Star City

PROJECT STAR

Preferred Project Report

December 2008

Star City SYDNEY HOTEL & CASINO

urbis

Preferred Project Report

Prepared for
Sydney Harbour Casino Properties Pty Limited

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	John Wynne
Associate Director	Ian Cady
Support Staff	Fiona Buchan
Job Code	SA3861
Report Number	Preferred Project Report

As the principal author of this report, I hereby certify that to the best of my knowledge the information contained herein is neither false nor misleading.

Ian Cady

URBIS
Australia Asia Middle East
www.urbis.com.au

FIGURES:

PICTURES:

TABLES:

APPENDICES

Executive Summary

A Major Project application and Environmental Assessment were recently submitted to the Department of Planning for:

- A new 309 room hotel with ancillary lower level retail, gaming and conference facilities on the currently vacant 'Switching Station' site.
- 500 additional basement car parking spaces to be accessed via the existing Casino car park.
- Re-development of the retail arcade through the ground floor level of the building, linking Pyrmont Bay Park to the intersection of Union and Pyrmont Streets, and to Jones Bay Road.
- The redevelopment of the eastern (Pirrama Road) portion of the casino building (currently occupied by large external stairs) to contain additional restaurants, retail outlets, gaming space, other entertainment and tourist related facilities, a ceremonial entry and two porte cochere driveways providing new vehicular drop-off to the Casino.
- Works on the exterior of the existing tower buildings to enhance their external appearance.

The application was publicly exhibited, referred to various statutory authorities and considered by the Department of Planning and a panel of design experts convened by the Department. Following consideration of a range of responses to the original submission, various refinements to the scheme have occurred and additional analysis undertaken. In accordance with Section 75H(6) of the EP&A Act, this 'Preferred Project Report' has been prepared to outline proposed amendments to the project to minimise its environmental impact.

Pirrama Road Façade

The architectural expression of the new façade proposed to Pirrama Road has been a key aspect of the proposed design. To ensure that design excellence is achieved, the Department convened a panel of design experts to advise on this aspect of the design of the project.

Following several meetings and the presentation of various different concepts to the panel, the building façade has been straightened to more clearly respond to the alignment of Pirrama Road. It now expresses a new entry structure comprising a clear glazed cylindrical form, with two distinct flanking façades. The formal grid created by the structure of these flanking facades will be finished in oxidised stainless steel panels set behind clear glazed planes. This formal balance of solid and glazed elements will express both the masonry character of Pyrmont and the light and activity appropriately associated with the casino use, and the entertainment context of the harbour side of the precinct.

The proposed vehicular drop-off facilities have also been amended to be contained wholly within the site, and have been split into two separate driveways either side of the new entry. The northern driveway will be reserved for VIPs and limousines, and both will be designed as high quality paved surfaces continuous with the adjacent pedestrian domain, identified by bollards and subtle surface treatments.

Car Parking

The City of Sydney has requested that the Minister apply the maximum parking rate of 1 space / 5 hotel rooms and 4 spaces / 100m^2 of function room area that apply to hotels within Central Sydney, resulting in a maximum parking calculation of 237 spaces for the hotel proposed on the Switching Station component of the site.

However, we stress that the site is not in Central Sydney, and the above maximum rates are therefore not applicable to the project. Furthermore, the 500 proposed additional car parking spaces relate not only to the proposed hotel, but also to proposed expansion of the integrated Casino, ballroom and retail development on the site, including retail and casino expansion on the Switching Station site. No specific standards exist for Casinos, and the RTA recommends analysis of existing comparable facilities. In the case of the proposed expansion of an existing facility, analysis of that facility is clearly the best indication of demand.

As detailed in the submitted EA, an holistic assessment of the entire development is appropriate. On this basis, the proposed 20% increase in parking (from 2,500 to 3,000) is entirely appropriate in the context of a 26.8% expansion of a comparable mix of facilities on the site, noting that existing facilities only satisfy 80% of actual demand, and that the then Minister has previously approved 550 additional spaces in association with a smaller development on the Switching Station site in 1997.

We also note that a large number of casino patrons currently park in residential streets during peak periods because the existing Star City car park is full. Failure to provide sufficient additional parking will exacerbate this problem.

Environmental Assessment

Star City is a key tourism and entertainment venue, situated on a prime site on the foreshore of Sydney Harbour. It attracts more than 8.5 million visitors a year and is important to Sydney's reputation as a modern, vibrant city. However, it is more than 10 years since Star City opened and upgrading is required if Sydney is to retain a quality gaming venue that remains competitive within the international casino market. Both Tabcorp (the operator of Star City) and the NSW Government have indicated that they want NSW to have a world class casino.

Under relevant planning controls the site is required to be developed for 'casino or complementary' development and all aspects of the project are permissible. While the proposed hotel building adopts a taller, more slender form than originally envisaged in the former master plan for the site, the total amount of development proposed is consistent, and the hotel tower will remain noticeably lower than the two existing towers. In conjunction with the proposed low scale 'podium' building to Union Street, this design concept will mediate between the height of the existing towers and the lower scale of surrounding buildings.

The new arcade and active street front uses will enliven the locality and improve the range of services available to casino guests and residents.

No significant adverse environmental effects are anticipated and the project will significantly improve the range of facilities and the appearance of the Casino, and reinforce the role of Sydney as a world class destination.

1 Introduction

This report constitutes Preferred Project Report, prepared on behalf of Sydney Harbour Casino Properties Pty Ltd for alterations and additions to the Star City Casino in Pyrmont.

It has been prepared in accordance with the requirements of Part 3A of the Environmental Planning and Assessment Act 1979 and State Environmental Planning Policy (Major Projects) 2005.

The project was declared a 'Major Project' by the Minister on 27 May 2008 and Director General's Environmental Assessment Requirements, also issued on 30 June 2008. Copies of the Minister's Major Project Declaration and the Director General's Requirements are included at **Appendix A** of the Environmental Assessment Report.

A Major Project application and Environmental Assessment were recently submitted to the Department of Planning. The application was publicly exhibited, referred to various statutory authorities and considered by the Department of Planning and a panel of design experts convened by the Department. Following consideration of a range of responses to the original submission, various refinements to the scheme have occurred and additional analysis undertaken.

In accordance with Section 75H(6) of the EP&A Act, this 'Preferred Project Report' has been prepared to outline proposed changes to the project to minimise its environmental impact.

2 Background

2.1 Pyrmont Bay Master Plan

The Pyrmont Bay Master Plan was adopted on 30 April 1993, prior to the incorporation of Sydney Regional Environmental Plan (SREP 26) into Sydney LEP 2005. It applied to the entire Darling Island, Pyrmont Bay Park / Boulevard and Casino precinct. Amendment 1 to the Master was adopted in May 1996, and applied specifically to the Switching Station site.

While the Master Plan was not carried forward when the former SREP 26 was incorporated into SLEP 2005, and therefore no longer has statutory effect, it nevertheless provides a useful guide to the original planning intentions that informed the current controls.

2.1.1 Urban Design / Built Form

Relevant urban design / built form principles established in the Master Plan include:

- *Use building forms to define the public domain by generally building to the street alignment or to an established building line and to a recommended height.*
- *Allow some variation with taller landmark buildings, but still maintain building line with podium, screen or landscape devices.*
- *Form a strong built edge to the water with a continuous line of buildings and a colonnade, linking the Maritime Museum to the historic Victualling yards (Revy).*
- *Building heights should increase from 14 metres at the waterfront to 28 metres behind with different forms of landmark buildings to a maximum of 66 metres.*

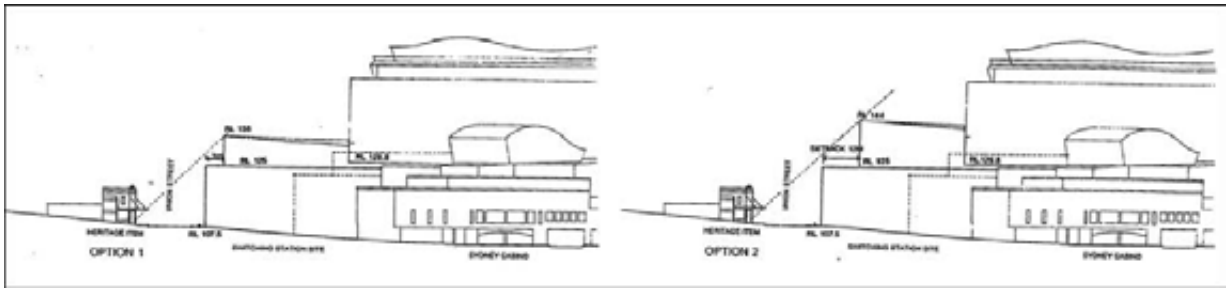
2.1.2 Height

With regard to height, the Master Plan stated that the:

> *"Building envelope of the Power Station/Entertainment complex site should be of an appropriate street scale along the foreshore boulevarde (Pirrama Road). Behind this, the landmark building envelope should not dominate the street, but should step to the general building height of 28 metres and up to a maximum landmark height of 66 metres".*

Amendment 1 provided two possible interpretations of the built form envelope controls applicable the Switching Station site. While neither option recognised the 'landmark site' height status of the site pursuant to Clause 25 of SREP 26, the second option did provide for additional height above the 28 metre SREP 26 control, in conjunction with slightly increased setbacks above podium level.

Figure 1 – *Master Plan Height Options*



Picture 1 – *Massing Options 1 (28 metre) and 2 (34 metre) from Pyrmont Bay Master Plan (Amendment 1)*

2.1.3 Floor Space

Of the overall business FSR of 2.5:1 applicable to the entire Master Plan area, the Master Plan redistributed this floor space in accordance with Clause 48 of the former SREP 26. Specifically it allocated less development potential around the waterfront and wharves, and a 'business' GFA of 119,000m^2 to the main Casino site and 21,500m^2 to the Switching Station site.

2.1.4 Car Parking

Relevant car parking principles established in the Master Plan include:

- Provide on-site parking within the range recommended in the Urban Development Plan.
- Provide for special needs parking for entertainment/hotel/casino complex subject to traffic study.

2.1.5 Entertainment/Casino/Hotel Sub-Area

While the Master Plan included a range of detailed provisions that have variously been incorporated into the existing Casino, of relevance to the current project are the following specific provisions:

- *Development will be built generally to the street alignment to define streets and the public domain*
- *A landmark section may be included up to 66 metres in height from the assumed natural ground level, covering not more than 30% of that part of the site to which the 28 metre height limit applies.*
- *Create an "Activity Strip" at ground level along the foreshore boulevard with views across park to the water.*
- *Encourage restaurants, bars and other similar activities associated with hotel and casino above with views across park to the water and the city.*
- *Facades to the foreshore park should create an architectural style and character appropriate for this highly significant location.*
- *Ground level activity should be encouraged on foreshore boulevard frontage and in the through-site pedestrian concourse and its connection the light rail concourse.*
- *A 3 metre colonnade should be provided to foreshore boulevard.*
- *Seek co-ordinated signage and night lighting and illuminated signs to commercial frontage to the foreshore boulevard.*
- *Provide pedestrian connection from light rail station to foreshore boulevard, to Jones Bay Road and to pedestrian concourse connection.*

2.2 Original Development Consent for the Casino DA 33/94

On 2 December 1994, the Minister granted consent for:

> *"Development of a casino and entertainment complex, including hotel, serviced apartments, theatres, restaurants, bars, car parking and associated facilities".*

The consent included the following relevant conditions:

Condition 4. FSR not to exceed 3:1.

Condition 13. Further design detailing of Pirrama Road stairs required to "*activate and enrich this elevation. This shall include a wide variety of cuisine options offering easy choice and easy accessibility for the public".*

Condition 16. *"The pedestrian concourse shall be located as shown on the drawings with the following features:*

i) pedestrian interest and activities.

ii) opportunities for through site views between the foreshore and Pyrmont Street.

iii) a minimum width of 6 metres, of which 4 metres is to be column free."

Condition 39. 2,500 car spaces are to be provided.

2.3 Development Consent DA 30/97 - Switching Station Site

On 22 October 1997, the Minister for Urban Affairs and Planning granted consent for the erection of a function centre with 550 car parking spaces and retail uses on the Switching Station Site. This development was designed generally in accordance with Amendment 1 to The Pyrmont Bay Master Plan. However, the scheme did not proceed and the consent has now lapsed.

2.4 Design Excellence (Design Competition for Switching Station)

On 12 March 2007 the Director General issued requirements for a Project Application for proposed redevelopment of only the Switching Station component of the site. Notably, these included a requirement to undertake a design competition overseen by officers of the Department of Planning. This competition was conducted, and in August 2007 a winning entry was recommended by a panel comprising three architects appointed by the Department of Planning and three representatives of the Casino.

The competition submission of the winning entry, and the panel's report are included at **Appendix B** of the Environmental Assessment Report**.**

The winning entry forms part of the current comprehensive Project for the entire Casino site. However, the design has continued to evolve through ongoing consultation with the members of the panel.

2.5 Community Consultation by Proponent

Prior to submission of the Project Application, Urbis conducted a community and stakeholder consultation process (**Appendix C** of the Environmental Assessment Report). The consultation process involved:

- Correspondence and one-on-one meetings with local MPs to brief them on the proposal and invite input
- Door-knocking and onsite interviews with adjoining neighbours, local residents, and community groups
- Meeting with the Chamber of Commerce
- Telephone interviews with relevant issue-based welfare groups and community services
- Staff briefings and production of a reference sheet for community enquiries
- Door-knocking and interviews with local businesses
- Broad distribution of community newsletters relaying information and inviting feedback on the current plans
- Walk-up interviews with local workers
- Display boards in the Casino foyer, and ongoing opportunities to provide feedback via a suggestion box, dedicated email address and 1800 phone number

- One-on-one meetings with concerned stakeholders
- Advice sought from Pyrmont Local Area Command Crime Prevention Officer, and Council's Community Development Team
- Meetings with key institutional stakeholders and interviews with peak tourism and hospitality bodies
- Meetings with relevant government agencies (e.g. Department of Planning, Sydney Harbour Foreshore Authority, Roads and Traffic Authority)
- Reporting on what was found.

Overall, participants in the consultation were supportive of the Casino's plans. There is a sense that the redevelopment will improve the retail, dining and recreational offer currently available in the locality, and will enable the Casino to cater to a broader cross-section of the community's needs for recreation, entertainment, and accommodation.

The stakeholders interviewed were pleased about:

- the retail offer, and the potential for the new arcade to become a community meeting space
- the general revitalisation of the Casino and the anticipated effect on the immediate vicinity
- provision of adequate parking facilities
- the upgraded entertainment and dining facilities
- opportunities for community benefit.

The primary issues for consideration identified through consultation are as follows:

- Crime and safety – while crime is not an issue in the Pyrmont area at present, there is a need to maintain strong site management and crime prevention through environmental design
- Competition and construction impact on commercial and retail business – the retail offer in the Star City premises should complement the existing retail mix in the area, and businesses should be kept informed about the construction timeframe and relevant changes to traffic and acoustics
- Local residential amenity – residents want to be informed about issues such as overshadowing, increase in traffic, demand for parking and disruption caused by construction were primarily raised by adjoining residents, who are eager to remain engaged in consultation through the planning and development process
- Provision of support services - Community and welfare groups want to be reassured that the Casino's support services for problem gambling, drug and alcohol abuse are adequate.

2.6 Statutory Exhibition of the Submitted Application

The above process of pre-application consultation has now been augmented by formal exhibition of the application by the Department of Planning. In accordance with Section 75H(5) of the Act, the Director-General provided the proponent with copies of submissions received (with names and addresses of non-statutory submitters deleted). Our summary of the issue raised in these submissions, and the proponents responses, are included at **Section 6** of this report.

3 Reasons for the Project

Star City is a key tourism and entertainment venue, situated on a prime site on the foreshore of Sydney Harbour. It attracts more than 8.5 million visitors a year and is important to Sydney's reputation as a modern, vibrant city. However, it is more than 10 years since Star City opened and upgrading is required if Sydney is to retain a quality gaming venue that remains competitive within the international casino market. Both Tabcorp (the operator of Star City) and the NSW Government have indicated that they want NSW to have a world class casino. Tabcorp recently concluded negotiations with the NSW Government which enable Star City to expand its table-game operations, and will result in Star City remaining the only casino in NSW for a further 12 years. Tabcorp has therefore decided to make a major investment in the Star City complex and proposes to refocus the buildings toward the harbour side, refurbish the gaming floor, increase the supply of hotel rooms and create a new restaurant, retail and entertainment precinct.

3.1 The Switching Station Site

The State Government always intended that the Switching Station would be developed as part of the Casino, and indeed this is a condition of the lease of the site to Sydney Harbour Casino Properties Pty Ltd, and a requirement of State Environmental Planning Policy No. 41 (see Section 6.2.4). Following the Sydney 2000 Olympics there was an oversupply of hotel rooms in Sydney, which made it uneconomic to develop the site. However, with increased hotel occupancy rates in recent years (see Section 6.17) redevelopment of the site for hotel and retail purposes is now proposed to fill an identified void in the tourism market.

3.2 The Through-Site Retail Arcade

Exclusion of the Switching Station site from the existing Casino has prevented a direct connection from the through-site retail arcade to the intersection of Pyrmont and Union Streets. The existing arcade has also lacked the critical mass to create an attractive retail destination. An increased retail offer and extension of the arcade to the intersection of Pyrmont and Union Streets at one end, and an activated Pirrama Road frontage at the other is proposed to create an attractive and active arcade to serve both customers and the general public seeking a route through the site.

3.3 The Pirrama Road Stairs

While the large scale of the stairs to the Pirrama Road entry to the casino provides some sense of grandeur to this frontage, the large area of the stairs, grade separation of active uses from the Pirrama Road frontage and the concentration of all vehicular movements at Pyrmont Street has compromised the functional connectivity between Pirrama Road and the Casino.

While the original purpose of the stairs was to facilitate the significant fire egress widths calculated for the gaming floor at the time of approval, subsequent refinement of these calculations in accordance with revised Regulations has revealed that considerably less width is required for egress, and more active uses and pedestrian amenities can now be incorporated (see **Appendix D** of the Environmental Assessment Report). Replacement of the stairs with active uses and the relocation of certain vehicular drop-off and casino entry functions to Pirrama Road is proposed to create a more active and visually exciting street edge to Pirrama Road and the Harbour, as originally envisaged in the master plan.

3.4 Architectural Expression of Existing Towers

The design of the existing casino building was the outcome of an intensive design process. However, the serviced apartment and hotel towers have heavy masonry facades reflecting the design sensibilities and urban planning controls of the early 1990's, when the casino was designed. The new scheme for the Switching Station hotel tower adopts a lighter more contemporary façade, and the existing tower facades are proposed to be updated to create visual compatibility between the existing and proposed towers.

4 The Site and Context

The site comprises the irregularly proportioned street block bounded by Edward Street, Pyrmont Street, Union Street, Pirrama Road and Jones Bay Road. It accommodates the existing Star City Casino, which was opened in 1997 and comprises:

- A 10,500m^2 main gaming floor.
- 3,800m^2 of retail space.
- 11 restaurants and 10 bars.
- 2 theatres.
- 480 hotel rooms / serviced apartments.
- A 900 person ballroom / conference facility.
- Basement parking for 2,500 cars.

The site also accommodates the light rail line and the 'Casino' light rail station and bus interchange, which are all housed within the casino building, adjacent to the Pirrama Road frontage. The southern portion of the site, known as the Switching Station site, has been the subject of previous approvals and Major Project applications, as discussed in Sections 2.3 and 2.4.

Figure 2 – Aerial Site Photograph

Picture 2 – *Aerial Photograph of the site*

Figure 3 – Site Photographs

Picture 3 – *The 'Switching Station' site (vacant foreground)*

Picture 4 – *Star City Casino, elevated view from Sydney CBD*

Picture 5 – *Existing Pirrama Road Stairs*

Picture 6 – *Existing Pirrama Road Stairs*

The former Switching Station site is part of the Casino site, but was not developed as part of the Casino development and remains vacant. This part of the site is located on the corner of Union, Pyrmont and Edward Streets, immediately to the south of the existing Casino complex. The site was formerly used as Substation No. 7160, owned by Sydney Electricity. This function has since been transferred to another site, and the property decontaminated to enable its redevelopment.

4.1 Legal Description

The site is leased by Sydney Harbour Casino Properties Pty Ltd from the Casino Control Authority, and has a total area of 39,206m^2, including the 4,756m^2 switching station site.

The site is legally described as:

- Lot 121 DP828957 (Switching Station Site).
- Lots 300-3-2 DP873212 (Main Site).
- Lot 1 DP 867854 & Lot 201 DP 867855 (Driveway which exits near Channel 7).

The subject site is affected by a number of easements. These affectations are not critical to the proposed scheme, and the intent of some, such as those regarding rights of way and shelter may be incorporated in new instruments. Such matters can be rationalised following approval of the final design. Conditions of approval to this effect would be appropriate.

Title surveys and a summary of existing easements are included at **Appendix E** of the Environmental Assessment Report.

4.2 Regional Context

The Casino is located in a major tourism precinct on the edges of Darling Harbour, overlooking the Sydney CBD. With around 3000 employees and 8.5 Million visitors per year, the Casino is a major tourist facility contributing to the image of Sydney as an international tourist and business destination. The quality of the Star City complex and its associated accommodation is important to the perception of Sydney as a 'world class' city by both interstate and international visitors.

