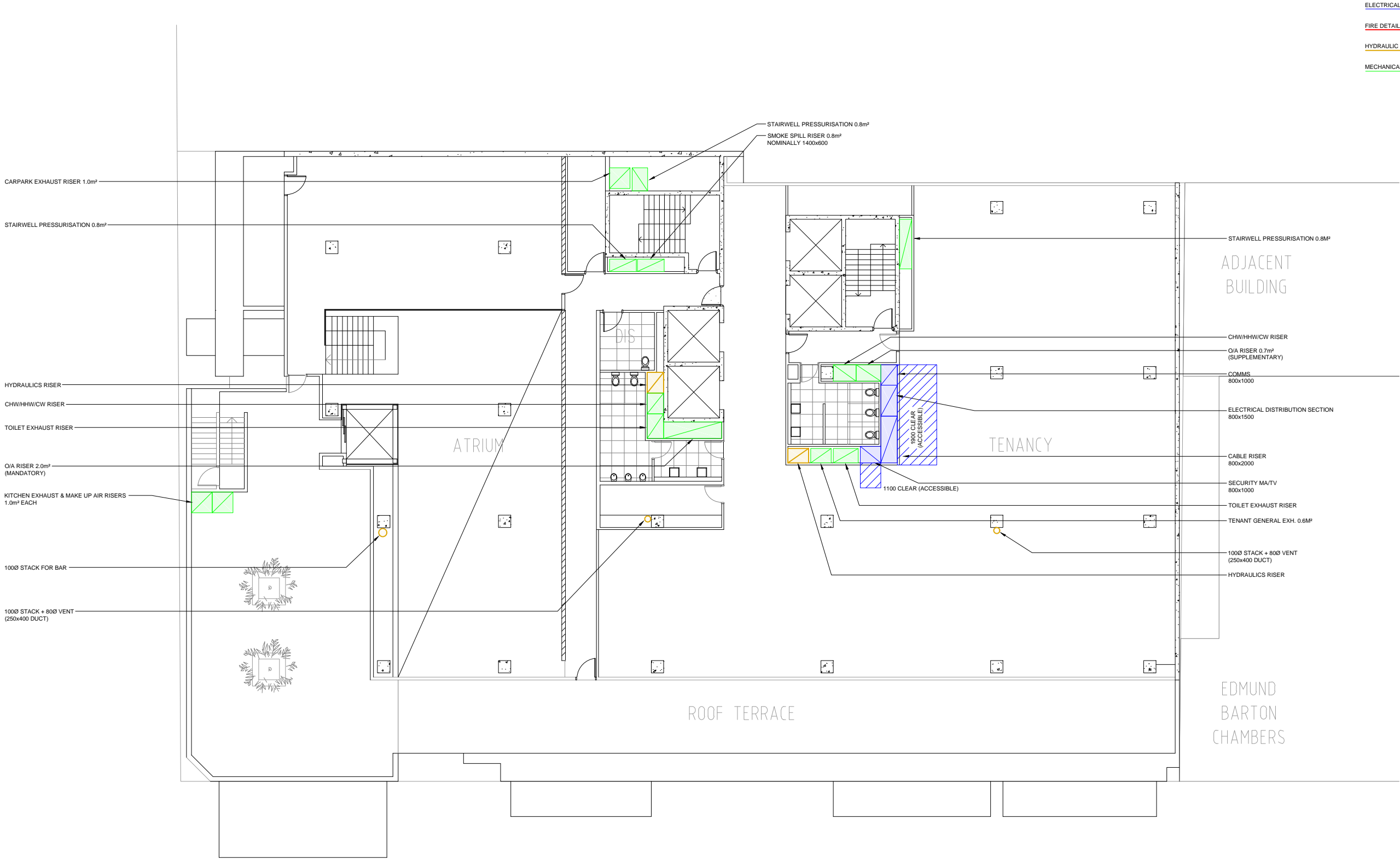
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PROJECT
WRIGHT STREET DEVELOPMENT

DRAWING
COMBINED SERVICES FIRST FLOOR

SCALE	1:100@A1	DATE	NOV 2016	No. IN SET	3 OF
DESIGNED	BDJ	DRAWN	KD	CHECKED	-

PROJECT No.	DRAWING No.
SSE3057	CS03
PLOT DATE 7/9/2017 4:48:01 PM	REVISION P4 SHEET SIZE A1



ELECTRICAL DETAILS

FIRE DETAILS

HYDRAULIC DETAILS

MECHANICAL DETAILS

REVISION	DESCRIPTION	DATE



SYSTEM SOLUTIONS ENGINEERING

1 level
75 Fullarton road, kent town
50 67 south australia
08 8333 1855 telephone
08 8333 1866 facsimile
610 0765 4971 abn

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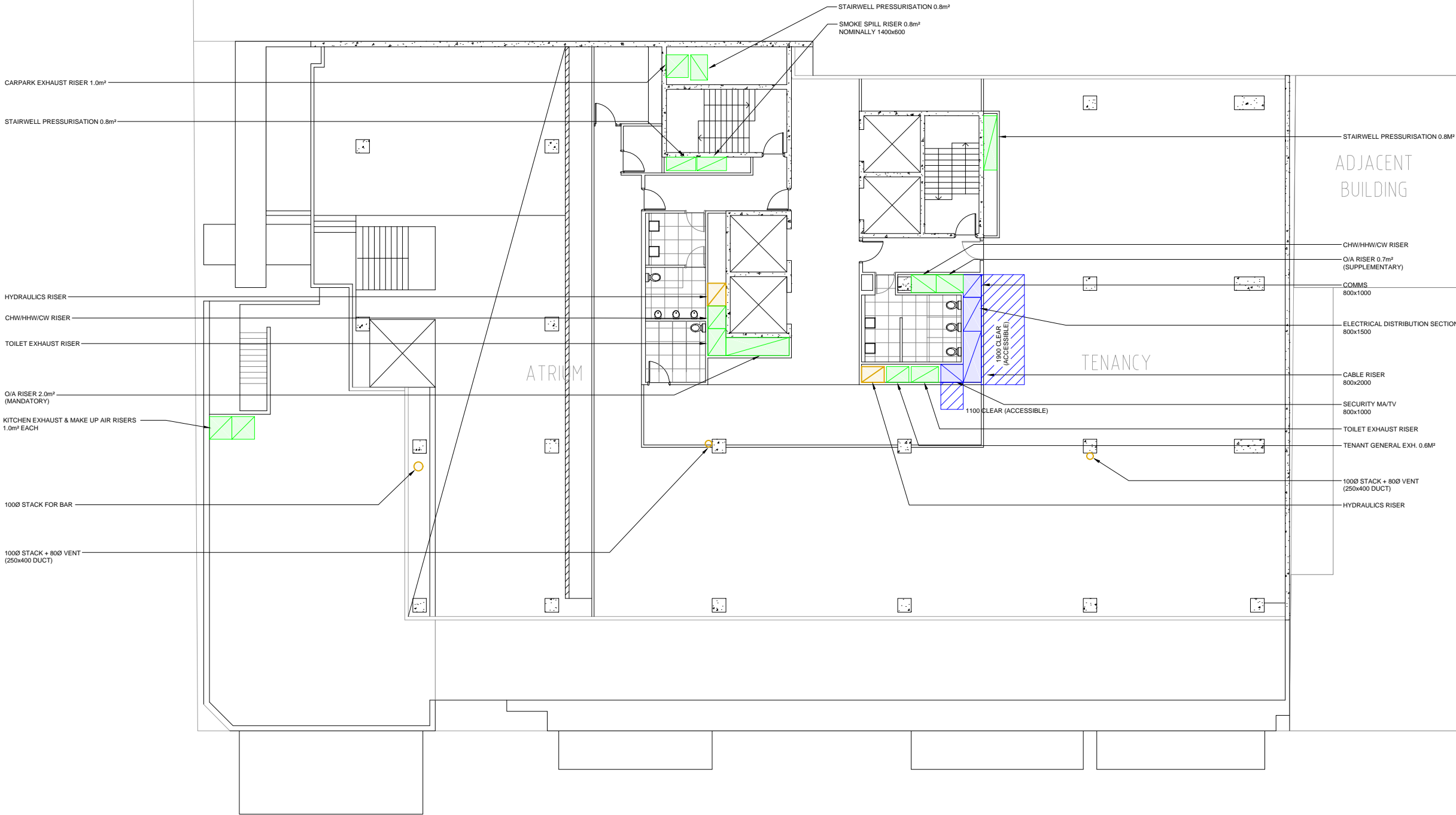
PROJECT
WRIGHT STREET DEVELOPMENT


DRAWING
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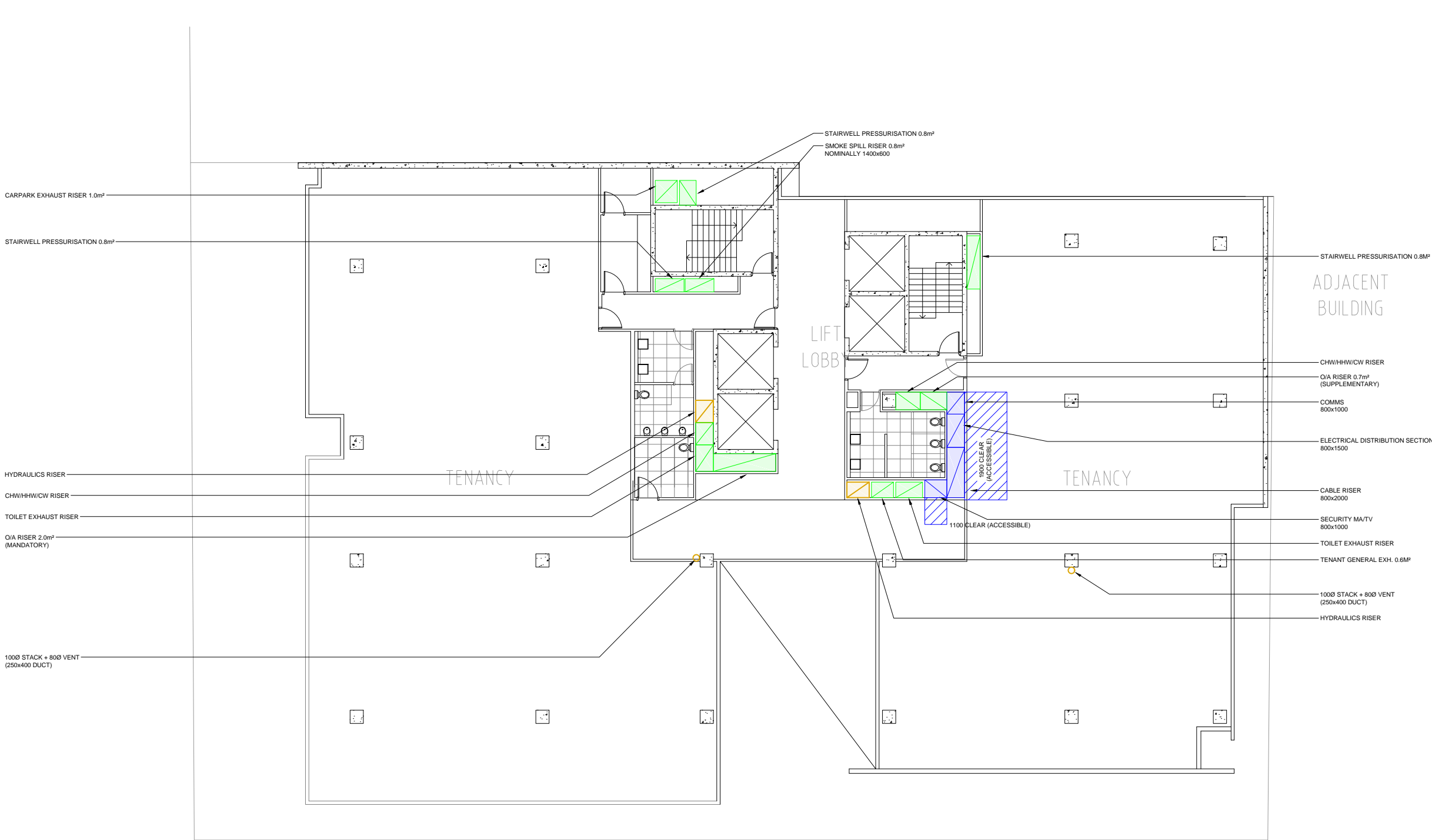
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	PLOT DATE 7/9/2017 4:47:37 PM	REVISION P4

- ELECTRICAL DETAILS
- FIRE DETAILS
- HYDRAULIC DETAILS
- MECHANICAL DETAILS



REVISION	DESCRIPTION	DATE
 SYSTEM SOLUTIONS ENGINEERING 1 level 75 Bullarton road, kent town 50 67 south australia 08 8333 1855 telephone 08 8333 1866 facsimile 610 0765 4971 abn		
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PROJECT WRIGHT STREET DEVELOPMENT		
DRAWING COMBINED SERVICES THIRD FLOOR		
SCALE	1:100@A1	DATE NOV 2016
DESIGNED	BDJ	DRAWN KD
PROJECT No.	SSE3057	DRAWING No. CS05
PLOT DATE	7/9/2017 4:47:04 PM	REVISION P4
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ELECTRICAL DETAILS

FIRE DETAILS

HYDRAULIC DETAILS

MECHANICAL DETAILS

REVISION	DESCRIPTION	DATE



SYSTEM SOLUTIONS ENGINEERING

1 level
75 Bullarton road, kent town
50 67 south australia
08 8333 1855 telephone
08 8333 1866 facsimile
610 0765 4971 abn

CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK OR MAKING ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED BEFORE MANUFACTURE.
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PROJECT
WRIGHT STREET DEVELOPMENT

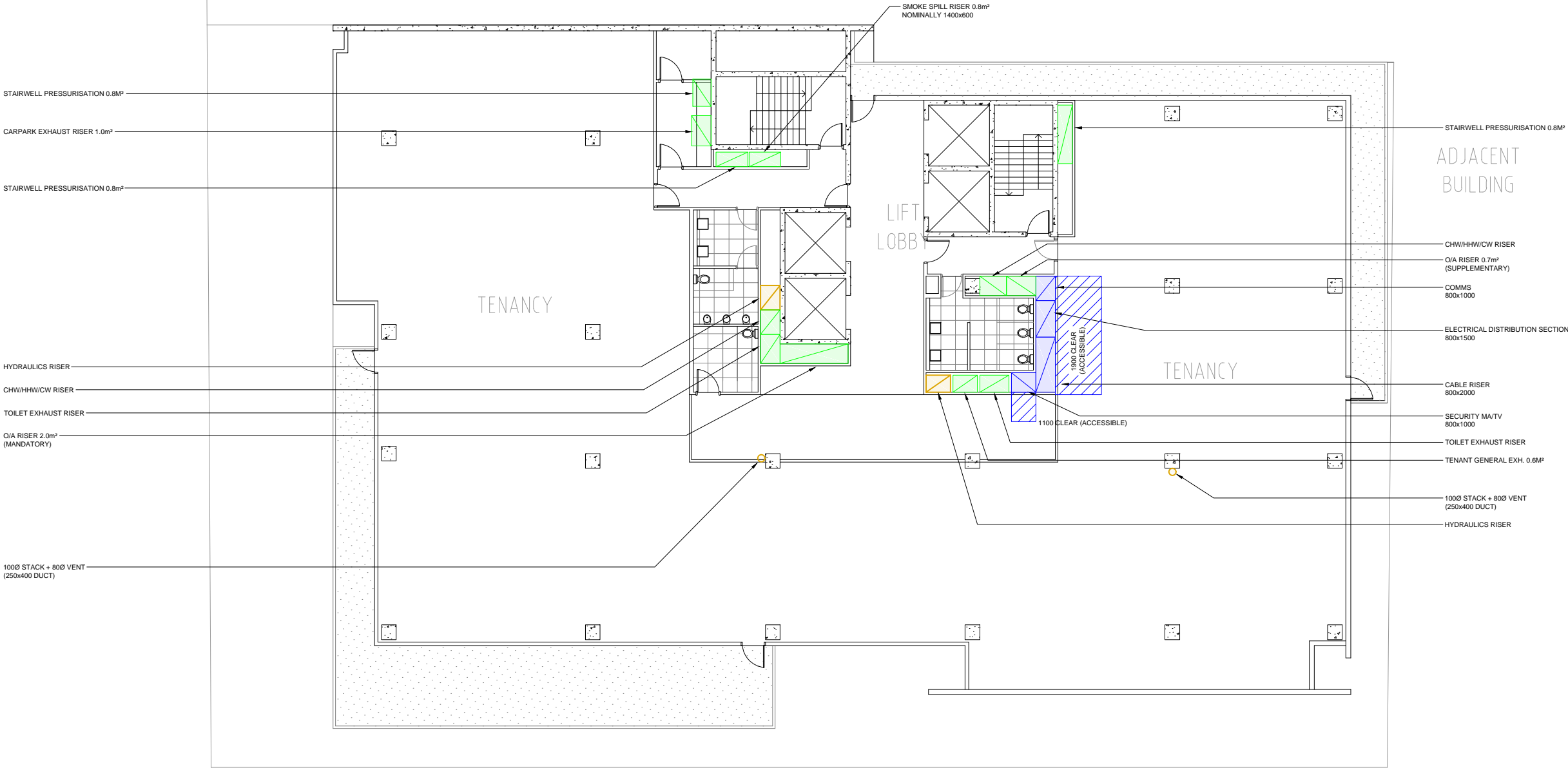
DRAWING
**COMBINED SERVICES
TYPICAL LEVEL 10 - 12**

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DESIGNED	BDJ	DRAWN	KD	CHECKED	-

PROJECT No.	DRAWING No.
SSE3057	CS07

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- ELECTRICAL DETAILS
- FIRE DETAILS
- HYDRAULIC DETAILS
- MECHANICAL DETAILS



REVISION	DESCRIPTION	DATE



SYSTEM
SOLUTIONS
ENGINEERING

1 level
75 Bullarton road, kent town
50 67 south australia
08 8333 1855 telephone
08 8333 1866 facsimile
610 0765 4971 abn

