

Environmental Assessment Report CityOne Concept Plan

George, Margaret and Carrington Streets, Sydney
Upgrade of Eastern Accessways to Wynyard Station and
Commercial and Retail Development

Submitted to
Department of Planning
On Behalf of Thakral Holdings Limited

January 2011 ■ 10453

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Signature  Date 18/01/11

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Statement of Validity

Prepared under Part 3A of the Environmental Planning and Assessment Act, 1979
(as amended)

Environmental Assessment prepared by

Name	Kirk Osborne
Qualifications	BA MURP
Address	Level 7, 77 Berry Street, North Sydney
In respect of	Concept Plan Application

Concept Plan

Applicant name	Thakral Holdings Group (Thakral)
Applicant address	Level 12, Thakral House 301 George Street Sydney NSW 2000
Land to be developed	Land between George and York Streets including Thakral House, Shell House, Wynyard Lane stratum and stratum underneath Wynyard Park.
Proposed development	Upgrade of Eastern Accessways to Wynyard Station, and retail and commercial development

Environmental Assessment

	An Environmental Assessment (EA) is attached
Certificate	<p>I certify that I have prepared the content of this Environmental Assessment and to the best of my knowledge:</p> <ul style="list-style-type: none">■ It is in accordance with the Environmental Planning and Assessment Act and Regulation.■ It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.

Signature



Name Kirk Osborne

Date 18 January 2011

Executive Summary

This Part 3A Concept Plan is seeking approval for building envelopes above and below ground for a new commercial building and basement car park between George and Carrington Streets, and the envelope for the Wynyard Station concourse area between George and York Streets.

The Concept Plan includes conceptual designs for the new commercial tower and the eastern access ways to Wynyard Station between George Street and the eastern alignment of Carrington Street. It does not seek approval for any physical works within the site area, nor for any concept design of the station concourse area west of the eastern alignment of Carrington Street.

Thakral is the proponent for the CityOne Concept Plan application. The detailed design and carrying out of the Concept Plan development will occur in a number of stages, with each stage to be the subject of a separate detailed Project Application or relevant statutory planning approval process within the umbrella of the overall Concept Plan approval.

At this stage it is anticipated that Transport NSW will be responsible for the carrying out of all development on land generally to the west of the eastern kerb of Carrington Street, and Thakral will be responsible for the carrying out of the development on land underneath and generally to the east of the eastern kerb of Carrington Street. The future design for the paid or unpaid concourse areas of Wynyard Station west of the eastern alignment of Carrington Street will be subject to resolution by Transport NSW. The final staging and responsibility for the carrying out of development works to the west of Carrington Street will be determined by Transport NSW.

The overall project will deliver significant upgrades to Wynyard Station to improve passenger capacity, safety and amenity and improve pedestrian connections.

Consent Authority

Under Clause 23 (rail and related transport facilities) of Schedule 1 of the Major Development SEPP development associated with railway infrastructure that has a capital investment value of more than \$30 million and that the Minister determines is of strategic State or regional planning significance, and is for the purpose of commercial, residential or retail development is subject to Part 3A of the EP&A Act.

On 6 September 2010, the Minister declared the CityOne project to be a Major Development and authorised the submission of a Concept Plan under Section 75M of the EP&A Act. Accordingly the Minister for Planning is the consent authority for this project.

Proposed Concept Plan

The CityOne Concept Plan will facilitate the future design and carrying out of:

- Major work to Wynyard Station, including:
 - redevelopment of the concourse layout (non-paid areas), railway station entries and circulation thoroughfares (from George Street to York Street);
 - upgraded access for persons with a disability; and
 - a capital contribution by Thakral towards upgraded station facilities, ticketing areas, services, lifts and amenities; and fire and life safety systems to the upper and lower platforms (Platforms 3-6).

- Demolition of:
 - Thakral House (301 George Street);
 - 14-28 Carrington Street (part of the Menzies Hotel);
 - the internal structure of Shell House (the facade and clock tower are to be retained); and
 - existing concourse/ramps between the Station and George Street and part of the Hunter Connection and links to Wynyard Park.
- Conservation works to the facade of Shell House.
- A new office building consisting of a 29 level tower (above the new retail centre and concourse) on the land between Carrington Street and George Street.
- Five levels of retail linking George Street, Carrington Street and the station/ticketing area.
- Activation of Margaret Street with new ground level retail
- New concourse and connections to Wynyard Lane, Carrington Street and George Street.
- Construction of associated tenant basement parking.
- Associated public domain improvements.

The Concept Plan is seeking approval for:

- the building envelopes (above and below ground) for the commercial buildings, concourse area, basement carpark;
- concept design and performance specification for the Wynyard station unpaid concourse east of the eastern alignment of Carrington Street;
- public domain concept design east of the eastern alignment of Carrington Street ;
- design criteria to guide the future detailed design stages of the development east of Carrington Street;
- a Floor Space Area (FSA) of 85,000m²; including up to 9,700 m² FSA for retail uses;
- land uses (refer to Section 7.6) consistent with the City Centre zone;
- Ecologically Sustainable Development strategy for the project;
- pedestrian and vehicle access arrangements; and
- 177 car parking spaces to service the tenants of the new commercial building.

Upgraded station facilities, ticketing areas, services, lifts and amenities; and fire and life safety systems to the upper and lower platforms (Platforms 3 – 6) are to be proposed by Transport NSW in the future under a separate approvals process.

Approval is sought for the concept design for the unpaid concourse area from the eastern edge of Carrington Street through to George Street as detailed in Section 5 of this report and at **Appendix C**. The future detailed Project Application relating to development east of Carrington Street will be prepared generally in accordance with the principles illustrated on the concept designs, subject to resolution and refinement in consultation with RailCorp.

Future Project Application(s) will be lodged for future stages of the development. This may include demolition and construction works for the unpaid station concourse areas and associated retail and for the construction of the CityOne tower and redevelopment of Shell House.

Detailed designs of the station concourse and new commercial building will be provided at future stages.

Strategic Justification and Public Benefits

The CityOne Project will facilitate a major redevelopment of Wynyard Station and existing commercial buildings adjacent to and above the station to deliver a world class retail, commercial and public transport interchange in the Sydney CBD.

The objectives for the CityOne Project are to extend the functional life of Wynyard Station and revitalise the station precinct through significant improvements to the aesthetic, functional and management requirements of Wynyard Station, which will accommodate future passenger growth and connections.

The project will also deliver an improved public domain surrounding the site, in particular significant upgrade of the George Street station entrance. The proposal will rationalise existing retail floor space to create an efficient and functional unpaid station concourse area and retail facility.

Central to the design development of the proposal east of Carrington Street has been the need to assist and integrate with the future upgrading of Wynyard Station consistent with and complementary to other State government initiatives including the now proposed construction of the City Relief Line, the construction of the Barangaroo Pedestrian Link and the implementation of critical initiatives in the Wynyard Precinct to improve bus flows during the peak as outlined in the MOU (September 2008) between the State government and the City of Sydney Council.

The overall Project specifically aims to deliver the widest possible benefit to public transport users, the general public and wider business community by:

- addressing the additional passenger/pedestrian demand associated with the Metropolitan Transport Plan initiatives (including the construction of the City Relief Line Projects) and the redevelopment of Barangaroo;
- allowing for and integrating with Transport NSW's plans for a future significant increase in the pedestrian capacity of the Wynyard Station unpaid concourse areas both north – south and east – west (between York and George Streets) to meet forecast demand for 2060; and
- allowing for and integrating with Transport NSW's plans for a future reconfiguration of the station concourse and platform access west of Carrington Street to improve platform clearance and station exit times.

Contribution Offer

Thakral has made an offer to the State government to contribute towards the upgrading of both the paid and unpaid areas of Wynyard Station, including the carrying out of works within the unpaid areas of the station and a contribution for works within the paid areas of the station.

Environmental Assessment

On 22 September 2010, the Director-General of the Department of Planning issued the requirements for the preparation of an Environmental Assessment to accompany a Concept Plan for the project.

Statutory Instruments

The Environmental Assessment and the technical supporting investigations provide a detailed assessment of the environmental impact of the CityOne Project. The Concept Plan demonstrates that the proposed development is generally consistent with the provisions of the relevant environmental planning instruments including the Sydney Local Environmental Plan 2005.

There are two main areas of non-compliance with the Sydney LEP being the height control for the Carrington Street frontage and the overshadowing of the Martin Place footpath. The Concept Plan proposes a maximum height of 146 metres which does not comply with height control on the Carrington Street frontage. Whilst the proposed envelope exceeds the Carrington Street height limit the urban form proposed for Carrington Street is considered to achieve a building envelope which is capable of producing an excellent design outcome. In light of the merits of the proposal and its significant public benefits the non compliance with the Carrington Street height limit is considered appropriate.

Notwithstanding that the proposed building envelope fully complies with the height limits applying to the George Street frontage of the site, the building envelope will result in minor overshadowing of the western edge of the Martin Place footpath for about an hour during the winter lunchtime period. The minor overshadowing impact of the proposal on the Martin Place footpath does not impinge upon the pedestrian amenity of Martin Place and should be considered in the context of the significant public benefits proposed in the CityOne development.

Having regard to the design development and significant contribution towards public transport upgrades, pedestrian connectivity and public domain improvements that will result from the project, the environmental impact of the overshadowing to Martin Place is considered acceptable. There is no additional overshadowing of Wynyard Park during the critical mid-winter lunchtime period.

Station upgrades

Wynyard station is the third busiest station in the CBD and suffers from extended periods of congestion in the AM and PM peak periods. The pedestrian congestion in the AM peak is primarily due to the stations ticket gate capacity and concourse layout.

The main pedestrian movement issues in the station include poor way finding, unclear sightlines due to concourse clutter, indirect and unclear access arrangements and passenger capacity constraints. The current amenity of the public domain is poor and the station requires major fire and life safety upgrades.

The CityOne Project will revitalise the Wynyard Station precinct and contribute to an extension in its functional life by increasing passenger capacity, comfort and amenity. The proposed upgrades east of Carrington Street will provide for significantly greater capacity to 2060 . The overall development will importantly, subject to future detailed design and a separate approvals process by RailCorp, accommodate future connections and passenger growth resulting from the future Barangaroo development and future rail infrastructure projects.

Future changes to the station access arrangements will also enhance integration with bus transport in Carrington and York Streets and will improve existing interchange arrangements.

The Concept Plan also assesses the following issues

- built form;
- transport and accessibility;
- heritage;
- contamination;
- geotechnical and structural impacts;
- infrastructure and utilities; and
- wind, noise and vibration impacts.

The Concept Plan demonstrates that the proposed development has significant public benefits and does not have unacceptable environmental impacts. All measures that have been recommended as part of the supporting technical investigations and studies to mitigate potential environmental impacts have been incorporated into the Concept Plan or are included in the Statement of Commitments.

1.0 Introduction

This Concept Plan and Environmental Assessment Report (EAR) is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is to fulfil the Environmental Assessment Requirements issued by the Director General for the preparation of an Environmental Assessment of a Concept Plan for building envelopes above and below ground for a new commercial building and basement car park between George and Carrington Streets, and the envelope for the Wynyard Station concourse area between George and York Streets (herein referred to as the CityOne Project).

The Concept Plan includes conceptual designs for the new commercial tower and the eastern access ways to Wynyard Station between George Street and the eastern alignment of Carrington Street. It does not seek approval for any physical works within the site area, nor for any concept design of the station concourse area west of the eastern alignment of Carrington Street.

Thakral is the proponent for the CityOne Concept Plan application. The detailed design and carrying out of the Concept Plan development will occur in a number of stages, with each stage to be the subject of a separate detailed Project Application or relevant statutory planning approval process within the umbrella of the overall Concept Plan approval.

At this stage it is anticipated that Transport NSW will be responsible for the carrying out of development on land generally to the west of (the western kerb of) Carrington Street, and Thakral will be responsible for the carrying out of the development on land generally underneath and to the east of Carrington Street. The future design for the paid or unpaid concourse areas of Wynyard Station west of the eastern alignment of Carrington Street will be subject to resolution by Transport NSW. The final staging and responsibility for the carrying out of development works to the west of Carrington Street will be determined by Transport NSW.

This report has been prepared by JBA Urban Planning Consultants Pty Ltd on behalf of Thakral and is based on information provided by Thakral, Concept Plan and design information provided by Hassell, and supporting technical documents provided by the expert consultant team.

The CityOne Concept Plan is seeking to address strategic project issues and establish the key parameters of the development prior to more detailed design work being undertaken.

The CityOne Concept Plan will facilitate the future design and carrying out of:

- Major work to Wynyard Station, including:
 - redevelopment of the concourse layout (non-paid areas), railway station entries and circulation thoroughfares (from George Street to York Street);
 - upgraded access for persons with a disability; and
 - a capital contribution by Thakral towards upgraded station facilities, ticketing areas, services, lifts and amenities; and fire and life safety systems to the upper and lower platforms (Platforms 3-6).
- Demolition of:
 - Thakral House (301 George Street);
 - 14-28 Carrington Street (part of the Menzies Hotel);
 - the internal structure of Shell House (the facade and clock tower are to be retained); and
 - existing concourse/ramps between the Station and George Street and part of the Hunter Connection and links to Wynyard Park.

- Conservation works to the facade of Shell House.
- A new office building consisting of a 29 level tower (above the new retail centre and concourse) on the land between Carrington Street and George Street.
- Five levels of retail linking George Street, Carrington Street and the station/ticketing area.
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The Concept Plan is seeking approval for:

- the building envelopes (above and below ground) for the commercial buildings, concourse area, and basement carpark;
- concept design and performance specification for the Wynyard station unpaid concourse east of the eastern alignment of Carrington Street;
- public domain concept design east of the eastern alignment of Carrington Street ;
- design criteria to guide the future detailed design stages of the development east of Carrington Street;
- a Floor Space Area (FSA) of 85,000m²; including up to 9,700 m² FSA for retail uses;
- land uses (refer to Section 7.6) consistent with the City Centre zone;
- Ecologically Sustainable Development strategy for the project;
- pedestrian and vehicle access arrangements; and
- 177 car parking spaces to service the tenants of the new commercial building.

Upgraded station facilities, ticketing areas, services, lifts and amenities; and fire and life safety systems to the upper and lower platforms (Platforms 3 – 6) are proposed by Transport NSW under a separate approval process.

Approval is sought for the concept designs for the unpaid concourse areas from the eastern edge of Carrington Street through to George Street as detailed in Section 5 of this report and at **Appendix C**. The future detailed Project Application relating to development east of Carrington Street will be prepared generally in accordance with the principles illustrated on the concept designs, subject to resolution and refinement in consultation with Transport NSW .

It is proposed that subsequent detailed Project Applications for demolition, construction, and detailed design of the building and internal layout of all facilities will be lodged should the Concept Plan be approved.

This EAR describes the site, its environs and the proposed development, and includes an assessment of the proposal in accordance with the Director-General's Environmental Assessment Requirements under Part 3A of the EP&A Act.

The report is structured as follows:

Section 1: Introduction, overview of the project, project team and approvals process and consultation.

Section 2: Strategic justification including strategic context and project rationale, public benefits and contributions.

Section 3: Site analysis, overview of existing site conditions and surrounding development.

Section 4: Design Excellence.

Section 5: A description of the “Concept Plan” including key elements for which project approval is sought.

Section 6: Environmental assessment of the Concept Plan.

Section 7: Draft Statement of Commitments.

Section 8: Conclusion.

Technical studies undertaken to inform the Concept Plan and to assist in its environmental assessment are appended to this Report.

These studies address the Director General’s requirements for the environmental assessment. They provide a technical assessment of the environmental impact of the proposed development, and recommend proposed mitigation measures to manage potential environmental impacts associated with the proposal.

1.1 Environmental Assessment and Approvals Process

State Environmental Planning Policy (Major Development) 2005 (the Major Development SEPP) identifies development to which Part 3A of the EP&A Act applies, and for which the Minister is the consent authority.

Clause 6 of the SEPP states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 1 (Classes of Development), Schedule 2 (Specified Sites) or Schedule 3 (State significant development) of the SEPP, is declared to be a project to which Part 3A applies.

Under Clause 23 (rail and related transport facilities) of Schedule 1 of the Major Development SEPP development associated with railway infrastructure that has a capital investment value of more than \$30 million and that the Minister determines is of strategic State or regional planning significance, and is for the purpose of commercial, residential or retail development is subject to Part 3A of the EP&A Act.

In accordance with Section 75B of the EP&A Act, and Clause 6 of the Major Projects SEPP, JBA Urban Planning Consultants on behalf of Thakral requested that the Minister:

- declare the CityOne Project to be a Major Development subject to Part 3A of the EP&A Act; and
- authorise the preparation and lodgement of a Concept Plan for the site.

On 6 September 2010, the Minister declared the CityOne Project to be a Major Development and authorised the submission of a Concept Plan under Section 75M of the EP&A Act.

On 22 September 2010, the Director-General of the Department of Planning issued the requirements for the preparation of an Environmental Assessment to accompany a Concept Plan for the project.

A copy of the Director General's Environmental Assessment requirements is included in **Appendix A**.

Figure 1 below outlines the main steps in the approval process for the Concept Plan application.

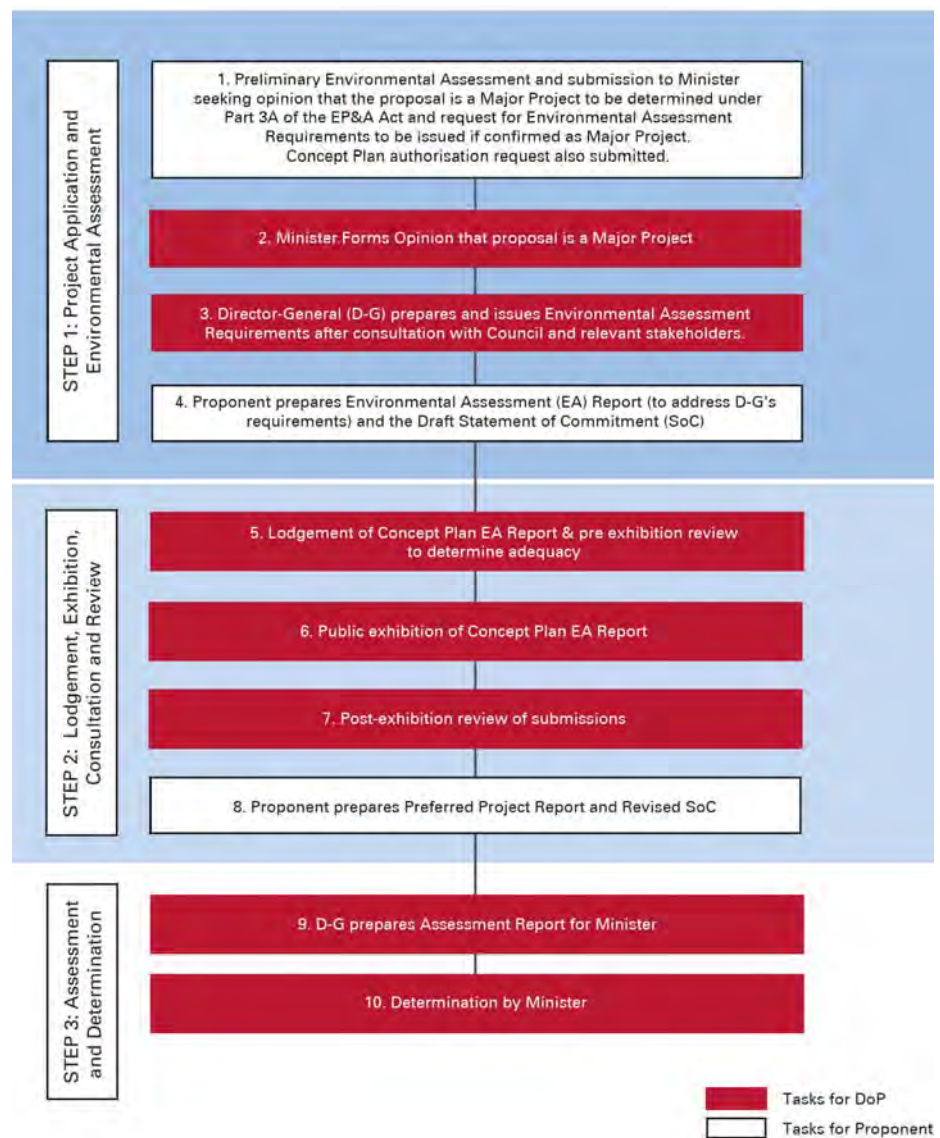


Figure 1 – Concept Plan Approvals process

1.2 Project Team

An expert project team has been formed to undertake the Concept Plan. It includes:

Proponent	Thakral
Building Architects	Hassell
Urban Planning	JBA Planning
Station and Landscape Architects	Hassell
Pedestrian, Traffic and Transport	Halcrow
Geotechnical	ARUP
Stormwater	Warren Smith & Partners
Structural Engineering	Taylor Thomson Whitting
Hydraulic Services	Warren Smith & Partners
Utility Services	Norman Disney & Young
Heritage	HBO + EMTB Heritage
Sustainable Strategy	Cundall
Wind Assessment	MEL Consultants
Contamination	Consulting Earth Sciences
Accessibility	Morris Goding Accessibility Consulting
Noise and Vibration	Renzo Tonin & Associates
Construction Management Strategy	Brookfield Multiplex and Robert Bird Group
Fire and Life Safety	Stephen Grubits & Associates
Shadow Diagrams/Strata Survey	Whelans Insite

1.3 Consultation

In accordance with Part 3A of the EP&A Act consultation is required to occur at the following stages:

- the Director General of the Department of Planning is required to consult with relevant public authorities in preparing the environmental assessment requirements for the Concept Plan; and
- the Director-General is required to advertise and exhibit the Environmental Assessment and appended reports and documentation.

In preparing the DGRs for the Environmental Assessment, the Department of Planning consulted with the following assessment authorities and groups:

- Rail Corp
- Roads and Traffic Authority
- Transport NSW (formerly Ministry of Transport)
- Sydney Metro
- Heritage Office
- Barangaroo Delivery Authority
- Sydney Buses
- City of Sydney Council
- Sydney Water

Comments and issues raised by these authorities and groups were considered in preparing the DGRs. The DGRs are included in **Appendix A**.

Agency and Council Consultation

Consultation for the project has occurred over a number of years, primarily with RailCorp due to the relationship between the station and the surrounding properties.

RailCorp as a key landowner and operator of the Station and rail infrastructure land has been integral to ensuring that the station design enables it to meet with its future demand scenarios. In April 2007 RailCorp provided a report to Thakral on Wynyard Station concourse prepared on its behalf by Translawcom.

The report has been extensively used in the preparation of the conceptual concourse design for the development east of the eastern kerb of Carrington Street. The conceptual concourse design has been produced with inputs from Connell Wagner and Halcrow to better understand the pedestrian modelling requirements.

In addition to the pedestrian modelling aspects, Stephen Grubits Associates were also engaged to analyse and assess the Fire & Life safety aspects of the station.

These findings and design outcomes have then become the subject of several meetings with the Premiers Department in October 2008, November 2008 and December 2010. The Premiers Department has facilitated government consultation including meetings with the Transport NSW, who have the primary responsibility for coordinating transport policy and planning as well as overseeing transport infrastructure delivery.

Transport NSW has been consulted with in regards to the concourse design for the development east of the eastern kerb of Carrington Street presented by Thakral. Part of the assessment by the Transport NSW has been reviewing the overall public benefit of the Concept Plan proposal and its relationship to the works proposed to be carried out at Wynyard Station by the State Government, and ensuring that future connections such as Barangaroo are possible.

In addition to the specific consultation measures undertaken below, a Planning Focus Group Meeting was held by the Department of Planning on 14 May 2009 which included representatives from the following Government Agencies:

- Rail Corp
- Roads and Traffic Authority
- Former Ministry of Transport
- Sydney Metro
- Barangaroo Delivery Authority
- State Transit Authority
- Sydney Water

An overview of consultations held by Thakral with the relevant authorities is detailed in **Table 1** below.

Ongoing consultation will occur with the key government agencies and Sydney City Council throughout the detailed design and Project Application stages of the project. Thakral has commenced discussions with Council in relation to the final building form as well as the possible design solutions for Wynyard Park.

Whilst extensive work has been carried out on construction traffic and its impacts, Thakral will continue to consult with Transport NSW, RailCorp, the RTA, and State Transit.

Table 1 – Summary of consultations

Agency	Issues/discussion	How addressed in EA
RailCorp		
Meetings 15 July 2010 16 Jan 2008 8 August 2007 18 June 2007 31 May 2007 5 April 2007 15 February 2007 30 November 2006 18 October 2005	<ul style="list-style-type: none"> Future proofing the concourse to 2031 and beyond Address additional demand scenarios – Barangaroo and Metro Improve station amenity & comfort levels Reduce Fire and Life Safety risks 	Sections 5 and 6 and Appendix I
Transport NSW		
Meetings 23 July 2010 12 August 2010 23 August 2010 2 December 2010 8 December 2010	<ul style="list-style-type: none"> Define overall scope of project Confirm contributions to paid/unpaid areas General discussion on connectivity with pedestrian entrances and Barangaroo 	<ul style="list-style-type: none"> Sections 2, 5 and 6 and Appendix I
City of Sydney Council and Central Sydney Planning Committee		
Meetings on April 2009 (Council Officer meeting), 6 May 2009 (CSPC) and on 12 October 2010	<ul style="list-style-type: none"> Overshadowing of Martin Place and Wynyard Park. Building setbacks and height Sustainability measures Construction and truck access Maintaining existing bus operations Pedestrian/cyclist treatments during construction Overall final development scenario. Construction Management Plans to be provided. 	<ul style="list-style-type: none"> Sections 5 and 6 and Appendices D, R and P
RTA		
Ongoing discussions	<ul style="list-style-type: none"> Construction and pedestrian issues. Pedestrian linkages require consideration including Barangaroo 	<ul style="list-style-type: none"> Section 6 and Appendices D, I and P

2.0 Strategic Justification and Public Benefits

The CityOne Project includes a major redevelopment of the eastern accessways to Wynyard Station and existing commercial buildings adjacent to and above the station to assist deliver a world class retail, commercial and public transport interchange in the Sydney CBD.

Investigations into the future redevelopment of Wynyard Station to take into account long term passenger demand and needs by addressing existing capacity issues, as well as pedestrian connectivity in the immediate vicinity, have been underway by the State government for a number of years.

Wynyard Station is the third busiest rail station in the CBD connecting with 8 major suburban rail lines. It currently handles approximately 24,000 passenger movements in the AM peak period.

The station is reaching operational capacity and is in need of upgrading to meet forecast patronage growth and to accommodate increasing pedestrian demand as a result of new developments in the Sydney CBD including, but not limited to, Barangaroo. It currently has poor passenger amenity, is congested at peak times and could benefit greatly from upgraded fire and life safety standards.

The existing Wynyard Station concourse exhibits extended periods where pedestrians are subjected to Level of Service D or E indicating that the station is exceeding its comfortable capacity:

- **Level of Service D:** the majority of pedestrians have their normal walking speed and manoeuvrability restricted. Pedestrians involved in reverse flow and crossing movements would be severely restricted; and
- **Level of Service E:** Virtually all pedestrians have their normal walking speed and manoeuvrability restricted. Pedestrians attempting reverse flow and crossing movements would experience extreme difficulty.

The station also has a poor street presence on George Street in particular.

A doubling in the existing capacity of Wynyard Station has been projected as being required by 2060 to accommodate the combined growth generated by the development of Barangaroo and by the increased patronage generated by the construction of the heavy rail projects that have been committed to under the State government's Metropolitan Transport Plan.

This represents a projected passenger demand of 49,500 people using the rail service at Wynyard during the AM peak, and an additional 11,000 people (i.e. a total of 60,500 people) moving through the overall Wynyard Station precinct during the AM peak¹. The concourse design proposed effectively doubles the existing station capacity.

Traditionally Wynyard Station has predominately serviced the CBD to the north and east of the station, being the core commercial precinct in the CBD. Consequently the major pedestrian flows out of Wynyard Station have been to the north and east. In recent years major commercial and retail development have been occurring in the western corridor of the CBD including the Westpac, American Express, Macquarie Bank and KPMG head offices located west of Kent Street and the King Street Wharf development.

¹ Source: Connell Wagner Report included with Appendix I

This has resulted in increased pedestrian movements to and from the west side of Wynyard station. The proposed development of Barangaroo will continue to significantly increase pedestrian flows to the west.

The CityOne Project is fully supported by its strategic planning context both in terms of delivering key public transport outcomes for Sydney and in ensuring the ongoing growth and role of Sydney as a globally competitive and innovative city.

The CityOne Project will directly assist in the implementation of, is consistent with, and/or complements a number of significant recent State and local government strategies, plans, initiatives and announcements including the:

- NSW State Plan;
- City of Cities: A Plan for Sydney's Future (the Sydney Metropolitan Strategy);
- Sydney City Draft Subregional Strategy;
- Sustainable Sydney 2030;
- Metropolitan Transport Plan;
- Transforming Sydney: A City/State Partnership Memorandum of Understanding between the State Government and City of Sydney Council (September 2010); and
- Proposed redevelopment of Barangaroo South.

2.1 Strategic Context

NSW State Plan

The NSW State Plan was released in March 2010. The plan sets a strategic direction and goals for the NSW Government across a broad range of services and infrastructure. Two priorities in the State Plan are to strengthen business and jobs and to deliver better transport. The State Plan recognises that quality and efficient transport services and facilities are critical in providing access to jobs, services and facilities, and has a major impact on our quality of life.

CityOne will deliver major improvements to the eastern accessways to Wynyard Station, providing for improved station access, increased passenger capacity and significantly improved amenity. Additionally the project will deliver a landmark commercial tower, contributing to the city's status as a global city and providing new construction jobs and ongoing employment opportunities.

The CityOne Project satisfies key priorities of the NSW State Plan.

Sydney Metropolitan Strategy

"City of Cities: A Plan for Sydney's Future" (the Metropolitan Strategy for Sydney) was launched by the NSW Government in December 2005. It provides commentary and direction for the next 25-30 years at a regional level on issues such as land use, economic development, jobs, transport, innovation, centres and corridors, and residential areas within Sydney. It aims to accommodate 1.1 million additional residents and 500,000 new jobs over the period to 2031.

The Metropolitan Strategy aims to provide an additional 58,000 new jobs in the Sydney CBD over the next 25 years, including substantial increases to the office and retail floor space.

The CityOne Project and concept designs for development east of Carrington Street have been developed in the context of the city's future growth as envisaged in the Sydney Metropolitan Strategy and draft subregional strategy for Sydney City. These strategies seek to reinforce the city's global city role and set an employment target of additional 58,000 jobs to 2031.

These growth pressures have been major drivers in the need to deliver a world class public transport interchange at Wynyard Station.

The proposed CityOne Project will support the Government's strategy for Sydney by increasing the supply of high quality office and retail space in the CBD.