4.3 Local Context

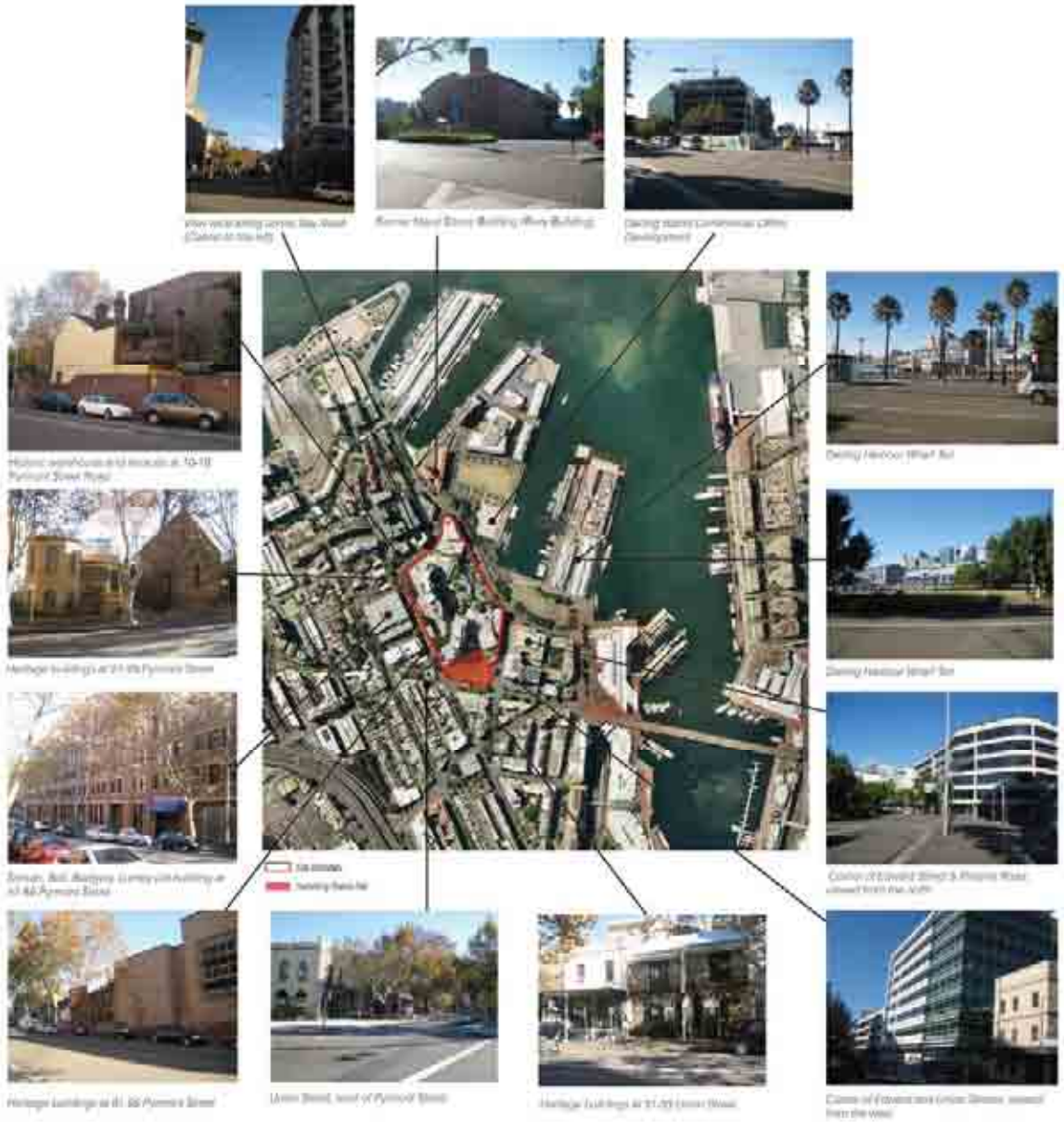
The immediate context of the site is highly varied in terms of its land use mix, built form and character. Historically, Pyrmont's urban pattern has been characterised by smaller residential forms on the ridge, with larger industrial, and now commercial building footprints occupying the flatter areas around the shoreline.

This is consistent with the role of the Pyrmont precinct as an inner urban mixed-use area, providing an immediate transition zone between the high-rise commercial core of the CBD and the suburban expanse to the west.

There is a contrasting built form within the surrounding area, including:

- Low scale (two storey) buildings in Harris Street.
- Medium rise (four to nine storey) buildings surrounding the site.
- Higher building elements, such as the Star City Casino and more recent residential development at Distillery Hill.

Figure 4 – *The Locality*



Picture 7 – *Development in the immediate vicinity of the Casino*

4.3.1 North

To the north of the site across Jones Bay Road is a precinct of high density, predominantly residential development of typically eight storeys in height.

4.3.2 East

To the north-east of the site are Jones Bay Wharf, Darling Island and Darling Harbour Wharf 10, which comprise a number of new buildings and refurbished former maritime/storage buildings. These buildings are now used for a mix of commercial office and residential uses, and are set amongst a number of landscaped foreshore open spaces.

To the south-east is a street block of mixed retail and commercial uses characterised by the modern 5 and 8 storey office buildings on the opposite side of Edward Street, and a lower 3 storey office building, remnant heritage listed pubs and terrace house buildings on Union Street.

Further east is Darling Harbour and the Sydney CBD, which has a direct visual connection to the Casino.

4.3.3 South

Union Street forms the southern boundary of the site. Its alignment extends from Union Square on Harris Street to Pyrmont Bridge, which provides direct pedestrian and monorail access to the Sydney CBD.

A low scale, predominantly residential precinct of two to three storey buildings with numerous active ground level uses exists on the southern side of Union Street. The terrace buildings on the southwest corner of Edward Street are heritage items.

4.3.4 West

A diverse range of building styles, heights and land uses exist to the west of the site across Pyrmont Street. A high proportion of these buildings are heritage listed, including the row of terrace houses occupying the entire length of the northern side of Union Street, west of Pyrmont Street.

4.4 Access and Transport

The site is located at an important strategic juncture between the residential areas of Pyrmont to the south and west and the more intensive entertainment and commercial elements wrapping around the peninsula's edge from Darling Harbour.

The key elements of the traffic and transport system are summarised below.

Car Access

Presently there are three major locations of vehicular access to the casino for the public. These are:

- Edward Street North/Pirrama Road intersection. Five control gates are available and tidal flow arrangements are envisaged if demanded by peak flows. This intersection, which is signal controlled, also allows for coach ingress to the coach drop-off, pick-up and parking area, and Showroom Theatre loading.
- Edward Street South from Pyrmont Bridge Road where two entry and two exit lanes are available to the car park.
- The porte cochere which is located on the Pyrmont Street frontage (entrance via Jones Bay Road) and includes direct dedicated circulation to and from the car park for valet parking.

Public Transport

The site enjoys a high level of accessibility by public transport, including:

- The Star City light rail stop, which provides access to and from the CBD and inner western suburbs. Services operate 24 hours per day, every 10 to 15 minutes.
- Pyrmont Bay Ferry Wharf, which provides access to and from the CBD, Balmain, the Lower North Shore and Circular Quay, operating every 30 minutes.
- Local bus services, which connect Pyrmont to the CBD, operating between 6.00am and 1.00am, approximately every 10 minutes.
- The Sydney Monorail, which runs every 3 to 5 minutes, linking Pyrmont and the CBD.

Pedestrian & Cycling Activity

There are significant pedestrian and cyclist flows along Union Street, including:

- Local residents walking to and from work in the CBD.
- Employees in the western commercial developments in Pyrmont walking to and from transport services in the CBD.
- Pedestrians and cyclists from inner western suburbs travelling via Anzac Bridge through Pyrmont to and from the CBD.

Union Street is not affected by heavy vehicle traffic, enhancing its use as a pedestrian and cycle route, and the City of Sydney has imminent plans to create dedicated bicycle lanes along the length of Union Street.

4.5 Socio-demographic Profile

Key indicators of the socio-economic conditions of Pyrmont are:

- Over 94% of Pyrmont residents live in apartments or units
- The population of Pyrmont is predominantly young. Residents in Pyrmont aged between 20-29 years constitute the largest population group (34.8% of Pyrmont residents) according to the 2006 Census. The proportion of residents in this age group has dropped slightly since the 2001 Census which recorded 35.7% in this age range. This figure is substantially higher than the wider Sydney area of 15.1%
- The second highest population group in Pyrmont is those aged 30-44 years which is 31.9% of the local population. This is also higher than the Sydney average of 23.6%
- Average incomes are high, some 75% above the average per capita income in the Sydney Metropolitan area (Sydney).
- Household sizes are small at 2.02, compared to 2.7 for Sydney. This is not surprising given the inner city location, which appeals to the younger demographic, typically with no dependents. In fact, 65% of the residents are aged 14-39, compared to only 38% for Sydney.
- A high proportion of the households are classified as ‘non-family’ households (45% compared to 27% for Sydney). Of these, two-thirds are lone person households. The majority of the households classified as ‘family households’ are couples with no children (62% compared with 33% in Sydney).
- The majority of the residents are employed primarily in white collar employment (88%). These people are also more likely to have a tertiary qualification (34%).

In summary, the area is characterised by young, professional, high income earners. There are few families in the area, with singles and couples the primary household type. The appeal for this area in the future is likely to remain the same, with people moving into the next stage of their lives (family/children) likely to move out, while the next generation of young professionals move in.

Table 1 – Pyrmont Population

Pyrmont Local Catchment Area, 1991-2016 **Table 3.1**

Year/Period [1]	Estimated Resident Population (No.) [1] Local Catchment	Net Change Per Annum [2]	% Change Trade Area [2]
1991	1,700		
1996	3,900	440	18.1%
2001	8,300	880	16.3%
2006	10,440	430	4.7%
2011	12,500	410	3.7%
2016	13,500	200	1.6%

1. as at June

2. for each 5 year period

Source : ABS Cdata 1991, 1996, 2001 and 2006; ABS, Regional Population Growth, Australia, Electronic Delivery (3218.0.55.001); ie. Title, Author, Date, ABS publication number etc; Urbis

4.6 Site Analysis

The Buchan Group have undertaken the site and locality analysis summarised in the image below:

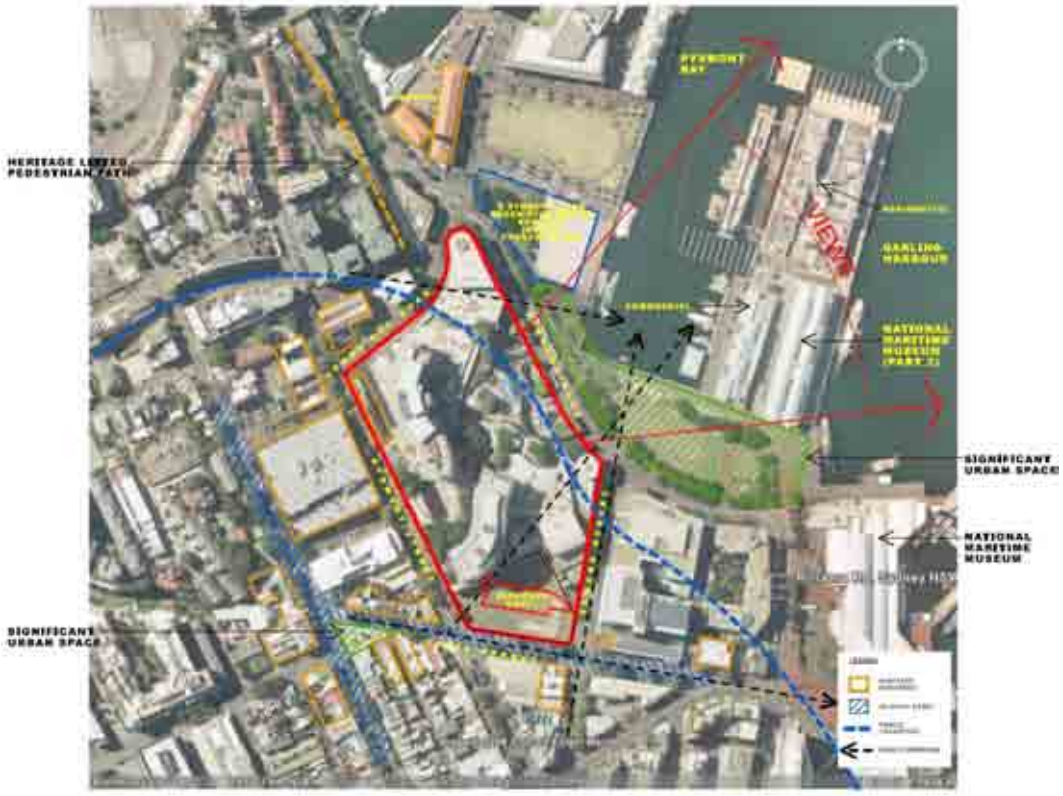


Figure 5 – Site analysis plan

4.7 Geotechnical Conditions

A Geotechnical Investigation Report has been completed by Jeffrey and Katauskas Pty Ltd. In view of the bulk of this report, a copy will be submitted under separate cover to the Department of Planning. With the exception of some dewatering requirements that will be required in relation to excavation of the Switching Station site, there are no specific geotechnical constraints effecting the site.

Works on the main casino site are all proposed above existing structure and geotechnical conditions are therefore not relevant.

5 The Exhibited Project

The Major Project Application was originally submitted on 12 September 2008, and related to substantially the same development as is currently proposed. However, following referral of the application to a range of statutory agencies, public exhibition, preliminary assessment by Department of Planning officers and a process of ongoing consultation with the Design Review Panel convened for the project by the Department, a range of amendments have been made in response to issues raised.

While the hotel proposed on the Switching Station site, and the upgrades to the existing tower facades remain as originally proposed, the design of the Pirrama Road façade has been significantly revised as described at Sections 7 and 8 below.

A computer generated images of the originally proposed works to Pirrama Road is included at Figure 5.

Figure 6 – Computer generated image of the originally proposed Pirrama Road facade

6 Response to Submissions

The issues raised in public submissions to the Department of Planning, and the proponents response to these issues are summarised below.

Key Issues

1. Additional 500 car parking spaces
2. Impact on local traffic & parking
3. Impact on pedestrian movements
4. Porte cochere
5. Undercroft area
6. Additional Requirements
7. Public Transport
8. Traffic Studies and Modeling
9. Building height & bulk
10. Façade treatments
11. Building design and appearance
12. Signage and LCD System
13. Views, vistas, impact on surrounding aesthetic
14. Heritage
15. Social Impact
16. Impact on local businesses
17. Public Consultation
18. Ecologically Sustainable Development
19. Construction Management
20. Planning Compliance
21. Other

1. Additional 500 car parking spaces

- Generation of additional traffic & impact to surrounding area
- Impact functioning of port cochere
- Provision of 500 spaces excessive

Response

The City of Sydney seeks to apply the maximum parking rate of 1 space / 5 hotel rooms and 4 spaces / 100m^2 of function room area that apply in Central Sydney, resulting in a maximum parking calculation of 237 spaces for the hotel proposed on the Switching Station component of the site.

However, we stress that the site is not in Central Sydney, and the above maximum rates are therefore not applicable to the project. Furthermore, the 500 proposed additional car parking spaces relate not only to the proposed hotel, but also to proposed expansion of the integrated Casino, ballroom and retail development on the site, including retail and casino expansion on the Switching Station site. No specific standards exist for Casinos, and the RTA recommends analysis of existing comparable facilities. In the case of the proposed expansion of an existing facility, analysis of that facility is clearly the best indication of demand.

As detailed in the submitted EA, an holistic assessment of the entire development is appropriate. On this basis, the proposed 20% increase in parking (from 2,500 to 3,000) is entirely appropriate in the context of a 26.8% expansion of a comparable mix of facilities on the site, noting that existing facilities only satisfy 80% of actual demand, and that the then Minister has previously approved 550 additional spaces in association with a smaller development on the Switching Station site in 1997.

A large number of casino patrons currently park in residential streets during peak periods because the existing Star City car park is full. Failure to provide sufficient additional parking will exacerbate this problem.

2. Impact on local traffic & parking

- General comment
- Existing traffic congestion exacerbated by new traffic & parking arrangements
- Parking overflow into surrounding streets

Response

Modelling conducted by ARUP during all peak periods (including 10pm -1am Friday and Saturday nights) shows that all of the intersections specified in DGRs will continue operating acceptably into the future.

3. Impact on pedestrian movements

- General comment
- Removal of sheltered walking path between Jones Bay and Pirrama Roads
- Potential vehicle & pedestrian conflict
- Separation of pedestrian and vehicle uses
- Reduced pedestrian amenity

Response

- A weather protection awning will be provided along all frontages where new work is proposed.
- While 4 vehicle crossing points are proposed to Pirrama Road, the frontage is some 120 metres wide, and there will be unobstructed level sightlines between pedestrians and vehicles. Furthermore, the northern driveway (2 crossings) will be limited to use by limousines/VIP vehicles.

4. Porte cochere

- General comment
- Impact on pedestrian and vehicular movements on Pirrama Road
- Enforcement of restricted vehicular access to porte cochere
- Potential vehicle & pedestrian conflict at entry to porte cochere
- Impact on street activation
- Provides opportunity for concentration of anti-social behaviour
- Ongoing management of Jones Bay Road Taxi Rank

Response

- Use of the Pirrama Road driveways will be easily enforced through the use of removable bollards and the driveways will only be used for arrival and drop off.
- The existing successful management of antisocial behaviour at the Pirrama Road frontage will be modified to accommodate the new design.
- The additional vehicular drop off facility will provide options for the management of taxi operations.

5. Undercroft area

- Congestion of undercroft area (bus and coach facilities)
- Entrance to undercroft area too narrow for coach/bus entry

Response

- The trafficable area for bus and passenger movements is not altered. While the new Pirrama Road stairs will slightly reduce the perceived headroom, it will not compromise the manoeuvring area available for buses.

6. Additional Requirements

- Swept path of longest vehicle to be submitted
- Layout of carpark to be in accordance with AS.2890.1-2004 and AS.2890.2-2002
- All entries to enter and exit the site in a forward direction
- Demolition and Construction Traffic Management Plan to be submitted
- All works/regulatory signposting to be at no cost to RT
- Upgrade the footpath area of Union Street to City of Sydney requirements
- Inclusion of parking countdown display
- Line marking arrangements around entry to car park
- Public domain (driveway & footpath) should be designed to City of Sydney's Street Design Code
- Union Street to be designed to accommodate on-road cycle way

Response

- Layout of car park will be in accordance with AS.2890.1-2004 and AS.2890.2-2002, and will accommodate the swept path of the longest vehicles proposed.
- While the existing loading operations of occasional heavy vehicles delivering stage sets and the like at the commencement of major shows will continue, all other vehicle movements into and from the site will be in a forward direction
- A Construction Traffic Management Plan has been submitted
- All works/regulatory signposting will be at no cost to RTA
- Union St footpaths will be upgraded to City of Sydney requirements

- Parking countdown displays will be clearly displayed at car park entries.
- Public domain (driveway & footpath) will be designed to City of Sydney's Street Design Code
- Union Street footpath works will be designed to account for the Union Street cycle way

7. Public Transport

– Increased public transport servicing

– Public transport strategies to encourage mode share

Response

- The existing bus and light rail facilities will be maintained unaltered.
- The proposed Pirrama Road works will enhance the amenity and utility of the existing bus/rail interchange within the site.

8. Traffic Studies and Modeling

– Inadequacy of Traffic Impact Report

– Comprehensive traffic study to be undertaken for Pyrmont

– Additional traffic modeling required

Response

- Traffic modelling and impact analysis is included in the report by ARUP, included at **Appendix Q** of the submitted Environmental Assessment Report, and addressed further in the supplementary statement included at **Appendix A** of this report.

9. Building height & bulk

– Height excessive/does not comply controls

– Not a landmark site & not eligible for increased height

– Overshadowing

– Not compatible with surrounding area (particularly heritage elements)

– FSR

Response

- Height compliance is addressed in the submitted Environmental Assessment Report. Whilst we note the concerns raised in relation to the height of the proposed hotel, the proponent requests that the application be determined on the basis of the currently proposed height. The proposed tower is no higher than the existing Star City buildings, is strongly supported by the tourism industry and needs to be the proposed height to be economically viable.

- Landmark notation relates to the Casino site, of which the switching station is part, pursuant to SEPP 41.
- Additional analysis of overshadowing is included in the revised architectural drawings at **Appendix B.**
- The switching station is part of the casino and the tower relates thereto. The podium complies with street edge height controls and adopts an appropriate sandstone expression.
- FSR is consistent with original master plan intent.

10. Façade treatments

- Reflection from glass façade
- Scale of glass frontage to Pirrama Rd to be reduced
- Sandstone to be incorporated into façade
- Façade detracts from character of area

Response

- The reflectivity report included at **Appendix C** demonstrates that no unreasonable reflectivity impacts will result from the project.
- The Pirrama Road façade has been modified to incorporate prominent masonry elements.
- A high proportion of glazing is proposed to express internal activity to the public domain in keeping with the casino function of the development, and the ciontext of the entertainment precinct within which it is located.

11. Building design and appearance

- Design does not complement location/ not in keeping with locality
- Lack of design excellence/poor design outcome
- Does not contribute to village/heritage envisaged for area
- Activation of street level preferred

Response

- The design of the hotel proposed on the Switching Station site the outcome of Design Competition and the Pirrama Road façade is the outcome of an extensive design consultation with Design Review Panel appointed by the Department.
- Human scale and articulation of Switching Station podium sympathetic to village character.
- Both Street frontages provide active uses addressing the street

12. Signage and LCD System

- Excessive amount of signage
- Further signage information to be submitted

- Signage will detract from heritage character
- Visual impact of LCD lighting and signage
- Light pollution

Response

- Whilst subjective, the extent of illuminated signage is consistent with Casino typologies and the level of activity and excitement appropriately associated with NSW's only casino.

13. Views, vistas, impact on surrounding aesthetic

- Detrimental impact of skyline
- Interruption &/or loss of visual connections/ views and view corridors

Response

- Visual connections and view impacts are addressed in detail in the report of Gabrielle Morrish included at **Appendix N** of the submitted Environmental Assessment Report.

14. Heritage

- Impact on surrounding heritage items/historic character
- Heritage impact assessment to be undertaken

Response

- The proposed works do not directly effect any heritage item. Surrounding items already exist in a context of historic buildings adjacent to a major casino facility. The proposed sandstone podium to Union Street reconciles this relationship.
- A formal Heritage Impact Statement is not statutorily required or warranted.

15. Social Impact

- Restriction on outdoor gaming
- Noise from increased gaming areas/ balconies
- Increased gaming areas will increase existing anti-social behaviour
- General social impact of gambling-related development
- Tobacco smoke pollution from outdoor gaming areas
- Increased anti-social behaviour & crime
- Compromised safety/security for local residents
- Need for increased police presence

- Inadequacy of Social Impact Report
- Impact of construction on local residents
- Need for provision of community space within development

Response

- Gaming related issues fall within the jurisdiction of the licensing function of the Casino Control Authority.
- The Casino has an existing Security Management Plan that will be updated to reflect the revised design and additional facilities.
- Smoke pollution will be no different than that resulting from patrons currently going outside for a cigarette.
- A Construction Management Plan has been submitted.
- Potential Social Impacts are addressed in the Social Impact Assessment prepared by Urbis and included at **Appendix U** of the submitted Environmental Assessment Report.

16. Impact on local businesses

- Local businesses undermined by casino development
- Development does not complement local business mix

Response

- The Economic Impact Assessment included at **Appendix V** of the submitted Environmental Assessment Report demonstrates that the proposal will have no medium to long term adverse impact on surrounding retailers.
- The final mix of retailers is yet to be determined.

17. Public Consultation

- Issues with public consultation process (ie lack or unwillingness to consult)
- Public consultation to establish local community needs for retail outlets

Response

- While Star City engaged Urbis to conduct community consultation, such consultation is not mandatory and only complements the formal public exhibition of the application by the Department of Planning.

18. Ecologically Sustainable Development

- Retention of water feature
- Waste of water in water features

- Wasteful electricity usage
- Effect of building on wind tunnelling
- Retention of trees
- Requirement for Water Sensitive Urban Design
- 5-star rating to be achieved

Response

- A 4 Star NABERS rating is proposed and reflects a very high level of performance for the use specific characteristics of a hotel.

19. Construction Management

- Trade Waste
- Storm water
- Engagement of Water Servicing Coordinator
- Control of Sediments
- Management of loading dock congestion

Response

- A Construction Management Plan is included at **Appendix X** of the submitted Environmental Assessment Report.
- The project includes various Statements of Commitment, and conditions of consent will also require a range of management plans to address ongoing operational management. A Construction Certificate will also be required.

20. Planning Compliance

- Consideration of Clause 25 Sydney Harbour Catchment Sydney REP 2005
- Consideration of Clause 26 Sydney Harbour Catchment Sydney REP 2005
- Consideration of Section 5.3 of the Sydney Harbour Foreshores and Waterways Area DCP
- Consideration of Section 5.4 of the Sydney Harbour Foreshores and Waterways Area DCP
- Consideration of Section 5.5 of the Sydney Harbour Foreshores and Waterways Area DCP
- Master Plan to be developed and adopted before DA is approved

Response

The above provisions state:

SREP (Sydney Harbour Catchment) 2005

25 Foreshore and waterways scenic quality

The matters to be taken into consideration in relation to the maintenance, protection and enhancement of the scenic quality of foreshores and waterways are as follows:

(a) the scale, form, design and siting of any building should be based on an analysis of:

(i) the land on which it is to be erected, and

(ii the adjoining land, and

(iii) the likely future character of the locality,

(b) development should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands, foreshores and tributaries,

(c) the cumulative impact of water-based development should not detract from the character of the waterways and adjoining foreshores.