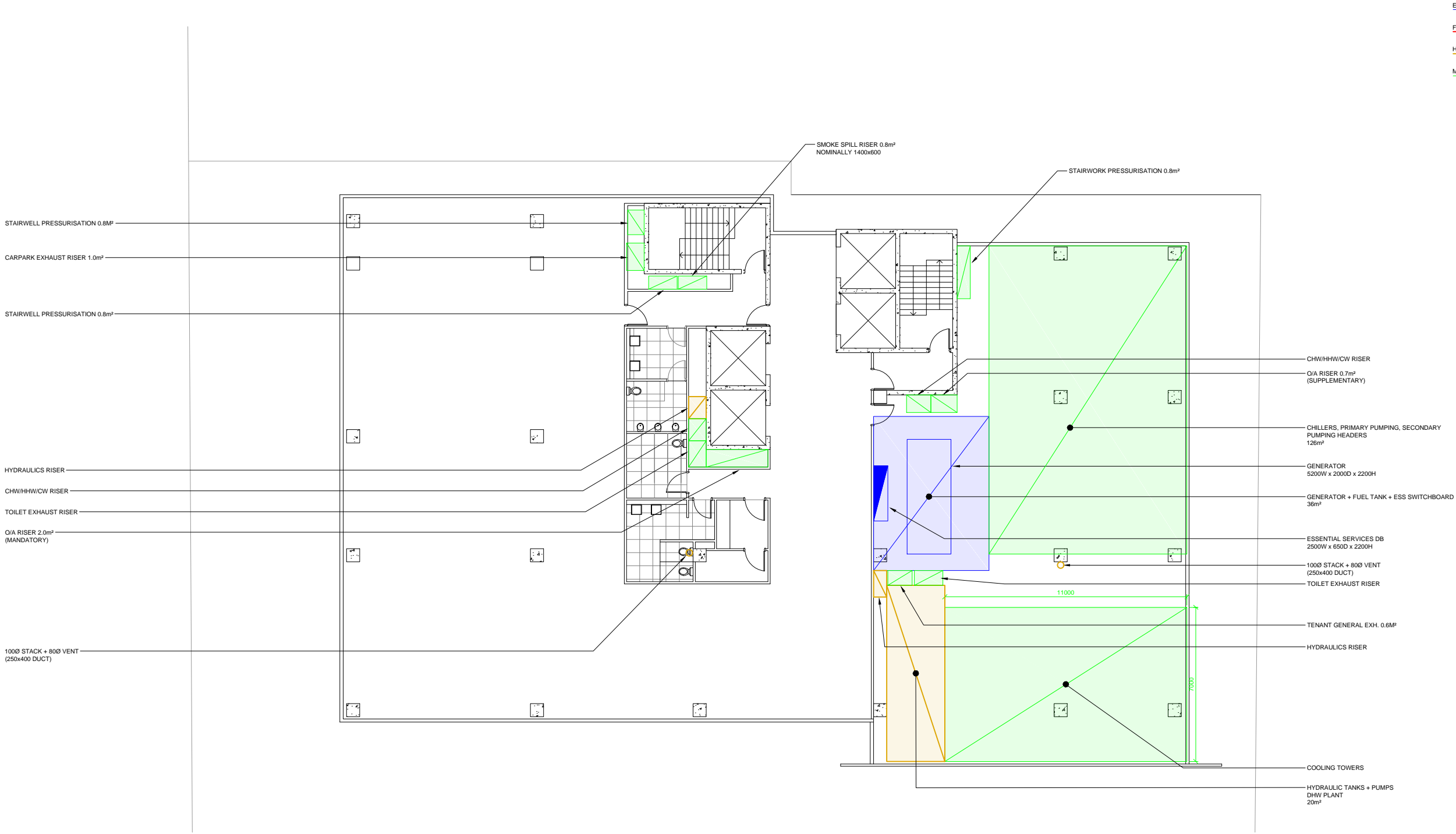
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PROJECT
WRIGHT STREET
DEVELOPMENT

DRAWING
COMBINED SERVICES
LEVEL 13

SCALE	1:100@A1	DATE	NOV 2016	No. IN SET	8 OF
DESIGNED	BDJ	DRAWN	KD	CHECKED	-

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	PLOT DATE 7/9/2017 4:45:02 PM	REVISION P4



- ELECTRICAL DETAILS
- FIRE DETAILS
- HYDRAULIC DETAILS
- MECHANICAL DETAILS

REVISION	DESCRIPTION	DATE



SYSTEM SOLUTIONS ENGINEERING

1 level
75 fullarton road, kent town
50 67 south australia
08 8333 1855 telephone
08 8333 1866 facsimile
610 0765 4971 abn

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PROJECT
WRIGHT STREET DEVELOPMENT

DRAWING
**COMBINED SERVICES
LEVEL 14 - PLANT 1**

SCALE	1:100@A1	DATE	NOV 2016	No. IN SET	9 OF
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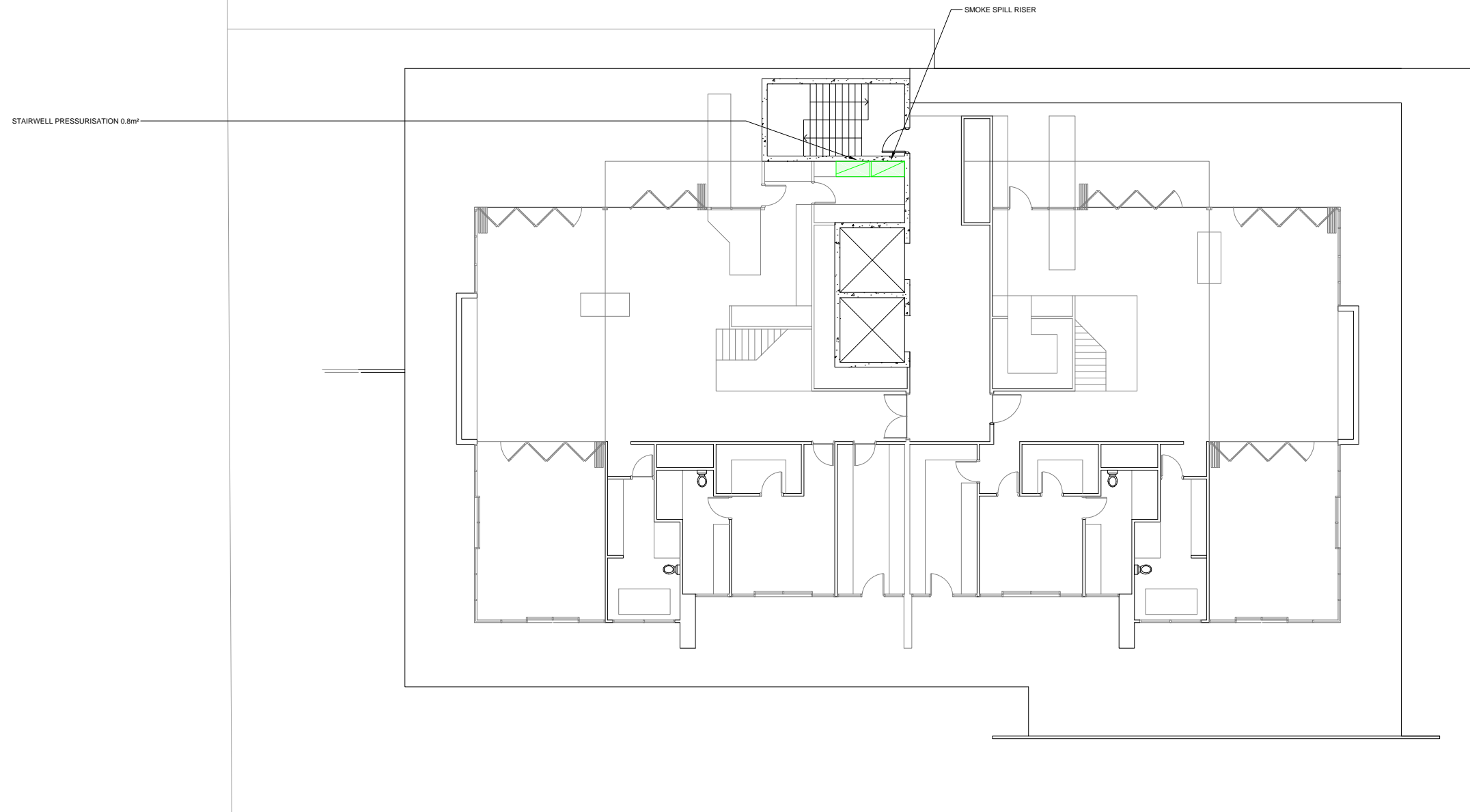




ELECTRICAL DETAILS

FIRE DETAILS

HYDRAULIC DETAILS

MECHANICAL DETAILS



REVISION	DESCRIPTION		DATE
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<p>PROJECT</p> <p>WRIGHT STREET DEVELOPMENT</p>			
<p>DRAWING</p> <p>COMBINED SERVICES PENTHOUSE LAYOUT</p>			
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<p>PROJECT No.</p> <p>SSE3057</p> <p>PLOT DATE 7/9/2017 4:48:19 PM</p>		<p>DRAWING No.</p> <p>CS11</p>	
		<p>REVISION</p> <p>P4</p>	<p>SHEET No.</p> <p>A</p>

76-88 Wright Street, Adelaide, SA

Desktop Pedestrian Level Wind Assessment



Document No: GWTS-DPR-10280-2017-0
76-88 Wright Street, Adelaide



Client: Prepared For: BESTEC 144 Gawler Place ADELAIDE, SA 5000 Contact: Ivailo Dimitrov ☎ +61 8 8232 4442 Email: idimitrov@bestec.com.au	Prepared By: Global Wind Technology Services Pty Ltd ABN 17 125 364 794 505, 434 St Kilda Road, Melbourne VIC 3004 ☎ +61 3 99 399 490 Email: info@gwts.com.au
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Project Category: ST-CL-DPR-FV	Document No: GWTS-DPR-10280-2017-0
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Prepared By: Michael Swaney	Date: September 18 th , 2017
Released By: Seifu Bekele	Date: September 18 th , 2017
Revision History Revision No: 0	Comments: Initial Issue

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EXECUTIVE SUMMARY

GWTS has been commissioned by **BESTEC** to perform an assessment of pedestrian level winds for the proposed development on **88 Wright Street, Adelaide, SA**.

This study was conducted by GWTS as a study to help in achieving a greater understanding of the wind conditions and environment of the proposed development. GWTS investigated the wind environment around the proposed development by considering the form and exposure of the proposed development, the nearby existing developments, the local wind climate and the proposed use of ground level areas in and adjacent to the proposed development.

This study concludes that:

- Some localized increases in the ground level wind conditions may occur.
- Exceedances of the recommended criteria are predicted to approach the limit for the recommended criteria and some recommendations have been made.

The following recommendations were made:

- Increase in canopy width above Compton Street atrium entrance
- Minimum balustrade heights of 1.6m on the level 2 terrace
- Minimum balustrade heights of 1.6m on level 7, 10 and 13 terraces
- The use of vegetation on the level 10 Sky Garden to a height of 1.6m
- Precaution to securely fix or remove lightweight items on balconies and external decks during high wind events.

Please note that this is an opinion statement and is not based on wind tunnel testing.

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1. INTRODUCTION

A 18-storey high mixed-use development is proposed at 76-88 Wright Street, Adelaide. The site is bounded by low to mid-rise developments and a proposed 15-storey building to the north-east, Wright Street and low-rise developments to the south and Compton Street to the west. A close-up aerial view of the site is shown in **Figure 1**.

The objective of the study was to consider the likely wind conditions due to the proposed development and reduce any adverse wind conditions accordingly. The pedestrian wind environment study of the development was based on professional experience, computational analysis, empirical data, architectural drawings supplied to GWTS by BESTC Pty Ltd (**Appendix A**) and statistical data about the site wind climate.



Figure 1: Overview of the proposed development site

A satellite view of the proposed development with the surroundings of an approximately 2km radius for terrain categories is shown in **Figure 2**.

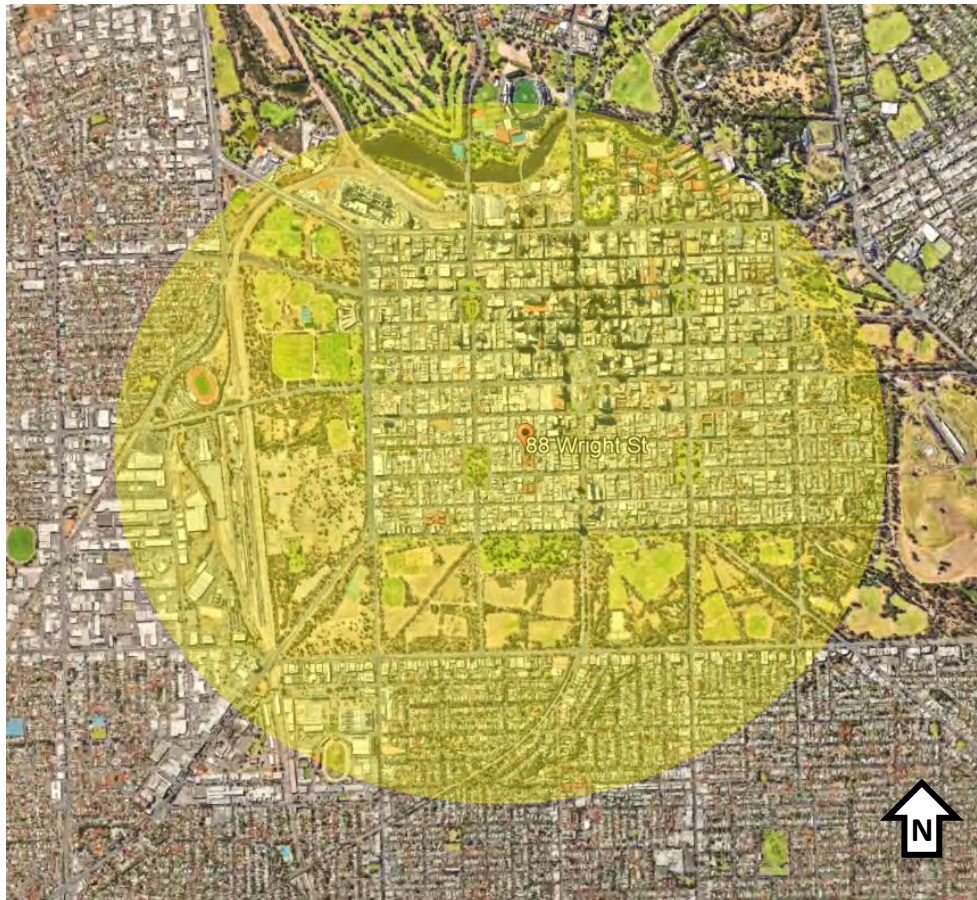


Figure 2: Satellite image of the proposed site on 88 Wright Street and surrounding terrains.

This report is an opinion statement, and is not based on wind tunnel testing. Thus, the findings of this study are based on a wind climate assessment of the site of the proposed development as well as the authors' experience of scale model wind tunnel testing and full scale assessments of other similar developments.

2. ENVIRONMENTAL WIND EFFECTS

Atmospheric Boundary Layer

As wind flows over the earth it encounters various roughness elements and terrain such as water, forests, houses and buildings. To varying degrees, these elements reduce the mean wind speed at low elevations and increase air turbulence. The wind above these obstructions travels with un-attenuated velocity, driven by atmospheric pressure gradients. The resultant increase in wind speed with height above ground is known as a wind velocity profile.

The terminology used to describe the wind flow patterns around the proposed Development is based on the aerodynamic mechanism, direction and nature of the wind flow. Flow patterns are illustrated in **Figure 3**.

Downwash – refers to a flow of air down the exposed face of a Tower. A tall Tower can deflect a fast moving wind at higher elevations downwards.

Corner Accelerations – when wind flows around the corner of a building it tends to accelerate in a similar manner to airflow over the top of an airplane wing.

Flow separation – when wind flowing along a surface suddenly detaches from that surface and the resultant energy dissipation produces increased turbulence in the flow.

Flow channeling – the well-known “street canyon” effect occurs when a large volume of air is funneled through a constricted pathway. To maintain flow continuity the wind must speed up as it passes through the constriction.

Direct Exposure – a location with little upstream shielding for a wind direction of interest. The location will be exposed to the unabated mean wind and gust velocity. Piers and open water frontage may have such exposure.

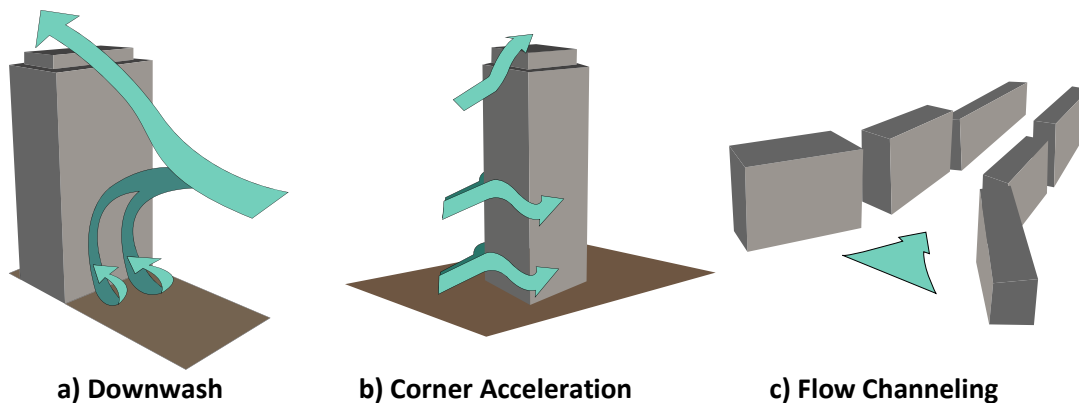


Figure 3: Typical wind-structure flow patterns

3. WIND CLIMATE

Weather records from the Adelaide Airport meteorological station (1985-2011) have been obtained from the Australian Bureau of Meteorology [4]. These have been statistically analysed to produce the directional distribution of mean (averaged over 1 hour) wind speed thresholds at a reference height of 10m, with a probability of exceedance of 0.05% (Figure 3). The 0.05% probability of exceedance for the directional wind speeds is approximately equivalent to a combined probability of exceedance for winds from all directions of 0.1%, as required by the criteria in Table 2 [5].

Adelaide Airport annual maximum mean for 10 degree sectors (m/s)

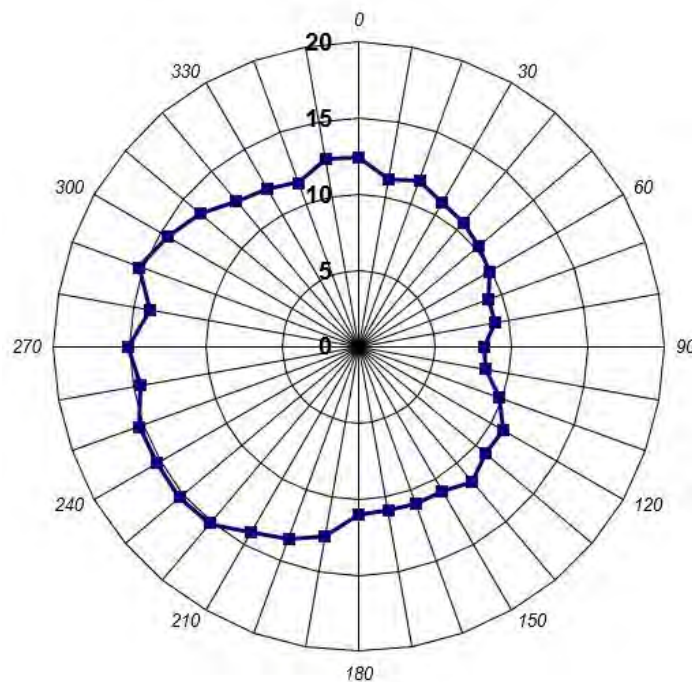


Figure 4: Directional distribution of annual maximum 10 minute mean wind speeds (m/s) at 10m height at Adelaide Airport

The stronger winds of the Adelaide region originate from the westerly and south westerly directions, with the highest predicted wind speeds coming from the south-west.

3.1. WIND EXPOSURE

The surrounding topography within 2km of the site in all directions is predominantly low rise. Therefore, the site of the proposed development is considered to have a Terrain Category 3 wind exposure for all directions, as defined in the Australian Standard for Wind Actions [4]. Satellite photographs of the project site and surrounding terrain are shown in **Figure 1** and **Figure 2**.