Sydney City Draft Subregional Strategy

The Draft Sydney City Subregional Strategy was released in July 2008. It is a key part of the implementation of the Metropolitan Strategy and is intended to guide land use planning in the City of Sydney local government area to 2031. The proposal will contribute to the following aims of the draft subregional strategy:

- reinforcing global competitiveness and strengthen links to the regional economy;
- ensuring adequate capacity for new office developments; and
- developing an improved and increasingly integrated transport system that meets the City's multiple transport needs.

Sustainable Sydney 2030

The Sustainable Sydney 2030 plan (Sydney 2030) was released by the City of Sydney in March 2008. It represents the beginning of an ongoing commitment by the City of Sydney to achieve the vision and targets set for a green, global and connected city. It also intends to complement the draft Sydney City Subregional Strategy and will be used to inform the future draft SLEP. Sydney 2030 establishes a vision for the future for the Sydney CBD that will be incorporated into Council's corporate plan, budgets and actions, with outcomes monitored and reviewed over time.

The CityOne Concept Plan reinforces the 10 strategic directions set out in the plan. In particular it will contribute to achieving:

- a globally competitive and innovative city;
- an integrated transport system for a connected city;
- a city for walking and cycling; and
- sustainable development renewal and design.

Metropolitan Transport Plan

The Metropolitan Transport Plan, Connecting the City of Cities (MTP) was published by the State government in February 2010. This Plan is a \$50.2 billion, 10 year funded package of transport infrastructure for Sydney that responds to growing transport challenges in Sydney as the current population of 4.1 million increases to 6 million by 2036. It is one of the State government's platforms in the implementation of the vision for Sydney set out in the NSW State Plan and the Sydney Metropolitan Strategy. The MTP will be incorporated into the Metropolitan Strategy review and a consolidated Metropolitan Plan to guide Sydney's future land use and transport planning prepared.

The MTP recognises the importance of Sydney's economic role as the nation's global financial gateway. The MTP acknowledges and plans for major investment in rail and road capacity and the need to increase the capacity, quality and condition of the State's public transport. In particular for the Sydney CBD the MTP seeks to improve the quality and availability of public transport.

The main transport schemes under the MTP are:

- Rail Western Express Services and City Relief Line (new rail line from Eveleigh to Wynyard) by 2018;
- South West Rail Link and North West Rail Link by 2018;
- Light rail extensions from Haymarket to Circular Quay and Lilyfield to Dulwich Hill; and
- 1000 additional buses by 2014 and continued roll out of strategic bus corridors and bus priority measures.

As identified in the MTP, the Western Express Services and City Relief Line will introduce express train services from Richmond, Penrith, Blacktown and Parramatta. A new five kilometre priority tunnel is proposed to be built to separate western services from inner city trains to provide shorter journey times. The main west tracks, which currently terminate at central, will be extended via a new track from Eveleigh into new underground platforms. As part of the project, new platforms are proposed to be built at Wynyard (and also at Redfern, Central and Town Hall) to cater for the new services. Eight (8) new platforms are proposed between Redfern and Wynyard, each long enough to accommodate 12 car trains, to cater for an ultimate additional capacity of 5,000 extra seats from Parramatta in the peak hour. The additional platforms at Wynyard Station will provide additional PM peak capacity.

The project, which is illustrated at **Figure 2**, is intended to eliminate the need for western trains to merge with suburban tracks before reaching the CBD, also addressing the fundamental capacity bottleneck of Illawarra Junction, which limits the existing ability to run services on the North, South and Inner West Lines. It is noted that with the announcement of the MTP, the CBD Metro rail project is no longer current.

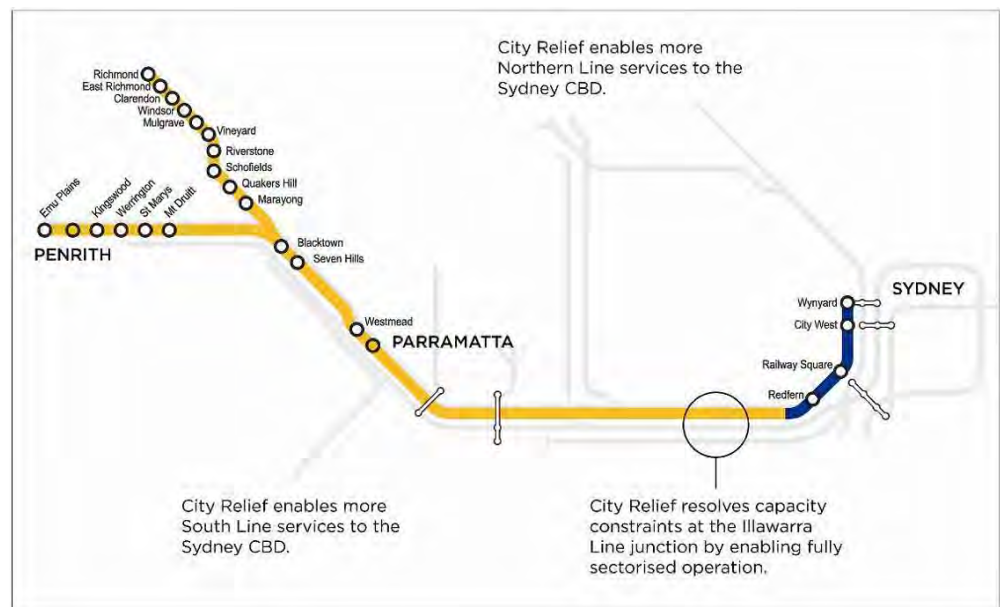


Figure 2 – Proposed Barangaroo Pedestrian Link

(Source: Metropolitan Transport Plan)

Transforming Sydney: A City/State Partnership

The NSW State Government and the City of Sydney Council has recently (September 2010) entered into a 5 year Memorandum of Understanding (MOU) to achieve an integrated approach to delivering a series of transport outcomes designed to secure Sydney's future as a driver of the state and national economy, and as a vibrant, sustainable and liveable city.

The MOU specifically commits the Council and the State government to:

- an expanded light rail service for the inner city; and
- new and enhanced railway lines into the City Centre, enabling increased services from Western Sydney and additional capacity at key city stations.

Under the MOU, the Council and State government have agreed to implement an action list as approved by the Premier and Lord Mayor on a six monthly basis.

The current action plan contains 16 initiatives, including, of particular relevance to the CityOne Project:

- undertake a study to determine the optimum alignment for the CBD light rail extension;
- develop a City Centre Access Plan to identify short/medium term improvements to public/active transport and traffic flows at key locations and identify longer term options, post light rail and other public / active transport initiatives, to enhance connectivity into and within the City Centre;
- design and construct the heavy rail projects that improve services to the City Centre, as announced in the MTP;
- implement critical initiatives in the Wynyard precinct to improve bus flows during the peak;
- reduce the speed limit in the city centre to 40km hr where possible; and
- mark the intersection of York and Margaret Streets in distinctive yellow paint to encourage motorists not to queue across intersections.

The proposed Wynyard Precinct and Bus improvements identified in the MOU are:

1. Examine the prohibition of traffic from York Street in the AM peak with the exception of buses, based on confirmation from Transport NSW that this will lead to a net positive in transport management impact.
2. Implement measures on George Street northbound between Jamison and Grosvenor Streets to prevent taxis illegally stopping and therefore reducing left turn intersection capacity.
3. Install taxi shelter in Jamieson Street.
4. Implement traffic control measures that prioritise buses exiting Carrington Street into Margaret Street.
5. Reconfigure bus stop at Wynyard Park (along York Street and Carrington Streets) to enhance bus efficiency.
6. Reconfigure bus stopping arrangements, increase the length of curb-side bus space and provide additional bus shelters along Clarence Street.
7. Reconfigure bus lane times on Clarence Street (west) between Market and Jamieson Streets to 9 pm.
8. Extend parking restriction times to 7 pm on Macquarie Street (east) on the southbound approach to Shakespeare Place.
9. Establish additional bus layover capacity in the Wynyard precinct.
10. Enhance efficiency of afternoon peak bus operations to improve bus operating efficiency and reduce bus congestion at the Queen Victoria Building.
11. Establish Clearways on Monday to Friday during the am and pm peak along the following roads to improve public transport operations and reliability:
 - York Street
 - Bridge Street
 - Market Street
12. Investigate measures to improve public transport operations and reliability, including additional clearway zones on:
 - Elizabeth Street
 - King Street

The above initiatives are proposed to be finalised by December 2010.

The CityOne Project will directly complement the initiatives under the MOU, particularly by improving pedestrian connections from George Street to Wynyard Station and through the broader Wynyard precinct to the bus interchanges at York and Carrington Streets.

Barangaroo South

The growth of the CBD's western corridor is set to continue with the development of the 22 ha Barangaroo site. A Concept Plan for a mixed development at Barangaroo has been approved by the Minister for Planning. The currently approved development includes 508,300m² of floorspace for commercial, residential, retail and community uses. The Barangaroo South Concept Plan modification proposal that is currently with the Minister for Planning for consideration will increase the total quantum of floor space on the site to approximately 564,000 m².

Once fully developed the Barangaroo precinct (as currently proposed to be modified) will have capacity to accommodate up to approximately 21,000 new workers and 2,475 residents. The majority of these new workers will be located in the new commercial precinct at the southern end of the Barangaroo site.

Transport planning for Barangaroo, including the preparation of the Barangaroo Transport and Accessibility Management Plan September 2008 is the responsibility of the Transport and Access Working Group (TAWG) established by the Barangaroo Steering Committee. Members of the TAWG re Barangaroo Development Authority, Transport NSW, City of Sydney and Lend Lease (Millers Point) Pty Ltd. Various other agencies and bodies are drawn upon as advisors as required.

An essential component of the Barangaroo development will be new, accessible and attractive pedestrian links to the existing rail and bus services at Wynyard Station. The traffic and transport analysis for the Barangaroo Concept Plan estimates that approximately 63% of daily journey to work trips to Barangaroo will be by train. This has been estimated to equate to an increase of 20% of current arrivals at Wynyard in the AM peak (or 7,470 additional train commuters alighting at Wynyard, including 4,560 in a peak hour)².

Existing pedestrian links for Barangaroo are inadequate and will not allow that project's transport mode share targets to be met. The Barangaroo South Concept Plan modification proposal identifies that an integrated transport hub comprising the rail systems, bus services and the Wynyard – Barangaroo pedestrian link will need to be created.

Under the current Barangaroo South Concept Plan modification proposal, a series of external improvements are envisaged to improve connections between Barangaroo South and the city, including the main pedestrian route between Barangaroo and Wynyard which has been identified as requiring a major upgrade with new infrastructure.

The identified pedestrian linkages to Wynyard from Barangaroo include:

- **Barangaroo pedestrian link:** a new high-volume pedestrian tunnel from Barangaroo to the frequent rail and bus services at Wynyard Station and George Street; and
- **City Walk Wynyard Connection:** a new pedestrian link bridge over Sussex Street / Hickson Road located close to the intersection of Hickson Road and Napoleon Street which links into the Barangaroo Pedestrian Link.

² Barangaroo South Concept Plan Amendment Transport and Management Accessibility Plan Supplementary Report, ARUP, August 2010

Upgrades to the public domain of the Margaret Street as part of the pedestrian connections to Wynyard Railway Station have also been identified as desirable.

As the improvements are outside the Barangaroo South Concept Plan area, they can only be delivered with the approval of the City of Sydney Council and other relevant stakeholders.

The design and delivery of the Barangaroo Pedestrian Link is considered critical in ensuring safe and efficient pedestrian movements and transport integration between Barangaroo and the transport hub of Wynyard, and accordingly is to be undertaken by the NSW State government. The State government committed \$20 million of funding in the 2010-2011 budget towards the design and construction of the Link.

Although the precise location and configuration of the new pedestrian tunnel connection to Barangaroo is yet to be finally determined, the proposed route for the link is shown at **Figure 3**. The Wynyard Station precinct and the City One Project will play a key role in achieving a successful integration of Barangaroo into the wider CBD.

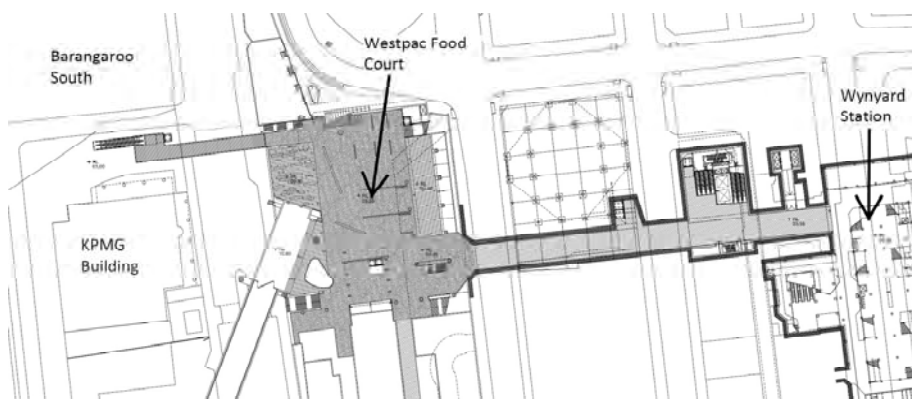


Figure 3 – Proposed Barangaroo Pedestrian Link

(Source: Barangaroo South Concept Plan Amendment Transport Management and Accessibility Plan Supplementary Report, ARUP, August 2010)

2.2 Project Public Benefit

Thakral has a unique ability to deliver upgrades to parts of the Wynyard Station unpaid concourse and develop a new office tower due to its strategic landholdings in the Wynyard Station precinct. Thakral owns or controls significant retail holdings on the concourses serving Wynyard Station. It can capitalise on an underdeveloped site and give Wynyard Station a strong presence in the northern CBD.

The CityOne development has been under consideration by Thakral for a number of years. During this time various design schemes have been considered and discussions held with the Department of Planning, City of Sydney Council, Rail Corp and other State agencies.

Thakral's objectives for the CityOne Project are to:

- extend the functional life of Wynyard Station and revitalise the station precinct by developing a concept design that delivers significant improvements to the aesthetic, functional and management requirements of the Wynyard Station concourse east of Carrington Street, and which will accommodate future passenger growth and connections;

- deliver a design that rationalises the current retail floor space of Thakral to create an efficient and functional unpaid station concourse area and retail facility east of Carrington Street;
- improve the quality of public domain surrounding the site, in particular in relation to the George Street station entrance; and
- deliver a landmark commercial tower that is environmentally sustainable, commercially viable and exhibits design excellence.

Central to the design development of the proposal has been the need to assist with the upgrading of Wynyard Station consistent with and complementary to other State government initiatives including the now proposed construction of the City Relief Line, the construction of the Barangaroo Pedestrian Link and the implementation of critical initiatives in the Wynyard Precinct to improve bus flows during the peak as outlined in the MOU (September 2008) between the State government and the City of Sydney Council (refer to Section 2.1 above).

The Project specifically aims to deliver the widest possible benefit to public transport users, the general public and wider business community by:

- addressing the additional pedestrian demand associated with the MTP initiatives (including the construction of the City Relief Line Projects) and the redevelopment of Barangaroo; and
- increasing the pedestrian capacity of the Wynyard Station unpaid concourse areas between Carrington and George Streets.

In order to deliver the above public benefit, the Concept Plan proposal incorporates the following performance specifications for future pedestrian exits to George Street:

- 20 metres minimum total combined width; and
- Unimpeded pedestrian flows between the concourse and the street.

These performance specifications have been determined by Transport NSW as the key design criteria to ensure that the redevelopment of the eastern access ways to the Wynyard Station unpaid concourse can appropriately accommodate future pedestrian growth and demand to 2060. The performance specifications are subject to detailed pedestrian modelling and will be confirmed by Transport NSW during the detailed design phase of the project.

Improvement Works by Proponent –East of eastern kerb of Carrington Street

The scope of the CityOne Project for which approval is sought as part of the Concept Plan proposal includes the carrying out by Thakral of the following Station upgrade works on that part of the site located generally east of Carrington Street (subject to a future detailed Project Application):

- Reconfiguration of the existing George Street station entry and pedestrian thoroughfare to meet the Transport NSW performance specification of a total combined width of exit to George Street of a minimum of 20 metres (subject to detailed pedestrian modelling) to accommodate pedestrian demand to 2060;
- Upgrade of main concourse wall, floor and ceiling finishes;
- New escalators to the Hunter Connection and Carrington Streets; and
- New signage and landscaping.

Further detail relating to the scope of station upgrade works proposed to be carried out by Thakral on land underneath and east of Carrington Street is provided at Section 5. The detailed design of these works will be the subject of a separate Part 3A Project Application following approval of the Concept Plan.

Drawings illustrating the proposed improvements to the concourse area on land generally east of Carrington Street are included at **Appendix C**.

Connell Wagner has undertaken extensive preliminary pedestrian and passenger modelling of existing conditions and future growth scenarios taking into account future development at Barangaroo and rail infrastructure upgrades. Halcrow have reviewed the Connell Wagner modelling and prepared a pedestrian impact review which is discussed at Section 6.4.

The modelling undertaken by Connell Wagner relates to an assumed horizon of 2031 and to an indicative concept design for the unpaid concourse area west of Carrington Street which is not agreed with Transport NSW and is beyond the scope of the Concept Plan approval. Accordingly, the modelling and pedestrian impact review is subject to further detailed analysis at the time that a design for the upgraded station concourse is proposed as part of a separate approval process.

Notwithstanding, the preliminary modelling and pedestrian impact review demonstrates that the indicative design for the unpaid concourse east of Carrington Street, and the broader Concept Plan envelope for the unpaid concourse west of Carrington Street:

- Can facilitate a doubling in pedestrian capacity within the paid concourse area in the AM peak to meet Transport NSW's estimated pedestrian demand to 2060 (i.e. it will be able to cater for 49,000 passengers in the AM peak in 2031 compared to 23,800 in 2007).
- Will facilitate the service of 60,000 persons in the **AM peak hour**, compared to the current concourse which serves 100,000 passengers **per day** within the unpaid concourse.

The proposed Project will greatly reduce the duration of pedestrian journey times and improves the average Level of Service for the unpaid concourse area.

Modelling demonstrates that the Project will result in no worse than a Level of Service C (the existing station is already at Level of Service D or E for extended periods) for the concourse by 2031:

- **Level of Service C:** Freedom to select walking speed and pass other pedestrians is restricted. Crossing movements possible but with frequent adjustment of speed and direction to avoid contact.

Without this improvement, by 2031 the existing layout of Wynyard will be intolerably congested with people unable to walk without frequent changes of speed and direction to avoid others.

Improvement Works by Transport NSW – Unpaid area west of Carrington Street

The CityOne Concept Plan proposed the envelopes for the concourse areas of Wynyard Station west of Carrington Street, including the zone of the Wynyard Park station entrance.

The Concept Plan does not propose any conceptual design or physical works west of the eastern alignment of Carrington Street. The design and carrying out of works west of Carrington Street is subject to resolution by Transport NSW and will be the subject of a separate approvals process.

Future Station upgrade works on land generally to the west of Carrington Street will accommodate future connections and passenger growth resulting from both the future Barangaroo development and from future rail infrastructure projects including the Western Express / City Relief Line.

The scope of works to the unpaid concourse layout west of Carrington Street will be determined by Transport NSW to provide for future patronage growth and improvements in functionality and amenity at Wynyard Station as follows:

- Elimination of queues by providing additional ticket gates. Existing unacceptably long queues at the ticket gates represent a system at or exceeding capacity.
- Removal of conflicting movements and an increase the existing pedestrian capacity to accommodate pedestrian demand to 2060.
- Reduced clutter and improved layout of retail and circulation spaces in the unpaid concourse areas will further improve pedestrian amenity and establish clearer through site connections to provide for clear pedestrian flows out of the paid concourse area.
- Enhanced facilities for people with disabilities, and more direct access to the bus interchange.
- Improved quality of materials and finishes and quality retail facilities within the Station area.
- Improved acoustic environment, and air quality and temperature.

Monetary Contribution towards Station Improvements by RailCorp – Paid Area

The carrying out of works by RailCorp within the paid areas of the station (i.e. inside the ticket barriers) is subject to resolution and agreement with the State Government separate to the Part 3A planning approval process. At this stage it is anticipated that these works will include the following:

- passenger toilets, ticketing information and staff facilities;
- upgrades to the lower and upper platforms;
- escape stairs and associated smoke exhaust systems; and
- congestion relief.

A monetary contribution towards these works will be made under an appropriate arrangement between Thakral and the State government. The expenditure of this monetary contribution, and the timing of the carrying out of works (and obtaining any necessary approvals), is to be determined by RailCorp.

In the context of the scope of other works that are currently being planned for the upgrade of Wynyard Station (e.g. the MTP initiatives and the funding of the Barangaroo Pedestrian Link), a monetary contribution for the works to the paid station area is considered more appropriate than the carrying out of works in kind by Thakral. This is to enable flexibility and integration with other works that may be undertaken by RailCorp at a later stage to suit RailCorp's programme.

Fire and life safety

Previous fire and safety studies for Wynyard Station have identified that the following matters need to be addressed to bring the station up to current industry standards, including those specified by RailCorp and the requirements contained in the BCA:

- Fire resistance of the unprotected steel structure needs to be increased to ensure adequate structural stability in case of fire.
- The excessive compartment size needs to be addressed by a performance-based solution or reduced in size to comply with the Performance Requirements of the BCA.

- The egress provisions need to be enhanced so that dead-end travel distances and distances to exits are decreased while increasing the exit capacity of the station.
- Changes are required to the Smoke Hazard Management arrangements to cater for smoke exhausts from the platforms and concourse.

It is envisaged that part of the capital contribution will be utilised by RailCorp to address these existing deficiencies in the Fire and Life Safety aspects of the Station.

Integration with bus interchange and surrounding public domain

The CityOne Project will deliver a range of public domain improvements and benefits. The proposed public domain works are described in detail at Section 5.

Key public domain improvements / benefits are:

- Upgrade pedestrian connectivity to Wynyard Station from George Street;
- Increase to the capacity of the Wynyard Station concourse areas east of Carrington Street;
- Upgrades and activation of Wynyard Lane; and
- Improved way finding, signage and clear site connections

The Public Domain Concept is illustrated at **Figure 4**.

The proposed Public Domain Plan for the CityOne Project has been developed having regard to the proposed upgrades to the Wynyard Station precinct and bus improvements set out in the MOU between the State government and the City of Sydney Council (refer to Section 2.1 above). As the Wynyard precinct and bus improvement works to be carried out by the State government and City of Sydney Council are yet to be finally resolved (resolution is expected by December 2010), the Proponent has committed to preparation of a detailed public domain plan as part of the detailed future Project Application to fully integrate with these works.

The concourse envelopes of the CityOne Project can readily accommodate the Barangaroo Pedestrian Link that is to be constructed by the State government between Wynyard Station and Barangaroo South in the currently preferred location (refer to **Figure 3** above). The Barangaroo Pedestrian Link is a key part of the future pedestrian circulation infrastructure required to support the development of the western CBD. As identified above, the State government has committed \$20 million in the 2010-2011 budget for construction of the link.



Figure 4 – Public Domain Concept

3.0 Site Analysis

3.1 Site Location and Context

The CityOne site is located between George and York Streets, Sydney (refer **Figure 5 and 6**). The site has a total site area of 11,124m² and comprises the Menzies Hotel (including Shell House), Thakral House, Wynyard Station, part of Wynyard Park, stratum lots above and below Wynyard Lane, and stratum lots below Wynyard Park, Carrington Street, and York Street that together form the Wynyard Station Concourse - refer to Section 3.2.

The site experiences several changes in ground level, increasing over 8m in height from George Street in the east to York in the west. George Street ground level is at RL 13.37m, Wynyard Lane ground level is RL 14.7m, Carrington Street ground level is RL 18.9m and the York Street ground level is RL22.21m.

The site is located in the northern part of Sydney's CBD, in the core commercial office precinct of the CBD. The site's immediate environs is the area generally between Jamison Street to the north, Barrack Street to the south, York Lane to the west and George Street to the east. This area forms the immediate context for the site and therefore is an important consideration in the contextual relationship of the proposal and in informing the urban form of the building envelope.

Development within the vicinity of the site generally presents a mixed streetscape with buildings of varying uses, ages, heights, architectural finishes and subdivision patterns.

The street pattern is generally characterised by a rectangular block grid, with both two-way and one-way street functions. There are a number of laneways, minor streets and squares including Regimental Square and Sesquicentenary Square.

Wynyard Park is a notable feature of the streetscape, and along with Regimental Square and Sesquicentenary Square, to some extent disrupts the regular grid pattern.



Figure 5 – Locality Plan (Source: Hassell)

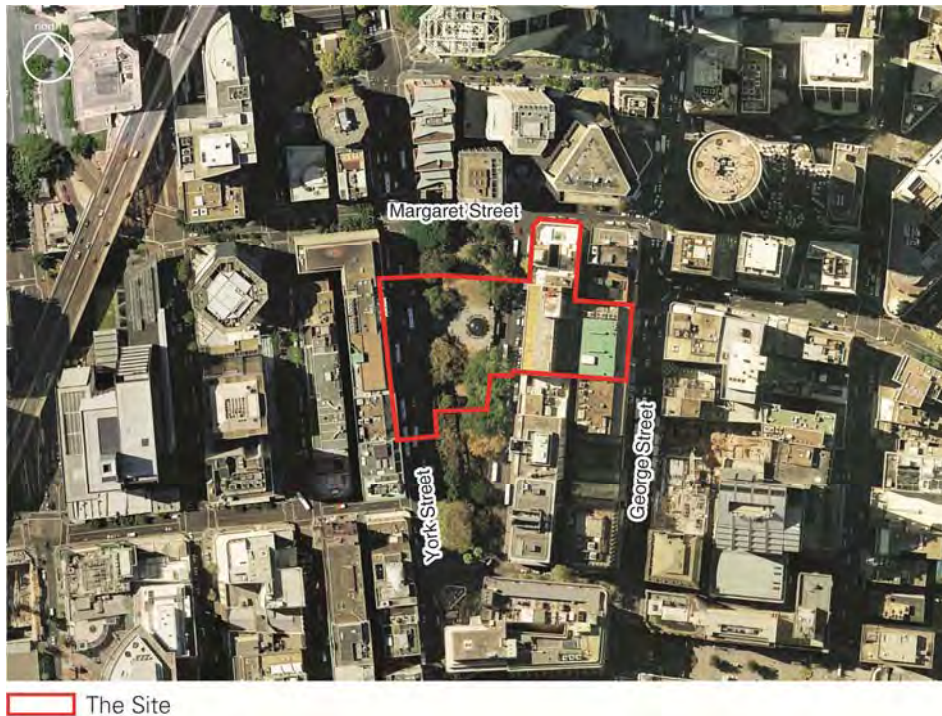


Figure 6 – Aerial photo of site (Hassell)

3.1.1 Existing Development

The site comprises a number of existing elements including the following (refer to Figures 7 – 16).

- **Thakral House:** completed in 1962, is a 13 storey commercial office building with 2 levels of shopping arcades and the entrance to Wynyard Station in George Street. The building's main elevation is to George Street, and its rear elevation is to Wynyard Lane.
- **The Menzies Hotel:** completed in 1963, comprises a 14 storey hotel building with its main elevation to Carrington Street, and its rear elevation to Wynyard Lane. The building is internally integrated with Shell House to the north. No direct public access to the Station or retail levels that pass beneath it is provided.
- **The Shell House:** is a 11-storey steel framed building located on the corner of Margaret Street, Carrington Street and Wynyard Lane. It was built in 1938 as a commercial office building, and in 1979 was converted to hotel rooms as an extension of the Menzies Hotel. Shell House is a listed heritage item in the Sydney LEP 2005.
- **Wynyard Lane Stratums:** An overhead building stratum above Wynyard Lane links Thakral House and the Menzies Hotel. The stratums below Wynyard Lane for part of the station concourse.

Wynyard Lane is located between Thakral House and The Menzies Hotel. It is a one-way southbound service road between Margaret Street and Wynyard Street which bisects the development site in a north-south direction. It provides access to car parking associated with the Menzies Hotel, the Wynyard Public Carpark and adjacent commercial buildings.

- **Wynyard Park:** A portion of Wynyard Park also comprises the site. Wynyard Park is roughly triangular in design and is bounded by Carrington Street to the east, York Street to the west, Margaret Street to the north and Wynyard Street to the south. Mature trees surround the site's boundary, and a number of walkways and items of street furniture are located within the Park. Wynyard Dome is located on the eastern side of the Park, and provides pedestrian access to Wynyard Concourse and Wynyard Station.
- **Stratum Lots:** As indicated in **Table 1** (see Section 3.2) the site includes a number of stratum lots under Carrington Street, York Street and Wynyard Park. The lots comprise the concourse areas of Wynyard Station and pedestrian links.
- **Wynyard Station:** Wynyard Station opened in 1932 and is one of the major CBD rail stations. Wynyard station currently has two levels, each with two platforms. The upper level (Platforms 3 and 4) serve the North Shore line, the Northern line via Macquarie Park and the Western line. The lower level (Platforms 5 and 6) serves the City Circle, the Bankstown line, the Airport and East Hills line and the Southern line. Both rail lines run south under York Street from Wynyard to Town Hall.

The passenger concourse is on a mid level between the upper and lower platforms. The station has several underground connections to and through several surrounding buildings and is located immediately below Wynyard Park. Pedestrian access connects to George Street, Hunter Street, Pitt Street, Carrington Street, Wynyard Park, Clarence Street and Kent Street.

Over 100,000 passengers pass through the Wynyard Station concourse each day.

Photographs of the site are shown at **Figures 7-16**.



Figure 7 – Thakral House in George Street



Figure 8 – Entry to Wynyard Station in George Street



Figure 9 – The Menzies Hotel



Figure 10 – The Menzies Hotel and its relationship with Shell House



Figure 11 – Shell House



Figure 12 – Carrington Street entrance to Wynyard Station



Figure 13 – Wynyard Lane with building stratum above



Figure 14 – View north along Carrington Street



Figure 15 – View of Wynyard Park looking north



Figure 16 – The Wynyard Park Dome in front of the Menzies Hotel

3.2 Land Ownership and Legal Description

The legal description and ownership of each allotment which comprises the development site is detailed in **Table 2** below and illustrated on **Figure 17**. RailCorp, Wynyard Centre Pty Ltd (Thakral) own land which comprises the development site. A site survey is included at **Appendix B**.

