APPLICATION ON NOTIFICATION –

Applicant:	CK Property Group C/ Ekistics
Development Number:	040/L074/20
Nature of Development:	Construction of a 6-storey tourist accommodation building, with restaurant/bar, retail, car parking and port cochere
Development Type:	Merit / Category 2
Subject Land:	2-7 McLaren Parade, Port Adelaide
Development Plan:	Port Adelaide Enfield, consolidated 06 February 2018
Zone / Policy Area:	Regional Centre Zone / McLaren's Wharf Policy Area 44
Contact Officer:	Janaki Benson
Phone Number:	08 8343 2339
Consultation Start Date:	12 March 2020
Consultation Close Date:	26 March 2020
During the notification period, hard copies of the application documentation can be viewed at the Department of Planning, Transport and Infrastructure, Level 5, 50 Flinders St, Adelaide, during normal business hours. Application documentation may also be viewed during normal business hours at the local Council office (if identified on the public notice).	

Written representations must be received by the close date (indicated above) and can either be posted, hand-delivered or emailed to the State Commission Assessment Panel.

Any representations received after the close date will not be considered.

Postal Address:
The Secretary
State Commission Assessment Panel
GPO Box 1815
ADELAIDE SA 5001

Street Address:
Development Division
Department of Planning, Transport and Infrastructure
Level 5, 50 Flinders Street
ADELAIDE

Email Address: scapreps@sa.gov.au

South Australian
DEVELOPMENT ACT, 1993
REPRESENTATION ON APPLICATION – CATEGORY 2

Applicant:	CK Property Group C/ Ekistics
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Phone Number:	08 8343 2339
Close Date:	26 March 2020

My Name: _____ My phone number: _____

Primary method(s) of contact: **Email:** _____

Postal Address: _____ **Postcode:** _____

You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

My interests are: *(please tick one)*

- ☐ owner of local property
- ☐ occupier of local property
- ☐ a representative of a company/other organisation affected by the proposal
- ☐ a private citizen

The address of the property affected is: _____ **Postcode** _____

My interests are: *(please tick one)*

- ☐ I support the development
- ☐ I support the development with some concerns
- ☐ I oppose the development

The specific aspects of the application to which I make comment on are: _____

I: *(please tick one)*

- ☐ wish to be heard in support of my submission
- ☐ do not wish to be heard in support of my submission *(Please tick one)*

By: *(please tick one)*

- ☐ appearing personally
- ☐ being represented by the following person *(Please tick one)*

Signature: _____

Date: _____

Return Address: The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or
Email: scapreps@sa.gov.au

DEVELOPMENT APPLICATION FORM

PLEASE USE BLOCK LETTERS

COUNCIL: Port Adelaide Enfield Council

APPLICANT: CK Property Group

Postal Address: Suite 5, Level 5, 66 Hunter St, Sydney

Owners:

Lots 2 & 3 - Kystepher Nominees Pty Ltd (A.C.N. 007 995 842)

Lots 4 - 7 - Yarramundi Investments Pty Ltd (A.C.N. 008 008 231)

BUILDER: TBA

Postal Address:

Licence No:

CONTACT PERSON FOR FURTHER INFORMATION

Name: Rebecca Thomas c/-Ekistics

Telephone: 0474 894 433

Email: rthomas@ekistics.com.au

EXISTING USE: Vacant

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: 6 storey tourist accommodation building, restaurant/bar, retail, car parking & port cochere

LOCATION OF PROPOSED DEVELOPMENT:

House No: Lot No: 2-7 Street: McLaren Parade Town/Suburb: Port Adelaide

Section No [full/part] Hundred: Volume: Folio: Refer attached

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

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]: $ 19,000,000

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

SIGNATURE: Dated: 21, 2, 2020

WALI Coughton

DEVELOPMENT REGULATIONS 1993
Form of Declaration
(Schedule 5 clause 2A)

To: State Planning Commission

From: CK Property Group

Date of Application: 21/01 /2020

Location of Proposed Development: .....

House No: ..... Lot No: 2-7 Street: McLaren Parade....Town/Suburb Port Adelaide...

Section No (full/part): .....Hundred: .....

Volume: ..... Folio: .....

Lot 2	6220/548
Lot 3	6220/549
Lot 4	6220/550
Lot 5	6220/551
Lot 6	6220/552
Lot 7	6220/553

Nature of Proposed Development:
Construction of a 6-storey tourist accommodation building (180 keys) comprising lobby, restaurant, bar and function spaces, retail tenancies, carparking and port cohere

I Walt Coulston of CK Property Group **.....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 1993*.**

Date: / /

Signed: .....

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

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.

ekistics

McLaren Wharf Hotel
Port Adelaide

Planning Report

Prepared for:
CK Property Group

Date:
24.02.2020

ekistics

Proprietary Information Statement

Document Control

Revision	Description	Author	Date
V1	Draft Planning Statement	RT	10/02/20
V2	Planning Statement	RT	21/02/20
V3	Final Planning Statement	RT	24/02/20

ekistics

Contents

Appendices

Figures

Executive Summary

Category	Details
PROJECT	McLaren Wharf Hotel
ADDRESS OF SITE	Lots 2 to 7 McLaren Parade, Port Adelaide
CERTIFICATES OF TITLE	Lot 2 6220/548 Lot 3 6220/549 Lot 4 6220/550 Lot 5 6220/551 Lot 6 6220/552 Lot 7 6220/553
SITE AREA	2,463m²
FRONTAGES	McLaren Parade 54.1 metres McLaren Wharf Promenade 56.25 metres Lipson Street 43.36 metres
LOCAL GOVERNMENT	City of Port Adelaide Enfield
RELEVANT AUTHORITY	State Commission Assessment Panel
DEVELOPMENT PLAN	Port Adelaide Enfield Development Plan (consolidated 6 February 2018)
ZONING	Regional Centre Zone
POLICY AREA/PRECINCT	McLaren's Wharf Policy Area 44
EXISTING USE	Vacant land
PROPOSAL DESCRIPTION	Construction of a 6-storey tourist accommodation building (180 keys) comprising lobby, restaurant, bar and function spaces, retail tenancy, carparking, landscaping and port cochere
NATURE OF DEVELOPMENT	Consent
REFERRALS/CONCURRENCES	Coastal Protection Board Government Architect Heritage SA City of Port Adelaide Enfield (informal)
PUBLIC NOTIFICATION	Category 2 (due to building height)
APPLICANT	CK Property Group
CONTACT PERSON	Rebecca Thomas, Ekistics Planning and Design 0474 894 433 rthomas@ekistics.com.au
OUR REFERENCE	00790

1. Introduction

1.1 Background

This report has been prepared on behalf of CK Property Group in support of an application for a 6-storey tourist accommodation building on McLaren Wharf in Port Adelaide.

The site has been vacant for a number of years and presents a significant opportunity for a destination development outcome in the heart of the Port which will both invigorate the Promenade and stimulate a diverse range of local businesses and medium density residential properties in the locality.

This statement provides information about the subject land and proposed development and assesses the merits of the proposal against the relevant provisions of the Regional Centre Zone, McLaren's Wharf Policy Area 44 and other relevant General policy provisions of the Port Adelaide Enfield Council Development Plan.

For the purposes of this Statement, the Port Adelaide Enfield 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 Stakeholder Engagement and Pre-lodgement Process

The Applicant commenced the voluntary pre-lodgement service offered by the Department of Planning, Transport and Infrastructure (DPTI) in mid-2019. In addition to the regular pre-lodgement meetings held during this process, other stakeholder meetings were also held. Key meetings are outlined below:

- Project Initiation meeting with DPTI – 21 May 2019
- Project Introduction Meeting with Port Adelaide Enfield Council – 22 August 2019
- Pre-lodgement Planning meeting with DPTI and Agencies – 14 November 2019
- Presentation to Council's Major Projects Group – 25 November 2019
- McLaren Parade Upgrade meeting with Council – 17 December 2019
- Office for Design and Architecture SA (ODASA) Design Review Panel presentation – 22 January 2020

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

Engagement with other relevant stakeholders has also taken place including Renewal SA (RSA), who have care and control of the McLaren Wharf Promenade, and the South Australian Tourism Commission (SATC).

RSA are very supportive of the level of activation and public realm engagement incorporated into the project and use of the Promenade for outdoor dining. We understand management of the Wharf Promenade space may transfer to Council in the future and the Applicant will continue engagement with both RSA and Council on opportunities to enhance the Promenade pedestrian experience and amenity.

SATC are also extremely supportive of new tourist accommodation opportunities in Port Adelaide, recognising the growing demand created by the defence sector, cruise ships visits, tourism in the State generally and the need for more short stay accommodation options and conference / business event facilities within Port Adelaide. SATC have provided their written support (refer ***Appendix 1***).

SATC's views are underpinned by data on tourist accommodation demand and align with the findings of the McLaren Wharf Project's lead Hotel consultant (AHS Advisory) who has identified that, over and above the known additions to supply in the competitive market area, a further 371 rooms are likely to be sustainable in Port Adelaide given the outlook for demand growth.

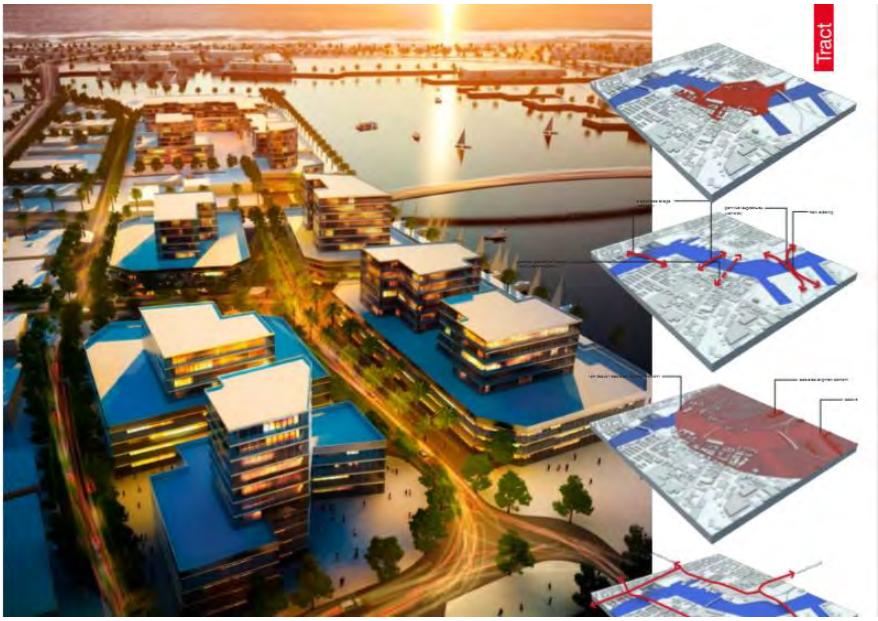
The Port Adelaide Enfield Council have also sought to engage with the Project Team on the potential upgrade of McLaren Parade and early feedback form Council indicates Council is committed to a civil and public realm upgrade of the street, with a budget allocation being considered for next financial year. If possible, the intent would be to align both the hotel and street upgrade construction timing as well as final design interface decisions in relation to paving materials, landscaping treatment, street furniture and the like.

1.3 Strategic Alignment and Benefits

Early in the design development phase of the project, investigations were undertaken to explore the history of Port Adelaide and review previous master planning work as well as identify the strategic benefits of the project within the selected location. This work informed the design context (and is reflected in the Architectural Package) but was also valuable for the Applicant in order to better appreciate the local 'Port' environment as well as inform the commercial viability of the project.

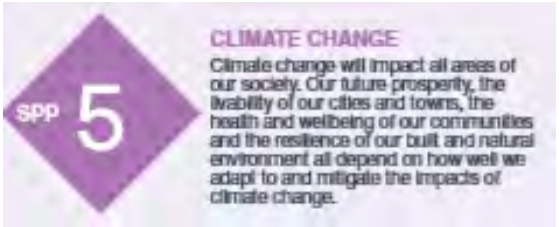
With respect to past masterplan work, two key documents reviewed included:

- ***Port Adelaide Precinct Plan***, Connor Holmes and David Lock on behalf of Renewal SA, 2014; and
- ***McLaren Wharf & Cruickshank's Corner Precincts Master Plan Framework***, Tract & GHD, prepared for the State Government, LMC [now RSA] and the Port Adelaide Enfield Council, 2010.



In addition, the project directly supports the achievement of the following State Planning Polices (SPP's), aimed at improving the liveability, sustainability and prosperity of the state.

As a statutory instrument under the Planning, Development and Infrastructure Act 2016, the State Planning Policies outline the planning and design ambitions for South Australia and represent the highest level of policy.

State Planning Policy	Proposal's Contribution to Policy Achievement
	The proposal makes efficient use of strategic yet highly underutilized site within the Port and presents a proposal which will be a catalyst for more local investment and establish a local benchmark for high quality development outcomes.
	Design development for this project has been thorough and well considered, informed by a range of stakeholders to incorporate all key design drivers including activation, heritage, massing, materiality, accessibility, flood management and sustainability. Recent amendments were influenced by the ODASA Design review panel.
	ESD opportunities have been part of the design development from the beginning resulting in a suite of initiatives that will facilitate a leading example of energy efficient hotel design both locally and nationally.
	Respect for the history of the Port and the remaining local architecture is acknowledged, with the design seeking to be responsive to the need for innovation and contemporary built form outcomes while also ensuring sensitive heritage interfaces and respect for the historic fabric in the locality.
	This project will generate significant local investment in addition to new employment opportunities generated during construction and after with ongoing hotel operations. Other value add opportunities will arise through associated goods and services, transport and complementary tourism venture.

2. Subject Site and Locality

The subject site comprises a vacant parcel of land situated within the McLaren Wharf Precinct, a prime public waterfront area located between the Port River to the north and Nile Street and McLaren Parade to the south. While the Precinct has a unique waterfront location and public promenade, excellent proximity to the core of Port Adelaide and valuable architecture and historic built form, it remains underdeveloped and is challenged by fragmented land ownership.

The subject site comprises a rare consolidated development opportunity in the heart of the Precinct.

Formally recognised as Lots 2 to 7 McLaren Parade, Port Adelaide, the land is identified by the following Certificates of Title (Appendix 2):

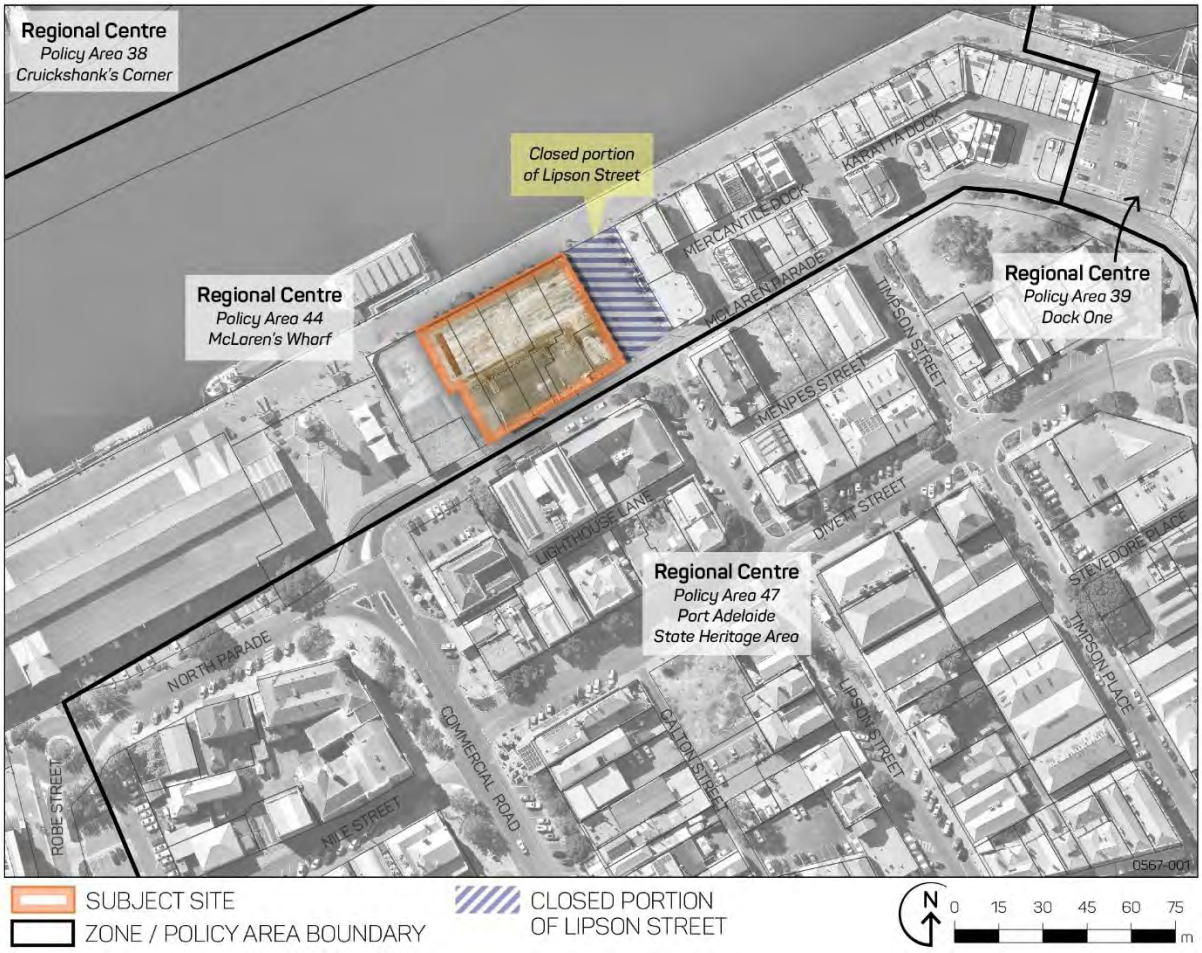
Allotment	Certificate of Title
2	6220/548
3	6220/549
4	6220/550
5	6220/551
6	6220/552
7	6220/553

The subject site measures approx. 2,463m^2 and is vacant of structures although it does contain a remnant asphalt carpark covering approx. 727m^2 and is fully fenced. The site is essentially rectangular albeit for a step in its western boundary. The land falls from north to south with the Promenade level currently sitting approx. 700mm higher than the level at McLaren Parade.

Currently a number of easements and rights of way (RoW) affect the site, the majority of which appear to be residual from the previous site occupation. Should consent be granted and the project proceed, the titles will likely be amalgamed, and the easements/RoW's extinguished and/or modified to reflect the proposed development.

The site and relevant land use zoning detail is identified in Figure 2.1 over page.

Figure 2.1 Site, locality and zoning

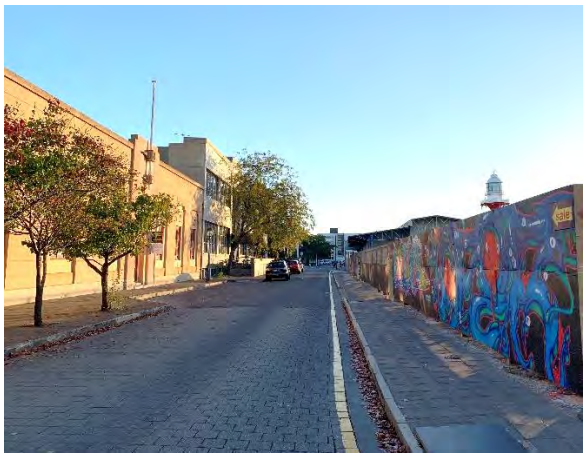


Images of the subject site are provided below.

Figure 2.2 Subject Site

As illustrated, the site has a southern frontage of approx. 54 metres to McLaren Parade (a local road, in the care and control of Council) from which all vehicle access is provided. This is the site's only public road frontage. The opportunity to significantly enhance this public thoroughfare and make it a shared space and one-way street is currently being explored by Council.

Figure 2.3 McLaren Parade

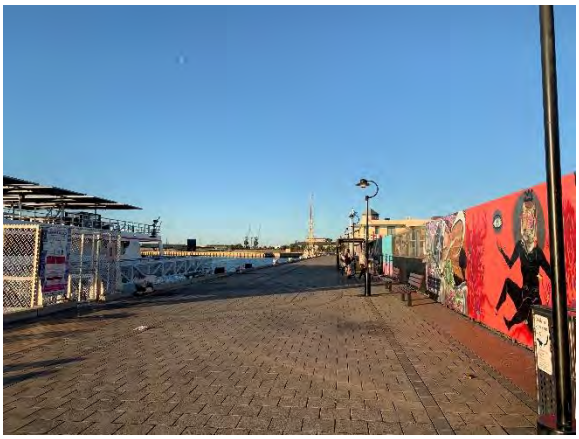


The site also has a 43-metre eastern frontage to Lipson Street however this end of the street has been closed to traffic and connects with the Port River Promenade located immediately north of the site. These areas function as public space and are accessed by pedestrians, cycles and emergency / service vehicles only.

Figure 2.4 Lipson Street

A 10.8 metre wide public wharf promenade (currently in the care and control of Renewal SA) abuts the northern boundary whereby the site presents a significant 56 metre frontage to the Port Adelaide River.

Figure 2.5 McLaren Wharf Promenade



To the west, the subject site abuts another vacant allotment of approx. 943m^2 which is not in the ownership or control of the Applicant. Notwithstanding, discussions with this adjoining landowner are open and continuing with opportunities to integrate the future development of this neighbouring land with the proposed hotel site remaining an option.

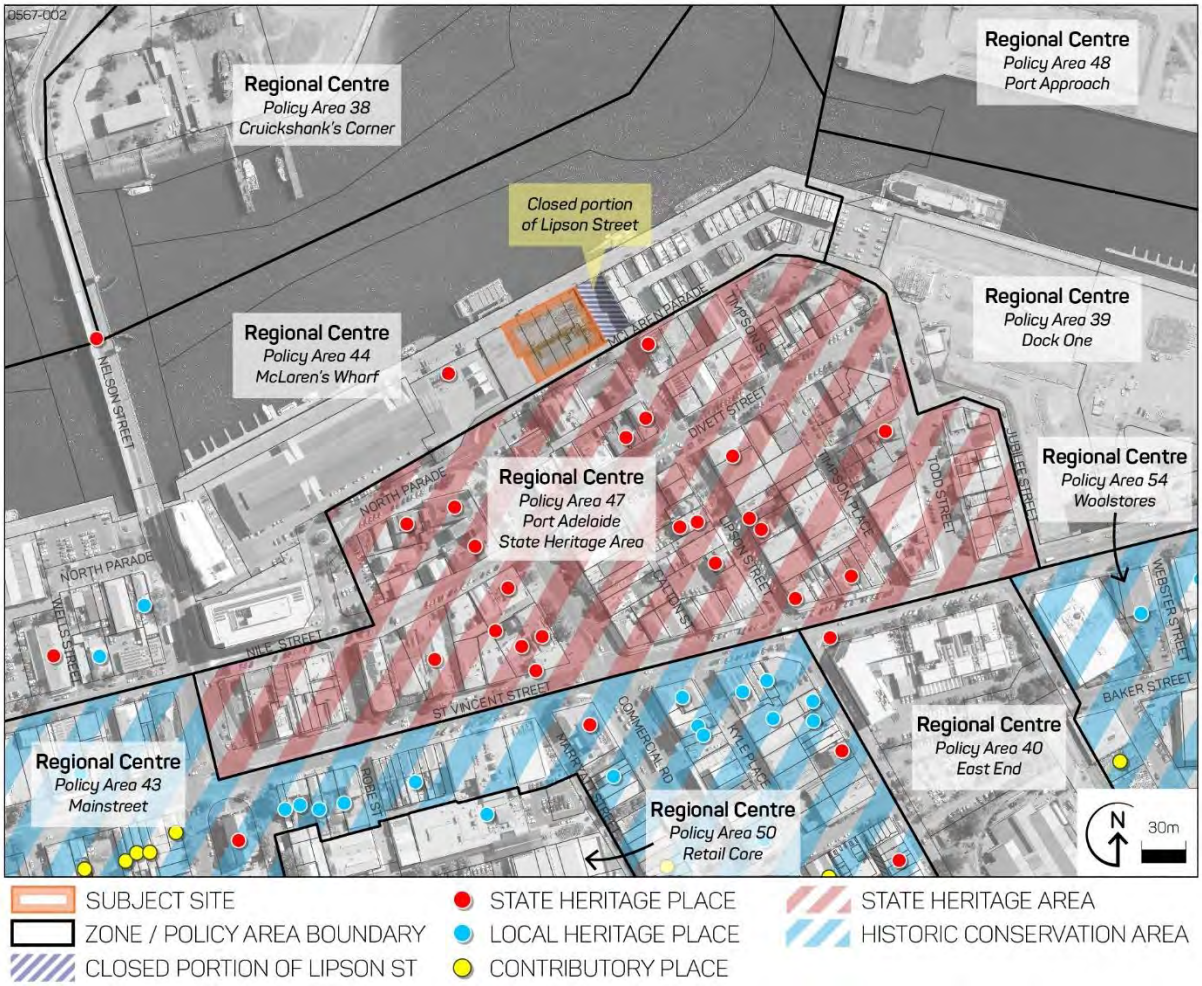
To the west of this neighbouring site is the public plaza area known as 'Lighthouse' or 'Black Diamond Square' (containing a prominent and heritage listed Lighthouse) and further west, the Fishman's Wharf Market.

Figure 2.6 Black Diamond Square and Lighthouse

The wider locality contains a variety of buildings from different eras and of different scales and land uses. The State Heritage Area to the immediate south represents the colonial architecture and the commercial core of the early Port Adelaide settlement associated with the town's function as the state's major port. 18 sites within the Port Adelaide state heritage area are also on the South Australian Heritage Register including the adjacent 'Dockside Tavern' on the McLaren and Lipson corner.

The relevant heritage listings are illustrated in the image over page.

Figure 2.7 Relevant Heritage Listings and State Heritage Area



The Art Deco style former Harbors Board building (not heritage listed), on the opposite corner is closer again to the site, immediate opposite the proposed Port Cochere hotel entry. A number of more contemporary building are situated within the same setting as the proposed hotel. Images from the locality are provided below.

Figure 2.8 Images of the locality

A number of the key precinct features are identified by Brown Falconer in their Context Analysis including the image over page which illustrates the highly central and strategic location of the development site and its ability to become a focus point and destination venue for Port Adelaide.

Figure 2.9 Precinct Features (c/- Brown Falconer)

3. Procedural Matters

3.1 Nature of Development

Notwithstanding the common use of the term 'hotel', the proposed development involves the construction of tourist accommodation in the form of a 'motel'. 'Tourist Accommodation' and 'Serviced Apartments' are not defined land uses in the Regulations.

A 'Motel is defined in the Regulations as:

> ***motel*** *means a building or group of buildings providing temporary accommodation for more than 5 travellers, and includes an associated restaurant facility, but does not include a hotel or residential flat building;*

The development will also incorporate a range of ancillary and supporting uses including the Port Cochere, Concierge, Check-in, Function Spaces and Lobby areas.

The proposed at-grade car parking is also ancillary to the 'motel' use, managed by a valet service and will not be available as a public carpark.

In addition, the ground floor will incorporate a public Restaurant/Bar and an adjoining tenancy most likely also for food/beverage (F&B) sales or similar tourist focused activity.

Within the 'Regional Centre Zone' these uses including the ancillary vehicle parking are all '**Consent'** uses (meaning the application is neither 'Complying' nor 'Non-complying' but is to be assessed on its merits).

3.2 Planning Authority

Pursuant to Schedule 10 of the Regulations, development within Policy Area 44 – McLaren's Wharf of the Regional Centre Zone is to be assessed by the **State Planning Commission (SPC)** via the State Commission Assessment Panel (SCAP).

3.3 Public Notification

Proposals which exceed the recommended five (5) storey limit in Policy Area 44 as illustrated on Development Plan Concept Plan Map PAdE/36 are required to undergo **Category 2 public notification** to all adjoining landowners and occupiers.

3.4 Referrals

It is anticipated that the proposal will be referred to the following authorities pursuant to Schedule 8 of the Regulations:

- **Government Architect**, DPTI;
- **Coast Protection Board**, Department for Environment and Water (DEW); and
- **Heritage South Australia**, DEW.

The **Port Adelaide Enfield Council** will also be informed of the application and invited to provided technical input/feedback.

4. Proposed Development

4.1 Key Features

The application proposes the construction of a six (6) storey 'motel' with 180 rooms/suites (and supporting ancillary uses including car parking and function space), a restaurant and bar and retail tenancy. Whilst the proponent is not yet able to publicly announce the ASX listed Hotel Operator an agreement has been reached with the successful Hotel Operator who currently operates over 60 Hotels in Australia.

The 'L' shaped building has a Gross Leasable Floor Area (GLFA) of 8,755m^2 and measures 24.5 metres high to the top of the parapet and a further 4.25 metres to the top of the roof top plant / lift over run. To ensure maximum activation and views, the building is sited hard up to the northern (Promenade) boundary (with various recesses for articulation) and presents a 0m - 2.5m setback to the east (Lipson).

The proposal is comprehensively illustrated in Architectural Plans prepared by Brown Falconer and attached as *Appendix 3*.

More specifically the development includes:

- A ground floor level with 4.2-4.7 metre ceiling heights comprising the primary building entries and lobby via an adjacent port cochere to McLaren Street, and active uses presenting to Lipson and the Promenade, including a bar and lobby lounge, public restaurant, and open terrace addressing the north-east corner;
- A separate ground floor tenancy for retail/F&B occupation at the western end abutting the Promenade;
- Back of House (BoH) functions including administration, kitchen, laundry, waste and amenities are also at ground level, located away from the activated frontages and behind a well screened façade and slatted fence;
- A port cochere (drop off-pick up) area under the building roof, accessed via the carpark from McLaren Parade;
- At-grade car parking for 17 vehicles in an open paved area adjacent McLaren Parade and a further 14 car parking spaces within a two-level car stacker system located within the building on the southern façade (setback 20 metres from McLaren Parade);
- Eight (8) bicycle racks adjacent the Lipson Street façade, providing space for the parking of 16 bicycles;
- A first floor, also with 4.2-4.7 metre ceiling heights, comprising 15 suites, a guest gym, function spaces (including a southern facing balcony) and two boardrooms;
- The four (4) levels above (floors 2-5) contain the remaining hotel rooms/suites and BoH amenities; and
- Roof top plant and lift overruns penetrate a low hipped roof in the centre of the building, sited behind and rising above the corner brick parapet and appropriately screened.

These and other features of the development are outlined further below.

4.2 Architectural Design

Through the course of a six (10) month design development process, the architectural approach has been developed and refined multiple times with the scheme now presented, considered to be the optimal design for the site.

Key images of the proposal in the context of the existing locality are illustrated below.

Figure 4.1 McLaren Wharf Hotel (c/- Brown Falconer)

Key design drivers included the need to activate three (3) frontage (Promenade, Lipson and McLaren) while also managing a single street entry/exit via McLaren Parade. The resulting L shaped building presents three (3) active ground level façades to the north, east and south-east with the functional areas and car parking located in the south-west corner.

A high-quality appearance and presentation from the immediate locality and adjoining public spaces is critical but so too are the vista views of the building from the south looking along Lipson through the State Heritage Area and the views across the water from the north, back to the McLaren Wharf Precinct.

The design brief also required that the development 'future proof' the opportunity to connect in with any future development that might occur on the neighbouring land to the immediate west.

The Lipson and Promenade corner is the principle building focus and the design seeks to reinform this junction through form, setbacks and material. The recessive corner terrace below two-level height glazed arches creates light and shade variations through the day and enables people to socialise in the building and spill out to the Promenade.

The defining brick corner element is flanked by two recessed wings with a solid concrete panel (inset with vertical windows) and a further recessed gridded glazed façade to the bottom and top of the concrete. These façade elements successfully break up the mass of the building from all sides.

Materials proposed include:

- a mottled 'blackett' sandstone brick;
- light grey precast concrete with a sandblasted finish;
- charcoal and ochre coloured stainless steel;
- timber cladding;
- high performance double glazed windows; and
- surfmist colourbond© roof sheeting.

Solid steel canopies project out over the Promenade and Lipson Street plaza by approx. 2.5 metres (with a 3m vertical clearance) providing the opportunity for outdoor dining and pedestrian shelter. We note that both the encroachments and outdoor dining necessitate a separate permit from Renewal SA and Council.

Notwithstanding the western façade abuts a private property boundary and may be built out in the future, the design incorporates the same high-quality finishes to this façade. Opportunity for a mural and/or light display on this wall is also proposed, possibly in conjunction with the Port's 'Wonderwall' street art project.

While the car park and BoH is a functional space with an essential street frontage for vehicle access, its frontage width has been minimised and quality paving and landscaping will enhance the utilitarian aspects of this space. This will be further enhanced with the proposed upgrade of McLaren by Council so that the carpark and road will have an integrated design and a shared/pedestrian quality.

Along the McLaren streetscape, the eye is drawn to the Port Cochere which will present with high quality finishes and reflect a welcoming and impressive entrance for hotel guests. This space is also intended as a 'shared space' for vehicles and pedestrians with no steps or notable level changes between the site and the surrounding public land/road reserve.

Both the car park and Port Cochere will remain accessible, without fencing or physical enclosure, to reinforce that pedestrian movement through and around the site is paramount.

Since the January 2020 Design Review Panel was held, the following design variations have been undertaken in response to the Government Architect's preliminary feedback:

Spatial changes include:

- Inset terraces to the brick arches on Lipson Plaza and the Promenade to provide outdoor dining space and a more engaged brick tower;
- Window bays at ground level between steelwork have been pushed in to provide 500mm of seating and a planting zone;
- Canopy intersecting window bays to provide complete shelter along the Lipson Plaza and the Promenade facades;
- More articulated entryway and setback of main entry doors to engage the Port Cochere;
- Alignment of precast concrete façade elements on both Lipson and the Promenade has been pushed back 900mm from the face of the brickwork to create additional layering in the façade;
- The glazed negative joint (between brick and precast elements, promenade elevation) is now aligned to marry into the upper level glass and L1 glass facades, creating a cleaner and more consistent detail;
- A negative joint has been introduced to the Lipson façade to match the Promenade façade;
- Increased depth and hierarchy in the façade by bringing the low-level steel proud of the upper level precast by 300mm (where previously flush);
- Relocation of the roof top plant away from Lipson Street and State Heritage Precinct;
- Car stackers aligned to grid and slot under the main precast wall, neatening the southern façade;
- Removal of art wall aside State Heritage Precinct;
- Slight narrowing of windows on the precast facade to match brick tower and better tie together both components (this also improves solar performance);
- Splaying of the spandrel in the precast walls to improve view to wharf; and
- Deeper reveal to slot window on McLaren Parade façade.

Material changes include:

- Steelwork grid is now finished in an ochre colour to tie into the tones of the brickwork and broader precinct;
- Splayed window spandrels are also finished in ochre colour to relate to steelwork below, brickwork aside; and

- Concrete colour has been softened to a light grey tone (previously whiter in colour), reducing starkness of façade amongst State Heritage Precinct.

The architectural approach has been continually informed by advice from DASH Architects, the project's heritage advisors. DASH's report is provided as ***Appendix 4***.

DASH have assessed the impact of the proposed development on the State Heritage Area and the various heritage listed places within the State Heritage Area as well as other listed places nearby (eg the Lighthouse and the Birkenhead Bridge).

DASH conclude that the proposal:

- Does not propose the loss of any heritage fabric;
- Does not materially affect the setting of the Heritage Items in the locality; and
- Utilises materials, finishes, setbacks, scale and other built form qualities that are complementary to the heritage place.

Heritage Considerations are discussed further in the Development Plan Assessment section of this report.

4.3 Sustainability Features

Wood & Grieve (part of Stantec) were engaged to advise on the sustainability opportunities for the project and provide engineering solutions to enable the project to achieve high performance sustainability and best practice where possible. Wood & Grieve's advice and input is based on their involvement in other high performing hotels and are expected to be refined and added to through final design development. Their Sustainability Performance Memo is located at ***Appendix 5***.

As a minimum the following sustainability features are proposed:

- A high performing façade reducing heating and cooling loads and increasing occupant comfort;
- Large roof top solar PV array to reduce energy consumption and CO2 emissions;
- Minimum 4 star NABERS hotel rating;
  - » Represents an increase of >30% reduction in predicted carbon emissions;
  - » 1st NABERS rated hotel in South Australia in 4+ years, and most efficient on record;
- High efficiency mechanical plant and equipment with multi-stage chillers for increased part-load performance;
- High Efficiency Domestic Hot Water system;
- High WELS rated fixtures and fittings to reduce water and energy consumption;
- Integrated Building Management Systems to allow for energy efficient booking strategies and building operation;
- LED Lighting throughout with smart sensors and controls;
- Onsite training of staff and management to ensure design outcomes are realised; and
- Heat Recovery for reduced energy consumption associated with conditioning outside air.

There are also a number of additional ESD initiatives the Applicant is pursing which will be resolved post-planning consent as part of the next phase of design development. Several of the additional initiatives expected to be implemented include:

- Achievement of a 5.0 star NABERS rating, which would represent a 50% increase in energy efficiency on national average;
- Carbon Neutral - offsetting embodied or operational energy via credible offset programs;
- Procurement of large volume of renewable energy, promoting local investment via Power Purchase Agreement;
- Innovative water-to-water Heat Pump for Domestic Hot Water;
- Solar boosted low carbon condensing boiler fired Domestic Hot Water;
- Water cooled high efficiency chillers with cooling towers;
- Building Integrated Photovoltaics- innovative smart PV that functions as both shade and/or window;
- Smart Electro/Thermochromic Glass- solar or electronically controlled glazing that responds to climate;
- Innovative Variable Volume Fan Coil units for reduced energy consumption; and
- Super Low Flow shower heads for reduced domestic hot water consumption.

The proposed features present significantly enhanced sustainability outcomes and enable a leading example of energy efficient hotel design both locally and nationally.

4.4 Traffic

GTA Traffic Engineers have informed the access and parking design and provision for the proposal and their report is provided as ***Appendix 6***.

Vehicle access to the land is only available via McLaren Parade and accordingly, access to an at grade carpark and port cochere is provided via this public street with three (3) crossovers proposed.

1. A two-way vehicle access / egress point at the western end of the site for carpark access and exit.
2. A two-way vehicle access / egress point located centrally which in addition to the carpark, provides access to the one-way Port Cochere drop off/pick up zone.
3. An exit only crossover at the eastern end of the site for vehicles exiting the Port Cochere.

A covered Port Cochere area functions as the main hotel entry for hotel guest. This space will be managed by the hotel valet and is accessible for light vehicles and the hotel shuttle bus service.

31 on site car parks are provided comprising 17 at grade car space (including 1 disabled space) and a further 14 car parking spaces within a two-level car stacker system located within the building on the southern façade.

The parking layout has been designed in accordance with Australian Standard / New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004 and Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009.

All parking on site will be managed by the hotel valet service with guests encouraged to drive into the Port Cochere and leave the vehicle with staff for parking.

In addition, hotel operations will encourage other forms of transport to and from the hotel including the use of a hotel bus transfer from the Cruise Ship terminal, the Adelaide Airport and other identified destinations (eg defence employment sites in the north).

An on-site loading and waste collection area is proposed near the north western corner of the car park and has been designed to accommodate movements by vehicles up to an 8.8 metre Medium Rigid Vehicle.

4.5 Waste Management

Rawtec have informed the requirements with respect to waste management and have prepared a Waste Management Plan (located at ***Appendix 7***) to ensure waste is successfully managed at the site.

Key features of the Waste Management Plan are as follows:

- Waste collected primarily via the rear loading dock accessed through the car park;
- Estimated waste and recycling volumes determined for all land uses types and recommended waste collection services documented for all waste streams including both routine (daily) collections and on-call waste removal (eg hard waste)
- Appropriate square metres areas and bin sizes for all land use waste types identified and sufficient space allocated in the building design;
- 16 rear lift waste collections required per week comprising:
  - 5 to land fill;
  - 6 to recycling; and
  - 5 for organics.

GTA have confirm the loading bay as designed can be accessed by a 8.8 metre waste collection vehicle (the maximum size vehicle anticipated to service this development).

4.6 Landscaping

The opportunity to incorporate greening into the project is considered critical given the limited vegetation surrounding the site and the resulting starkness this create. Birdseye Studio have prepared a landscaping scheme for the proposal incorporating new tree plantings in the car park, hedges to screen infrastructure and climbing plants to be grown up stainless steel cabling placed around the port cochere steel pillars (refer Appendix 8). In addition, four (4) sand filter garden beds within the carpark will be constructed as vegetated swales designed to reduce stormwater volume, improve water quality through infiltration and vegetative filtering, and reduce runoff velocity.

Planter boxes are to be placed around the outdoor dining areas and Greenwall plantings are proposed as part of the façade and incorporated at two locations:

- within the brick façade, sited above the canopies and terrace bar in the north-east corner; and
- along the edge of the Function Space balcony on the first floor facing south.

At this stage of design development, the Junglefy Greenwall system is proposed to be used which comprises an active, modular green wall system composed of linear, low-density polyethylene.

The architectural renders illustrate the value of these plantings which aim to soften, screen and cool the site and surrounds.

Figure 4.2 Landscape Design (incorporating potential McLaren Parade upgrade) c/- Brown Falconer

Proposed plant species are yet to be resolved but it is proposed that locally grown native species are utilised where possible to support a sense of belonging and reflect the indigenous heritage of the area.

Final landscaping details will also preferably be resolved in collaboration with Council's proposed upgrade of McLaren Parade. The landscaping plans also include a suggested design option for the McLaren public realm proposed to be upgraded by Council.

4.7 Civil and Stormwater

CPR have informed the project's civil engineering requirements including site levels, drainage, stormwater management and water quality (Appendix 9).

Currently the carpark on the site drains to McLaren Parade via an existing Gross Pollutant Trap (GPT). It is proposed to reuse this GPT and relocate it slightly west, below the eastern most driveway access point. The GPT will filter all water from the new car park (which is approx. 80m^2 smaller than the existing car park). Water from the car park surface will also be grade towards the four (4) sand filter garden beds within the carpark. This water, once treated, will discharge to the existing stormwater system within the roadway ultimately is carried out to the river.

Water from a 1,645m^2 roof catchment area will be collected and discharged to the Port River via a proposed new pipe in the north-east corner which will penetrate through the existing wharf structure and out to the river. This system mirrors an existing similar pipe outlet which carries water from the adjacent road system.

With respect to floor levels, considerable investigations have occurred with respect to determining a suitable finished floor level for the project in light of:

- the coastal location and potential flood risk, including guidelines for developments to incorporate an additional 0.7m sea level rise contingency;
- the function of the McLaren Wharf Promenade and ensuring equitable access for all from this important public thoroughfare;
- the existing site levels which grade from north down to the south; and
- the desire to minimise retaining walls and other barriers around the perimeter of the site which are not in keeping with the highly accessible, engaging and integrated development aims.

The majority of the ground floor level sits at 3.45m AHD, which satisfies the Coast Protection Board's (CPB) flood risk standard to 2050 (and is consistent with Council's Development Plan provisions). The only exception to this is the entry and concierge space off the port cochere which has a floor level of 2.90m AHD. While noting this is below the CPB's recommended minimum level, early engagement with the Coast and Marine Branch (CMB) of DEW confirmed that given the small size of this area, the CPB is unlikely to have objection to the design. The CMB also recognised the practicality of having a lower concierge entrance from a building design and access functionality perspective and notes the constraints of the available building area and low Wharf Promenade levels.

The Applicant is aware that any floor levels below 3.45m AHD are subject to an increased flood risk hazard (by way of storm surge) to 2050 and that current guidelines call for new developments to accommodate an additional 0.7m of sea level rise beyond 2050, to 2100. Raising the floor levels by 0.7m to minimise this future flood risk would have significant consequences for the building design and appearance, interaction with and activation of the Promenade, and limit equitable access resulting in the need for substantial ramping adjacent the Wharf.

Accordingly, the approach has been to build in the potential for a floor level increase should this be necessary in the future. The generous 4.2-4.7 metre ceiling heights within the ground floor allow for the floor level adjacent the Promenade to be raised if required. This "future proofing" is considered the most practical solution while not compromising the current accessibility and activation of the development.

4.8 Acoustic Treatments

Acoustic design features have been assessed and recommended by Bestec and their Acoustic Services report is located at ***Appendix 10***. The development itself a noise generating activity (eg vehicles, loading dock, waste collection, patrons, function etc) while there are also existing noise generating activities within proximity to the site. For example, watercraft on the river (e.g. The Dolphin Explorer which docks adjacent the Wharf immediately west of the site), and the two nearby hotels, the Dockside Tavern (located 20m east) and the Lighthouse Wharf Hotel (approx. 40m south). The Dockside is currently closed but Bestec's assessment has conservatively assumed it may open in the future and generate music and patron noise. Other sensitive receivers include nearby residents, Country Arts SA and Ocean View College.

Bestec's report outlines the proposed acoustic design criteria, the results of the traffic noise assessment and preliminary recommendations for acoustic treatment to achieve the selected design criteria.

Ambient noise levels were identified from site surveys carried out in December 2019.

Appropriate acoustic design criteria have been nominated based on Council's Development Plan policies, the SA Environment Protection (Noise) Policy 2007, National Construction Code Series 2019 and AS2107:2016 'Acoustics – Recommended design sound levels and reverberation times for building interiors'.

Bestec's recommendations to ensure the development appropriately responds to both continuous and intermittent noise intrusion include:

- Façade construction requirements for the precast concrete and the composite light weight façade;
- Glazing specifications;
- Roof structure specifications;
- Minimum insulations and specification requirements for partition walls, door, floors;
- Mechanical plant screening (final specifications to be resolved once mechanical service are confirmed in post-planning design development);
- Waste collection times restricted as per EPA guidelines - after 7:00 am and before 10:00pm Monday to Friday and after 9:00 am on Saturday and Sunday.

All of Bestec's recommendations have been noted by the Applicant and Architects and will be adopted in the building's construction should Consent be granted.

4.9 McLaren Parade upgrade and Public Realm

Early in the Pre-lodgement process, the City of Port Adelaide Enfield contacted the Applicant in relation to the potential upgrade of McLaren Parade. This road, which extends through to the recent Dock 1 development, had been identified by Council as a strategic route for civil and urban design improvements. Council recognises that the proposed Hotel development is a valuable opportunity to integrate the road upgrade with the proposed

carpark and port cochere features of the project, enabling significant amenity and pedestrian enhancements as well as complementary materials and landscaping.

Council held a workshop on the 14th January 2020 where Council staff presented information and options for the upgrade which include converting it to a one-way 'shared' vehicle and pedestrian street with more landscaping and indented on-street parking. CK Property were asked by Council to provide some imagery to assist Council in identifying the type of streetscape improvements that might be achieved.

Figure 4.3 Upgrade McLaren Opportunity

Current McLaren Streetscape

While work within the McLaren Parade road reserve is beyond the scope of the Development Application, the Applicant has confirmed in writing to Council that the hotel proponent would welcome the opportunity to work collaboratively with Council on an integrated public realm design for McLaren Parade should Council resolve to allocate the necessary capital works funds. We understand that Council are generally supportive and enthusiastic about improvements to McLaren Parade and that a capital fund allocation is proposed for the Council's draft 20-21 budget.