4. ASSESSMENT CRITERIA

GWTS's assessment criteria for pedestrian wind comfort are based on 3-second gust criteria, as currently used by the City of Adelaide. A set of annual maximum peak 3-second gust velocities is derived from meteorological data for the geographical location under consideration, for all wind directions to be assessed. For all of these possible wind directions and speeds, the regions where each of the wind speed criteria may be exceeded are then considered.

Most people will consider a site unacceptable for a given activity if the mean and/or gust velocities in that area during the annual maximum wind event exceed the annual maximum wind speed criterion for that activity. The site would also be likely to be considered excessively windy for that activity during more moderate winds.

The threshold gust velocity criteria are:

Table 1: Wind Comfort and Safety Gust Criteria

Annual Maximum 3 second Gust Speed	Result on Perceived Pedestrian Comfort
>23m/s	Unsafe (frail pedestrians knocked over)
<16 m/s	Acceptable for walking (steady steps for most pedestrians)
<13 m/s	Acceptable for short standing (window shopping, vehicle drop off, queuing)
<10 m/s	Acceptable for long standing, sitting (outdoor cafés, pool area, gardens)

Recommended Criteria

Table 2 lists the specific areas adjacent to the development and the corresponding recommended criteria. The assessment areas are also shown from **Figure 5** to **Figure 10** with the recommended criteria overlaid.

Table 2: Recommended application of criteria

Area	Recommended Criteria
Cafes and outdoor seating areas	Recommended to meet the criterion for sitting/long standing
Public Footpaths	Recommended to meet the criterion for walking
Main Building Entrances	Recommended to meet the criterion for standing
Balconies, external decks and terraces	Recommended to meet the criterion for walking (refer to the discussion below on page 10)

Intended Use of Adjacent Ground Level Areas

There are public footpaths adjacent to or in close proximity to the proposed development. These areas are highlighted in red in **Figure 5**. It is recommended that the walking criterion be satisfied for these pedestrian walkway areas.

The main building entrances of the proposed development are highlighted in orange in **Figure 5**. It is recommended that the criterion for standing be satisfied for these areas.

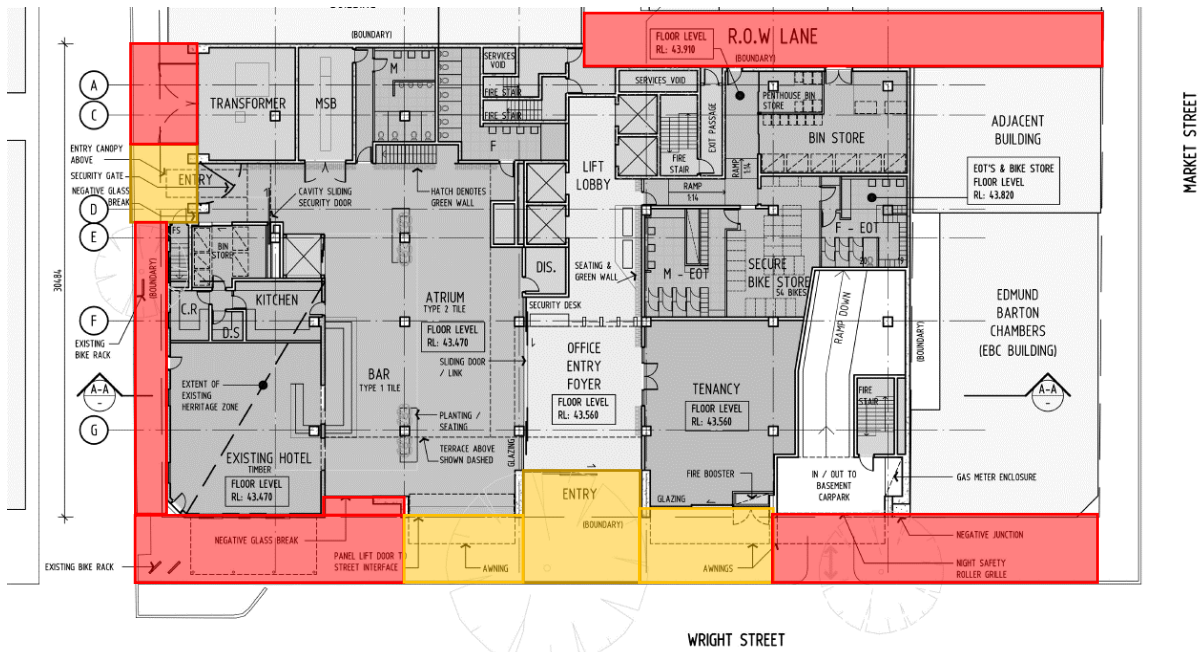
We recommend the walking criterion be satisfied on the penthouse balconies and the terraces on levels 2, 7, 10 and 13 of the proposed development (highlighted in red in **Figure 6** to **Figure 10**) as they may not be intended for use all the time. The walking criteria can be used in this spaces since:

- The use of this area can be avoided during high wind event;
- These areas are not public spaces and their use is not required all the time;

It is likely to be difficult to achieve wind conditions meeting a more stringent criterion than the walking criterion on the terraces of the proposed Development due to their exposure and the form and proximity of adjacent developments. It should therefore be noted that meeting the walking criteria recommended as the minimum requirement on elevated areas will not guarantee that occupants will find wind conditions in these areas acceptable, however, meeting the criterion for walking comfort would result in the majority of people considering such areas acceptable for their intended use from a wind point-of-view.

General adverse conditions/scenarios that may occur on the terraces in extreme wind events include:

- The cooling effect of the wind on the human body (particularly for pool deck areas),
- Difficulty hearing others speak.



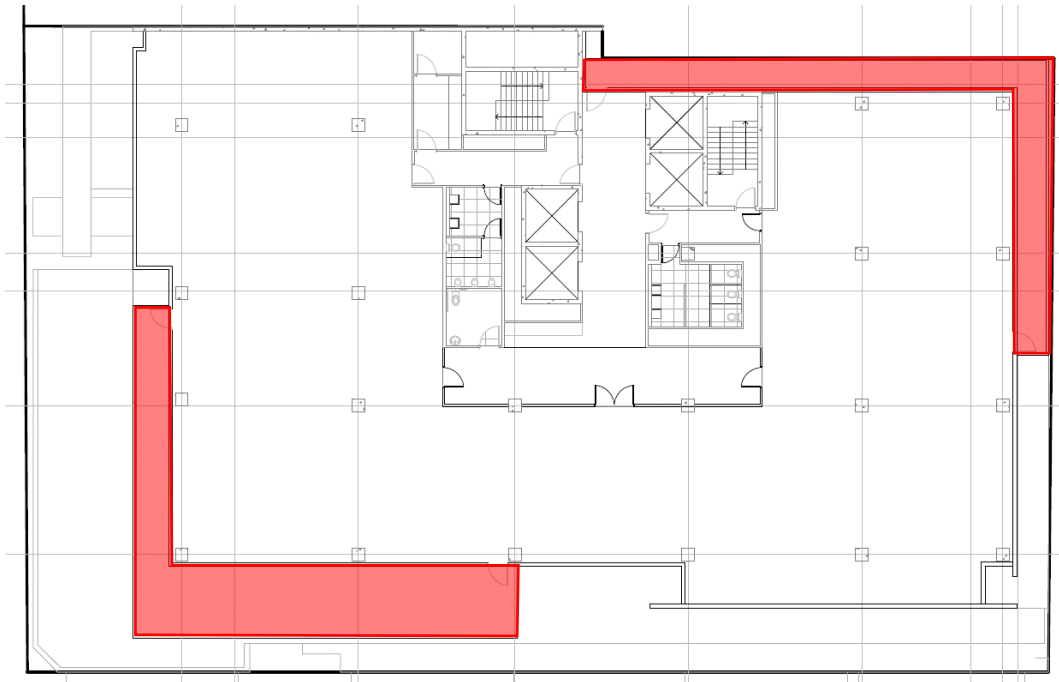
- Recommended to meet criterion for standing
- Recommended to meet criterion for walking

Figure 5: Schematic plan view of proposed development with recommended wind criteria overlaid on the ground floor of the proposed development



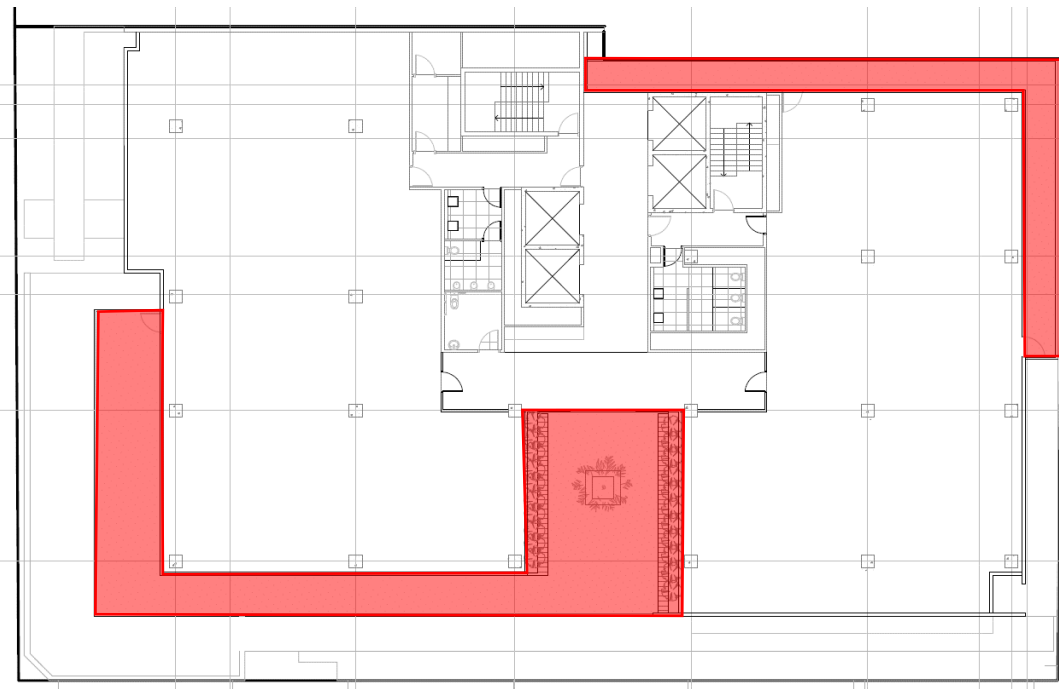
- Recommended to meet criterion for walking

Figure 6: Schematic plan view of proposed development with recommended wind criteria overlaid on level 2 of the proposed development



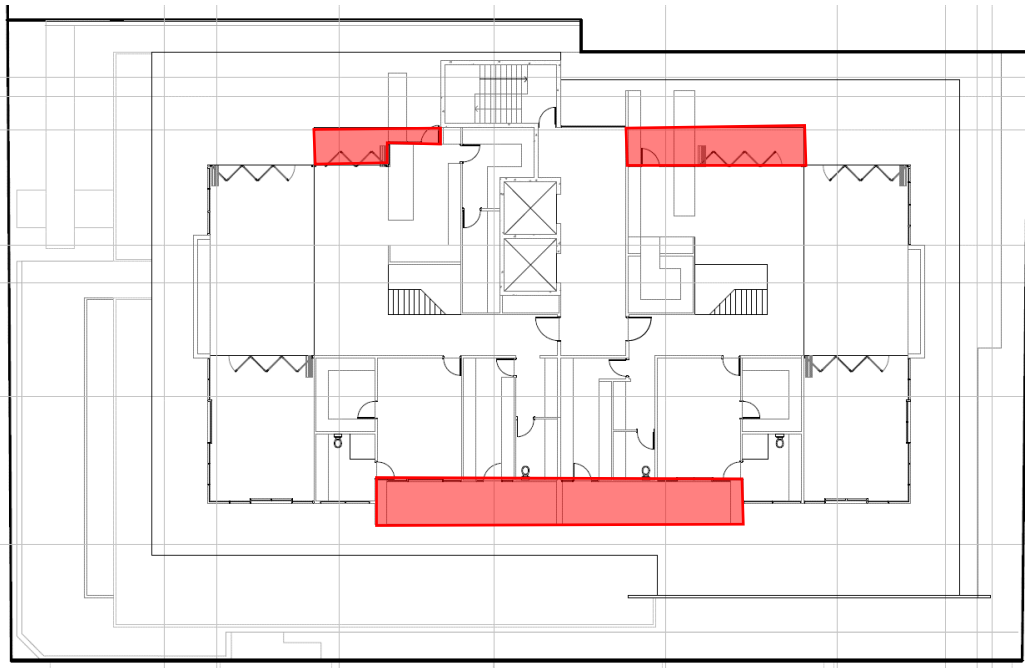
■ Recommended to meet criterion for walking

Figure 7: Schematic plan view of proposed development with recommended wind criteria overlaid on levels 7 and 13 of the proposed development



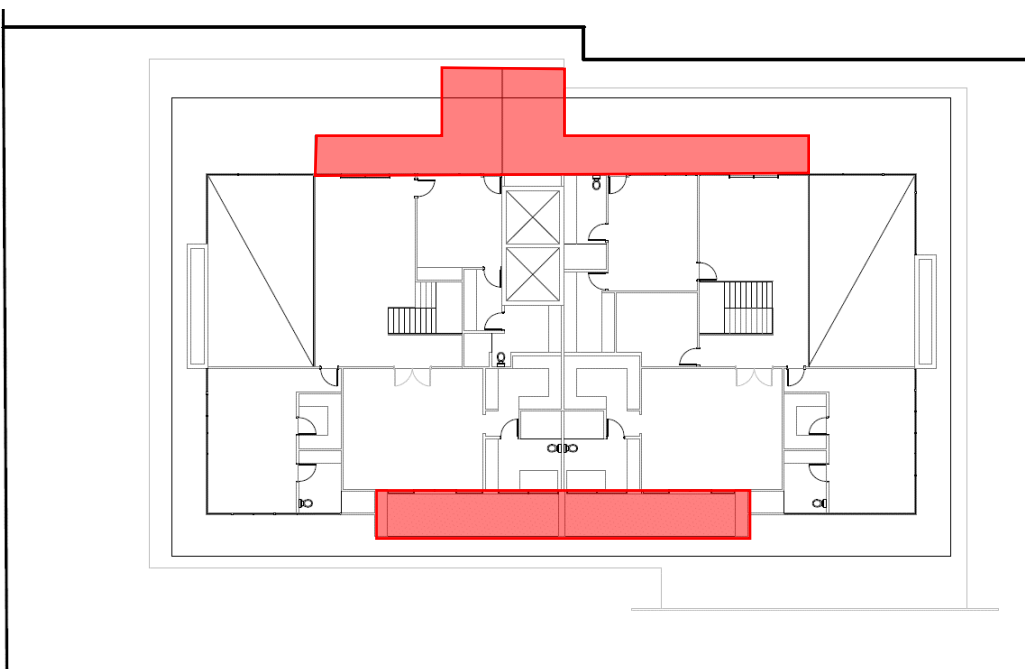
■ Recommended to meet criterion for walking

Figure 8: Schematic plan view of proposed development with recommended wind criteria overlaid on level 10 of the proposed development



■ Recommended to meet criterion for walking

Figure 9: Schematic plan view of proposed development with recommended wind criteria overlaid on the upper penthouse level of the proposed development



■ Recommended to meet criterion for walking

Figure 10: Schematic plan view of proposed development with recommended wind criteria overlaid on the lower penthouse level of the proposed development

5. WIND ENVIRONMENT ANALYSIS

The wind profile of the site can be factored for height above ground, estimated local terrain roughness, local turbulence and the influence of buildings to produce estimated annual average maximum 3-second moving average gust wind speeds adjacent to the proposed development. These estimates can then be compared with the applicable criteria to determine whether they would be acceptable or not.

Estimates of ground level wind speeds have been made based on the Adelaide region wind climate data, computational analysis, empirical aerodynamics data and upstream exposure. Wind conditions in all ground level areas adjacent to the proposed development are predicted to meet the criterion for comfort and safety using wind control mechanisms.

Wright Street Main Building Entrance

The Wright Street entrance consists of the atrium entry, office foyer entry and tenancy entry. As the building above is set back approximately 4.9 meters from these building entrances, the Level 2 terrace will act as a podium and deflect winds from the ground floor entrances, thus preventing the occurrence of downwash. As illustrated in the drawings provided by BESTEC Pty Ltd, awnings of a minimum length of 1.7 meters have been implemented over the entrances which will also provide further protection.

Thus, it is expected that these architectural features will generally produce a calm wind environment by eliminating the effects of downwash at the entrance area. Considering that awnings and a building setback at second floor have been implemented in the design, wind speeds around the entrance area are predicted to be within the recommended criterion for standing.

Compton Street Atrium Entrance

The Compton Street atrium entrance is located on the western side of the building and is exposed to the strongest winds in Adelaide. As westerly winds interact with the western façade, wind speeds are expected to accelerate downwards toward the atrium entrance. As illustrated in the drawings provided by BESTEC, a canopy of 4.7m long and 1.7m wide has been implemented over the entrance area and will likely enhance the wind comfort in the area. Recommendations have been made below regarding minimum canopy width.

Level 2 Terrace

The level 2 terrace is exposed to the strongest winds in the Adelaide region: westerly, south westerly and southerly winds. As westerly winds interact with the western façade, wind speeds are expected to accelerate downwards toward the atrium entrance. However, as almost half of the terrace area is recessed behind the glazing façade above, wind speeds on the level 2 terrace are not expected to exceed the recommended walking criterion. Recommendations for minimum balustrade height have been made.

Level 7, 10 and 13 Terraces

Wind speeds on the south western terraces are predicted to marginally exceed the recommended criterion for walking due to direct exposure to horizontal winds. Recommendations regarding minimum balustrade heights have been provided to create a safe and comfortable wind environment in this area.

Level 10 Sky Garden Entrance

It is predicted that strong southwesterly winds will create uncomfortable wind conditions at the entrance of the level 10 Sky Garden due to direct exposure to horizontal winds and corner acceleration. As indicated in the provided architectural drawings, sliding doors are between the lift shaft and the Sky Garden exposed to direct wind.

As southerly and south-westerly winds approach the entrance, positive pressures will be generated at the entrance. The internal pressures within the building are predicted to be negative or significantly lower than the positive pressures acting upon the entrance, creating a pressure difference across the entrance interface. As air flows from regions of high pressure to low pressure, it is expected to enter the entrance once the door is opened. This phenomenon may result in difficulties opening and closing doors, mechanical failure or wind induced noise. A further pressure drop is expected between the building entrance foyer and the lift shafts [7] [8], which may induce airflow into the shafts upon the opening of lift doors and through small gaps when the doors are closed, creating the potential for wind induced noise.

GWTS recommend that precaution is exercised in this area by ameliorating wind speeds to prevent infiltration through the sliding doors. Using a double door design can reduce the wind effect at this location.