26 Maintenance, protection and enhancement of views

The matters to be taken into consideration in relation to the maintenance, protection and enhancement of views are as follows:

(a) development should maintain, protect and enhance views (including night views) to and from Sydney Harbour,

(b) development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items,

(c) the cumulative impact of development on views should be minimised.

Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005

5.3 SITING OF BUILDINGS AND STRUCTURES

The following criteria should be observed when siting buildings and structures:

- *where there is existing native vegetation, buildings should be set back from this vegetation to avoid disturbing it;*
- *buildings should address the waterway;*
- *buildings should not obstruct views and vistas from public places to the waterway;*
- *buildings should not obstruct views of landmarks and features identified on the maps accompanying this DCP; and*
- *where there are cliffs or steep slopes, buildings should be sited on the top of the cliff or rise rather than on the flat land at the foreshore.*

Where a council has not set a foreshore building line, buildings should be sited having regard to:

- *the above criteria;*
- *minimising loss of views; and*
- *the siting of the buildings on adjoining properties.*

5.4 BUILT FORM

Buildings and other structures should generally be of a sympathetic design to their surroundings; well designed contrasts will be considered where they enhance the scene. Many councils have development controls governing built form and the heights of buildings. The following guidelines are designed to reinforce the local requirements:

- *where buildings would be of a contrasting scale or design to existing buildings, care will be needed to ensure that this contrast would enhance the setting;*
- *where undeveloped ridgelines occur, buildings should not break these unless they have a backdrop of trees;*
- *while no shapes are intrinsically unacceptable, rectangular boxy shapes with flat or skillion roofs usually do not harmonise with their surroundings. It is preferable to break up facades and roof lines into smaller elements and to use pitched roofs;*
- *walls and fences should be kept low enough to allow views of private gardens from the waterway;*
- *bright lighting and especially floodlighting which reflects on the water, can cause problems with night navigation and should be avoided. External lights should be directed downward, away from the water. Australian Standards AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting should be observed;*
- *use of reflective materials is minimised and the relevant provisions of the Building Code of Australia are satisfied;*
- *colours should be sympathetic with their surrounds and consistent with the colour criteria, where specified, for particular landscape character types in Part 3 of this DCP;*
- *the cumulative visual impact of a number of built elements on a single lot should be mitigated through bands of vegetation and by articulating walls and using smaller elements; and*
- *the cumulative impact of development along the foreshore is considered having regard to preserving views of special natural features, landmarks or heritage items.*

5.5 SIGNAGE

Signs can be obtrusive but they are often necessary and, if done imaginatively, can enliven a scene. A consistent series of signs, using a unified graphic style and construction and siting principles, should be used in particular areas to indicate all the public open spaces along the waterway.

The Department has prepared the Parramatta River Foreshore Signage Manual (3rd Edition) which contains detailed design guidelines for signage on public open space along the Parramatta River. The requirements of the Manual should be followed for publicly owned land along the Parramatta River.

See also State Environmental Planning Policy No. 64—Advertising and Signage (SEPP 64).

In addition, councils have signage policies applying to each local government area. The following criteria are designed to reinforce the local requirements and provide guidelines in the absence of any other signage policy. Signs on privately owned land should meet the following requirements:

- *they should be of minimal dimensions and consistent with the commercial or community identity of the premises;*
- *they should not be brightly illuminated to avoid becoming navigational hazards. Lighting of signs should be directed downward away from the water;*
- *they should preferably be placed on the facades of buildings, rather than on roofs or free standing; and*
- *signs that intrude on the skyline should be avoided.*

These matters have all been considered, as relevant, in the development and assessment of the project, and specifically the Visual Impact report of Gabrielle Morrish included at **Appendix N** of the submitted Environmental Assessment Report.

With regard to the need for a Master Plan, in the context of an area where all surrounding sites have been fully developed, a master plan would serve no purpose. It would simply involve the stripping away of detail from the current application and separating that detail into a separate application.

Pursuant to Clause 106(2) of Sydney LEP 2005, The Minister has the power to waive the requirement for a master plan in circumstances such as these.

21. Other

- Basement encroachment on Metro Rail Corridor Alignment
- Sea level rising
- Omission of contour line maps
- Increases CO2 emissions
- Damages the economy

Response

- The structural design of the proposed basement car park is not contingent upon the proposed railway tunnel and will be designed in consultation with relevant rail authorities.
- Sea level changes are an issue beyond the scope of the Casino to address.
- Contour lines would provide no relevant information in the context of a developed urban site.
- CO^2 emissions will be consistent with a 4 Star NABERS rating.
- The Casino makes a significant contribution to the National, NSW and local economy, and will employ significant numbers of people in both the construction and operational phases of the project.

6.1 Response to Design Review Panel

Various iterations of the Pirrama Road façade design have been presented to and discussed with the design review panel convened for the project by the Department. With specific regard to the most recent comments of the panel, the following responses are made.

> ***"Building Façade***
>
> *The revised building façade is considered to be a slight improvement on the EA proposal but is in need of more refinement and detailing.*
>
> *The PPR is to include sufficient information with regard to materials and finishes on the façade to ascertain the architectural character of the new elevation.*
>
> *The flanking facades on either side of the main pedestrian entry zone would appear to be finished mainly in glazing so that their appearance would be similar to the EA proposal, particularly in night time views. Solids and voids should be more legible on the elevation and glazing should be reduced.*
>
> *The flanking facades should be of more formal geometrical design and should be straight in plan, following the line of the property boundary. These facades should include more extensive use of sandstone or other solid material at and above street level as a contrast to the glazed entry façade area".*

Response

The façade has been further revised in direct response to the above comments. It has been straightened in plan to follow the alignment of the property boundary. The facades flanking the entry element incorporate the expressed masonry structural grid, providing a more formal geometric design and a more legible balance of solids and voids. Sandstone is proposed at ground level.

A single drop-off area at the southern end of the frontage is preferred, freeing up the northern area for public uses such as cafes, seating, outdoor performance space and the like.

The drop-off drive should be straightened to align with the property boundary. This will offer better functionality and more drop off space and less encroachment onto the pedestrian area and café seating area. The porte cochere should also be realigned accordingly.

The footpath crossing area is to be treated as a 'shared zone' with no grade separation from the footpath proper. The entire footpath area including the drop off should be paved in high quality paving and the vehicular area subtly marked in the paving pattern. Contrasting paving is to be provided to the footpath / driveway crossover zone".

Response

The entire drop-off area and porte cochere have been straightened to align with the property boundary and will be treated as a single shared zone, with vehicle zones defined by paving contrast, rather than grade separation. While the northern drop off area is still proposed, it will only be used for limousine and VIP arrival, providing a special ceremonial entry. However, as a continuous surface with managed vehicular access, the design will not preclude possible use for outdoor performance, public events and the like.

"Plan Treatment

Locations of columns to support the upper level restaurant areas will be critical to the functionality of the ground plane. Columns are to be indicated on the ground level plan in a logical location to allow free movement of pedestrians and vehicles and to complement the architectural quality of the façade"

Response

Ground plane columns have been rationalised to reflect the straightened façade and create a more formal colonnade, with adjacent unobstructed path of travel with awning cover.

7 Proposed Amendments

The amendments to the proposed Pirrama Road façade and porte cochere are described by the project architect as:

Pirrama Road Level (B02 Plan)

- *The façade has been realigned to provide a straight plane addressing the Pirrama Road and property boundary alignment, incorporating a fold in the plan form at the southern end in response to the bend in Pirrama Road and to align with the central axis of the existing Lyric Theatre cone form.*
- *The central entry space is retained and expanded toward the boundary to provide a much more generous arrival lobby space. The space is contained within an outwardly projecting curved glass atrium wall rising through four levels. A parallel line of cantilevered glass containing entry doors is set in-board of the atrium wall.*
- *Vehicular arrival has been reorganized to provide two separate porte cochere either side of the central entry space. Taxi and visitor drop-off is provided to the north of the entry, and VIP set-down is provided to the south of the entry. The vehicular arrival has been realigned to run parallel with the building façade. The drop-off areas are protected by projecting cantilevered glazed canopies.*
- *The paving treatment of the public domain is proposed to be of high quality CBD standard, providing a contiguous pedestrian focused treatment extending from Pirrama*
- *Road kerb to building edge and beyond, to the transport interchange kerb line. Vehicular driveways will be defined by installation of matching paving setts, bollards, in-ground markers and lights and will be managed by commissar. The driveways will not be grade separated and will be treated as shared pedestrian zones.*
- *Continuous full width pedestrian footpath is maintained along the Pirrama Road kerb. Vehicle crossovers are to be treated as shared zones.*
- *Colonnades are provided to either side of the entry atrium and together with projecting glazed canopy running along the atrium rim, allow for covered pedestrian access along the building edge.*
- *The colonnade incorporates a back drop wall featuring a water feature installation and ponded water leading into the central arrival space. Public access is maintained in a reconfigured arrangement to the transport interchange area.*
- *Open public stair access from Pirrama Road level to retail level above and through site link is maintained, but realigned to accommodate the revised porte cochere arrival and façade configuration.*
- *Retail/café uses are retained in slightly modified form to provide activation to the public domain.*

Building Façade

- *The building façade has been modified to more clearly respond to the alignment of Pirrama Road. The façade has also been composed into three distinct parts a central glazed entry form and two flanking façades containing and expressing the restaurant, open balcony and night venue uses either side of the entry atrium. The revised façade has been reduced in length with an increased setback from the Lyric Theatre cone form.*
- *The central entry is contained by a vertical, highly transparent glass wall, curving in plan, providing visual connection between the internal and external spaces over four levels.*

- *The glazed atrium wall is to be support by a highly refined structural system, that effectively supports the glazed wall from the roof structure so that the entry wall floats above the ground plane.*
- *The central entry form sits slightly proud of the flanking façade walls, which fold in plan into the curved entry form, providing a smoother transition between façade components.*
- *The two flanking facades have been revised to form a more formal geometric composition derived from the vertical structural grid and horizontal floor plates. This primary grid is proposed to be expressed in solid fabric sandstone spandrels and oxidized stainless steel column cladding providing a framework within which the openings, projecting balconies and operable glazed walls are contained. The modulation of the primary grid is expressed through the central entry form to provide a subtle continuity of rhythm across the entire façade.*
- *At ground level, both flanking facades incorporate colonnades, defined by a row of columns in line with the building façade over and a backdrop sandstone wall that extends into the central arrival space. The backdrop wall incorporates retail/café shopfronts, water wall feature installation and access points through to the transport interchange and through site link stairs.*
- *The flanking facades are highly articulated within the formality of the primary grid, incorporating an array of conditions appropriate to the activities occurring along the façade edge projecting open balconies, projecting vertical blades, inset balconies with bi-folding glazed doors, operable louvered glass panels and projecting bay windows at restaurants. Each of these components will feature refined architectural detail resolution, including pinned façade glass and louver systems.*
- *The palette of materials proposed for the flanking facades comprises glass, sandstone and stainless steel. Stainless steel finishes will typically be applied as thin edge trimming elements at the floor plate junction with façade glass, vertical fins to mitigate wing impact on open balconies, trim to projecting window bays, and the like.*

8 The Preferred Project

The Preferred Project comprises:

- A new 309 room hotel with ancillary lower level retail, gaming and conference facilities on the currently vacant 'Switching Station' site.
- 500 additional basement car parking spaces to be accessed via the existing Casino car park.
- Re-development of the retail arcade through the ground floor level of the building, linking Pyrmont Bay Park to the intersection of Union and Pyrmont Streets, and to Jones Bay Road.
- The redevelopment of the eastern (Pirrama Road) portion of the casino building currently occupied by large external stairs to contain additional restaurants, retail outlets, gaming space, other entertainment and tourist related facilities, a ceremonial entry and a driveway providing a new vehicular drop-off to the Casino.
- Works on the exterior of the existing tower buildings to enhance their external appearance.

Photomontages of the revised project are included at **Appendix D** of this report. Architectural Drawings are included at **Appendix B** of this report. A sample board of proposed external finishes will be submitted under separate cover. The following table provides an overview of key numeric aspects of the proposed development.

Table 2 – Numeric Overview

	Existing Gross floor Area (GFA)[1]	Proposed (net increase)	Total
Casino Site			
Site Area	33,450 m^2	N/A	33,450 m
Gross Floor Area[1]	102,551m^2	3,711 m^2	106,262m^2
FSR	3.07:1	0.11:1	3.17:1
Hotel Rooms/Apartments	480	Nil	480
Car parking	2,500	Nil	2,500
Switching Station Site			
Site Area	4,756 m^2	N/A	4,756 m^2
Gross Floor Area	Nil	23,886 m^2	23,886 m^2
FSR	Nil	5.02:1	5.02:1
Hotel Rooms/Apartments	Nil	309	309
Car parking	Nil	500	500
Total Project			
Site Area	38,206 m^2	N/A	38,206 m^2
Gross Floor Area	102,551 m^2	27,597 m^2	130,148m^2
FSR	2.68:1	0.72:1	3.40:1
Hotel Rooms/Apartments	480	309	789
Car parking	2500	500	3,000

[1] *Pursuant to Sydney local Environmental plan 2005: "gross floor area of a building within Ultimo-Pyrmont, means the sum of the areas of each floor of the building, where the area of each floor is taken to be the area within the inner faces of the external enclosing walls as measured at a height of 1,400 millimetres above each floor level, but excluding*

(a) columns, fin walls, sun control devices, awnings and any other elements, projections or works outside the general lines of the outer face of the external walls, and

(b) lift towers, cooling towers, machinery and plant rooms, and airconditioning and ventilation ducts, and

(c) ancillary car parking and any associated internal designated vehicular and pedestrian access to it, and

(d) space for the loading and unloading of goods, and

(e) internal public areas, such as arcades, atria and thoroughfares, and terraces and balconies with outer walls less than 1,400 millimetres high".

8.1 Detailed description of proposed development

Details of each of the elements of work proposed in the project are provided below:

8.1.1 Proposed Hotel and Podium Extension

It is proposed to construct a new hotel and an extension to the existing podium of the casino complex on that part of the site referred to as the 'Switching Station'.

Key features are summarised as follows:

- The existing podium level of the casino complex will be extended onto the Switching Station site. The podium structure will comprise levels above ground, which continue the form and scale of the existing podium.
- The three levels of the podium will be used generally as follows:
  - Level 00: Hotel foyer, hotel back of house areas, retail and café/restaurant space.
  - Level 01: Gaming, leisure and relaxation areas, being an extension of the gaming floor in the existing casino complex.
  - Level 02: Conference facilities.
- The ground level of this building will be provided with an appropriate interface and connections with the surrounding streets, including:
  - New major pedestrian entry points to the complex will be created at the intersections of Union Street with both Pyrmont and Edward Streets.
  - The primary pedestrian entry 'address' to the hotel will be from the intersection of Union and Pyrmont Streets, with a secondary access point being available from the intersection of Union and Edward Streets. These new entries also provide connection into the rest of the casino complex via the reconfigured internal pedestrian arcade through the building.
  - Retail and café/restaurant premises are provided along the Union Street frontage and will be accessible from the internal hotel lobby space.
  - There will be modifications to the existing Porte Cochere in Pyrmont Street to provide a dedicated 'drop off' and valet parking area to serve the new hotel.
  - The proposed building is setback from the corner of Union Street and Pyrmont Street to provide a publically accessible open space forming a major pedestrian entry point into the casino complex and linking to the reconfigured internal pedestrian arcade.
- Level 1 of the extended podium will contain an enclosed extension to the gaming floor, and an adjacent outdoor area orientated towards Union Street.
- Level 2 of the podium will accommodate conference facilities including a flexible and adaptable space that can accommodate a range of different sized meetings and functions, along with gathering / pre-function and back of house areas.
- The proposed hotel will be constructed above the podium level. Features of the proposed hotel include:
  - 13 floors above the podium, containing 309 accommodation rooms.
  - A narrow tower form aligned parallel to Union Street, orientated with its primary aspects to the north and south.
  - A setback of 20 metres from the Union Street frontage.
  - A new hotel swimming pool and guest recreation area is located on the roof of the podium, accessible from the lower levels of the hotel tower.

Figure 7 – *Computer generated image of proposed hotel*

Picture 8 – *Computer generated image of proposed hotel*

8.1.2 Car Park Expansion

It is proposed to extend the existing basement car park under the casino onto the 'Switching Station' site. This car park will be in a new basement below the proposed hotel podium and will principally serve hotel guests and casino members.

Key features are summarised as follows:

- The proposed basement will comprise four levels of car parking, with each level connecting into and extending the existing car parking provided on the casino complex.
- An additional 500 car parking spaces are provided in the new basement parking area.
- Public vehicle entry to the enlarged car park remains from the existing entry points from Edward Street and Pirrama Road. No new car park entry points will be created.

It is also proposed to erect a digital display above the car park entry indicating how many spaces remain available within the car park. This will be linked to automatic sensors that detect each vehicle entering and leaving the car park.

8.1.3 Expanded and Altered Retail Arcade

It is proposed that the internal pedestrian arcade providing access through the site from the corner of Pyrmont and Union Streets to the Pirrama Road frontage will be significantly altered.

Key features are summarised as follows:

- The arcade will be provided with a new pedestrian entry point from the new publically accessible open space provided on the corner of Union and Pyrmont Streets.
- The arcade will be expanded and altered to connect to the new entry point located on the corner of Union and Edward Streets.
- The arcade will be upgraded to provide new connection points into the Porte Cochere area, through to the Lyric Theatre and on to the reconfigured Pirrama Road frontage and Jones Bay Road.
- A number of new retail premises and café/restaurant areas will be created fronting the altered and expanded pedestrian arcade, complementing the existing retail outlets in the Pyrmont area.

8.1.4 Pirrama Road Frontage

It is proposed to construct extensive alterations and additions to the frontage of the complex to Pirrama Road.

Key features are summarised as follows:

- The frontage of the complex will be redeveloped to provide an attractive and functional new 'front' to the site orientated towards Pirrama Road and Sydney Harbour. The redeveloped front will become the' ceremonial' entry for people visiting the complex, and will present a punctuated glazed wall to the street edge that curves out to mark the new entry to the site.
- The existing large pedestrian stairs providing pedestrian access from Pirrama Road to the main entry point to the casino complex will be demolished, and replaced with a single flight along a single alignment from the new entry point to the gaming floor, via the retail arcade level.
- At ground level, two new vehicle drop off zones will be created either side of the new entry, the southern providing a genral vehicle drop off zone, and the northern being reserved for limousines and VIP arrival.
- Principal pedestrian entry into the Pirrama Road frontage will be between the two drop off points, via a glass enclosed foyer containing stairs, escalators and elevators that will connect people to the existing retail arcade above, from which separate stairs/escalators will provide access to the gaming floor, ballroom and other facilities on higher levels.
- A second stairway will provide a direct line of travel from Pirrama Road to the existing through site link to Pyrmont Street above.
- Café/restaurant spaces will also be provided at ground level fronting Pirrama Road.
- Level 00 of the new frontage will comprise an extension of the existing internal pedestrian arcade, with premium new retail outlets on the internal side of the arcade (either side of the gaming floor entry) and restaurants on the Pirrama Road side, with harbour views. The existing through-site arcade from Pyrmont Street to Pirrama Road will have open stairs down to Pirrama Road, while the arcade itself will be extended north past the gaming floor entry and through to Jones Bay Road.
- Level 01 of the new frontage of the building will comprise an extension to the existing gaming floor, including two large open balconies, and a void to the entry below, contained within the new façade to Pirrama Road. The balconies will be used as external break out areas to the gaming floor, providing for a variety of gaming, leisure and entertainment purposes. Entry to the gaming floor

area from the retail arcade below will be via a replacement of the existing stair, escalator and lift located below the existing glass cone structure.

- Level 02 of the new frontage of the building will provide a new harbour view night venue, bar and restaurant, and an open landscape deck and void to the entry below.
- Level 03 will comprise a series of open decks providing various break out spaces, including a large pre-function area adjacent to the existing ballroom, which will be expanded. The large open deck immediately within the proposed new façade will have a bridge link to the ballroom pre-function area, and will accommodate a range of food, beverage and seating facilities to complement the pre-function area.

Figure 8 – *Computer Generated Images of Pirrama Road Façade of the Preferred Project*

Picture 9 – *Photomontage of proposed Pirrama Road Façade*

8.1.5 Upgrading the facades of existing Serviced Apartment and Hotel Towers

Works are proposed to the exterior of the existing hotel and serviced apartment buildings to enhance their external appearance and function.

These works are described as follows:

- A new glazed façade will be provided to the existing hotel and serviced apartment buildings. This glazing will be constructed by way of a supporting structural framework being erected on the exterior of the existing buildings and infilled with open joined, colour backed glazed panels.
- In addition, horizontal glazed elements will be erected to provide sun shading on the long facades of both tower buildings

8.2 Landscaping and Public Domain

A revised Landscape Plan prepared by Tract Consultants is included at **Appendix E** of this report. Tract prepared the following landscape design report in support of this plan:

> *Star City was originally planned and constructed as a pioneer project for the redevelopment of Ultimo and Pyrmont as a precinct including buildings, provision of facilities and functions and included open space that was contiguous with the foreshores and the Pyrmont hinterland. As the surrounding areas have been redeveloped into an urban waterfront setting over time, Star City is no longer the 'isolated destination' that it once and Pyrmont has been urbanised and now forms an extension of the city.*
>
> *As part of the current development proposal for the building frontage and new entry on Pirrama Road it is proposed to upgrade the adjacent streetscape to that of the high quality of the CBD. This will enhance the visual connection and form an extension of the city streetscapes and urban precincts typical of Martin Place and East Circular Quay. This connection will be brought about through the use of the City of Sydney standard paving details which include dark coloured granite pavers for the pedestrian areas and granite sets for the new driveway set down zone in the creation of a new urban plaza. The urban connection will be further enhanced through upgrading of the streetscape adjacent the new hotel complex on Union Street where granite paving is also proposed.*

The existing roof terraces on level 2 will be expanded over the new building below and will be enclosed by the new building structure to the front. This will allow for outdoor seating and dining options as well as providing useable public areas and access to the level 3 terrace. The landscape associated with the existing level 3 terrace will be adjusted according to the new building structure proposed. Existing garden beds will be re adjusted where necessary and will be re-planted with a variety of colourful groundcovers and feature shrubs and trees in order to create variety, interest and scale for the users of these outdoor spaces.

A new roof top platform will be created on level 3 and serve as casual and formal break out space from the Ballroom. Some permanent seating and low level soft planter beds will be provided in order to create scale and enhance the useability of this open deck.

All non trafficable roof structures are to include a series of landscape gravel designs which will be in keeping with the existing roof artworks on various levels of the roof of the Star City complex.

The new hotel complex at the south eastern end of the site will include a roof garden and pool deck on level 3. Timber decking, stone paving, a pergola shade structure and feature tree, shrub and groundcover planting will be incorporated in the design.