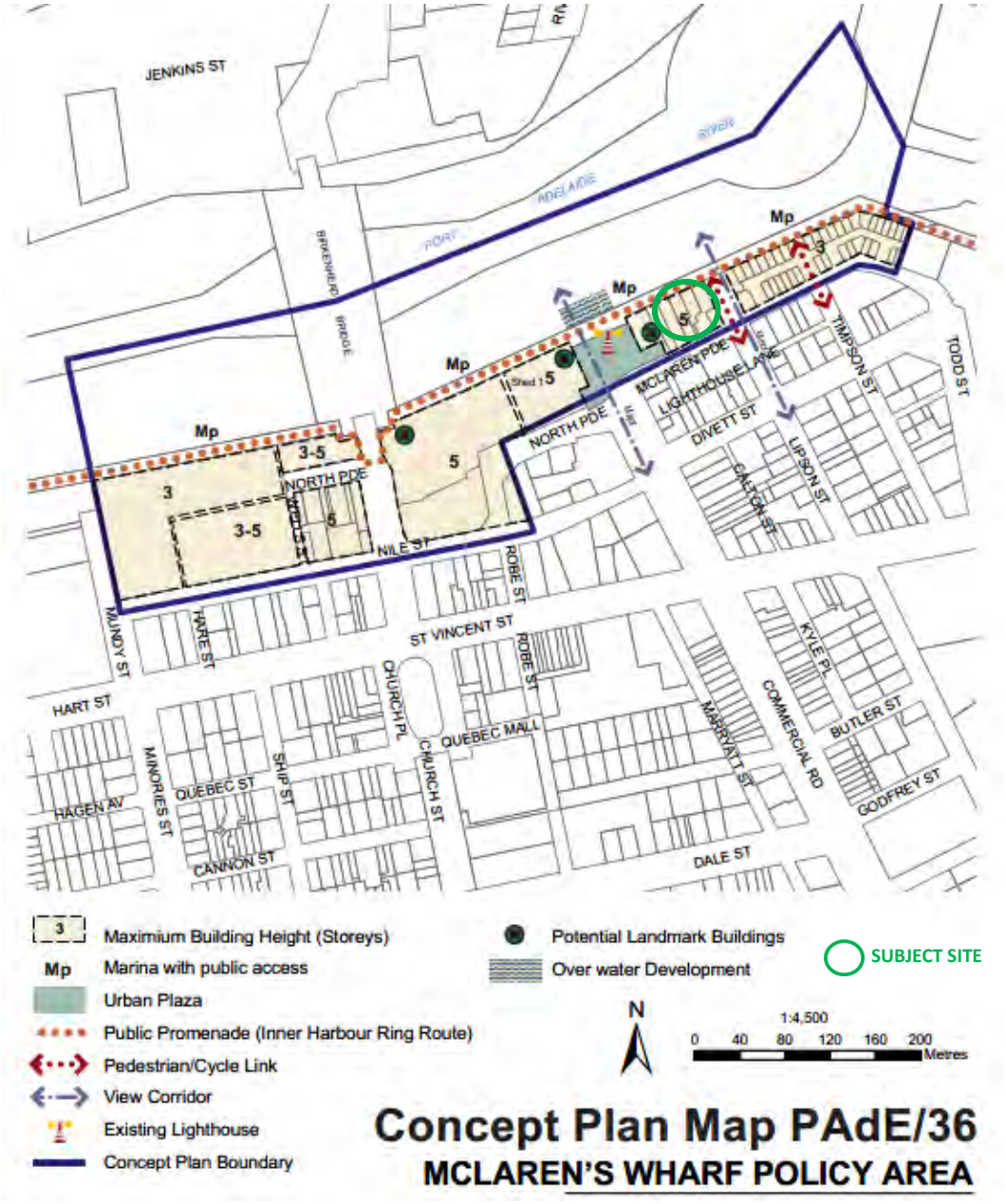
5. Development Plan Assessment

5.1 Overview

The subject site is located within the **Regional Centre Zone** and more specifically is in the '**McLaren's Wharf Policy Area 44**' of the Port Adelaide Enfield Council Development Plan (consolidated version 8 February 2018).

The site is identified in the Development Plan as being within the 'Waterfront Development Area' and as a location for a 'landmark building'. Concept Plan Map PAdE/36 identifies the preferred outcomes of the McLaren Wharf Policy Area and is extracted below.

Figure 5.1 Concept Plan Map PAdE/36



5.2 Land Use

The proposed tourist accommodation use with complimentary food and beverage operations, is highly aligned to the aims of the McLaren's Wharf Policy Area 44 and the Regional Centre Zone.

Tourist accommodation is specifically encouraged within the McLaren's Wharf Policy Area 44.

> Policy OBJ 1 *Mixed tourism, retail, office, recreational, educational and residential development of diverse character which capitalises on its access to the waterfront.*

The Policy area also encourages mixed uses in proximity to the Lighthouse Square and lists the following forms of development (amongst others) as 'envisaged' in the Policy Area:

- hotel;
- public place;
- restaurant;
- shop;
- tourist accommodation; and
- tourist development.

The Regional Centre Zone encourages:

- The rehabilitation and optimal use of blighted and underutilised waterfront land in the inner harbour of the Port Adelaide River;
- A range of medium to high rise residential developments in conjunction with non-residential development;
- The further development of tourism, cultural and recreational facilities related to Port Adelaide's unique maritime and commercial heritage and character, and promotion of the zone as a major State tourism destination;
- Active main streets and waterfront promenades offering lively cafes, shops and pubs together with residential, commercial, tourism, cultural and leisure activities; and
- Land uses including 'hotels', 'motels' 'restaurants' and 'tourist development'.

The zone specifically seeks tourism and retail development adjacent the Port River as expressed in the following provisions:

> ***Zone PDC 10*** *Land adjacent to the Port Adelaide River not required for port or shipping activities should be progressively redeveloped for a range of the following uses where consistent with the intent for each policy area:*
>
> *(a) community uses*
>
> *(b) medium and higher density residential uses*
>
> *(c) recreation*
>
> *(d) tourism*
>
> *(e) office*
>
> *(f) retail.*
>
> ***Zone PDC 13*** *Tourist development should be primarily situated adjacent to, and on the Port Adelaide River and associated public promenade within the following policy areas:*
>
> *… (f) McLaren's Wharf Policy Area 44*

The proposal achieves the relevant land use provisions of the Development Plan and directly contributes to the revitalisation of the waterfront promenade are sought by the Zone's Desired Character statement (part extract below).

Port Adelaide was South Australia's first commercial Port. The zone captures and celebrates this history while embracing new ideas, innovation and development and supporting a vibrant, creative and sustainable community.

The heritage of the Port Adelaide Centre will be valued in its revitalisation, focusing on active main streets, waterfront promenades and the Port Adelaide River.

5.3 Tourism Development

The Development Plan contains a suite of General Tourism Development provisions and in the context of this application the following are relevant.

OBJ 1 *Environmentally sustainable and innovative tourism development.*

OBJ 3 *Tourism development that sustains or enhances the local character, visual amenity and appeal of the area.*

PDC 4 *Tourism development should, where appropriate, add to the range of services and accommodation types available in an area.*

As outlined, the proposal embodies a number of leading ESD features and is aiming to achieve a minimum 4 star NABERS rating which represents an increase of >30% reduction in predicted carbon emissions. As a vacant site in a prime waterfront location, the land in its current condition significantly detracts from the waterfront amenity and promenade experience. The high-quality tourism offering will enhance the aesthetics of the immediate local area as well as the longer views over the port from various vantage points. In addition to boosting the availability of local tourist accommodation the development will be a destination driver for Port Adelaide, encouraging not just tourists but also new local residents who will be encouraged to live in an area experiencing investment and growth.

The proposal achieves the Tourism Development aims of the Council's Development Plan.

5.4 Built Form, Design and Heritage

Issues of built form, character, scale, materiality and heritage are addressed in the sections below.

5.4.1 Design and Appearance

The McLaren's Wharf Policy Area 44 incorporates the following design related aims within the Policy's Desired Character statement which highlight the design approach sought for this location.

- A Policy area that is the cornerstone identity of the Port Adelaide Waterfront, comprising an appealing location and a gateway leading people to the Port Adelaide River;
- Buildings of height, scale and architectural form that reinforce and emphasise the policy area as a focus for activity in Port Adelaide;
- Buildings developed along the waterfront will create strong visual links back to St Vincent Street and the core of the heritage centre beyond;

- Buildings and spaces will be sympathetic in scale and form with the rich architectural heritage of existing buildings in and adjacent to the policy area;
- Landmark buildings of high architectural design and greater scale and intensity to form the focus of the policy area; and
- Buildings throughout the precinct will provide a continuous built form to all major thoroughfares.

Similarly, the Regional Centre Zone recognises that development within the zone should capture and celebrate the Port's history while embracing new ideas, innovation and development and supporting a vibrant, creative and sustainable community.

Key built form Policy's for the Regional Centre Zone include:

> *PDC 24 Development should be compatible with and reinforce the rich, historical and highly urbanised townscapes within the zone.*
>
> *PDC 25 Development should respect, but not mimic, existing 19th century building forms and townscapes of significance.*
>
> *PDC 27 Buildings should be situated close to or abutting street frontages, particularly on corner sites, to reinforce the prevailing townscape character within the zone.*
>
> *PDC 31 The siting, form and scale of buildings on corner sites should be designed to:*
>
> *(a) increase the presence of built form on street intersections*
>
> *(b) address both street frontages*
>
> *(c) minimise unusable open space on the street frontages.*
>
> *PDC 38 Development should incorporate a high degree of architectural quality with building design adequately addressing:*
>
> *(a) compatibility in terms of form and scale with existing buildings and the desired character statement of the relevant policy area*
>
> *(b) interest and diversity*
>
> *(c) public domain interface*
>
> *(d) a high quality streetscape*
>
> *(e) building height*
>
> *(f) massing and proportion*
>
> *(g) facade articulation*
>
> *(h) elements such as eaves, sun shading devices, entries and balconies.*

The strategic positioning of the land on the waterfront and abutting significant public land also lends itself to a landmark 'destination' building which is suggested in Concept Plan Map PAdE/36. The following Principles guide the delivery of landmark buildings.

> *PDC 50 Landmark buildings should be appropriately designed with facade treatments and distribution of mass, setbacks and ground level articulation/uses.*
>
> *PDC 51 Landmark buildings should be at an appropriate scale at ground level to create a pleasant, comfortable and well-proportioned pedestrian environment at a human scale.*

The architectural design approach adopted has successfully balance these aims through a building which is striking in appearance but also familiar in its form, rhythm and texture. The defining corner brick element presents as a gateway form welcoming people to the primary pedestrian area of Port Adelaide. By wrapping this element around the site corner, and connecting it with a lighter weight, more contemporary façade, the building prioritises both key pedestrian facades.

Window and door openings enable clear views into the building at ground level and engagement is encouraged through people friendly spaces to eat, drink and gather. Inset glazing and openings will result in variable shadow and light across the façade creating spaces interest and intimacy.

The confident building scale and form align with the character of the Port and its working history. The two-storey scaled arches have a warehouse feel, as does the use of brick.

Massing of the long facades is managed through the inclusion of a lower, highly glazed podium form, a more solid middle element and a glazed top bond. The horizontal podium lines reflect existing 2 and 3 level buildings surrounding the site.

The building has been designed to carefully manage the interface with the adjacent heritage area and listed buildings, particularly with regard to massing proportions; overshadowing, scale and appearance and materiality.

On McLaren Parade, the functional Port Cochere lands the building to the boundary edge through steel columns, upper level glazing and a contrasting solid wall with corridor end windows placed as a central feature. The solidity of this wall breaks the repetition of the other highly glazed facade and is reflective of the highly solid Art Deco façade of the former Harbours Board building immediately opposite.

The parapet hides the roof, again, consistent with many other buildings in the locality and while a portion of the roof top plant will project above this parapet level, the siting of the plant centrally on the roof and away from McLaren and Lipson Street, will minimize the visibility of this element.

As a landmark building, the structure has been carefully designed with a well-articulated façade, elements to break up and distribute mass, ground level activation and a human scale ground plane to offer an enhanced pedestrian environment.

In addition to Policy and Zone built form and design provisions, the General Section of the Development Plan contains the following relevant policies which have been considered.

Medium and High Rise Development

PDC 1 Buildings should be designed to respond to key features of the prevailing local context within the same zone as the development. This may be achieved through design features such as vertical rhythm, proportions, composition, material use, parapet or balcony height, and use of solid and glass.

PDC 3 Windows and doors, awnings, eaves, verandas or other similar elements should be used to provide variation of light and shadow and contribute to a sense of depth in the building façade

PDC 4 Buildings should:

(a) achieve a comfortable human scale at ground level through the use of elements such as variation in materials and form, building projections and elements that provide shelter (for example awnings, verandas, and tree canopies)

(b) be designed to reduce visual mass by breaking up the building façade into distinct elements

(c) ensure walls on the boundary that are visible from public land include visually interesting treatments to break up large blank facades.

PDC 5 Buildings should reinforce corners through changes in setback, materials or colour, roof form or height.

PDC 10 responds the design of building entrances for multi-level buildings and encourages them to be

- oriented towards the street;
- visible and clearly identifiable from the street; and
- provide shelter, a sense of personal address and transitional space around the entry.

The building contains multiple entry opportunities however the primary hotel entry point is from McLaren Parade through the sheltered pedestrian and vehicle drop off point. People arriving by vehicle (whether private, cab, uber or the like) will arrive at this southern side of the building and hence the importance of this entry space. The design, materials and most importantly levels of this port cochere space will enable it to flow direct from Lipson Street and the upgraded McLaren Parade so that the space will effectively feel like an extension to the public realm. As a shared space with high quality architectural finishes, landscaping and lighting, this space will be inviting to pedestrians who will have ample space and sightlines to manoeuvre through concurrently with slow moving vehicles.

The primary entry, as well as the other ramped entry points off the Promenade all achieve the aims of PDC 10.

5.4.2 Building Height

In relation to building height, we note the five (5) storey reference on the Development Plan Concept Map PAdE/36 (refer Figure 5.1) and the policies seeking a maximum five storey building height.

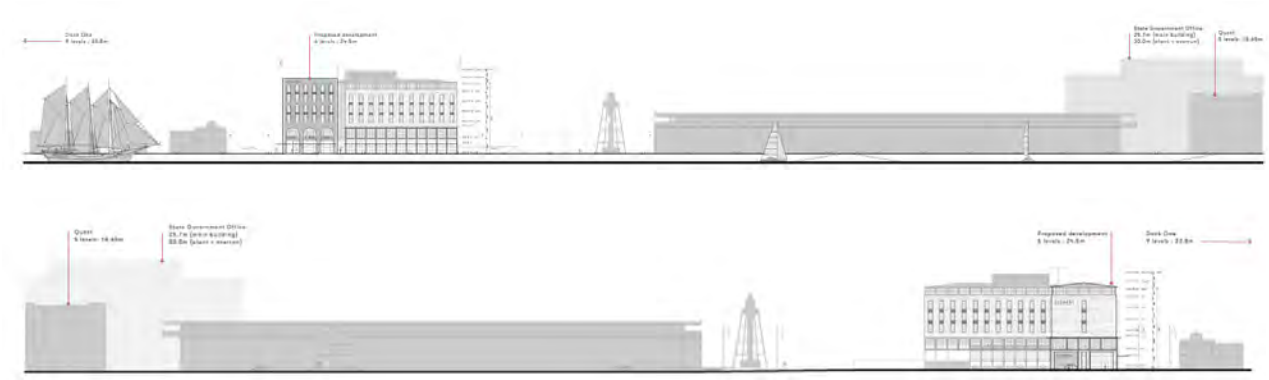
Zone PDC 49 Buildings should not exceed the number of storeys as indicated on the following relevant concept plan maps:

(g) Concept Plan Map PAdE/36 - McLaren's Wharf Policy Area

While the building comprises an additional level totalling six (6) storeys, we have formed the view that this scale, at 24.5 metres, is consistent with the general scale of built form envisaged in this locality, noting that a 5 storey building could potentially measure anywhere from 18 metres to 25 metres high subject to floor to ceiling heights and other vertical building elements.

The proposed building is also consistent with established scale of built form in the locality, being closely aligned to the height of the recently constructed State Government office building and the nearby Quest Hotel, as illustrated in the images below.

Figure 5.2 North and South Streetscape scale (c/- Brown Falconer)



Further, the proposed building remains lower than the Dock One hotel building (conversion of former office building) which measures 34 metres high.

The Development Plan recognises that landmark buildings will, in addition to being of outstanding architectural design, also have a greater scale and intensity than the majority of other built form in order to reinforce the focal point and destination aims of these sites.

The Zone Desired Character statement identifies that new development should be "*cognisant of the overall variation in heights and perceived heights of adjacent buildings and structures, not just solely as a measurement of the number of storeys but also in their design and context.*" *(our emphasis)*

The Zone also contains the following relevant provisions:

> ***Regional Centre Zone***
>
> ***PDC 53*** *Development should be contextual and respond to both the existing and desired future character of the locality, with particular regard to scale, massing, composition, architectural expression and materials.*
>
> ***PDC 58*** *While buildings should not be limited to the height of adjacent buildings, they should be designed to reflect the street wall heights and horizontal elements of adjacent buildings by:*
>
> *(a) reinforcing the prevailing datum heights, including parapet levels, balconies or distinguishing elements such as verandas and canopies at the street level; and*

(b) reinforcing a distinction of levels below and above prevailing horizontal elements through architectural expression.

Whether 5 or 6 storeys, any development on the subject site is expected to be of a greater scale than the adjoining sites to the south and east. The proposed building height at 24.5 metres is clearly higher than the neighbouring-built form, as it is encouraged to be, however the design cleverly manages this scale by incorporating different façade components both vertically and horizontally. Glazing, recesses and material use also reduces the visual bulk of the building. The physical separation of the site from the State Heritage Area and other adjoining built form, combined with the articulated elements of the façade, port cochere and complementary landscaping result in a building that sits comfortably within the streetscape and the wider heritage character context.

A reduction to a five (5) level building (which might equate to a lowering at approx. 3.5m) would have a negligible impact on the building's apparent scale and unlikely to be discernible to pedestrians or even long visa views of the building. A five-storey building would also have no impact on the ability to view heritage built form in the locality. However, importantly, the additional level does facilitate a viable tourist accommodation development with the minimum number of rooms and complimentary facilities required to ensure a commercially sustainable development.

We note commentary in the Port Adelaide Precinct Plan which identifies key considerations with respect to scale and intensity and the contribution multi-level buildings will have on achieving more workers, residents and visitors to the Port.

The overall approach of the Precinct Plan has been to create a dense and vibrant environment that provides a full mix of uses to create a thriving urban place that contributes towards fulfilling the role of Port Adelaide as a Regional Activity Centre whilst preserving, building and reinforcing the rich heritage character and unique physical setting of the inner Port.

A key factor in achieving this outcome is the carefully balance in height and density of new development with commercial development considerations, investment attraction and factors of land economics. For example, the height and density of development must be a scale and intensity to adequately offset the risk and significant costs associated with site formation and remediation around the inner harbour…

Neither the Desired Character for the Policy Area or the Zone are compromised in any way by the proposed building height and DASH Architects have also confirmed that the additional storey proposed has no material impact on the heritage values of the Heritage Items in the locality.

In our view, the height at six (6) storey, while marginally above the five (5) level guideline, is acceptable on this site and within the established (and anticipated) character of a zone which specifically seeks high quality, innovative buildings and complementary land uses, and a more intense use of vacant land on the inner harbour of the Port River.

5.4.3 Materials, Finishes and Public Art.

As outlined, the material palette has been informed through feedback through the PLP process and advice from DASH. The following provisions have also informed the selection.

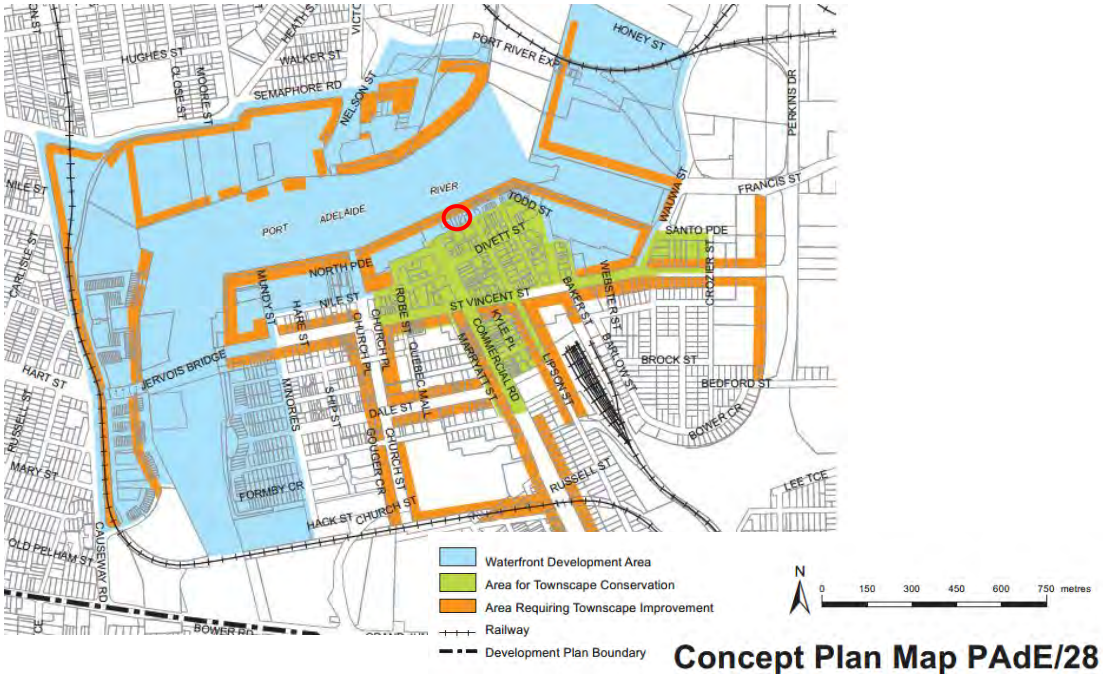
> ***Regional Centre Zone***
>
> ***PDC 36*** *Materials incorporated in development should reflect, and reinforce, the historic, maritime character of the zone wherever practicable.*
>
> ***Medium and High Rise Development***
>
> ***PDC 6*** *Materials and finishes should be selected to be durable and age well to minimise ongoing maintenance requirements. 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.*

The soft sandblasted concrete, brickwork, and ochre and charcoal colour steelwork are the standout materials complimented by timber cladding and landscaping. The materials, colours and finishes are considered to achieve the relevant Development Plan provisions, reflecting a contemporary presentation of materials traditionally used within the Port environment.

5.4.4 Heritage

As outlined, the site is adjacent to a State Heritage Area and a State listed property. In terms of development opportunities, the land is identified as being within the 'Waterfront Development Area', and is adjacent to but not within the Townscape Conservation Area, as illustrated in the following Development Plan extract.

Figure 5.3 Townscape and Waterfront Development Areas Concept Plan Map PAdE/28 (extract)



Policy references to the site's heritage interface are scattered throughout the Development Plan, and include the following key provisions:

> ***Policy Area 44 PDC 10*** *New buildings should respect the form, scale and design of the historic townscapes immediately south of the area and create contemporary architecture which is innovative, functional and attractive. Architectural themes evocative of the area's maritime and industrial heritage should be incorporated.*
>
> ***Zone OBJ 8*** *The conservation and enhancement of items and areas of significance to the zone's unique maritime and commercial heritage, townscape, waterscape and landscape character.*
>
> ***Zone OBJ 9*** *The reinforcement of those parts of the zone which have distinctive and valued architectural and townscape characters with compatibly designed new buildings, where their scale, height, mass, setbacks and materials enhance the character of the zone.*
>
> ***Zone Desired Character***
>
> *Development including landmark buildings will be designed to carefully manage the interface with heritage buildings, particularly with regard to massing proportions; overshadowing, scale and appearance.*
>
> ***General Section - Heritage Places***
>
> ***PDC 6*** *Development that materially affects the context within which the heritage place is situated should be compatible with the heritage place. It is not necessary to replicate historic detailing, however design elements that should be compatible include, but are not limited to:*
>
> > *(a) scale and bulk*
> >
> > *(b) width of frontage*
> >
> > *(c) boundary setback patterns*
> >
> > *(d) proportion, form and composition of design elements such as rooflines, openings, fencing and landscaping*
> >
> > *(e) colour and texture of external materials.*
>
> ***PDC 9*** *Development of a State or Local Heritage Place, or development on land adjacent to a State or Local Heritage Place should conserve, maintain, enhance and reinforce the historic character of individual buildings and/or the existing streetscape character by exhibiting architectural and roof-form designs, street frontage widths, front and side boundary set-backs, materials, colours, fences and landscape settings which complement and give prominence to historic buildings or their detailing, and should have regard to the provisions of design guidelines in Table PAdE/3 - Conservation Design Guidelines*

DASH Architects have undertaken a comprehensive review of the proposal against the relevant Development Provisions. DASH note that from a heritage point of view, the interactions between the new building and the State Heritage Item at the corner of Lipson Street and McLaren Parade (as reflected in the image below) are particularly important as this is the closest physical relationship and this aspect of the building is part of longer views with the State Heritage Area.

Figure 5.4 Lipson Street view

In this context, DASH make the following observation and conclusions (extracted from their report):

- Given the existing subdivision pattern will be maintained and that there were previously structures on the Subject Site … the proposed works will not adversely affect the setting of the State Heritage Area, or any items within it;
- From a heritage point of view the additional storey proposed (the development is 6 storeys high, rather than 5), has no material impact on the heritages value of the Heritage Items in the locality;
- The materials proposed to the two-storey podium at the corner of Lipson Street and McLaren are of most importance from a heritage point of view. The use of a gridded steel frame as an ochre colour is appropriate as it is complimentary to the articulation, height, scale and colouring seen in the adjacent buildings, without replicating them.
- The design, and particularly the set out, scale and composition of the proposed development have considered their context and proposed an appropriate solution.
- The proposed layout of vehicle access, parking and associated landscaping does not have a significant or negative impact on the heritage values of the Heritage Items in the locality.

In conclusion, DASH advise that, in their view, the proposal meets the intent of the majority of the relevant Development Plan provisions with respect to Heritage Matters in that the development:

- Does not propose the loss of any heritage fabric;
- Does not materially affect the setting of the Heritage Items in the locality;
- Utilises materials, finishes, setbacks, scale and other built form qualities that are complementary to the heritage place; and
- Scale, at 6 storeys, will have no material impact on the heritage values of the Heritage Items in the locality.

Lastly, we note that DASH recommends the imposition of a Planning Condition to any Consent granted requiring the management of vibration throughout the construction process to protect heritage items within the vicinity of the site. The Applicant has no objection to this Condition and notes that as the project does not involve excavation, vibration impacts can be readily managed.

The proposed design is considered to successfully achieve the built form, design and heritage related Development Plan provisions and will be a transformational asset to the core of Port Adelaide.

5.5 Street Activation and the Pedestrian Environment

Policy Area 44 identifies the pedestrian experience as critical and seeks "*A high degree of pedestrian activity and amenity … throughout the policy area with particular focus on the waterfront promenade* (Desired Character statement)".

Policy PDC 12 seeks linear building forms to define the waterfront promenade and provide frequent pedestrian spaces and links which enable public access and provide views to the waterfront.

The proposal delivers on both these ambitions with a highly active and interesting ground floor plane, glazing to allow views into and out of the building and extensive areas for seating/dining along the building perimeter to take fully advantage of the Promenade and water views. Canopies provide shade and shelter and engage with public realm.

The Zone provisions also emphasise the importance of new development integrating with and improving public spaces.

> *Regional Centre Zone*
>
> *PDC 48 Development adjacent to the public promenade, public plazas, public reserves, main roads and edges of public spaces should be designed to:*
>
> > *(a) maintain an active interface through architectural detail and interest in skyline and pedestrian levels*
> >
> > *(b) provide active street frontages at ground level with land uses such as cafes, restaurants, local shops and home offices that contribute to the vibrancy and diversity of the area*
> >
> > *(c) maintain the continuity of streetscape with streets and public spaces defined by consistent building frontages at the street alignment*
> >
> > *(d) maximise solar access and limit overshadowing of these areas*

(e) protect the amenity of residents at ground level

(f) protect pedestrian amenity

(g) provide for varied and attractive building elevations.

PDC 56 Development should provide for pedestrian comfort by:

(a) interfacing at a pedestrian scale at the street level

(b) creating a well-defined and continuity of frontage

(c) contributing to the interest, vitality and security of the pedestrian environment

(d) minimising micro climatic impacts (particularly wind tunnelling and downward drafts) and providing shelter in the form of canopies, verandas trees or the like

(e) maintaining a sense of openness to the sky from street level

(f) bringing daylight to the street, particularly in the Spring and Autumn months.

We also note Medium and High Rise Development provisions OBJ 5, OBJ 6, PDC 8 and PDC 11 which reiterate the above extracted provisions.

The proposal achieves these pedestrian and activation aims by:

- enabling activity and interest at street/promenade level around three side of the site;
- offering an enlivened building edge, with activities (active land uses, multiple entry points, seating/dining etc);
- creating an attractive, safe and vibrant space with high quality, fit for purpose landscaping;
- creating contrasts between solid façade elements, voids and recessed elements (for example windows, doors and balcony openings) in the building façade that are well articulated and create interest to passers-by;
- improving safety through passive surveillance on all public building elevations; and
- positioning car parking, BoH services, plant and mechanical equipment in as discreet location as possible and ensuring it is well screened and integrated with the façade.

These features, as they relate to the Lipson and Promenade corner, are illustrated in the following image.

Figure 5.5 Lipson and Promenade public realm interface (c/- Brown Falconer)

In terms of building floor levels, the following provision is relevant.

> ***PDC 11*** *To contribute to direct pedestrian access and street level activation, the finished ground level of buildings should be no more than 1.2 metres above the level of the footpath, except for common entrances to apartment buildings which should be at ground level or universally accessible.*

Slight floor level rises (well below 1.2m) do necessitate ramping from the Promenade to enter the retail tenancy, restaurant and bar space while at the north- east corner the level difference is managed via a step along the boundary edge. From the Port Cochere access is at grade with an internal ramp and multi-step access option. Site levels have been managed appropriately and kept as low as possible in the context of adjoining site levels and flood hazard management.

5.5.2 Waterfront Development

The site is specifically identified as 'Waterfront Development' in Concept Plan Map PAdE/28 and accordingly these Zone PDC's have been reviewed in the context of this application. The aims of these policies, as they relate to this project, are primarily to:

- Protect the public promenade and ensure a minimum width of 8 metres is maintained;
- Encourage access to and from the Promenade to enhance activation;
- Support the development of uses including restaurants, café and other tourism uses towards the waterfront; and
- Maintain the free movement of pedestrians and cyclists along the Promenade.

We confirm the project proposes minimal encroachment into the Promenade, in the form of 3 metre high canopies, outdoor dining and planer boxes and that these elements all require a separate Encroachment permit from Council.

Importantly, the width of public promenade exceeds 8 metres and the inclusion of outdoor dining will directly contribute to the activation and enjoyment of pedestrians walking along this public thoroughfare.

The proposal maintains and reinforces a clearly defined area for pedestrians and cyclists, provides shelter and seating opportunities, and retains the waterfront as a convenient, safe and attractive link to adjoining areas.

5.6 Amenity and Interface Considerations

A selection of the key interface related development Plan policies are extracted below.

Regional Centre Zone

PDC 35 Development should be designed to minimise undesirable microclimatic and solar access effects on other land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow.

General Section

Medium and High Rise Development

PDC 20 Multi-storey buildings should:

(a) minimise detrimental micro-climatic and solar access impacts on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow…

PDC 22 Development of 5 or more storeys, or 21 metres or more in building height (excluding the rooftop location of mechanical plant and equipment), should be designed to minimise the risk of wind tunnelling effects on adjacent streets by adopting one or more of the following:

(a) a podium at the base of a tall tower and aligned with the street to deflect wind away from the street

(b) substantial verandas around a building to deflect downward travelling wind flows over pedestrian areas

(c) the placement of buildings and use of setbacks to deflect the wind at ground level.

Interface Between Land Uses

PDC 1 Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:

(a) the emission of effluent, odour, smoke, fumes, dust or other airborne pollutants

(b) noise

(c) vibration

(d) electrical interference

(e) light spill

(f) glare

(g) hours of operation

(h) traffic impacts.

PDC 7 *Development that emits noise (other than music noise) should include noise attenuation measures that achieve the relevant Environment Protection (Noise) Policy criteria when assessed at the nearest existing noise sensitive premises.*

The physical separation of the site from sensitive land uses assists to manage interface issues.

As outlined, Bestec has assessed and made recommendations in relation to acoustic treatments to ensure the development achieves the selected design criteria, including the SA Environment Protection (Noise) Policy 2007.

These include façade construction requirements, glazing specifications, roof structure specifications, mechanical plant screening.

In addition, restriction of the waste collection times as per EPA guidelines - after 7:00 am and before 10:00pm Monday to Friday and after 9:00 am on Saturday and Sunday, are to be imposed.

Other interface considerations include the treatment of wind sheer, which is managed through the articulated façade with few flush solid wall elements, and the inclusion of recesses, window reveals and canopies at the lower level to disseminate wind movement down the building façade. The ground plane design also assists to protect people from wind coming off the water.

Material selection will limit glare, with a pallete that does not exhibit excessive shine or reflectivity.

Lastly, an assessment of the potential shadow impact from the building on the neighbouring built form and streets to the east, south and west has been prepared (refer Brown Falconer Plan DA03). The majority of the shade impact is on the hotel carpark during winter solstice, while other areas which receive additional shade from the building will do so for only short periods of the day. This impact is reasonable and anticipated in a location encouraging multi-level structures.

Lighting associated with the building is yet to be resolved but is intended for visual guidance, security and also as a creative façade feature to elegantly emphasise the building appearance in the evening. Lighting will achieve all relevant Australian Standards ensuring there is no unreasonable light spill or brightness which might affect nearby residents (the closest being located approx. 35 metres east on the Promenade).

Interface impacts have been appropriately considered in the design, siting and future construction of the development and will ensure the proposal meets the Development Plan provisions.

5.7 Landscaping

For a site currently barren of any trees or plants, the proposed development offers an opportunity to incorporate greening around the perimeter of the site and within the hard stand spaces.

The Development Plan recognises the value of landscaping, emphasised in the following policy provisions:

> ***Policy Area PDC 16*** *Development should provide adequate landscaping within each site, and landscaped public spaces where appropriate. At the waterfront, a durable paved, carefully detailed, continuous and well finished public promenade should be provided. Particular care should be taken to ensure that the landscape interface between this area and the adjoining Historic Conservation Area is compatible with the heritage value of that policy area.*
>
> ***Medium and High Rise Development***
>
> ***PDC 23*** *Deep soil zones should be provided to retain existing vegetation or provide areas that can accommodate new deep root vegetation, including tall trees with large canopies.*
>
> ***General Section – Landscaping, Fencing and Walls***
>
> ***PDC 2*** *Non-residential development should incorporate a minimum 10 per cent landscaping of the total site area.*
>
> ***PDC 3*** *Landscaping should:*
>
> *(a) include the planting of locally indigenous species where appropriate*
>
> *(b) be oriented towards the street frontage*
>
> *(c) result in the appropriate clearance from powerlines and other infrastructure being maintained*

The primary purposes of the landscaping for this development is to soften hard paved areas, reduce the visual mass of the building from the pedestrian level, improve the streetscape appearance, screen service yards, reduce stormwater runoff and improve water quality. The proposed trees will also offer shade in the carpark while the landscaping around and on the building will assist to manage climate control around the building. These features achieve the provisions above including General Section – Landscaping - PDC 1.

While plant species are yet to be resolved (with a preference to determine this detail in conjunction with Council's McLaren Parade landscaping strategy) the intention is to plant locally indigenous species as encouraged by the Development Plan (General Section – Landscaping - PDC 3). Albeit we note that PDC 37 in the Regional Centre Zone states that "*Landscaping and vegetation should achieve a balance between the use of indigenous and exotic plants and trees*."

5.8 Parking and Vehicle Movement

5.8.1 Vehicle Manoeuvring

The proposal utilises the only public road frontage available for vehicle access and will close an existing crossover and create three new crossover points to accommodate access into and out of the site car park and a dedicated Porte Cochere. All vehicles accessing the site will enter and exit in a forward direction and the access

points and carpark design can adequately accommodate both an 8.8m waste truck and a 7.7 metre minibus. Seven (7) on site car parking space will be lost on McLaren Parade to accommodate the waste/delivery truck turning movements.

Traffic volumes generated by the development have been estimated by GTA with a peak volume of up to 40 vehicle trips per hour in the morning. GTA confirm that this traffic generation is low and will not cause any notable changes in traffic operations or to the functioning of the surrounding road network.

The proposal achieve the following relevant Transport and Access provisions.

General Section – Transport and Access

PDC 31 Development should be provided with safe and convenient access which:

(a) avoids unreasonable interference with the flow of traffic on adjoining roads

(b) accommodates the type and volume of traffic likely to be generated by the development or land use and minimises induced traffic through over-provision

(c) is sited and designed to minimise any adverse impacts on the occupants of and visitors to neighbouring properties.

PDC 38 Access and egress points to development should be located and designed so as to:

(a) minimise traffic hazards and the free flow of traffic on adjoining roads

(b) avoid vehicle queuing on public roads

(c) avoid the generation of traffic into adjacent residential areas

(d) minimise right turn movements onto arterial roads

(e) minimise interference with the function of intersections, junctions and traffic control devices.

5.8.2 Car Parking

As outlined, car parking for a total of 31 vehicles is provided for onsite comprising 17 at-grade spaces adjacent McLaren Parade and a further 14 car parking spaces within a two-level car stacker system as illustrated below.

We note the Development Plan contains the following provisions to guide the rate of on-site parking for different land uses.

Zone PDC 61 Vehicle parking should be provided in accordance with the rates set out in Table PAdE/5 - Off Street Vehicle Parking Requirements or Table PAdE/5A - Off Street Vehicle Parking Requirements for Designated Areas (whichever applies).

General Section – Transport and Access

PDC 44 Development should provide off-street vehicle parking and specifically marked disabled car parking places to meet anticipated demand in accordance with Table PAdE/5 - Off Street Vehicle Parking Requirements.

As the site is located within a Designated Area, Table PAdE/5A applies to the assessment of this application.

The Development Plan does not provide a specific rate of on-site car parking for tourist accommodation in this Designated Areas location. However, the Zone does seek for developments to provide a sufficient supply of parking as expressed in the following Zone provision.

> ***Zone PDC 21*** *Development should provide sufficient off-street car parking to meet its anticipated parking demand either on the subject land or on another appropriate site within the locality. The provision of lesser amounts of car parking may be appropriate where:*
>
> > *(a) the site is located within the designated area of a gazetted car parking fund established under the Development Act 1993*
> >
> > *(b) an agreement is reached between the Council and the applicant for a financial contribution in lieu of the shortfall of required car parking spaces at a contribution rate per car parking space in accordance with the gazetted car parking fund.*

With 180 rooms, there some is potential for the development to generate more parking demand than can be accommodate on site. Accordingly, this issue has been explored in considerable detail and signoff on the parking provision by the hotel operator has occurred.

On site car parking opportunities were explored early in the design phase including at-grade, upper level podium and basement level parking. Sub-level structural issue including a high-water table, prevent basement level excavation and as such, basement and undercoft parking is not feasible on this site. Upper level / podium parking options were deemed inefficient given site dimensions and are cost prohibitive given the moderate number of spaces required for the hotel. Upper level/podium parking would also be detrimental to the built form design and negatively impact on the façade appearance given the site dimensions would not facilitate sleeving of the car parking with tenancy space. The interface to the State Heritage Area to the south would likely be compromised by a building containing upper parking level.

Ultimately the hotel operator has indicated that a more modest number of onsite spaces to accommodate some staff and guest vehicles is sufficient from an operational perspective. The operator runs a similar hotel in Brisbane city which successfully operates with a similar room and car parking ratio. Noting the Port location is not in the Adelaide CBD, the operators will incorporate a number of additional measures to managing parking demand. Firstly, all on-site spaces will be managed by the hotel valet service and not available for general public parking.

Guests will be advised of the limited availability of hotel parking at the time of on-line booking. As is the case with the majority of people staying in hotel accommodation, alternative transport options will be encouraged, including ride share and the hotel bus shuttle service to key destinations. Regular hotel managed shuttle bus services will transport guests to key employment destinations eg shipbuilding yards at Osbourne. The bus will also service key locations such as the Airport, the Cruise ship Terminal and other local tourist spots eg Pirate Life Brewery, Semaphore Main street and coastal locations.

In addition to this, opportunities for supplementary parking off the hotel site but on another '*appropriate site within the locality*' (as encouraged by Zone PDC 21) will continue to be explored and where feasible, the hotel could lease additional parking spaces within dedicated multi-level public car parks sited on suitable locations (i.e. away from heritage interfaces and not on the waterfront). This arrangement (leasing spaces on nearby sites) is very common for hotels and can be efficiently managed taking account of seasonal peak periods verses quieter periods of the year when tourist levels are lower.

In relation to the car park design, GTA have confirmed the layout, aisle widths and parking spaces comply with the relevant Australia Standards and all turn path assessment for vehicles expected to enter this site (light, 8.8m trucks and the mini bus) have been checked and modelled to demonstrate compliance.

Accordingly, the proposal is considered to achieve the following provision.

General Section – Transport and Access

PDC 46 Vehicle parking areas should be sited and designed in a manner that will:

(a) facilitate safe and convenient pedestrian linkages to the development and areas of significant activity or interest in the vicinity of the development

(b) include safe pedestrian and bicycle linkages that complement the overall pedestrian and cycling network

(c) not inhibit safe and convenient traffic circulation

(d) result in minimal conflict between customer and service vehicles

(e) avoid the necessity to use public roads when moving from one part of a parking area to another

(f) minimise the number of vehicle access points to public roads

(g) avoid the necessity for backing onto public roads

(h) where reasonably possible, provide the opportunity for shared use of car parking and integration of car parking areas with adjoining development to reduce the total extent of vehicle parking areas and the requirement for access points

(i) not dominate the character and appearance of a centre when viewed from public roads and spaces

(j) provide landscaping that will shade and enhance the appearance of the vehicle parking areas through the incorporation of trees that will grow to a height greater than 2.4 metres (unless it can be demonstrated that planting conditions will prevent trees from attaining such a height) and shrubbery and bushes not exceeding 60 centimetres in height)

(k) have regard to the amount, type and timing of movement generated by the use.

5.8.3 Bicycle Parking

The following provision is relevant to the assessment of bicycle parking.

General Section – Transport and Access

PDC 19 Developments (such as centre, office, commercial or industrial developments that are likely to give rise to a demand for cyclist facilities) should encourage and facilitate cycling as a mode of transport by incorporating end-of-journey facilities including:

(a) showers, changing facilities, and secure sheltered lockers

(b) legible signage indicating the location of bicycle facilities

(c) secure bicycle parking facilities provided at the rate set out in Table PAdE/4 - Off Street Bicycle Parking Requirements and located so they are:

(i) 100 metres from Security Level 1 facilities described in AS 2890.3 Parking facilities - Bicycle parking facilities

(ii) 30 metres from Security Level 2 facilities described in AS 2890.3 Parking facilities - BICYCLE parking facilities.

Bicycle racks are provided along the Lipson St façade and will accommodate 16 bikes. Table PAdE/4 suggests that the development should have marginally more than this, with 19 spaces for employees and visitors. This calculation is based on the various separated land uses when in reality there will be significant overlap for people utilising the site. For example, a number of patrons at the restaurant are very likely to also be hotel guests.

If required addition bike racks could be accommodated on the Promenade and/or Lipson and the Applicant is happy to discuss the installation of more parking around the site with the relevant authority if this is deemed necessary.

However, given the nature of the development and that hotel guests are less likely to have bicycles as they are travelling, the provision of bike parking is considered sufficient. GTA concur with this view.

5.9 Energy Efficiency and Sustainability

For multi-level buildings the Development Plan encourages water and energy efficient measures as extracted below.

Medium and High Rise Development

OBJ 7 Buildings designed and sited to be energy and water efficient.

PDC 20 Multi-storey buildings should:

(b) incorporate roof designs that enable the provision of photovoltaic cells and other features that enhance sustainability (including landscaping).

In addition, the General 'Energy Efficiency' Section of the Development Plan reiterates the above provisions and also seeks as follows:

> *General Section – Energy Efficiency*
>
> *PDC 2 Buildings should be sited and designed:*
>
> *(a) to ensure adequate natural light and winter sunlight is available to the main activity areas of adjacent buildings*
>
> *(b) so that open spaces associated with the main activity areas face north for exposure to winter sun.*
>
> *PDC 3 Development should facilitate the efficient use of photovoltaic cells and solar hot water systems by:*
>
> *(a) taking into account overshadowing from neighbouring buildings*
>
> *(b) designing roof orientation and pitches to maximise exposure to direct sunlight.*

As outlined, as suite of sustainability features are proposed which will directly contribute to the achievement of the provision above, including:

- A high performing façade reducing heating and cooling loads and increasing occupant comfort;
- Large roof top solar PV array to reduce energy consumption and CO2 emissions;
- High efficiency mechanical plant and equipment with multi-stage chillers for increased part-load performance;
- High Efficiency Domestic Hot Water system;
- High WELS rated fixtures and fittings to reduce water and energy consumption;
- Integrated Building Management Systems to allow for energy efficient booking strategies and building operation;
- LED Lighting throughout with smart sensors and controls; and
- Heat Recovery for reduced energy consumption associated with conditioning outside air.

These represent the minimum ESD project features, which will ensure a minimum 4 star NABERS hotel rating.

There are also a number of additional ESD initiatives the Applicant is pursing which will be resolved post-planning consent as part of the next phase of design development.

The proposed features present significantly enhanced sustainability outcomes and achieve the relevant provisions of the Development Plan with regard to energy efficiency and sustainability.

5.10 Waste Management

The proposal incorporates a dedicated loading bay which has sufficient space for waste bin storage and collection. Located adjacent the BoH and car stackers, the loading bay is screened with timber cladding and sited away from the hotel entry, primary sightlines into the development and adjoining developments.

All waste streams can be accommodated on site in separate bins including:

- General waste (land fill);
- Comingled recycling;
- Cardboard recycling; and
- Organics.

Waste generated from all potential on-site activities has been accounted for (restaurant, café, hotel, office etc) and volumes estimated to ensure the development can accommodate the required waste management strategy.