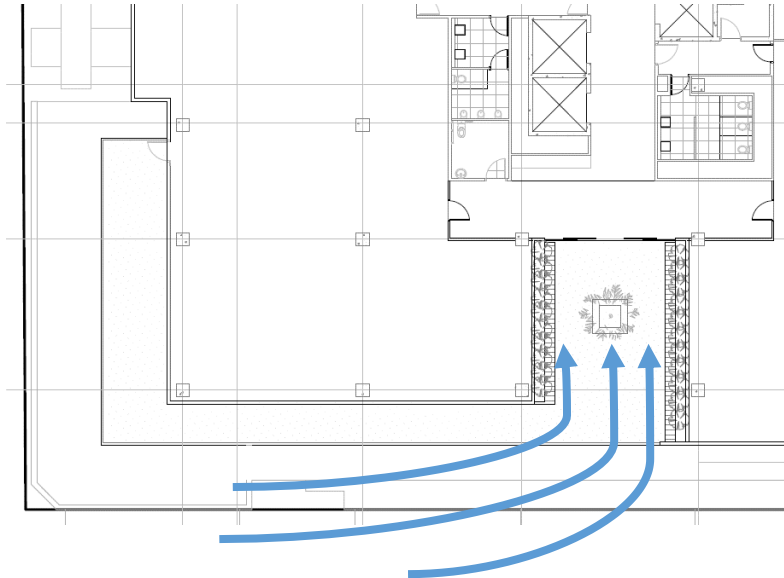


Figure 11: Wind flow (corner accelerations) on the Level 10 Sky Garden

Balconies and Terraces

Balcony and terrace areas located at the mid-section of a broad face are usually experience a low wind velocity when compared to areas located at the ends and corners of the building. Accelerated corner flows, standing vortices and high exposure to corner balconies often create a windy environment that may impede the overall use of the recreational area.

Although the proposed sky garden terrace will often be acceptable for outdoor recreation, conditions may occasionally exceed the criteria for human comfort during strong winds due to the height of the balconies to strong westerly winds. Thus, minimum heights for balcony balustrades have been recommended.

6. RECOMMENDATIONS

The following recommendations are made:

- **Canopy over Compton Street atrium**

It is recommended that the width of canopy over the atrium entrance be increased as much as possible to cover the extent of the entrance area on Compton Street, as illustrated in red in **Figure 12**

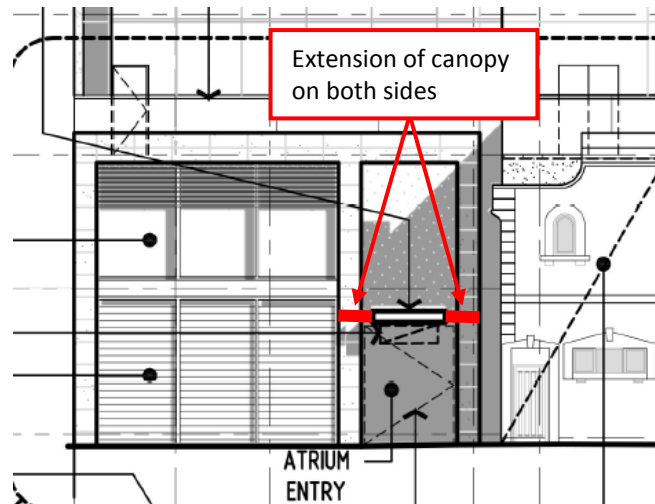


Figure 12: Recommended increase to atrium canopy

- **Balustrade heights on level 2 terrace**

A balustrade **with minimum height of 1.6m** is proposed around the perimeter of the **level 2** terrace area, which we considered sufficient to ameliorate any discomfort generated by direct exposure to horizontal wind and therefore, the wind velocity is expected to be within the recommended criterion for walking.

- **Balustrade heights on levels 7 and 13 terraces**

It is recommended that a minimum balustrade height of 1.6m be implemented on the south western terraces on level 7 and 13.

- **Vegetation on the level 10 Sky Garden**

It is recommended that vegetation is used to reduce the impact of wind discomfort caused by direct exposure to horizontal winds, as highlighted in green **Figure 13**. Relatively dense and closely spaced vegetation, such as hedges or shrubs, of approximately 1.6m height from floor level, are recommended to effectively decrease wind flows around pedestrian level. Alternatively, an airlock should be considered.

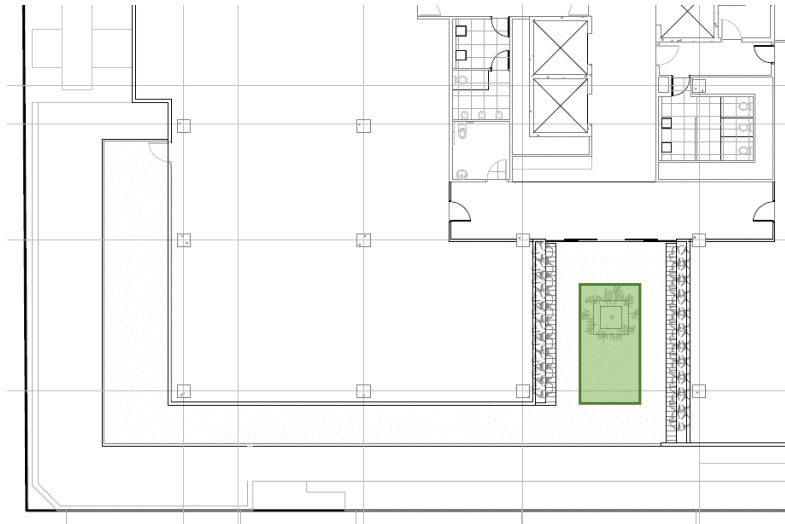


Figure 13: Recommended location of vegetation on the level 10 Sky Garden

- ***Penthouse Balconies***

GWTS recommend that a minimum balustrade height of 1.2m be implemented on the penthouse balconies. It is also recommended that safety and precaution is taken by the building occupants to securely fix lightweight items on balconies. During high wind events, the balconies are at potential risk of the removal of lightweight items from these areas of the proposed development.

7. CONCLUSIONS

GWTS has carefully evaluated the wind environment around the proposed building by considering the form and exposure of the proposed development, the nearby existing developments, the local wind climate and the proposed use of ground level areas in and adjacent to the proposed development. Based on our experience and empirical relations for wind speed at a ground level and the above consideration, expected wind speeds around the proposed building have been predicted and then compared in relation to widely used and accepted criteria for comfort and safety.

This study concludes that:

- Some localized increases in the ground level wind conditions may occur.
- Exceedances of the recommended criteria are predicted to approach the limit for the recommended criteria and some recommendations have been made.

The following recommendations were made:

- Increase in canopy width above Compton Street atrium entrance
- Minimum balustrade heights of 1.6m on the level 2 terrace
- Minimum balustrade heights of 1.6m on level 7, 10 and 13 terraces
- The use of vegetation on the level 10 Sky Garden to a height of 1.6m
- Precaution to securely fix or remove lightweight items on balconies and external decks during high wind events.







Please note that this is an opinion statement and is not based on wind tunnel testing.

8. REFERENCES

- [1]. Australian Standard 1170.2:1989, Wind actions
- [2]. Melbourne, W. H., "Criteria for Environmental Wind Conditions", Jour. Industrial Aerodynamics, Vol. 3, 241-249, 1978
- [3]. Australian Wind Engineering Society, "Cladding Pressure and Environmental Wind Studies" Quality Assurance Manual, 1994
- [4]. AS/NZS 1170.2 Supplement 1: 2011
- [5]. Aynsley R, Melbourne W, Viclery B, *Architectural Aerodynamics*, Applied Science Publishers
- [6]. Australasian Wind Engineering Society, *Guidelines for Pedestrian Wind Effects Criteria*, <http://www.awes.org/archives/news/pedestrian-wind-effects-criteria/3>
- [7]. Jones I. G, Maloney D, Richardson H. W, Leaky Buildings: Experiences from full-scale measurements; methods of description, AWES10 Workshop
- [8]. Jo J. H, Yeo M. S, Kim K. W (2007) Effect of Building Design on Pressure-related Problems in High-rise Residential Buildings, ARCC Soring Research Conference, Eugene, Oregon, April 16-18

9. APPENDIX

9.1. DRAWINGS

 SD02 - EXISTING SITE PLAN	8/09/2017 6:14 AM	Adobe Acrobat D...	1,106 KB
 SD04 - PLANS	8/09/2017 5:58 AM	Adobe Acrobat D...	12,627 KB
 SD08 - ELEVATIONS	8/09/2017 7:21 AM	Adobe Acrobat D...	10,723 KB
 SD09 - ELEVATIONS	13/09/2017 2:58 PM	Adobe Acrobat D...	9,691 KB
 SD18 - PERSPECTIVES	12/09/2017 12:12 ...	Adobe Acrobat D...	3,991 KB
 Xref - Wright st	15/09/2017 10:47 ...	DWG File	1,478 KB

22 September 2017

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

To Whom It May Concern,

DEVELOPMENT NUMBER: DA 020/A059/17
APPLICANT: Wright Developments SA Pty Ltd
NATURE OF DEVELOPMENT: 18 Multi Story Mixed Use Building
SUBJECT LAND: 76-88 Wright Street Adelaide SA 5000

The application has been assessed and at a height of RL 111.560m 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 21metres.

If the development is approved by the Department of Infrastructure and Regional Development 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

File No:
2014/11234/01

19 October 2017

Ref No:
12000142

Ben Scholes
Project Officer – CBD & Inner Metro Team
Strategic Development Assessment
Planning and Development
Department of Planning, Transport and Infrastructure
Level 5, 50 Flinders Street
Adelaide SA 5000

benjamin.scholes@sa.gov.au

For the attention of the State Commission Assessment Panel (SCAP)

74-88 Wright Street, Adelaide

Further to the referral (020/A059/17) received 20 September 2017 pertaining to the development application at the above address and in my capacity as a statutory referral in the State Commission Assessment Panel (SCAP), I am pleased to provide the final recommendations report from the Design Review process for your consideration.

The proposal was presented at two Design Review sessions, one Desktop Review session and three Design workshops, over which period the design response progressed. A pre-lodgement agreement was not reached in advance of lodgement.

The subject site is located on the northwest corner of Wright and Compton Streets. Wright Street is designated as a Local Street in the Adelaide City Council Design Manual, with a focus on its residential character and a complementary mix of amenities and retail to support this at the ground level, such as cafes and local services. The Manual seeks the local character to be reinforced and heritage materials to be cherished.

The site will be an amalgamation of several lots, with the western lots accessed from the rear right-of-way lane off Market Street. Once amalgamated, the site will be rectangular in shape with a total approximate land size of 1,450 square metres, and includes the Wright Street Hotel (old Queens Arms Hotel), a Local heritage place, on the southwest corner. The surrounding area is characterised by a mixture of one to three storey commercial and residential buildings, including a Local heritage place, Edmund Barton Chambers (72-74 Wright Street, Former Deaf and Dumb Mission) that directly adjoins the site's eastern boundary. A number of other Local heritage places are also located in the site's vicinity, including a former shop directly opposite Wright Street (89 Wright Street). Compton Street is a narrow one-way road with a one-way bike lane, connecting Gouger Street to the City's western precincts. To the northeast of the site, a 17 storey mixed use building, which includes residential apartments and hotel rooms, has been recently approved at 23-29 Market Street.

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File No:
2014/11234/01

Ref No:
12000142

The proposed height of the building is approximately 68 metres, which substantially exceeds the maximum envisaged height of 43 metres for the area. The proposed height is particularly challenging in this location due to the narrowness of Wright Street and the adjacency to the Local heritage places. However, I acknowledge that the building height has been reduced from the originally proposed 77 metres, and the project is seeking to satisfy the over height requirements as described in the Development Plan. My support for any building height beyond 43 metres, particularly in this locality with small scale existing built fabric, is contingent on the proposal achieving a high quality design outcome, particularly in terms of the scale, materiality, and contextual response to the Local heritage places, streetscape and the fine grain character of the area.

The proposed two storey podium form extends to all boundaries. I support the provision of 'shadowline' detailing to the interface to both the Wright Street Hotel and the Edmund Barton Chambers to create visual separation between the proposed built form and the heritage fabrics. I acknowledge the setbacks above the podium are proposed to address the scale and context of Wright and Compton Streets and the Local heritage places, and support the increased setback along the western boundary and the vertical separation between the Wright Street Hotel and the new built form above.

I commend the design team for the ambition of the project to maintain the Wright Street Hotel. While I acknowledge that the new roof terrace can offer additional activation to the streetscape, I am of the view that the hotel should remain as a three dimensional building including roof and chimneys. I recommend the proposal considers the heritage value of the roof and chimneys and retains the hotel's cultural and built value intrinsic to the corner pub idiom.

The architectural expression of the podium is masonry in character to respond to the solid characteristics of the adjoining Local heritage places. I support the vertical and horizontal articulations to reference the existing scale and proportions of the heritage fabric, such as windows, verandah and balcony. However I am yet to be convinced by the embossed '88' street number on the Wright Street frontage. In my opinion, the proposed signage is inconsistent with the design approach to sensibly regard the scale and fine grain character of the adjoining heritage buildings. I recommend the development of a signage strategy that are an integral part of the overall architectural expression.

The office floors above the podium are setback from Wright Street and Compton Street with the intent to mitigate building bulk and scale, and respond to the proportions of the Local heritage places. I support the provision of wrap-around balconies to the southwest and north east corners at mid-building levels to create three dimensional articulation, with the design intent to break down the overall built form and respond to the scale of the existing streetscape context. The three level tall 'sky garden' is provided on the Wright Street frontage on levels 10, 11 and 12 to offer a communal landscape space for the offices and further emphasise the sculptural modelling of the building, which I also support. The projection of the built elements at high level to provide further variation in facade depths is also supported. The proposed scale in the predominantly one to three storey context results in a high degree of visibility in 360 degrees. Therefore any development on this site must make a generous and positive contribution to the streetscape and city skyline on all elevations. While I support the general direction of the proposed architectural expression to

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create sculpturally modelled forms and the high quality pre-finished materials selected, my ongoing support is contingent on resolution of the design details to ensure the full delivery of the original design intent during the upcoming phases of design development.

Two penthouse apartments are proposed to the top two levels of the building. I support the proposed apartment configurations that afford functional and generous layouts. I also support the provision of outlook, access to natural light and ventilation to all habitable rooms.

The ground floor plan proposes active uses, including a publicly accessible courtyard that exposes the northern and eastern facades of the heritage hotel, which I support. I also support the provision of the atrium volume above extending over five levels. The proposal includes a new stair and lift to the rear of the Wright Street Hotel, providing connectivity from the courtyard space to the upper levels of the hotel and the office tenancies. In my view, visibility through the courtyard space and visibility of the heritage fabric is critical to the success of the public plaza space. As such, I support the provision of the glazed lift structure to the northeast corner of the hotel building. I recommend consideration of the detailing of the glazed lift during the next phase of the design development, including structural and services requirements and signage to ensure the design intent for allowing visibility of the heritage walls is realised. I also support the inclusion of the internal green walls, however I understand delivery and maintenance of specimens of the envisaged lush character is highly specialised and technical. I anticipate resolution of the green wall as design development progresses, cognisant of the ecologically sustainable development (ESD) ambitions of the project, particularly in regards to species selections, artificial lighting and maintenance.

Vehicular access is proposed from Wright Street, which I support given the location of the existing cross over on Wright Street and the need to prioritise pedestrian amenity on Market and Compton Streets. The crossover is widened with the intent to provide a consistent architectural expression to the podium facade and ensure sightlines to the pedestrians. The transformer is located on Market Street via the Compton Street frontage, and the refuse collection is proposed to occur on the rear lane. I acknowledge the technical requirements for providing services access on street frontages. I urge continuous engagement with the specialist consultants with the view to maximise the extent of high amenity active use interfaces to the streets.

An 'active chilled beam system' is proposed on office floors to minimise energy consumption. The use of a double glazing unit with an integrated shading system is also proposed to manage solar loads. I recommend the incorporation of the ESD principles, including optimising access to natural light and northern aspect and managing overshadowing, wind impacts and solar loads. The active engagement of a landscape architect is also recommended to ensure delivery of high quality landscape areas and 'green walls' that positively contribute towards the sustainability ambitions of the proposal.

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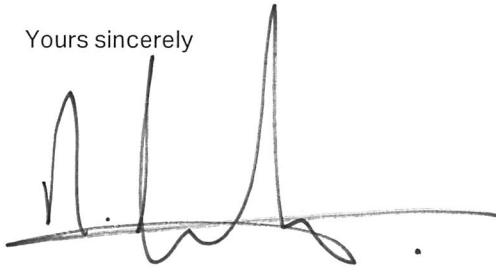
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2014/11234/01

Ref No:
12000142

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

- A high quality of external materials for building and landscaped areas supported by the provision of a materials sample board.
- Retention of the original roof form and chimneys of the Wright Street Hotel building.
- Review of the signage strategy.
- Further development of landscape areas and 'green walls' to ensure they can be sustained and maintained as envisaged.

Yours sincerely

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke at the end.

Nick Tridente
Associate Government Architect

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Scholes, Benjamin (DPTI)

From: Janaki Benson <J.Benson@cityofadelaide.com.au>
Sent: Monday, 30 October 2017 11:20 AM
To: Scholes, Benjamin (DPTI)
Subject: 020/A059/17 - Council comments

Dear Ben

020/A059/17 – 76-88 Wright Street, Adelaide

Please find Council's technical comments below:

Waste

- From review of the supporting documents, the proposed waste management plan is generally workable, however there are some considerations that need addressing:
 - As the proposed site is totally dependent on street parking controls for collection, this places the site at risk with any future changes to on street controls (for example, planning consent has been issued for 23 -29 Market Street, where on street waste collection will occur. From this process it was clear on street parking controls were not an ideal solution and there was strong reluctance in the area to change or decrease on street parking).
 - The proposed collections times and frequency will result in competing demand for on street collections.
 - In relation to the proposed retail tenancy, the proposed waste volumes (as a limit) are viewed as a constraint for flexible land use. For future proofing, it is suggest the waste generated by the retail tenancy be combined with the office's waste volumes (thus allowing for flexibility in the tenancy).

Traffic

- There are no traffic/transport related objections to this development, subject to the following matter/s being addressed:
 - 300mm clearance being available between the accessible car parking space and the stairwell wall.
 - Further information to be provided on traffic management system for single width driveway, including vehicle hold points and any signaling. The Traffic and Parking Assessment Report states that the car park would prioritise in-bound movements - however, the swept paths appear to preclude the ability for a hold point to be included.
 - SPAC should confirm why female end of trip facilities are smaller than the males.
 - Traffic control and line marking plans to provide delineation measures to guide drivers entering and leaving the ramp, particularly given that swept paths appear to show drivers needing to veer right before turning hard left to enter.
 - Traffic and parking signage and line marking to meet the requirements of AS2890.1-2004 and the AS1742 series as relevant.
 - Demonstrated ability to provide continuous accessible paths of travel between car park and lift given the limited manoeuvring space that appears available to wheelchair users between the car park and lift door.
 - Ramp grades at the ramp entry interface to comply with the requirements of AS/NZS2890.1-2004 as recommended by the Traffic and Parking Assessment Report.
 - Door operation along bicycle access areas should be made bicycle-friendly (no heavy swing doors, automated opening preferred).
 - The proposal does not satisfy CW PDC 242 "Facilities for the loading and unloading of courier, delivery and service vehicles and access for emergency vehicles should be provided on-site as appropriate to the size and nature of the development. Such facilities should be screened from public view and designed, where possible, so that vehicles may enter and leave in a forward direction." The development relies entirely on kerb-side parking to cater for all delivery and servicing needs. The City has been experiencing, with continuing development, several situations

where loading demands exceed the number of loading spaces that can be accommodated on-street. With increasing development, this situation is certainly not going to improve. A large site such as this should be seeking to internalise and therefore future-proof their proposed development against changes to kerb-side conditions and availability. The applicant should also be reminded of the following:

- Please note Council is not under any obligation to remove/alter parking that has been legally installed.
- Any changes to parking controls require public consultation prior to consideration for approval.
- The continuation of on-street parking at any location cannot be guaranteed into the future.
- All on-street parking is available to the public and cannot be reserved.
- Availability of on-street spaces cannot be guaranteed and indeed with increasing demands, may not always be available when required.

