Adelaide Development Company C/ - Ekistics

Demolition of existing building structures and construction of a 21 storey building comprising of commercial/retail tenancies, ancillary car parking, landscaping and associated building works.

75-85 Pirie Street, Adelaide

020/A075/17

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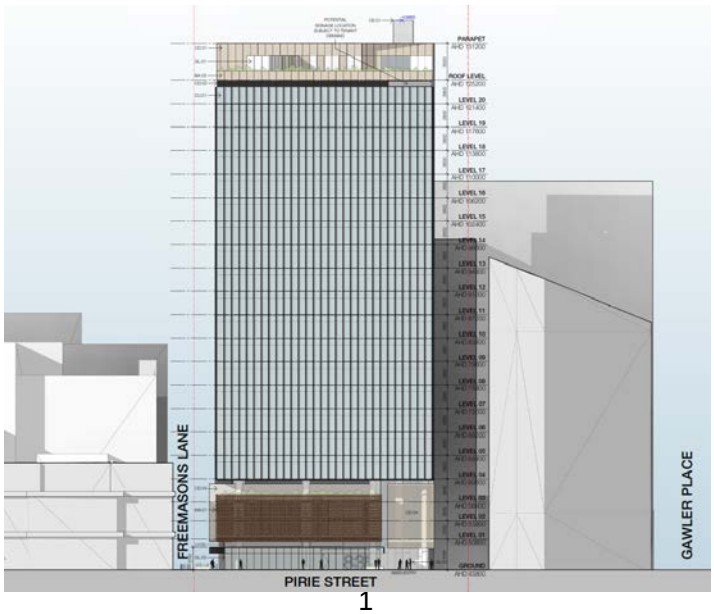


OVERVIEW

Application No	020/A075/17
Unique ID/KNET ID	2717 Appian 2017/24909/01
Applicant	Adelaide Development Company C/- Ekistics
Proposal	Demolition of existing building structures and construction of a 21 storey building comprising of commercial/retail tenancies, ancillary car parking, landscaping and associated building works.
Subject Land	75-85 Pirie Street, Adelaide
Zone/Policy Area	Capital City Zone / Central Business Policy Area
Relevant Authority	State Commission Assessment Panel
Lodgement Date	21/11/2017
Council	Adelaide City Council
Development Plan	Adelaide City Development Plan [Consolidated 20 June 2017]
Type of Development	Merit
Public Notification	Category 1
Referral Agencies	ODASA, State Heritage and Adelaide Airport
Report Author	Karl Woehle
RECOMMENDATION	Planning Consent subject to conditions

EXECUTIVE SUMMARY

The applicant seeks Development Plan Consent for the demolition of existing buildings and structures. The construction of a multi-storey commercial building consisting of retail and office tenancies, ancillary car parking, landscaping and building works in the Central Business Policy Area of the Capital City Zone at 75-85 Pirie Street, Adelaide.

The proposed development is a merit kind of development that triggers statutory referrals to the Government Architect, State Heritage, Adelaide Airport and a non-mandatory referral to the City of Adelaide. The proposed land-use is considered acceptable and consistent with the land-uses envisaged in the Central Business Policy Area of the Capital City Zone.

The height and scale of the proposed development is considered acceptable and consistent with the planning policy provisions. The Government Architect is of the view that the height and scale is appropriate within the locality. The design and appearance of the proposed development appropriately addressed the desired character of the Policy Area and Zone. The Government Architect in principle supports the design, architectural expression and materiality.

State Heritage are of the opinion that the proposed development is considered to be acceptable and should not detrimentally impact the physical or material heritage values of the adjacent State Heritage Place. It was also acknowledged that the front and side setbacks of the proposed development enhances and opens views to the State Heritage Place.

The proposed above ground car parking is not sleeved as anticipated within the Zone. The Government Architect does not support the above ground car parking and is of the view the proposed podium car parking inhibits delivery of a meaningful interface to the public realm. There is support for the masonry brick screening, landscaping on the level 3 terrace and articulation between the podium and tower. The car parking on level 3 has a 3.8 metre slab to slab height providing the development with the opportunity to adapt the car parking level should the opportunity arise. Whilst car parking is not anticipated for the Zone, it is considered that the proposed development appropriately screens views of cars from ground and adjoining buildings.

Council raised concerns relating to the proposed interaction for pedestrians within Freemasons Lane from a user experience and safety perspective. It is noted that the proposed development intends to maintain the shared nature of the Freemasons Lane, however a secondary pedestrian space is proposed to be created as part of the development. Additionally the development has been setback 4.8 metres at ground level providing sufficient space and scope for further design development if required.

The proposal generally achieved appropriate performance outcomes in respect to technical matters such as pedestrian access, bicycle parking, energy efficiency, wind analysis, crime prevention and waste management

On balance, it is considered the proposal satisfies the intent of the Central Business Policy Area and other relevant development control policies. It is consequently considered that the proposed development is not at significant variance with the Development Plan and warrants Development Plan Consent subject to conditions.

ASSESSMENT REPORT

1. BACKGROUND

1.1 Strategic Context

On 30 May 2017 the Minister for Planning approved the Capital City Policy Review (Design Quality) Development Plan Amendment. The purpose of the DPA was to introduce and reinforce design quality within the Capital City Zone which:

- Reinforce design quality for new development;
- Establish additional requirements for over-height development including zone interface treatments and triggers for over-height allowances;
- Increase greening policy provisions for over-height development and;
- Strengthen the Desired Character Statement along Rundle Street to recognise its important character.

1.2 Pre-Lodgement Process

The applicant engaged in the Pre-lodgement Service offered by the Department of Planning, Transport and Infrastructure which is provided to applicants with developments involving building work exceeding 10 million dollars in value within the Capital City Zone.

The proponent engaged in one (1) Pre-lodgement Panel meeting and one (1) Design Review Session. The proponent responded to some of the issues raised during the pre-lodgement panel meeting and design review panel session.

Previous Approval

On 26 June 2006, Council previously approved a development for an 18 storey office and retail development. The development approval has since lapsed on 19 June 2012.

2. DESCRIPTION OF PROPOSAL

Application details are contained in the ATTACHMENTS.

Land Use Description	Multi-storey commercial use building consisting of retail/café tenancy and office space tenancies
Building Height	85.4 metres (parapet) / 21 storeys
Description of levels	**Ground:** Transformer, waste collection, associated building services, bicycle parking and end of trip facilities, retail/cafe space and lobby area for offices **Level 1-3 :** Car parking, plant equipment and landscaping **Level 4 – 20:** Offices with floor space ranging between 1,773sqm and 1,832sqm

	Level 20 – Multi-purpose space, terrace, landscaping and building plant equipment
Site Access	Pedestrian access is via Pirie Street and Freemasons Lane
Car Parking	122 car parks, access gained via Freemasons Lane. Car parking provided on multiple levels and screened from public
Bicycle Parking	205 bicycle parks and associated end of trip facilities provided. Access gained via Freemasons Lane
Encroachments	Pirie Street ground floor canopy

3. SITE AND LOCALITY

3.1 Site Description

The development site is comprised of 3 allotments located at 73 – 85 Pirie Street, Adelaide and are situated on the southern side of Pirie Street. The development site is generally rectilinear in shape and has an area of approximately 2,911 square metres. The development site has a primary street frontage of approximately 44m to Pirie Street. The secondary frontage of 65m is to Freemasons Lane (a public road/pedestrian footpath) located to the east of the development. The development site includes the privately owned laneway to the west known as Freemans Lane, the lane has free and unrestricted rights of way over it to the adjoining properties.

The existing building at 85 Pirie Street is occupied by commercial offices, a ground floor café and informal car parking at grade to the rear, which is accessed via Freemasons Lane. The existing building at 73-79 Pirie Street was previously utilised as a licensed hotel/entertainment premises and restaurant which is currently vacant and is serviced from Freemans Lane.

Figure 1 – Subject site, Pirie Street frontage

The site consist of three allotments, described as follows:

Lot No	Street	Suburb	Hundred	Title Reference
A7 in D68343	Pirie Street	Adelaide	Adelaide	CT 5968/547
A8 in D68343	Pirie Street	Adelaide	Adelaide	CT 5968/548
A9 in D68343	Pirie Street	Adelaide	Adelaide	CT 5968/549

The figure below illustrates the subject land highlighted in blue in the context of the immediate locality.

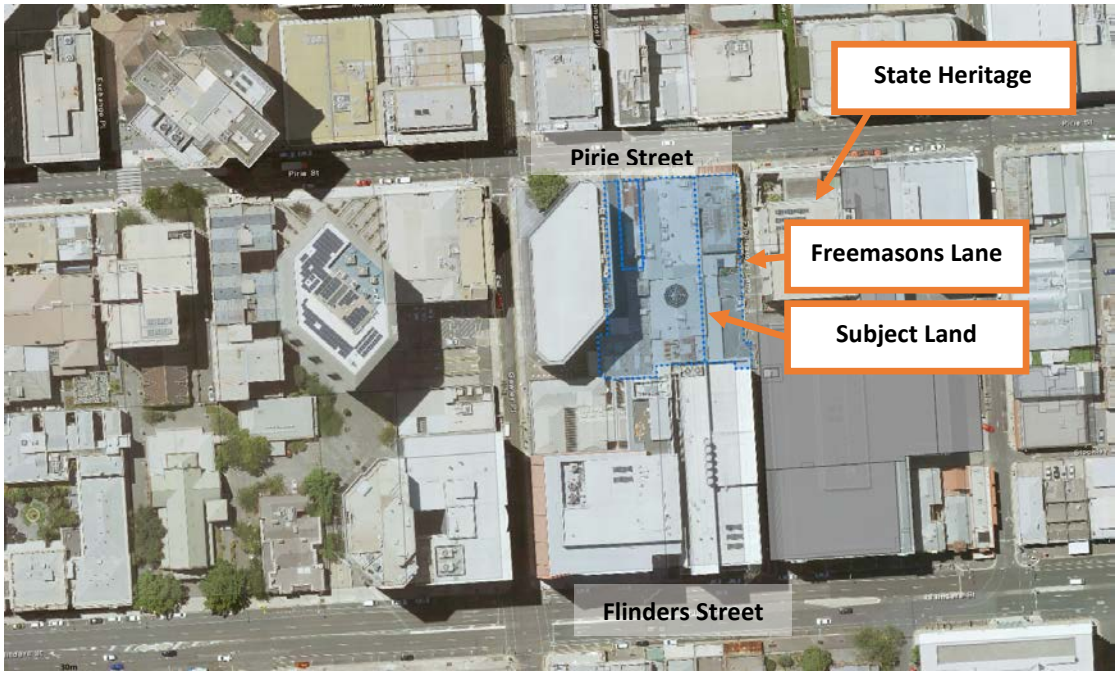


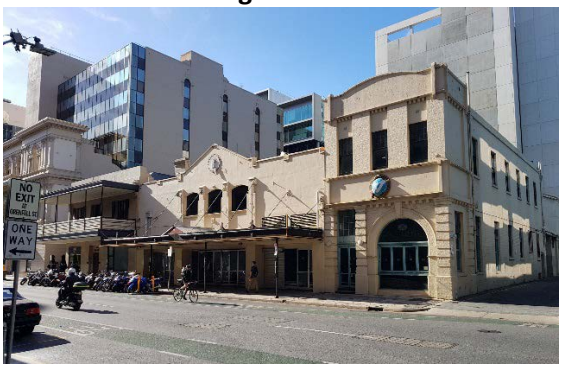
Figure 2 - Location Map

The subject site gains domestic vehicle access via Freemasons Lane located to the immediate east. Freemans Lane to the west operates as a service lane for73-85 Pirie Street.

Figure 3: Site Photographs

Pirie Street - looking north

Pirie Street - looking east



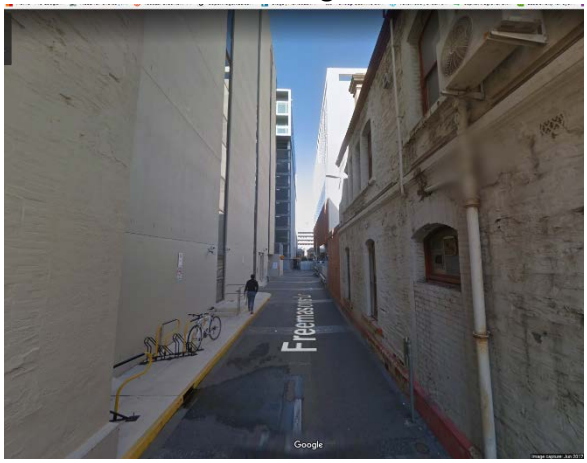
Pirie Street – looking south to the subject site

Pirie Street - looking west

Freemans lane – looking north

Freemasons lane – looking south

Freemasons Lane – looking north



Freemasons Lane – looking south

Existing pedestrian link between Freemasons Lane and Flinders Link

3.2 Locality

The immediate locality is generally characterised by a wide range of uses from commercial offices, retail tenancies and cafes. The built form ranges from low scale two storey buildings through to building over 10 storeys. The architectural expression within the immediate locality is generally contemporary in nature.

The Darlington House Offices (formerly People's Palace, former German club) is located to the east of the subject site and is identified as a significant State Heritage Place in the locality.

4. COUNCIL TECHNICAL ADVICE

4.1 Adelaide City Council

Advice was sought from Council Administration regarding technical matters. The following points were raised for consideration:

- The overall proposed configuration of vehicle movement within the adjacent lanes and vehicle access to the site is acceptable, subject to further clarification and detailed design of the spaces where vehicles and pedestrians will interact.
    - Proposed interaction for pedestrians through the driveway connections is concerning from a user experience and safety perspective.
    - Revision of the exit boom gate is needed as part of achieving an appropriate shared space configuration.
    - Outstanding pedestrian safety issues could have some impact on the building configuration and structure around vehicle access area, it may be pertinent for this to be a reserved matter
- Waste management is supported.
- Applicant should ensure that they have all necessary rights to access Freemans Lane.
- Retail at ground is supported, size and width of tenancy, along with the use of glass. Tenancy doesn't reflect the fine grained context sought and established by other Pirie Street tenancies.
- Development Plan expressly outlines that parking at first and second level is not anticipated in this location – to the Pirie Street and Freemasons Lane frontages. The car parking proposed is not sleeved as anticipated within the Zone
- Applicant should be aware that a 1.8m clearance from the property line (not building line) should be maintained for pedestrian movement and access along Pirie Street.
- A separate outdoor dining permit will be required for the indicated outdoor dining.

In response to the above, the applicant noted they have reviewed the laneway and are confident that further design resolution of the private/public realm can occur during the detailed design phase without impacting the proposed building. Additional information was provided from the applicant's traffic consultant to further clarify how the proposed pedestrian and vehicle interface will operate. It was acknowledged that the proposed development provides sufficient space for pedestrians at ground, much of which is owned by the applicant and has been provided to improve access and pedestrian connectivity.

The Adelaide City Council referral response is contained in the **ATTACHMENTS** and are further discussed in the planning assessment.

5. STATUTORY REFERRAL BODY COMMENTS

Referral responses are contained in the ATTACHMENTS.

5.1 Government Architect

The Government Architect is a mandatory referral in accordance with Schedule 8 of the *Development Regulations 2008.* The Panel must have regard to this advice. The Government Architect responded to the referral and expressed general support for the proposed development but suggested several elements of the proposed development that would benefit from further design refinements and review.
These elements are:

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

- Opportunity exist to locate car parking below ground or sleeve the car parking levels with smaller tenancies to engage and take advantage of the vibrant street environment.
- Consideration to increase all car parking slab heights to 3.8 metres to facilitate adaptive reuse outcomes.
- Opportunity to make the level 3 terrace accessible to assist in engaging the lower levels of the building with the public realm.
- Encourage preliminary testing of the lift design to ensure it achieves maximum efficiency and flexibility for future tenancy.
- Opportunity to further articulate the car parking brick screening element, cognisant of the textual qualities the brickwork and glancing and oblique viewing angles.
- Consideration of internal shading as design development progresses with a view to achieving a uniform and integrated outcome.

The Government Architects statutory referral response is contained in the **ATTACHMENTS** and are further discussed in the Planning Assessment.

5.2 State Heritage

The State Heritage Unit is a mandatory referral in accordance with Schedule 8 of the *Development Regulations 2008*. The Panel must have regard to this advice. The State Heritage Unit responded to the referral and expressed that the development is considered to be acceptable for the following reasons:

- There are no works proposed within the site of the State heritage place. Other than the construction management issues, the proposed development does not directly affect the physical fabric or material heritage values of the State heritage place.
- Visually, the pronounced articulation of the building's form into a four-storey base and eighteen-storey tower allows for a design response referential to the scale and visual character of the three-storey State heritage place. The architectural differentiation between the tower with the consistency of its glazed facades versus the articulation of the lower levels into a series of juxtaposed forms and voids defines an appropriate streetscape scale and level of visual interest. The proposed permeability and material expression of the carpark screening provides visual interest and fine grain to compensate for the lack of activation and fenestration at these levels
- The immediate context of the State Heritage Place at the Freemasons' Lane interface is enhanced by the front and side set-backs at street level that opens up views to the historic building along the Pirie Street and Freemasons' Lane frontages.

State Heritage provided three (3) planning conditions and six (6) general notes that were recommended to be attached to any planning consent.

The State Heritage's statutory referral response is contained in the **ATTACHMENTS** and are further discussed in the Planning Assessment

5.3 Adelaide Airport

The Adelaide Airport is a mandatory referral in accordance with Schedule 8 of the *Development Regulations 2008*. The Panel must have direction to the advice.

The application has been assessed and at a height of RL 134.8m AHD. As a result the application will penetrate the Adelaide Airport Obstacle Limitation Surfaces (OLS) which is protected airspace for aircraft operations. It is noted that the proposed development will penetrate the OLS by approximately 9 metres.

As such the application will require approval in accordance with the Airports Act 1996 and the Airport (protection Airspace) Regulation 1996 and therefore will be forwarded to the Department of Infrastructure and Regional Development for their approval.

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

The Adelaide Airport's statutory referral response is contained in the **ATTACHMENTS** and are further discussed in the Planning Assessment.

6. PUBLIC NOTIFICATION

The application is a Category 1 development pursuant to Capital City Zone Principle of Development Control 40(a). No public notification was required.

7. POLICY OVERVIEW

The subject site is located in the Central Business Policy Area of the Capital Zone as described within the Adelaide City Development Plan [Consolidated 20 June 2017].

Relevant planning policies are contained in **ATTACHMENTS** and summarised below.

7.1 Policy Area

The Central Business Policy Area is highlighted in the Development Plan as the pre-eminent economic, governance and cultural hub for the State. Buildings within the Policy Area should exhibit innovative design approaches which produce stylish and evocative architecture. The Policy Area anticipates tall and imposing buildings that provide a hard edge to the street, which should be of the highest design quality.

7.2 Zone

The Capital City Zone encourages a diverse range of land uses with non-residential land uses at ground floor level to achieve greater activation of street frontages. It is anticipated that developments fronting North Terrace will reflect their importance through highly contextual design that reflect and responds to their setting and role.

It is noted that there is no prescribed height limit for this particular part of the Capital City Zone. The Zoning seeks a high standard of architectural design and finish that is appropriate to the City's role and image as the capital of the State.

The Zone recognises the importance of boulevards and it is envisaged that development along North Terrace will reinforce the important pedestrian promenade and cultural boulevard that provides an important northern edge to the City square mile.

7.3 Council Wide

The Council Wide provisions provide direction on the desire for increased levels of activity and interest at ground level; the safe and convenient servicing of sites; a high standard of design and appropriate bulk and scale of buildings and contribution to streetscape.

7.4 Overlays

7.4.1 Adelaide City Airport Building Heights

The proposed development exceeds the OLS Values set out in Airport Building Heights MAP/1 (Overlay5)

8. PLANNING ASSESSMENT

The application has been assessed against the relevant provisions of the Adelaide City Development Plan, which are contained in the **ATTACHMENTS**.

8.1 Quantitative Provisions

	Development Plan Guideline	Proposed	Guideline Achieved	Comment
Building Height	Capital City Zone does not have prescribed maximum height for site	85.4m in height to the top of the parapet	YES ☒ NO ☐ PARTIAL ☐	
Land Use	Zone and Policy area envisages office and retail uses	Mix-use commercial building – retail and office space	YES ☒ NO ☐ PARTIAL ☐	
Car Parking	No minimum parking requirements in Capital City	**122 car parking spaces**	YES ☒ NO ☐ PARTIAL ☐	
Bicycle Parking	**Office** 1 per 200m2* 2 plus 1 per 1000m2* (visitor) **Retail** 1 per 300m2* 1 per 600m2 *(visitor) ***gross leasable floor area**	Required approximately 187 bicycle spaces Proposed 205 bicycle spaces	YES ☒ NO ☐ PARTIAL ☐	
Front Setback	Zone seeks buildings built to the street frontage	Ground floor setback 1.5m from Pirie Street	YES ☒ NO ☐ PARTIAL ☐	Discussed further in assessment
Rear Setback	Zone and policy area generally silent on rear setbacks	Development abuts rear boundary to level 14	YES ☒ NO ☐ PARTIAL ☐	
Side Setback	Zone and policy area generally silent on side setbacks	4.8m setback to Freemasons Lane (east) and 1.5-2m setback to Freemans Lane	YES ☒ NO ☐ PARTIAL ☐	Discussed further in assessment

8.2 Land Use and Character

The proposal involves the development of café/retail tenancy at ground and commercial office space. The proposal is considered consistent with PDC 1 which seeks this form of land-use within the Capital City Zone.

8.3 Building Height

The proposed development is approximately 85.4m in height to the top of the parapet. It is noted that the development site is not subject to a prescribed maximum building height, however relevant airport heights still apply to the development site.

Adelaide Airport have confirmed that the proposed development will penetrate the Adelaide Airport Obstacle Limitation Surface (OLS) airspace by approximately 9 metres. As such the application will require approval from the Departments of

Infrastructure and Regional Development. The Government Architect supports the height of the proposed development within the immediate locality.

8.4 Setbacks

The Capital City Zone seeks high street walls that frame the city streets, which is further strengthened by the Central Business Policy Area that supports tall and imposing buildings that provide a hard edge to the street.

The ground floor of the proposed development has been setback 1.5 metres to Pirie Street, 4.8 metres to Freemasons Lane and 1.5-2m to Freemans Lane. The proposed setback at ground to Freemasons Lane provides the opportunity to strategically widen and connect the laneway through to Flinders Link which would result in benefits to the north south pedestrian network as highlighted in the Development Plan.

The Government Architect supports the site configuration and the resulting benefits to the public realm. On balance the proposed setbacks appropriately responds to the context of the development site, whilst providing the opportunity to further enhance the public realm.

8.5 Design and Appearance

The Capital City Zone seeks buildings to reflect innovative design approaches and contemporary architecture that responses appropriately to the locality and context. There is a strong emphasis placed on creating interesting pedestrian environments and ground floor activation through careful building articulation and fenestration, frequent openings in building facades and other design features.

The proposed development is a 21 storey tall building which is rectangular in form with textured glazing and curtain screening. The built form has been broken up into three segments, a base, office tower and roof top element. The three segments vary in scale, texture and materiality, which is supported by the Government Architect. The proposed development presents a bold identity in terms of building massing consistent with the desired character of the Central Business Policy Area. The design response to the existing streetscape and localised character is also supported by the Government Architect.

The base of the building is articulated through the use of metal fabric screens, frameless glass facade, glazed shopfront, masonry screens to the carpark levels, structural columns, metal canopy and an entrance lobby that is offset and expressed internally. The proposed development demonstrates a high level of design detailing that is considered visually interesting and integrated with the public realm. The Government Architect is of the view that the success of the design is contingent on refined detailing of the connections between each distinctive element.

The proposed development at ground is setback 4.8 metres along Freemasons Lane providing the development opportunities for outdoor dining, landscaping and public seating. The applicant noted the setback at ground also incorporates a footpath within the private site which would essentially benefit the general public and aligns with the Pedestrian Network Map within the Development Plan. The Government Architect strongly supports the widening of the connection from Freemasons Lane through to Flinders Link and the resulting benefits to the north south pedestrian network.

The podium car parking is concealed by a masonry brick screen that is intended to provide a high level of texture and a solid façade element that is supported by the Government Architect, but is also of the view that there is opportunity to further articulate the textual qualities and brickwork. Council noted that the proposed car parking is not sleeved with active uses which is anticipated within the Zone. Council also considered that the proposed car parking will not allow for satisfactory integration and contribution to the public realm sought by the Zone.

The third level of podium car parking is configured to 3.8 metre slab heights, which could accommodate the transformation of the car parking level to further commercial occupancy. The adaptability of the proposed development is in principle supported by the Government Architect. Whilst car parking is not anticipated for the Zone, it is considered that the proposed development appropriately screens views of cars from ground and adjoining buildings and allows for future adaptability of these floor levels.

The office tower element of the building is characterised by angled glass panels that forms a continuous curtain wall. The Government Architect supports the expression of the office tower and recommends further design development of the internal shading devices. The top of the building is characterised by bronze metal cladding, bronze vertical louvers and bronze metal balustrades and is separated by a horizontal charcoal metal cladding band, which further defines the top roof top and mechanical plant services.

On balance the appearance and architectural expression is considered appropriate in the locality and is generally consistent with policies in the Central Business Policy Area of the Capital City Zone. The proposed materials are considered robust and fit for purpose consistent with the PDC 7 (CC) which seeks buildings to achieve a high standard of external appearance through use of appropriate materials. The Government Architect is of the view that the proposed development appropriately responds to the immediate locality and generally supports the proposed development.

8.6 Heritage

The Capital City Zone envisages developments to provide a new settings for heritage places, whilst appropriately responding to the site context and broader streetscape.

The applicant engaged DASH architects to prepare a Heritage Impact Statement for the application. The Heritage Impact Statement considers the proposed development in the context of the State Heritage Place, in particular the front portion of 89 Pirie Street. The report concluded that the demolition and construction of the proposed development would not result in the loss of heritage fabric, nor would it substantially affect the setting of the Heritage places in the locality.

State Heritage generally concur with the analysis and the recommendation presented in the Heritage Impact Statement. State Heritage are of the opinion that the pronounced articulation of the building's form into a four-storey base and eighteen–storey tower provides an appropriate design response to the scale and visual character of the adjacent three-storey State Heritage Place. The proposed permeability and material expression of the car parking screening provides visual interest and fine grain to compensate for the lack depth to the facade. State Heritage also support the front and side setbacks at street level and are of the opinion the development will potentially open up views to the State Heritage Place.

The proposed development appropriately responds to the adjacent State Heritage Place and the immediate context and is considered generally consistent with the Development Plan Policies.

8.7 Traffic Impact, Access and Parking

8.7.1 Site Access

The applicant engaged MFY traffic consultants to provide a traffic and parking report for the proposed development. The consultant noted that access to the proposed development would be provided via Freemasons Lane and Flinders Link. Council has advised the overall proposed vehicle movement arrangements is acceptable, subject to further clarification and detailed design of the spaces where vehicle and pedestrians interact.

Currently there is no footpath within Freemasons Lane, which is signed as a shared zone. The proposed development intends to maintain the shared nature of the laneway by including a secondary pedestrian space created by an eastern boundary setback of 4.8 metres with public realm improvements in the form of pavement treatments, street furniture and landscaping.

Council are of the view that the proposed interactions for pedestrians through the driveway connections and Freemasons Lane is concerning from a user experience and safety perspective and suggested this matter be reserved for further resolution.

The proposed development of the pedestrian environment in Freemasons Lane has the potential to provide a positive design outcome in which pedestrian safety within the laneway could be adequately addressed in the detailed design documentation stage.

As the applicant is investigating transferring land currently accommodating private parking to Council to achieve continuous public street title and rationalise management and liability issues, a condition is recommended requiring final design details of the pedestrian environment in Freemasons Lane to ensure the appropriate rigour is applied during detailed design development.

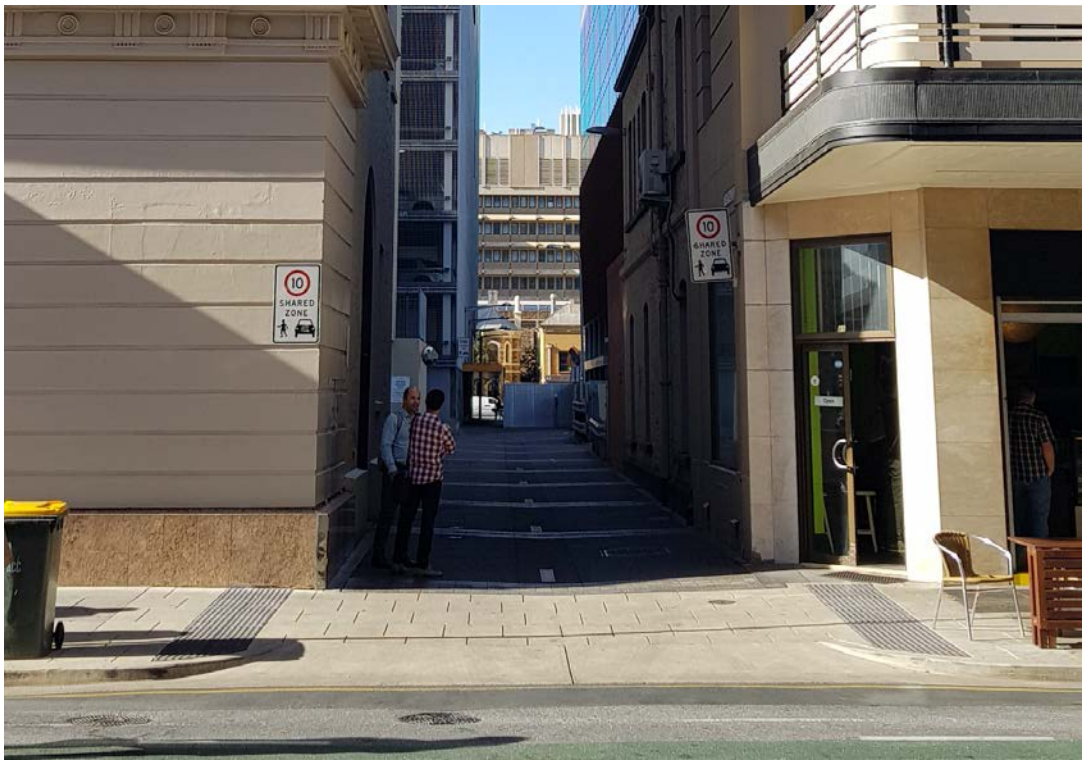


Figure 4 - Freemasons Lane (shared use)

Figure 5 – Proposed pedestrian environment (Freemasons Lane)

8.7.2 Traffic Impact

Domestic vehicle access to the ancillary car parking will be provided via Freemasons Lane and Flinders Link. The vehicle ramp will provide simultaneous vehicle movements to/from the car parking. The consultant's traffic report noted the car parking could generate 62-90 trips during peak hours within Freemasons Lane / Flinders Link and is considered to be low in volume and could be easily accommodated within the road network.

Freemans Lane is a private laneway located to the west and is proposed to be used exclusively for service vehicles, consistent with existing uses. It is noted in the traffic consultant's report that the loading and servicing of development is managed entirely within subject site with all service vehicles entering and exiting the site in a forward direction. The traffic report also demonstrated that the turning circles and manoeuvring for Medium Rigid trucks can be accommodated within Freemans Lane.

8.7.3 Car parking

The Capital City Zone does not prescribe a minimum or maximum parking requirement. The proposal includes a total of 122 car parking spaces which are ancillary to the office tenancy and are situated on levels 1 to 3 which are accessible from Freemasons Lane and potentially Flinders Link (once access is permitted). It is noted that cars will enter and exit the carpark in a forward direction. The brick façade from levels 1 to 3 reduces the visibility of the cars from ground, however cars may still be visible from upper levels.

The applicant has confirmed that the access points, internal ramp, lane configuration and car parking spaces have been designed to achieve the relevant Australian Standards. It is also noted that the proposed car parking includes appropriate accessible parking provisions. As such the proposed car parking is generally consistent with the parking policies within PDC 251 Council Wide.

8.7.4 Bicycle parking

The Adelaide City Council Development Plan Table Adel/6 anticipates the following bicycle parking rates:

- **Office** one bicycle park per 200m^2 of gross leasable floor area for employees and two plus one per 1000m^2 of gross leasable floor for visitors.

- **Retail** one bicycle park per 300m^2 of gross leasable floor area for employees and one per 600m^2 of gross liable floor for visitors.

Based on these bicycle parking rates the proposed development will require approximately 184 bicycle parks for the commercial office use and 3 bicycle parks for the retail tenancy.

The proposed development includes a large 449m^2 end of trip facility which includes 205 bicycle parking spaces, associated lockers and amenities. The end of trip facilities are accessed via security pass from Freemasons Lane. The bicycle parking is located at ground level, ensuring appropriate passive surveillance of the bicycle parking satisfying PDC 235 in the Development Plan. The proposed bicycle parking generally satisfies the quantitative and qualitative policy provisions of the Development Plan.

8.8 Environmental Factors

8.8.1 Crime Prevention

The Development Plan generally seeks developments to integrate and attempt to facilitate natural passive surveillance, clear lines of sight and appropriate lighting within the design of the building to reduce potential crime.

The materials and finishes used at ground are considered to be robust and durable. The facades at ground along Pirie Street and Freemasons Lane are predominately glazed ensuring that there are views in and out of the building providing the opportunity for passive surveillance. The applicant has noted that the canopy lighting will be in accordance with the Australian and New Zealand lighting standards, which should provide suitable illumination to the public realm.

The inclusion of a wide public walk way along Freemasons Lane to Flinders link provides excellent visibility and a clear line of sight. A roller door will be utilised at the entrance of the car park during afterhours to minimise the potential of entrapment spots around the building. The landscaping at ground level is low lying in nature, minimises the potential for people to be obscured.

The applicant confirmed that access into the office tower/ workspace element of the proposal will be secured after hours with access via a swipe card.

The proposed development demonstrates appropriate crime prevention considerations and design initiatives that generally satisfies the Crime Prevention policy provisions in the Development Plan.

8.8.2 Noise Emissions

Council Wide PDC 93 seeks mechanical or plant equipment to be designed and sited to minimise noise impacts on adjacent premises and properties. It is noted that the proposed development does not adjoin any sensitive uses or contains such uses within the building.

The plant equipment located on roof top has been screened and appropriately located to the rear of the development, away from Pirie Street. The Government Architect generally supports the proposed screening and design of the top element of the proposed development.

The applicant confirmed that relevant BCA and EPA Noise Policy requirements, including the analysis of the façade glazing thickness to achieve suitable

acoustics standards for commercial building will be resolved during the detailed design phase.

8.8.3 Waste Management

Council Wide Waste Management policies and objectives collectively encourages the use of a dedicated area for on-site waste collection and sorting of recyclable materials, that does not create unacceptable levels of smell and odour or detrimental effects to the amenity.

The proposed development includes a storage room large enough to accommodate 5x1100 litres general waste bins, 6x1100 litres recycling bins, 4x660 litres organic bins and 1x1100 cardboard bin. The proposed development does not include a dedicated area for E-waste or Hard Waste.

The waste consultant's report anticipates that the office tenants will have a commercial cleaning contractor that will collect and manually transfer material to the waste collection room on ground floor. Waste collection will occur on premises and is accessed via Freemans Lane, consistent with PDC 242 Council Wide which seeks on-site facilities for the loading and unloading of service vehicles that are screened from public view.

The collection vehicles expected for waste collection at the proposed development will consist of Rear lift trucks for collection of routine waste and Pan tech or flat-bed trucks for collection of at-call waste streams. The waste consultant's report estimates that there would be 16-17 collection vehicle movements per week at the site. It is also highlighted that the loading and servicing of development is managed entirely within the site and all service vehicles entre and exit the site in a forward direction.

Council have reviewed the proposed waste management plan and are satisfied that the functional requirements will be met. The proposed management plan generally satisfies the Development Plan policies.

8.8.4 Energy Efficiency

The Energy Efficiency policies and objectives seeks developments to be compatible with long term sustainability of the environment and minimise consumption of non-renewal resources and utilities. PDC 115 Energy Efficiency seeks new office developments to minimise energy consumption and limit gas emissions by utilising various design approaches some of which are:

- passive solar consideration in the design, planning and placement of building;
- re-use and/or improving existing structures or building;
- designing for the life-cycle of the development to allow for future adaption;
- consider low levels of embodied energy in selections and use of materials;
- develop energy efficient solutions including passive designs using natural light, solar control, air movement and thermal mass. Systems should be zoned to minimise use of energy;
- using low carbon and renewable energy sources; such as Combined Heat and Power (CHP) systems and photovoltaics; and
- preserving and enhancing local biodiversity, such as by incorporating roof top gardens.

The applicant engaged BESTEC for an Ecologically Sustainable Design (ESD) strategy. The report highlights that the proposed development has been designed to achieve a 5 Star Design and As Built version 1.1 minimum "Australian

Excellence" and a 5 Star NABERS Energy after a minimum of 12 months post occupancy.

The proposed development utilises high performance double glazing to reduce air-conditioning load and solar heat gain. Passive chilled beam cooling systems will be utilised within the building and is considered to be highly energy efficient. Extensive metering and sub-metering for energy management will be connected to a fully integrated Building Management System.

Rainwater storage tanks with provide toilet and urinal flushing and landscape irrigation. Water efficient fittings will be utilised on taps, toilets and showers.

The building has been designed to ensure the floorplates receive the maximum amount of daylight, which should result in the reduction of electricity. The glare and additional heat loading will be reduced by the use of internal blinds. Energy efficient T5 and LED lighting technology along with a digital lighting control system will be utilised within the proposed development.

The proposed development demonstrates appropriate energy efficient considerations and initiatives and generally satisfies Council Wide Energy Efficiency policies and objectives.

8.8.5 Wind Analysis

The Development Plan provisions encourages development over 21 metres in building height to be designed to reduce potential wind impacts on adjacent properties and pedestrian environment. The policy provision in the Development Plan encourages the use of podiums, verandas and placement of building as design initiatives that could potential mitigate wind impacts.

The applicant engaged GWTS to conduct a Pedestrian Wind Level Assessment. The assessment concluded that there were localised increases in the ground level wind conditions that may occur as a result from the downwash of the tower façade. It was also noted in the assessment that there were some concerns relating to the wind conditions on the level 3 terrace and rooftop terrace. As a result recommendations were made which relate to the minimum canopy widths over the main building entrances, minimum balustrade heights and canopies along Freemasons Lane.

The applicant noted that all of the recommendations contained in the Pedestrian Wind Assessment have been adopted in the building design to mitigate and reduce the wind impact upon the ground level and terrace. The proposed development generally satisfies the provisions set out in the Development Plan and is deemed acceptable.

8.8.6 Site Contamination

The applicant has not undertaken any preliminary site investigations, however given the previous and current uses, it not considered that there are any notable risks of potential contaminates which may affect the proposal. It is also noted that the proposed uses are not considered sensitive and are generally consistent with the existing uses on site.

8.9 Signage

Potential signage locations have been nominated on the proposed development. The applicant has noted that these have been provided to show indicative locations for future tenant branding.

A condition has been proposed to be placed on any planning consent to ensure the signage strategy is appropriately integrated into the overall architectural expression.

8.10 Stormwater

The applicant engaged Wallbridge Gilbert Aztec to conduct a Preliminary Stormwater Management Report. It is noted that the site is currently impervious, being covered by buildings and external asphalt car parking spaces and drains into existing Council Stormwater system.

The report confirmed that the proposed stormwater system will drain into the existing Council stormwater infrastructure. It is anticipated that there will be some modifications in Freemans Lane in the form of a pipe extension. The applicant noted that the pipe extension can be accommodated within the site boundary. There are proposed rainwater tanks on level 1 (Hydro Room) which can be recirculated for use in toilets facilities and landscaping irrigation. The consultant also noted that there are no external parking areas or other areas where pollutants may mix with runoff water as such the water leaving the site does not require any further treatments.

The proposed development generally displays appropriate stormwater management considerations and should not result in increased stormwater discharge volumes.

8.11 Landscaping

The Capital City Zone seeks integrated landscaping to promote quality spaces integrated with the public ream that can be used for recreation and help optimize security and safety internally and into the public realm.

The applicant engaged Aspect Studios to provide a Landscape Concept Plan. The landscape concept utilises plant species that are considered fit for purpose, robust and should grow in an urban environment. The applicant noted that the green planting on level 3 is an architectural feature which helps define the edge of the podium. The Government Architect supports the inclusion of the landscaping on the level 3 terrace and believes further opportunity exist to make the terrace accessible to assist in engaging the lower levels of the building with the public realm

The proposed public seating within the subject site provides the opportunity for pedestrians traveling along Freemasons Lane to stop and utilise the space. The design and layout of the space also helps define and separate pedestrians from vehicles. The Government Architect supports the proposed integrated seating and landscaping. On balance the proposed development demonstrates appropriate landscaping considerations that have been appropriately integrated into the public realm, consistent with the Development Plan provisions.

8.12 Interface

The development site is bound by Freemans Lane, Pirie Street and Freemasons Lane providing the development appropriate separation to the adjacent buildings. The development abuts a commercial building to the south which is an existing blank wall. It is noted that the adjacent buildings do not contain sensitive uses and the potential for direct overlooking is likely to be low.

The shadow diagram indicates that the proposed development should not substantially increase overshadowing on the winter solstice. On balance the interface and overshadowing as a result of the proposed development is considered acceptable for the immediate locality.

9. CONCLUSION

The applicant seeks Development Plan Consent for the demolition of existing buildings and structures. The construction of a multi storey building consisting of retail and office tenancies and associated car parking, landscaping and building works in the Central Business Policy Area of the Capital City Zone at 73 -85 Pirie Street, Adelaide.

The proposed development is considered acceptable in scale and height for the locality. It is noted that the development is not subject to a prescribed maximum building height, however relevant airport heights still apply to the development site. Adelaide Airport have no objection to the proposed height of the building.

The design and appearance of the proposed development contextually responds to the immediate State Heritage Place and locality. The Government Architect in principle supports the scale, built form, architectural expression and materials.

Council a generally satisfied with the proposed waste arrangements and configuration of vehicle movements within the adjacent lanes. Vehicle access to the proposed development is considered acceptable, subject to further resolution of potential pedestrian safety issues within Freemasons Lane. It is noted currently Freemasons Lane operates as a shared space and there is no footpath present. The proposed development maintains the shared nature of the laneway, however an alternative pedestrian space is proposed as part of the development. The Government Architect strongly supports the widening of the connection from Freemasons Lane through to Flinders Link, and resulting benefits to the north south pedestrian network. The ground floor of the development has been setback 4.8m from Freemasons Lane and should provide sufficient space for further design resolution in the final detailed design stage.

The proposed development includes ancillary car parking on levels 1-3 which are generally not envisaged within the Central Business Policy Area. It is also noted that the car parking has not been sleeved, reducing the potential for further activation of Pirie Street. The Government Architect in principle does not support the proposed above ground car parking, however there is support for the proposed brick façade, landscaping at levels 3 and the articulation between the podium and tower elements. On balance the proposed development appropriately screens the car parking from Pirie Street and should not detract from the activation of the public realm at ground level.

When assessed against the relevant Development Plan policies the proposal generally satisfies the relevant policy provisions. The proposal is consistent with the desired character of the Central Businesses Policy Area and Capital City Zone. The proposal should not result in or cause unacceptable impacts on the adjacent State Heritage Place or locality. Accordingly, the proposal warrants Development Plan consent subject to conditions.

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.

3) RESOLVE to grant Development Plan Consent to the proposal by Adelaide Development Company for DA 020/A075/17 at 73-85 Pirie 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/A075/17.

Plans by Wood Bagot

Sheet Title	Project Number	Drawing No.	Revision	Date
Demolition Plan	140332	SK 1001	A	03/11/17
Site Plan	140332	SK 1002	A	03/11/17
Ground Floor Plan	140332	SK 2200	A	03/11/17
Level 01 Floor Plan	140332	SK 2201	A	03/11/17
Level 2 Floor Plan	140332	SK 2202	A	03/11/17
Level 3 Floor Plan	140332	SK 2203	A	03/11/17
Level 4 -11 Typical Floor Plan	140332	SK 2204	A	03/11/17
Level 12 Floor Plan	140332	SK 2212	A	03/11/17
Level 13 Floor Plan	140332	SK 2213	A	03/11/17
Level 14 – 20 Floor Plan	140332	SK 2221	A	03/11/17
Building Elevations - North	140332	SK 3200	A	03/11/17
Building Elevations - East	140332	SK 3201	A	03/11/17
Building Elevations - South	140332	SK 3202	A	03/11/17
Building Elevations – West	140332	SK 3203	A	03/11/17
Building Section – North/South	140332	SK 3300	A	03/11/17
Building Section – East / West	140332	SK 3301	A	03/11/17
CU 01 Facade	140332	SK 5200	A	03/11/17

Reports / Correspondence

- Planning Report by Ekistics, dated November 2017
- Landscape Concept Plan by ASPECT Studios, dated November 2017
- Energy Efficiency Façade Statement by Bestec, dated 6 November 2017
- Pedestrian Level Wind Assessment by GWTS, dated 11 November 2017
- Heritage Impact Statement by Dash Architects, dated 17 November 2117
- Traffic and Parking Report by MFY, dated 15 November 2017
- Energy Efficiency Statement by Bestec, dated 7 November 2017
- Waste Management Plan by Rawtec, dated 15 November 2017
- Stormwater Management Report by Wallbridge Gilbert Aztec, dated 16 November 2017
- Additional Traffic comments by MFY, dated 15 February 2017

2. Prior to Development Approval for the superstructure works, the applicant shall submit a final detailed schedule of external materials and finishes including a physical materials sample board, to the reasonable satisfaction of the State Commission Assessment Panel in consultation with the Government Architect.

3. The applicant shall submit, final signage design details including dimensions and specified graphics including colours to the reasonable satisfaction of the State Commission Assessment Panel.

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

5. All bicycle parks shall be designed and constructed in accordance with Australian Standard 2890.3-2015 and shall be located to ensure ease of access to users.

6. The development shall comply with noise level criteria specified in Environment Protection (Noise) Policy 2007 (under the Environment Protection Act). This includes noise from roof-level plant and equipment relative to adjacent properties, which will also comply with PDC 93 of the Adelaide (City) Development Plan. Sound attenuation

devices and visual screening shall be implemented as necessary to comply with these requirements.

7. All external lighting on the subject land shall be designed and constructed to conform to Australian Standard (AS 4282-1997). The lighting shall be designed and operated with CPTED practices in mind in order to maximise pedestrian amenity and safety 24 hours, 7 days a week.

8. Prior to Development Approval for superstructure works the applicant shall submit, to the reasonable satisfaction of the State Commission Assessment Panel, final design details of the proposed pedestrian environment in Freemasons Lane documenting means of maintaining safe pedestrian movements through configuration of wayfinding signage, pavement treatment (eg tactile indicators) and street furniture

9. 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.

10. A Construction Environment Management Plan (CEMP) shall be prepared to the satisfaction of the State Commission Assessment Panel in consultation with Heritage South Australia (Department of Environment, Water and Natural Resources) prior to Development Approval being granted 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 "Environmental Management of On-site Remediation" – to minimise environmental harm and disturbance during construction.

    The management plan must incorporate, without being limited to, the following matters:
    a) Proposal for the ongoing monitoring of the condition of the heritage place during relevant stages of the works;
    b) Proposal for protective measures against consequential damage to the heritage place; and
    c) Procedures to be followed if any structural distress or damage is identified in the heritage fabric

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

State Heritage Conditions

12. A dilapidation survey recording the condition of the State Heritage Place shall be prepared prior to the commencement of work on site, to the satisfaction of the relevant authority. As well as recording fabric in good condition, the survey shall also record the location, type and dimensional extent of any existing physical damage to the place that might be affected by the proposed demolition, excavation and construction works.

13. During ground works, short term vibration levels at the heritage-listed structure shall be monitored, and shall not exceed the velocity limits for structural vibration in building established for Group 3 structures in the German Standard Din 4150 part 3.

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 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 proposed development will penetrate the Adelaide Airport Obstacle Limitation surface (OLS) which is in 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 will be forwarded to the Department of Infrastructure and Regional Development for their approval. 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.

e. Crane operations associated with construction, if approved, shall be the subject to a separate application to the Department of Infrastructure and Regional Development.

State Heritage Notes

a. Any changes to the proposal for which planning consent is sought or granted may give rise to heritage impacts requiring further consultation with the Department of Environment, Water and Natural Resources, or an additional referral to the Minister for Sustainability, Environment and Conservation. Such changes would include for example
   (1) an application to vary the planning consent, or
   (2) Building Rules documentation that incorporates differences from the proposal as documented in the planning application.

b. If an archaeological artefact believed to be of heritage significance is encountered during excavation works, disturbance in the vicinity shall cease and the SA Heritage Council shall be notified.

c. Where it is known in advance (or there is reasonable cause to suspect) that significant archaeological artefacts may be encountered, a permit is required prior to commencing excavation works. For further information, contact the Department of Environment, Water and Natural Resources.

d. If Aboriginal sites, objects or remains are discovered during excavation works, the Aboriginal Heritage Branch of the Aboriginal Affairs and Reconciliation Division of the Department of the Premier and Cabinet (as delegate of the Minister) should be notified under Section 20 of the Aboriginal Heritage Act 1988.

Karl Woehle
Planning Officer
DEVELOPMENT DIVISION
DEPARTMENT OF PLANNING, TRANSPORT and INFRASTRUCTURE

83 Pirie Street

Development Application

15.11.17

WOODS BAGOT

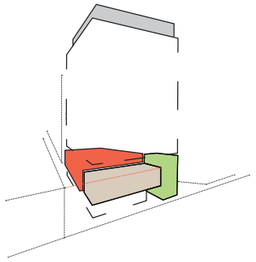
Contents

01 Summary.

01 Summary
Design Statement

83 PIRIE STREET

Design Statement.



Rejuvenating an underutilised site in Adelaide's CBD, the 83 Pirie street development will provide thirty-thousand square meters of contemporary commercial accommodation and provide a valuable contribution to the urban realm.

Located on the corner of Pirie street and Freemasons lane, the subject site has three frontages to Pirie street, Freemasons Lane (east) and Freemans Lane (west). Transparent building lobby and retail areas work to activate Pirie street with pedestrian movement and outdoor dining. A combination of retail and transparent EOT facilities create a strong laneway culture within Freemasons lane. Active frontages and generous setbacks return space back to pedestrians and unlock the key north-south pedestrian axis of Freemasons lane/Flinders Link – strengthening and contributing to the North-south pedestrian grain that exists within Gawler place and Chesser Street.

The building's bold form has been broken down and articulated through close analysis of existing site conditions and analysis of adjacent buildings - in particular reference to the heritage building nearby. The building's podium has been divided into three blocks of various scales, with each block's scale and materially being informed and derived from both the streetscape and the architectural language of buildings adjacent. Level 3 has been sized at 3800mm slab to slab height to allow for future conversion into commercial space. A purposeful and restrained approach has informed the design of the tower component, with repetition of angled glass panels creating an elegant and sophisticated design aesthetic.

A strong emphasis on creating clear and safe separation between service vehicles and pedestrians has informed the approach to site access. Service and waste vehicles will gain access via Freemans Lane (west) whereas pedestrians and cars will attain access via Freemasons Lane. In alignment with the Adelaide City Council's focus on the Flinders Street bike-way, the EOT facility has been located at Ground Level along Freemasons Lane, with access south to Flinders Street. A transparent façade, generous ground level setback, outdoor dining and landscaping provides opportunities for public to dwell. Through transparency and continuity of finishes, public are invited to enter the building via Pirie street and Freemasons lane.

01 Summary
Development Summary

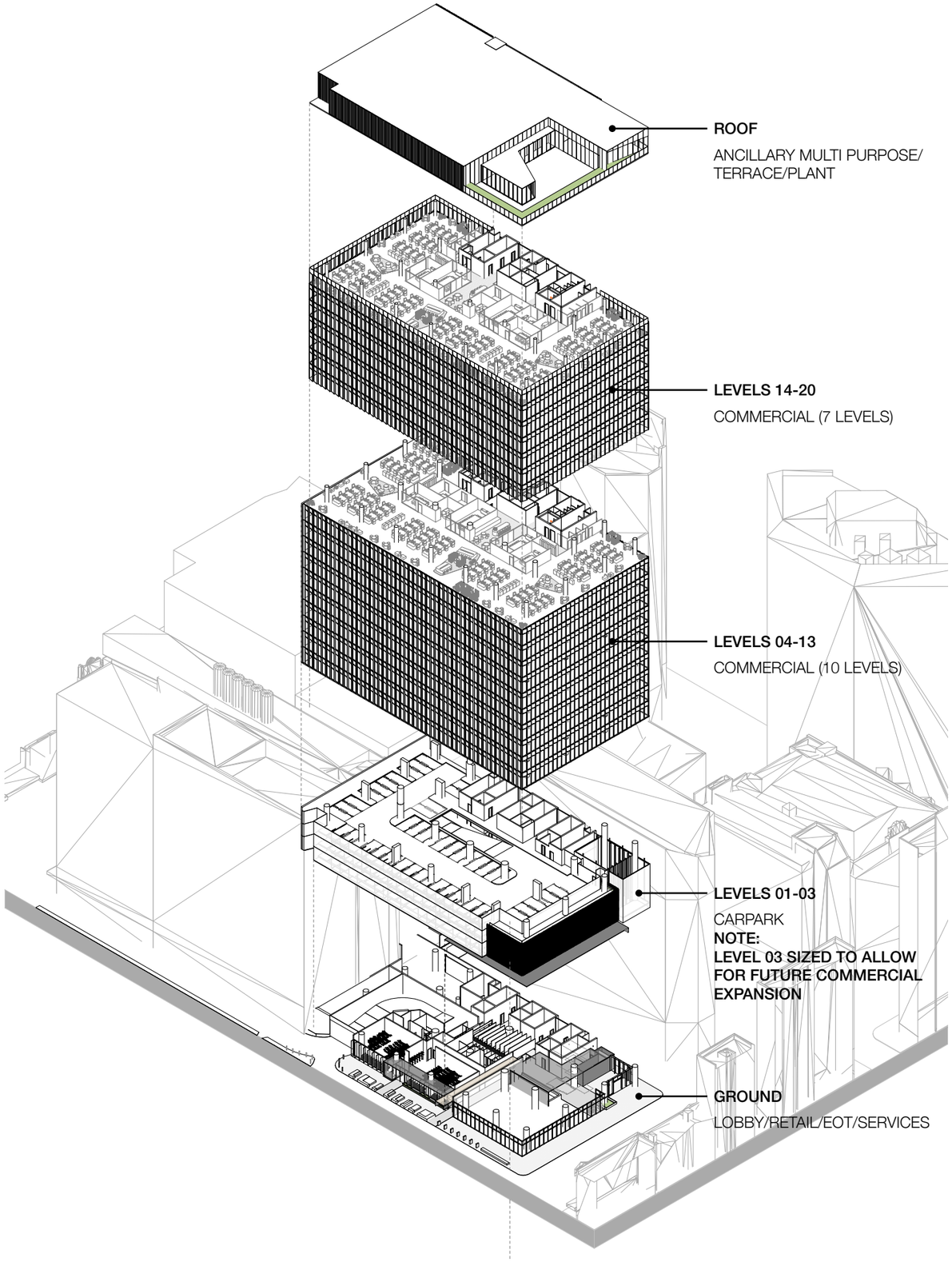
83 PIRIE STREET

Development Summary.

Location
73-85 Pirie Street, Adelaide SA

Building Type
21 Storey office building

Content
- Ground Level Retail, Lobby, EOT (205 Parks), Services and BOH
- 122 Carparks (Level 01, 02 and 03)
  (Level 03 sized to allow for future commercial expansion)
- 17 Commercial levels (Level 04-20)
- Roof level multipurpose area, terrace and plant



02 Site Context.

02 Site Context
Urban Context

Located on Pirie Street and in close proximity to Gawler Place, the subject site forms an integral part of Adelaide's CBD.

KING WILLIAM ST

GAWLER PLACE

RUNDLE MALL

GRENFELL ST

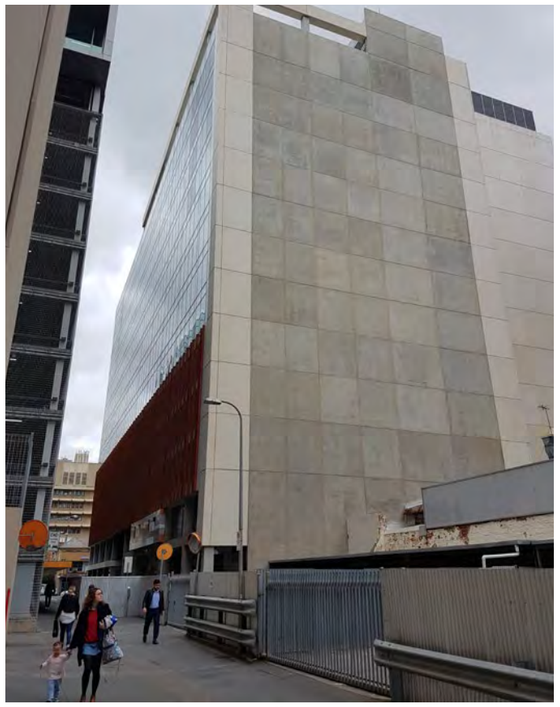
PIRIE ST

FLINDERS ST

GROTE ST

02 Site Context
Existing Conditions

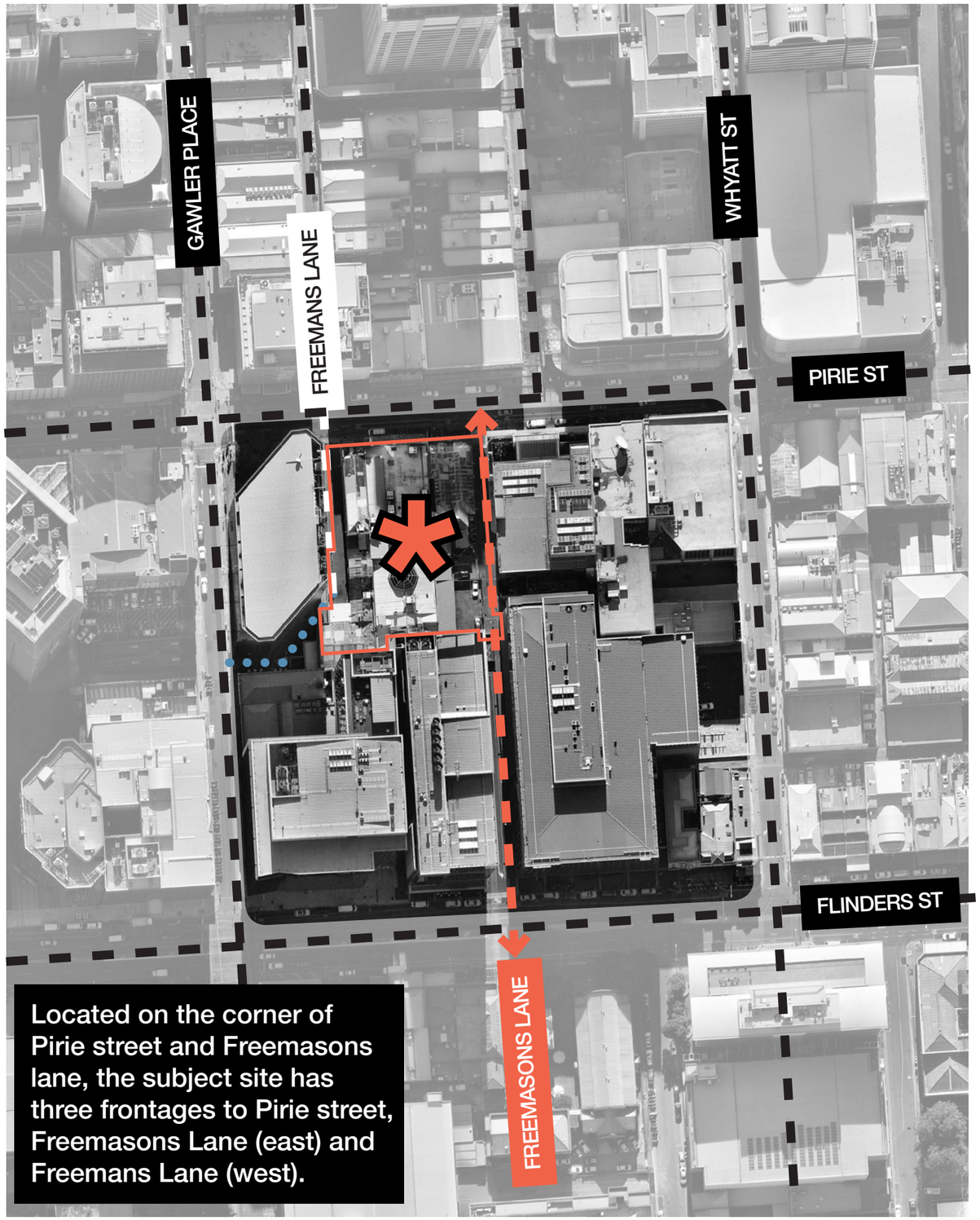
Subject Site Area : 2911m²



Freemasons Lane - Currently 3.8m wide

Freemans Lane - Currently 4.1m wide

Local Heritage State Heritage



02 Site Context
Site History

PIRIE STREET

History.

Named after John Pirie, founding director and one of the largest financiers of the South Australian Co; Pirie Street has always formed an integral spine within Adelaide's CBD district.

Beginning as a residential street occupied largely by trades and labour workers operating businesses from their homes, it became a developed commercial environment in the 1950's. Accelerated commercial development occurred following construction of Adelaide Town Hall in 1866.

http://adelaidia.sa.gov.au/places/pirie-street

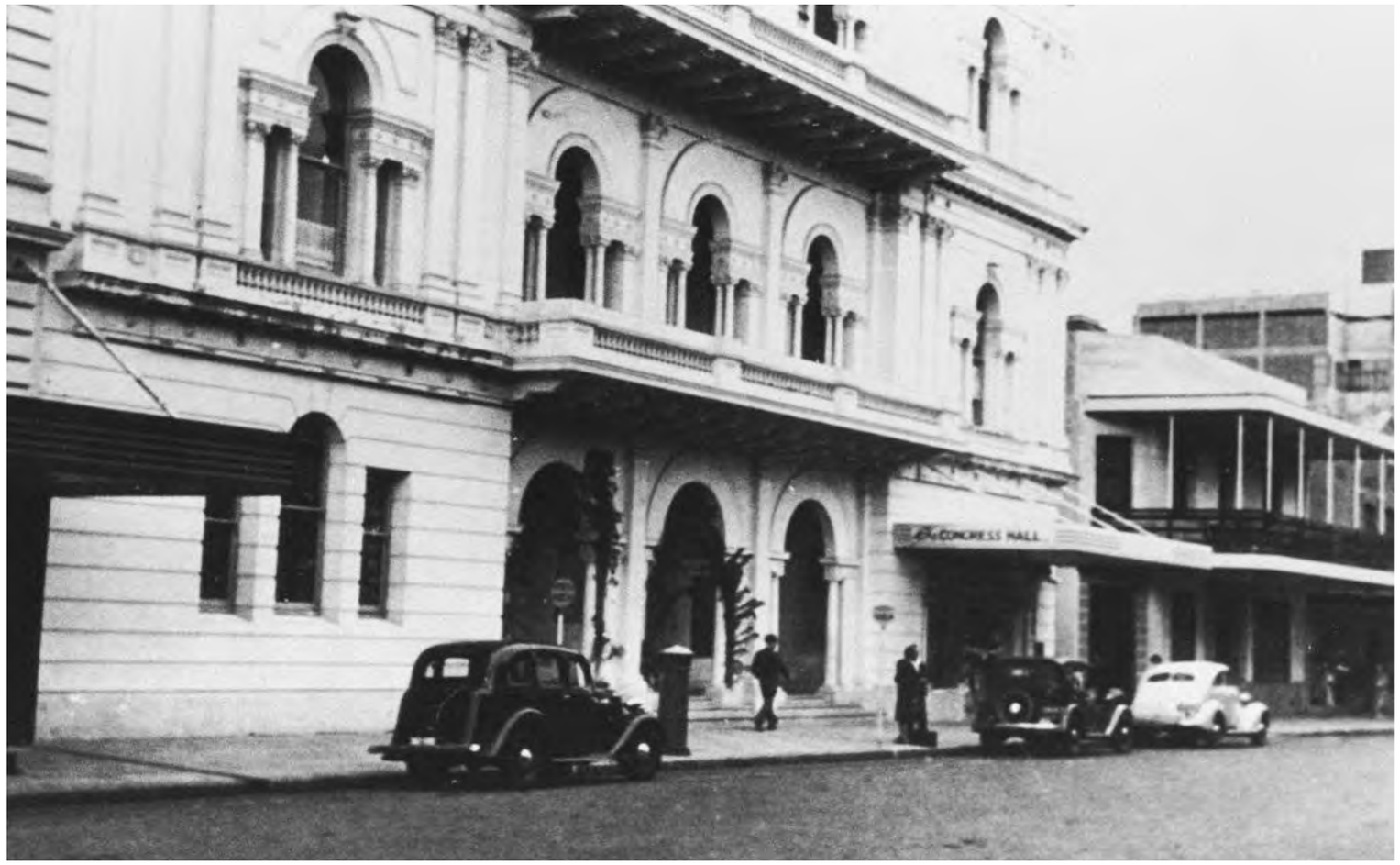
02 Site Context
Site History

PIRIE STREET

89 Pirie Street.

Located adjacent our subject site, the German Club building was purchased in 1899 by the Salvation Army which occupied it until 1979. Widely known as the ‘People’s Palace’ (currently Darlington House Offices), the building served first as headquarters for the organisation and then provided low-cost temporary accommodation.

In 1938 Harold Griggs designed an additional third storey. The building has been damaged over the years by fire, one of which led to the demolition of the Albert Hall. Since its sale by the Salvation Army, People’s Palace has been redeveloped as offices.



http://adelaidia.sa.gov.au/places/pirie-street

03 Design Response.

03 Design Response
Design Narrative

PIRIE STREET

WORKLIFE.

Drawing upon the Pirie Street's history as a residential street comprised of businesses with attached homes, the 'WORKLIFE' concept informs the buildings planning, access and massing.

Residents worked in or near their homes. Small-scale workshops, forges and shops dotted the neighbourhood.

03 Design Response
Massing

PIRIE STREET

Inherent Scale.

A textured, intimate and undulating streetscape

1928

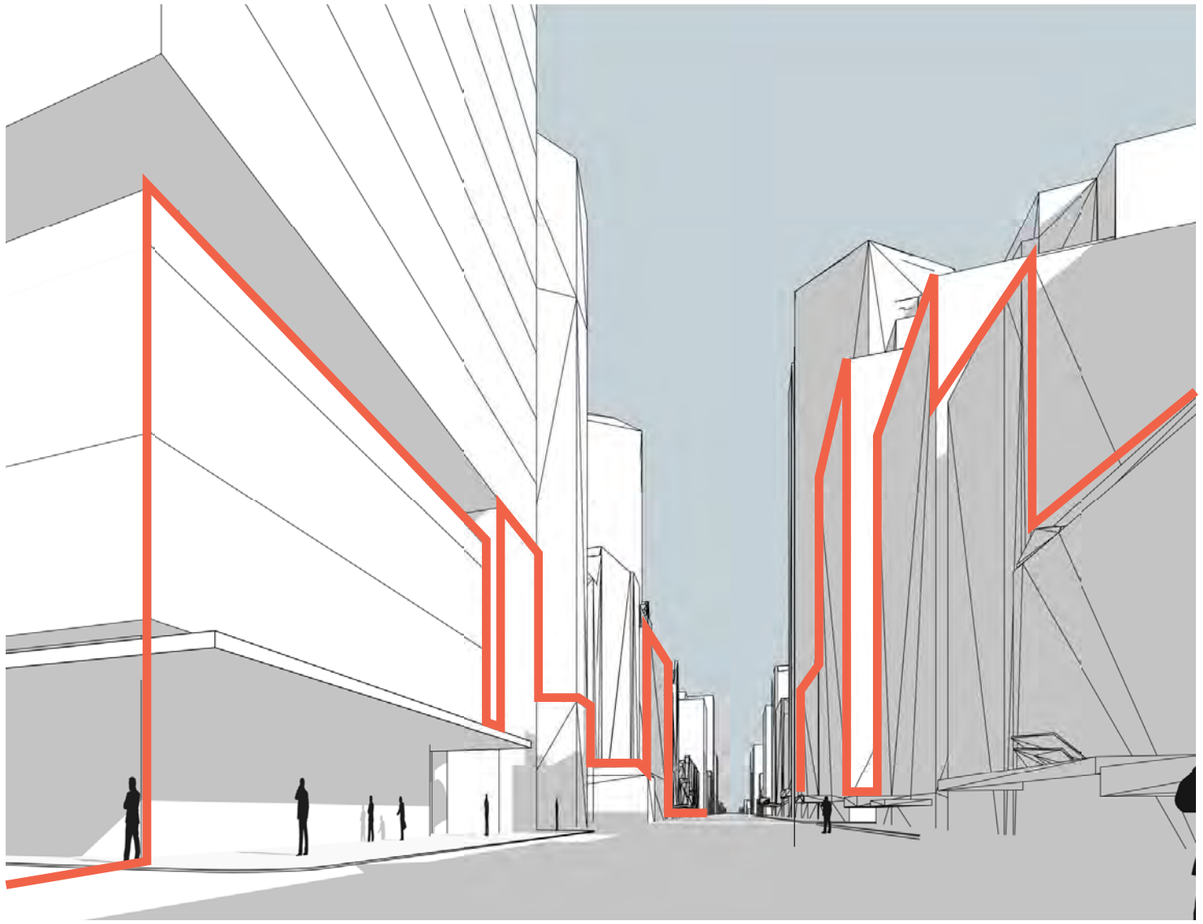
2017

03 Design Response
Massing

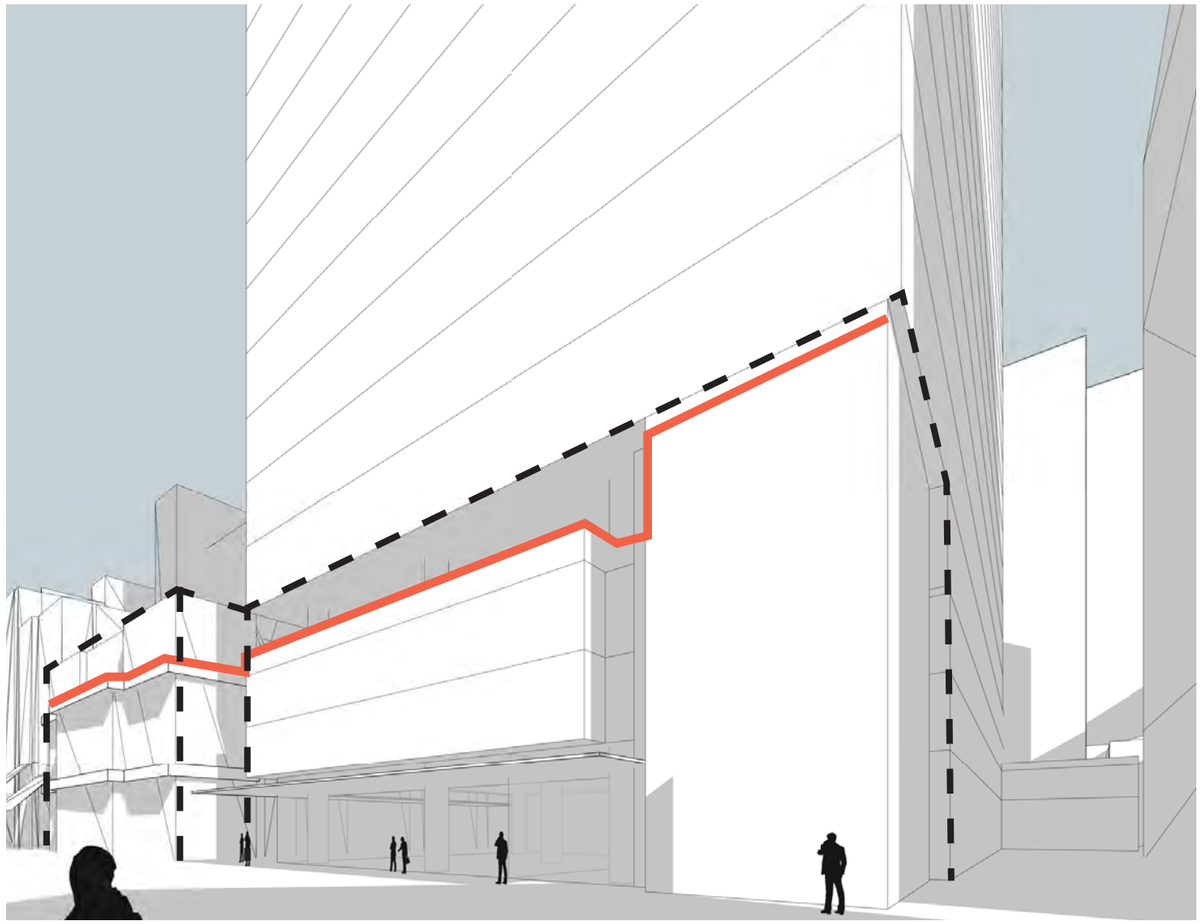
PIRIE STREET

Inherent Scale.