The Waste Management Plan and proposed on-site practices will achieve the relevant Development Plan provisions as follows:

> *Medium and High Rise Development*
>
> *PDC 26 Development should provide a dedicated area for the on-site collection and sorting of recyclable materials and refuse, green organic waste and wash-bay facilities for the ongoing maintenance of bins. This area should be screened from view from public areas so as to not to detract from the visual appearance of the ground floor.*
>
> *General Section – Waste Management*
>
> *OBJ 1 Development that, in order of priority, avoids the production of waste, minimises the production of waste, reuses waste, recycles waste for reuse, treats waste and disposes of waste in an environmentally sound manner.*
>
> *PDC 2 The storage, treatment and disposal of waste materials from any development should be achieved without risk to health or impairment of the environment.*
>
> *PDC 3 Development should avoid as far as practical, the discharge or deposit of waste (including wastewater) onto land or into any waters (including processes such as seepage, infiltration or carriage by wind, rain, sea spray, stormwater or by the rising of the water table).*
>
> *PDC 6 Development that involves the production and/or collection of waste and/or recyclable material should include designated collection and storage area(s) that are:*
>
> *(a) screened and separated from adjoining areas*
>
> *(b) located to avoid impacting on adjoining sensitive environments or land uses*
>
> *(c) designed to ensure that wastes do not contaminate stormwater or enter the stormwater collection system*

(d) located on an impervious sealed area graded to a collection point in order to minimise the movement of any solids or contamination of water

(e) protected from wind and stormwater and sealed to prevent leakage and minimise the emission of odours

(f) stored in such a manner that ensures that all waste is contained within the boundaries of the site until disposed of in an appropriate manner.

Wastewater will connect to the sewer system and water runoff from the car park will be appropriately treated by the GPT before discharge to the Port River.

The proposal achieves the relevant waste management provision of the Development Plan.

5.11 Crime Prevention

Relevant provisions of the Development Plan which relate to crime prevention features include:

Medium and High Rise Development

OBJ 4 *Development that integrates built form within high quality landscapes to optimize amenity, security and personal safety for occupants and visitors.*

PDC 9 *Common areas and entry points of the ground floor level of buildings should be designed to enable surveillance from public land to the inside of the building at night.*

General Section – Crime Prevention

PDC 1 *Development should be designed to maximise surveillance of public spaces through the incorporation of clear lines of sight, appropriate lighting and the use of visible permeable barriers wherever practicable.*

PDC 2 *Buildings should be designed to overlook public and communal streets and public open space to allow casual surveillance.*

PDC 5 *Development, including car park facilities should incorporate signage and lighting that indicate the entrances and pathways to, from and within sites*

PDC 10 *Development should avoid pedestrian entrapment spots and movement predictors (eg routes or paths that are predictable or unchangeable and offer no choice to pedestrians).*

Other additional policies seek for development to be resistant to vandalism and graffiti, incorporate appropriate lighting, and establish landscaping which is robust and minimises concealment opportunities.

The proposal has been designed to achieve a crime resistant environment, with a strong focus on both internal design elements and interaction with the public realm.

The proposal will enhance the interface, interaction and surveillance of the public realm through both façade design, incorporation of active uses at ground level and the encouragement of pedestrian movements through the ground floor spaces and multiple entry points. The proposed after hour uses such as restaurant, bar/café

(including outdoor dining) will provide activation to the surrounding urban spaces. This will promote passive and active surveillance of spaces adjoining the proposal.

The lobbies at ground level will be clearly identified when entering the site and are open areas with no concealed recesses. Further surveillance of the public areas (both within and external to the site) is provided from the balconies and windows above.

The car park, while not physically secured, we will be managed by Hotel valet services and include CCTV security monitoring 24hrs a day. Appropriate automated lighting within the car park will ensure good visibility and has been designed to avoid entrapment spots.

New landscaping, artwork and design features will be appropriately selected and sited so as to not create concealed spaces but create a positive sense of identity and ownership, while also discouraging crime and vandalism.

Overall, the proposal significantly extends the duration and level of intensity of public activity and provides high level of internal and external surveillance and security. The application achieves the relevant Crime Prevention provisions of the Development Plan.

5.12 Stormwater and Flood Management

5.12.1 Stormwater Management

The following provision are relevant to the assessment of stormwater management.

General Section – Water Sensitive Design

PDC 8 *Development should be sited and designed to:*

(a) capture and re-use stormwater, where practical

(b) minimise surface water runoff

(c) prevent soil erosion and water pollution

(d) protect and enhance natural water flows

(e) protect water quality by providing adequate separation distances from watercourses and other water bodies

(f) not contribute to an increase in salinity levels

(g) avoid the water logging of soil or the release of toxic elements

(h) maintain natural hydrological systems and not adversely affect:

(i) the quantity and quality of groundwater

(ii) the depth and directional flow of groundwater

(iii) the quality and function of natural springs.

PDC 9 *Water discharged from a development site should:*

(a) be of a physical, chemical and biological condition equivalent to or better than its pre-developed state

(b) not exceed the rate of discharge from the site as it existed in pre-development conditions.

General Section – Water Catchment Areas

PDC 29 *Development resulting in the depositing of an object or solid material in a watercourse or floodplain or the removal of bank and bed material should not:*

(a) adversely affect the migration of aquatic biota

(b) adversely affect the natural flow regime

(c) cause or contribute to water pollution

(d) result in watercourse or bank erosion

(e) adversely affect native vegetation upstream or downstream that is growing in or adjacent to a watercourse.

The use of the GPT, together with the sand filter garden beds, to clean 'dirty' stormwater from the carpark surfaces water prior to its release into the Port River (via the existing Council stormwater system), achieves the water quality provisions in the Development Plan.

"Clean" stormwater from the building roof will also be discharged into the river via a proposed new pipe in the north-east corner which will penetrate through the existing wharf structure.

The discharge of all water collected on the site into the river system is an appropriate solution and logical given the proximity of this water body to the site. Water flows are a non-issue in this situation and water quality is appropriately managed. The simple stormwater management approach achieves the intent of the Development Plan provisions.

5.12.2 Flood Management

We note that specific site levels for development in proximity to the water's edge are specified in the Zone. As the building will be sited 10 metres from the water's edge the following provision is relevant:

Zone PDC 75 *Development set-back 8 metres or more from the water's edge should be protected against wave effects and not have a site level less than 3.20 metres Australian Height Datum (AHD) or a habitable floor level less than 3.45 metres AHD. … These levels can be reduced where reasoned technical arguments in relation to the effects of land subsidence and wave effects demonstrate that the lower levels provide adequate protection. The form and layout of development should be designed to enable future flood protection against a further 0.7 metres of sea level rise and additional land subsidence by 2100.*

Other than the small entry lobby space off the Port Cochere, the balance of the ground floor level achieves this minimum requirement and the CPB have advised of their likely support (subject to final referral).

Other flood relevant provisions include:

General Section - Coastal Areas

OBJ 6 Development that can accommodate anticipated changes in sea level due to natural subsidence and probable climate change during the first 100 years of the development.

PDC 20 Development and its site should be protected against the standard sea-flood risk level which is defined as the 1-in-100 year average return interval flood extreme sea level (tide, stormwater and associated wave effects combined), plus an allowance to accommodate land subsidence until the year 2100.

General Section – Water Sensitive Design

PDC 10 Development should include stormwater management systems to protect it from damage during a minimum of a 1-in-100 year average return interval flood.

The ground floor ceiling height clearances provide a contingency for raising this floor level in the future should sea level rise and storm surge risks increase. This essentially future proofs the development such that it can achieve of the additional 0.7m of sea level rise beyond 2050, to 2100, if required.

As outlined, the Applicant is aware that any levels below 3.45m AHD are subject to an increased flood risk hazard (by way of storm surge) to 2050 however raising the floor levels by 0.7m to minimise this future flood risk will have negative consequences for the building design and appearance, interaction with and activation of the Promenade, and equitable access including the need for substantial ramping adjacent the Wharf.

The flood mitigation approach is considered to achieve the Development Plan intent.

6. Conclusion

This report has been prepared on behalf of the CK Property Group for their proposal to construct a 6-storey tourist accommodation building with 180 rooms, comprising a lobby, restaurant, bar and function spaces, retail tenancy, carparking, landscaping and port cochere.

The site sits on the McLaren Wharf with prime water frontage providing a unique tourism offering with views across the water. To the south, the site benefits from the historic character of the 'old port', protected by the State Heritage Area and place listings.

As a strategically located, large consolidated land parcel, the site offers significant opportunity to invigorate Port Adelaide and in particular the Wharf Promenade and provide a unique investment opportunity on a highly underutilised parcel of land. The vacant site is ideally suited to a tourist accommodation development, a land use strongly encouraged by the Regional Centre Zone and the McLaren's Wharf Policy Area 44.

This report assesses the merits of the proposal against the relevant provisions of the Port Adelaide Enfield 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.

Following an assessment of the proposal, it is our view that the application appropriately addresses all the key planning issues relevant to a tourist accommodation development and has carefully designed the appearance of the building to harmoniously sit within the streetscape, respect the adjoining heritage character and respond to the context of the locality.

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

Appendix 1. SATC Correspondence

Government of South Australia
South Australian Tourism Commission

19 August 2019

State Commission Assessment Panel
GPO Box 1815
ADELAIDE, SA 5001

Re: Letter of Support – Port Adelaide Hotel Development

To Whom It May Concern

The South Australian Tourism Commission (SATC) has been provided an overview of the proposed hotel development at Port Adelaide.

Through our discussions with CK Property Group we support the development of a 180 room internationally branded 4-5 star. With the growing Defence sector and Tourism sector there is strong interest in more accommodation infrastructure in the Port Adelaide precinct.

South Australia has enjoyed a cruise ship boom with a record 82 cruise ship visits to our state during 2018-19. Port Adelaide is well positioned to capitalise on pre and post accommodation needs for cruise passengers.

Ensuring that there is adequate tourism infrastructure available for the growing demand of tourism, is a priority for the SATC.

This proposed new development will support the ambitious target of $12.8 billion outlined in the South Australian Visitor Economy Sector Plan 2030.

The hotel development in Port Adelaide will also appeal to the conference market and business events. More hotel accommodation in Port Adelaide, will meet a gap but will also have a flow on effect for other businesses in hospitality.

Should you have any questions, please contact me for additional comments.

Regards,

Nick Jones
Executive Director, Destination Development

Appendix 2. Certificates of Title

Government of South Australia
Department of Planning, Transport and Infrastructure

Product	Register Search
Date/Time	10/08/2016 11:15AM
Customer Reference	
Order ID	20160810004054
Cost	$27.75

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

Registrar-General

Certificate of Title - Volume 5703 Folio 162

REAL PROPERTY ACT, 1886
South Australia

Parent Title(s)	CT 5445/49
Dealing(s) Creating Title	RTC 8728615
Title Issued	22/10/1999
Edition	3
Edition Issued	19/11/2007

Estate Type

FEE SIMPLE

Registered Proprietor

KYSTEPHER NOMINEES PTY. LTD. (ACN: 007 995 842)
OF 229 ST VINCENT STREET PORT ADELAIDE SA 5015

Description of Land

ALLOTMENT 2 DEPOSITED PLAN 52739
IN THE AREA NAMED PORT ADELAIDE
HUNDRED OF PORT ADELAIDE

Easements

SUBJECT TO RIGHT(S) OF WAY AND EASEMENT(S) OVER THE LAND MARKED A (RTC 8728615)

SUBJECT TO FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER THE LAND MARKED X (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED D AND F FOR DRAINAGE PURPOSES (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED C (RTC 8728615)

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

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.3.4.5.6 AND 7 MARKED D FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.3.4.5 AND 6 MARKED F FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.3.4.5.6 AND 7 MARKED C (RTC 8728615)

TOGETHER WITH RIGHT(S) OF WAY AND EASEMENT(S) OVER PORTION OF ALLOTMENT 1 AND PORTIONS OF ALLOTMENTS 3.4.5 AND 6 MARKED A (RTC 8728615)

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER PORTION OF ALLOTMENTS 1.3 AND 6 AND PORTIONS OF ALLOTMENTS 4 AND 5 MARKED B

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER PORTION OF ALLOTMENTS 1.3.4.5 AND 6 MARKED X (RTC 8728615)

Schedule of Dealings

Dealing Number	Description
8629445	AGREEMENT UNDER DEVELOPMENT ACT, 1993 PURSUANT TO SECTION 57(2) FOR MANAGEMENT
10827970	MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL

Notations on Plan

NIL

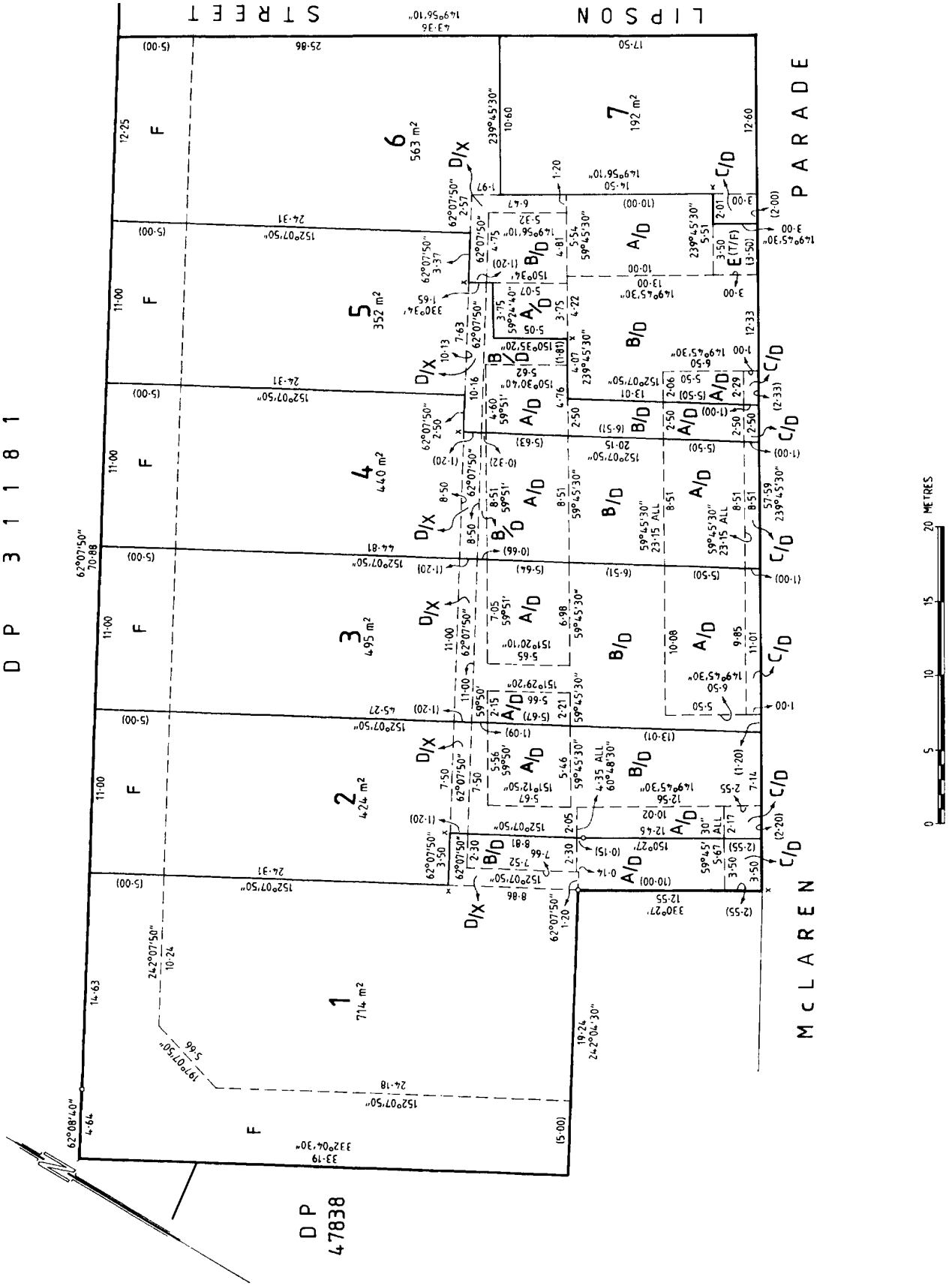
Registrar-General's Notes

NIL

Administrative Interests

PROPERTY IN A STATE HERITAGE AREA 29/04/1982

* Denotes the dealing has been re-lodged.



Government of South Australia
Department of Planning, Transport and Infrastructure

Product	Register Search
Date/Time	10/08/2016 11:16AM
Customer Reference	
Order ID	20160810004082
Cost	$27.75

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

Registrar-General

Certificate of Title - Volume 5703 Folio 163

REAL PROPERTY ACT, 1886
South Australia

Parent Title(s)	CT 5445/49
Dealing(s) Creating Title	RTC 8728615
Title Issued	22/10/1999
Edition	3
Edition Issued	19/11/2007

Estate Type

FEE SIMPLE

Registered Proprietor

KYSTEPHER NOMINEES PTY. LTD. (ACN: 007 995 842)
OF 229 ST VINCENT STREET PORT ADELAIDE SA 5015

Description of Land

ALLOTMENT 3 DEPOSITED PLAN 52739
IN THE AREA NAMED PORT ADELAIDE
HUNDRED OF PORT ADELAIDE

Easements

SUBJECT TO RIGHT(S) OF WAY AND EASEMENT(S) OVER THE LAND MARKED A (RTC 8728615)

SUBJECT TO FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER THE LAND MARKED X (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED D AND F FOR DRAINAGE PURPOSES (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED C (RTC 8728615)

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

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.4.5.6 AND 7 MARKED D FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.4.5 AND 6 MARKED F FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.4.5.6 AND 7 MARKED C (RTC 8728615)

TOGETHER WITH RIGHT(S) OF WAY AND EASEMENT(S) OVER PORTION OF ALLOTMENT 1 AND PORTIONS OF ALLOTMENTS 2.4.5 AND 6 MARKED A (RTC 8728615)

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER PORTION OF ALLOTMENTS 1.2 AND 6 AND PORTIONS OF ALLOTMENTS 4 AND 5 MARKED B

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER PORTION OF ALLOTMENTS 1.2.4.5 AND 6 MARKED X (RTC 8728615)

Schedule of Dealings

Dealing Number	Description
8629445	AGREEMENT UNDER DEVELOPMENT ACT, 1993 PURSUANT TO SECTION 57(2) FOR MANAGEMENT
10827970	MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL

Notations on Plan

NIL

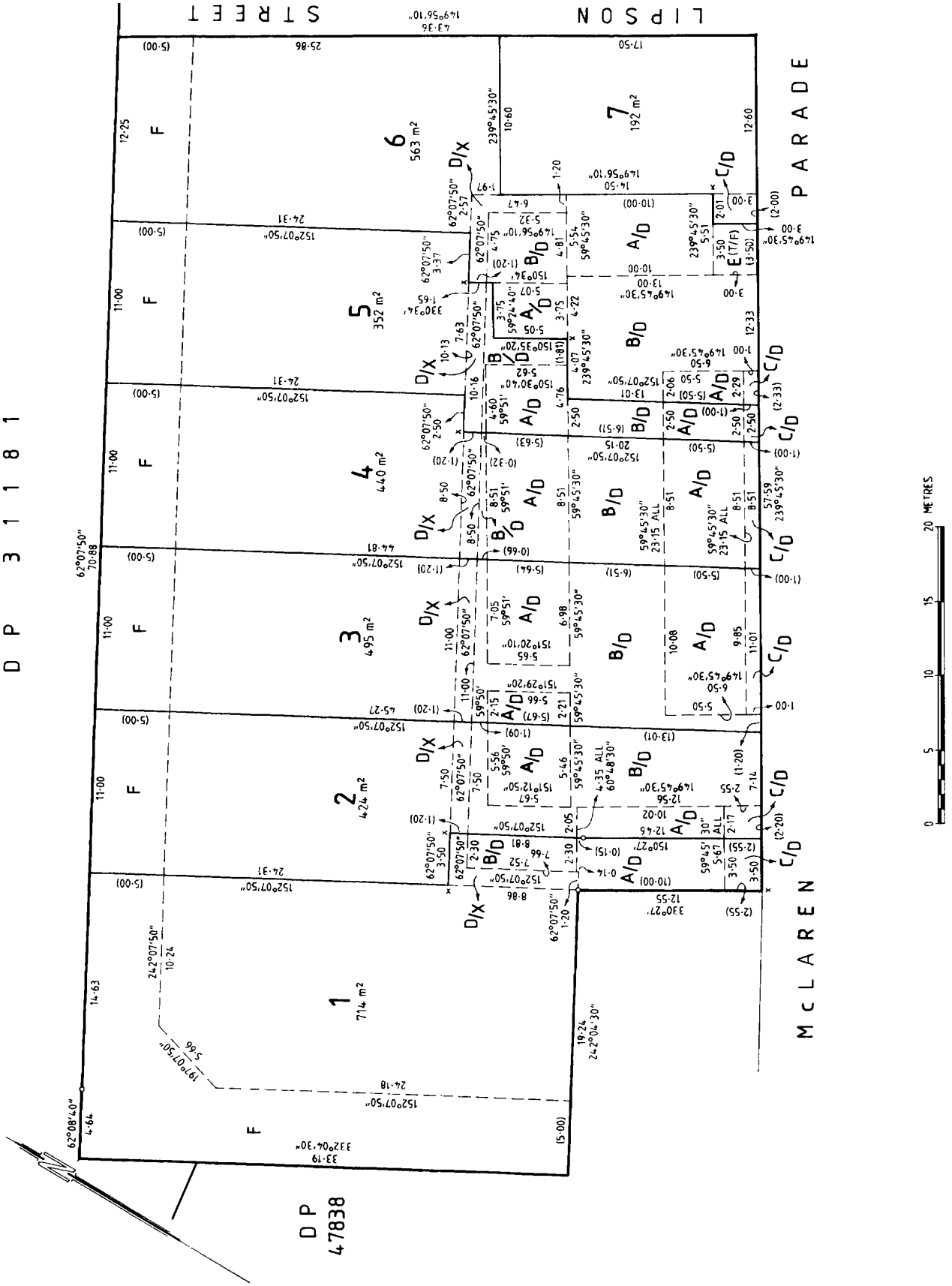
Registrar-General's Notes

NIL

Administrative Interests

PROPERTY IN A STATE HERITAGE AREA 29/04/1982

* Denotes the dealing has been re-lodged.



Government of South Australia
Department of Planning, Transport and Infrastructure

Product	Register Search
Date/Time	10/08/2016 11:17AM
Customer Reference	
Order ID	20160810004096
Cost	$27.75

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

Registrar-General

Certificate of Title - Volume 5703 Folio 164

REAL PROPERTY ACT, 1886
South Australia

Parent Title(s)	CT 5445/49
Dealing(s) Creating Title	RTC 8728615
Title Issued	22/10/1999
Edition	2
Edition Issued	14/07/2003

Estate Type

FEE SIMPLE

Registered Proprietor

YARRAMUNDI INVESTMENTS PTY. LTD. (ACN: 008 008 231)
OF C/- 1ST FLOOR 25-27 MCLAREN PARADE PORT ADELAIDE SA 5015

Description of Land

ALLOTMENT 4 DEPOSITED PLAN 52739
IN THE AREA NAMED PORT ADELAIDE
HUNDRED OF PORT ADELAIDE

Easements

SUBJECT TO RIGHT(S) OF WAY AND EASEMENT(S) OVER THE LAND MARKED A (RTC 8728615)

SUBJECT TO FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER THE LAND MARKED X (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED D AND F FOR DRAINAGE PURPOSES (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED C (RTC 8728615)

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

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.5.6 AND 7 MARKED D FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.5 AND 6 MARKED F FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.5.6 AND 7 MARKED C (RTC 8728615)

TOGETHER WITH RIGHT(S) OF WAY AND EASEMENT(S) OVER PORTION OF ALLOTMENT 1 AND PORTIONS OF ALLOTMENTS 2.3.5 AND 6 MARKED A (RTC 8728615)

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER PORTION OF ALLOTMENTS 1.2.3 AND 6 AND PORTIONS OF ALLOTMENT 5 MARKED B

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER PORTION OF ALLOTMENTS 1.2.3.5 AND 6 MARKED X (RTC 8728615)

Schedule of Dealings

Dealing Number	Description
8629445	AGREEMENT UNDER DEVELOPMENT ACT, 1993 PURSUANT TO SECTION 57(2) FOR MANAGEMENT

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL

Notations on Plan

NIL

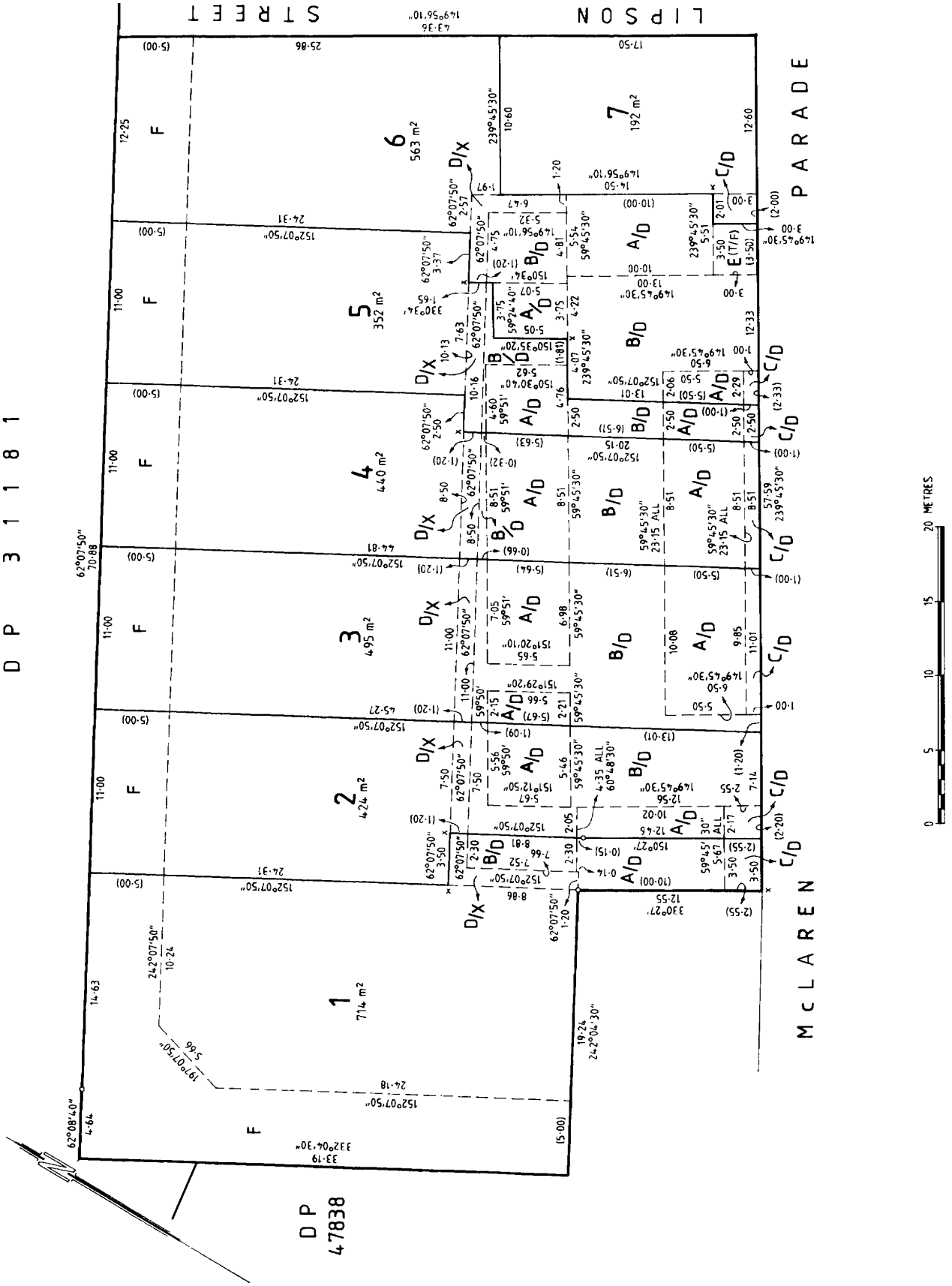
Registrar-General's Notes

NIL

Administrative Interests

PROPERTY IN A STATE HERITAGE AREA 29/04/1982

* Denotes the dealing has been re-lodged.



Government of South Australia
Department of Planning, Transport and Infrastructure

Product	Register Search
Date/Time	10/08/2016 11:17AM
Customer Reference	
Order ID	20160810004107
Cost	$27.75

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

Registrar-General

Certificate of Title - Volume 5703 Folio 165

REAL PROPERTY ACT, 1886
South Australia

Parent Title(s)	CT 5445/49
Dealing(s) Creating Title	RTC 8728615
Title Issued	22/10/1999
Edition	2
Edition Issued	14/07/2003

Estate Type

FEE SIMPLE

Registered Proprietor

YARRAMUNDI INVESTMENTS PTY. LTD. (ACN: 008 008 231)
OF C/- 1ST FLOOR 25-27 MCLAREN PARADE PORT ADELAIDE SA 5015

Description of Land

ALLOTMENT 5 DEPOSITED PLAN 52739
IN THE AREA NAMED PORT ADELAIDE
HUNDRED OF PORT ADELAIDE

Easements

SUBJECT TO RIGHT(S) OF WAY AND EASEMENT(S) OVER THE LAND MARKED A (RTC 8728615)

SUBJECT TO FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER THE LAND MARKED X (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED D AND F FOR DRAINAGE PURPOSES (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED C (RTC 8728615)

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

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.4.6 AND 7 MARKED D FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.4 AND 6 MARKED F FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.4.6 AND 7 MARKED C (RTC 8728615)

TOGETHER WITH RIGHT(S) OF WAY AND EASEMENT(S) OVER PORTION OF ALLOTMENT 1 AND PORTIONS OF ALLOTMENTS 2.3.4 AND 6 MARKED A (RTC 8728615)

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER PORTION OF ALLOTMENTS 1.2.3 AND 6 AND PORTIONS OF ALLOTMENT 4 MARKED B

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER PORTION OF ALLOTMENTS 1.2.3.4 AND 6 MARKED X (RTC 8728615)

Schedule of Dealings

Dealing Number	Description
8629445	AGREEMENT UNDER DEVELOPMENT ACT, 1993 PURSUANT TO SECTION 57(2) FOR MANAGEMENT

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL

Notations on Plan

NIL

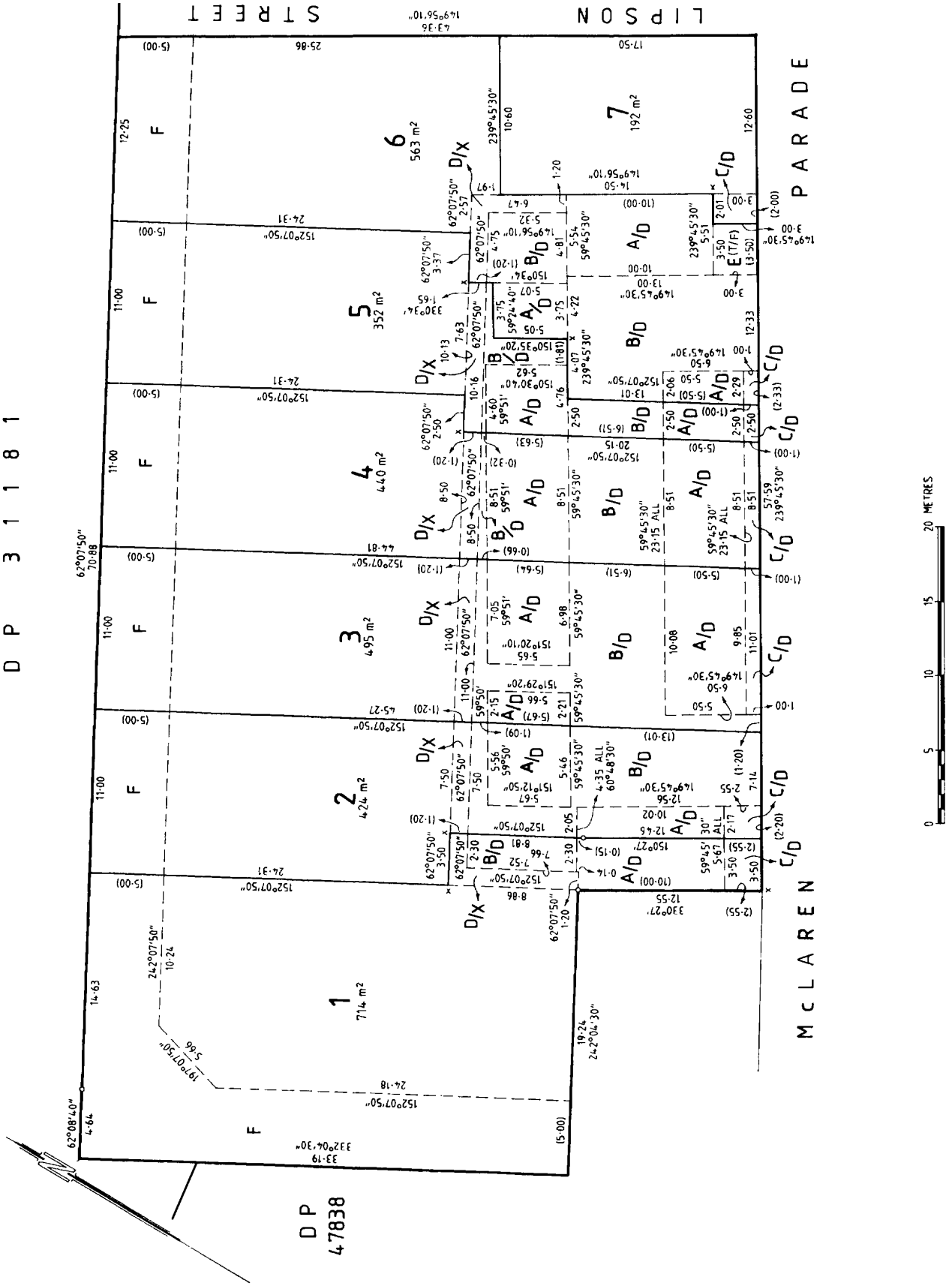
Registrar-General's Notes

NIL

Administrative Interests

PROPERTY IN A STATE HERITAGE AREA 29/04/1982

* Denotes the dealing has been re-lodged.



Government of South Australia
Department of Planning, Transport and Infrastructure

Product	Register Search
Date/Time	10/08/2016 11:18AM
Customer Reference	
Order ID	20160810004137
Cost	$27.75

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

Registrar-General

Certificate of Title - Volume 5703 Folio 166

REAL PROPERTY ACT, 1886
South Australia

Parent Title(s)	CT 5445/49
Dealing(s) Creating Title	RTC 8728615
Title Issued	22/10/1999
Edition	2
Edition Issued	14/07/2003

Estate Type

FEE SIMPLE

Registered Proprietor

YARRAMUNDI INVESTMENTS PTY. LTD. (ACN: 008 008 231)
OF C/- 1ST FLOOR 25-27 MCLAREN PARADE PORT ADELAIDE SA 5015

Description of Land

ALLOTMENT 6 DEPOSITED PLAN 52739
IN THE AREA NAMED PORT ADELAIDE
HUNDRED OF PORT ADELAIDE

Easements

SUBJECT TO RIGHT(S) OF WAY AND EASEMENT(S) OVER THE LAND MARKED A (RTC 8728615)

SUBJECT TO FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER THE LAND MARKED X (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED D AND F FOR DRAINAGE PURPOSES (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED C (RTC 8728615)

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

SUBJECT TO SERVICE EASEMENT(S) OVER THE LAND MARKED E(T/F) FOR ELECTRICITY SUPPLY PURPOSES TO DISTRIBUTION LESSOR CORPORATION (SUBJECT TO LEASE 8890000) (223LG RPA)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.4.5 AND 7 MARKED D FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.4 AND 5 MARKED F FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.4.5 AND 7 MARKED C (RTC 8728615)

TOGETHER WITH RIGHT(S) OF WAY AND EASEMENT(S) OVER PORTION OF ALLOTMENT 1 AND PORTIONS OF ALLOTMENTS 2.3.4 AND 5 MARKED A (RTC 8728615)

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY OVER PORTION OF ALLOTMENTS 1.2 AND 3 AND PORTIONS OF ALLOTMENTS 4 AND 5 MARKED B

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER PORTION OF ALLOTMENTS 1.2.3.4 AND 5 MARKED X (RTC 8728615)

Schedule of Dealings

Dealing Number	Description
8629445	AGREEMENT UNDER DEVELOPMENT ACT, 1993 PURSUANT TO SECTION 57(2) FOR MANAGEMENT

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL

Notations on Plan

NIL

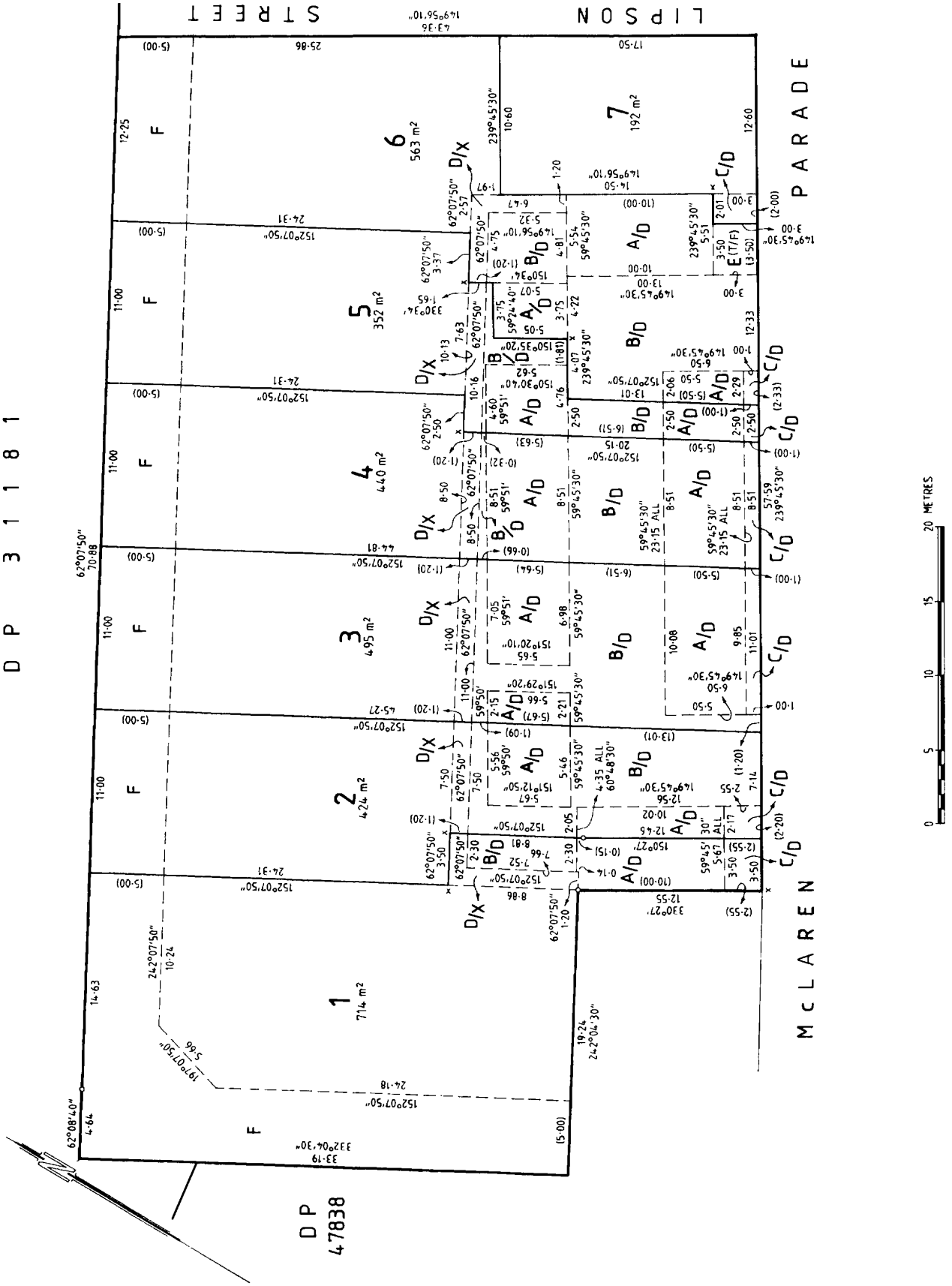
Registrar-General's Notes

NIL

Administrative Interests

PROPERTY IN A STATE HERITAGE AREA 29/04/1982

* Denotes the dealing has been re-lodged.



Government of South Australia
Department of Planning, Transport and Infrastructure

Product	Register Search
Date/Time	10/08/2016 11:19AM
Customer Reference	
Order ID	20160810004155
Cost	$27.75

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

Registrar-General

Certificate of Title - Volume 5703 Folio 167

REAL PROPERTY ACT, 1886
South Australia

Parent Title(s)	CT 5445/49
Dealing(s) Creating Title	RTC 8728615
Title Issued	22/10/1999
Edition	4
Edition Issued	12/06/2013

Estate Type

FEE SIMPLE

Registered Proprietor

YARRAMUNDI INVESTMENTS PTY. LTD. (ACN: 008 008 231)
OF PO BOX 772 PORT ADELAIDE SA 5015

Description of Land

ALLOTMENT 7 DEPOSITED PLAN 52739
IN THE AREA NAMED PORT ADELAIDE
HUNDRED OF PORT ADELAIDE

Easements

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED C (RTC 8728615)

SUBJECT TO EASEMENT(S) OVER THE LAND MARKED D FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.4.5 AND 6 MARKED D FOR DRAINAGE PURPOSES (RTC 8728615)

TOGETHER WITH THE EASEMENT(S) OVER PORTION OF ALLOTMENTS 1.2.3.4.5 AND 6 MARKED C (RTC 8728615)

TOGETHER WITH FREE AND UNRESTRICTED RIGHT(S) OF WAY WITH LIMITATIONS OVER THE LAND MARKED X (RTC 8728615)

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

TOGETHER WITH RIGHT(S) OF WAY AND EASEMENT(S) OVER THE LAND MARKED A (RTC 8728615)

Schedule of Dealings

Dealing Number	Description
8629445	AGREEMENT UNDER DEVELOPMENT ACT, 1993 PURSUANT TO SECTION 57(2) FOR MANAGEMENT

Notations

Dealings Affecting Title

NIL

Priority Notices

NIL

Notations on Plan

NIL

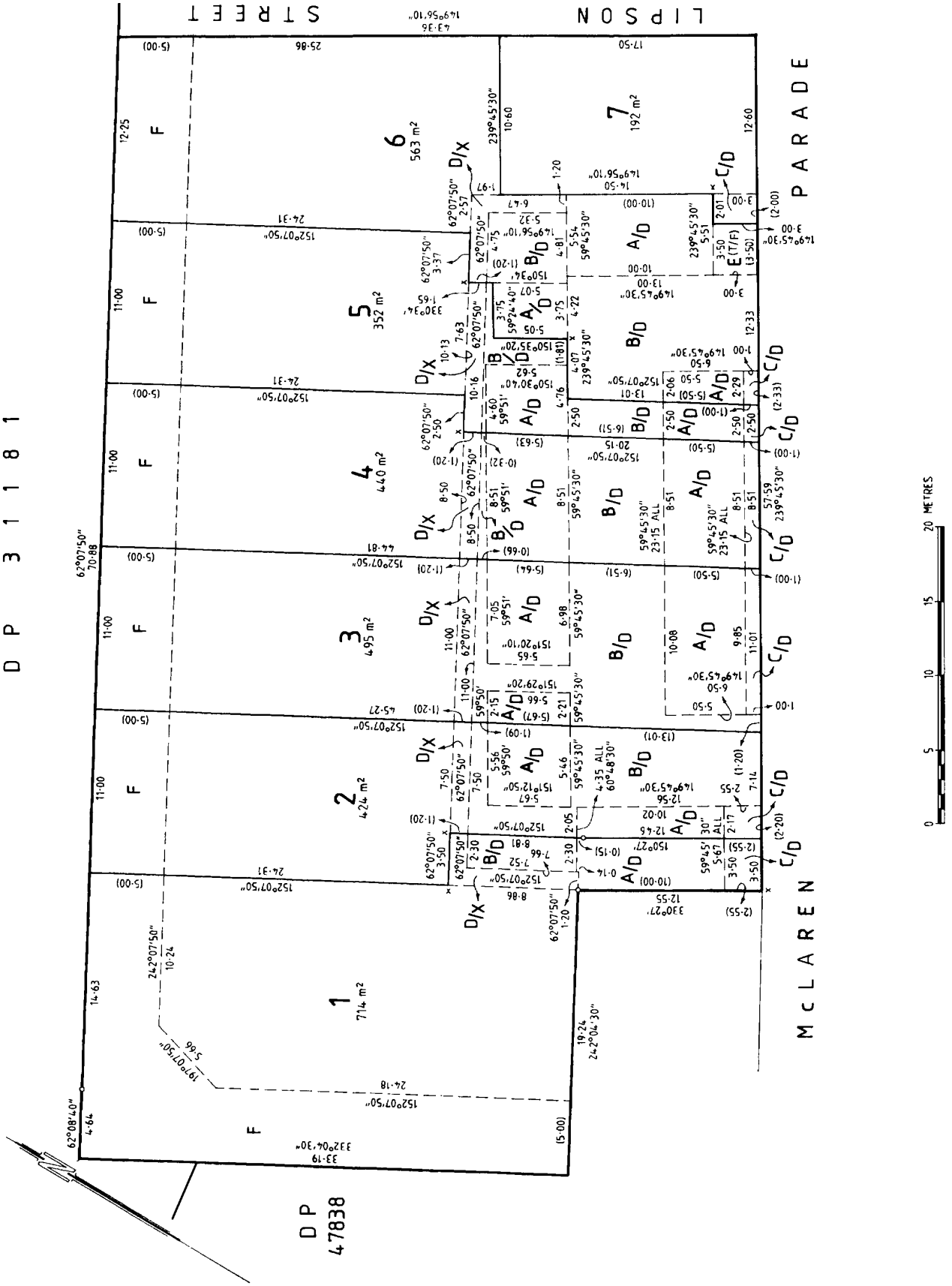
Registrar-General's Notes

NIL

Administrative Interests

NIL

* Denotes the dealing has been re-lodged.