Encroachments

- The building canopies proposed over Council meet Council's current Encroachment Policy.

Street Trees

- It has been noted by the applicant that the intention is to retain the existing street trees to Wright Street. However, there may be pruning required to facilitate the new build/canopy. If pruning is needed, the applicant must contact Council's Senior Consultant – Parks Water & Environment- Kent William on 8203 7814 to discuss.

Although an assessment against the Development Plan is not required, Administration provides the following planning comments below:

Height

- At 68 metres, the development is significantly over the maximum building height of 43 metres prescribed by Capital City Zone 21. The Desired Character of the *Capital City Zone* seeks that development be 'contextual' in that it responds to its surrounding and carefully considers the adjacent built form. In this case, the subject site is directly adjacent the lower scale *Main Street (Adelaide) Zone*. *Capital City Zone* PDC 25 prescribes that development that exceeds the prescribed maximum building height that are directly adjacent the *Main Street (Adelaide) Zone* boundaries should be designed to maintain the established or desired future character of the area. While a podium is proposed, this does not meet the 3-6 metre upper level setback desired by Capital City Zone PDC 12. It is considered that the podium setback, together with its proposed height, will not assist with maintaining the more intimate pedestrian scale sought along Wright Street.
- It is noted that the development does not appear to meet the minimum criteria set by *Capital City Zone* PDC 21 to allow for the building to exceed the maximum building height of 43 metres. Even if this could be established a 58% increase above the maximum height is considered excessive and inconsistent with the desired height adjacent to the *Main Street (Adelaide) Zone*.

Local Heritage

- The proposed development is considered to significantly diminish the heritage value of the Local Heritage Place (Townscape) at 88 Wright Street and 34-40 Compton Street, Old Queens Arms Hotel, and is not supported for the reasons outlined below:
 - The heritage places impacted by the proposed development are 72 – 74 Wright Street, the former Deaf and Dumb Mission and 88 Wright Street, Old Queens Arms Hotel. Both are identified within the Adelaide (City) Development Plan as Local Heritage Places (Townscape).
 - The relevant Heritage and Conservation objectives and principles of the Development Plan are Objectives (Obj) 42, 43, 44 and Principles of Development Control (PDC) 136, 137, 138, 139, 140, 142. In addition, the Capital City Zone Desired Character and PDC 11 also apply.
 - The former Deaf and Dumb Mission site does not form part of this application. Consequently, it is considered that the adjacency provisions of the Development Plan have been reasonably addressed with respect to built form alignment/siting, podium height, tower setback and materiality.
 - A major intervention to the heritage listed fabric of the former hotel is proposed and this has been considered in greater detail.

- The drawing detail for the west and south facades of the former hotel, including the posts, cast iron lacework, quoins, balustrade, balcony roof and rendered profiles including the cornice, differ from the actual building detail. The assumption has been made that this is due to a graphic “short-cut” and does not reflect the actual intent for the façade. If it is the intent, this loss of original/early fabric and detailing is not supported and is contrary to Obj 43 and PDCs 138 & 139.
- The development seeks to demolish the full extent of the roof including 6 chimneys to achieve a proposed roof terrace, primarily based upon the argument that these elements are not visible from the street and demolition is therefore of minor consequence. Notwithstanding the fact that these elements are visible, as a site viewing will confirm, demolition of this building fabric is contrary to PDCs 136, 138 & 139.
- The Heritage Impact Assessment report (p18) agrees there is a loss of heritage value for the former hotel with respect to PDCs 136 & 138.
- The suggestion in the Heritage Impact Assessment report (p18) that “the application proposes to retain all of the heritage place, including eastern (side) and northern (rear) facades” is not supported by the drawings. The drawings do not provide this level of detail with respect to the east and north facades/elevations and the floor plans suggest otherwise. This is further questioned because of the detail shown in the Atrium 3D drawing (W076 SD17).
Furthermore, the continued reference to the retention of the hotel is not supported by the drawings. The construction of columns to support the tower within the hotel footprint would presumably necessitate the removal of the ground and first floors as is suggested by Section A-A and detail drawings which suggests a complete gutting of the interior of the building. Any retention therefore at best would result in a “heritage wallpaper” wrapping around Wright Street and Compton Street with effectively a new building behind. There would be no appreciable retention of the 3-dimensional hotel building as intended by the Development Plan and certainly no ability to interpret the nature of the building except for the facades fronting both streets.
- The references to the continued (hotel) use of the building are also not supported by the drawings. The hotel function may well continue, but it is not in the Old Queens Arms or Hotel Wright Street building; rather in a new building. As such Obj 44 and PDCs 137(a), 138 & 139 are not met – development will occur within the nominated 6 metre retention depth.
- The proposed development is considered incompatible with the retention of the heritage value of the Local Heritage Place, as required by the Development Plan, a view expressed by Council staff from the inception of this proposal. Under this proposal, the remnant portion of the former hotel will no longer be recognisable as a 19th century hotel type found in Adelaide and will be dominated by the height and minimal set-back of the new tower.
- Demolition of a substantial portion of the built form, both internally and externally negates any understanding of the form of development it currently represents (i.e. a corner hotel). The ability to understand the original form and extent of the hotel will be lost. It will retain no sense of historic integrity and context from the remnant portions of the heritage place, and is not considered to be a sensitive design response.
- The proposal will not retain the built form, heritage value or building fabric of the Local Heritage Place, the former Old Queens Arms Hotel.
- The following provisions of the Adelaide (City) Development Plan, underlined to highlight specific relevance to demolition of heritage fabric are also noted.

Council Wide Heritage and Conservation

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

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

137 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.

138 A local heritage place (as identified in Tables Adel/2, 3 or 4) or the Elements of Heritage Value (as identified in Table Adel/2) 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.

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, and 4 metres in the City Living Zone or the Adelaide Historic (Conservation) Zone or as otherwise indicated in the heritage Tables in respect of frontages and side wall returns.

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.

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.

Regards

Janaki Benson
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Think before you print!

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3 November 2017

State Commission Assessment Panel
Level 5, 50 Flinders Street,
ADELAIDE SA 5000

Attention: Ben Scholes

Dear Mr Scholes

Re: Response to ODASA and Council Referral Comments

MasterPlan has been instructed to prepare a response to the statutory referral comments received from the Associated Government Architect and the informal referral comments received from the Adelaide City Council.

ASSOCIATE GOVERNMENT ARCHITECT REFERRAL COMMENTS

We are in receipt of the referral comments from the Associate Government Architect dated 19 October 2017 and note that the final design lodged for approval is as a result of significant input from the Office of Design and Architecture throughout the pre-lodgement process.

We note that the Associated Government Architect is supportive of:

- the shadow line detailing to the interface of both the Wright Street Hotel and Edmund Barton Chambers;
- the setbacks above the podium to address the scale of Wright Street and Compton Street;
- the increased setback to the western boundary and the vertical separation of the new built form, above the Wright Street Hotel;
- the vertical and horizontal articulations referencing the existing scale and proportions of the heritage fabric;
- the wrap around balconies to the south-western and north-eastern corners of the mid-building levels;



- the sculptural modelling derived from the sky garden at Levels 10, 11 and 12;
- the projection of built elements and variation in façade depth at the upper levels;
- the general direction of the architectural expression and the high quality pre-finished materials selected;
- the apartment configuration of the penthouses including outlook, access to natural light and ventilation to all habitable rooms;
- the ground floor active uses and publicly accessible courtyard;
- the Atrium volume;
- the glazed lift structure to the heritage building;
- the inclusion of the internal green walls; and
- vehicle access from Wright Street.

The Associated Government Architect's (AGA) support for the height of the building is contingent on the height quality design outcomes referenced above.

While the AGA commends the design team for the ambition of the project team to maintain the Wright Street Hotel, he is of the opinion that the hotel's cultural and built value should retain the roof form and chimneys despite the acknowledgement that the new roof terrace offers additional activation to the streetscape.

Whilst we respect the alternate opinion expressed by the AGA in respect to the retention of the roof form and chimneys, the design team is firmly of the opinion that:

- the heritage value of the roof form and chimneys is limited;
- the building's chimneys and roof form are neither prominent nor significantly contribute towards the historic character of the locality¹;
- the roof form and chimneys as fabric, visible from the street within the micro-context of Compton Street and Wright Street is limited;

¹ Pg 8, Heritage Impact Assessment prepared by Jason Schulz DASH Architects dated 15 September 2017.



- the roof form and chimneys in the views of the northern façade and eastern facade are likely to be obscured by any development envisaged to be developed to the east or north of the existing building and accordingly are not considered to form part of the heritage value of the place, noting its status as a Local Heritage (Townscape) listed property, where the value of the heritage as defined by the Adelaide City Council “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”; and
- the positive contribution of the roof needs to be considered in the context of what is envisaged as an appropriate form of development adjacent the heritage place.

Accordingly, we submit that the heritage value of the hotel is not diminished by the demolition of the roof and chimneys but instead is enhanced through the proposed integration of the hotel’s clearly visible fabric within the Wright Street and Compton Street contexts, together with the expression of the Hotel’s eastern wall within a publicly accessible courtyard and the integration of the roof terrace at the podium level of the building.

The proponent acknowledges the other recommendations of the AGA and confirms acceptance of:

- a condition relating the materials and finishes of the building, and landscaping areas;
- the submission of an integrated signage strategy as a separate application; and
- a condition of consent relating to the provision of additional details on the design and maintenance of the “green walls”.

ADELAIDE CITY COUNCIL REFERRAL COMMENTS

We are in receipt of the informal referral comments provided by the Adelaide City Council and offer the following response under the respective headings of:

- Waste;
- Traffic;
- Encroachments;
- Street Trees;
- Height; and
- Local Heritage.



Waste

We note that the ACC confirm that the waste strategy is generally workable.

The proposed development does not seek to change the current on-street parking controls to facilitate waste collection. Waste Collection from Compton Street for the collection of the Hotel's waste can be accommodated within the existing on-street designated loading zones. The collection of the Office Building's waste from Market Street can be facilitated by the waste collection vehicle reversing into the existing 'Right of Way' to the north of the subject land.

The ground floor commercial tenancy's (not the Hotel) waste will be integrated with that of the office building waste volumes.

Traffic

We note that there are no traffic/transport related objections to this development subject to clarification of a couple of matters which we confirm below:

- a 300 millimetre clearance will be available between the accessible car park and the stairwell wall;
- we confirm acceptance of a condition of consent to provide additional details on the design and management of the traffic management system to control the one-way movement;
- the male and female 'End of Trip' facilities are the same as that for the males, with both including three shower cubicles and one toilet pan and locker facilities. The bike storage area while separated for layout purposes is open for use by both males and females;
- we confirm acceptance of conditions of consent relating to:
 - traffic control and line marking;
 - traffic and parking signage and line marking; and
 - ramp grade compliance with AS/NZ 2890.1-2004.
- door operation to the Bike Storage area will be bicycle friendly; and
- delivery and service vehicles are intended to service the building through the use of the existing on-street loading zones in Compton Street. We note that Compton Street has five, separate 10 minute loading zones on the western side of the street that are all capable of being used by delivery vehicles to service the proposed development. While the proposal does not provide off-street facilities for loading and unloading of delivery vehicles in accordance with PDC 242, we respectfully submit that the existing on-street loading zones provide sufficient capacity for the type and nature of the use of the building in that:



- the existing hotel use currently uses the on-street loading zones for services and deliveries and accordingly the continued use of the hotel will remain status quo; and
- the new office use will primarily be serviced by small vans and small rigid vehicles, that can readily be accommodate on street.

Encroachments

We note and acknowledge that the proposed development conforms to Council's current encroachment Policy and Operating Guidelines.

Street Trees

We note the requirement to contact Council's Senior Consultant – Parks Water and Environment in the event that pruning of the street tree is required.

Height

We note that Council is not required to, nor requested to, provide an assessment against the Development Plan in that the State Commission Assessment Panel is the relevant Authority for the assessment of the subject application.

Notwithstanding so, the administration has provided narrow commentary on the assessment of the application limited only to the overall building's height, which is inconsistent with their approach on the most recently approved development at 23-29 Market Street where the Council Administration refrained from making any assessment commentary on the building's height notwithstanding the building's height in respect to the narrowness and intimate setting of Market Street.

We refer to the Development Application Report and associated documentation accompanying the application which provides a holistic consideration of all the relevant development plan provisions in the assessment of the application.

Specifically, in response to Council Administration's comments, we refer to Sections 6.3.1 Building Height and 6.3.2 Building Setbacks.

The Development Plan does not differentiate between the over height provisions across different areas within the Capital City Zone. The site is not located adjacent the City Living Zone or the Adelaide Historic (Conservation) Zone where Zone PDC 22 expressly provides for a lesser building height to manage the interface with low rise residential development.

The proposed development fulfils the requirements of Zone PDC 21 to warrant exceeding the 43 metre height guideline and incorporates the specified sustainable design measures that must be included for a building to exceed the height guideline.



A detailed discussion on the merits of the height is contained on Pages 53 to 58 inclusive of the Development Application Report in justification of the proposed building's height and regard to the relevant provisions of the Development Plan for the Assessment of Building Height.

We also note that the Associate Government Architect's support for the proposed building's height is based on the high-quality design outcome of the building.

In respect to building setbacks above a podium level, we submit that the proposed development satisfies Zone Principle of Development Control 12 referred vaguely by the administration of requiring a "3.0-6.0 metre upper level setback", noting PDC 12 refers to 3.0-6.0 metres as a guide subject to an assessment of the qualitative principles sought to be achieved.

The proposed development as clearly documented on pages 59 and 60 of the Development Application Report provides a variety of setbacks to the levels of the building above the podium and illustrated on the proposal plans and elevations.

The setbacks range from 1.5 metre protruding elements in the Wright Street façade to 6.5 metres to the southern façade of the penthouses. The Podium is clearly defined by a 4.6 metres setback to Levels 2, 3 and 4 from Wright Street with the same 4.6 metre setback expressed in a vertical plane across the western portion of the southern façade. The eastern portion of the southern façade is setback at 3.0 metres from Wright Street.

The Podium along Compton Street is clearly expressed with a setback of Levels 2, 3 and 4 of 9.6 meters and 6.7 metres from the Street Alignment. The architectural expression of the building exhibits varying setbacks of the upper levels at a minimum of 3.5 metres to 9.5 metres from Compton Street.

This is reinforced by the Associate Government Architect who in his assessment states:

"I acknowledge that the setbacks above the podium are proposed to address the scale and context of Wright Street and Compton Streets and the local heritage places..."

"The office floors above the podium are setback from Wright Street and Compton Street with the intent to mitigate the building bulk and scale and respond to the proportions of the local heritage places."

Accordingly, we respectfully submit that the Adelaide City Council is incorrect in their assessment of the Zone Principle of Development Control as it applies to the proposed development, in that it does meet the upper level setbacks envisaged to meet the qualitative expression of the development plan provision.



Local Heritage

The Adelaide City Council's Local Heritage comments assert:

- the drawing details of the external appearance of the Hotel depict the removal of the original early detailing and fabric of the building;
- demolition of the roof and chimneys are a significant loss of the building's elements that contribute to the heritage value of the place;
- that the Heritage Impact Report prepared by Dash Architects agrees that there is a loss of heritage value;
- that the retention of the northern and eastern facades of the existing heritage building are not supported by the proposal's plans and elevations;
- that the retention of the Hotel is not supported by drawings with the necessitated removal of the ground and first floors and substantial loss of the internal fabric;
- that the continued use of the Hotel is not support by drawings;
- that the proposed development is dominated by the height and minimal setback of the new tower; and
- that the internal demolition of the of the building will negate the understanding of the original form of the building.

With due respect to the author of the Local Heritage Comments provided by the Adelaide City Council's Administration, the design team respectfully and fundamentally refutes the assertions that have been documented and offers the attached response prepared by Jason Schulz of DASH Architects to these matters.

In terms of the continued use of the Hotel, we are bemused by the assertion that the continued use is not supported by the drawings.

The building footprint, enveloped by the original eastern, western and southern external walls of the hotel Wright Street are clearly annotated as "Existing Hotel". The Ground, First and Second (Roof Terrace) floor levels are colour coded to identify the space on the proposal drawings.

Section 5.0 on page 27 of the Development Application Report clearly documents that;

"the retention and reuse of the original fabric of the Hotel Wright Street as a hotel at the ground and first floors with a roof terrace"

forms an integral part of the proposed development.



Section 5.1 of the development application clearly identifies the nature, purpose and extent of the proposed hotel land use.

The applicant has also retained the Hotel License under the Liquor Licensing Act for re-instatement within the redeveloped property.

Accordingly, we submit that the documentation submitted and forming part of the development application clearly illustrates the continued hotel land use as part of the application and that it is within the retained external walls of the original hotel building.

In addition, and for clarity, the following photographs and elevations of the existing eastern wall are provided.



Photo 1: Aerial Photo of Eastern Elevation



Photo 2: Northern Extent of Eastern Elevation 1st Floor



Photo 3: Southern Extent of Eastern Elevation 1st Floor



Photo 4: Internal View Ground Floor Eastern Wall to be Retained



Photo 5: Internal View Ground Floor Eastern Wall to be Retained



Photo 6: Internal View Ground Floor Eastern Wall (Existing Openings)

Please find **attached** a comparison drawing of the existing and proposed eastern elevation of the original Hotel Wright Street external wall to be retained, repaired and rejuvenated to expose the existing stonework.

If you have any queries regarding the content of our response, please contact me on 0413 832 603.

Yours sincerely

Greg Vincent
MasterPlan SA Pty Ltd

enc: Heritage Response to Council Feedback prepared by DASH Architects.
Existing and Proposed Eastern Elevation of the Original Hotel Wright Street to be retained.

cc: Mohyla Architects.
DASH Architects.

DASH (Danvers Schulz Holland) Architects was founded in 1964 and has since established itself as one of South Australia's leading practices in the provision of specialist heritage services.

DASH Architects has been at the forefront of the development of a sustainable paradigm for the conservation of cultural heritage within Australia. This approach is based on contemporary values and traditions, and recognises the importance of both tangible and intangible cultural significance within our community.

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Hotel Wright Street Redevelopment

Heritage Response to Council Feedback

DA163337 Issue –

03.11.17

1.0 Introduction

In September 2017 DASH Architects prepared a Heritage Impact Assessment for Wright Developments SA Pty Ltd on the proposed redevelopment of 76-88 Wright Street, Adelaide. The site contained the Local Heritage (Townscape) listed Hotel Wright Street (Old Queens Arms Hotel, 88 Wright Street).