A textured, intimate and undulating streetscape



Proposed



Proposed

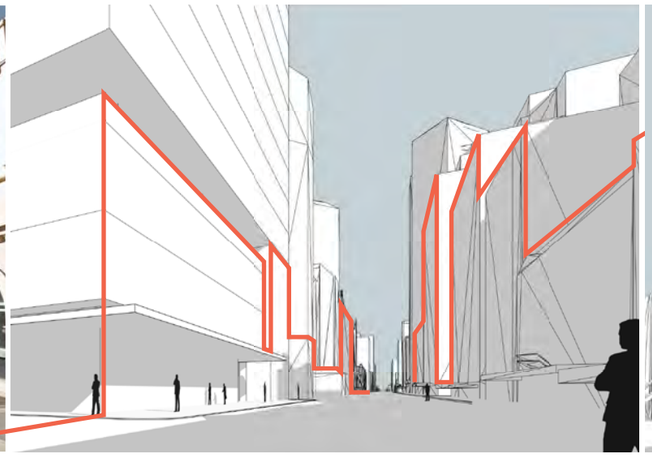
03 Design Response
Massing

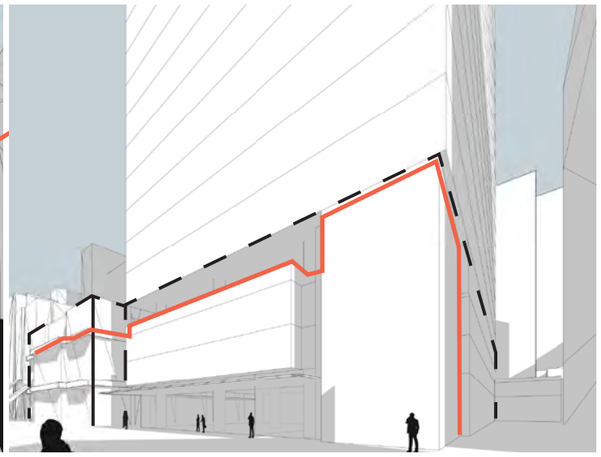
PIRIE STREET

Inherent Scale.

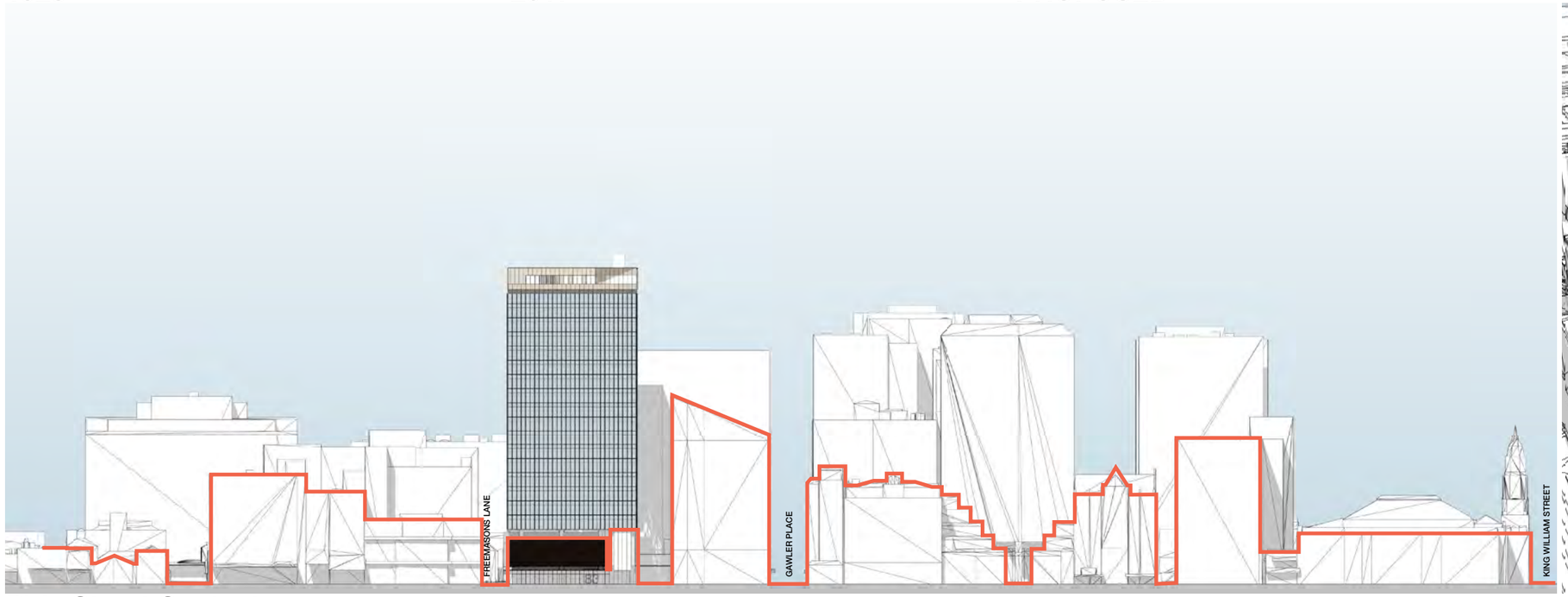
1928

2017



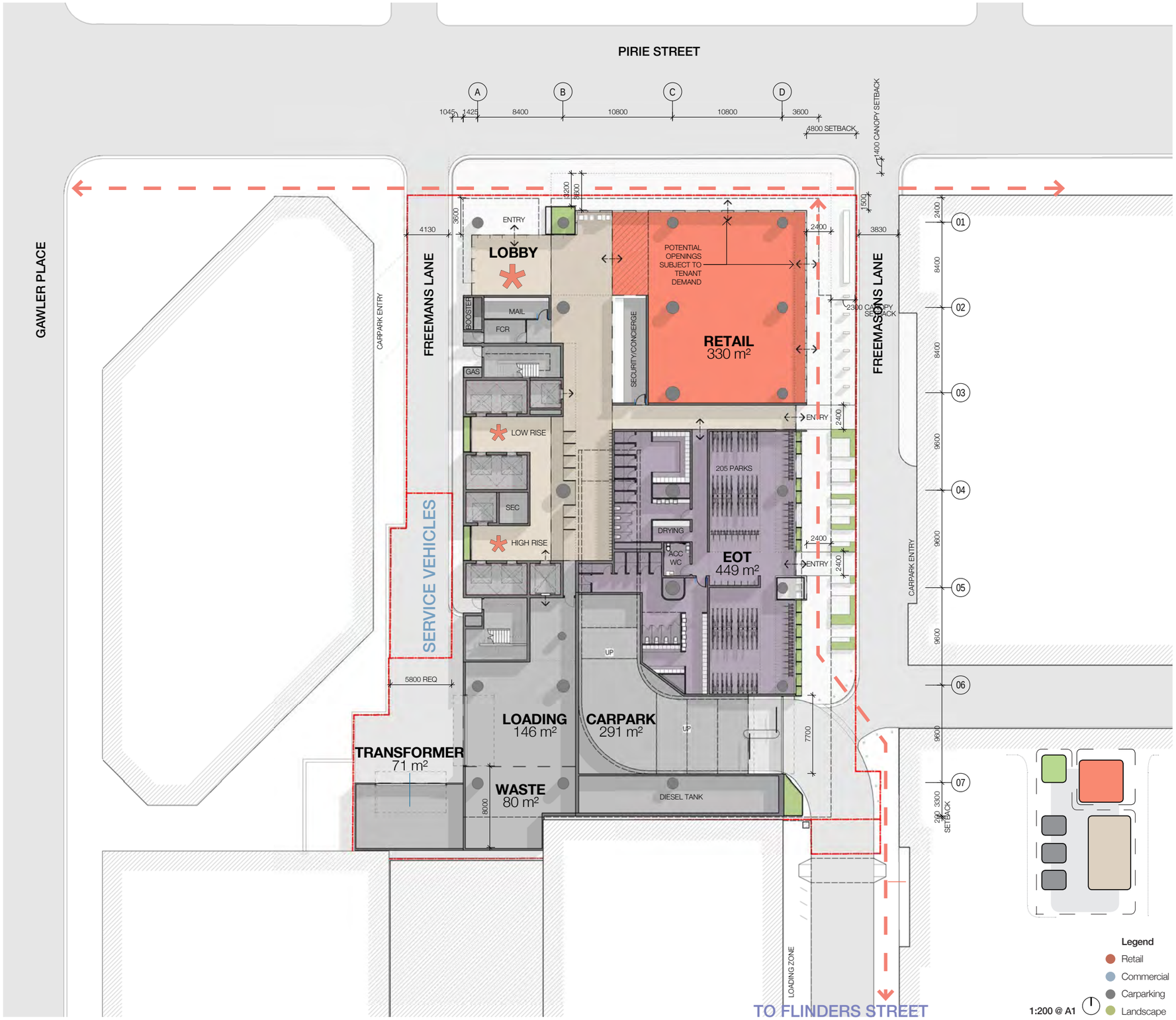


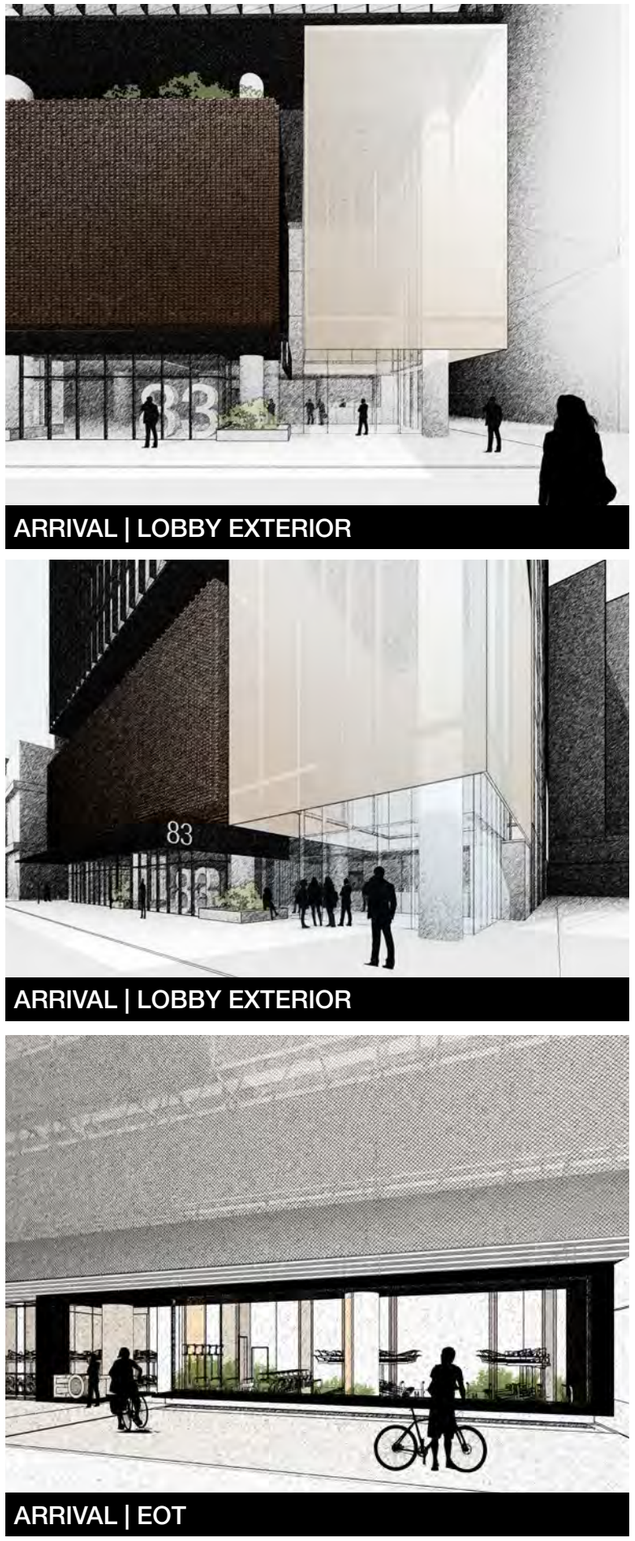
PROPOSED



Pirie Street Context

03 Design Response
Ground Plane



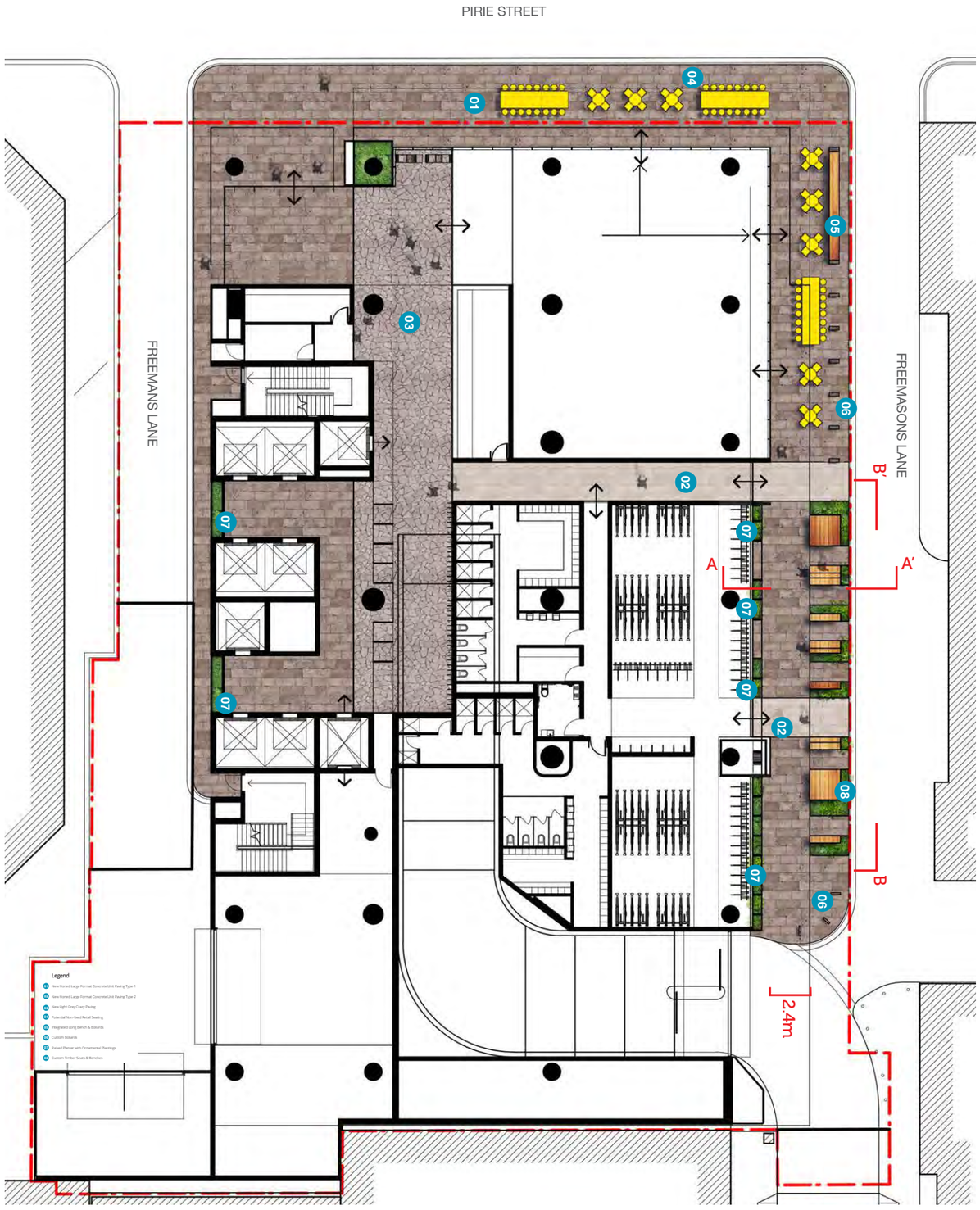


ARRIVAL | LOBBY EXTERIOR

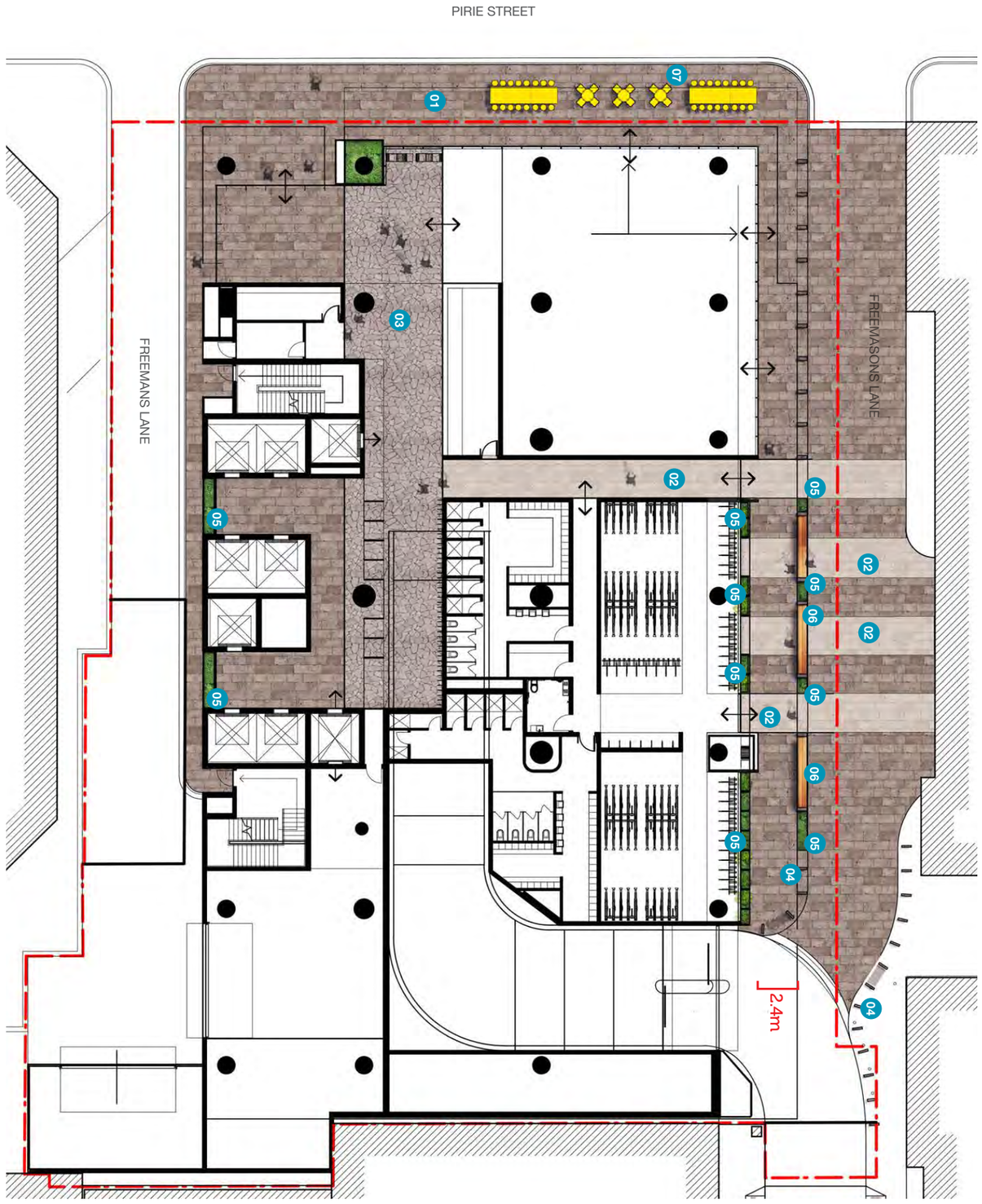
ARRIVAL | LOBBY EXTERIOR

ARRIVAL | EOT

03 Design Response
Ground Plane



PROPOSED PUBLIC REALM - EXISTING LANE WIDTH

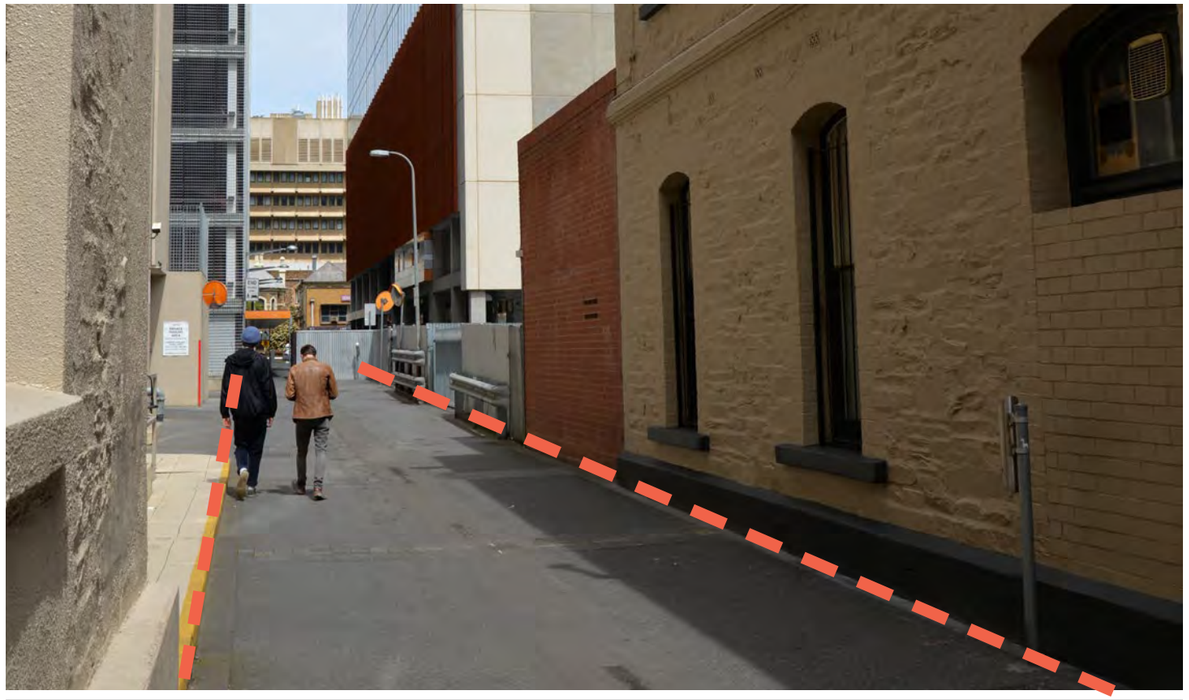


POTENTIAL PUBLIC REALM - LANE WIDENED

03 Design Response
Ground Plane

PIRIE STREET

Freemasons Lane.



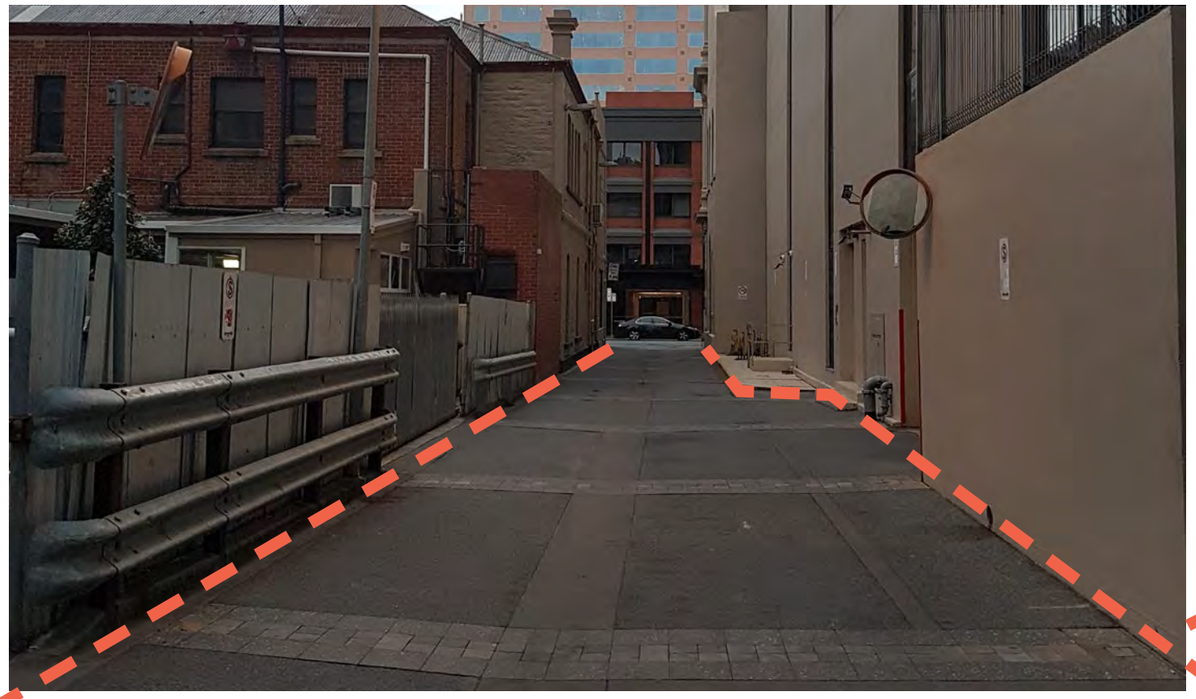
MASSING STUDY - BEFORE

MASSING STUDY - AFTER SETBACK TO CREATE PEDESTRIAN AREA

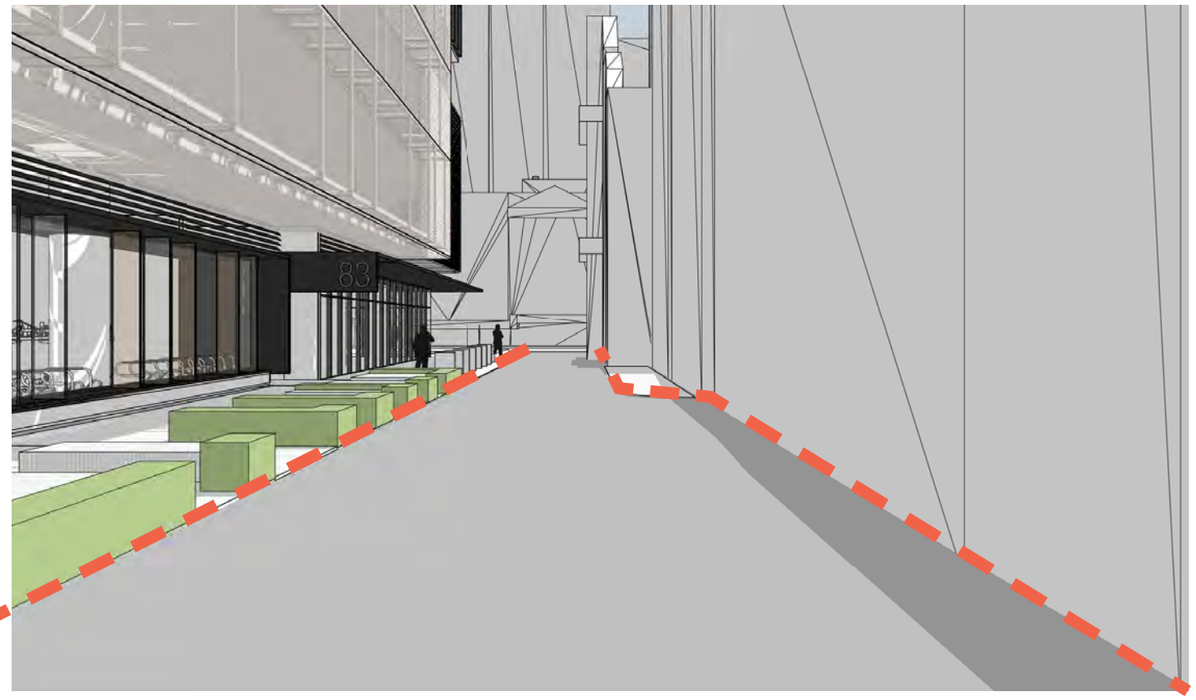
03 Design Response
Ground Plane

PIRIE STREET

Freemasons Lane.



MASSING STUDY - BEFORE



MASSING STUDY - AFTER

03 Design Response
Ground Plane

PIRIE STREET

Freemasons Lane.

MASSING STUDY - BEFORE

MASSING STUDY - AFTER REMOVAL OF FENCES

03 Design Response
Architectural Language

PIRIE STREET

Inherent Scale.

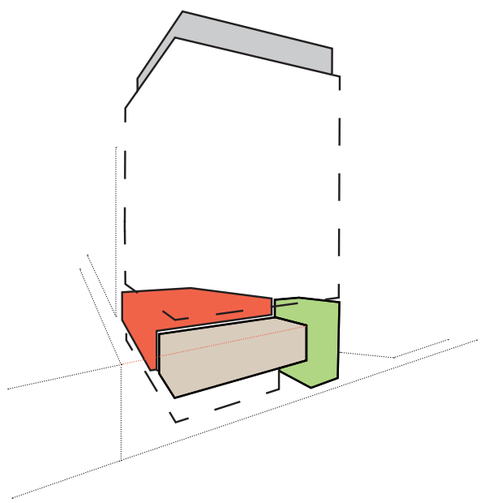
Informed by the site's existing frontage to Pirie Street, the proposed massing references the current horizontal form and vertical element to the site's north-west corner.

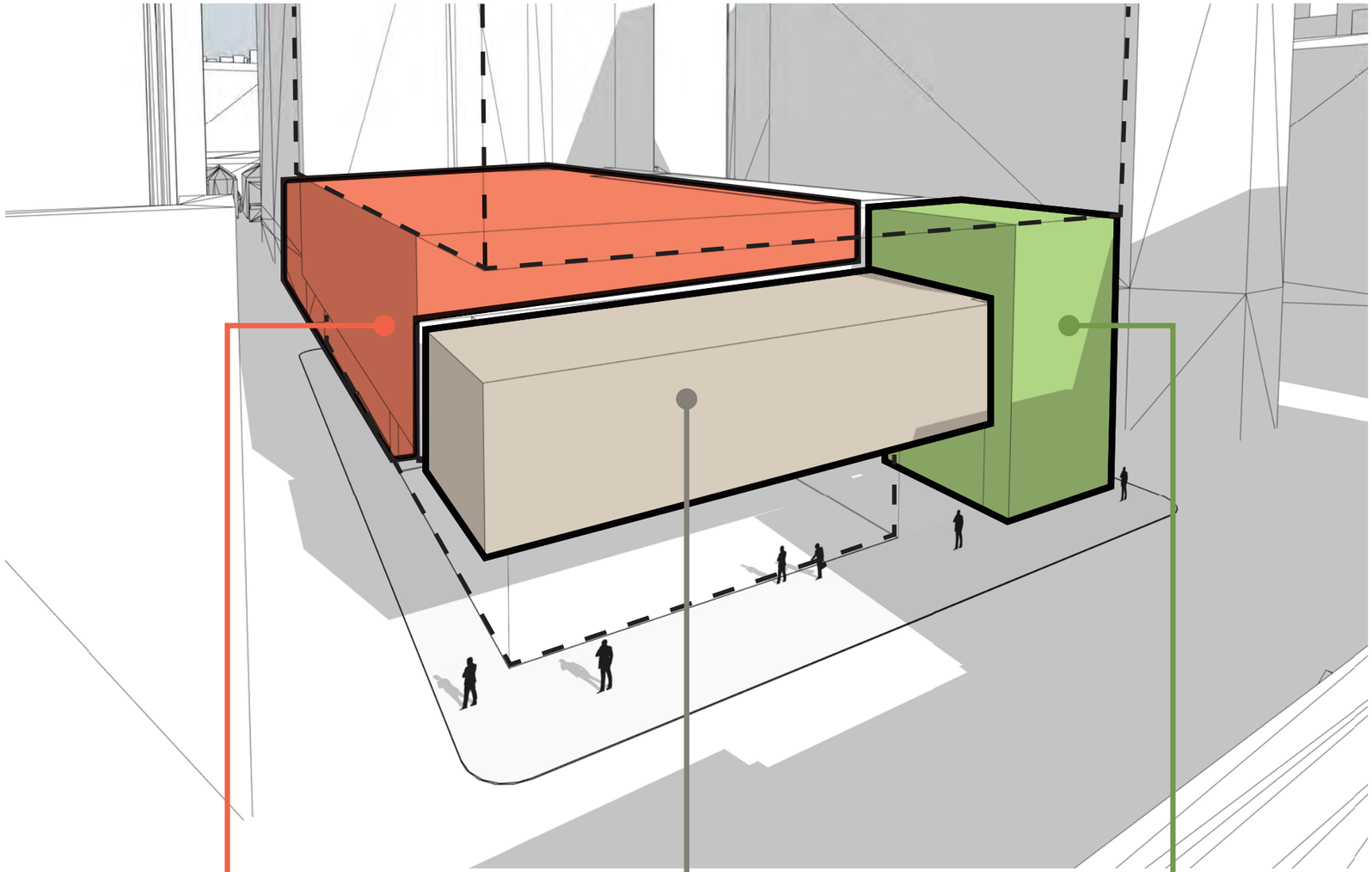
03 Design Response
Architectural Language

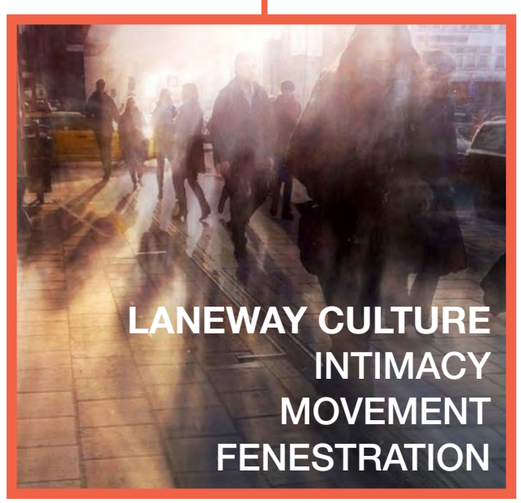
83 PIRIE STREET

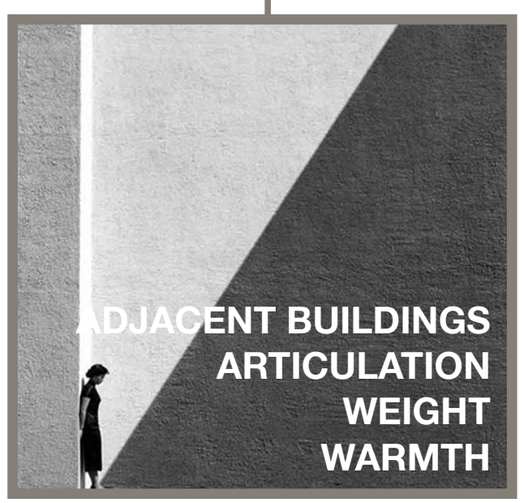
Podium Composition.

The building's bold composition has been broken down and articulated through close analysis of existing site conditions and analysis of adjacent buildings - in particular reference to the heritage building adjacent. The building's podium has been divided into three blocks of various scales, with each block's scale and materially being informed and derived from both the streetscape and the architectural language of buildings adjacent.







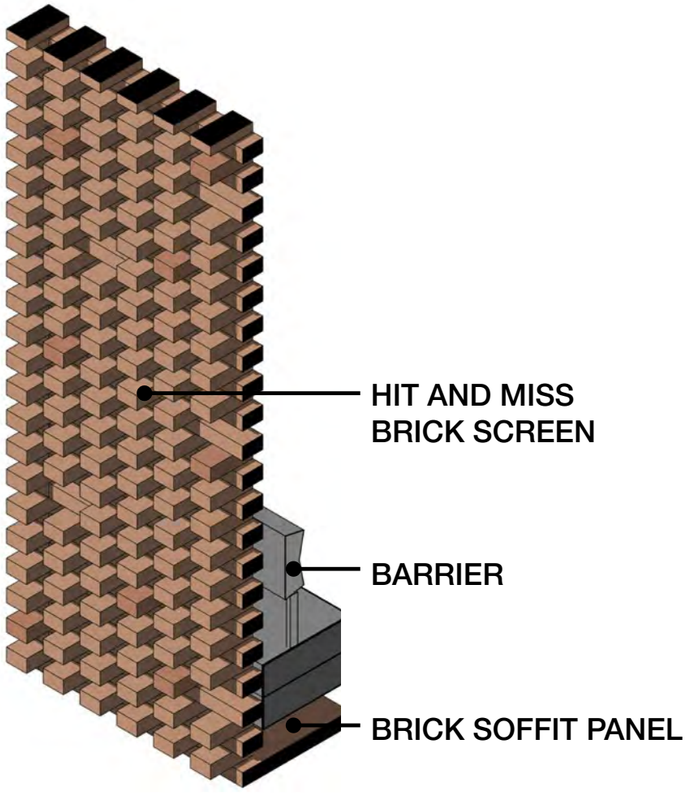


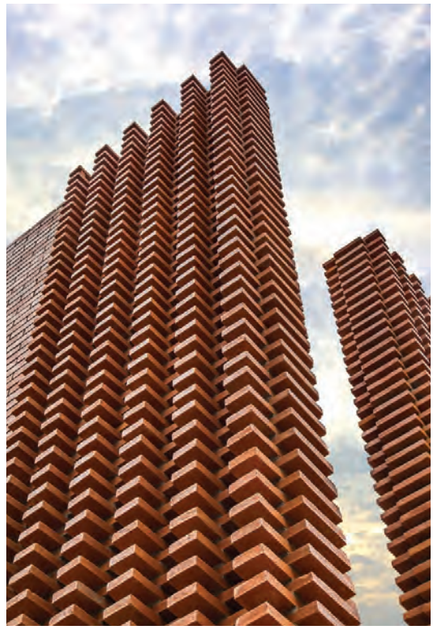
03 Design Response
Architectural Language

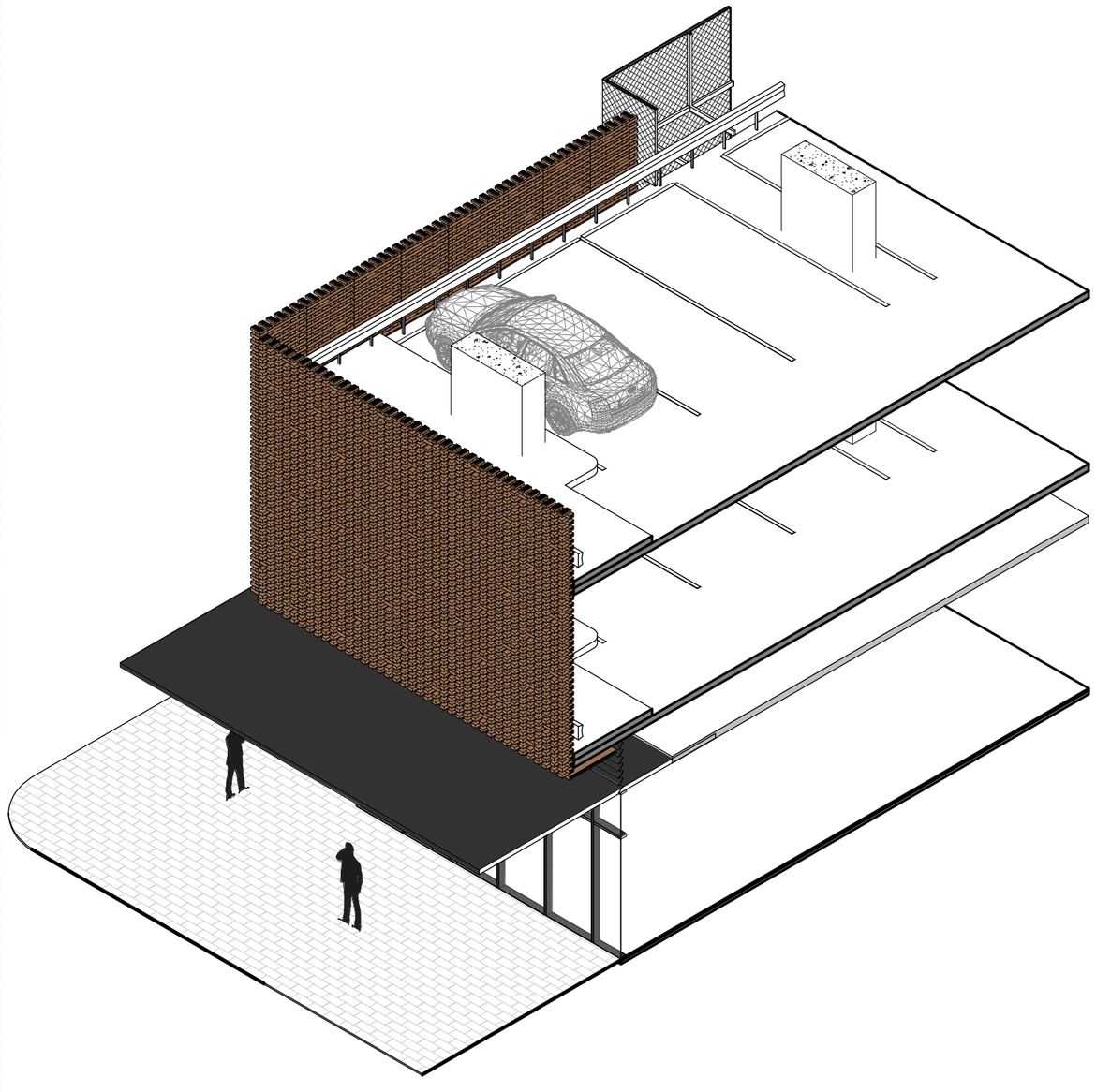
03 83 Pirie Street
Architectural Language

83 PIRIE STREET

Podium Facade.

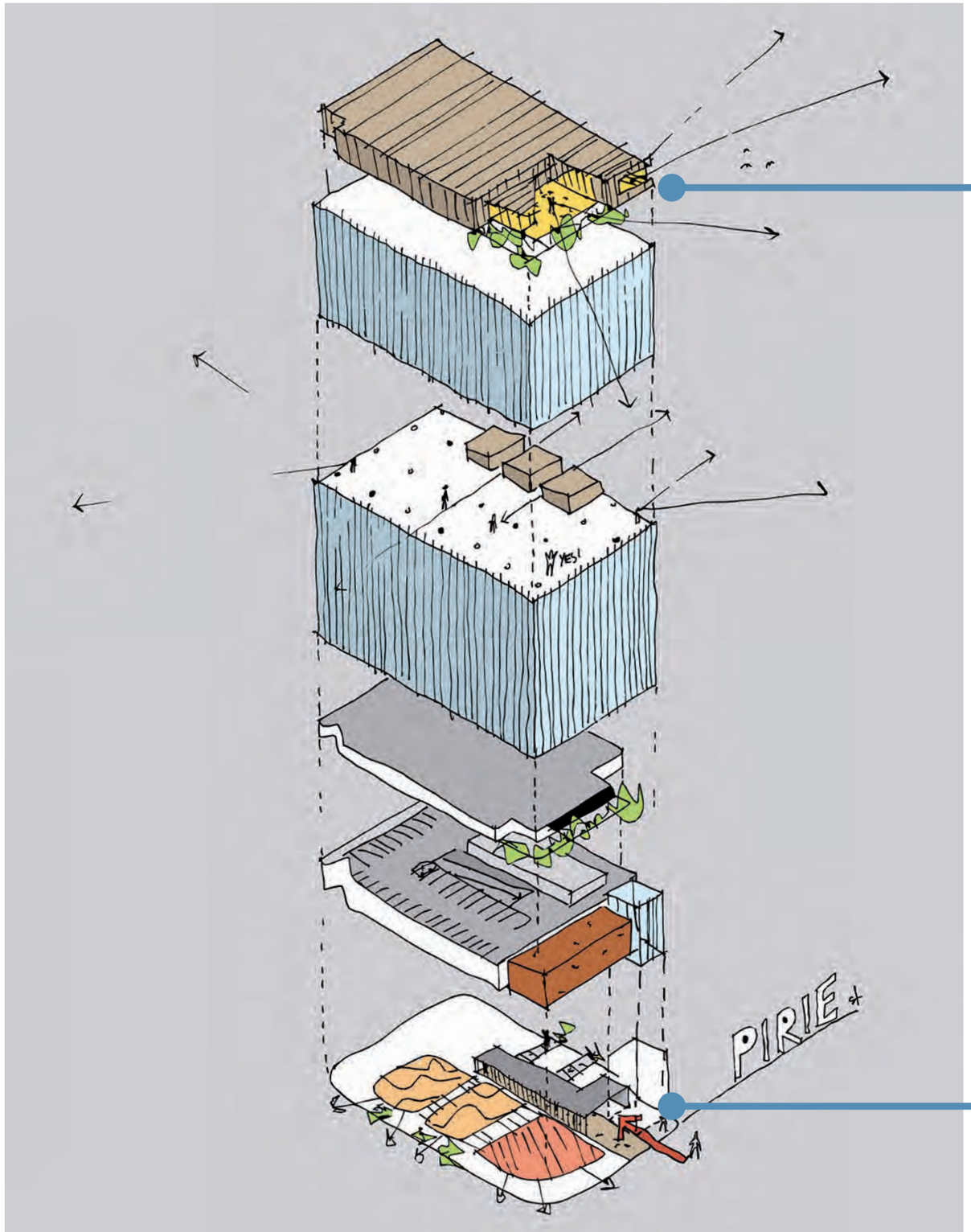


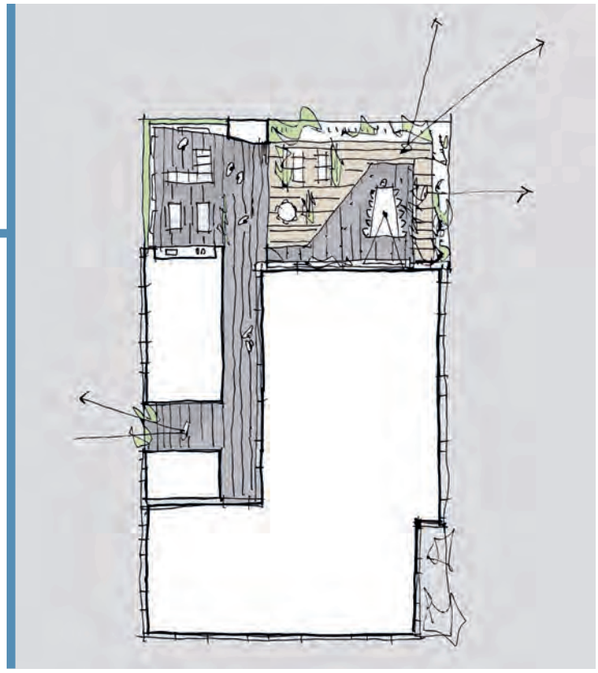


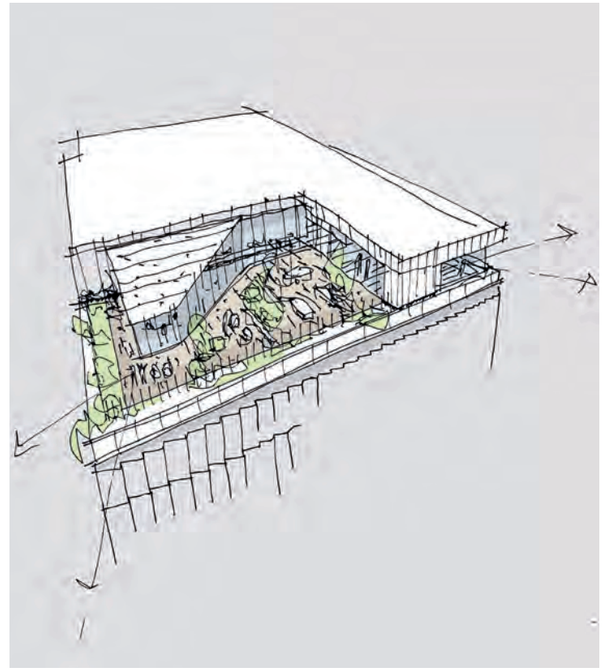


03 83 Pirie Street
Architectural Language

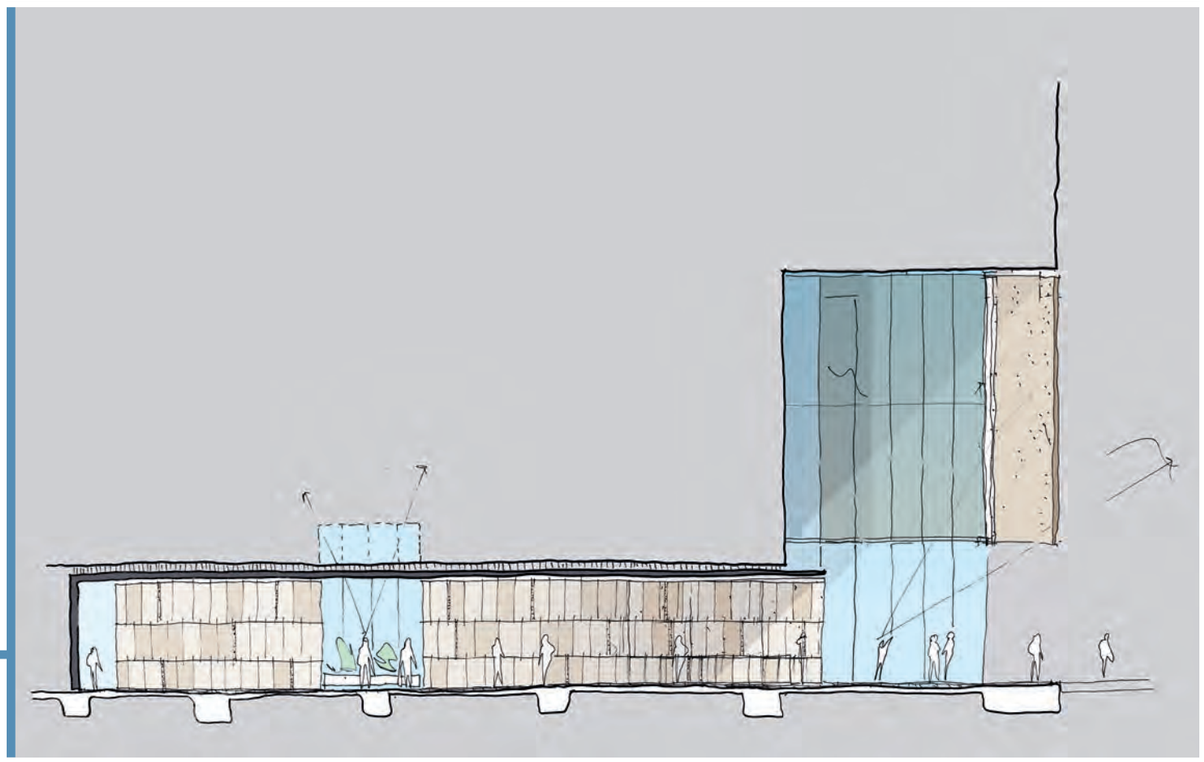
03 83 Pirie Street
Architectural Language





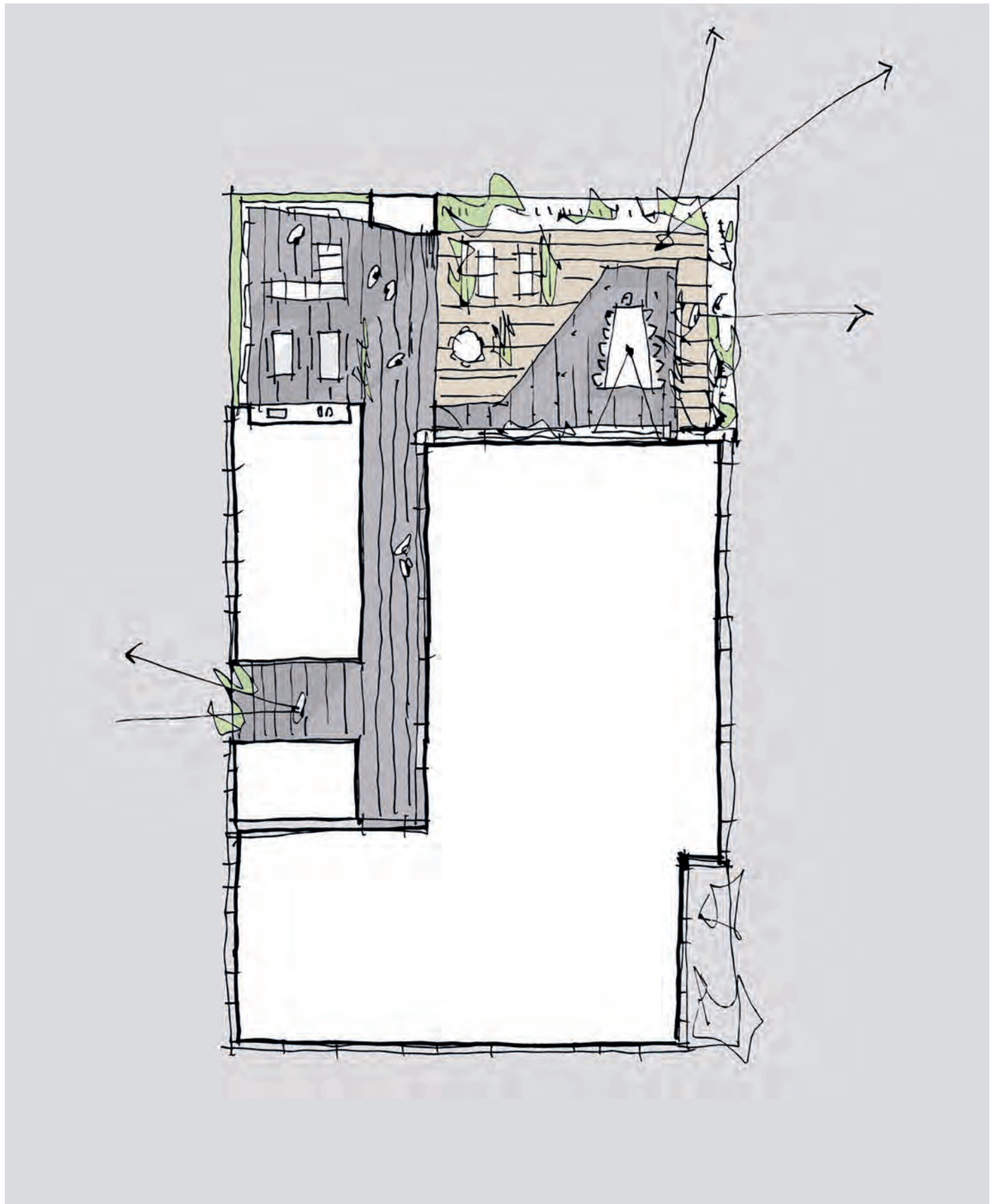


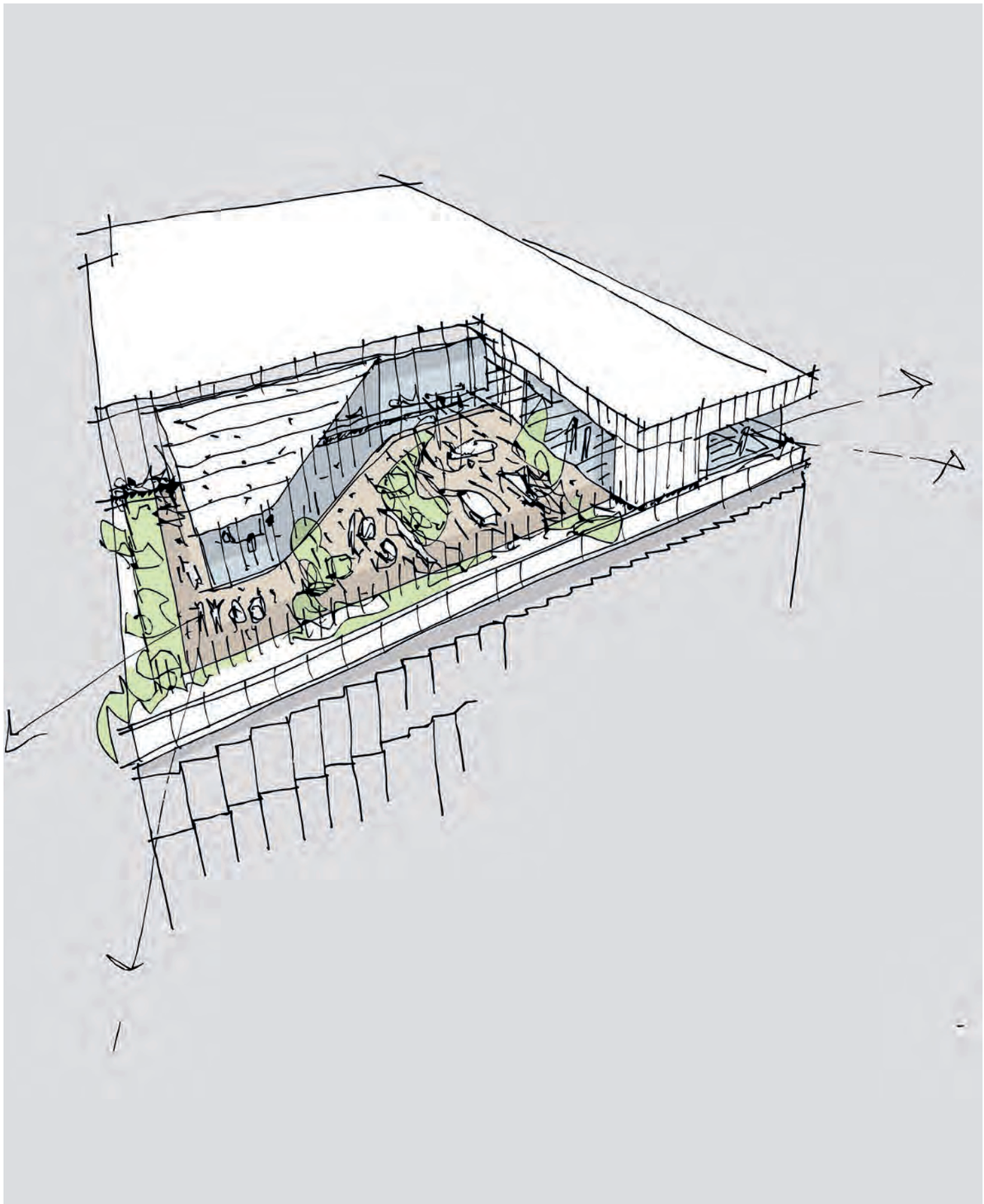
POTENTIAL ROOF TOP TREATMENT



LOBBY DESIGN

03 83 Pirie Street
Architectural Language



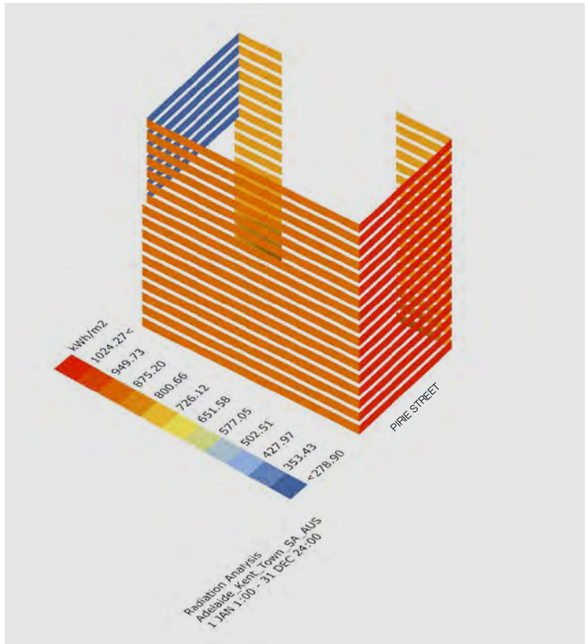


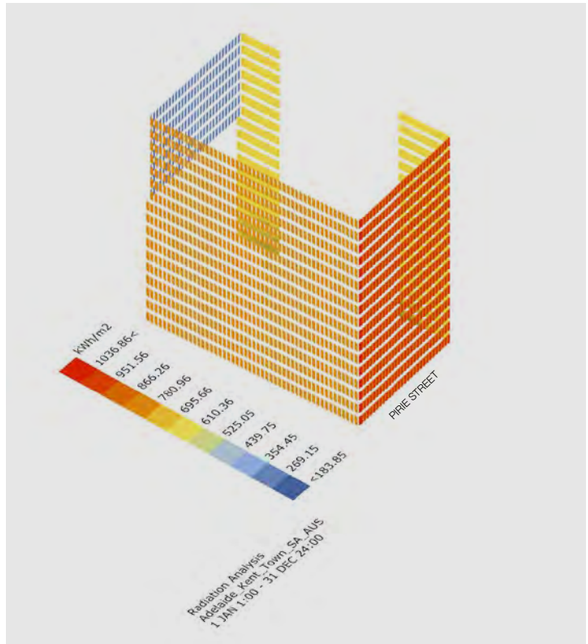
POTENTIAL ROOF TOP TREATMENT

03 83 Pirie Street
Architectural Language

83 PIRIE STREET

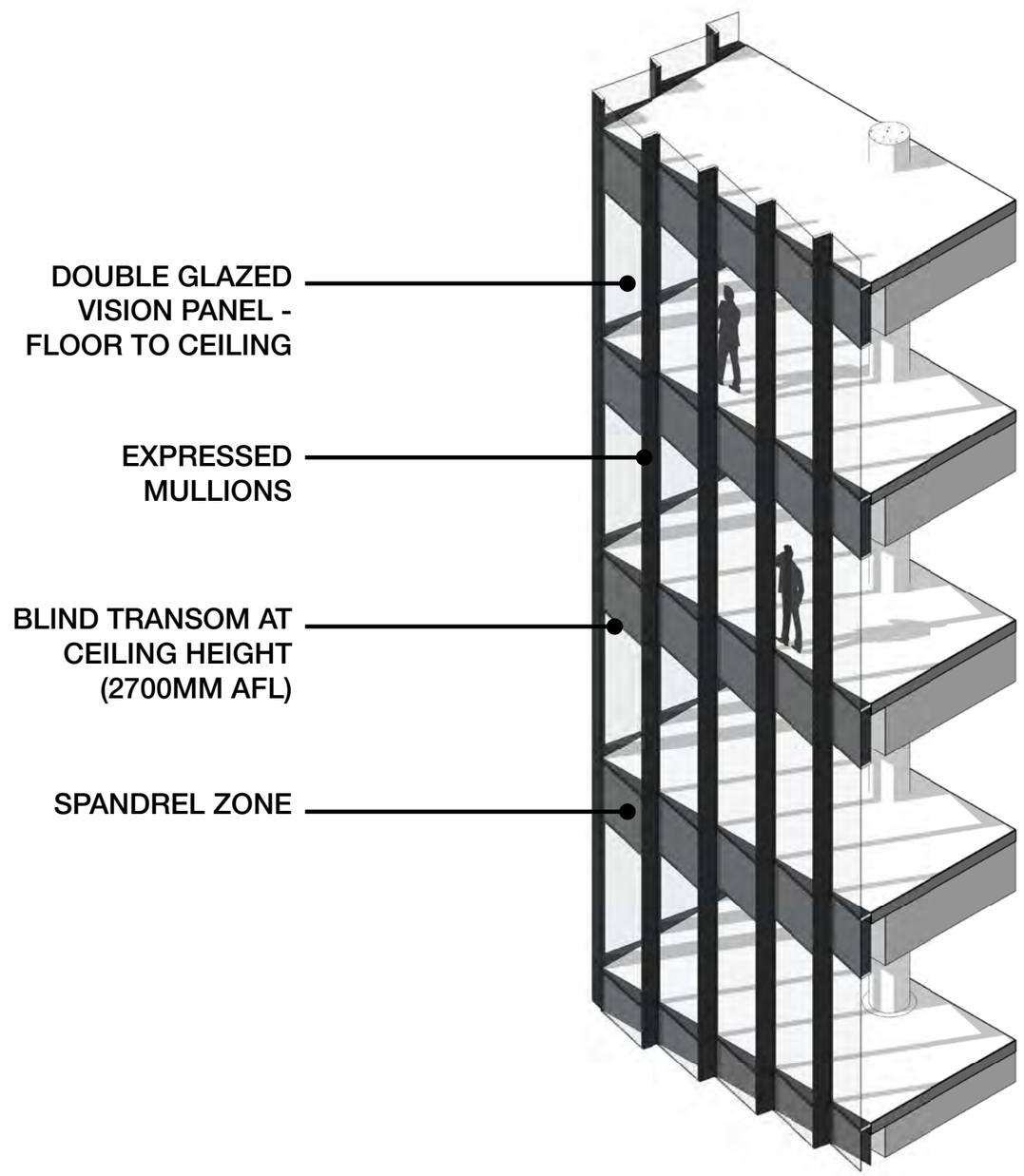
Tower Facade.





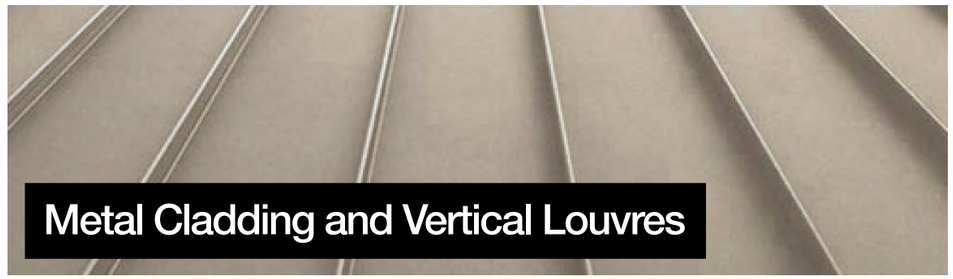
12% REDUCTION IN RADIATION GAIN BY APPLYING ANGLE TO FACADE PANELS

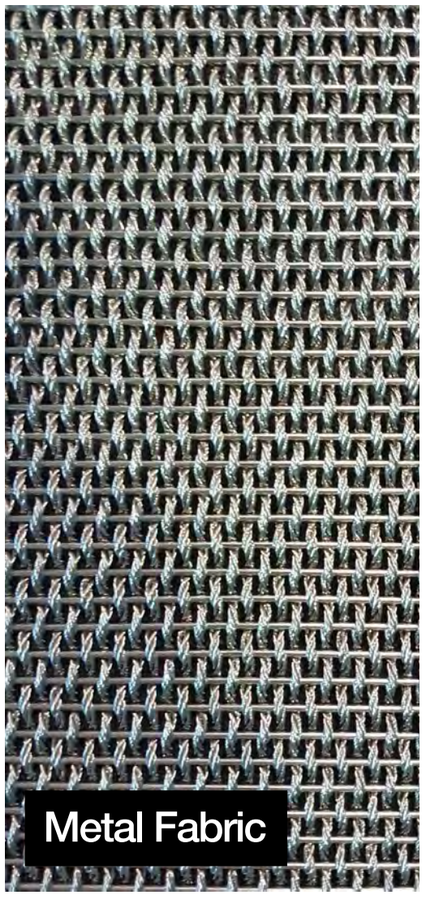
ADDITIONAL RADIATION GAIN HAS BEEN MEDIATED THROUGH USE OF DOUBLE-GLAZING. REFER TO ENGINEER'S REPORT.