Appendix 3. Brown Falconer Architectural Package

McLaren Wharf Port Adelaide - Hotel Development

Contact

Brown Falconer
28 Chesser Street, Adelaide
South Australia, 5000
Telephone 08 8203 5800
bfg.admin@brownfalconer.com.au
brownfalconer.com.au

Contents

DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	19.02

BROWN FALCONER
28 Chesser Street, Adelaide, South Australia 5000
Telephone : 08 8203 5800 Facsimile : 08 8223 2440
ABN 65 007 846 586 brownfalconer.com.au

CK PROPERTY GROUP

PORT ADELAIDE HOTEL

COVER PAGE

Scale N/A
Drawn MG LP ER
Date 19/02/2020
Job No 2019042
Dwg No 3293 DA02 Rev 02 A1 sheet

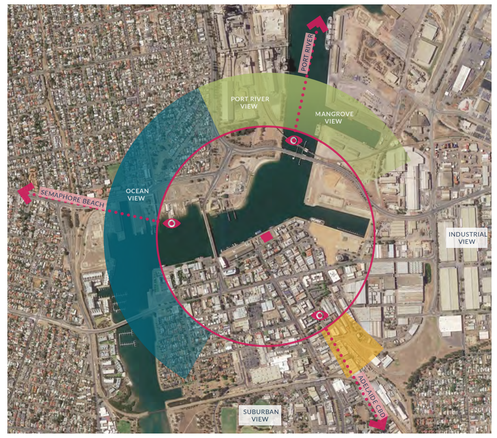
McLaren Wharf Port Adelaide - Hotel Development
Context Analysis + Project Aspiration

DA ISSUE

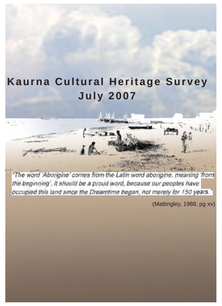
Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02

Locality

Sun and Views



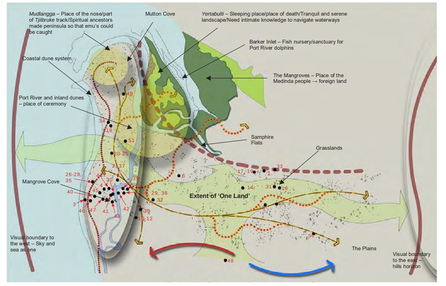
Cultural Context



Port Adelaide / Yertabulti

'...there were mangroves before the wharves were built. Those mangroves were a source of food for the local Kaurna people who lived there.' Kaurna Elders Veronica Brodie and Lewis O'Brien told of how they saw their land as their 'University' that their people 'walked to gain strength, knowledge and spirituality.'

https://www.cityofpae.sa.gov.au/page.aspx?u=2380



Heritage Context

Historic Context

Art Context

Key Locations

Legend

- Subject Site
- 1 Quest Hotel
- 2 Port Adelaide Backpackers
- 3 MH Motel
- 4 Hart's Mill
- 5 Queen's Wharf
- 6 Fishermen's Market
- 7 Lighthouse
- 8 McLaren Wharf
- 9 Lipson Street Plaza
- 10 One and All Ship
- 11 Clipper Ship
- 12 Dockside Tavern
- 13 Maritime Museum
- 14 Town Hall
- 15 Visitor's Centre
- 16 Port Admiral Hotel
- 17 Port Mall

Site Analysis

Legend

- Front of House
- Back of House
- Active Node
- Activated Frontage
- Sight Lines
- Boundary

Design Principles

*Agreed with the local community through significant and comprehensive community consultation events during the McLaren Wharf Master Plan project, Renewal SA and Tract

- Celebrate the Waterfront
- Activate the Plaza
- Enhance City Streets
- Support a Diverse Community
- Promote Port's History
- Provide a Welcome for Visitors
- Facilitate Coming and Going
- Ensure a City for People

Project Principles

BROLA FALCONER
28 Chesser Street, Adelaide, South Australia 5000
Telephone : 08 8203 5800 Facsimile : 08 8223 2440
ABN 65 007 846 586 brownfalconer.com.au

CK PROPERTY GROUP

PORT ADELAIDE HOTEL

CONTEXT ANALYSIS AND PROJECT ASPIRATION

Scale N/A
Drawn MG LP ER
Date 14/02/2020
Job No 2019042
Dwg No 3293 DA02 Rev 01 A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

Form, Sun Study + Long Views

DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02

Form

Gesture 1
Allow for future expansion

Gesture 2
Corner feature with recessive wings

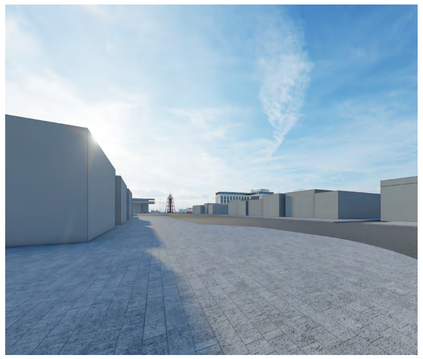
Gesture 3
Two storey finer grain with recessive top level

Sun Study : Winter Solstice - 21st of June

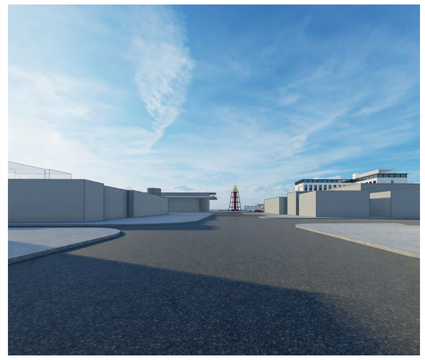
Sun Study : Equinox - 20th of March

Sun Study : Summer Solstice - 21st of December

Long Views



Corner of Commercial Rd and St Vincent St



Corner of Commercial Rd and Nile Street

Corner of Lipson St and St Vincent St

Birkenhead

McLaren Wharf near Warrawee Dock

Queens Wharf

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PORT ADELAIDE HOTEL

FORM, SUNSTUDY AND LONG VIEWS

Scale N/A
Drawn MG LP ER
Date 14/02/2020
Job No 2019042
Dwg No 3293 DA03 Rev 01 A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

3D Perspectives

DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02

McLaren wharf looking south-west

McLaren wharf promenade

Fishermen's Wharf looking north-east

Lipson Street looking north-west

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PORT ADELAIDE HOTEL

3D PERSPECTIVES

Scale N/A
Drawn MG LP ER
Date 14/02/2020
Job No 2019042
Dwg No 3293 DA04 Rev 01 A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

3D Perspectives

McLaren Wharf facade

McLaren Parade

Lipson Plaza colonnade

McLaren Parade entrance

DA ISSUE

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PORT ADELAIDE HOTEL

3D PERSPECTIVES

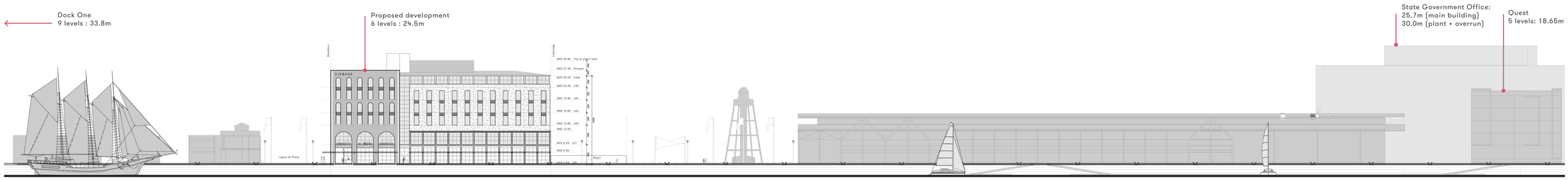
Scale N/A
Drawn MG LP ER
Date 14/02/2020
Job No 2019042
Dwg No 3293 DA05 Rev 01 A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

Streetscape Elevations

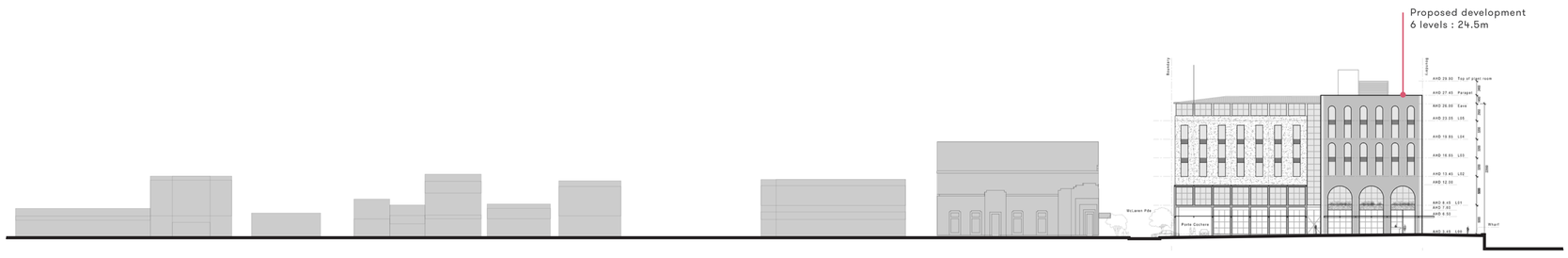
DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02



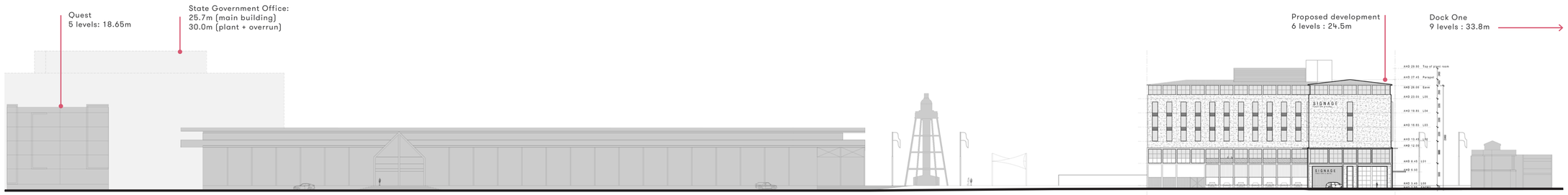
North Streetscape (McLaren Wharf)

Scale - 1:500



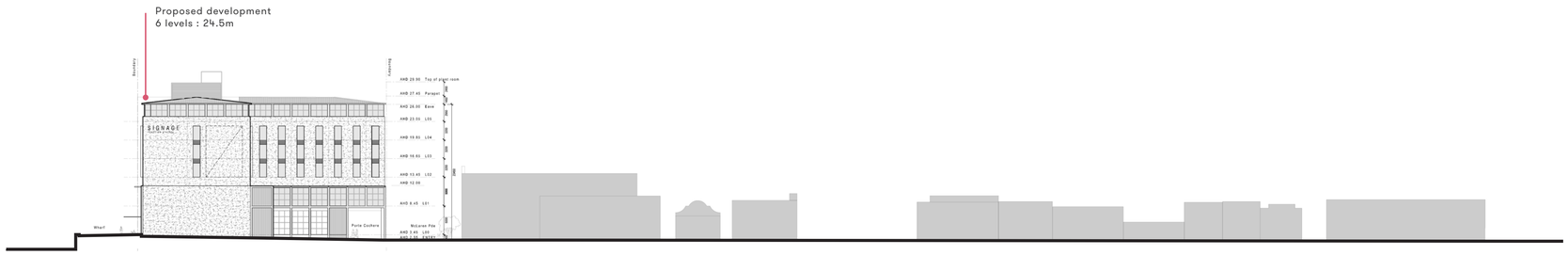
East Streetscape (Lipson Street)

Scale - 1:500



South Streetscape (McLaren Parade)

Scale - 1:500



West Streetscape (Commercial Road)

Scale - 1:500

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CK PROPERTY GROUP

PORT ADELAIDE HOTEL

STREETSCAPE ELEVATIONS

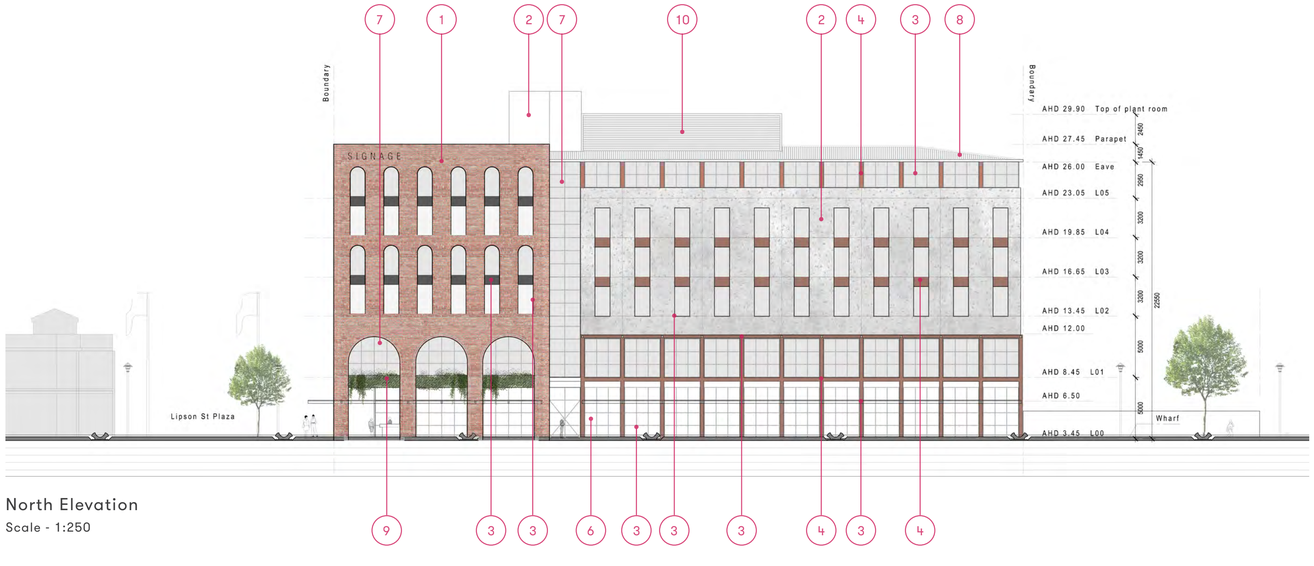
Scale 1:500
Drawn MG LP ER
Date 14/02/2020
Job No 2019042
Dwg No 3293 DA06 Rev 01 A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

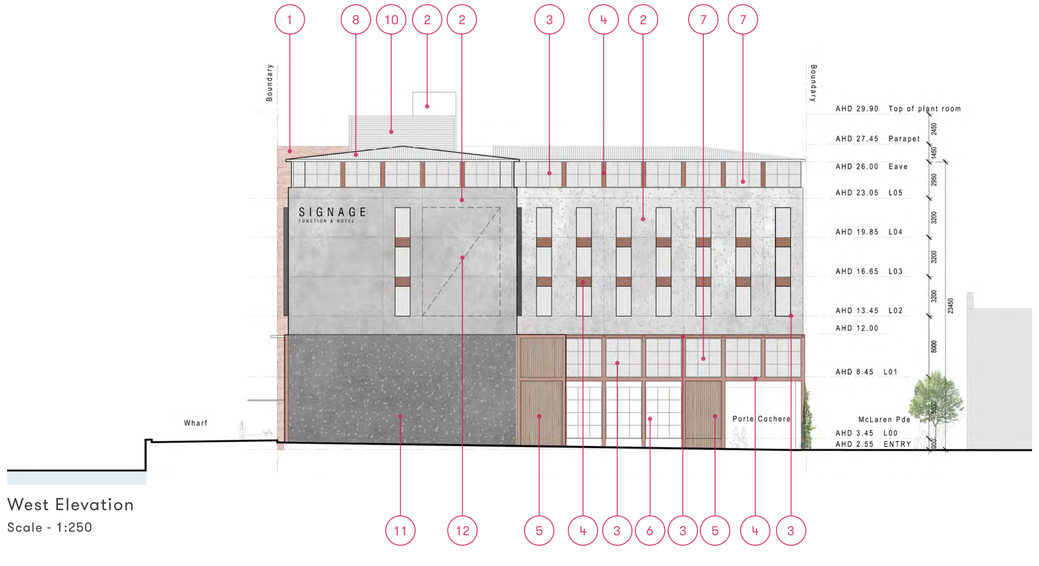
Elevations

DA ISSUE

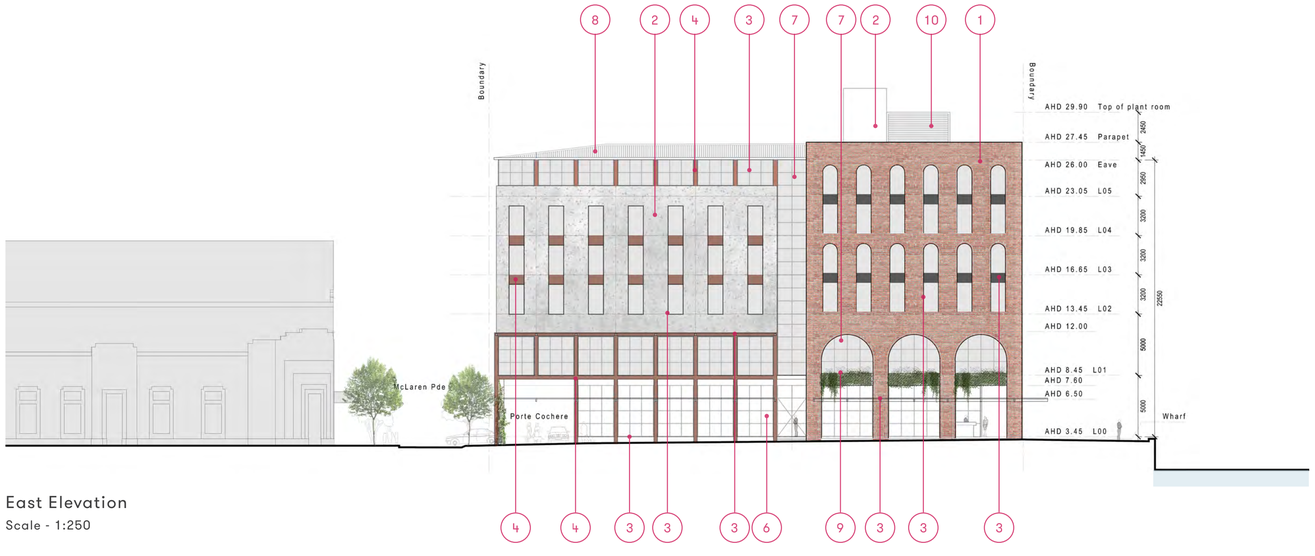
Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02



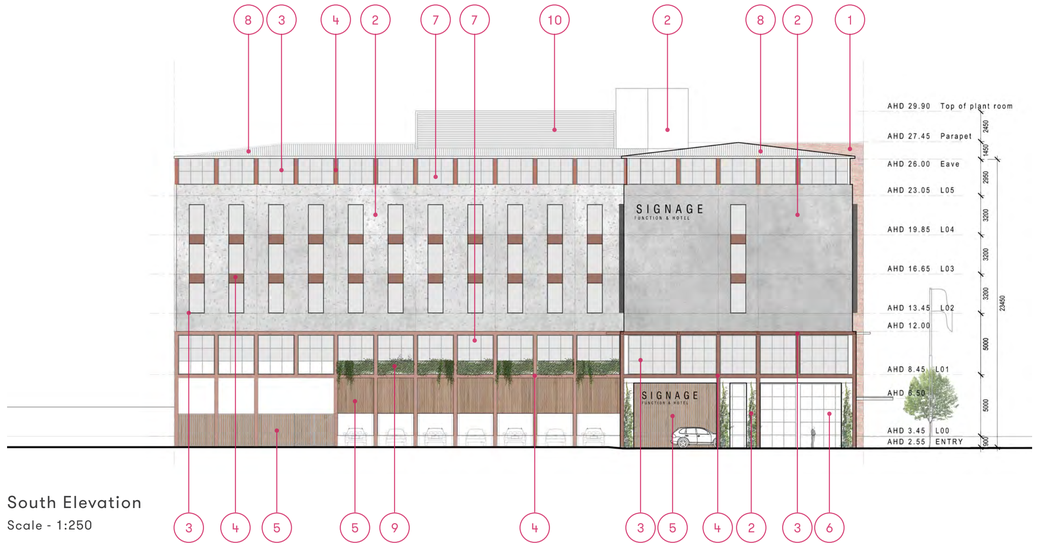
North Elevation
Scale - 1:250



West Elevation
Scale - 1:250



East Elevation
Scale - 1:250

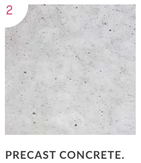


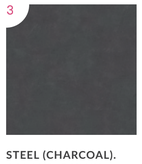
South Elevation
Scale - 1:250

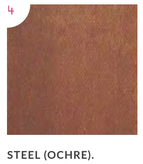
Material Legend

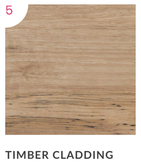
1

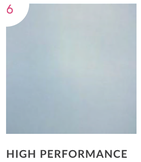
PGH CRAFTED SANDSTOCK BRICK. COLOUR: BLACKETT

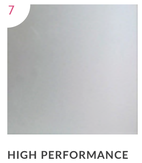
2

PRECAST CONCRETE. LIGHT GREY OXIDE MIX, SANDBLASTED FINISH

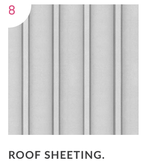
3

STEEL (CHARCOAL). COLOUR: DULUX DURATEC ELEMENTS MONUMENT

4

STEEL (OCHRE). COLOUR: DULUX DURATEC ELEMENTS WEATHERED STEEL

5

TIMBER CLADDING

6

HIGH PERFORMANCE DOUBLE GLAZED WINDOWS. LOW-E NEUTRAL

7

HIGH PERFORMANCE DOUBLE GLAZED WINDOWS. LOW-E TINTED

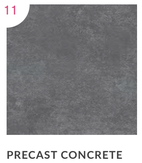
8

ROOF SHEETING. COLOUR: COLOURBOND SURFMIST

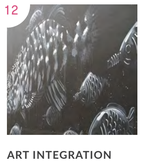
9

LANDSCAPE INTEGRATION - PLANTERS OR GREEN WALL

10

NATURAL ANODISED 2 STAGE LOUVRES TO ROOF PLANT

11

PRECAST CONCRETE DARK GREY OXIDE MIX, SANDBLASTED FINISH

12

ART INTEGRATION OR VISUAL DISPLAY OPPORTUNITY

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CK PROPERTY GROUP

PORT ADELAIDE HOTEL

ELEVATIONS

Scale	1:250
Drawn	MG LP ER
Date	14/02/2020
Job No	2019042
Dwg No	3293 DA07 Rev 01

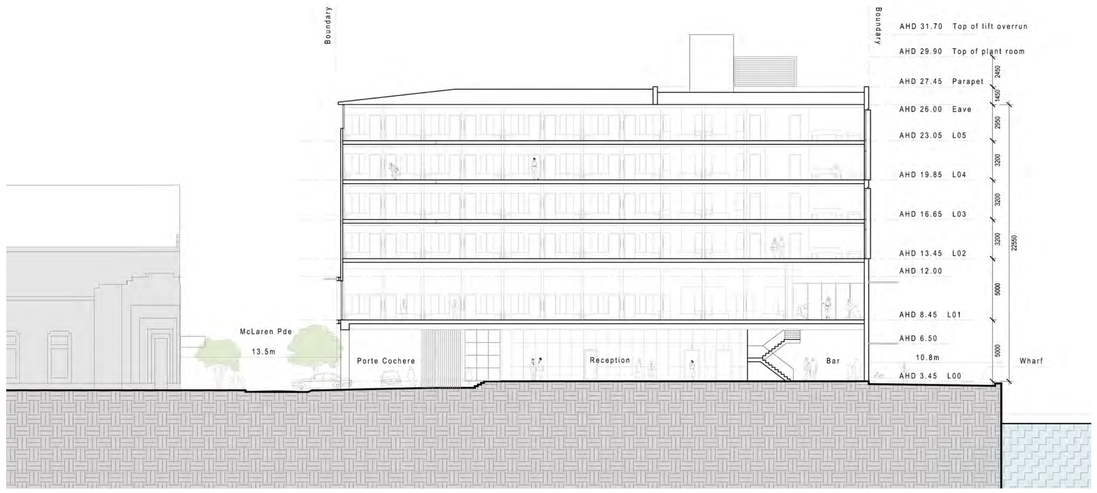
A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

Sections + Photomontages

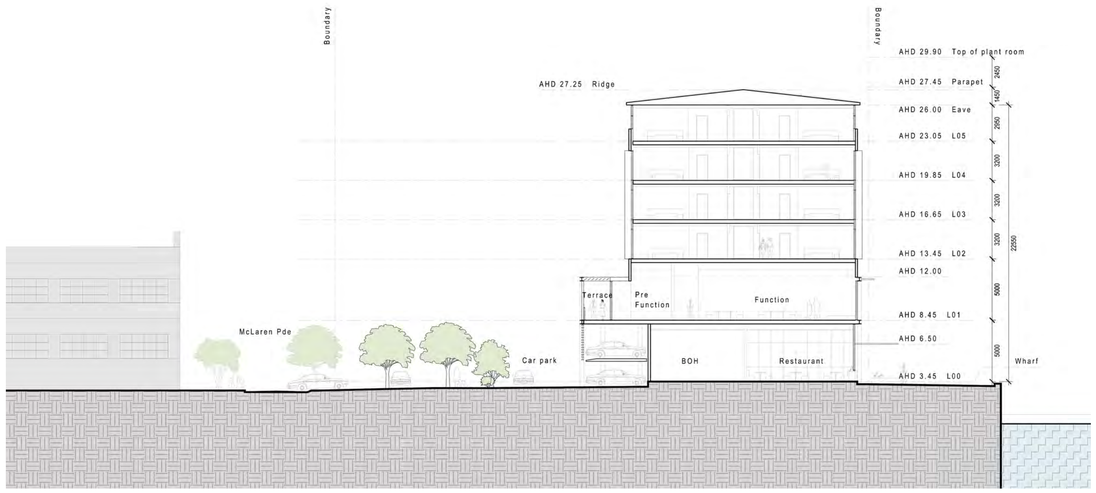
DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02



Section A

Scale - 1:250



Section B

Scale - 1:250

Photomontage 01

Corner of Parade N and Commercial Rd looking north-east

Photomontage 02

McLaren Wharf looking west

Photomontage 03

Lipson St looking north-west

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PORT ADELAIDE HOTEL

SECTIONS AND PHOTOMONTAGES

Scale	1:250
Drawn	MG LP ER
Date	14/02/2020
Job No	2019042
Dwg No	3293 DA08 Rev 01

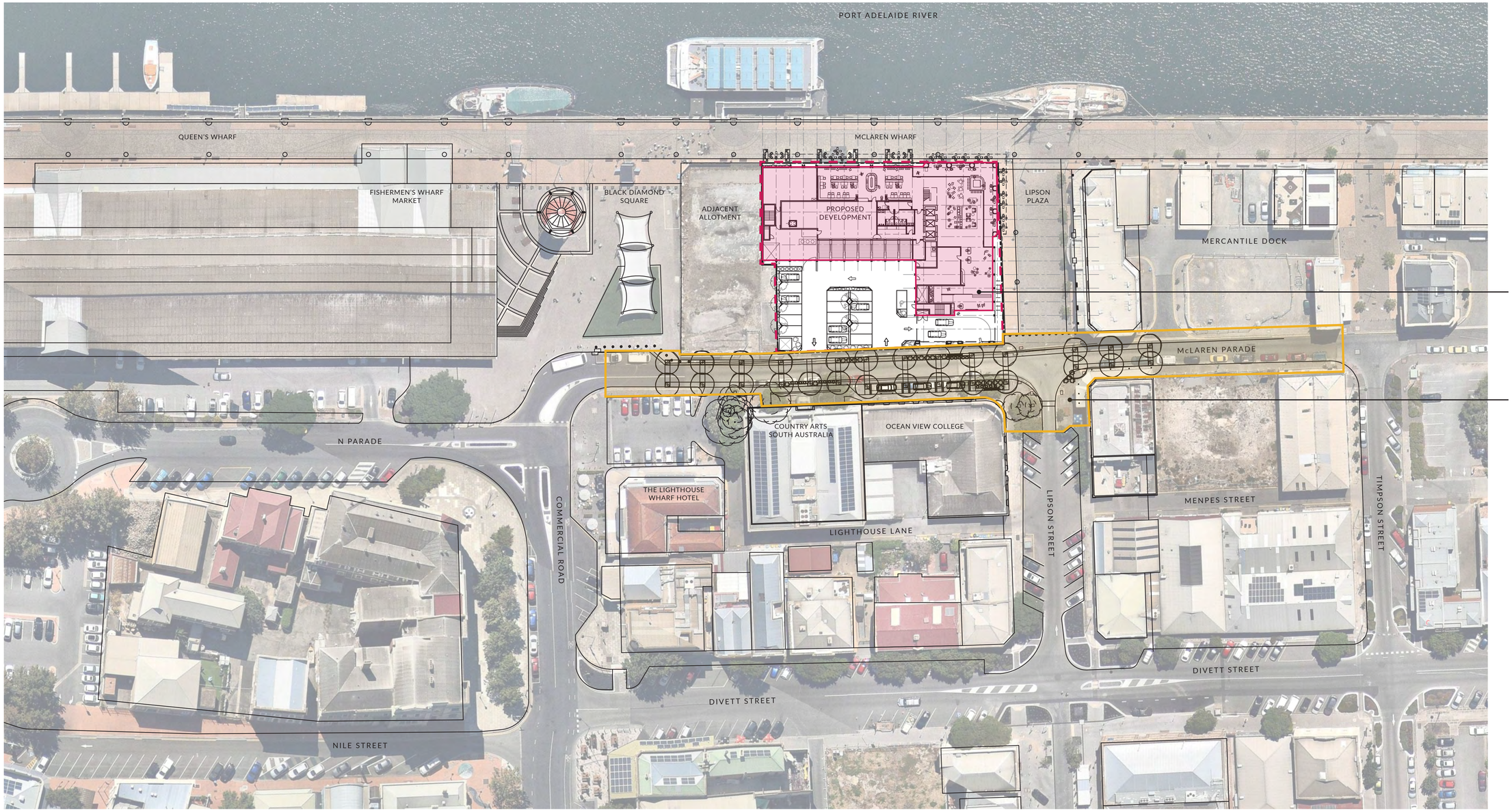
A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

Site Plan

DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02



Proposed building footprint shown hatched

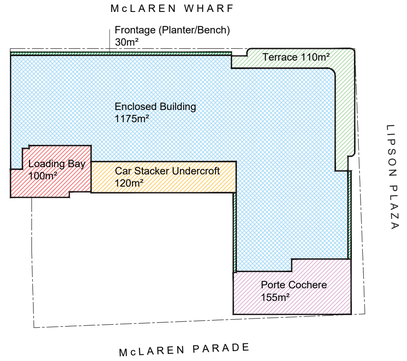
Potential extent of Council's McLaren Parade upgrade shown hatched

Site Plan
Scale - 1:500

Metrics

Level	King	Double/DDA	Suite	1 Bed Suite	Car Parks	Keys	GFA
	24m²	28m²	30 - 32m²	35m²			
L00	-	-	-	-	31	-	1175
L01	11	1	3	1		16	1580
L02	30	3	6	2		41	1500
L03	30	3	6	2		41	1500
L04	30	3	6	2		41	1500
L05	30	3	6	2		41	1500
TOTALS	**131**	**13**	**27**	**9**	31	**180**	**8755m²**

Ground Floor Area Plan
Scale - 1:500



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PORT ADELAIDE HOTEL

SITE PLAN

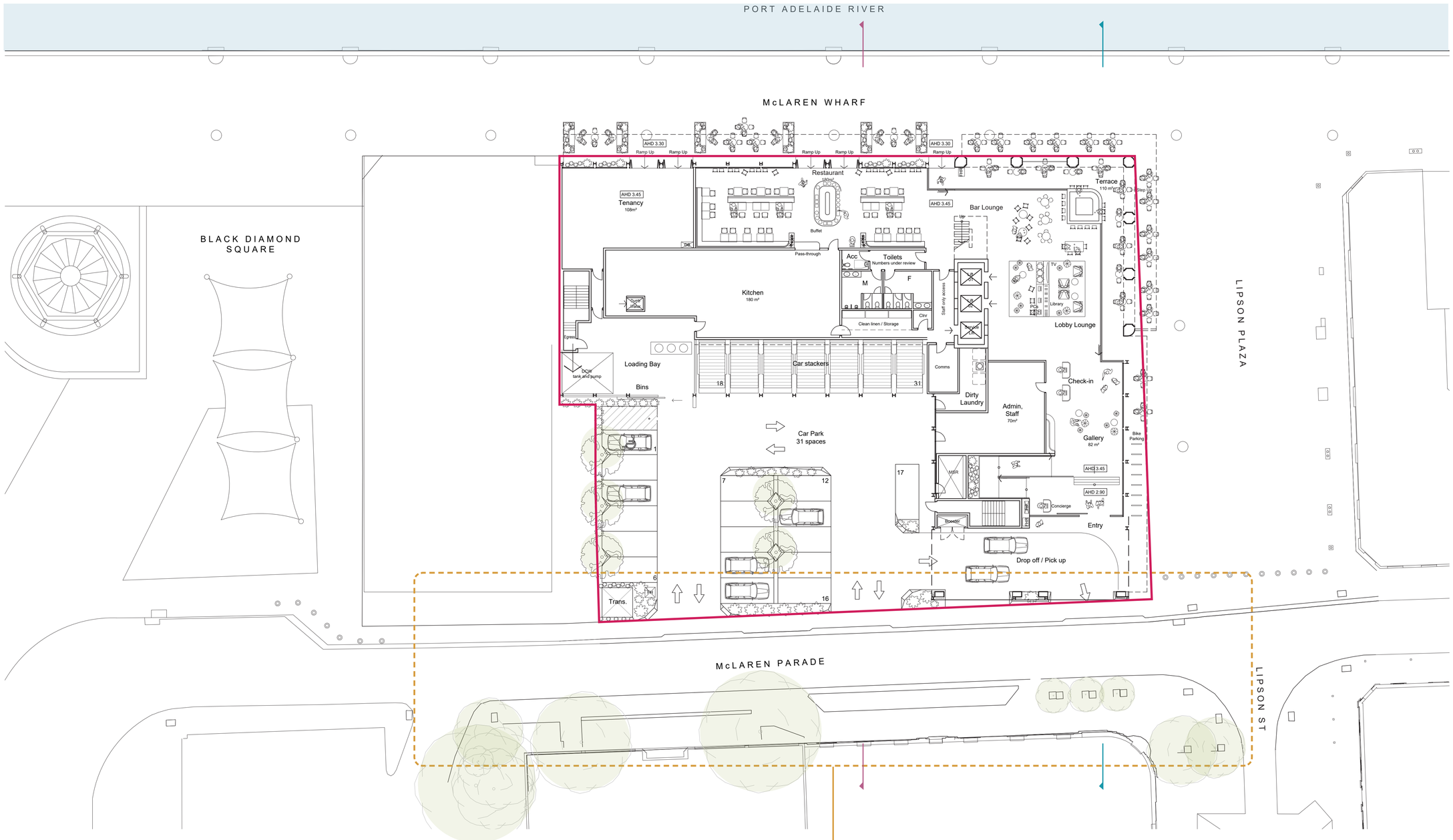
Scale 1:500
Drawn MG LP ER
Date 14/02/2020
Job No 2019042
Dwg No 3293 DA09 Rev 01 A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

Floor Plans

DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	19.02



Ground Floor Plan

Scale - 1:200

0 1 2 3 4 5 6 7 8 9 10m

Scale 1:200 @ A1

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PORT ADELAIDE HOTEL

GROUND FLOOR PLAN

Scale	1:200
Drawn	MG LP ER
Date	19/02/2020
Job No	2019042
Dwg No	3293 DA10 Rev 02

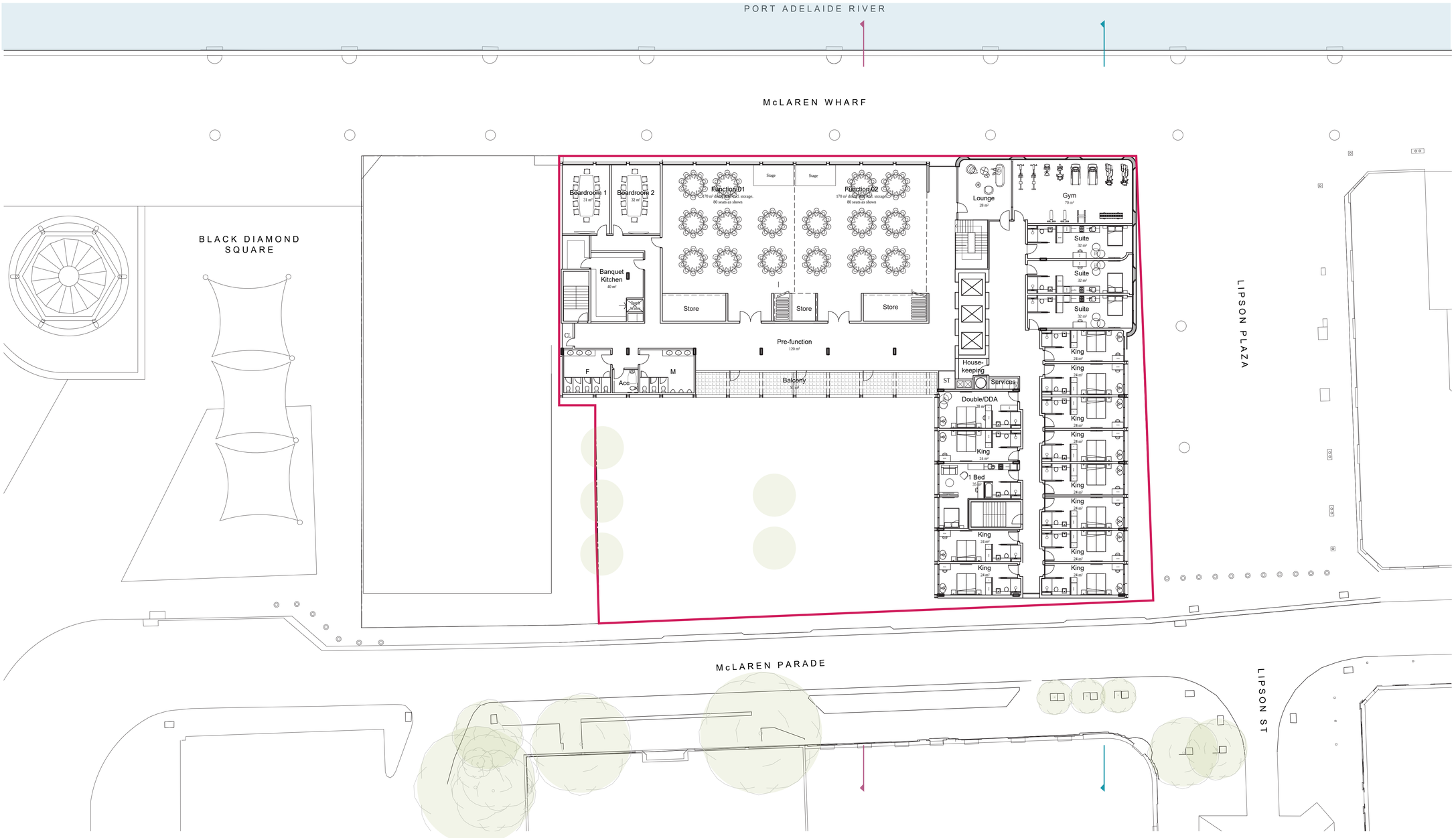
A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

Floor Plans

DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02



Level 1 Plan

Scale - 1:200

0 1 2 3 4 5 6 7 8 9 10m

Scale 1:200 @ A1

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PORT ADELAIDE HOTEL

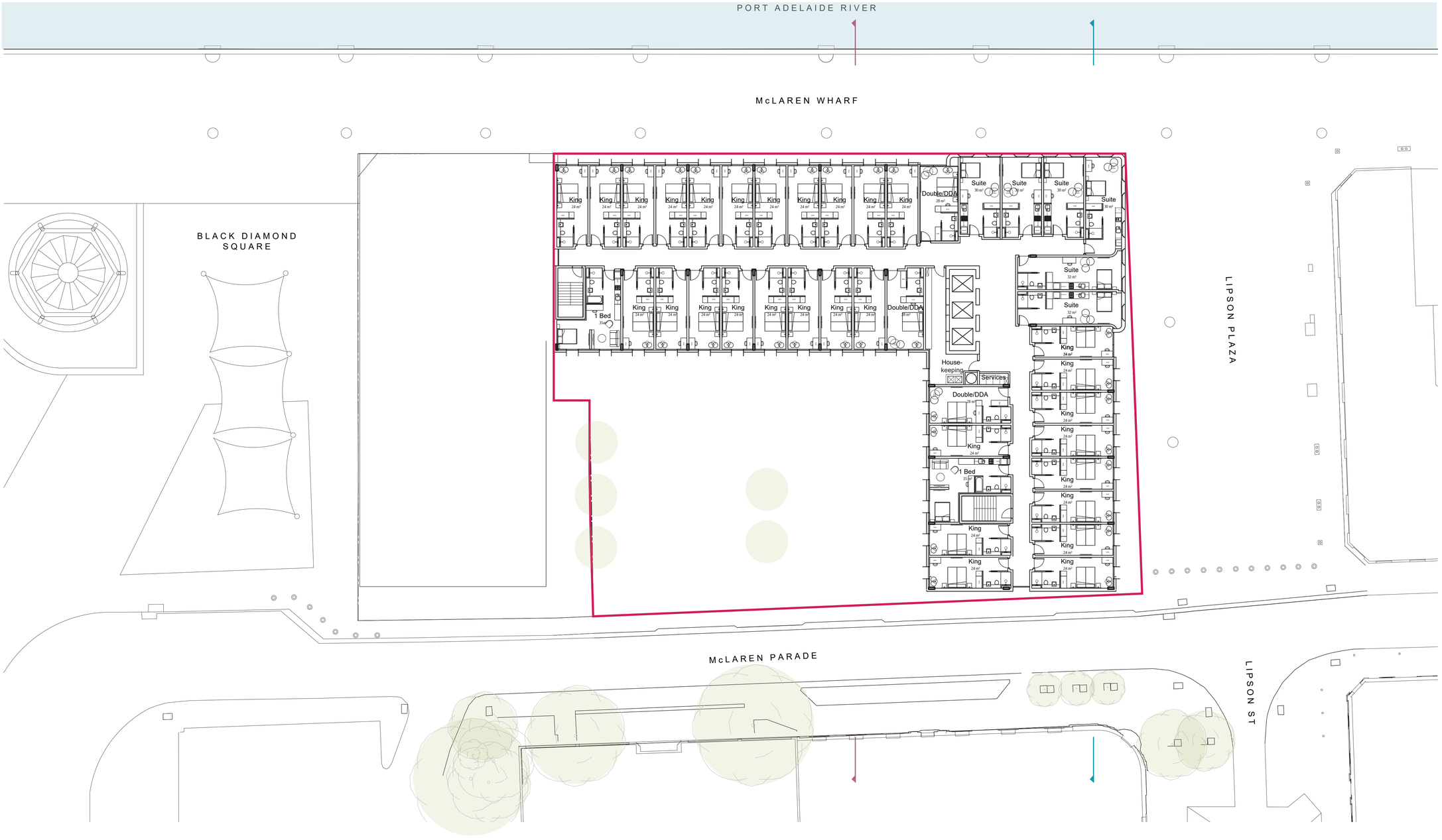
LEVEL 1 PLAN

Scale	1:200
Drawn	MG LP ER
Date	14/02/2020
Job No	2019042
Dwg No	3293 DA11 Rev 01

A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

Floor Plans



Level 2-4 Plan

Scale - 1:200

DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02

0 1 2 3 4 5 6 7 8 9 10m

Scale 1:200 @ A1

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CK PROPERTY GROUP

PORT ADELAIDE HOTEL

LEVELS 2-4 PLAN

Scale 1:200
Drawn MG LP ER
Date 14/02/2020
Job No 2019042

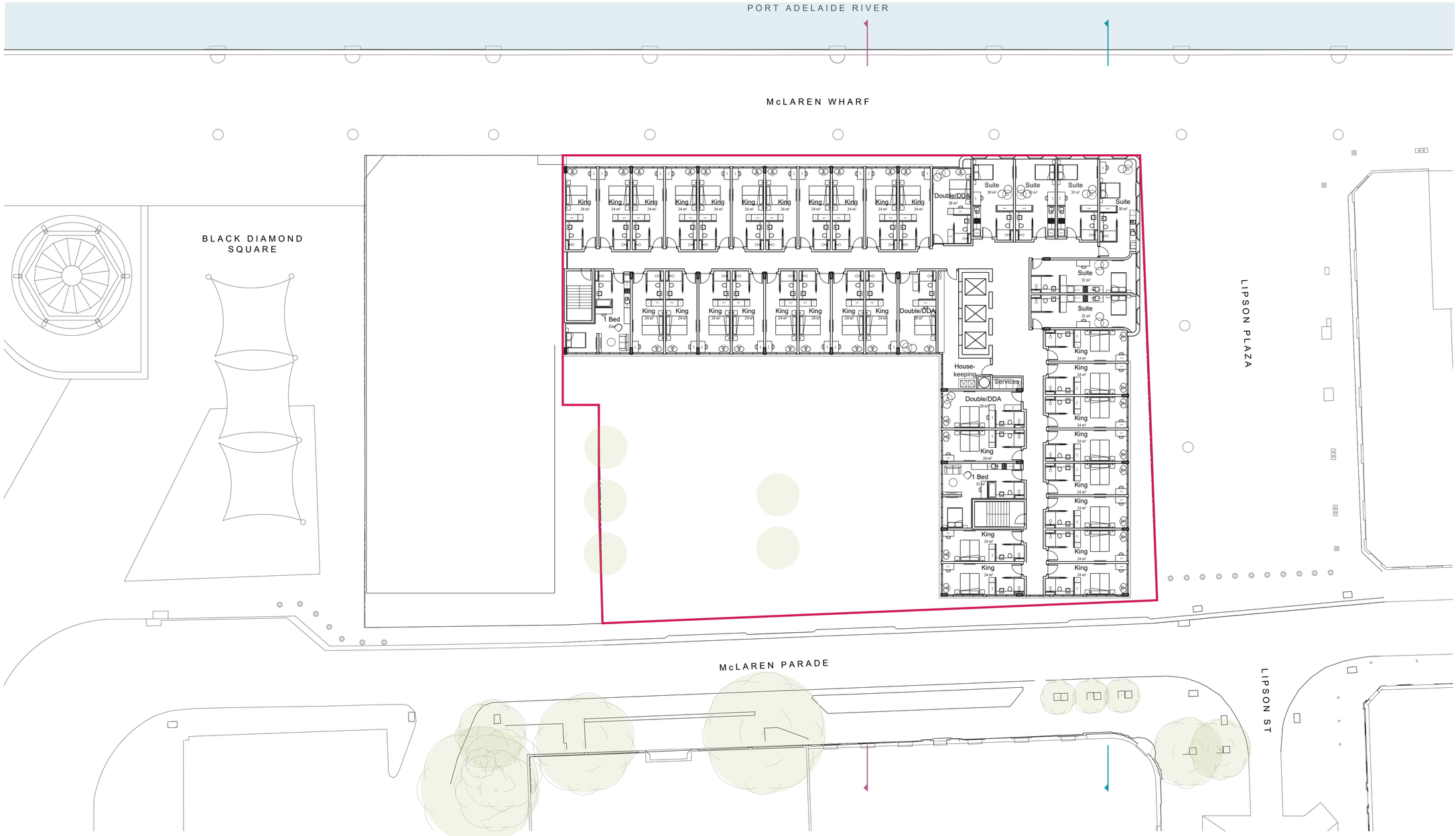
Dwg No 3293 DA12 Rev 01 A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

Floor Plans

DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02



Level 5 Plan

Scale - 1:200

0 1 2 3 4 5 6 7 8 9 10m

Scale 1:200 @ A1

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CK PROPERTY GROUP

PORT ADELAIDE HOTEL

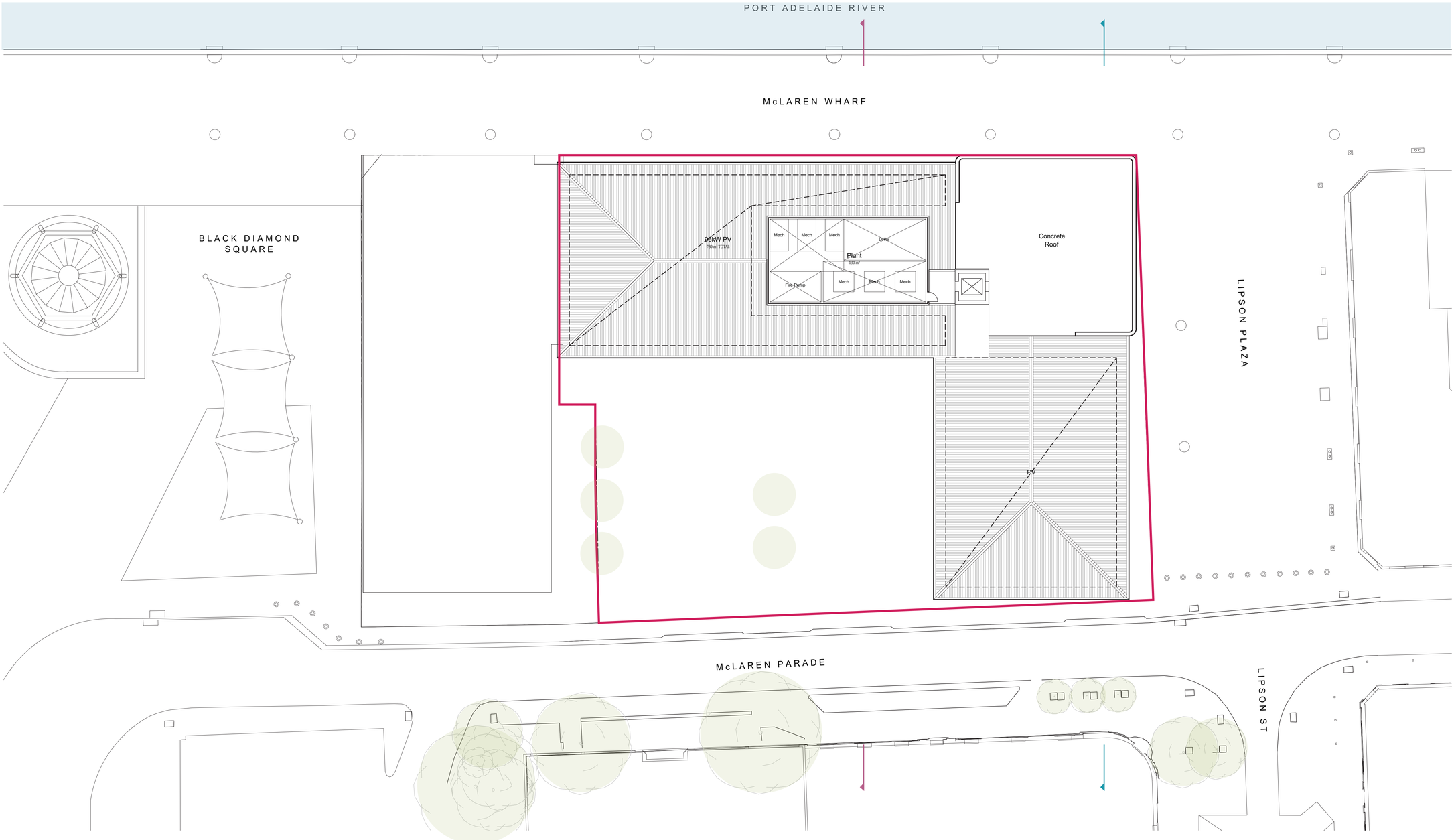
LEVEL 5 PLAN

Scale	1:200
Drawn	MG LP ER
Date	14/02/2020
Job No	2019042
Dwg No	3293 DA13 Rev 01

A1 sheet

McLaren Wharf Port Adelaide - Hotel Development

Floor Plans



Roof Plan

Scale - 1:200

DA ISSUE

Rev	Amendment	Date
	ISSUED FOR PROVISIONAL DEVELOPMENT PLAN CONSENT	14.02

0 1 2 3 4 5 6 7 8 9 10m

Scale 1:200 @ A1

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PORT ADELAIDE HOTEL

ROOF PLAN

Scale 1:200
Drawn MG LP ER
Date 14/02/2020
Job No 2019042

Dwg No 3293 DA14 Rev 01

A1 sheet

Appendix 4. DASH Heritage Impact Assessment

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 for Proposed Hotel Development, McLaren Wharf, Port Adelaide

DA193731– 17.02.2020

1.0 Introduction

DASH Architects has been engaged by CK Property Group (the Applicant) to provide heritage advice to it, and to prepare this Heritage Impact Statement (HIS), in relation to the proposed hotel development at McLaren Wharf, Port Adelaide (the Proposed Development).