The site immediately to the east of the proposed development contains the LHP(T) listed Former Deaf and Dumb Church and Institute (72-74 Wright Street), while the site opposite the Hotel Wright Street accommodates the LHP(T) listed Former Shop (89 Wright Street).

This application, and our accompanying Heritage Impact Assessment, was referred to the Adelaide City Council, who in turn provided feedback to the Department of Planning Transport and Infrastructure in an email from Janaki Benson (Senior Planner – Development Assessment) dated 30 October 2017.

This short report responds to the heritage issues raised by Council in that correspondence.

2.0 Heritage Response

Council's heritage advice states that the proposed development "*significantly diminishes the heritage value of the Local Heritage Place (Townscape) at 88 Wright Street*", and in turn is therefore not supported. It goes on to provide the following commentary / reasoning:

Council Comment

The drawing detail for the west and south facades of the former hotel, including the posts, cast iron lacework, quoins, balustrade, balcony roof and rendered profiles including the cornice, differ from the actual building detail. The assumption has been made that this is due to a graphic "short-cut" and does not reflect the actual intent for the façade. If it is the intent, this loss of original/early fabric and detailing is not supported and is contrary to Obj 43 and PDCs 138 & 139.

Response

The Design Team may wish to clarify this point, however drawing W076-SD08 shows the facades of the Hotel Wright Street at a scale of 1/200. At this scale the hotel is clearly drawn with reduced detail. As any works to the to the

posts, cast iron lacework, quoins, balustrade, balcony roof and rendered profiles including the cornice would constitute “Development” under the Act, and accordingly such works would need to be included in the application. For this reason, the only works to the east and west facades of the Local Heritage Place will be those noted on the application.

Accordingly, we consider the application to be consistent with the cited provisions.

Council Comment

The development seeks to demolish the full extent of the roof including 6 chimneys to achieve a proposed roof terrace, primarily based upon the argument that these elements are not visible from the street and demolition is therefore of minor consequence. Notwithstanding the fact that these elements are visible, as a site viewing will confirm, demolition of this building fabric is contrary to PDCs 136, 138 & 139.

The Heritage Impact Assessment report (p18) agrees there is a loss of heritage value for the former hotel with respect to PDCs 136 & 138.

Response

The Heritage Impact Assessment acknowledges that the chimney and roof of the Hotel Wright Street can be viewed from some vantage points within the streetscape. Importantly, however, the Assessment report also considers the contribution of these elements to the *townscape character of the local area*. This assessment is central to considering the extent of potential impacts to the heritage value of the place. Council’s own guidelines for Townscape places 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**.*¹[bolding by author for emphasis]

The Assessment report concluded:

The Hotel’s greatest contribution towards the townscape character of the area is when viewed within its Micro context (ie within the immediate vicinity of the building). Located on the corner of Wright and Compton Streets, the LHP(T) has a local visual prominence. Fabric visible from the street within this primary Micro context is limited to the western (Compton St) and southern (Wright St) building facades, and prominent Wright Street balcony.

While the Hotel’s eastern wall is currently partially visible from the street (upper portion), the Development Plan envisages the adjoining land to be redeveloped in such a manner as to conceal this façade. As a result I do not consider the current eastern façade, or views of the roof or chimneys from this side to form part of the heritage value of the place (refer Images 11 and 12...).

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

This is similarly the case for views of the roof and chimneys from the northern end of Compton Street, where envisaged development will readily conceal their view (refer Images 13 and 14...).

...LHP(T) places have been identified due to their positive contribution to the townscape character of the area. That is to say, their historic character is their heritage value.

The application does seek to demolish the existing roof and chimneys to enable the roof level to be integrated into the podium's roof terrace level. As noted, the Hotel Wright Street's greatest contribution towards the townscape character of the area is when viewed within its Micro context (ie within the immediate vicinity of the building). From these views the roof and chimneys are not visible (refer discussion Section 4.1). These features are visible from Middle Scale views..., however they are neither prominent, nor significantly contribute towards the overall historic character of the locality.

As the roof and chimneys make only a marginal contribution to the historic townscape character, I consider them to be of only marginal heritage value. On this basis their proposed removal presents only a minor shortfall against PDC 136 and 138. This shortfall, in my opinion, is more than offset however by the value-added retention of the eastern and northern facades, their setting of the place within the proposed Urban Plaza, and general overall restoration and refurbishment of the heritage place.

We contend that the assessment undertaken in DASH Architects report dated 15.09.17 was both thorough and considered. It carefully assessed the extent of character contribution of the affected elements, and in turn their relative heritage value. This assessment then informed the magnitude of any heritage impacts against the relevant provisions, which as noted was found to be “*only marginal*”.

DASH Architects' approach to considering the 'relative' heritage value when assessing potential heritage impacts, and in turn weighting of Development Plan provisions, is based on past Court judgments and legal advice. The Full Court of the Supreme Court (per the leading judgment of His Honour Justice Kourakis as he then was) in *Development Assessment Commission v A& V Contractors Pty Ltd* considered the matter of the demolition of a Local Heritage Place. In this judgement the following was noted:

It is well accepted that principles of development control are guidelines. An application for development must be assessed against those principles. On occasions, perhaps even commonly, developments will advance the objects of some parts of a development plan but be inconsistent with others. In that case, a planning judgment must be made as to the merits of the proposed development. Only if the development is seriously at variance with the Development Plan in the opinion of the planning authority is it necessary to refuse approval...

...the assessment of the planning merits of a development is assessed "by reference to the Plan" and not by a mechanical application of its express provisions. It cannot be expected that the express provisions will speak directly to every conceivable development. A development may merit approval on balance even if it is not expressly supported by a particular provision, whilst another, perhaps more exceptionally, may not warrant approval even if it is not inconsistent with any of the Development Plan's express provisions.

This trial (that DASH Architects provided expert witnessing services to) went on to consider the matter of the demolition of a Local Heritage place:

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.
[author's underlining].

This approach is central to that undertaken in our Heritage Impact Assessment, namely *the relative heritage importance is necessary to determine whether to depart from the principles that protect it*. In this instance the *relative heritage importance* of the roof and chimney were assessed as being low, and in turn the heritage impacts marginal.

This does not appear to be the approach undertaken in Council's response. No assessment of the relative heritage values of the roof and chimneys appears to have been undertaken. Further, Council's feedback appears to imply all impacts are equally unacceptable. We contend this is not an appropriate approach to heritage impact assessment.

Council Comment

The suggestion in the Heritage Impact Assessment report (p18) that "the application proposes to retain all of the heritage place, including eastern (side) and northern (rear) facades" is not supported by the drawings. The drawings do not provide this level of detail with respect to the east and north facades/elevations and the floor plans suggest otherwise. This is further questioned because of the detail shown in the Atrium 3D drawing (W076 SD17).

Response

Drawing W076 SD04 clearly identifies the extent of heritage building to be retained, both at ground and first floor level.

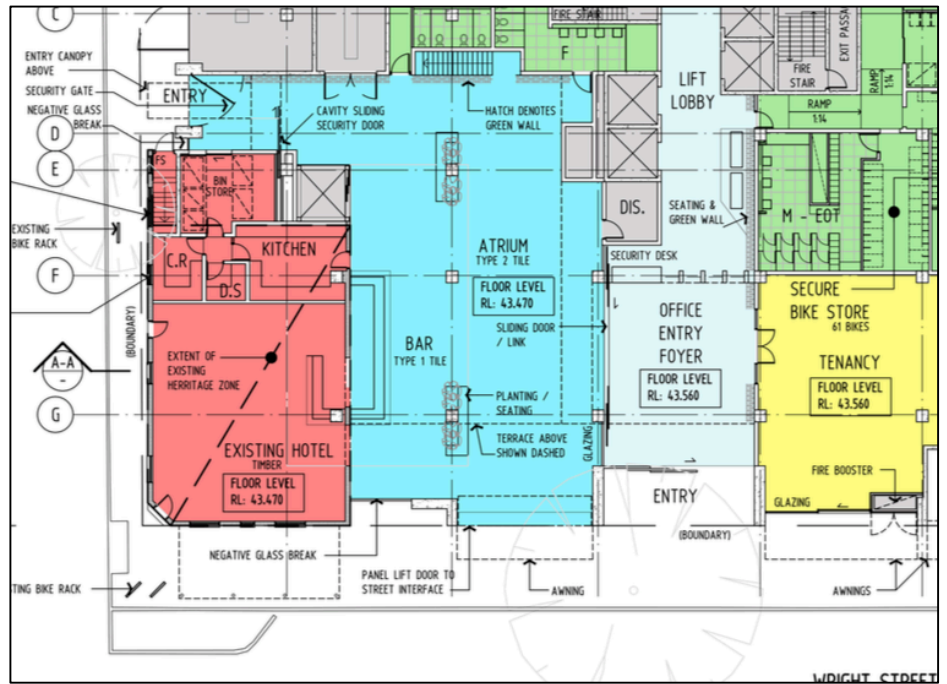


Image 1: "Existing Hotel" Ground Floor retention (part drawing W076 SD04)

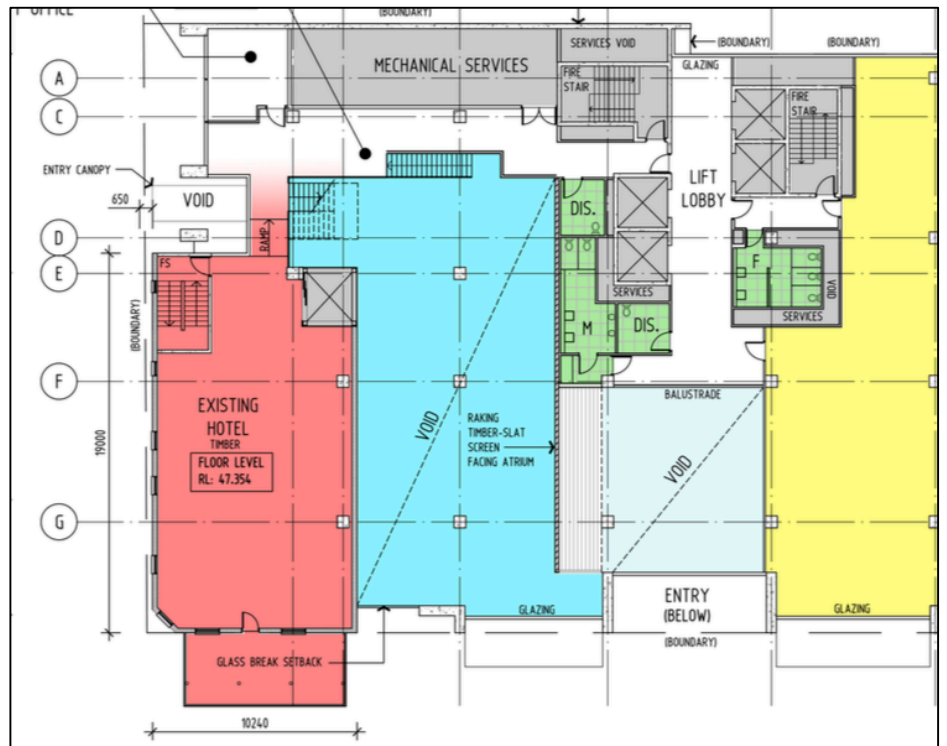


Image 2: "Existing Hotel" Level 1 Floor retention (part drawing W076 SD04)

What actually constitutes "all of the heritage place" is not clear, as Council's Development Plan envisages demolition of the place beyond a 6m retention depth. This intent of the comment cited by Council is that the proposal retains significantly more of the "heritage place" than envisaged by Council's

Development Plan, as indicated by the above extracts.

Council Comment

Furthermore, the continued reference to the retention of the hotel is not supported by the drawings. The construction of columns to support the tower within the hotel footprint would presumably necessitate the removal of the ground and first floors as is suggested by Section A-A and detail drawings which suggests a complete gutting of the interior of the building. Any retention therefore at best would result in a “heritage wallpaper” wrapping around Wright Street and Compton Street with effectively a new building behind. There would be no appreciable retention of the 3-dimensional hotel building as intended by the Development Plan and certainly no ability to interpret the nature of the building except for the facades fronting both streets.

Response

Interiors of Townscape places are not included in the extent of heritage listing, as defined by Council’s own guidelines (ref discussion pages 2 and 3 above). The above response’s reference to “heritage wallpaper” is, in many ways, that which is ironically sought by Council’s Development Plan, as the listing is limited to those elements that *contribute 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* (ref Council’s own guideline). Council state the intent of these provisions is to provide an *“appreciable retention of the 3-dimensional hotel building”*. This is simply not supported by any interpretation of the relevant Local Heritage (Townscape) provisions.

Furthermore, the large atrium, and retention of the overall form of the hotel will provide such an *appreciable retention of the 3-dimensional hotel building*, notwithstanding Council’s provisions do not specifically seek it.

Council Comment

The references to the continued (hotel) use of the building are also not supported by the drawings. The hotel function may well continue, but it is not in the Old Queens Arms or Hotel Wright Street building; rather in a new building. As such Obj 44 and PDCs 137(a), 138 & 139 are not met – development will occur within the nominated 6 metre retention depth.

The proposed development is considered incompatible with the retention of the heritage value of the Local Heritage Place, as required by the Development Plan, a view expressed by Council staff from the inception of this proposal. Under this proposal, the remnant portion of the former hotel will no longer be recognisable as a 19th century hotel type found in Adelaide and will be dominated by the height and minimal set-back of the new tower.

Response

It is unclear the issue Council is raising in this instance. The use of the building is not part of the heritage listing. The redevelopment will see the Hotel integrated and modernised as modern hotel operation as part of a large site redevelopment. This approach is entirely consistent with CW Obj 44 and PDC 137 that seeks the *continued use or adaptive reuse of the heritage place*.

Council goes on to discuss retention depths with regard to the adaptive reuse of the place. The reasoning behind this is unclear.

The matter of setback depths of the development over is discussed at length in the original Heritage Assessment Report, but also was the subject of significant interrogation by the ODASA Design Review process. As noted in Section 7.2.2 of our Heritage Impact Assessment, the proposal provides a greater than 6m retention depth to the heritage place at the lower levels (9.1m), and only a minor encroachment within this zone well above the heritage place. Such encroachments (above Level 5) are not considered to diminish the streetscape character contribution of the Local Heritage (Townscape) place, and therefore not be contrary to PDC 139.

Council Comment

Demolition of a substantial portion of the built form, both internally and externally negates any understanding of the form of development it currently represents (i.e. a corner hotel). The ability to understand the original form and extent of the hotel will be lost. It will retain no sense of historic integrity and context from the remnant portions of the heritage place, and is not considered to be a sensitive design response.

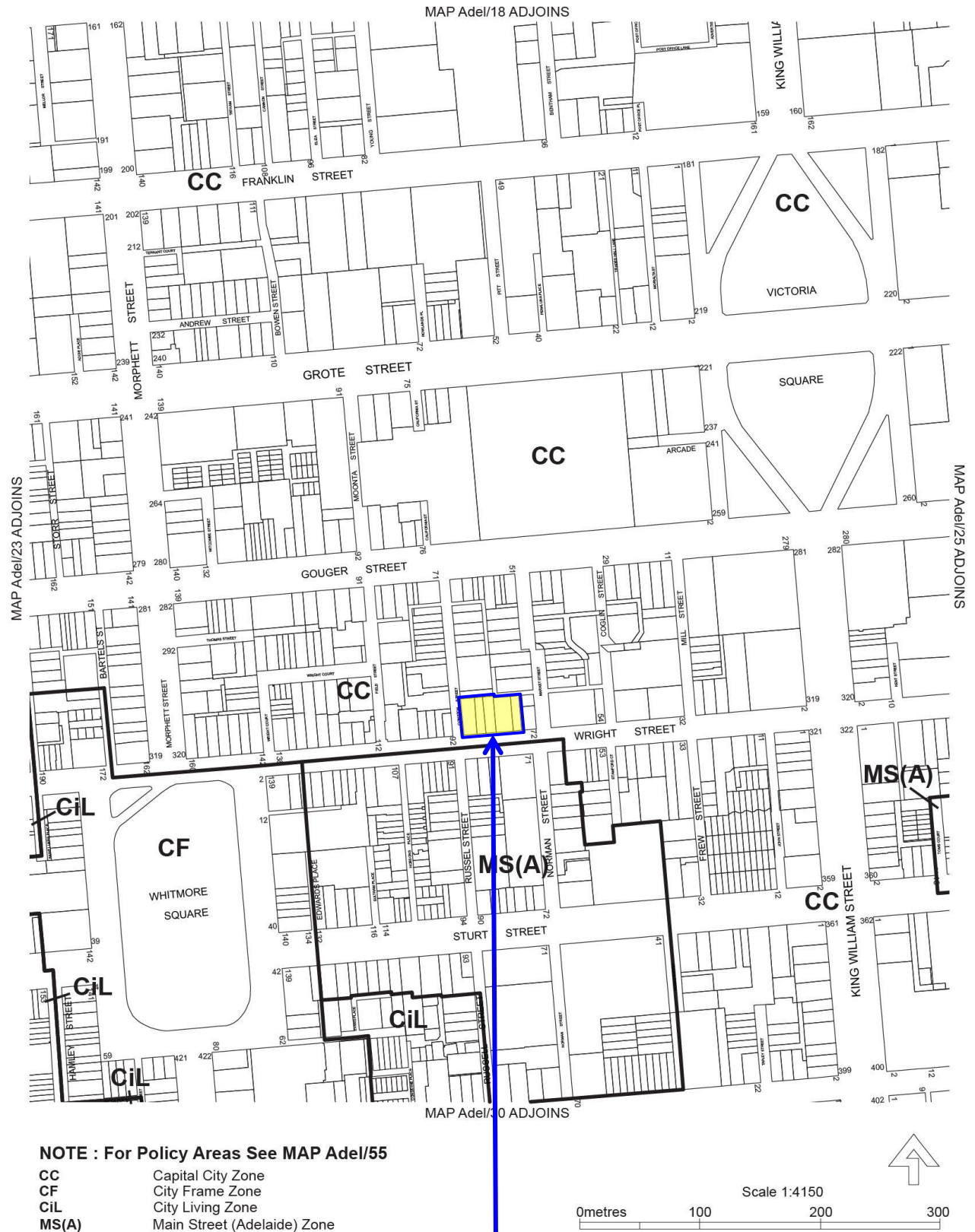
The proposal will not retain the built form, heritage value or building fabric of the Local Heritage Place, the former Old Queens Arms Hotel.

Response

As noted earlier, the extent of heritage listing of the Local Heritage (Townscape) place is limited to those elements 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*. It therefore does not extend to the building interiors, nor the building form beyond the cited retention depth (6m, PDC 139).

With the exception of the roof and chimneys (discussed above) the extent of proposed demolition not only retains all identified elements of heritage value, but considerably more (such as the eastern façade and overall building form within the atrium).