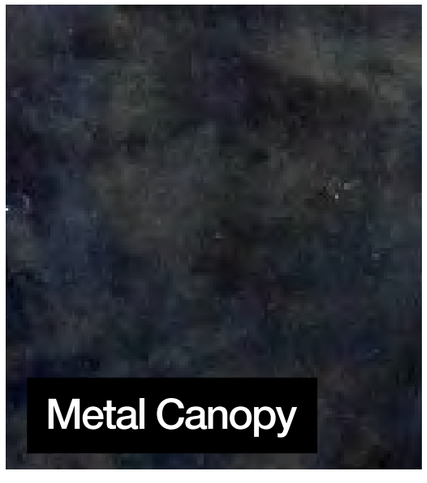


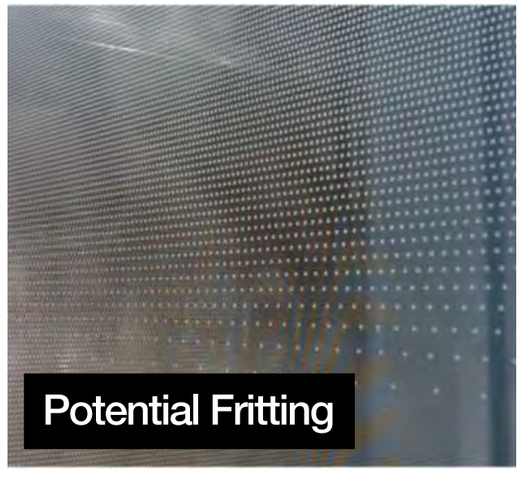
03 83 Pirie Street Materiality

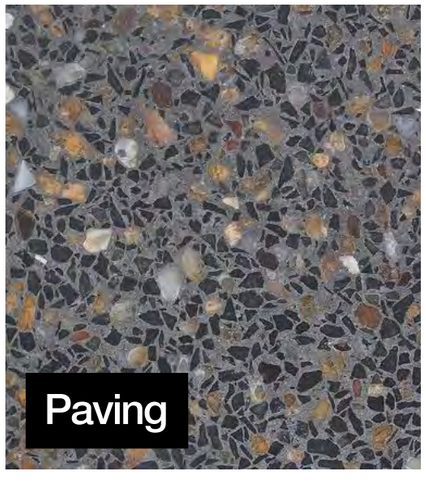
Palette.

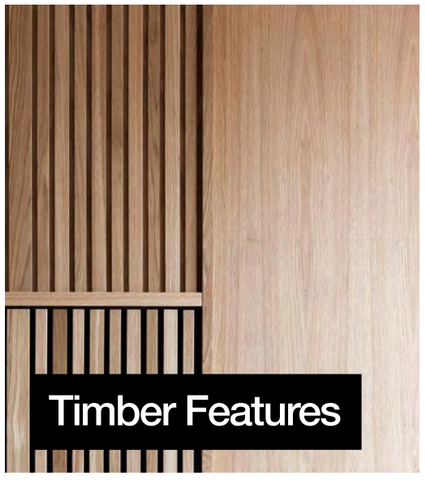












03 83 Pirie Street
Future Proofing

83 PIRIE STREET

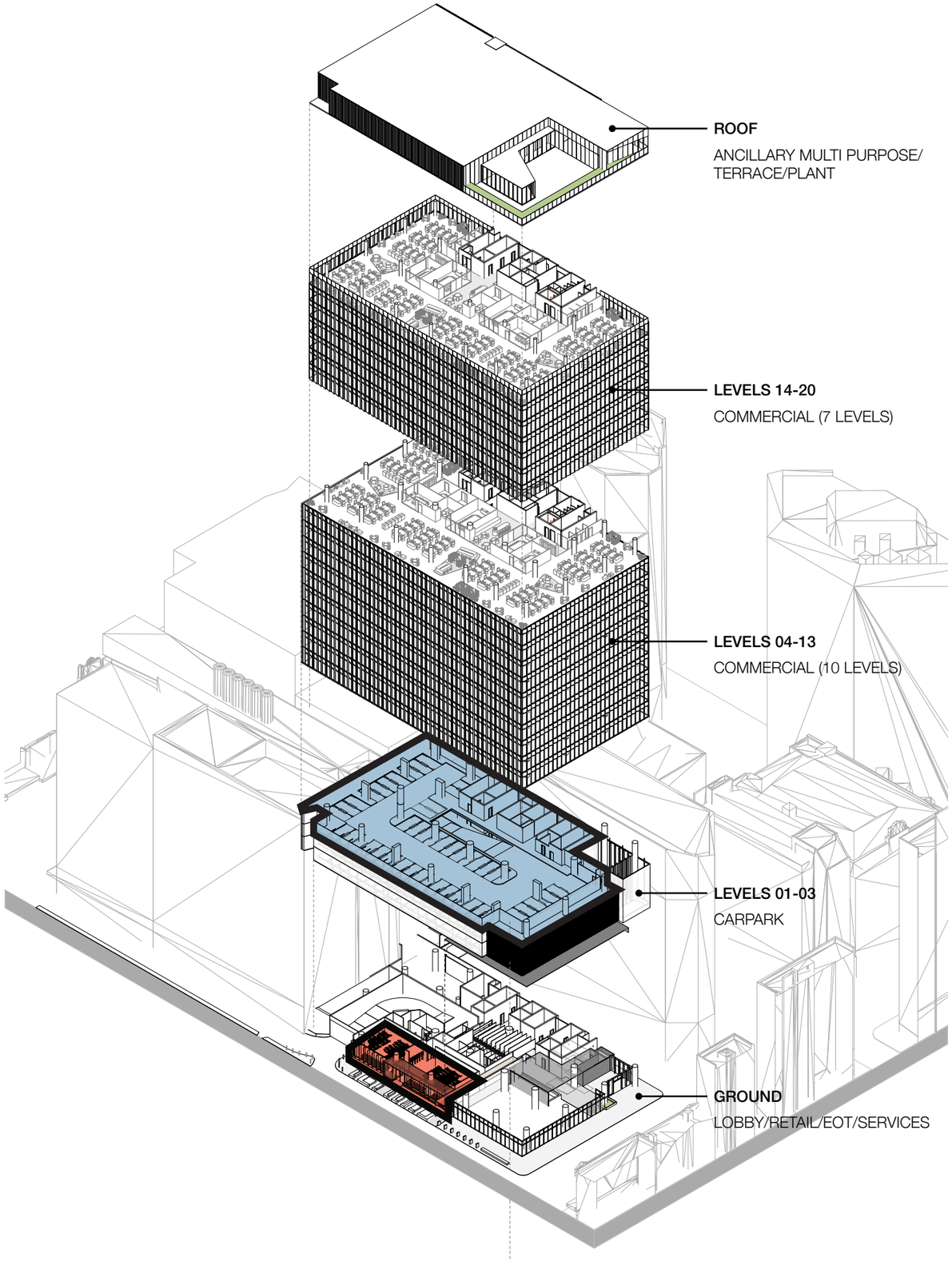
Future Proofing.

Key strategies have been incorporated into the building's design to ensure future proofing of 83 Pirie Street.

- Level 03 has been sized at 3800mm slab to slab height to allow for future conversion into commercial space. A north facing terrace area on Level 3 offers potential for additional activation in the future, following conversion of this level from carparking to commercial space.

- To respond to evolving laneway relationships, ground floor EOT facilities allow for future conversion into Retail space

- Ground floor canopy to Freemasons Lane has been designed to comply with Adelaide City Council encroachment policies at both the current road width, as well as the potential widened width



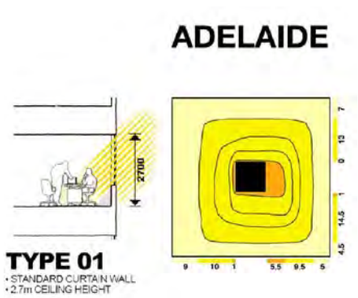
03 83 Pirie Street
Workplace Architecture

83 PIRIE STREET

Workplace Architecture.

As evident in the floor depth analysis shown adjacent, the majority of the floorplates should achieve lighting levels above 250 Lux.

Whilst areas within the centre of the floor plate begin to achieve ‘dim’ levels, these areas are naturally suited to having built zones within a typical workplace fitout - as indicated in the indicative test fits on the following page.



Legend

- BRIGHT (2000 Lux or more)
- USEFUL LIGHT (250-2000 Lux)
- DIM (250 Lux or less)

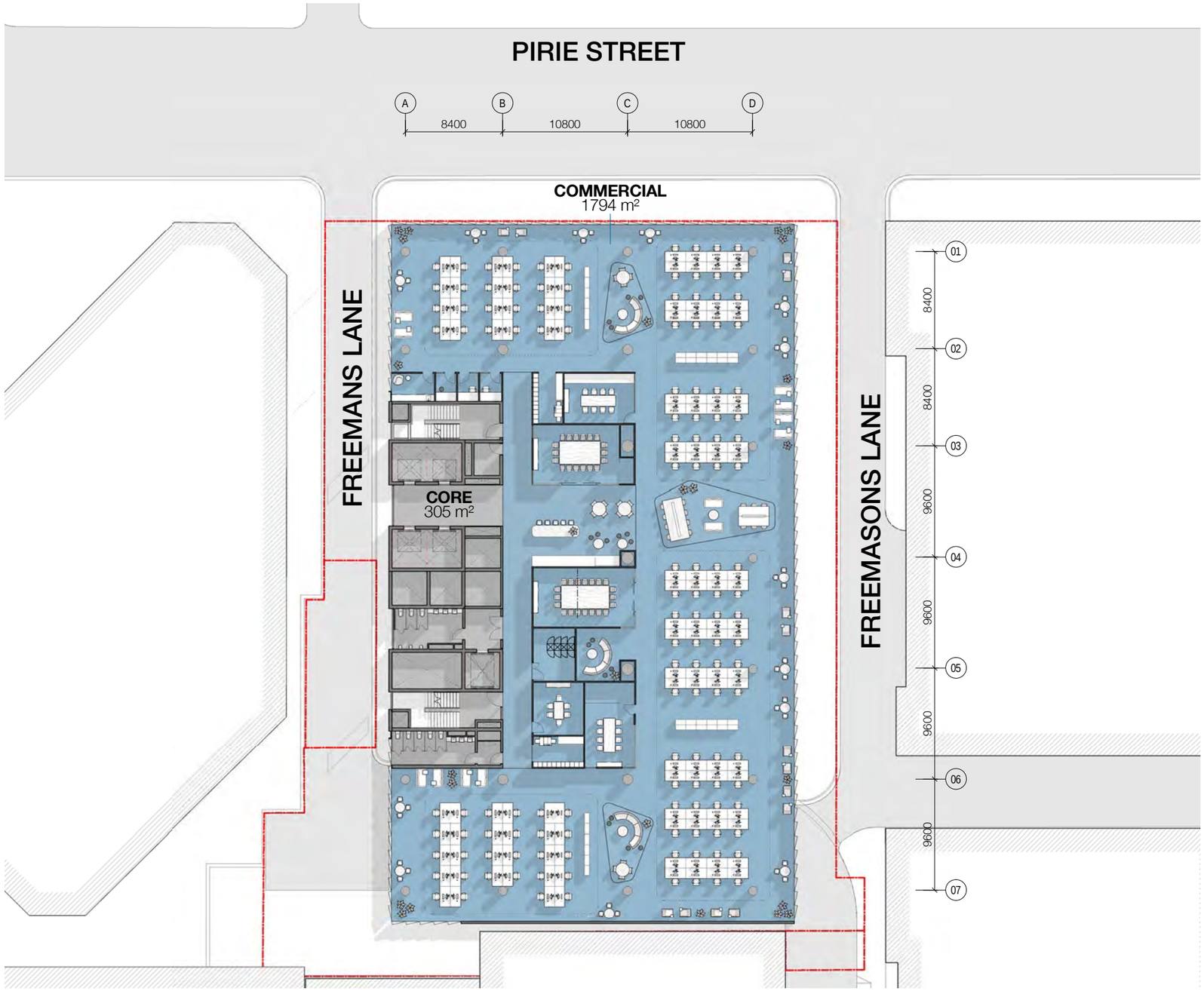
FLOOR DEPTH ANALYSIS - LOW RISE

FLOOR DEPTH ANALYSIS - HIGH RISE

03 83 Pirie Street
Workplace Architecture

83 PIRIE STREET

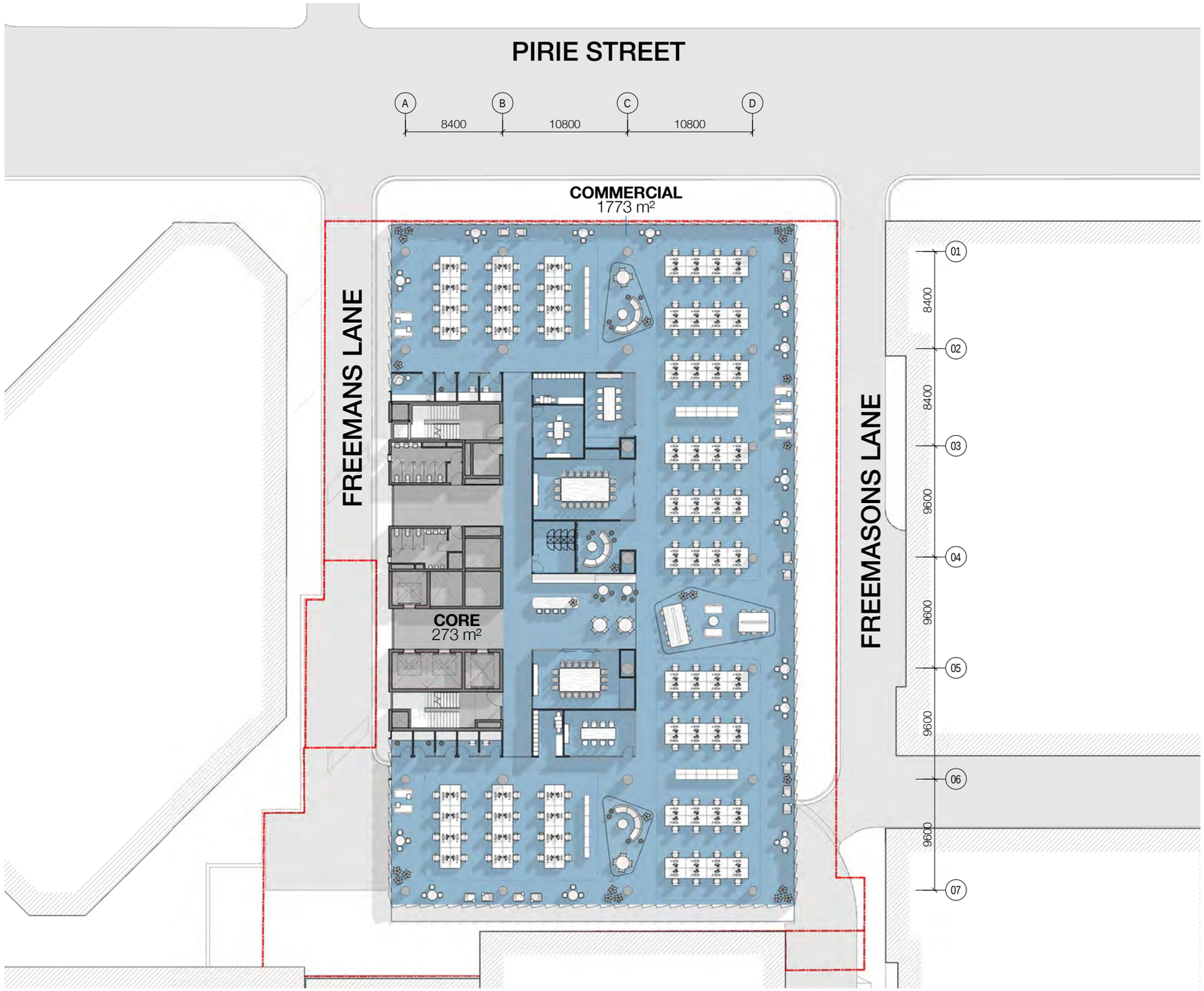
Low Rise Testfit.



03 83 Pirie Street
Workplace Architecture

83 PIRIE STREET

High Rise Testfit.

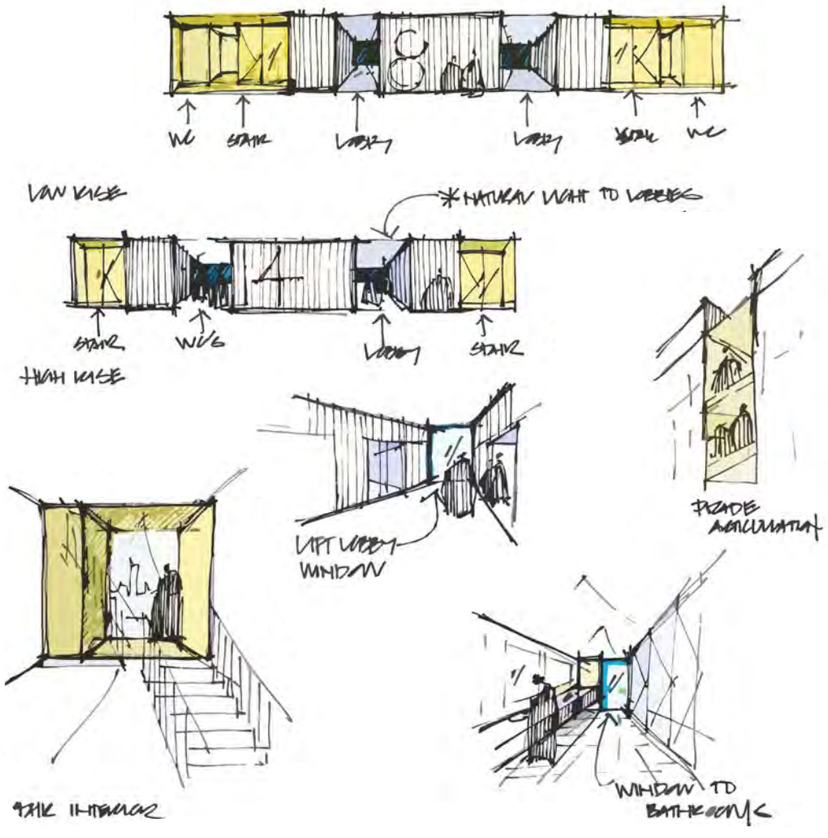


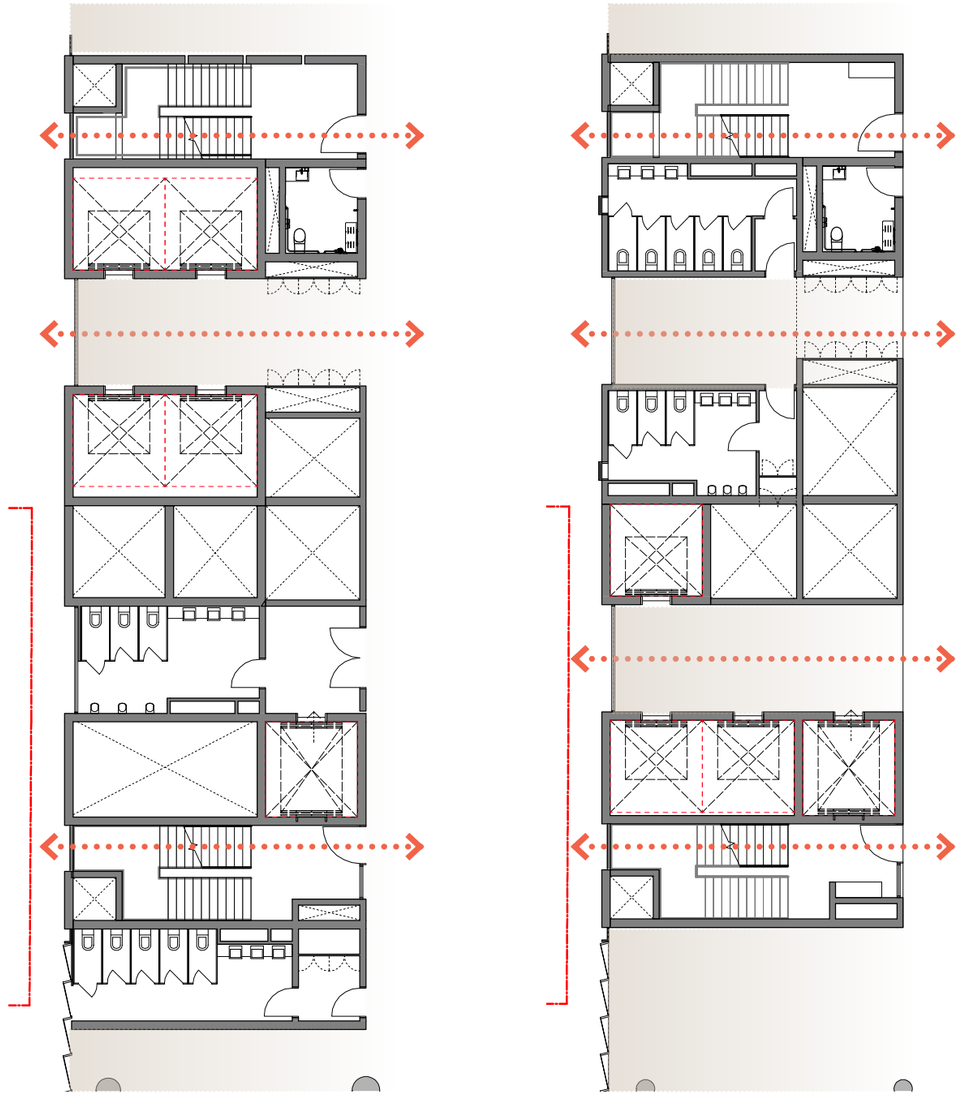
03 83 Pirie Street
Workplace Architecture

83 PIRIE STREET

Core Design.

Referencing the building's form at a smaller scale, the core has been split into three blocks - allowing daylight access into Lift Lobbies, fire stairs and wet areas.





LOW RISE

HIGH RISE

04 Architectural Drawings.

83 PIRIE STREET

73-85 Pirie Street

DA DRAWING LIST

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Cover Page

Project number
140332

Scale

Sheet size
A1

Sheet number
SK0000

Revision
A

Date
03/11/17

83 PIRIE STREET

73-85 Pirie Street

GFA Schedule (By Type)

Name	Area
AIR HANDLING PLANT	498 m²
BOH	60 m²
CARPARK	5349 m²
CHILLERS	294 m²
COMMERCIAL	30441 m²
COOLING TOWERS	183 m²
CORE	6276 m²
ENTRY	193 m²
EOT	449 m²
FIRE TANK/PUMP	83 m²
GENERATORS	108 m²
LOADING	146 m²
LOBBY	161 m²
MEETING	93 m²
MULTIPURPOSE	151 m²
PLANT	238 m²
RETAIL	330 m²
ROOF LOBBY	85 m²
TERRACE	417 m²
TRANSFORMER	71 m²
WASTE	80 m²
	45704 m²

GFA Schedule (Per Level)

Level	Name	Area
GROUND	BOH	60 m²
GROUND	CARPARK	291 m²
GROUND	CORE	208 m²
GROUND	ENTRY	193 m²
GROUND	EOT	449 m²
GROUND	LOADING	146 m²
GROUND	LOBBY	161 m²
GROUND	RETAIL	330 m²
GROUND	TRANSFORMER	71 m²
GROUND	WASTE	80 m²
		1988 m²
LEVEL 01	CARPARK	1647 m²
LEVEL 01	CORE	262 m²
LEVEL 01	PLANT	238 m²
		2147 m²
LEVEL 02	CARPARK	1755 m²
LEVEL 02	CORE	297 m²
		2052 m²
LEVEL 03	CARPARK	1656 m²
LEVEL 03	CORE	276 m²
LEVEL 03	TERRACE	119 m²
		2052 m²

GFA Schedule (Per Level)

Level	Name	Area
LEVEL 04	COMMERCIAL	1801 m²
LEVEL 04	CORE	308 m²
		2109 m²
LEVEL 05	COMMERCIAL	1801 m²
LEVEL 05	CORE	308 m²
		2109 m²
LEVEL 06	COMMERCIAL	1801 m²
LEVEL 06	CORE	308 m²
		2109 m²
LEVEL 07	COMMERCIAL	1801 m²
LEVEL 07	CORE	308 m²
		2109 m²
LEVEL 08	COMMERCIAL	1794 m²
LEVEL 08	CORE	304 m²
		2098 m²
LEVEL 09	COMMERCIAL	1801 m²
LEVEL 09	CORE	308 m²
		2109 m²
LEVEL 10	COMMERCIAL	1801 m²
LEVEL 10	CORE	308 m²
		2109 m²
LEVEL 11	COMMERCIAL	1801 m²
LEVEL 11	CORE	308 m²
		2109 m²
LEVEL 12	COMMERCIAL	1801 m²
LEVEL 12	CORE	308 m²
		2109 m²

GFA Schedule (Per Level)

Level	Name	Area
LEVEL 13	COMMERCIAL	1832 m²
LEVEL 13	CORE	277 m²
		2109 m²
LEVEL 14	COMMERCIAL	1773 m²
LEVEL 14	CORE	277 m²
		2050 m²
LEVEL 15	COMMERCIAL	1773 m²
LEVEL 15	CORE	277 m²
		2050 m²
LEVEL 16	COMMERCIAL	1773 m²
LEVEL 16	CORE	277 m²
		2050 m²
LEVEL 17	COMMERCIAL	1773 m²
LEVEL 17	CORE	277 m²
		2050 m²
LEVEL 18	COMMERCIAL	1773 m²
LEVEL 18	CORE	277 m²
		2050 m²
LEVEL 19	COMMERCIAL	1773 m²
LEVEL 19	CORE	277 m²
		2050 m²
LEVEL 20	COMMERCIAL	1773 m²
LEVEL 20	CORE	277 m²
		2050 m²

GFA Schedule (Per Level)

Level	Name	Area
ROOF LEVEL	AIR HANDLING PLANT	498 m²
ROOF LEVEL	CHILLERS	294 m²
ROOF LEVEL	COOLING TOWERS	183 m²
ROOF LEVEL	CORE	245 m²
ROOF LEVEL	FIRE TANK/PUMP	83 m²
ROOF LEVEL	GENERATORS	108 m²
ROOF LEVEL	MEETING	93 m²
ROOF LEVEL	MULTIPURPOSE	151 m²
ROOF LEVEL	ROOF LOBBY	85 m²
ROOF LEVEL	TERRACE	298 m²
		2038 m²
		45704 m²

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Client
ADC

Project
83 Pirie Street

Sheet title
Area Schedules

Project number
140332

Scale

Sheet size
A1

Sheet number
SK0001

Revision
A

Date
03/11/17

TELSTRA
24 LEVELS ABOVE GROUND
100 METERS HIGH

EXISTING BUILDING
17 LEVELS ABOVE GROUND
73 METERS HIGH

SAI GLOBAL
13 LEVELS ABOVE GROUND
53 METERS HIGH

AON BUILDING
12 LEVELS ABOVE GROUND
51 METERS HIGH

NAB
9 LEVELS ABOVE GROUND
37 METERS HIGH

EXISTING BUILDING
2 LEVELS ABOVE GROUND
5 METERS HIGH

EXISTING BUILDINGS
2 LEVELS ABOVE GROUND
8 METERS HIGH

ALLIANZ BUILDING
8 LEVELS ABOVE GROUND
37 METERS HIGH

EXISTING BUILDING
7 LEVELS ABOVE GROUND
25 METERS HIGH

HEALTH PARTNERS BUILDING
8 LEVELS ABOVE GROUND
30 METERS HIGH

ANGUS BUILDING
16 LEVELS ABOVE GROUND
61 METERS HIGH

NEC AUSTRALIA
12 LEVELS ABOVE GROUND
44 METERS HIGH

PEOPLES CHOICE CREDIT UNION
16 LEVELS ABOVE GROUND
63 METERS HIGH

SANTOS
13 LEVELS ABOVE GROUND
48 METERS HIGH

SGIC / CGU
8 LEVELS ABOVE GROUND
36 METERS HIGH

EXISTING BUILDING
4 LEVELS ABOVE GROUND
17 METERS HIGH

OBSERVATORY HOUSE
8 LEVELS ABOVE GROUND
16 METERS HIGH

EXISTING BUILDING
3 LEVELS ABOVE GROUND
12 METERS HIGH

LEVELS AND BUILDING HEIGHT ARE APPROXIMATES ONLY

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Client
ADC

Project
83 Pirie Street

Sheet title
Locality Plan

Project number
140332

Scale
1 : 500

Sheet size
A1

Sheet number
SK 1000

Revision
A

Date
03/11/17

PIRIE STREET

GAWLER PLACE

FREEMANS LANE

FREEMASONS LANE

DEMOLISH
EXISTING BUILDING IN
ITS ENTIRETY

DEMOLISH
EXISTING BUILDING IN
ITS ENTIRETY

DEMOLISH
EXISTING BUILDING IN
ITS ENTIRETY

DEMOLISH
EXISTING BUILDING IN
ITS ENTIRETY

EXISTING BOUNDARY
FENCE TO BE
DEMOLISHED

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Demolition Plan

Project number
140332

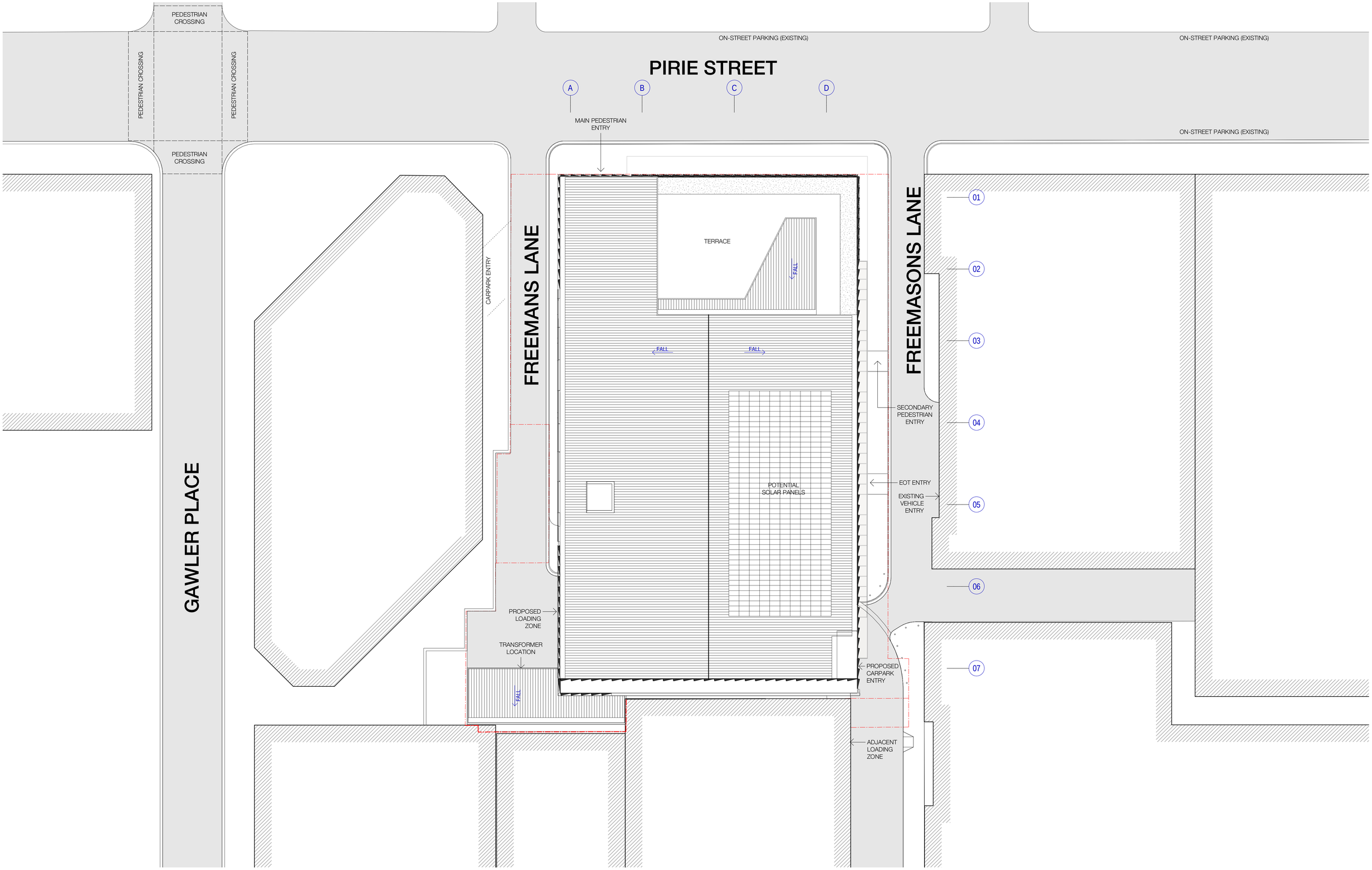
Scale
1 : 200

Sheet size
A1

Sheet number
SK 1001

Revision
A

Date
03/11/17



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Client
ADC

Project
83 Pirie Street

Sheet title
Site Plan

Project number
140332

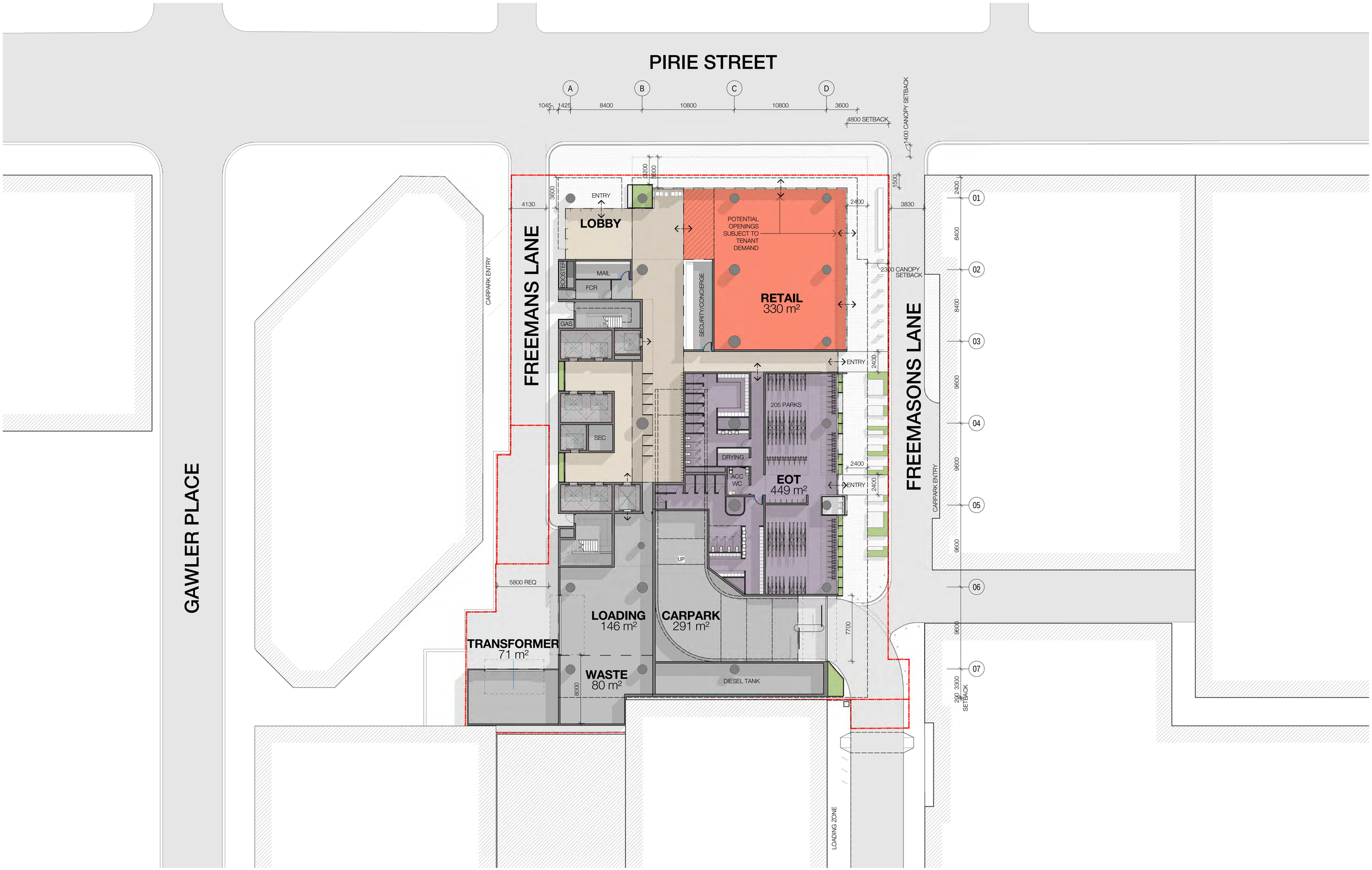
Scale
1 : 200

Sheet size
A1

Sheet number
SK 1002

Revision
A

Date
03/11/17



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Client
ADC

Project
83 Pirie Street

Sheet title
Ground Floor Plan

Project number
140332

Scale
1 : 200

Sheet size
A1

Sheet number
SK 2200

Revision
A

Date
03/11/17

PIRIE STREET

A B C D

1200 8400 10800 10800 3600 2400 SETBACK

725

3750

FREEMANS LANE

GAWLER PLACE

FREEMASONS LANE

CARPARK
1647 m²
(38 PARKS)

UP

COMMS

FIRE BREAK TANK

HYDRO PLANT ROOM

MSB

HYDRO PLANT ROOM

2400

01

8400

02

8400

03

9600

04

9600

05

9600

06

9600

07

300 3200 SETBACK

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Level 01 Floor Plan

Project number
140332

Scale
1 : 200

Sheet size
A1

© Woods Bagot

Sheet number
SK 2201

Revision
A

Date
03/11/17

PIRIE STREET

A 1200 | B 8400 | C 10800 | D 10800 | 3600 | 2400 SETBACK

GAWLER PLACE

FREEMANS LANE

FREEMASONS LANE

VOID

CARPARK
1755 m²
(41 PARKS)

UP

01 2400 | 02 8400 | 03 8400 | 04 9600 | 05 9600 | 06 9600 | 07 3200 | 300 SETBACK

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Level 02 Floor Plan

Project number
140332

Sheet number
SK 2202

Scale
1 : 200

Revision
A

Sheet size
A1

Date
03/11/17

PIRIE STREET

A 1200 | B 8400 | C 10800 | D 10800 | 3600 | 2400 SETBACK

PERIMETER PLANTER AND BALUSTRADE

FREEMANS LANE

GAWLER PLACE

FREEMASONS LANE

VOID

CARPARK
1656 m²
(43 PARKS)

UP

01 2400
02 8400
03 8400
04 9600
05 9600
06 9600
07 3200
300 SETBACK

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Level 03 Floor Plan

Project number
140332

Scale
1 : 200

Sheet size
A1

Sheet number
SK 2203

Revision
A

Date
03/11/17

PIRIE STREET

A B C D

5400 SETBACK 1200 8400 10800 10800 3600 3300 SETBACK

FREEMANS LANE

FREEMASONS LANE

GAWLER PLACE

CORE
308 m²

COMMERCIAL
1801 m²

2400 8400 9600 9600 9600 3200 300 SETBACK

01 02 03 04 05 06 07

Client **ADC**	Project **83 Pirie Street**	Sheet title **Level 04-11 Typical Floor Plan**	

Project number **140332**	Scale **1 : 200**	Sheet size **A1**	
Sheet number **SK 2204**	Revision **A**	Date **03/11/17**	

PIRIE STREET

A B C D

5400 SETBACK 1200 8400 10800 10800 3600 3300 SETBACK

FREEMANS LANE

FREEMASONS LANE

GAWLER PLACE

OVERRUN

OVERRUN

CORE
308 m²

COMMERCIAL
1801 m²

2400 8400 8400 9600 9600 9600 3200

01 02 03 04 05 06 07

300 SETBACK

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Level 12 Floor Plan

Project number
140332

Scale
1 : 200

Sheet size
A1

Sheet number
SK 2212

Revision
A

Date
03/11/17

PIRIE STREET

A B C D

5400 SETBACK 1200 8400 10800 10800 3600 3300 SETBACK

FREEMANS LANE

FREEMASONS LANE

GAWLER PLACE

CORE
277 m²

COMMERCIAL
1832 m²

2400 8400 9600 9600 9600 3200

01 02 03 04 05 06 07

300 SETBACK

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Level 13 Floor Plan

Project number
140332

Scale
1 : 200

Sheet size
A1

Sheet number
SK 2213

Revision
A

Date
03/11/17

PIRIE STREET

A B C D

5400 SETBACK 1200 8400 10800 10800 3600 3300 SETBACK

FREEMANS LANE

FREEMASONS LANE

GAWLER PLACE

CORE
277 m²

COMMERCIAL
1773 m²

2400 8400 8400 9600 9600 9600 1200

01 02 03 04 05 06 07

2000 SETBACK

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Level 14-20 Typical Floor Plan

Project number
140332

Scale
1 : 200

Sheet size
A1

Sheet number
SK 2214

Revision
A

Date
03/11/17

PIRIE STREET

A B C D

5500 SETBACK 1200 8400 10800 10800 3600 3500 SETBACK

PERIMETER PLANTER AND BALUSTRADE

FREEMANS LANE

FREEMASONS LANE

GAWLER PLACE

MULTIPURPOSE
151 m²

TERRACE
210 m²

MEETING
93 m²

FIRE TANK/PUMP
83 m²

GENERATORS
108 m²

BOILERS OVER

BMS/DAS

AIR HANDLING PLANT
498 m²

COOLING TOWERS
183 m²

CHILLERS
294 m²

2400 8400 9600 9600 9600 1200 2000 SETBACK

01 02 03 04 05 06 07

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Roof Level Plan

Project number
140332

Scale
1 : 200

Sheet size
A1

Sheet number
SK 2221

Revision
A

Date
03/11/17

FACADE SCHEUDLE

BA:01 GLASS BALUSTRADE
BA:02 SOLID BALUSTRADE - METAL (BRONZE)

MA:01 MASONRY SCREEN

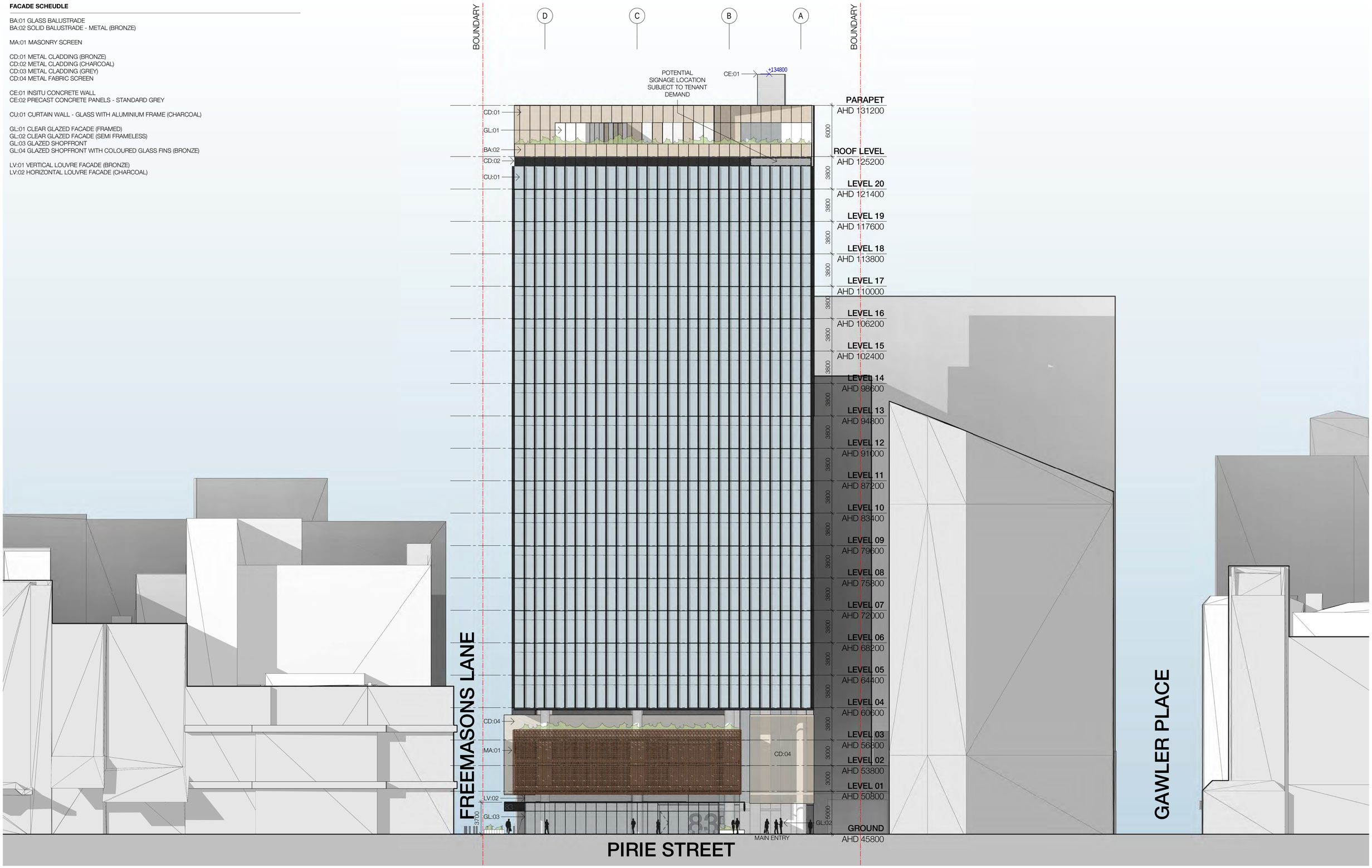
CD:01 METAL CLADDING (BRONZE)
CD:02 METAL CLADDING (CHARCOAL)
CD:03 METAL CLADDING (GREY)
CD:04 METAL FABRIC SCREEN

CE:01 INSITU CONCRETE WALL
CE:02 PRECAST CONCRETE PANELS - STANDARD GREY

CU:01 CURTAIN WALL - GLASS WITH ALUMINIUM FRAME (CHARCOAL)

GL:01 CLEAR GLAZED FACADE (FRAMED)
GL:02 CLEAR GLAZED FACADE (SEMI FRAMELESS)
GL:03 GLAZED SHOPFRONT
GL:04 GLAZED SHOPFRONT WITH COLOURED GLASS FINS (BRONZE)

LV:01 VERTICAL LOUVRE FACADE (BRONZE)
LV:02 HORIZONTAL LOUVRE FACADE (CHARCOAL)



WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Building Elevations - North

Project number
140332

Scale
1:200

Sheet size
A1

Sheet number
SK3200

Revision
A

Date
03/11/17

FACADE SCHEUDLE

BA:01 GLASS BALUSTRADE
BA:02 SOLID BALUSTRADE - METAL (BRONZE)

MA:01 MASONRY SCREEN

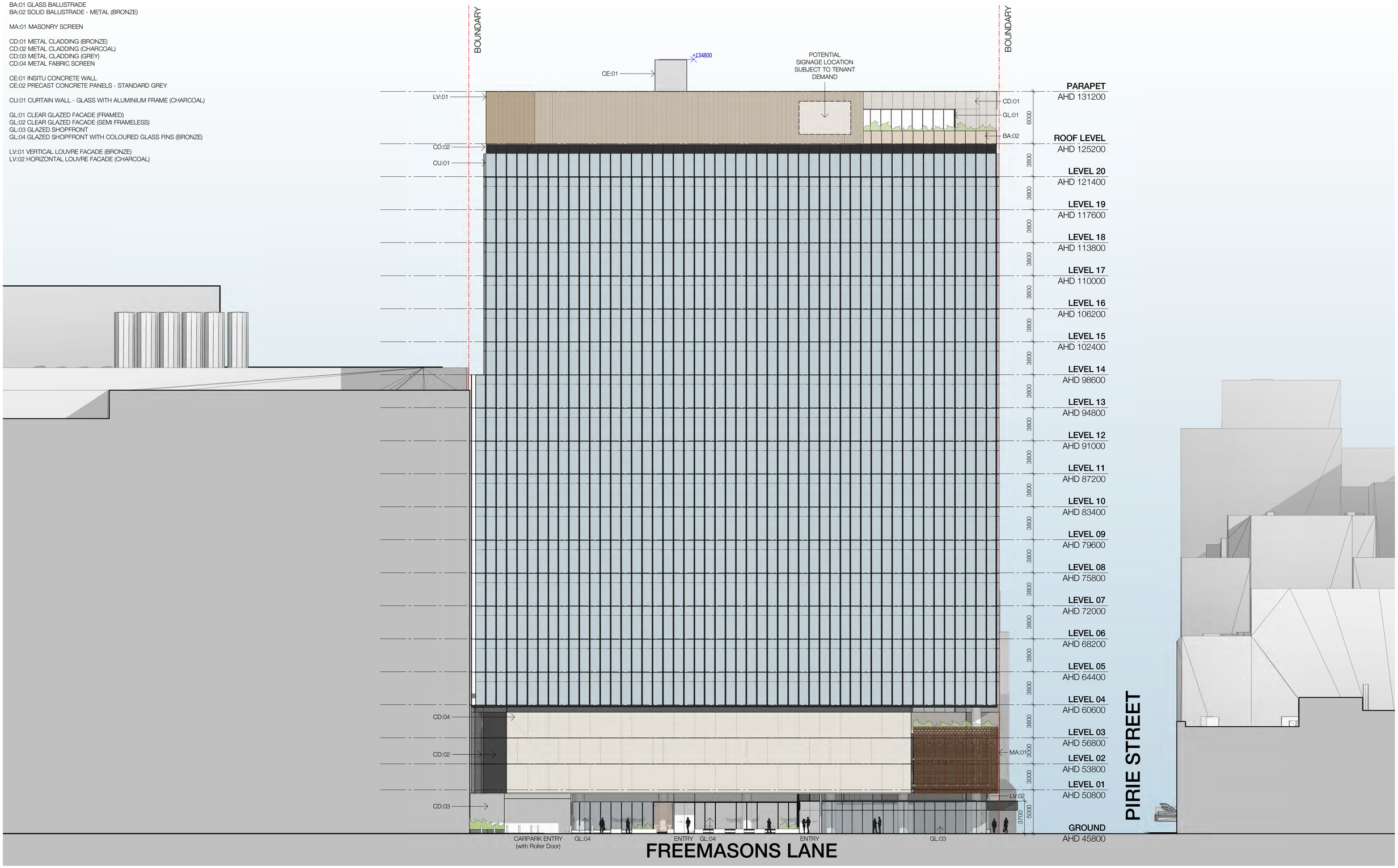
CD:01 METAL CLADDING (BRONZE)
CD:02 METAL CLADDING (CHARCOAL)
CD:03 METAL CLADDING (GREY)
CD:04 METAL FABRIC SCREEN

CE:01 INSITU CONCRETE WALL
CE:02 PRECAST CONCRETE PANELS - STANDARD GREY

CU:01 CURTAIN WALL - GLASS WITH ALUMINIUM FRAME (CHARCOAL)

GL:01 CLEAR GLAZED FACADE (FRAMED)
GL:02 CLEAR GLAZED FACADE (SEMI FRAMELESS)
GL:03 GLAZED SHOPFRONT
GL:04 GLAZED SHOPFRONT WITH COLOURED GLASS FINS (BRONZE)

LV:01 VERTICAL LOUVRE FACADE (BRONZE)
LV:02 HORIZONTAL LOUVRE FACADE (CHARCOAL)



WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Building Elevations - East

Project number
140332

Scale
1:200

Sheet size
A1

Sheet number
SK3201

Revision
A

Date
03/11/17

FACADE SCHEUDLE

BA:01 GLASS BALUSTRADE
BA:02 SOLID BALUSTRADE - METAL (BRONZE)

MA:01 MASONRY SCREEN

CD:01 METAL CLADDING (BRONZE)
CD:02 METAL CLADDING (CHARCOAL)
CD:03 METAL CLADDING (GREY)
CD:04 METAL FABRIC SCREEN

CE:01 INSITU CONCRETE WALL
CE:02 PRECAST CONCRETE PANELS - STANDARD GREY

CU:01 CURTAIN WALL - GLASS WITH ALUMINIUM FRAME (CHARCOAL)

GL:01 CLEAR GLAZED FACADE (FRAMED)
GL:02 CLEAR GLAZED FACADE (SEMI FRAMELESS)
GL:03 GLAZED SHOPFRONT
GL:04 GLAZED SHOPFRONT WITH COLOURED GLASS FINS (BRONZE)

LV:01 VERTICAL LOUVRE FACADE (BRONZE)
LV:02 HORIZONTAL LOUVRE FACADE (CHARCOAL)

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Building Elevations - South

Project number
140332

Scale
1:200

Sheet size
A1

Sheet number
SK3202

Revision
A

Date
03/11/17

FACADE SCHEUDLE

BA:01 GLASS BALUSTRADE
BA:02 SOLID BALUSTRADE - METAL (BRONZE)

MA:01 MASONRY SCREEN

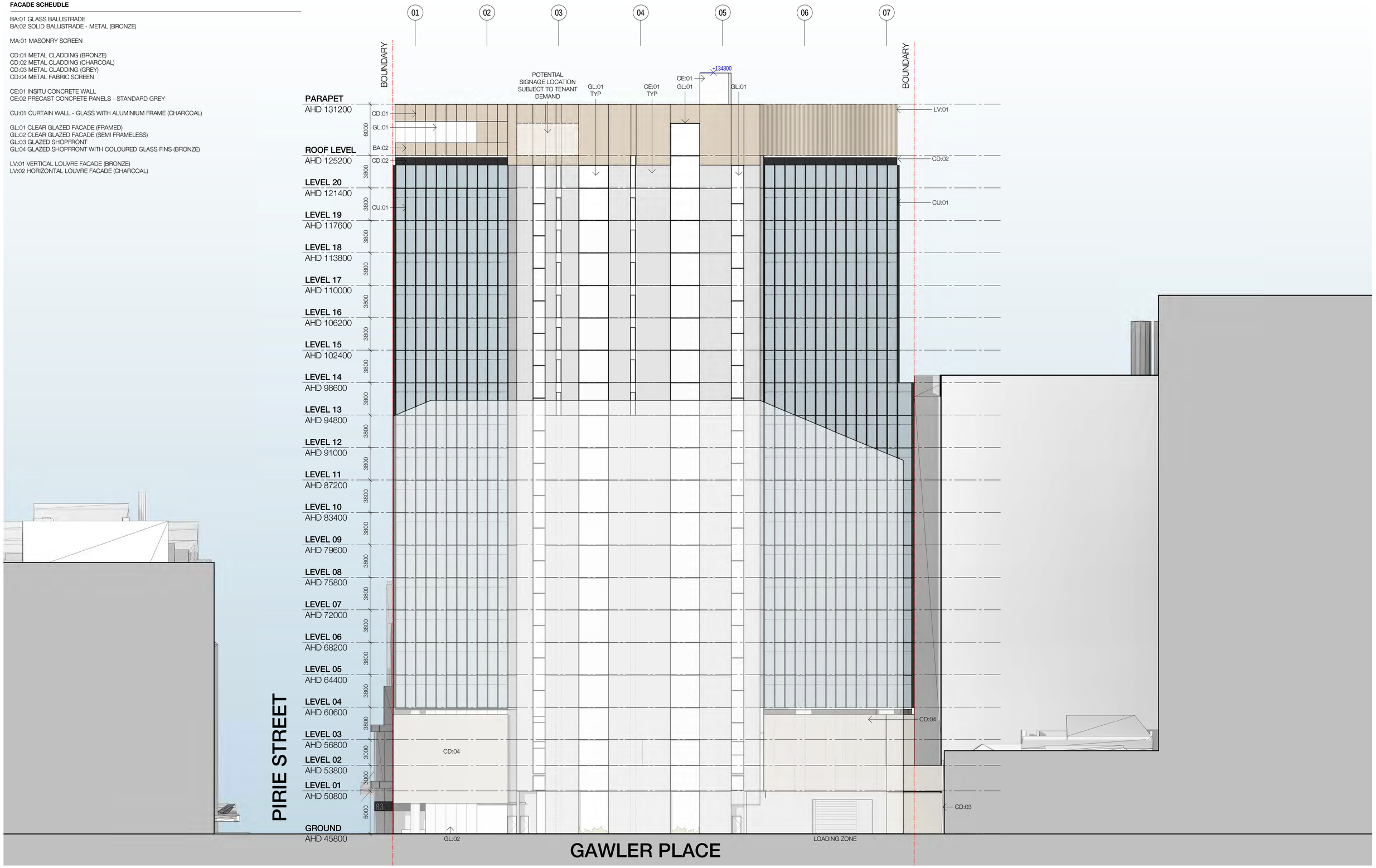
CD:01 METAL CLADDING (BRONZE)
CD:02 METAL CLADDING (CHARCOAL)
CD:03 METAL CLADDING (GREY)
CD:04 METAL FABRIC SCREEN

CE:01 INSITU CONCRETE WALL
CE:02 PRECAST CONCRETE PANELS - STANDARD GREY

CU:01 CURTAIN WALL - GLASS WITH ALUMINIUM FRAME (CHARCOAL)

GL:01 CLEAR GLAZED FACADE (FRAMED)
GL:02 CLEAR GLAZED FACADE (SEMI FRAMELESS)
GL:03 GLAZED SHOPFRONT
GL:04 GLAZED SHOPFRONT WITH COLOURED GLASS FINS (BRONZE)

LV:01 VERTICAL LOUVRE FACADE (BRONZE)
LV:02 HORIZONTAL LOUVRE FACADE (CHARCOAL)



WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Building Elevations - West

Project number
140332

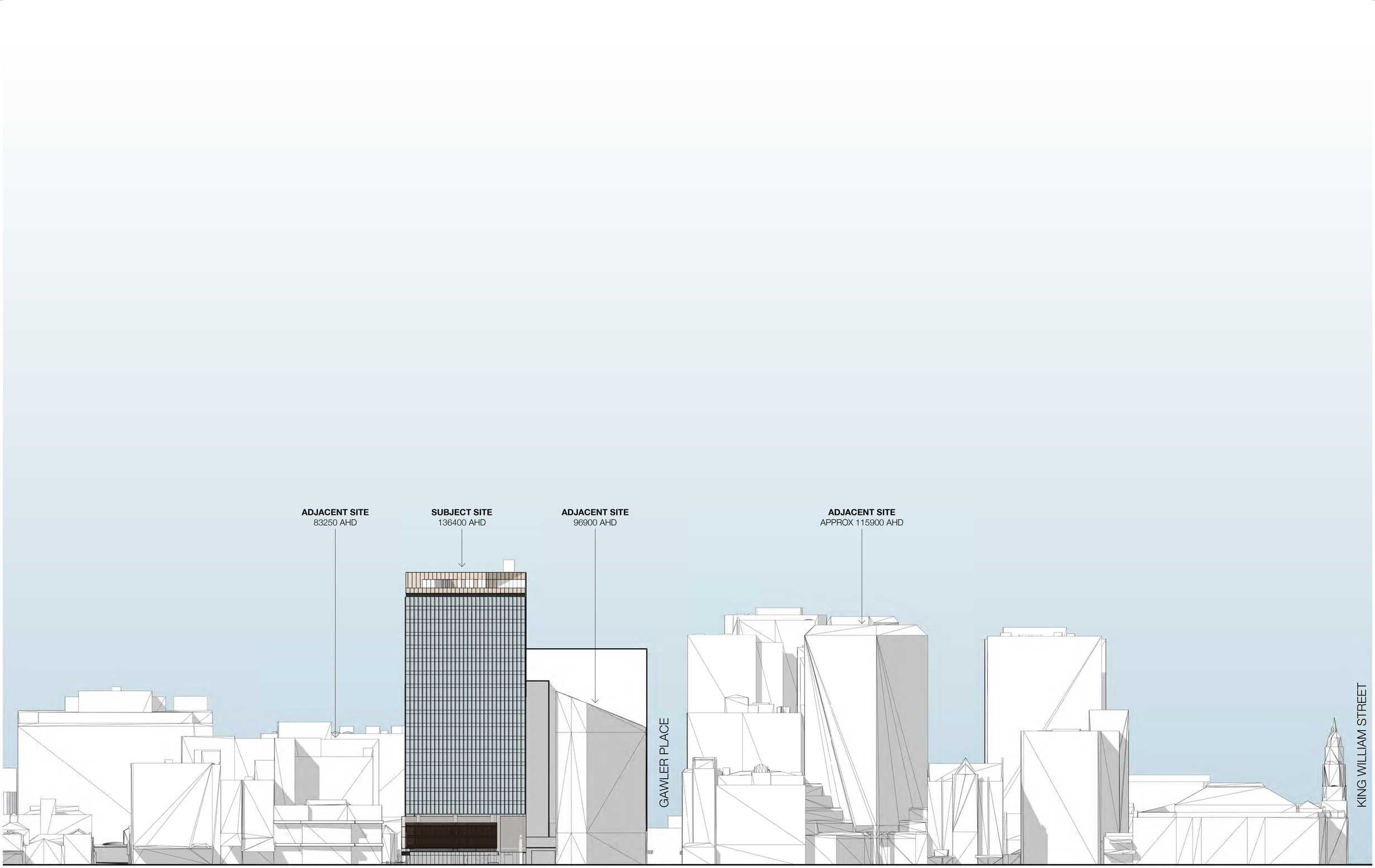
Scale
1:200

Sheet size
A1

Sheet number
SK3203

Revision
A

Date
03/11/17



WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Streetscape Elevation - Pirie Street

Project number
140332

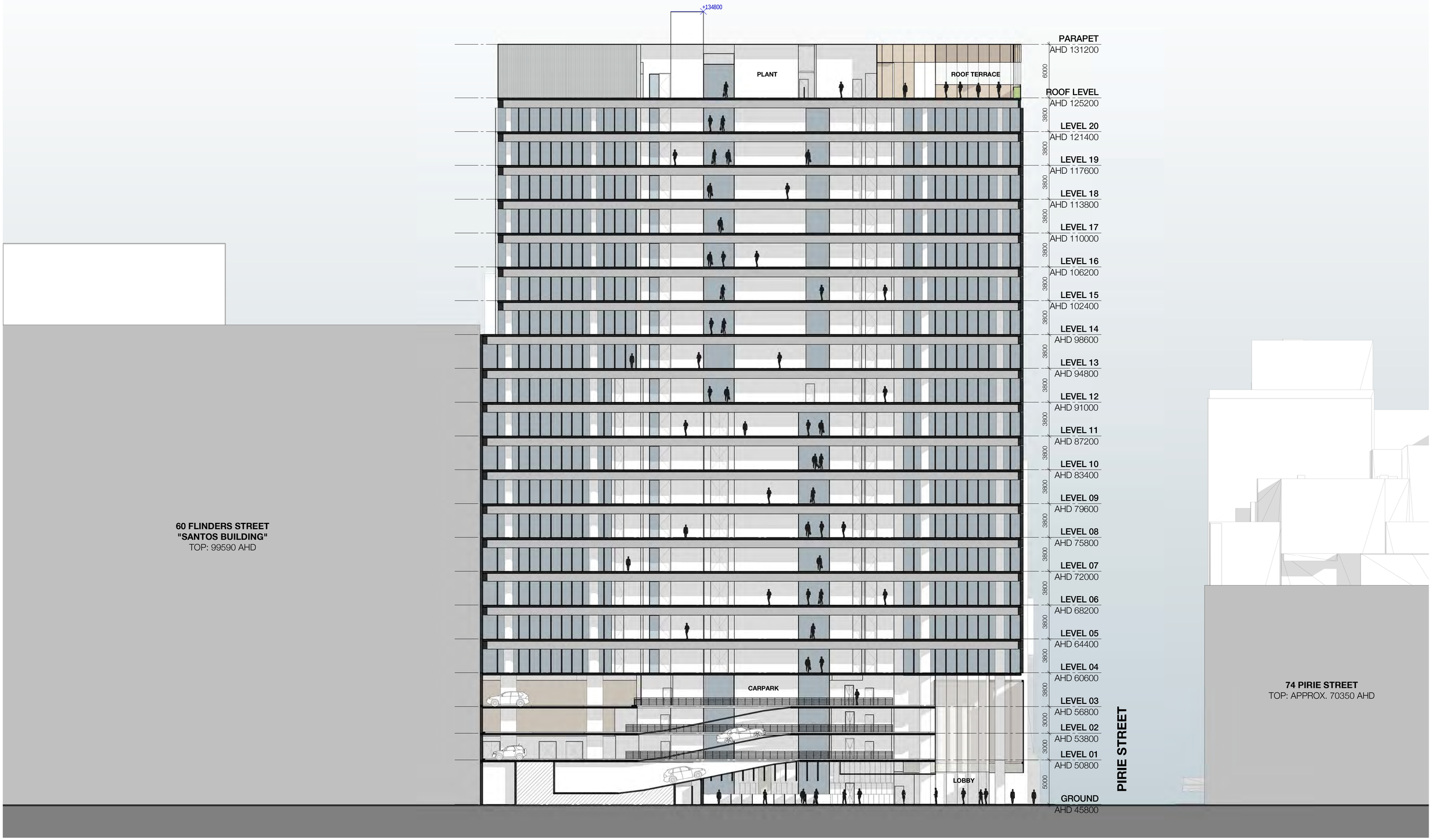
Scale
1 : 500

Sheet size
A1

Sheet number
SK3204

Revision
A

Date
03/11/17



WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Building Section - North/South

Project number
140332

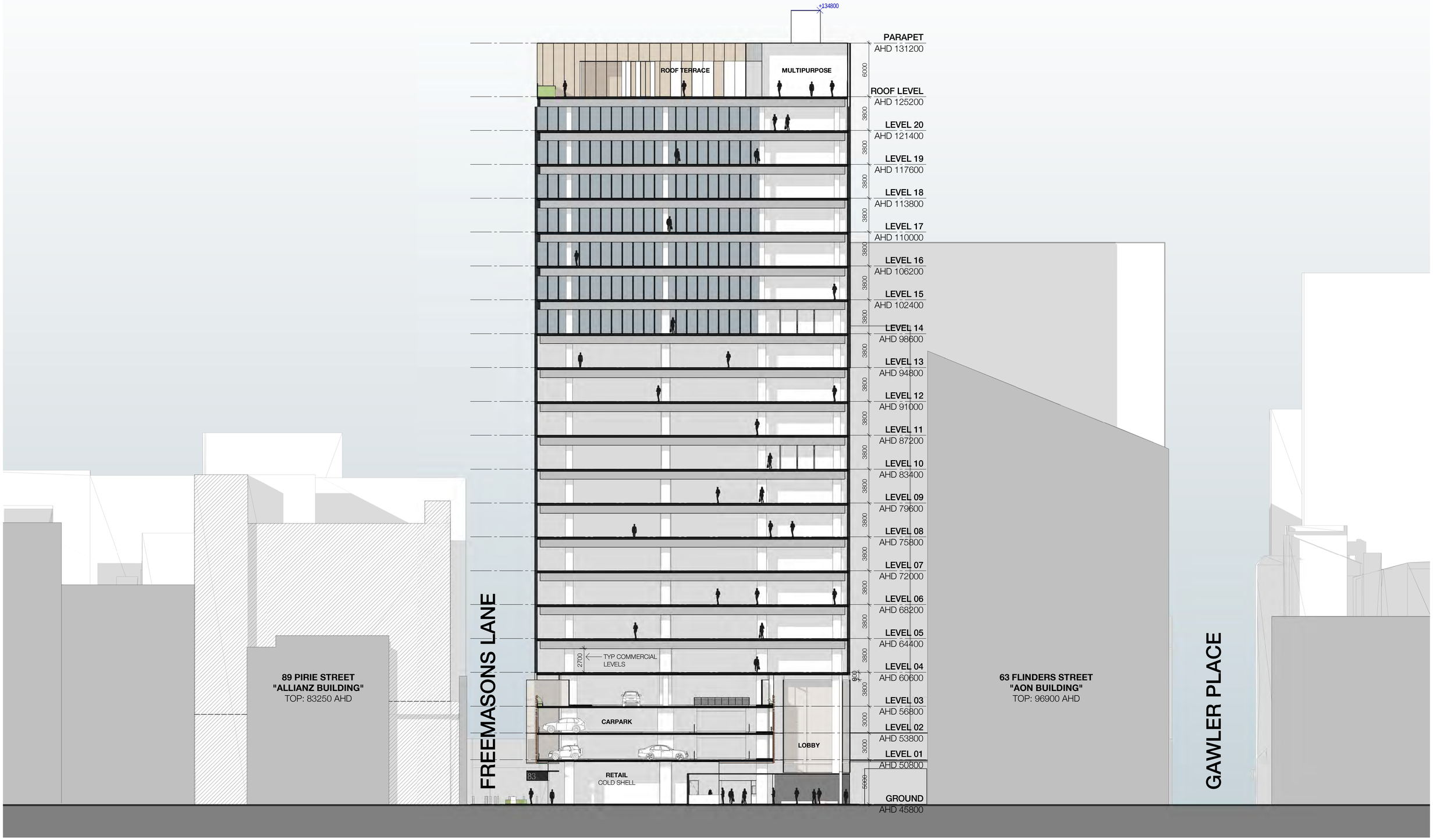
Scale
1 : 200

Sheet size
A1

Sheet number
SK3300

Revision
A

Date
03/11/17



WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Building Section - East/West