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 Brown Falconer (the Design Architects) and other members of the consultant team;
- Attended meetings with Peter Wells of The Heritage Branch of the Department for Environment and Water (DEW);
- Attended a formal Design Review Session with ODASA;
- Reviewed feedback from Port Adelaide Enfield Council's Local Heritage Adviser;
- Reviewed Port Adelaide Enfield (City) Development Plan (consolidated 06 February 2018) (The Development Plan);
- Reviewed various iterations of design proposals;
- Reviewed the architectural documents to be lodged for Development Plan Consent (Brown Falconer's Drawings # 2019042 07/02/2020 DA01 Rev01 -14 pages); and
- Reviewed the Landscape Architects drawings (Birdseye Studios).

2.0 About the Author

I am an architect and heritage consultant with 25 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

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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 a 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 Subject Site of the proposed development is highlighted in orange on Image 01 below and green on the subsequent images (Images 02, 03, 04 & 05). Brown Falconer's Location Plan within the drawing set noted above, shows it in more detail.

The Site is, for all intents and purposes, vacant. It is loosely rectangular, although there is a step in the eastern boundary, and is predominantly flat, although there is a slight 'fall' toward the River. The site is bounded on two sides by McLaren Parade and Lipson Street, noting that the section of Lipson St has been closed to traffic and has formed a public square, and on a third side by the Dock. The remainder of the 'block' is separately owned and, it is presumed, will be developed separately, sometime in the future.

The Design Architects and Consulting Planner will, no doubt, describe both the site and the building proposed on it in further detail as part of their submissions.

3.2 Heritage and Character Listings

There are no State or Local Heritage Places on the Subject Site.

There are a number of State Heritage Places and a State Heritage Area near the Subject Site. Collectively I have described these as State Heritage Items.

Amongst the State Heritage Places within what I consider to be the 'immediate' Locality of the Subject Site, I consider that the following to be sufficiently close to warrant a detailed review of the impact that the works proposed as part of the Application will have on their Heritage values. These include:

- The Port Adelaide State Heritage Area and the various State Heritage places within that Area;
- Former South Island (Originally Port Adelaide) Lighthouse; and
- Birkenhead Bridge

I consider that the other Heritage Places in the Locality are sufficiently distant from the Subject 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.

There are no Local Heritage Places or contributory items (character listings) on the Subject Site or within the Locality.

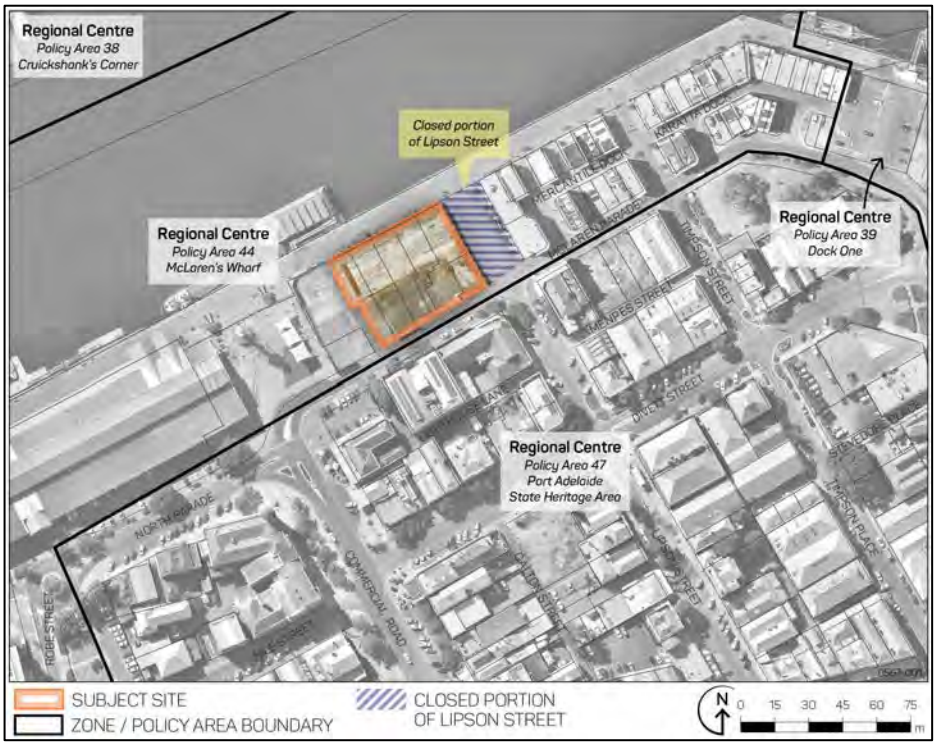


IMAGE 01 – Image showing subject site and local zoning (prepared by Ekistics Panning).

IMAGE 02 – Indicative 3D image of site (not an actual photograph) taken from https://www.google.com/maps. Green annotations have been added by Author. Step in eastern boundary has not been shown.

IMAGE 03 – Indicative 3D image of site (not an actual photograph) taken from https://www.google.com/maps. Green annotations have been added by Author. Step in eastern boundary has not been shown.

IMAGE 04 – Image showing subject site and extent of associated listing (taken from http://location.sa.gov.au/viewer/. Red shading shows State Heritage Places and Areas. Blue shading shows Local Heritage Places. Green annotations have been added by Author.

IMAGE 05 – Image showing subject site and extent of associated listing (taken from http://location.sa.gov.au/viewer/. Red shading shows State Heritage Places and Areas. Blue shading shows Local Heritage Places. Green annotations have been added by Author.

3.2.1 Details of Heritage Listings

Following are photos, and extracts from the SA Heritage Places database, in relation to:

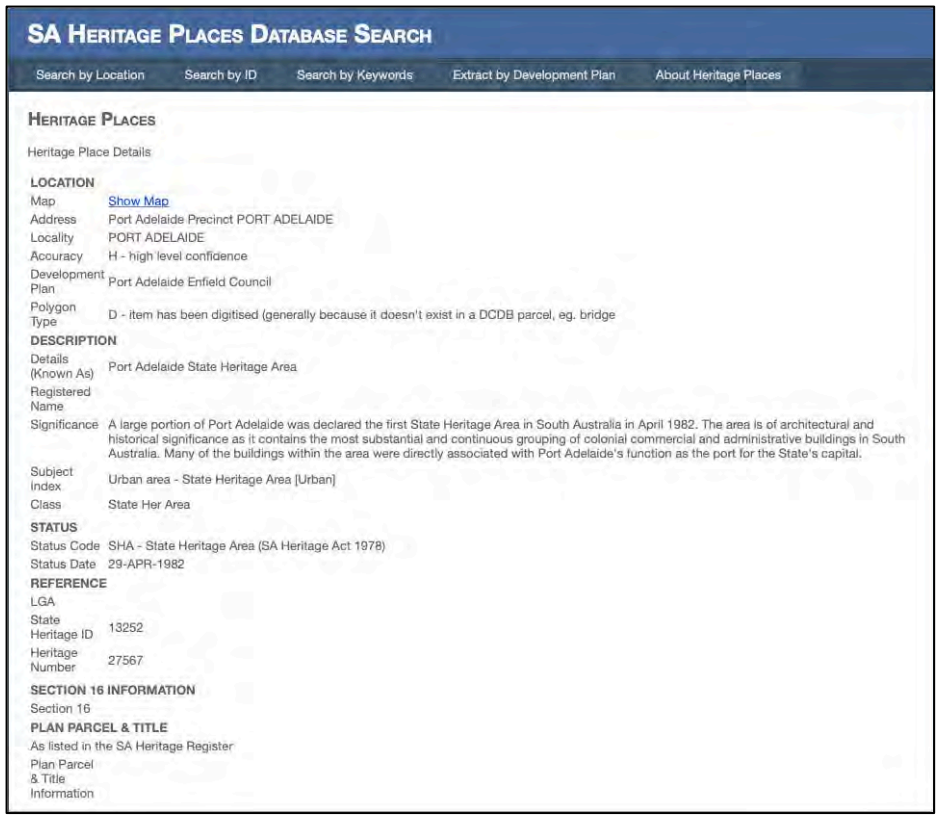
- Port Adelaide State Heritage Area and some of the State Heritage places within that Area;
- Former South Island (Originally Port Adelaide) Lighthouse; and
- Birkenhead Bridge

3.2.1.1 Port Adelaide State Heritage Area and some of the State Heritage places within that Area

As noted above, there are various State Heritage Listed Places within the Port Adelaide State Heritage Area. Those closest to the Subject Site, and therefore of most relevance in this assessment, are:

- Dockside Tavern (former Britannia Hotel) on McLaren Parade; and
- Former Bank of Australasia, Port Adelaide Branch on Lipson Street.

Given the nature of the State Heritage Places within the Area, the nature of the State Heritage Area itself, and given the location and nature of the proposed development, I have considered the State Heritage Area and the State Heritage Places within it collectively. In doing so, and in this report, I have not quoted or referenced details of the listings for the individual State Heritage Places within the Area. I have referenced the details for the listing of the State Heritage Area.



SA HERITAGE PLACES DATABASE SEARCH

Search by Location | Search by ID | Search by Keywords | Extract by Development Plan | About Heritage Places

HERITAGE PLACES

Heritage Place Details

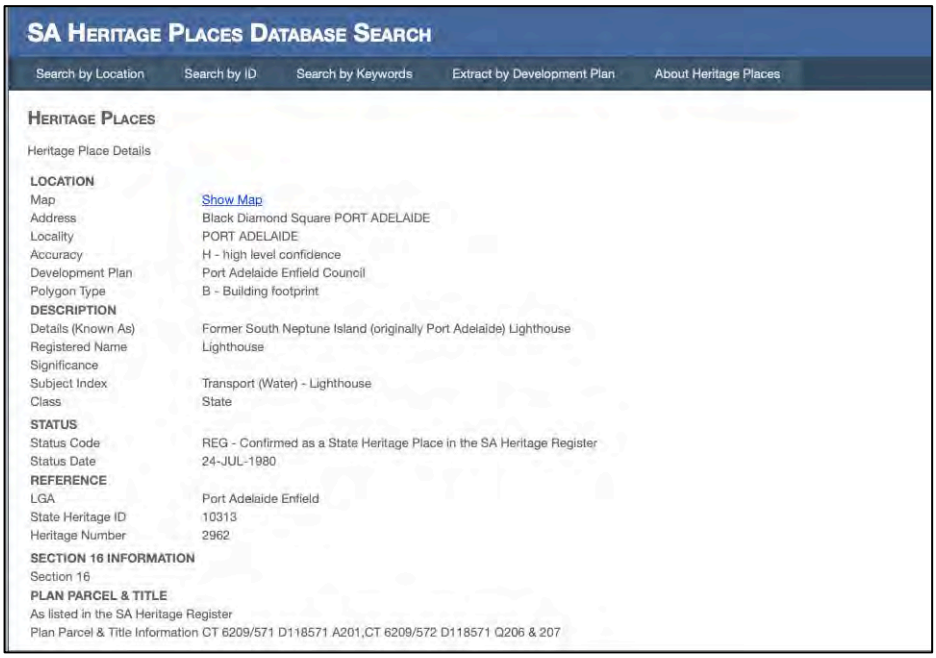
LOCATION	
Map	Show Map
Address	Port Adelaide Precinct PORT ADELAIDE
Locality	PORT ADELAIDE
Accuracy	H - high level confidence
Development Plan	Port Adelaide Enfield Council
Polygon Type	D - item has been digitised (generally because it doesn't exist in a DCDB parcel, eg. bridge
DESCRIPTION	
Details (Known As)	Port Adelaide State Heritage Area
Registered Name	
Significance	A large portion of Port Adelaide was declared the first State Heritage Area in South Australia in April 1982. The area is of architectural and historical significance as it contains the most substantial and continuous grouping of colonial commercial and administrative buildings in South Australia. Many of the buildings within the area were directly associated with Port Adelaide's function as the port for the State's capital.
Subject index	Urban area - State Heritage Area [Urban]
Class	State Her Area
STATUS	
Status Code	SHA - State Heritage Area (SA Heritage Act 1978)
Status Date	29-APR-1982
REFERENCE	
LGA	
State Heritage ID	13252
Heritage Number	27567
SECTION 16 INFORMATION	
Section 16	
PLAN PARCEL & TITLE	
As listed in the SA Heritage Register	
Plan Parcel & Title Information	

IMAGE 06 – Extract from Heritage Places Database Search (http://maps.sa.gov.au/heritagesearch/HeritageSearchByKeywords.aspx).

IMAGE 07 – Photo of building directly opposite site on McLaren Parade (within State Heritage Area) (by Author).

IMAGE 08 – Photo of Dockside Tavern, building diagonally opposite site on McLaren Parade and Lipson Street (Place is a Stat Heritage Item and within State Heritage Area) (by Author).

3.2.1.2 Former South Island (Originally Port Adelaide) Lighthouse



SA HERITAGE PLACES DATABASE SEARCH

Search by Location | Search by ID | Search by Keywords | Extract by Development Plan | About Heritage Places

HERITAGE PLACES

Heritage Place Details

LOCATION	
Map	Show Map
Address	Black Diamond Square PORT ADELAIDE
Locality	PORT ADELAIDE
Accuracy	H - high level confidence
Development Plan	Port Adelaide Enfield Council
Polygon Type	B - Building footprint
DESCRIPTION	
Details (Known As)	Former South Neptune Island (originally Port Adelaide) Lighthouse
Registered Name	Lighthouse
Significance	
Subject Index	Transport (Water) - Lighthouse
Class	State
STATUS	
Status Code	REG - Confirmed as a State Heritage Place in the SA Heritage Register
Status Date	24-JUL-1980
REFERENCE	
LGA	Port Adelaide Enfield
State Heritage ID	10313
Heritage Number	2962
SECTION 16 INFORMATION	
Section 16	
PLAN PARCEL & TITLE	
As listed in the SA Heritage Register	
Plan Parcel & Title Information	CT 6209/571 D118571 A201,CT 6209/572 D118571 Q206 & 207

IMAGE 09 – Extract from Heritage Places Database Search (http://maps.sa.gov.au/heritagesearch/HeritageSearchByKeywords.aspx).

IMAGE 10 – Photo of Lighthouse in Black Diamond Square (A State Heritage Item)(by Author).

3.2.1.3 Birkenhead Bridge

SA HERITAGE PLACES DATABASE SEARCH

Search by Location | Search by ID | Search by Keywords | Extract by Development Plan | About Heritage Places

HERITAGE PLACES

Heritage Place Details

LOCATION	
Map	Show Map
Address	BIRKENHEAD
Locality	BIRKENHEAD
Accuracy	H - high level confidence
Development Plan	Port Adelaide Enfield Council
Polygon Type	D - item has been digitised (generally because it doesn't exist in a DCDB parcel, eg. bridge
DESCRIPTION	
Details (Known As)	Birkenhead Bridge [Metal Double Bascule]
Registered Name	Birkenhead Bridge
Significance	The Birkenhead Bridge across the Gawler Reach of the Port River was completed in 1940. It is significant for being Australia's first double bascule bridge. The only other opening bridge remaining in South Australia (in 1999) is the vertical lift span bridge at Paringa on the River Murray.
Subject Index	Transport (Road) - Road Bridge
Class	State
STATUS	
Status Code	REG - Confirmed as a State Heritage Place in the SA Heritage Register
Status Date	04-MAR-1993
REFERENCE	
LGA	Port Adelaide Enfield
State Heritage ID	14348
Heritage Number	2949
SECTION 16 INFORMATION	
Section 16	
PLAN PARCEL & TITLE	
As listed in the SA Heritage Register	
Plan Parcel & Title Information	CT 0000/0000,CT 6104/95 D88720 A7

IMAGE 11 – Extract from Heritage Places Database Search (http://maps.sa.gov.au/heritagesearch/HeritageSearchByKeywords.aspx).

IMAGE 12 – Photo of Birkenhead Bridge from near the Subject Site (Bridge is a State Heritage Item) (by Author).

4.0 Proposed Work

4.1 Description

The Development (loosely) proposes construction of new 6 storey Hotel Building with public spaces at the lower levels and accommodation at the upper levels. There is also associated car parking and a drop off / pick up lane at ground level.

Again, the Design Architect and Consulting Planner will describe the overall Development in more detail. I have therefore only discussed below those elements of the Development that affect, or have the potential to affect, the Heritage Values of the State Heritage Items (places and Area) in the locality.

From a heritage point of view, my critical consideration have been:

- The set out of the new development on the site, including Management of vehicle access and parking (Setout);
- The height and articulation of the new development, in both a vertical and horizontal sense (Scale); and
- The forms, materials and colours used in the design (Composition).

Set out

The development proposed a new 'L' shaped building that 'address' Lipson Street (that is a public square rather than roadway at that point) and the Port River Waterfront. The depth of the building means that there are also 'return' facades to McLaren Parade and the currently vacant land that is the remainder of the Block.

The main entrance to the building is from the 'return' on McLaren Parade. There is also a porte cochere (for vehicle drop off and pick up) in this location. That said, the building is also to be permeable to pedestrians at both Lipson street and the waterfront.

From a heritage point of view, the interactions between the new building and the State Heritage Items at the corner of Lipson Street and McLaren Parade are particularly important as this is the closest physical relationship and this aspect of the building is part of longer views with the State Heritage Area (through the SHA to the subject site; adjacent to the SHA; and to the SHAS, past the subject site, from the waterfront and river itself).

Vehicle access to the site has been restricted to a carpark from Lipson Street and the porte cochere drop under the building at the corner of Lipson and McLaren parade. The development proposes landscaping to edges of the site and central areas of the carpark to these areas. These are shown on the Landscape architects drawings. While these will be important, I suggest that the future works to McLaren Parade itself will further enhance the amenity of these spaces. From a heritage point of view however, the proposed layout of vehicle access, parking and associated landscaping does not have a significant or negative impact on the heritage values of the Heritage Items in the locality.

The need to address potential flooding from the River has meant that the ground floor level of the new development is higher than the ground levels across and

adjacent the site. While this is not ideal for access to the building and for the building's general interactions with the public realm, the increase in height has been mitigated by the designers and the relevant authorities to a level that it is manageable. This increase in floor level does not, in and of itself, impact negatively on the heritage values of the Heritage Items in the Locality.

As noted above, the subject site does not occupy the entire block. It is likely that the remainder of the block will be developed later (that is subsequent to this Application and in a form unknown at the time of this application). It is also likely that should this development proceed, development on the remainder of the block would be strongly influenced by it. In the short term however, this development has had to consider the site 'as it stands' (with a vacant site next to it) as well as in the context of a likely future development next to it (without knowing the form and nature of that development). Again, this does not, in and of itself, impact negatively on the heritage values of the Heritage Items in the Locality.

Scale

The new building is 6 storeys in total height. The vertical elevations of the building have been broken down, in most sections, into: a two storey podium; a further three storey body; and a largely glass top floor. The exception is at the corner of Lipson Street and the Waterfront. This element is a full 6 storeys high but has been articulated using large, wide, two storeys high, archways at the lower two levels and narrower, two storey high archways through the upper levels.

This corner element also allows a further development on the remainder of the site to either 'book end' the block, with a similarly designed element, with or to address it in another, complimentary, way.

The 6 Storeys is greater than identified in the Concept Plan within the Development Plan (image 18). While the applicant's Planner will discuss this in greater detail, from a heritage point of view the additional storey proposed (the development is 6 storeys high, rather than 5), has no material impact on the heritages value of the Heritage Items in the locality.

All sections of the building proposes verandahs or sun shading elements to the lower levels where they interact with the public realm.

Composition

The new buildings address the corner of McLaren Street and Lipson Street and present to the face of the Lipson Street (and its public space) and the waterfront.

The materials proposed to the two storey podium at the corner of Lipson Street and McLaren are of most importance from a heritage point of view. The use of a gridded steel frame is an ochre colour is appropriate as it is complimentary to the articulation, height, scale and colouring seen in the adjacent buildings, without replicating them. Within this steel grid the windows themselves are also further articulated, providing a finer grain detail. This feature is discussed further below.

IMAGE 13 – Image of proposed new development (form the Port River). Prepared by Brown Falconer and included in its DA Set.

IMAGE 14 – Image of proposed new development (form the Port River). Prepared by Brown Falconer and included in its DA Set.

IMAGE 15 – Image of proposed new development (form the Port River). Prepared by Brown Falconer and included in its DA Set.

IMAGE 16 – Image of proposed new development (form the Port River). Prepared by Brown Falconer and included in its DA Set.

IMAGE 17 – Image of proposed new development (form the Port River). Prepared by Brown Falconer and included in its DA Set.

4.2 Works to the Public realm

Althought included on some of Brown Falconer's drawings, I understand that the works to the public realm (ie outside the boundaries of the subject site), particularly those along McLaren Parade, are not included in this Application. These works may be developed further in consultation with Council and Renewal SA. As they are not part of this Application I have not considered them in this statement.

5.0 Assessment

Following is my assessment of the potential heritage impacts of the proposed development.

5.1 Impact on Subject Site

As noted above, there are no heritage items on the Subject Site. As such there will be no physical impact on any heritage values associated with it.

5.2 Impact on Other Heritage Places

Following is a summary of my assessment of the potential impact of the Development on the Heritage Items (Places and Areas) 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.

5.2.1 Port Adelaide State Heritage Area and the various State Heritage places within that Area

There are no physical works proposed to any items within the State Heritage Area.

Given the proximity of some of the Area to the Site however, the management of construction vibration throughout the construction process will be critical to avoiding damage to Items within it. I suggest that the preparation of a Vibration Management Plan, to the approval of SCAP (and likely with referral to the DEW Stage Heritage Unit as part of that) be made a condition of the Approval.

Given the existing subdivision pattern will be maintained and that there were previously structures on the Subject Site (in the preparation of this report I have not had cause to investigate what these were in great detail), the proposed works will not adversely affect the setting of the State Heritage Area, or any items within it. That said, the new works will be visible in conjunction with some of the items and will be located adjacent them. The success of the new works in addressing the issues associated with this is discussed in later sections, under the Development Plan Assessment.

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 Items.

5.2.2 Former South Island (Originally Port Adelaide) Lighthouse

There are no physical works proposed to this State Heritage Item.

Given the proximity of this Heritage Place to the Site, the management of construction vibration throughout the process will be critical to avoiding damage to it. I suggest that the preparation of a Vibration Management Plan, to the approval of SCAP (and likely with referral to the DEW Stage Heritage Unit as part of that) be made a condition of the Approval.

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 this place.

5.2.3 Birkenhead Bridge

There are no physical works proposed to this State Heritage Item.

The works do not propose any physical works to the Place, nor does the construction of the works, assuming reasonable steps are taken, present any significant risk to its fabric.

While the proposed new Hotel will be viewed in the foreground or background, depending on your reference point, it will be one of many such buildings within those views. Further, the proposed development will infill an area that was previously developed in a manner consistent with the overriding character of the locality (in a site coverage and layout sense at least). Based on this, the proposed works will not have any material impact on the setting of the heritage Place.

As such, I do not believe that the proposed works will have any material impact on the Heritage Values of this place.

6.0 Development Plan Provisions

The site is in the City of Port Adelaide Enfield's Regional Centre Zone, Policy Area 44, and is adjacent Regional Centre zone, Policy Area 47 (Port Adelaide State Heritage Area).

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 Places" sections of the Development Plan.

Of particular relevance within the Heritage Places section is Principle of Development Control (PDC) 9 that states:

> *"Development of a State or Local Heritage Place, or development on land adjacent to a State or Local Heritage Place should conserve, maintain, enhance and reinforce the historic character of individual buildings and/or the existing streetscape character by exhibiting architectural and roof-form designs, street frontage widths, front and*

side boundary set-backs, materials, colours, fences and landscape settings which complement and give prominence to historic buildings or their detailing, and should have regard to the provisions of design guidelines in Table PAdE/3 - Conservation Design Guidelines."

In my view, Table PAdE/3 does not directly relate to the circumstances of this Development. That is, a new commercial development that is not within an Historic Conservation Area (HCA). In considering PDC 9, and particularly the section that states "*exhibiting architectural and roof-form designs, street frontage widths, front and side boundary set-backs, materials, colours, fences and landscape settings which complement and give prominence to historic buildings or their detailing"*, I note that the context of this site (with large commercial buildings) is very different to the context envisaged by the Table (that is focused on residential design or commercial development within a HCA). As such, I have not given much consideration to the Table.

The Design has also been subject to a formal Design Review process through SCAP. I have therefore deferred to that process within this assessment and have restricted my comments to assessing the impact of the proposed Development on the Heritage Character of the Locality and the identified heritage Items within that locality.

As noted above the design, and particularly the set out, scale and composition of the proposed development have considered their context and proposed an appropriate solution.

On this basis, the proposed Development meets the intent of most of the Development Plan provisions, with respect to Heritage Matters in that it:

- Does not propose the loss of any heritage fabric;
- Does not materially affect the setting of the Heritage Items in the locality; and
- utilises materials, finishes, setbacks, scale and other built form qualities that are complementary to the heritage place (this is discussed further below).

As noted above, from a heritage point of view the additional storey proposed (the development is 6 storeys high, rather than 5 noted in the Concept Plan in the Development Plan – extract below), has no material impact on the heritage values of the Heritage Items in the locality.

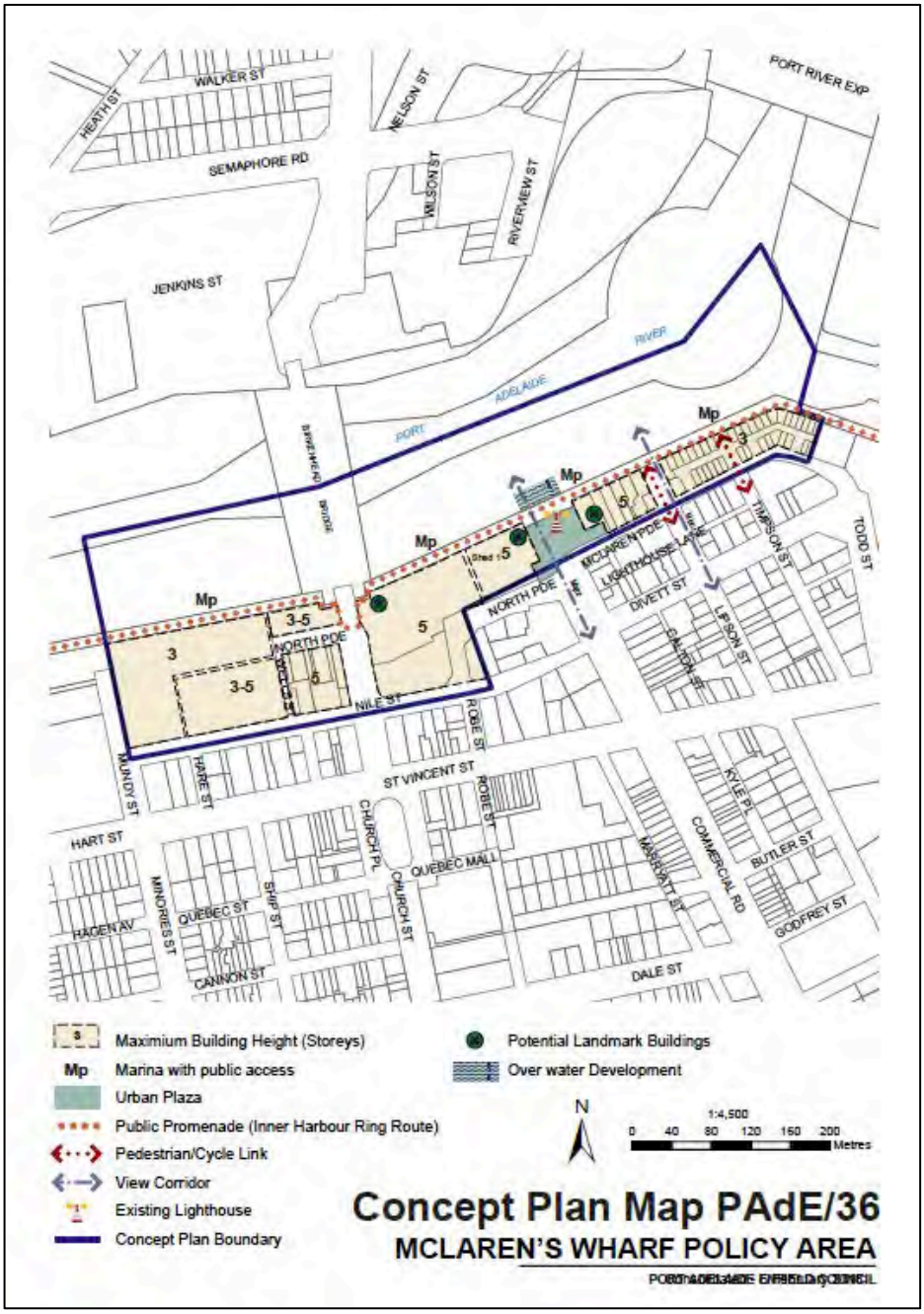


IMAGE 18 – Concept Plan for the Area, taken from Development Plan.

7.0 Conclusion

The development does not propose any physical changes to the fabric of any heritage items. Further, provided vibration during construction is appropriately managed, the proposed development does not present any substantial risk to any heritage fabric.

While the setting of the nearby Heritage Items may be affected by the proposed works, this effect has been mitigated through the set out, scale and composition used on the proposed development.

My overall assessment is therefore that the proposed works will not have any material impact on the heritage value of any of the Heritage Places in the locality.

8.0 Sign off

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

David Holland
Architect
Director, DASH Architects

Appendix 5. Wood & Grieve Sustainability Assessment

WOOD & GRIEVE ENGINEERS

NOW PART OF Stantec

Memo

Enquiries: Nathan Lawry
Project No: 43406

To: Walt Coulston

From: Nathan Lawry Date:4th Feb 2020

Subject: Port Adelaide Hotel
Sustainability Performance

Stantec Australia have been engaged to provide sustainability advice and engineering input for the development located at McLaren Wharf, Port Adelaide. The hotel development is seeking to substantially increase sustainability outcomes from a business-as-usual position. Negotiations with the Clean Energy Finance Corporation (CEFC) have commenced in order to understand requirements that would qualify the development as innovative and advancing the hotel industry's energy efficiency capability. As such, there exists some degree of flexibility given the early stage of design and scope for negotiation with the CEFC.

The following initiatives are committed to as a minimum and will be implemented regardless of negotiation outcomes with the CEFC:

- High Performing Façade reducing heating and cooling loads and increasing occupant comfort
- Large Solar PV array to reduce energy consumption and CO2 emissions
- Minimum 4 star NABERS Hotel rating
    - Represents an increase of >30% reduction in predicted carbon emissions
    - 1st NABERS rated Hotel in South Australia in 4+ years, and most efficient on record
- High Efficiency Mechanical Plant and Equipment with multi-stage chillers for increased part-load performance
- High Efficiency Domestic Hot Water system
- High WELS rated fixtures and fittings to reduce water and energy consumption
- Integrated Building Management Systems to allow for energy efficient booking strategies and building operation
- LED Lighting throughout with smart sensors and controls
- On site training of staff and management to ensure design outcomes are realised
- Heat Recovery for reduced energy consumption associated with conditioning outside air

The following initiatives will be explored with the CEFC with several likely to be implemented:

- 5.0 star NABERS rating- 50% increase in energy efficiency on national average
- Carbon Neutral- offsetting embodied or operational energy via credible offset programs
- Procurement of large volume of renewable energy, promoting local investment via Power Purchase Agreement
- Innovative water-to-water Heat Pump for Domestic Hot Water
- Solar boosted low carbon condensing boiler fired Domestic Hot Water
- Water cooled high efficiency chillers with cooling towers
- Building Integrated Photovoltaics- innovative smart PV that functions as both shade and/or window
- Smart Electro/Thermochromic Glass- solar or electronically controlled glazing that responds to climate
- Innovative Variable Volume Fan Coil units for reduced energy consumption
- Super Low Flow shower heads for reduced domestic hot water consumption

Regardless of negotiation outcomes with the CEFC, the McLaren Wharf hotel development will at a minimum provide significantly enhanced sustainability outcomes and provide a leading example of energy efficient hotel design both locally and nationally.

Regards,

Nathan Lawry

Senior Sustainability Engineer

Appendix 6. GTA Transport Impact Assessment

Proposed Motel - McLaren Parade, Port Adelaide

Transport Impact Assessment

Prepared by: GTA Consultants (SA) Pty Ltd for Ekistics

on 24/02/20

Reference: S174590

Issue #: A

GTAconsultants

Proposed Motel - McLaren Parade, Port Adelaide

Transport Impact Assessment

Client: Ekistics

on 24/02/2020

Reference: S174590

Issue #: A

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	24/02/2020	Final	Sarah Hartland	Richard Frimpong	Paul Morris	

GTAconsultants

Melbourne | Sydney | Brisbane

CONTENTS

Figures

Tables

1. INTRODUCTION

1.1. Background

A motel development is proposed on land located at lots 2-7 McLaren Parade in Port Adelaide. The proposed development will comprise a motel within a multi-storey building with car parking and access from McLaren Parade.

GTA Consultants was commissioned by Ekistics to undertake a transport impact assessment of the proposed development.

1.2. Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the proposed development, including consideration of the following:

1. Existing traffic and parking conditions surrounding the site
2. Parking demand likely to be generated by the proposed development
3. Suitability of the proposed parking in terms of supply (quantum) and layout
4. Traffic generation characteristics of the proposed development
5. Proposed access arrangements for the site
6. Transport impact of the development proposal on the surrounding road network.

1.3. References

In preparing this report, reference has been made to the following:

1. The Port Adelaide Enfield Council Development Plan - consolidated 6 February 2018
2. Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
3. Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2002
4. Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009
5. Plans for the proposed development prepared by Brown Falconer dated 19 February 2020
6. Various technical data as referenced in this report
7. Other documents as nominated.

2. EXISTING CONDITIONS

2.1. Subject Site

The subject site is located at lots 2-7 McLaren Parade in Port Adelaide. The site of approximately 2,500 sq.m has a frontage of approximately 54.0 metres to McLaren Parade, approximately 43.3 metres to Lipson Street and approximately 56.3 metres along the Port River on the north side. A vacant allotment adjoins the site on its western side.

The site is located within a Regional Centre Zone. Currently the site is unoccupied with surrounding properties typically tending to be commercial in nature.

The location of the subject site and the surrounding environs is shown in Figure 2.1.

Figure 2.1: Subject Site and Surrounding environs

2.2. Road Network

2.2.1. McLaren Parade

The subject site is located on McLaren Parade which is a two-way road with a carriageway width of approximately 6 metres and contains indented parking lane on the southern side (with capacity to allow for up to 3 parked vehicles). On-street parking is currently unrestricted for the majority of McLaren Parade on the southern side adjacent the site, excluding one space located on the southern side of McLaren Parade adjacent to the existing driveway access for the Light House Wharf Inn as shown in Figure 2.2. Parking is not permitted on the northern side.

Figure 2.2: Parking Restrictions on McLaren Parade – view west

Figure 2.3 and Figure 2.4 illustrate the typical layout of McLaren Parade adjacent to the subject site.

Figure 2.3: McLaren Parade view west

Figure 2.4: McLaren Parade view east

2.2.2. Lipson Street

Lipson Street operates as a one-way street in a northern direction between St Vincent Street and McLaren Parade. This section of Lipson Street contains one traffic lane approximately 4.2 metres wide with angled parking on either side of the road. The section to the north of McLaren Parade (known as Lipson Plaza), is closed to vehicle traffic by formalised kerb and bollards.

Figure 2.5: Lipson Street

Figure 2.6: Lipson Plaza

2.2.3. Commercial Road

Commercial Road provides connection between McLaren Parade and the arterial road network. This The portion of Commercial Road to the north of St Vincent Street contains one lane of traffic in either direction as well as a bike lane on the eastern side only. Lane widths along Commercial Road are typically 3.3 – 3.5 metres wide and the bike lane is approximately 1.2 metres wide.

Figure 2.7: Commercial Road view South

3. DEVELOPMENT PROPOSAL

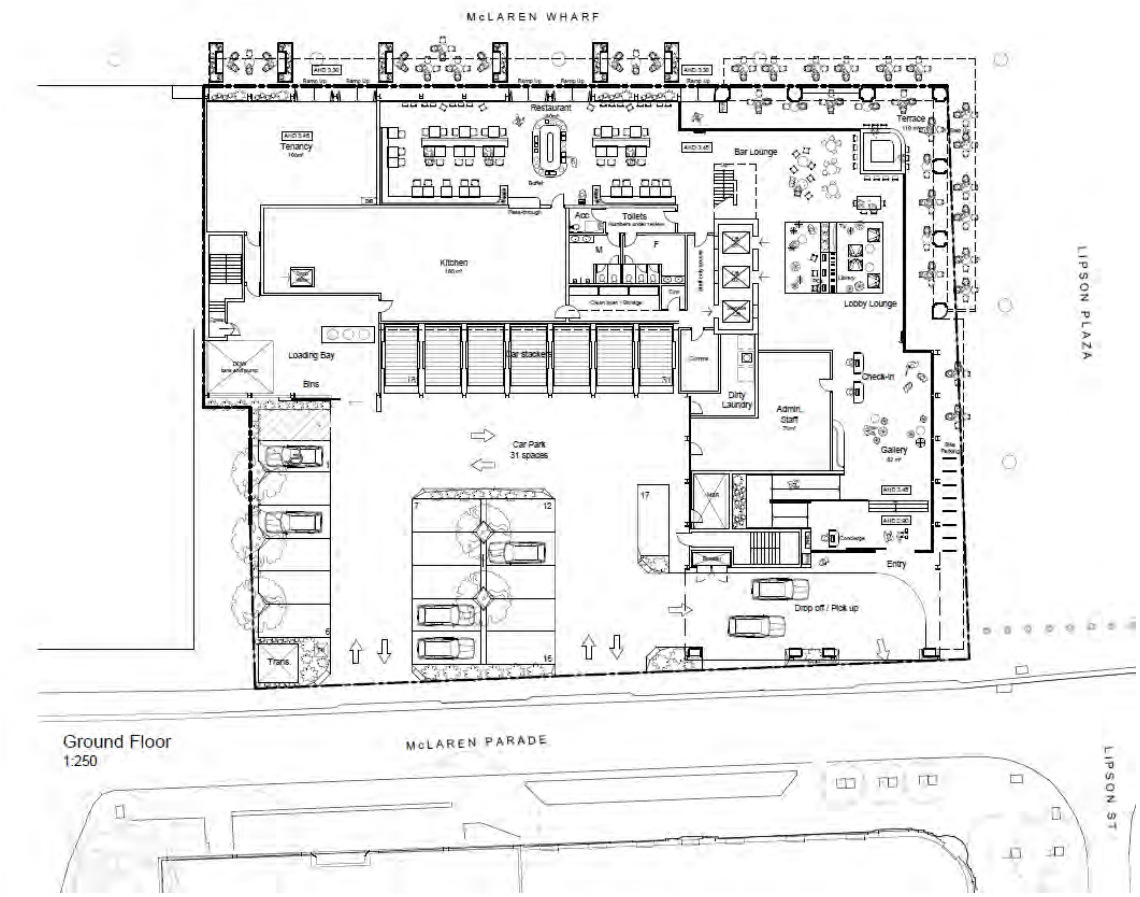
3.1. Land Uses

The proposed development is to comprise the following:

- 180 motel rooms for accommodation
- Ancillary food and beverage, gym and lounge facilities
- A retail tenancy fronting the Port River
- Function and meeting rooms
- 31 on-site parking spaces (inclusive of 14 spaces in 7 car stacker modules for valet parking)
- 8 bicycle rails accommodating up to 16 bicycles

The proposed ground floor site layout is shown in Figure 3.1.

Figure 3.1: Proposed Site Layout



3.2. Car Parking

A total of 31 on-site car parking spaces, including one disability parking space will be provided to the rear of the building on the eastern side of the property. Seven car stackers are proposed to accommodate 14 car parking spaces. The parking stacker will be managed by valet parking services for the motel development.

A drop off / pick up point will be located in the porte-cochere on the southern side of the building fronting McLaren Parade.

3.3. Vehicle Access

Access to the development is proposed as follows:

- All vehicular access to the site is proposed via McLaren Parade
- The existing access on the western portion of the site is to be retained and used as an egress only
- The remaining existing access is to be closed
- A new ingress/egress access will be provided centrally of the site which will provide access to the drop off / pick up area as well as the carpark
- A new egress access will be provided on the eastern portion of the site which will only cater for drop off / pick up vehicular movements.

The access points have been designed to accommodate the largest vehicles anticipated to use each access, this includes vehicles up to Medium Rigid Vehicle class (8.8 metres or less in length).

3.4. Loading Areas

An on-site loading and waste collection area is proposed near the north western corner of the car park. This loading area has been designed to accommodate movements by vehicles up to an 8.8 metre Medium Rigid Vehicle to be able to enter and exit the site in a forward direction.

The loading area is designed so that the vehicle can enter the site via the middle access point and circulate through the carpark to enable the vehicle to reverse into the loading area. It is then intended for the vehicle to exit the site via the western access point.

4. CAR PARKING

4.1. Development Plan Car Parking Requirements

The subject site is located within a Regional Centre Zone and within Policy Area 44 McLarens Wharf. The subject site is located in a Designated Area under the Development Plan Table PAdE/5A – Off Street Vehicle Parking Requirements for Designated Areas.

The Vehicle Parking Rates Tables in Table PAdE/5A provides parking rates for residential development but excluding tourist accommodation. No rates for tourist accommodation (motel) is provided in Table PAdE/5A. It is noted in Table PAdE/5 that parking rates for Tourist Accommodation are 1 space per room.