8.3 External Signage

Several large electronic video panels are proposed to be located on the existing and proposed frontage to Pirrama Road, including a form of video screen comprising LEDs mounted within the mullions of the frame supporting the glazed entry feature. The panels will display a range of content promoting the casino and its facilities, events and attractions. They will also display major sporting and cultural events.

The panels will create a sense of excitement and activity to Pirrama Road and the adjoining foreshore open space.

The location of the proposed video panels on the revised project are indicated in the architectural drawings included at **Appendix B** of this report.

A package of 'way finding' signage is also proposed to direct the public to and through the various facilities within the complex, including the through site link and light rail / bus station.

8.4 Operational Management

The proposed hotel will have a distinct identity to Union Street, but both the hotel and the expanded retail arcade will be managed as part of the existing overall casino facility. Specifically, the hotel will operate in the same manner as the existing Star City Hotel and the retail arcade will operate in the same manner as the existing arcade. In accordance with the existing casino license, all facilities will operate on a 24 hr basis

The current casino facility is subject to strict security codes to maintain high levels of privacy and to ensure the safety of patrons. The proposed expanded facilities will also be subject to the same level of security management. The casino currently has a Life Safety Plan and Emergency Management Plan, which will be updated to accommodate the new facilities.

The proposed hotel will have independent reception, concierge and servicing facilities. However, the laundry facility within the new hotel has been designed to serve the entire complex, negating the need for the current two trucks per day that take laundry off-site for washing.

With regard to waste, the existing waste storage facility will become dedicated to all existing and proposed food and beverage operations, while the new facility within the Switching Station site will handle all non-food & beverage waste.

8.5 Construction Staging

The physical implementation (i.e. demolition, construction etc.) of the project is proposed to be conducted in the following stages:

Stage 1A

Hotel site preparation works including:

- Site Establishment
- Infrastructure and enabling works
- Excavation
- Demolition

Stage 1B.

Casino site preparation works including:

- Site Establishment
- Infrastructure and enabling works
- Excavation
- Demolition
- Refurbishment of and adjustment of existing areas and associated works within the existing footprint on Level 1

Stage 2A

- Hotel Carpark and Podium
- Pirrama Road frontage

Stage 2B.

- Hotel Tower

Stage 2C

- Pirrama Road façade

Stage 2D.

- Retail Precinct + casino lobby
- Existing porte cochere upgrade

Stage 3.

- Existing building re-clad

8.6 Capital Investment Value

The capital investment value of the project will be:

- Casino Expansion and Refurbishment $175,100,000
- New Hotel (Switching Station site) $169,409,000
- Total Project Construction Cost Estimate $344,509,000

Separate Quantity Surveyor's Certificates verifying the costs of the two components of the project are included at **Appendix J** of the submitted Environmental Assessment Report.

8.7 Draft Statement of Commitments

A revised Statement of Commitments made by the proponent of the project is included at **Appendix F** of this report.

Commitments include:

- Preparation of an External Lighting Management Plan
- Preparation of a Sustainability Plan
- Preparation of a Noise and Vibration Management Plans (Construction and Operation)
- Preparation of a Pedestrian Safety Management Plan
- Preparation of a Green Transport Plan
- Preparation of a Reflectivity Mitigation Plan
- Works to Pyrmont Bay Park

9 Environmental Assessment

The following environmental assessment addresses the matters identified in the Director General's Environmental Assessment Requirements for the project **(see Appendix A** of the submitted Environmental Assessment Report).

9.1 Sydney Metropolitan and Subregional Strategies

The 2005 *"Metropolitan Strategy City of Cities: A Plan for Sydney's Future"* (the 'Metro' Strategy) is the State Government's strategy for the Greater Sydney Metropolitan Area. This is a broad policy document addressing the regional structure of Sydney. With regard to 'Global Sydney', within which Star City is located, the Metro Strategy (p23) identifies the following role:

> *"The main focus for national and international business, professional services, specialized health and education precincts, specialized shops and tourism, it is also a recreation and entertainment destination for the Sydney region and has national and international significance".*

The proposed improvements to maintain a world class tourist offer at Star City are clearly consistent with this broad role.

However, given the broad scope of the Metro Strategy, various more detailed sub-regional strategies have recently been released, including the "Sydney City Draft Subregional Strategy" (the Draft Subregional Strategy). The Draft Subregional strategy identifies 5 key directions for the city:

- *Reinforce global competiveness and strengthen links to the regional economy.*
- *Ensure adequate capacity for new office and hotel developments.*
- *Plan for sustainable development of major urban renewal projects.*
- *Plan for Housing Choice.*
- *Develop an improved and increasingly integrated transport system that meets the subregion's multiple transport needs. (our emphasis)*

Figure 9 – *Sydney Draft Subregional Strategy*

Picture 10 – *Extract of Figure 3(p11) Sydney Draft Subregional Strategy*

The first key direction identifies tourism as a globally competitive industry that should be boosted in the City. The second key direction identifies hotels as a 'crucial' aspect of the city's economy, and encourages opportunities for new hotels. Key Action No. SC A2.2.6 is to:

> *"Promote key tourist and visitor destinations in the subregion, including future visitor accommodation and facilities".*

The overriding 'Key Directions' and 'Structure Plan' maps of the Draft Subregional Strategy identify Star City as one of only 19 'Metropolitan Attractors' in the subregion, and one of only three in Pyrmont-Ultimo - the other two being the Fish Markets and Wentworth Park Greyhound Track.

With regard to 'Economy and Employment' the Draft Subregional Strategy identifies Star City as one of only four 'Cultural/Recreational' industry concentrations.

The Draft Subregional strategy also identifies five specialized precincts, including the 'Pyrmont-Ultimo' Precinct, in relation to which it states:

> *"The area has … become an attractive location for visitor accommodation. It includes a number of cultural, visitor and entertainment facilities, including the Powerhouse and Maritime Museums, Star City Casino and Lyric Theatre as well as maritime activities and the associated retail and wholesale activities of the Fish Markets".*

The 'Key Assets and Drivers' of the Precinct are identified as:

- *Concentration of multi-media firms.*
- *Entertainment and cultural precincts including Star City Casino and Sydney Fish Markets.*

In summary, the Draft Subregional Strategy identifies Star City as a key asset and driver of Pyrmont-Ultimo, and of the tourism industry generally, which is identified as a globally competitive industry that should be boosted in the City. The Draft Regional Strategy also identifies the provision of additional hotel accommodation as crucial to the city's economy. The proposed enhancement of the casino, and provision of some 300 additional hotel rooms is therefore clearly consistent with both the Metro and Draft Subregional Strategies.

9.2 Relevant EPIs & Guidelines

9.2.1 Environmental Planning and Assessment Act 1979

Part 3A of the Environmental Planning and Assessment Act 1979 (The EP&A Act) requires that major projects obtain approval from the Minister for Planning. Development is defined as a 'Major Project' to which Part 3A applies either by being identified within a State Environmental Planning Policy or by order of the Minister published in the Gazette. As indicated earlier, the Minister has formally declared the project a 'Major Project' (see **Appendix A** of the submitted Environmental Assessment Report) .

The Major Project approval process provides for the Minister for Planning to undertake a co-ordinated, whole of government assessment of the merits of a proposal that has significance to the State or region.

9.2.2 Casino Control Act 1992

The Casino Control Act governs the operation of casinos in NSW. Its primary objects are:

> *(a) ensuring that the management and operation of a casino remain free from criminal influence or exploitation;*
>
> *(b) ensuring that gaming in a casino is conducted honestly;*
>
> *(c) containing and controlling the potential of a casino to cause harm to the public interest and to individuals and families.*

Clause 7(1) of the Casino Control Act 1992 provides that the Minister may, from time to time, issue directions to the Casino Control Authority regarding various matters relating to the Casino. The directions most relevant to this proposal are those relating to the number of gaming tables and also the number of gaming devices for which the Casino holds a licence to operate.

Clause 65 of the Casino Control Act 1992 provides that gaming may not be undertaken within the Casino unless the facilities provided relating to the conduct or monitoring of Casino operations are located in accordance with plans which are approved by the Casino Control Authority. This includes the location of gaming machines and tables. Assessment of the proposal against these provisions is not a matter for consideration under the EP&A Act, and will be addressed under a separate application for an amended gaming license.

9.2.3 State Environmental Planning Policy (Major Projects) 2005

Clause 6 of State Environmental Planning Policy (Major Projects) 2005 (SEPP Major Projects) specifies various criteria by which development may be defined as a 'Major Project'. Part of this clause states:

> *(1) Development that, in the opinion of the Minister, is development of a kind:*
>
> *(a) that is described in Schedule 1 or 2, or*
>
> *(b) that is described in Schedule 3 as a project to which Part 3A of the Act applies, or*
>
> *(c) to the extent that it is not otherwise described in Schedules 1-3, that is described in Schedule 5 is declared to be a project to which Part 3A of the Act applies.*

Clause 10 of Schedule 2 to the Major Projects SEPP describes development with a capital investment value of more than $5 million on the sites identified on Map 9. The Switching Station site is listed within this clause at point (g), and is identified on Map 9. With a capital investment value of over $169 million, this component of the development is clearly a major project, and was declared as such by the Minister on 4 September 2006.

With regard to the remainder of the scheme, Clause 17 to Schedule 1 of SEPP Major Projects includes:

> ***"Tourist, convention and entertainment facilities***
>
> *Development for the purpose of tourist related facilities, major convention and exhibition facilities or multi-use entertainment facilities that:*
>
> (*a) has a capital investment value of more than $100 million, or*
>
> *(b) employs 100 or more people, or*
>
> *(c) has a capital investment value of more than $5 million and is located in an environmentally sensitive area of State significance".*

The project is clearly a 'tourist and entertainment' facility and has a value of over $175 million.

The Minister was formally requested to declare the entire project as a Major Project on 18 April 2008 and did so on 30 June 2008. A copy of the declaration is included at **Appendix A** of the submitted Environmental Assessment Report.

9.2.4 State Environmental Planning Policy 41 (Casino Entertainment Complex)

The objectives of the policy are:

> *(a) to promote the social and economic welfare of the State through the generation of employment and other long term economic benefits, and*
>
> *(b) to further the development of Sydney, in particular as a world class tourist destination, and*

(c) to improve and enhance the cultural and recreational facilities of Sydney for the people of New South Wales, and

(d) to promote the orderly and economic use and development of land, in particular strategic land within the City of Sydney which is vested in the Crown, and

(e) to promote the development of the City West precinct of Sydney,

by enabling land, including the site specified by Ministerial direction under section 7 (1) of the Casino Control Act 1992 as the permissible location for a casino, to be developed for the purpose of a casino entertainment complex with the consent of the consent authority.

SEPP 41 applies specifically to the site and permits, and indeed requires its use for a casino or complementary development, despite the provisions of any other planning instrument. The proposed development is therefore permissible pursuant to SEPP 41. Complementary development is defined as:

"development for any of the following purposes:

car and coach parking, community facilities, conference and convention centres, cultural and entertainment facilities, hotels, public recreation areas, public transport purposes and interchange facilities, restaurants, bars and cafes, retail shops, serviced apartments, sporting and recreation facilities (such as a health centre, gymnasium , swimming pool and tennis courts) , theatres, and any other purposes that are ancillary to development for the purpose of a casino".

(our emphasis)

The proposed re-development of the casino will allow for better achievement of the above objects and the proposed uses all constitute 'casino' or 'complementary development', and are therefore permissible pursuant to SEPP 41.

9.2.5 State Environmental Planning Policy (Infrastructure)

SEPP Infrastructure provides a mechanism by which the Roads and Traffic Authority (RTA) is given the opportunity to comment on the impact of development proposals that meet certain criteria relating to potential traffic generation. The subject proposal will require this referral as it will result in:

- Increased gross floor area greater than 4,000m^2 of shops / commercial premises; and
- Car parking for more than 200 vehicles.

ARUP Consulting has already held preliminary discussions with the RTA, and advised of the key parking and vehicular access provisions of the proposal. The Department of Planning is required to refer the application to the RTA for formal comment.

9.2.6 State Environmental Planning Policy 55 (Remediation of Land)

This policy requires that consideration is given to the suitability of the site for the proposed development in terms of potential groundwater and/or soil contamination. While the switching station site is known to have been previously contaminated, it has been remediated. A limited Phase 1 Contamination Assessment prepared by Douglas Partners and a Contamination Revocation Notice (Section 35) provided for the site by the DECC are included at **Appendix L** of the submitted Environmental Assessment Report. These demonstrate that the site is no longer contaminated.

9.2.7 State Environmental Planning Policy (Temporary Structures and Places of Public Entertainment) 2007

This policy provides that development consent is required to use a building as a place of public entertainment.

Under the SEPP, the following matters are to be taken into consideration prior to the granting of consent for a place of public entertainment:

(a) the maximum number of persons who should be permitted to be in the part of the building used as a place of public entertainment at any one time while entertainment is being provided and how that number should be monitored,

(b) the principles for minimising crime risk set out in Part B of the Crime Prevention Guidelines,

(c) any adverse impact on persons in the vicinity of any noise likely to be emitted as a result of the use of the building as a place of public entertainment and any proposed measures for limiting the impact,

(d) whether the hours during which the building is used as a place of public entertainment should be limited,

(e) any parking or traffic impacts likely to be caused as a result of the use of the building as a place of public entertainment,

(f) whether the use is proposed to be carried out on land that comprises, or on which there is:

(g) an item of environmental heritage that is listed on the State Heritage Register, or that is subject to an interim heritage order, under the Heritage Act 1977, or

(ii) a place, building, work, tree, relic or Aboriginal object that is described as an item of environmental heritage or as a heritage item in another environmental planning instrument, or

(iii) land identified as a heritage conservation area, an archaeological site or a place of Aboriginal heritage significance in another environmental planning instrument.

These matters are addressed broadly throughout this report, and will be fully addressed in future applications for the use of specific tenancies/premises as places of public entertainment, particularly in terms of patron numbers and technical BCA assessments.

9.2.8 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The site is not zoned under this plan, but is identified as being within the "Foreshores and Waterways Area". The proposed development is not of a type listed at Schedule 2 that requires referral to the Foreshores and Waterways Planning and Development Advisory Committee.

The relevant matters for consideration provided at Division 2 of the Plan are as follows:

"Foreshore and waterways scenic quality

The matters to be taken into consideration in relation to the maintenance, protection and enhancement of the scenic quality of foreshores and waterways are as follows:

(a) the scale, form, design and siting of any building should be based on an analysis of:

(i) the land on which it is to be erected, and

(ii) the adjoining land, and

(iii) the likely future character of the locality,

(b) development should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands, foreshores and tributaries,

(c) the cumulative impact of water-based development should not detract from the character of the waterways and adjoining foreshores.

Maintenance, protection and enhancement of views

The matters to be taken into consideration in relation to the maintenance, protection and enhancement of views are as follows:

(a) development should maintain, protect and enhance views (including night views) to and from Sydney Harbour,

(b) development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items,

(c) the cumulative impact of development on views should be minimised"

These matters are specifically addressed in relation to 'Visual Impact' at Section 6.7.

The DCP accompanying the SREP provides planning guidelines with respect to ecological and landscape considerations and also has regard to development types – water-based/interface development and land-based development. The DCP Map indicates that the site is opposite an area identified as Grassland and has no specified landscape character or specified landmark buildings that would be affected by the proposal.

The following guidelines for land-based development are relevant to this proposal:

"Siting of Buildings and Structures

- *Buildings should address the waterway;*
- *Buildings should not obstruct views and vistas from public places to the waterway;*
- *Buildings should not obstruct views of landmarks and features identified on the maps accompanying the DCP*

Built Form

- *Buildings and other structures should generally be of sympathetic design to their surroundings; well designed contrasts will be considered where they enhance the scene.*
- *Where would be of contrasting scale or design to existing buildings, care will be needed to ensure that this contrast would enhance the setting;*
- *Bright lighting and especially floodlighting which reflects on the water, can cause problems with night navigation and should be avoided. External lights should be directed downwards, away from the water. AS/NZ1158.3:1999 and AS4282:1997 should be observed.*
- *Use of reflective materials is minimised and the relevant provisions of the BCA are satisfied;*
- *The cumulative impact of development along the foreshore is considered having regard to preserving views of special natural features, landmarks or heritage items."*

As detailed throughout this assessment, and specifically in the visual impact assessment at Section 6.7, the proposed built form has been designed to more positively address Sydney Harbour and will not interrupt any significant view corridors or vistas to or from the harbour, or obstruct views to any identified landmarks or features. The proposal has been designed in sympathy to the scale, form, design and siting of surrounding buildings, including various heritage items, and will enhance the visual qualities of the harbour foreshore.

The lighting and video panels proposed on the Pirrama Road frontage will be oriented to the immediate proximity of Pirrama Road. With the exception of a narrow corridor up Pyrmont Bay, this low level lighting will be obstructed from the Harbour by the Buildings at Darling Harbour Wharf 10. However, an external lighting management plan will be submitted for separate approval. This management plan will ensure that no bright lighting that could interfere with night navigation will be oriented directly along the alignment of Pyrmont Bay.

9.2.9 Sydney Local Environmental Plan 2005

Sydney Local Environmental Plan 2005 (SLEP 2005) is the principal planning instrument applicable to the site and Part 3 of this instrument contains the planning and development principles for the Ultimo-Pyrmont precinct. On 9 December 2005, the provisions that previously related to the land under Sydney Regional Environmental Plan 26 (City West) (SREP 26) were incorporated into SLEP 2005, which now details zoning, building height and floor space controls, as well as heritage conservation and Master Plan provisions applicable to the site.

Planning Principles for Ultimo-Pyrmont

The proposed development is consistent with the following relevant planning principles for Ultimo/Pyrmont:

Role and land use activities	Comment	Consistent?
(a) Development in Ultimo-Pyrmont is to provide for a significant increase in residential population in a mixed-use development pattern also accommodating employment, educational and other uses.	Significant residential development has occurred in the vicinity of the site, but is prohibited on the casino site pursuant to SEPP 41. Significant employment generation is proposed.	√
(c) Where possible, development is to make use of existing under-utilised buildings and large areas of land which are either vacant or occupied by out of date facilities.	The proposal will better utilise the Pirrama Road stairs, and develop the currently vacant 'Switching Station' site	√
(d) Development is to take full advantage of the existing facilities, proximity to Darling Harbour, Central Station and other facilities of the City centre, and the extensive Pyrmont waterfront.	The proposed development, and particularly the additional hotel accommodation, will permit greater tourist utilisation of the various facilities of Pyrmont and the Sydney CBD.	√
(e) Retail development providing for the full range of neighbourhood needs is to be encouraged.	A wide range of neighbourhood retail opportunities will be provided within the expanded retail arcade.	√
(f) Uses at the ground level of buildings fronting the public domain should complement the functions of the public domain. …	Active uses are proposed to all street frontages of proposed works. The celebratory nature of works proposed to Pirrama Road will complement the park opposite and café and hotel lobby uses will contribute the the Union Street 'activity strip'.	√
Social issues		
(a) A range of services and facilities should be provided to meet the needs of the existing and new residents and workers, including retail, leisure, recreational and welfare facilities that promote the health and well-being of the community and recognise its cultural and ethnic diversity.	The proposed expansion of the retail arcade will increase the potential range of services available to existing and new residents and workers	√
(b) Urban design is to enhance the conviviality and sense of place of Ultimo-Pyrmont and reflect the character and heritage of Ultimo-	The proposed urban design will activate, and create a more lively sense of place along the street frontages of the site.	√

Role and land use activities	Comment	Consistent?
Pyrmont.		
(c) Development is to enable surveillance and to enhance street level activity to increase actual and perceived security.	Increased street level activity will enhance actual and perceived safety around the site.	√
Urban design		
(a) Building heights are to reflect and emphasise the topography of Ultimo-Pyrmont by increasing in height as distance increases from the nearest waterfront. Building heights should allow a reasonable sharing of distant views from buildings by their occupants.	The proposed building heights step up away from the waterfront, without unreasonably obstructing the views currently afforded the occupants of any nearby building.	√
(b) The heights and scale of buildings are to form a transition between the high-rise buildings in the City and low-rise buildings in the suburbs adjoining Ultimo-Pyrmont.	The proposed building heights have been designed to create transitional elements that mediate the heights of adjacent structures.	√
(c) The heights and scale of new buildings are to respect existing buildings in the locality, particularly heritage items and buildings in conservation areas.	The low scale sandstone podium to Union Street respects the scale of various surrounding heritage items.	√
(d) The heights and form of buildings are to take account of visual impact, solar access, wind impact and, where appropriate, the privacy of residences, in order to contribute to a high quality of environmental amenity in intensively used parts of the public domain and in residential areas.	The proposed hotel tower has been designed as a slender footprint, oriented to minimise its visual impact. The proposed podium element also mitigates perceived height and wind down-draft down the face of the tower.	√
(e) Buildings fronting the public domain should have appropriate height, bulk, finish and street alignment so as to enhance its quality by complementing its character. In general the scale of street facades must be appropriate to the width of adjoining streets or lanes, adjoining heritage items or other contextual elements.	The proposed podium element is of a scale that reflects the width of Union street, and the general scale established by surrounding heritage items and the podium of the existing casino building.	√
(f) Higher buildings may be accommodated: (i) if they will emphasise existing or former high points in the natural ground level on Distillery Hill, Pyrmont Point, Darling Island and adjoining the CSR Stables, they will reflect the former vertical smoke-stack elements of the Pyrmont	The proposed hotel tower reflects, but is considerably lower than the former vertical smoke-stack elements of the Pyrmont Point Power Station. It also mediates between the height of the existing towers built to reflect this element, and the lower scale of surrounding buildings. The podium element to Union street will reflect the traditional street scale of the locality and mitigate the scale of the proposed	√

Role and land use activities	Comment	Consistent?
Point Power Station, … and they will not compromise the environmental amenity and general scale of buildings in their locality.	tower.	
(g) Development on the waterfront and on adjoining land is to maximise the environmental quality of those parts of the peninsula for all users.	While not on the waterfront, the proposed works to the Pirrama Road frontage will enhance the visual quality and sense of activity within the public waterfront park on the opposite side of the street.	√
Public domain		
(a) Public recreation areas are to provide for a range of recreational opportunities for the residents of and workers within Ultimo-Pyrmont.	Activation of the street edges will create a more positive relationship to adjacent public open spaces.	√
(b) Coordinated pedestrian and cycling networks are to be provided throughout Ultimo-Pyrmont and to link with the City centre and suburbs adjoining Ultimo-Pyrmont. Access to major natural features such as foreshores and escarpments are to be included.	The proposed active street edge uses will enhance existing non-vehicular routes along these frontages and improvements to the existing through-site link will improve the legibility and amenity of this route.	√
(c) The passage of through motor traffic in residential areas and areas of pedestrian and cycling priority is to be discouraged	While the proposed 500 additional parking spaces will increase the number of vehicular movements to the site, these movements will occur primarily via Pirrama Road, via routes that do not intrude into local residential streets.	√
Leisure and recreation		
Full advantage is to be taken of the leisure and recreation facilities and the public open space in the City centre and in surrounding areas (particularly in Ultimo-Pyrmont) and the use of Sydney Harbour for leisure and recreation. Public access to the entire foreshore in Ultimo-Pyrmont is to be provided. Opportunities for waterfront and water-based recreation and tourism activities, compatible with adjoining land uses, are to be provided.	The proposed activation of Pirrama Road will enhance opportunities for active use of the adjacent waterfront public park, and the new through site link will improve access to the foreshore.	√
Movement and parking		
(a) A range of housing and work, leisure and service facilities is to be provided in Ultimo-Pyrmont so that the need for travel is minimised.	The proposed development will increase the range of work and retail opportunities afforded the growing residential population of the area.	√
(b) A high degree of accessibility is to be provided to places in and outside Ultimo-Pyrmont for both able and disabled persons.	The proposed active street edge uses will enhance existing non-vehicular routes along these frontages and improvements to the existing through-site link will improve the legibility and amenity of	√