Project number
140332

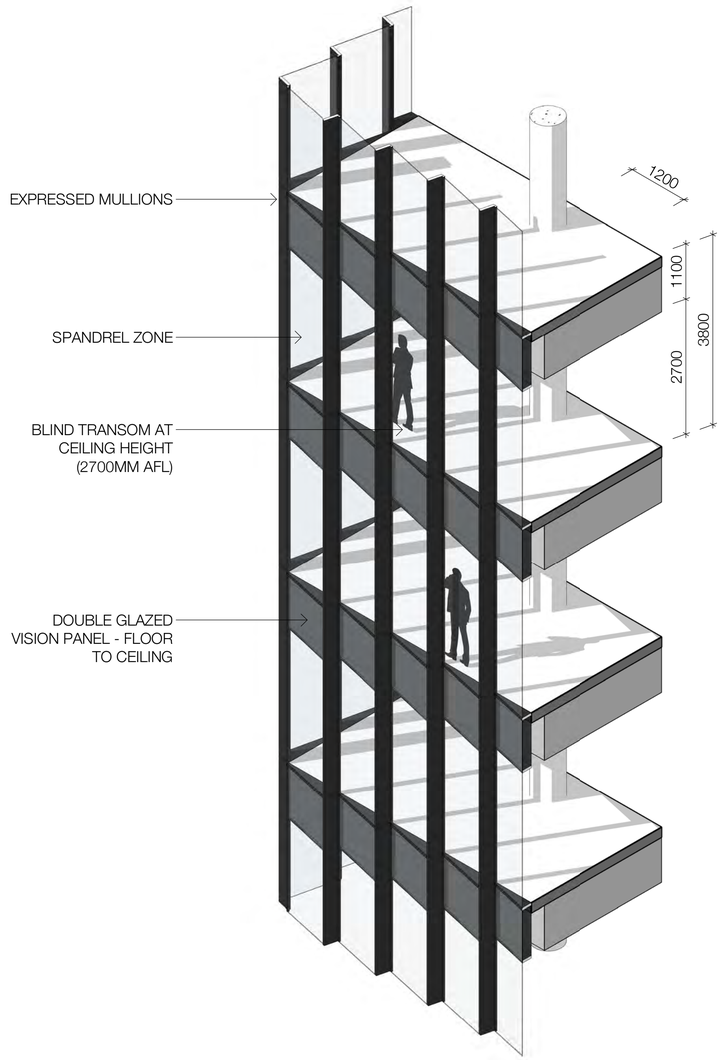
Scale
1 : 200

Sheet size
A1

Sheet number
SK3301

Revision
A

Date
03/11/17



WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
CU01 Facade

Project number
140332

Scale

Sheet size
A1

Sheet number
SK5200

Revision
A

Date
03/11/17

Winter Solstice 9AM

Winter Solstice 12PM

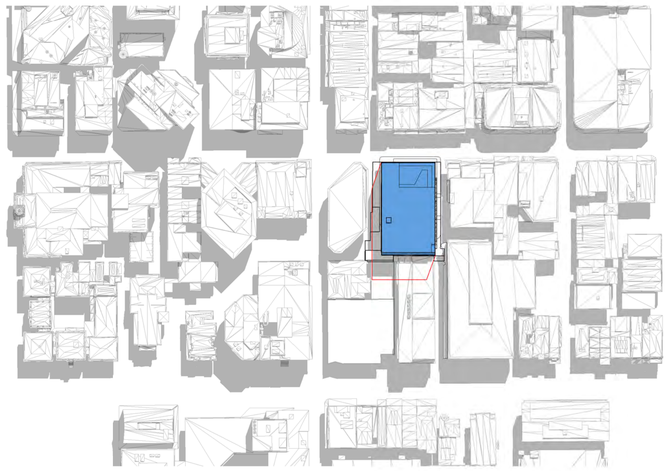
Winter Solstice 3PM

Equinox 9AM

Equinox 12PM

Equinox 3PM

Summer Solstice 9AM



Summer Solstice 12PM

Summer Solstice 3PM

WOODS BAGOT™

Client
ADC

Project
83 Pirie Street

Sheet title
Shadow Diagrams

Project number
140332

Scale
1 : 2000

Sheet size
A1

Sheet number
SK 8600

Revision
A

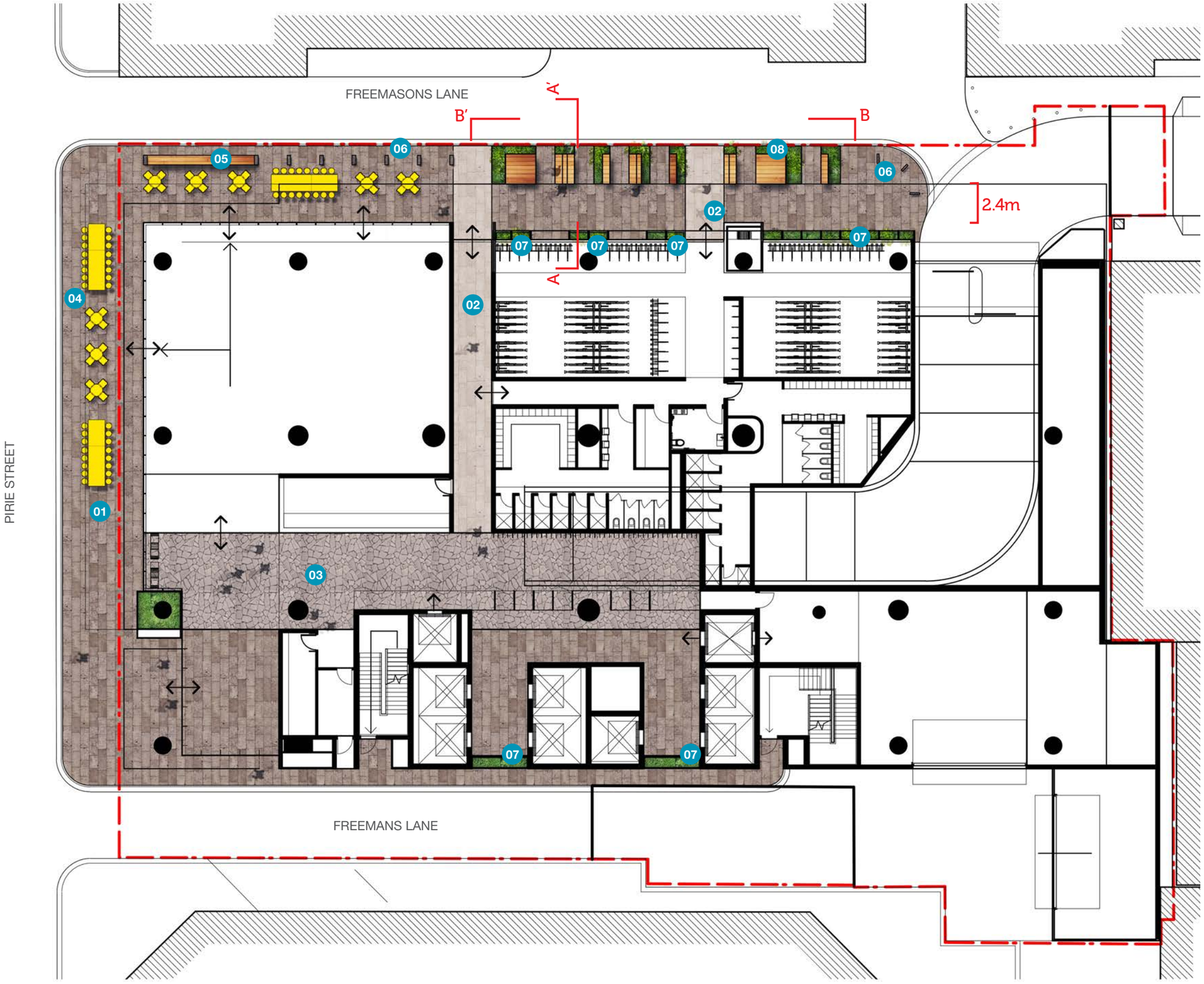
Date
03/11/17

83 Pirie Street

Landscape Concept Plan

November 2017
Project No.: 17061 Rev E

ASPECT Studios™



Legend

01 New Honed Large Format Concrete Unit Paving Type 1

02 New Honed Large Format Concrete Unit Paving Type 2

03 New Light Grey Crazy Paving

04 Potential Non-fixed Retail Seating

05 Integrated Long Bench & Bollards

06 Custom Bollards

07 Raised Planter with Ornamental Plantings

08 Custom Timber Seats & Benches

83 Pirie Street | Landscape Concept | Option 1

ASPECT Studios™

Landscape Concept Plan

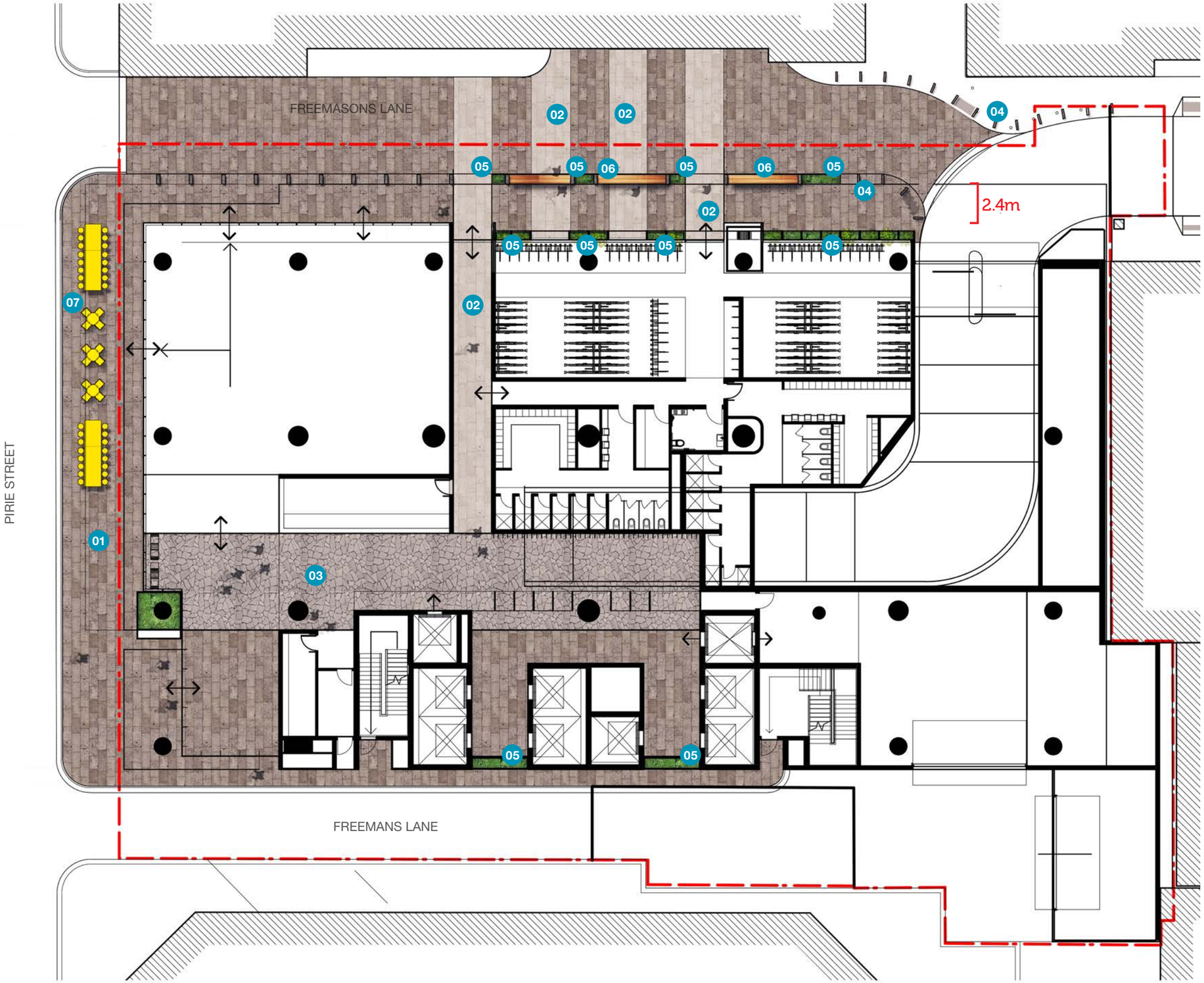
Architects: **Woods Bagot**

Client: **Adelaide Development Company**

Scale: **1:250 @ A3**

0 2.5 5 10M

Date: **15.11.2017**
Dwg no.: **A17061_SK01**
Rev: **E**



Legend

01 New Honed Large Format Concrete Unit Paving Type 1

02 New Honed Large Format Concrete Unit Paving Type 2

03 New Light Grey Crazy Paving

04 Custom Bollards

05 Raised Planter with Ornamental Plantings

06 Integrated Long Bench & Raised Planter

07 Potential Non-fixed Retail Seating

83 Pirie Street | Landscape Concept | Option 2

ASPECT Studios™

Landscape Concept Plan

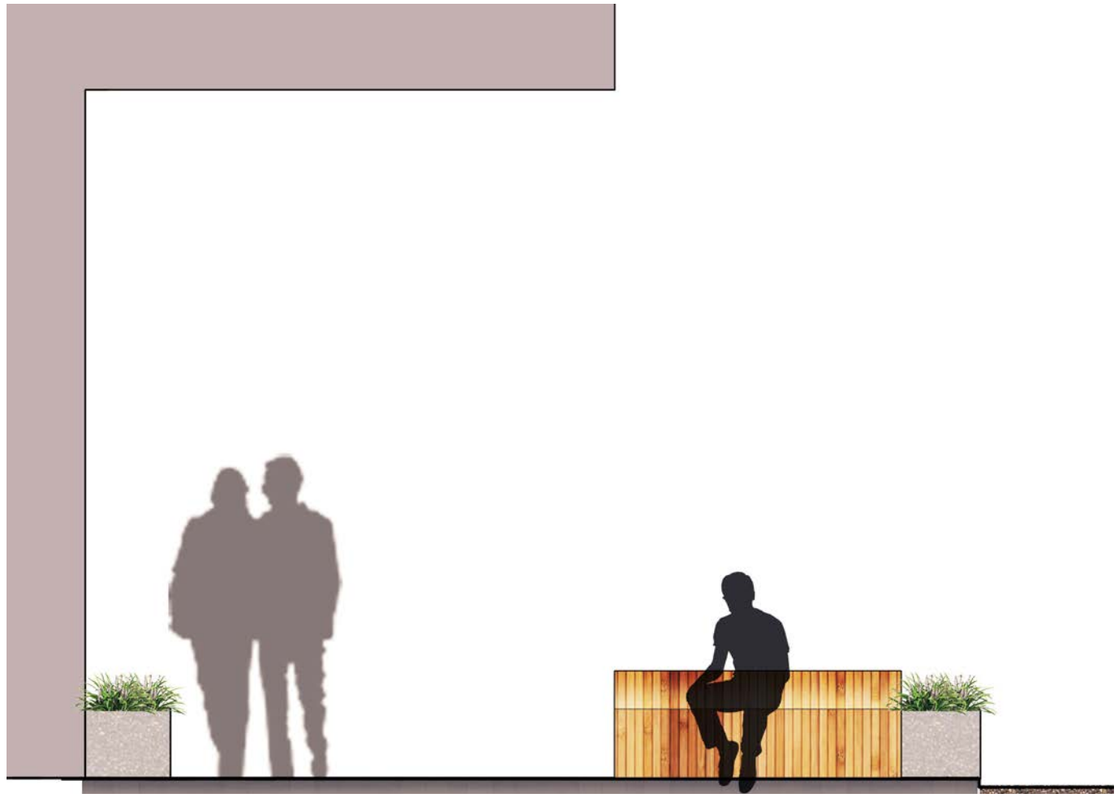
Architects: **Woods Bagot**

Client: **Adelaide Development Company**

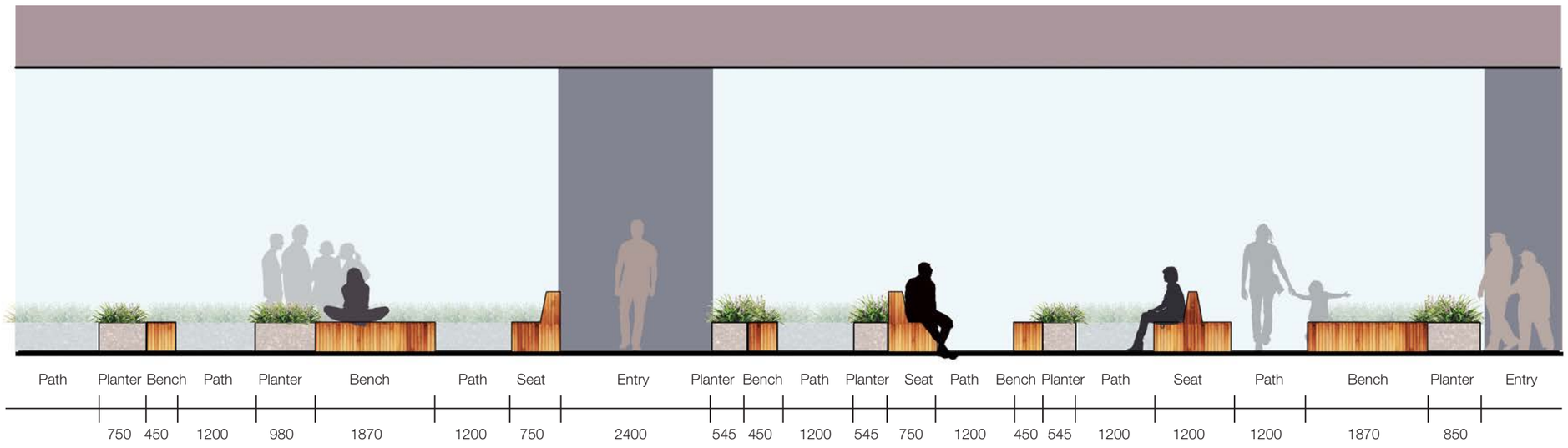
Scale: **1:250 @ A3**

0 2.5 5 10M

Date: **15.11.2017**
Dwg no.: **A17061_SK02**
Rev: **E**



Section A-A'
1:50 @ A3



Section B-B'
1:100 @ A3

83 Pirie Street | Landscape Concept

ASPECT Studios™

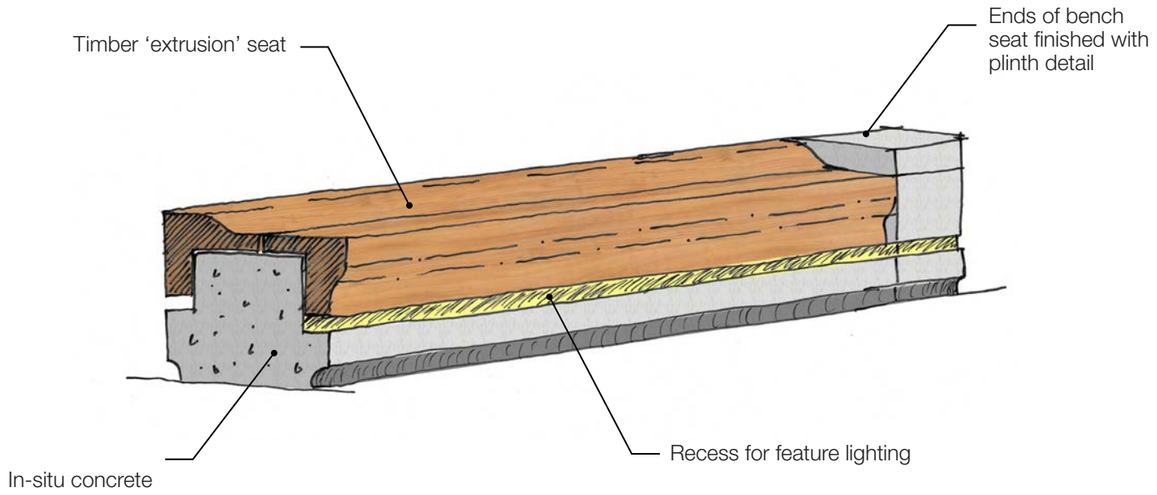
Architects: **Woods Bagot**

Client: **Adelaide Development Company**

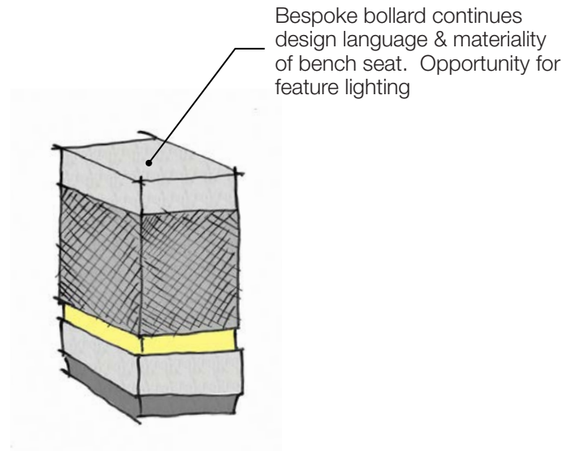
Scale: **As Shown**

Typical Sections

Date: **15.11.2017**
Dwg no.: **A17061_SK03**
Rev: **E**



Bench Seat Concept
N.T.S

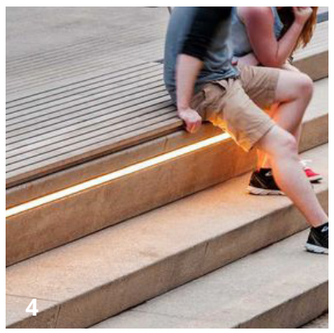


Bollard Concept
N.T.S

Stretcher Bond Honed Concrete Paver
600 x 400 x 40mm

Contrasting Colour Stretcher Bond Honed Concrete Paver

Light Coloured Feature Stone Crazy Paving



Timber / Concrete Bench Detail with Feature Lighting

Ground Storey Planting

1. *Clematis microphylla*
   Small-leaved Clematis
2. *Cotyledon orbiculata 'Silver Wave'*
   Silver Pigs Ear
3. *Echium candicans*
   Pride of Madeira
4. *Limonium perezii*
   Perennial Statice
5. *Liriope muscari*
   Lilyturf
6. *Liriope muscari 'Just Right'*
   Just Right Liriope
7. *Ophiopogon japonicus*
   Mondograss
8. *Pandorea pandorana*
   Wonga Wonga Vine
9. *Syzygium australe 'Brush Cherry'*
   Brush Cherry

Roof Top Planting

1. *Agave attenuata*
   Century Plant
2. *Beschorneria Yuccoides*
   Yucca-leaved Beschorneria
3. *Carpobrotus rossii*
   Pig Face
4. *Crassula ovata*
   Money Tree
5. *Dichondra argentea 'silver falls'*
   Silver Ponysfoot
6. *Euphorbia wulfenii*
   Mediterranean Spurge
7. *Murraya paniculata*
   Orange Jessamine
8. *Kniphofia*
   Red Hot Poker

83 Pirie Street | Landscape Concept

ASPECT Studios™

Architects: **Woods Bagot**

Client: **Adelaide Development Company**

Scale: **N.T.S**

Suggested Planting Palette

Date: **15.11.2017**
Dwg no.: **A17061_SK05**
Rev: **E**

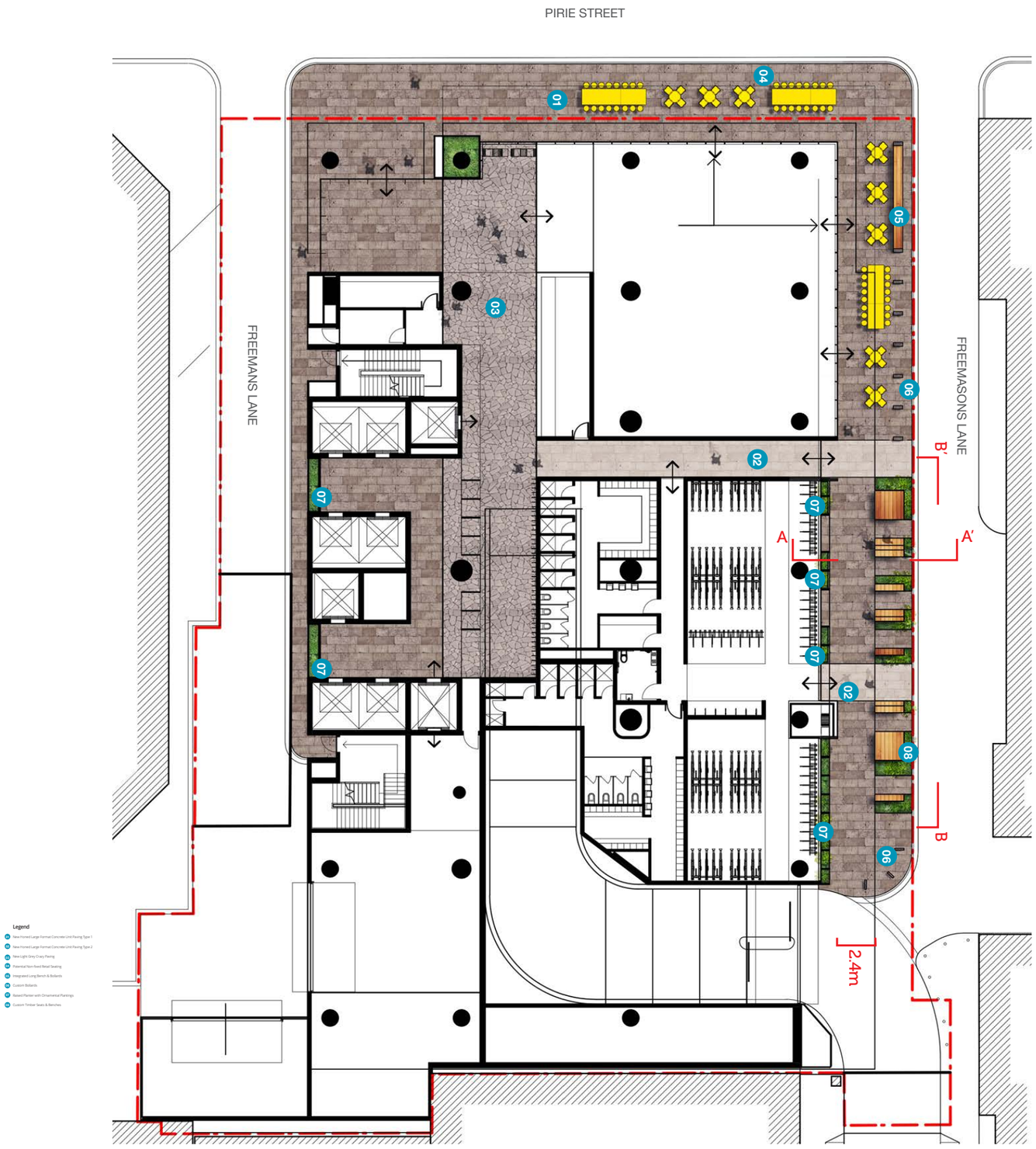
83 Pirie Street

Movement Diagrams

15.02.18

WOODS BAGOT

03 Design Response
Ground Plane

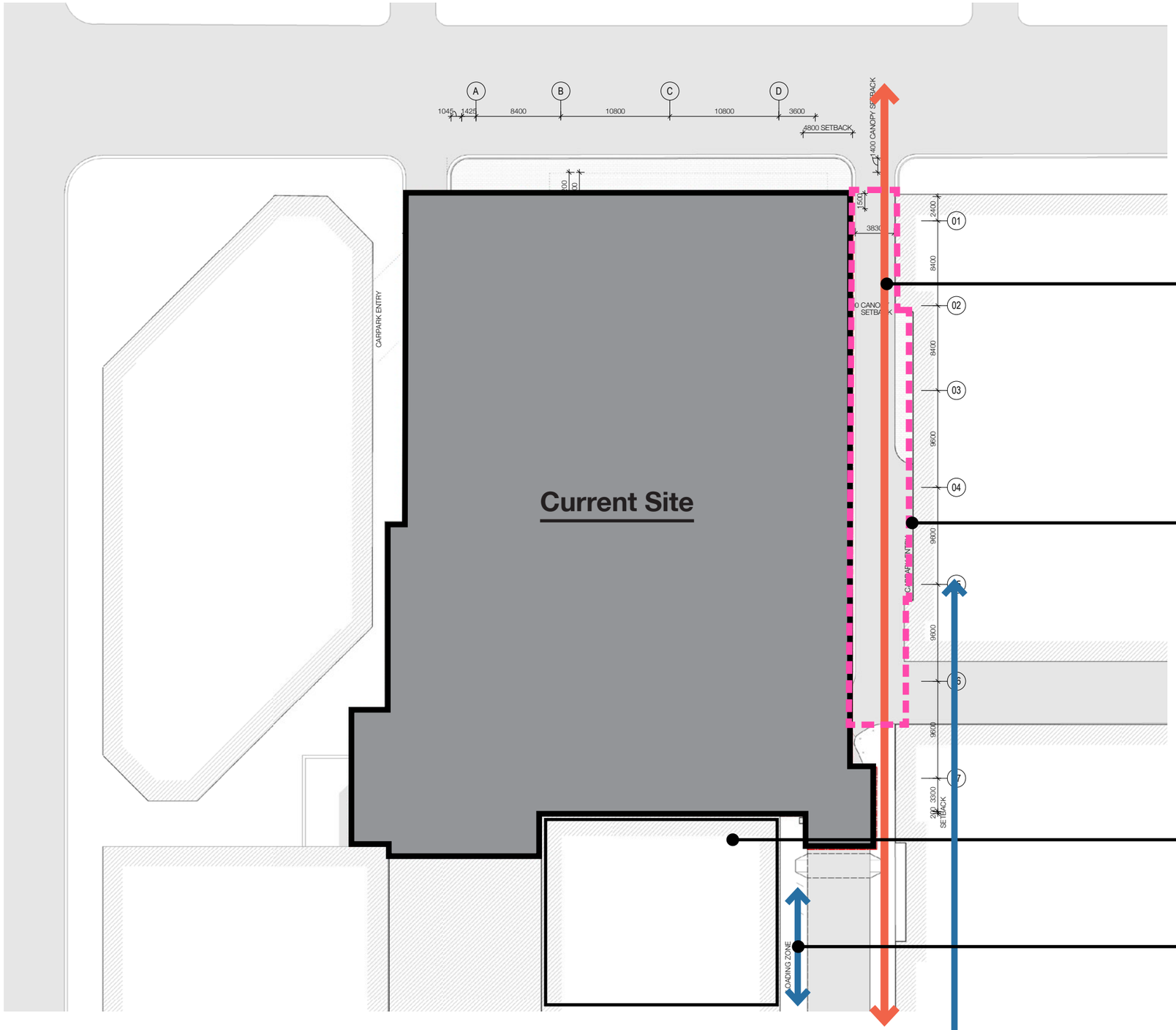


ARRIVAL | LOBBY EXTERIOR

ARRIVAL | LOBBY EXTERIOR

ARRIVAL | EOT

Current Pedestrian Movement



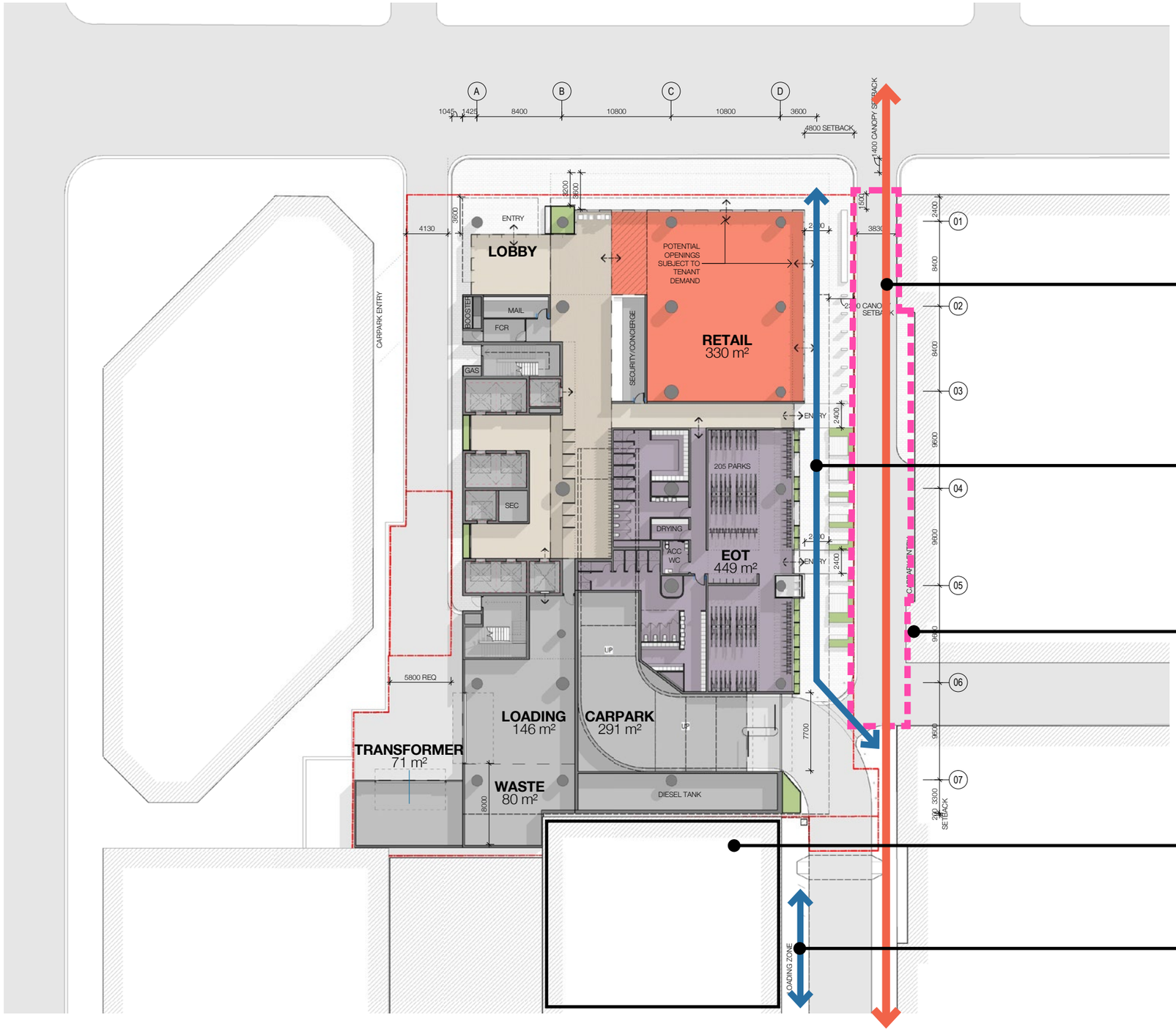
Alignment of current pedestrian movement.

Shared Street Environment as signed on street and noted in the development plan.

Loading and BOH vehicle entry for adjacent development

Set back - Private Land Holding

Proposed Pedestrian Movement



Alignment of current pedestrian movement maintained.

A secondary pedestrian space created as part of the development.

Shared Street Environment as signed on street and noted in the development plan maintained.

Loading and BOH vehicle entry for adjacent development

Set back - Private Land Holding

NOTE : For Policy Areas see MAP Adel/50

CC	Capital City Zone
I2	Institutional (Government House) Zone
I3	Institutional (University/Hospital) Zone
PL	Park Lands Zone

Scale 1:4150

0metres 100 200 300

Zone Boundary

Development Plan Boundary

ADELAIDE (CITY)
ZONES
MAP Adel/19

Consolidated - 20 June 2017

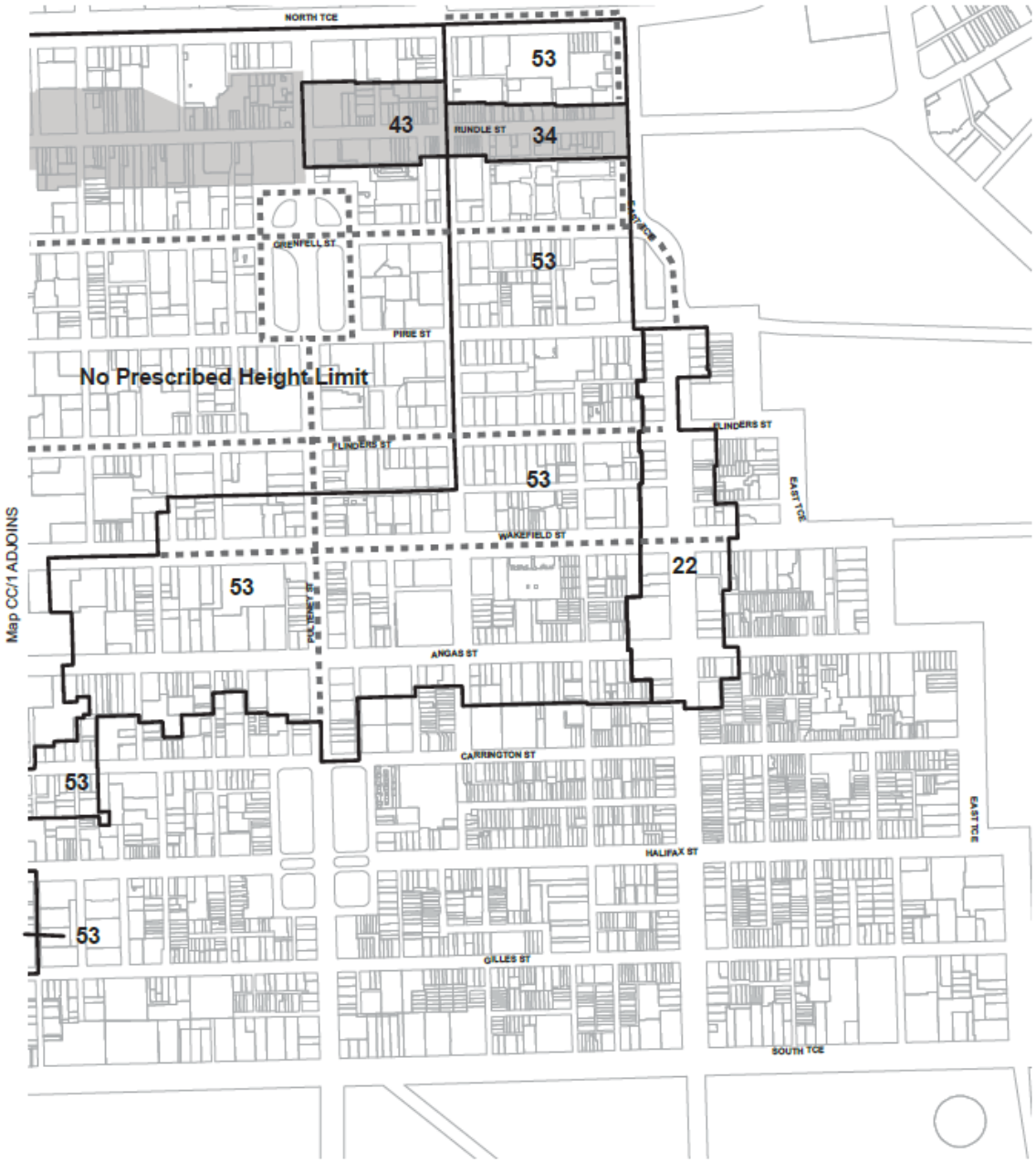
13	Central Business Policy Area
14	Main Street Policy Area
19	Botanic Park Policy Area
25	Adelaide Oval Policy Area
○	State Heritage Place
●	Local Heritage Place
▲	Significant Tree
◆◆◆◆◆◆◆	Existing Pedestrian Link
▮▮▮▮▮▮▮▮▮▮	Proposed Pedestrian Link
━━━	Policy Area Boundary

Scale 1:4150

0metres 100 200 300

ADELAIDE (CITY) POLICY AREAS MAP Adel/50

Consolidated - 20 June 2017



N

1:8000

0 120 240 360 480 600 metres

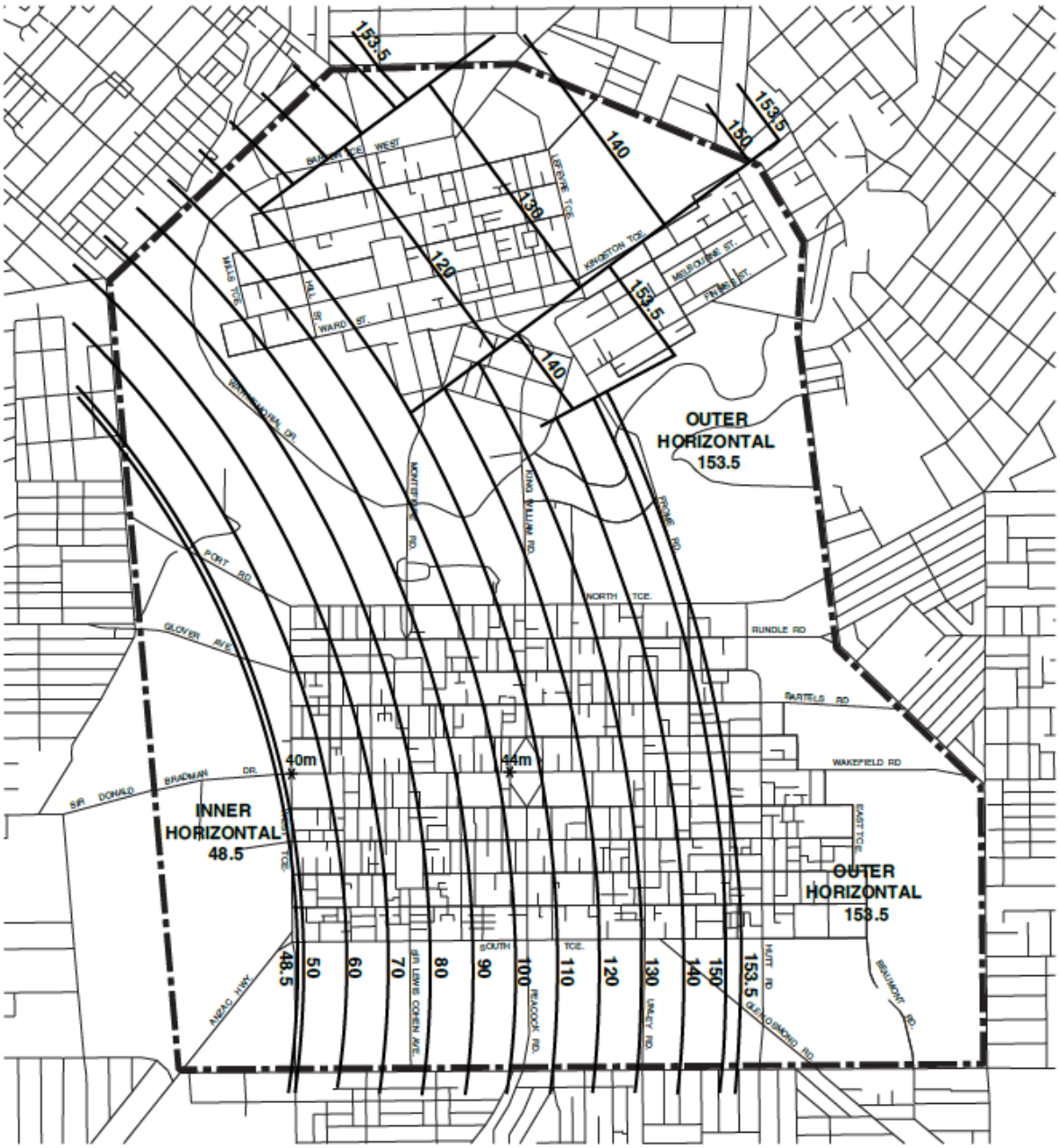
Maximum Building Height (Metres) within Capital City Zoned land
Note: Airport Building Height Restrictions Apply. Refer Map Adel/1 (Overlay 5).

City Boulevards and Terraces

Policy Areas of a 'main Street' type

ADELAIDE (CITY) BUILDING HEIGHTS
Concept Plan Figure CC/2

Consolidated - 20 June 2017



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

100 OLS Values in Australian Height Datum (AHD)

OLS Contour Boundary

*** 40m** Indicative ground level in AHD. Note: Ground level varies throughout the Council area and accurate ground level in AHD would need to be confirmed

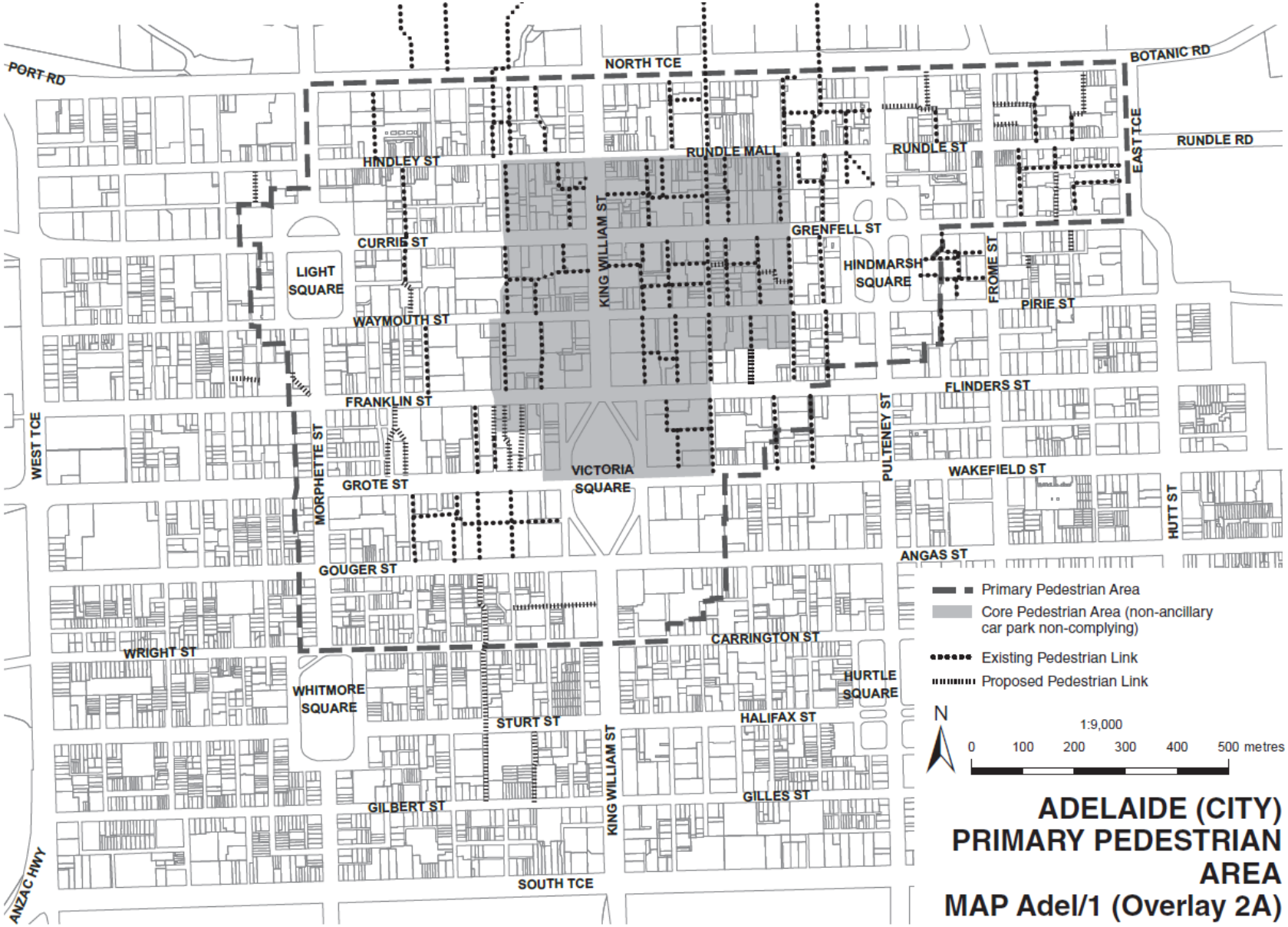
Development Plan Boundary

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

Scale 1:26,000

0metres 500 1000

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



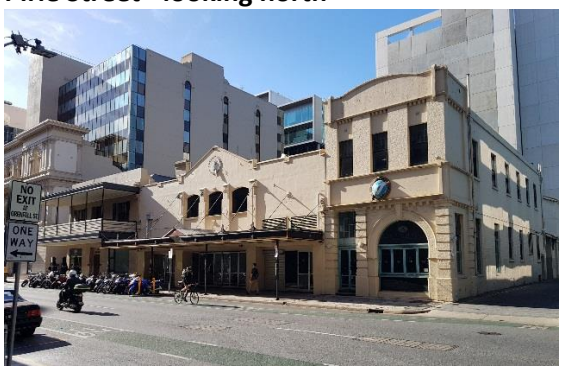
ADELAIDE (CITY) PRIMARY PEDESTRIAN AREA MAP Adel/1 (Overlay 2A)

Consolidated - 20 June 2017

Site Photographs

Pirie Street - looking north

Pirie Street - looking east



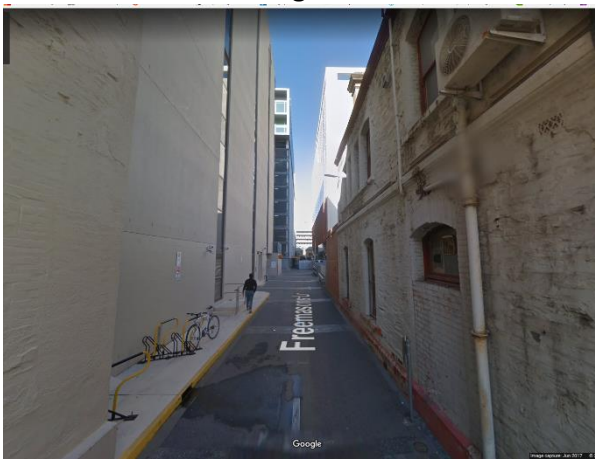
Pirie Street – looking south to the subject site

Pirie Street - looking west

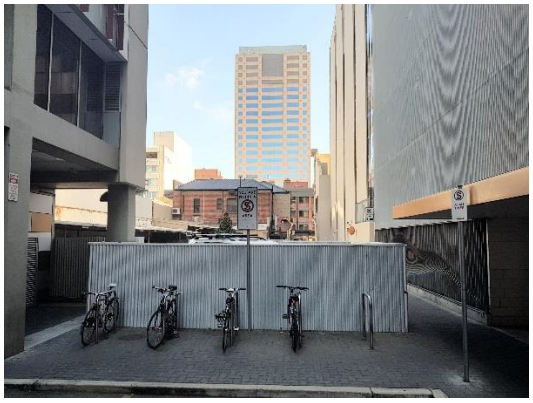
Freemans lane – looking north

Freemans lane – looking south

Freemasons Lane – looking north



Freemasons Lane – looking south



Existing pedestrian link between Freemasons Lane and Flinders Link

Product	Register Search (CT 5968/547)
Date/Time	21/08/2017 12:58PM
Customer Reference	
Order ID	20170821006509
Cost	$28.25

REAL PROPERTY ACT, 1886
South Australia

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

Certificate of Title - Volume 5968 Folio 547

Parent Title(s) CT 5913/152, CT 5943/240, CT 5950/229

Creating Dealing(s) RTD 10371238

Title Issued 01/08/2006 **Edition** 3 **Edition Issued** 23/07/2014

Estate Type

FEE SIMPLE

Registered Proprietor

CLONE PTY. LTD. (ACN: 060 208 602)
OF 83 PIRIE STREET ADELAIDE SA 5000

Description of Land

ALLOTMENT 7 DEPOSITED PLAN 68343
IN THE AREA NAMED ADELAIDE
HUNDRED OF ADELAIDE

Easements

TOGETHER WITH RIGHT(S) OF WAY ON FOOT ONLY WITH LIMITATIONS OVER THE LAND MARKED E (RTC 10268935)

TOGETHER WITH RIGHT(S) OF WAY ON FOOT ONLY WITH LIMITATIONS OVER THE LAND MARKED G (RTD 10371238)

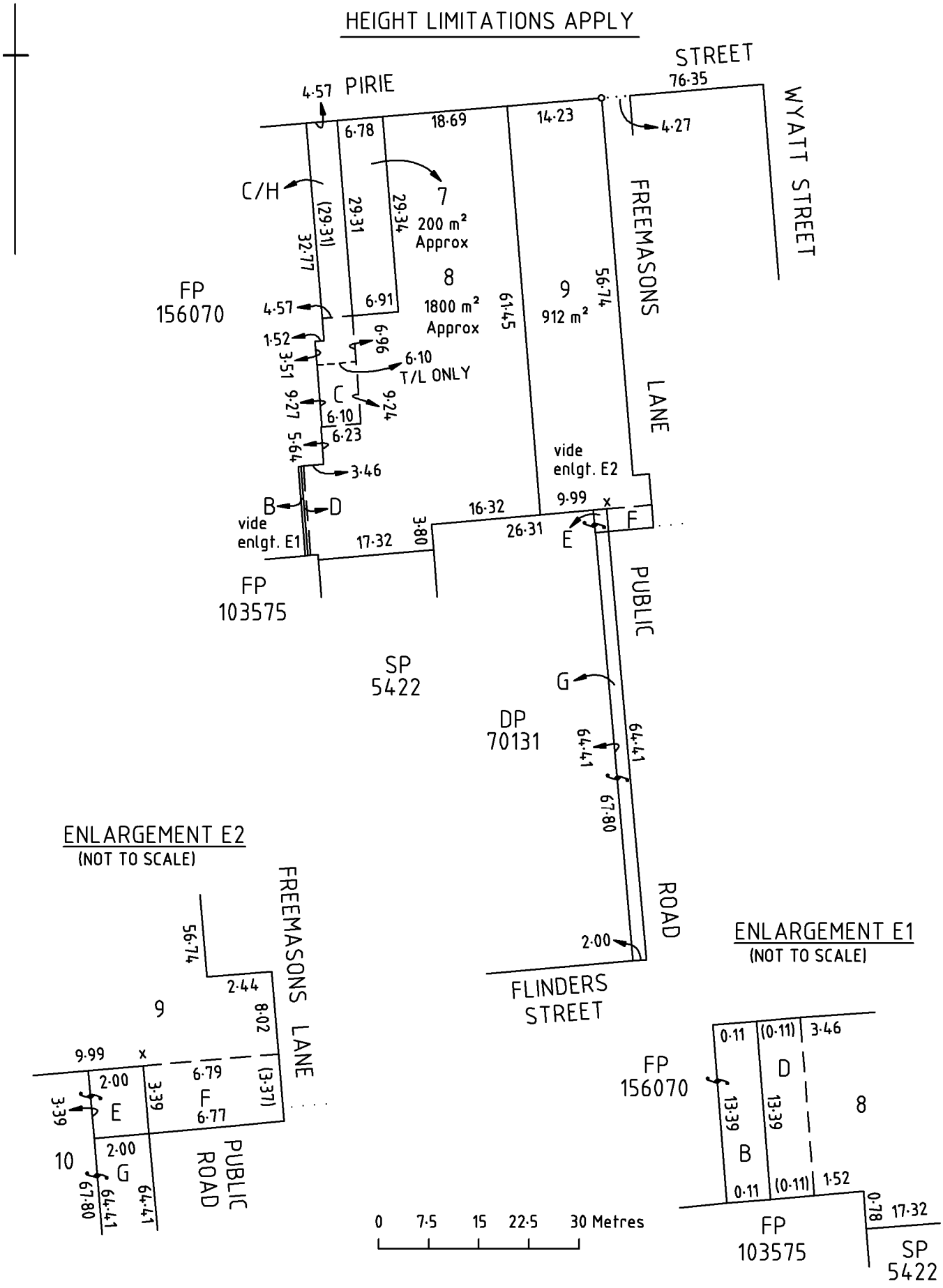
TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED H

Schedule of Dealings

Dealing Number	Description
12155422	MORTGAGE TO NATIONAL AUSTRALIA BANK LTD.

Notations

Dealings Affecting Title	NIL
Priority Notices	NIL
Notations on Plan	NIL
Registrar-General's Notes	NIL
Administrative Interests	NIL



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Creating Dealing(s) RTD 10371238

Title Issued 01/08/2006 **Edition** 3 **Edition Issued** 23/07/2014

Estate Type

FEE SIMPLE

Registered Proprietor

CLONE PTY. LTD. (ACN: 060 208 602)
OF 83 PIRIE STREET ADELAIDE SA 5000

Description of Land

ALLOTMENT 8 DEPOSITED PLAN 68343
IN THE AREA NAMED ADELAIDE
HUNDRED OF ADELAIDE

Easements

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED C (T 2217089)

SUBJECT TO PARTY WALL RIGHT(S) OVER THE LAND MARKED D (T 2217089)

SUBJECT TO FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED C AND H

TOGETHER WITH RIGHT(S) OF WAY ON FOOT ONLY WITH LIMITATIONS OVER THE LAND MARKED E (RTC 10268935)

TOGETHER WITH RIGHT(S) OF WAY ON FOOT ONLY WITH LIMITATIONS OVER THE LAND MARKED G (RTD 10371238)

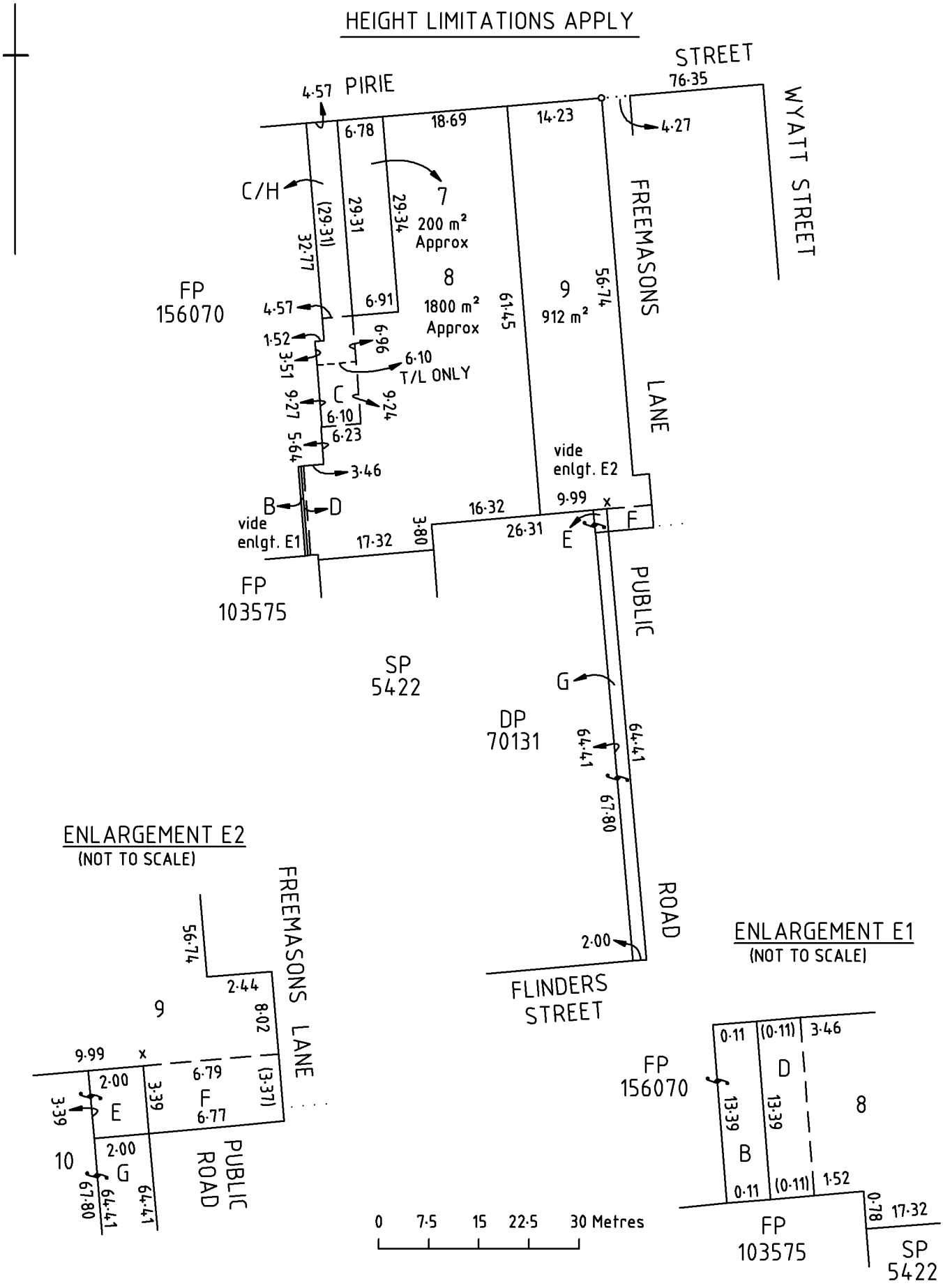
TOGETHER WITH PARTY WALL RIGHT(S) OVER THE LAND MARKED B (T 2217089)

Schedule of Dealings

Dealing Number	Description
12155422	MORTGAGE TO NATIONAL AUSTRALIA BANK LTD.

Notations

Dealings Affecting Title	NIL
Priority Notices	NIL
Notations on Plan	NIL
Registrar-General's Notes	NIL
Administrative Interests	NIL



REAL PROPERTY ACT, 1886
South Australia

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

Certificate of Title - Volume 5968 Folio 549

Parent Title(s) CT 5913/152, CT 5943/240, CT 5950/231

Creating Dealing(s) RTD 10371238

Title Issued 01/08/2006 **Edition** 3 **Edition Issued** 23/07/2014

Estate Type

FEE SIMPLE

Registered Proprietor

CENTRIC PROPERTIES PTY. LTD. (ACN: 007 632 699)
OF 83 PIRIE STREET ADELAIDE SA 5000

Description of Land

ALLOTMENT 9 DEPOSITED PLAN 68343
IN THE AREA NAMED ADELAIDE
HUNDRED OF ADELAIDE

Easements

SUBJECT TO THE EASEMENT(S) FOR LIGHT AND AIR OVER THE LAND MARKED F (RTC 10268935)

SUBJECT TO FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER THE LAND MARKED F

TOGETHER WITH RIGHT(S) OF WAY ON FOOT ONLY WITH LIMITATIONS OVER THE LAND MARKED E (RTC 10268935)

TOGETHER WITH RIGHT(S) OF WAY ON FOOT ONLY WITH LIMITATIONS OVER THE LAND MARKED G (RTD 10371238)

Schedule of Dealings

Dealing Number	Description
12155408	MORTGAGE TO NATIONAL AUSTRALIA BANK LTD.

Notations

Dealings Affecting Title NIL

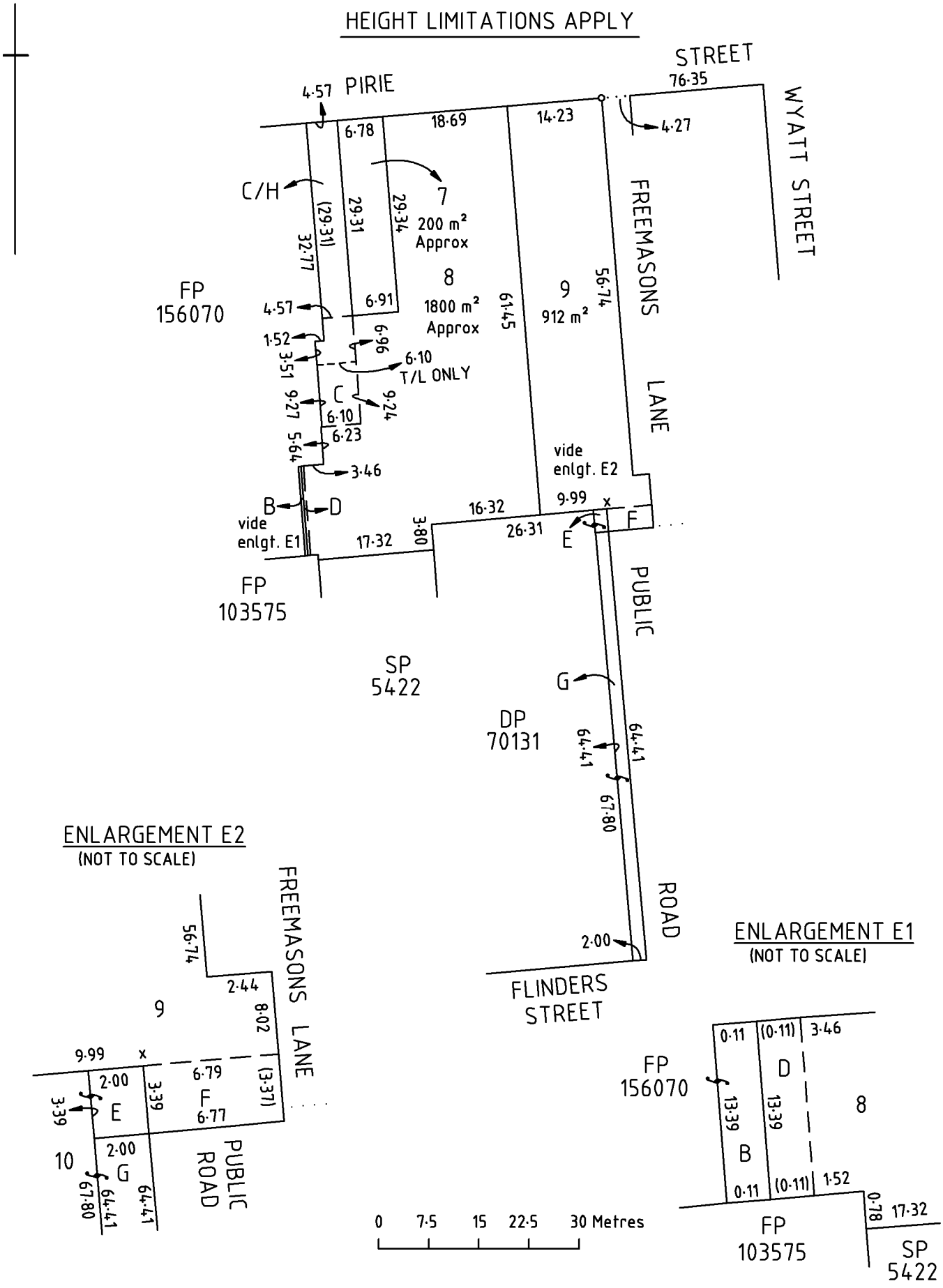
Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes

PLAN FOR LEASE PURPOSES VIDE G567/1996
PLAN DEPOSITED D70131

Administrative Interests NIL



ORIGINAL SHEET SIZE A1

IDENTIFICATION CERTIFICATE

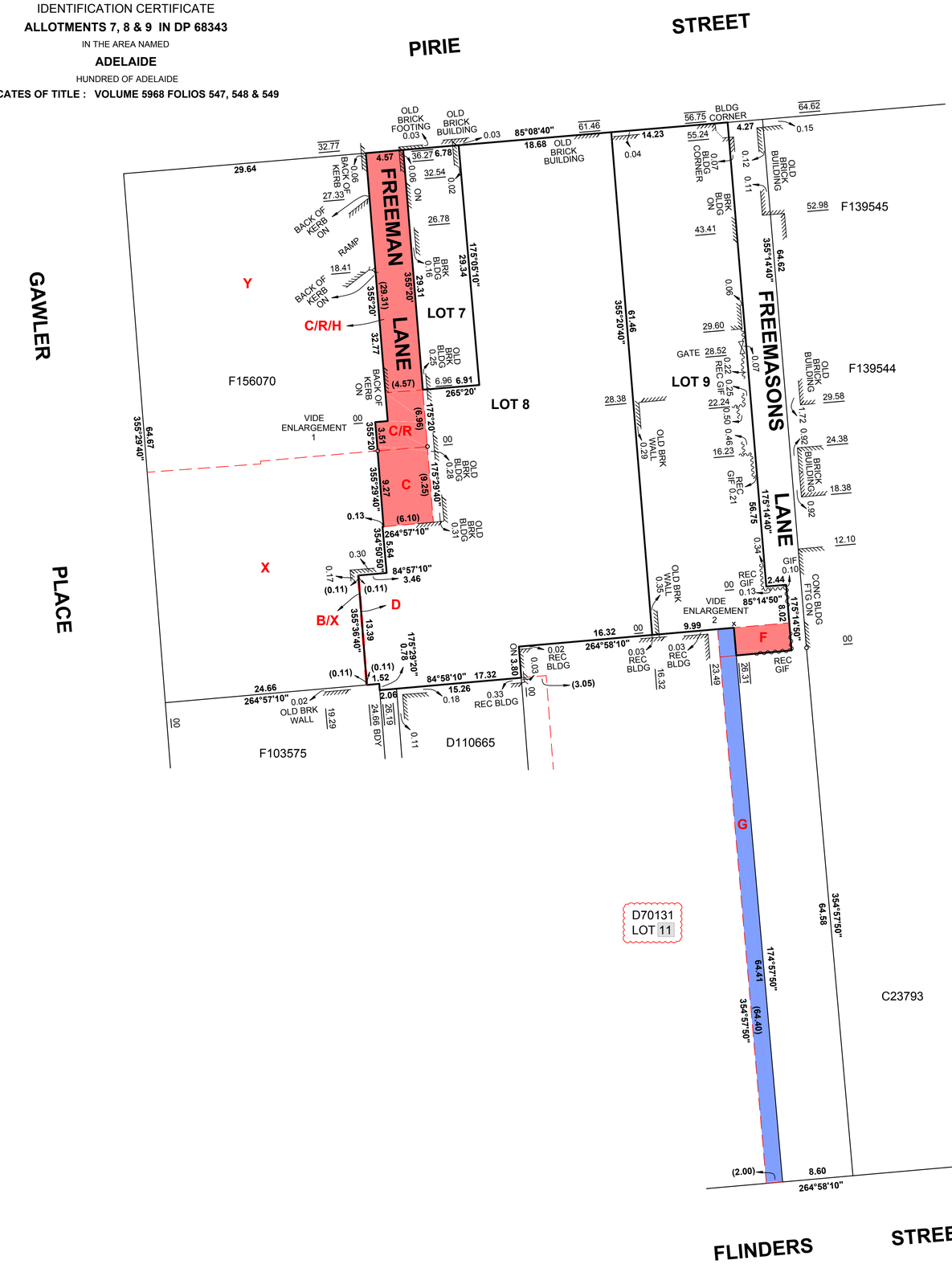
ALLOTMENTS 7, 8 & 9 IN DP 68343

IN THE AREA NAMED

ADELAIDE

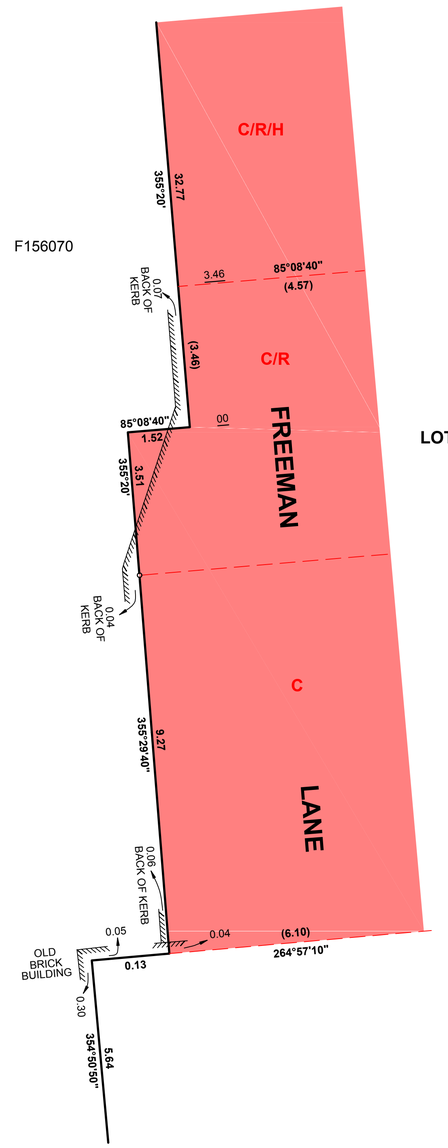
HUNDRED OF ADELAIDE

CERTIFICATES OF TITLE : VOLUME 5968 FOLIOS 547, 548 & 549



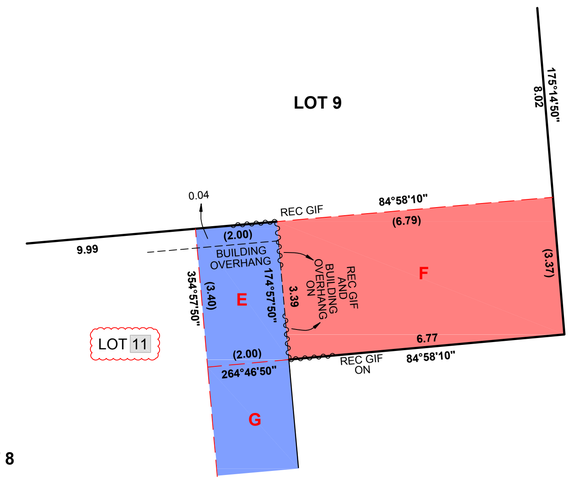
ENLARGEMENT 1

NOT TO SCALE



ENLARGEMENT 2

NOT TO SCALE



NOTES: MULTIPLE EASEMENTS EXIST OVER THE SUBJECT LAND. REFER TO CERTIFICATES OF TITLE FOR DETAILS.