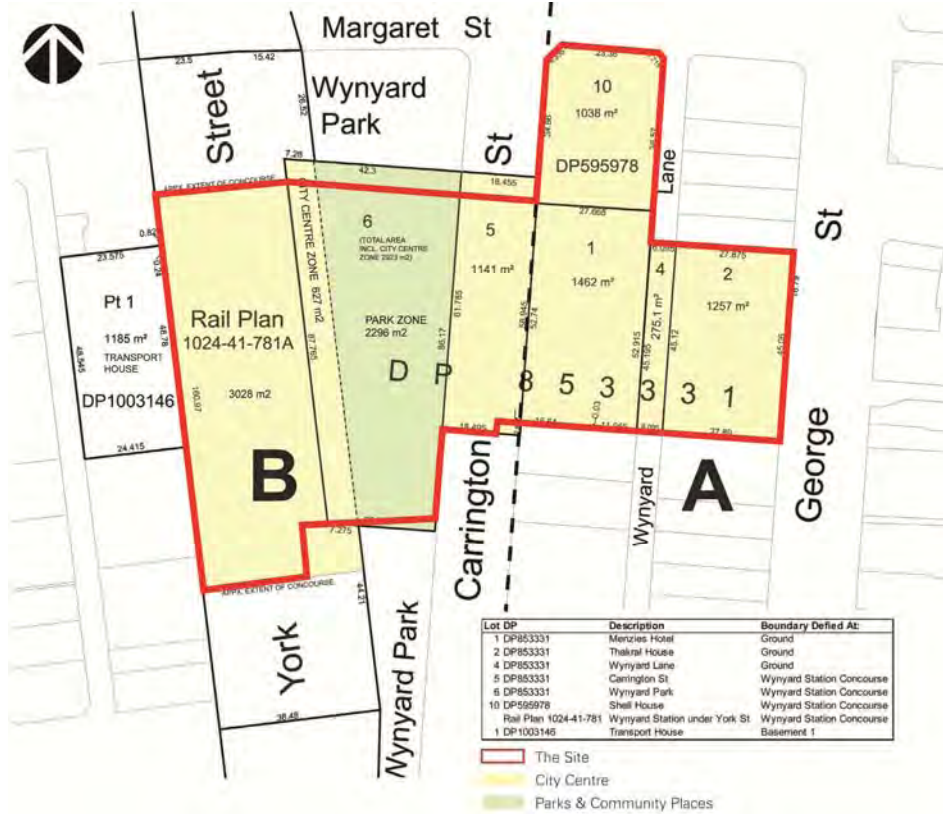


Figure 17 – CityOne development site

Table 2 – Development site

Site/lot "name"	Development Site Area*	Owner	Description
A – East of Carrington Street			
Former Shell House <i>Lot 10, DP 595978</i>	1038 m ²	Wynyard Centre Pty Limited.	An 11 storey commercial office building built in 1938. In 1979 was converted to hotel rooms as an extension of the Menzies Hotel. Shell House is a listed heritage item in the Sydney LEP.
The Menzies Hotel <i>Lot 1, DP 853331</i>	1462 m ²	RailCorp - Occupied by Thakral subject to the Wynyard Centre Lease.	A 14 storey hotel, completed in 1963. It provides no direct public access to the Station or retail levels that pass beneath it.
Thakral House <i>Lot 2, DP 853331</i>	1257 m ²	RailCorp - Occupied by Thakral subject to the Wynyard Centre Lease.	A 13 storey commercial office building completed in 1962, with retail space on the ground and first basement levels.
Wynyard Lane (stratum lots above and below road level) <i>Lot 4, DP 85333</i>	275 m ²	RailCorp - Occupied by Thakral subject to the Wynyard Centre Lease. Crown land below RailCorp stratum	Stratum lot that runs above Wynyard Lane between Thakral House and the Menzies Hotel. Also includes stratum lots below Wynyard Lane.
Subtotal	4032 m²		
B – West of and including Carrington Street			
Concourse under Carrington Street <i>Lot 5, DP 853331</i>	1141 m ²	RailCorp	Stratum lots at concourse area
Concourse under Wynyard Park <i>Lot 6, DP 853331</i>	2923 m ²	RailCorp - Occupied by Thakral subject to the Wynyard Centre Lease.	Stratum lots at concourse area.
Concourse under York Street <i>Rail Plan 1024-41-781</i>	3028 m ²	RailCorp	Stratum lots at concourse area
Wynyard Park	Same as Lot 6, DP 853331 (already included in site area)	RailCorp / Crown Land	The portion of the lot located above Lot 6, DP 853331 that includes a triangular urban park and access points to Wynyard Station. Wynyard Park is a listed heritage item in the Sydney LEP.
Subtotal	7092 m²		
TOTAL AREA	11,124 m²		

3.3 Zoning

Pursuant to Sydney LEP 2005, the site is zoned partly City Centre and partly Parks and Community Places. **Figure 18** provides an extract of the land use zoning map for the site.



Figure 18 – Zoning Plan (extract from SLEP 2005 Central Sydney Zoning Map)

3.4 Pedestrian and Vehicular Access

The public domain areas within and surrounding the site experience high levels of pedestrian activity due to its central city location and the presence of the major transport interchange of Wynyard Station and the bus stops along York, Carrington and George Streets. There are significant pedestrian movements through and surrounding the site from workers, shoppers, tourists and residents.

Pedestrian Access

There are several pedestrian connections into Wynyard Station. The main George Street connection is through the two retail concourses known as the Wynyard Centre under Thakral House. A second connection to George Street north of Margaret Street is via the Met Centre underground shopping arcade. There is also a pedestrian connection through the Met Centre to Jamison Street.

Connections to York Street and York Lane are via escalators to Railway House. Access to York Street is also available via Wynyard Park. The lift, escalators and stairs servicing Wynyard Park also service the western side of Carrington Street, linking to the Carrington Street bus interchange.

The city on the western side of the station is serviced by a pedestrian tunnel that runs through to Kent Street and also connects to Clarence Street. The city on the eastern side of the station is serviced via the Hunter Connection with access to Hunter Street and Pitt Street.

There is a poorly identified and used through site link via the Menzies Arcade which runs from George Street through to Carrington Street. The link crosses above Wynyard Lane and also provides access to Level 2 of Thakral House. Existing pedestrian connections are illustrated in **Figure 19**.

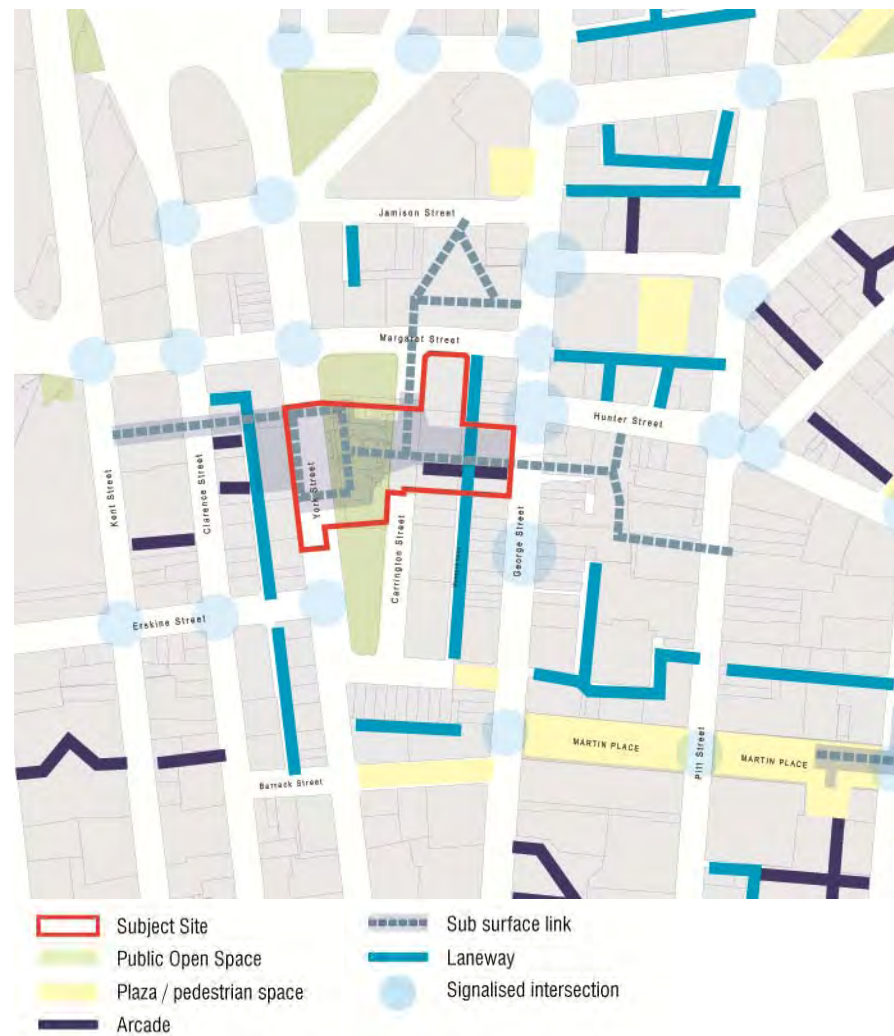


Figure 19 – Pedestrian connections and movements (Source: Hassell)

Vehicular Access

George Street is situated to the east of the site and is a major north-south arterial route through the Sydney CBD and provides two traffic lanes in both directions.

York Street is situated to the west of the site and is also a major arterial route into the CBD, particularly for vehicles arriving from the north across the Harbour Bridge. York Street is a one way south bound carriageway with four lanes of traffic, one of which operates as a transit lane for buses.

Margaret Street is situated to the north and functions as a major east-west collector road providing one traffic lane and kerbside parking in both directions.

Carrington Street runs through the site, one way in a northbound direction. It is a local road which connects Margaret Street and Wynyard Street and is a part of the Wynyard bus interchange.

Wynyard Lane also runs through the site in a north-south direction. It predominantly functions as a service vehicle access to the buildings fronting George Street and Carrington Street and access to the Wynyard public car parking areas. Existing vehicular access off Wynyard Lane is illustrated in **Figure 20**.

Wynyard Street is an east-west local road situated to the south of the site and is a two way carriageway linking George and York Streets.



Figure 20 – Vehicular access off Wynyard Lane (Hassell)

Figure 21 below illustrates the road network surrounding the site.



Figure 21 – Surrounding road network (Source: Hassell)

Existing Bus Services

York Street and Carrington Street comprise the Wynyard Station bus interchange, consisting of approximately 19 stops which provide services to destinations across the metropolitan area. Several bus stops are also located along George Street.

The public transport network servicing the site and in the vicinity of the site is illustrated at **Figure 22**.



Figure 22 – Public transport network (Source: Hassell)

3.5 Surrounding Development

As described above the CityOne site is in the northern core CBD area. The surrounding land uses comprise a mix office, retail, and hotel developments. The character of the existing built form along George Street (see **Figures 23 to 26**) in the vicinity of the site comprises a diverse mix of street frontages, building heights, architectural styles and features. The subdivision pattern in this part of George Street is regular, however the allotment sizes vary greatly. Along the section of George Street in the vicinity of Thakral House there is disparate height, form and materials of buildings. The most recently completed development in the vicinity of Thakral House is the Ivy development at 320 George Street.

Like George Street, the streetscape character of Carrington Street has no particular consistency in materials and finishes, building heights or architectural styles. There is some similarity between the buildings at 50 and 60 Carrington Street, which are the two buildings at the southern end of the street, in terms of their overall height and podium/cornice alignment.

The Met Centre building dominates the streetscape in Margaret Street. The Met Centre also connects directly to Wynyard Station concourse and comprises about 80 retail stores over two levels. The other notable building in Margaret Street is the heritage listed Scots Church which terminates the northern vista of Wynyard Park. Along the length of Margaret Street within the area of the precinct, the building heights vary greatly.

Development on the western side of Wynyard Park along York Street is typically commercial office development of varying heights and architectural styles. Irrespective of the disparate heights, a strong street wall character is established in this section of York Street accentuated by the AWA Building (47 York Street) and James Hardie House (65 York Street).

The Carrington Street, Margret Street and York Street edges provide a strong sense of urban enclosure, created by the uniformity of the buildings lining the streets, resulting in the effect of “an urban room”.

The Wynyard Lane Public Car Park is located underground, immediately adjacent to the site. The car parking spaces are within the disused tram tunnels under Wynyard Park. Entry to the car park is via Wynyard Lane and the exit is via Cumberland Street.



Figure 23 – George Street looking south from the Wynyard Station Entrance



Figure 24 – George Street looking north to Circular Quay



Figure 25 – Carrington Street looking south



Figure 26 – Surrounding Tower Development along Margret Street

Surrounding Heritage Items

A number of heritage items are located in the immediate precinct surrounding the site. Key items are identified in **Figure 27** below and include:

1. **Lisgar House:** 30-32 Carrington Street, Sydney (immediately to the south of the development site)- Listed on Schedule 8 Part 1 of SLEP 2005 (refer to **Figure 28**).
2. **Scots Church and Assembly Hall:** Margaret and York Street, Sydney (immediately north of Wynyard Park)- Listed on Schedule 8 Part 1 of SLEP 2005 (refer to **Figure 29**).
3. **Railway House/Transport House:** 19-31 York Street, Sydney (immediately east of Wynyard Park)- Listed on Schedule 8 Part 1 of SLEP 2005.
4. **Former Beneficial House:** 285 George Street, Sydney (north of the proposed development site)-Listed on Schedule 8 Part 1 of SLEP 2005.
5. **Former Skinners Family Hotel:** Corner of George and Hunter Streets, Sydney (opposite the proposed development site)- Listed on Schedule 8 Part 1 of SLEP 2005.
6. **Westpac Bank:** 341 George Street, Sydney (south of the development site)- Listed on Schedule 8 Part 1 of SLEP 2005.
7. **Former National Australia Bank:** 343 George Street, Sydney (south of the development site)- Listed on Schedule 8 Part 1 of SLEP 2005.
8. **Former Societe Generale Building:** 348-352 George Street, Sydney (south-east of the proposed development) - Listed on Schedule 8 Part 1 of SLEP 2005.
9. **Former United Permanent Building:** 354-360 George Street, Sydney (south-east of the proposed development) - Listed on Schedule 8 Part 1 of SLEP 2005.
10. **Wynyard Station Railway Tunnels:** Wynyard Station- Listed on State Rail Authority Register S170.
11. **Westpac Bank:** 319-321 George Street- Listed on Schedule 8 Part 2 Building Elements of SLEP 2005. The street facades and external walls of the building are listed.
12. **Former AWA Building:** 45-47 York Street (south west of the development site)- Listed on Schedule 8 Part 1 of SLEP 2005 (refer to **Figure 30**).
13. **63 York Street,** Sydney (south west of the development site)- Listed on Schedule 8 Part 1 of SLEP 2005.
14. **264-278 George Street,** Sydney: Australia Square (north east of the development site)- Listed on Schedule 8 Part 1 of SLEP 2005.

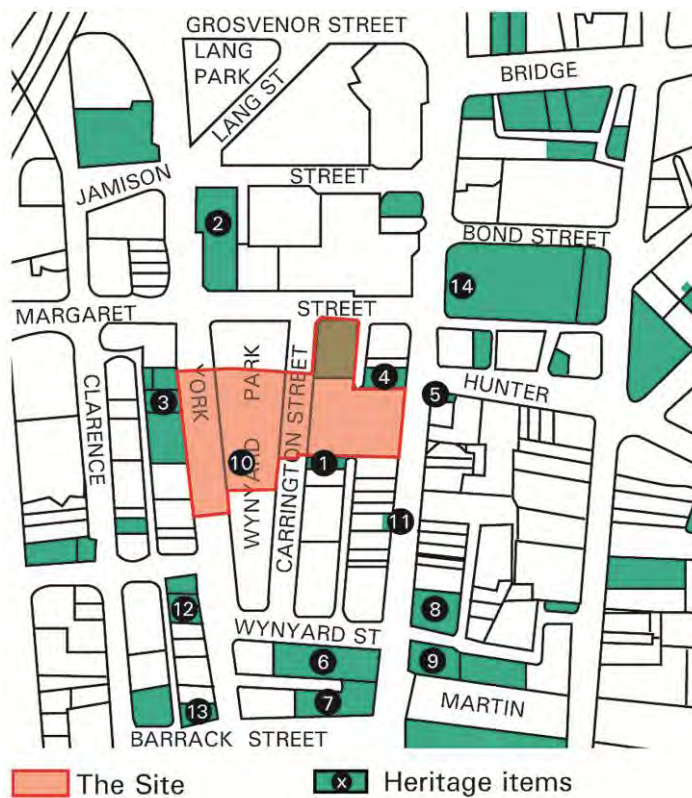


Figure 27 – Surrounding Heritage Items (SLEP 2005)



Figure 28 – Lisgar House



Figure 29 – Scots Church and Assembly Hall



Figure 30 – Former AWA Building on Carrington Street

In addition to the heritage items, the following heritage streetscapes and landscape/townscape/archaeological items are listed under SLEP 2005 (refer to **Figure 31**).

1. **Martin Place (1A), Angel Place (1B), Wynyard Street (1C) and a section of York Street (1D):** are identified as heritage streetscapes in SLEP 2005 on the Central Sydney Heritage Streetscape Map.
2. **Wynyard Park:** identified on Schedule 8 Part 3 of SLEP 2005 as an Archaeological/ Townscape/Landscape Item.
3. **Regimental Square:** identified on Schedule 8 Part 3 of SLEP 2005 as an Archaeological/Townscape/ Landscape Item.



Figure 31 – Surrounding Heritage streetscapes, landscapes, townscapes (SLEP 2005)

3.5.1 Development potential of Surrounding Sites

The CityOne Project needs to be considered in the context of the development potential of the surrounding sites and future opportunities for other major developments.

The land ownership/ subdivision patterns, allotment sizes and the number of heritage items within the area are key considerations (in addition to the current planning controls) which are likely to limit the potential for future development of surrounding sites.

These key considerations are addressed in further detail below.

Land ownership

The current land ownership patterns for the precinct are mapped in **Figure 32** below. This Figure identifies those sites which have been strata titled and are either in single or multiple ownership and, the torrens title allotments. There are 16 strata title allotments and 34 torrens title allotments within the precinct (excluding the CityOne Development).



Figure 32 – Landownership patterns surrounding the site

Figure 32 also identifies land within the precinct which are contiguous parcels of land in the same land ownership. There are four (4) contiguous parcels of land in the precinct, as follows (excluding the CityOne Development site):

1. 317-321 George Street, Sydney;
2. 50-60 Carrington Street, Sydney;
3. 11-31 York Street, Sydney; and
4. 330-346 George Street, Sydney

It is noted that 11-31 York Street includes Railway House which is a heritage listed building.

Allotment sizes

Figure 33 below identifies all sites within the precinct which have site areas of less than 800sqm. Clause 50 of SLEP 2005 restricts the development potential of small sites by not allowing buildings of a height greater than 55 metres on sites with an area less than 800m².

There are 31 lots with site areas under 800m² (excluding CityOne site) **Figure 33** also maps contiguous land ownership is mapped in for the purposes of identifying those sites which could potentially be amalgamated for redevelopment. The amalgamated site areas of the contiguous land holdings are as follows:

1. 317-321 George Street, Sydney = 510 m²;
2. 50-60 Carrington Street, Sydney = 2330 m²;
3. 11-31 York Street, Sydney = 2700 m²; and
4. 330-346 George St, Sydney = 1427sqm.

It is noted that 317-321 George Street, if developed as an amalgamated allotment, would be restricted to a maximum building height of 55m pursuant to Clause 50 of SLEP 2005, as the amalgamated site area is less than 800 m².



Figure 33 – Allotment sizes of surrounding sites

As detail above there are also a number of heritage site in the vicinity of the CityOne site.

Based on the above analysis the development potential and future opportunities for other major developments surrounding the site are limited. In particular there are few sites, if any that can offer the major public benefits that can be delivered by the CityOne Project. Surrounding land ownership is fragmented and it is highly unlikely that in the short to medium term other developments with the significance of CityOne Project will be proposed.

4.0 Design Excellence Delivery Process

The provisions of Chapter 1 Part 5: *Urban form, design excellence and environmental design* of the Central Sydney LEP 2005 aim to promote design excellence in terms of urban form, massing, bulk and architectural treatment. Whilst there are a number of options by which design excellence may be achieved in the ultimate development of a site, the undertaking of a rigorous analysis of site constraints and opportunities to determine the most appropriate FSR, height and development outcomes for a site is an integral part of the process.

The CityOne Project has been a matter of detailed consideration by Thakral and the project team for over eight (8) years. The background to the Concept Plan proposal is based on the examination by three (3) separate architectural teams – Rice Daubney, PTW and Hassell - of a range of different design options / considerations for the new building configuration, as well as examination of options for the design of the new station concourse. This process has been extensive and thorough.

In addition, in 2006 the CityOne Project was the subject of an Urban Design Commentary by a fourth architectural firm engaged by the Department of Planning to provide an independent analysis of the key urban design issues associated with the proposed development of the site.

This process has led to the adoption by the project team of a set of optimum development outcomes and design principles for the development that both inform and support the Concept Plan proposal, and will guide the detailed design phase of the development.

A further design competition / competitive process is not proposed for the CityOne Project.

Clause 26(5) Design Excellence of SLEP 2005 provides that (where a Development Plan (Stage 1 DA) is not in place), the consent authority *may* have regard to whether the design of the altered building is the result of a design competition that is:

- is consistent with any relevant development control plan, and
- satisfies the requirements for design competitions in any relevant development control plan.

Pursuant to DCP 1996, the consent authority can accept an alternative process to a design competition/competitive process in exceptional circumstances if is satisfied (Clause 12.1.6):

- the aims and objectives of the LEP have been achieved; and
- a feasible design option has been prepared for the development of the site; and
- the development will exhibit design excellence.

The design excellence delivery process for the CityOne Project is set out in the following sections.

In this instance a further design competition/competitive process is not considered to be required and the Minister may be satisfied that the proposal achieves design excellence due to the significant work to date undertaken by Thakral to this point (through the testing of a number of schemes) and having regard to the following practicalities that make the CityOne Project unique:

- The need to fully understand at a high level of technical resolution any impacts of the proposed development on the operation, functionality and amenity of Wynyard Station. This requirement has driven Thakral and its architectural teams to undertake comprehensive investigations into the site's opportunities, constraints, urban design and key features; and
- The need for the selected project architects to understand in great detail the requirements and outcomes of the project, and to have the best capacity to deliver the required detailed design documentation to completion.

It is considered that the detailed investigations that have been undertaken to date to develop the concept for such a complex and important development cannot be furthered in any meaningful way through a normal competition process. Such a process could only propose a superficial design proposition that in the fullness of further detailed design may not be technically feasible, fundamentally possible or intrusive in detail from a station functionality perspective.

4.1 Development and Testing of Alternative Design Options

One of the key reasons for not electing to pursue a competitive process is the long history and extensive 'testing' of various options on the site. The development and testing of alternative design options for the CityOne Project is detailed below.

4.1.1 2002 Concept Scheme

An initial concept scheme prepared by architects Rice Daubney was presented to the DoP and the Central Sydney Planning Committee (CSPC) in mid 2002 for consideration and comment. This scheme proposed only limited works (capital investment value of approximately \$50 million) to Wynyard Station including improvements to the station concourse and pedestrian access. The scheme also included conservation work to Shell House for its use as a hotel, and the construction of a mixed-use development above the site comprising a commercial office and residential tower. The 2002 concept scheme involved departures from a number of key existing planning controls, including height and FSR.

4.1.2 Alternative Design Options 2002-2006

Between 2002 and 2006, Rice Daubney was asked by Thakral to examine a series of different concept design options based on alternative tower configurations for the site. These configurations examined some fundamentally differing form propositions, with each design being considered against the other designs proposed by the architectural team.

Alternative options for the development of the site examined by Rice Daubney during this period include the following:

- Retention of existing buildings:
 - retention of the existing Thakral House building and its subsequent strata subdivision and sale (do nothing option); and
 - retention and refurbishment of the existing south wing of the Menzies building and possibly, Shell House and their sale (minimum redevelopment option).
- Demolition of Shell House: The demolition and redevelopment of Shell House in conjunction with the development of Thakral House and Menzies Hotel.
- Reduction in the scope of the development: A reduction in the scope of the development to fully comply with all statutory planning controls.

4.1.3 2006 Concept Scheme

On the basis of the rigorous analysis and testing by the architectural and client team of the series of alternative design concepts, a configuration was developed by the client team into a pre-application proposal.

The 2006 Rice Daubney concept scheme was submitted to DoP as part of a request to the Minister for consideration of the development as a Major Project under Part 3A in February 2006. It varied in a number of key ways from the 2002 concept scheme. Rice Daubney provided the following summary of the key variations:

“The 2002 concept was a design that comprised a larger footprint tower with commercial office floor plates located in the lower 2/3 and residential apartments on the top 1/3. Below the tower, a podium component contained office, serviced apartments and retail facilities. The tower itself was square in plan and presented a substantial building mass when viewed from any direction compared to the relatively slender skyscraper proportions of the current proposal.

The 2002 podium component, whilst providing an elevated public connection to Wynyard Park through a large atrium space, had a very minor physical and visual connection to Wynyard Station. The Station was accessed via a dual pedestrian ramp similar to the existing system and the concourse area was totally underground compared to the large, open, light filled grand Railway Hall now proposed.

The previous large atrium space was predominately associated with the commercial development above whereas the current concept is a total integration with Wynyard Station and the public domain from George Street through to York Street. This proposal has an unmistakable Station address from George and Carrington Streets and from Wynyard Park and York Street.”

Figure 34 below, illustrates the key variations in the scale and massing of the 2002 concept scheme (as shown in white) and the 2006 concept scheme (as shown in red).

In addition to the above design changes, the most significant change in between the 2002 and 2006 concept schemes related to the scope of rail related infrastructure works proposed to Wynyard Station. The scope of works proposed in the 2006 scheme increased the capital investment value of the project by 60%. The extent of rail related works and, in particular, issues critical to the current and future capacity, efficiency and BCA compliance of Wynyard Station (associated with fire and life safety issues), were highlighted as key design issues at this time.

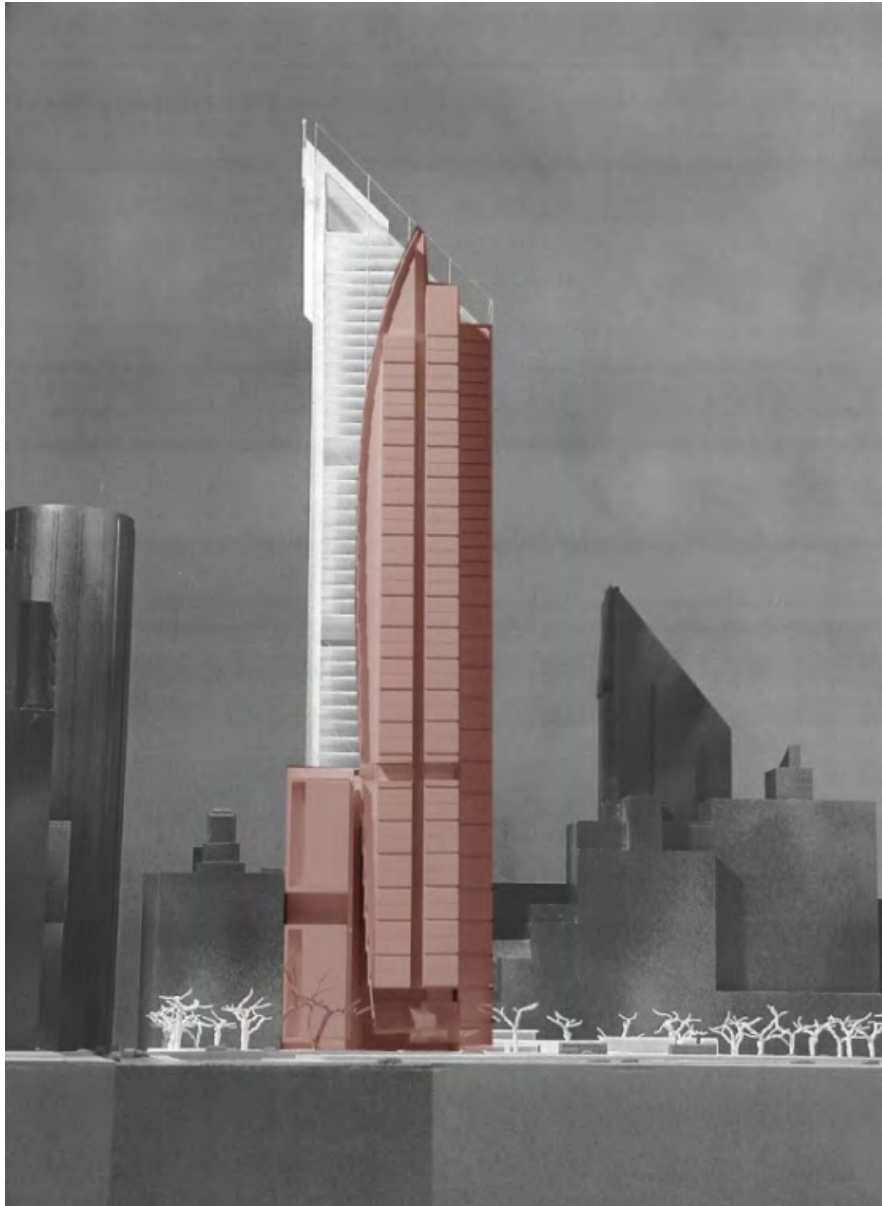


Figure 34 – Comparison- 2002 concept and 2006 concept schemes

4.1.4 Peer Review of 2006 Concept Scheme

The DoP engaged Architectus to prepare an independent Urban Design Commentary for the 2006 concept scheme. The primary author of the Urban Design Commentary was Michael Harrison. The Urban Design Commentary provided an independent analysis of the key urban design issues associated with the proposed redevelopment of the site. It involved:

- a brief urban design compliance check with relevant key controls and standards of the City of Sydney planning provisions;
- commentary on potential changes to the then proposal to reduce non-compliances and provide significant public benefits;
- urban design commentary on key aspects of the then proposal and how the proposal relates to its urban context; and
- a brief urban design report;

Specifically, the Urban Design Commentary addressed the urban design issues of the following elements of the proposal:

- the 'rail hall' and its public benefit;
- Wynyard Park and the impact of the 'rail hall';
- the tower and its impacts of bulk, streetscape and overshadowing; and
- FSR and site area, and the reliance of 'bonus' FSR to deliver the public benefit of the 'rail hall'.