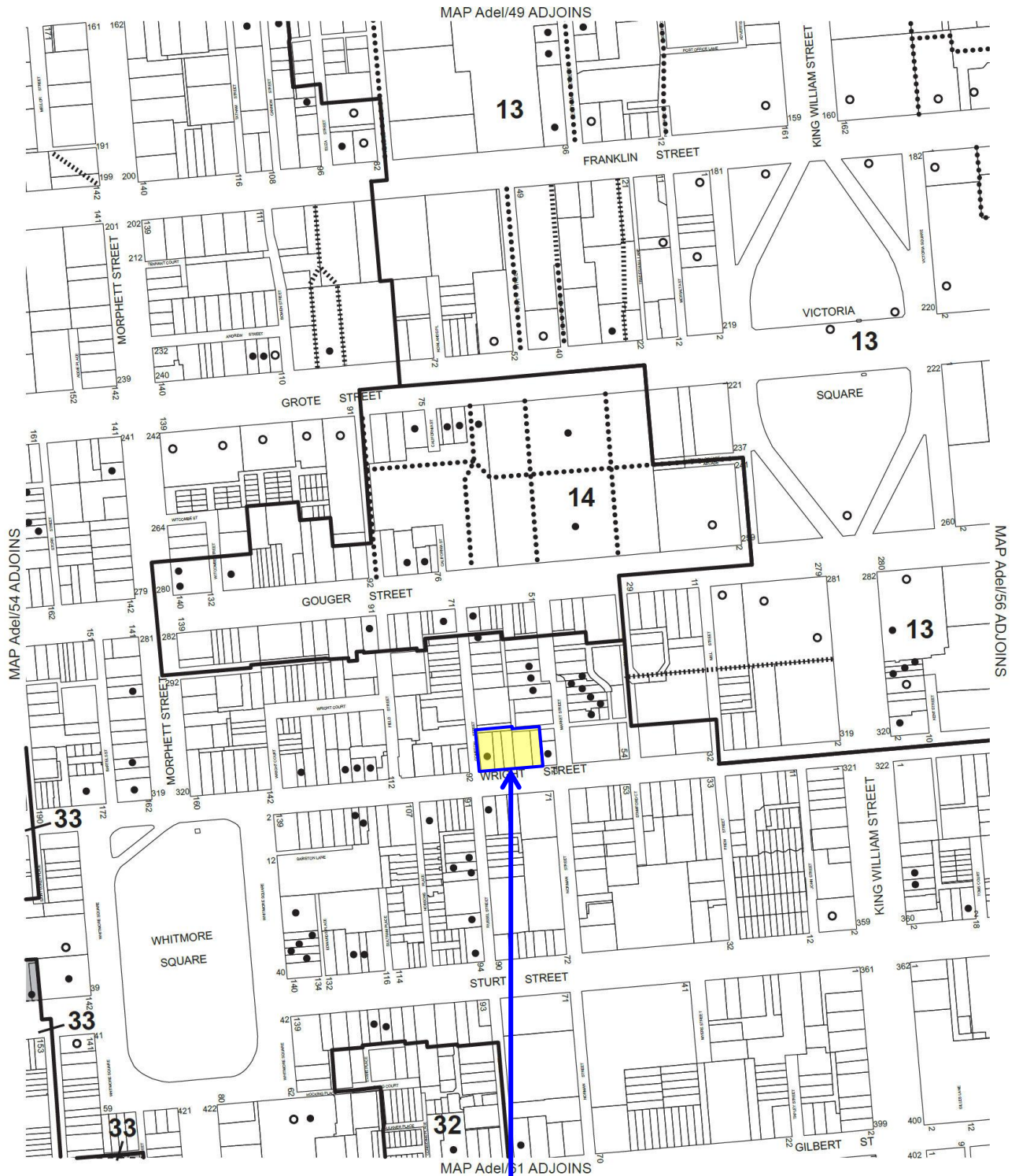
Council's comment does not appear to delineate between a Townscape listing, or the other multiple types of Local Heritage Listing within their Development Plan. To provide context to this, Obj 42 seeks development to retain the *heritage value* of a place. In this instance the *heritage value* is the historic character contribution of the building to the townscape. Works beyond the fabric visible from the Townscape by default, should not adversely affect this.



Subject Land

ADELAIDE (CITY) ZONES MAP Adel/24

Consolidated - 20 June 2017



Subject Land

- 13 Central Business Policy Area
- 14 Main Street Policy Area
- 32 South Central Policy Area
- 33 South West Policy Area
- State Heritage Place
- Local Heritage Place
- Policy Area Boundary
- ▨ Maximum height of 2 storeys

- Existing Pedestrian Link
- Proposed Pedestrian Link

Scale 1:4150
0metres 100 200 300



**ADELAIDE (CITY)
POLICY AREAS
MAP Adel/55**

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 set-backs.

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:
- (a) enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages;
 - (b) complement the surrounding built form in terms of height, massing and scale; and
 - (c) incorporate façade treatments along major street frontages that are sufficiently enclosed and detailed to complement neighbouring buildings consistent with the Desired Character of the locality.

Advertising

- 33** Other than signs along Hindley Street, advertisements should use simple graphics and be restrained in their size, design and colour.
- 34** In minor streets and laneways, a greater diversity of type, shape, numbers and design of advertisements are appropriate provided they are of a small-scale and located to present a consistent message band to pedestrians.
- 35** There should be an overall consistency achieved by advertisements along individual street frontages.
- 36** In Chesser Street, French Street and Coromandel Place advertisements should be small and preferably square and should not be located more than 3.7 metres above natural ground level or an abutting footpath or street. However, advertisements in these streets may be considered above 3.7 metres at locations near the intersections with major streets.
- 37** Advertisements on the Currie Street frontages between Topham Mall and Gilbert Place and its north-south prolongation should be of a size, shape and location complementary to the desired townscape character, with particular regard to the following:
- (a) On the southern side of Currie Street, advertisements should be fixed with their underside at a common height, except where the architectural detailing of building façades precludes it. At this 'canopy' level advertisements should be of a uniform size and fixed without the support of guy wires. Where architectural detailing permits, advertisements may mark the major entrances to buildings along the southern side of Currie Street with vertical projecting

advertisements 1.5 metres high by 1.2 metres wide at, or marginally above, the existing canopy level. Painted wall or window signs should be restrained.

- (b) On the northern side of Currie Street, advertisements should be of a uniform fixing height and consistent dimensions to match those prevailing in the area.

PROCEDURAL MATTERS

Complying Development

38 Complying developments are prescribed in Schedule 4 of the *Development Regulations 2008*.

In addition, the following forms of development are assigned as **complying**:

- (a) Other than in relation to a State heritage place, Local heritage place (City Significance), or Local heritage place, work undertaken within a building which does not involve a change of use or affect the external appearance of the building;
- (b) Temporary depot for Council for a period of no more than 3 months where it can be demonstrated that appropriate provision has been made for:
 - (i) dust control;
 - (ii) screening, including landscaping;
 - (iii) containment of litter and water; and
 - (iv) securing of the site.
- (c) Change in the use of land from a non-residential use to an office, shop or consulting room (excluding any retail showroom, adult entertainment premises, adult products and services premises or licensed premises).

Non-complying Development

39 The following kinds of development are **non-complying**:

A change in use of land to any of the following:

Amusement machine centre

Advertisements involving any of the following:

- (a) third party advertising except on Hindley Street, Rundle Mall or on allotments at the intersection of Rundle Street and Pulteney Street, or temporary advertisements on construction sites;
- (b) advertisements located at roof level where the sky or another building forms the background when viewed from ground level;
- (c) advertisements in the area bounded by West Terrace, Grote Street, Franklin Street and Gray Street;
- (d) animation of advertisements along and adjacent to the North Terrace, King William Street and Victoria Square frontages.

Total demolition of a State Heritage Place (as identified in [Table Adel/1](#)).

Vehicle parking except:

- (a) where it is ancillary to an approved or existing use;
- (b) it is a multi-level car park located outside the Core Pedestrian Area as indicated on [Map Adel/1 \(Overlay 2, 2A and 3\)](#); or

- (c) it is within an existing building located outside the Core Pedestrian Area as indicated on [Map Adel/1 \(Overlay 2, 2A and 3\)](#).

Public Notification

- 40** Categories of public notification are prescribed in Schedule 9 of the *Development Regulations 2008*.

In addition, the following forms of development, or any combination of (except where the development is non-complying), are assigned:

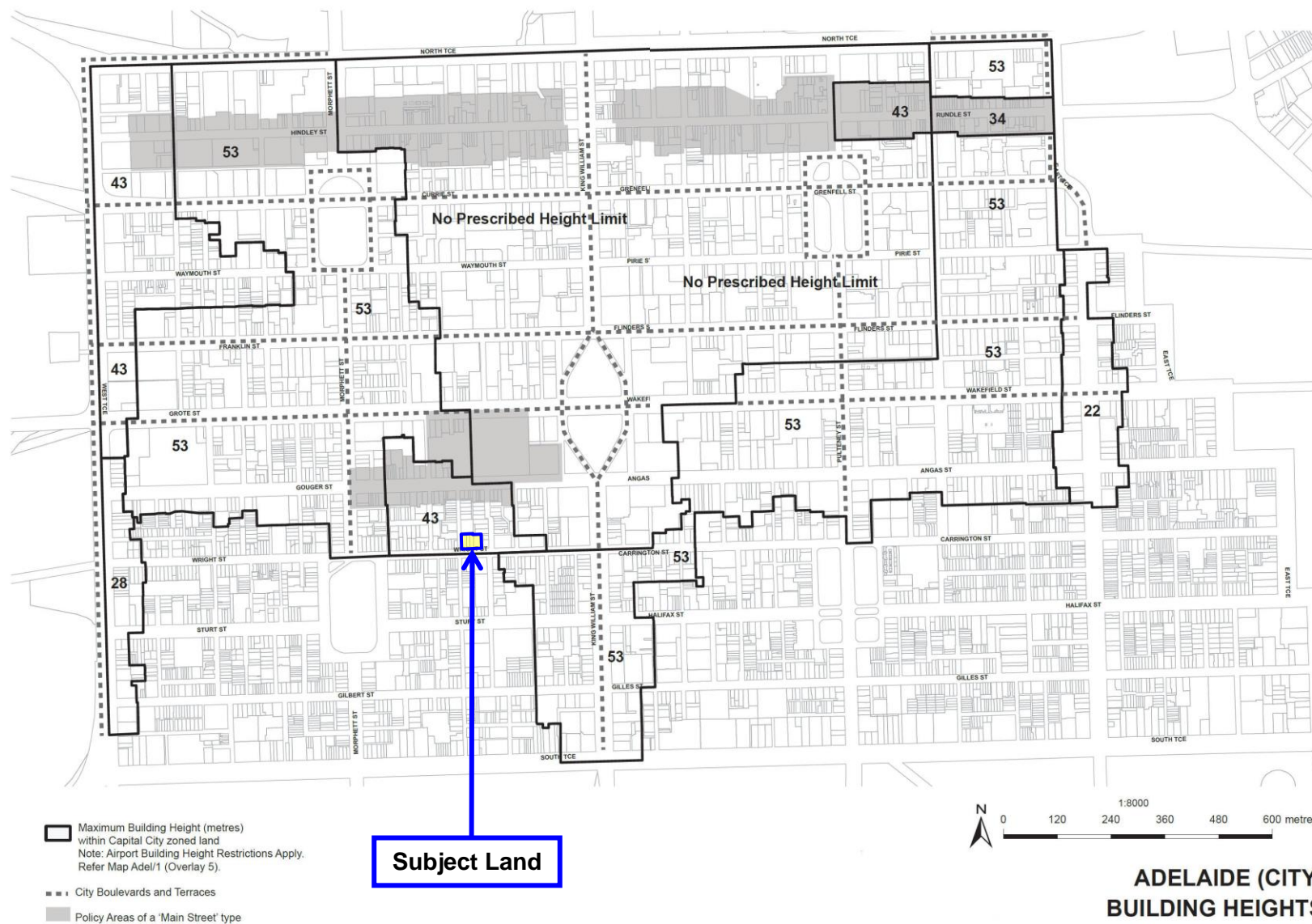
- (a) **Category 1**, public notification not required:

All forms of development other than where it is assigned Category 2.

- (b) **Category 2**, public notification required. Third parties do not have any appeal rights.

Any development where the site of the development is adjacent land to land in the City Living Zone or Adelaide Historic (Conservation) Zone and it exceeds 22 metres in building height.

Note: For Category 3 development, public notification is required. Third parties may make written representations, appear before the relevant authority on the matter, and may appeal against a development consent. This includes any development not classified as either Category 1 or Category 2.



ADELAIDE (CITY)
BUILDING HEIGHTS
Concept Plan Figure CC/1 & Figure CC/2

Consolidated - 30 May 2017

COUNCIL WIDE

City Living

Housing Choice

OBJECTIVES

- Objective 6:** A variety of housing options which supplement existing types of housing and suit the widely differing social, cultural and economic needs of all existing and future residents.

PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should comprise of a range of housing types, tenures and cost, to meet the widely differing social and economic needs of residents.

Medium to High Scale Residential/Serviced Apartment

OBJECTIVE

- Objective 22:** Medium to high scale residential (including student accommodation) or serviced apartment development that:

- (a) has a high standard of amenity and environmental performance;
- (b) comprises functional internal layouts;
- (c) is adaptable to meet a variety of accommodation and living needs; and
- (d) includes well-designed and functional recreation and storage areas.

PRINCIPLES OF DEVELOPMENT CONTROL

Building Entrances

- 2 Entrances to medium to high scale residential or serviced apartment development should:
 - (a) be oriented towards the street;
 - (b) be visible and easily identifiable from the street; and
 - (c) provide shelter, a sense of personal address and transitional space around the entry.
- 3 Entrances to individual dwellings or apartments within medium to high scale residential or serviced apartment development should:
 - (a) be located as close as practical to the lift and/or lobby access and minimise the need for long access corridors;
 - (b) be clearly identifiable; andavoid the creation of potential areas for entrapment.

Daylight, Sunlight and Ventilation

- 4 Medium to high scale residential or serviced apartment development should be designed to maximise opportunities to facilitate natural ventilation and capitalise on natural daylight and minimise the need for artificial lighting during daylight hours.

- 5 Medium to high scale residential or serviced apartment development should be designed and located to maximise solar access to dwellings and communal open space on the norther facade.
- 6 Ceiling heights that promote the use of taller windows, highlight windows, fan lights and light shelves should be utilised to facilitate access to natural light, improve daylight distribution and enhance air circulation, particularly in dwellings with limited light access and deep interiors.
- 7 The maximum distance of a habitable room such as a living, dining, bedroom or kitchen from a window providing natural light and ventilation to that room is 8 metres.

Private Open Space

- 8 Medium to high scale residential development and serviced apartments should provide the following private open space:
 - (a) studio (where there is no separate bedroom): no minimum requirement but some provision is desirable.
 - (b) 1 bedroom dwelling/apartment: 8 square metres.
 - (c) 2 bedroom dwelling/apartment: 11 square metres.
 - (d) 3+ bedroom dwelling/apartment: 15 square metres.

A lesser amount of private open space may be considered appropriate in circumstances where the equivalent amount of open space is provided in a communal open space accessible to all occupants of the development.

Private open space for 2 or more bedroom dwellings/apartments may be divided into different areas whilst private open space for studios or 1 bedroom dwelling/apartments should be in a single area.

Areas used for parking of motor vehicles are not included as private open space.

- 9 Balconies should be integrated into the overall architectural form and detail of the development and should:
 - (a) utilise sun screens, pergolas, shutters and openable walls to control sunlight and wind;
 - (b) be cantilevered, partially cantilevered and/or recessed in response to daylight, wind, acoustic and visual privacy;
 - (c) be of a depth that ensures sunlight can enter the dwelling below; and
 - (d) allow views and casual surveillance of the street while providing for safety and visual privacy.
- 10 The incorporation of roof top gardens is encouraged providing it does not result in unreasonable overlooking or loss of privacy.

Visual Privacy

- 11 Medium to high scale residential or serviced apartment development should be designed and sited to minimise the potential overlooking of habitable rooms such as bedrooms and living areas of adjacent development.
- 12 A habitable room window, balcony, roof garden, terrace or deck should be set-back from boundaries with adjacent sites at least three metres to provide an adequate level of amenity and privacy and to not restrict the reasonable development of adjacent sites.

Noise and Internal Layout

- 13** 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.

Minimum Unit Sizes

- 14** Medium to high scale residential or serviced apartment development should provide a high quality living environment by ensuring the following minimum internal floor areas:
- (a) studio (where there is no separate bedroom): 35 square metres.
 - (b) 1 bedroom dwelling/apartment: 50 square metres
 - (c) 2 bedroom dwelling/apartment: 65 square metres
 - (d) 3+ bedroom dwelling/apartment: 80 square metres plus an additional 15 square metres for every additional bedroom over 3 bedrooms.

Note: Dwelling/apartment "unit size" includes internal storage areas but does not include balconies or car parking as part of the calculation.

Outlook

- 15** All medium to high scale residential or serviced apartment development should be designed to ensure the living rooms have a satisfactory external outlook. Living rooms that do not have an outlook or the only source of outlook is through high level windows or a skylight are not considered to provide an appropriate level of amenity for the occupiers.

On-Site Parking and Fencing

OBJECTIVE

Objective 23: Safe and convenient on-site car parking for resident and visitor vehicles.

PRINCIPLES OF DEVELOPMENT CONTROL

- 16** To ensure an adequate provision of on-site parking, car parking should be provided for medium to high scale residential (other than student accommodation) or serviced apartment development in accordance with [Table Adel/7](#).
- 17** Garages and parking structures associated with medium to high scale residential or serviced apartment development should be located so that they do not visually dominate the street frontage.

Storage Areas

- 18** Site facilities should be readily accessible to each dwelling/serviced apartment, complement the development and relevant desired character and should include:
- (a) a common mail box structure located close to the main pedestrian entrance;
 - (b) areas for the storage and collection of goods, materials, refuse and waste including facilities to enable the separation of recyclable materials as appropriate to the size and nature of the development and screened from public view; and
 - (c) external clothes drying areas for residential dwellings that do not incorporate ground level open space.

- 19** Medium to high scale residential (other than student accommodation) or serviced apartment development should provide adequate and accessible storage facilities for the occupants at the following minimum rates:

- (a) studio: 6 cubic metres
- (b) 1 bedroom dwelling/apartment: 8 cubic metres
- (c) 2 bedroom dwelling/apartment: 10 cubic metres
- (d) 3+ bedroom dwelling/apartment: 12 cubic metres

50 percent of the storage space should be provided within the dwelling/apartment with the remainder provided in the basement or other communal areas.

Environmental

Crime Prevention Through Urban Design

OBJECTIVES

Objective 24: A safe and secure, crime resistant environment that:

- (a) ensures that land uses are integrated and designed to facilitate natural surveillance;
- (b) promotes building and site security; and
- (c) promotes visibility through the incorporation of clear lines of sight and appropriate lighting.

PRINCIPLES OF DEVELOPMENT CONTROL

- 20** 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.

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

Operating Hours and Associated Activities of Licensed Premises

OBJECTIVE

Objective 25: Operating hours of licensed premises or licensed entertainment premises, together with associated activities of such premises, established and operated so as to reinforce the desired character of the locality and appropriate behavioural activities.