4.2. Adequacy of Parking Supply

The proposed development will provide 31 car parking spaces located within the site. These parking spaces can accommodate the anticipated parking demand generated by the site, when considered together with sustainable transport options including taxi/ride share and public transport to the site. The parking proposed on the site will typically cater for staff, and guests based on a valet parking system. This would typically be a cost to the guest to park at the motel as occurs at other similar tourist accommodation in central business districts.

The demand for parking at the proposed development will be managed through information for customers when making bookings to advise of the parking available at the site (i.e. valet parking). This is common practice with tourist accommodation and enables customers to make decisions about transport options to the hotel.

It is noted that in recent times rideshare services have increased market share significantly as a transport mode to tourist accommodation, and in conjunction with improved taxi services (as a result of rideshare competition), many people are choosing the convenience and cost saving of rideshare and taxi services over the use of hire cars to avoid the associated burden of parking costs, self-driving stress and cost of a hire car when not in use. This reduces the parking demand for business travel significantly and is similar to hotels operating in the central business district of Adelaide.

Additionally, the proposed development will seek to charter a shuttle bus to transport people to local tourist and business destinations daily, such as Semaphore, Outer Harbor, Osborne, and other tourist/hospitality services in Port Adelaide, which will assist in reducing the use of private vehicles by customers.

It is understood that the proposed operator of the development has accepted the proposed parking supply for the site and will be able to manage parking effectively based on the above methods and through experience at other sites they currently operate.

Notwithstanding the above, there is parking available in the surrounding precinct to cater for short and long term parking at Fisherman's Wharf approximately 150 metres west of the site (pay and display ticket parking).

It is noted that the provision of additional parking at the site for the proposed development has been considered but is constrained by other factors including the inability to provide basement level parking due to the high water table and structural requirements of the wharf, relative inefficiency of the size of the site for parking making the cost of additional parking levels economically unfeasible, and the impact of additional parking levels on design and heritage requirements for the site.

4.3. Car Parking Layout

The parking layout has been designed in accordance with Australian Standard / New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004 and Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009. GTA notes the following in relation to the car parking layout:

- Standard car parking spaces are 2.5 metres wide and 5.4 metres long, set within a 6.2 – 6.3 metre wide aisle, which meets the User Class 2 requirements for a hotel.
- One open ended parallel car parking space is provided which is 2.3 metres wide and 5.4 metres long and set within a 6.3 metre aisle. This meets the dimensional requirements for User Class 2, with 0.5 metre additional clearance for vehicle reversing from the adjacent angled spaces.
- One disability parking space is provided, which is 2.4 metres wide and 5.4 metres long set within a 6.2-metre-wide aisle, which meet the requirements outlined in Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009. In addition, the shared space adjacent to the disabled car parking space is only 2.4 metres wide and 5.4 metres long, which is acceptable.
- Car stacker spaces are 2.7 metres wide (column to column), and set within a 6.9 metre wide aisle, which meets the apron width requirement outlined within the standard.

A turn path assessment using AutoTURN software has been undertaken to confirm that the design vehicle movements are able to be accommodated within the proposed car park layout. Figure 4.1 considers the 99th percentile light vehicle (Toyota Hilux size) bypassing parked vehicles within the porte cochere while Figure 4.2 considers a mini bus circulating the porte cochere (largest vehicle).

Figure 4.1: B99 entry and exit movement at drop off / pick up point

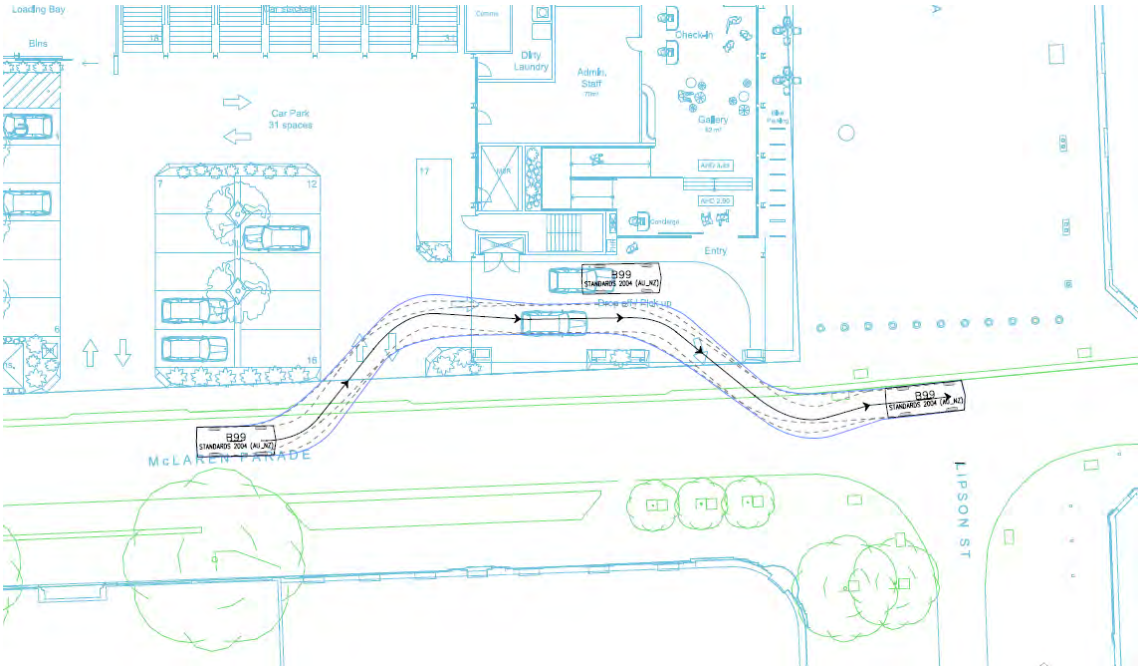
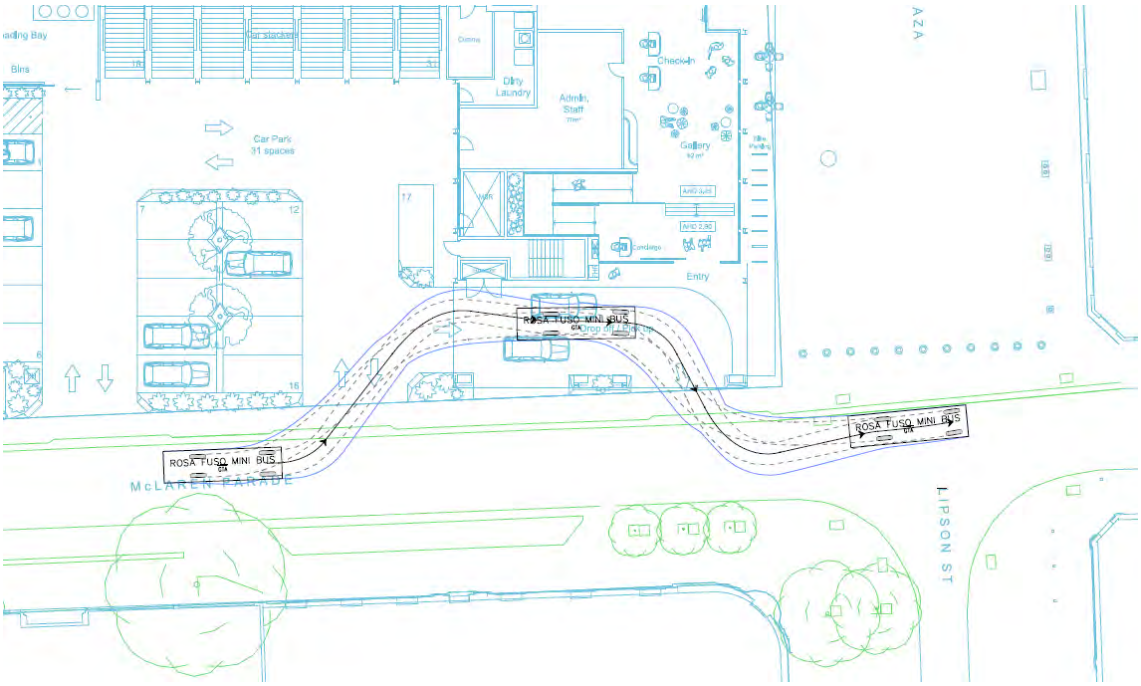


Figure 4.2: Minibus entry and exit movement at drop off / pick up point



5. SUSTAINABLE TRANSPORT INFRASTRUCTURE

5.1. Bicycle Facilities

The requirements for the provision of bicycle parking is outlined within Table PAdE/4 of the Development Plan. The following rates are applicable for the proposed development:

Table 1: Development Plan Bicycle Parking Assessment

User	Development Plan Bicycle Parking Rate	Development Plan Bicycle Parking Requirement
Hotel		
Employee	1 per 25 square metres bar floor area and 1 per 100 square metres lounge, beer garden	4 spaces
Visitor	1 per 25 square metres bar floor area and 1 per 100 square metres lounge, beer garden	4 spaces
Restaurant		
Employee	1 per 100 square metres of floor area	4 spaces
Visitor	2 spaces	2 spaces
Motel		
Employee	1 per 40 rooms	5 spaces
Visitor	NA	NA
	Total:	**19 spaces**

Based on the combined usage, the development will generate a Development Plan bicycle requirement of 19 spaces. This marginally exceeds the current provision of 16 bicycle parking spaces provided at the eastern side of the site. However, GTA Consultants considers the requirements outlined within the Development Plan would be higher than the anticipated bicycle demand, especially given the multiple uses, and the integrated nature between these uses. As such, GTA considers the provision of 16 bicycle parking spaces will meet the anticipated demand.

5.2. Public Transport

The subject site is located approximately 1 km from the Port Adelaide Railway Station and approximately 450 metres from the nearest bus stop which provides connection between the City and Osborne.

It is also noted that the area is accessible by taxis and ride share services which are already commonly used by other developments in the surrounding area.

5.3. Walking and Cycling Network

The subject site fronts onto the McLaren Wharf which consists of a 10 metre wide (approx.) pedestrian footpath. The roads surrounding the subject site contain sealed footpaths and provide access to number of nearby restaurants and shops. A walking trail (the 'Loop') is also located to the west of the subject site which can be accessed via McLaren Wharf.

6. LOADING FACILITIES

6.1. Proposed Loading and Refuse Collection

A designated loading and refuse collection area are proposed to be located on the north-western corner of the carpark. The loading and refuse collection area will be capable of accommodating vehicles of Medium Rigid Vehicle class (up to 8.8 metres long). Vehicles would enter the site via the middle access point and circulate through the carpark prior to reversing into the loading area.

Turn paths into and out of the proposed loading area for a standard Medium Rigid Vehicle are shown in Figure 6.1 and Figure 6.2.

Based on the turn paths above, in conjunction with the porte-cochere movements shown in Figure 4.1 and Figure 4.2, the vehicle requires the width of the existing McLaren Parade carriageway to undertake the turning manoeuvre.

Subsequently, this would impact on approximately seven existing car parking spaces which are located on the south side of McLaren Parade.

Figure 6.1: Medium Rigid Vehicle (entry)

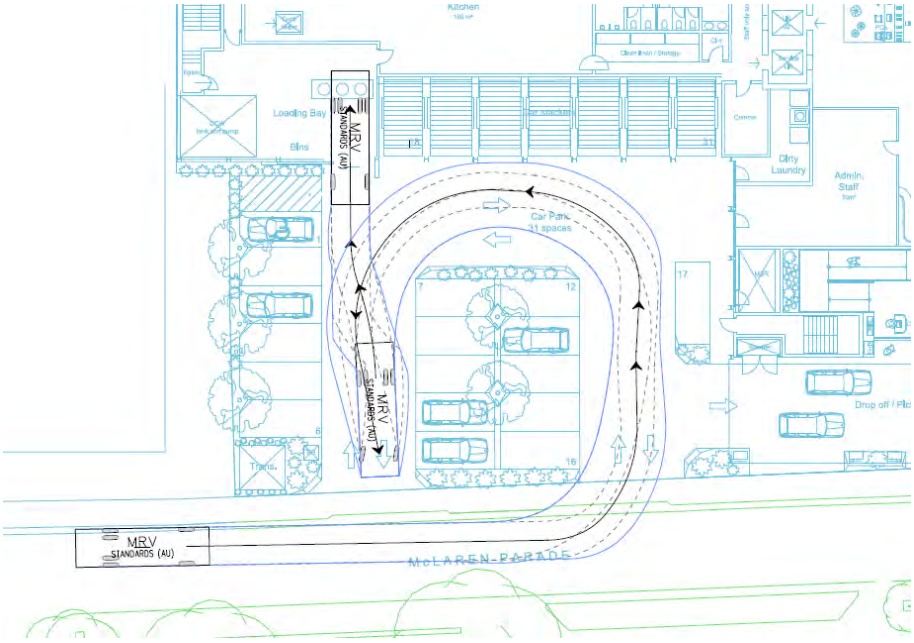
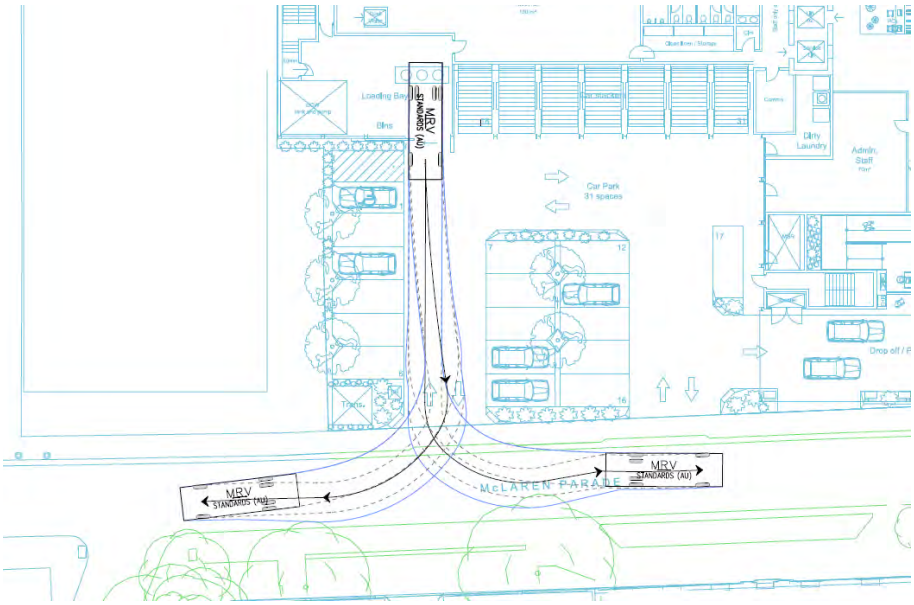
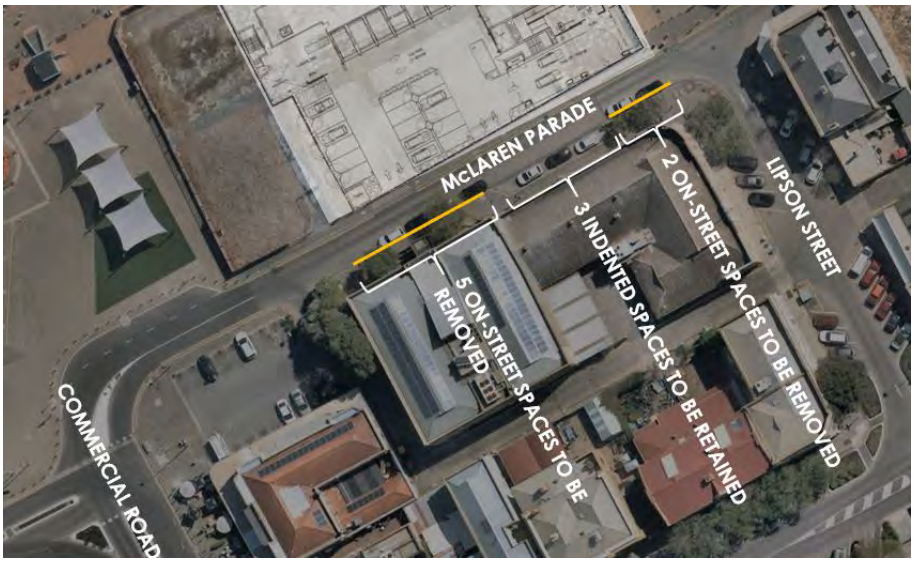


Figure 6.2: Medium Rigid Vehicle (exit)



To facilitate two-way traffic movements on McLaren Parade and vehicle turning movements to and from the site, a No Stopping zone is proposed on the southern side of McLaren Parade. The existing indented parking spaces on McLaren Parade will be maintained and not impacted by the parking controls. Figure 6.3 details to approximate location of the proposed No Stopping zone.

Figure 6.3: Proposed On-Street Car Parking Plan



It is understood that Council are considering a future upgrade of McLaren Parade with reconstruction of the carriageway and footpaths and possible traffic management to one-way (eastbound). No details of the upgrade were available at the time of this report however the above turning movements will need to be considered by Council for the proposed upgrade.

7. TRAFFIC IMPACT

7.1. Traffic Generation

Traffic generation rates for the proposed development have been based on empirical traffic generation data for similar developments within Adelaide to provide an appropriate estimate of traffic generation for the proposed development.

Traffic movements at two sites have been considered:

- Hilton Hotel, Victoria Square, Adelaide - The drop-off / pick-up area for the 378 room Hilton Hotel in Adelaide on a typical weekday during the AM peak period recorded a total of 58 vehicle movements (50% in and 50% out), which equates to a rate of 0.16 movements per room.
- Rydges Hotel, South Terrace, Adelaide – The drop-off/pick-up area recorded 44 vehicle movements (60% in and 40% out), which equates to a rate of 0.45 movements per hour based on 98 rooms.
- The surveys result in an average trip generation rate of 0.22 trips per room in the typical AM peak hour period.

The proposed 180 room motel could be expected to generate up to 40 vehicle trips in the AM peak hour. It is considered that the AM Peak Hour typically generates a higher number of trips than the PM Peak, partially due to check out times. Arrival times tend to more staggered. Assuming a peak-to-daily ratio of 10%, the proposed development is likely to generate approximately 400 daily vehicle trips.

7.2. Distribution and Assignment

The directional distribution and assignment of traffic generated by the proposed development will be influenced by a number of factors, including the:

- Configuration of the road network in the immediate vicinity of the site
- Existing operation of intersections providing access around the local road network
- Distribution of households in the vicinity of the site
- Surrounding employment centres, retail centres and schools in relation to the site
- Likely distribution of employee's residences in relation to the site
- Configuration of access points to the site

The primary road providing connectivity between the subject site and the broader road network is Commercial Road. It is our understanding that the motel in addition to tourists will cater for interstate / overseas workers associated with the ship building and similar activities located at Osborne. As such, examples of the direction of travel associated with the subject site could be as follows:

- Travel northbound from the Airport to the subject site (via Port Road);
- Travel northbound from the subject site to Osborne (via Commercial Rd / St Vincent St / Victoria Road);
- Travel southbound from the subject site to the Airport (via Port Road);

- Travel southbound from Osborne to the subject site (via Victoria Road / St Vincent St / Commercial Rd).

Due to the one-way configuration of Lipson Street, it is expected that the majority of vehicles will enter and exit the site via McLaren Parade / Commercial Road as this is the most direct route to the arterial road network.

7.3. Traffic Impact

The proposed development is likely to generate up to 40 trips during the AM Peak Hour and 400 daily trips. A majority of these trips would likely enter and exit via the east (Commercial Road) with most trips expected on the western portion of McLaren Parade given the connectivity to Commercial Road North and the traffic signals at St Vincent Street to the south. It is anticipated that an additional 300 trips per day would use McLaren Parade west, whilst 100 trips per day could travel east to Divett Street or Todd Street.

The overall traffic generation of the proposed development is low and will not cause any noticeable changes in traffic operation of these streets and will not adversely impact the operation of the surrounding road network.

8. CONCLUSION

Based on the analysis and discussions presented within this report, the following conclusions are made:

1. The proposed development comprises a 180 room motel with integrated food, beverage and function facilities with a 31 space car park and access from McLaren Parade.
2. The Development Plan identifies that the subject site is located in a Designated Area in the Regional Centre zone with no parking rates specified for Tourist Accommodation.
3. The proposed supply of 31 car parking spaces will cater for parking demands associated with valet parking and staff for the motel.
4. The provision of parking will be supported by the use of sustainable transport modes away from private vehicle use in particular taxi and ride-share services which is a preferred mode of travel for tourist accommodation. A shuttle bus is also proposed for the motel to assist with providing transport to and from nearby business and tourist destinations.
5. The Development Plan recommends bicycle parking for 19 spaces when considering individual uses within the proposed development. The provision of 8 bicycle rails for 16 spaces is acceptable given the anticipated uses within the development.
6. The car parking layout complies with the Australian Standard for Off-Street Car Parking (AS2890.1:2004) and the Australian Standard for Parking for People with Disabilities (AS2890.6:2009).
7. The proposed loading area would facilitate vehicles up to a medium rigid vehicle (MRV), which would circulate and access the loading dock internally, and enter and exit via McLaren Parade.
8. Parking restrictions will be required on McLaren Parade to ensure the two-way carriageway operates safely and efficiently and caters for turning movements at the proposed driveways for the proposed development. The existing indented on-street parking bays will not be impacted.
9. The possible future upgrade of McLaren Parade by Council will require consideration of the traffic generation and vehicles movement requirements of the proposed development.
10. The proposed development will typically generate up to 400 vehicle per day which will not adversely impact the surrounding road network or intersections given the relatively low traffic volumes operating in this precinct presently.

Appendix 7. Rawtec Waste Management Plan

McLaren Wharf Hotel Development WMP - CK Group

Waste Management Plan

Document verification

Date	Version	Title	Prepared by	Approved by
06/02/20	V1	McLaren Wharf Port Adelaide - Draft WMP	K Le Gallou	J Webb
19/02/20	V1.1	McLaren Wharf Port Adelaide - WMP	K Le Gallou	J Webb

Important notes

Document summary

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

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

1. Development summary

Project	McLaren Wharf Hotel Development - McLaren Parade, Port Adelaide
Client	CK Group
Architect	Brown Falconer
Project manager	Moto Projects
Traffic consultant	GTA Consultants

1.1. Land use and occupancy

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

Table 1: Land use and occupancy overview

Level	Land use	Waste and resource generation rate	Size
Ground	Tenancy	Café/Restaurant	108 m^2
	Kitchen	Café/Restaurant	180 m^2
	Dining	Hotel or Motel (Combined Bar & Dining Areas)	180 m^2
	Bar	Hotel or Motel (Bar Areas)	230 m^2
	Admin	Offices or Consulting Rooms	70 m^2
Level 1	Banquet kitchen	Café/Restaurant	40 m^2
	Function	Hotel or Motel (Combined Bar & Dining Areas)	340 m^2
	Gym	Gym	70 m^2
	Hotel rooms	Hotel or Motel (Accommodation)	16
Level 2-5	Hotel rooms	Hotel or Motel (Accommodation)	164 rooms (41 per level)

1.2. Recommended services

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

Table 2: Recommended waste management services

	Required/recommended waste and recycling collection services							
	Land use	**Commercial**	**Commercial**	**Commercial**	**Commercial**	**Commercial**	**Commercial**	**Commercial**
		Hotel or Motel (Accommodation)	*Café/Restaurant*	*Hotel or Motel (Combined Bar & Dining Areas)*	*Hotel or Motel (Bar Areas)*	*Offices or Consulting Rooms*	*Gym*	*Café/Restaurant*
	Development land uses	**Hotel rooms**	**Kitchen + Banquet Kitchen**	**Dining + Function**	**Bar**	**Admin**	**Gym**	**Tenancy**
Routine collection (rear lift)	General waste	**X**	**X**	**X**	**X**	**X**	**X**	**X**
	Comingled recycling	**X**	**X**	**X**	**X**	**X**	**X**	**X**
	Organics recycling	**X**	**X**	**X**	**X**	**X**	**X**	**X**
	Cardboard recycling	NS	**X**	**X**	**X**	NS	NS	**X**
	Paper recycling	NS	NS	NS	NS	**X**	NS	NS
	Confidential paper recycling	NS	NS	NS	NS	**X**	NS	NS
On-call or external drop-off	Hard waste	**X**	**X**	**X**	**X**	**X**	**X**	**X**
	E-waste	**X**	**X**	**X**	**X**	**X**	**X**	**X**
	CFL/Lighting	**X**	**X**	**X**	**X**	**X**	**X**	**X**
	Printer Cartridges	**X**	**X**	**X**	**X**	**X**	**X**	**X**
	Batteries	**X**	**X**	**X**	**X**	**X**	**X**	**X**

X = Required/Desired

NS = Not serviced as separate service not required

These recommendations align with the *SA Better Practice Guide – Waste Management in Residential or Mixed-Use Developments* (Green Industries SA, 2014).

2. Waste management analysis

2.1. Estimated waste and recycling volumes

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

Table 3: Estimated waste volumes produced by the development[1]

		Estimated waste generation volumes (litres per week)							
Land use type		**Commercial**	**Commercial**	**Commercial**	**Commercial**	**Commercial**	**Commercial**	**Commercial**	**Total**
Development land use		**Hotel rooms**	**Kitchen + Banquet Kitchen**	**Dining + Function**	**Bar**	**Admin**	**Gym**	**Tenancy**	
WRGR classification		*Hotel or Motel (Accommodation)*	*Café/Restaurant*	*Hotel or Motel (Combined Bar & Dining Areas)*	*Hotel or Motel (Bar Areas)*	*Offices or Consulting Rooms*	*Gym*	*Café/Restaurant*	
Waste stream	General waste	6,300	3,900	4,800	800	100	20	2,200	**18,100**
	Comingled recycling	3,800	700	400	200	50	20	400	**5,600**
	Organics recycling	1,900	5,200	6,400	40	20	4	2,900	**16,500**
	Cardboard recycling	NE	2,000	1,200	600	NE	NE	1,100	**4,900**
	Paper recycling	NE	NE	NE	NE	50	NE	NE	**100**
	Confidential paper recycling	NE	NE	NE	NE	6	NE	NE	**10**
Total site volume		**12,000**	**11,800**	**12,800**	**1,600**	**200**	**40**	**6,600**	**45,200**

*Totals have been rounded and may not equate

NE = Not Estimated as Not Required

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

2.2. Bin size and collection details

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

Table 4: Estimated bin requirements and collections per week

	Waste area		
	Bin size (L)	**Number of bins required**	**Collections per week**
General waste	1,100	3	5
Comingled recycling	1,100	2	3
Organics recycling	660	5	5
Cardboard recycling	1,100	2	3
Paper recycling	240	1	On call
Confidential paper recycling	240	1	On call
Total		14	16

*Totals have been rounded and may not equate

The following irregular waste streams will be managed as they occur onsite:

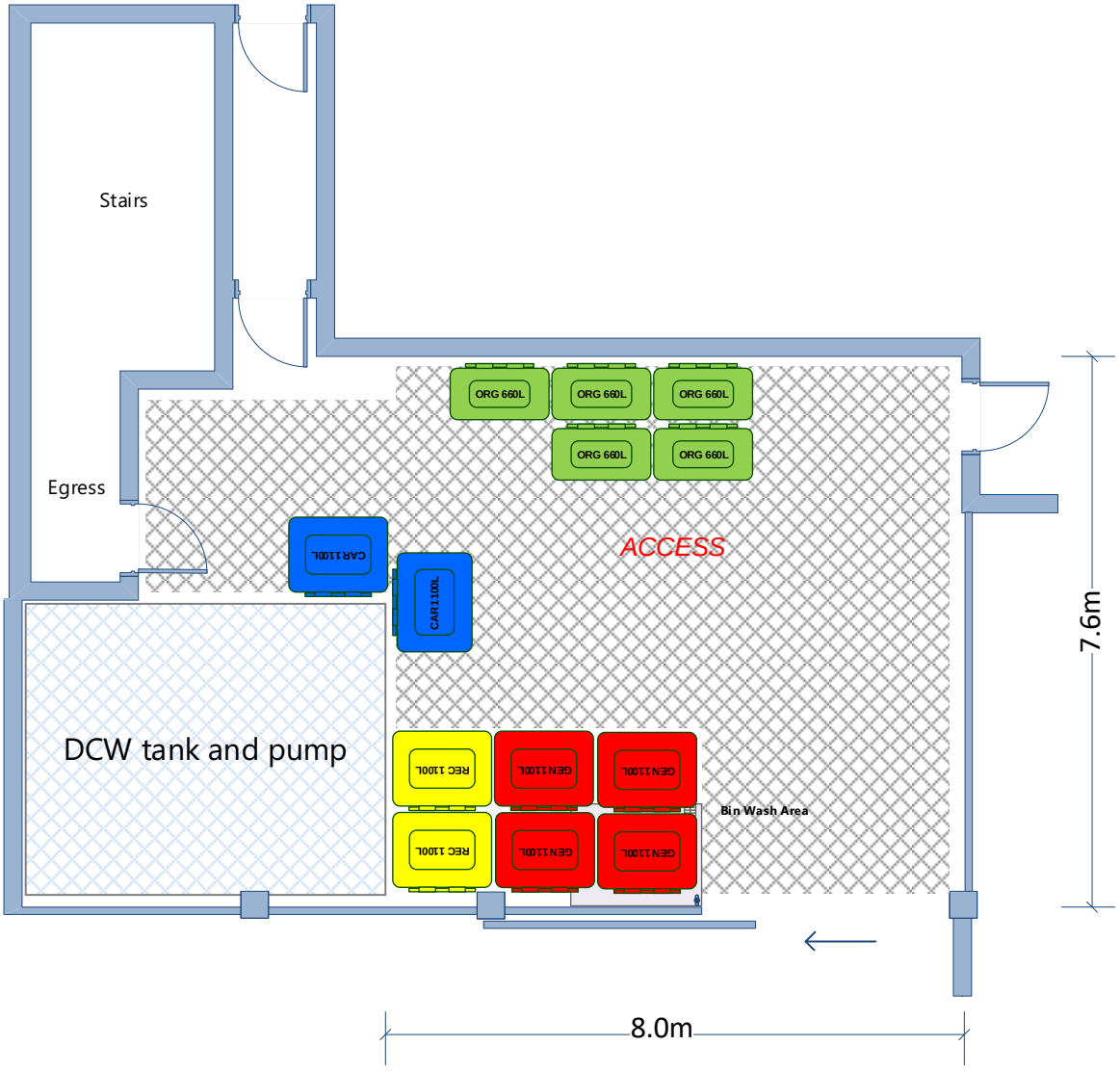
- Electronic waste (batteries, printer cartridges, lighting)
  - E-waste will be temporarily stored within the development (e.g. within appropriate containers where they are generated or in an central storage location. It would then be taken to an appropriate receival facility (e.g. recycling depot or participating retailer) or collected by a certified collection contractor.
- Hard Waste (during tenancy/hotel room fit out or furniture replacement)
  - Hard waste will be temporarily stored within the development and 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.

Container deposit system (CDS) containers could also be separately collected to the comingled recycling. The hotel operator could partner with a collection organisation (e.g. Scouts SA) that can collect the containers, ensure they are recycled, and provide the 10-cent refund for the collected containers to the business.

2.3. Waste storage area

Figure 1 outlines an indicative drawing of the waste storage area for the development. This is an example configuration outlining the estimated size and layout of the waste storage area. Additional design advice and other considerations have been included in Appendix 2.

Figure 1: Indicative waste storage area



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

3. Waste management system

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

Table 5: Waste management system for the development

Proposed waste management system		
Waste/recycling services	• General waste • Comingle recycling	• Organics recycling • Cardboard recycling
WMS step	**WMS notes**	
1. User storage	• Hotel guests will dispose of their waste and recycling in bins provided in their rooms. – It is recommended at minimum that a general waste and recycling bin be provided with clear signage. • Waste and recycling from the kitchens/bar/tenancy will be collected at the point of generation: – General waste will be collected using black bin liners – Organics will be collected using compostable bin liners – Comingled recycling will be collected loose – Cardboard will be collected loose. • If required, the administration room may have a 240-litre paper recycling and 240 litre confidential paper recycling bin in the printing/utility room.	
2. Transfer pathways	• Cleaners will collect waste and recycling from the hotel rooms and transfer via the service lifts to the bulk bins in the ground floor loading bay. • Staff from the kitchen, bar will transfer waste and recycling via the kitchen BOH corridor to the bulk bins in the ground floor loading bay. Staff from the tenancy will use the corridor to the loading area to transfer waste and recycling. • Transfer routes must be at least 1.25m wide, free of obstructions and steps and a slope of no more than 1:10.	
3. Aggregation & storage	• 1100 litre and 660 litre bulk bins will be stored in the loading bay. • Waste and recycling will be placed into the appropriate bin and stored until collection.	
4. Bin collection	• The waste collection contractor will enter the development in a forward direction and reverse into the loading bay (the vehicle must be fitted with appropriate safety measures). • The contractor will collect bins from the waste area and empty them at the rear of the collection vehicle and then return them to the waste area • The collection vehicle will then exit the development in a forward direction.	

4. Collection requirements

4.1. Vehicle movements per week

The number of collection vehicle movements has been estimated at 16 per week. This is based on the estimated waste and recycling volumes and service frequency as outlined in Table 4. This also assumes that collection will take place by the same waste collection contractor for all services for the hotel and tenancy.

4.2. Collection vehicle

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

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

Table 6: Truck dimensions for consideration

Collection vehicle dimensions[2]		
Vehicle type	Rear Lift	Pan-tech/Flat Bed
Collection type	Collection of bins up to 1100 L	At call waste streams
Dimensions	3.4m minimum, up to 4m (h) x 2.5m (w) x 8.8m minimum, up to 11m (l)	Up to 4.5m (h) x 2.5m (w) x 8.8m (l)
Rear loading space required	2m	-
Operational vehicle height	Up to 4m	Up to 4.5m
Vehicle turning circle	18-25m	10m

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

Appendix 1 - Policies

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

- The South Australian Environment Protection (Waste to Resources) Policy 2010 (W2REPP) (Government of South Australia, 2011):
  - Waste is subject to resource recovery processes, which can include source separation, before disposal to landfill.
- South Australian Better Practice Guide – Waste Management in Residential or Mixed-Use Developments (Green Industries SA (previously Zero Waste SA), 2014):
  - Identifies need for areas to store waste and recyclable materials. They must be appropriate to the size and type of development, screened from public, minimises disturbance to residents and provides access to service vehicles.

Appendix 2 - Additional waste management and design considerations

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

Area	Consideration
Bin/chute rooms	• Access to bin/chute rooms by mobility impaired persons must be considered. • Allocating chutes in closed waste rooms on each floor may prevent odours or spillage issues compared to providing access directly from a hallway.
Bin design, colours and signage	• Bins and signage should conform to the Australian Standard for Mobile Waste Containers (AS 4213).
Bin transfer routes	• The Better Practice Guide recommends transfer routes be at least 1.25m wide, free of obstructions and steps and a slope of no more than 1:10. • These should not pass through living areas or dwellings.
Bin washing	• A bin washing station must: – Slope to a drain leading to the sewer – Have a tap and a hose with mains supply – Be at least 2m x 2m – Be slip resistant to prevent slippage during washing. • Note: – Line marking and bunding is not required around the bin wash area. – Bins can be stored on top of the bin wash area in the waste room. During washing, other bins can be placed outside the waste collection room while bins are washed in the waste room. Alternatively, the bin wash area can be installed outside the waste room. It may also be possible for the waste contractor to be contracted to provide this service (either on-site or off-site).
Container deposit scheme (10-cent) containers	• Businesses that generate large volumes of beverage containers eligible for the 10-cent refund (e.g. restaurants, cafes, hotels) could partner with a collection organisation (e.g. Scouts SA) that shares the revenue from this stream. These businesses collect the containers, ensure they are recycled and share the 10-cent refund (using a portion to cover the cost of collection) with the business.
Detailed design and construction	• This WMP provides a high-level overview of waste management at the development. Appropriate design and construction advice should be sought during the detailed design phase to ensure equipment, infrastructure and building services can fulfil the functions proposed.
Education and training	• The developer should consider providing education and training for tenants in the building's WMS to ensure appropriate waste management practices.

Area	Consideration
	• The inclusion of better practice waste management requirements within strata or commercial lease agreements should also be considered.
Hard waste	• An aggregation point for hard waste should be provided that is easy to access for collection vehicles. – This streamlines collection logistics. If stored in individual locations the building services manager, tenant and collection contractor will need to be present for collection. This may increase costs.
Health and amenity	• The Better Practice Guide stipulates effective WMS design should: – Minimise and mitigate odour and noise – Consider and preserve visual amenity for residents/tenants, neighbours and the public – Prevent waste spreading beyond the defined location – Specify washable services enabling periodic cleaning – Provide adequate ventilation.
Lid within a lid bin	• Bulk bins (e.g. 1100 litre) with a 'lid within a lid' system can be used to make waste and recycling disposal easier for tenants. – A smaller, lighter lid reduces the weight and risk for people disposing of materials. – The larger lid can be locked, stopping oversize items being put into the bin.
Peak periods	• Peak periods during the year (e.g. Easter, Public Holidays, Christmas) can increase waste generation rates. Additional collections may need to be scheduled in these circumstances.
Waste collection timing	• Waste collection timing and frequency should be scheduled to minimise the impact of noise and traffic on residents, neighbours and the public.
Waste storage area	• A secure storage area should be provided to prevent interference with the bins and equipment from the public.
Waste streams	• The SA Better Practice Guide indicates that organics (food and/or garden) is a required/expected service in South Australia. • It is beneficial for disposal points of all three streams (general waste, comingled recycling and food organics) located together.

Appendix 8. Birdseye Studios Landscape Plans

LEGEND

- EXISTING TREES
- PROPOSED TREES
- 1 PROPOSED PAVING TYPE 1
- 2 PROPOSED PAVING TYPE 2
- 3 PROPOSED HEDGE
- 4 PROPOSED GARDEN BED
- 5 PROPOSED CLIMBER
- 6 PROPOSED WSUD SAND FILTER GARDEN BED
- 7 PROPOSED FACADE PLANTING
- 8 PROPOSED PLANTING IN PLANTER
- EXTENT OF WORKS

MCLAREN WHARF HOTEL
CONCEPT PLAN

BIRDSEYE STUDIOS LANDSCAPE ARCHITECTS ACN 603 475 332 contact@birdseyestudios.com.au birdseyestudios.com.au

BIRDSEYE : STUDIOS

0 5 10M

1:250 @ A3

19052 SK01 REV C
20 FEB 2020

NOT FOR CONSTRUCTION

LEGEND

- EXISTING TREES
- PROPOSED TREES
- 1 PROPOSED PAVING TYPE 1
- 2 PROPOSED PAVING TYPE 2
- 3 PROPOSED HEDGE
- 4 PROPOSED GARDEN BED
- 5 PROPOSED CLIMBER
- 6 PROPOSED WSUD SAND FILTER GARDEN BED
- 7 PROPOSED FACADE PLANTING
- 8 PROPOSED PLANTING IN PLANTER

LEGEND - INDICATIVE MCLAREN PARADE UPGRADE

- 9 PROPOSED PAVING TYPE 3 IN SHARE USED ZONE
- 10 PROPOSED PLANTING IN STEEL EDGE
- 11 PROPOSED BENCH & VERGE PLANTING
- EXTENT OF WORKS
- EXTENT OF WORKS BY THE CITY OF PORT ADELAIDE ENFIELD

MCLAREN WHARF HOTEL
MCLAREN PARADE UPGRADE CONCEPT PLAN

BIRDSEYE STUDIOS LANDSCAPE ARCHITECTS ACN 603 475 332 contact@birdseyestudios.com.au birdseyestudios.com.au

BIRDSEYE : STUDIOS

0 5 10M

1:250 @ A3

19052 SK02 REV C
20 FEB 2020

NOT FOR CONSTRUCTION

Appendix 9. CPR Stormwater Management Plan

Project No: 190160
Wednesday, 5 February 2020

CK Group
C/- Ekistics
PO Box 32
GOODWOOD SA 5034

Attn: Ms Beck Thomas

RE: MCLAREN WHARF, PORT ADELAIDE
HOTEL DEVELOPMENT
STORM WATER MANAGEMENT PLAN

Further to your instruction and the appointment of CPR Engineers as civil and structural engineering consultant, we are pleased to provide the following level of detail to outline the stormwater management principles for the proposed Hotel Development on McLaren Parade, Port Adelaide.

The stormwater concept has been based upon the architectural plans prepared by Brown Falconer, and the survey provided by Alexander Symonds which depicts the existing site's features.

Existing site:

The existing site is partly covered by a sealed asphalt car park with associated stormwater drainage and existing gross pollutant trap (Humes Sceptor Pit STC3). The existing car park area covers 727m2 of the total area of the site of 2,463m2.

COMBE PEARSON REYNOLDS
CONSULTING ENGINEERS

174 Fullarton Road, Dulwich SA 5065
PO Box 2832, Kent Town SA 5071
Ph: 08 8332 1344 Fax: 08 8332 1044
email: admin@cprengineers.com.au

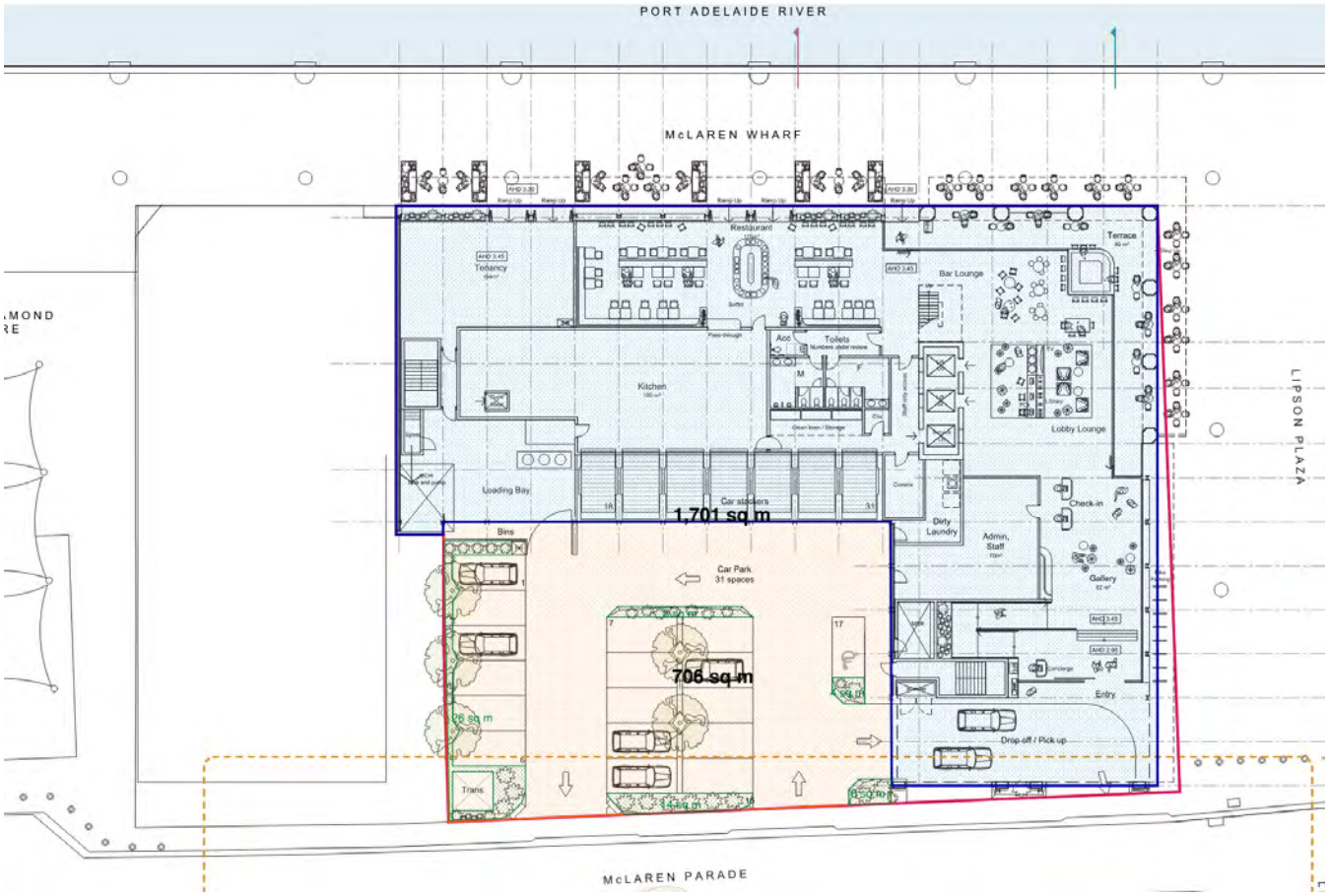
Combe Pearson Reynolds Pty Ltd as Trustee for the CPR Trust
ACN 112 731 558 ABN 12 112 731 558

The "For Construction" drawings of the existing car park have been provided by the client and are enclosed in Appendix A. This plan outlines the existing Stormwater layout and area of asphalt. The car park surface grades to McLaren Parade. There is no obvious signs of detention of the existing car park.

Proposed Development features:

The proposed development is proposed as follows:

- New roof area of 1,645m2
- New car park pavement area of 648m2
- New Landscape areas of 58m2



Stormwater Management Principles:

It is understood that the relevant stormwater management principles outlined by the City of Port Adelaide Enfield are as follows due to correspondence received from Council on 3rd December 2019:

- *Council's development plan prescribes a number of requirements regarding site/floor levels and stormwater quality.*

- *Stormwater quality improvement systems should be incorporated that ensure that 90% GP (greater than 50mm), 80% TSS, 60% TP, 45% TN water quality reduction targets, and Class 1 Hydrocarbon separation have been achieved. Particular given the site will discharge directly to a sea outlet with no downstream wetland to improve stormwater quality.*
- *Water Sensitive Urban Design (WSUD) techniques should be incorporated within the development with evidence that bio-filtration trenches, drainage swales, slotted kerbs, permeable pavement, and/or retention systems have been provided, consistent with the examples provided in the Water Sensitive Urban Design Technical Manuals for the Greater Adelaide Region.*
- *Council would support the implementation of a new sea outlet subject to all relevant approvals being obtained. It may need to be confirmed with DEW / DPTI regarding what approvals are required. Provided a new sea outlet is provided, this would alleviate the need for stormwater detention.*

Design Response:

CPR Engineers' design response to the above incorporates the following:

A **Finished Floor Level** of the occupied elements of the building at RL 3.45.

- This floor level provides amenity to the adjacent levels of the McLaren wharf and Lipson Plaza.
- The design of the structure of the building is such that should the issue of rising sea levels impact on the access and amenity of the building and its surrounds, that the ground floor level can be refurbished to raise the floor levels to accommodate protection.
- CPR understands this may see an increase in posing sea levels of upto approximately 700mm in the next 100 years.
- CPR confirm that this principal has been factored into the current design by the Architect and the preliminary structural assessment of the building and is acceptable to CK Group.

Water Quality will be addressed by 2 means.