The independent Urban Design Commentary made the following conclusions in relation to the 2006 concept scheme as follows:

- “1. The potential to achieve very significant public benefits means that the proposal deserves a well considered review of the potential impacts and a careful balance of the conflicting issues.*
- 2. It is important that a study be carried out of the potential to link East Darling Harbour that is comparable to the vision exhibited by the proposal. The study should be done either as part of the proposal or separately but certainly concurrently.*
- 3. Wynyard Park is a very important public space in the city and any built physical intrusion must be subject to the highest level of scrutiny and must enhance the intrinsic qualities of the park.*
- 4. The proposal, as illustrated, is likely to be too intrusive into the park. However, key public benefit aspects of the proposal are very important and modifications to the proposal should be considered such as a very lightweight clear glazed canopy with open sides or simply opening the concourse to the sky so that it is like a large sunken court in Wynyard Park and that standing in Wynyard Park people can see from end to end of the park without interruption.*
- 5. Carrington St should continue to function as a street with minimal intervention.*
- 6. The York St footpath by the park should be considered for narrowing in favour of expanding the green area of Wynyard Park.*
- 7. The proposal for Wynyard Lane will improve the lane.*
- 8. Shell House will remain unchanged externally except for an additional top floor which is acceptable in urban design terms subject to heritage assessment.*
- 9. The relatively consistent street height of the buildings fronting Carrington St and surrounding Wynyard Park give an opportunity for one building to break the street frontage height rule. The only building that would qualify is the subject proposal because of its public domain significance as being the main entry to one of the main rail stations in Sydney. While it may be preferred to maintain the street frontage height rule, a sensitive design solution may be able to break the rule and achieve the intent of the control (given the relatively narrow frontages of the tower to the streets).*
- 10. The street frontage height rule for George St should be treat the same as Carrington St for this proposal.*
- 11. The proposal conforms to the Martin Place Sun Access Control Plan. The proposal does cast some additional shadow, particularly on the GPO steps for about an hour for 8 weeks of the year during the control period (April 14 to August 31). The shadow analysis should be independently confirmed. Maintaining the sunlight to the GPO steps would result in removing about 6 storeys from the tower. It needs to be decided whether protecting this amount of sunlight is appropriate in the circumstances. The initial conclusion is that sunlight access to the steps is significant and the overshadowing is therefore also significant. Note that a more detailed evaluation of the shadows over the steps might afford greater insight and permit alternative solutions or conclusions about overshadowing.*

12. The south wall of the tower should have windows and an easement or covenant needs to be put in place because the south wall is on the boundary.

13. There is reasonable urban design justification for the scale of the proposed tower. If it is accepted that the unique circumstances of the proposal justify relaxation of the setback and bulk controls to the extent of the proposal then it is considered that resolving the visual appearance of the bulk of the tower should appropriately rest with the Design Competition providing there is an objective in the design competition that requires the consideration of street frontage heights and tower bulk to be addressed in the design quality of the building rather than application of numeric standards.

14. Advice from Blake Dawson Waldron is that the site area including stratum is 8,096 sqm and accords with the LEP definition of site area. BDW also advise that the development must be considered as a whole and parks of the development are not permissible in the Parks and Community Places zone even though the actual uses proposed in the zone are permissible – this is a technical liability and should not be a reason for ultimate refusal.

15. There is a notional equity in the significant public benefit of the proposal and the heritage floor space incentives of the Central Sydney Plan which may justify the 'bonus' FSR if the site area was deemed to be private land excluding stratum."

The independent Urban Design Commentary also identified the following potential changes that could be explored in relation to the 2006 concept scheme:

"1. Reduce the height of the tower by 6 storeys (about 9,000 m2 FSA as advised by the applicant) to protect the sunlight on the GPO steps (to be confirmed by independent shadow analysis).

2. Reduce the scale of the rail hall across Carrington St and Wynyard Park by either providing an open sided glass canopy that is very finely designed to be as minimalist as possible or open up the rail concourse to the sky so that it functions as a sunken court. The overall objectives should be to minimise the structures in the park, to ensure that any structure is an intrinsic element of the public domain (i.e. it should not be perceived as an adjunct to the tower or have the visual effect of 'privatising' part of Wynyard Park for commercial gain), to enable uninterrupted views from one end of the park to the other at ground level and to reduce the current built physical intrusions.

3. The street frontage heights and setbacks above may not need to be interpreted numerically but should be sensitively interpreted in the architectural design quality of the proposal.

Additional public benefits that should be studies and be part of the proposal or done in conjunction with the proposal are:

Extending the green space of the park westwards by narrowing the York St footpath,

Widening the footpath into the Carrington St carriageway to ease pedestrian queuing congestion for buses, and

Planning the pedestrian link to East Darling Harbour to make it very easy and pleasant for people to access the railway station / bus interchange."

4.1.5 2006 – 2009 Design Development

Following the peer review undertaken by Architectus, in June 2006 Thakral engaged PTW Architects to re-examine the proposed development.

In addition, Hassell Architects were concurrently engaged to assist in the development of preliminary schematic designs for the upgrading of the Wynyard Station concourse paid and unpaid areas, the canopy roof in Wynyard park including station wide ventilation and smoke management, together with fire and life safety improvements.

The station and its linkages between the various modes of transport were seen as key drivers for the project. With the emergence of Barangaroo and (at that time) Sydney Metro it became increasingly apparent that Wynyard station would become a major transport interchange that would require significant increased capacity to future proof the needs of both RailCorp and Transport.

The architectural brief evolved through a process of workshops and presentations, with PTW and Hassell working closely with the Thakral development team, and with co –consultants from other disciplines as the need arose.

In addition the conclusions and recommendations of the Urban Design Commentary, prepared by Michael Harrison of Architectus for the Department of Planning (February 2006), were taken into account, especially where the shortfalls and non compliances of previous proposals had been emphasised in the commentary.

As a result of the rigorous process of examination and testing of alternative design schemes, in 2009 Thakral developed a concept scheme based on the built form envelopes for the tower element recommended by PTW and the station concourse and canopy concept design prepared by Hassell.

The sloping top of the preferred building envelope (some 94 metres lower than the maximum permitted height indicated on the LEP height control plan and SLEP 2005 Clause.48, Schedule 2/E), fitted within the height control objective of SLEP 2005 Clause 47(f) which aims to provide sunlight access to significant sandstone buildings in Martin Place.

As part of this process, an indicative building design was prepared by PTW to illustrate one option for a future detailed building design that fits within the 2009 concept scheme parameters.

4.2 Optimum Development Outcomes and Design Principles

The culmination of the Rice Daubney, Architectus, PTW and Hassell architectural and urban design analysis and review process, and testing of alternative design options undertaken between 2002 and 2010 led to the adoption of a set of optimum development outcomes and design principles for the CityOne Project and the development of a proposed building envelope to support a Part 3A Concept Plan application for the site.

These optimum development outcomes and design principles defined in **Appendix C** support the proposed Concept Plan building envelopes and establish the basis from which the detailed design of the future development can occur.

The optimum development outcomes and design principles that have been adopted for the CityOne Project are:

- The delivery of a building with a strong commercial and transport identity which sets a benchmark for development in Sydney for overall design excellence, urban form, and environmental sustainability.
- The provision of a landmark building which is highly successful in its integration with the urban context and key City transport infrastructure (fundamental to the City's function/operation).
- The delivery of the essential upgrade of the eastern access ways to Wynyard Station and transport related infrastructure ahead of previous schedule and at limited capital cost to the State.
- The provision of essential commercial floor space in recognition of Sydney's role as a pre-eminent commercial, retail, residential and tourist destination.
- The provision of a development which complements and protects the special character and heritage significance of the City Centre.
- The provision of the opportunity and impetus for further consideration to be given to the amplification of the state's rail network including pedestrian connections to the Barangaroo development.
- The delivery of significant public domain improvements including the integration of major pedestrian connections from the site to neighbouring development and through and within the site to the surrounding public domain.
- The upgrade of both the appearance, quality and level of amenity of the public domain and station facilities for commuters as they transfer between rail, bus and metro networks and into the wider City.

More specifically, the redevelopment proposal will provide the following key development outcomes in terms of rail infrastructure, public domain and urban form:

Rail Infrastructure

- The acceleration of much needed improvement works to the eastern access ways to Wynyard Station.
- The provision of a capital contribution to rail infrastructure to assist in providing for improved levels of public amenity and improved fire and life safety provisions within the Station.
- The delivery of improvements to the public perceptions and use of the site and rail infrastructure.
- The provision and opportunity for the amplification of Wynyard Station including accommodating increased capacity associated with connections directly to the Barangaroo development.

Public Domain

- The creation of a landmark building which engages with the surrounding urban form and established streetscape, by way of function, materials, finishes and architectural excellence.
- The provision of improved through-site links and clarified pedestrian network including at the concourse level from George Street through to Carrington Street.
- Significantly improve the appearance, quality and function of the public domain in and around the site, especially with regard to pedestrian access to the station from George Street.

- Clear architectural indication of the improved George Street station entrance and the new station entrance on the eastern side of Carrington Street (where previously there was none).
- Improved pedestrian circulation capacity from Carrington Street down to the George Street retail level and the station concourse.
- Improved disabled access, via lifts, from the surrounding streets to retail levels and station concourse levels.
- Improved natural ventilation (supplemented with mixed mode and “spill” air conditioning) and daylight to the station concourse, the retail centre and the George Street ramps leading down to the station concourse.
- Inclusion of the Hunter Arcade retail level (leading to the Hunter Connection tunnel under George Street) in the main volume of the retail centre, opening it to daylight and natural ventilation for the first time.
- The use of the multi level retail centre as the station entrance, open to sunlight and fresh air at either end.

Urban Form

- The design, development and construction of a building which delivers the urban form, design excellence and environmental outcomes anticipated by the SLEP 2005 for the City Centre and which in this regard, sets a benchmark for new railway station design and refurbishment and provides an identity for Wynyard Station.
- The construction of a building which protects and positively responds to the Wynyard Park Special Area through the use of architectural form, detailing and materials which complement and enhance the specific attributes and qualities of the built form of the area and will contribute to the City skyline.
- The retention and conservation of Shell House facade and clock tower and its meaningful integration into the development site as an office building, the function for which it was originally designed.
- The delivery of a building which incorporates the latest ESD technologies including promoting opportunities for natural light and ventilation of the Wynyard Station concourse, water recycling, and energy and water efficient technologies.
- The provision of the highest level of internal amenity to the buildings occupants and visitors, as well as to the surrounding public domain.
- The delivery of a development with improved car and service vehicle access from Wynyard Lane that rationalises the driveway access to the site and provides efficiencies in layout and management.
- The creation of an urban form which provides a comfortable environment for pedestrians and assists in the enclosure of Wynyard Park (as anticipated by the Wynyard Park Special Area provisions).
- Visual connection and pedestrian access from Wynyard Lane directly into the retail centre and provision of a limited number of small retail outlets on Wynyard Lane.
- An impressive entrance lobby to the commercial office tenancies, with both a Carrington and George Street address, with views through the grand colonnade bounding Carrington Street, westwards to Wynyard Park.
- Provide a landmark building that successfully integrates with the urban context and the transport infrastructure, including the proposed pedestrian arcade beneath Margaret Street leading to the Barangaroo development.
- Provide additional high grade commercial office space, targeted at 5 star plus Green Star V3 rating, at a key location in the city.

4.3 Design Excellence Delivery Process

The achievement of design excellence has been paramount in the architectural selection process undertaken by Thakral, and significant resources have been committed to this end.

Each of the architectural firms engaged by Thakral – Rice Daubney, PTW and Hassell possess the qualities and experience to prepare an appropriate design solution to, amongst other things, achieve ‘design excellence’ in accordance with the intent of the requirements of the Central Sydney planning controls.

In determining its architectural selection criteria, Thakral was mindful of the special nature of the site and the importance of selecting firms with a demonstrated ability to achieve design excellence given the site’s importance to the City. Hassell has worked on a number of highly regarded and awarded rail infrastructure and commercial building projects.

Due to the complexity of the site and, in particular, the special requirements for any future development to integrate with the operational requirements of Wynyard Station, Hassell has undertaken comprehensive investigations over a number of years into the site, and Wynyard Station to determine an optimum design solution for the site. The extent of exploration of structural and other technical constraints on the site to ‘test’ that the proposal can successfully integrate with the station and is technically feasible has been significant.

As previously stated, due to the complexity of these constraints and requirements, the normal design competition process could only propose a superficial design proposition that in the fullness of further detailed investigation may not be technically feasible, fundamentally possible, or intrusive in detail with respect to the operational requirements of Wynyard Station.

The design solution for the CityOne Project incorporates and builds upon the investigations, solutions and recommendations made by both Rice Daubney and PTW and the proposed concept reflects design excellence. In this instance a design competition for the CityOne Project is considered not to be warranted.

In the August 2010 review of the Central Sydney Planning Committee (CSPC), the review Panel considered that greater discretion should be available to the CSPC to waive the design competition process if circumstances warrant. The Panel cited the design requirements for the Barangaroo site included in the Major Development SEPP where the Director General can waive the requirements for a design competition because of the excellence of the proposed design for the development concerned and where the Director-General is satisfied that:

- the architect responsible for the proposed design has an outstanding reputation in architecture, and
- necessary arrangements have been made to ensure that the proposed design is carried through to the completion of the development concerned.

For the Barangaroo site, the Major Development SEPP also requires that the consent authority have regard to the following matters in considering if buildings demonstrate design excellence:

- (a) *whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*
- (b) *whether the form and external appearance of the building will improve the quality and amenity of the public domain,*
- (c) *whether the building will meet sustainable design principles.*

These design criteria could also be applied to the CityOne site to ensure design excellence is achieved.

Architectural Reputation and Credentials

The architectural selection criteria for the CityOne Project were based on:

- Breadth and depth of experience with different project types within Australia and internationally.
- Demonstrable rail works design excellence.
- Demonstrable public transport expertise.
- Demonstrable commercial office design expertise.
- General reputation and 'brand' recognition'.
- Reputation for design innovation and excellence.

The subsequent detailed Project Application for the development on land generally east of Carrington Street will be prepared as a highly consultative process, driven by Thakral and involving all the relevant approval authorities and their consultants and specialist service providers, the clients consultants and technical specialists.

5.0 Concept Plan

5.1 Introduction

The Concept Plan establishes the vision and planning and development framework for one of the CBD's most significant sites. It articulates what the proponent is seeking to achieve for the future CityOne development and establishes the key development objectives, broad parameters and fundamental outcomes that underpin the project. Strategies to achieve these outcomes are recommended, with implementation actions detailed in the Statement of Commitments (refer to Section 7).

The Concept Plan seeks to address the environmental setting and technical challenges of the CityOne site to deliver a world class transport interchange for Sydney's CBD and a new retail centre and major commercial office tower.

The CityOne Concept Plan will facilitate the future design and carrying out of:

- Major work to Wynyard Station, including:
 - redevelopment of the concourse layout (non-paid areas), railway station entries and circulation thoroughfares (from George Street to York Street);
 - upgraded access for persons with a disability; and
 - a capital contribution by Thakral towards upgraded station facilities, ticketing areas, services, lifts and amenities; and fire and life safety systems to the upper and lower platforms (Platforms 3-6).
- Demolition of:
 - Thakral House (301 George Street);
 - 14-28 Carrington Street (part of the Menzies Hotel);
 - the internal structure of Shell House (the facade and clock tower are to be retained); and
 - existing concourse/ramps between the Station and George Street and part of the Hunter Connection and links to Wynyard Park.
- Conservation works to the facade of Shell House.
- A new office building consisting of a 29 level tower (above the new retail centre and concourse) on the land between Carrington Street and George Street.
- Five levels of retail linking George Street, Carrington Street and the station/ticketing area.
- Activation of Margaret Street with new ground level retail
- New concourse and connections to Wynyard Lane, Carrington Street and George Street.
- Construction of associated tenant basement parking.
- Associated public domain improvements.

5.2 Concept Approval

The Concept Plan is seeking approval for:

- the building envelopes (above and below ground) for the commercial buildings, concourse area, and basement carpark;
- concept design and performance specification for the Wynyard station unpaid concourse east of the eastern alignment of Carrington Street;
- public domain concept design east of the eastern alignment of Carrington Street ;
- design criteria to guide the future detailed design stages of the development east of Carrington Street;
- a Floor Space Area (FSA) of 85,000m²; including up to 9,700 m² FSA for retail uses;
- land uses (refer to Section 7.6) consistent with the City Centre zone;
- Ecologically Sustainable Development strategy for the project;
- pedestrian and vehicle access arrangements; and
- 177 car parking spaces to service the tenants of the new commercial building.

Upgraded station facilities, ticketing areas, services, lifts and amenities; and fire and life safety systems to the upper and lower platforms (Platforms 3 – 6) are proposed by Transport NSW under a separate approval process.

Approval is sought for the concept designs for the unpaid concourse areas from the eastern edge of Carrington Street through to George Street as detailed in Section 5 of this report and at **Appendix C**. The future detailed Project Application relating to development east of Carrington Street will be prepared generally in accordance with the principles illustrated on the concept designs, subject to resolution and refinement in consultation with Transport NSW .

It is proposed that subsequent detailed Project Applications for demolition, construction, and detailed design of the building and internal layout of all facilities will be lodged should the Concept Plan be approved.

5.3 Project Objectives

The key elements of the objectives for the redevelopment of the site are:

- Contribution to a world standard transport interchange at Wynyard Station that meets public transport needs to 2060 , including significant improvements to the aesthetic, functional and management requirements of Wynyard Station.
- Reconfiguration of the unpaid concourse of Wynyard Station east of Carrington Street to increase passenger capacity.
- Future integration of the existing bus terminal on York and Carrington Streets to provide commuters with a seamless and efficient transfer between bus and rail networks (subject to separate approvals process by Transport NSW).
- Future delivery of essential upgrades to Wynyard Station to address current significant deficiencies in terms of fire and life safety aspects of the station (subject to separate approvals process by Transport NSW).
- Improvement in the appearance and quality of public domain surrounding the site.
- To ensure urban design excellence in the upgrade of Wynyard Station and development of a new commercial tower.

- Delivery of a landmark commercial office tower that integrates with the surrounding urban context and key transport infrastructure, and is recognisable as the CityOne development providing an identity for Wynyard Station.
- Delivery of a building that delivers design excellence and sustainable environmental outcomes.
- Delivery of a development which complements and protects the heritage significance of surrounding heritage items and streetscapes.

The Concept Plan design objectives for the Wynyard Station upgrades east of Carrington Street are to:

- Provide an unpaid concourse layout to accommodate future transport developments and patronage growth to 2060.
- Provide enhanced facilities for people with disabilities including lift access to the George Street concourse level.
- Fully integrate the Hunter Connection by providing new escalators stairs and upgrades to the existing concourse.
- Improve connections to bus interchanges to Carrington Street.
- Increase pedestrian capacity of the concourse area by reconfiguring retail areas.
- Improve way-finding, signage and site connections.
- Provide increased connectivity to York and Carrington Streets.
- Provide quality retail facilities throughout the concourse areas.
- Improved fire and life safety performance of the concourse.

5.4 Design and Built Form

5.4.1 Building Envelope and Massing

The Concept Plan seeks approval of building envelopes with a maximum RL of 159.70 and RL 154.92, reducing down to RL 125.96 in compliance with SLEP 2005 Clauses 47(f) and 79.

The building envelope, illustrated in **Figures 35-37**, seeks to achieve the following:

- A building mass that can provide setbacks and articulation of the built form in recognition of the heritage values of the adjoining heritage items.
- Chamfering of the top of the tower so as not to create any additional overshadowing of the GPO facade and minimise the overshadowing of the footpath at Martin Place.
- The addition of one level at Shell House.

Figures 35-37 (also included at **Appendix C**) detail the proposed building envelopes. A numeric overview of the envelopes is provided in **Table 3**.

The maximum building heights shown on the Concept Plan drawings include plant and lift overruns but exclude communications devices and architectural roof features.

Table 3 – Numeric Overview

Elevation	RL
North – Shell House	RL 73.60
CityOne tower	RL 159.70

Elevation	RL
South	RL 125.96
East	RL 125.96 - RL 159.70
West - Shell House CityOne tower	RL 73.60 RL 125.96 - RL 159.70
Basement carpark	RL -13.08

Below ground envelopes are to enable adequate provision for structure, plant rooms, station passages and shafts associated with fire and life safety.

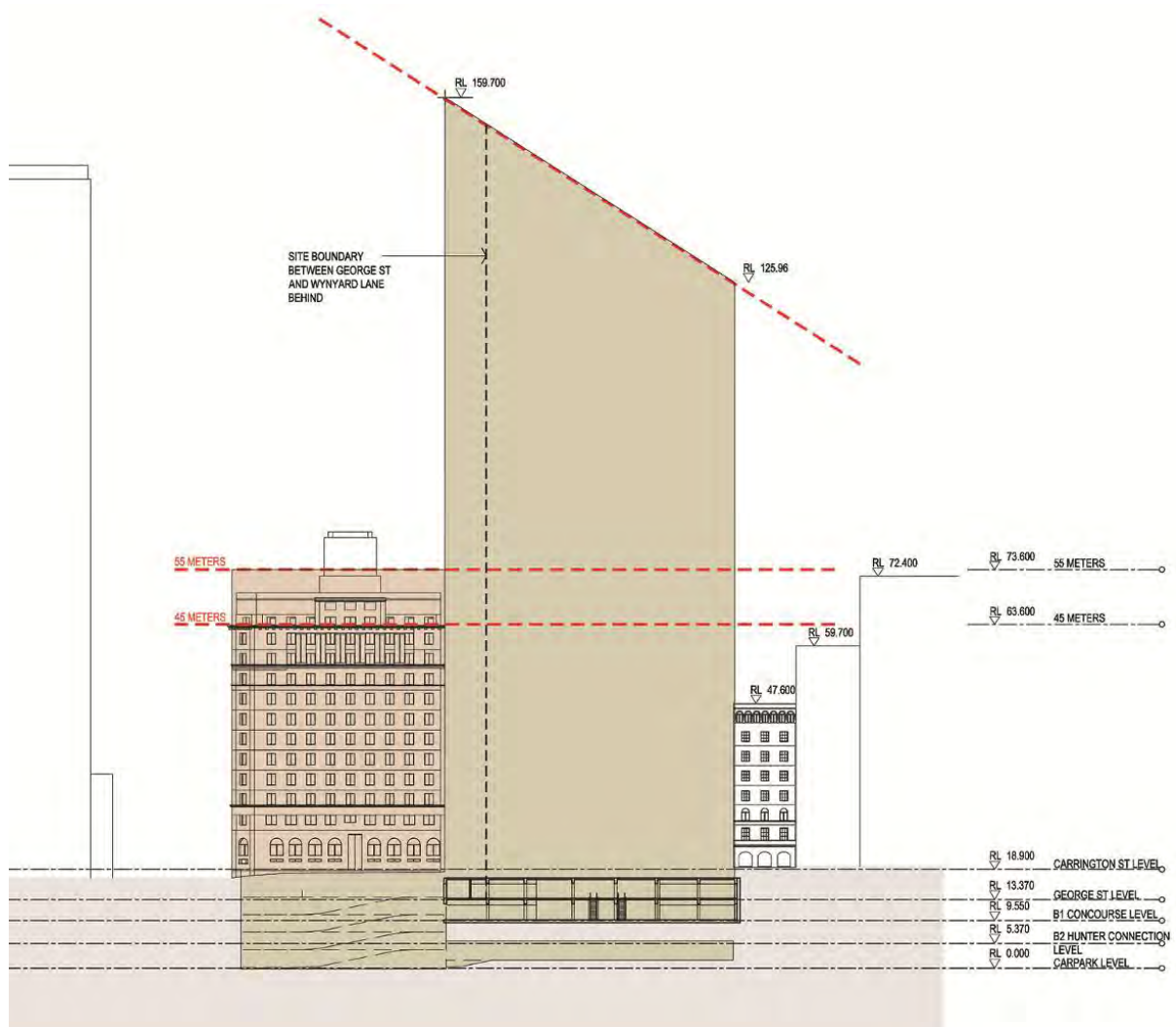


Figure 35 – Proposed building envelope – west elevation (Source: Hassell)

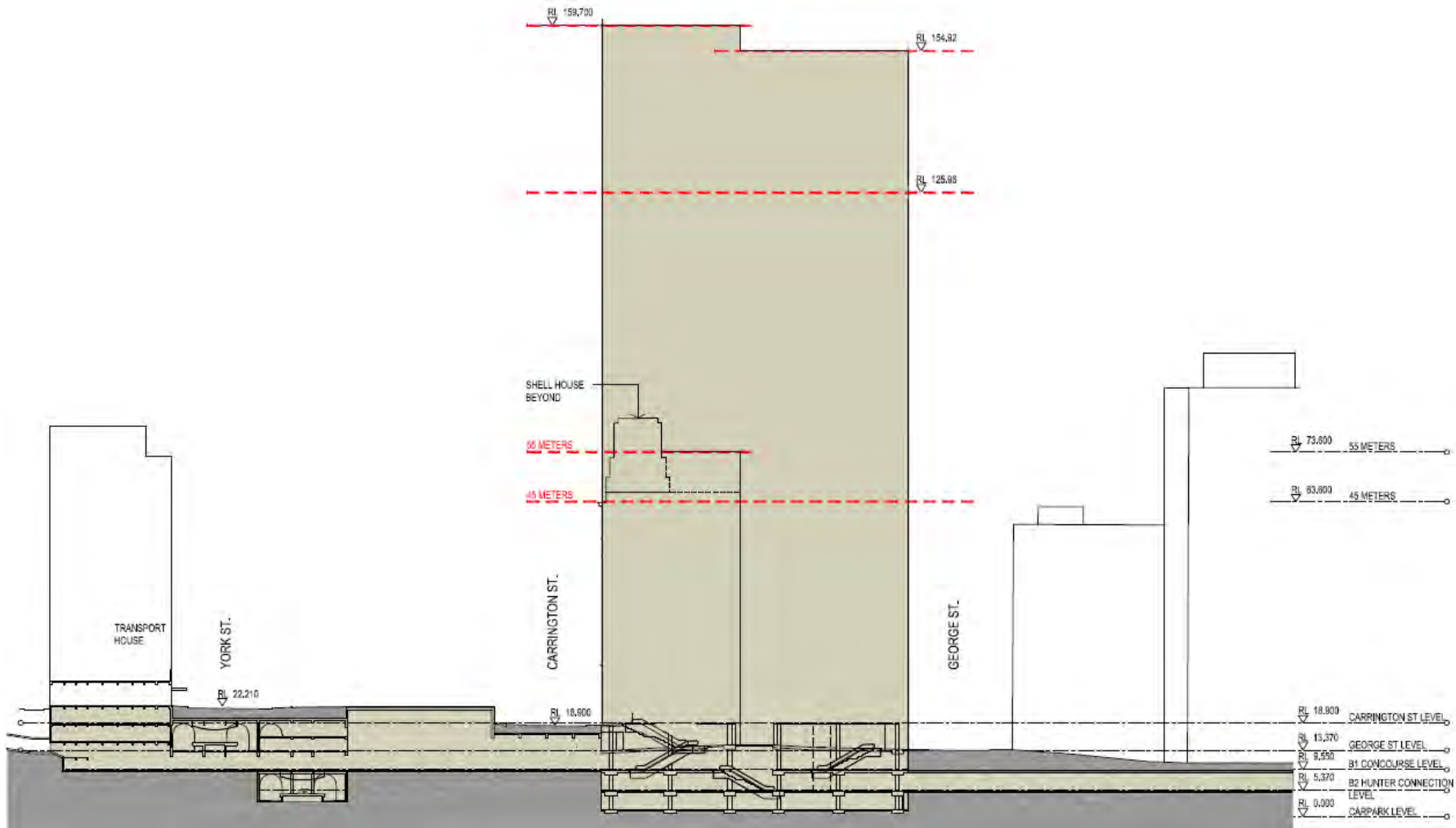


Figure 36 – Proposed building envelope – south elevation (Source: Hassell)

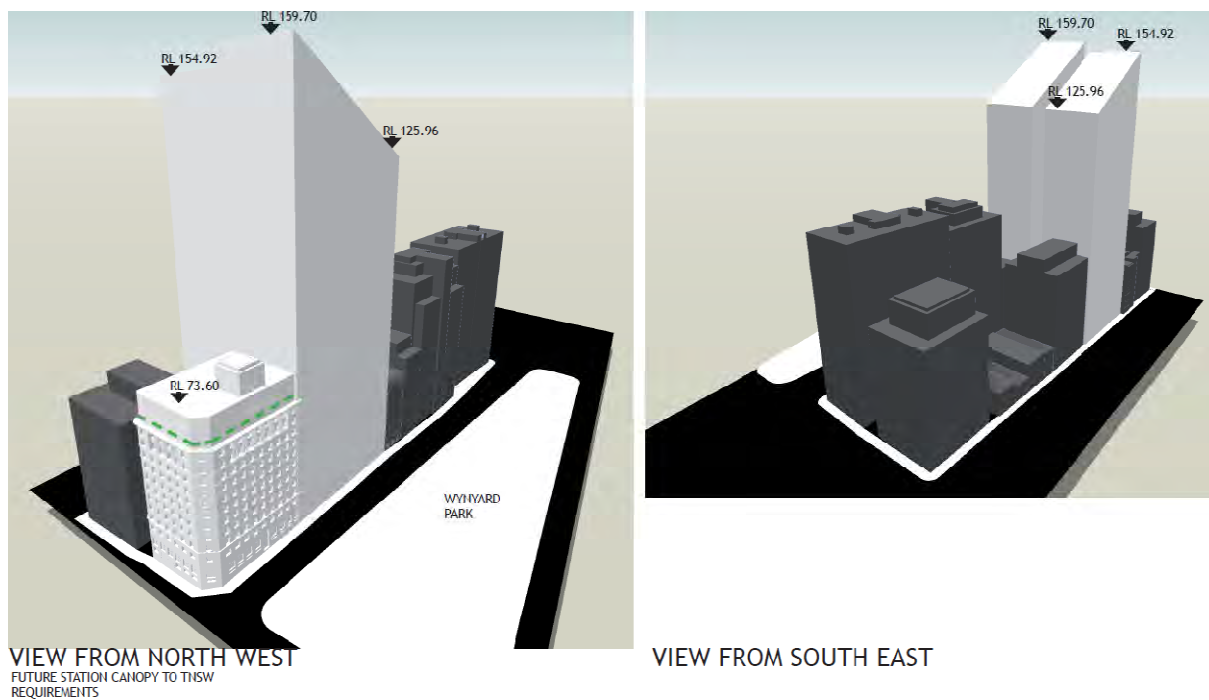


Figure 37 – Proposed envelope heights

5.4.2 Performance specifications for Wynyard Station concourse design

The Concept Plan proposal incorporates the following performance specifications for the future eastern access ways between George Street and Wynyard Station unpaid concourse:

- 20 metres minimum total width of exit to George Street; and
- Unimpeded pedestrian flows between the concourse and the street.

These performance specifications have been determined by Transport NSW as the key design criteria required to be delivered in order to ensure that the detailed design and redevelopment of the eastern access ways to Wynyard Station unpaid concourse can appropriately accommodate future pedestrian growth and demand to 2060. The performance specifications are subject to detailed pedestrian modelling and will be confirmed by Transport NSW during the detailed design phase of the project.

The indicative design of the unpaid concourse area east of Carrington Street (refer to **Appendix C**) provides for the minimum 20 metre total combined width of exit.

The performance specifications for combined total width of future pedestrian exits to the west, north and south are accommodated within the proposed Concept Plan envelope.

An indicative location for future station access points at the northern and southern ends of Wynyard Park is shown on the Concept Plan drawings. It is noted that the indicative location of the northern and southern access points is outside the site of the Concept Plan and does not form part of the development for which approval is sought. The 10 metre combined total width of exits to the north and to the south that has been provided for within the Concept Plan envelope, and the new northern and southern exits to Wynyard Park, will be subject to a separate approvals process by Transport NSW.