Alexander & Symonds Pty Ltd
11 King William Street Kent Town,
South Australia 5067
PO Box 1000 Kent Town, SA 5071
DX 209 ABN 93007 753 988

T (08) 8130 1666
F (08) 8362 0099
W www.alexander.com.au
E adelaide@alexander.com.au

+ Property + Land Development +
+ Construction + Mining +
+ Spatial Information Management +

Alexander Symonds Surveying Consultants

LEGEND

BRK	DENOTES BRICK
BDY	DENOTES BOUNDARY
BLDG	DENOTES BUILDING
CB	DENOTES COLORBOND
FTG	DENOTES FOOTING
REC	DENOTES RECENT
F	DENOTES FENCE
GI	DENOTES GALVANISED IRON

BOUNDARY DEFINITION IN ACCORDANCE WITH SURVEY MARKS FOUND IN DP 68343

0 3 6 9 12 15

SCALE 1:300 METRES
AT ORIGINAL SHEET SIZE B2

CRAIG BARWICK
LICENSED SURVEYOR

REFERENCE A097017.0000

DWG No A097017 IDENT(B)

FIELD BOOK RSW Date of Survey 23/08/2017

BCA 29/08/2017

DEVELOPMENT REGULATIONS 2008
Form of Declaration (Schedule 5 clause 2A)

Government of South Australia

To: Adelaide City Council

From: Adelaide Development Company
GPO Box 1348
ADELAIDE SA 5001

Date of Application: / /

Location of Proposed Development: _____

House No: 73-85 Lot No: _____ Street: Pirie Street

Town/Suburb: Adelaide

Lot 7 - CT 5968 / 547

Lot 8 – CT 5968 / 548

Lot 9 – CT 5968 / 549

Nature of Proposed Development:

21 storey office building and ground floor retail

I LAEL MAYER (GENERAL MANAGER) being ~~the applicant~~/ a person acting on behalf of the applicant (delete the inapplicable statement) 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.

Signed: _____ **Date:** 15 / 11 / 17

Government of South Australia

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 –

a) an internal alteration of a building; or
b) 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) an aerial line and a fence, sign or notice that is less than 2.0 m in height and is not designed for a person to stand on; or
b) 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 also comply.

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

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

Note 5

An information brochure: 'Building Safely Near Powerlines' has been prepared by the Technical Regulator to assist applicants and other interested persons.

This brochure is available from council and the Office of the Technical Regulator. The brochure and other relevant information can also be found at **sa.gov.au/energy/powerlinesafety**

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.

DEVELOPMENT APPLICATION FORM

PLEASE USE BLOCK LETTERS

COUNCIL: Adelaide City Council

APPLICANT: Adelaide Development Company

Postal Address: GPO Box 1348

ADELAIDE SA 5001

Owner: as above

Postal Address: _____

_____

BUILDER: To be advised

_____

Postal Address: _____

_____

_____ Licence No: _____

CONTACT PERSON FOR FURTHER INFORMATION

Name: Rebecca Thomas - Ekistics Planning

Telephone: (08) 7231 0286 [work] 0474 894 433 [Ah]

Fax: _____ [work] _____ [Ah]

EXISTING USE: office, shop and vacant buildings

FOR OFFICE USE

Development No: _____

Previous Development No: _____

Assessment No: _____

☐ Complying	Application forwarded to DA
☐ Non Complying	Commission/Council on
☐ Notification Cat 2	/ /
☐ Notification Cat 3	Decision: _____
☐ Referrals/Concurrences	Type: _____
☐ DA Commission	Date: / /

	Decision required	Fees	Receipt No	Date
Planning:				
Building:				
Land Division:				
Additional:				
Development Approval				

DESCRIPTION OF PROPOSED DEVELOPMENT: 21 storey office building and ground floor retail

LOCATION OF PROPOSED DEVELOPMENT: _____

House No: 73-85 Street: Pirie Street Town/Suburb: Adelaide

Lot 7 - CT 5968 / 547 Lot 9 – CT 5968 / 549

Lot 8 – CT 5968 / 548

LAND DIVISION:

Site Area [m^2] _____ Reserve Area [m^2] _____ No of existing allotments _____

Number of additional allotments [excluding road and reserve]: _____ Lease: YES ☐ NO ☐

BUILDING RULES CLASSIFICATION SOUGHT: _____ Present classification: _____

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

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

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

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

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

DEVELOPMENT COST [do not include any fit-out costs]: $ 72·6M

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 / 11 / 17

GENERAL MANAGER

ekistics

83 PIRIE STREET ADELAIDE

Planning Report

Prepared for:
Adelaide Development Company

Date:
17.11.2017

ekistics

ekistics

Proprietary Information Statement

Document Control

Revision	Description	Author	Date
V1	Draft Planning Statement	RT	03/11/17
V2	Draft Planning Statement	RT	06/11/17
V3	Final Planning Statement	RT	17/11/17

Approved by: RThomas  *Senior Associate* Date: 17/11/17

ekistics

Contents

Appendices

Figures

Tables

Executive Summary

Category	Details
PROJECT	83 Pire Street, Adelaide
ADDRESS OF SITE	73-85 Pirie Street, Adelaide
CERTIFICATES OF TITLE	Lot 7 - CT 5968/547 Lot 8 – CT 5968/548 Lot 9 – CT 5968/549
SITE AREA	2,911m²
FRONTAGE (Pirie Street)	44.3 metres
DEPTH (Freemasons Lane)	64.7 metres
LOCAL GOVERNMENT	Adelaide City Council
RELEVANT AUTHORITY	State Commission Assessment Panel
DEVELOPMENT PLAN	Adelaide (City) Development Plan (consolidated 20 June 2017)
ZONING	Capital City Zone
POLICY AREA/PRECINCT	Central Business Policy Area 13
EXISTING USE	Office, shop, carpark and vacant building
PROPOSAL DESCRIPTION	Demolition of existing buildings and construction of a 21-storey building comprising retail, lobby and bike storage on ground level, three level podium carpark, 17 office floors above and roof top meeting and balcony space
NATURE OF DEVELOPMENT	Consent
REFERRALS/CONCURRENCES	• Government Architect • Adelaide Airport • State Heritage Unit • Adelaide City Council
PUBLIC NOTIFICATION	Category 1
APPLICANT	Adelaide Development Company
PREVIOUS APPROVAL	Application 646/2005 - 18 storey office & retail development - approved by Council on 26 June 2006 (lapsed in 19 June 2012)
CONTACT PERSON	Rebecca Thomas, Ekistics Planning and Design 0474 894 433 rthomas@ekistics.com.au
OUR REFERENCE	00486

1. Introduction

1.1 Background

This report has been prepared on behalf of Adelaide Development Company (ADC) in support of an application to demolish the existing buildings located at 73 to 85 Pirie Street, Adelaide and construct a multi-level office building with ground level retail tenancy and screened podium car parking.

The site is one of only a few remaining undeveloped, large, consolidated and strategically located capital city sites in the heart of the Adelaide's commercial office district with generous frontage to Pirie Street and public lane access to Flinders Street. The proposal aims to deliver approximately 30,000m^2 of commercial office space while activating Pirie Street at ground level with a complimentary retail offering and maintaining the existing vehicle access arrangements via Freemasons Lane with the inclusion of an adaptable, yet concealed podium carpark.

This Statement provides information about the subject land and proposed development and assesses the merits of the proposal against the relevant provisions of the Capital City Zone and other relevant Council Wide provisions of the Adelaide (City) Development Plan.

For the purposes of this Statement, the Adelaide (City) Development Plan will be referred to as the 'Development Plan', the *Development Act*, 1993 will be referred to as the 'Act' and the *Development Regulations*, 2008 will be referred to as the 'Regulations'.

1.2 Pre-Lodgement Process

The Applicant elected to participate in the 'Pre-lodgement' process offered by the Department of Planning Transport and Infrastructure (DPTI). This involved:

- A project initiation meeting;
- A pre-lodgement planning (PLP) meeting in September 2017; and
- A Design Review session, hosted by the Office for Architecture and Design SA (ODASA) in October 2017.

The feedback provided via these sessions, particularly in relation to the proposed architectural expression, form, massing and materials informed the design development of the project.

2. Procedural Matters

2.1 Nature of Development

The proposed development involves the demolition of existing buildings and the construction of a multi-level office building with ground level retail space and screened podium car parking over three (3) levels.

Pursuant to the definitions in Schedule 1 of the Regulations an **office** is defined as follows:

> *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;*

While the precise nature of the ground floor tenancy space is not yet known, it is anticipated that they will comprise a shop/s, mostly likely food and beverage retail. A 'shop' is also defined in the Regulations as:

> ***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.*

The proposed podium car parking is ancillary to the proposed office use and will not be available as a public carpark.

Within the 'Capital City Zone' the development of a multi-storey, mixed use building comprising ancillary vehicle parking is a '**Consent use**' (meaning the application is neither 'Complying' nor 'Non-complying', but is to be assessed on its merits).

2.2 Planning Authority

Pursuant to Schedule 10(4B) of the Development Regulations, 2008, the **State Commission Assessment Panel (SCAP)** is the relevant planning authority for this application, as the total development cost is well in excess of $10 million.

2.3 Agency Consultation

In accordance with Principle of Development Control 40 within the Capital City Zone, the application constitutes a **Category 1** form of development and does not require public notification.

2.4 Referrals

The application will require referral to the '**Government Architect**' pursuant to Schedule 8 of the Regulations as it involves development within the City of Adelaide for which the SCAP is the relevant authority under Section 4(B) of Schedule 10 of the Regulations.

The application will require referral to **Adelaide Airport** Ltd, specifically the Commonwealth Secretary for the Department of Infrastructure and Regional Development (DIRD), as the proposed building height exceeds the Obstacle Limitation Surface Heights shown on Map Adel/1 (Overlay 5) of the Adelaide (City) Development Plan.

We understand that the Application will require referral to the **State Heritage Branch** as the development adjoins a State Heritage Place (i.e. 89 Pirie Street, Adelaide) located on the opposite side of Freemasons Lane.

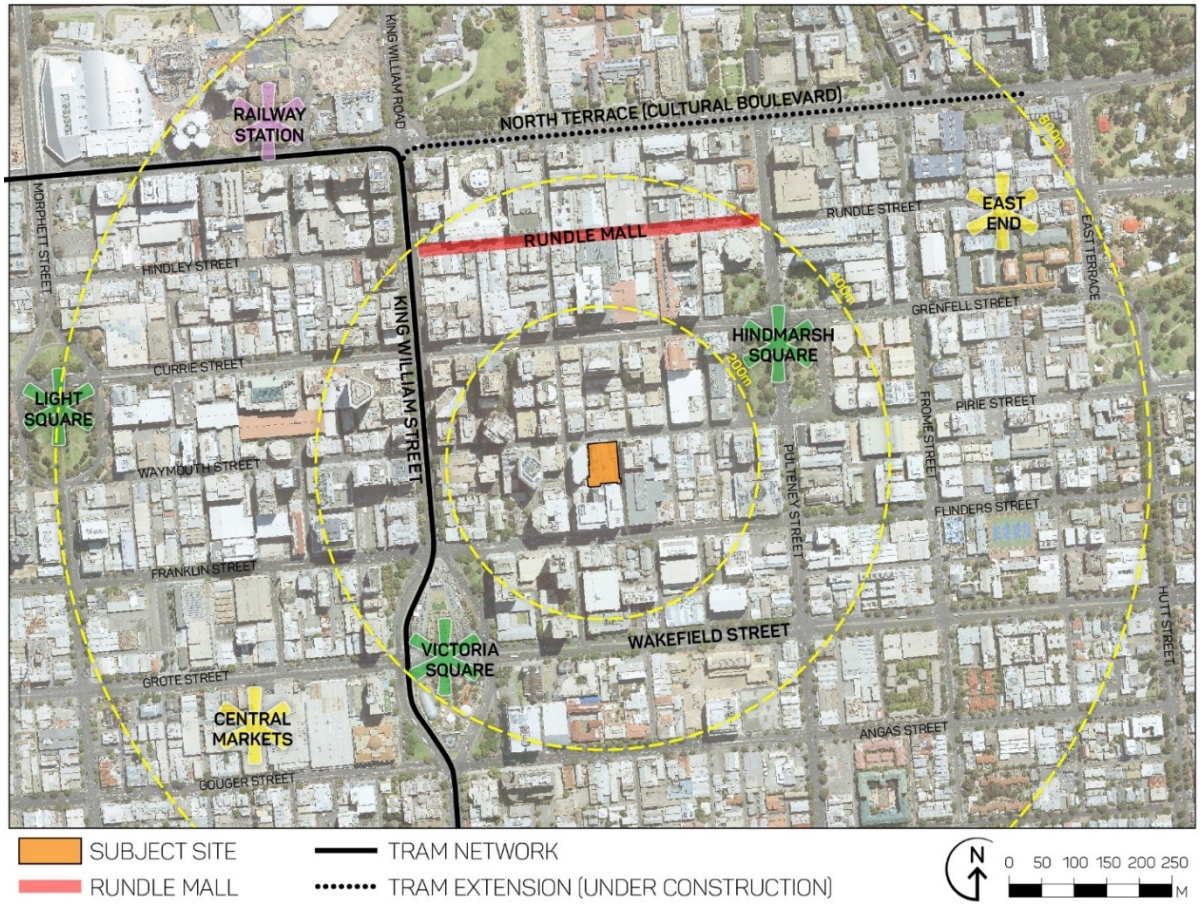
An informal referral to **Adelaide City Council** is also anticipated in order to canvas local infrastructure and service provision issues (i.e. traffic, waste, public realm etc.).

3. Subject Site and Locality

The subject site is recognised as 73 to 85 Pirie Street, Adelaide and is located on the south-eastern corner of Freemason Lane, a 3.8 metre wide public road that functions (informally) as a shared vehicle/pedestrian space connecting to Flinders Link and Flinders Street. Freemans Lane comprises private land with an average width of 4.1 metres which runs along the western edge of the subject site to Pirie Street. Freemasons Lane is used predominately as a service road for the subject site and car park access for the adjoining site to the west which enjoys a right of way over part of the lane.

The property is strategically located within the prime business district of Adelaide's CBD and within walking distance to key city destinations, as indicated by the following image. Pirie Street is a primary east-west connector for vehicles, pedestrians and cyclists within the city.

Figure 2.1 *Site and locality*



The site comprises the following three (3) titles:

- Certificate of Title Volume 5968 Folio 547 (Allotment 7 Deposited Plan 68343);
- Certificate of Title Volume 5968 Folio 548 (Allotment 8 Deposited Plan 68343); and
- Certificate of Title Volume 5968 Folio 549 (Allotment 9 Deposited Plan 68343).

The land, which measures 2,911m², is an irregular land parcel with a frontage of approximately 44m to Pirie Street and 65m to Freemasons Lane (a public road). As mentioned, the site incorporates Freemans Lane, which is a private laneway.

The allotments are encumbered by various rights of way and easement obligations which are best illustrated in the combined survey plan prepared by Alexander Symonds, appended with the Certificates of Title in ***Appendix 1***.

The subject land is located within the '**Central Business Policy Area 13'** of the '**Capital City Zone'** of the Adelaide (City) Development Plan (Consolidated 20 June 2017) and is currently occupied by a number of two-storey buildings. The existing building at 85 Pirie Street is occupied by commercial offices, a ground floor café and informal at grade carpark for 27 vehicles accessed via Freemasons Lane. The existing buildings at 73-79 Pirie

Street, previously utilised as a hotel, licensed entertainment premises and restaurant, have been vacant for a number of years and are serviced from Freemans Lane.

The locality is generally characterised by large commercial offices with ground level shops and cafes. To the immediate west, the Aon building comprises a 12 level office building (approximately 51 metres high). To the east is the State Heritage 'Darlington House Offices (formerly People's Palace, former German club)' to the rear of which is the 8 level Allianz Building (not heritage listed). To the south fronting Flinders Street is the Santos building at 13 levels and approximately 48 metres and the Peoples Choice Credit Union building (16 levels and 63 metres high).

Immediately opposite the site on Pirie Street are a series of two-storey buildings and the NAB 9 level tower at approximately 38 metres high.

Photographs of the façade of the existing buildings on site as well as photographs of the surrounding lanes are provided in the following images.

Figure 2.2 *Subject Site (Pirie Street frontage) with Freemans Lane to the right*

Figure 2.3 *Freemans Lane looking south (subject site to the left)*

Figure 2.4 *Freemasons Lane looking north to Pirie St (subject site to the left)*

Figure 2.5 *Freemasons Lane looking north to Pirie St (subject site to the left)*

Figure 2.6 *Flinders Link*

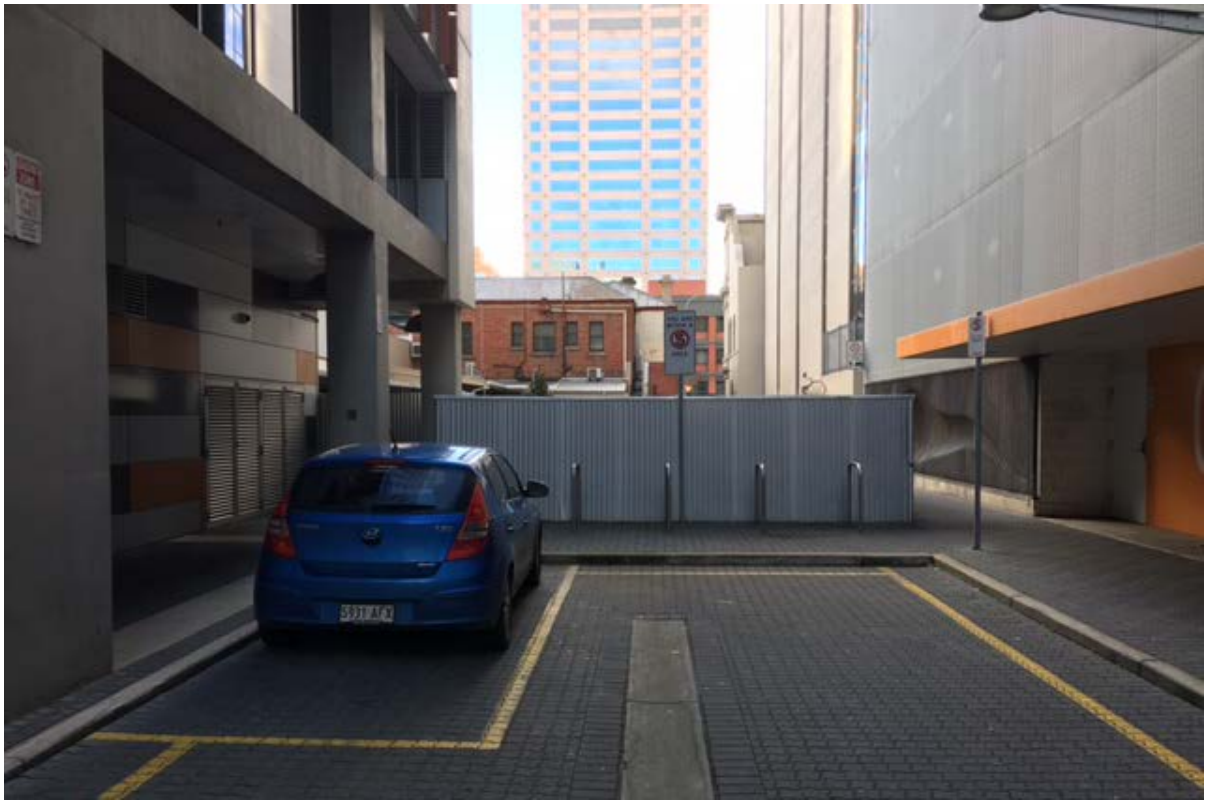


Figure 2.7 *Flinders Link*

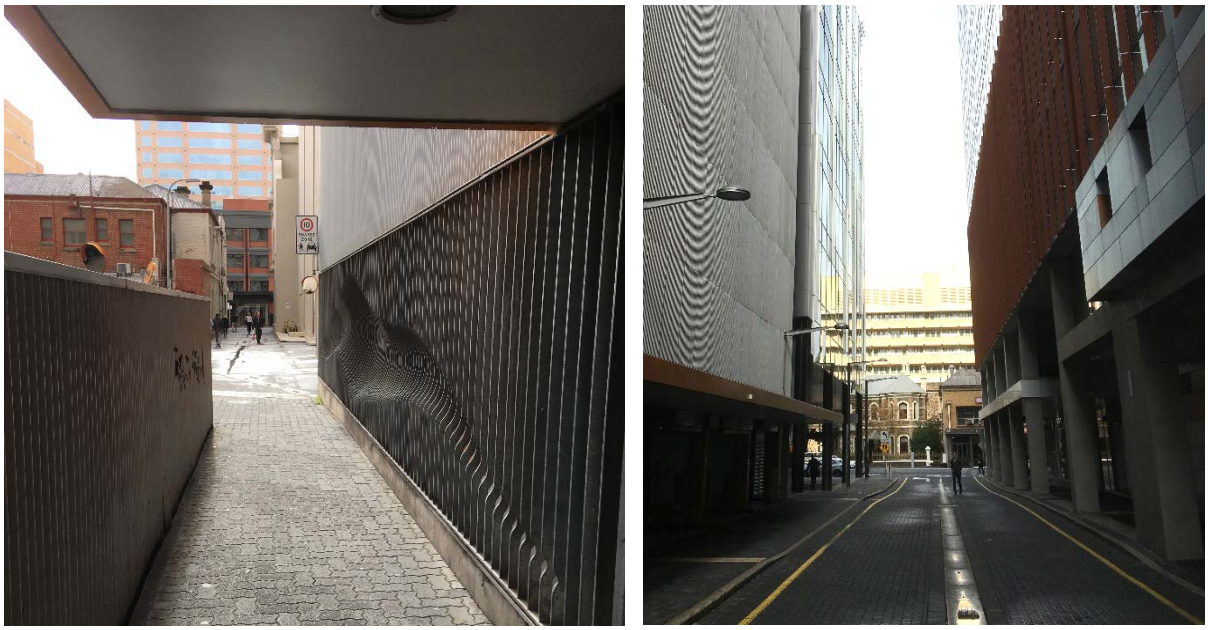


Figure 2.8 illustrates the adjoining State Heritage Place recognised as 'Darlington House Offices (formerly People's Palace, former German club)', located opposite the site, over Freemasons Lane, at 89 Pirie Street, Adelaide. The location of other heritage listed places in proximity of the site are shown on Figure 4.1.

Figure 2.8 *Adjoining State Heritage Place*

Historical image courtesy of slsa.sa.gov.au

3. Description of the Proposal

3.1 Key Features

The application proposes demolition of the existing buildings and improvements on the land and construction of a 21-storey building (ground plus 21 levels including roof level) rising to 85.4 metres above natural ground level (131,200 AHD), occupied predominately by commercial 'office' space.

The proposal is best illustrated in the Architectural Plans prepared by Woods Bagot and attached as ***Appendix 2***.

More specifically the building includes:

- A ground floor with five (5) metre ceiling heights comprising:
  - the primary building entry and lobby in the north-west corner to Pirie Street which opens as a void up to level 3;
  - a retail tenancy occupying approximately 330m^2 in the north-eastern corner with frontage to Pirie and Freemasons Lane (division into more than 1 tenancy possible subject to market demand);
  - a large 449m^2 secure 'End of Trip' (EOT) bicycle facility space for cyclist with storage for 205 bikes and associated lockers and change rooms, accessed from Freemasons Lane via a glazed 'shop front' (and internally via a ground floor corridor);
  - back of house functions such as the loading dock and waste room (accessible from Freemans Lane), lifts and plant equipment; and
  - the vehicle access ramp at the southern end of Freemasons Lane, servicing upper level car parking, (accessible from both Freemasons Lane and Flinders Link);
- The ground floor also includes a 4.8 m wide pedestrian walkway and informal congregation space along Freemasons Lane, incorporating landscaped planter beds, public seating and space for outdoor dining;
- A three (3) level podium over levels 1 to 3 comprising:
  - 122 ancillary car parking spaces for future tenant use (not publicly accessible carpark);
  - 3.8 metre slab to slab height on level 3 carpark to 'future proof' the space for adaptable commercial fit-out in the future (as market demand dictates and/or vehicle parking demand reduces);
  - 3 metre slab to slab height on carpark levels 1 and 2;
  - a landscaped planting edge and glazed balustrade at level 3;
  - plant equipment and services;
- 17 commercial floors above the podium occupied by approximately 30,400m^2 of office space (internal floor fit-out and partitioning not yet confirmed although indicative fit-out is shown for information purposes); and
- A 'roof' level containing:
  - a multi-purpose space, meeting room and outdoor terrace space for use by the office tenants measuring approximately 450m^2 in area (partly open to the sky) with landscaped planting edge and balustrade; and

- plant and equipment.

As stated, the main building height is 85.4 metres above natural ground level (131,200 AHD) however, a small portion of plant extends above the roof line to a height of 134,800 AHD. The building exceeds the OLS airport height level by approximately 14.8 metres.

3.2 Architectural Design

The architectural approach adopted is expressed the 'Design Response' section of the Wood Bagot Architectural package in *Appendix 2*.

Key design concepts adopted in the development of the proposal include:

- A bold, elegant architectural tower with visually defining lower, middle and top elements;
- A 14.8 metre high podium element, formed by three 'blocks' of varying size and orientation informed by the existing streetscape form and architecture;
- Form, materiality and scale of this podium element references the adjacent heritage building to the east and contrasts solid to void texture through brickwork and glazing;
- Consistent 3.8 metre floor to floor heights across all commercial and 1 carparking level to accommodate future downward expansion ;
- Transparent building lobby and retail façade on Pirie Street to generate street activation through pedestrian movement and also outdoor dining (subject to tenancy occupation);
- Transparent retail façade and ETO facilities with complimentary landscaping to Freemasons Lane offer significant improvement to existing poor lane activation and aesthetics;
- Generous boundary setbacks convert space for pedestrian movement, outdoor dining and improved north-south linkage through Flinders Link;
- Retention of the existing lane usage arrangements with separation of pedestrian and domestic vehicles (Freemasons Lane) from waste and service vehicles (Freemans Lane);
- Unique materiality including:
  - use of a non-uniform masonry brick screen over the carpark levels forming a highly textured, solid façade element;
  - a repetition of angled glass panels on the commercial levels façade forming a curtain wall;
  - a solid 'top' building level which caps the tower with a combination of bronze metal cladding and balustrading and charcoal metal banding; and
  - a feature woven metal fabric screen which wraps around the main building entry and podium levels on Freemasons Lane.

Potential signage locations are nominated on the elevations and are provided to show indicative locations for future tenant branding.

3.3 Siting and Encroachments

The building is to be sided 1.5 metres off its Pirie Street boundary (north) and 4.8 metres off the boundary to Freemasons Lane (east). To the south the building is sited on the boundary abutting the neighbouring buildings to the south until the 15th level when the building steps back off the boundary by 2 metres. The building is sited on the exiting Freemans Lane boundary (a private lane which forms part of the site area) providing a 4.1 metre lane clearance to Pirie Street, which widens to the rear of the lane as the title boundaries step westwards.

In relation to encroachments, the proposed ground floor canopy will encroach over the Pirie Street footpath by 1.4m and has a clearance of 3.7 metres to the underside of the canopy above the footpath level. On Freemasons Lane, the canopy is entirely within the subject site and is setback from the boundary edge by 2.3 metres (also with a 3.7 metre clearance above ground level). These dimensions achieve the specifications in the Adelaide City Council encroachment policy.

3.4 Adaptability

The adaptability of spaces within the building has been a key component of the design approach. It is recognised that over-time, spaces and their uses which are required now, may not be necessary or in demand in the future. The design team sought to ensure that the layout of spaces within the building, ceiling heights, fenestration arrangement, outlook and access points embody flexibility and feasible adaption opportunities. For example:

- The third level of **podium car parking** is configured to enable commercial occupancy should market demand and/or the need for the allocated number of car parks reduce in the future. This conversion could occur either over the entire 3rd level or as a smaller commercial space which sleaves the building along the northern façade. The slab to slab height of this level (3.8 metres) would accommodate this transformation, as would the masonry brick screen around the podium, the construction of which allow for openings to be created for future window glazing.
- The generous **ETO space** which presents a glazed 'shop-front' façade, is similarly designed to allow for conversion to a commercial tenancy (café, wine bar, bike shop etc) in the future should the functionality of Freemasons Lane change and become a more activated space. In this circumstance, some of the bike parking could be relocated to levels 1 or 2 and/or provided as mezzanine bike parking within the existing ETO space (noting the 5-metre ceiling in this space) which would enable the front portion of the ETO space to be adapted to a commercial space.
- The **ground floor retail area** is arranged to enable division into multiple tenancies subject to commercial demand, with both street frontages having entry points, generous glazing and access to outdoor seating/dining space (which can be accommodated within the site boundary).

3.5 Landscaping and Public Realm

The Applicant has engaged Aspect Studios to prepare a draft Landscape Concept to inform the project. The application as lodged is entirely contained within its own site boundaries with the exception of the Pirie Street canopy encroachment previously mentioned.

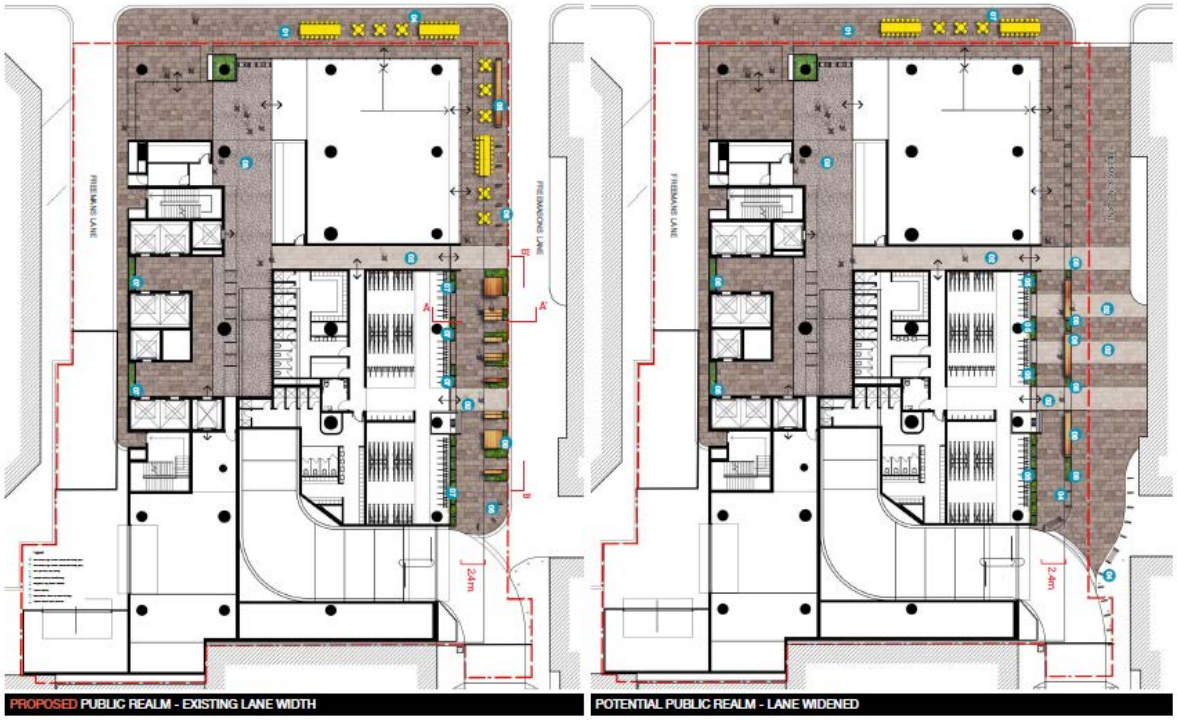
The landscape concept incorporates a material pallet which has the public and private spaces merging together as integrated spaces with the use of the concrete paving selection and has considered potential locations for outdoor dining, landscaping treatment and public seating around the building.

The design presented is intended to inform dialogue with Adelaide City Council (which the Applicant has initiated) and is configured in a manner which would enable the potential widening of Freemasons Lane should Council wish to pursue this opportunity.

Extracted from the Woods Bagot submission, the image below shows the proposed arrangements (left) and the possibility that exits to widen Freemasons Lane should Council wish to explore this opportunity.

At present Freemasons Lane is too narrow to provide a separate compliant public footpath in addition to the vehicle carriageway (hence the informal shared vehicle and pedestrian arrangements that currently exists). Acknowledging this, the applicant has generously incorporated a 'footpath' within the private site area which would essentially function as a public footpath once built and occupies approximately 230m^2 of the site for the benefit of the general public.

Figure 3.1 *Public realm – Proposed and Potential*



A planting schedule is also provided for ground level species and also plantings within the level 3 and roof level landscaped edge.

3.6 Specialist Consultant Documentation

In addition to the project outline provided above, the following specialist consultant documentation (located in the Appendices) provides more detailed information in relation to features of the proposal.

Table 3.1 *Specialist consultant documentation*

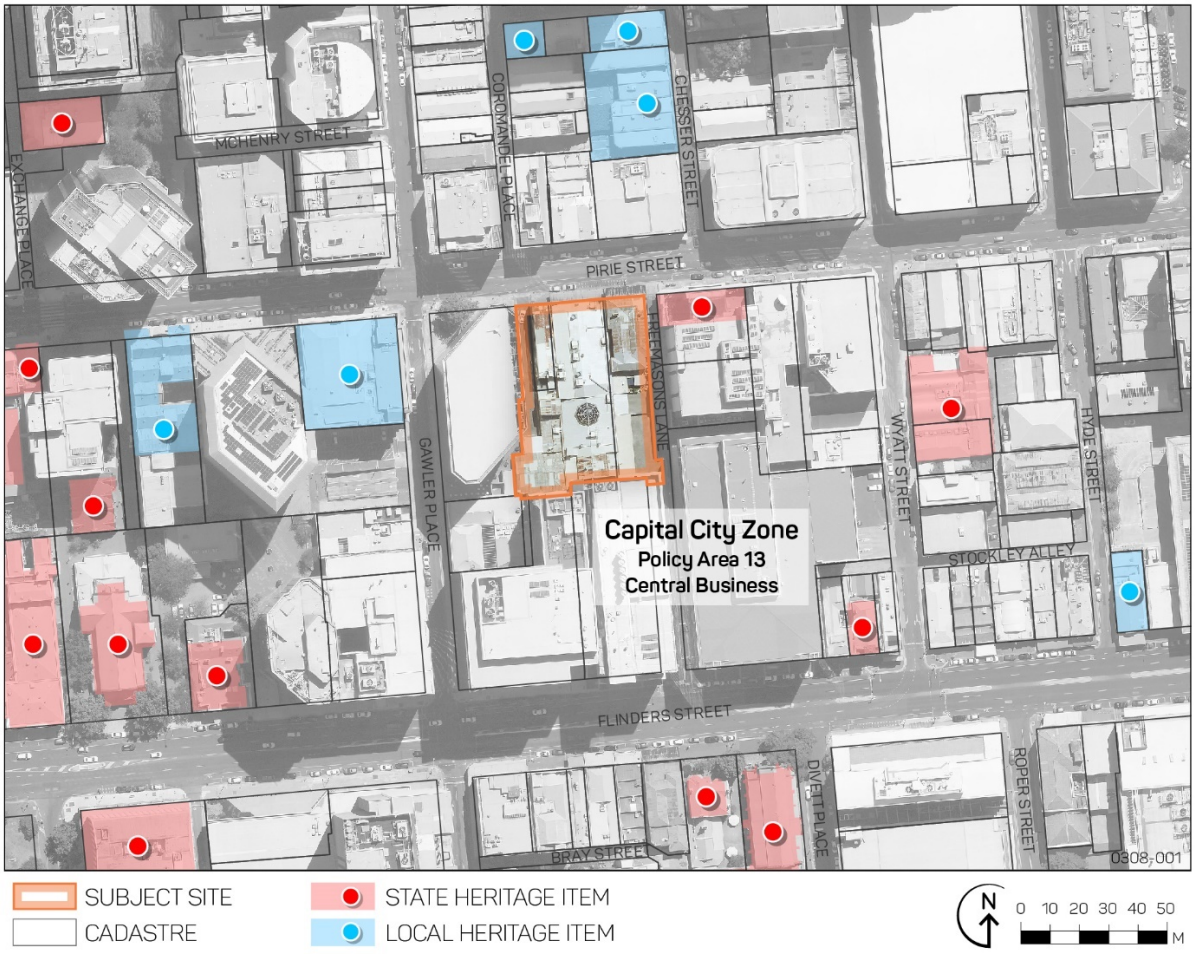
Discipline	*Documentation*	*Consultant*	*Appendix #*
Survey	Survey Plan and Certificates of Title	Alexander Symonds	Appendix 1
Architectural	Plans, elevations, perspectives, sections, materials/finishes, shadow plans, staging & Architectural Statement	Woods Bagot	Appendix 2
Landscaping	Landscape Design Documentation	Aspect Studio	Appendix 3
Wind Effects	Wind Impact Assessment Report	BESTEC	Appendix 4
Heritage	Heritage Impact Statement	DASH Architects	Appendix 5
Traffic	Traffic and Parking Report	MFY	Appendix 6
ESD	Energy Efficiency Statement	BESTEC	Appendix 7
Waste	Waste Management Report	Rawtec	Appendix 8
Stormwater	Stormwater Management Report	WGA	Appendix 9

4. Development Plan Assessment

4.1 Overview

The subject land is located within the City of Adelaide and is within the '**Central Business Policy Area 13'** of the '**Capital City Zone'** of the Adelaide (City) Development Plan (Consolidated 20 June 2017).

Figure 4.1 *Development Plan zoning*



A primary objective of the 'Capital City Zone' is the achievement of '*A vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living*'.

A primary objective of the 'Central Business Policy Area 13' is for '*A concentration of employment, governance, entertainment and residential land uses that form the heart of the City and central place for the State'*.

4.2 Land Use

Central Business Policy Area 13

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

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

Capital City Zone

Desired Character (extract)

This Zone is the economic and cultural focus of the State and includes a range of employment, community, educational, tourism and entertainment facilities…

The Zone will be active during the day, evening and late night…

Non-residential land uses at ground floor level that generate high levels of pedestrian activity such as shops, cafés and restaurants will occur throughout the Zone.

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

PDC 1 *The following types of development, or combinations thereof, are envisaged:*

…

Licensed entertainment premises

Office

Restaurant

Shop or group of shops…

4.2.1 Land Use Assessment

The Central Business Policy Area within the Capital City Zone is the principal location within Adelaide for large scale commercial office functions, contributing to a concentration of economic activity, employment opportunities and a lively, robust Capital city centre. The inclusion of a complementary ground floor tenancy suited to retail uses, achieves the desire for pedestrian level activation and offers the potential for a business which operates beyond traditional office hours.

Office and retail uses are specifically encouraged and envisaged in this location and accordingly, the application achieves all the relevant Development Plan provisions related to land use.

4.3 Building Height, Massing and Design

Central Business Policy Area 13

Desired Character (extract)

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

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

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

Capital City Zone

Desired Character (extract)

High-scale development is envisaged in the Zone with high street walls that frame the streets…

the Central Business Policy Areas, upper level setbacks are not envisaged.

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.

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…

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.

OBJ 5 *Innovative design approaches and contemporary architecture that respond to a building's context.*

OBJ 6 *Buildings that reinforce the gridded layout of Adelaide's streets and respond to the underlying built-form framework of the City.*

OBJ 7 *Large sites developed to their full potential while ensuring a cohesive scale of development and responding to a building's context.*

PDC 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.*

PDC 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 though articulation, avoiding any large blank façades, and incorporating design features within blank walls on side boundaries which have the potential to be built out;…

(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.

PDC 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.*

PDC 21 *Development should not exceed the maximum building height shown in Concept Plan Figures CC/1 and 2…*

PDC 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.*

Council Wide

PDC 170 *The height, scale and massing of buildings should reinforce:*

(a) *the desired character, built form, public environment and scale of the streetscape as contemplated within the Zone and Policy Area, and have regard to:*

(i) *maintaining consistent parapet lines, floor levels, height and massing with existing buildings consistent with the areas desired character;*

(ii) *reflecting the prevailing pattern of visual sub-division of neighbouring building frontages where frontages display a character pattern of vertical and horizontal sub-divisions; and*

(iii) *avoiding massive unbroken façades.*

(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 façade into distinct elements;*

(iii) *incorporating art work and wall and window detailing; and*

(iv) *including attractive planting, seating and pedestrian shelter.*

PDC 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.*

PDC 180 *Development should respect the composition and proportion of architectural elements of building façades 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 façades 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 façades or windows; and*

(b) *clearly defining ground, middle and roof top levels.*

PDC 182 *Building façades 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.*

PDC 187 *The design, external materials, colours and finishes of buildings should have regard to their surrounding townscape context, built form and public environment, consistent with the desired character of the relevant Zone and Policy Area.*

PDC 188 *Development should be finished with materials that are sympathetic to the design and setting of the new building and which incorporate recycled or low embodied energy materials. The form, colour, texture and quality of materials should be of high quality, durable and contribute to the desired character of the locality. Materials, colours and finishes should not necessarily imitate materials and colours of an existing streetscape*

PDC 189 *Materials and finishes that are easily maintained and do not readily stain, discolour or deteriorate should be utilised.*

PDC 190 *Development should avoid the use of large expanses of highly reflective materials and large areas of monotonous, sheer materials (such as polished granite and curtained wall glazing).*

OBJ 49 *Innovative and interesting skylines which contribute to the overall design and performance of the building.*

PDC 193 *Buildings should be designed to incorporate well designed roof tops that:*

(a) reinforce the desired character of the locality, as expressed in the relevant Zone or Policy Area;

(b) enhance the skyline and local views;

(c) contribute to the architectural quality of the building;

(d) provide a compositional relationship between the upper-most levels and the lower portions of the building;

(e) provide an expression of identity;

(f) articulate the roof, breaking down its massing on large buildings to minimise apparent bulk;

(g) respond to the orientation of the site; and

(h) create minimal glare.

PDC 194 *Roof top plant and ancillary equipment that projects above the ceiling of the top storey should:*

(a) be designed to minimise the visual impact; and

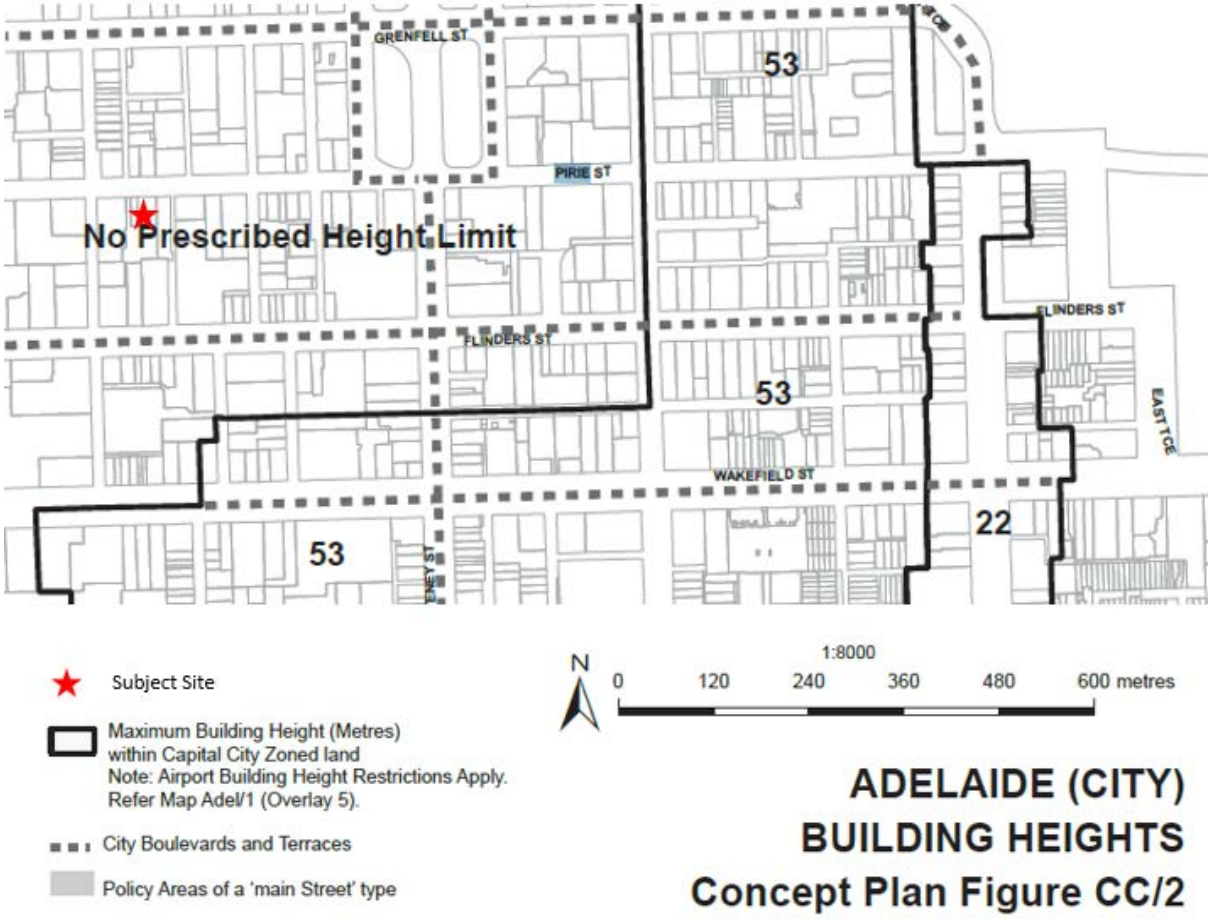
(b) be screened from view, including the potential view looking down or across from existing or possible higher buildings, or be included in a decorative roof form that is integrated into the design of the building.

4.3.1 Building Height, Massing and Design Assessment

Height and Massing

The subject site is located within the central portion of the Capital City where there are no prescribed height limits nominated in the Development Plan, other than to ensure that building heights do not pose a risk to airport operational safety. We note the Policy Area seeks 'tall and imposing buildings'.

Figure 4.2 *Building Heights Map Extract – Adelaide City Development Plan*



We understand that the Obstacle Limitation Surface (OLS) applicable to the site is approximately 120 metres AHD. The proposed building exceeds the OLS by approximately 14.8 metres at its highest point (top of plant). Preliminary advice from Adelaide Airport Services is that this exceedance is likely to be considered negligible and support from Adelaide Airport is anticipated.

The scale of the building, while higher than the buildings within its immediate locality, will sit comfortably within the Adelaide skyline and appears balanced in the context of the surrounding built form scale and form. We note that preliminary advice from ODASA supports this view.

Architectural Expression

The architectural expression of the building is considered to respect the established character of many city towers, presenting a traditional and efficient rectangular form with a textured glazed, curtain wall façade. The high attention to detail in the building design is evident with the building components (top, middle and base) carefully assembled so that while each component is distinctly visually different (particularly in relation to the material finish) the result is an elegant, interesting and cohesive built form appearance. The inclusion of shadow lines between the building elements assists to manage the visual mass of the building and create a distinct pedestrian environment at ground level.

The use of high quality materials and finishes; a visually impressive, defining building entrance; and generous public spaces and lobby area are all qualities which demonstrate a high standard of design as expected in the city centre. The proposal is considered to successfully achieve the desire for buildings that are contextual by responding to its surroundings, carefully considering the adjacent built form, and positively contributing to the character of the immediate area.

To Pirie Street, the building presents a strongly modelled façade with the light and open glazed shop front extending across the building frontage and the contrasting, textured masonry podium above which will read cohesively with the vertical composition and propositions of the adjoining heritage building.

Lane Frontage

The presentation of the building to Freemasons Lane achieves the desire for a sense of intimacy and enclosure within these minor laneways and at ground level, the arrangement of internal spaces and predominately glazed façade is composed in a way that responds to the buildings' context.

Freemasons Lane does not currently have a high value character and for the most part, functions as a service lane with large expanses of solid walling, visible service infrastructure and roller doors to vehicle access points (refer to Figure 2.4 and 2.5). Flinders Link, while notably improved in recent years, to also predominantly a service road and limited active uses present to the street (refer to Figure 2.6 and 2.7). Notwithstanding, the design proposed for 83 Pirie Street has sought to significantly improve the appearance, activation and pedestrian experience for people using this thoroughfare.

Service Areas and Roof Top

Service areas and vehicle access has been sited to the rear of both lanes and façade treatment incorporates substantial glazing and multiple building entry points to encourage the movement of people throughout and around the building. The topic of street level activation is explored further is Section 4.4 below.

The siting of the building on the land respects and reinforces Adelaide's grid layout and takes advantage of the existing solid boundary walls to the rear (being the back of neighbouring buildings to the south) by placing infrastructure and 'back-of-house' uses to the rear and away from the main pedestrian thoroughfare and building entrances. Upper levels of the proposed building facing south are set in from the boundary and offer views and natural light over the top of the neighbouring southern buildings.

The roof top area has been efficiently designed to accommodate building plant and equipment while also incorporating a large multi-purpose space, meeting room and outdoor terrace space for use by the office tenants. This space offers highly desirable views to the north, east and west and contributes positively to the architectural quality of the building by breaking down the building mass, presenting an interesting skyline and mirroring the similar landscaping and balustrade treatment on level 4.

Podium Carpark

Market expectation to provide onsite carparking has resulted in the inclusion of three levels of carparking above the ground floor. This feature of the project was carefully considered and various options where explored in early design development.

Below level basement parking was considered, however this proved cost prohibitive. Furthermore, the construction of large multi-level basements are neither adaptable or sustainable. Over time these spaces may be superfluous with the gradual reduction in car usage within the city and are not easily converted to viable alternative land uses.

A modest amount of upper level car parking to service the commercial building tenant/s was deemed most practical. It is recognised that the Development Plan seeks for first floor car parking to be sleeved by non-residential land uses ensure an activated street front. Design options to include commercial tenancy space within the car park levels were explored however these spaces were considered awkward in terms of their configuration and accessibility (due to the building core location) and were unlikely to be successfully tenanted. The carpark ramp design was also significantly compromised, resulting in unacceptable building inefficiencies.

In considering the upper level carpark design, we also note that when vehicle parking is incorporated into buildings, it should (PDC 32):

- Enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages;
- Complement the surrounding built form in terms of height, massing and scale; and
- Incorporate façade treatments along major street frontages that are sufficiently enclosed and detailed to complement neighbouring buildings consistent with the Desired Character of the locality.

While the proposal does not achieve the desire for carpark sleeving, the design does meet all three of the points above. In particular, the highly textured, un-uniform brick podium element is deliberately bold and cleverly provides natural ventilation while also concealing the vehicles behind.

Similarly, the finely textured woven metal fabric screen which covers the carpark from Freemasons Lane is intended to significantly limit and diffuse visibility of cars (and headlights) when viewed from street level, both during the day and at night. The screen's texture is most effective when viewed at an oblique angle, which will be the predominant pedestrian view from the south or north along the lane. A direct view through the screen will not be feasible given the width of Freemasons Lane and the proximity of the adjacent buildings to the east.

While noting ODASA's preliminary commentary in relating to the carpark levels, the design as presented is nonetheless considered to successfully achieve the key goal of concealing visible car parking through a highly integrated, deliberately bold façade arrangement. The potential adaptability of level 3 to future commercial space is also a key 'future-proofing' aspect of the project.

Summary

The proposed architectural expression and form has been assessed against the wide number of Development Plan provisions relating to building height, mass, scale, design language, built form quality and relationship to adjoining buildings and streetscape character. The project is considered to achieve the vast majority of these principles and objectives and will positively contribute to the Desired Character of this part of the city.

4.4 Street Activation and the Pedestrian Environment

Capital City Zone

Desired Character (extract)

> *…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.*
>
> *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.*
>
> *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.*
>
> ***OBJ 4*** *City streets that provide a comfortable pedestrian environment.*
>
> ***PDC 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.*
>
> ***PDC 7*** *Buildings should achieve a high standard of external appearance by:*
>
> *…*
>
> *(c) ensuring lower levels are well integrated with, and contribute to a vibrant public realm; and…*
>
> ***PDC 8*** *Buildings should present an attractive pedestrian-oriented frontage that adds interest and vitality to City streets and laneways.*

PDC 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.*

PDC 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.*

PDC 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).*

PDC 123 *Buildings within the Core and Primary Pedestrian Areas identified in Map Adel/1 (Overlays 2, 2A and 3), unless specified otherwise within the relevant Zone or Policy Area, should be designed to provide weather protection for pedestrians against rain, wind and sun. The design of canopies, verandahs and awnings should be compatible with the style and character of the building and adjoining buildings, as well as the desired character, both in scale and detail.*

PDC 125 *Development that is over 21 metres in building height and is to be built at or on the street frontage should minimise wind tunnel effect.*

Council Wide

PDC 196 *Development should be designed to create active street frontages that provide activity and interest to passing pedestrians and contribute to the liveliness, vitality and security of the public realm.*

PDC 197 *Retail frontages should be designed to provide interest to passing pedestrians at street level and relief to building mass.*

PDC 198 *Commercial buildings should be designed to ensure that ground floor façades are rich in detail so they are exciting to walk by, interesting to look at and to stand beside.*

PDC 200 *Outdoor dining should:*

(a) be located outside the associated premises;

(b) provide sufficient set-backs, such as from kerbs and property boundaries, and clearances, such as from buildings;

(c) be located in an area safe for patrons where the security of the building is not compromised;

(d) ensure the dining area is set back from the building line at street intersections;

(e) ensure unimpeded pedestrian flow through free and uninterrupted pedestrian paths; and

(f) ensure wheelchair access to pedestrian ramps is not compromised.

PDC 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.*

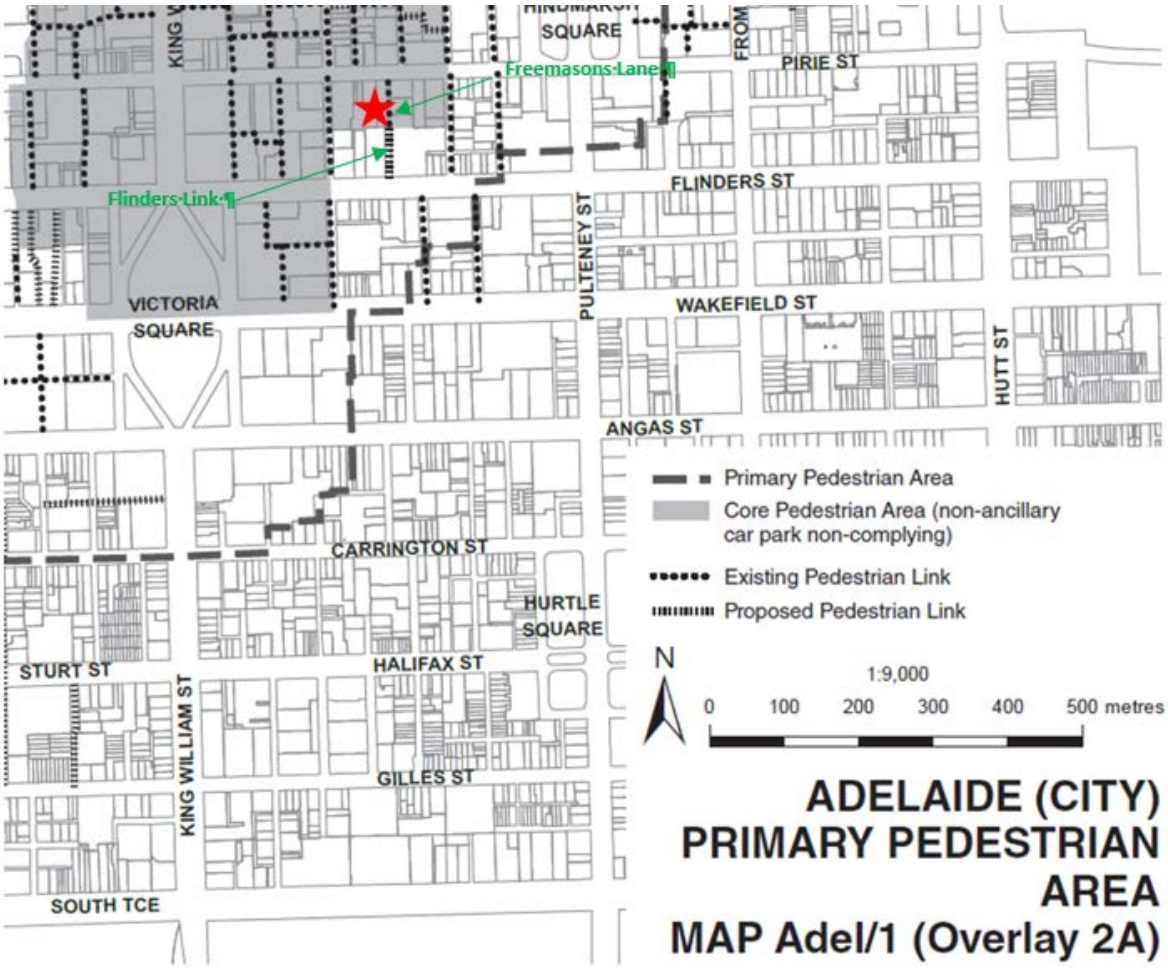
PDC 230 *Permanent structures over a footpath should have a minimum clearance of 3.0 metres above the existing footpath level, except for advertisements which should have a minimum clearance of 2.5 metres and temporary structures and retractable canopies which should have a minimum clearance of 2.3 metres above the existing footpath level.*

4.4.1 Street Activation and the Pedestrian Environment

Reference to street activation and the improved pedestrian environment around the site have been covered to a reasonable degree in the previous Section 4.3 however, the following additional commentary is also relevant.

Of particular importance is Freemasons Lane as a valuable north-south pedestrian thoroughfare which connects to Flinders Link and out to Flinders Street, as identified in the following map.

Figure 4.3 *Pedestrian Connection Map Extract – Adelaide City Development Plan*



As previously mentioned, the current service lane functions, resulting in inactive building frontages along these lanes means these spaces are not highly activated by adjoining uses but are very busy with week day city workforce commuters nonetheless. An unusual allotment boundary configuration means that the subject site currently cuts through the point at which the two lanes meet and narrows the lane by half.

Initial design development identified the opportunity to improve this current arrangement and widen the laneway so that Flinders Link and Freemasons Lane effectively connect as a single continuous thoroughfare. This could only be achieved through the allocation of a considerable portion of the subject site to footpath and roadway space that functions as a continuation of the public laneways. In consultation with the traffic consultants and the landscape architect, a new design concept was created for Freemasons Lane, best illustrated in the following images prepared by Woods Bagot.

Figure 4.4 *Freemasons Lane design response*

Current *Proposed*

Importantly, this design can be achieved without alteration to the existing functioning of Freemasons Lane and does not necessitate any capital construction by Council. In the event that Council does elect to undertake a capital upgrade to the lane (recognising that in the past Council expressed interest in a lane upgrade in conservations with the Applicant), an alternative design which includes the widening of Freemasons Lane has also be prepared (refer to Figure 3.1) and this serves to also demonstrate that the proposed development, in particular access into the carpark ramp, is feasible in either circumstance.

The western side of Freemasons Lane will be substantially enhanced by the proposal through the inclusion of a glazed ground level façade which at the northern end is associated with a proposed retail tenancy (anticipated to be food and beverage related). This arrangement sites the most active use/s at the northern end of Freemasons Lane transitioning south to the ETO space which will be active during week days and then the vehicle entry/exit point to the rear of the site. As mentioned, the ETO space has been designed as an adaptable space which could accommodate a retail tenant in the future. In the meantime, the glazed façade, proposed outdoor seating and landscaping treatments will greatly enhance this middle area of the Lane and contribute to a comfortable, secure and attractive environment for pedestrian movement and social interaction.

In relation to the pedestrian environment, the proposed canopy design to Pirie Street and Freemasons Lane has been designed in consultation with a wind engineer (refer to BESTEC Pedestrian Level Wind Assessment). Following the identification of some localised increases in ground level wind conditions resulting from downwash on the tower façade, recommendations relating to canopy widths over buildings entrances and along the footpaths were adopted by the design team. The proposed canopy design has also incorporated the minimum clearances required by the Adelaide City Encroachment Policy.

The potential wind conditions on the level 3 terrace and rooftop terrace was also assessed and recommendations provided (and subsequently adopted) relating the minimum balustrades heights to ensure these spaces can be utilised comfortably other than in more extreme weather conditions.

All the recommendations within the Pedestrian Level Wind Assessment have been adopted in the building design and as such, the proposal is considered to achieve the Development Plan provisions relating to wind impacts on pedestrians.

The proposal is also considered to meet and in fact exceed the expectation of the Development Plan provisions as they relate to the improvement of key pedestrian connections through the city; enhanced ground level activation including opportunities for outdoor dining; creation of an intimate, safe, and comfortable pedestrian environment.

4.5 Heritage

Capital City Zone

Desired Character (extract)

Contemporary juxtapositions will provide new settings for heritage places.

Council Wide

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.

4.5.1 Heritage Assessment

DASH Architects have prepared a Heritage Impact Statement for submission with the application. This assessment considers the proposed development in the context of heritage listed buildings within proximity to the site, in particular the front portion of 89 Pirie Street, which is State Heritage listed. Other Local Heritage items have also been acknowledged in the report.

The Development Plan clearly envisages that new buildings will display a distinctly different and contemporary architectural form compared to older heritage buildings. As previously described, the proposed design presents a strongly modelled façade with a substantial glazed façade at ground level, contrasting the more solid, textured brick podium above. The vertical composition, proportions and masonry materiality of the podium element are considered to complement and respectfully reference the adjoining heritage building.

In addition, DASH notes also that:

- The greater setback provided on Freemasons Lane "*results in additional 'clearance' between the new building and the adjacent Heritage Building (89 Pirie Street) that in turn 'opens up' views to return façade of that building. This will enhance the heritage values of 89 Pirie Street*."
- The use of red brick and glass in the podium and "*its composition along the street (that reflects some of the articulation present in the current buildings on the site) are also compatible with the heritage places in the Locality.*"

On the basis of DASH's advice and our assessment against the relevant provision of the Development Plan as they relate to heritage matters, we have formed the view that the proposal will not negatively affect the setting of the adjoining heritage place.

4.6 Landscaping

Council Wide Provisions

PDC 206 *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.

PDC 207 *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.*

4.6.1 Landscaping Assessment

Aspect Studio's have prepared a Landscape Concept for the project. Feature landscaping has been incorporated within the building (level 3 and roof top) and a robust selection of plants have been selected that will grow in planter boxes in this upper level, urban environment. The visibility of green plantings, particularly on level 3 through the glazed balustrade, is an architectural feature which defines the edge of the podium from the balance of the tower

Landscaped planters also feature in the pedestrian walkway along Freemasons Lane and in other pockets around the building perimeter. A ground level plant palate is provided comprising a combination of local and exotic species.

Public seating (within the subject site rather than on public land) is intended to encourage people travelling along the lane to stop, eat lunch, chat and informally congregate. The design and layout of this space will enable the separation of pedestrians from vehicles and provides a clearly designated 'people' zone along the eastern edge of the proposed building.

The combination of attractive planting, seating and pedestrian shelter will significantly enhance people's experience within Freemasons Lane and contribute to the amenity of the proposed building also.

4.7 Car Parking and Vehicle Movement

Capital City Zone

PDC 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.

PDC 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.*

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.*

PDC 244 *Vehicular access to development located within the Core and Primary Pedestrian Areas identified in Map Adel/1 (Overlay 2A) should be limited and designed to minimise interruption to street frontages.*

PDC 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…

PDC 254 *Off-street parking should:*

(a) be controlled in accordance with the provisions for the relevant Policy Area;

(b) be located away from street frontages or designed as an integral part of buildings on the site. Provision of parking at basement level is encouraged; …

PDC 258 *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).*

4.7.1 Car Parking and Vehicle Movement Assessment

MFY informed the project design from an access and carpark perspective and have prepared the appended Traffic and Parking Report.

The proposal seeks to retain (albeit improve) the existing two-way functionality of all associated roads by retaining domestic vehicle access via Freemasons Lane, service vehicles via Freemans Lane and no vehicle access via Pirie Street. Vehicle movement between Freemasons Lane and Flinders Link is proposed (not currently possible due to land ownership arrangements). Vehicle access from minor streets and lanes is encouraged by the Development Plan.

The reconfigured design of Freemasons Lane separates pedestrians and vehicles in a manner which is greatly improved from the existing informal/shared space situation and a clearly marked crossing point over the new carpark driveway access has been incorporated with bollards to enhance safety. Vehicle access points have been kept to a minimum on Freemasons Lane (one, double width crossing point only) with service vehicles utilising Freemans Lane. The boom gate location and vehicle movements permitted in all directions will assist to minimise vehicle queuing in the lane.

The proposed carpark is ancillary to the office use (not a public carpark) and the access point, internal ramp and lane configuration and car parking spaces have been designed to achieve the relevant Australian Standards. Vehicle turning movements into and out of the carpark and within the carpark have been assessed and the design modified to accommodate the safe movement of vehicles. Access in all directions along Freemasons Lane and Flinders Link is provided and has been assessed for compliance. It is anticipated that the majority of vehicles utilising the office carpark will utilise Flinders Link as this lane is wider and access into and out of the city via Flinders Street is typically more convenient and less congested than Pirie Street.

Loading and site servicing is contained to the rear of the site (away from public view) and is managed entirely within private land (Freemans Lane) with all vehicles entering and exiting the site in a forward direction. Turning circles and manoeuvring for Medium Rigid trucks have been accommodated ensuring the site can be adequately serviced in relation to deliveries, waste collection and the like.

MFY has assessed the anticipated volume of traffic and the capacity for the existing road network to accommodate the increased movement of vehicles from the site. The ability for vehicles to leave the site and disperse in all direction is useful and provides optimal choice for drivers while also reducing the likelihood of site specific congestion. MFY conclude that traffic generated would be low in volume and can be easily accommodated.

Overall, the traffic and parking arrangements proposed are considered to be safe, convenient and suitable for the development and achieve the relevant Development Plan provisions.

4.8 Bicycle Parking

OBJ 65 *Adequate supply of secure, short stay and long stay bicycle parking to support desired growth in City activities.*

PDC 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.*

PDC 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.

PDC 238 *To facilitate and encourage the use of bicycles and walking as a means of travel to and from the place of work, commercial and institutional development should provide on-site shower and changing facilities.*

4.8.1 Bicycle Parking Assessment

The proposal incorporate a very generous End of Trip space on the ground floor of the building for the secure storage of bicycles, together with showers, lockers and changing rooms. The Development Plan requires the provision of 185 'bike park's' for a building of this size and land use mix, calculated as follows:

- Office: one per 200m² of gross leasable floor area (GLFA) for employees and two plus one per 1,000m² of GLFA for visitors; and
- Retail: one per 300m² of GLFA for employees and one per 600m² of GLFA for visitors.

The proposed EOT space is able to accommodate 205 bikes, exceeding the Development Plan requirement. Furthermore, the design of the space achieves the design features sought in the Principles above as the EOT space is highly visible and easily accessible from Freemasons Lane; and provides showers and changing facilities.

4.9 Energy Efficiency and Sustainability

Council Wide Provisions

OBJ 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.*

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

(a) *appropriate orientation of the building by:*

(i) *maximising north/south facing façades;*

(ii) *designing and locating the building so the north façade receives good direct solar radiation;*

(iii) *minimising east/west façades 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.*

PDC 109 *Orientation and pitch of the roof should facilitate the efficient use of solar collectors and photovoltaic cells.*

PDC 110 *Buildings, where practical, should be refurbished, adapted and reused to ensure an efficient use of resources.*

PDC 111 *New buildings should be readily adaptable to future alternative uses.*

PDC 115 *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.

PDC 119 *Development should be designed and sited to minimise micro-climatic and solar access impact on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow.*

4.9.1 Energy Efficiency and Sustainability Assessment

BESTEC have prepared an ESD strategy for the project noting the clients desire for a highly efficient building.

A 5 Star Design and As Built version 1.1 minimum "Australian Excellence" Green Star rating is to be achieved (without relying on the purchase of Green Power) and a 5 Star NABERS Energy rating (after a minimum of 12 months post occupancy).