Role and land use activities	Comment	Consistent?
Walking, cycling and use of public transport are to be encouraged as the means of movement.	this route.	
(e) The provision for vehicular movement is to be consistent with the development of a high-quality pedestrian environment within the street system.	While four new vehicular crossing points are proposed to Pirrama Road, two will be reserved for limousine and VIP drop-off, and all have been designed within a high quality pedestrian-prioritised environment.	√
(f) Parking controls are to support public transport strategies of the Government and to reflect road network capacities.	While no controls apply, and additional parking is proposed, a constrained approach is proposed, where demand will continue to exceed on-site supply. (see Section 6.12.1)	√

Zone Objectives

The land is zoned 'Residential Business'. The proposed development is consistent with the following relevant zone objectives:

(a) to promote a wide range of uses, particularly business development including tourist, leisure, commercial, retail and office development consistent with Ultimo-Pyrmont's proximity to the Sydney CBD, harbour locations and transport infrastructure, and

…

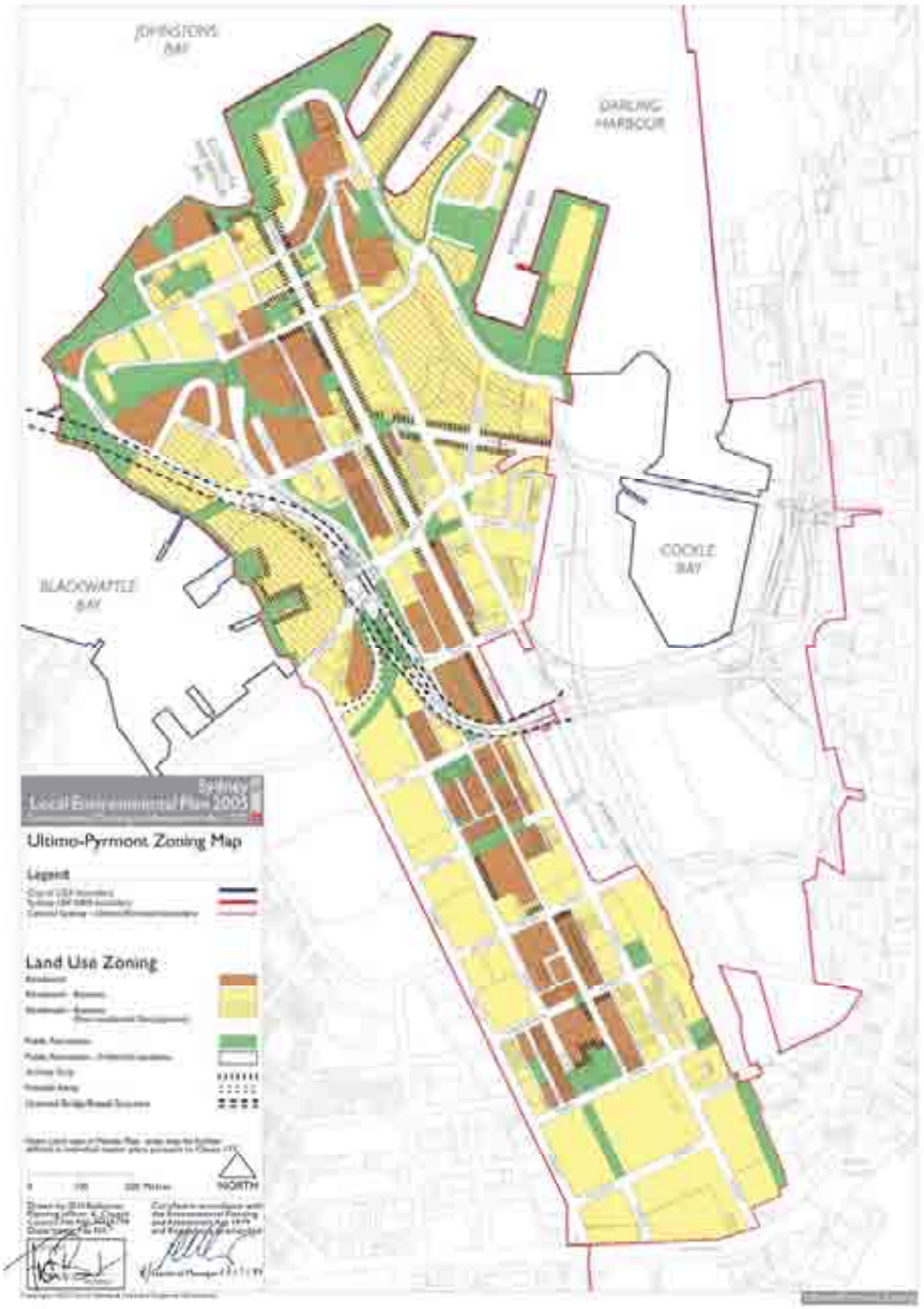
(c) to accommodate uses which generate employment opportunities and provide facilities and services that enable people to live and work in the same community, and

(d) to ensure that the total amount of employment-generating development is compatible with the traffic capacity of Ultimo-Pyrmont and adjoining areas, and

(e) to encourage sustainable transport modes for journeys to work and other trips, including walking, cycling and all forms of public transport, and

(f) to limit advertising to a level compatible with the creation of a high-quality mixed-use area.

Figure 10 – *Zoning Map*



Picture 11 – *Extract of SLEP 2005 Ultimo Pyrmont Zoning Map*

Permissibility under the LEP is considered on the basis as to whether or not the proposed development is consistent with one or more of the zone objects. As described above, the proposal is considered to be consistent with a number of the zone objects in particular:

"to promote a wide range of uses, particularly business development including tourist, leisure, commercial, retail and office development consistent with Ultimo-Pyrmont's proximity to the Sydney CBD, harbour locations and transport infrastructure"

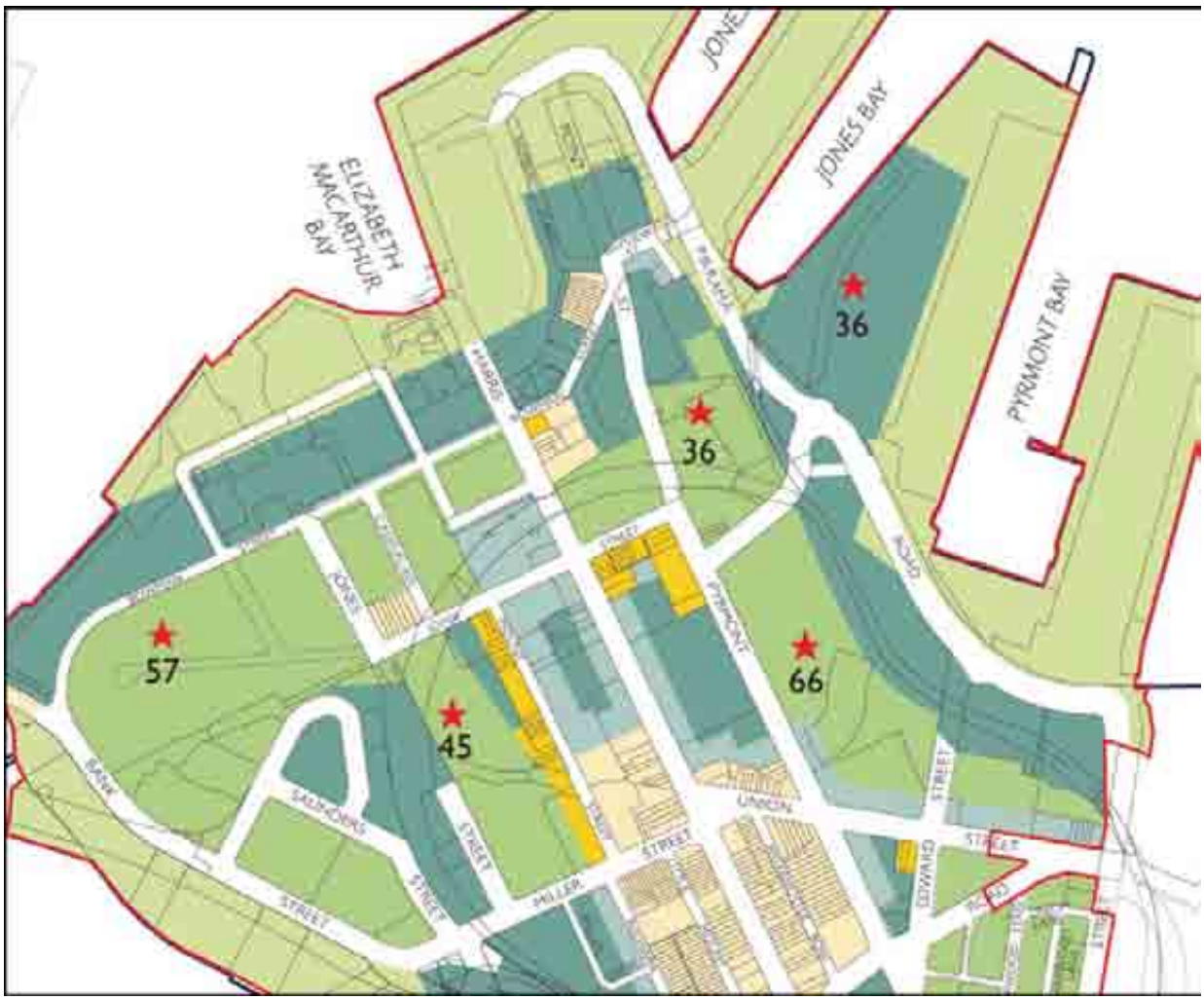
The proposed development is therefore permissible with consent under SLEP 2005.

Building Height

Clause 9 of SLEP 2005 invokes the maximum building heights for land as shown on the Ultimo-Pyrmont Height Map. The achievement of maximum building height must also result in a design consistent with the urban design principles contained within SLEP 2005. The Ultimo-Pyrmont Height Map specifies a 15 metre street edge height for the Switching Station site, a wide zone along Pirrama Road with a 21 metre height limit and a height of 28 metres across the rest of the site.

However, Clause 95 (also by way of the Ultimo-Pyrmont Height Map) specifies 'landmark sites' which may accommodate building heights in excess of the underlying height standards. In this instance, the height map identifies a site specific building height of 66 metres.

Figure 11 – *Height Control Map*



Picture 12 – *Extracts from SLEP 2005 Ultimo Pyrmont Height Map*

The enclosing structure over the Pirrama Road steps will generally reflect the height of the existing podium, in general accordance with the 21 and 28 metre height controls.

With regard to the proposed hotel tower, Under SLEP 2005 the site is earmarked as a landmark site, with a maximum height specified as 66m. A height exceeding the 28metre standard, but below the height of the existing hotel and serviced apartment towers will enable the realisation of a viable hotel

development within this tourism precinct, and reinforce the building's relationship with the taller Star City buildings which have been constructed closer to the 66m height.

This narrower, taller building form is also proposed to provide more attractive rooms with better access to natural light and views, and greater building separation and view corridor retention.

On 2 June 2007 the Minister advised with regard to the then scheme for the Switching Station component of the site that:

"The scale of any development on this site needs to achieve an appropriate relationship with the adjoining buildings surrounding the site, and mediate between the Casino building and lower surrounding buildings"

While no longer in force, Amendment 1 to the Pyrmont Bay Master Plan dealt specifically with the Switching Station site and had a similar 'vision':

"The urban design principles for redevelopment of the relatively small Switching Station site must respond to its context comprising the Sydney Harbour Casino, heritage items and a low scale conservation area. Development is to continue the casino podium along the street frontages of the site and compliment the curved forms of the casino tower elements. A higher building element setback from the street alignment will provide a transition from the landmark height of the casino development to the street wall heights in the neighbouring Pyrmont area…"
(our emphasis)

Amendment 1 was predicated on gross floor area of 21,500m^2, with the resultant building mass arranged as a 15 metre podium, with two options for a taller element setback above. The podium height was intended to reflect the neighbouring street wall heights, and a 45 degree height plane from ground level on the opposite side of Union Street formed the basis for the height of two options for a taller element beyond.

The first option involved a 30.5 metre (RL 138) high element, setback only 7 metres from Union Street. The second option involved a 37 metre (RL 144) element setback 12 metres. While both of these options sat within the nominal 45 degree height plane, both would have been clearly visible from, and quite close to the opposite side of Union Street (see Figure 11 in Section 2.1.2).

In the design competition for the project conducted in August 2007, a 13 storey building with a topmost point at RL 165.5 was presented. In response to the comments of the competition jury (see **Appendix B** of the submitted Environmental Assessment Report), structural redesign has reduced the height of the proposed tower such that the scheme now has a topmost height of RL 164.05.

The currently proposed option extends the 45 degree principle of the Master Plan (see Figure 11), setting the tower element 20 metres off Union Street. While this creates a taller building:

The building still generally reflects the 45 degree height plane;

The building is setback considerably further from Union Street;

The main façade of the proposed building reflects the top of the main 'pre-cast' façade element of the existing casino towers; and

The top most point of the building (RL164.05) still sits more than 3 metres (one storey) below the top most point of the existing casino buildings (RL167.3).

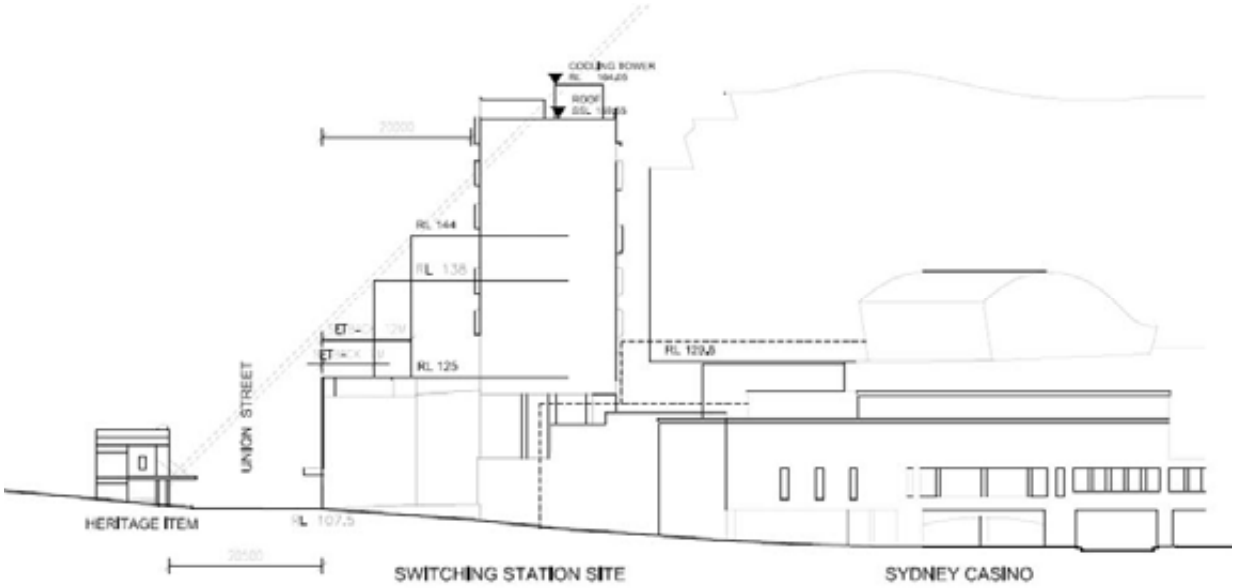


Figure 12 – *Master Plan Height Rationale*

The taller more slender form creates a more elegant form than the squatter, boxy approach taken on the adjacent "Atrium" building at 60 Union Street. The proposed form is also more consistent with the typology and proportions of the existing towers. An improved transition is thereby provided with the 15 metre sandstone finished podium element reflecting the lower surrounding buildings, with increased separation to a distinctly separate building element that reflects the style of, but is still lower than the existing Casino towers.

The more boxy 30.5 metre and 37 metre options in Amendment 1 would have been inconsistent with both the lower scale character of the surrounding area, and the taller scale of the casino towers. Furthermore, they would not have been suitable for contemporary 5 star hotel accommodation in terms of floor plate dimensions or access to sunlight, views and natural ventilation.

In this regard, Cox Richardson Architects have advised that a tall, slender building massing is most appropriate in this location because it will:

- *Relate to the topography of the immediate context.*
- *Allow significant setback to be achieved to Union Street, Pyrmont Street and Edward Street.*
- *Diminish mass as viewed on the Union Street alignment from Pyrmont Bridge (east of the site) and Union Square (west of the site).*
- *Permit a legible view corridor from Union Square to the Harbour between the Proposal and the adjacent Casino Serviced Apartments and better retain existing views generally from the public domain to the City and Harbour.*
- *Reduce impacts of overshadowing on the public domain of Union Street*
- *Result in less bulk and mass as presented to the Public Domain by the proposal.*
- *Mediate the built-form from the existing Casino Serviced Apartments and Casino Hotel to the surrounding lower scale built form south of the Site.*
- *Modelling of the upper levels will be such that a positive relationship to the top of Precast Datum in the excising Casino Building is established. This will be achieved through façade articulation and setback above the Datum level".*

We therefore conclude that, in our opinion, a revision to the design competition scheme with a topmost height of RL 164.05 will achieve an appropriate relationship with the adjoining buildings surrounding the site, and mediate between the Casino building and lower surrounding buildings.

The proposed re-cladding of the existing serviced apartment and hotel buildings will not alter their height, but the change in materials will allow these buildings to read as part of the same 'family' of buildings as the proposed hotel tower.

Floor Space Ratio (FSR)

Clause 98 of LEP 2005 specifies the maximum area of business floor space permitted on the land in master plan areas as a maximum FSR of 2.5:1. However, pursuant to Clauses 98(2) and 115, a greater FSR may be adopted for the site by way of a Master Plan.

LEP 2005 permits additional FSR on land that is subject to a master plan (i.e. deemed DCP) if:

a) a better pattern of building heights will result, and

b) there are reductions in building heights on other sites in the deemed DCP area, and

c) the urban design principles for Ultimo-Pyrmont will be achieved for that land, and

d) the greater building height will not adversely affect the quality of the adjoining public domain.

The Pyrmont Bay Master Plan provided a floor space distribution for the area encompassing the Pyrmont Street Entertainment and Casino Centre, Darling Island Residential, Wharf 7-10, the Switching Station site, and Pyrmont Bay Park. All other land within the deemed DCP area has been developed in general accordance with this distribution. However, while the previous 1997 consent for the Switching Station site approved a development that fully realised the 21,500m^2 GFA attributed to it under the Master Plan, the Casino has only 102,551m^2, despite being allocated 119,000m^2 GFA under the Master Plan.

While the Pyrmont Bay Master Plan has no statutory force, in the absence of any other applicable guidance, it demonstrates that the amount of development proposed is consistent with what was originally planned for the site. Specifically, while the 23,886m^2 of GFA proposed on the Switching Station site is marginally higher then the 21,500m^2 envisaged in the Master Plan, the 106,162m^2 of GFA proposed on the Casino site is considerably less then the 119,000m^2 envisaged, and the 130,048m^2 of GFA within the total project is less than the 139,500m^2 GFA envisaged for the entire site.

Heritage

The site is not located within a conservation area, and while Item 70 is located on the site (Pyrmont Power Station, Building A at 42 Pyrmont Street, on the corner of Jones Bay Road), this heritage item has been incorporated in the overall development of the Casino site.

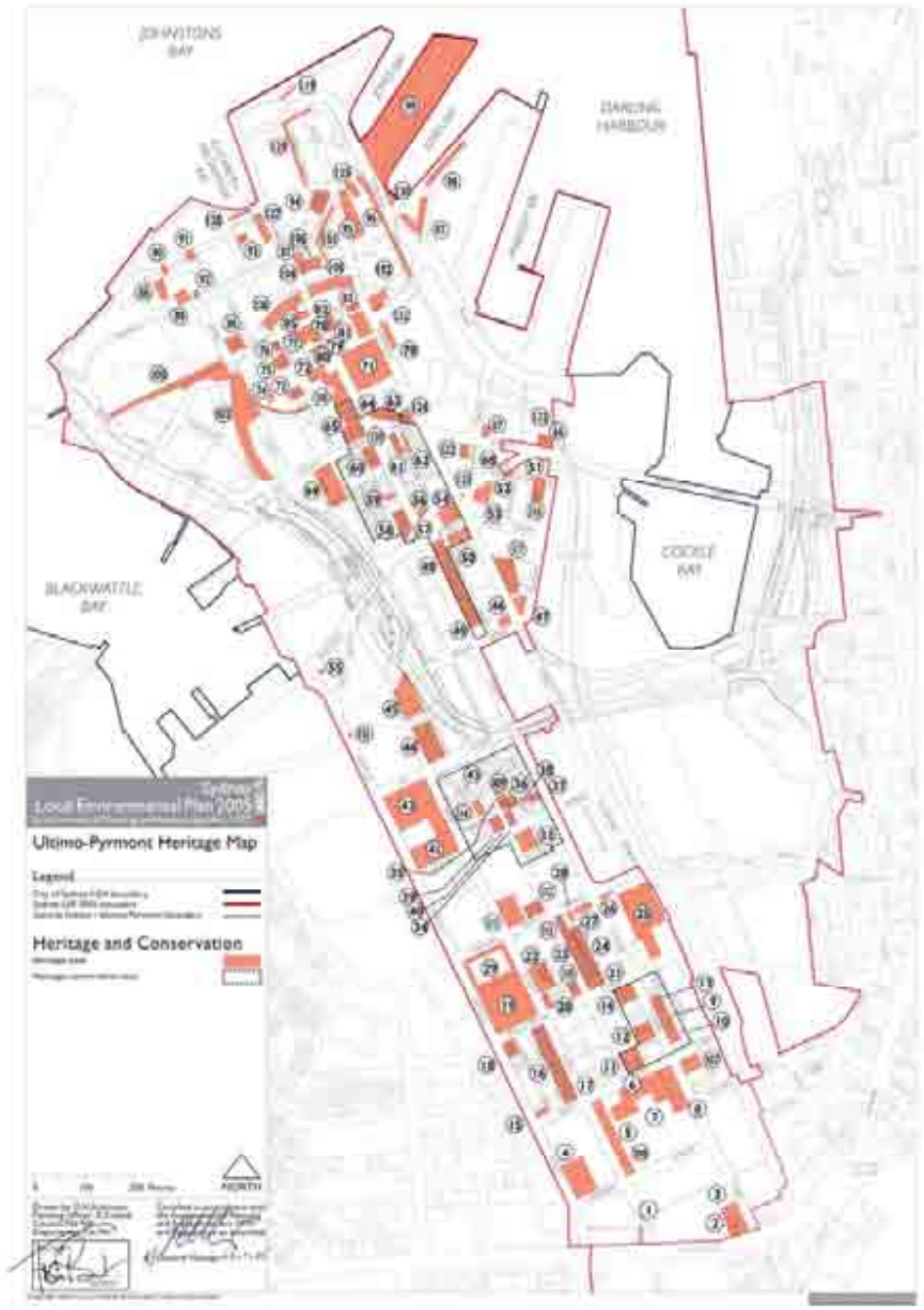
The site is also in the immediate vicinity of numerous heritage items, including:

- No. 63 Group of dwellings at 91-95 Pyrmont Street.
- No. 67 New York Hotel at 60 Union Street (north east corner Union and Edward Streets)
- No. 71 Schute, Bell, Badgery, Lumby Ltd building at 47-69 Pyrmont Street
- No. 83 Cottages at 27-29 Pyrmont Street
- No. 97 Naval Stores Building at Jones Bay Road, Darling Island
- No. 102 Escarpment and Fencing to Jones Bay Road
- No. 122 Group of dwellings at 31-33 Union Street (south west corner Union and Edwards Streets)
- No. 122 Group of dwellings at 31-33 Union Street (south west corner Union and Edwards Streets)

- No. 132 Warehouses and Terraces 10-18 Pyrmont Street

However, only items 67, 122, 124 and 63 are in the direct vicinity of any proposed works, being opposite the Switching Station site.