- The existing stormwater gross pollutant trap will be relocated and re-used to service the new car park area of 648m2 which is less than the existing car park pavement area (727m2);
- The selected landscape areas identified on the plan totalling 32m2 will be realised for swale and WSUD sand filter treatment and discharge into the adjacent system.

Disposal of **Roof catchment area** is proposed to discharge directly to the Port River:

- By directing the roof box gutter system on the north and east side of the building directly to the north east corner of the site, adjacent to an existing Junction Box which has a 300 diam RCP stub connected to it.

— By installing a separate run of stormwater directing roof run-off with new pit to discharge directly to the Port River, in a similar fashion to the existing in ground system that carries stormwater from Council road infrastructure.

Conclusion:

By referencing the details and the area of the existing car park on site, it has been demonstrated that stormwater detention is not required on the site subject to approval of the means of penetrating the structure of the existing retaining wall to the port river.

Water quality treatment provides improvements in the quality of discharge from the post development car park site via means of WSUD areas.

The proposed floor level integrates accessibility to the wharf and plaza areas whilst addressing any future potential increase in sea levels by committing to refurbishment of the ground floor area in response to any other Council wide treatment of the adjacent plaza and wharf areas.

CPR is in receipt of an alternative design for the McLaren Parade streetscape. The gradients of the car park and the porte cochere will require slight amendment to realise the alternative. Should this become part of the project an alternative civil design layout can be provided with minor adjustment.

Please let me know if you or Council have any queries during the assessment period.

Yours Faithfully

David Reynolds
COMBE PEARSON REYNOLDS

Encl:
App A - Drawings of the existing site – Alan Gilbert & Associates drawing.
App B – 190160-C01-Rev A – Stormwater Management Plan

APPENDIX A:

Drawings of Existing car park / Stormwater – Alan Gilbert & Associates.

LEGEND

——	150 HIGH KERB
⁄P2.555	PAVEMENT DESIGN LEVEL
⁄TK2.555	TOP OF KERB DESIGN LEVEL
◘ ◇	STORMWATER DRAINAGE PITS
—·—·—	STORMWATER DRAINAGE PIPES
	STORMWATER SIP TYPE-1
-·-·-·-	EXISTING STORMWATER DRAINS
-·-·-·-	PROPOSED COUNCIL S/W DRAINS (REFER COUNCIL DWG. 14.2.1)
---v---	EXISTING WATER MAIN

REFERENCE DRAWINGS

FOR CIVIL WORKS DESIGN REFER SHEET-1
FOR ALLOTMENT EARTHWORKS/TEMPORARY "CAPPING" DETAILS REFER SHEET-3
FOR DEMOLITION DETAILS PLAN REFER SHEET-4
FOR SEDIMENTATION CONTROL PLAN REFER SHEET-5
FOR STANDARD DETAILS REFER SD1, SD2, SO3, SD4, SK558, SK679, SK681/A, SK753/A, CW-3B, CW-24, SW-1, SW-8D
FOR BOUNDARY & EASEMENT LOCATION REFER SYMONOS RYAN & CORNISH DWG. 97 0903

SET-OUT NOTES: TO BE READ IN CONJUNCTION WITH THE SURVEYORS PLAN

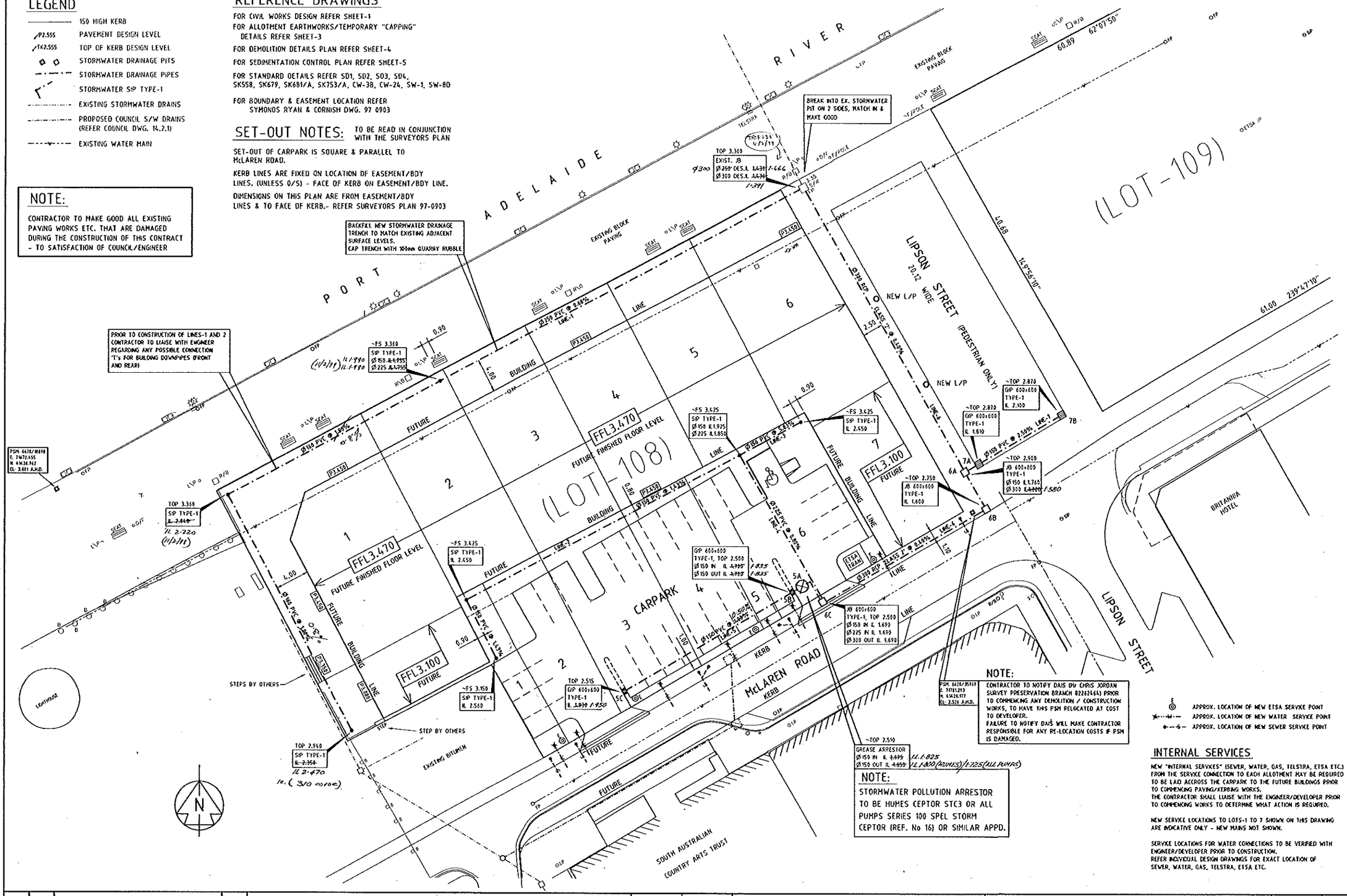
SET-OUT OF CARPARK IS SQUARE & PARALLEL TO McLAREN ROAD.

KERB LINES ARE FIXED ON LOCATION OF EASEMENT/BDY LINES. (UNLESS O/S) - FACE OF KERB ON EASEMENT/BDY LINE.

DIMENSIONS ON THIS PLAN ARE FROM EASEMENT/BDY LINES & TO FACE OF KERB.- REFER SURVEYORS PLAN 97-0903

NOTE:

CONTRACTOR TO MAKE GOOD ALL EXISTING PAVING WORKS ETC. THAT ARE DAMAGED DURING THE CONSTRUCTION OF THIS CONTRACT - TO SATISFACTION OF COUNCIL/ENGINEER



NOTE:

CONTRACTOR TO NOTIFY DAIS (Mr CHRIS JORDAN SURVEY PRESERVATION BRANCH 82262464) PRIOR TO COMMENCING ANY DEMOLITION / CONSTRUCTION WORKS, TO HAVE THIS PSM RELOCATED AT COST TO DEVELOPER.
FAILURE TO NOTIFY DAIS WILL MAKE CONTRACTOR RESPONSIBLE FOR ANY RE-LOCATION COSTS IF PSM IS DAMAGED.

NOTE:

STORMWATER POLLUTION ARRESTOR TO BE HUMES CEPTOR STC3 OR ALL PUMPS SERIES 100 SPEL STORM CEPTOR (REF. No 16) OR SIMILAR APPD.

◎	APPROX. LOCATION OF NEW ETSA SERVICE POINT
★--W--	APPROX. LOCATION OF NEW WATER SERVICE POINT
●--S--	APPROX. LOCATION OF NEW SEWER SERVICE POINT

INTERNAL SERVICES

NEW "INTERNAL SERVICES" (SEWER, WATER, GAS, TELSTRA, ETSA ETC.) FROM THE SERVICE CONNECTION TO EACH ALLOTMENT MAY BE REQUIRED TO BE LAID ACCROSS THE CARPARK TO THE FUTURE BUILDINGS PRIOR TO COMMENCING PAVING/KERBING WORKS.
THE CONTRACTOR SHALL LIAISE WITH THE ENGINEER/DEVELOPER PRIOR TO COMMENCING WORKS TO DETERMINE WHAT ACTION IS REQUIRED.

NEW SERVICE LOCATIONS TO LOTS-1 TO 7 SHOWN ON THIS DRAWING ARE INDICATIVE ONLY - NEW MAINS NOT SHOWN.

SERVICE LOCATIONS FOR WATER CONNECTIONS TO BE VERIFIED WITH ENGINEER/DEVELOPER PRIOR TO CONSTRUCTION.
REFER INDIVIDUAL DESIGN DRAWINGS FOR EXACT LOCATION OF SEWER, WATER, GAS, TELSTRA, ETSA ETC.

Issue	Date	Amendment	App'd
A	13-1-99	PITS-5A, 5B, 5C, 6A, LEVELS ALTERED.	S.G.C.

NOTES:

ALL CONCRETE PIPES TO BE RCP CLASS "2" WITH RUBBER RING JOINTS
ALL PVC PIPES TO BE STORMWATER CLASS (HEAVY DUTY)

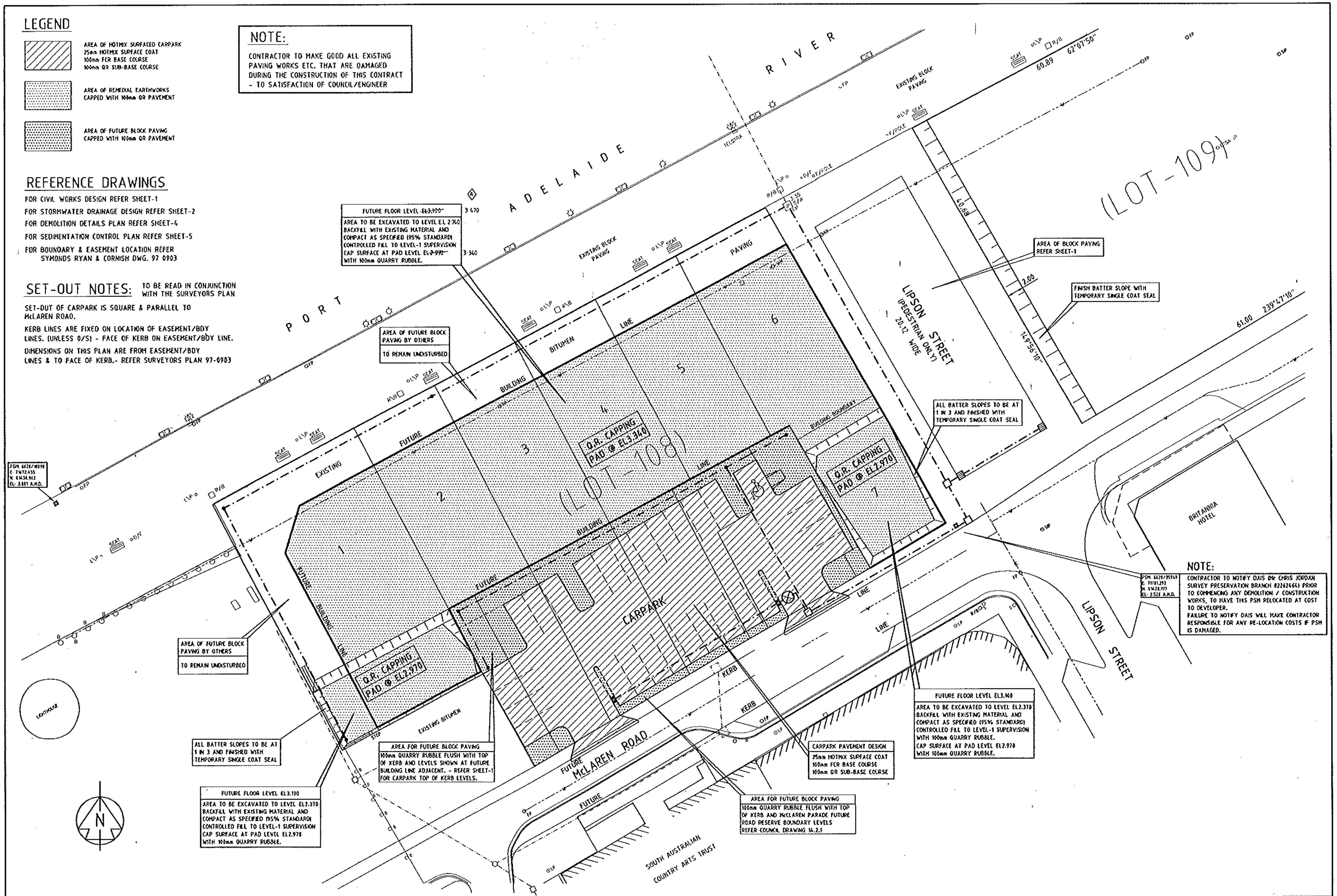
Drn S.G.C.
Des S.G.C.
L.B. S R & C
F.B. C70P1
App'd
Date 1/12/98

ALLAN GILBERT & ASSOCIATES PTY. LTD
CONSULTING ENGINEERS
46 KENSINGTON ROAD ROSE PARK, SOUTH AUSTRALIA 5067
TEL 8332 8777
FAX 8364 1725
A.C.N. 007 923 364

LIPSON WHARF PTY. LTD.
LIPSON WHARF REDEVELOPMENT

LOT 108 - STORMWATER DRAINAGE DESIGN

Scales 1:200
Drawing No. 97-070/2 A.



LEGEND
AREA OF HOTMIX SURFACED CARPARK 25mm HOTMIX SURFACE COAT 100mm FCR BASE COURSE 100mm QR SUB-BASE COURSE
AREA OF REMEDIAL EARTHWORKS CAPPED WITH 100mm QR PAVEMENT
AREA OF FUTURE BLOCK PAVING CAPPED WITH 100mm QR PAVEMENT
NOTE:
CONTRACTOR TO MAKE GOOD ALL EXISTING PAVING WORKS ETC. THAT ARE DAMAGED DURING THE CONSTRUCTION OF THIS CONTRACT - TO SATISFACTION OF COUNCIL/ENGINEER
REFERENCE DRAWINGS
FOR CIVIL WORKS DESIGN REFER SHEET-1
FOR STORMWATER DRAINAGE DESIGN REFER SHEET-2
FOR DEMOLITION DETAILS PLAN REFER SHEET-4
FOR SEDIMENTATION CONTROL PLAN REFER SHEET-5
FOR BOUNDARY & EASEMENT LOCATION REFER SYMONDS RYAN & CORNISH DWG. 97 0903
SET-OUT NOTES: TO BE READ IN CONJUNCTION WITH THE SURVEYORS PLAN
SET-OUT OF CARPARK IS SQUARE & PARALLEL TO McLAREN ROAD.
KERB LINES ARE FIXED ON LOCATION OF EASEMENT/BDY LINES. (UNLESS O/S) - FACE OF KERB ON EASEMENT/BDY LINE.
DIMENSIONS ON THIS PLAN ARE FROM EASEMENT/BDY LINES & TO FACE OF KERB.- REFER SURVEYORS PLAN 97-0903
PORT ADELAIDE RIVER
(LOT-109)
(LOT-108)
LIPSON STREET (PEDESTRIAN ONLY) 20.12 WIDE
LIPSON STREET
McLAREN ROAD
BRITANNIA HOTEL
SOUTH AUSTRALIAN COUNTRY ARTS TRUST
CARPARK
EXISTING BLOCK PAVING
FUTURE BUILDING LINE
EXISTING BITUMEN
FUTURE FLOOR LEVEL EL3.100
AREA TO BE EXCAVATED TO LEVEL EL 2.740 BACKFILL WITH EXISTING MATERIAL AND COMPACT AS SPECIFIED (95% STANDARD) CONTROLLED FILL TO LEVEL-1 SUPERVISION CAP SURFACE AT PAD LEVEL EL2.970 WITH 100mm QUARRY RUBBLE.
AREA OF FUTURE BLOCK PAVING BY OTHERS
TO REMAIN UNDISTURBED
Q.R. CAPPING PAD @ EL3.340
Q.R. CAPPING PAD @ EL2.970
AREA OF BLOCK PAVING REFER SHEET-1
FINISH BATTER SLOPE WITH TEMPORARY SINGLE COAT SEAL
ALL BATTER SLOPES TO BE AT 1 IN 3 AND FINISHED WITH TEMPORARY SINGLE COAT SEAL
NOTE:
CONTRACTOR TO NOTIFY DAIS OR CHRIS JORDAN SURVEY PRESERVATION BRANCH 82262664) PRIOR TO COMMENCING ANY DEMOLITION / CONSTRUCTION WORKS, TO HAVE THIS PSM RELOCATED AT COST TO DEVELOPER.
FAILURE TO NOTIFY DAIS WILL MAKE CONTRACTOR RESPONSIBLE FOR ANY RE-LOCATION COSTS IF PSM IS DAMAGED.
FUTURE FLOOR LEVEL EL3.140
AREA TO BE EXCAVATED TO LEVEL EL2.370 BACKFILL WITH EXISTING MATERIAL AND COMPACT AS SPECIFIED (95% STANDARD) CONTROLLED FILL TO LEVEL-1 SUPERVISION WITH 100mm QUARRY RUBBLE. CAP SURFACE AT PAD LEVEL EL2.970 WITH 100mm QUARRY RUBBLE.
CARPARK PAVEMENT DESIGN
25mm HOTMIX SURFACE COAT 100mm FCR BASE COURSE 100mm QR SUB-BASE COURSE
AREA FOR FUTURE BLOCK PAVING
100mm QUARRY RUBBLE FLUSH WITH TOP OF KERB AND McLAREN PARADE FUTURE ROAD RESERVE BOUNDARY LEVELS REFER COUNCIL DRAWING 14.2.1
AREA FOR FUTURE BLOCK PAVING
100mm QUARRY RUBBLE FLUSH WITH TOP OF KERB AND LEVELS SHOWN AT FUTURE BUILDING LINE ADJACENT. - REFER SHEET-1 FOR CARPARK TOP OF KERB LEVELS.
FUTURE FLOOR LEVEL EL3.100
AREA TO BE EXCAVATED TO LEVEL EL2.370 BACKFILL WITH EXISTING MATERIAL AND COMPACT AS SPECIFIED (95% STANDARD) CONTROLLED FILL TO LEVEL-1 SUPERVISION CAP SURFACE AT PAD LEVEL EL2.970 WITH 100mm QUARRY RUBBLE.
60.89 62°07'50"
61.00 239°47'10"
40.88
149°56'10"
N

Issue	Date	Amendment	App'd
A	3-12-98	NOTE ALTERED RE. LEVELS - LOTS 1 TO 6.	SGC.

Drn S.G.C. L.B. S R & C
Des S.G.C. F.B. C70P1
App'd
Date 1/12/98

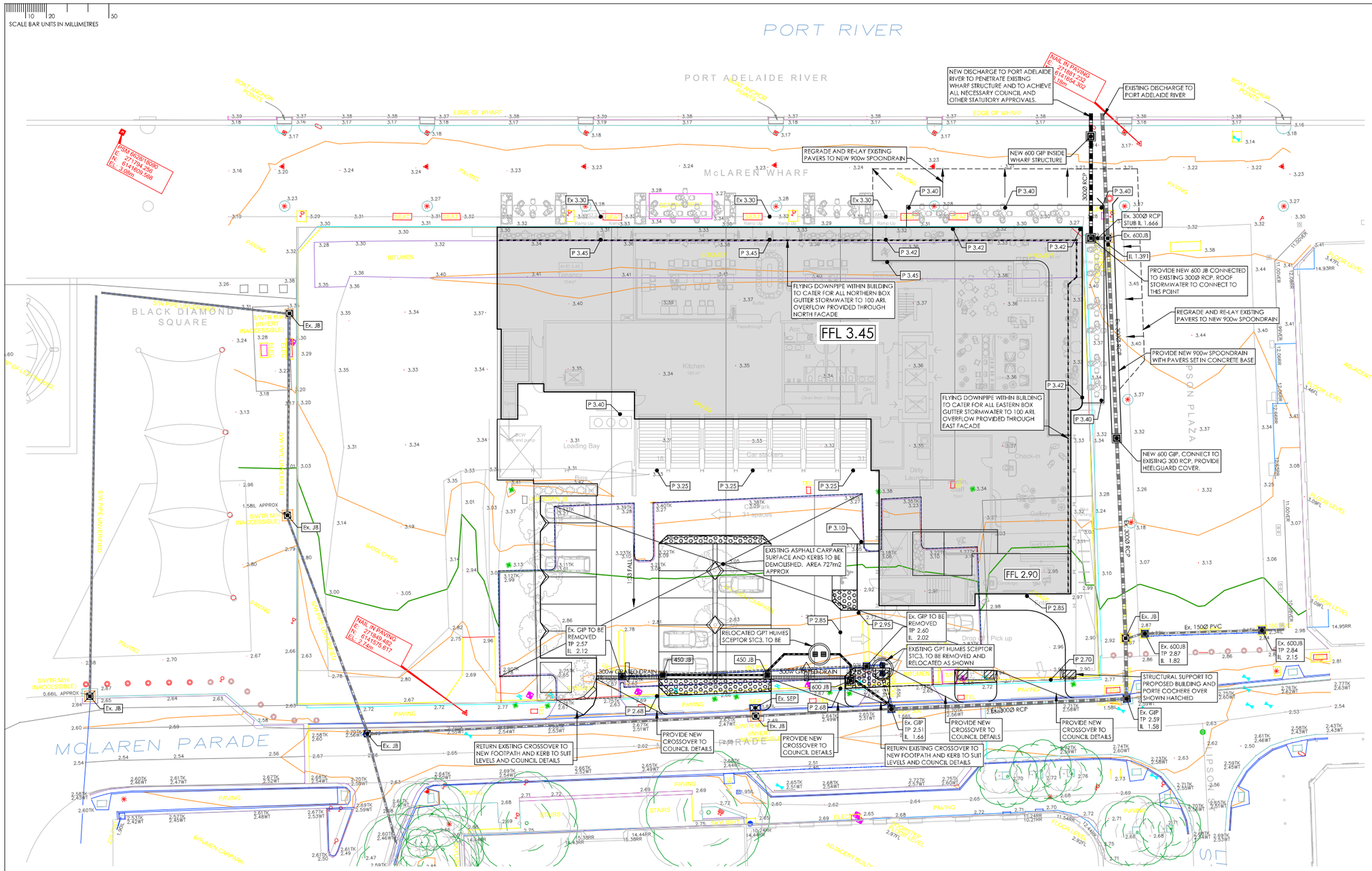
ALLAN GILBERT & ASSOCIATES PTY. LTD
CONSULTING ENGINEERS
66 KENSINGTON ROAD ROSE PARK, SOUTH AUSTRALIA 5067 TEL 8332 6777 FAX 8364 1725 A.C.N. 007 923 364

LIPSON WHARF PTY. LTD.
LIPSON WHARF REDEVELOPMENT
LOT 108 - ALLOTMENT EARTHWORKS & "CAPPING"

Scales 1:200
Drawing No. 97-070/3A

APPENDIX B:

190160-C01-Rev A – Stormwater Management Plan



STORMWATER MANAGEMENT PLAN

SCALE 1:200

LEGEND

▬ ▫ ▬ ▫ ▬	NEW STORMWATER PIPE (UNSEALED SYSTEM).
▬ ▫ ▬ ▫ ▬	STORMWATER PIPE EXISTING.
▥	GRATED INLET PIT
☒	JUNCTION BOX
▥▥▥	300 WIDE 'ACO' GRATED STRIP DRAIN OR SIMILAR APPROVED.
P **.**	DESIGN LEVEL P-PAVEMENT LEVEL TK-TOP OF KERB WT-WATER TABLE TP-TOP OF PIT IL- INVERT LEVEL EX-EXISTING LEVEL TB-TOP BATTER BB-BOTTOM BATTER TW-TOP OF WALL L-LANDSCAPE LEVEL
+ 53.35	EXISTING SPOT LEVELS FROM SURVEY.
⬡⬡⬡	DENOTES SWALE/WSUD DRAINAGE ZONES, REFER DETAIL

SWALE/WSUD DRAINAGE DETAIL

SCALE 1:20

PRELIMINARY
06/02/2020

Revision	Date	Details	Eng\Dft
A	06-02-20	SUBMITTED FOR PLANNING APPROVAL	D.R.\M.D.C.

COMBE
PEARSON
REYNOLDS
CONSULTING ENGINEERS

174 Fullarton Road Dulwich SA 5065
PO Box 2832 Kent Town SA 5071
Phone: 08 8332 1344
e-mail: plans@cprengineers.com.au

Combe Pearson Reynolds Pty. Ltd.
as Trustee for the CPR Trust
ACN 112 731 558 ABN 12 112 731 558

Project PORT ADELAIDE HOTEL

Address 2 - 7 McLAREN PARADE, PORT ADELAIDE

Client CK GROUP

Architect BROWN FALCONER
28 CHESSER STREET, ADELAIDE
Phone 8203-5800

Sheet Title STORMWATER MANAGEMENT PLAN

Designed	Drawn	Date	Scale
D.R.	M.D.C.	Feb-20	1:200 @ A1
Checked	Drawing No.		Rev.
-	190160-C100		A

Last Saved by: MatthewC

Appendix 10. BESTEC Acoustic Report

BESTEC®

BRINGING BUILDINGS TO LIFE

PORT ADELAIDE HOTEL DEVELOPMENT
MCLAREN WHARF PORT ADELAIDE

ACOUSTIC SERVICES
CONCEPT DESIGN REPORT

BESTEC

ABN 43 909 272 047

Building Engineering
Services Technologies
Consulting Engineers

A. 144 Gawler Place
Adelaide SA 5000

GPO Box 818
Adelaide SA 5000

T. (08) 8232 4442
F. (08) 8232 4244

E. consulting@bestec.com.au
W. bestec.com.au

MLI: TKH
56491/6/1
16 February 2020

MOTO Projects
Level 3, 100 Pirie Street
ADELAIDE SA 5000

Attention: Mr L McClurg

Dear Sir

PORT ADELAIDE HOTEL DEVELOPMENT – MCLAREN WHARF PORT ADELAIDE
CONCEPT DESIGN REPORT
ACOUSTIC SERVICES

As requested, we enclose a copy of our design report on the Acoustic Services for the above project.

We trust that the report provides sufficient information for your immediate purpose and we would be most pleased to further discuss any aspect upon your request.

Yours faithfully
BESTEC PTY LTD

MICHAEL LI
ACOUSTIC SERVICES ENGINEER

DOCUMENT CONTROL

Report Issue Register					
Report Title		PORT ADELAIDE HOTEL DEVELOPMENT MCLAREN WHARF PORT ADELAIDE			
Report Type		Acoustic Concept Report			
Document Number		101366c		**Project Number**	56491
Client		MOTO Projects			
Rev.	**Date**	**Revision Details**	**Author**	**Reviewed by**	
00	18.12.19	Initial Issue	Michael Li	Ivailo Dimitrov	
01	05.02.20	Revised Issue	Michael Li	Ivailo Dimitrov	
02	13.02.20	Revised Issue	Michael Li	Ivailo Dimitrov	
03	16.02.20	Revised Issue	Michael Li	Ivailo Dimitrov	

CONTENTS

Introduction

BESTEC Pty Ltd was engaged to provide acoustic engineering services during the design and construction stages of the Port Adelaide Hotel development at 25 McLaren Parade, Port Adelaide, SA 5015. This document presents the proposed acoustic design criteria, the results of our traffic noise assessment and preliminary recommendations for acoustic treatment to achieve the selected design criteria.

Executive Summary

In summary:

- The preliminary architectural drawings of the proposed development were reviewed.
- Attended surveys were conducted at the proposed site to determine the existing ambient noise levels and dominant sources of noise on 5 December and 12 December.
- Appropriate acoustic design criteria were nominated based on Port Adelaide Enfield Council Development Plan, SA Environment Protection (Noise) Policy 2007, National Construction Code Series 2019 and AS2107:2016 “Acoustics – Recommended design sound levels and reverberation times for building interiors”.
- Architectural acoustics design recommendations to achieve the selected criteria were provided, including:
    - Constructions of the building façade and glazing were nominated in order to provide sufficient attenuation to noise from port activity and music from the Dockside Tavern and the Lighthouse Wharf Hotel.
    - Appropriate constructions of the walls and floors separating the hotel suites were nominated to ensure compliance with the requirements of National Construction Code Series 2019, Building Code of Australia for sound insulation (Section F5).
    - Preliminary design recommendations for reverberation control in order to achieve the selected criteria for room acoustics within the critical spaces.

For an explanation of acoustic terms, please refer to the Glossary of Acoustic Terminology attached to this document (refer Appendix D).

Acoustic Analysis

References

The following documents have been referenced within the preparation of this report

[1] Port Adelaide Enfield Council Development Plan, Consolidated – 6 February 2018.

[2] SA Environment Protection (Noise) Policy 2007.

[3] World Health Organisation (1999) “Guidelines for Community Noise”.

[4] AS/NZS 2107:2016/2000 “Acoustics – Recommended design sound levels and reverberation times for building interiors”.

[5] AS2021:2015 “Acoustics – Aircraft noise intrusion – Building siting and construction”

[6] Adelaide Airport Masterplan 2019.

[7] Parafield Airport Masterplan 2017.

[8] Concept Architectural Drawings provided by Brown Falconer, dated 06 December 2019.

[9] National Construction Code Series 2019, Building Code of Australia, Class 2 to Class 9 Buildings.

[10] AS ISO 140.4–2006 “Acoustics – Measurement of sound insulation in buildings and of building elements. Part 4: Field measurements of airborne sound insulation between rooms”.

[11] ISO 140-5:1998 “Acoustics – Measurement of sound insulation in buildings and building elements. Part 5: Field measurements of airborne sound insulation of façade elements and facades”.

[12] Development proposal assessment for venues where music may be played, EPA Guidelines, September 2003.

[13] Townsville Ocean Terminal Project – Review of Submissions by Ron Rumble Pty Ltd – June 2008

Proposed Development and Conditions

It is proposed that a new 6-storey hotel be constructed on the site, comprising of the following components:

- Ground floor: Retail tenancy, lobby lounge, restaurant, gallery, bar, bar lounge, alfresco terrace, kitchen, reception, admin room, loading bay, car park and amenities.
- Level 1: Function rooms, function lobby, boardrooms, kitchen, gymnasium, suites, king rooms and double/ accessible rooms.
- Level 2 - 5: King rooms, suites, double/ accessible rooms and housekeeping on each level.
- Roof: Engineering services plant.

Noise Survey

Attended Noise Survey

An attended noise survey was conducted at the proposed site at location L1 and L2 (refer to Figure 1) between 11:20AM - 11:40AM, on 5 December 2019 and between 10:00PM – 10:15PM, on 12 December 2019 in order to determine the existing noise levels, mainly from port activities in the vicinity of the development site. The survey was conducted using a Brüel and Kjær Hand-held Analyser Type 2270 Sound Level Meter (Serial Number: 3003020, last calibrated on the 15 October 2019, due for calibration 14 October 2020), with an approved windshield fitted at all times. The calibration of the analyser was spot checked before and after the measurements and no drift was detected.

Location	Time	L_{Aeq}, dB(A)	L_{A10}, dB(A)	L_{A90}, dB(A)	L_{Amax}, dB(A)	Notes
1	5 December 2019 11:20AM	59	61	54	76	Typical operation of Dolphin Explorer, with engine on idle for 15mins, reverse for departure for 2mins. At departure, tour guide starts broadcasting with PA system onboard.
1	12 December 2019 10:00PM	45	47	42	61	Multiple road train and heavy vehicles passing through on Tom Diver Derrick Bridge.
2	12 December 2019 10:15PM	46	47	43	62	Moderate traffic noise from Divett Street.

Table 1: Summary of the measured noise levels during the attended noise survey at Port Adelaide Hotel

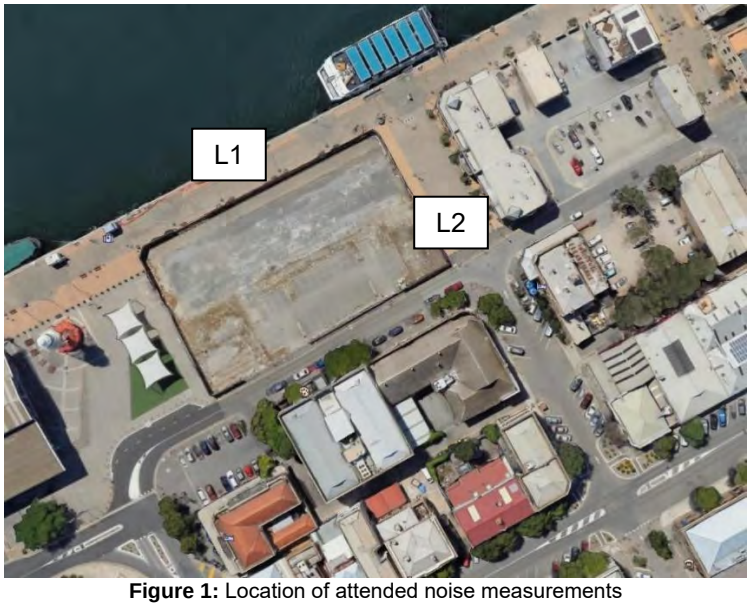


Figure 1: Location of attended noise measurements

Design Criteria

Environmental Noise

Continuous Noise

This criterion will be relevant to noise emitted from the proposed development resulting from operation of engineering services, operational noise from the commercial component, car park etc.

The Environment Protection (Noise) Policy 2007 [2] sets out the maximum allowable continuous noise in terms of A-weighted Equivalent Continuous Noise Level (L_{Aeq}) based on the time of day and zoning / use of land, in which the noise source and receiver are located. With reference to the Port Adelaide Enfield Council Development Plan [1], we note that the proposed development is located within the Regional Centre (RCe) Zone. The Regional Centre Zone is an essentially mixed-use zone comprising a mixture of commercial and residential uses. Port Adelaide Enfield Council Development Plan [1] states in Principles of Development Control 7 that:

"7 Development that emits noise (other than music noise) should include noise attenuation measures that achieve the relevant Environment Protection (Noise) Policy criteria when assessed at the nearest existing noise sensitive premises."

Therefore, the criteria derived in accordance with the EPP 2007 [2] based on the indicative noise levels for different land categories apply. Table 2 shows the indicative noise factors based on time of day and land-use as stipulated in Table 2 of the EPP 2007 [2].

Land Use Category	Day Time (07:00 to 22:00)	Night Time (22:00 to 07:00)
Commercial	62	55
Residential	52	45

Table 2: Indicative noise factors based on time of day and land use of immediate development locale

Since the mixed-use area is intended for commercial and residential purposes, the Environment Protection (Noise) Policy 2007 [2] states that the indicative noise level is the average of the indicative noise factors for the land use categories. In addition, the Environment Protection (Noise) Policy 2007 states that the predicted continuous noise due to the proposed development (for application for development authorisation) should not exceed the indicative noise level, minus 5dBA. Based on the average of the "Commercial" and "Residential" land use categories, minus 5dBA for planning purposes, the applicable day and night time noise criteria would be as follows:

- Day-time (7:00 a.m. to 10:00 p.m.): 52dBA
- Night-time (10:00 p.m. to 7:00 a.m.): 45dBA

Note that if noise emitted by the proposed development contains any tones, modulation, impulsive or low frequency characteristics, the continuous noise level of the noise source must be adjusted as follows:

- Noise containing 1 characteristic – 5dBA penalty added to source continuous noise level;
- Noise containing 2 characteristics – 8dBA penalty added to source continuous noise level;
- Noise containing 3 or 4 characteristics – 10dBA penalty added to source continuous noise level.

Moreover, the Port Adelaide Enfield Council Development Plan [1] also states in Principles of Development Control that:

> *"1 Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:*
> *… (b) noise*
> *2 Development should be sited and designed to minimise negative impacts on existing and potential future land uses desired in the locality.*
> *4 Residential development adjacent to non-residential zones and land uses should be located, designed and/or sited to protect residents from potential adverse impacts from non-residential activities.*
> *5 Sensitive uses likely to conflict with the continuation of lawfully existing developments and land uses desired for the zone should be designed to minimise negative impacts.*

6 Non-residential development on land abutting a residential zone should be designed to minimise noise impacts to achieve adequate levels of compatibility between existing and proposed uses."

Intermittent Noise

This criterion will be relevant to noise emitted from the proposed development resulting from short term noise events – rubbish collection, car door slams, etc.

The criteria provided in the above sections relate to continuous noise sources, and do not cater for intermittent noise events, such as slamming of car doors, car horns sounding, etc. We recommend the use of the World Health Organisation (WHO) Guidelines [3], which recommends a maximum A-weighted noise level L_{Amax}, of 45dBA in a bedroom, which is equivalent to approximately 55dBA to 60dBA at the façade of the residential building with windows partially open.

In addition, the EPP 2007 provides assessment criterion of L_{Amax} of 60dBA for night-time for the proposed development (for application for development authorisation) [2], which agrees with the criterion stipulated by the WHO [3].

Music Noise

We note that pre-recorded music may be played in the ground floor bar while the function rooms are intended as multipurpose spaces accommodating functions with live and pre-recorded music, convention events, birthday parties etc. Therefore, an assessment against the EPA Guidelines for Music Noise [12] and Port Adelaide Enfield Council Development Plan [1] requirements is warranted.

EPA provides guidelines for assessment of music emissions from entertainment venues [12], which is used for acoustic assessment for development approval purposes as well as for acoustic design of residential developments in the vicinity of existing entertainment venues. The criterion is set as follows:

"The music noise ($L_{10,15min}$) from an entertainment venue when assessed externally at the nearest existing noise sensitive location should be:

- *less than 8 dB above the level of background noise ($L_{90,15min}$) in any octave band of the sound spectrum, and*
- *less than 5 dB(A) above the level of background noise ($L_{A90,15min}$) for the overall (sum of all octave bands) A-weighted levels."*

Typical background noise levels (L_{90}) in a hotel suite with air-conditioning operating are provided in AS/NZS 2107-2000, Appendix C [4] as detailed in below along with the calculated relevant music noise criteria.

	Octave band sound pressure level dB re 20µPa									**Overall level, dBA**
	31.5	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	
Background noise level $L_{90, 15min}$ (AS/NZS 2107-2000)	70	52	42	34	28	25	22	20	18	30
Maximum allowable exceedance	8	8	8	8	8	8	8	8	8	5
Maximum allowable music noise level, $L_{10,15min}$	78	60	50	42	36	33	30	28	26	35

Table 3: Typical background noise level $L_{90,15min}$ in a hotel suite with the air-conditioning on (AS/NZS 2107-2000) and the relevant music noise criteria.

In addition, Port Adelaide Enfield Council principle of development control 10 states

"10 Development proposing music noise should include noise attenuation measures that achieve the following desired noise levels:

(a) Adjacent existing noise sensitive development property boundary:

(i) Less than 8 dB above the level of background noise ($L_{90,15min}$) in any octave band of the sound spectrum; and

(ii) Less than 5 dB(A) above the level of background noise ($L_{A90,15\ min}$) for the overall (sum of all octave bands) A-weighted levels; or

(b) Adjacent land property boundary:

(i) Less than 65dB(Lin) at 63Hz and 70dB(Lin) in all other octave bands of the sound spectrum; or

(ii) Less than 8dB above the level of background noise ($L_{90,15min}$) in any octave band of the sound spectrum and 5dB(A) overall (sum of all octave bands) A-weighted levels."

Building Acoustics

The level of background and transient/intermittent noise, the speech privacy rating and the room acoustics define the quality of the acoustics within a building. The recommended criteria for each space are shown in Table 4 below. Please refer to each individual section below for interpretation of the criteria.

Type of occupancy/activity	Background Noise L_{Aeq}, dBA	Reverberation Time, secs	Airborne Sound Insulation		Weighted Sound Level Difference, D_W
			R_w	R_W+C_{tr}	
Hotel rooms	30 – 40		50[1]	50[2]	
Admin, Staff	40 – 45	Minimise as practical			40 – 45
Restaurant	40 – 50	0.8 – 1.1			N/A
Tenancy	40 – 45	N/A[3]			40 – 45
Kitchen	< 55	N/A			35 – 40
Entry/gallery	45 – 50	< 1.0			N/A
Lounge/Bar	< 50	< 1.0			N/A
Boardroom	30 – 40	0.6 – 0.8			40 – 45 45 – 50[4]
Gymnasium	< 50	< 1.0			40 – 45
Function room	40 – 45	0.7 – 1.0			45 – 50
Toilets	< 55	N/A			40 – 45
Amenities	< 55	N/A			35 – 40

Table 4: Proposed building acoustic design criteria for the Port Adelaide Hotel Development

Background Noise

AS/NZS 2107-2016

AS/NZS 2107-2016 [4] sets the criteria for background noise in terms of A-weighted equivalent continuous sound pressure level over 15-minute intervals ($L_{Aeq,\ 15min}$) in accordance with the use of the spaces and the location of the buildings. Recommendations for each space are provided in Table 4 in terms of an averaged A-weighted sound pressure level (L_{Aeq}) with Table 5 detailing the subjective response of individuals to the proposed sound levels for interpretation of the recommendations.

Average Sound Pressure Levels (dBA)	Subjective Rating
35 – 40	Audible but unobtrusive
40 – 45	Moderate but unobtrusive
45 – 50	Unobtrusive with low levels of surrounding activities
50 – 55	Unobtrusive with high levels of surrounding activities

Table 5: Subjective ratings for various average sound pressure levels

[1] Between hotel rooms and a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification.
[2] Between hotel rooms
[3] We assume that the tenancy will be handed over as cold shell with the fit-out carried out by the tenant
[4] For video conference

Sound Insulation

Hotel/ Residential Component

For enclosed spaces, the noise from activities in the adjacent rooms transmitted through walls, floors, ceilings etc. increase the background noise level similarly to the noise intrusion from any outside sources. The level of noise transmitted from the adjacent rooms and the level of sound insulation/speech privacy is controlled by the design of building elements and providing adequate level of sound attenuation through specifying appropriate construction types for walls, floors, doors, ceilings etc.

The minimum requirements for sound insulation for the residential component (Buildings Class 3) are set by the National Construction Code Series 2019, Building Code of Australia [9] stipulates the required weighted sound reduction index (R_w), weighted sound reduction index with spectrum adaptation term ($R_w + C_{tr}$) and weighted normalised impact sound pressure level ($L_{n,w}$) for building elements separating sole-occupancy units. We note that the proposed hotel suites would be classified as Class 2 or 3 buildings, and therefore note the following criteria are applicable to the proposed development:

> *"A floor in a Class 2 or 3 building must have R_W+C_{tr} (airborne) not less than 50 and an $L_{n,w}$ not more than 62 (impact) if it separates –*
>
> *(i) Sole occupancy units; or*
> *(ii) A sole occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of different classification"*
>
> *"A wall in Class 2 or 3 building must –*
> *(i) Have an $R_W + C_{tr}$ (airborne) not less than 50, if it separates sole-occupancy units; and*
> *(ii) Have an R_W (airborne) not less than 50, if it separates a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification; and*
> *(iii) Is of discontinuous construction if it separates –*
>
> *(A) A bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than kitchen) in an adjoining unit; or*
> *(B) A sole-occupancy unit from a plant room or lift shaft."*
>
> *"A door may be incorporated in a wall of Class 2 or 3 building that separates a sole-occupancy unit from a stairway, public corridor, public lobby or the like, provided the door assembly has an R_W not less than 30."*
>
> *"Where a wall required to have sound insulation rating has a floor above, the wall must continue to-*
> *(i) The underside of the floor above; or*
> *(ii) A ceiling that provides the sound insulation required for the wall."*
>
> *"If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any sole-occupancy unit by construction with an $R_W + C_{tr}$ (airborne) not less than –*
> *(i) 40 if the adjacent room is a habitable room (other than a kitchen); or*
> *(ii) 25 if the adjacent room is a kitchen or non-habitable room."*

Commercial Component

For enclosed spaces, the noise from activities in the adjacent rooms transmitted through walls, floors, ceilings etc., increase the background noise level similarly to the noise intrusion from any outside sources. The level of noise transmitted from the adjacent rooms and the level of sound insulation/speech privacy is controlled by the design of building elements and providing adequate level of sound attenuation through specifying appropriate construction types for walls, floors, doors, ceilings etc.

There are no Australian or International Standards giving recommendations for sound insulation ratings for adjoining spaces. Instead recommendations are based on experience from previous projects, with these recommendations reflecting budget constraints and user expectations. The privacy rating is dependent on the sound absorption and background noise level in the adjoining space as well as the area and acoustic performance of the dividing partition.

The proposed criteria for speech privacy between the spaces separated by partitions (extending either to the ceiling level or to the roof structure above) detailed in Table 4 are presented in terms of Weighted Sound Level Difference (D_W), as defined by ISO 16283-1:2014, which is related to the sound level difference between two spaces. The criteria are based on our experience in the acoustic design of similar facilities. Table 6 details the subjective response of individuals to the proposed privacy ratings for interpretation of the recommendations.

D_W Rating	Subjective Rating
50 - 55	Confidential privacy
45 - 50	Very good privacy. Speech inaudible unless raised
40 - 45	Good privacy. Speech audible but unintelligible
35 - 40	Normal privacy. Neighbouring conversations are audible and may be understood
< 35	Privacy not required

Table 6: Subjective perceptions for various privacy ratings

Room Acoustics

AS 2107-2016 [4] sets out the design criteria for reverberation times within occupied spaces. The reverberation time defines the time taken for sound to decay within a space and thus the degree of intelligibility of both unassisted speech and sound reinforcement systems. The criterion for a given space depends on the volume of the space, with Table 7 outlining the subjective impression for spaces with varying volume. Criteria considered appropriate for the various spaces involved within the project scope are listed in Table 4 above.