BESTEC confirm that the following energy and water initiatives are incorporated into the project:

- Passive design – the use of high performance double glazing to reduce energy demands (also refer to page 32 of the Wood Bagot Architectural package for façade design details);
- A building façade and engineering services design optimised using computer modelling integrative design techniques;
- Selection of energy efficient lighting fittings (T5 and LED) with a digital lighting control system;
- Water cooled high efficiency chillers and gas condensing boilers for the provision of thermal energy;
- Air conditioning using passive chilled beam technology with high induction swirl diffusers to maximise indoor air quality. All air conditioning systems will incorporate an economy cycle and heat exchangers allowing 100% outside air to be used for free cooling when conditions allow;
- Hot water generation by a gas boosted hot water system;

- Extensive metering and sub-metering for energy management, connected to a fully integrated Building Management System;
- Light coloured roof coverings to reflect heat and reduce the site solar heat island effect;
- Zero use of ODP refrigerants and insulations;
- Inclusion of rainwater storage tanks with the water reticulated to provide toilet and urinal flushing and landscape irrigation supplies; and
- Water efficient tap and toilet fittings.

Subject to further design development and a possibility of pursuing a 6 Star Green Star result, the project may also incorporate gas fired engines providing low carbon electricity. A potential location for the installation of solar panels on the roof has also been identified.

The indoor environmental quality has also been assessed and the following features noted:

- The use of paints, sealants, adhesives, carpets and other coverings which have low off-gassing properties;
- Maximising access to daylight whilst minimising glare. The daylight performance of the main commercial floors are expected to be excellent with glare control provided by the use of internal blinds ((also refer to page 35 of the Wood Bagot Architectural package for office floor light details);
- Outside air at a design rate 50% higher than minimum code requirements at all times with the outside air increasing to 100% during economy cycle operation; and
- Design modelling will optimise the façade and internal air conditioning systems approach in order to maximise thermal comfort.

Construction management initiatives are also outlined in the BESTEC report.

Access to natural light within the office floor plates has been carefully analysed and assessment confirms that the majority of the floorplates should achieve lighting levels above 250 Lux. Whilst areas within the centre of the floor plate will have lower light levels, these areas are suited to having partitioned offices/meeting rooms and the use of additional artificial light is reasonable for these central areas.

The use of expressed mullions on the glazed façade manages solar radiation and glare and ground level canopies provide suitable shelter to pedestrians and people in the lower tenancies.

The podium levels are naturally ventilated through the metal screen and brick façade design reducing the buildings reliance on mechanical air conditioning.

The adaptability of the building has been previously considered in this report and the features outlined demonstrates that the design offers flexibility, in particular, level 3 carpark level and the ground floor ETO space. Bike parking could also be relocated to levels 1 and 2 if required to free up the proposed ETO in the future for a commercial use.

The proposed energy efficiency features, good use of the site's northern orientation, carefully designed glazed façade treatment and measures to ensure a comfortable pedestrian environment align with the Development Plan provisions relating to energy efficiency and sustainability.

4.10 Waste Management

Council Wide Provisions

OBJ 28 *Development which supports high local environmental quality, promotes waste minimisation, re-use and recycling, encourages waste water, grey water and stormwater re-use and does not generate unacceptable levels of air, liquid or solid pollution.*

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

PDC 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.*

4.10.1 Waste Management Assessment

Rawtec have prepared a Waste Management Plan which has informed the size of the waste room and loading dock facilities located to the rear of the building on the ground floor.

It is anticipated that the office tenants will have a commercial cleaning contract with an external provider and that waste from the office spaces will be collected manually and transferred to the waste room outside of office operating hours.

Waste requirements for the retail tenant/s will be determined when the tenant/s is known however access to the waste room is allowed for from the retail tenancy through the lobby to the rear service area and waste room. The management of retail waste will be resolved once the tenant requirements are known (i.e. food and beverage waste and/or other non-food waste) and most likely incorporated into the lease arrangements to ensure large volumes of waste is moved to the waste room outside of peak office hours.

An 80m^2 waste room is of sufficient size for the building's waste needs (and achieves the minimum required based on Rawtec's calculations) and can accommodate separated space for general waste, paper and other recycling and organic waste. An indicative layout of the waste room is provided in the Rawtec report.

The collection of waste for removal off site is accommodated within the loading dock, accessed from Freemans Lane and the size and configuration of the dock has been designed to accommodate the movements of a medium ridged waste collection vehicle. Turning circles are provided the MYF Traffic Report.

The proposal suitably incorporates a dedicated area for on-site collection and sorting of recyclable materials and refuse and achieves the relevant Development Plan requirements related to waste management.

4.11 Crime Prevention

Council Wide Provisions

OBJ 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.

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

(a) promote natural surveillance of the public realm, including open space, car parks, pedestrian routes, service lanes, public transport stops and residential areas, through the design and location of physical features, electrical and mechanical devices, activities and people to maximise visibility by:

(i) orientating windows, doors and building entrances towards the street, open spaces, car parks, pedestrian routes and public transport stops;

(ii) avoiding high walls, blank façades, 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.

4.11.1 Crime Prevention Assessment

The consideration of safety (actual and perceived) and measures to prevent the likelihood of crime and vandalism have informed the design development of 83 Pirie Street. Key features include:

- The use of robust and durable materials and finishes, particularly at ground level and within Freemasons Lane;
- Offering clear sightlines as far as achievable through and around the development including visibility between the public and private spaces;
- Minimisation of potential entrapment spots around the building (note - a roller door will secure access into the car park after hours and be positioned to ensure clear visibility);
- Use of appropriate under canopy lighting in accordance with Australian and New Zealand lighting standards with suitable illumination levels and lighting spill that reduces black spots, while not creating glare;
- Inclusion of a wide public walkway with excellent visibility and escape route options at either end;
- Existing accessibility and escape route options unchanged in Freemasons Lane;
- A secure carpark which will be closed out of hours and not accessible by the public;
- Secure, visible building entrances encouraging activity on all sides of the site;
- Greater activation on Freemasons Lane due to the inclusion of the EOT and a retail tenancy which wraps around the site corner and has the potential to offer day and night activity;
- Enhanced passive surveillance around the site through the use of a glazed, ground level façade, multiple door locations and access points, as well as the new public walkway; and
- Use of suitable landscaping which includes a combination of lower ground level plantings minimising the opportunity for people to be obscured by plantings.

The design development of the project has sought to 'design out crime' by creating a physical environment that discourages illegitimate behaviour and fosters feelings of safety and security. The proposal meets the intent of the relevant crime prevention principles in the Development Plan and will significantly enhance the vibrancy and activity in the immediate area, particularly in Freemasons Lane.

4.12 Stormwater

PDC 126 *Development of stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.*

PDC 128 *Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site.*

PDC 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.*

4.12.1 Stormwater Assessment

A preliminary Stormwater Management report has been prepared by WGA to inform the planning design phase of the project. The site is currently impervious, being covered by buildings and asphalt car parking spaces. It is understood that no on site stormwater detention is sought by Council. Accordingly, the proposed stormwater arrangements will maintain the status quo with water runoff directed east and west into the existing underground system in each laneway. Some modifications in Freemans Lane are anticipated (pipe extension) but can be accommodated within the site boundary. A grated strip drain will be installed at the base of the ramp to the car parking areas to manage surface runoff.

It is also proposed to incorporate rainwater storage tanks at level 1 (within the Hydro Room) with the water reticulated to provide toilet and urinal flushing and landscape irrigation supplies.

As there are no external carparking areas or other surfaces where pollutants may mix with runoff water, the water leaving the site does not require treatment.

Stormwater discharge volumes from the site will remain unchanged.

5. Conclusion

This report has been prepared on behalf of ADC in association with their application to demolish the existing buildings located at 73 to 85 Pirie Street, Adelaide and construct a multi-level office building with ground level retail tenancy and screened podium car parking. As a strategically located, large consolidated land parcel, the site offers significant opportunity to invigorate Pirie Street and the surrounding locality and provide a unique investment opportunity on a highly underutilised parcel of land.

This report assesses the merits of the proposal against the relevant provisions of the Adelaide (City) Development Plan and addresses key planning issues related to:

- Land use;
- Built form design, heritage, massing and height;
- Street activation and the pedestrian environment;
- Landscaping and the public realm;
- Carparking, traffic movement and bicycle parking;
- Energy efficiency, waste management and stormwater; and
- Crime prevention.

As the prime location within the city for commercial, retail, professional services, hospitality and entertainment uses, promoting the economic position of the State, new buildings within the Capital City Zone should be exemplary in design and support an appropriate mix of land uses which facilitate the business functions of the city and encourage a vibrant pedestrian environment.

Following an assessment of the ADC proposal, it is our view that the application appropriately addresses all the key planning issues relevant to a mixed-use tower in the CBD and has carefully designed the appearance of the

building to harmoniously sit within the streetscape, respect the adjoining heritage building and respond to the context of the locality and its internal space functions.

On balance, the proposal is considered to have substantial merit and warrants the granting of Development Plan Consent.

Adelaide Development Company

PROPOSED COMMERCIAL DEVELOPMENT
73 – 85 PIRIE STREET, ADELAIDE

TRAFFIC AND PARKING REPORT

November 2017

17-0158

Traffic • Parking • Transport

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Revision issue	Date	Description	Approved by
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Final	7 November 2017	Final Report	MLM
Rev A	10 November 2017	Minor amendments to final report	MLM
Rev B	15 November 2017	Figures Updated	MLM

CONTENTS

1.0 INTRODUCTION

This report assesses the traffic and parking aspects associated with the proposed construction of a mixed-use development at 73-85 Pirie Street, Adelaide. The subject proposal will include retail and commercial areas and will have frontage to Pirie Street, Freemasons Lane and Flinders Link. The building will also have frontage to Freemans Lane which is a privately owned road within the site.

Parking for the proposal will be provided on a number of levels within the proposed development. There will be 122 parking spaces provided in the facility which will be for ancillary use by the commercial tenancies.

Access to the parking levels for the proposed development will be provided via Freemasons Lane and Flinders Link. Separate access for deliveries and refuse will be provided via Freemans Lane.

Traffic associated with the proposed development will be distributed throughout the broader road network throughout the Adelaide CBD. This will minimise the impact associated with the development. Traffic which will directly access the development will be able to utilise either Freemasons Lane or Flinders Link which will provide a choice for drivers and increased distribution, thus minimising any traffic impact.

In addition, an assessment of alternative travel models has also been included in this report. This assessment has given consideration to the pedestrian connection along Flinders Link and Freemasons Lane.

2.0 EXISTING SITUATION

The subject site is 73-85 Pirie Street, Adelaide. It has frontage to Pirie Street to the north, Freemasons Lane to the east and Flinders Link to the south. Freemans Lane is located along the western edge of the land. This private road forms part of the subject site and is utilised by land to the west of the site. A free and unrestricted right-of-way is provided over a portion of the subject land to effect this access. Figure 1 identifies the subject site.

Figure 1: Subject site

The site is currently improved by two storey buildings which incorporate an office and retail facilities plus a former hotel and gaming premises. The existing buildings are serviced via Freemans Lane and Freemasons Lane.

Access to the site is currently available for both Freemasons Lane and Flinders Link, with this access servicing 27 existing spaces. The site is also subject to a free and unrestricted right-of-way in favour of the allotment to the south of the subject site. This enables the car park for this site to have access to and from Flinders Link

2.1 ROAD NETWORK

Pirie Street is an access road within the Adelaide CBD with a daily traffic volume in the order of 8,300 vehicles. It has a two lane undivided carriageway for the majority of its length.

Freemasons Lane is a narrow dead-end lane with an estimated daily traffic volume in the order of 100 vehicles per day. This lane provides access to a number of access points. Currently the built form of Freemasons Lane is not consistent with the extents of the road reserve in that the buildings on the south-eastern and south-western corners of the Freemasons Lane/Pirie Street intersection extend into the road reserve. Figure 2 illustrates this issue, which results in the effective width of the lane being further reduced.

Figure 2: Existing built form not consistent with road reserve boundary of Freemasons Lane

Freemasons Lane intersects Pirie Street at an uncontrolled intersection. All movements are permitted at this intersection. The lane also forms part of the north-south major pedestrian corridor developed by Council.

Flinders Link is a dead-end road which services the adjacent commercial developments and parking facilities. It has an estimated daily traffic volume in the order of 400 vpd. The width of the road has been designed to accommodate the peak traffic volumes exiting Flinders Link car park. Flinders Link intersects with Flinders Street at an unsignalised t-intersection. Vehicle entry movements in both directions are permitted at this intersection. Exit movements are restricted to left-out turns only.

Vehicular connection is not currently provided (due to land ownership arrangements) between Flinders Link and Freemasons Lane, however, a pedestrian connection has been developed along the eastern edge between these roads.

3.0 PROPOSAL

It is proposed to construct a multi-storey commercial development as illustrated on Woods Bagot's Suite of Drawings 140332, dated 3 November 2017. The proposal will include the following components:

- retail areas of 363 m^2;
- commercial areas of 30,441 m^2;
- a 205-space bicycle parking facility accessed from Pirie Street; and
- parking on three levels within the building podium with provision for 122 parking spaces for ancillary use by executives only.

Domestic vehicle access to the subject site will be provided via Freemasons Lane and Flinders Link. A ramp will be constructed at the southern end of the site and will provide for simultaneous movements to/from the car park. Figures 3 and 4 identify the turning movements of vehicles entering and exiting the subject site via this access point.

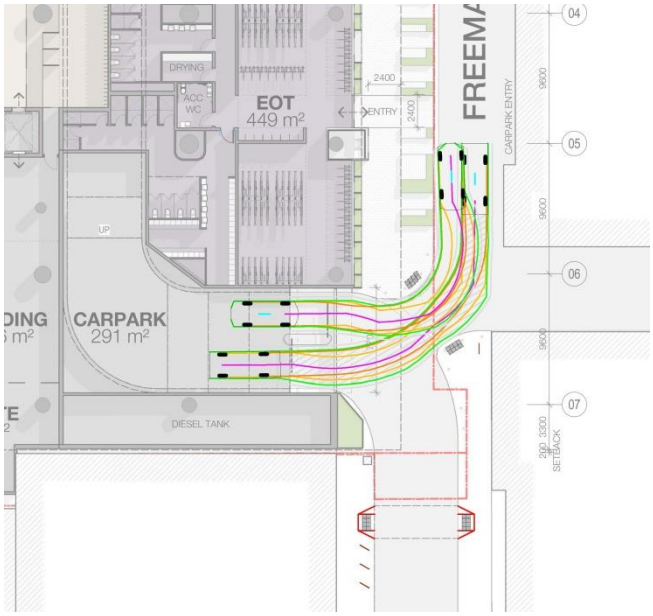

Figure 3: Movements of vehicles entering/exiting the site via Freemasons Lane

Figure 4: Movements of vehicles entering/exiting the site via Flinders Link

The proposed parking areas will comply with the requirements of the Australian/New Zealand Standard, *Parking Facilities Part 1: Off-street car parking (AS/NZS 2890.1:2004)* in that:

- right angled spaces will meet the recommended width requirement of 2.4 m;
- adjacent aisles will meet the recommended width of 5.8 m identified for a Class 1A development (employee parking);
- spaces will be at least 5.4 m long;
- end aisle extensions of at least 1.0 m will be provided in dead-end aisles;
- 300 mm clearance will be provided to obstructions;
- Ramps will have a minimum width of 5.5m and will provide 0.3m clearance to adjacent walls; and
- the vehicular ramps within the site will comply with the grade requirements and will incorporate appropriate transitions for ground clearance.

The access has been designed for drivers entering the site to have priority via Flinders Link. This will mean that the majority of vehicles will be directed to and from the wider road network and will have convenient access to Flinders Street and then in all directions at its signalised intersection with Pulteney Street.

Freemasons Lane will also provide access, as currently occurs, and will intersect with the entry lane at right angles. This will ensure that drivers will have adequate sight lines when entering and exiting the site from either direction.

Vehicular access to the ramp will be controlled with access control equipment. This will be located prior to the start of the access ramp and will be positioned so that

drivers can readily access the control system. A roller door will be provided to secure the ramp access afterhours.

The site will continue to be serviced via Freemans Lane. The largest vehicle which will service the site will be the refuse vehicle which will be equivalent to a medium rigid vehicle (MRV). This vehicle will be able to enter Freemans Lane via a left or right turn from Pirie Street, as illustrated in Figure 5.

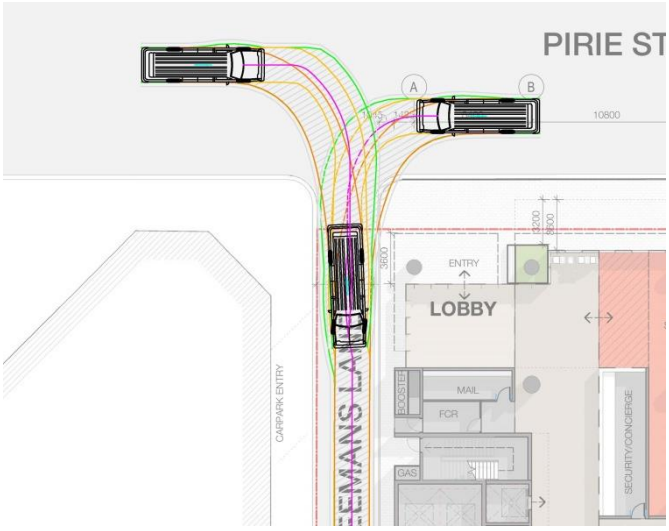

Figure 5: Swept path of MRV entering Freemans Lane.

Vehicles will be able to turn within the subject site. Accordingly, loading and refuse requirements will satisfy the turning requirement of the *Australian Standard, Parking Facilities Part 2: Off-street commercial vehicle facilities (AS 2890.2–2002).* Figure 6 illustrates the swept path of an MRV turning in Freemans Lane.

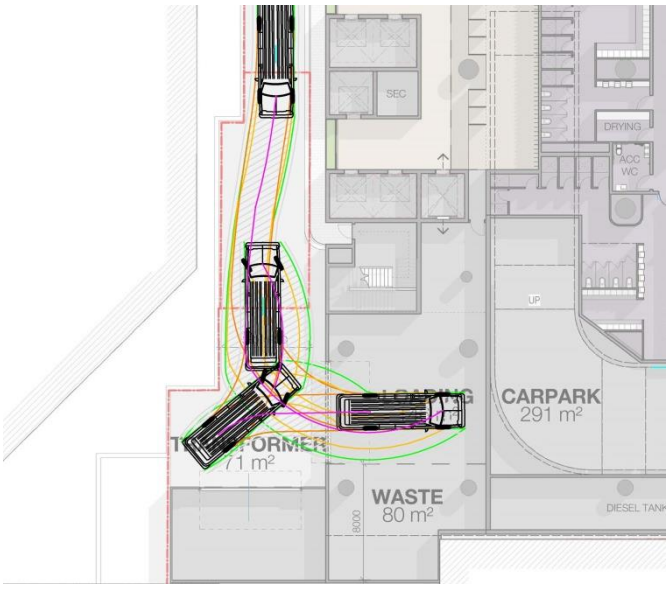

Figure 6: Swept path of refuse vehicle turning in Freemans Lane.

The above scenario reflects the existing situation on the site in respect to truck access, albeit it is proposed to marginally widen the paved access (Freemans Lane) to 4.1m. This will allow for a 3.5m clear lane width plus 0.3m clearance on both sides. This will also improve access for the adjacent land.

The design of the loading facilities will mean that drivers can enter and exit Freemans Lane in a forward direction. Appropriate sightlines will be maintained for drivers entering and exiting Freemans Lane.

4.0 PARKING ASSESSMENT

The subject site is zoned as 'Capital City' in Adelaide City Council's Development Plan (Consolidated 20 June 2017). The Development Plan does not state a vehicle parking provision rate for developments located in this zone. Notwithstanding this, the proposal includes 122 parking spaces. These spaces will be allocated to commercial tenancies of the development and will not be available for use by the general public.

Other users of the facility who wish to drive to the CBD have the alternative of parking at public parking facilities which provide permanent parking option. Facilities located in close proximity to the site include:

- Flinders Link;
- Wyatt Street;
- Secure Parking – Rundle Place;
- Stockley Alley;
- Pirie Street; and
- State Centre Car Park.

4.1 BICYCLE PARKING

Council's Development Plan states the following requirement for bicycle provision:

- office: one per 200m² of gross leasable floor area (GLFA) for employees and two plus one per 1,000m² of GLFA for visitors; and
- retail: one per 300m² of GLFA for employees and one per 600m² of GLFA for visitors.

Adopting these rates will require a provision of 182 bicycle parks for the commercial development and three bicycle parks for the retail development. In addition, a first principle analysis was undertaken to determine the bicycle parking demand for the commercial component of the proposed development.

Assuming a rate of one employee per 12m² GLFA, the commercial development will generate, in the order of 2,550 employees. 2011 Census noted that 2.5% of employed persons in City of Adelaide rode a bicycle to work. If the same proportion is adopted, then there would be a requirement for 64 parking spaces for the commercial component. This would result in a total requirement of 66 bicycle parking spaces within the subject site.

The development provides for 205 bicycle parking spaces, as such, exceed the anticipated demand for bicycle parking spaces at the site, based on both the Development Plan and the first principle assessment.

4.2 PUBLIC TRANSPORT

Access to public transport can be considered a major reason for the exclusion of vehicle parking in developments located in the 'Capital Zone'. Further, the Council's Development Plan has clearly defined pedestrian links which provide connectivity between the subject site and the public transport station. Key public transport modes include:

- Taxi

Dedicated taxi stopping zones are located on Pirie Street, Flinders Street and Pulteney Street in close proximity to the subject site.

- Bus Routes

A high portion of bus routes servicing the Adelaide metropolitan area operate via the bus stops on Grenfell Street and Currie Street. These stops are located approximately 300 m from the subject site.

Other bus stops located within close proximity to the site include Stop D2 and V2 on King William Street and Stop E1 and U1 on Pulteney Street.

- Train

The Adelaide Train Station is located approximately 950 metres from the subject site. All the train routes operating in South Australia terminate at the Adelaide Station which provides for connectivity to/from the proposed development.

- Tram

The Glenelg Tram service is a high frequency service that travels between Glenelg and Adelaide. The route stops at a total of 17 stops. The subject site will be serviced by the Pirie Street tram stop which is located approximately 300 metres from the subject site. The service operates at a frequency of 5 minutes during the weekday peak periods and 10 minutes during the weekday off-peak and weekend peak periods. It is of relevance that the trams are presently operating at capacity during the peak periods.

4.3 PEDESTRIAN ACCESS

The existing frontages to Pirie Street and Freemasons Lane will be enhanced to improve pedestrian accessibility and amenity. Pedestrian access to the building will be via Pirie Street and Freemasons Lane.

A 2.4 m wide pedestrianised area will be established adjacent Freemasons Lane. This will provide good integration with the public realm as well as establish a north-south pedestrian connection to facilitate the movement of pedestrians through the site. While not a public thoroughfare, this area will create the amenity of a user friendly, safer and more generous pedestrian connection between Flinders Street and Pirie Street, along Flinders Link and Freemasons Lane.

While Freemans Lane is not intended for pedestrian access, minimum clearance to emergency egress doors will be provided to ensure these routes can safely be used in emergency circumstances.

5.0 TRAFFIC ASSESSMENT

Traffic associated with the proposed development will be distributed amongst the CBD road network. Specific routes used by drivers when depend on where they will choose to park and which access route is utilised. The impact will be reduced by the use of other transport modes which are convenient to the site.

Table 3 represents traffic generation rates adopted for this assessment. Such rates are consistent with traffic volumes identified for similar land uses, albeit the high uptake of public transport options in the CBD are likely to result in lower rates being realised.

Table 3: Forecast traffic generation rates

Development Type	Trip Generation Rates		Units
	am peak	pm peak	
Retail	2.0	9.0	per 100 m^2
Commercial	2.0	2.0	per 100 m^2

Based on the proposed floor area and adopting the above rates, the forecast trip generation for the subject site is:

- 620 trips in the am peak hour; and
- 640 trips in the pm peak hour.

Traffic accessing the subject site, however, will be much lower as it will only relate to the vehicles entering and exiting the parking facility. The remaining traffic will either utilise the broader road network to access the CBD and then walk to the site or use an alternative mode of transport.

Given that the parking facility has a provision for 122 spaces and only caters to the commercial development component, the number of trips using Flinders Link and Freemasons Lane will actually be much lower.

The following two scenarios were considered to estimate the trips generated on these roads by the development:

- If the development was considered in isolation, it would generate a theoretical parking demand of approximately 1,218 vehicles to service the facility (based on a parking generation rate for commercial facilities of four spaces/100m²). The actual provision is 122 spaces which equates to approximately 10% of the theoretical demand. If 10% of vehicles are considered as having an origin or destination at the proposed parking levels, the development would generate approximately 62 trips in the am peak and 64 trips in the pm peak using the car park access; and

- If all the occupants of the parking facility arrived during the am peak hour and left during the pm peak hour (which will rarely occur), the facility will generate approximately 125 trips in the am and peak hours. It would not be anticipated that all drivers would access the site during the single peak hour period. If the peak hour represented 70% of the total volume entering the site in the morning and exiting in the afternoon, there would be approximately 90 trips during the peak periods.

Regardless of which generation assessment was to be applied to the proposal, the traffic generated would still result in a low volume during these peak periods and less at other times.

The provision for traffic to distribute both north and south of the site will provide for a minimal traffic impact associated with the subject development. Drivers will be able to connect to Flinders Street via Flinders Link. This route will be more heavily utilised as it is less congested and provides an opportunity for drivers to turn in all directions at the Pulteney Street intersection.

Alternatively, drivers will be able to access Pirie Street via Freemason Lane. All movements are permitted at this intersection. While the queues along the road in peak hour can obstruct adjacent intersections, the signal at the Gawler Street/Pirie Street intersection provides an opportunity for drivers to turn right out at this intersection.

6.0 SUMMARY

This traffic assessment has reviewed access, traffic and parking aspects of the proposed mixed-use development on Pirie Street. Three levels of parking will be incorporated into the development. The design of the parking spaces and ramps will be in accordance with the relevant Australian Standards.

The proposal includes 122 parking spaces to cater for ancillary use, notwithstanding that Council's Development Plan does not state a parking requirement for development in the 'Capital City' zone.

Employees and visitors to the site will utilise various forms of transport to access the CBD. This includes public transport, cycling, shared vehicles, and private car, consistent with similar developments within Adelaide City. This will mean that traffic associated with the development of the site will be distributed so that there will be no significant impact at any one location

Access to the site will be available via both Freemasons Lane and Flinders Link. This will provide improved accessibility for the site and will enable drivers to distribute in all directions. This access arrangement will also contribute to reducing any traffic impact.

Pedestrian access for the site will also substantially improve the adjacent pedestrian environment on Freemasons Lane. Good facilities for cyclists will also be established which will provide good accessibility to and convenient facilities to encourage use of alternative transport modes. This, together with the improved access arrangements, will ensure minimal impact on the broader road network.

MLM/17-0158

15 February 2018

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Ms Rebecca Thomas
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16 Vardon Avenue
ADELAIDE SA 5000

Dear Rebecca

DA 020/A075/17 – 73-85 PIRIE STREET, ADELAIDE

I am in receipt of correspondence from the City of Adelaide in relation to the proposed office development at the above site. As requested, I have reviewed the comments relating to pedestrians, access and traffic with the view to providing further clarification as to the intent of the design's interface with the public realm. Further to this review, please find following the concern raised by Council followed by my response.

- *The overall proposed configuration of vehicle movement within the adjacent lanes and vehicle access to the site is acceptable, but only subject to further clarification and detailed design of the spaces where vehicles and pedestrians will interact. This is essential to achieve suitable resolution of safety where the site interfaces with the existing public roads. The objective would be to pursue a 'shared space' environment that clearly signals to vehicles to travel at low speed and for pedestrians to share the space, rather than be technically restricted to a narrow footpath area. The current proposed interaction for pedestrians through the driveway connections is concerning from a user experience and safety perspective. The proposal at present seeks to have pedestrians, and more particularly directing pedestrians with vision impairment, to cross the vehicle connection twice to travel between two publicly accessible footpaths, which inherently increases the risk of collision though exposure to additional conflict points.*

  There may be some confusion on behalf of Council as to the extent of the existing public roads. The south-eastern corner of the subject site protrudes in between Freemasons Lane and Flinders Link. This portion of the site denies any vehicular access between these two roads, which are both culs-de-sac. Figure 1 illustrates the boundaries of the site and the pedestrian connections.

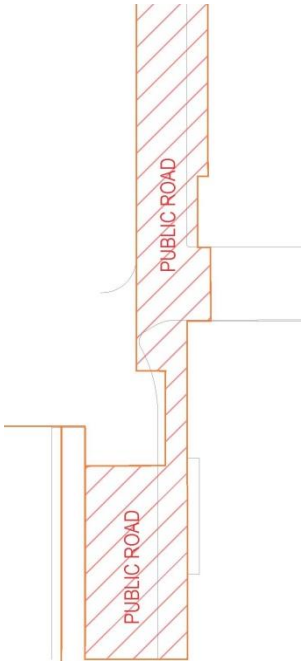


Figure 1: Boundaries of the subject site with the public roads

There is no footpath provision on Freemasons Lane but this road is signed as a shared zone. There is an existing path that connect the eastern footpath of Flinders Link to Freemasons Lane. Adjacent the south-eastern boundary of the site (i.e. at the northern end of Flinders Link) there is an existing footpath that facilitates access for pedestrians from the western side of Flinders Link to the public footpath on the eastern side. The path between the roads is currently defined by fencing. Figure 2 identifies the existing pedestrian movements on the public roads.

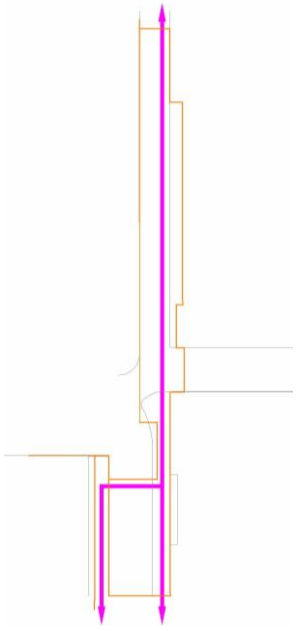


Figure 2: Existing pedestrian movements between Flinders Link and Freemasons Lane

The current proposal does not change any of the existing access arrangements. It seeks to provide a superior interface with the public realm. The access for the site has been developed to provide for distribution of traffic and enable drivers to use Flinders Link to enter and exit the site. This will minimise the volume of vehicles within the shared zone on Freemasons Lane. The access points will be constructed as crossovers and will be at the same level as the shared zone. The interaction between vehicles using the private access driveway will be comparable to the interface of any private driveway across a footpath and lower than the interaction between drivers and pedestrians within the shared zone. Importantly, the sightlines between drivers and pedestrians will comply with relevant Australian Standards and the volume and speed of vehicles will be low (drivers entering and exiting the site will be required to stop at the controlled access). Figure 3 illustrates the proposed driveway and its interface with the public roads

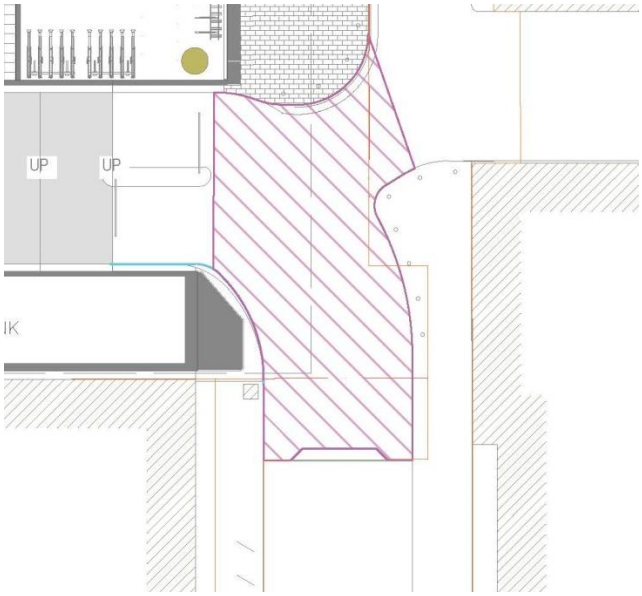
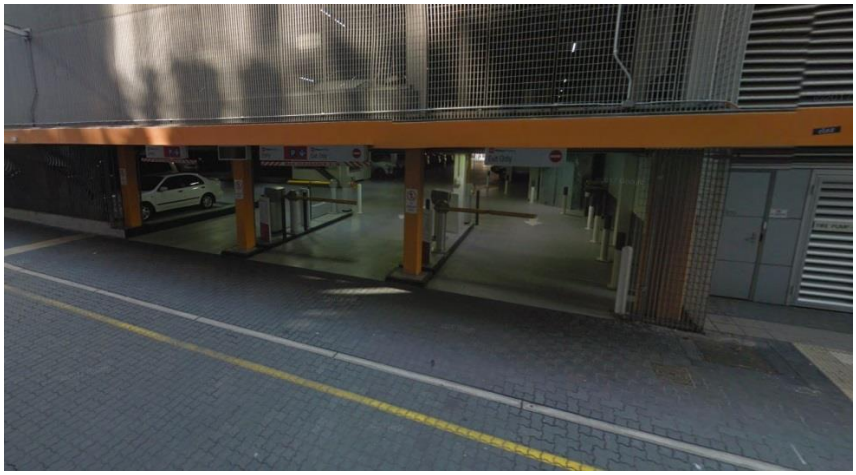


Figure 3: Interface of proposed driveways with the public road

The pedestrian environment in the precinct will be significantly improved following completion of the development. The existing fences will be removed enabling pedestrians to move freely between the subject site and the shared zone within Freemasons Lane which will be established at the same level. Pedestrians movements in Flinders Link will be consistent with the current movements. Pedestrians will continue to utilise the portion of the footpath at the end of Flinders Link to cross to the western side of Flinders Link. The crossover to the site will be constructed at this location but this is a common situation for pedestrians walking along footpaths. As an example, pedestrians are currently required to cross the footpath to access the public car park (which has a much greater traffic volume and a wide access arrangement) in Flinders Link, as illustrated in Photograph 1.



Photograph 1: Access across public footpath in Flinders Link

The proposal does not amend the existing shared use arrangements. The proposal will enhance the environment for pedestrians adjacent the subject site and will provide greater options for pedestrians than the current situation. In regard to vision impaired pedestrians, the proposal will comply with appropriate DDA compliance requirements. Figure 4 illustrates the pedestrian movements which will be available post development.

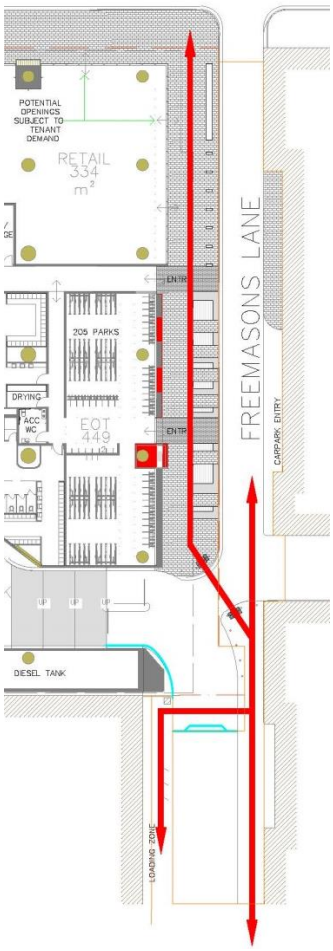


Figure 4: Proposed pedestrian access movements

- *In addition, revisions to the location of the exit boom gate is needed as part of achieving a shared space configuration, as drivers will seek to have their vehicle clear of the boom gate before observing and effectively negotiating pedestrian and intersection interactions. It is our experience that this is a common driver behaviour resulting from a general lack of confidence in boom gates staying upright whilst the vehicle is still underneath.*

  The access will only provide for private entry to the proposed car park for regular users and traffic volumes will be low (predominantly entry in the morning and exit at night). Significant care has been taken to ensure that sight lines will be provided for exiting drivers to view pedestrians, both on the subject land and on the public roads. Adequate storage will be available for drivers to view the road environment before entering the public road, as illustrated in Figure 5.

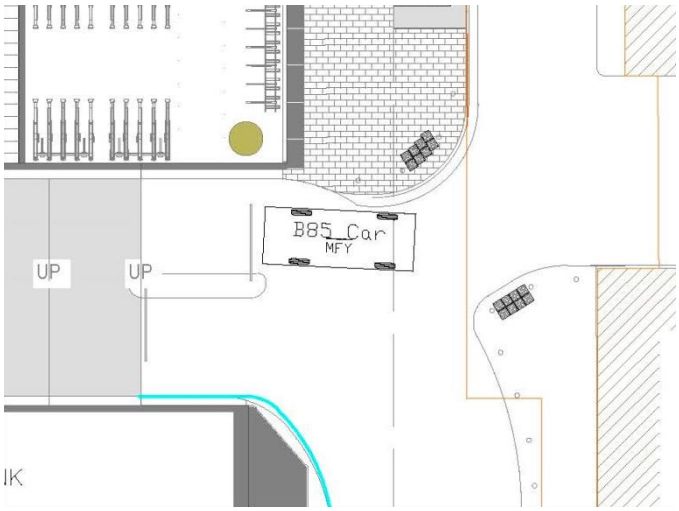


Figure 5: Vehicular storage at exit

- *As resolving these outstanding pedestrian safety issues could have some impact on the building configuration and structure around vehicle access area, it may be pertinent for this to be a reserved matter.*

  As discussed above, there are no outstanding pedestrian safety issues to be resolved. The proposal only seeks to establish normal access to the land in accordance with appropriate standards. Given that the proposed access is consistent with the requirements of AS/NZS2890.1:2004, any minor amendments required during the detailed design will not impact the proposed building configuration or structure.

- *Part of this essential detailed design is proposed to include conversations between CoA and the proponent regarding potential transfer of the portion of the site sitting between the two sections of public roads, to CoA to enable creation of a continuous public street title and rationalise ongoing management and liability of the spaces.*

  The current proposal does not require any transfer of land. It has been developed based on the existing boundaries and interface with the existing public roads. The proposed access

arrangements are not intended to provide a formal vehicular connection between Flinders Link and Freemasons Lane. Restricting this access while maintaining good accessibility and traffic distribution and improving pedestrian accessibility informed the proposed access design solution. While a physical connection for vehicles between Freemasons Lane and Flinders Link would be possible, the current design would only permit small vehicles and would require slow traffic movements. This is consistent with the existing shared zone environment on Freemasons Lane and will discourage drivers to use the connection to travel between Pirie Street and Flinders Street. The building will be located in a position that does not preclude any future widening of Freemasons Lane to match Flinders Link.

In summary, the intent of providing a crossover at the end Flinders Link may have created an impression that a through road connection was to be established but this is not the case. The design of the driveways will be consistent with other driveways to private development sites and will operate in a comparable fashion. In particular, the interface between the site and the public realm will be consistent with the design requirements in relevant Australian Standards and will provide for safe pedestrian movements.

Yours sincerely,
MFY PTY LTD

MELISSA MELLEN
Director

75-83 Pirie Street, Adelaide, SA

Pedestrian Level Wind Assessment

Document No: GWTS-DPR-10290-2017-1
75-83 Pirie Street, Adelaide

GWTS

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Project Category: ST-CL-DPR-FV	**Document No:** GWTS-DPR-10290-2017-1

Prepared By: Michael Swaney	**Date:** October 3rd, 2017
Released By: Seifu Bekele	**Date:** October 3rd, 2017
Revision History **Revision No:** 0 1 2	**Comments:** Initial Issue Updated Updated

EXECUTIVE SUMMARY

GWTS has been commissioned by **BESTEC** to perform an assessment of pedestrian level winds for the proposed development on **75-83 Pirie Street, Adelaide, SA.**

This study was conducted by GWTS 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:

- Minimum canopy widths over the main building entrances
- Minimum balustrade height on the rooftop terrace
- Canopies along Freemasons Lane

Please note that this is an opinion statement and is not based on wind tunnel testing.

TABLE OF CONTENTS

1. INTRODUCTION

The proposed development consists of a 20 storey mixed-use building. The extent of the site is bounded by Pirie Street to the north, Freemasons Lane to the east, an adjacent high–rise building to the south and Freemasons Lane 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 BESTEC **(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 within approximately 2km radius for terrain categories is shown in **Figure 2.**

Figure 2: Satellite image of the proposed site on 75-83 Pirie 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 in 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.**

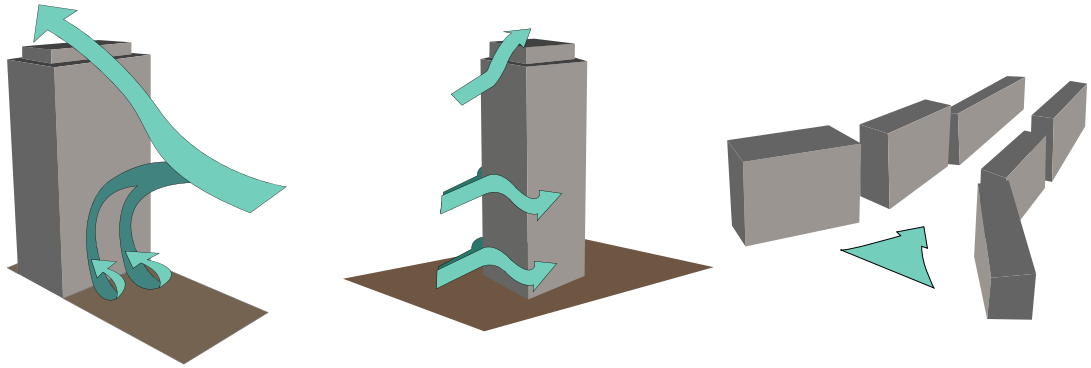
Downwash – refers to a flow of air down the exposed face of a Tower. A tall Tower can deflect a fast moving wind at higher elevations downwards.

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.



a) Downwash **b) Corner Acceleration** **c) Flow Channeling**

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].

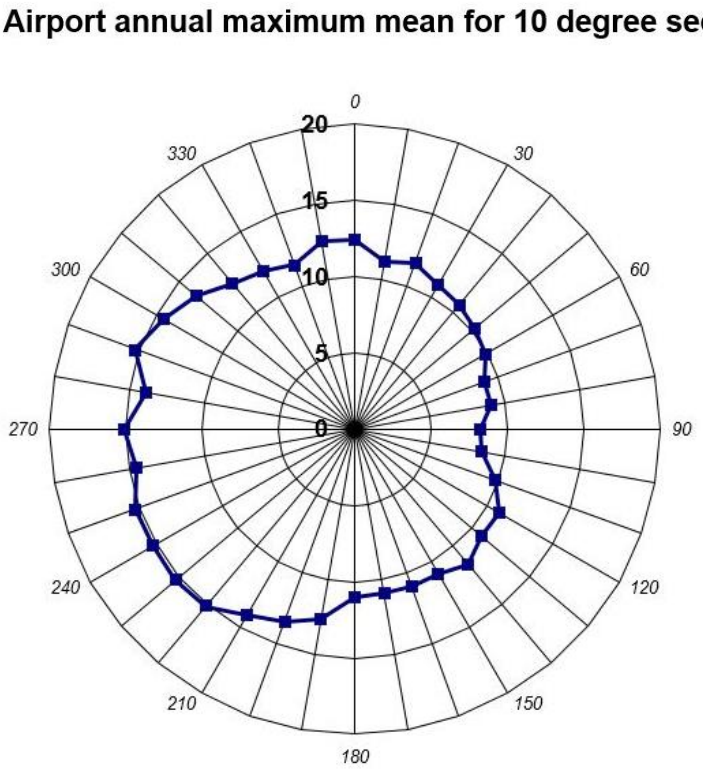


Figure 4: Directional distribution of annual maximum 10 minute mean wind speeds (m/s) at 10m height at Adelaide Airport

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 for the Adelaide Area

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 7** with the recommended criteria overlaid.

Table 2: Recommended application of criteria

Area	Recommended Criteria
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 11**)
Service lane	Recommended to meet the criterion for safety

Intended Use of Adjacent Ground Level 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.

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 level 3 and the rooftop terrace areas of the proposed development are highlighted in red in **Figure 6 and Figure 7**. It is recommended that the walking criterion be satisfied for these areas (see discussion on **page 11**)

Building Roof Terrace/Deck Recommended Criterion Discussion

Building roof terrace/deck and balconies may not be intended for use all the time. People need to be safe and comfortable to walk around to decide to use the space for other activities. The walking criteria can be used in this spaces since;

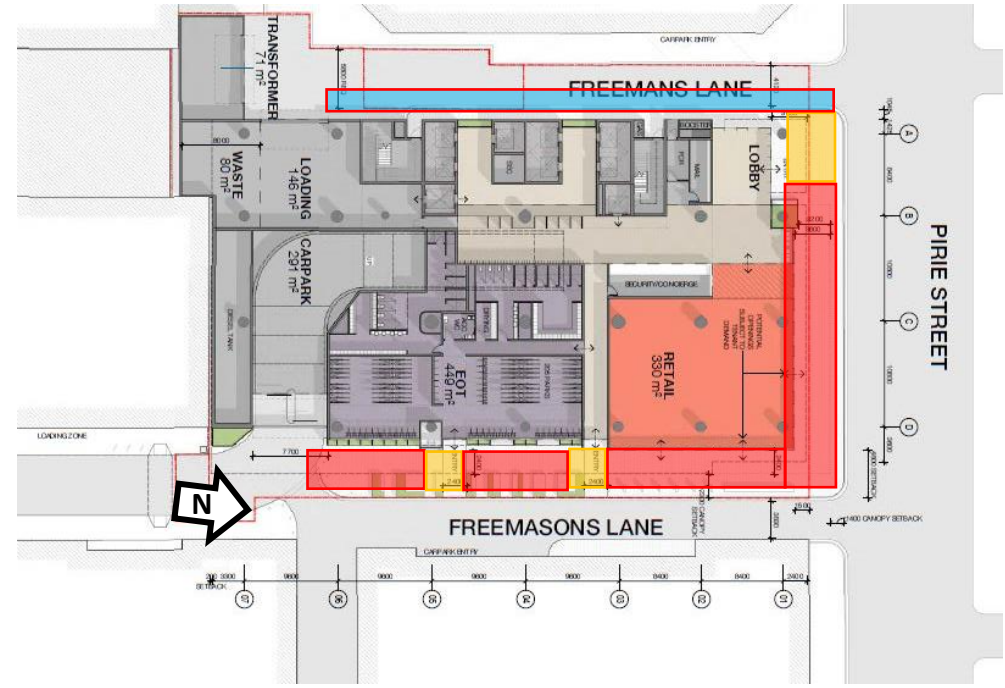
- The use of this area can be avoided during high wind event;
- These areas are not public spaces and their use is not required all the time;

It is likely to be difficult to achieve wind conditions meeting a more stringent criterion than the walking criterion on the level 3 terrace and the rooftop terrace 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 recreation areas will not guarantee that occupants will find wind conditions in these areas acceptable.

In our experience we suggest that outdoor recreation areas should meet the criterion for walking comfort in order that the majority of reasonable people consider such areas acceptable for their intended use from a wind point-of-view.

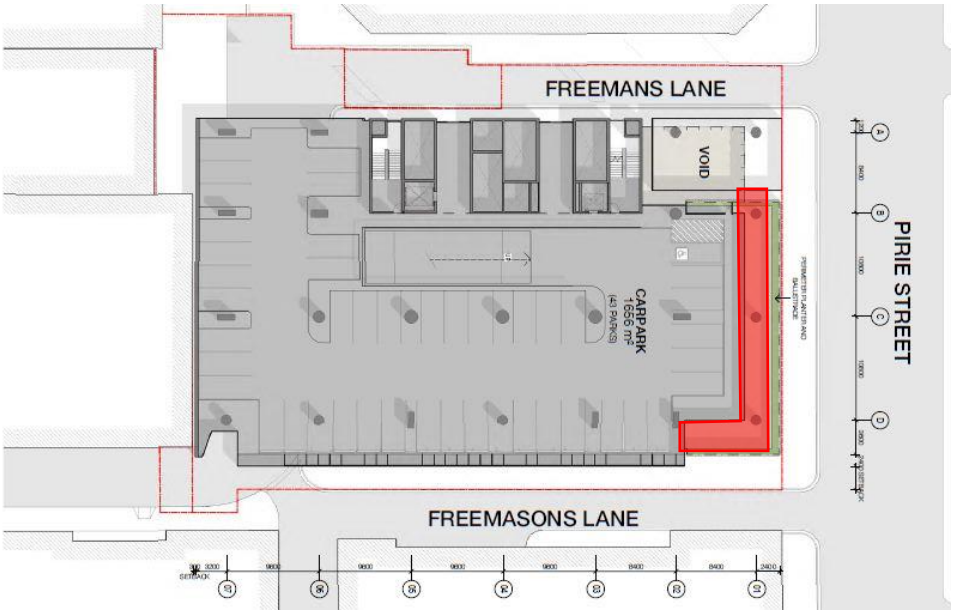
General adverse conditions/scenarios that may occur on a rooftop in extreme wind events include:

- The cooling effect of the wind on the human body (particularly for pool deck areas),
- The removal of lightweight items such as newspapers, lightweight furniture etc.,
- Difficulties hearing others speak.



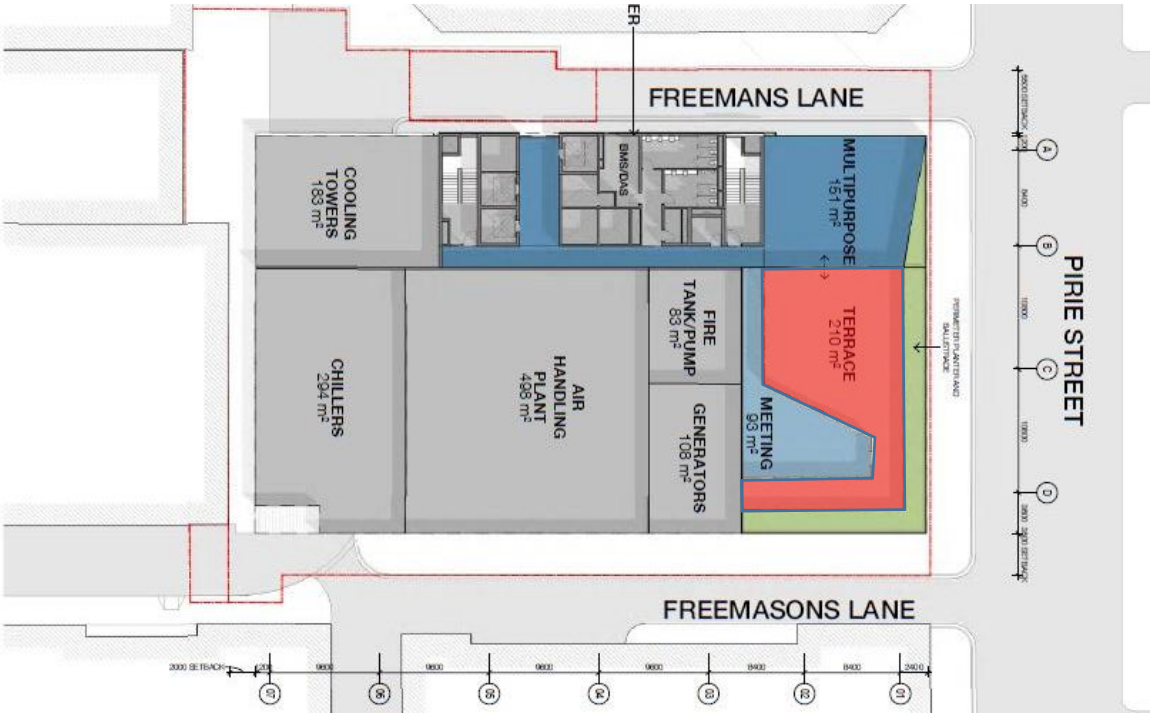
Recommended to meet criterion for standing
Recommended to meet criterion for walking
Recommended to meet criterion for safety

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 3 of the proposed development



Recommended to meet criterion for walking

Figure 7: Schematic plan view of proposed development with recommended wind criteria overlaid on the roof 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.

Pirie Street and Freemasons Lane Building Entrances

The main building entrance is located on the north face of the proposed development along Pirie Street while a secondary entrance is located on Freemasons Lane to the east of the proposed development. Considering the absence of a significant building podium and a relatively smooth façade, it is predicated that accelerated wind speeds will occur on Freemasons Lane (east) and Pirie Street (north) as a result of downwash. The elevations and renders provided by BESTEC indicate that canopies have been implemented over both entrances which will generally produce a calm wind environment by eliminating the effects of downwash at the entrance areas. Recommendations on minimum canopy widths have been provided above the building entrances to achieve a safe and comfortable wind environment within the recommended standing criterion.

Level 3 Terrace

The level 3 terrace is located 11m above ground level to the north of the proposed development. The terrace area lies within the building form of the successive levels 4 and above and is therefore not subject to the effects of downwash generated along the building façade. Considering that the level 3 terrace is well shielded from westerly and southerly winds and is exposed only to the weaker winds of Adelaide, wind speeds expected to be within the recommended walking criterion.

Rooftop Terrace

The rooftop terrace is located on the north eastern corner of the proposed development. Adjoining the proposed terrace area are rooms for Function, Generators and Fire Tank/Pump, which are expected to shield the terrace from the strongest winds in the Adelaide region; westerly and south westerly winds. Thus, the terrace area is exposed only to the weaker winds of Adelaide originating from the north and the east. However, it is predicted that wind speeds may occasionally approach the recommended criterion for walking due to the height (79.4m) and direct exposure of the rooftop terrace and consequently, appropriate recommendations have been made.

Freemans Lane (west) and Freemasons Lane (east)

The proposed development is relatively well protected against the predominant winds in Adelaide (south and south west) by the existing People's Credit Union and SANTOS HQ building to the south and The AON Centre to the west. However, as the proposed development is significantly higher than its surrounding buildings, it is likely that strong westerly winds will hit the exposed part of the western façade, generating a downwash effect in Freemans Lane (west).

Mid-rise buildings are also located to the east of the proposed development which is likely to reduce the speed of approaching easterly winds. Although easterly winds are the weakest winds in the Adelaide region, it is expected that easterly winds will accelerate along the eastern façade towards Freemasons Lane (east) as a result of downwash.

Due to the height, orientation and general form of the proposed development, it is likely that downwash will be generated along the eastern and western facades of the proposed development creating uncomfortable wind conditions in Freemans and Freemasons Lane. However, Freemans Lane (west) is a service lane, low traffic with the wind speed expected below the safety criteria. Thus, no recommendation provided. Freemason Lane (east), extending the carpark by 1200mm to the east will provide sufficient shielding from the downwash and no additional canopy will be required to fulfill the recommended criteria.

6. RECOMMENDATIONS

The following recommendations are made:

- ***Canopy over main building entrances***

It is recommended that the canopy illustrated in the architectural drawings maintain a minimum width of 2m above 3.6m above the ground on the Pirie Street and 2.4m above the ground on Freemasons Lane entrances, as highlighted in red in **Figure 8.**

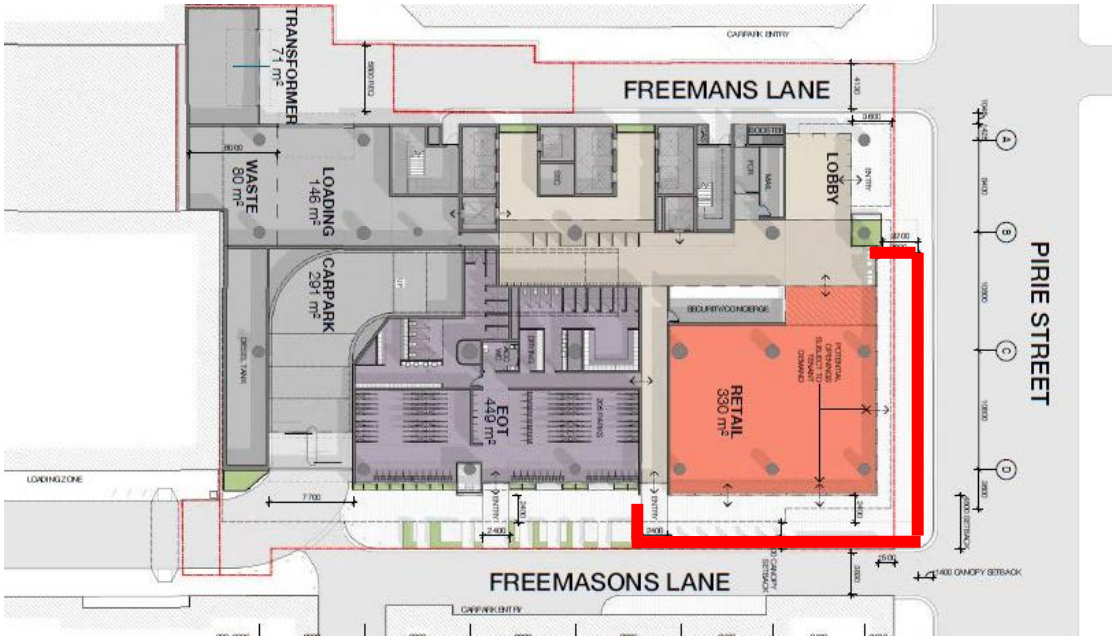


Figure 8: Recommended location of canopy

- ***Balustrade heights on the rooftop terrace***

It is recommended that a minimum balustrade height of 1.5m be implemented in the final design to create a safe and comfortable wind environment on the rooftop terrace.

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:

- Minimum canopy widths over the main building entrances
- Minimum balustrade height on the rooftop terrace
- Canopies along Freemasons Lane

Please note that this is an opinion statement and is not based on wind tunnel testing. Given the height of the building and to have high level of confidence on the predicted values a wind tunnel test is recommended.

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/

[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

170920_PLP Submission	27/09/2017 12:33 ...	Adobe Acrobat D...	17,083 KB
171003_Wind Model to Bestec	4/10/2017 1:55 PM	Rhino 3-D Model	214,892 KB

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NAR:HAC
55682/1/1
7 November 2017

Woods Bagot Pty Ltd
Level 14, 11 Waymouth Street
ADELAIDE SA 5000

Attention: Mr W Moughraby

Dear Sir

83 PIRIE STREET DEVELOPMENT
BUILDING ENGINEERING SERVICES

This document outlines the Ecologically Sustainable Design (ESD) strategy which will be applied to the 83 Pirie Street Development which will be employed to reduce the project's impact on the environment in both construction and operation.

GREEN RATINGS

The development is designed to achieve the following third party certified green building ratings:-

Green Star

5 Star Design and As Built version 1.1 minimum "Australian Excellence".

NABERS

5 Star NABERS Energy after a minimum of 12 months post occupancy building tuning.

Energy and Green House Gas Emissions

The following energy initiatives are proposed:-

- Passive design – the use of high performance double glazing to reduce energy demands.
- A building façade and engineering services design optimised using computer modelling integrative design techniques.
- Selection of energy efficient lighting fittings (T5 and LED) with a digital lighting control system.
- Water cooled high efficiency chillers and gas condensing boilers for the provision of thermal energy.
- Subject to further design development and a possibility of pursuing a 6 Star Green Star result, the project may incorporate gas fired engines providing low carbon electricity.
- Air conditioning using passive chilled beam technology with high induction swirl diffusers to maximise indoor air quality. All air conditioning systems will incorporate an economy cycle and heat exchangers allowing 100% outside air to be used for free cooling when conditions allow.
- Hot water generation by a gas boosted hot water system.
- Extensive metering and sub-metering for energy management, connected to a fully integrated Building Management System.
- Light coloured roof coverings to reflect heat and reduce the site solar heat island effect.

Energy and Green House Gas Emissions (Cont.)

- Using zero ODP refrigerants and insulations.

- Designed to achieve 5 star NABERS Energy certified outcome without relying on the purchase of Green Power.

Water, Waste Water and Stormwater

The following water initiatives are proposed:-

- Providing rainwater storage tanks with the water reticulated to provide toilet and urinal flushing and landscape irrigation supplies.

- Rainwater will be collected from the plantroom roof area and discharged into the rain water tank via the internal downpipe system. Overflow facilities will be provided within the tank to permit overflow when the rainwater tanks are full.

- Water efficient fittings with a minimum WELS ratings:-

    - Taps 6 Stars
    - WC's 4 Stars
    - Showers 3 Stars

- Stormwater systems designed such that historic peak stormwater outflows should not be exceeded and all stormwater is appropriately treated before discharge to sewer.

Waste

The following waste initiatives are proposed:-

- Provisions will be made for the location and use of separate bins for general and recyclable waste.

Indoor Environment Quality

The following indoor environment quality initiatives are proposed:-

- Using paints, sealants, adhesives, carpets and other coverings which have low off-gassing properties (low VOC, low formaldehyde).

- Maximising access to daylight whilst minimising glare. The daylight performance of the main commercial floors are expected to be excellent with glare control provided by the use of internal blinds.

- Outside air at a design rate 50% higher than minimum code requirements at all times with the outside air increasing to 100% during economy cycle operation.

- Design modelling will optimise the façade and internal air conditioning systems approach in order to maximise thermal comfort.

Construction

The following construction initiatives are proposed:-

- Selecting locally sourced materials wherever viable.

- Selecting materials with a comparatively low embodied energy/carbon profile e.g. timber in preference to steel wherever viable.

Construction (Cont.)

- Selecting building materials with a recycled material content e.g. thermal insulation, reinforcement bar, fly ash in concrete, recycled content floor coverings wherever viable.

- Utilising an Environmental Management Plan and Environmental Management System (EMS) that is certified to ISO 14001 standards.

- Managing construction waste (including demolition) such that a minimum of 90% of all waste (excluding soil, contaminated waste and green waste) is diverted from landfill.

Please contact the undersigned should you require any further information.

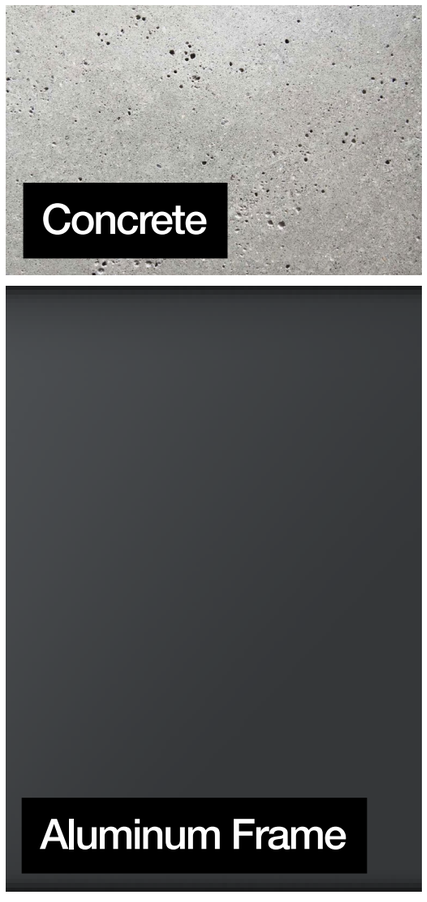
Yours faithfully
BESTEC PTY LTD

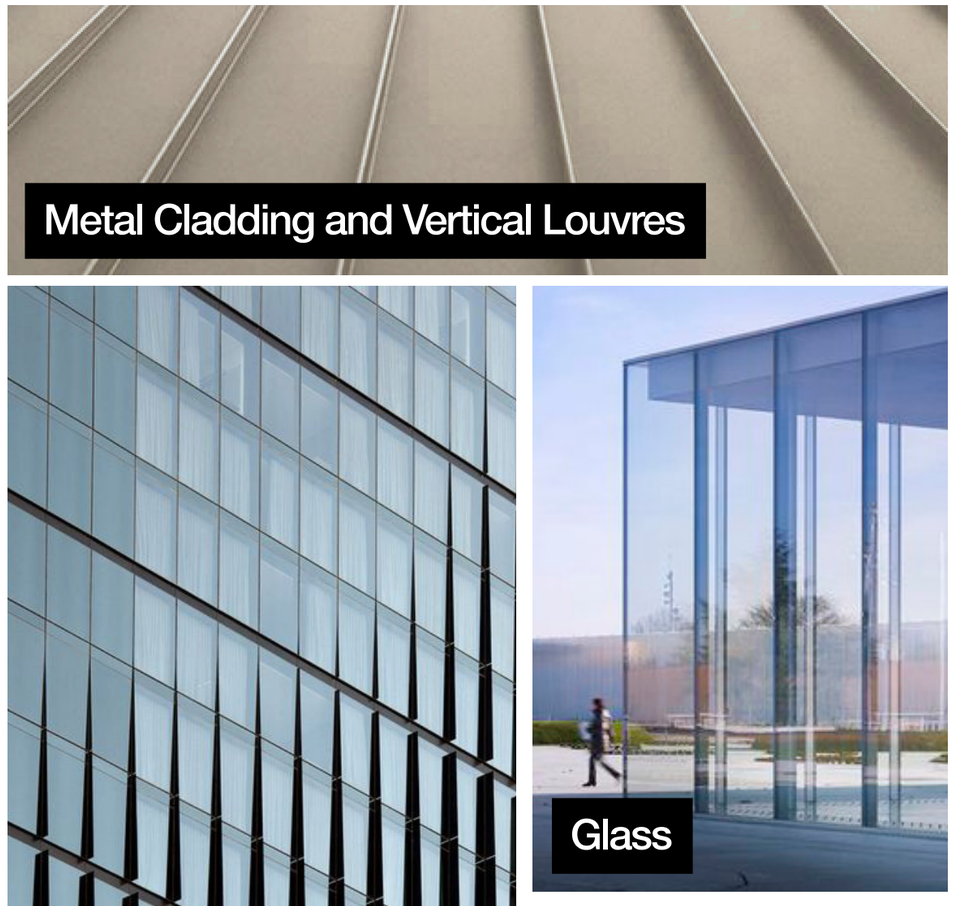
NICHOLAS ROSSHIRT
DIRECTOR

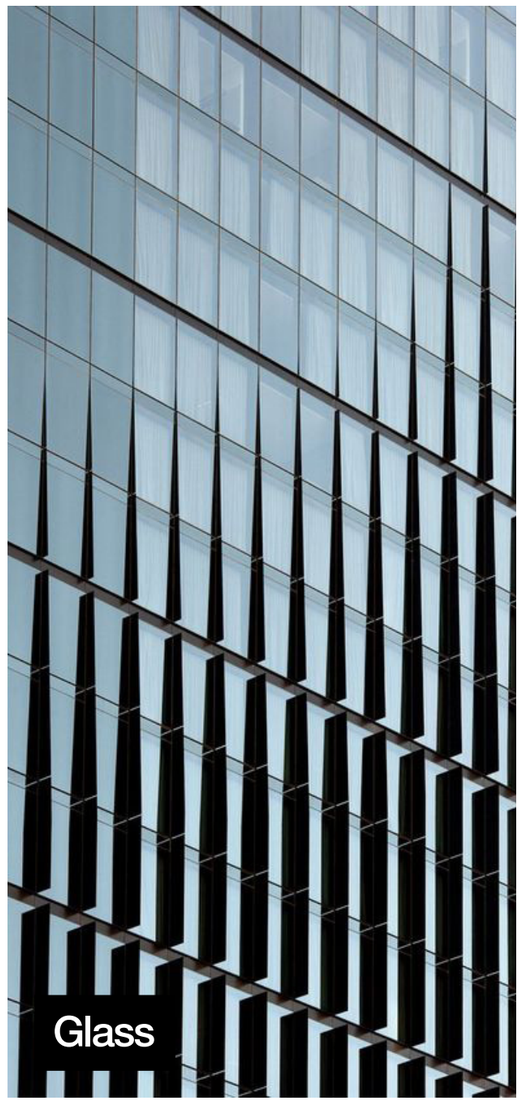
03 83 Pirie Street Materiality

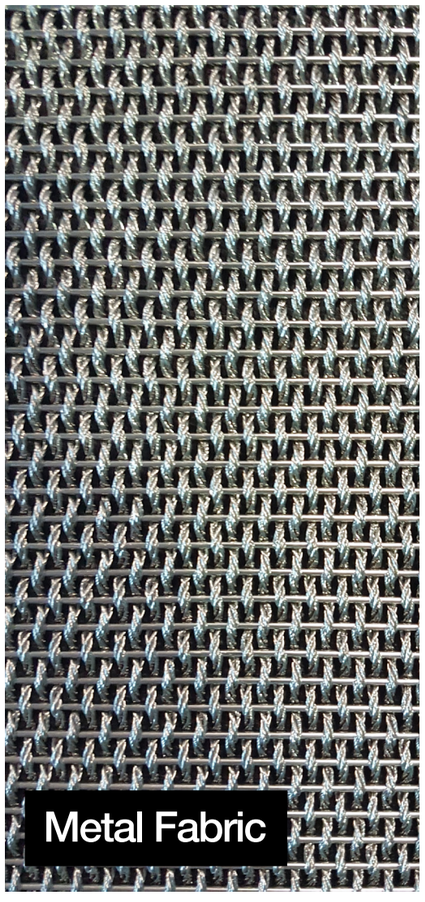
Palette.