5.4.3 Tower Design

The concept design philosophy for the tower has been developed around three key principles:

- the integrated nature of the rail station concourse and access to this from George Street dictates a limited range of design options available for the Office Tower;
- the design controls of Solar Access Plane to Martin Place; and
- recognition of the adjacent heritage buildings, in both Carrington Street and George Street.

Hassell have prepared a Concept Design Statement which is included at **Appendix C**. The underlying design philosophy for the CityOne Project is to open up the Wynyard precinct, with the new building to capture as much daylight, and to create a welcoming and friendly environment.

To achieve this, the design of the future commercial tower is intended to be as transparent as possible to reveal activity within the development from as many vantage points as possible, but particularly on its east and west facades.

Similarly, the concept designs seek to maximise the amount of daylight in the public domain areas and the station concourse. Daylight will be able to enter into the concourse areas and retail centre through the atria connection on Shell House and via Wynyard Lane.

Enhancing pedestrian access to the station has been a fundamental driver in designing the concourse area east of Carrington Street. The new pedestrian access arrangements detailed in Section 5.7 below will provide multiple new pedestrian connections to the station and through site linkages.

Design Criteria

As discussed in Section 4, the CityOne Project has been informed by comprehensive site and contextual analysis and iterative design development. The building envelope proposed for the future commercial building can provide a building form and architecture appropriate to this CBD location by allowing for the best urban design and environmental outcomes for the site.

The Concept Plan proposes that the detailed design of the future building on the site meets the proposed design criteria which are set out in **Appendix C**. The Design Criteria include objectives and controls that address:

- Building envelope;
- Setbacks;
- Building articulation;
- Building materials;
- Public Domain;
- Access and Parking;
- Landscaping; and
- Sustainable Development.

The Design Criteria seek to ensure that a landmark building is established that successfully integrates with the urban context, and transport interchange functions of the precinct and transport infrastructure.

5.5 Land use

As detailed in Section 6.2, the Concept Plan is seeking approval for 85,000m² GFA.

Under SLEP 2005, the City Centre zone allows for a wide range of uses that encourage global city activities such as finance, commerce, retailing, cultural activities, entertainment and government uses. A range of uses consistent with the City Centre zone are proposed including the following:

- commercial offices;
- business premises;
- shops;
- general retail;
- food and drink premises;
- health/medical centre;
- public amenities;
- transport facilities; and
- tenant car parking.

Final land uses will be detailed in subsequent application(s).

5.6 Pedestrian Access

The CityOne development will deliver new eastern access ways to Wynyard Station. An assessment of the proposed eastern access arrangements is located at Section 6.4 and illustrated at **Figure 38**. **Appendix C** includes concept designs for the Wynyard Station unpaid concourse area generally to the east of the eastern kerb of Carrington Street. .

Approval is sought for the concept designs for the unpaid concourse area generally east of the eastern kerb of Carrington Street as illustrated below and at **Appendix C**. The future detailed Project Application will be prepared to meet the 20 metre minimum total combined width of pedestrian exit to George Street specified by Transport NSW, and generally in accordance with the principles illustrated on the concept designs, subject to resolution and refinement in consultation with RailCorp. The final widths of the pedestrian exits will be determined subject to detailed pedestrian modelling.

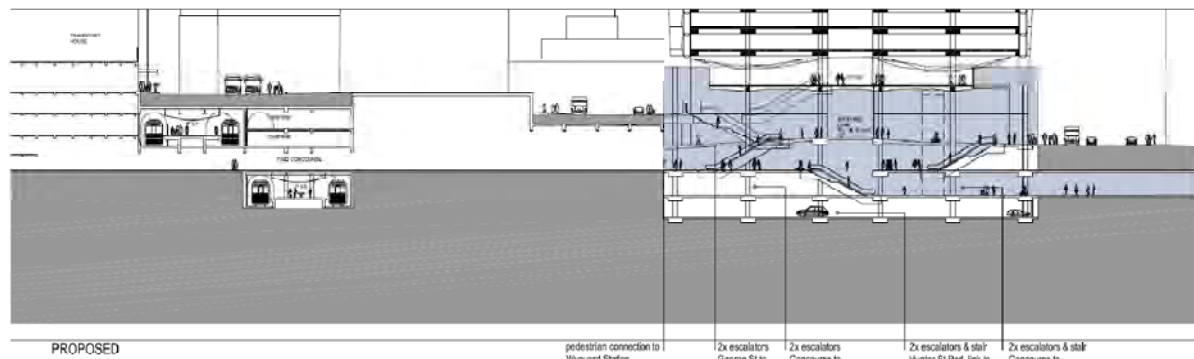


Figure 38 – Pedestrian access arrangements – eastern access ways to George Street

The concept design for the eastern access between the station and George Street consists of:

- Carrington Street level (eastern side within new tower building);
- George Street level (connecting across Wynyard Lane);
- Main concourse level (connecting to the ticket gates and paid concourse to the west);
- Hunter Connection (connecting the main concourse level to the Hunter arcade).

George Street Pedestrian Access

The George Street entry will be redesigned to provide a new at grade concourse level that opens up connections to Wynyard Lane and the concourse level under Carrington Street. The redevelopment of the George Street entry will provide a clear identity and address for Wynyard Station on George Street. The new George Street entry will meet Transport NSW's key performance specification of a minimum 20 metres total combined width of pedestrian exit.

The George Street concourse level will include:

- new stairs and four escalators connecting down to the Main Concourse;
- two new escalators and new stairs connecting to Carrington Street level (east side); and

The George Street concourse level is illustrated indicatively at **Figure 39**.

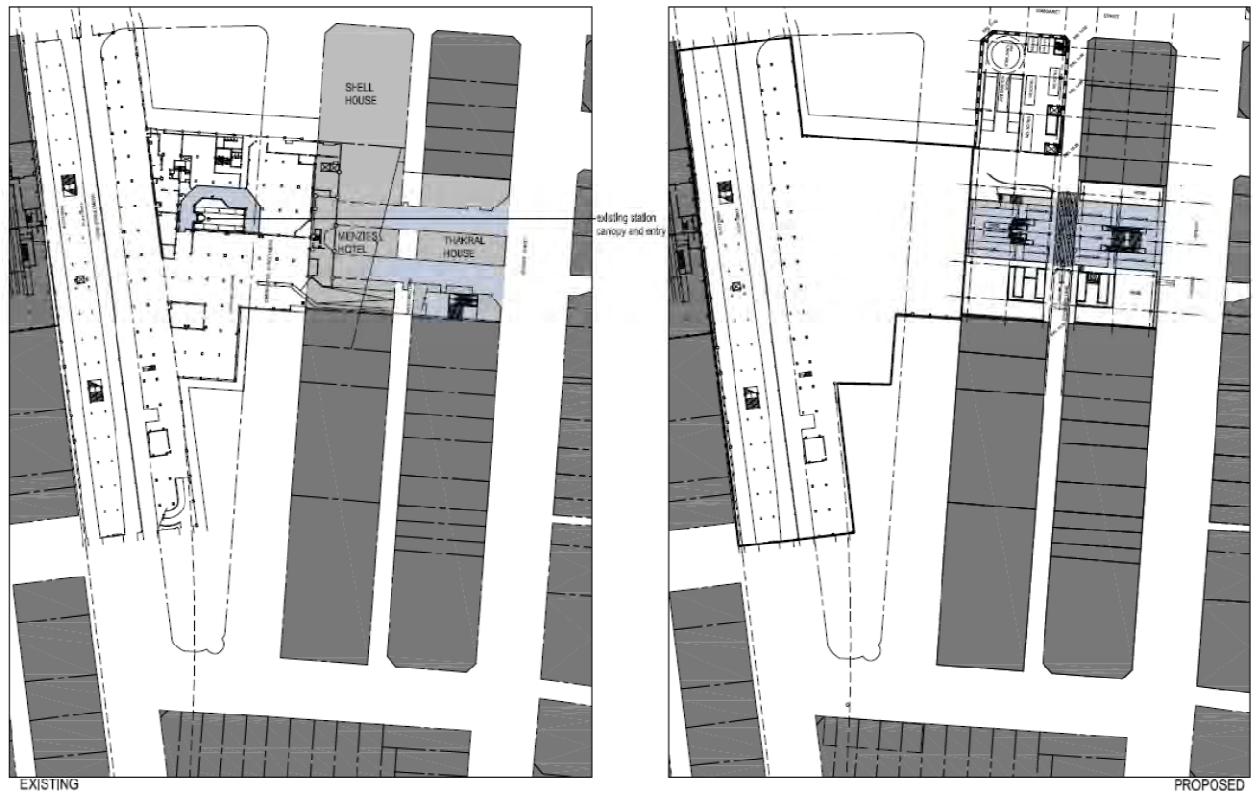


Figure 39 – Pedestrian Access arrangement George Street concourse level

Main Concourse

New vertical transport connections at the Concourse level east of Carrington Street will include:

- two new escalators and new stairs to the Hunter Connection; and
- four new escalators (east of Carrington Street) connecting up to George Street concourse Level.

A new public lift between George Street and Wynyard Lane will provide access to each level between Hunter Connection and Carrington Street levels.

The Main Concourse level is illustrated at **Figure 40**.



Figure 40 – Pedestrian Access arrangement George Street concourse level

Carrington Street Pedestrian Access

On the eastern side of Carrington Street new escalators and stairs will be provided which will connect to the George Street concourse level. A new lift will also be provided which will provide access from Carrington Street down to the Hunter Connection level.

The Carrington Street concourse level is illustrated at **Figure 41**.

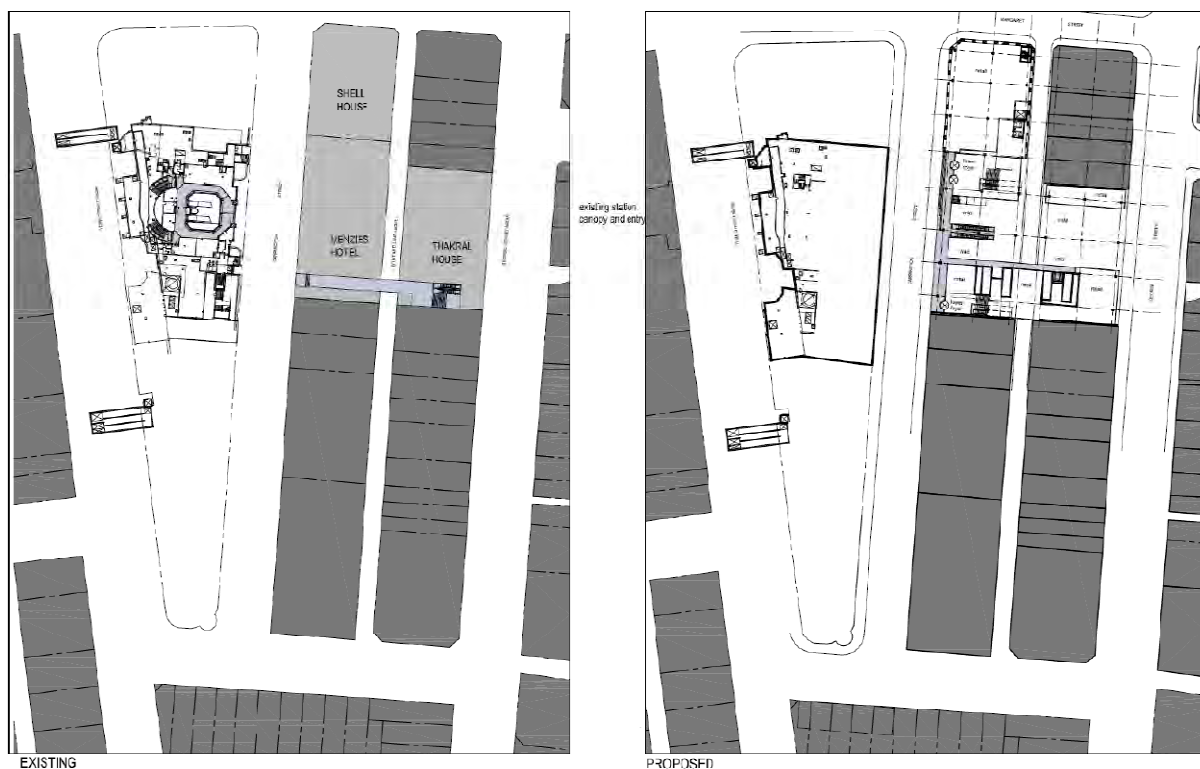


Figure 41 – Pedestrian Access arrangement Carrington Street concourse level

5.6.1 Commercial Building

The main street address and pedestrian access to the commercial building will be via Carrington Street. Access to the commercial building will via stairs and escalators to the foyer on Level 1.

Access from George Street will be via the new retail centre and concourse areas.

5.7 Vehicular Access

All vehicular access to the proposed development is located off Wynyard Lane as illustrated in **Figure 39** above and detailed in the Traffic and Parking Report (see **Appendix D**).

Vehicular access to the proposed basement parking levels is located via a new vehicle entry at the northern end of Margaret Street which will provide access to the basement carpark. A second entry will be provided further along Wynyard Lane which will provide access for service vehicles to the loading dock and to the Wynyard Lane Public Car Park.

The current access to the Wynyard Lane Public Car Park is under the Menzies hotel and alterations to the car park entry (and some car parking spaces) will be required to accommodate the structural supports for the new tower above, resulting in the loss of some existing car parking spaces.

5.8 Car Parking

177 new car parking spaces across four levels of basement car parking will be provided to service the tenants of the new office tower.

The detailed design of loading dock areas and the final number of servicing bays will be finalised during the Project Application stage in accordance with the Central Sydney DCP 1996.

5.9 Public Domain

In addition to the new concourse area as detailed above, several other public domain improvements are proposed east of Carrington Street. The design approach developed by Hassell for the public domain has considered the Sustainable Sydney 2030 plan and Sydney CBD Public Life and Public Spaces Survey by Gehl Architects.

The conceptual design for the public domain east of Carrington Street includes all areas accessible to the public including the George and Carrington Street building entries, the unpaid levels of the new concourse and Wynyard Lane.

The detailed design of the public domain will be addressed in a future Project Applications, however the design will be informed by the following principles, as detailed in the Public Domain Plan at **Appendix C**.

- **Key junctions** – use paving materials consistent with the City of Sydney pallet (including Sydney bluestone) to clearly identify public domain. Raising of crossing points to Wynyard Lane to provide level access and pedestrian safety.
- **Sight Lines** – provide clear views through the site to key entrances and exists. Provide strong visual connections to improve passive surveillance and pedestrian safety.
- **Character and experience** – improve the character and experience of the public domain by improving pedestrian connections, creating active spaces and integrating with the transport network.

- **Roads and Lanes** – consider opportunities for activation of streets and lanes and streetscapes improvements to Wynyard Lane and Carrington Street, including potential raised paving treatment/resurfacing to provide a consistent and level surface and distinctive connections.

5.10 Heritage

The proposed development consists of a variety of heritage conservation measures including:

- retention and conservation works to the Shell House building façade;
- retention and conservation works to the Shell House Clock Tower;
- reconverting Shell House from a hotel use back to its original commercial use;
- re-establishment of the original floor levels within Shell House; and
- provision of an interpretive interface to connect the new podium with Shell House.

5.11 Sustainability

A Sustainability Summary has been prepared by Cundall (see **Appendix E**). The summary outlines three key long term sustainability strategies that will be implemented as part of the CityOne development:

- Achieving a minimum 5 Green Stars.
- Achieving a high level of energy efficiency.
- Designing a future adaptable building to reduce future emissions in line with the City of Sydney 2030 targets.

The detailed design development for this project will thoroughly review the sustainability targets for commercial office buildings and retail centres with the aim of maximising sustainability and future flexibility whilst reducing energy use and carbon/CO₂ emissions. Some of the measures that will be considered for incorporation into the project as part of any future design include:

- adopting a central plant strategy;
- energy efficient HVAC systems;
- indoor environmental quality;
- waste management;
- green commuter strategies;
- alternative heat rejection strategies such as waste water heat rejection, open loop aquifer cooling and phase change material heat stores.

5.12 Indicative Project Staging

The final staging of the proposed development will be resolved during the detailed design stages.

The construction works will be staged across the site to ensure continued access to Wynyard Station.

At this stage it is anticipated that development on land generally west of Carrington Street will be carried out by Transport NSW subject to separate approvals processes, and development on land generally east of the western kerb of Carrington Street will be carried out by Thakral.

Future Project Application(s) may include:

- Project Application for demolition and excavation works.
- Project Application for construction of basement structures and station concourse areas including associated retail and construction of CityOne tower and refurbishment of Shell House.

The final staging of works on land west of Carrington Street will be determined by Transport NSW.

Construction works for development east of Carrington Street will also be staged. The future Project Application will require flexibility in staging so as to allow for both staged completion and staged occupation and handover of various areas in order to progressively complete areas of the works.

An indicative schedule for the construction of the proposed commercial building and station concourse works are detailed in **Tables 4** below.

Table 4 – Staging of Demolition and Construction Works

Stage	Works
<i>Stage 1</i>	Site establishment
<i>Stage 2</i>	Demolition of existing Thakral House and Menzies Hotel from roof down to existing Level 2. Demolition and excavation of part of Thakral House and Menzies Hotel from Level 2 to the new footing level of half the site.
<i>Stage 3</i>	Commencement of structural works from new footing level to new level 3. Installation of temporary steel truss at new level 3 and structure works above Level 3.
<i>Stage 4</i>	Installation of temporary access ramp to George Street and Hunter Connection. Demolition and excavation of remaining half of the site from existing Level 2 down to new footing level. Complete structural works to remaining half of the site from new footing level to Level 2.
<i>Stage 5</i>	Shell House – install facade retention system Internal strip out and demolition. Excavation to new basement levels. Construction of new structure from basement level to new roof.

A preliminary construction management and methodology for the project has been prepared by Brookfield Multiplex and Robert Bird Group and is included at **Appendix P** and discussed at Section 6.15.

6.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the Concept Plan proposal. It addresses the matters for consideration set out in the Director-General's Environmental Assessment Requirements (DGRs).

The draft Statement of Commitments complements the findings of this section.

6.1 Director General's Environmental Assessment Requirements

Table 5 provides a detailed summary of the individual matters listed in the Director General's Environmental Assessment Requirements (DGRs) and / or identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Table 5 – Director General's Environmental Assessment Requirements

Requirement	Location in Environmental Assessment	
General		
Executive Summary	Page viii	
Statement of Validity	Page vii	
Quantity Surveyor’s Certificate	Submitted under separate cover	
Site Analysis	Section 2.0	
Description of the Proposed Development	Section 5.0	
Assessment of the Key Issues	Section 6.0	
Draft Statement of Commitments	Section 7.0	
Conclusion and Justification	Section 8.0	
Key Issues	Report	Technical Study
Relevant EPIs policies and guidelines to be addressed	Section 6.2 - 6.3	N/A
Public Benefits	2.0	
Rail Infrastructure and Access <ul style="list-style-type: none">▪ Pedestrian Access▪ Safety and Security▪ Future Connections▪ Capacity Upgrades▪ Structural Impacts	Section 5.7 Section 6.4.3 Section 5.4 Section 2.0 Section 6.10	Appendix I Appendix G
Urban Design / Design Excellence <ul style="list-style-type: none">▪ Building design▪ Design excellence process▪ Tower impacts on adjoining development▪ Retail design▪ Station address and public domain legibility▪ Concourse and Station interface	Section 6.6 Section 4.0 Section 6.6 Section 6.4 Section 6.4 Section 6.4	Appendix C
Built Form <ul style="list-style-type: none">▪ Height Study▪ View Analysis▪ Options for siting and layout	Section 6.6.1 Section 6.6.1 Section 4.0	Appendix C
Bus Infrastructure	Section 6.7.1	Appendix D
Heritage	Section 6.8	Appendix H

Requirement	Location in Environmental Assessment	
Environmental Amenity Impacts		
▪ Overshadowing	Section 6.6.3	Appendix C
▪ Privacy	Section 6.9.1	-
▪ View Loss	Section 6.9.2	-
▪ Wind Impacts	Section 6.9.3	Appendix L
Transport and Accessibility	Section 6.7	Appendix D
Traffic Impacts	Section 6.7	Appendix D
Parking	Section 6.7	Appendix D
Contributions	Section 2.0	-
Landscaping and Public Domain Management	Section 5.10	Appendix C
Ecologically Sustainable Development	Section 5.12	Appendix E
Drainage	Section 6.11	Appendix M
Utilities	Section 6.12	Appendix N
Contamination	Section 6.13	Appendix O
Staging	Section 5.13	Appendix C
Consultation	Section 1.4	-
Plans and Documents		
Existing Site Survey Plan	Appendix C	
Site Analysis Plan	Appendix C	
A Locality/Context Plan	Appendix C	
Architectural Drawings	Appendix C	
Model	Submitted under separate cover	
Geotechnical and Structural Report	Appendix G and Q	
Stormwater Concept Plan	Appendix M	
View Analysis	Appendix C	
Landscape Plan	Appendix C	
Shadow Diagrams	Appendix R	
Construction Management Plan and Traffic Management Plan	Appendix P and D	
Construction Methodology	Appendix P	

6.2 State Legislation

6.2.1 Environmental Planning and Assessment Act 1979

Part 3A of the EP&A Act outlines the process for considering applications under the Major Development SEPP. In particular it outlines:

- What development constitutes a Major Development;
- The matters which the Minister must take into account when assessing a major application;
- Information which must be submitted with a major Project Application;
- The environmental assessment requirements for approval;
- Public exhibition of Major Project Applications;
- Assessment report procedures; and
- Appeals under Part 3A.

This report responds to these requirements.

The DGRs in particular reference the Objects of the EP&A Act. The following objects of the EP&A Act are relevant to the proposal:

- (a) *to encourage:*
 - (iii) *the promotion and co-ordination of the orderly and economic use and development of land,*
 - (iv) *the provision of land for public purposes,*
 - (v) *the provision and co-ordination of community services and facilities, and*
 - (vii) *ecologically sustainable development,*

The Concept Plan is consistent with the relevant objects of the EP&A Act as the development:

- is an appropriate and orderly economic use of the land;
- delivers significant improvements to the aesthetic, functional and management requirements of Wynyard Station which will accommodate future passenger growth;
- provides improved and new Station connections;
- provides a sustainable office development as well as sustainable public transport by assisting to deliver increased passenger capacity at Wynyard station through to 2060 in accordance with performance specifications provided by Transport NSW; and
- is within an area highly accessible to public transport, employment and cultural facilities.

6.3 Statutory Planning Instruments

This section summarises the relevant statutory planning instruments that apply to the site:

- State Environmental Planning Policy (Major Developments) 2005;
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55);
- State Environmental Planning Policy (Infrastructure) 2007;
- Draft SEPP (Competition);
- Sydney Local Environmental Plan 2005;
- Central Sydney Development Control Plan 1996;
- City of Sydney Heritage Development Control Plan 2006; and
- City of Sydney Draft Ecologically Sustainable Development - Development Control Plan.

6.3.1 State Environmental Planning Policy (Major Development) 2005

Clause 6 of the Major Development SEPP provides that development that in the opinion of the Minister is development of a kind referred to in Schedule 1 (classes of development) or Schedule 2 (specified sites) is declared to be a project to which Part 3A of the EP&A Act applies.

Clause 23(2) (Group 8) in Schedule 1 in the Major Projects SEPP - Rail and related transport facilities, identifies:

(2) Development within a railway corridor or associated with railway infrastructure that has a capital investment value of more than \$30 million and that the Minister determines is of strategic State or regional planning significance, and is for the purpose of:

- (a) commercial, residential or retail development, or*
- (b) container packing, storage or examination facility, or*
- (c) bus interchange development.*

The proposed development is for such development as identified above, and has an estimated "capital investment value" of approximately \$425 million. The capital investment value of the rail infrastructure (station) works alone upwards of \$60 million (. As demonstrated above, the development is of a type listed in Schedule 1 of the SEPP and is therefore a Major Project to which Part 3A of the EP&A Act applies.

6.3.2 State Environmental Planning Policy (Infrastructure) 2007

The aim of the Infrastructure SEPP is to facilitate the effective delivery of infrastructure across the State by:

- improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services;
- providing greater flexibility in the location of infrastructure and service facilities;
- Allowing for the efficient development, redevelopment or disposal of surplus government owned land;
- identifying the environmental assessment category into which different types of infrastructure and services development fall;
- identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development; and
- providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing.

Clause 85 of the SEPP requires the relevant rail authority to be notified for development immediately adjacent to rail corridors, if the development:

- is likely to have an adverse effect on rail safety, or
- involves the placing of a metal finish on a structure and the rail corridor concerned is used by electric trains, or
- involves the use of a crane in air space above any rail corridor.

The CityOne development does not trigger the aforementioned matters, however, the development will be referred to RailCorp under Clause 86.

Clause 86 applies to development that involves the penetration of ground to a depth of at least 2m below ground level (existing) on land within 25m (measured horizontally) of a rail corridor. The future detailed project application for the proposed development will involve excavation, therefore the Concept Plan should be referred to RailCorp in accordance with Clause 86.

In relation to "Subdivision 2 – Development in Rail Corridors" of the Infrastructure SEPP the "draft *Interim guidelines for development near busy roads and adjacent to railway corridors*" is relevant.

This document is addressed in the following reports:

- Traffic Impact Assessment at **Appendix D**;
- Noise and Vibration Report at **Appendix F**; and
- Structural and Geotechnical Assessment Report at **Appendix G**.

As development is not proposed within the Interim Metro Corridor, clause 88A does not apply. However, an assessment of the potential structural and geotechnical impacts of the development on the nearby Interim Metro corridor is considered in Section 6.10.2 and at **Appendix G**.

In addition to the above, Thakral has consulted with Railcorp and Transport NSW.

Clause 104 of the SEPP requires that the Roads and Traffic Authority be notified of development that involves:

- new premises of a specified size and / or capacity; or
- an enlargement or extension of existing premises, being an alteration or addition of a specified size and / or capacity.

The Concept Plan is of a type listed under Schedule 3 of the SEPP, namely development for the purposes of a commercial premises with an area greater than 2500m² with access to any road. As the Concept Plan development will increase the capacity of the CityOne site, it should be referred to the RTA.

6.3.3 State Environmental Planning Policy 55 - Remediation of Land

State Environmental Planning Policy 55 – Remediation of Land (SEPP 55) aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. It requires that a consent authority must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated, and if the land is contaminated whether or not it can be made suitable for the proposed use.

As detailed in Section 6.13, a Stage One Environmental Site Assessment (ESA) has been undertaken. The ESA concludes that the CityOne site is likely to be deemed suitable for the proposed development with respect to contamination and that based on the results of the Stage 1 ESA, no further investigation into contamination at the site is required.

6.3.4 Draft State Environmental Planning (Competition)

In July 2010 draft State Environmental Planning Policy (Competition) was publicly exhibited. The draft SEPP aims to promote economic growth and competition and remove anti-competitive barriers in environmental planning and assessment.

The draft SEPP proposes:

- the commercial viability of a proposed development may not be taken into consideration by a consent authority when determining development applications;
- the likely impact of a proposed development on the commercial viability of other individual businesses is not a matter for consideration; except if the proposed development is likely to have an overall adverse impact on the extent and adequacy of local community services and facilities; and
- any restrictions in local planning instruments on the number of a particular type of retail store in an area, or the distance between stores of the same type, will have no effect.

The draft SEPP is a matter for consideration by the relevant consent authority. No issues are considered to arise with respect to the proposal.

6.3.5 Sydney Local Environmental Plan 2005

The Sydney Local Environmental Plan 2005 (SLEP 2005) is the principal EPI applying to the site. It identifies land use zones, objectives and development standards that must be considered when determining development applications. However, pursuant to Section 75R(3), major project applications are only required to comply with State Environmental Planning Policies, and other environmental planning policies (LEPs and REPs) to the extent that they dictate permissibility.

As required by the DGRs however an assessment against the relevant controls is detailed in **Tables 6** and **7** below.

Table 6 – Assessment against SLEP 2005

Instrument/Policy	Comments
Sydney LEP 2005	
Chapter 1 Part 2 Clause 26 - Design Excellence	The design excellence of the development, and the proposal by which design excellence has been achieved is demonstrated at Section 4.
Chapter 2 Part 2 Clause 32 – Zoning	<p>The site is part zoned “City Centre” and part “Parks and Community Uses”.</p> <p>All the elements of the proposal are consistent with the objectives of, and permissible with consent in the City Centre zone.</p> <p>Although some land uses within the overall development are not permitted in the Parks and Community Uses Zone, all the uses actually located on the land zoned ‘Park and Community Uses’ (namely the rail station concourse and its associated retail uses) are permissible in this zone and are consistent with the zone objectives.</p> <p>The proposed development is therefore permissible with consent</p>
Chapter 2 Part 3 Clauses 47-50 Height of Buildings – Maximum height 55m - 235m and Martin Place Sun Access Plane E	The Concept Plan proposes a maximum building envelope height of 146.33 metres. The maximum height complies with the maximum 235 m height limit on the George Street frontage of the site, and with the Martin Place Sun Access Plane E. It does not, however, comply with the 55 m height limit permitted on the Carrington Street frontage of the site. An height analysis and assessment of the proposal is located at Section 6.6.
Chapter 2 Part 4 Clause 58 Floor Space Ratio –FSR 8:1 – 12.5:1	The concept plan proposes a maximum FSR of 9.63:1 and therefore complies.
Chapter 2 Part 5 Clause 65 Car Parking	The concept plan proposes a maximum of 177 tenant car spaces and therefore complies with clause 65 - Parking provision.
Chapter 2 Part 6 Clauses 67-76 Heritage	<p>Shell House and Wynyard Park are items of local heritage significance. There are also several other items of local heritage significance in the vicinity of the site.</p> <p>A heritage assessment has been prepared and is addressed in Section 6.8.</p>

Instrument/Policy	Comments
Chapter 2 Part 7 Special Areas	<p>The site is within the Wynyard Park Special area. The proposed development is consistent with the Wynyard Park special area objectives set out in Schedule 6 of SLEP, in that:</p> <ul style="list-style-type: none"> the design recognises Wynyard Park's public domain role in the northern part of Central Sydney by providing enhanced access to the park and an improved interface with Wynyard Station; it will protect mid-winter lunchtime sun access to Wynyard Park; the proposed street frontage height will retain the sense of urban enclosure provided to Wynyard Park; it will enhance the terminating vistas along Carrington Street and York Street; and it seeks concept approval for the upgrade of the Wynyard Station component of the public transport interchange provided at Wynyard and will deliver significant enhancements to the public domain of Wynyard Park.