Reverberation Time (sec)			Subjective Rating
Small ($100m^3$)	Medium ($1,000\ m^3$)	Large ($10,000m^3$)	
< 0.3	0.3 - 0.5	0.6 - 0.8	Dead
0.3 - 0.5	0.5 - 0.7	0.8 - 1.0	Medium dead
0.5 - 0.7	0.7 - 1.0	1.0 - 1.5	Average
0.7 - 1.0	1.0 - 1.5	1.5 - 2.5	Medium live
1.0 - 2.0	1.5 - 2.5	2.5 - 4.5	Live

Table 7: Subjective response to various reverberation times and room volumes

Assessment and Recommendations

General

Acoustic Sealants

We note that for the acoustic integrity of building elements to be maintained, all gaps and interfaces along the junctions and joints of linings must be sealed with an appropriate acoustic grade sealant. Penetrations for mechanical or electrical services must be properly caulked and sealed around the ductwork and cabling to ensure the intended acoustic rating of the partition is retained.

Appropriate acoustic caulking products include:

- Bostik Firemastic.
- Bostik Seal-n-flex 2637.
- Pyropanel Multiflex.
- Boral Fyreflex.
- Dow-Corning 790 Silicone.
- Dow-Corning 795 Silicone.
- Sika Sikaflex-11 FC.
- Fosroc Flamex 3.

Cavity Infill

Where a cavity infill is recommended, equivalent alternatives are:

- Fibreglass – 50mm, $12kg/m^3$.
- Rockwool – 50mm, $38kg/m^3$.
- Polyester – 900gsm.

Ceiling Overlay

Where a ceiling overlay is recommended, equivalent alternatives are:

- Glasswool – 100mm, 12kg/m^3.
- Rockwool – 100mm, 38kg/m^3.
- Polyester – 100mm, 32kg/m^3.

Where higher durability and/or water resistance is required, 6mm compressed fibre cement sheeting could be used in lieu of the 13mm fire-rated plasterboard and 9mm compressed fibre cement in-lieu of 16mm fire-rated plasterboard.

Noise Intrusion

Noise Associated with Port Activity

We note that the proposed development is located adjacent to the Dolphin Explorer (within 15m), which often departs once on Monday to Saturday and twice on Sunday. The attended noise survey note that the entire departure sequence takes approximately 25 minutes, which includes boarding, reverse and depart. During the attended noise survey, no other Port Activity noise could be captured. In order to provide an accurate approximation of noise intrusion to the proposed development, the attended survey noise level is corrected according to the Townsville Ocean Terminal Noise and Vibration Assessment [12], during which it was found that the noise emissions from a ship engine could reach sound power level of 111dBA. Hence, this assessment will use the noise level from the attended survey, then adjusted and offset with a distance from the centre of Port Adelaide River.

Noise Associated with Aircraft Noise

The Port Adelaide Enfield Council [1] stated that development within area affected by aircraft noise should be consistent with AS2021 – Acoustic – Aircraft Noise Intrusion – Building siting and construction. According to AS2021 [5], the noise exposure of building site could be determined by Aircraft Noise Exposure Forecast map (ANEF) provided by the aerodrome. We note that the proposed development is within the ANEF zone <20 (both Parafield Airport [7] and Adelaide Airport [6]), which indicates that the construction of the building need not specifically be designed for aircraft noise intrusion and other noise source such as traffic or port noise is more dominant.

Music Noise

We note that there are two liquor licence holders around the Port Adelaide Hotel development, the Lighthouse Wharf Hotel is located on 1 Commercial Rd and is currently operational; the Dockside Tavern is located on 4 McLaren Parade and is closed permanently. Although the Dockside Tavern is no longer operational, the location of the Dockside Tavern (which is closer to the hotel development comparing to the Lighthouse Wharf Hotel) would have greater music noise impact onto the resident in the hotel if the business is being taken over by another operator. Hence, in order to control music noise intrusion for the residents in the proposed development, we assessed the music noise from the Dockside Tavern as worst case scenario where any treatment required would also be able to cover the music noise impact from the Lighthouse Wharf Hotel.

- The Dockside Tavern liquor license states:

  "*The authorised hours for the sale of liquor is 5am to midnight Monday to Wednesday, 5am to 2am on Wednesday to Saturday and 8am to midnight on Sunday on premises.*"

We assessed the effect of music noise originating from the bar area of the Dockside Tavern onto the hotel rooms against the criteria outlined above based on the following assumptions:

- Reverberant sound pressure level of 97dBA in the bar area of the Dockside Tavern, resulting from music and patron noise (based on measurements taken in a bar on a busy weekend night during a previous project).
- The following construction of the Dockside Tavern building envelope has been assumed:
  - Facade – 200mm thick masonry wall;
  - Glazing – 4mm float glass;
  - Roof – profiled sheet metal with R1.5 cavity infill and ceiling of 13mm plasterboard.

Building Envelope Recommendation

Based on the architectural drawings [8] and the above noise intrusion assessment, we note the following construction of the building elements:

- Solid façade
  - 150mm precast concrete. Please note that this construction is sufficient from acoustic point of view, however, it might require additional thermal insulation.
  - Composite light weight façade constructed of 9mm fibre cement to the external side of minimum 92mm steel studs and 1 layer of 13mm plasterboard to the internal side with cavity infill as specified above.
- Glazing
  - Single Glazing – We recommend minimum 10.38mm laminated
  - Double Glazing – We recommend double glazing constructions of 6mm float glass on the external side with 12mm airgap and 6.38mm laminated glass on the internal side.

  Please note where operable glazing is envisaged, compressible acoustic seals (Raven or Schlegell ranges) should be used.
- Roof structure – We note the roof is constructed with the combination of concrete and roof metal sheet.
  - Metal Sheet: We recommend 0.48mm roof cladding over minimum 90mm, 14kg/m^3 insulation blanket. The recommendation will be revised once the mechanical plant selection is finalised.
  - Concrete: We recommend minimum 200mm thick concrete be used from acoustic point of view.

Sound Insulation

Commercial/ Retail Component

Partitions

- Normal Privacy (D_W 35-40, yellow colour) – 1 layer of 13mm plasterboard to each side of 92mm steel studs extending to ceiling level with ceiling overlay and cavity infill as specified. Please note that the ceiling overlay shall extend minimum 1,200mm each side of the partition. For partition detail, please refer to Appendix A, Detail 1.
- Good Privacy (D_W 40-45, green colour) – 1 layer of 13mm plasterboard to one side of 92mm steel studs and 2 layers of 13mm plasterboard to the other side with 1 layer of plasterboard extending to the structure above and cavity infill as specified. For partition detail, please refer to Appendix A, Detail 2.
- Very Good Privacy (Dw 45-50, Red Colour) – 2 layers of 13mm plasterboard on each side of minimum 64mm steel studs with all the layers of plasterboard on each side extending to the structure above and cavity infill as specified. For partition detail, please refer to Appendix A, Detail 3.

Operable Walls

- Operable Wall for Function Room (Blue Colour) – We recommend operable wall with Weighted Sound Reduction Index of no less than R_W 53 (based on laboratory test) be installed. In addition, an acoustic baffle construction of 2 layers of 13mm Plasterboard to each side of the operable wall track, with cavity infill as specified above for partitions, should be installed, extending to the structure above as shown in Figure 2 below.

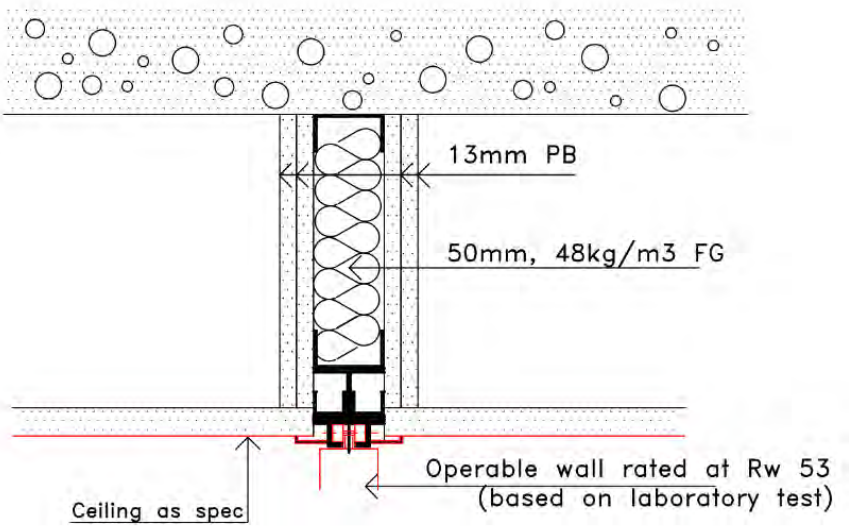


Figure 2: Operable Wall Baffle Treatment

Doors

- Normal Privacy, D_W 35-40 – 40 mm thick solid core doors or hinged aluminium framed glass doors with 10.38mm laminated glass.
- Good Privacy, D_W 40-45 – 55 mm thick solid core doors or hinged aluminium framed doors with 10.38mm laminated glass. We recommend medium duty acoustic seals (Raven RP8, RP10 or equivalent). We note that the glass door would not strictly achieve Good speech privacy as the Weighted Sound Reduction of 10.38mm laminated glass is R_W 35, however, it would be acceptable between the sensitive spaces and adjacent trafficable area.
- Very Good Privacy, D_W 45-50 – Proprietary acoustic door with Weighted Sound Reduction Index of R_W 43. Please note that the proprietary acoustic doors are supplied as a set, including door leaf, frame, seals and hardware and are installed and tested by the supplier to guarantee compliance.

  For amenities, 40mm solid core doors will be acceptable. Please note that relief air grilles installed within doors are not acceptable from an acoustic point of view.

Floors

- Floor separating Gym and ground floor –Recommendations in regards to preventing noise and vibration associated with the gymnasium will be provided once the structural design is sufficiently developed.
- Other floor separating ground and first level – Minimum 200mm thick concrete will be sufficient from acoustic point of view.

Hotel/Residential Component

Partitions/ Walls

To achieve the NCC 2019 requirements, we recommend:

- Walls between sole-occupancy units:
  - Where discontinuous construction is required – either:
    - 2 layers of 13mm fire rated plasterboard to each side of 64mm staggered studs in 92mm track extending to the structure above and with cavity infill of 50mm, 14kg/m^3 glasswool.
    - 1 layer of 13mm plasterboard on 28mm furring channels with cavity infill of 25mm, 12kg/m^3 glasswool to one side of minimum 150mm concrete wall and 1 layer of 13mm plasterboard on 28mm furring channels and resilient mounts to the other side with cavity infill of 25mm, 12kg/m^3 glasswool.
  - Where discontinuous construction is not required:
    - 1 layer of 13mm plasterboard on 28mm furring channels with cavity infill of 25mm, 12kg/m^3 glasswool to each side of minimum 150mm shear concrete wall; or

- 2 layers of 16mm fire-rated plasterboard to each side of 92mm steel studs with cavity infill of 75mm, 14kg/m^3 glasswool.

- Walls separating sole-occupancy units from corridors and lobbies – 2 layers of 13mm fire-rated plasterboard to one side of 76mm steel studs and 1 layer of 13mm fire-rated plasterboard to the other side with cavity infill of 75mm, 11kg/m^3 glasswool.
- Walls between sole occupancy units and stairwells - 28 mm furring channels installed with resilient mounts to the building core concrete wall (assumed 250mm thick in-situ concrete), with 1 layer of 13 mm plasterboard to the hotel suites side and cavity infill of 25 mm, 14kg/m^3 glasswool.

Doors

- Hotel Room doors – minimum 45mm thick solid core doors with compressible seals (e.g. Raven or Schlegel ranges).
- Stairwell doors - minimum 45 mm thick solid core doors or as to suit fire rating requirements where necessary. In order to avoid noise from slamming of stairwell doors into the hotel lobbies or adjacent bedrooms, we recommend installing a soft closer mechanism (e.g. damping piston) to the stairwell doors.

Floors

- Floors – we consider that 150mm concrete on steel pan (BONDEK, Kingspan or similar) over steel joists and ceiling of 1 layer of 13mm plasterboard installed on resilient mounts offset from the concrete by 200mm cavity will be required to comply with the NCC 2019 requirements for airborne noise. Alternatively, the ceiling constructed of 13mm flush plasterboard can be installed on lightweight suspension grid with minimum cavity of 200mm. Where hard floor finishes (tiles, timber flooring) are installed above habitable areas in the apartments below, resilient underlay (Acoustibond, Regupol etc.) should be installed in order to meet the NCC 2019 requirements for impact noise.

Room Acoustics

Recommendations for acoustic treatment in order to control reverberation and achieve the selected criteria for room acoustics will be provided once the reflected ceiling plans and architectural finishes schedule are available.

Engineering Services

Hydraulic Services

The following stipulates the recommended design, in order to reach NCC compliance with hydraulic systems. Where a wall separates a room of a sole-occupancy unit from a duct, soil, waste or water pipe serving or passing through more than one sole-occupancy unit, we recommend the following constructions:

PVC pipes:

- Where the adjacent room is a habitable room (i.e. bedroom, open plan living room, etc.), the pipes should be lagged with Soundlag 4525C or equivalent and enclosed with 1 layer of 13mm plasterboard with cavity infill of 75mm, 11kg/m^3 glasswool (See Appendix C Detail 4 attached).
- Where a waste water pipe is running within the ceiling space of a habitable room or the waste water pipe is running within the ceiling space next to a habitable room, the pipes should be lagged with Soundlag 4525C or equivalent with ceiling overlay of 75mm, 11kg/m^3 glasswool extending minimum 1,200mm each side of the pipe. Please note that down lights should be avoided in these areas (See Appendix C Detail 5).

We note that the specified constructions above will achieve a rating of $R_W + C_{tr}$ 40, and will meet the NCC requirements for a services riser adjoining a habitable space.

- Where the room is a non-habitable room (See Appendix C Detail 6)
  - The pipes should be lagged with Soundlag 4525C or equivalent, and the wall construction would be as per architectural requirements, or
  - The pipes left unlagged and enclosed with 1 layer of 13mm plasterboard with cavity infill as specified.

We note that both the constructions specified will achieve a rating of $R_W + C_{tr}$ 25, and will meet the NCC requirements for services riser adjoining a kitchen or non-habitable room.

Acoustically rated pipes (Geberit, Raupiano, Silere etc.)

If the drainage system is constructed using acoustically rated pipes, the following wall constructions will be sufficient to achieve NCC 2019 requirements:

- Where the adjacent room is a habitable room, construction of 1 layer of 13mm plasterboard with cavity infill of 75mm, 11kg/m^3 glasswool. Where a waste water pipe is running within the ceiling space of a habitable room or the waste water pipe is running within the ceiling space next to a habitable room ceiling overlay of 75mm, 11kg/m^3 glasswool extending minimum 1,200mm each side of the pipe will be required.
- Where the adjacent room is non-habitable – 1 layer of 13mm plasterboard.

Drainage pipes reticulated into ceiling spaces or risers, have to be supported resiliently to the brackets to prevent transmission of flow induced vibration into the building structure, which is re-radiated as structure borne noise. Applying appropriately sized neoprene sleeves between the pipes and the brackets is sufficient in that regard.

Where either copper pipe reticulation or drainage pipes are proposed to run within partitions separating adjoining spaces, the installation should ensure there is no physical contact between the pipes and the partition leaves and where the pies are supported to the stud work, neoprene isolation pads are used.

The above applies to all areas of the building including hotel rooms, back of house area, corridor spaces, riser ducts, clinical and non-clinical spaces, office areas and all other associated areas.

Flexible couplings must be used at the point of connection between the service pipes in a building and any circulating or other pump, in order to avoid vibration from pump operation be transmitted into the building structure, which could lead to structure borne noise.

Mechanical Services Noise

Details of the mechanical services that will be serving the fit out are not available at this stage; the assessment of the noise emissions resulting from fans, roof plant (condensers and others) and ducted air conditioning units will be conducted once the mechanical services design is sufficiently developed.

Environmental Noise

Noise Associated with Mechanical Plant

Details of the engineering plant that will be serving the development are not available at this stage. However, we note that the airborne noise associated with the engineering services will be controlled by design of appropriate attenuators, duct lagging and acoustic enclosures. This will include noise intrusion from the plant, as well as the environmental noise to the surrounding noise sensitive receivers. Where plant screening is required for the roof plant, recommendations of screening extend and construction will be provided once the engineering plant selection is available.

The vibration and structure borne noise will be controlled by design of appropriate vibration isolators (double deflection mounts, spring isolators etc.).

Noise Associated with Rubbish Collection

The bin area is located on the ground floor loading bay area where the waste collection vehicles will access the refuse area via McLaren Parade, collect rubbish and exit via McLaren Parade. Based on this, we assessed the noise impact on the surrounding noise sensitive receivers resulting from noise emissions from typical rubbish collection vehicle activities.

We calculated the A-weighted Equivalent Continuous Noise Level over a typical 15-minute interval ($L_{Aeq,15min}$) assuming the following activity durations and measured noise levels from similar activities on a previous project:

- Rubbish collection vehicle accessing the waste loading zone (including reverse alarm) – 30 seconds, 70dBA at 5m.
- Rubbish collection – 10 minutes, 65dBA at 5m.
- Rubbish collection vehicle departing – 30 seconds, 73dBA at 5m.
- The balance of a 15-minute interval – 4 minutes, 54dBA (ambient noise level).

The calculated A-weighted Equivalent Continuous Noise Level over a typical 15-minute interval ($L_{Aeq,\ 15min}$) resulting from loading / unloading activities, which we used in the assessment was 65dBA at 5m.

Based on the above, we calculated incident noise levels of less than 50dBA at the façade of the nearest noise sensitive receiver (residents on Mercantile Dock) and 52dBA at the façade of the nearest commercial

noise sensitive receiver (Country Arts SA and Ocean View College on McLaren Parade). Therefore, we note that this readily achieves the selected criteria for environmental noise (for criteria refer above). However, we recommend the rubbish collection be restricted to the EPA stipulated day time only (i.e., after 7:00 am and before 10:00pm) Monday to Friday and after 9:00 am on Saturday and Sunday (if applicable).

Noise Associated with Delivery Trucks

We note that there would be a loading bay located on the ground floor and calculated the A-weighted Equivalent Continuous Noise Level over a typical 15-minute interval ($L_{Aeq,15min}$) assuming the following activity durations and measured noise levels from similar activities on a previous project:

- Delivery vehicle accessing the loading dock (including reverse alarm) – 30 seconds, 70dBA at 5m.
- Loading/unloading activities including noise from refrigeration unit on the delivery vehicle – 10 minutes, 76dBA at 5m.
- Delivery vehicle departing – 30 seconds, 73dBA at 5m.
- The balance of a 15-minute interval – 4 minutes, 54dBA (ambient noise level).

The calculated A-weighted Equivalent Continuous Noise Level over a typical 15-minute interval ($L_{Aeq,\ 15min}$) resulting from delivery vehicle activities, which we used in the assessment was 74dBA at 5m.

Based on the above we predicted incident noise levels of 57dBA at the nearest commercial noise sensitive receiver (Country Arts SA and Ocean View College on McLaren Parade) and 48dBA at the nearest residential noise sensitive receiver (residents on Mercantile Dock). We note that the noise emissions due to the delivery vehicle activities readily achieves the day-time environmental noise criteria and would not affect the amenity of the adjacent residential and commercial area.

Noise Associated with Car Park

We have assessed the noise impact within the critical spaces of the proposed development associated with the use of the adjacent carpark, considering the following:

- Vehicle movement through car parking spaces
- Vehicle Ignition
- Vehicle door slamming
- Vehicle idle and take off from car parking and drop off zones

A time weighted averaged approach was implemented, based on the above breakdown of noise generating activities.

To calculate the noise levels from the carpark operation over a typical 15-minute period, we assumed 8 vehicles either entering or exiting the carpark during this period. Therefore, the noise level ($L_{Aeq,15min}$) used in this assessment was 70dBA at 5m. We note the car park activities readily achieves the environmental noise criteria and would not affect the amenity of the adjacent residential and commercial area.

Conclusion

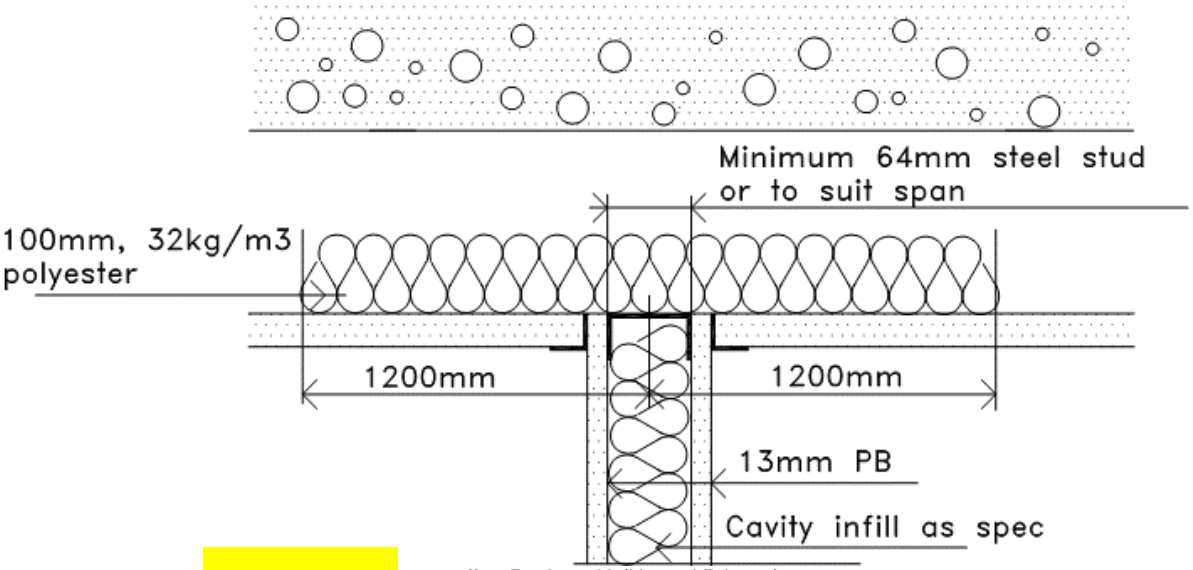
As a summary, we conclude the recommendations that were made throughout the report:

- For sound insulation recommendation please refer to Section Commercial/ Retail Component and Section Hotel/ Residential Component.
- For building envelope recommendation:
  - Noise intrusion from port activities and music noise impact from the Lighthouse Wharf Hotel and the Dockside Tavern have been taken into account to provide appropriate building envelope recommendations. (See Section: Building Envelope Recommendation.)
- For environmental noise recommendation:
  - Rubbish collection noise – We recommend the rubbish collection be restricted to the EPA stipulated day time only (i.e., after 7:00 am and before 10:00pm) Monday to Friday and after 9:00 am on Saturday and Sunday (if applicable) to achieve the day-time environmental noise criteria.
  - Delivery trucks noise – No further treatment required as noise emissions due to the delivery vehicle activities readily achieves the day-time environmental noise criteria.
  - Car park noise – No further treatment as the car park activities readily achieves the environmental noise criteria.
- For engineering services recommendations:
  - Mechanical services – Will be assessed once the mechanical plant selections and layout are available.
  - Hydraulic services – please refer to Section Hydraulic Services.

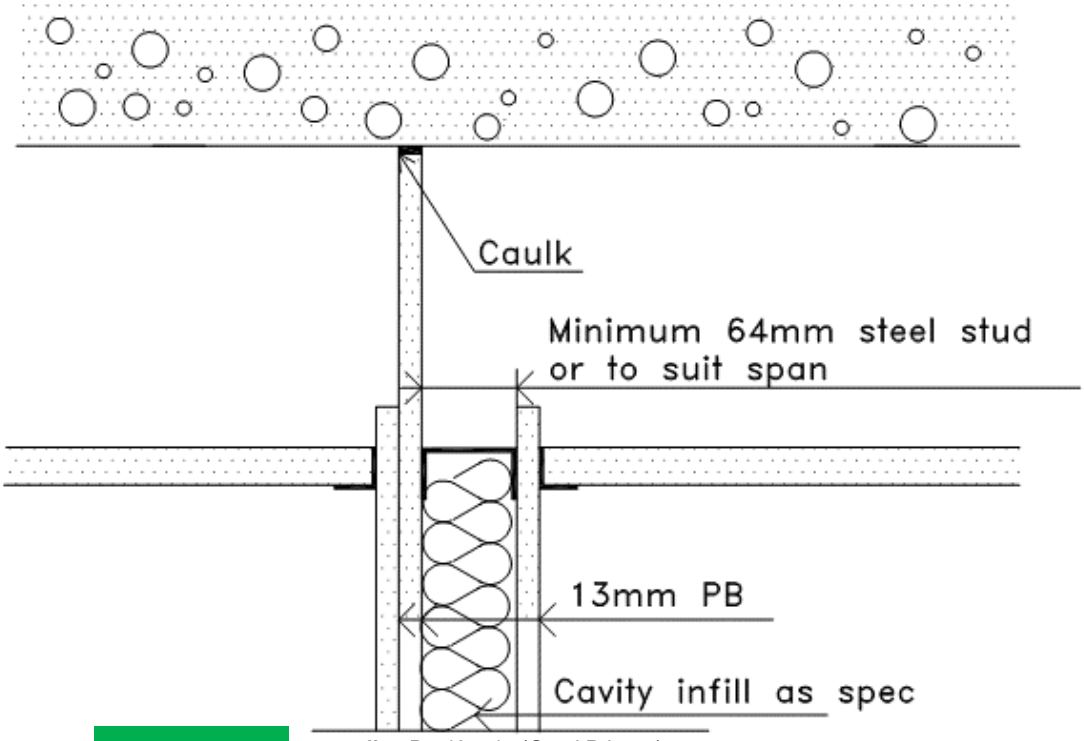
Appendix A

Standard Partition Construction Details

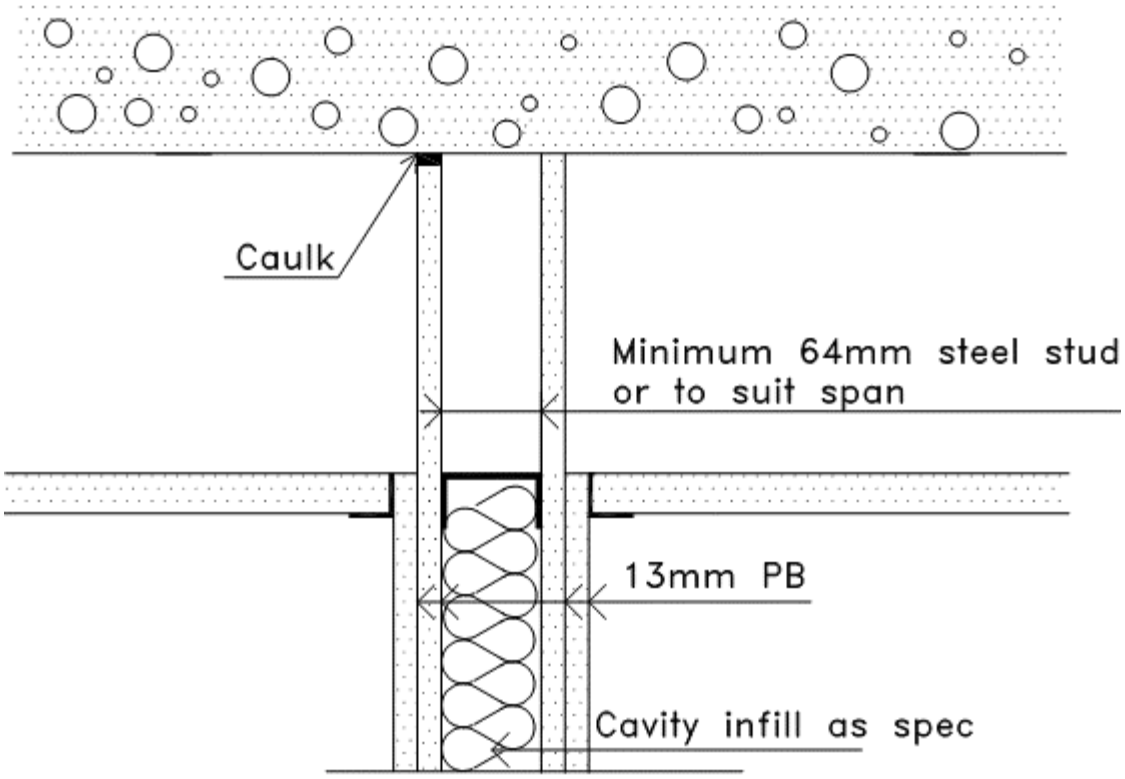
Speech Privacy	D_w	Mark-up Colour
Normal Speech Privacy	35 – 40	
Good Speech Privacy	40 – 45	
Very Good Speech Privacy	45 – 50	



Detail 1: D_W 35 – 40 (Normal Privacy)



Detail 2: D_W 40 – 45 (Good Privacy)



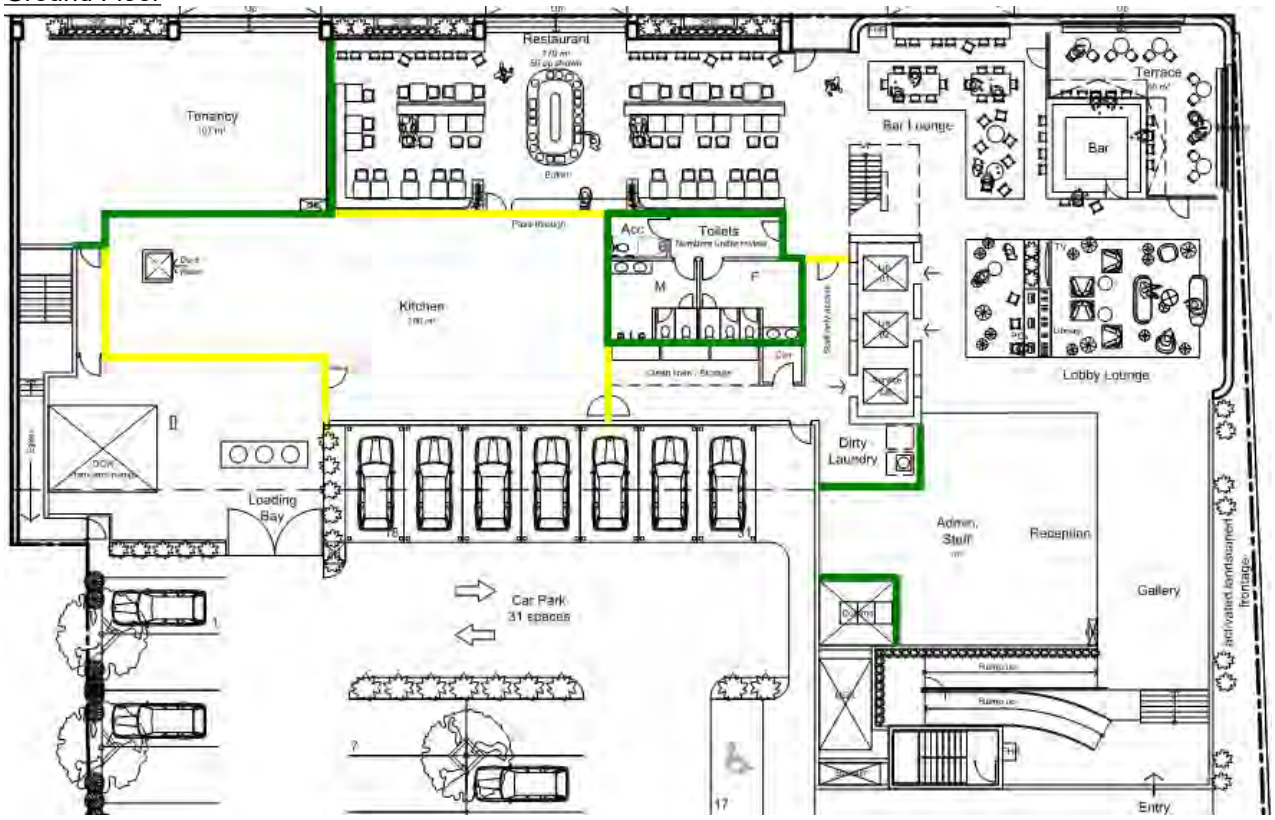
Detail 3: D_W 40 – 45 (Very Good Privacy)

Appendix B

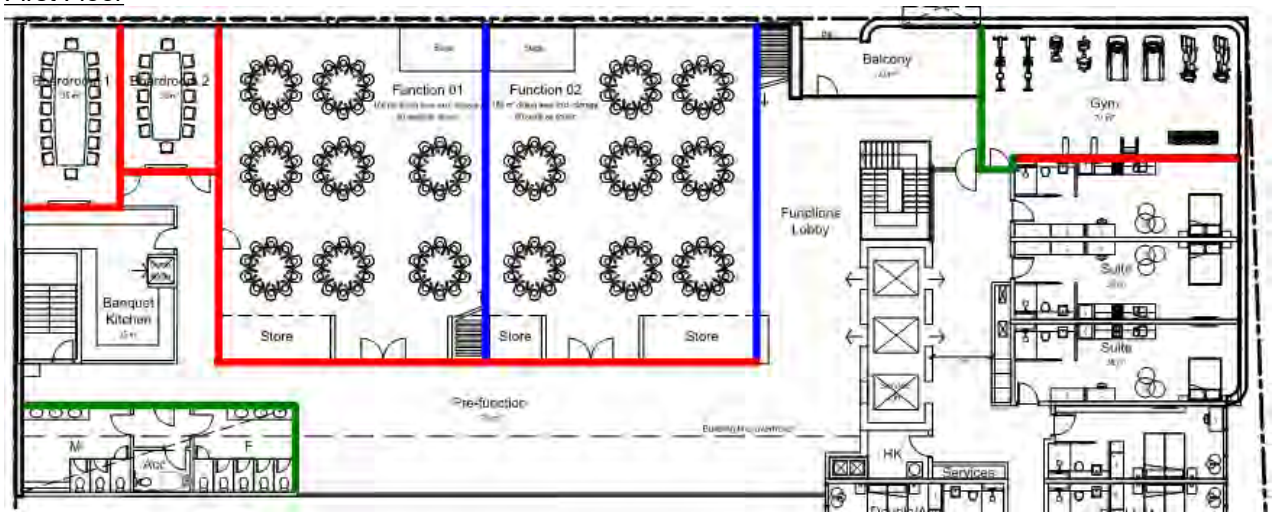
Internal Partition Mark-ups

Speech Privacy	D_w	Mark-up Colour
Normal Speech Privacy	35 – 40	
Good Speech Privacy	40 – 45	
Very Good Speech Privacy	45 – 50	
Operable Walls		

Ground Floor

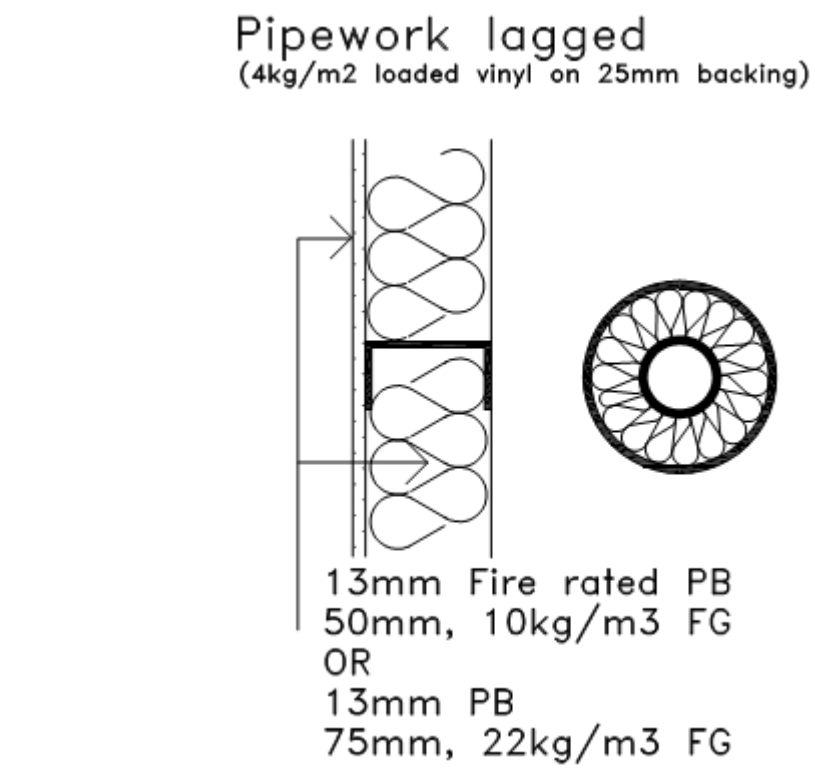


First Floor

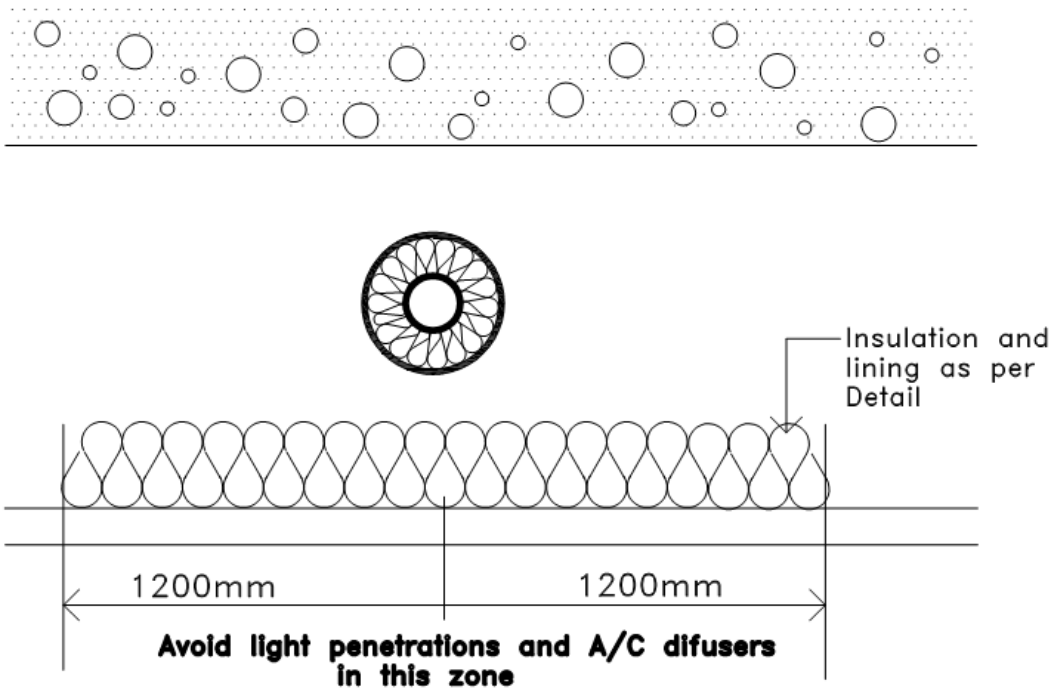


Appendix C

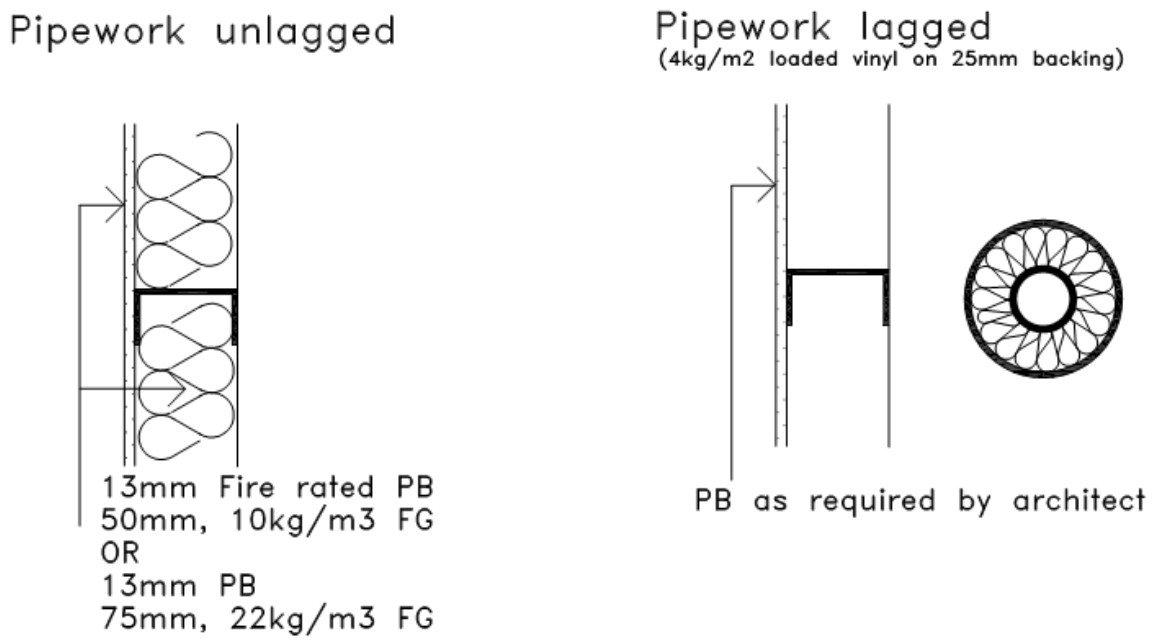
Hydraulic services details to achieve NCC compliance



Detail 4: Construction to achieve R_w+C_{tr} 40, for pipes running adjoining habitable spaces (Bedroom, Living)



Detail 5: Construction for pipes running through ceiling of habitable spaces



Detail 6: Construction to achieve R_w+C_{tr} for pipes adjoining non-habitable spaces (e.g. Bathroom, Laundry)

Appendix D
Glossary of Acoustic Terminology

dB(A) Also referred to as dBA. A unit of measurement, decibels(A), of sound pressure level which has its frequency characteristics modified by a filter ("A-weighted") so as to more closely approximate human ear response at a loudness level of 40 phons. The table below outlines the subjective rating of different sound pressure levels.

Noise Level (dBA)	Subjective Rating
25-30	Barely audible and very unobtrusive.
30-35	Audible but very unobtrusive.
35-40	Audible but unobtrusive.
40-45	Moderate but unobtrusive.
45-50	Unobtrusive with low levels of surrounding activity.
50-55	Unobtrusive with high levels of surrounding activity.

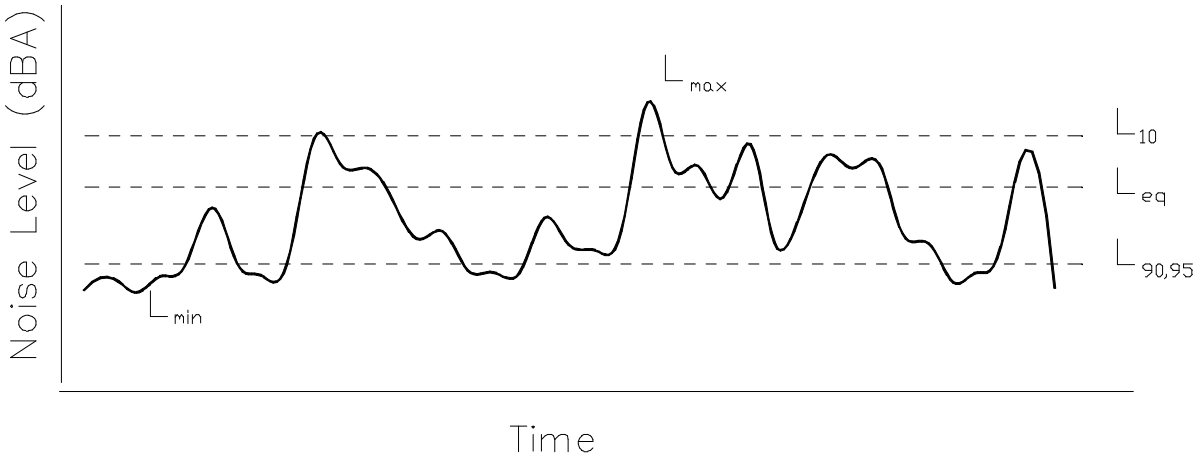
L_1 The noise level which is equalled or exceeded for 1% of the measurement period. L_1 is an indicator of the impulse noise level, and is used in Australia as the descriptor for intrusive noise (usually in dBA).

L_{10} The noise level which is equalled or exceeded for 10% of the measurement period. L_{10} is an indicator of the mean maximum noise level, and is used in Australia as the descriptor for intrusive noise (usually in dBA).

L_{90}, L_{95} The noise level which is equalled or exceeded for 90% of the measurement period. L_{90} or L95 is an indicator of the mean minimum noise level, and is used in Australia as the descriptor for background or ambient noise (usually in dBA).

L_{eq} The equivalent continuous noise level for the measurement period. L_{eq} is an indicator of the average noise level (usually in dBA).

L_{max} The maximum noise level for the measurement period (usually in dBA).



Note: The subjective reaction or response to changes in noise levels can be summarised as follows: A 3dBA increase in sound pressure level is required for the average human ear to notice a change; a 5dBA increase is quite noticeable and a 10dBA increase is typically perceived as a doubling in loudness.

STC/R_W Sound Transmission Class or Weighted Sound Reduction Index. Provides a single number rating (from the sound transmission loss or sound reduction index for each frequency band) of the sound insulation performance of a partition. The higher the value, the better the performance of the partition. The subjective impression of different ratings is shown in the table below.

Type of noise source	STC/Rw Rating				
	40	45	50	55	60
Normal Speech	Audible	Just Audible	Not Audible		
Raised speech	Clearly Audible	Audible	Just Audible	Not Audible	
Shouting	Clearly Audible	Clearly Audible	Audible	Just Audible	Not Audible
Small television/small entertainment system	Clearly Audible	Clearly Audible	Audible	Just Audible	Not Audible
Large television/large hi-fi music system	Clearly Audible	Clearly Audible	Clearly Audible	Audible	Just Audible
DVD with surround sound	Clearly Audible	Clearly Audible	Clearly Audible	Audible	Audible
Digital television with surround sound	Clearly Audible	Clearly Audible	Clearly Audible	Audible	Audible

FSTC/R_W' The equivalent of STC/R_W, unit for sound insulation performance of a building element measured in the field.

C_I, C_{tr} The ratings (R_W, D_{nTw}, L_{nTw}) are weighted in accordance to a spectrum suited to speech. This term modifies the overall rating to account for noise with different spectra, such as traffic (C_{tr}) or footfalls (C_I). The ratings may be written as R_W+C_{tr}, or $D_{nTw}/L_{nTw}+C_I$.

NNIC/D_{nTw} Normalised Noise Isolation Class, or Weighted Standardised Sound Level Difference. Provides a single number rating of the sound level difference between two spaces, and incorporates the effects of flanking noise between two spaces. This rating is generally accepted to be about 5 points less than the STC/R_W rating.

IIC/L_{nw} Impact Insulation Class, or Weighted Normalised Impact Sound Level. L_{nw}=110-IIC. The higher the IIC rating, or the lower the L_{nw} rating the better the performance of the building element at insulating impact noise. The table below gives the subjective impression of different ratings:

IIC	Lnw	Subjective Rating
40	70	Clearly Audible
45	65	Clearly Audible
50	60	Audible
55	55	Audible
60	50	Just Audible
65	45	Inaudible

FIIC/L_{nTw}' The equivalent of IIC/L_{nw}, but the performance is for the building element measured in the field.