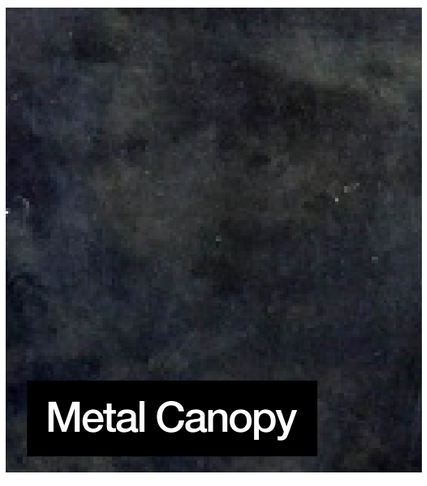
Revised
11.12.2017

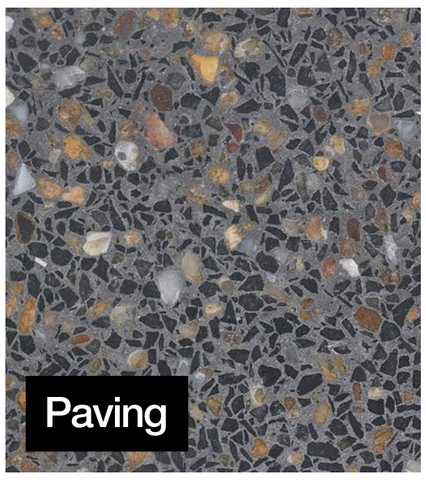


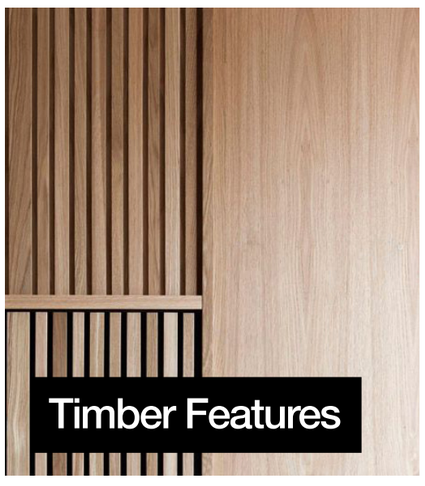












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NAR:MJH
55682/0/0
6 November 2017

Woods Bagot Pty Ltd
Level 14, 11 Waymouth Street
ADELAIDE SA 5000

Attention: Mr W Moughraby

Dear Sir

83 PIRIE STREET DEVELOPMENT
MECHANICAL SERVICES

As requested we have conducted thermal analysis of the façade for the above project and report accordingly on the various alternatives to satisfy both air conditioning criteria and architectural aesthetics. We have based our analysis on both a 3700 viewing panel and a 2700 viewing panel with an insulated spandrel panel within the ceiling space zone of 1000mm.

Based on the introduction of a passive chilled beam air conditioning system within the building to maximise both Greenstar and NABERS performance it is necessary to maintain thermal performance of the façade and subsequent parameter zone areas between 90-100w/m² for the 3.6m deep perimeter zone floor area to ensure there is adequate slab soffit area to install the passive chilled beams.

Given there are base building internal cooling load components namely base building lights, power and occupancy to be accounted for the residual allowance can be attributed to façade thermal performance.

Base building internal loads are as follows:-

Lights	8 w/m² of floor area
Power	15 w/m² of floor area
Occupancy	7 w/m² of floor area
Total	30 w/m² of floor area

As such a residual allowance of 60-70w/m² of floor area is permitted for heat gains through the façade. The heat gains through the façade are influenced by two factors conducted load determined by the U value Solar gains through the façade as a result of solar penetration through the glazing determined by the solar heat gain co-efficient (SHGC) or shading mechanisms such as frits or external shading devices.

On the above basis we have evaluated the following façade alternatives for both 3700 and 2700 high glazed panels:-

3700 High Glazing

Glazing Type	Glazing Thermal Performance		Frit Applied External to Window Panel	Façade Thermal Performance w/m²
	U Value	SHGC		
Double Glazed Air Filled	1.9	0.42	0%	142
Double Glazed Air Filled	1.9	0.23	0%	88
Double Glazed Air Filled*	1.9	0.23	50%	66
Double Glazed Air Filled	1.9	0.23	40%	72

Glazing Type	Glazing Thermal Performance		Frit Applied External to Window Panel	Façade Thermal Performance w/m²
Double Glazed Argon Filled	1.6	0.23	0%	90
Double Glazed Argon Filled*	1.6	0.23	50%	62
Double Glazed Argon Filled*	1.6	0.23	40%	68
Single Glazed	3.6	0.68	0%	220
Single Glazed	3.6	0.34	50%	137
Single Glazed	3.6	0.408	40%	154

2700 High Glazing

Glazing Type	Glazing Thermal Performance		Frit Applied External to Window Panel	Façade Thermal Performance w/m²
	U Value	SHGC		
Double Glazed Air Filled	1.9	0.42	0%	106
Double Glazed Air Filled*	1.9	0.23	0%	70
Double Glazed Air Filled*	1.9	0.23	50%	52
Double Glazed Air Filled*	1.9	0.23	40%	56
Double Glazed Argon Filled*	1.6	0.23	0%	68
Double Glazed Argon Filled*	1.6	0.23	50%	50
Double Glazed Argon Filled*	1.6	0.23	40%	53
Single Glazed	3.6	0.68	0%	158
Single Glazed	3.6	0.34	50%	100
Single Glazed	3.6	0.408	40%	111

Based on the above the glazing solutions denoted * achieve the stated thermal performance parameters of 60-70 w/m² of floor area for façade thermal performance.

The above evaluation demonstrates that high performance glazing with a low SHGC offers thermal performance of the façade which can achieve the necessary parameters to satisfy the passive chilled beam performance without the need for frits.

We trust the above is satisfactory and would be pleased to further elaborate as required.

Yours faithfully
BESTEC PTY LTD

NICHOLAS ROSSHIRT
DIRECTOR

cc Adelaide Development Company – Mr T Simpson
Rider Levett Bucknall – Mr G Altamura

DASH Architects is one of the State's leading practices in the provision of specialist heritage services. Over the past 45 years it has helped establish benchmarks for the approach to management, refurbishment and redevelopment of heritage assets in South Australia.

Operating across the full range of the architectural disciplines enables DASH Architects an appreciation of the role of cultural heritage within the broader design process, as one of many factors that influence project outcomes.

This flexible and integrated approach is based primarily on contemporary community values and traditions. Within this framework there is an acknowledgement that while the preservation of heritage fabric is important, it is only one of many considerations when assessing the cultural significance of a place.

Heritage Impact Statement Proposed Development at 83 Pirie Street, Adelaide

DA173462 – issue B – 17.11.2017

1.0 Introduction

DASH Architects has been engaged by the Adelaide Development Company (ADC, or the Applicant) to provide heritage advice and to prepare this Heritage Impact Statement (HIS) in relation to the proposed Development at 83 Pirie Street, Adelaide (the Site).

Specifically, this report has been prepared by David Holland, Director of DASH Architects. I have also provided advice to the Design Team as it prepared the Application. Details of my qualifications and experience are set out below.

In preparing this Heritage Impact Statement, I have:

- Visited the site and locality;
- Attended various meetings with the Applicant's Architects Woods Bagot (the Design Architects);
- Reviewed various source documents including:
    - Extracts from the SA Heritage Places database.
- Reviewed Adelaide City Council's Development Plan (consolidated 20 June 2017);
- Reviewed various iterations of design proposals; and
- Reviewed the final documents to be lodged for Development Plan Consent generally, being Woods Bagot's Drawings (# 140332):
    - SK 0000 (preliminary) Cover Page
    - SK 0001 (-) Area Schedules
    - SK 1000 (-) Locality Plan
    - SK 1001 (-) Demolition Plan
    - SK 1002 (-) Site Plan
    - SK 2200 (-) Ground Floor Plan
    - SK 2201 (-) Level 01 Floor Plan
    - SK 2202 (-) Level 02 Floor Plan
    - SK 2203 (-) Level 03 Floor Plan
    - SK 2204 (-) Level 04-11 Typical Floor Plan
    - SK 2212 (-) Level 12 Floor Plan
    - SK 2213 (-) Level 13 Floor Plan
    - SK 2214 (-) Level 14-20 Typical Floor Plan
    - SK 2221 (-) Roof Level Plan
    - SK 3200 (-) Building Elevations - North
    - SK 3201 (-) Building Elevations - East
    - SK 3202 (-) Building Elevations - South
    - SK 3203 (-) Building Elevations - West
    - SK 3204 (-) Streetscape Elevation - Pirie Street
    - SK 3300 (-) Building Section - North/South

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- SK 3301 (-) Building Section - East/West
- SK 5200 (-) CU01 Facade
- SK 8600 (-) Shadow Diagrams

2.0 About the Author

I am an architect and heritage consultant with over 20 years of consulting experience. Since 2000, I have been a Director of DASH Architects (Danvers Schulz Holland Architects Pty Ltd), a multi-disciplinary practice providing professional services in the fields of Architecture & Interiors, Heritage, and Urban Design. Of the professional services it offers, DASH Architects specialise in contextual architecture and urban design within zones of heritage significance, adjoining heritage items or as extensions and modifications to heritage items themselves.

As part of DASH Architects, I have been responsible for, or overseen, numerous significant heritage projects (including multiple award winners), significant architectural projects, Conservation Management Plans and conservation projects.

As part of Local Heritage PARs/DPAs, or as part of Development Applications or appeals, I have prepared numerous Heritage Significance Reports, assessing properties against the relevant listing criteria and Development Plan provisions, and Heritage Impact Statements, assessing the impact of proposed Development on the heritage values of Places.

I am also regularly asked to provide expert heritage and design advice to other architects, designers and applicants in relation to proposed developments.

I am Fellow of the Australian Institute of Architects (RAIA). I have previously been its State President, a National Director, and a member of the National Practice Committee. I was also a Chapter Councillor and chair of the State Practice Committee. I have sat on the Architectural Practice Board of South Australia. My practice is a member of the Association of Consulting Architects - Australia and I have been a member of its SA Branch Committee.

I have also been, and continue to be, a member of various State and National Visiting Panels responsible for the accreditation of the Architectural courses at the University of Adelaide and at the University of South Australia.

3.0 Background

3.1 The Site

The Site of the proposed development is highlighted (loosely) in green on the images below (IMAGE 01 & 02). Woods Bagot drawing 140332 SK 1000 Locality Plan shows it in more detail. The Design Architects and Consulting Planner will, no doubt, describe it in yet further detail as part of their submissions.

3.2 Heritage Places in Locality

For the purposes of this HIS, it is important to note that while the site does not contain any heritage places, there is a State Heritage Place (sections of 89 Pirie Street) immediately to its East, separated from the Subject Site by Freemasons Lane. There are also other State and Local Heritage Place in the 'broader' locality. There are no contributory items in the 'broader' locality.

IMAGE 01 below shows the 'broader' locality (State Heritage Items are in Red, Local Heritage Items are in Blue and the Site is in Green). IMAGE 02 below shows a more 'immediate' locality (again, State Heritage Items are in Red, Local Heritage Items are in Blue and the Site is in Green).

IMAGE 01 – 'Broader' Locality of the Site (taken from www.location.sa.gov.au/viewer/)

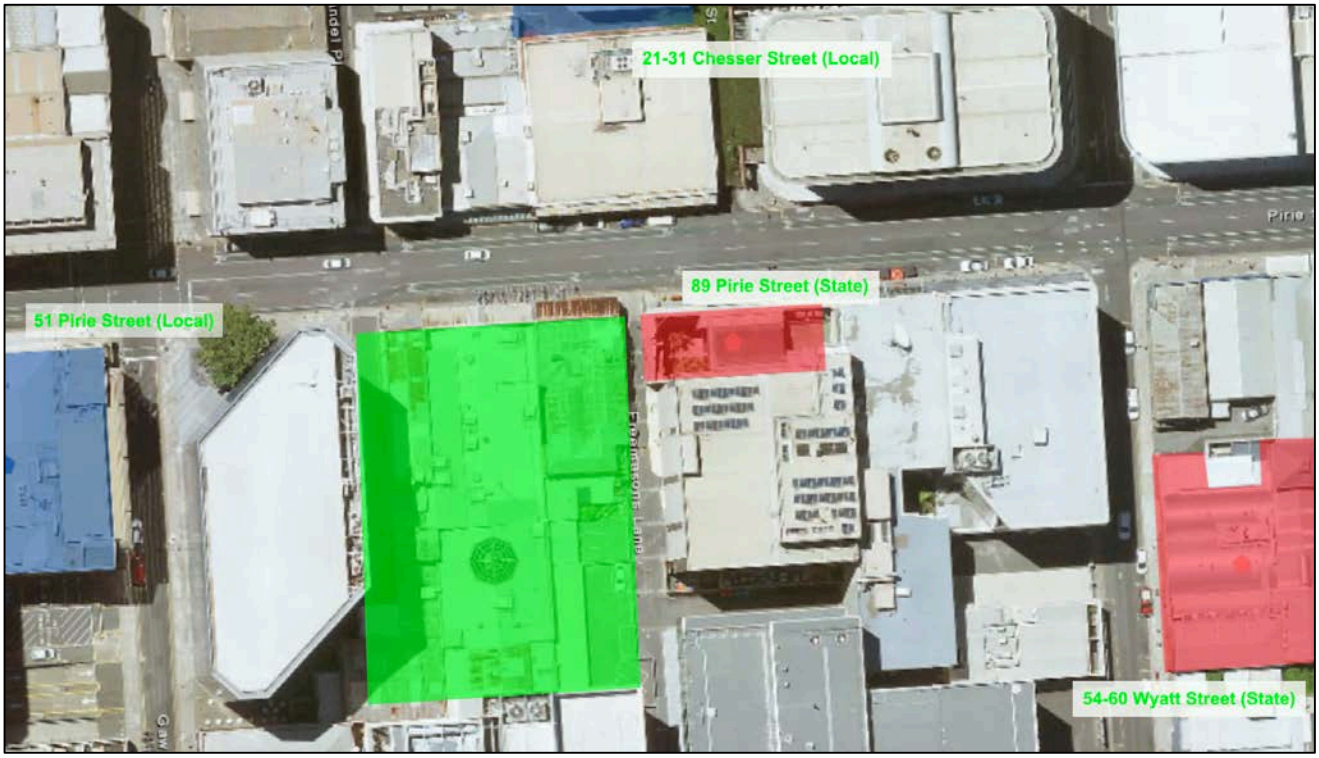


IMAGE 02 – 'Immediate' Locality of the Site (taken from www.location.sa.gov.au/viewer/)

Amongst the Heritage Places in the 'immediate' locality, I consider that the following are sufficiently close to the Site to warrant a detailed review of the impact of the works proposed as part of the Application on their Heritage values. These are shown on Image 02 above and include:

- 89 Pirie Street (State) – IMAGE 3 below; and
- 51 Pirie Street (Local) – IMAGE 5 below.

I consider that the other Heritage Places in the 'immediate' and 'broader' locality (including 21-31 Chesser Street (Local) and 54-60 Wyatt Street (State)) are sufficiently distant from the site such that the work proposed on it will not have an adverse impact on either their physical fabric or their settings. As such I have not considered them further in this Statement.

3.2.1 Heritage Listings

Following are extracts from the SA Heritage Places database in relation to 51 and 89 Pirie Street:

3.2.1.1 89 Pirie Street (State)

IMAGE 3 - 89 Pirie Street (photo by Author)

LOCATION	
Map	Show Map
Address	89 Pirie Street ADELAIDE
Locality	ADELAIDE
Accuracy	H - high level confidence
Development Plan	ADELAIDE Council
Polygon Type	B - Building footprint
DESCRIPTION	
Details	Darlington House Offices (former People's Palace, former German Club)
Significance	
Subject Index	Recreation and entertainment - Club; Miscellaneous - Office [Miscellaneous]
Class	State
STATUS	
Status Code	REG - Confirmed as a State Heritage Place in the SA Heritage Register
Status Date	11-SEP-1986
REFERENCE	
LGA	Adelaide
State Heritage ID	13391
Heritage Number	1291
SECTION 16 INFORMATION	
Section 16	
PLAN PARCEL & TITLE	
As listed in the SA Heritage Register	
Plan Parcel & Title Information	CT 6121/18 F139545 A6

IMAGE 4 – Extract from Heritage Places Database Search for 89 Pirie Street (http://maps.sa.gov.au/heritagesearch/HeritageSearchByKeywords.aspx).

3.2.1.2 51 Pirie Street (Local)

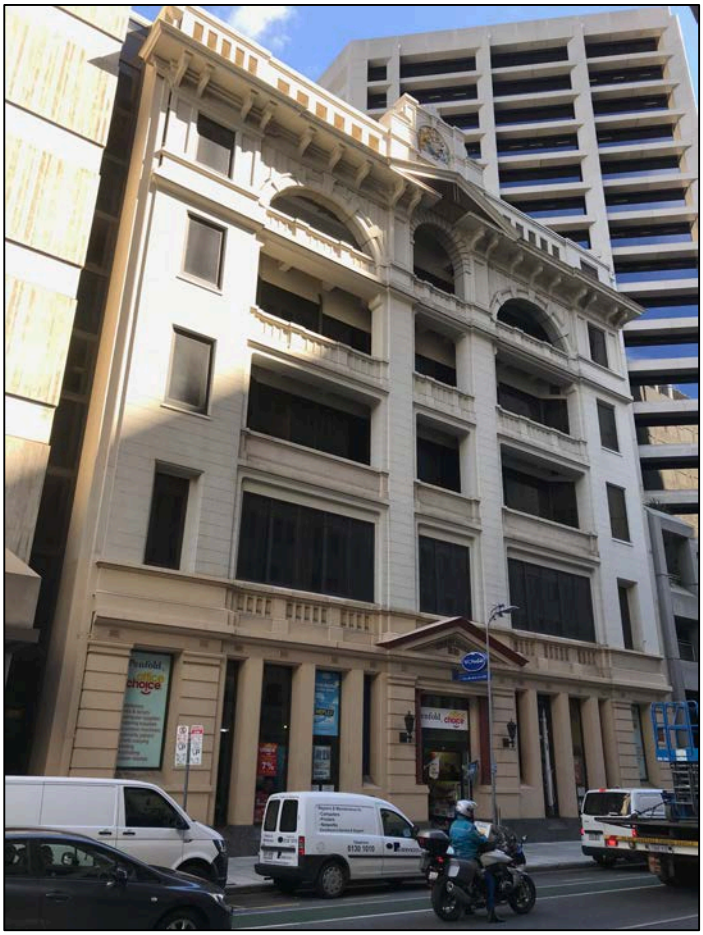


IMAGE 4 - 51 Pirie Street (photo by Author)

LOCATION	
Map	Show Map
Address	51 Pirie Street ADELAIDE
Accuracy	H - high level confidence
Development Plan	ADELAIDE Council
Polygon Type	P - parcel (from DCDB)
DESCRIPTION	
Details	Bank
Extent of listing	
Class	Local
Local Heritage Place Class Type	Townscape
STATUS	
Authorisation Date	01-NOV-2001
REFERENCE	
LGA	Adelaide
Heritage Number	127
Council Reference	
SECTION 23 INFORMATION	
Section 23	

IMAGE 6 – Extract from Heritage Places Database Search for 51 Pirie Street (http://maps.sa.gov.au/heritagesearch/HeritageSearchByKeywords.aspx).

4.0 Proposed Work

4.1 Description

Having reviewed the documents prepared by the Design Architects, I understand that the Development (loosely) comprises:

- Demolition of the buildings and structures currently on the site; and
- Construction of a new high–rise tower building.

Again, the Architect and Consulting Planner will describe the overall Development in more detail. I have therefore only discussed those elements of the Development that affect, or have the potential to affect, the Heritage Values of the Heritage Places in the Immediate Locality.

4.1.1 Demolition of the buildings and structures currently on the site

While the buildings on the site, and particularly those elements of them that directly face Pirie Street, contribute to the overall character of the Street, they are not of recognised heritage value (IMAGES 5 &6). Nor do they contribute to the heritage values of the Heritage Places in the locality. As such their removal will not materially affect the Heritage Values of the Heritage Places in the Locality (being, 51 and 89 Pirie Street).

Given the close proximity of 89 Pirie Street to the Site however, the management of vibration during the demolition process will be important to avoiding damage to it. As such, I suggest that vibration be considered and included in the Construction Environment Management Plan (CEMP).

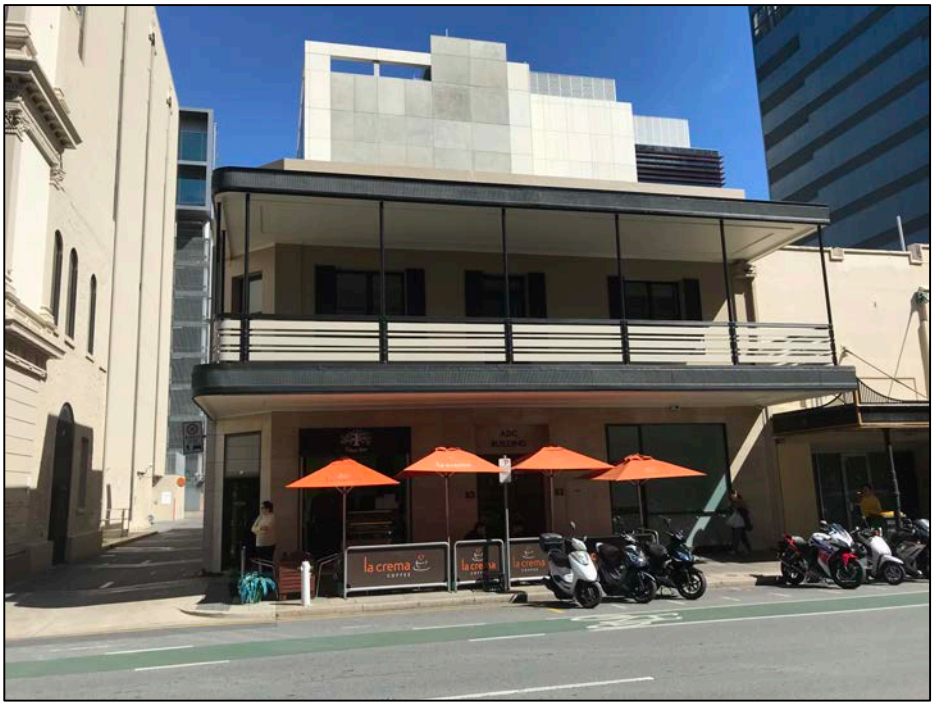


IMAGE 5 – Photograph of the Site showing existing buildings – Eastern end along Pirie Street (by

author). Note that photo also shows Freemasons Lane and a section of the adjacent State Heritage Place (89 Pirie Street) on left side.

IMAGE 6 – Photograph of the Site showing existing buildings – Western end along Pirie Street (by author).

4.1.2 Construction of a new high–rise tower building.

4.1.2.1 Design Features

I note that the following 'design features' have been incorporated into the design of the new high-rise tower that have the potential to affect the way that the new development impacts on the Heritage Items in the Locality (most notably 89 Pirie Street).

> Setback from Freemasons Lane
> The new Development incorporates an increased 'setback' from Freemasons Lane. This results in additional 'clearance' between the new building and the adjacent Heritage Building (89 Pirie Street) that in turn 'opens up' views to return façade of that building. This will enhance the heritage values of 89 Pirie Street. IMAGE 7 below shows this.

IMAGE 7 – Extract from Woods Bagot drawings –artist's view of proposed new building with 89 Pirie Street in background.

Podium Level within design

The use of a podium level in the design, separated from the remainder of the tower by a shadow-line', helps to break down the overall height / scale of the new building and assists in it relating to the other elements in the streetscape, particularly the heritage elements (IMAGE 8).

Further, the materials used in the podium level of the new building (redbrick and glass), and its composition along the street (that reflects some of the articulation present in the current buildings on the site) are also compatible with the heritage places in the Locality.

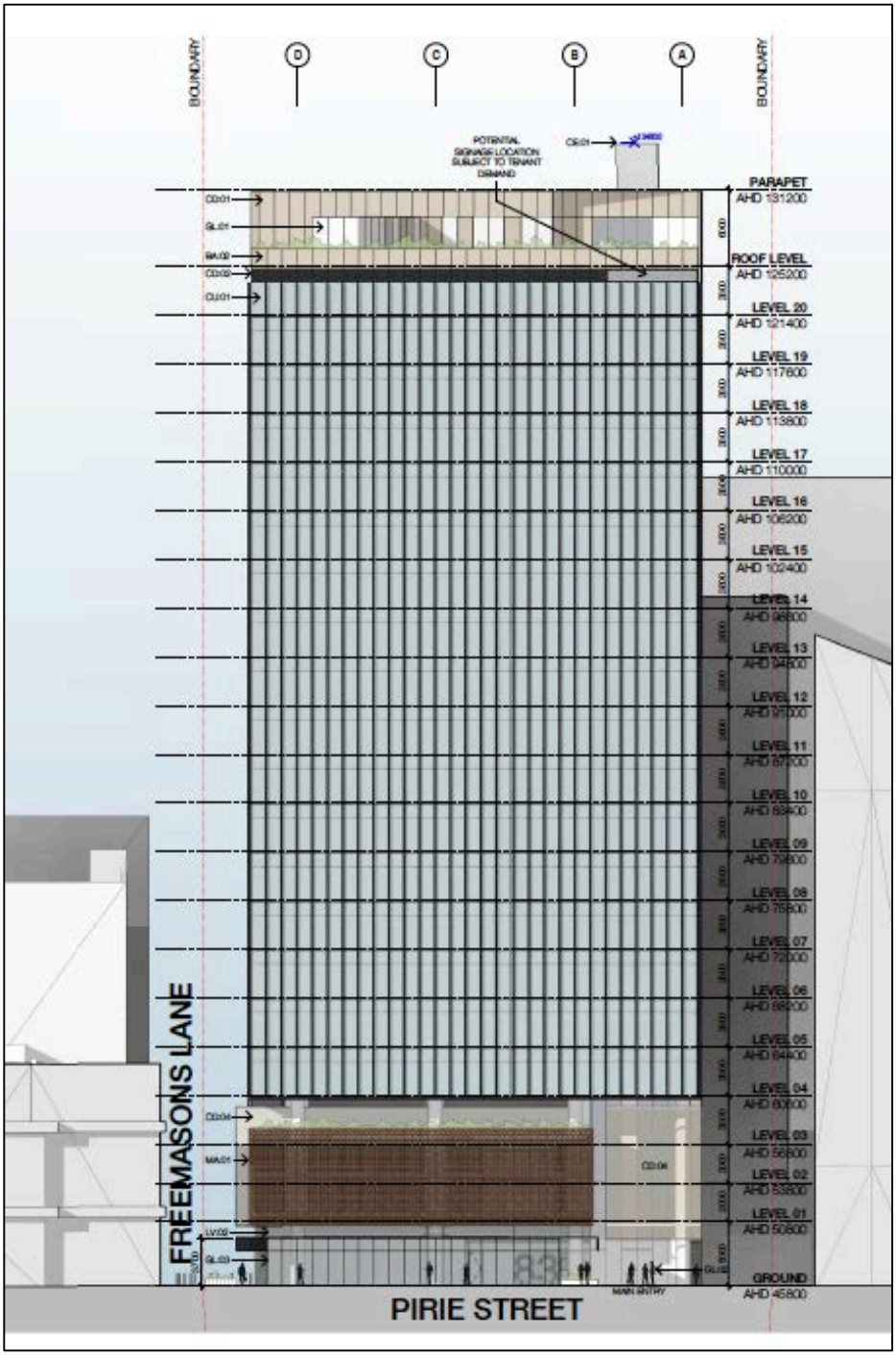


IMAGE 8 –Extract from Woods Bagot drawings –elevation of proposed new building with 89 Pirie Street to left.

4.1.2.2 Vibration management during construction

Given the close proximity of this Heritage Place to the Site, the management of construction vibration throughout the process will be important to avoiding damage to it. I suggest that vibration be considered and included in the Construction Environment Management Plan (CEMP).

5.0 Assessment

Following is a summary of my assessment of the potential impact of the Development on the Heritage Places in the Locality.

As noted above, this assessment has been limited to those places identified above, within the immediate locality of the site that are likely to be affected

5.1.1 89 Pirie Street

The Application does not propose any physical works to this place.

The setting of the Place is such that it is an element within a dense urban setting. It has a primary facade facing Pirie Street and a short secondary, return, frontage to the side lane (and the Site). The proposed development does not alter either the setting of, or 'visual access' to, the primary frontage of the Place. Further, the proposed increased setback of the new building from the side lane allows enhanced views to the secondary frontage of 89 Pirie Street from Pire Street.

Given the close proximity of this Heritage Place to the Site, the management of vibration throughout the demolition and construction processes will be important to avoiding damage to it. I suggest that vibration be considered and included in the Construction Environment Management Plan (CEMP).

Given the above, and assuming vibration is managed, I do not believe that the proposed works will have any material impact on the heritage value of these places.

5.1.2 51 Pirie Street

The Application does not propose any physical works to this place.

As for 89 Pirie St, the setting of the Place is such that it is an element within a dense urban setting. It has a primary facade facing Pirie Street and newer building element facing Gawler Place. The proposed development does not alter either the setting of, or 'visual access' to, the primary frontage of the Place.

Given this, I do not believe that the proposed works will have any material impact on the heritage value of these places.

5.2 Assessment against Development Plan Provisions

The site is in the Central Business Policy Area within the Capital City Zone.

The Consulting Planner for the Project will undertake a detailed assessment of the Application against the provisions of the Development Plan. For the purposes of the Statement however I have reviewed the above Zone and Policy Area provisions, as well as those within the "Heritage and

Conservation" sections of the Development Plan.

Having done so, I have not identified any areas of significant variance and have formed a view that the Application meets the intent of the Development Plan from a Heritage point of view.

6.0 Conclusion

I have formed a view that the demolition, and new construction works proposed as part of this Application, would not result in the loss of heritage fabric, nor would it substantially affect the setting of the Heritage places in the locality.

Within this context, I have formed a view that the package of work proposed should be supported from a heritage point of view.

7.0 Sign off

This report has been prepared for and on behalf of DASH Architects.

David Holland
Architect
Director, DASH Architects

WGA
WALLBRIDGE GILBERT AZTEC

Adelaide Development Company
83 Pirie St
Adelaide
SOUTH AUSTRALIA 5000

16th November 2017

Job No. ADL171090

Attention: Mr Tom Simpson

Dear Tom,

OFFICE REDEVELOPMENT, 83 PIRIE ST ADELAIDE

PRELIMINARY STORMWATER MANAGEMENT REPORT

1. INTRODUCTION

WGA have been engaged by Adelaide Development Company to undertake the preliminary civil design for the proposed new office development located at 83 Pirie Street, Adelaide. This report is intended to outline the preliminary stormwater management design for the proposed works. The final detailed design is still being carried out and as such this advice is preliminary only.

2. DEVELOPMENT DESCRIPTION

The proposed development is detailed on the Architectural drawings as prepared by Woods Bagot, project number 140332 drawings SK2200-SK2204, SK2212-SK2214 & SK2221, and involves the construction of a new multi-storey office building. The new building occupies almost the entire site with only minor paved areas located on the northern side of the site.

Demolition of the existing structures within the new building footprint will also occur as part of the development.

3. EXISTING STORMWATER DRAINAGE

The site is currently occupied by a series of buildings and an on-grade asphalt car park at the rear.

The laneway on the eastern side of the site is currently drained by a series of short grated strip drains. These grates are connected by an underground box culvert (375mm x 225mm) which connects to a 225mm dia pipe at the northern end of the lane. This pipe connects into the 450mm dia pipe located on the southern side of Pirie Street. There are several downpipes located on the eastern side of the site that discharge directly onto this eastern laneway.

The laneway on the western side of the site contains a 225mm dia pipe that connects to three catch pits. These grates collect runoff from the laneway. The 225mm dia pipe connects to a 300mm dia pipe at the northern end of the lane. This pipe connects into the 450mm dia pipe located on the southern side of Pirie Street. There are two downpipes located on the southern end of the lane that connect directly into the catch pit and there are also three downpipes located on the western side of the site that discharge directly onto this western laneway.

A checker plate drain exists on the northern side of the site, crossing the Pirie Street footpath, and connecting to the kerb and gutter. This drain appears to collect roof runoff from the northern side of the site.

A copy of the Engineering Survey is attached in Appendix A and a copy of Council's stormwater drainage network is attached in Appendix B.

4. COUNCIL REQUIREMENTS

Adelaide City Council's requirements for stormwater drainage are as follows:

- For traditional downpipe drainage, stormwater discharge to the street kerb and gutter is preferred, with a maximum of 15 l/s allowable per outlet. The footpath crossing shall be via a checker plate drain (refer Adelaide City Council standard detail C222). The maximum spacing per outlet is 5m. No stormwater detention is required.
- Where a syphonic downpipe system is proposed, stormwater detention storage is required to reduce the post-development 1 in 100 year flow rate to the pre-development 1 in 20 year flow rate.
- Finished floor levels of new development shall be no lower than the existing surface level at the property boundary.

5. STORMWATER MANAGEMENT METHODOLOGY

Collection of roof drainage will follow the same philosophy as the current building. Runoff will be spread east and west with connection to the existing underground drainage system in both laneways.

Depending on the final roof layout, it is likely that the existing 225mm dia pipe located in the western laneway will need to be extended further south towards the southern edge of the building. New downpipes on this side of the site will be connected to the kerb and gutter via checker plate drains.

New downpipes on the eastern side of the site will be directly connected to the existing box culvert (where possible).

A grated strip drain is proposed to be installed at the base of the ramp to the car parking areas. This is to collect surface runoff and prevent it flowing across the footpath.

A copy of the indicative stormwater drainage layout is attached in Appendix C, noting that the final layout is still to be finalised.

Should you have any further queries, please contact the undersigned.

Yours faithfully

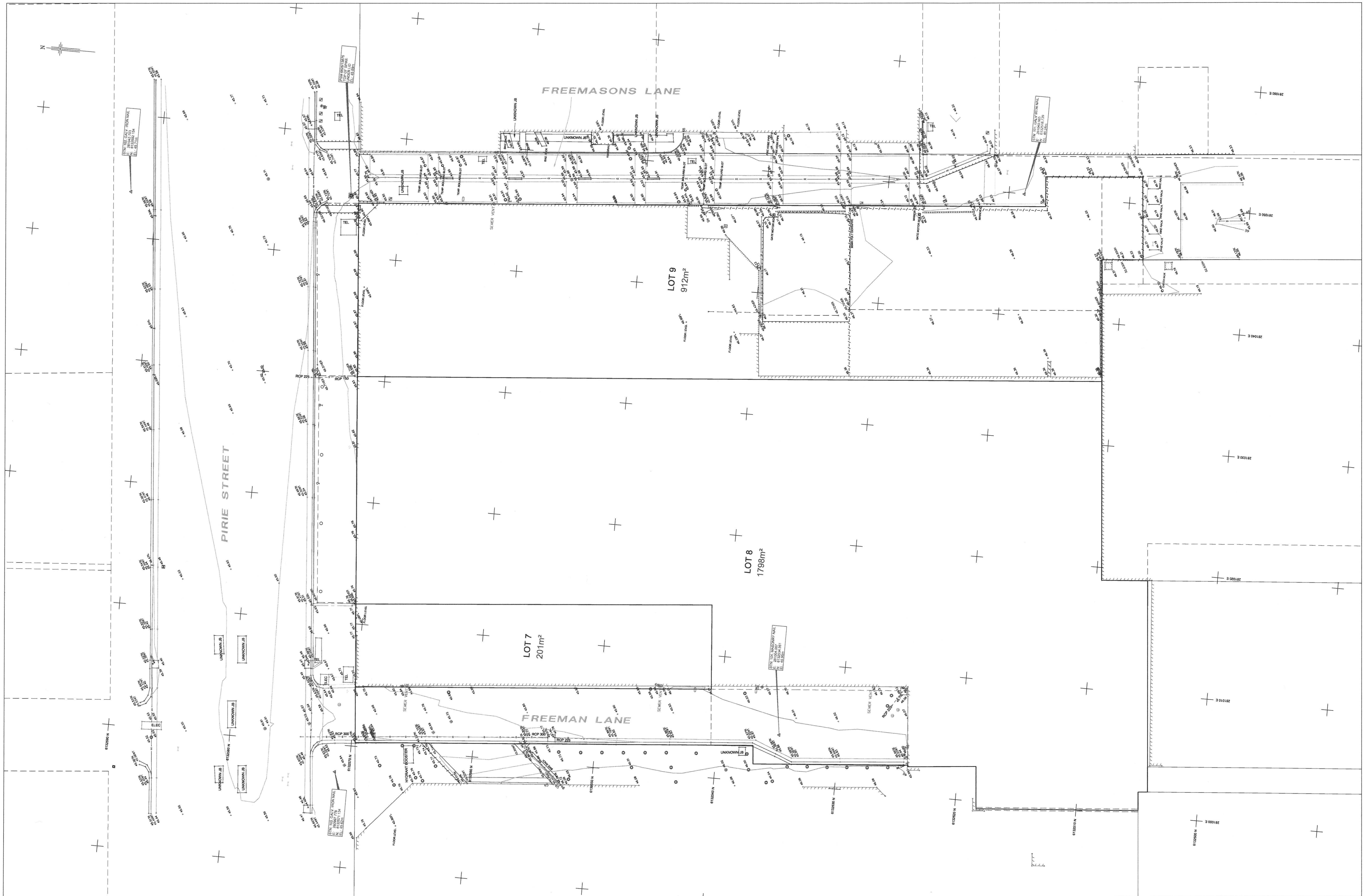
Colin Hill
for
WALLBRIDGE GILBERT AZTEC

Appendix A – Engineering Survey
Appendix B – Existing Council Drainage
Appendix C – Preliminary Stormwater Sketch

CH:nd

APPENDIX A

Engineering Survey



REV	DATE	DESCRIPTION	CALC	FIELD
0	25/08/2017	INITIAL RELEASE	CB	RSW

ADDITIONS, AMENDMENTS AND APPROVALS

IMPORTANT NOTE:
No underground services have been located. All underground services must be identified prior to any excavation or construction work on site.

LEGEND

47.51TK TOP KERB
47.36WT WATER TABLE
45.16FL FLOOR LEVEL
48.12IL INVERT LEVEL
TAP
WATER METER
SPRINKLR / IRRIG VALVE
HYDRANT
DOMESTIC OUTLET
DOWNPIPE
DOMESTIC SUMP
STORMWATER M'HOLE
SEP / GRATING
AIR COND. UNIT
TEL. COMM. PILLAR / PIT
TRAFFIC LIGHT
SIGN / BUS SIGN
LITTER BIN
MAIL BOX / SIGNAL BOX
TICKET MACHINE
ROAD / ELEC. SERVICE
WATER SV / FP
ELEC. / GAS METER
GAS SERVICE
PSM
PEG / TBM
SURVEY MARKS
BOREHOLE
POWER / LIGHT POLE
CABLE MARKER
STOBIE / WOODEN POLE
POST / BOLLARD
SEWER MH / IO / SIP
UNKNOWN POINT / SERVICE
SEWER VENT
EDGE OF VEGETN
ROAD SIGN / HOARD.
TREE / SHRUB
Possible REGULATED / SIGNIFICANT TREE by measurement only (trunk greater than 2.0m circumference). Professional advice from council / arborist required.
SPOON DRAIN
BOTTOM OF BANK
TOP OF BANK
CHANGE OF GRADE
DRAIN
SEWER PIPE UG
TEL. COMM. UG
WATER PIPE UG
BUILDING
WALL
GI BUILDING
CONCRETE
FENCE
GATE

COORDINATE SYSTEM	
VERTICAL:	AHD
HORIZONTAL:	GROUND PLANE ORIENTED TO: MGA 94 ZONE 54
SCALE: GROUND (CSF = 1.0001825)	

ADOPTED STATION & AUTHORITY		
PSM 6628/13875	RL:	45.691 SDB
PSM 6628/13875	E:	281044.970 SDB
	N:	6132574.103 SDB

SDB denotes SA Government survey data base values (Dated: / / 2015)

0 1 2 4 6 8 10 m

1:100

© ALEXANDER & SYMONDS PTY. LTD.

ORIGINAL SHEET SIZE A0

Notes:
Property boundaries shown hereon as solid BLACK lines have been surveyed by Alexander Symonds. Property boundaries DCDB shown hereon as dashed GREY lines have been sourced from the relevant government authority and may be of poor accuracy. DCDB data has been provided for general information only.

CONTOUR INTERVAL:	Maj: 1.0m, Min: 0.2m	
SURVEY:	RSW	23/08/2017
DRAWN:	RSW	25/08/2017
CHECKED:	-	-

Alexander & Symonds Pty Ltd
11 King William Street Kent Town, South Australia 5067
PO Box 1000 Kent Town, SA 5071
ABN 93007 753 988

T (08) 8130 1666
F (08) 8362 0099
W www.alexander.com.au
E adelaide@alexander.com.au

+ Property + Land Development +
+ Construction + Mining +
+ Spatial Information Management +

Alexander Symonds Surveying Consultants

DETAIL AND LEVEL SURVEY
73 - 85 PIRIE STREET
ADELAIDE

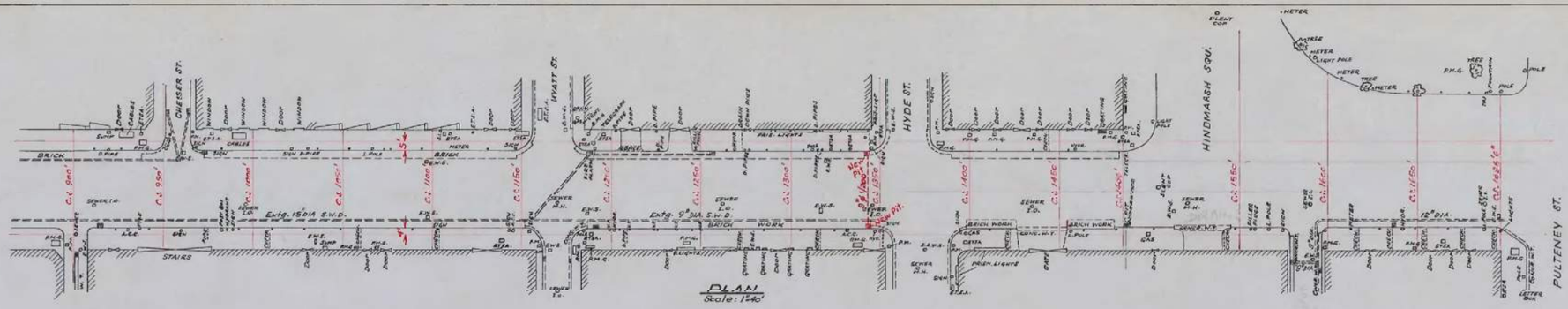
DRAWING No. A097017 Detail

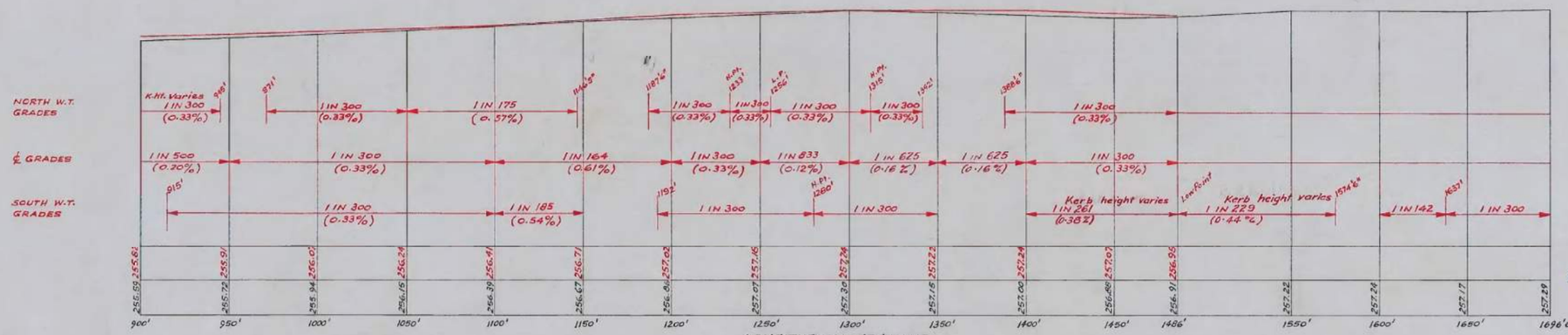
SHEET 1 OF 1

REVISION 0

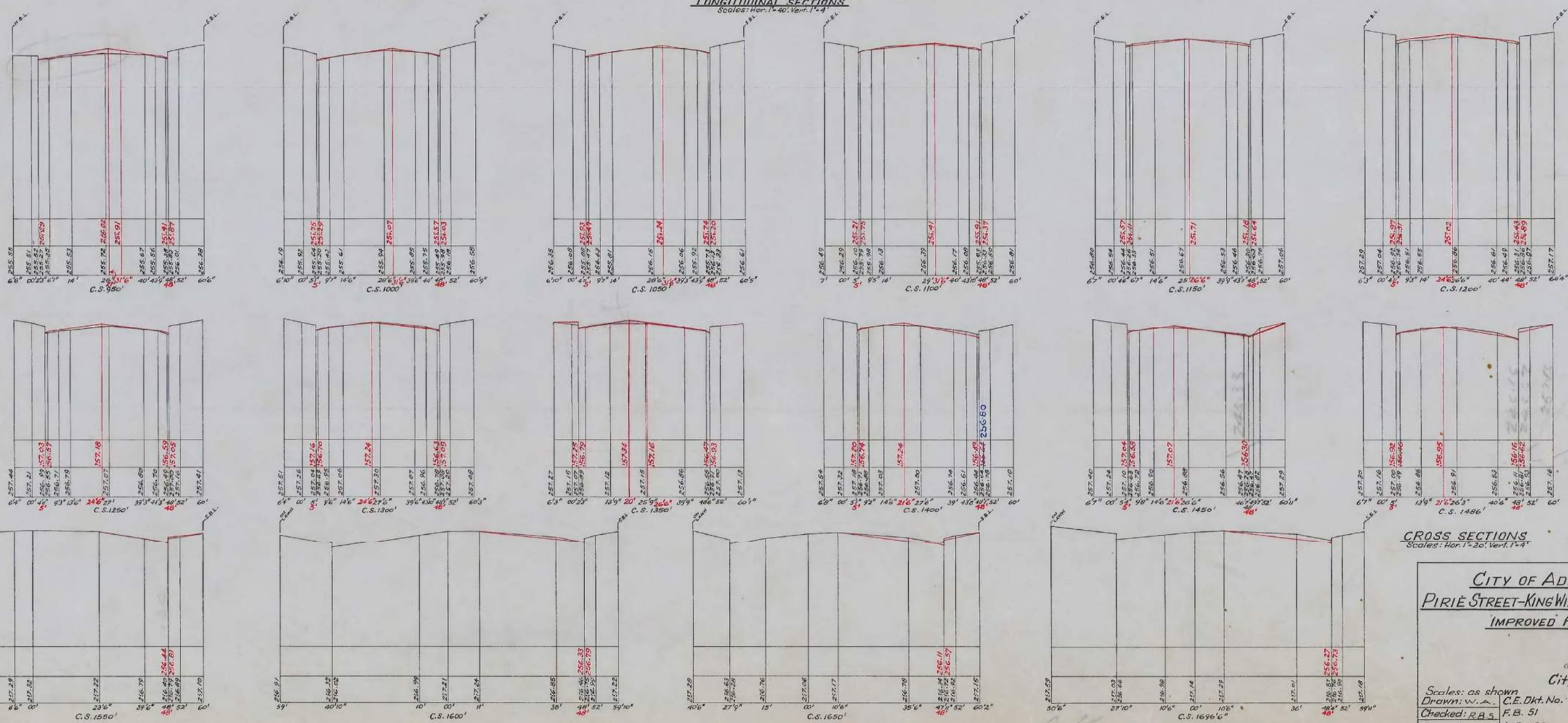
APPENDIX B

Existing Council Drainage





Alterations, shown in blue, as constructed Dec. 1962.



CROSS SECTIONS
Scales: Hor. 1"=20' Vert. 1"=4'

REFER TO BC62120 FOR U/G DRAINAGE
C62132 FOR DRAINAGE WEST OF GAWLER PL.

CITY OF ADELAIDE

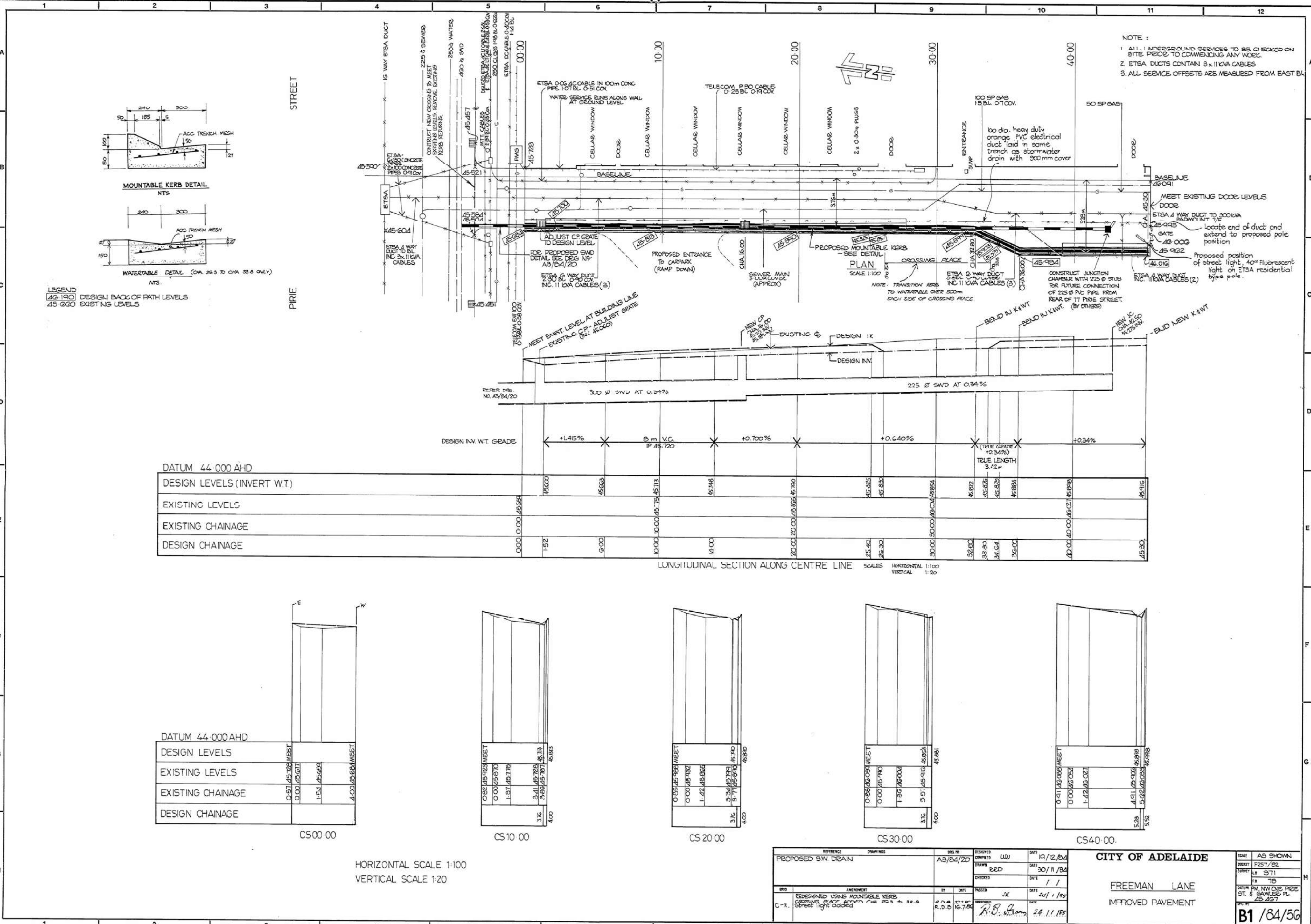
PIRIE STREET – KING WILLIAM TO PULTENEY ST.

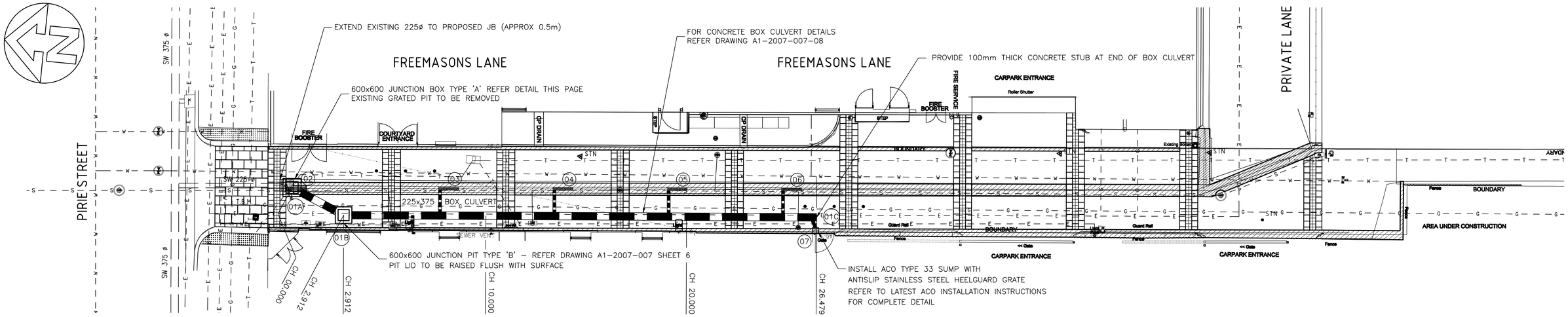
IMPROVED PAVING

City Engineer & Surveyor

Scales: as shown	
Drawn: W.A.	C.E. Dkt. No.
Checked: R.A.S.	F.B. 51
Passed:	L.B. 189

DRG. NO. BC62/17


NOTE :
1. ALL UNDERGROUND SERVICES TO BE CHECKED ON SITE PRIOR TO COMMENCING ANY WORK.
2. ETSA DUCTS CONTAIN 3 x 11 KVA CABLES
3. ALL SERVICE OFFSETS ARE MEASURED FROM EAST BL.
MOUNTABLE KERB DETAIL
NTS
ACC TRENCH MESH
WATERTABLE DETAIL (CHA. 22.3 TO CHA. 33.8 ONLY)
NTS
LEGEND
46·190 DESIGN BACK OF PATH LEVELS
45·660 EXISTING LEVELS
PIRIE
STREET
BASELINE
PROPOSED MOUNTABLE KERB - SEE DETAIL
CROSSING PLACE
PLAN
SCALE 1:100
PROPOSED ENTRANCE TO CARPARK (RAMP DOWN)
SEWER MAIN (APPROX)
ADJUST C.P. GRATE TO DESIGN LEVEL
FOR PROPOSED SWD DETAIL SEE DRG Nº A3/84/20
100 dia. heavy duty orange PVC electrical duct laid in same trench as stormwater drain with 900 mm cover
CONSTRUCT JUNCTION CHAMBER WITH 225 Ø STUBS FOR FUTURE CONNECTION OF 225 Ø PVC PIPE FROM REAR OF 77 PIRIE STREET. (BY OTHERS)
Locate end of duct and extend to proposed pole position
Proposed position of street light, 40w Fluorescent light on ETSA residential type pole.
MEET EXISTING DOOR LEVELS
NOTE : TRANSITION KERB TO WATERTABLE OVER 300mm EACH SIDE OF CROSSING PLACE.
MEET EXIST. LEVEL AT BUILDING LINE
EXISTING C.P. - ADJUST GRATE
DESIGN INV.
300 Ø SWD AT 0.34%
225 Ø SWD AT 0.34%
DESIGN INV. W.T. GRADE
+1.415%
8 m V.C. IP 45.720
+0.700%
+0.640%
+0.34%
TRUE LENGTH 3.42m
DATUM 44·000 AHD
DESIGN LEVELS (INVERT W.T.)
EXISTING LEVELS
EXISTING CHAINAGE
DESIGN CHAINAGE
LONGITUDINAL SECTION ALONG CENTRE LINE
SCALES HORIZONTAL 1:100 VERTICAL 1:20
DATUM 44·000 AHD
DESIGN LEVELS
EXISTING LEVELS
EXISTING CHAINAGE
DESIGN CHAINAGE
CS00·00
CS10·00
CS20·00
CS30·00
CS40·00
HORIZONTAL SCALE 1:100
VERTICAL SCALE 1:20
PROPOSED S.W. DRAIN
A3/84/20
REDESIGNED USING MOUNTABLE KERB
Street light added
CITY OF ADELAIDE
FREEMAN LANE
IMPROVED PAVEMENT
AS SHOWN
F257/82
B1 /84/56



PLAN

0 1 2 3 4 5

SCALE 1:100

STORMWATER LEGEND

- PROPOSED 150ø STORMWATER CONNECTION
- PROPOSED 375x225 REINFORCED CONCTRETE BOX CULVERT
- PROPOSED 600mm WIDE SPOON DRAIN
- PROPERTY CONNECTION TO ACC #C231-01
- ACO KS100 POLYMER CHANNELL WITH ANTISLIP HEELGUARD S GRATE (CLASS 'C' LOADING)
- ACO TYPE 33 SUMP (450 DEPTH) WITH STAINLESS STEEL ANTISLIP HEELGUARD GRATE

DRAIN SCHEDULE

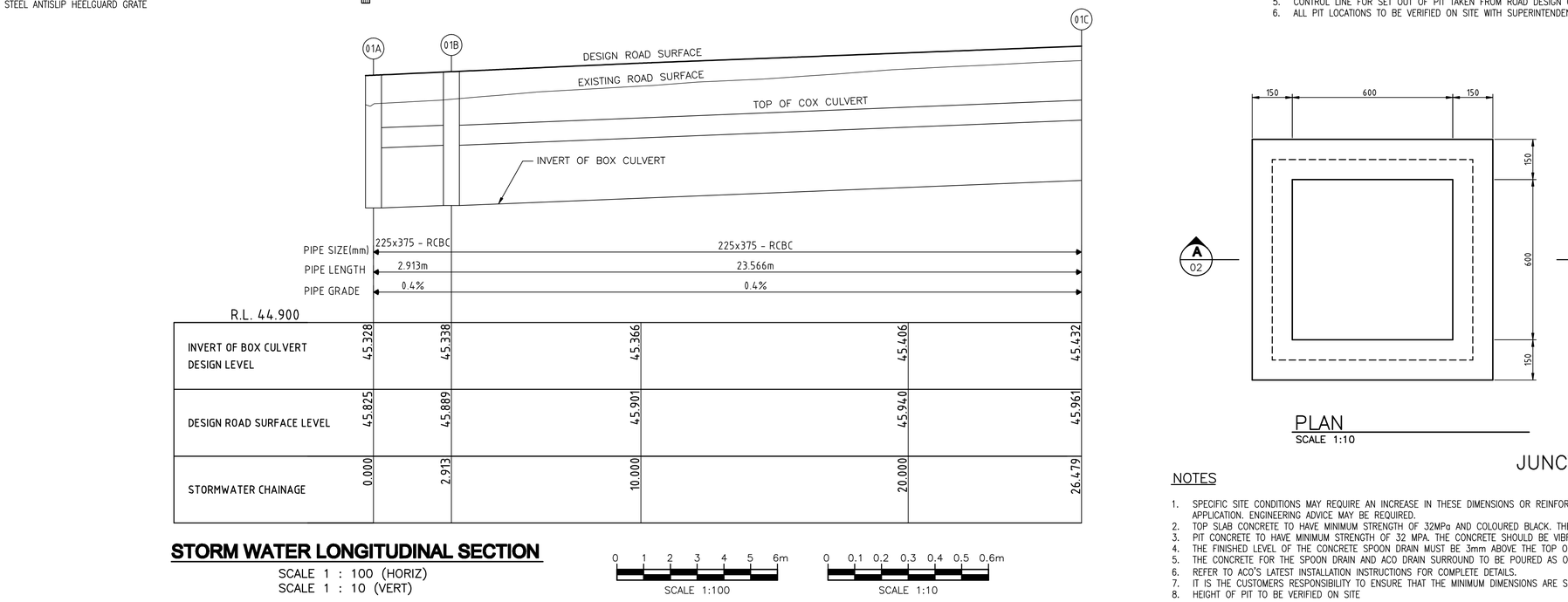
SECTION	SIZE (MM)	CLASS	GRADE %	LENGTH (M)
01A - 01B	375x225 RCBC	90KN	0.4	2.913
01C - 01C	375x225 RCBC	90KN	0.4	23.566

DRAIN CONNECTION SCHEDULE

NO	DESCRIPTION	CHAINAGE	DESIGN SURFACE LEVEL	DRAIN SIZE (mm)	INVERT LEVEL
01A	JUNCTION BOX TYPE 'A'	CHAINAGE 6.604 OFFSET 0.039 EAST	45.823	375x225 RCBC	45.328
01B	JUNCTION BOX TYPE 'B'	CHAINAGE 9.477 OFFSET 1.325 WEST	45.889	375x225 RCBC	45.338
01C	END STUB	CHAINAGE 33.043 OFFSET 1.325 WEST	45.961	375x225 RCBC	45.432
02	ACO 100 K9 CLASS C	CHAINAGE 6.604 OFFSET 00	45.815*	150 FRCP	REFER NOTE 03
03	ACO 100 K9 CLASS C	CHAINAGE 14.204 OFFSET 00	45.858*	150 FRCP	REFER NOTE 03
04	ACO 100 K9 CLASS C	CHAINAGE 19.904 OFFSET 00	45.881*	150 FRCP	REFER NOTE 03
05	ACO 100 K9 CLASS C	CHAINAGE 25.599 OFFSET 00	45.903*	150 FRCP	REFER NOTE 03
06	ACO 100 K9 CLASS C	CHAINAGE 31.294 OFFSET 00	45.925*	150 FRCP	REFER NOTE 03
07	ACO TYPE 33 CLASS C	CHAINAGE 32.986 OFFSET 2.038 WEST	45.973	150 FRCP	45.523

SETOUT NOTES

1. DRAIN LENGTHS ARE MEASURED FROM CENTRE OF PIT FOR PIT TYPE 'A' AND 'B'
2. ACO SETOUT REFERENCE POINT IS LOCATED IN MIDDLE OF GRATE AT THE DOWNSTREAM END – REFER DRAWING A1-2007-007-08 'TYPICAL PAVING LAYOUT DETAIL (PLAN VIEW)' FOR LOCATION
3. SETOUT LEVEL FOR ACO PIT REFERENCED FROM TOP OF GRATE (DESIGN SURFACE LEVEL)
4. * – DENOTES SETOUT REFERENCE LEVEL FOR SETOUT OF ACO PIT
5. CONTROL LINE FOR SET OUT OF PIT TAKEN FROM ROAD DESIGN CONTROL LINE
6. ALL PIT LOCATIONS TO BE VERIFIED ON SITE WITH SUPERINTENDENT

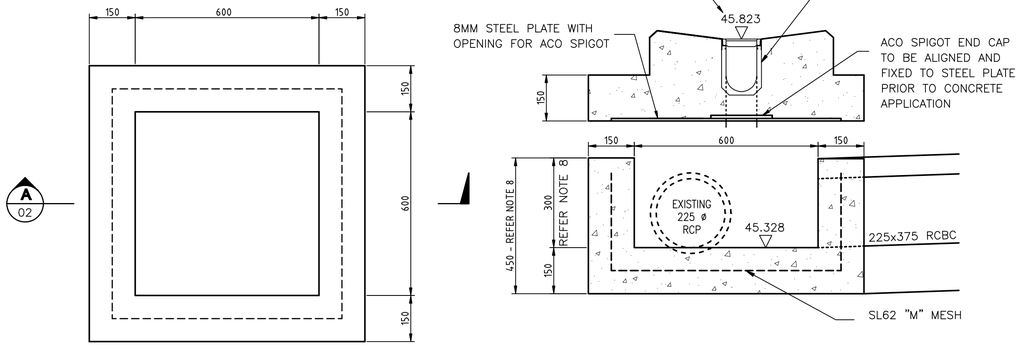


STORM WATER LONGITUDINAL SECTION

SCALE 1 : 100 (HORIZ)
SCALE 1 : 10 (VERT)

0 1 2 3 4 5 6m
SCALE 1:100

0 0.1 0.2 0.3 0.4 0.5 0.6m
SCALE 1:10



PLAN

SCALE 1:10

SECTION

SCALE 1:10

A 02

JUNCTION BOX TYPE A

NOTES

1. SPECIFIC SITE CONDITIONS MAY REQUIRE AN INCREASE IN THESE DIMENSIONS OR REINFORCEMENT. IT IS THE CUSTOMER'S RESPONSIBILITY TO ENSURE THE CONCRETE ENCASEMENT IS DESIGNED FOR THE APPLICATION. ENGINEERING ADVICE MAY BE REQUIRED.
2. TOP SLAB CONCRETE TO HAVE MINIMUM STRENGTH OF 32MPa AND COLOURED BLACK. THE CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
3. PIT CONCRETE TO HAVE MINIMUM STRENGTH OF 32 MPA. THE CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
4. THE FINISHED LEVEL OF THE CONCRETE SPOON DRAIN MUST BE 3mm ABOVE THE TOP OF THE CHANNEL EDGE.
5. THE CONCRETE FOR THE SPOON DRAIN AND ACO DRAIN SURROUND TO BE POURED AS ONE MASS FOR STRENGTH.
6. REFER TO ACO'S LATEST INSTALLATION INSTRUCTIONS FOR COMPLETE DETAILS.
7. IT IS THE CUSTOMERS RESPONSIBILITY TO ENSURE THAT THE MINIMUM DIMENSIONS ARE SUITABLE FOR THE GROUND CONDITIONS.
8. HEIGHT OF PIT TO BE VERIFIED ON SITE

DESIGNED	GY	DATE 04/2007
DRAWN	GY	DATE 04/2007
CHECKED	DP	DATE 03/2007
QUALITY ASSURED		DATE

City projects

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.

The Contractor and his Sub-contractors shall verify all dimensions, lines, levels and existing service locations, prior to commencement on site, preparation of detail/shop drawings, and fabrication of construction/building components.

ALL UNDERGROUND SERVICES TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF WORK.

EXISTING UNDERGROUND SERVICE LEGEND

- ETSA
- GAS
- SEWER
- TELSTRA
- WATER
- STORMWATER

TENDER COPY - CERTIFICATION

"I, DAWYD PINTER (Architect/Engineer's Name)
being a certificated/registered Architect/Engineer and duly authorised representative of ADELAIDE CITY COUNCIL (Consulting Firm or Company)
hereby:
- certify the information in this drawing is an accurate "design" representation of the works.
- certify that the "design" is in accordance with the brief and all relevant standards.
- accept responsibility for the "design" information contained in this drawing.
- acknowledge the "design" information contained in this drawing may be relied on by Council and others.

Certification for Stage ..... by ..... (Signature) on ..... (Date)"
for: ADELAIDE CITY COUNCIL (Company Name)

FREEMASONS LANE

OFF PIRIE STREET

UPGRADE AND SHARED USE ZONE

STORMWATER DETAILS

ACC USE - SIGHTED FOR CONSTRUCTION

CITY DEVELOPMENT | CITY PROJECTS | PROJECT MANAGER

ADELAIDE CITY COUNCIL

ACC FILE REF.	2007/00125
SCALE	AS SHOWN
SHEET REF.	2 of 9
DRAWING SET NUMBER	A1-2007-007
SHEET	02

APPENDIX C

Preliminary Stormwater Sketch

PIRIE STREET
GAWLER PLACE
FREEMANS LANE
FREEMASONS LANE
Existing 450mm dia RCP
Existing 300mm dia RCP
Existing 300mm dia RCP
Existing 375 x 225 RCBC
Checker plate drain to kerb and gutter. Connect to new downpipe (typical)
Connect new downpipe to existing RCBC (typical)
New 225mm dia RCP
Grated strip drain at base of ramp
LOBBY
RETAIL 330 m²
POTENTIAL OPENINGS SUBJECT TO TENANT DEMAND
EOT 449 m²
LOADING 146 m²
CARPARK 291 m²
TRANSFORMER 71 m²
WASTE 80 m²
DIESEL TANK

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

REV.	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	15.09.17	PRELIMINARY ISSUE			
B	16.11.17	PRELIMINARY ISSUE	CH	CH	

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

WGA
WALLBRIDGE GILBERT AZTEC

60 Wyatt Street, Adelaide
South Australia 5000
Telephone 08 8223 7433
Email adelaide@wga.com.au

83 PIRIE STREET

CIVIL WORKS PLAN

A1

DRAWING NUMBER: ADL171090 C01 Rev. B

Design: C.HILL Drawn: CJH

Adelaide Development Company

83 Pirie St Development

Waste Management Plan

October

Prepared by Rawtec Pty Ltd

ABN 59 127 176 569
PO Box 1159,
Glenelg South SA 5045
Ph: +61 8 8294 5571
www.rawtec.com.au

Document verification

Date	Version	Title	Prepared by	Approved by
30/10/2017	Draft	ADC 83 Pirie St Waste Management Plan	Jarvis Webb	Mark Rawson
03/11/2017	Final	ADC 83 Pirie St Waste Management Plan	Jarvis Webb	Mark Rawson
15/11/2017	Final Amended	ADC 83 Pirie St Waste Management Plan	Jarvis Webb	Mark Rawson

Contents

List of Tables

List of Figures

1. Introduction

1.1. About This WMP and the Proposed Development

This document provides a waste management plan (WMP), for the proposed development identified in Table 1 below. This WMP will be included with building plans for the development lodged with the Development Assessment Commission (DAC) to obtain Development Approval. The WMP outlines the proposed waste management system (WMS) for the development at high-level, which demonstrate that successful management of waste can be achieved at the site.

Table 1: Proposed development's details

Site Location	83 Pirie St, Adelaide CBD
Development Project	83 Pirie St Development
Client	Adelaide Development Company
Project Architect	Woods Bagot
Traffic Consultant	MFY

1.2. Purpose and Scope Of WMP

This WMP has been developed for the planning stage of this development. It provides a preliminary design for the WMS for this site and is intended to demonstrate that successful management of waste can be achieved at the site. To support this WMP, the Client will need to provide the additional documentation or details on their plans as listed in Section 1.3 below.

The WMP has been prepared with the policy and requirements for waste management (identified in Appendix 1) in conjunction with the Client, Project Architects and Traffic Consultant, who have indicated the intended site uses of the development, occupancy data, and requirements for how waste should be managed. If future land uses and waste management arrangements for the development are altered, the WMP may need to be updated.

The suggested arrangements in this WMP are preliminary and reflect one possible configuration for the waste management system at this site. These arrangements could evolve and be refined (during detailed building design) before the construction takes place. This may affect the WMP for the site, which should be updated accordingly.

1.3. Required Supporting Documentation and Design Details

The following information will need to be provided in support of this WMP:

1. Building plans confirming:
    - The size and layout of the waste rooms.
    - Transfer pathways for safe and efficient movement of bins/waste between waste rooms and locations for collection.
2. Traffic Consultant to confirm:
    - Parking, loading, unloading and manoeuvring for collection vehicles servicing the development.