Table 7 – Assessment against other relevant DCPs

Instrument/Policy	Comments
Central Sydney DCP 2005	<p>The Central Sydney Development Control Plan 2006 (CSDCP) was taken into consideration during the development of the Concept Plan design. Further consideration of CSDCP will be undertaken during detailed design of the project. The key controls that are relevant to this development (building bulk, street front heights and setbacks) are addressed Section 6.6.</p>
Heritage DCP 2006	<p>The City of Sydney Heritage Development Control Plan is intended for detailed heritage and conservation planning and will be taken into consideration during the detailed design stage of the development. An assessment of the impact of the proposal on Shell House and Wynyard Park, and the surrounding heritage items in accordance with SLEP 2005 is located in Section 6.8 and at Appendix H.</p>
Draft Ecologically Sustainable Development DCP 2006	<p>The draft City of Sydney Ecologically Sustainable Development – Development Control Plan (draft ESD DCP) was publicly exhibited in March 2008. It has not yet been formally adopted by the City of Sydney. The draft ESD DCP provides a comprehensive set of guidelines and requirements to ensure the application of ESD principles throughout the City and applies to commercial development.</p> <p>Environmental performance under the draft ESD DCP is based upon eight environmental impact categories including management, indoor environmental quality, energy, water, materials, land use and ecology and emissions, with points awarded for commitment to certain targets.</p>

Floor Space Ratio

The maximum FSR for the site is 8:1, with the potential to increase to a maximum of 12.5:1, subject to satisfying height limits and other development controls and merit considerations within the SLEP.

The total development site has an area of 11,804m². However, in applying the relevant definition and clause 58 of the LEP, the "site area" for the purposes of the FSR calculation is reduced to 8,828m².

The 8,828m² comprises the “development site” area of 11,804m² but **excludes** 2,296m² of land in Wynyard Park being land on which the proposed development (as a whole) is ‘not allowed’ by virtue of the Parks and Community Places zoning of this land.

The stratum lots beneath Carrington Street and York Street and the stratum lots above and below Wynyard Lane are included in the 8,828m² site area for the purpose of calculating FSR. The land which comprises the stratum allotments beneath Carrington Street, York Street and Wynyard Lane do not form part of the land that is dedicated for the purposes of a ‘street, a public place, a public reserve or community land’. Consequently, this land is not excluded from the site area calculation. This interpretation is confirmed in legal advice from the proponent’s solicitors Black Dawson Waldron.

As the area of Wynyard Park has been excluded from the ‘site area’ the FSA contained within the Wynyard Park Stratum has also been excluded from the FSR calculations for consistency.

Therefore the FSR calculation, based on the above is:

$$\begin{aligned} &85,000\text{m}^2 \text{ FSA} / 8,828\text{m}^2 \text{ site area} \\ &= 9.63:1 \text{ FSR} \end{aligned}$$

Therefore the proposed FSR complies with the maximum permitted under SLEP.

6.3.6 Draft Sydney LEP 2010

In September 2010 City of Sydney adopted a new draft Sydney LEP and Council and CSPC resolved to seek a section 65 certificate from the Director General of the Department of Planning to allow the draft LEP to be placed on public exhibition. Once a section 65 certificate has been issued (and any amendments to the draft plan made as directed by the Director General) the draft LEP will be exhibited for a minimum of 60 days.

The draft LEP at this point in time, is not a proposed environmental planning instrument and is therefore not a matter for consideration in assessing development application. However a preliminary review of the key draft LEP controls has been undertaken to consider any implications for the CityOne Project.

Zoning

Under the draft LEP the site (excluding Wynyard Park) is proposed to be zoned Metropolitan Centre (B8) which is similar to the current City Centre zone. Wynyard Park is proposed to be zoned RE1 Public Recreation (similar to the current Parks and Community Places zone).

Floor Space Ratio

In the draft LEP, the base FSR remains 8:1, with an additional FSR of 4.5:1 achievable for office, business or retail premises within Area A1 (which is the area the CityOne site is in). The achievement of the additional floorspace is contingent on the allocation of heritage floorspace which is purchased and transferred from another site.

For the purposes of calculating FSR the site area definition is similar to the current LEP. However the draft LEP introduces a new provision relating to development below ground level in the RE1 zone (i.e. Wynyard Park). The new provision provides that development which can be undertaken in any the adjoining zone land can be undertaken on land below ground within the RE1 zone, subject to demonstrating the proposal is not inconsistent with the zone objectives and will not have significant adverse affects on the environment.

If this provision is ultimately adopted in the final instrument, this would have the effect that none of the proposed land uses for the CityOne Project are prohibited and therefore would increase the site area for the purposes of calculating the FSR from 8,828m² to 11,124m² as the land under Wynyard Park would not need to be excluded. Therefore the FSR would be about 7.6:1. The proposed FSR for CityOne would therefore remain compliant with the base FSR in draft LEP.

Heights

The draft LEP generally retains the same height controls that currently apply to the site.

The site would continue to be subject to three different height controls. The northern portion of the George Street frontage allows for development up to 235m, whilst the southern portion is controlled by the sun access plane to Martin Place. The sun access plane requires no additional overshadowing of Martin Place 12.00 midday and 2.00pm between 14 April and 31 August. A maximum height limit of 55m is proposed along the Carrington Street frontage.

6.3.7 Strategic Plans and Policies

Section 2 addresses the relevant strategic plans that apply to the site including the following:

- NSW State Plan;
- City of Cities: A Plan for Sydney's Future (the Sydney Metropolitan Strategy);
- Sydney City Draft Subregional Strategy;
- Sustainable Sydney 2030;
- Metropolitan Transport Plan; and
- Transforming Sydney: A City/State Partnership Memorandum of Understanding between the State Government and City of Sydney Council (September 2010).

6.4 Station Concept Design and Upgrades

As described at Section 2, Wynyard station is the third busiest station in the CBD and suffers from extended periods of congestion in the AM and PM peak periods. The pedestrian congestion in the AM peak is primarily due to the stations ticket gate capacity and concourse layout, whilst station capacity in the PM peak is constrained by the frequency of train service and platform capacity rather than by the physical layout and facilities of the station.

The station concourse areas have retail shops around the perimeter as well as some retail located in the centre of the concourse area.

The main pedestrian movement issues in the station include:

- poor way finding;
- unclear sightlines due to concourse clutter;
- indirect access arrangements e.g. concourse to Carrington Street;
- capacity constraints in the north west (Westpac Link) passageway;
- AM peak congestion due to queues at ticket gates exiting the station and cross-flow conflicts as a result of the western ticket gates proximity to the stairs servicing platforms 3 and 4; and
- platform congestion during the PM peak.

Transport NSW has identified the key performance specifications for the design of the future unpaid concourse east of Carrington Street (i.e. to George Street) that are required to be met in order to accommodate anticipated pedestrian demand to 2060. The Concept Plan proposal and conceptual design for the development east of Carrington Street has accommodated these specifications. The performance specification will be subject to detailed pedestrian modelling during the detail design stage.

The Station Concept design prepared by Hassell for the development generally east of the eastern kerb of Carrington Street will provide for significant growth in throughput of passengers. The concept for the station design proposes a major reorganisation of the existing retail spaces, which will be relocated to the edges of the concourse. This will provide for clear pedestrian flows out of the paid concourse area.

The strategic justification and public benefit of the proposed CityOne project in the context of the above existing situation is detailed at Section 2 of this EA.

Halcrow have undertaken an assessment of the pedestrian impacts of the concept designs (refer to **Appendix D**) and consider that the improvements proposed between Carrington Street and George Street will provide the necessary capacity to 2060 as well as providing a greatly improved pedestrian link from George Street to Carrington Street and York Street. .

The development will revitalise the Wynyard Station precinct by extending its functional life through increased passenger capacity, comfort and amenity. The development will importantly, accommodate future connections and passenger growth resulting from the future Barangaroo development and any future rail infrastructure projects.

The Halcrow pedestrian impact review concluded that the proposed project will:

- improve pedestrian travel paths and movements through the station;
- provide the necessary pedestrian capacity between Carrington Street and George Street;
- improve emergency evacuation times through removal of concourse clutter, relocation of retail to the edges of the concourse and improved signage;
- provide an improved pedestrian link from George Street to Carrington Street and York Streets; and
- accommodate future connections and passenger growth resulting from the future Barangaroo development and future rail infrastructure projects.

Illustrations of the proposed upgrades are included at **Figures 42 and 43**.



Figure 42 – Indicative illustration of upgraded Wynyard Station (George Street level)



Figure 43 – Indicative illustration of view from upgraded station entrance on Carrington Street

6.4.1 Accessibility

An Accessibility Report has been prepared by Morris Goding Accessibility Consulting and is located at **Appendix J**. The report provides a review of the proposed access arrangements to demonstrate that at completion, the development is capable of complying with the relevant standards and regulations to provide adequate access for people with disabilities. The report also identifies potential areas which will require attention during the detailed design of the development.

The report recommends that the following statutory and regulatory guidelines be encompassed into the final design of the development: the Federal Disability Discrimination Act (DDA), DDA Access to Premises Standards 2010 (DDA Access Code 2010), DDA Transport Standards (DSAPT), Building Code of Australia (BCA) Part D3, AS 1428.1:2009, AS 1428.4.1:2009 - (Tactile Ground Surface Indicators), AS 1735.12 - (Lift facilities for persons with disabilities), and AS 2890.6:2009 - (Car Parking).

The above recommendations are reflected in the Statement of Commitments.

6.4.2 Fire and Life Safety

As part of the proponent's proposal, a significant capital contribution is being made towards the upgrading of the station, including the paid area works by others. It is envisaged that part of the capital contribution will be utilised to address deficiencies in the Fire and Life Safety aspects of the Station. In order to assess measures that may be required in addressing Fire and Life Safety requirements, the proponent commissioned a Fire and Life Safety Report by Stephen Grubits & Associates (see **Appendix K**). The report identifies issues with the existing station design and provides an overview of the proposed concept design and the implementation of the improvements.

Existing Station

Previous fire and safety studies identified that the following matters need to be addressed to bring Wynyard Station up to current industry standards, including those specified by RailCorp and the requirements contained in the BCA:

- Fire resistance of the unprotected steel structure needs to be increased to ensure adequate structural stability in case of fire.
- The excessive compartment size needs to be addressed by a performance-based solution or reduced in size to comply with the Performance Requirements of the BCA.
- The egress provisions need to be enhanced so that dead-end travel distances and distances to exits are decreased while increasing the exit capacity of the station.
- Changes are required to the Smoke Hazard Management arrangements to cater for smoke exhausts from the platforms and concourse.

Concept Design

The Fire Safety Strategy previously undertaken to identify issues with the existing Station design was used to inform the design of the Concept Plan. The detailed design and implementation of the following strategies will be part of the subsequent Project Application for the site and ongoing work between RailCorp and Thakral, the strategies include:

- Emergency Egress Strategy;
- Smoke Hazard Management Strategy; and
- Fire Resistance Strategy.

The implementation of these strategies will ensure the necessary fire and life safety improvements for Wynyard Station are undertaken and will result in a vastly increased level of fire and life safety for the users of Wynyard Station and significantly decreased risk of a potential damage to Wynyard and the greater Sydney area as a result of a fire.

The above recommendations are reflected in the Statement of Commitments.

6.4.3 Crime and Public Safety

The principles of Crime Prevention Through Environmental Design (CPTED) have been incorporated throughout the concept design of Wynyard Station and will be further considered during the detailed design to address potential safety and security issues that arise in the occurrences of this type of development.

A Crime and Public Safety Management Plan for the non-paid concourse areas of Wynyard Station east of the eastern kerb of Carrington Street will be developed in consultation with RailCorp after finalisation of the detailed design.

The plan will involve details regarding:

- the operation management of the Thakral owned and leased areas by trained staff and security personnel;
- undertaking regular patrolling of the Thakral leased areas; and
- installation of CCTV around the site to provide a higher level of security and safety for the area.

These measures will ensure that the development will provide a safe and secure environment for users of the Station, retail or commercial areas, and dissuade those from making trouble either within or in the vicinity of the Station.

The future and ongoing management of the paid concourse and station platforms will remain under the responsibility and control of RailCorp.

The above recommendations are reflected in the Statement of Commitments.

6.5 Urban Design

A Concept Design Statement for the CityOne Project prepared by Hassell is included at **Appendix C**.

The CityOne site is currently underdeveloped and exhibits poor urban design quality, both in terms of its built form and integration with the public domain. A significant opportunity exists in the redevelopment of the site to:

- enliven the Carrington and George Street streetscapes and activate Wynyard Lane;
- integrate Wynyard Station and its concourse into the development and the surrounding public domain;
- provide improved through site linkages from George Street; and
- provide an improved urban form which delivers design excellence.

As discussed in Section 4, the CityOne Project has been informed by comprehensive site and contextual analysis and iterative design development. The building envelope proposed can provide a building form and architecture appropriate to this CBD location by allowing for the best urban design and environmental outcomes for the site. The redevelopment of the site will regenerate and further activate the area by delivering improved public amenity and access to Wynyard Station and the surrounding bus services.

The Concept Plan seeks approval for the proposed building envelopes, and for the design concept for the concourse areas of the development east of the eastern kerb of Carrington Street. As part of the Concept Plan proposal, approval is sought for the establishment of detailed design criteria to guide the resolution of the architectural design of both the unpaid concourse areas to the east of the western kerb of Carrington Street and the future design of the commercial tower above.

The CityOne Concept Design included at **Appendix C** has been developed by Hassell to meet the design principles articulated in the Concept Design Statement, and to demonstrate how the design criteria at **Appendix C** may translate into the final built form design.

The design criteria aim to ensure the future building delivers an urban form anticipated by the SLEP 2005 for the City Centre. The CityOne building seeks to provide a sense of containment to Wynyard Park by positively responding to the Wynyard Park Special Area through an architectural form that will contribute to the qualities of the built form of the area.

The Concept Plan retains and conserves the Shell House facade and clock tower and its meaningful integration into the development site as an office building, the function for which it was originally designed. Facade treatments and materials will be selected which will enhance the appearance of the Carrington and George Street frontages.

The proposed urban form will establish the site as the primary CBD gateway for the Wynyard precinct and northern part of the CBD. Clearly identifiable entries to Wynyard Station will be created from George Street and Carrington Street.

Enhanced visual connections, pedestrian access to, and activation of Wynyard Lane will be achieved by establishing direct and legible connections into the new concourse and retail centre and the provision of some small retail outlets fronting Wynyard Lane.

The Design Criteria seek to ensure that a landmark building is established that successfully integrates with the urban context, and transport interchange functions of the precinct and transport infrastructure. The Design Criteria at **Appendix C** include objective and controls that address:

- Building envelope;
- Setbacks;
- Building articulation;
- Building materials;
- Public Domain;
- Access and Parking;
- Landscaping; and
- Sustainable Development.

6.6 Built Form

The proposed building envelope seeks to provide for a sustainable and contemporary office and retail development. The building envelope provides flexibility for setbacks and building articulation as well as for clearly defined building entries.

As discussed below the building envelope responds to the key height and overshadowing controls within the Sydney LEP.

6.6.1 Heights

The building height has been designed with specific regard to potential overshadowing impacts to Wynyard Park, Martin Place and the GPO building, and to creating an appropriate built form relationship to Carrington Street, whilst providing for a building that will deliver a high quality urban design outcome, particularly in terms of giving Wynyard Station an identity.

The site is subject to three different height controls under SLEP 2005. The existing height controls applying to the site are illustrated at **Figure 44**, which is an extract from SLEP 2005.

Figures 45 and 46 illustrate the location of the Martin Place sun access plane in plan and in section. The northern portion of the George Street frontage allows for development up to 235m, whilst the southern portion is controlled by the sun access plane to Martin Place which allows for development up to approximately 200m. The maximum permissible building height along the Carrington Street frontage is 55m.

In addition to the numerical height standards, Clause 49 of SLEP 2005 requires that no additional overshadowing occurs in certain locations at nominated times between 14 April and 31 August. Of specific relevance to the proposal is that no additional overshadowing be cast on Martin Place (between Pitt and George Streets) from 12 noon to 2 pm. Overshadowing is addressed at Section 6.6.4.



Figure 44 – Height Plan (extract from SLEP 2005 Central Sydney Height Map)

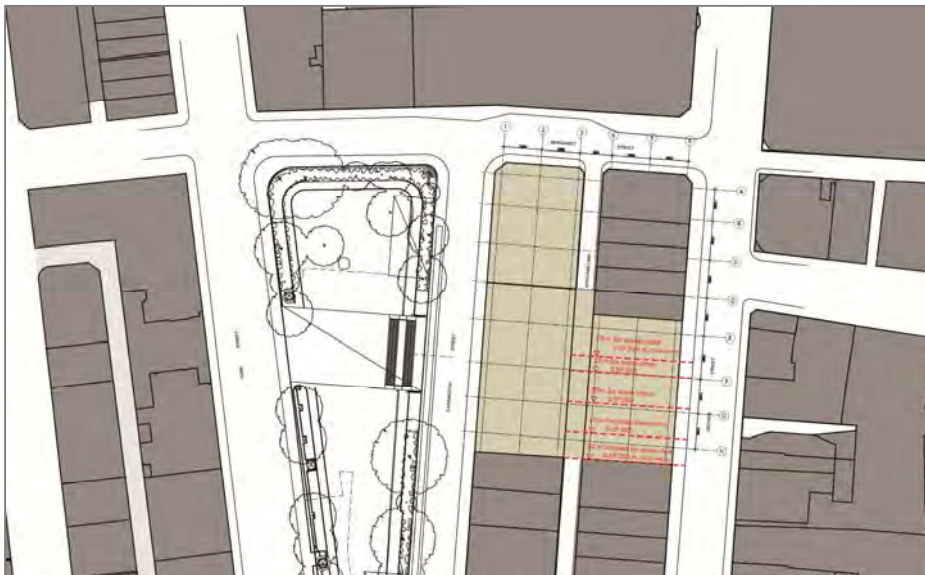


Figure 45 – Martin Place Sun Access Plane - plan

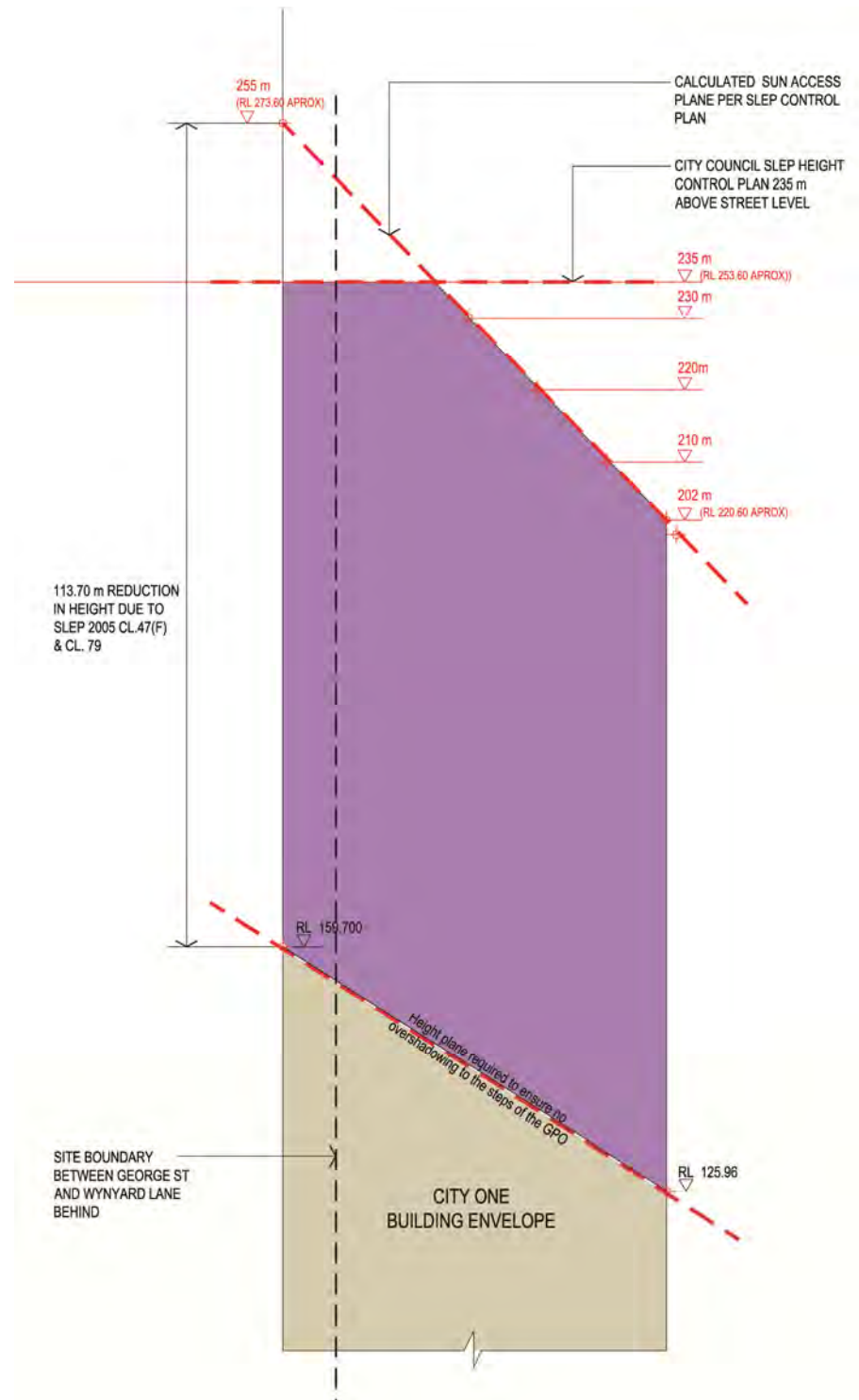


Figure 46 – Martin Place Sun Access Plane - section

The CityOne tower graduates in height from south to north in direct response to the SLEP 2005 height limits, overshadowing requirements and in order to deliver the best urban design outcome for the site.

A maximum building height of 146.33 metres (RL 159.70) is proposed for the CityOne tower at the northern end on the George Street frontage. The tower reduces in height to the south to a maximum height of 112.59 metres (RL 125.96) in direct response to the Martin Place Sun Access Plane E.

The maximum tower height of 146m is significantly lower than the height limits (up to 235m) for the George Street frontage under the SLEP height map and fully complies with the Martin Place Sun Access Plane E. It is therefore consistent with the height limits which apply to the George Street portion of the site.

A maximum building height of 55 metres is permitted for the Carrington Street portion of the site – i.e. that part of the site between Carrington Street and the western alignment of Wynyard Lane.

Under the existing SLEP 2005 height controls, it would not be possible to construct an appropriate and viable commercial tower on the CityOne site as that part of the site that has a 200 – 235 metre height limit is only approximately 1,260 m² in area.

Accordingly, the proposed tower footprint has utilised the whole of the available development site area between George Street and Carrington Street – a site area of 2,775 m². The placement of the proposed CityOne tower envelope exceeds the permissible 55 metre building height for Carrington Street by between 57 to 91 metres.

An comparative height study, showing the proposed envelope and how it relates to the existing and approved developments around the site is shown at **Figure 47**. As illustrated, the CityOne tower sits comfortably within the city skyline and is not a dominate built form, with a number of buildings in the vicinity taller than the CityOne tower.

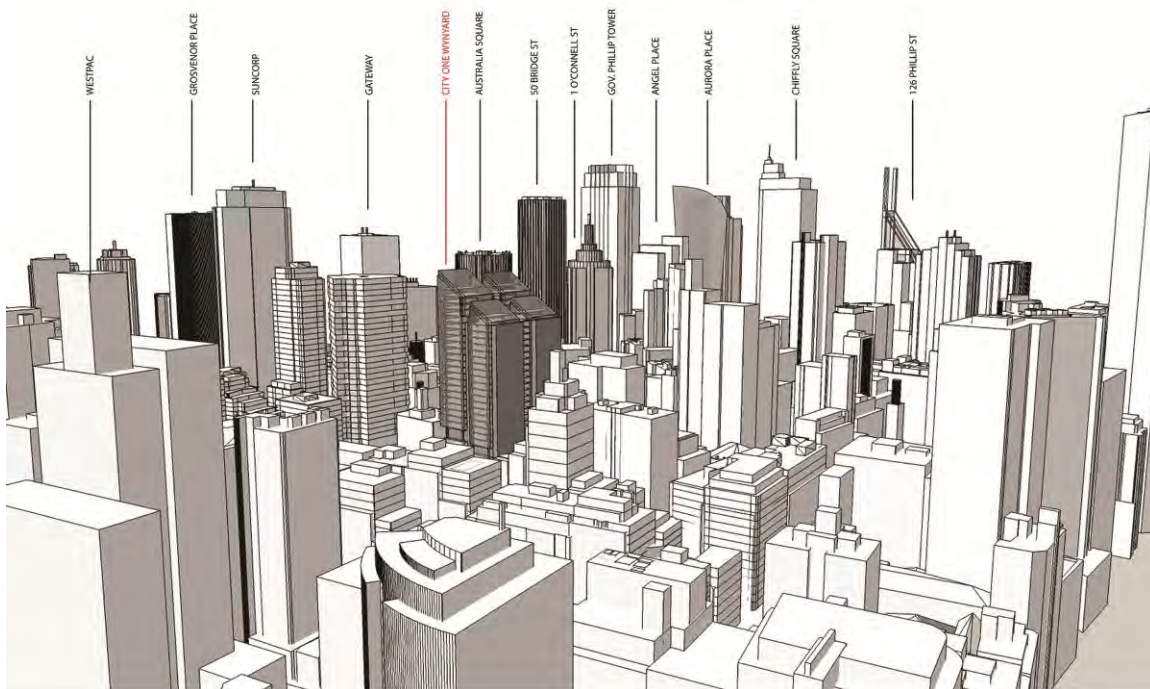


Figure 47 – Comparative heights (Source: Hassell)

The design intent for Carrington Street is to provide a clearly identifiable entry to Wynyard station and to the new commercial building. There is also potential to continue the existing colonnade to the southern end of Carrington Street.

Within the building envelope fronting Carrington Street a detailed building form and design demonstrating design excellence will be delivered. The detailed design of the tower will be required to ensure the existing spatial qualities of Wynyard Park are not actively impacted.

This will require further detailed resolution of the design of the Carrington Street frontage of the new building in accordance with the proposed detailed design criteria (refer to **Appendix C**) and with the recommendations made in the heritage impact statement (refer to Section 6.8).

Within the building envelope, the detailed building design can respond to the character of Carrington Street and to the heritage listed Shell House by providing a distinct separation to the new tower by an east west atria, which will also provide solar access. The selection of materials and finishes and facade treatments on Carrington Street, and the use of varied facade treatments including cantilevers, transparent materials, canopies and different textures can be used to reduce the apparent height and mass of the building fronting Carrington Street, and to assist in the creation of a pedestrian scale.

Also within the building envelope, the detailed building design can be developed to provide a sense of containment and reinforcement of the geometry of Wynyard Park. A major view corridor will be provided through the building between George Street and Wynyard Park, and active frontages will be provided to Carrington Street and Wynyard Lane.

As detailed in the Concept Design Statement prepared by Hassell included at **Appendix C**, an underlying design philosophy for the CityOne Project is to open up the Wynyard precinct, with the new building to capture as much daylight, and to create a welcoming and friendly environment. To achieve this, the design of the future commercial tower should be as transparent as possible to reveal activity within the development from as many vantage points as possible, but particularly on its east and west facades. Hassell has recommended the use of a self venting double skin facade so the activity within the building is visible from both within the development at the lower levels from Wynyard Park as well as from adjoining developments.

Hassell has also recommended the following principles be adopted for the design massing within the maximum proposed building envelope:

- Maximise the amount of daylight into the public domain of the development and the rail concourse by the activation of Wynyard Lane;
- Utilise Wynyard Lane to assist in breaking up the mass of the tower with both the activation of the lane and the development of a 'vertical laneway' concept on the northern and southern elevations;
- Reduce the bulk and mass of the tower by breaking the massing into four vertical blocks;
- Reduce the bulk of the eastern and western facades by way of a separation and setback from historic neighbours including Shell House;
- Include a major transparent connecting piece between Shell House and the new tower lower levels, revealing the bridge links, ramps, stairs and activity pods between these two components of the development; and
- Articulate the western facade to Carrington Street in recognition of the different relative scale of each of the adjacent historic neighbours.

The detailed design criteria at **Appendix C** include criteria designed to ensure that these issues are appropriately resolved as part of the design resolution of the future tower form. The Concept Design Statement included at **Appendix C** includes illustrative material demonstrating how these design principles may be resolved at the detailed design stage.

An illustration of a tower concept is shown at **Figure 48**.



Figure 48 – Indicative Illustration of tower concept

Notwithstanding the height non-compliance at the Carrington Street frontage, the CityOne Development is considered to comply with the stated LEP objectives of the height control (refer Clause 47 of SLEP 2005) as it will:

- not affect sunlight access to key areas of the public domain;
- provide a high quality urban form, while maintaining satisfactory sky exposure and daylight to public areas;
- confine ground level wind speeds to velocities which ensure pedestrian comfort and amenity of the public domain;
- is located on a site capable of providing appropriate urban form and amenity; and
- is an appropriate height transition between new buildings and heritage items or Special Areas.

A comparative height analysis is provided at Section 6.6.2. Further information relating to the separation of tower development within the locality, and the impact of the proposed building envelope on sky exposure is provided at Section 6.6.3. Potential wind impacts are addressed at Section 6.9.3.

It is noted that the height of the proposed building envelope is also significantly lower than both the previous 2002 and 2006 design schemes. The Architectus review of 2006 concept suggested that the then proposed tower (which had a maximum height of 235 metres on the Carrington Street frontage) be reduced by about 6 storeys (i.e. approximately 18 metres). The current Concept Plan envelope has been reduced by approximately 88 metres.

In light of the merits of the proposal, the non compliance with the development standard is considered appropriate in this instance.

Street Frontage Heights and Setbacks

The Central Sydney DCP sets a maximum street frontage height limit of 45m on Carrington Street and George Street.

As identified above, the street elevation of the proposed tower envelope comes to the street alignment along Carrington Street without any setback in a podium form. Similarly, there is no podium form proposed to George Street.

As discussed above the detailed design of the Carrington Street frontage will consider articulation and setback treatments within the maximum proposed building envelope, which does not comply with the street frontage height requirement. The junctions of Shell House and Lisgar House will be treated as an articulation in the tower form creating a clear distinction between the new and the old. This treatment at Shell House will be reinforced by the transparency of the link element between Shell House and the new building itself, which corresponds to the transition zone at the main entry at ground level and the ramped connections between the existing Shell House floor levels at the floor levels of the new building.

As detailed in the Heritage Impact Statement (refer to Section 6.8 below), the streetscape presence of the adjacent heritage items is respected by the creation of vertical articulation where the new building abuts. It is considered that in the context of Central Sydney, this approach, carefully resolved in detailed design, will produce a satisfactory outcome.

The detailed design of the new built form will be required to contribute positively to the spatial qualities of Wynyard Park, and to establish a distinct low rise and tower elements. At detailed design stage, it will be important that the new building form reinforces the characteristic built form of the area and achieves a comfortable street environment for pedestrians in terms of daylight, scale, sense of enclosure and wind mitigation. There are a number of architectural methods that can be utilised to represent the 45 metre street frontage height zone. Hassell has recommended that the western facade of the future tower form to Carrington Street be articulated at the lower levels, stepped in recognition of the different relative scale of each of the adjacent historic neighbours. A diagram illustrating one resolution of the Carrington Street facade is included in the Concept Design Statement at **Appendix C**.