Figure 13 – *Heritage Map*



Picture 13 – *Extract of SLEP 2005 Ultimo Pyrmont Heritage Map*

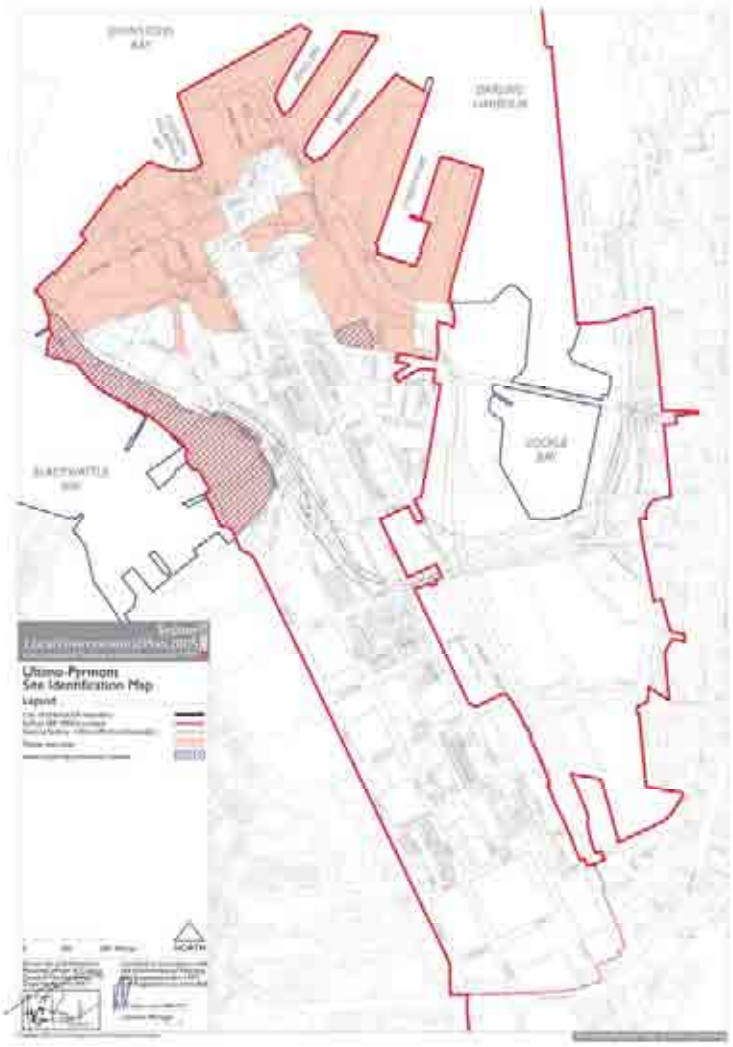
A Heritage Impact Statement (HIS) has been prepared by Urbis (see **Appendix M** of the submitted Environmental Assessment Report) and is considered at Section 6.6.

Master Plans

Notwithstanding that 'Master Plans' are no longer recognised under the EP&A Act, and must be dealt with as 'Deemed DCPs', Clause 106 of SLEP 2005, and the Map thereto (see below), requires the preparation of Master Plans prior to the development of certain land, including the subject site. While the Pyrmont Bay Master Plan was prepared pursuant to the former SREP 26 (Amendment 1 related specifically to the Switching Station site), this plan was not recognized in the list of adopted Master Plans carried forward when SREP 26 was incorporated into Clause 106 of SLEP 2005. Clause 106 also states that:

"The Minister may waive compliance with this requirement because of the nature of the development, the adequacy of other guidelines or for such other reasons as the Minister considers sufficient".

Figure 14 – *Master Plan Sites Map*



Picture 14 –*Extract of SLEP 2005 Ultimo Pyrmont Site Identification Map*

Activity Strips

The Ultimo-Pyrmont zoning map identifies Union Street as an 'activity strip'. Clause 90 of SLEP 2005 requires ground floor development along these strips to include non-residential uses such as retail outlets, restaurants, neighbourhood facilities and the like. This is to emphasise people-oriented street frontages and enhance security and surveillance. The Union Street frontage will consist of the entry to the new hotel and casino, and a café. These uses will provide activation along this identified strip.

9.3 Urban Development Plan for Ultimo Pyrmont

An Urban Development Plan (UDP) for Ultimo Pyrmont has been prepared for the areas within Ultimo and Pyrmont to which SREP 26 formerly applied. Clause 83(2) of SLEP 2005 requires that the consent authority have regard to the "Ultimo Pyrmont Urban Development Plan endorsed by the Council on 25 March 2004"

The UDP makes more detailed provisions for land development within the precinct than are contained within LEP 2005, and is consistent with the LEP's broader development controls.

The provisions within the UDP relate to design based development criteria, such as more detailed building envelopes, sustainable residential development, access, parking and circulation, and public domain strategies. Importantly, the built form controls contained in the UDP that relate to building envelopes and form do not apply to Masterplan sites.

The following table outlines and addresses those provisions in the UDP of relevance to this application:

UDP Provision	The Proposal	Consistent
Facades of new development should relate sympathetically to existing buildings in the vicinity, particularly if they have heritage or streetscape value.	The scale and sandstone finish of the proposed hotel podium will be sympathetic to the character of surrounding heritage items and the traditional character of the streetscape. However, the modern finishes of the tower elements will reflect the modern revitalisation of Pyrmont. The overall development will thereby acknowledge the former character of the locality, while celebrating its present and future.	√
Buildings should be in plan and elevation to develop appropriate rhythm, proportions and depth in facades to articulate street edges.	The podium of the proposed new hotel element is not inconsistent with the scale and massing of terrace building forms that traditionally characterised the streetscape. However, the fine grain vertical rhythm of terrace housing is inappropriate for a modern hotel on a site of this scale. While the extensions along the Pirrama Road frontage provide a rhythm of overlapping curved elements that reflect the finer grain of Pyrmont, they adopt a distinctly modern and dynamic expression that deliberately contrasts with the more rigid expression of traditional buildings in the locality.	√
Building treatment must add interest to facades, for example patterned and textured treatment such as string courses, surrounds to openings and masonry detail. *New development must complement existing buildings in the vicinity in materials and colours. Generally, facades should have a*	All proposed facades include a range of detailed elements that create interest. While such interest is created through modern architectural elements, the inclusion of a sandstone finished podium to Union Street reconciles this modern design expression with the more traditional styles of surrounding heritage buildings.	√/X

UDP Provision	The Proposal	Consistent
masonry or rendered character.	However, the Pirrama Road Façade is proposed to have an almost entirely glazed façade to redress the inward looking character of the existing casino, and create a strong visual link between proposed active uses and the foreshore.	
Horizontal elements should relate to existing buildings…;	The horizontal form of the podium to Union Street reflects the horizontal massing proportions of traditional terrace house rows, albeit in a modern style.	√
Facades should not contain large unbroken expanses of glass or curtain walling.	See above.	√/X
Reflective glass must not be used.	Glass with a maximum reflectivity index of less than 20% will be used (see Section 6.14).	√
Union Street frontage of the Switching Station site is identified as an Activity Strip.	The Union Street frontage will consist of the entry to the new hotel, retail outlets and a café. These uses will provide activation along this identified activity strip.	√
Site identified as a 'Retail and Leisure' node.	The site is only one of three such nodes in the Ultimo/Pyrmont locality, the others being the fish markets and Darling Harbour. The proposed improvements to the Star City entertainment complex will reinforce its role as a significant regional retail and leisure node.	√

9.4 Developer Contributions

The proposed development is subject to the provisions of the City of Sydney Section 94 Contributions Plan – Ultimo Pyrmont 1994 and Affordable Housing Contributions under the provisions of the Sydney LEP and the City West Affordable Housing Program.

6.4.1 Section 94

The City of Sydney Section 94 Contributions Plan – Ultimo Pyrmont 1994, provides the following contribution rates specifically for 'Casino' development:

- Gaming and Entertainment: $123.7/m^2 site area
- Retail and Restaurant: $113.80/m^2 of gross floor area
- Hotel (based on 5 star): $4,721.00/room

A contribution of $588,317.20 is generated in relation to the 4,756m^2 of additional site area being used for 'Gaming and Entertainment' (i.e. the switching station site). A contribution of $1,458,789.00 is generated by 309 additional hotel rooms, and a contribution of $900,954.6 is generated in relation to the net increase of 7,971m^2 of 'Retail and Restaurant' space.

The total resultant contribution under this plan is therefore $2,948,060.80

9.4.1 Affordable Housing Contributions

Based on the current contribution rate of $33.34 per square metre of floor area (for commercial developments), a total affordable housing contribution of $916,716.64 is generated in relation to proposed 27,496m^2 of additional proposed 'commercial' gross floor area.

9.4.2 Alternative Contributions

In consultation with the Sydney Harbour Foreshore Authority, the proponent intends to undertake improvement works to a value of $2,948,060.80 to Pirrama Road, Pyrmont Bay Park and surrounding public domain spaces, in lieu of monetary contributions generated under the City of Sydney Section 94 Contributions Plan – Ultimo Pyrmont 1994.

9.5 Architecture and Urban Design

The following design statements have been prepared for the various components of the project by the relevant design architects:

9.5.1 Proposed Hotel (Switching Station Site) – Cox Richardson

Objectives

- *To make a significant contribution to the Built Form and quality of the Public Domain on the Peninsula.*
- *To improve the amenity for residents and workers, and add significantly to the Entertainment/Leisure/Accommodation Capacity of the Darling Harbour Precinct.*
- *To provide a Landmark Building for the Pyrmont Locality.*
- *To present a Positive Iconic Presence to Sydney Harbour and in Particular the Pyrmont Bridge approach to the Peninsula.*

Podium

The Podium is responsive to the historic character of the Union Street streetscape by way of its materiality and scale. It provides an Active edge to Union Street, Pyrmont Street and Edward Street via Hotel entries, Retail frontages, Hotel lobby activity and Casino entry points. A reworked Pedestrian linkage through the existing Casino is proposed from the Union Street / Pyrmont Street Intersection that is more inviting and legible from the Public Domain than the existing arrangement. A continuous and seamless public domain link from Union Square/Street and Pyrmont Street to Pyrmont Park is proposed. Similarly a new pedestrian linkage from the Union Street / Edward Street intersection through the existing Casino is proposed.

The reconfiguration of the existing through-site link, and the establishment of a new one, will improve the permeabil¬ity and clarity of the Public Domain engagement with the existing Casino complex.

The Porte Cochere solution is proposed as an extension of the existing to service taxi drop-off only – valet parking and coach drop-off are restricted to the existing Porte Cochere.

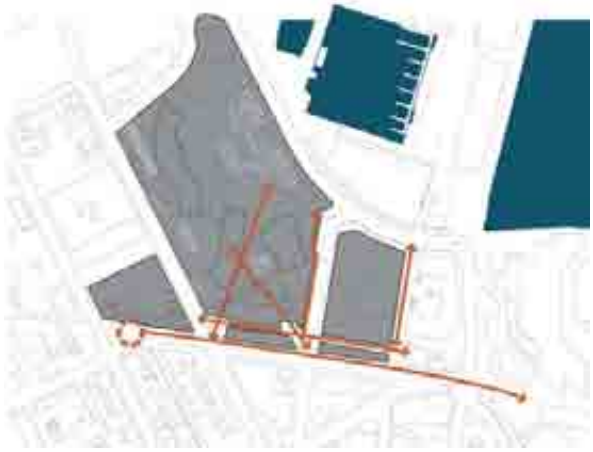
The main hotel lobby entry is adjacent the extended new porte cochere addressing the Union Street / Pyrmont Street intersection. The hotel lobby itself acts as a 'through-site' link also encouraging public permeability. Its alignment is such that it engages the 'through-site' link located at the 'Atrium' building directly opposite in Edward Street. A strong pedestrian address is created for the Hotel lobby directed towards the entertainment precinct of Darling Harbour and the CBD, via Pyrmont Bridge. The hotel lobby contains active uses (Café, Bar and Lounge) which are wholly transparent to and hence animate Union Street encouraging Public engagement and use of the Lobby. These uses are consistent with current Union Street Activity. The proposal includes an external café seating area directly ad¬dressing the Union Street / Pyrmont Street corner exposed to the afternoon sun and anticipated as an extension

and enhancement of current Union Street outdoor Café activity. The eastern portion of the Podium's Union Street frontage is activated with three Retail shopfronts.

The Podium presents a strong Street definition to Union, Pyrmont and Edward Streets. It is predominately finished in Sandstone and is of a height and scale appropriate to its immediate Streetscape Context. It relates positively to the Union Street Character.

Improvements to the Public Domain of Union, Pyrmont and Edward Streets is proposed via new street trees, paving, footpath awnings and street lighting.

Figure 15 – *Urban Design – Hotel Podium*



Picture 15 – Public Movement

Picture 16 – Street Activation

Picture 17 – Street Definition

<u>Tower</u>

The vision for the Tower is Fresh and Contemporary.

It provides a Separate Identity and Counterpoint to the existing Casino Buildings; however it also acknowledges the Built Form of the existing Casino Buildings – particularly in the curvature of its North Facade. The datum level of the 'top of precast' to the existing Casino buildings is strongly referenced in the detail to north façade of the tower. Its south façade however responds positively to the alignment of Union Street.

The tower's slender and distinctive form minimizes visual bulk and mass - particularly as viewed from the Public Do¬main on the Union Street alignment east (Pyrmont Bridge) and west (Union Square) of

the Site. Both the east and west elevations are highly articulated to achieve a slender form. The eastern elevation is given particular consideration as it addresses the approach to the Site from the CBD and hence presents an iconic and highly distinctive raked form.

The key view corridors to the CBD from the Public Domain of Union Square are retained due to the separation be¬tween the tower and the adjacent Casino Serviced Apartment Building, and similarly the Tower setback to Union Street.

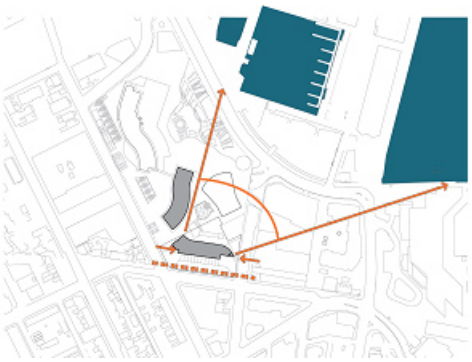
Its setback to Pyrmont Street and Edward Street also mitigates impacts on the view corridor of these streets.

The tower mediates the height of the adjacent Casino Buildings and the adjacent surrounding built form immediately south of the Site.

The orientation of the tower is such that a maximum number of rooms are allocated to the north, and conversely a minimum number allocated to the south. The tower cores are located to the south-east and south-west providing protection to the building from early morning and late afternoon sun.

Figure 16 – Urban Design – Hotel Tower

Picture 18 – Setback



Picture 19 – Tower Alignment

Picture 20 – View Corridors and Vistas

9.5.2 Upgrade of existing serviced apartment and hotel tower facades – Cox Richardson

Objectives

To improve the tower facades such that they are consistent in quality to the other proposed news works - on the Switching Station site and the Pirrama Road frontage.

To relate positively to the new tower proposal for the Switching Station Site To improve the operational and thermal performance of the towers To improve the presentation of the Casino complex to the Harbour and the CBD

To introduce shading to window openings

To 'seal' the existing external lifts to the Hotel to address operational problems associated with their current exposure to the environment.

Description

It is proposed to over-clad all facades to the existing Casino towers where currently finished in precast in an open-jointed colour-backed glazing.

Additionally, horizontal fritted glazing will be used as a sunshade on the long facades of both buildings. These will be off-set from the colour-backed glazing at varying distances and be detailed to read as consistent to the horizontal fritted glazing as proposed to the new tower's north façade.

Glass selection will be determined to ensure a consistent and coordinated appearance across all new works to the entire Casino complex.

Glazing to long elevations will extend beyond the extent of precast to form glazed 'blades', hence diminishing impacts of mass and heaviness associated with current condition. The 'blade' detail described will be consistent with 'blade' treatment to the south façade of the new tower.

9.5.3 Pirrama Road Building Expansion – The Buchan Group

Introduction

The new Pirrama Road façade elevation has been designed to mutually satisfy the multiple requirements of:

- *expressing the many aspects of the public dimension of the building s new purpose,*
- *responding to the evolving context of Pyrmont,*
- *establishing a contemporary architectural excellence in the form, composition and detailing of this important piece of street edge architecture,*
- *making a positive and appropriate contribution to the activation of the ground level public realm.*

Contextual Response

The design responds to the dual contextual imperatives of the surrounding context and that of the existing Star City architecture.

The evolving context of Pyrmont's built form is diverse in its uses, historical styles and scale. Within this diversity, certain aspects of commonality are evident, in particular the degree of street definition, scale and materiality. The design also responds to the infill nature of the architecture within the existing architectural context of Star City, itself of a diverse elemental nature with various conic forms (both inverted and upright cones), flytower forms, and three mid-rise hotel and apartment towers (two existing and one new) all competing for aesthetic attention. The design responds to the opportunity for the new architecture to unify these multiple forms of the existing architecture.

Ground Plane and Public Realm

The external ground level spaces have been designed to allow public pedestrian amenity to predominate.

The entire external ground plane will feature the highest quality exfoliated granite paving with orthogonal bands reinforcing the formality of the architecture, with pattern and material extrapolated contiguously into the main entry interior, as well as across the public footpath adjacent Pirrama Road.

The ground level building façade is set back up to approximately 20 metres from Pirrama Road providing for significant public open forecourt space. Pedestrian shelter is provided to this area by means of a colonnade of sandstone columns and a finely detailed glass canopy, both extending the full width of the elevation.

Public vehicular arrival is provided by means of a one way drive aligned parallel to the straight facades of the building, with contiguous paving and no curbs or grade separation, the vehicle zones being defined by bollards and ground lights thus ensuring a strong sense of pedestrian right of way . A less frequently used VIP vehicular arrival zone (managed by Star City staff) is proposed to the north of the new entry element which for much of the time may be used as a public activity space.

The ground level façades are animated by a range of treatments and uses, with café/retail uses to both ends of the façade, the central entrance/arrival element, and immediately to either side of the central entry sandstone walls with a flush glass veneer and tumbling water wall treatment into ground level water pools. The sandstone walls feature distinct breaks to provide public access into the public transport interchange zone.

Program and Functionality

The 4-storey form in its horizontal and vertical hierarchies, in its balances of solid/void and opacity/transparency, in its highly articulated architectural animation, and in its disposition of constituent forms is expressive of the various functions through the levels of the new building and, philosophically, of the strong sense of welcome, entrance, views (in and out) and public uses that are all intended for the new building.

The vertical hierarchy of the elevational design expresses the distinct organisation of the programmatic uses level by level, with: ground level dedicated to street level café/retail uses, public arrival both vehicular and pedestrian, public access via continuous covered colonnade and canopy protected pathways, and the central arrival element (the volume of which extends as a void through all four levels), first level dedicated to restaurants overlooking Pirrama Road and the Harbour, the elevation thus featuring combinations of operable glazed sections and bay window elements, second level above ground dedicated to the casino gaming floor, the elevation featuring open unenclosed terraces, third level dedicated to a destination night venue and restaurant, the elevation thus featuring architectural devices as a combination of open recessed terraces and operable glazed wall sections.

The horizontal elevational hierarchy similarly expresses the arrangement of the programmatic uses across the façade, with uses on all four levels set to either side of the main central public entrance, itself located on the axis of the existing upright glazed cone form.

FORMALITY

The design response adopts a contemporary urban formality, for reasons of contextual conformity, of unifying the diverse existing architectural forms, and of annunciating the relationship of the façade with the alignment of Pirrama Road. Notwithstanding the diverse palette of the architectural detail reflecting the like diversity of the programmatic uses, the formality of the elevation employs a degree of singularity and simplicity of form.

The overall form is shaped into three constituent forms a projecting clear glazed part-cylindrical form located centrally as a 4-level void over the main entry, and flanking forms to either side of the central form, predominantly straight and aligned directly parallel with that of Pirrama Road.

The ground level plan is set back from the main façade of the upper three levels, with the creation of a ground level colonnade of sandstone columns extending through the primary structural grid of the main façade. The formality and hierarchy of the composition is thus reinforced by the elevational expression of the primary structural grid modulation and rhythm across the façade, and the secondary grid of vertical glazed and stainless steel mullions and horizontal glazing transoms. Formal distinction between solid and void is thus distinctly expressed in the architectural elevation.

A single parapet level is employed across the elevation for reasons of formality and unity, this being given perspective relief by the break created to either side of the central entry form.

Materiality

The palette of basic materials is glass, sandstone, and stainless steel. Sandstone is adopted as the prevailing solid material for contextual reasons. It is employed in two basic forms. Firstly, it is employed as a predominating base to the colonnade and the recessed ground level walls to either side of the

glazed central entry and continuing internally through the central entry as a backdrop feature wall, thus firmly grounding the overall form. Secondly, it is employed throughout the upper levels of the flanking forms in a spandrel structural grid arrangement in order to express the formality of the structural rhythm of the floor by floor hierarchy, and to define the organisation of window and terrace openings across the façade.

Within the framework of the solid spandrel and column grid, glazing is strongly expressed in the upper levels of the façade for maximising views out to the Harbour and the City.

The glazing takes a wide and diverse series of applications across the flanking forms

As balustrades defining the edges of open terraces, as operable horizontal louvers to restaurant terraces, as fixed panels to discrete areas including the restaurant bay window projections, and as a framing device to the third level parapet and sides of the flanking forms. The vertical side of the flanking form to the south is inclined obliquely to a parallel alignment with that of the adjacent inverted cone element.

The central skylit entry element is given both internal and external distinction by the employment of continuous clear glazing throughout with fine stainless steel horizontal glazing members extrapolated from the flanking forms.

Stainless steel is employed throughout as glazing framing, as string courses to the sandstone forms, as canopy support elements, and as vertical fins and blade elements.

The stainless steel provides the crucial aspect of pattern across the façade and importantly a diversity of pattern by means of deftly varied horizontals and verticals, together with the variations in openings and projections all within the composition of forms and the prevailing order and formality of the sandstone column and spandrel grid.