1.4. What This WMP Contains

Table 2 below outlines what is contained in the waste management plan (WMP)

Table 2: What this WMP contains

Section 2 – Description of Development	Provides details of the development relevant to the WMP preparation and indicates the waste and recycling collection services proposed for the development.
Section 3 – Outcomes from the Analysis on Waste and Recycling Requirements at the Development	Provides estimates of the waste and recycling volumes likely to be generated at the site which will require storage, collection and disposal. This includes the recommended size and layout of the development waste and recycling storage locations.
Section 4 – Proposed Waste Management System (WMS)	Provides an overview of the proposed WMS for the development, including the main elements and important design requirements, and how these systems should operate. The WMS outlines how waste would be stored, transferred and collected at the site.
Section 5 – Collection Vehicle Requirements	Includes relevant information on collection requirements, including number of collections per week and provision for access and maneuverability for waste collection vehicles.
Appendix 1 – Policy, Design and Operational Waste Management Requirements	This Appendix identifies the policy, design, and/or operational requirements for waste management that have been used in relation to the development of the WMP.
Appendix 2 – Additional Waste Management Design Considerations	This Appendix provides better practice design advice and other waste management design considerations for the development, based on the South Australia Better Practice Waste Management Guide for Residential and Mixed Use Developments and other applicable documents.

2. Description of the Development

2.1. Land Uses and Occupancy Data

The Client has provided Rawtec with a description of the development and plans showing the proposed layout of the site, buildings and land uses. A breakdown of the land use and tenancy assumptions used for estimating waste and recycling volumes for the development, can be found in Table 3 below.

Table 3: Land use and occupancy overview

Development Land Use	*Land Use Waste and Recycling Generating Rate*[1]	m2
Offices*	*Offices or Consulting Rooms*	30,441
Retail	*Retail (Greater then 100m2)*	334

**Includes roof Multipurpose and Meeting land use areas.*

[1] Waste and recycling generation rate land use categories are based on the SA Better Practice Guide – Waste Management in Residential or Mixed Use Developments (Green Industries SA, 2014).

2.2. Recommended Waste and Recycling Services

To achieve effective waste and recycling management at the site, Table 4 below outlines the recommended waste and recycling services that should be collected from the development as outlined in the *SA Better Practice Guide – Waste Management in Residential or Mixed Use Developments* (Green Industries SA, 2014).

Table 4: Proposed waste recycling services for the development per identified land uses[2]

	Required/Desired Waste and Recycling Collection Services		
Service type	***Development Land Uses***	***Offices***	***Retail***
	Wast/Recycling Streams		
Routine collection (e.g. rear-lift collection)	**General Waste**	**X**	**X**
	Co-mingled Recycling	**X**	**X**
	Organics (Food) Recycling	**X**	**X**
	Cardboard Recycling	NS	**X**
	Paper Recycling	**X**	NS
	Confidential Paper Recycling	**X**	NS
***On-call collection** (pick-up by contractor)/ **External drop-off** (by building services)	**Hard Waste**	**X**	**X**
	E-waste	**X**	**X**

X	= Required/Desired
NS	= Not serviced as not required/desired

The following tenancy managed waste and recycling streams are not included in this WMP:

- E-waste (batteries and printer cartridges, lighting etc.) – These waste streams would be temporarily stored within land uses (e.g. offices) before being dropped off at an appropriate external location (e.g. local recycling depot or office supply store) or collected by an appropriate collection company. Some items may be managed through an external collection contractor (e.g. for carpark lighting replacement).
- Hard waste (e.g. during tenancy fit out) – hard waste would be temporarily stored within tenancies, and be managed via a pull-in/pull-out collection service during retrofitting or maintenance activities. This would be arranged by the tenants in conjunction with building services, to ensure that collection via the on-property loading area, is undertaken at an appropriate time.

[2] 'X' indicates required/desired as per The SA Better Practice Guide – Waste Management in Residential or Mixed Use Developments (Green Industries SA, 2014).

3. Outcomes from the Analysis on Waste and Recycling Requirements at the Development

3.1. Estimated Waste and Recycling Volumes By Land Use

Table 5 details the estimated waste and recycling volumes by land use for the development.

Table 5: Estimated waste and recycling volumes by land use[3]

Estimated Waste Generation Volumes (Litres Per Week) by Land Use & Waste Stream (All Land Uses)				
Development Land Use		***Offices***	***Retail***	**Totals (Litres Per Week)**
WRGR Classification		*Offices or Consulting Rooms*	*Retail (Greater than 100m2)*	
Waste Stream	**General Waste**	46,000	1,500	**47,500**
	Co-mingled Recycling	19,800	400	**20,200**
	Organics (Food) Recycling	7,700	80	**7,800**
	Cardboard Recycling	NE	1,100	**1,100**
	Paper Recycling	23,500	NE	**23,500**
	Confidential Paper Recycling	2,800	NE	**2,800**
Total Site Volume (Litres per Week)		**99,800**	**3,100**	**102,900**

**Note: Totals have been rounded to better reflect estimates and may not equate*

NE = Not Estimated as Not Required

[3] Waste generation metrics found in the South Australian Better Guide Practice Guide – Waste Management in Residential or Mixed Use Developments (Green Industries SA (previously Zero Waste SA), 2014) and/or Waste and recycling metrics developed by Rawtec, which are based on industry knowledge and experience.

3.2. Waste and Recycling Stream Volumes, Bin Sizes and Collection Details

Table 6 below identifies the:

- estimated waste and recycling volumes generated at the development;
- nominated bin sizes for each waste stream;
- proposed collection frequency;
- number of bins required;
- proposed waste collection service provider; and
- the location where bins are presented for collection.

Table 6: Analysis of waste and recycling volumes, bins and collection details

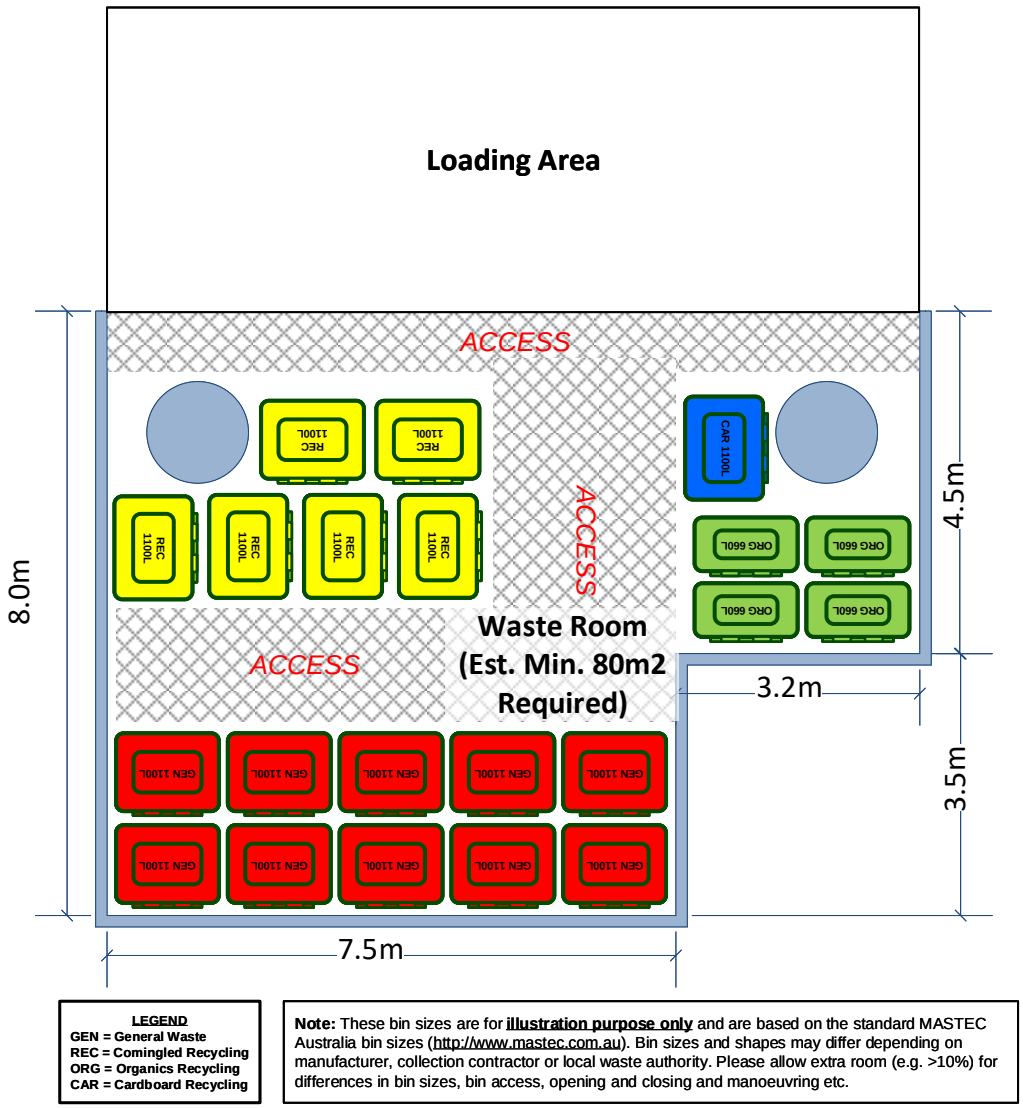
Waste stream	Estimated Waste Volume (Litres Per Week)*	Proposed Services				
		Bin Size *(Litres)*	**Collection Frequency**	**Est. no. of bins required**	**Proposed waste collection service provider**	**Proposed location where bins/ waste is presented for collection**
General Waste	47,500	*1100*	5 x per week	10	Commercial Waste and Recycling Collection Contractor	Within Waste Room Adjacent to Loading Area
Co-mingled Recycling	20,200	*1100*	3 x per week	6		
Organics (Food) Recycling	7,800	*660*	3 x per week	4		
Cardboard Recycling	1,100	*1100*	2 x per week	1		
Paper Recycling	23,500	*240*	2 x per week	32 (1-2 Per Tenancy)		Within Each Office Tenancy
Confidential Paper Recycling	2,800	*240*	2 x per fortnight	23 (1-2 Per Tenancy)		
Totals	**102,900**	**-**	**-**	**-**	-	-

Note: Totals have been rounded to better reflect estimation of the volumes and may not equate

3.3. Recommended Waste Storage Area

An indicative drawing of the development's waste storage room containing the required number of bins, including one example of bin configuration, can be found in Figure 1 below.

Figure 1: Preliminary drawing showing the estimated required size and layout of the ground floor waste room storage and no. bins



4. Proposed Waste Management System

4.1. Overview of the WMS

To effectively manage the waste generated at the site, an appropriate Waste Management System (WMS) is required. The WMS consists of:

- User storage of waste
- Waste transfer to common disposal area
- Aggregation and storage of this waste
- Waste/bin collection.

The tables below provide an outline of the waste management system for each building. This is based on the waste management steps recommended in the *South Australian Better Practice Guide – Waste Management in Residential or Mixed Use Developments* (Green Industries SA, 2014).

4.2. Development Waste Management System

	WMS step	WMS Notes
Storage, transfer pathways and collection details for: • general waste • co-mingled recycling • organics (food) recycling • cardboard recycling • paper recycling • confidential paper recycling	**1 – User disposal and storage**	• Each tenancy would have its own bin station to store waste and recyclables (e.g. 60-120L bins). • Office tenancies would each have a 240L paper recycling bin and a 240L confidential paper recycling bin, which would be managed via pull-in/pull-out paper recycling collection service.
	2 – Transfer pathway to common disposal area	• Staff/cleaners would manage waste and recyclables within each tenancy, and transfer material from the tenancies to the bin storage room when required.
	3 – Aggregation and storage	• Waste and recyclables would be aggregated and stored within the larger bins in the waste room. • See Appendix 3 for recommendations on pathways (width, slope etc.) from storage to collection point.
	4 – Waste Collection	• Collection contractors would park their vehicles in the on-property loading area. • Waste and recycling bins would be collected (and returned) from the bin storage room (see Section 5 for details on collection vehicle access requirements). • Collection vehicle swept paths and parking maneuverers in the loading area accessed down Franklin St (private lane) are to be confirmed by the Traffic Consultant.

5. Collection Vehicle Requirements

5.1. Collection Vehicle Requirements

The collection vehicles expected for waste collection at this development would generally be:

- Rear-lift trucks – for collection of routine waste, comingled recycling;
- Pan-tech or flat-bed trucks – for collection of at-call waste streams, if required.

Examples of the likely truck dimensions are provided in the below to assist the Traffic Engineer/Consultant in ensuring that the loading area can accommodate the waste and recycling collection vehicles, and that vehicles can enter and exit the area safely. In addition to the truck length, the parking area will need to accommodate at least 2m behind collection vehicles for waste bin loading for the rear-lift trucks.

Collection vehicle dimensions and operating requirements vary between waste collection contractors. The client would be required to ensure that the collection vehicle used by the waste collection contractor servicing the development is able to accommodate for the on-street parking and other requirements before collection can begin.

Table 7: Likely dimensions and turning circles of waste collection vehicles that would be required to access the site[4]

Likely minimum dimensions and turning circles of waste collection trucks	
Vehicle Type	Rear-lift waste trucks (to collect bins up to 1100L)
Height	4.5m
Width	2.5m
Length	8.8m
Space at the rear to load bins	2m
Vehicle height in operation	3.8m (min)
Vehicle turning circle	18-25m

5.2. Estimated Number of Waste Vehicle Movements Per Week

We have estimated that there would be 16-17 collection vehicle movements per week. This is based on the estimated waste and recycling volumes and service frequency outlined by council and described above. These estimated vehicle movements do not include an on-call of infrequent services such as hard waste/E-waste collection.

[4] 4 Vehicle length and width dimensions are based on Australian MRV standard specifications - AS 2890.2-2002. Vehicle heights are based on common collection vehicles currently operating in the SA market. However, it should be noted that waste and recycling collection vehicles are custom designed and may differ from these specifications.

Appendix 1 – Policy, Design and Operational Waste Management Requirements

This WMP has been prepared with the following policy, design, and/or operational requirements for waste management in mind:

- *The South Australian Environment Protection (Waste to Resources) Policy 2010 (W2REPP) (Government of South Australia, 2011):*
    - This Policy requires that waste is subject to resource recovery processes, which can include source separation, before disposal to landfill.
- *South Australian Better Practice Guide – Waste Management in Residential or Mixed Use Developments (Green Industries SA (previously Zero Waste SA), 2014):*
    - Identifies need for areas to store waste and recyclable materials, appropriate to the size and type of development, screened from public, which minimises disturbance to residents and provides for service vehicle access.
    - Provides guidance on design of waste management systems for medium to high density residential and mixed use developments.
- *Adelaide (City) Development Plan (Department of Planning, Transport & Infrastructure, 2017).*
    - Objectives and principles of development control regarding waste management, specifically:
        - OBJ 28: Development which supports high local environmental quality, promotes waste minimisation, re-use and recycling, encourages waste water, grey water and stormwater re-use and does not generate unacceptable levels of air, liquid or solid pollution.
        - PDC 101: A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new development.
        - PDC 102: A dedicated area for the collection and sorting of construction waste and the recycling of building materials during construction as appropriate to the size and nature of the development should be provided and screened from public view.
        - PDC 103: 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.

The estimation of waste and recycling volumes contained in this waste management plan, is based on:

- The proposed land use data;
- Client and regulatory expected services for different development land uses; and
- Waste generation metrics found in:
    - The *South Australian Better Guide Practice Guide – Waste Management in Residential or Mixed Use Developments* (Green Industries SA (previously Zero Waste SA), 2014)
    - Waste and recycling metrics developed by Rawtec, which are based on industry knowledge and experience.

Appendix 2 – Additional Waste Management Design Advice

The below table provides design advice and other considerations based on the *South Australia Better Practice Waste Management Guide for Residential and Mixed Use Developments*. For further recommendations and information from this guide, please visit the Green Industries SA website.

Area	Recommendation/ Consideration
Bin transfer routes	• The Better Practice Guide recommends transfer routes be free of obstructions and steps, at least 1.25m wide and a slope of no more than 1:10. • These should also not pass through living areas or dwellings.

Bin washing	• It is recommended that a bin wash area be installed and that it:
	  ◦ Is sloped to a drain leading to the sewer;
	  ◦ Has an installed tap with mains supply and a hose nearby;
	  ◦ Is at least 2m x 2m; and
	  ◦ Is slip resistant to prevent slippage during washing.
	• Note that line marking and bunding is not required around the bin wash area, and bins can be stored on top of the bin wash area in the waste room. During washing, other bins can be placed outside the waste collection room while bins are washed in the waste room.
	• Please note that alternatively, it is possible for the bin wash area to be installed outside the waste room. It may also be possible for the waste contractor to be contracted to provide this service (either on-site or off-site).

ekistics

16 February 2018 REF No.: 00486-004

Department of Planning, Transport and Infrastructure

Strategic Development Assessment – Planning and Development

Level 5, 50 Flinders Street

ADELAIDE SA 5000

Attention: Karl Woehle

By Email: *Karl.Woehle@sa.gov.au*

Dear Karl

RESPONSE TO REFERRAL AGENCY COMMENTS AND PLANNING QUERIES – APPLICATION 202/A075/17 – 21 STOREY OFFICE BUILDING AND GROUND FLOOR RETAIL, 73-79 PIRIE STREET, ADELAIDE

Thank you for the opportunity to respond to the agency referral comments. We provide a response to these below.

ODASA Referral

Correspondence from ODASA dated 24 January 2018 is overwhelmingly positive and confirms support for many of the key project features including:

- The quality and clarity of the presentation and the appropriate emphasis on context and design strategy;
- The site configuration (including setbacks) and resulting benefits to the public realm including integrated seating and landscaping;
- The office entry forecourt beneath the metal fabric screen and the glazed retail tenancy frontage to Pirie Street and Freemasons Lane;
- The access strategy which separates car park and pedestrian access on Freemasons Lane and service vehicles to Freemans Lane;
- The 3.8 metre slab height to the third car park level to facilitate adaptive reuse;
- The level 3 landscaped terrace to Pirie Street;
- The mix of activities and landscaping edge offered in the rooftop level;
- The building height and mass; and
- Response to the streetscape in terms of scale, texture and materiality.

We acknowledge that ODASA have a philosophical objection to all above ground parking in the city. We have comprehensively addressed this issue within the Planning Report (page 26) and outlined the various considerations taken in electing to incorporate above ground parking in lieu of basement parking. We also clarified why commercial sleeving is not proposed, namely that early design investigations identified that these 'sleeved' spaces were awkward in terms of their configuration and accessibility and were unlikely to be successfully tenanted.

In considering the external design solution ultimately presented for the car parking levels, that being a highly textured, solid façade element in the form of a non-uniform masonry brick screen, direction was taken from the following Zone Principle.

Zone

PDC 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.

Notwithstanding our inclusion of above ground car parking, we have successfully addressed PDC 32 and importantly we note that the ODASA referral states their support for the masonry brick screening that *'seeks to present a highly textures, solid façade element'* as well as the Level 3 landscaping supported, greening and articulation between podium and tower elements.

Accordingly, we stand by the design as presented.

Council Referral

The Applicant initiated communication with Council early in the application process and have sought to respond to the primary issues raised in relation to traffic and public realm. We note that Council offer support for the proposed configuration of vehicle movement within the adjacent lanes and vehicle access to the site.

We disagree with any suggestion that a Reserve Matter is required to address pedestrian safety issues, as they have been already addressed. In order to clarify the proposed arrangements, MFY have prepared a response (***Appendix 1***) for your consideration. In particular, we clarify that the proposal does not seek or require change to the current public access arrangements within the lanes, albeit vehicles will now be able to traverse the private land between the laneways.

Woods Bagot have also prepared additional plans (***Appendix 2***) to graphically illustrate that:

- The existing pedestrian movements and shared use zone along Freemasons Lane is unchanged; and
- The proposal offers an additional pedestrian route along the eastern boundary of the subject site in the form of a traditional 'footpath'.

The necessity for any Reserve Matter is, in our view, unwarranted. Final civil design detail can be resolved for the site's interface with Freemasons Lane and Flinders Link as it is managed for all developments abutting public roads, via Section 221 of the *Local Government Act, 1999*.

State Heritage

We note the support of the State Heritage Unit for the proposal and in particular, their commentary in relation to the façade treatment across the upper level carpark as extracted below:

> *The proposed permeability and material expression of the carpark screening provides visual interest and fine grain to compensate for the lack of activation and fenestration at these levels*

However, we are surprised by the unusual, onerous and somewhat duplicated conditions sought to be imposed which requires the Applicant to submit, in addition to a Construction Management Plan (which is understood and accepted), a dilapidation survey and also to monitor vibration levels to a German Standard during site works, especially since this proposal has no subterranean levels.

The Construction Management Plan will incorporate measures to manage the construction interface with adjoining sites and as such the necessity for all three of the proposed heritage conditions is questioned.

Thankyou for the opportunity to respond to these matters. We trust that the information provided is sufficient to enable finalisation of your planning assessment and presentation of the application to the next available State Commission Assessment Panel.

Please do not hesitate to contact the undersigned on (08) 7231 0286 should you require any additional information or should you wish to discuss any aspect of the proposed development.

Yours Sincerely

Rebecca Thomas
Senior Associate

Woehle, Karl (DPTI)

From: Rebecca Thomas <rthomas@ekistics.com.au>
Sent: Friday, 16 February 2018 12:49 PM
To: Woehle, Karl (DPTI)
Subject: Pirie St

Hi Karl

In response to a few queries you have raised with me in relation to this application, I advise as follows:

- Site Contamination
  - The client has not undertaken any preliminary site investigations at this stage

- Crime Prevention
  - The office building lobby and access to upper levels will be secured after hours with swipe access for approved persons only
  - The carpark will also be available for approved pass holders only during office hours and secured afterhours with a security door
  - Informal surveillance around the building and along the lanes will be enhanced through the inclusion of the retail tenancy, building entrance lobby. EOT facilities and additional glazing (i.e. within lift lobby to Freemans Lane) and various entry/service points on all sides
  - The inclusion of public seating on Freemasons Lane will also enhance casual surveillance through the congregation of people in and around the seating and landscaping features
  - Good sightlines are provided around the entrance lobby and down the laneways from within the public realm
  - The design has avoided the creation of any entrapment spots around the building
  - Car park floor plates have been designed as clear open plan spaces with long continuous wall surfaces and minimal protrusions
  - Internal pathways to stairs and lift banks will be well lit and legible
  - A complementary mix of day and night-time activities is offered through the office/retail land use mix
  - Appropriate lighting will be incorporated into the canopy soffit and lobby areas
  - The building incorporates robust and durable design features to discourage vandalism

- Acoustics
  - The site is not adjacent any 'sensitive' land uses and does not incorporate any such uses within the proposed building
  - All mechanical plant is housed within the building (predominately at ground level and within the upper car parking levels)
  - Any future licensed area/s will be designed to achieve relevant objective noise criteria as necessary to obtain required liquor licenses
  - BCA and EPA Noise Policy requirements, including an analysis of the façade glazing lamination thickness to achieve suitable acoustics standards for commercial building will be resolved during detailed design phase

A response to the agency referrals will be issued to you shortly.

Should you have any further queries, please contact me at your convenience.

Kind Regards,

Rebecca Thomas
Senior Associate

ekistics

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OFFICE FOR DESIGN + ARCHITECTURE SA

Confidential

File No:
2014/11234/01

Ref No:
12299274

24 January 2018

Karl Woehle
Planning Officer
Department of P Street
Adelaide SA 5000

For the attention of the State Commission Assessment Panel

73-85 Pirie Street, Adelaide

Further to the referral 020/A075/17 received 24 November 2017 pertaining to the development application at the above address and in my capacity as a statutory referral in the State Commission Assessment Panel, I would like to offer the following comments for your consideration.

The project was presented to the Design Review panel on one occasion.

The proposed development is for a 21 storey office building with ground floor lobby, retail tenancy and End of Trip (EOT) facilities, three levels of above ground car parking, 17 commercial floors and rooftop terrace with multipurpose and meeting spaces. The proponent has acquired the subject land over an extended period, and I commend this persistence to achieve a consolidated site suitable for a development of this scale. I also welcome the delivery of contemporary workspace in this part of the city and the project team's aspiration to contribute to the urban environment. I am encouraged by the opportunities presented by this development to strengthen Pirie Street's pedestrian culture and unlock and activate the key north south pedestrian axis of Freemasons Lane.

The subject site is located on the corner of Pirie Street and Freemasons Lane. Pirie Street forms part of the city's movement network with high volumes of pedestrian, bike, vehicle and servicing activities. Freemasons Lane adjoins the site's eastern boundary. This shared use zone presently narrows to become a pedestrian connection to Flinders Link, where the subject site locally extends into the laneway. Flinders Link, accessed from Flinders Street, currently provides access to the carpark of 80 Flinders Street. Freemans Lane adjoins the site's western boundary. This is a private laneway that also services adjoining sites and terminates at the site's southern boundary. The State heritage listed Darlington House Offices (former People's Palace, former German Club) is located directly east of the site across Freemasons Lane.

The contextual analysis highlights the history of Pirie Street as a residential street occupied by businesses with attached homes. This has informed the 'work life' massing concept that comprises public and private frontages. The massing concept has also been informed by the site's existing built form frontage to Pirie Street that is characterised by horizontal massing with a vertical element in the north west corner. A historical and built form analysis of the adjacent State heritage building informs the podium expression. I commend the quality and clarity of the presentation and the appropriate emphasis on context and design strategy.

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Government of South Australia

File No:
2014/11234/01

Ref No:
12299274

The ground floor frontage is setback 4.8 metres from Freemasons Lane and 1.5 metres from Pirie Street. I support this site configuration and resulting benefits to the public realm including integrated seating and landscaping. I acknowledge the consideration given to potential future upgrades to Freemasons Lane and urge consultation with Council to achieve an integrated and mutually agreeable outcome for the public realm within both the current and potential future context. This includes new paving treatments. I anticipate that the arrangement of all outdoor seating will be informed by pedestrian movement patterns. I strongly support the widening of the connection from Freemasons Lane through to Flinders Link, and resulting benefits to the north south pedestrian network.

The ground floor entrance lobby is located in the north west corner and setback from Pirie Street to create a small forecourt beneath the metal fabric screen, which I support. A 330 square metre retail tenancy is located in the north east corner with frontages to Pirie Street and Freemasons Lane, and I support the resulting streetscape activation that extends into the laneway. A 449 square metre EOT facility is accessed off Freemasons Lane via a glazed shopfront and internal corridor. While I support the consideration given to cyclists, in my view the EOT facility provides limited genuine activation to Freemasons Lane due to the controlled private access and typically dispersed movement patterns to and from the facility. However, I acknowledge the existing laneway conditions may not support retail activity at this time and note the ground floor EOT facilities allow for future conversion into retail space. The internal fit out of the ground floor tenancies will contribute significantly to the building's presentation at street level, given the full height glazing proposed. As such, I urge ongoing consideration be given to the controlled and uncontrolled ground floor facade expression as design development progresses.

Service vehicle access is from Freemans Lane, and car park and pedestrian access is from Freemasons Lane. I support the access strategy that separates service vehicles and pedestrians. However, in principle I do not support above ground car parking in this location, as it inhibits delivery of a meaningful interface to the public realm. In my view, the opportunity exists to locate car parking below ground or to sleeve the car park levels with smaller tenancies to engage with and take advantage of the existing vibrant street environment. I support the inclusion of a 3.8 metre slab to slab height in the third car park level to enable potential future adaptive reuse and recommend consideration be given to increasing slab heights in the remaining car parking levels to further facilitate adaptive reuse outcomes. I support the inclusion of the landscaped terrace fronting Pirie Street on level three that provides a greening opportunity and articulation between the podium and tower elements. In my opinion, the opportunity exists to make this terrace accessible to assist in engaging the lower levels of the building with the public realm.

The service core is positioned centrally on the west facade. I support the separation of the lifts to achieve outlook from the lift lobbies and inclusion of windows within the stairwells as this provides good internal amenity and built form articulation. While I acknowledge the low rise/high rise lifting strategy will be subject to tenant requirements, I urge undertaking preliminary testing to ensure the lift design achieves maximum efficiency and flexibility for future tenants. I acknowledge the test fitouts of the office floors that respond to light levels.

The rooftop of the development includes a multipurpose room, meeting room, outdoor terrace for use by the office tenants and landscaped planted edge, which I support.

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Confidential

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I support the proposed 85.4 metre building height, as in my opinion this is appropriate within the Pirie Street context and the location of the site on the southern side of the street. The architectural expression is characterised by three blocks that vary in scale, texture and materiality. I support the bold identity presented by the building massing, and the response to the existing streetscape character in terms of scale, texture and materiality. The built form composition of the building base includes a number of elements, including the metal fabric screen of the entrance lobby that is offset and expressed internally over three levels, semi frameless glass facade, glazed shopfront, masonry screen to the carpark levels with inset metal fabric screen on level three, expressed columns, metal canopy and blade signage. In my view, the success of this design is contingent on refined detailing of the connections between each distinct element. This also applies to the detailing of the canopy and office tower soffits, which will be visible from street level. The car park levels are concealed by a masonry brick screen that seeks to present a highly textured, solid facade element. I support the screening concept for the above ground car parking, which is robust and contextual. However, in my view an opportunity exists to further articulate the mass of this element, cognisant of the textual qualities the brickwork and glancing and oblique viewing angles. I anticipate resolution of building base as detailed design development progresses, and I urge delivery of the fine grain detailing as illustrated in the visualisations. I support the expression of the office tower, which is characterised by angled glass panels that form a curtain wall and expressed aluminium mullions. Internal blinds are proposed for glare control. Given their potential visual impact, I urge consideration of internal shading as design development progresses with a view to achieving a uniform and integrated outcome.

The expression of the top of the building is characterised by bronze metal cladding, bronze vertical louvres, and bronze metal balustrading. The top of the building is separated by a horizontal charcoal metal cladding band. I support the screening strategy that conceals the rooftop plant. The presentation material indicates visual consistency between the three different bronze cladding elements, and I anticipate this will be achieved through the final material selections. I also encourage delivery of high quality materiality and refined detailing for the top of the building, as envisaged for the lower levels of the development.

The development targets a Green Star Five Star Design and As Built version 1.1 minimum and 5 Star NABERS Energy rating, which I support. I note potential solar panels are identified on the roof plan, and urge delivery of such ESD initiatives as part of this development.

I am encouraged by the use of streetscape perspectives to examine and demonstrate the development's impact on the human scale experience.

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

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

Yours sincerely

Kirsteen Mackay
South Australian Government Architect

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Ref: SH/13391D
Date: 29 January 2018

Secretary – Ms Alison Gill
State Commission Assessment Panel
GPO Box 1815
ADELAIDE SA 5001

Attention: Karl Woehle

Dear Mr Woehle

DESCRIPTION: DEMOLITION OF EXISTING BUILDINGS AND STRUCTURES, CONSTRUCTION OF A COMMERICAL BUILDING CONSISTING OF RETAIL AND OFFICE SPACE, ASSOCIATED CAR PARKING, LANDSCAPING AND BUILDING WORKS – 73-85 PIRIE STREET, ADELAIDE

Application number:	020/A075/17
Referral received:	24/11/2017
State heritage place:	Darlington House Offices (former People's Palace, former German Club), 89 Pirie Street ADELAIDE

The above application has been referred to the Minister for Sustainability, Environment and Conservation in accordance with Section 37 of the *Development Act 1993* as development that directly affects a State heritage place or, in the opinion of the relevant authority, materially affects the context within which a State heritage place is situated.

The proposed development site is located to the west of the above State heritage place, separated by Freemasons' Lane.

The application includes a Heritage Impact Statement (DASH Architects, 17/11/2017). I concur generally with its analysis and recommendations in relation to the contextual impact of the proposed development on the State heritage place.

Subject to the recommendation set out below, the proposed development is considered to be acceptable in relation to the above State heritage place for the following reason/s.

- There are no works proposed within the site of the State heritage place. Other than the construction management issues covered by conditions recommended below, the proposed development does not directly affect the physical fabric or material heritage values of the State heritage place.
- Visually, the pronounced articulation of the building's form into a four-storey base and eighteen-storey tower allows for a design response referential to the scale and visual character of the three-storey State heritage place. The architectural differentiation between the tower with the consistency of its glazed facades versus the articulation of the lower levels into a series of juxtaposed forms and voids defines an appropriate streetscape scale and level of visual interest. The proposed permeability and material expression of the carpark screening provides visual interest and fine grain to compensate for the lack of activation and fenestration at these levels
- The immediate context of the State heritage place at the Freemasons' Lane interface is enhanced by the front and side set-backs at street level that open up views of the historic building and by the activation along the Pirie Street and Freemasons' Lane frontages.

Recommendation

A. The following condition/s should be incorporated into any consent or approval.

Condition 1: A dilapidation survey recording the condition of the State heritage place shall be prepared prior to the commencement of work on site, to the satisfaction of the relevant authority. As well as recording fabric in good condition, the survey shall also record the location, type and dimensional extent of any existing physical damage to the place that might be affected by the proposed demolition, excavation and construction works.

Reason for condition: To provide a record prior to the commencement of the proposed works, as a reference for the assessment of any subsequent damage.

Condition 2: A Construction Management Plan outlining measures to minimise ground vibrations in the proximity of the heritage building is to be prepared to the satisfaction of the relevant authority in consultation with Heritage South Australia (Department of Environment, Water and Natural Resources) prior to final Development Approval being granted. The Management Plan shall include:

a) proposals for the ongoing monitoring of the condition of the heritage place during relevant stages of the works;

b) proposals for protective measures against consequential damage to the heritage place; and

c) procedures to be followed if any structural distress or damage is identified in the heritage fabric.

Reason for condition: To protect the physical integrity of the fabric of the State heritage place.

Condition 3: During ground works, the short term vibration levels at the heritage-listed structure shall be monitored, and shall not exceed the velocity limits for structural vibration in buildings established for Group 3 structures in the German Standard DIN 4150 Part 3.

Reason for condition: To protect the heritage-listed structure from structural movement due to the proximity of new construction.

General notes

1. Should Council not adopt the above recommendation in full, it will be necessary to obtain the concurrence of the State Commission Assessment Panel before a decision is conveyed to the applicant.
2. Any changes to the proposal for which planning consent is sought or granted may give rise to heritage impacts requiring further consultation with the Department of Environment, Water and Natural Resources, or an additional referral to the Minister for Sustainability, Environment and Conservation. Such changes would include for example (a) an application to vary the planning consent, or (b) Building Rules documentation that incorporates differences from the proposal as documented in the planning application.
3. To ensure a satisfactory heritage outcome, Council is requested to consult the Department of Environment, Water and Natural Resources in finalising any conditions or reserved matters above.
4. In accordance with Regulation 43 of the *Development Regulations 2008*, please send the Department of Environment, Water and Natural Resources a copy of the Decision Notification.

5. Council is requested to inform the applicant of the following requirements of the *Heritage Places Act 1993.*
   (a) If an archaeological artefact believed to be of heritage significance is encountered during excavation works, disturbance in the vicinity shall cease and the SA Heritage Council shall be notified.
   (b) Where it is known in advance (or there is reasonable cause to suspect) that significant archaeological artefacts may be encountered, a permit is required prior to commencing excavation works.

   For further information, contact the Department of Environment, Water and Natural Resources.
6. Council is requested to inform the applicant of the following requirements of the *Aboriginal Heritage Act 1988.*
   (a) If Aboriginal sites, objects or remains are discovered during excavation works, the Aboriginal Heritage Branch of the Aboriginal Affairs and Reconciliation Division of the Department of the Premier and Cabinet (as delegate of the Minister) should be notified under Section 20 of the *Aboriginal Heritage Act 1988*.

For any enquiries in relation to this application, I can be contacted on telephone 8124 4935 or e-mail peter.wells@sa.gov.au.

Yours sincerely

Peter Wells
Principal Conservation Architect
DEPARTMENT OF ENVIRONMENT, WATER AND NATURAL RESOURCES
as delegate of the
MINISTER FOR SUSTAINABILITY, ENVIRONMENT AND CONSERVATION

18 December 2017

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

To Whom It May Concern,

DEVELOPMENT NUMBER: **DA 020/A075/17**
APPLICANT: **Adelaide Development Company**
NATURE OF DEVELOPMENT: **Demolition of existing buildings and structures, new commercial building**
SUBJECT LAND: **83 Pirie Street Adelaide SA 5000**

The application has been assessed and at a height of RL 134.8m 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 9metres.

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

Adelaide Airport

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Woehle, Karl (DPTI)

From: Janaki Benson <J.Benson@cityofadelaide.com.au>
Sent: Monday, 15 January 2018 4:41 PM
To: Woehle, Karl (DPTI)
Subject: FW: Council Comment - 020/A075/17

Dear Karl

020/A075/17 – 73079 Pirie Street, Adelaide

Please find Council's comments below:

Technical:

Waste

- Waste management is supported.

Traffic/Public Realm

- The overall proposed configuration of vehicle movement within the adjacent lanes and vehicle access to the site is acceptable, but only subject to further clarification and detailed design of the spaces where vehicles and pedestrians will interact. This is essential to achieve suitable resolution of safety where the site interfaces with the existing public roads. The objective would be to pursue a 'shared space' environment that clearly signals to vehicles to travel at low speed and for pedestrians to share the space, rather than be technically restricted to a narrow footpath area. The current proposed interaction for pedestrians through the driveway connections is concerning from a user experience and safety perspective. The proposal at present seeks to have pedestrians, and more particularly directing pedestrians with vision impairment, to cross the vehicle connection twice to travel between two publicly accessible footpaths, which inherently increases the risk of collision though exposure to additional conflict points.

  In addition, revisions to the location of the exit boom gate is needed as part of achieving a shared space configuration, as drivers will seek to have their vehicle clear of the boom gate before observing and effectively negotiating pedestrian and intersection interactions. It is our experience that this is a common driver behaviour resulting from a general lack of confidence in boom gates staying upright whilst the vehicle is still underneath.

  As resolving these outstanding pedestrian safety issues could have some impact on the building configuration and structure around vehicle access area, it may be pertinent for this to be a reserved matter.

  Part of this essential detailed design is proposed to include conversations between CoA and the proponent regarding potential transfer of the portion of the site sitting between the two sections of public roads, to CoA to enable creation of a continuous public street title and rationalise ongoing management and liability of the spaces.

  Regarding the internal car park design, opportunities for safe pedestrian connection should be identified. Additionally, some modifications appear necessary in order to achieve a continuous accessible path of travel between the accessible car parking spaces and the lifts.

Land Tenure

- The applicant should ensure that they have all necessary rights to access Freeman Lane.

Planning:

Ground Level

- While the retail tenancy at ground is supported, the size and width of this tenancy, along with its use of glass, doesn't reflect the fine grained context sought and established by other Pirie Street tenancies

Car Parking

- The Development Plan expressly outlines that car parking at first and second level is not anticipated in this location – to the Pirie Street and Freemason Lane frontages. The car parking proposed is not sleeved as anticipated within the Zone, nor is it considered this design will allow for integration and contribute to the vibrant public real sought by *Capital City Zone* PDC 7(c) & (d).

Outdoor dining

- The applicant should be aware that a 1.8 metre clearance from the property boundary line (not building line) should be maintained for pedestrian movement and access along Pirie Street. A separate outdoor dining permit will be required in any event. For information in relation to the issuing of outdoor dining permits, please contact the City of Adelaide Customer Service Centre on 8203 7203.

Hope this assists.

Regards

Janaki Benson
Senior Planner - Development Assessment
Planning Assessment
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www.cityofadelaide.com.au

Central Business Policy Area 13

Introduction

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

DESIRED CHARACTER

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

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

OBJECTIVES

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

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

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

PRINCIPLES OF DEVELOPMENT CONTROL

Land Use

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

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

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

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 though 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, Benthem 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 though 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.

Council Wide

Environmental

Crime Prevention Through Urban Design

OBJECTIVES

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

(a) ensures that land uses are integrated and designed to facilitate natural surveillance;

(b) promotes building and site security; and

(c) promotes visibility through the incorporation of clear lines of sight and appropriate lighting.

PRINCIPLES OF DEVELOPMENT CONTROL

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

(a) promote natural surveillance of the public realm, including open space, car parks, pedestrian routes, service lanes, public transport stops and residential areas, through the design and location of physical features, electrical and mechanical devices, activities and people to maximise visibility by:

(i) orientating windows, doors and building entrances towards the street**,** open spaces, car parks, pedestrian routes and public transport stops;

(ii) avoiding high walls, blank facades, carports and landscaping that obscures direct views to public areas;

(iii) arranging living areas, windows, pedestrian paths and balconies to overlook recreation areas, entrances and car parks;

(iv) positioning recreational and public space areas so they are bound by roads on at least two road frontages or overlooked by development;

(v) creating a complementary mix of day and night-time activities, such as residential, commercial, recreational and community uses, that extend the duration and level of intensity of public activity;

(vi) locating public toilets, telephones and other public facilities with direct access and good visibility from well-trafficked public spaces;

(vii) ensuring that rear service areas and access lanes are either secured or exposed to surveillance; and

(viii) ensuring the surveillance of isolated locations through the use of audio monitors, emergency telephones or alarms, video cameras or staff eg by surveillance of lift and toilet areas within car parks.

(b) provide access control by facilitating communication, escape and path finding within development through legible design by:

(i) incorporating clear directional devices;

(ii) avoiding opportunities for concealment near well travelled routes;

(iii) closing off or locking areas during off-peak hours, such as stairwells, to concentrate access/exit points to a particular route;

(iv) use of devices such as stainless steel mirrors where a passage has a bend;

(v) locating main entrances and exits at the front of a site and in view of a street;

(vi) providing open space and pedestrian routes which are clearly defined and have clear and direct sightlines for the users; and

(vii) locating elevators and stairwells where they can be viewed by a maximum number of people, near the edge of buildings where there is a glass wall at the entrance.

(c) promote territoriality or sense of ownership through physical features that express ownership and control over the environment and provide a clear delineation of public and private space by:

(i) clear delineation of boundaries marking public, private and semi-private space, such as by paving, lighting, walls and planting;

(ii) dividing large development sites into territorial zones to create a sense of ownership of common space by smaller groups of dwellings; and

(iii) locating main entrances and exits at the front of a site and in view of a street.

(d) provide awareness through design of what is around and what is ahead so that legitimate users and observers can make an accurate assessment of the safety of a locality and site and plan their behaviour accordingly by:

(i) avoiding blind sharp corners, pillars, tall solid fences and a sudden change in grade of pathways, stairs or corridors so that movement can be predicted;

(ii) using devices such as convex security mirrors or reflective surfaces where lines of sight are impeded;

(iii) ensuring barriers along pathways such as landscaping, fencing and walls are permeable;

(iv) planting shrubs that have a mature height less than one metre and trees with a canopy that begins at two metres;

(v) adequate and consistent lighting of open spaces, building entrances, parking and pedestrian areas to avoid the creation of shadowed areas; and

(vi) use of robust and durable design features to discourage vandalism.

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

To maximise security and safety, buildings should be designed to minimise access between roofs, balconies and windows of adjacent buildings.

85 Security features should be incorporated within the design of shop fronts to complement the design of the frontage and allow window shopping out of hours. If security grilles are provided, these should:

(a) be transparent and illuminated to complement the appearance of the frontage;

(b) provide for window shopping; and

(c) allow for the spill of light from the shop front onto the street.

Solid shutters with less than 75 percent permeability are not acceptable.

86 Public toilets should be designed and located to:

(a) promote the visibility of people entering and exiting the facility by avoiding recessed entrances and dense shrubbery which obstructs passive surveillance;

(b) limit opportunities for vandalism through the use of vandal proof lighting on the public toilet buildings and nearby;

(c) avoid features which facilitate loitering, such as seating or telephones immediately adjacent the structure; and

(d) maximise surveillance through location near public transport links, pedestrian and cyclist networks.

Noise Emissions

OBJECTIVES

Objective 26: Development that does not unreasonably interfere with the desired character of the locality by generating unduly annoying or disturbing noise.

Objective 27: Noise sensitive development designed to protect its occupants from existing noise sources and from noise sources contemplated within the relevant Zone or Policy Area and that does not unreasonably interfere with the operation of non-residential uses contemplated within the relevant Zone or Policy Area.

PRINCIPLES OF DEVELOPMENT CONTROL

Noise Sources

89 Development with potential to emit significant noise (including licensed entertainment premises and licensed premises) should incorporate appropriate noise attenuation measures in to their design to prevent noise from causing unreasonable interference with the amenity and desired character of the locality, as contemplated in the relevant Zone and Policy Area.

93 Mechanical plant or equipment should be designed, sited and screened to minimise noise impact on adjacent premises or properties. The noise level associated with the combined operation of plant and equipment such as air conditioning, ventilation and refrigeration systems when assessed at the nearest existing or envisaged noise sensitive location in or adjacent to the site should not exceed

(a) 55 dB(A) during daytime (7.00am to 10.00pm) and 45 dB(A) during night time (10.00pm to 7.00am) when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

(b) 50 dB(A) during daytime (7.00am to 10.00pm) and 40 dB(A) during night time (10.00pm to 7.00am) in or adjacent to a City Living Zone, the Adelaide Historic (Conservation) Zone, the North Adelaide Historic (Conservation) Zone or the Park Lands Zone when measured and

adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

94 To ensure minimal disturbance to residents:

(a) ancillary activities such as deliveries, collection, movement of private waste bins, goods, empty bottles and the like should not occur:

(i) after 10.00pm; and

(ii) before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday.

(b) typical activity within any car park area including vehicles being started, doors closing and vehicles moving away from the premises should not result in sleep disturbance when proposed for use after 10.00pm as defined by the limits recommended by the World Health Organisation.

Noise Receivers

95 Noise sensitive development should incorporate adequate noise attenuation measures into their design and construction to provide occupants with reasonable amenity when exposed to noise sources such as major transport corridors (road, rail, tram and aircraft), commercial centres, entertainment premises and the like, and from activities and land uses contemplated in the relevant Zone and Policy Area provisions.

96 Noise sensitive development in mixed use areas should not unreasonably interfere with the operation of surrounding non-residential uses that generate noise levels that are commensurate with the envisaged amenity of the locality.

Waste Management

OBJECTIVE

Objective 28: Development which supports high local environmental quality, promotes waste minimisation, re-use and recycling, encourages waste water, grey water and stormwater re-use and does not generate unacceptable levels of air, liquid or solid pollution.

PRINCIPLES OF DEVELOPMENT CONTROL

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

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

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

(a) containing a dedicated area for the collection and sorting of construction waste and recyclable building materials;

(b) on-site storage and management of waste;

(c) disposal of non-recyclable waste; and

(d) incorporating waste water and stormwater re-use including the treatment and re-use of grey water.

104 Development should not result in emission of atmospheric, liquid or other pollutants, or cause unacceptable levels of smell and odour which would detrimentally affect the amenity of adjacent properties or its locality. Land uses such as restaurants, shops, cafés or other uses that generate smell and odour should:

(a) ensure extraction flues, ventilation and plant equipment are located in appropriate locations that will not detrimentally affect the amenity of adjacent occupiers in terms of noise, odours and the appearance of the equipment;

(b) ensure ventilation and extraction equipment and ducting have the capacity to clean and filter the air before being released into the atmosphere; and

(c) ensure the size of the ventilation and extraction equipment is suitable and has the capacity to adequately cater for the demand generated by the potential number of patrons.

Energy Efficiency

OBJECTIVE

Objective 30: Development which is compatible with the long term sustainability of the environment, minimises consumption of non-renewable resources and utilises alternative energy generation systems.

PRINCIPLES OF DEVELOPMENT CONTROL

All Development

106 Buildings should provide adequate thermal comfort for occupants and minimise the need for energy use for heating, cooling and lighting by:

(a) providing an internal day living area with a north-facing window, other than for minor additions*, by:

(i) arranging and concentrating main activity areas of a building to the north for solar penetration; and

(ii) placing buildings on east-west allotments against or close to the southern boundary to maximise northern solar access and separation to other buildings to the north.

(b) efficient layout, such as zoning house layout to enable main living areas to be separately heated and cooled, other than for minor additions;

(c) locating, sizing and shading windows to reduce summer heat loads and permit entry of winter sun;

(d) allowing for natural cross ventilation to enable cooling breezes to reduce internal temperatures in summer;

(e) including thermal insulation of roof, walls, floors and ceilings and by draught proofing doors, windows and openings;

(f) ensuring light colours are applied to external surfaces that receive a high degree of sun exposure, but not to an extent that will cause glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles;

(g) providing an external clothes line for residential development; and

* Minor additions have a floor area less than 50 percent of the existing dwelling and do not include a day living area.

(h) use of landscaping.

107 All development should be designed to promote naturally ventilated and day lit buildings to minimise the need for mechanical ventilation and lighting systems.

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

(a) appropriate orientation of the building by:

(i) maximising north/south facing facades;

(ii) designing and locating the building so the north facade receives good direct solar radiation;

(iii) minimising east/west facades to protect the building from summer sun and winter winds;

(iv) narrow floor plates to maximise the amount of floor area receiving good daylight; and/or

(v) minimising the ratio of wall surface to floor area.

(b) window orientation and shading;

(c) adequate thermal mass including night time purging to cool thermal mass;

(d) appropriate insulation by:

(i) insulating windows, walls, floors and roofs; and

(ii) sealing of external openings to minimise infiltration.

(e) maximising natural ventilation including the provision of openable windows;

(f) appropriate selection of materials, colours and finishes; and

(g) introduction of efficient energy use technologies such as geo-exchange and embedded, distributed energy generation systems such as cogeneration*, wind power, fuel cells and solar photovoltaic panels that supplement the energy needs of the building and in some cases, export surplus energy to the electricity grid.

109 Orientation and pitch of the roof should facilitate the efficient use of solar collectors and photovoltaic cells.

110 Buildings, where practical, should be refurbished, adapted and reused to ensure an efficient use of resources.

111 New buildings should be readily adaptable to future alternative uses.

112 Selection of internal materials for all buildings should be made with regard to internal air quality and ensure low toxic emissions, particularly with respect to paint and joinery products.

Office Development

115 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.

Renewable Energy

OBJECTIVES

Objective 31: The development of renewable energy facilities, such as wind and biomass energy facilities, in appropriate locations.

Objective 32: Renewable energy facilities located, sited, designed and operated to avoid or minimise adverse impacts and maximise positive impacts on the environment, local community and the State.

PRINCIPLES OF DEVELOPMENT CONTROL

116 Renewable energy facilities, including wind farms, should be located, sited, designed and operated in a manner which avoids or minimises adverse impacts and maximises positive impacts on the environment, local community and the State.

117 Renewable energy facilities, including wind farms, and ancillary developments should be located in areas that maximise efficient generation and supply of electricity.

118 Renewable energy facilities, including wind farms, and ancillary development such as substations, maintenance sheds, access roads and connecting power-lines (including to the National Electricity Grid) should be located, sited, designed and operated in a manner which:

(a) avoids or minimises detracting from the character, landscape quality, visual significance or amenity of the area;

(b) utilises elements of the landscape, materials and finishes to minimise visual impact;

(c) avoids or minimises adverse impact on areas of native vegetation, conservation, environmental, geological, tourism or built or natural heritage value;

(d) does not impact on the safety of water or air transport and the operation of ports, airfields and designated landing strips;

(e) avoids or minimises nuisance or hazard to nearby property owners/occupiers, road users and wildlife by way of:

(i) shadowing, flickering, reflection and blade glint impacts;

(ii) noise;

(iii) interference to television and radio signals;

(iv) modification to vegetation, soils and habitats; and

(v) bird and bat strike.

Micro-climate and Sunlight

OBJECTIVES

Objective 33: Buildings which are designed and sited to be energy efficient and to minimise micro-climatic and solar access impacts on land or other buildings.

Objective 34: Protection from rain, wind and sun without causing detriment to heritage places, street trees or the integrity of the streetscape.

PRINCIPLES OF DEVELOPMENT CONTROL

119 Development should be designed and sited to minimise micro-climatic and solar access impact on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow.

120 Development should be designed and sited to ensure an adequate level of daylight, minimise overshadowing of buildings, and public and private outdoor spaces, particularly during the lunch time hours.

121 Development should not significantly reduce daylight to private open space, communal open space, where such communal open space provides the primary private open space, and habitable rooms in adjacent City Living Zone, Adelaide Historic (Conservation) Zone and North Adelaide Historic (Conservation) Zone.

122 Glazing on building facades should not result in glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles.

123 Buildings within the Core and Primary Pedestrian Areas identified in Map Adel/1 (Overlays 2, 2A and 3), unless specified otherwise within the relevant Zone or Policy Area, should be designed to provide weather protection for pedestrians against rain, wind and sun. The design of canopies, verandahs and awnings should be compatible with the style and character of the building and adjoining buildings, as well as the desired character, both in scale and detail.

124 Weather protection should not be introduced where it would interfere with the integrity or heritage value of heritage places or unduly affect street trees.

125 Development that is over 21 metres in building height and is to be built at or on the street frontage should minimise wind tunnel effect.

Stormwater Management

OBJECTIVES

Objective 35: Development which maximises the use of stormwater.

Objective 36: Development designed and located to protect stormwater from pollution sources.

Surface water (inland, marine, estuarine) and ground water has the potential to be detrimentally affected by water run-off from development containing solid and liquid wastes. Minimising and possibly eliminating sources of pollution will reduce the potential for degrading water quality and enable increased use of stormwater for a range of applications with environmental, economic and social benefits.

Objective 37: Development designed and located to protect or enhance the environmental values of receiving waters.

Objective 38: Development designed and located to prevent erosion.

Development involving soil disturbance may result in erosion and subsequently sedimentation and pollutants entering receiving waters. Design techniques should be incorporated during both the construction and operation phases of development to minimise the transportation of sediment and pollutants off-site.

Objective 39: Development designed and located to prevent or minimise the risk of downstream flooding.

PRINCIPLES OF DEVELOPMENT CONTROL

126 Development of stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.

127 Development affecting existing stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.

128 Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site.

129 Development should incorporate appropriate measures to minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria and litter and other contaminants to the stormwater system and may incorporate systems for treatment or use on site.

130 Development should not cause deleterious affect 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.

Infrastructure

OBJECTIVES

Objective 40: Minimisation of the visual impact of infrastructure facilities.

Objective 41: Provision of services and infrastructure that are appropriate for the intended development and the desired character of the Zone or Policy Area.

PRINCIPLES OF DEVELOPMENT CONTROL

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

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

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

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

(a) electricity supply;

(b) water supply;

(c) drainage and stormwater systems;

(d) effluent disposal systems;

(e) formed all-weather public roads;

(f) telecommunications services; and

(g) gas services.

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.

Objective 45: Recognition of Aboriginal sites, items and areas which are of social, archaeological, cultural, mythological or anthropological significance.

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.

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.

Advertising

144 Advertisements or signs on the site of a heritage place should be located to complement, rather than dominate or conceal, the appearance and detailing of the heritage place by being:

(a) integrated with architectural elements of the heritage place, including within parapets or wall panels, and at canopy level or within fascias, end panels or windows; and

(b) below the silhouette 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

1 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

2 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.

3 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).

4 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.

5 Where possible, large sites should incorporate pedestrian links and combine them with publicly accessible open space.

6 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.

7 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

8 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.

9 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

10 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.

11 Building services such as drainage pipes together with security grills/screens, ventilation louvres and car park entry doors, should be coordinated and integrated with the overall facade design.

Materials, Colours and Finishes

12 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.

13 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

14 Materials and finishes that are easily maintained and do not readily stain, discolour or deteriorate should be utilised.

15 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).

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

16 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.

17 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.

18 Roof top plant and ancillary equipment that projects above the ceiling of the top storey should:

(a) be designed to minimise the visual impact; and

(b) be screened from view, including the potential view looking down or across from existing or possible higher buildings, or be included in a decorative roof form that is integrated into the design of the building.

19 Roof design should facilitate future use for sustainable functions such as:

(a) rainwater tanks for water conservation;

(b) roof surfaces orientated, angled and of suitable material for photovoltaic applications; and/or

(c) “green” roofs (ie roof top gardens structurally capable of supporting vegetation) or water features.

Active Street Frontages

OBJECTIVES

Objective 50: Development that enhances the public environment and, where appropriate provides activity and interest at street level, reinforcing a locality’s desired character.

Objective 51: Development designed to promote pedestrian activity and provide a high quality experience for City residents, workers and visitors by:

(a) enlivening building edges;

(b) creating welcoming, safe and vibrant spaces;

(c) improving perceptions of public safety through passive surveillance; and

(d) creating interesting and lively pedestrian environments.

PRINCIPLES OF DEVELOPMENT CONTROL

20 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.

21 Commercial buildings should be designed to ensure that ground floor facades are rich in detail so they are exciting to walk by, interesting to look at and to stand beside.

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

22 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.

23 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.

24 Landscaping should be provided to all areas of communal space, driveways and shared car parking areas.

25 Landscaping between the road and dwellings should be provided to screen and protect the dwellings from dust and visual impacts of the road.

Advertising

OBJECTIVE

Objective 56: Outdoor advertisements that are designed and located to:

(a) reinforce the desired character and amenity of the locality within which it is located and rectify existing unsatisfactory situations;

(b) be concise and efficient in communicating with the public, avoiding a proliferation of confusing and cluttered displays or a large number of advertisements; and

(c) not create a hazard.

PRINCIPLES OF DEVELOPMENT CONTROL

26 Advertisements should be designed to respect and enhance the desired character and amenity of the locality by the means listed below:

(a) the scale, type, design, location, materials, colour, style and illumination of any advertisements should be compatible with the design and character of the buildings and

land to which it is related, and should be in accordance with provisions for the Zone and Policy Area in which it is situated and any relevant adjacent Zones or Policy Areas;

(b) advertisements should be integrated with the architectural form, style and colour of buildings and wherever possible, requirements for advertisements should be considered in the design of new buildings;

(c) advertisements should be artistically interesting in terms of graphics and construction with intricacy and individuality in design encouraged while maintaining consistency in design and style where co-ordinated advertisements are appropriate;

(d) structural supports should be concealed from public view or of minimal visual impact;

(e) advertisements on individual premises should be co-ordinated in terms of type and design and should be limited in number to minimize visual clutter;

(f) advertisements should be displayed on fascia signs or located below canopy level;

(g) advertisements on buildings or sites occupied by a number of tenants should be co-ordinated, complementary and the number kept to a minimum; and

(h) advertisements on or adjacent to a heritage place should be designed and located to respect the heritage value of the heritage place.

Transport and Access

Access and Movement

OBJECTIVE

Objective 60: Access to and movement within the City that is easy, safe, comfortable and convenient with priority given to pedestrian and cyclist safety and access.

PRINCIPLES OF DEVELOPMENT CONTROL

224 Development should provide safe, convenient and comfortable access and movement.

225 Vehicle access points along primary and secondary city access roads and local connector roads, as shown on Map Adel/1 (Overlay 1) should be restricted.

Pedestrian Access

OBJECTIVES

Objective 61: Development that promotes the comfort, enjoyment and security of pedestrians by providing shelter and reducing conflict with motor vehicles.

Objective 62: Development that contributes to the quality of the public realm as a safe, secure and attractive environment for pedestrian movement and social interaction.

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

PRINCIPLES OF DEVELOPMENT CONTROL

226 Development should reflect the significance of the paths and increase the permeability of the pedestrian network identified within Map Adel/1 (Overlay 2) by ensuring:

(a) pedestrians are not disrupted or inconvenienced by badly designed or located vehicle access ramps in footpaths or streets; and

(b) vehicle and service entry points are kept to a minimum to avoid adverse impact on pedestrian amenity.

224 Within the Core, Primary and Secondary Pedestrian Areas identified within Map Adel/1 (Overlays 2, 2A and 3), development should be designed to support the establishment and maintenance of continuous footpaths so that pedestrian flow is free and uninterrupted. Pedestrian access should be provided at ground level mid-block between all streets.

228 Development should provide and maintain pedestrian shelter, access and through-site links in accordance with the walking routes identified within Map Adel/1 (Overlays 2, 2A and 3) and the provisions of the Zone or Policy Area in which it is located. Such facilities should be appropriately designed and detailed to enhance the pedestrian environment, have regard to the mobility needs of people with disabilities, and be safe, suitable and accessible.

229 Corner buildings in the Central Business Policy Area of the Capital City Zone, buildings adjacent to street intersections and buildings along a high concentration public transport route or along public transport pedestrian routes identified within Map Adel/1 (Overlay 4) should provide weather protection for pedestrians in the form of verandahs, awnings or canopies. Where verandahs or awnings are provided which block street lighting, they should include additional lighting beneath the canopy.

230 Permanent structures over a footpath should have a minimum clearance of 3.0 metres above the existing footpath level, except for advertisements which should have a minimum clearance of 2.5 metres and temporary structures and retractable canopies which should have a minimum clearance of 2.3 metres above the existing footpath level.

231 Where posts are required to support permanent structures, they should be located at least 600 millimetres from the kerb line.

232 Access for people with disabilities should be provided to and within all buildings to which members of the public have access in accordance with the relevant Australian Standards. Such access should be provided through the principal entrance, subject to heritage considerations and for exemptions under the relevant legislation.

Bicycle Access

OBJECTIVES

Objective 64: Greater use of bicycles for travel to and within the City and the improvement of conditions, safety and facilities for cyclists.

Objective 65: Adequate supply of secure, short stay and long stay bicycle parking to support desired growth in City activities.

PRINCIPLES OF DEVELOPMENT CONTROL

233 Development should have regard to the bicycle routes identified within Map Adel/1 (Overlay 3) by:

(a) limiting vehicular access points; and

(b) ensuring that vehicles can enter and leave the site in a forward direction, thereby avoiding reverse manoeuvres.

234 An adequate supply of on-site secure bicycle parking should be provided to meet the demand generated by the development within the site area of the development. Bicycle parking should be provided in accordance with the requirements set out in Table Adel/6.

235 Onsite secure bicycle parking facilities for residents and employees (long stay) should be:

(a) located in a prominent place;

(b) located at ground floor level;

(c) located undercover;

(d) located where passive surveillance is possible, or covered by CCTV;

(e) well lit and well signed;

(f) close to well used entrances;

(g) accessible by cycling along a safe, well lit route;

(h) take the form of a secure cage with locking rails inside or individual bicycle lockers; and

(i) in the case of a cage have an access key/pass common to the building access key/pass.

236 Onsite secure bicycle parking facilities for short stay users (i.e. bicycle rails) should be:

(a) directly associated with the main entrance;

(b) located at ground floor level;

(c) located undercover;

(d) well lit and well signed;

(e) located where passive surveillance is possible, or covered by CCTV; and

(f) accessible by cycling along a safe, well lit route.

237 Access to bicycle parking should be designed to:

(a) minimise conflict with motor vehicles and pedestrians;

(b) ensure the route is well signed and well lit including the use of road markings such as a bicycle logo if appropriate to help guide cyclists; and

(c) ensure the route is unhindered by low roof heights.

238 To facilitate and encourage the use of bicycles and walking as a means of travel to and from the place of work, commercial and institutional development should provide on-site shower and changing facilities.

Public Transport

OBJECTIVES

Objective 66: Development that promotes the use of sustainable transport consistent with State Government objectives and initiatives.

Objective 67: Accessible public transport for all metropolitan residents and visitors and safe and attractive facilities for public transport users.

PRINCIPLES OF DEVELOPMENT CONTROL

239 Development along a high concentration public transport route should be designed to ensure that activity and interest for public transport passengers is maximised through the incorporation of active street frontages.

234 Development along high concentration public transport routes identified in Map Adel/1 (Overlay 4) should:

(a) ensure there are pedestrian links through the site if needed to provide access to public transport;

(b) provide shelter (e.g. verandahs) for pedestrians against wind, sun and rain;

(c) provide interest and activity at street level; and

(d) where possible, avoid vehicle access across high concentration public transport routes identified in Map Adel/1 (Overlay 4). Where unavoidable, vehicle access should be integrated into the design of the development whilst retaining active street frontages.

Traffic and Vehicle Access

OBJECTIVES

Objective 68: Development that supports a shift toward active and sustainable transport modes (i.e. public transport, cycling and walking).

Objective 69: An enhanced City environment and the maintenance of an appropriate hierarchy of roads to distribute traffic into the City to serve development in preference to through traffic.

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

PRINCIPLES OF DEVELOPMENT CONTROL

241 Development should be designed so that vehicle access points for parking, servicing or deliveries, and pedestrian access to a site, are located to minimise traffic hazards and vehicle queuing on public roads. Access should be safe, convenient and suitable for the development on the site, and should be obtained from minor streets and lanes unless otherwise stated in the provisions for the relevant Zone or Policy Area and provided residential amenity is not unreasonably affected.

242 Facilities for the loading and unloading of courier, delivery and service vehicles and access for emergency vehicles should be provided on-site as appropriate to the size and nature of the development. Such facilities should be screened from public view and designed, where possible, so that vehicles may enter and leave in a forward direction.

243 Where practicable, development sites should contain sufficient space for the location of construction equipment during the course of building construction, so that development does not rely on the use of Council road reserves to locate such equipment**.**

244 Vehicular access to development located within the Core and Primary Pedestrian Areas identified in Map Adel/1 (Overlay 2A) should be limited and designed to minimise interruption to street frontages.

245 Where vehicular access to a development is gained by an existing crossing in the Core Pedestrian Area identified in Map Adel/1 (Overlay 2A), there should be no increase in the number of parking spaces served by the crossing, nor any increase in the number of existing crossings serving that development.

246 There is no minimum setback required from a rear access way where the access way is wider than 6.5 metres. Where the access way is less than 6**.**5 metres in width, a setback distance equal to the additional width required to make the access way 6**.**5 metres or more, is required to provide adequate manoeuvrability for vehicles.

247 The number of access points on primary city access roads identified in Map Adel/1 (Overlay 1) should be limited to minimise traffic and pedestrian inconvenience, interference with public transport facilities and adverse effects on the environment.

248 Buildings located along primary and secondary access roads should be sited to avoid the need for vehicles to reverse on to the road (unless the dimensions of the site make this impractical).

Car Parking

OBJECTIVES

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

Objective 72: An adequate supply of short-stay and long-stay parking to support desired growth in City activities without detrimental affect on traffic and pedestrian flows.

PRINCIPLES OF DEVELOPMENT CONTROL

251 Car parking areas should be located and designed to:

(a) ensure safe and convenient pedestrian movement and traffic circulation through and within the car parking area;

(b) include adequate provision for manoeuvring and individually accessible car standing areas;

(c) enable, where practical, vehicles to enter and leave the site in a forward direction;

(d) minimise interruption to the pattern of built form along street frontages;

(e) provide for access off minor streets and for the screening from public view of such car parking areas by buildings on the site wherever possible;

(f) minimise adverse impacts on adjoining residential properties in relation to noise and access and egress;

(g) minimise loss of existing on-street parking spaces arising through crossovers and access;

(h) incorporate secure bicycle parking spaces and facilitate convenient, safe and comfortable access to these spaces by cyclists; and

(i) provide landscaping, such as semi-mature trees, to shade parked vehicles and reduce the visual impact of the car parking area while maintaining direct sight lines and informal visual surveillance.

252 All development should provide car parking spaces for people with disabilities in accordance with the requirements in the Building Code of Australia (BCA). For classes of buildings not covered by the requirements of the BCA, the number of spaces should be provided in accordance with Table Adel/7 and such car parking spaces should comply with Australian Standard 2890.1: 'Parking Facilities - Off-street Car Parking'.

254 Off-street parking should:

(a) be controlled in accordance with the provisions for the relevant Policy Area;

(b) be located away from street frontages or designed as an integral part of buildings on the site. Provision of parking at basement level is encouraged; and

(c) not include separate garages or carports in front of buildings within front set-backs.

258 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).

259 Multi-level car parks or non-ancillary car parking use of an existing building should only be established where it can be demonstrated that there is a need which is not adequately satisfied by other parking facilities in the locality.

260 Multi-level car parks and short stay public use of ancillary car parking spaces are discouraged at ground floor street frontages in the Primary Pedestrian Area identified in Map Adel/1 (Overlays 2, 2A and 3). Multi-level car parks, short stay public use of ancillary car parking spaces or non-ancillary car parking use of an existing building may be appropriate where it:

(a) is located away from ground floor street frontages to major streets;

(b) ensures vehicle access is from the road with less pedestrian activity in instances where a site has access to more than one road frontage;

(c) has no more than one entry lane and one exit lane;

(d) has a controlled exit at the property boundary to stop vehicles before travelling across the footpath;

(e) has no more than one left in and one left out access point;

(f) avoids access points along high concentration public transport routes identified in Map Adel/1 (Overlay 4); and

(g) with respect to ancillary parking, is provided at basement level, or undercroft if located behind other uses which provide activity on the street frontage.

261 Multi-level car parks should be designed to:

(a) provide active street frontages and land uses such as commercial, retail or other non-car park uses, along ground floor street frontages to maintain pedestrian interest and activity at street level;

(b) be of a high quality design and complement the surrounding built form in terms of height, bulk and scale;

(c) provide surveillance, lighting and direct sightlines along clearly defined and direct walkways, through and within car parking areas and to lift and toilet areas;

(d) on a corner site with two major street frontages, be set back from the major street frontages, with commercial or other non-car park floor space in front of and screening the car parking building;

(e) on a site with only one major street frontage, include screening so that any car parking is not visible from the public realm either day or night, and detailed to complement neighbouring buildings in a manner consistent with desired character in the relevant Zone and Policy Area;

(f) incorporate treatments to manage the interface with adjacent housing, such as careful use of siting and use of materials and landscaping;

(g) not have vehicle access points across major walking routes identified in Map Adel/1 (Overlay 2); and

(h) provide safe and secure bicycle parking spaces in accordance with the requirements of Table Adel/6.

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

266 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.

268 Development is encouraged to develop and expand upon the existing or create new tourism activities to maximise employment and the long-term economic, social and cultural benefits of developing the City as a competitive domestic and international tourist destination.

269 Tourist facilities should be compatible with the prevailing character of the area, within close proximity to public transport facilities and well designed and sited.

270 Development located either abutting, straddling or within 20 metres of a Zone or Policy Area boundary should provide for a transition and reasonable gradation from the character desired from one to the other.

271 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.