The CSDCP sets Special Area Setbacks for Wynyard Park restricting development above 45m fronting Carrington Street. Whilst the detailed design will be the subject of a separate Project Application, building above the Carrington Street frontage is considered acceptable as the proposal will enhance the distinctive character of Wynyard Park (see Section 6.8) and have no adverse impact on the quality of the public domain in terms of pedestrian wind environment (see Section 6.9.3) or daylight access (see Section 6.6.3).

6.6.2 Building Separation

The CityOne Development will comprise the only tower development within the subject city block and as demonstrated in **Figure 49** below is generously separated from other surrounding tower developments.

The CityOne Project needs to be considered in the context of the development potential of the surrounding sites and future opportunities for other major developments.

As illustrated in **Figure 49**, the CityOne Development will ensure adequate tower separation being located a minimum of 65m, 75m and 80m from the nearest existing tower developments and will therefore comply with the minimum tower separation requirements of 24m prescribed in CSDCP 1996 and will achieve an acceptable relationship terms of amenity and urban form.

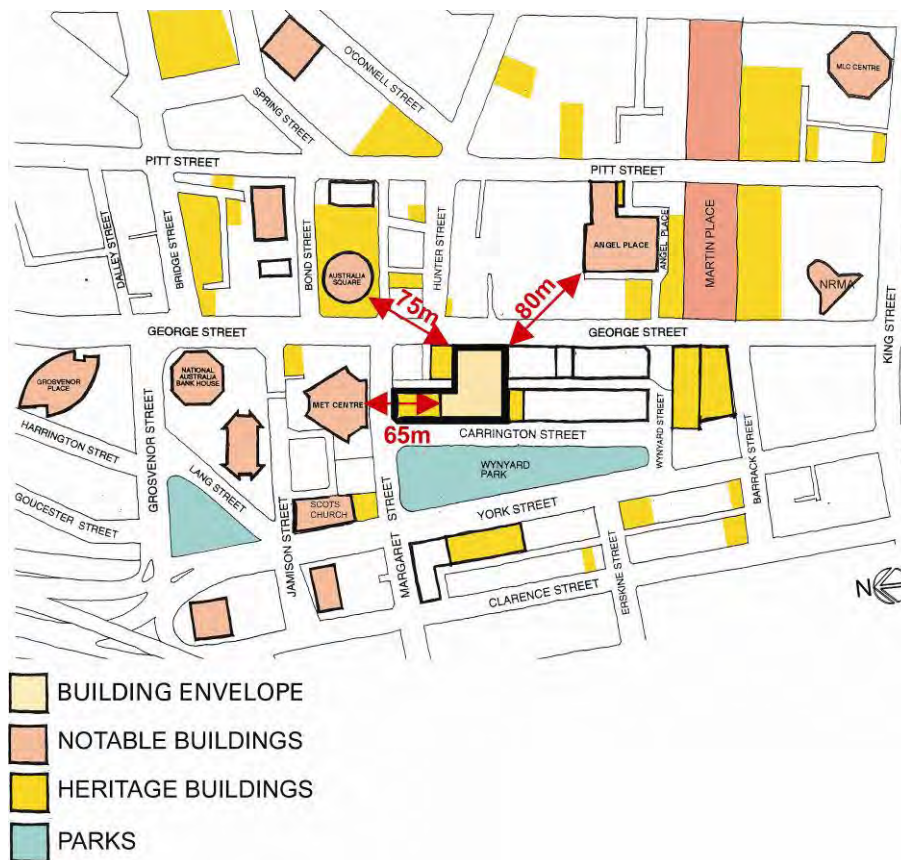


Figure 49 – Surrounding Tower Development

As described in the Site Analysis at Section 3 and illustrated by **Figures 27-33** in that section, the existing land ownership/ subdivision patterns, allotment sizes and the number of heritage items within the area are key considerations (in addition to the current planning controls) which are likely to limit the potential for future development of surrounding sites.

Based on the information contained within the Site Analysis, the development potential and future opportunities for other major developments surrounding the site is limited. In particular there are few sites, if any that can offer the major public benefits that can be delivered by the CityOne Project. Surrounding land ownership is fragmented and it is highly unlikely that in the short to medium term other developments with the significance of CityOne Project will be proposed.

Accordingly, it can reasonably be concluded that an appropriate distance separation between existing and future tower forms in the locality will be maintained, and also that approval of the CityOne building envelope will not create an unexpected precedent to other development within the Wynyard Park precinct.

6.6.3 Overshadowing

The envelope will result in minimal overshadowing impact to Martin Place and no overshadowing of Wynyard Park during the critical mid-winter lunchtime period.

The statutory provisions in SLEP 2005 relating to overshadowing are:

- Clause 47(f) aims to provide sun access to significant sandstone buildings in Special Areas in order to improve the ground level environmental quality of public spaces.
- Clause 48 and Schedule 2E of SLEP 2005 - Sun Access Plane for Martin Place Non-compliance with the Sun Access Plane is a prohibition under SLEP 2005.
- Clause 49 - no additional overshadowing permitted to Martin Place (between Pitt and George Streets) between 12 noon and 2pm between 14 April and 31 August (in addition to that existing at 27th December 1996). Non-compliance with the Clause 49 is a prohibition under SLEP 2005.
- Clause 79 requires consideration of the objectives of the Special Area controls and the character statement and specific objectives for the Martin Place Special Area found at Schedule 6. One of the stated objectives for the Martin Place Special Area is to protect and extend sun access and reflected sunlight to Martin Place during lunchtime hours from mid April to the end of August.
- Wynyard Park is also a Special Area in Schedule 6. One of the stated objectives for the Wynyard Park Special Area is to protect and extend mid-winter lunchtime sun access to Wynyard Park.

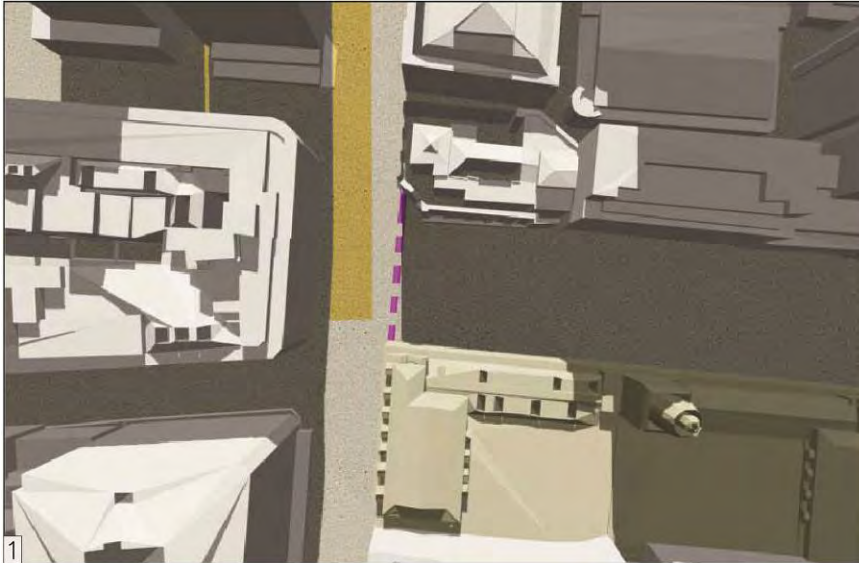
The proposed envelope has been designed to fully comply with the Martin Place Sun Access Plane under Clause 48 and Schedule 2E of SLEP 2005, and to meet the requirements and objectives at Clauses 47(f) and 79.

Notwithstanding the proposal results in additional overshadowing of a small portion of Martin Place adjacent to George Street for a short period between 12 noon and 1:15 pm at the winter solstice and does not therefore comply with Clause 49.

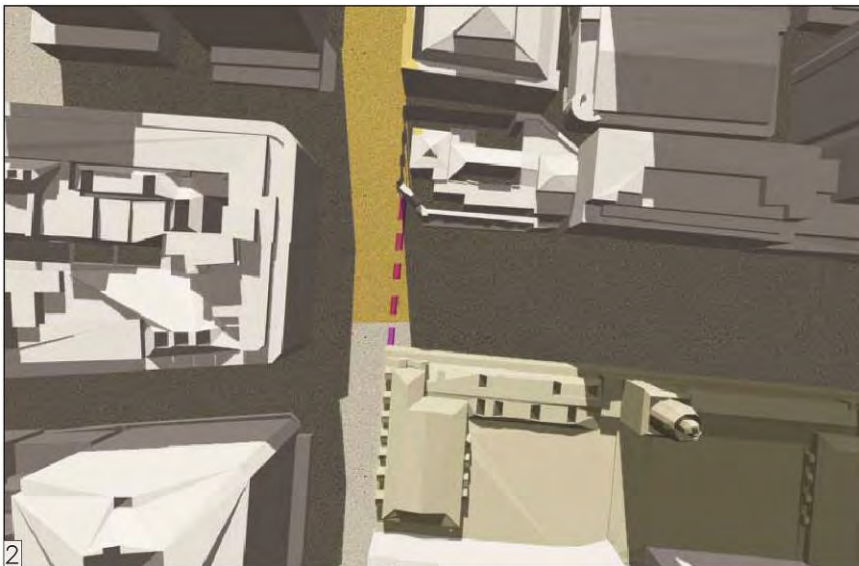
Martin Place

An overshadowing analysis of the CityOne development has been prepared by Whelans Insites to assess solar access impacts to Martin Place. The overshadowing impacts have been assessed at 14 April, 21 June and 31 August (included at **Appendix I**). The shadow analysis at 21 June is illustrated at **Figure 50**.

At **Figure 50**, the additional shadow cast by the proposed CityOne building envelope is shown in yellow. As shown, the narrow sliver of the Martin Place footpath that is currently in sunlight and will be affected by additional overshadowing is immediately adjacent to the George Street road reservation, the alignment of which is shown by the pink dotted line.



1
12.00pm (21 June)



2
12.15pm (21 June)



3
12.30pm (21 June)



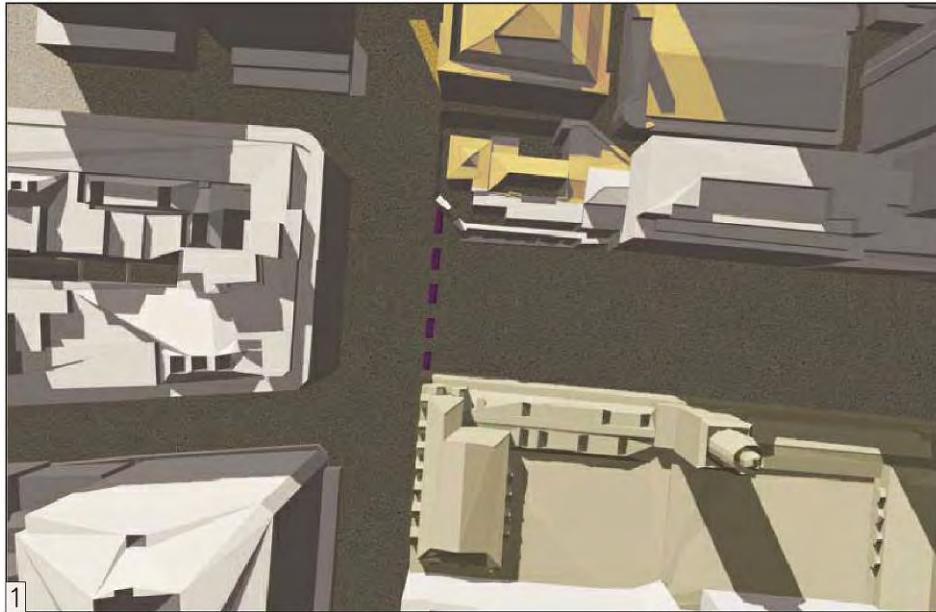
12.45pm (21 June)



1.00pm (21 June)



1.15pm (21 June)



1.30pm (21 June)

Figure 50 – Shadow analysis 21 June 12.00pm -1.30pm (Source: Whelans Insites)

The shadow analysis shows that the building envelope proposed, despite its compliance with the Martin Place Sun Access Plan E and the maximum height limit applying to the George Street portion of the site pursuant to Clause 50(1) of SLEP 2005, will cast a small additional shadow on the Martin Place footpath during the nominated period.

It should be noted that compliance with the Sun Access Plane under Clause 48 has not ensured compliance with the ‘no additional overshadowing’ provision of Clause 49.

The shadow diagrams for June 21st at **Figure 50** illustrate the existing solar access available to Martin Place (as shown in yellow) for 12noon, 12.15pm, 12.30pm, 12.45pm, 1.00pm, 1.15pm, and 1.30pm 1, the impact of the CityOne Development.

As demonstrated in **Figure 50**, the existing solar access available to Martin Place in June is currently extremely limited during the overall nominated period of 14 April to 31 August due to the overshadowing impacts of existing buildings which pre-dated the development standards contained in Central Sydney LEP 1996 and now SLEP 2005. The proposal will partially eliminate the small wedge of sunlight which is currently available at the western edge of Martin Place.

At the nominated times, the most significant shadow impact is between 12.30pm to 1.00pm. By 1.00pm, the shadow has started to move off the affected area. After 1.15pm no additional overshadowing is caused as a result of the proposed building envelope.

The area of Martin Place affected by additional shadow is a footway. There is no seating, planting or public art in the affected area, and it is not used for gathering or meeting. It is a pedestrian thoroughfare, with a function quite distinct from other parts of Martin Place.

The overall overshadowing impacts of the proposal on the Martin Place footpath should be considered in the context of the protection of sunlight access to the publicly important GPO steps and sandstone facade (refer below), to the considerable reduction in the height of the building below the maximum permitted under SLEP 2005 (i.e. the proposed building envelope is 93.9 metres lower than the maximum height permitted), to the reduction in the height of the tower from previous schemes, and to the significant public benefits proposed in the CityOne development. Having regard to the design development and significant public benefit of the proposal, the environmental impact of the overshadowing in this particular location of Martin Place is considered acceptable.

The shadow impacts to the Martin Place footpath were considered in the Architectus review of the then Rice Daubney Scheme in 2006 (refer to Section 4). The report considered that the existing area of sunlight access to Martin Place was of marginal value because it is contiguous with the George Street footpath and falls largely over the thoroughfare. The shadow impacts to the footpath were considered to be much less significant than the potential shadow impacts to the GPO steps and facade. Refer below.

GPO Steps and Facade

The Architectus urban design review of the previous 2006 scheme discussed in detail the issue of sunlight access to the GPO steps and considered that sunlight access to the steps is significant and therefore any additional overshadowing of the steps is also significant.

The steps of the GPO (which are outside the Martin Place alignment) are not technically affected by the height map and sun access plane (Clauses 48 and 49). However, under Clause 47(f) and Clause 79 the matter of providing sun access to significant sandstone buildings and to Martin Place is an objective based issue and requires merit assessment of the impact of development on sunlight access to the GPO.

Given the shadow impacts to the GPO steps were previously raised as a fundamental issue, a key consideration in determining the now proposed building envelope has been the retention of sunlight access to the façade of the GPO at the corner of George Street and Martin Place.

The proposed building envelope does not result in any additional overshadowing of the GPO steps or sandstone facade at any time of the day throughout the year.

The impact of the combined operation of Clauses 47(f) and 79 of SLEP 2005 (which aim to protect sunlight access to sandstone facades in Special Areas) on the maximum tower height allowed under the Martin Place Sun Access Plane is significant as illustrated in **Figure 51**.

As demonstrated, to ensure no shadow impact to the GPO façade, the maximum tower height has been reduced by nearly 94 metres as compared to the maximum permitted statutory height control.

The chamfering of the envelope which reduces in height from north to south results in no additional overshadowing of the GPO steps and facade and therefore satisfies the aims and objectives of SLEP Clauses 47(f) and 79.

It is considered that a further reduction in building height to remove the small sliver of additional overshadowing from the Martin Place footpath would be unreasonable given that it does not result in any significant loss of amenity to Martin Place.

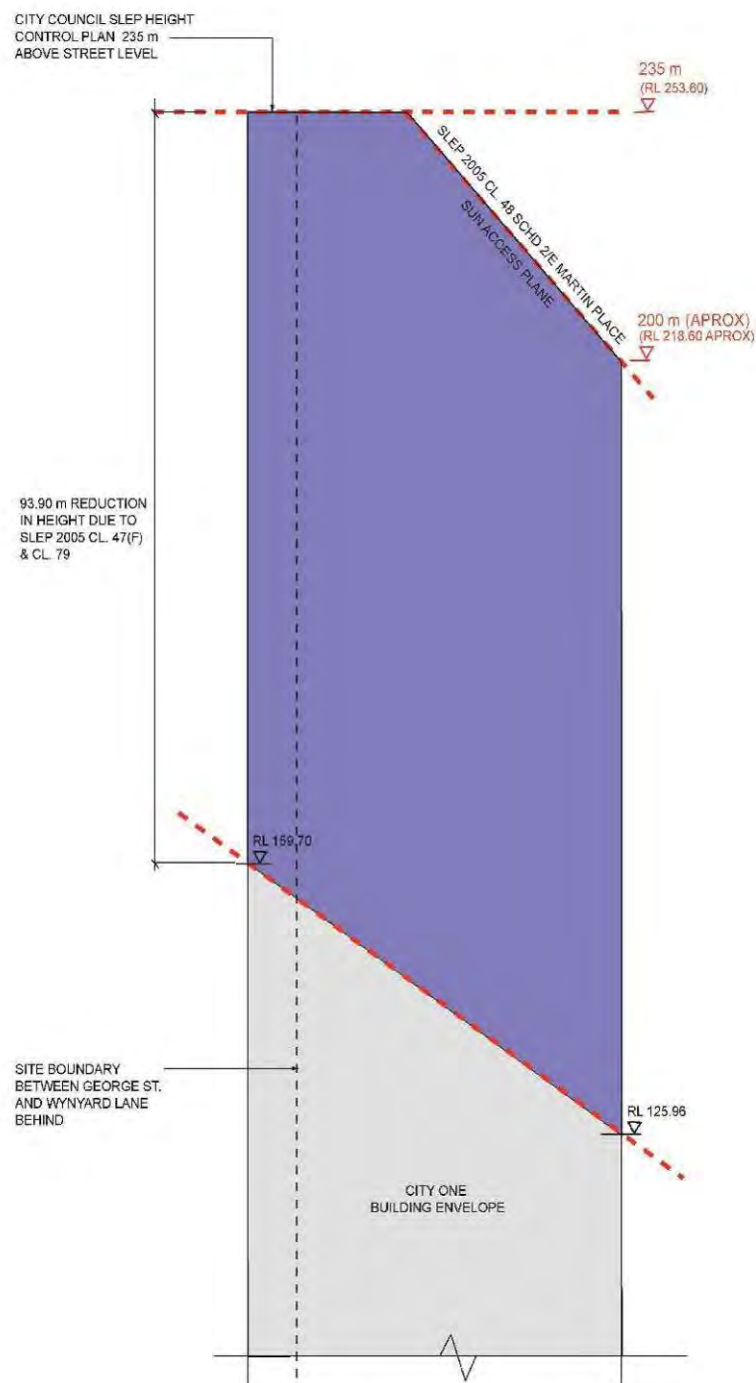
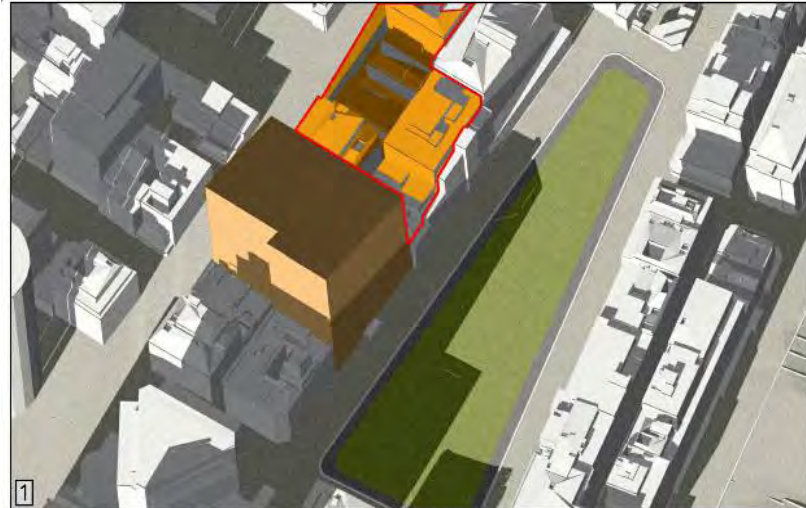


Figure 51 – Reduction in potential height due to SLEP 2005 CI 47(F) and CI 79 (Source: PTW)

Wynyard Park

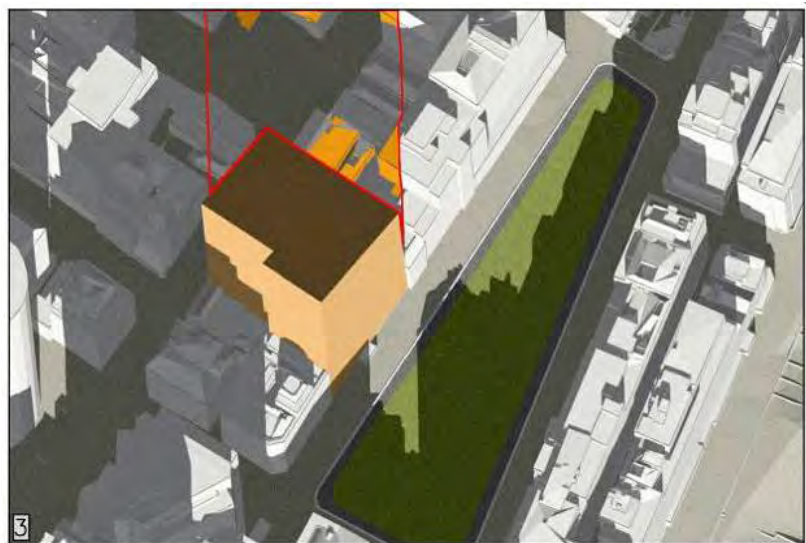
An overshadowing analysis of the CityOne development has also been undertaken to assess solar access impacts to Wynyard Park during the mid-winter lunch time period. As the shadow analysis at **Figure 52** shows, there will be no overshadowing impacts at this time.



12.00pm (21 June)



1.00pm (21 June)



2.00pm (21 June)

Figure 52 – Shadow analysis 21 June 1.30pm -2.00pm (Source: Whelans Insites)

6.6.4 Floor Space Ratios

The maximum FSR for the site is 8:1, with the potential to increase to a maximum of 12.5:1, subject to satisfying height limits and other development controls and merit considerations within the LEP.

The total development site has an area of 11,124m². However, in applying the relevant definition and clause 58 of the LEP, the “site area³” for the purposes of the FSR calculation is reduced to 8,828m². The 8828m² comprises the “development site” area of 11,124m² but excludes 2,296m² of land in Wynyard Park, being land on which the proposed development (as a whole) is ‘not allowed’ by virtue of the Parks and Community Places zoning of this land.

The stratum lots beneath Carrington Street and York Street and the stratum lots above and below Wynyard Lane are included in the 8,828m² site area for the purpose of calculating FSR. The land which comprises the stratum allotments beneath Carrington Street, York Street and Wynyard Lane do not form part of the land that is dedicated for the purposes of a ‘street, a public place, a public reserve or community land’. Consequently, this land is not excluded from the definition of site area for the purpose of calculating FSR. This interpretation is confirmed in legal advice from the proponent’s solicitors Blake Dawson Waldron.

As the area of Wynyard Park has been excluded from the FSR ‘site area’ the FSA contained within the Wynyard Park Stratum has also been excluded from the FSR calculations for consistency.

Therefore the FSR calculation, based on the above is:

$$\begin{aligned} &85,000\text{m}^2 \text{ FSA} / 8,828\text{m}^2 \text{ site area} \\ &= 9.63:1 \text{ FSR} \end{aligned}$$

Therefore the proposed FSR complies with the maximum permitted under SLEP 2005.

6.7 Transport

A Traffic and Parking Report has been prepared by Halcrow (see **Appendix D** to examine the traffic and parking impacts of the Concept Plan).

6.7.1 Bus Infrastructure

Construction of the proposed development has the potential to impact on the operation of buses and pedestrians along Carrington Street and York Street and is assessed in Section 6.15 below. A detailed Construction Traffic Management Plan which will be prepared for the site prior to construction and will ensure that bus services are not adversely affected during construction. The plan will be prepared in consultation with Sydney Buses and the Transport NSW.

³ Site area - In applying a floor space ratio for the purpose of determining a development application, the site area is taken to be:

- (a) if the application proposes development on only one lot, the area of that lot after excluding any land that is a street, a public place, a public reserve or community land, or
- (b) if the application proposed development on two or more lots, the largest area of contiguous land on which the development is proposed, excluding any land that is a street, a public place, a public reserve or community land, or
- (c) despite paragraphs (a) and (b), if the proposed development is only on land comprised of a street, a public place, a public reserve or community land (or any combination of them), so much of that land as will be occupied by a building that will be erected or physically affected by the proposed development.

Upon completion, the development will have no impact on the operation of buses along George Street, Carrington Street or York Street. The improved access arrangements and upgrades to the Station will enhance connectivity between the transport modes.

6.7.2 Car Parking

Under SLEP 2005 car parking provided in connection with the development must not exceed the maximum number spaces based on the following formula:

$$\text{Car parking} = \text{other FSA} / \text{total FSA} \times \text{Site area} / 50$$

Based on the CityOne site area of 8,828m² the maximum permissible number of spaces is calculated as follows:

$$\frac{85,000}{85,000} \times 8,828 / 50 = 177 \text{ spaces}$$

As the proposed development will provide 177 spaces it will not exceed the maximum tenant car parking provisions that apply to the site under the existing planning controls.

It is noted that the existing public car park spaces located within the site area will be removed as part of the Concept Plan application.

The provision and design of loading dock areas and service bays will be examined as part of the subsequent Project Application(s) for the site.

6.7.3 Operational Traffic

The Traffic Report assesses the traffic impact of the additional spaces proposed in the Concept Plan against the taxi generation potential of the existing Menzies Hotel which is proposed to be demolished.

The proposed development will provide 177 parking spaces, however, as a result of other structural works, 40 spaces will need to be removed from the existing Wynyard Lane public car park. The development therefore results in a net increase of only 137 spaces. The traffic generation rate for these spaces is calculated to be:

- AM peak hour = 36 two-way trips/hour
- PM peak hour = 28 two-way trips/hour

Using the average taxi generation figure for similar sized hotels in the CBD, it is forecast that the existing Menzies Hotel currently generates the following number of taxi movements:

- AM peak hour = 60 two-way taxis/hour
- PM peak hour = 58 two-way taxis/hour

As taxi trips related to the Menzies Hotel will be removed from the local road network as a result of the proposed development, these trips have been subtracted from the trips generated by the additional car spaces:

- AM peak hour: 36 - 60 trips/hour = 24 less trips per hour
- PM peak hour: 28 - 58 trips/hour = 30 less trips per hour

Therefore the proposed development will reduce traffic volumes associated with the operation of the site by 24 trips per hour during AM peak and 30 trips per hour during PM peak. The operation of the local road network surrounding the site will benefit from the traffic reductions as a result of the proposed development.

6.7.4 Construction Traffic

At the peak of activities, it is estimated that there would be a maximum of 12 trucks per hour visiting the site during concrete pours.

The estimated truck generation of 12 trucks per hour is low when compared to the existing volume of traffic on roads in the area. The peak hour traffic generation would be lower than the existing traffic loads from the use of the existing buildings (to be demolished) as an office building and hotel. The proposed development will also require the closure of existing public car park which has around 400 car spaces. This would equate to 80 vehicles per hour (noting car trips rather than truck trips). Therefore the total construction vehicle trips would be somewhat less than the traffic currently generated by the site.

In light of the above, the Traffic Report concludes that the predicted reduction in traffic would more than offset the effects of construction traffic in terms of the general operation of the CBD road system. However, the construction traffic has the potential to impact on the local roads. The Report recommends that a detailed construction traffic management plan be prepared for agreement by the relevant authorities prior to the issue of a Construction Certificate for any work involving truck access to the site. A summary of the potential impacts and recommended construction traffic measures is detailed below:

Carrington Street

The development has the potential to impact bus operations on Carrington Street which would need to continue unhindered during weekday peak periods. To address this, the Traffic Report recommends that no loading or unloading should take place on weekdays during the most critical time between 4:00 pm and 6:30 pm. As morning peak traffic conditions on Carrington Street are not as busy as in the evening, the Report recommends that construction traffic be minimised between 7:30 am and 9:30 am by having no general deliveries or collections during this period. It is noted that it may be necessary at times to start concrete pours during this time in order to allow sufficient time for the finishing of the concrete within specified daytime working hours.

York Street

Whilst construction vehicles will generally not be allowed to use George Street or York Street south, in order to redevelop the upper level of the Wynyard Park Station access it will be necessary to provide truck access from York Street.

In order to manage any impacts on York Street it is recommended that a gate is provided at the access and to have traffic controller management of trucks entering and exiting the site. To minimise interference with bus operations, access to this gate on weekdays should be restricted to the hours before 7:30 am and between 9:30 am and 4:00 pm.

Wynyard Lane

Vehicular use of Wynyard Lane will be greatly reduced during construction as the public car park, Thakral house, the Menzies Hotel and the various retail stores in the Station will not be operational. As a result the lane will only be needed for access to the buildings fronting the lane each way on both sides of the lane south of the site and on the eastern side of the lane opposite Shell House.

The Traffic Report recommends that when the lane is closed (to allow construction above and below its central sections), each remaining section should be converted to two way operation with "no stopping" controls applying to allow two way traffic flow.

To avoid conflicts and expedite entry and exit movements at each open end, traffic controllers should regulate traffic during business hours.

In addition to this, signs would be erected advising that access was only available to building occupants and authorised vehicles.

George and Margaret Streets

Construction vehicles will not be allowed to use George or Margaret Street except for the purposes of hoarding placement and removal or to do related works on the footpaths of George or Margaret Streets.

The above recommendations are reflected in the Statement of Commitments.

6.8 Heritage

A Heritage Impact Assessment (HIA) has been prepared by HBO + EMT Heritage and is located at **Appendix H**.

Assessment of Heritage Significance

The Concept Plan site contains two heritage items:

- Former Shell House; and
- Wynyard Park.

There are also a number of other heritage listed buildings in the vicinity of the site (see Section 3.5). A summary of the assessment of significance of the two items within the site is located below.

Former Shell House: 2-12 Carrington Street

The former Shell House building is on the corner of Carrington Street, Margaret Street and Wynyard Lane and stands within land of the original Military Barracks. Historically the site has had a variety of uses including the German Club in 1858-59, and as a hotel in the 1860s and 1870s. In 1928 the site was purchased by the Shell Oil Company, who then commissioned Spain & Cosh Architects to design its Sydney head office. The buildings historical values are derived from its use as a head office by the Shell Oil Company and as an example of Interwar Commercial Palazzo style architecture. In 1977 the site was sold to a property group for use as part of the neighbouring Menzies Hotel. It continues to operate as the north wing of the hotel.