Detail

The detailing is crisp and finely crafted. Fine stainless steel glazing members and string courses together with frameless glass louvers and balustrades, and crisply detailed bay window projections and cantilevering glazed canopies all provide delicate counterpoint to the robustness and earthy quality of the sandstone ground level walls and upper level post and beam grid of the building.

In particular, the central public entry element will feature very fine stainless steel glazing members within the flush external face of the clear glass façade, the glazing itself to be suspended off a combination of fine stainless steel rods and castings.

Texture and finish provide further visual interest and counter balance to the elevational composition. Whilst the glass is proposed to be clear throughout, careful and restrained variation in both the stainless steel and sandstone is proposed, with both polished and finished stainless steel, and smooth sawn and rough sawn sandstone to be employed across the façade.

9.6 Heritage Impacts

Given the proximity of numerous listed heritage items, including Sydney harbour, a Heritage Impact Statement (HIS) has been prepared by Urbis (see **Appendix M** of the submitted Environmental Assessment Report). The HIS concludes that:

"The main impact of the proposed podium and tower will be in relation to medium distance views to the tower from surrounding streets to the south, east and west, parts of which are in a Conservation Area. The Union Street streetscape will also be altered by the proposed 12-14m high podium building. The impact of the podium on Union St has been minimised by architectural devices such as the corner entries, the use of sandstone cladding on the podium, the building of the podium to the street alignment, the use of awnings on the lower Union St façade, and the activity provided by the hotel lobby and the shopfronts. Given the landmark status of the site, and the high quality of the architectural solution, the proposal for the Switching Station site is generally recommended for approval, with the following recommendations:

- *Position and impact of views to plant rooms on the Union St podium be clarified*
- *Signage panels on corner of Union and Edward Sts, and along Edward St should be reviewed to ensure that the impact on the streetscape is reduced.*

The impact of the recladding of the existing towers is not considered a heritage issue, and the extension of the flytower has no impact on the surrounding heritage items. The works proposed for Pirrama Rd will have some impact on medium-long distances from some vantage points on the Harbour".

9.7 Visual Impacts

A Visual Impact Assessment of the project has been prepared by GM Urban Design & Architecture (GMU Design) and is included at **Appendix N** of the submitted Environmental Assessment Report. The findings of the report in relation to identified significant views to the site are summarised below.

9.7.1 Long Distance Views

King Street Corridor

The view from the intersection of King Street and Clarence Street will be affected by the proposed hotel tower. However, while the hotel will block views to the lower section of the eastern pylon of Anzac Bridge, the top of the pylon and some of the distinctive guy wires will remain visible above. GMU Design consider this to be a medium and yet acceptable visual impact.

Millers Point

The proposed hotel tower will slightly reduce visible sky from both the new foreshore edge once it is redeveloped and two pocket parks on the Millers Point Peninsular. However GMU Design expects the hotel tower to meld with the surrounding skyline and therefore consider the visual impact to be acceptable.

9.7.2 Medium Distance Views

King Street Wharf Views

The proposed hotel tower will be visible from King Street Wharf, particularly along the foreshore edge of the western shore of Darling Harbour. GMU Design have assessed that the proposed development will blend into the existing built form and describe the proposed towers as less intrusive and more appropriate to the context of the development than the existing towers. GMU Design have therefore concluded that the project will have an acceptably low impact on this view.

Pyrmont Bridge Views

Most of the proposed development will be screened from this view by vegetation. However the hotel tower will still be visible. GMU Design have assessed that the hotel tower would not result in the obscuring of any existing views of major place-making elements. The existing streetscape has taller built forms and as a result GMU Design concluded that the proposed tower would fit with the existing street wall view and is therefore considered to have a medium but acceptable impact.

9.7.3 Immediate Views

Union Square

Though the proposed podium is visible from Union Square, it complements the 'square' shape of the surrounding built forms. Only the top of the proposed tower is visible and GMU Design concluded that the height of the proposed tower, even if it were lower, would create a similar affect. GMU Design noted the tower does not block the view of Centre Point Tower, but that it does obscure the MidCity Centre tower. This is considered to be a medium impact that is acceptable. At street level the proposal is considered by GMU Design to have a low impact which is acceptable.

Southern/northern foreshore boardwalks

From the southern boardwalk the proposed tower is a standalone element. However GMU Design describes this as adding to the visual interest of the view and being in scale with the existing towers. They have assessed that from the northern boardwalk the proposed tower will be a continuation of form within the existing view. In both contexts GMU Design consider that the proposed tower complements the existing views, and the impact is therefore considered acceptable.

9.7.4 Conclusion

GMU Design concluded that while the proposed development has unavoidable visual impacts, described as medium to low, all of the goals of the UDP have been addressed and the visual impacts on the surrounding area, Darling Harbour and city views are considered acceptable.

9.8 Solar Access

Additional shadow diagrams included with the architectural drawings (see **Appendix B** of this report) demonstrate that whilst the new hotel component will overshadow a limited number of residential properties on Pyrmont Street, even on the Winter Solstice such overshadowing is limited to the morning, and that from midday these properties all have full solar access for the rest of the day. Such levels of amenity are considered to be acceptable under the Urban Development Plan for the locality which stipulates a minimum of 3 hours solar access to main living areas.

Figure 17 – *Existing and Proposed Solar Access (Winter solstice)*

Picture 21 – Existing Winter Solstice Shadows – 9:00am

Picture 22 – Proposed Winter Solstice Shadows – 9:00am

Picture 23 – Existing Winter Solstice Shadows – Noon

Picture 24 – Proposed Winter Solstice Shadows – Noon

Picture 25 – Existing Winter Solstice Shadows – 3:00pm

Picture 26 – Proposed Winter Solstice Shadows – 3:00pm

9.9 Wind Effects

An analysis of the wind environment of the project with respect to the principal wind directions for Sydney has been prepared by Windtech (see **Appendix O** of the submitted Environmental Assessment Report).

The results of the study indicate that the pedestrian ground level areas are generally well shielded from principal winds by existing and proposed tree planting and awnings, and by existing neighbouring buildings.

It is expected that in general the wind conditions for the balconies and terraces will be acceptable for their intended use given the proposed impermeable balustrades and roofing. Certain outdoor areas will also be shielded by the existing casino buildings and the proposed hotel tower. With the addition of two 3m high screens at podium level between the proposed hotel tower and the existing serviced apartment tower, it is expected that any potential funnelling effect between these towers will be ameliorated and this area will be suitable for its intended use.

It is expected that with the addition of either a full height screen or panel louvring on the western side of the Level 1 terrace in the proposed hotel that this area will be acceptable for its intended use.

A door and baffle screen arrangement is proposed at the Pyrmont and Union Street entrance to the ground level retail area. With these additions this area should be suitable for its intended use.

It is not expected that the proposed development will have any adverse effects to the wind conditions to the local surrounding streets and pedestrian footpaths and thoroughfares.

While wind tunnel testing will be required to refine the exact final design of mitigating devices, a Statement of Commitment is proposed to undertake and implement the findings of such testing

9.10 Safety / Public Areas / Pedestrians

Urbis have prepared a 'Crime Prevention through Environmental Design' (CPTED) report for the project (see **Appendix P** of the submitted Environmental Assessment Report). CPTED aims to influence the design of buildings and places by:

- Increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture.
- Increasing the effort required to commit crime by increasing the time, energy or resources which need to be expended.
- Reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'.

- Removing conditions that create confusion about required norms of behaviour (NSW Department of Urban Affairs and Planning, 2001).

The following is a summary of the findings of this assessment:

"Crime and Safety in Pyrmont

There are no current concerns in relation to levels of crime, safety and security in Pyrmont and around the Star City Casino site

To address the incidence of crime in the basement car park, including car theft and theft from motor vehicle.

Design issues

- *Legibility and Pedestrian Access*
  - *There is potential for conflict in the number of uses indicated at the Pirrama Road main entry with pedestrians making authorized or unauthorized crossings of Pirrama Road (ie following desire lines) from Pyrmont Bay toward the entrance; pedestrians crossing at the corner of Jones Bay Street and Pirrama Road and pedestrians crossing near the corner of Edward and Pirrama. While there is a formal crossing at Edward Street, pedestrians are still crossing against the lights causing potential pedestrian safety concerns.*
  - *At the main entrance, there is potential for conflict where there are distractions (eg the Sound and Light Show, celebrities arriving) or lack of clarity in 'path-finding'.*
- *Passive/Active Surveillance*
- The design of the retail arcade improves greatly upon the current design as it will provide a more direct route through the Casino and permeability will be accentuated through a strong visual connection with Pyrmont Bay. While the curve of the retail arcade may still affect lines of sight and potentially create a physical place of entrapment, the continuation of CCTV cameras and roving security in the area will improve overall surveillance.

Proposed Mitigation Measures

- *Installation of CCTV cameras throughout the proposed car park area extension and if possible the current parking station and continuation of regular security patrols through these areas.*
- *Maintenance of clear and prominent signage, changed at regular intervals, warning people not to leave their valuables in their cars.*
- *Consideration of use of adequate lighting to a standard that enables face recognition in the car park and in the pedestrian arcade and ensuring street lighting is maintained to this standard in external areas adjacent to the Casino*
- *Continuation of after hours management measures (ie CCTV, roving security patrols) for the retail arcade to address potential loitering or malicious damage to property.*
- *Use of robust materials be used in finishes throughout the retail arcade to mitigate against potential malicious damage.*
- *Use of clear signage in relation to pedestrian access and path-finding through the pedestrian arcade.*
- *Use of traffic control personnel at the main entry to marshall vehicles and pedestrians during peak times or events.*
- *Ensuring that external doors are flush with walls.*
- *Ensuring that lighting is improved in Union Street.*

The CPTED Report recommends that a Pedestrian Safety Report be undertaken to address any potential pedestrian safety concerns.

9.11 Public Domain

The proposed redevelopment will activate the public realm at the interface of the casino as it addresses Pirrama Road and the Harbour beyond. This will be achieved primarily by the inclusion at the ground level of new restaurants and cafes directly adjacent to the public footpaths along Pirrama Road. In addition to this there is to be a general "humanisation" of the building at its upper public levels.

The landscape architectural character is envisaged as more "urban" than "resort like", whereby vegetation is to be confined to a more intimate human scale, and whereby street furniture, low level water features, granite paving, sculptures and artworks all combine to contribute to this urban character.

Public entry from Pirrama Road to the new gaming floor will be separated from the new entry icon element by means of a discrete entry located at the retail and restaurant level, whereby new escalators and grand stairs will be incorporated into an expanded floor void within the existing glazed cone form. This will provide a new "front door" arrival to the casino at Pirrama Road both for pedestrians and vehicular drop and will reconcile the casino's relationship between the built form and its setting and public domain through creation of an expanded urban edge built form fronting Pirrama Road, focusing upon an architecturally distinctive public entry.

9.12 Vehicular Access, Car Parking & Traffic Impacts

9.12.1 Car Parking

Neither SLEP 2005, nor DCP 1996 provide car parking controls for Ultimo – Pyrmont. However, the Urban Development Plan for Ultimo Pyrmont - 1999 Update specifies maximum parking generation rates for 'Residential Development' and 'Business Development' (1 space per 150m^2). While the proposed 28,282m^2 of additional gross floor area would generate an additional 188 spaces based on the 'Business Development' rate, this generic rate for retail and commercial office development fails to reflect the specific parking demands of a casino and complementary uses.

Similarly, a maximum parking rate of 1 space / 5 hotel rooms and 4 spaces / 100m^2 of function room area applies in Central Sydney, resulting in a maximum parking calculation of 237 spaces for these components of the hotel proposed on the Switching Station component of the site.

However, the site is in Pyrmont, not Central Sydney, and the above maximum rates are therefore not applicable to the project. Furthermore, the 500 proposed additional car parking spaces relate not only to the proposed hotel, but also to proposed expansion of the integrated Casino, ballroom and retail development on the site, including retail and casino expansion on the Switching Station site. No specific standards exist for Casinos, and the Roads and Traffic Authority Guide to Traffic Generating Development does not provide any guidance in relation to car parking for casino uses. However, it advises the following with regard to the provision of parking for clubs:

"Off-street car parking must be provided to satisfy the average maximum demand. Research has indicated that the demand for parking varies substantially depending on the type of club and cannot readily be related to building floor areas or to the membership. The determination of the number of parking spaces required is therefore based on the characteristics of the proposed development. Comparisons must be drawn with similar clubs.

For ten licensed clubs surveyed in 1978, the mean peak number of cars parked per 100m^2 of public or licensed floor area (bar, lounge, dining plus games) was 26.4, varying from 7.2 to 69.9, with a sample standard deviation of 17.4. However, since 1978 there have been some behavioural changes in the use of clubs, partly due to random breath testing.

The determination of peak parking demand must consider the peak demand time of the various activities within the development. Parking must be provided to satisfy the peak cumulative parking requirements of the development as a whole, by superimposing the parking demand for each activity".

Given that the casino has been in existence for over a decade, and the proposed expansion comprises a similar composition of mixes to the existing facility, the parking demand of the existing development is clearly the best guide to that of the proposed additions.

In this regard, the Department of Planning's assessment report in relation to the original construction of the casino (DA33/94 pp41) notes that the 2,500 spaces provided in the original casino were only ever anticipated to satisfy demand for 80% of the time, and that underutilised spare capacity of 2,000 spaces in other Darling Harbour car parks would be required to satisfy peak demand. Recent parking surveys by ARUP (see **Appendix Q** of the submitted Environmental Assessment Report) confirm that this is indeed the manner in which the Casino is currently operating, with peak demand of up to 3,600 spaces being spread between the existing 2,500 space casino car park and other parking stations in the locality.

The project proposes a floor space increase 26.8%. Given that the proposed expansion comprises a similar composition of mixes to the existing facility, an increase in peak parking demand of approximately 30% is also expected. The Transport Impact Assessment prepared by ARUP (see **Appendix Q** of the submitted Environmental Assessment Report) therefore concludes that the proposed 500 space increase (to a total of 3000 spaces) on the site (i.e. a 20% increase in on-site parking) will continue to accommodate approximately 80% of demand, thereby balancing the objectives of minimising parking impacts upon the locality, while maintaining a supply-constrained parking provision that encourages public transport use. The additional car parks will primarily service hotel guests and casino members.

Furthermore, the RTA has advised that it expects the likely redevelopment of sites such as the Exhibition Centre, Entertainment Centre and Barangaroo, in addition to reduction of on-street car parking, to reduce the supply of car parking in the Darling Harbour area by 2500 bays. While this is expected to be partially offset by 800 new car parking spaces proposed in Darling Walk, an additional 500 spaces in Star City, and some replacement of bays in the other sites mentioned above, it would still result in a significant net decline in the total number of spaces around Darling Harbour, at least in the short term. This would lead to less traffic generation on the road network and a reduced net rate of car spaces per employee or resident.

We also note that the 1997 consent for the Switching Station site approved 550 car parking spaces on the site in association with a smaller quantum of development on the Switching Station site, and no increase of floor space on the main casino site. Furthermore, the Pyrmont Bay Master Plan (Amendment 1 pp13) specifically refers to 2,000/3,000 spaces being provided for the Casino. It can thereby be seen that the total quantum of car parking proposed is consistent with that envisaged when the casino was originally planned, which in turn accurately predicted current operations.

9.12.2 Operational Traffic

The Transport Impact Report for the project prepared by ARUP (see **Appendix Q** of the submitted Environmental Assessment and the supplementary report at **Appendix A** of this report)) demonstrate acceptable impacts in the adjacent road intersections, including modelling of the five key intersections nominated in the Director General's requirements at all peak periods (including 10pm and 1am). The majority of road traffic generated by the casino is contained in the Darling Harbour precinct, and not in the residential areas of Pyrmont.

Measures proposed to mitigate the impacts as a result of the upgrade include:

- Improved lighting of the Pirrama Road/Jones Bay Roundabout to maximise pedestrian safety (a zebra crossing is not suitable here)
- Continuous footpath treatment along Pirrama Road with driveway style crossovers encouraging porte cohere traffic to give way to pedestrians

- Commissionaire staff to manage the operation of the porte cohere at all busy times
- Support for Council footpath upgrading program of Union Street
- Placing double lines on Pirrama Road to discourage right turn movements in and out of the porte cochere
- Reviewing and monitoring the performance of the Murray Street/Pyrmont Bridge Road intersection following the completion of the project

The existing public transport, coach and light rail system will be retained and enhanced by:

- The coach and light rail area has been improved by more direct and safer pedestrian links. Overall lighting, signage, and attractiveness of this area will be improved.
- The new Casino entry treatment to Pirrama Road will attract activity and focus to this eastern side of the site. Trams and buses will be right next to and under the “front door” of Star City.
- A Green Transport Plan to encourage sustainable transport behaviours and choices from Star City staff and visitors
- Pedestrian paths to and through the site are improved
- Bike parking will be increased and improved, integrated with regional bike route improvements
- The light rail station integrated into the design circulation
- Improved and activated access to Pirrama Road will encourage use of existing and new ferry services

The ARUP report also confirms that the car park circulation is in accordance with Australian Standards, Council and RTA codes, and will be a logical extension of the existing car park levels and circulation paths. It also confirms that existing services and delivery arrangements are enhanced, and the ease of emergency vehicle access will be maintained at existing high levels.

9.12.3 Construction Traffic

The ARUP Transport Impact Report (see **Appendix Q** of the submitted Environmental Assessment) predicts that during construction of the project there will be a peak workforce of up to 400 persons on the site, with the majority of these workers expected to walk across Darling Harbour to access Town Hall Station or take a bus to access Central Station and other destinations.

ARUP predict a peak construction parking demand of 133 cars, with a peak arrival time of 6.30am when 100 cars would arrive and peak departure time of 5.30pm when some 100 cars would depart. As no parking can be made available on site for private vehicles, these cars would be parked in legal on-street parking bays on the Pyrmont peninsula and in off-street car parks. It will therefore be a condition of employment that construction personnel respect the concerns of residents over parking and those personnel using private vehicles for transport will be encouraged to park their vehicles in public car parking facilities in order to maintain good relations with the residents around the project.

Deliveries to the site will occur during the daytime shift, i.e. 7.00am to 5.00pm at up to a peak rate of 10 per hour giving a total number of 100 delivery trucks each way per day. Construction traffic routes have been previously adopted by Star City Casino to be in accordance with the guidelines developed by City of Sydney Council. The “Construction Traffic Scheme” report prepared by Project Planning Associates Pty Ltd, July 1994, for NSW Public Works adopts the following approach and departure routes for Pyrmont Bay which would be used by the construction traffic for the casino upgrade:

Approach Routes:

- Arterial Routes: Pyrmont Bridge Road
- Local Routes: Pyrmont Street, Edward Street, Union Street (east), Darling Drive

- Departure Routes:
- Arterial Routes: Pyrmont Bridge Road and Pyrmont Street
- Local Routes: Pyrmont Street, Edward Street, Darling Drive

9.13 Noise

Bassett Acoustics has undertaken acoustic analysis of the likely noise emission from the use of the 'outdoor' gaming areas and other 'outdoor' entertainment areas proposed for Project Star (see **Appendix G**of this report). Noise emission criteria have been determined on the basis of existing ambient noise levels at the receivers most likely to be adversely affected and the requirements of the NSW Office of Liquor, Gaming and Racing.

Typical busy operational scenarios have been assessed and the analysis has indicated that use of the 'outdoor' gaming area and other 'outdoor' entertainment areas on Pirrama Road will meet the daytime (7.00 am – 12 midnight) criteria and also the night-time (12 midnight – 7.00 am) criteria with the exception of one mid-frequency. This exceedance is likely to be imperceptible at residential receivers and is very unlikely to cause annoyance. The use of the Union Street 'outdoor' gaming area may result in an overall daytime period (7 am to 12 midnight) exceedance of 3 dB(A) with an exceedance of up to 7 dB at 500 Hz. This noise is principally due to people talking and will have a mid-frequency character. The implementation of a 'Noise Management Plan' with close supervision will minimise these exceedances.

It should be noted that Project Star is located within an entertainment precinct. This assessment is based upon busy operating scenarios and typically noise emissions would be less than the levels predicted above. The assessments have been completed at the closest residential receivers and noise levels would be less than shown above at receivers further away or subject to shielding. The noise likely to be generated within the 'outdoor' gaming areas and other 'outdoor' entertainment areas will be of a mid-frequency nature, given that the sources include voices and electronic gaming machines. This type of noise is generally considered to be less intrusive and annoying than low frequency entertainment noise generated within places of entertainment such as bars and nightclubs.

9.14 Reflectivity

Bassett Consulting Engineers have been engaged by Tabcorp to undertake an assessment of the potential for reflected solar glare from the proposed vertical plane glass façade and canopy facing Pirrama Road. A copy of their report is included at **Appendix C.**

Bassett note that while Sydney LEP 2005 limits reflectance of glass to a maximum of 20, the proposed glazing varies from 9 percent down to 5 percent. The adjacent Darling Walk Project (Google Building) utilises vertical glazing with glazing reflectance varying from 15 percent to 14 percent.

Figure 18 –*Reflectivity – Analysis Locations*

With regard to the potentially sensitive locations indicated at Figure 18 above, Bassett's preliminary analysis shows that the current façade design involves no sunlight reflection towards driver location OP2. Likewise, for vertical glass, there is no sunlight reflection towards pedestrians at OP3.

There will be no reflection towards a pedestrian at position OP4 from the curved canopy aspect 48 degrees or from the south end of the façade which also has an aspect of 48 degrees. From the 63.5 degrees aspect of the canopy and from most of the main façade there is no reflection. There is a minor potential for reflection from the southern end of the main façade for that part that is visible above the dense trees shortly after sunrise for a short period of time bearing in mind that during early morning sunlight is not at full strength and that the angle at which any sunlight strikes the glazing will be well within 60 degrees of normal to the glass, and therefore if the recommended glass selection is used any reflection will be 9 percent or less depending in which part of the façade the reflection is apparent to the observer.

For residential position OP5 the surface which has an aspect (ASP) of 63.5 degrees has potential for solar reflection only at sunrise March/April and August/September, however, the city skyline will obscure most of the direct sun at this time eliminating this potential.

There are no views of Project STAR from observer positions OP6 and OP8. Also, there will be no reflection from the glazed façade towards OP7 with vertical glazing.

Boat operator position OP9 is based on an assumption that a ferry or water taxis operator approaches the location in a direct line from the East. From mid May to mid July there is a maximum of a 5 to 10 minute period following sunrise after the sun clears the top of the multi-storey buildings of the CBD when there is potential for sunlight reflection from the top part of the canopy and the south end of the façade top edge that has an aspect of 48 degrees. From the main façade and from the front of the canopy where the aspect is 63.5 degrees and the surfaces are vertical, there is potential for sunlight reflection early in the morning from the top edge of the façade for a 5 to 10 minute period. During early morning sunlight is not at full strength. Also, the angle at which any sunlight strikes the glazing will be well within 60 degrees of normal to the glass and therefore if the recommended glass is used the reflection will be 5 to 9 percent (depending on which part of the façade the sun is being reflected from) of the incident radiation and of low impact.

Any impacts from the curved canopy glazing will be less than indicated in the report because of the assumptions shown in Figure 6 in the Bassett Report where the curved shape is approximated to 3 flat planes. In reality the curve will consist of a series of smaller flat planes and hence the reflected sun image towards any one point at any one time will be much smaller and have lower impact.