PRINCIPLES OF DEVELOPMENT CONTROL

- 22** Licensed premises and licensed entertainment premises or similar should:
- (a) be located, designed and operated in order to reinforce the desired character of a locality, as expressed in the relevant Zone or Policy Area;
 - (b) be located, designed and operated so as to not negatively impact on peoples orderly use and enjoyment of a locality, such as through disorderly behavioural activities and/or disorderly behavioural movement to and from such land uses; and
 - (c) incorporate best practice measures to effectively manage the behaviour of users moving to and from such land uses.
- 23** Licensed premises and licensed entertainment premises or similar should operate with operating hours to reinforce the desired character of the locality.

Noise Emissions

OBJECTIVES

Objective 26: Development that does not unreasonably interfere with the desired character of the locality by generating unduly annoying or disturbing noise.

Objective 27: Noise sensitive development designed to protect its occupants from existing noise sources and from noise sources contemplated within the relevant Zone or Policy Area and that does not unreasonably interfere with the operation of non-residential uses contemplated within the relevant Zone or Policy Area.

PRINCIPLES OF DEVELOPMENT CONTROL

Noise Sources

- 24** Development with potential to emit significant noise (including licensed entertainment premises and licensed premises) should incorporate appropriate noise attenuation measures in to their design to prevent noise from causing unreasonable interference with the amenity and desired character of the locality, as contemplated in the relevant Zone and Policy Area.
- 25** Development of licensed premises or licensed entertainment premises or similar in or adjacent to a City Living Zone, the Adelaide Historic (Conservation) Zone or the North Adelaide Historic (Conservation) Zone should include noise attenuation measures to achieve the following when assessed at the nearest existing or envisaged future noise sensitive development:
- (a) the music noise ($L_{10, 15 \text{ min}}$) is:
 - (i) less than 8 dB above the level of background noise₂ ($L_{90, 15 \text{ min}}$) in any octave band of the sound spectrum; and

- (ii) less than 5 dB(A) above the level of background noise ($L_{A\ 90,15\ min}$) for the overall (sum of all octave bands) A-weighted level.
- 26** Mechanical plant or equipment should be designed, sited and screened to minimise noise impact on adjacent premises or properties. The noise level associated with the combined operation of plant and equipment such as air conditioning, ventilation and refrigeration systems when assessed at the nearest existing or envisaged noise sensitive location in or adjacent to the site should not exceed
 - (a) 55 dB(A) during daytime (7.00am to 10.00pm) and 45 dB(A) during night time (10.00pm to 7.00am) when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.
 - (b) 50 dB(A) during daytime (7.00am to 10.00pm) and 40 dB(A) during night time (10.00pm to 7.00am) in or adjacent to a City Living Zone, the Adelaide Historic (Conservation) Zone, the North Adelaide Historic (Conservation) Zone or the Park Lands Zone when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.
- 27** To ensure minimal disturbance to residents:
 - (a) ancillary activities such as deliveries, collection, movement of private waste bins, goods, empty bottles and the like should not occur:
 - (i) after 10.00pm; and
 - (ii) before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday.
 - (b) typical activity within any car park area including vehicles being started, doors closing and vehicles moving away from the premises should not result in sleep disturbance when proposed for use after 10.00pm as defined by the limits recommended by the World Health Organisation.

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

- 28** A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new development.
- 29** 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.
- 30** 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.

Energy Efficiency

OBJECTIVE

Objective 30: Development which is compatible with the long term sustainability of the environment, minimises consumption of non-renewable resources and utilises alternative energy generation systems.

PRINCIPLES OF DEVELOPMENT CONTROL

All Development

- 31** 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.
- 32** All development should be designed to promote naturally ventilated and day lit buildings to minimise the need for mechanical ventilation and lighting systems.
- 33** Energy reductions should, where possible, be achieved by the following:
 - (a) appropriate orientation of the building by:
 - (i) maximising north/south facing facades;
 - (ii) designing and locating the building so the north facade receives good direct solar radiation;

* Minor additions have a floor area less than 50 percent of the existing dwelling and do not include a day living area.

- (iii) minimising east/west facades to protect the building from summer sun and winter winds;
 - (iv) narrow floor plates to maximise the amount of floor area receiving good daylight; and/or
 - (v) minimising the ratio of wall surface to floor area.
 - (b) window orientation and shading;
 - (c) adequate thermal mass including night time purging to cool thermal mass;
 - (d) appropriate insulation by:
 - (i) insulating windows, walls, floors and roofs; and
 - (ii) sealing of external openings to minimise infiltration.
 - (e) maximising natural ventilation including the provision of openable windows;
 - (f) appropriate selection of materials, colours and finishes; and
 - (g) introduction of efficient energy use technologies such as geo-exchange and embedded, distributed energy generation systems such as cogeneration*, wind power, fuel cells and solar photovoltaic panels that supplement the energy needs of the building and in some cases, export surplus energy to the electricity grid.
- 34** Buildings, where practical, should be refurbished, adapted and reused to ensure an efficient use of resources.
- 35** New buildings should be readily adaptable to future alternative uses.
- 36** Selection of internal materials for all buildings should be made with regard to internal air quality and ensure low toxic emissions, particularly with respect to paint and joinery products.

Office Development

- 37** The following principles of sustainable design and construction are required for new office development, and additions and refurbishments to existing office development, to minimise energy consumption and limit greenhouse gas emissions:
- (a) passive solar consideration in the design, planning and placement of buildings;
 - (b) re-using and/or improving existing structures or buildings;
 - (c) designing for the life-cycle of the development to allow for future adaptation;
 - (d) considering low levels of embodied energy in the selection and use of materials;
 - (e) developing energy efficiency solutions including passive designs using natural light, solar control, air movement and thermal mass. Systems should be zoned to minimise use of energy;
 - (f) using low carbon and renewable energy sources, such as Combined Heat and Power (CHP) systems and photovoltaics; and
 - (g) preserving and enhancing local biodiversity, such as by incorporating roof top gardens.

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

- 38** 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.
- 39** 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.
- 40** Glazing on building facades should not result in glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles.
- 41** 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.
- 42** Weather protection should not be introduced where it would interfere with the integrity or heritage value of heritage places or unduly affect street trees.
- 43** Development that is over 21 metres in building height and is to be built at or on the street frontage should minimise wind tunnel effect.

Stormwater Management

OBJECTIVES

Objective 35: Development which maximises the use of stormwater.

Objective 36: Development designed and located to protect stormwater from pollution sources.

Surface water (inland, marine, estuarine) and ground water has the potential to be detrimentally affected by water run-off from development containing solid and liquid wastes. Minimising and possibly eliminating sources of pollution will reduce the potential for degrading water quality and enable increased use of stormwater for a range of applications with environmental, economic and social benefits.

PRINCIPLES OF DEVELOPMENT CONTROL

- 44** Development of stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.
- 45** Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site.

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

- 46** Development of a heritage place should conserve the elements of heritage value as identified in the relevant Tables.
- 47** 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.
- 48** A local heritage place (as identified in [Tables Adel/2, 3 or 4](#)) or the Elements of Heritage Value (as identified in [Table Adel/2](#)) 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.
- 49** 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, and 4 metres in the City Living Zone or the Adelaide Historic (Conservation) Zone or as otherwise indicated in the heritage Tables in respect of frontages and side wall returns.
- 50** 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.

- 51** 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.

PRINCIPLES OF DEVELOPMENT CONTROL

- 52** Where development significantly exceeds quantitative policy provisions, it should demonstrate a significantly higher standard of design outcome in relation to qualitative policy provisions including pedestrian and cyclist amenity, activation, sustainability and public realm and streetscape contribution.

Height, Bulk and Scale

PRINCIPLES OF DEVELOPMENT CONTROL

- 53** 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.

- 54** 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 \(Overlay 1\)](#).
- 55** 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.
- 56** Where possible, large sites should incorporate pedestrian links and combine them with publicly accessible open space.
- 57** Buildings and structures should not adversely affect by way of their height and location the long-term operational, safety and commercial requirements of Adelaide International Airport. Buildings and structures which exceed the heights shown in [Map Adel/1 \(Overlay 5\)](#) and which penetrate the Obstacle Limitation Surfaces (OLS) should be designed, marked or lit to ensure the safe operation of aircraft within the airspace around the Adelaide International Airport.

Landscaped Open Space

- 58** Landscaped open space should be provided on the site of a development to at least the extent specified in the Principles of Development Control for the relevant Zone or Policy Area for siting, amenity and screening purposes. Where the existing amount of landscaped open space provided is less than the amount specified in the relevant Zone or Policy Area, development should not further reduce this amount. Where landscaped open space is not required, the provision of landscaped pedestrian spaces, planter boxes and in-ground planting is appropriate.

Building Set-backs

- 59** In the City Living Zone, the Adelaide Historic (Conservation) Zone and the North Adelaide Historic (Conservation) Zone, buildings should maintain the prevailing set-back established by adjoining buildings, provided the resultant character reinforces the desired character for the locality.
- 60** Buildings within the Capital City Zone should be built to the street edge to reinforce the grid pattern, create a continuity of frontage and provide definition and enclosure to the public realm whilst contributing to the interest, vitality and security of the pedestrian environment.

Composition and Proportion

- 61** Development should respect the composition and proportion of architectural elements of building facades that form an important pattern which contributes to the streetscape's distinctive character in a manner consistent with the desired character of a locality by:

- (a) establishing visual links with neighbouring buildings by reflecting and reinforcing the prevailing pattern of visual sub-division in building facades where a pattern of vertical and/or horizontal sub-divisions is evident and desirable, for example, there may be strong horizontal lines of verandahs, masonry courses, podia or openings, or there may be vertical proportions in the divisions of facades or windows; and
 - (b) clearly defining ground, middle and roof top levels.
- 62** Where there is little or no established building pattern, new buildings should create new features which contribute to an areas desired character and the way the urban environment is understood by:
- (a) frontages creating clearly defined edges;
 - (b) generating new compositions and points of interest;
 - (c) introducing elements for future neighbouring buildings; and
 - (d) emphasising the importance of the building according to the street hierarchy.

Articulation and Modelling

- 63** Building facades fronting street frontages, access ways, driveways or public spaces should be composed with an appropriate scale, rhythm and proportion which responds to the use of the building, the desired character of the locality and the modelling and proportions of adjacent buildings.
- 64** Balconies should be designed to give shelter to the street or public space at first floor levels.
- 65** Balconies should:
- (a) respond to the street context and building orientation; and
 - (b) incorporate balustrade detailing to reflect the balcony type and location and the materials and detail of the building facade.
- 66** No part of any fully enclosed building should extend over property boundaries, including streets and public spaces, whether above a balcony at a lower level or not.

Materials, Colours and Finishes

- 67** The design, external materials, colours and finishes of buildings should have regard to their surrounding townscape context, built form and public environment, consistent with the desired character of the relevant Zone and Policy Area.
- 68** Development should be finished with materials that are sympathetic to the design and setting of the new building and which incorporate recycled or low embodied energy materials. The form, colour, texture and quality of materials should be of high quality, durable and contribute to the desired character of the locality. Materials, colours and finishes should not necessarily imitate materials and colours of an existing streetscape
- 69** Materials and finishes that are easily maintained and do not readily stain, discolour or deteriorate should be utilised.
- 70** Development should avoid the use of large expanses of highly reflective materials and large areas of monotonous, sheer materials (such as polished granite and curtained wall glazing).

Corner Sites

- 71** New development on major corner sites should define and reinforce the townscape importance of these sites with appropriately scaled buildings that:

- (a) establish an architectural form on the corner;
- (b) abut the street frontage; and
- (c) address all street frontages.

Sky and Roof Lines

OBJECTIVE

Objective 49: Innovative and interesting skylines which contribute to the overall design and performance of the building.

PRINCIPLES OF DEVELOPMENT CONTROL

- 72** Where a prevailing pattern of roof form assists in establishing the desired character of the locality, new roof forms should be complementary to the shape, pitch, angle and materials of adjacent building roofs.
- 73** Buildings should be designed to incorporate well designed roof tops that:
 - (a) reinforce the desired character of the locality, as expressed in the relevant Zone or Policy Area;
 - (b) enhance the skyline and local views;
 - (c) contribute to the architectural quality of the building;
 - (d) provide a compositional relationship between the upper-most levels and the lower portions of the building;
 - (e) provide an expression of identity;
 - (f) articulate the roof, breaking down its massing on large buildings to minimise apparent bulk;
 - (g) respond to the orientation of the site; and
 - (h) create minimal glare.

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

- 74** 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.
- 75** 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.

Landscaping

OBJECTIVE

Objective 55: Water conserving landscaping that enhances the local landscape character and creates a pleasant, safe and attractive living environment.

PRINCIPLES OF DEVELOPMENT CONTROL

- 76** Landscaping should:
 - (a) be selected and designed for water conservation;
 - (b) form an integral part of the design of development; and
 - (c) be used to foster human scale, define spaces, reinforce paths and edges, screen utility areas and enhance the visual amenity of the area.
- 77** Landscaping should incorporate local indigenous species suited to the site and development, provided such landscaping is consistent with the desired character of the locality and any heritage place.
- 78** Landscaping should be provided to all areas of communal space, driveways and shared car parking areas.

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

- 79** Development should provide safe, convenient and comfortable access and movement.
- 80** Vehicle access points along primary and secondary city access roads and local connector roads, as shown on [Map Adel/1 \(Overlay 1\)](#) should be restricted.

Pedestrian Access

OBJECTIVES

Objective 61: Development that promotes the comfort, enjoyment and security of pedestrians by providing shelter and reducing conflict with motor vehicles.

Objective 62: Development that contributes to the quality of the public realm as a safe, secure and attractive environment for pedestrian movement and social interaction.

Objective 63: Safe and convenient design of and access to buildings and public spaces, particularly for people with disabilities.

PRINCIPLES OF DEVELOPMENT CONTROL

- 81** Development should reflect the significance of the paths and increase the permeability of the pedestrian network identified within [Map Adel/1 \(Overlay 2\)](#) by ensuring:
 - (a) pedestrians are not disrupted or inconvenienced by badly designed or located vehicle access ramps in footpaths or streets; and
 - (b) vehicle and service entry points are kept to a minimum to avoid adverse impact on pedestrian amenity.
- 82** Within the Core, Primary and Secondary Pedestrian Areas identified within [Map Adel/1 \(Overlays 2, 2A and 3\)](#), development should be designed to support the establishment and maintenance of continuous footpaths so that pedestrian flow is free and uninterrupted. Pedestrian access should be provided at ground level mid-block between all streets.
- 83** 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.
- 84** Permanent structures over a footpath should have a minimum clearance of 3.0 metres above the existing footpath level, except for advertisements which should have a minimum clearance of 2.5 metres and temporary structures and retractable canopies which should have a minimum clearance of 2.3 metres above the existing footpath level.
- 85** Where posts are required to support permanent structures, they should be located at least 600 millimetres from the kerb line.
- 86** Access for people with disabilities should be provided to and within all buildings to which members of the public have access in accordance with the relevant Australian Standards. Such access should be provided through the principal entrance, subject to heritage considerations and for exemptions under the relevant legislation.

Bicycle Access

OBJECTIVES

- Objective 64:** Greater use of bicycles for travel to and within the City and the improvement of conditions, safety and facilities for cyclists.
- Objective 65:** Adequate supply of secure, short stay and long stay bicycle parking to support desired growth in City activities.

PRINCIPLES OF DEVELOPMENT CONTROL

- 87** 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.
- 88** 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](#).

- 89** 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.
- 90** 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.
- 91** 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.
- 92** 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.

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

- 93** 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.
- 94** 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.
- 95** 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.

Car Parking

OBJECTIVES

- Objective 71:** To meet community expectation for parking supply while supporting a shift toward active and sustainable transport modes.
- Objective 72:** An adequate supply of short-stay and long-stay parking to support desired growth in City activities without detrimental affect on traffic and pedestrian flows.

PRINCIPLES OF DEVELOPMENT CONTROL

- 96** Car parking areas should be located and designed to:
 - (a) ensure safe and convenient pedestrian movement and traffic circulation through and within the car parking area;
 - (b) include adequate provision for manoeuvring and individually accessible car standing areas;
 - (c) enable, where practical, vehicles to enter and leave the site in a forward direction;
 - (d) minimise interruption to the pattern of built form along street frontages;
 - (e) provide for access off minor streets and for the screening from public view of such car parking areas by buildings on the site wherever possible;
 - (f) minimise adverse impacts on adjoining residential properties in relation to noise and access and egress;
 - (g) minimise loss of existing on-street parking spaces arising through crossovers and access;
 - (h) incorporate secure bicycle parking spaces and facilitate convenient, safe and comfortable access to these spaces by cyclists; and
 - (i) provide landscaping, such as semi-mature trees, to shade parked vehicles and reduce the visual impact of the car parking area while maintaining direct sight lines and informal visual surveillance.
- 97** All development should provide car parking spaces for people with disabilities in accordance with the requirements in the Building Code of Australia (BCA). For classes of buildings not covered by the requirements of the BCA, the number of spaces should be provided in accordance with [Table](#)

[Adel/7](#) and such car parking spaces should comply with Australian Standard 2890.1: 'Parking Facilities - Off-street Car Parking'.

- 98** Off-street parking in the Core Pedestrian Area identified in [Map Adel/1 \(Overlay 2A\)](#) will only be appropriate where:
- (a) parking is ancillary to another activity carried out on the land;
 - (b) it can be provided without loss of pedestrian amenity; and
 - (c) it is not separately created on a strata title or community title basis (unless in association with another title held on the site).

Economic Growth and Land Use

OBJECTIVES

Objective 73: The role of the City enhanced as:

- (a) the community, civic and cultural heart of South Australia and as a driving force in the prosperity of the State;
- (b) the State centre for business, administration, services, employment, education, political and cultural activities, government and public administration;
- (c) a welcoming, secure, attractive and accessible meeting place for the people of metropolitan Adelaide and beyond for leisure, entertainment, civic and cultural activity, specialty shopping, personal and community services;
- (d) a centre for education and research built on key academic strengths and on the excellent learning environment and student accommodation available in the City;
- (e) a supportive environment for the development of new enterprises drawing on the cultural, educational, research, commercial and information technology strengths of the City centre;
- (f) the gateway to the attractions of South Australia for international and interstate visitors by developing a wide range of visitor accommodation, facilities and attractions, particularly attractions which showcase the particular strengths of South Australia; and
- (g) a great place to live, with a growing diversity of accommodation for different incomes and lifestyles.

Objective 74: A business environment which encourages investment from domestic and foreign sources, business development and employment.

Objective 75: Development which reinforces clusters and nodes of activity and distinctive local character.

Objective 76: A diverse mix of commercial, community, civic and residential activities to meet the future needs of the Capital City of South Australia.

PRINCIPLES OF DEVELOPMENT CONTROL

99 Development, particularly within the Capital City and Institutional Zones, is encouraged to:

- (a) provide a range of shopping facilities in locations that are readily accessible;
- (b) provide for the growth in economic activities that sustain and enhance the variety and mix of land uses and the character and function of the City;

- (c) maximise opportunities for co-location, multiple use and sharing of facilities;
 - (d) be accessible to all modes of transport (particularly public transport) and safe pedestrian and cycling routes; and
 - (e) have minimal impact on the amenity of residential areas.
- 100** Development located either abutting, straddling or within 20 metres of a Zone or Policy Area boundary should provide for a transition and reasonable gradation from the character desired from one to the other.
- 101** Development should not unreasonably restrict the development potential of adjacent sites, and should have regard to possible future impacts such as loss of daylight/sunlight access, privacy and outlook.