9.15 Ecologically Sustainable Development

Environmental performance of the new Hotel development will be measured according to the following methodology prepared by Cundall (see **Appendix T** of the submitted Environmental Assessment Report), which encourages environmental sustainability across a broad range of environmental indicators.

Unlike commercial buildings there is currently no Green Building Council approved rating tool for benchmarking the overall environmental performance of a Hotel building. However the Green Star commercial building principles are still applicable to many applications in a Hotel. As such the Green Star rating tool will be considered when applying ESD initiatives to the project.

The new NABERS Energy and Water Rating for Hotels will also be considered throughout the design of the new hotel development, however as the exact targets of this are not finalised yet, consideration will be given to cogeneration / trigeneration, onsite renewables, and/or blackwater recycling as means of achieving a 4 Star rating for the new hotel when the official tool is released.

The design response to sustainability is explained in the ESD Report according to the pertinent environmental indicators, which include management, indoor environmental quality, energy, transport, water, land use and ecology, materials and emissions to land, water and air.

The principles outlined in the Green Star assessment tool will be incorporated where possible as an approach to achieving a development which has high ESD credentials. By achieving a strong energy and water strategy with a combination of other appropriate measures results in a well balanced environmental outcome for the development. A 5 Star rating (the highest available) under this proposed rating scheme is not possible at this stage as the benchmarks and targets of this scheme have not been published. It is also important to note this project is a mixed use development with a large portion of internal refurbishment that will not include replacement of all systems and as such setting targets need to reflect the scope of works proposed.

The following table outline the environmental initiatives proposed, categorised according to the Green Star credit category headings.

Green Star Category	**ESD Initiatives – Hotel.**
Management	▪ Environmental Management Plan during construction and operation ▪ Building user guide
Indoor Environmental Quality	▪ Increased fresh air supply ▪ Carbon dioxide sensors ▪ Avoidance of Volatile Organic Compound emissions ▪ High levels of daylight atrium lobby ▪ High frequency electronic ballasts ▪ Efficient Air conditioning ▪ Maximise External Views
Energy Conservation	▪ Energy monitoring ▪ Room air conditioning linked to point of sale system ▪ Mixed mode ventilation ▪ High performance facade
Transport	▪ Good public transport links ▪ Transportation and Travel Guide ▪ Provision of cyclist facilities for staff
Water Conservation	▪ High Efficiency fittings ▪ Alternative Sources – rainwater storage, grey water and black water recycling systems

Materials	▪ Preference for environmentally responsible materials ▪ Low embodied energy & high recycled content ▪ Minimise Volatile organic compounds ▪ Dedicated waste recycling room
Emissions	▪ 100% of all refrigerants will have an Ozone Depletion potential of zero. ▪ Integrated refrigerant leak detection ▪ Filtered stormwater runoff

Green Star Category	**ESD Initiatives – Casino.**
Management	▪ Environmental Management Plan during construction and operation ▪ Building user guide
Indoor Environmental Quality	▪ Increased fresh air supply ▪ Carbon dioxide sensors ▪ Avoidance of Volatile Organic Compound emissions ▪ High levels of daylight atrium lobby ▪ High frequency electronic ballasts ▪ Efficient Air conditioning ▪ Maximise External Views
Energy Conservation	▪ Energy monitoring ▪ Room air conditioning linked to point of sale system ▪ Mixed mode ventilation ▪ High performance facade
Transport	▪ Good public transport links ▪ Transportation and Travel Guide ▪ Provision of cyclist facilities for staff
Water Conservation	▪ High Efficiency fittings ▪ Alternative Sources – rainwater storage, grey water and black water recycling systems
Materials	▪ Preference for environmentally responsible materials ▪ Low embodied energy & high recycled content ▪ Minimise Volatile organic compounds ▪ Dedicated waste recycling room
Emissions	▪ 100% of all refrigerants will have an Ozone Depletion potential of zero. ▪ Integrated refrigerant leak detection ▪ Filtered stormwater runoff

A Sustainability Plan detailing the above measures, and performance indicator commitments will be submitted under separate cover.

In summary, the proposed strategy for this development is a high level of ESD initiatives influenced by both the Green Star and ABGR (NABERS energy) rating systems. The Hotel has the biggest potential for energy and water savings as it is a new build, however significant savings are also being targeted for the Casino refurbishment. A combined strategy where possible will be sought which will be

beneficial to both Hotel and Casino. In order to target a higher rating in the NABERS Energy for Hotels scheme, consideration will be given to cogeneration / trigeneration and/or onsite renewables.

The ESD Report demonstrates that although official ratings tools are not specifically applicable to this development, the general principles can still be applied and an equivalent high performance development can be targeted.

9.16 Social Impact Assessment

Urbis has conducted an assessment of potential social impacts generated by the project (**Appendix U** of the submitted Environmental Assessment Report). The following have emerged as key considerations for the project in terms of potential for social impact.

Crime and Safety - while there are no major concerns in relation to levels of crime, safety and security in Pyrmont, the incidence of crime in basement car parking is noteworthy in comparison to on-street and above ground parking. According to Police, the Casino has a comparable incidence of car theft and theft from motor vehicles with to other car parks in the area. While it is understood that this is predominantly a police enforcement issue, there may be potential for innovative design solutions.

Commercial and Retail Business – businesses consulted did not express any significant concern about the development and were largely positive about the refurbishment and extension of the Casino, noting that it 'looks tired'. Some businesses looked favourably upon the Casino upgrade with an anticipated increase in passing clientele resulting in improved sales/profit. The following were the primary concerns raised during consultation by local business people: potential disruption caused to nearby business during the construction phase; desire for the new retail arcade to host retail offer that is complementary rather than competitive to existing Pyrmont business; and possible noise impact of vehicles entering/exiting the site and increased traffic during the development phase.

The overall community response to the retail arcade (particularly the dining and bars) was very positive. It was remarked that this might become an entertainment 'laneway' that would appeal to local residents who currently go to Darling Harbour or into the City for wine bars, music and dining (the new liquor licensing laws were expected to contribute to this activation).

Amenity for Local Residents – Although a slimline design has been chosen for the hotel, a few neighbouring residents have raised concerns about the potential for it to overshadow their properties. Other issues that residents would like to be informed about included the perceived need for traffic calming measures; the concern that the demand for parking may increase; the potential for additional noise caused by additional cars entering and exiting the basement car park; and the height of the proposed hotel.

Provision of Support Services – Community and welfare groups want to be reassured that the Casino support services for problem gambling and drug and alcohol abuse will remain adequate.

Residents and businesses were eager to be kept informed of progress, and to have further opportunities to comment on the designs following submission to the Department of Planning.

9.17 Economic Assessment

Urbis have prepared an Economic Impact Assessment of the project, with specific regard to the impacts of the proposed hotel and retail components of the projects upon surrounding similar businesses (see **Appendix V** of the submitted Environmental Assessment Report)

Retail Impacts

It is expected that the increased turnover of the proposed retail expansion will come from a range of sources; local Pyrmont residents; a broader local area; Pyrmont workers; Star City Hotel visitors and Casino visitors (which includes gaming patrons, theatre goers, conference delegates and tourists).

While economic modelling indicates a small one-off impact on existing retailers in Pyrmont, it is important to note trade in the area is growing and the impacted turnover of surrounding retailers at the

time the proposed retail commences trading will be above current levels, and the un-impacted (no development) trading level will be reached before 2015 (i.e. the development impact is the equivalent of slightly over a years growth).

An even smaller impact upon Darling Harbour retailers, and a negligible impact upon Sydney CBD retailers is predicted.

Hotel Impacts

In the Inner Sydney area, some 73 hotels of 4 – 5 star standard exist. They currently experience exceptionally strong occupancy rates, around 80%. In total they generate some 4.8 million guest nights. It is estimated that the new hotel will generate about 88,000 hotel guest nights that will be diverted from the existing offer.

The new hotel is expected to lower occupancy in the local Sydney hotel market by 1.4%.

Overall Impacts

Overall, these impacts can be considered only minor and based on a worst-case scenario. Overall, retailers won't be worse off after the development than they are now, while occupancy rates in competing hotels are expected to remain very high.

Further, a range of general economic and social benefits occur as a result of this increased competition including:

- Strengthening entertainment and tourism role of Pyrmont and Darling Harbour;
- Provision of an additional range of products, including food and beverage, non-food items and services as well as adding retailers that may not be currently available within the Pyrmont area;
- Additional consumer choice, leading to less escape spending from the local area;
- Strengthening the activity along Union Street, which will provide better connections to the main local retail strip on Harris Street;
- Greater consumer choice in the hotel sector, potentially forcing prices down and thus stimulating visitation;
- It will encourage rejuvenation of the local hotel offer; and
- Increased efficiencies generally in the hotel sector.

Economic Benefits

The development will have a range of local and state economic benefits. The key benefit is the employment generated as a result of the significant development investment. It is estimated that:

- Over 4,100 jobs will be created in the construction phase of the development (over a three year period);
- About 900 jobs will created (annually) once the development is completely operational;
- Further employment will be generated through the increased gaming floor space in not just gaming staff but support and administration staff.

9.18 Accessibility

The proposed development will provide a consistent accessible environment through detailed design and planning of integrated network of paths of travel. This will include the provision of appropriate continuous accessible entrances, paths of travel, circulation areas, signage, handrails, tactile ground indicators, stairs, ramps, lifts, accessible toilet facilities, accessible services and amenities, accessible car parking, accessible pedestrian and transport linkages.

Morris Godding Accessibility Consulting have advised (see **Appendix W** of the submitted Environmental Assessment Report) that the design of the project is capable of being finalized before the Construction Certification application to meet the requirements of the City of Sydney Access DCP 2004.

The main areas of assessment with the deemed to satisfy provisions and performance requirements of the Building Code of Australia 2008 are as follows:

- Federal Disability Discrimination Act (DDA)
- Building Code of Australia (BCA) Part D3
- AS 1428.1 - (80% of people with disabilities accommodated)
- AS 1428.2 - (90% of people with disabilities accommodated)
- AS 1428.4 - (Tactile Ground Surface Indicators)
- AS 1735.12 - (Lift facilities for persons with disabilities)
- AS 2890.1 - (Car Parking)
- City of Sydney Access DCP (2004)

9.19 Construction Management

A Preliminary Construction Management Plan has been prepared by APP (see **Appendix X** of the submitted Environmental Assessment Report). The Preliminary Construction Management Plan will be used as a reference document that provides the framework to ensure that construction work on the site does not adversely affect the health, safety, amenity, traffic or the environment of the public, neighbours, staff and employees. The Contractor will be required to submit a detailed Construction Management Plan to the satisfaction of NSW Department of Planning prior to the commencement of works on site.

The preliminary construction management plan is a dynamic tool that will be monitored and reviewed to ensure that its operation and objectives are carried out by the Contractor in its obligation to construct the works in accordance with this construction management plan. The nature of construction works will result in there being events undertaken in the immediate vicinity that will differ from the standard conditions in the surrounding environment. Disruption where it can not be avoided is proposed to be kept to a minimum and controlled in a safe and orderly fashion as outlined in this preliminary construction management plan.

The Preliminary Construction Management Plan includes an erosion and sediment control plan prepared by TTW.

9.20 Electrical and Telecommunications Services

Bassett Consulting Engineers have reviewed the availability of electrical and telecommunications services to the site (see **Appendix Y** of the submitted Environmental Assessment Report).

9.20.1 Electrical Services

Consultation between Bassett Consulting Engineers and Energy Australia has commenced with regards to the development works at Star City Casino. Energy Australia is in the process of providing information to assist in determining the necessary upgrades to the existing electricity supply for the development.

9.20.2 Telecommunications

Bassett Consulting Engineers have commenced negotiations with Telstra on the necessity to augment any street infrastructure. At this stage Telstra have not indicated that any areas in the network requiring enhancement or augmentation.

The existing Casino development consists of a Building Distributor and MDF located on level 4. This building distributor distributes both fibre and copper cabling throughout the site.

Telstra have stated that the nearest exchange they would use to service the site is the Glebe exchange. This exchange is located on the corner of Campbell Street and St Johns Road. Access to the site from the Glebe exchange will be via a Telstra node located on Union Street. Discussions with Telstra confirm that there is currently 200 copper pairs available within the street for connection to the site.

A new building distributor (MDF) is planned for the new Hotel building. This building distributor is to be serviced via a new copper / fibre optic connection via the conduit network located in Union Street.. A copper telephony service shall be initially provided for this development. Fibre Optic cabling may be provided once the need for data services to the site is established.

9.21 Water, Stormwater, Sewerage and Gas Services

Steve Paul and Partner have prepared a 'Hydraulic Services' Report that reviews the availability of, and proposed augmentation / amendment to water, stormwater, sewerage and gas services to the site (see **Appendix Z** of the submitted Environmental Assessment Report.

9.21.1 Water Services

The existing Casino is provided with domestic and fire fighting water supply from the 250mm water main that is located in Jones Bay Road. A 200mm water main is available for connection in Edward Street. The proposed hotel will be fed from a new independent connection from the 200mm Edward Street water main.

A preliminary Section 73 Application has been made to Sydney Water's Service Officer by Bassett Consulting Engineers. As part of the original Star City Casino project, Sydney Water allowed connection to the water mains that surrounded the site and a sewer connection was provided in a central position along the Pirrama Road frontage. Following project approval a further Section 73 Application shall be made to confirm Sydney Water's requirements for project.

9.21.2 Stormwater

The casino site currently discharges to the two existing seawater cooling conduits that formed part of the former Pyrmont Power Station. As detailed in the Hydraulic Services Report, this infrastructure has adequate capacity to serve the expanded floor and terraced areas of the proposed project.

The Switching Station site was provided with a new 600mm stormwater main as part of the City West upgrade. This main drains to the southern seawater conduit via a 1,050 & 750 mm stormwater mains and has a capacity of 820 litres/sec, which is adequate to drain the 357 litres/se calculated Q100 discharge of the hotel.

Initial discussions with Sydney Water Corporation have confirmed that stormwater detention is not required anda pre-submission Section 73 Application has been lodged with Sydney Water Corporation.

The proposed onsite stormwater concept is indicated at **Appendix D** of the submitted Environmental Assessment Report. All stormwater discharged from the site will pass through a pollution control device, which will consist of a stormwater harvesting tank that will be configured to act as a silt and oil arrestor. The car park drainage / sub-soil system shall also be fitted with an oil separator and silt arrestor prior to discharging into the internal stormwater drainage system.

As the site is located higher than the surrounding sites, and is surrounded by roadways that generally fall away from the site, the site is provided with a natural 1 in 100 flood path along Union and Edward Streets. Overland flow will therefore not be a factor requiring further consideration.

9.21.3 Sewerage

Casino Site

The existing Star City Casino drains via a 300mm sewer connection to the 375mm Sydney Water sewer main that is located centrally on the Pirrama Road frontage and a 225mm sewer connection that drains to a 300mmm sewer main in Edward Street. The 225mm sewer connection drains the Lyric Theatre, DAF Grease Waste Treatment Plant, the serviced apartments and a section of the retail component of the Casino. The capacity of the 225mm sewer connection is 4,500 fixture units (FU) - the total connected load for this connection is 2,090 FU. This results in a spare capacity of 2,410 FU. This sewer connection was not part of the original Casino development and was added due to difficulties encountered by draining the remote southern sections of the Casino. This additional sewer connection resulted in the 300mm sewer connection having spare capacity.

The 300mm sewer connection drains the remainder of the Star City Casino, with the exception of the SELS Heritage Building that drains to Pyrmont Street. The capacity of the 300mm sewer connection is 11,400 FU with the total connected load for this connection being 7,188 FU. This results in a spare capacity of 4,212 FU.

The existing sewer connections have more than adequate capacity to drain the proposed extension / refurbishment elements of the project.

Switching Station Site

The Switching Station Site is served by a 225mm sewer main with a capacity of 4,500 FU. The expected sewer discharge of the hotel is 2,110 FU. This results in a spare capacity of 2,390 FU. The existing Sydney Water sewer connection therefore has more than adequate capacity to drain the proposed hotel.

9.21.4 Gas Services

A 150mm secondary (1050Kpa) high pressure gas main exists in Pirrama Road and Edward Street and currently supplies the casino with natural gas. It is proposed that the new hotel will be fed from the existing high pressure service, with a separate new gas regulator and meter assembly being installed within the existing gas meter room that is located on the Edward Street frontage. Discussion with Alinta has indicated that the existing connection has adequate capacity for the project.

9.22 Building Code of Australia

A Building Code of Australia Capability Statement has been prepared for the project by Phillip Chun and Associates (see **Appendix AA** of the submitted Environmental Assessment Report).

The statement concludes that the proposal:

"is capable of being finalised … so that it meets the requirements of the Deemed-to-Satisfy Provisions and/or Performance Requirements of the Building Code 2008."

9.23 Fire Engineering

Arup has prepared a Fire Engineering Report (see **Appendix D** of the submitted Environmental Assessment Report). The report details a fire strategy that aims to achieves:

new works that meet the fire safety Performance Requirements of the current BCA;

no adverse impact on the existing and retained parts of the building as a result of the new works;

maintaining or improving the standard of fire safety in the existing parts of the casino building.

Egress from the Main Gaming Floor and Mezzanine will be affected by the removal of the 'Spanish Steps' from the north-eastern façade of the building. The proposed strategy involves new exits from these levels along the Pirrama Road side of the building in place of the Spanish Steps, although the new exits will not be as wide as the existing 'Spanish Steps'. Preliminary analysis indicates that queuing times at these new exits are in line with international practices such as those given within the Guide to Safety at Sports Grounds (Green Guide) by the Department of National Heritage whose recommendations will be considered in achieving compliance with DP4 of the BCA. The remaining levels of the casino and hotel will be assessed in a similar manner and preliminary reviews indicate appropriate exit widths can be achieved.

Smoke Control

The smoke management system for the building has also been reviewed. The current system divides the Main Gaming Floor into smoke compartments not larger than 3500m^2, each provided with smoke exhaust at a rate of 40m3/s in order to prevent the smoke layer dropping below the downstands that form the smoke reservoirs (at approximately 7m above the floor level). The other floors of the building are designed using a similar approach. It is proposed to maintain the current approved smoke exhaust strategy for the main gaming floor and levels above, extending the coverage to encompass the new works. Additional smoke zones will need to be created to provide exhaust to these new areas, with similar capacities to the existing zones. These smoke zones may need to be refined in the process of further design and analysis.

For the retail level, enclosure of the street will create a mall and this can be dealt with using smoke control measures that are standard practice in such environments.

Additional Fire Safety Issues for Consideration

Additional issues that will need to be considered in the fire safety design for the completed development will include the incorporation of a three-storey void in the new hotel and the provision of glazed stairs in a path of egress. As the hotel will link with the casino, those lower levels that are open to the casino will need to be addressed with regards to fire separation, egress and smoke management strategies.

The entire fire safety strategy will be refined and documented over the coming months. In accordance with the International Fire Engineering Guidelines, this refining process will take the structure of the development of a fire engineering brief (FEB) to outline the scope of works for the fire engineering analysis and methods used to address these issues. Consultation with stakeholders will be required in the determination of acceptance criteria to be included in the fire engineering assessment (FEA). This document will elaborate on the FEB and include all analysis, comparing results with the previously determined acceptance criteria and the Performance Requirements of the BCA.

ARUP have concluded that performance based fire engineering can deliver a building design that meets the Performance Requirements of the BCA.

9.24 Audit of 1997 Casino Consent

As required pursuant to the Director General's Environmental Assessment Requirements, an audit of compliance with the 1997 consent for the original casino is included at **Appendix BB** of the submitted Environmental Assessment Report.

10 Conclusion

Star City Casino employs around 3000 people and attracts about 8.5 million visitors a year. It is one of the State's biggest tourism destinations and is vital to the perception of Sydney as a world class destination, both domestically and internationally. However:

- It is now 11 years since the Casino was opened and comprehensive upgrading is required to remain competitive within the constantly evolving world casino market.
- The massive stairs to Pirrama Road do not engage with the waterfront, and the existing arcade has not performed well in either retail terms or as a public through site link.
- The former 'Switching Station' part of the site has never been developed and remains vacant.
- Hotel vacancy occupancy rates in Sydney are amongst the highest in the world at 80.9% (YTD April 2008).

Tabcorp and the NSW Government have recently concluded negotiations which will see Star City remain the only casino in NSW for a further 12 years. The cap on the number of gaming tables has also been lifted, subject to Casino Control Authority approval.

In view of this, the Project Application seeks approval for:

- A new 309 room hotel with ancillary lower level retail, gaming and conference facilities on the currently vacant 'Switching Station' site.
- 500 additional basement car parking spaces to be accessed via the existing Casino car park.
- Re-development of the retail arcade through the ground floor level of the building, linking Pyrmont Bay Park to the intersection of Union and Pyrmont Streets, and to Jones Bay Road.
- The redevelopment of the eastern (Pirrama Road) portion of the casino building (currently occupied by large external stairs) to contain additional restaurants, retail outlets, gaming space, other entertainment and tourist related facilities, a ceremonial entry and two porte cochere driveways providing new vehicular drop-off to the Casino.
- Works on the exterior of the existing tower buildings to enhance their external appearance.

The proposed new hotel and redevelopment of existing buildings can be achieved without any significant adverse environmental impacts. Under relevant planning controls the site is required to be developed for 'casino or complementary' development and all aspects of the project are permissible. While the proposed hotel building adopts a taller, more slender form than originally envisaged in the former master plan for the site, the total amount of development proposed is consistent, and the hotel tower will remain noticeably lower than the two existing towers. In conjunction with the proposed low scale 'podium' building to Union Street, this design concept will mediate between the height of the existing towers and the lower scale of surrounding buildings.

The new arcade and active street front uses will enliven the locality and improve the range of services available to casino guests and residents. Car parking is proposed to be proportionally increased to reflect the additional facilities on the site, and detailed traffic modelling demonstrates that this will not adversely affect surrounding streets.

The new façade to Pirrama Road and recladding of the existing towers will update the casino, creating an integrated contemporary appearance, and a more positive connection with the foreshore.

Following public exhibition of the submitted Project Application, consideration by the design review panel convened for the project and assessment by a range of public authorities, a number of concerns have been raised with the proponent. Additional reflectivity and acoustic analysis have therefore been undertaken, and numerous iterations of various design concepts for the Pirrama Road façade have been discussed with the design review panel. The final façade design now proposed has been the direct outcome of this analysis and discussion.

No significant adverse environmental effects are anticipated as a result of the Preferred project, which will significantly improve the range of facilities and the appearance of the Casino, and reinforce the role of Sydney as a world class destination.

Sydney

Level 21, 321 Kent Street
Sydney, NSW 2000
Tel: +612 8233 9900
Fax: +612 8233 9966

Brisbane

Level 12, 120 Edward Street
Brisbane, QLD 4000
Tel: +617 3007 3800
Fax: +617 3007 3811

Dubai

Level 4, Attareen Building,
Saaha Offices, Old Town Island
Downtown Burj Dubai, UAE
Tel: +971 4 4200212
Fax: +971 4 4200209

Melbourne

Level 12, 120 Collins Street
Melbourne, VIC 3000
Tel: +613 8663 4888
Fax: +613 8663 4999

Perth

Ground Floor, 53 Ord Street
West Perth, WA 6005
Tel: +618 9346 0500
Fax: +618 9321 7790

Australia · Asia · Middle East
www.urbis.com.au
info@urbis.com.au