Shell House is listed as a heritage item in Schedule 8 of SLEP.

Wynyard Park

Wynyard Park, bounded by Margaret Street to the north, York Street to the west, Wynyard Street to the south and Carrington Street to the east, has historically been used as open space, including as a military parade ground from 1792. In 1875 it was officially named Wynyard Recreation Ground to commemorate General E.B Wynyard, Commander of the British Forces in Australia. In 1887 it was dedicated as a public park and proclaimed as Wynyard Park. The park has undergone a number of physical changes which have included introduction of a band stand, memorial statue of Rev Dr John Dunmore Lang, new park gateway in south-east corner in 1905 and several other changes in the 1930's associated with the construction of Wynyard Station.

Impact Assessment

The HIA assesses the heritage impact of the CityOne proposal on Former Shell House and Wynyard Park as well as the other heritage items in the vicinity of the site.

In relation to Shell House the Concept Plan envelope includes an additional level to Shell House, which is to be at the present roof level.

New lift over runs and plant may be required and would be set back to minimise any visual impact from the surrounding public domain. The extent of the changes to the exterior of the building were assessed by HBO + EMBT as being minimal and were considered not to diminish the heritage significance of the former Shell House. The retention and use of the former Shell House and its incorporation into the development is positive, with the proposed office use of the former Shell House reinstating its original use.

The HIA concludes that the CityOne development will reinforce the historic and social significance of the heritage items within the site and will not detrimentally affect the significance of the heritage items in the vicinity of the site.

Recommendations

The heritage assessment recommends a number of measures for consideration in the detailed design of the works to Shell House, the new podium and tower building, Wynyard Park and Railway House. The measures for Shell House include:

- The roof top addition should be designed to be distinguished as an addition to assist in the interpretation and evolution of the building form.
- The roof addition should appear as a light framed structure.
- Conservation of the glazed terra cotta facing material of the west, north and part east facades and the clock tower will require further technical research.
- Detailed solutions will be required to address deterioration of some internal structural elements of the Clock Tower: e.g. spalling concrete.
- Undertake an archival record of the former Shell House in accordance with the guidelines published by the Heritage Branch of the NSW Department of Planning. The archival record should be carried out prior to commencement of internal demolition and construction, during the construction process and on completion.
- Incorporate into the new development, interpretation of the history of the site, including but not exclusively, the pre European history, history of the site from the arrival of the first fleet, the creation of the city circle railway, Shell House and the evolution of Wynyard Park. The interpretive venue should be in a prominent location, planned and designed by persons with expertise in heritage interpretation and executed to the highest standard of design commensurate with the quality of the design quality of the new development itself.

For Wynyard Park the recommended measures are:

- Significant trees should be protected either side of any proposed new entry.
- Any future development within the zone of the existing station entry should be limited to the extent of the existing paved area and not result in any reduction of grass or impact on tree root zones.

In relation to the proposed new CityOne tower and podium the HIA recommends that the design maintains the clear distinction between the new building form through articulation and where appropriate lightness and transparency where it adjoins the more solid masonry forms of the adjacent heritage items.

In relation to Wynyard Station, the HIA recommends that attention should be given in the detailed design of the upgrade of the concourse and platforms to identifying and retaining for interpretive purposes elements of the 1932 structure, fabric and finishes that can be integrated into the overall design and to create opportunities to undertake restoration of deteriorated significant fabric and finishes and/or reconstruction of missing or damaged fabric and details where appropriate. It is noted that works to the paid concourse and platform areas of the Station west of Carrington Street are beyond the scope of this application.

Other recommendations included in the HIA are reflected in the Statement of Commitments.

6.9 Environmental and Amenity Impacts

6.9.1 Privacy

The development will not directly look into or over any residential dwellings. The building will have distant views to the residential development in the surrounding area but will not result in the loss of any visual privacy to those dwellings.

6.9.2 View Loss

The proposal will not result in the loss of any significant views. There are no residential towers in the immediate proximity of the building which will be affected. The development will alter the views from some of the surrounding commercial buildings, however these views are generally of other city buildings and the affectation is appropriate in a CBD context.

View analysis is considered in the Concept Design Statement prepared by Hassell included at **Appendix C**

As detailed at **Appendix C**, an underlying design philosophy for the CityOne development is to open up the precinct. It is proposed that the development will significantly improve the visual connectivity of the site and surrounding precinct.

The concept design has been developed to create a significant new view corridor between George Street and Wynyard Park.

6.9.3 Wind Impact

An Environmental Wind Assessment of the Concept Plan building envelope has been prepared by MEL Consultants (see **Appendix L**). The assessment reviews the existing wind environment, assesses the potential impacts of the proposed tower and makes recommendations to be incorporated at the detailed design stage. A summary of the assessment is located below.

Existing wind environment

The strongest winds in the Sydney CBD region come from the west and south-east sectors with secondary strong winds coming from the north-east sea breeze. The proposed development is quite well shielded for all wind directions up to approximately two thirds of the envelope height. Above that there is some exposure to the west but the shielding to the south, east and north generally extends to the full height of the proposal.

Impact assessment

The west side could potentially be a flat face over Carrington Street. However, the shielding buildings to the west are on the escarpment and would provide effective shielding to about 2/3 the height of the highest possible height of CityOne.

This would be sufficient to ensure that the amount of wind flow induced downwards into Carrington Street would be relatively small, and would not cause wind conditions in the adjacent streetscapes to exceed the criterion for walking comfort.

The north, east and southern sides will have little exposure to direct wind flow and as such little wind flow will be induced downwards. There are also roofs of buildings on both the north and south sides and a podium building on the east side to deflect any downwards flows above street level.

Therefore the orientation and location of the proposed CityOne development is favourable with respect to environmental wind flows and would not cause any significant amount of additional wind flow to be induced to ground level.

Recommendations

The report recommends that during design development a full environmental wind tunnel model study be prepared to check wind flows in adjacent streets, Wynyard Park and at Station entries.

The above recommendation is reflected in the Statement of Commitments.

6.10 Structural and Geotechnical

6.10.1 Structural Assessment

The Structural Report prepared by TTW (see **Appendix Q**) outlines the proposed structural concept level design of the proposed development. The concept structure has been designed for strength, serviceability and stability, in accordance with the relevant structural clauses of the BCA and Australian Standards.

The proposed structural system will use a reinforced and prestressed concrete frame with reinforced concrete core and shear wall system. The prestress concrete will be proposed to maximise the column grids and minimise any possible transfer structure. The lateral loads will be resisted mainly by reinforced concrete core and shear walls that enclose stair and lift shafts and perimeter walls. Vertical loads will be carried by the walls and reinforced concrete columns.

A key element in the structural design is the column grid which will minimise the impact on access to the Station, the Hunter Connection, and leave Wynyard lane unobstructed.

The Report details structural matters that need to be considered during the detailed design stage. The matters include; geotechnical stability, shoring, protection of the existing structures being retained, dilapidation, stray current and electrolysis impacts on the railway, deflection limits, lateral drift, floor vibration, structural durability, fire resistance levels and waterproofing of structures. In addition to these matters the building will need to be constructed in accordance with the relevant design standards, criteria and codes.

Shell House will require particular attention during excavation, demolition and construction phase due to the facade of the building being retained. It is proposed that sufficient existing structure will be retained in order to act as support to the facade during the demolition and excavation phases. The exact extent of the existing structure required will be determined in the detailed Project Application but will be dictated by site constraints and overall economics associated with the works.

The above recommendations are reflected in the Statement of Commitments.

6.10.2 Rail Impacts

A Structural and Geotechnical Assessment on Rail Corridors has been prepared by ARUP and is located at **Appendix G**. The Assessment demonstrates that there will be no detrimental effects from the development on the safety or structural integrity of rail infrastructure or on transport operations in the existing rail corridor or proposed interim rail corridor. A summary of the Assessment is located below.

Impact on Wynyard Station

At the closest point the existing rail tracks are 40m from the face of the proposed excavation and the excavation is 15m below this track level. Movements in the

station box due to construction and excavation at the proposed site are expected to be within acceptable limits.

Movements induced by the excavation will be more pronounced on the concourse areas due to the closer proximity, but should be controllable and within acceptable limits due to good founding conditions using normal construction techniques and monitoring.

The loading from the proposed 30 storey tower will be supported on foundations at the base of the proposed excavation which is well below rail level and will have no significant impact on the existing rail infrastructure.

Impact on Proposed Metro

The interim rail corridor for the Sydney CBD Metro passes to the north of the site, between 3.4 and 5.7m below the base of excavation. The proposed development does not sit within the 1st reserve zone for the Metro corridor. The 2nd reserve proximity zone exists within a line drawn at 1:1 from the base of the tunnel to the surface. The 2nd reserve will thus extend to 35m from the southern edge of the easement.

This zone crosses the basement of Shell House on the corner of Carrington Street and Margaret Street. However, as there is an existing basement in this location, the proposal to make the basement deeper is not within the proximity zone and will not inhibit construction of the tunnels in the future.

On the basis of this approach, it is not anticipated that the proposed Concept Plan would impede the Metro interim rail corridor or affect the future operations of the Metro project should it proceed.

Impact on Adjacent Buildings

Due to the proximity of the excavation to adjacent buildings, it is likely that underpinning of some neighbouring building foundations will be required. The relief of in-situ stress caused by excavation will result in ground movements. A detailed ground investigation will provide the necessary parameters for a detailed design assessment of likely movements and the impact on adjacent buildings and underground structures.

Recommendations

It is recommended that a detailed geotechnical investigation be carried out to inform the detailed design of the proposed development. A full dilapidation survey of adjacent buildings and rail infrastructure in close proximity should be carried out before commencement of any work on site.

A monitoring regime will be required for continuous monitoring of movements during excavation. Regular inspection of adjacent buildings will be required during excavation to identify any minor structural damage to be repaired as required. Arrangements for ongoing approval and monitoring of rail infrastructure will be agreed with RailCorp.

The above recommendations are reflected in the Statement of Commitments.

6.11 Drainage

A Hydraulic Infrastructure Review prepared by Warren Smith Partners (see **Appendix G**) proposes a Stormwater Management Strategy for the site.

The Sydney Water Urban Development Section advised that Sydney Water have no requirement for the provision of On Site Detention (OSD) for the development site.

It is proposed as part of the Stormwater Management Strategy that stormwater drainage from roof and terrace areas be sized to cater for a 100 Year Storm Frequency Event and be collected by a system of syphonic drainage downpipes to connect to a 300,000 Litre capacity rainwater reuse tank. Overflow pipe work from the rainwater reuse tank will be designed to gravitate to connect to the Council and Sydney Water drainage system in George Street or Carrington Street.

Potential reuse of the rainwater using a suitable filtration method for water closet flushing and landscape irrigation will be explored during the detailed design stage.

The above recommendations are reflected in the Statement of Commitments

6.12 Utilities

A Hydraulic Infrastructure Review prepared by Warren Smith Partners (see **Appendix M**) and a Utilities Services Report prepared by Norman Disney & Young (see **Appendix N**) were undertaken to address the provision of servicing for proposed CityOne Concept Plan.

As detailed below, preliminary discussions held with relevant service providers indicate that the site can be adequately serviced for water, sewer, electricity, gas, and telecommunications through either existing capacity and/or augmentation as relevant within the site. The detailed design of the developments infrastructure connections will be resolved at the subsequent Project Application stage.

Water Supply

The development site is serviced by a 300mm diameter CICL Sydney Water water main in George Street and a 250mm diameter CICL Sydney Water water main in Carrington Street. Discussions with Sydney Water indicate that these water mains have adequate capacity to service the proposed development.

Sewerage Services

The development site is serviced by a 400mm VCP Sydney Water sewer in Wynyard Lane and a 990mm x 660mm brick oviform Sydney Water sewer situated in George Street. Discussions with Sydney Water indicate that either of these sewers have sufficient capacity to service the proposed development.

Stormwater Drainage

The development site is serviced by Council stormwater drainage road gullies in Margaret Street, Wynyard Lane and George Street which connect to a 300mm diameter Sydney Water VCP stormwater drainage line in George Street. These drainage lines will adequately convey drainage via the road corridors from the development site.

Gas Services

The development site is serviced with Jemena Limited natural gas mains. Discussions with Jemena indicate that their 100mm diameter 1,050kPa high pressure secondary main in Wynyard Lane has adequate capacity to service the proposed development.

Electrical Services

Discussions with Energy Australia have indicated that the three existing substations that service the site and other uses within the vicinity will need to be replaced. These works can be staged so that there will be no interruption to the provision of electricity during the construction.

The development will have no affect on RailCorp's electrical services which run through the site.

Communication Services

A review of the communication utilities running through the development site demonstrated that the proposal can be adequately serviced. Any potential impacts to these services during the construction stage can be resolved during the detailed design process without impacting on the provision of these services.

6.13 Contamination

A Stage 1 Environmental Site Assessment (ESA) has been undertaken by Consulting Earth Sciences and is located at **Appendix O**.

Based on review of historical information relating to the site and surrounding areas, researching local and regional environmental settings and observations made from a site visit, the ESA states that the CityOne site presents a low risk to human health and the environment arising from contamination.

Taking into consideration most surfaces are to remain as hard standing, the lack of extensive excavations proposed as part of the development and the likelihood that subsurface conditions are consistent, the ESA concludes that the CityOne site is likely to be deemed suitable for the proposed development with respect to contamination and that based on the results of the Stage 1 ESA, no further investigation into contamination at the site is required.

Due to the minimal expected surface disturbance, should any impacted fill be identified, the fill could be managed and retained in situ. The ESA recommends that if impacted fill is identified during excavation, a plan and procedures should be prepared to manage the assessment and disposal of any surplus material.

The above recommendation is reflected in the Statement of Commitments.

6.14 Noise and Vibration

A Noise and Vibration Impact Assessment for the Concept Plan has been undertaken by Renzo Tonin & Associates and is located at **Appendix F**. The report presents a preliminary assessment of noise intrusion into operation noise emissions for the development in terms of current standards and guidelines.

Road Traffic Noise

The traffic noise levels on George Street typically range from 70 to 75dB during peak hour. The maximum noise level caused by buses departing and stopping at stops on York Street and George Street is up to 90dB.

In order to achieve compliance with the internal noise levels recommended in Australian Standard AS2107 laminated glass or double glazed windows can be used for building façade treatment. The final selection of materials will be subject to a future Project Application for the site.

Rail Noise and Vibration

The proposed noise/vibration sensitive uses are located approximately 80m east of the underground rail network. As no Australian Standards or guidelines are applicable for airborne and regenerated rail noise impacting upon commercial uses, Renzo Tonin used rail noise and vibration criteria for commercial and retail development adjacent to railway corridors based on documents prepared by State Authority & Rail Infrastructure Corporation, Australian Standard AS2107, DECC guidelines and British Standard BS6472.

The assessment found that as the railway tunnels are located at a distance greater than 60m from the noise/vibration sensitive uses the impact of ground-borne noise and vibration upon occupants will be insignificant and the requirement for specific building mitigation is unnecessary. Furthermore, the two levels of basement car parking will provide an additional buffer zone to the railway line.

Mechanical Plant

The details of the mechanical plant for the development will be finalised at the Project Application stage(s). The mechanical plant such as rooftop exhausts, air-conditioning and refrigeration associated with the future development has the potential to impact on nearby residential and commercial properties. The report recommends the following measures to manage these impacts:

- mechanical services equipment be selected to ensure compliance with relevant noise limits;
- ongoing consultation with an acoustic consultant be undertaken throughout the process; and
- the detailed design of the mechanical plant should utilise noise reducing methods.

Construction Noise

The details of the construction equipment and operating times are not known at this stage. However, the assessment found that the nature of the construction processes proposed for the development will not present any difficulties in ensuring that compliance with City of Sydney 'Code of Practice – Construction Hours/Noise 1992' can be achieved.

The above recommendations are reflected in the Statement of Commitments.

6.15 Construction Management

A preliminary construction management and methodology for the project has been assessed by Brookfield Multiplex and Robert Bird Group. Brookfield Multiplex have prepared a Construction Methodology Report which has reviewed the current station and a series of preliminary building designs prepared by Hassell (**Appendix P**). A Construction Management Statement has also been prepared by the Robert Bird Group (**Appendix P**). The reports detail construction management methodologies that can be implemented for the project (including the staging of construction works), outline the potential construction impacts of the development, and identify issues that need to be addressed in a detailed construction management plan for the site.

It is noted that the construction management and methodology has included / assumed aspects of the future Wynyard Station works west of Carrington Street in relation to a design concept that is not at this stage agreed by Transport NSW, and does not form part of the Concept Plan proposal. This has been done only for completeness, and to enable a better understanding of how the separate scope of works to the east and west of Carrington Street may be undertaken without disruption to the operation of the station.

In this respect, the future detailed Project Applications relating to the station upgrade works will be required to be accompanied by detailed construction management and methodology information that is specific to the design proposed.

The physical constraints that impact on the demolition and construction works for the project east of Carrington Street have been identified by Brookfield Multiplex as:

- pedestrian paths of travel including the George Street concourses and Hunter Connection;
- two electrical substations located in the basement of Thakral House which supply power to Thakral House, the Menzies Hotel and adjacent buildings;
- RailCorp goods lift that services rail station operations and the existing retail premises;
- Wynyard Lane, which provides vehicular access to buildings north and south of the site and the Wynyard Lane Public Car Park;
- existing buildings on the site, including Shell House which will only be partially demolished.

The major works include:

- demolition of Thakral House and Menzies Hotel (south wing). Shell House will be substantially demolished (the facade will be retained);
- excavation works for the office tower site and Shell House for the basement car park;
- staged construction of the station concourse east of Carrington Street, CityOne office tower and refurbishment of Shell House.
- fit-out works to office and retail premises.

The detailed construction methodology will address:

- materials handling including, materials deliveries, waste management, cranes, hoists and loading platforms;
- protection measures for surrounding heritage items, adjoining buildings and the Wynyard Station Rail tunnels;
- public amenity, safety and pedestrian management including hours of work, noise and vibration, public safety, pedestrian management and community/stakeholder consultation;
- construction traffic management including designated transport routes and waiting areas, site access and street closures; and
- environmental management including occupational health and safety, hazardous materials, site discharge and recycling.

The major construction stages of the project east of Carrington Street will include:

- site establishment;
- partial demolition and excavation of Thakral House, Menzies Hotel and concourse;
- commencement of structural works for CityOne tower and concourse;
- completion of demolition and excavation of Thakral House, Menzies Hotel and concourse; and
- commencement of works to Shell House.

The Concept Construction Methodology Report demonstrates that the proposed development is capable of being constructed whilst maintaining the operation of the Station and pedestrian access to George Street, Carrington Street and Wynyard Park. The paths of travel within the Station will vary during the various stages of construction, but access will be available at all times. In addition access to York Street (via the wooden escalators), Kent Street and Clarence Street will remain unchanged during construction. Access to George, Margaret and Jamison Streets via the Met Centre will also remain unchanged.

A detailed Construction Management Plan will be submitted with relevant future project application(s). The demolition and construction methods and sequencing will be reviewed with RailCorp, State Transit, and RTA prior to and during construction to minimise potential impacts.

7.0 Draft Statement of Commitments

Subject	Commitment	Timing
1. Design	<p>a. The detailed design of the development east of Carrington Street is to provide a minimum total combined width of pedestrian exit to George Street of 20 metres and unimpeded flow to the street.</p> <p>b. The detailed design of the development east of Carrington Street is to demonstrate the manner in which the detailed design criteria prepared by Hassell included at Appendix C has been met.</p> <p>c. The detailed design of the development is to accommodate the existing pedestrian connections to the Hunter Connection and the Met Centre as shown on the Concept Plan Drawings prepared by Hassell. This requirement relates to the final location of the connections. During the demolition and construction stages of the project, these connections may be temporarily closed or altered in accordance with any Demolition or Construction Management Plan prepared in relation to items 11 and 12 of this Statement of Commitments.</p> <p>d. A consistent quality in design is to be achieved for retail premises outside the paid area of Wynyard Station. The detailed design of the location and configuration of retail premises is to be resolved as part of any project application relating to the detailed design of the non-paid concourse areas.</p> <p>e. A further Accessibility Strategy is to be prepared outlining the measures that will be adopted in the detailed design to ensure that at completion, the development provides adequate access for people with disabilities in accordance with the Concept Access Review prepared by Morris Goding Accessibility Consulting. Accessibility during demolition and construction works is to be separately addressed in the Demolition and Construction Management Plans required at items 11 and 12 of this Statement of Commitments.</p>	<p>To be demonstrated with any relevant Project Application.</p> <p>To be demonstrated with any relevant Project Application relating to works east of Carrington Street</p> <p>To be demonstrated with any relevant Project Application relating to works east of Carrington Street</p> <p>To be demonstrated with any Project Application relating to the design of the new station concourse (unpaid areas)</p> <p>To be submitted with any relevant Project Application</p>

Subject	Commitment	Timing
2. Crime and Public Safety	<ul style="list-style-type: none"> a. Thakral will be responsible for the operational management of the Thakral owned and leased areas of the non-paid concourse of Wynyard Station. b. All elements of the future development east of Carrington Street are to be designed in accordance with the principles of Crime Prevention Through Environmental Design. c. A Crime and Public Safety Management Plan for the non-paid concourse areas owned and leased by Thakral is to be developed in consultation with RailCorp and is to provide details with respect to operational management by trained staff and security personnel, regular patrolling of the Thakral leased areas, and installation of CCTV to provide a higher level of security and safety for the area. 	<p>To be demonstrated as part of any relevant Project Application</p> <p>To be demonstrated as part of any relevant Project Application</p> <p>To be demonstrated as part of any relevant Project Application</p>
3. Infrastructure and utility services	<ul style="list-style-type: none"> a. A detailed survey of existing utility services impacting on the site is to be undertaken. The survey is to identify the type, extent and location of existing utility services including power, gas, water, sewer, stormwater and communications. b. The detailed design of the proposed development is to identify the required capacity and intended location of new infrastructure services required by the development. Identification of site utility services requirements is to occur in consultation with all relevant authorities, including but not limited to Energy Australia, RailCorp and Telstra. c. Further investigation of the existing Railcorp substations beneath Wynyard Park (Upper concourse level 2) and on Basement Level 1, and their connecting high voltage cables is to be undertaken if (at the next stage of design development) it is determined that major works are likely to occur in these areas. 	<p>To be submitted with the first Project Application</p> <p>To be submitted with any relevant Project Application</p> <p>Details to be submitted with any Project Application proposing the carrying out of works beneath Wynyard Park that impacts this infrastructure</p>
4. Water management	<ul style="list-style-type: none"> a. Stormwater drainage from roof and terrace areas is to be sized to cater for a 1:100 year ARI storm frequency event and connected to a rainwater re-use tank. b. The potential for reuse of rainwater using a suitable filtration method for water closet and flushing and landscape irrigation is to be explored during the detailed design stage. c. The City of Sydney Council is to be consulted during the preparation of the Stormwater Management Plan. 	<p>To be submitted with any relevant Project Application</p> <p>To be submitted with any relevant Project Application</p>

Subject	Commitment	Timing
5. Parking and servicing	<ul style="list-style-type: none"> a. Off street bicycle parking and shower facilities are to be provided within the development in accordance with City of Sydney DCP 1996. b. All onsite parking areas are to conform to the requirements of AS2890.1:2004. c. All service / delivery areas are to conform to the requirements of AS2890.1:2002 subject to driveways complying with City of Sydney DCP 1996. 	To be demonstrated with any relevant Project Application
6. Public domain plan	<ul style="list-style-type: none"> a. The detailed design of the public domain east of Carrington Street is to be generally in accordance with the Public Domain Plan prepared by Hassell included at Appendix C. b. A detailed public domain plan illustrating all works proposed to be carried out is to be submitted with each relevant application. c. The detailed public domain plan(s) are to be prepared in consultation with City of Sydney Council to ensure that there is an appropriate level of integration in terms of design and standard of finishes between the development and other public domain spaces immediately adjoining the site that are the responsibility of the Council. 	To be demonstrated with any relevant Project Application
7. Heritage – new built form	<ul style="list-style-type: none"> a. The design of the new building will maintain the clear distinction between the new building form and the adjacent heritage items through articulation and where appropriate lightness and transparency where it adjoins the more solid masonry forms of the adjacent heritage items. 	To be demonstrated / submitted with any Project Application relating to the detailed design of the new commercial tower / extension and refurbishment of Shell House
8. Heritage – Former Shell House	<ul style="list-style-type: none"> a. The roof top addition will be designed to be distinguished as an addition to assist in the interpretation and evolution of the building form. b. The roof addition will appear as a light framed structure. c. Further research will be undertaken into the conservation of the glazed terra cotta facing material of the west, north and part east facades and the clock tower. d. The detailed design will address deterioration of some internal structural elements of the Clock Tower: e.g. spalling concrete. e. Archival recording will be undertaken of the former Shell House in accordance with the guidelines published by the Heritage Branch of the NSW Department of Planning. 	<p>To be demonstrated / submitted with any Project Application relating to Shell House</p> <p>Archival record will be carried out prior to commencement of internal</p>

Subject	Commitment	Timing
	f. Heritage interpretation of the history of the site will be incorporated into the detailed design.	demolition and construction, during the construction process and on completion.
10. Geotech	a. A detailed geotechnical investigation is to be carried out to inform the detailed design of the proposed development. b. A monitoring regime will be required for continuous monitoring of movements during excavation. Regular inspection of adjacent buildings will be required during excavation to identify any minor structural damage to be repaired as required. Arrangements for ongoing approval and monitoring of rail infrastructure will be agreed with RailCorp. c. All geotechnical investigations and subsequent specification and programming of shoring and excavation will be carried out in co-operation with RailCorp, State Transit, RTA and Sydney City Council.	Detailed investigations to be staged in accordance with the staging of demolition and bulk excavation works and prior to the commencement of construction works for the relevant stage
11. Noise, Vibration & Electrolysis	a. Building facade treatment is to ensure compliance with internal noise levels recommended in Australian Standard AS2107. b. Mechanical services equipment must not, either singularly or in total, emit noise levels which exceed the noise limits in DECC's Industrial Noise Policy and / or the City of Sydney Council DCP. c. All demolition and construction work on site will comply with the noise level and operating time schedule in the City of Sydney 'Code of Practice – Construction Hours/Noise 1992'. Details of the specific noise control measures to be adopted to ensure compliance with the Code of Practice are to be provided with the Construction Management Plan referred to at Item 13. d. The detailed design of the development is to take into consideration electrolysis from rail operations.	To be demonstrated / submitted with any relevant Project Application
12. Demolition	a. A Demolition Management Plan is to be prepared detailing the proposed staging and methodology of demolition works and demonstrating the manner in which the safe operation of the station and its accesses will be maintained. b. The Demolition Management Plan is to identify plans of any temporary or permanent shoring, underpinning and / or retaining walls around the site.	To be submitted with any Project Application that includes demolition To be included in the Demolition Management Plan

Subject	Commitment	Timing
	<ul style="list-style-type: none"> c. Demolition works are to be staged and programmed to minimise any temporary closure of Wynyard Lane and the public car park access. d. The proposed demolition methods and sequencing are to be reviewed by RailCorp, State Transit, and RTA prior to demolition commencing. 	<p>To be demonstrated with the relevant Project Application</p> <p>To be demonstrated with the relevant Project Application</p>
13. Construction	<ul style="list-style-type: none"> a. A Construction Management Plan is to be submitted as part of any future development on the site. The Construction Management Plan is to be prepared taking into consideration the likely timing of construction of Barangaroo, particularly in relation to potential cumulative traffic impacts. In this regard consultation is to be undertaken with the Barangaroo Development Authority and City of Sydney Council. b. A detailed Construction Traffic Management Plan will be submitted as part of any future development on the site. c. Construction works are to be staged and programmed to minimise any temporary closure of Wynyard Lane. 	<p>To be submitted with any relevant Project Application</p> <p>To be submitted with any relevant Project Application</p> <p>To be demonstrated with any relevant Project Application</p>
14. ESD	<ul style="list-style-type: none"> a. The detailed design of the commercial office component of the development is to achieve a minimum 5 Green Star rating. b. The potential for delivery of a central plant for the office component of the development is to be considered at the detailed design stage. c. The detailed design of the development is to review the sustainability targets for commercial office buildings and retail centres with the aim of maximising sustainability and future flexibility whilst reducing energy use and carbon/CO₂ emissions. d. The detailed design of the non-commercial office components of the development is to implement the guiding principles of Green Star to the greatest extent reasonably practical. 	<p>To be demonstrated / submitted with any Project Application relating to the design of the commercial tower</p> <p>To be demonstrated with any Project Application relating to the design of the station concourse</p>
15. Wind	<ul style="list-style-type: none"> a. A full environmental wind study is to be prepared demonstrating that the detailed design of the development will maintain wind flows in adjacent streets, Wynyard Park and Station entries at an acceptable criterion for walking comfort. 	<p>To be submitted with any Project Application relating to the commercial tower</p>
16. Fire & Life Safety	<ul style="list-style-type: none"> a. A detailed Fire & Life Safety Report is to be prepared for the unpaid concourse and retail area and tower building east of Carrington Street demonstrating that at completion, the detailed design of the proposed development will comply with 	<p>To be submitted with any Project Application relating to the design of the station concourse east of</p>

Subject	Commitment	Timing
	<p>current industry standards as specified by the Building Code of Australia. The detailed Fire & Life Safety Report is to demonstrate specific measures for implementation of the preliminary:</p> <ul style="list-style-type: none"> * Emergency Egress Strategy; * Smoke Hazard Management Strategy; and * Fire Resistance Strategy, outlined in the Fire & Life Strategy prepared by Stephen Grubits & Associates Pty Ltd. 	Carrington Street
17. Structure	<p>a. The structural design of the development is to comply with the most current version of the following Codes of Practices:</p> <ul style="list-style-type: none"> * AS1170.0/2002 Structural design actions; * AS1170.1/2002 Permanent imposed & other actions * AS1170.2/2002 Wind actions * AS1170.4/2007 Earthquake loads * AS3600/2001 Concrete structures * AS 4100/1998 Steel structures * AS3700/2001 Masonry structures * AS4678/2002 Earth retaining structures <p>b. The condition of existing structures to be kept is to be inspected to establish the extent to which items require repair, replacement or modification.</p> <p>c. The fire resistance levels of all structural elements shall comply with the relevant requirements of the BCA code or the requirements of a suitably qualified Fire Engineering Consultant where this supersedes the BCA.</p>	To be demonstrated with any relevant Project Application
18. Dilapidation survey	<p>a. A dilapidation inspection of all properties and infrastructure services adjoining the development on land east of Carrington Street will be carried out to establish the extent of any existing damage and enable any deterioration during construction to be readily identified.</p> <p>b. A copy of the dilapidation inspection is to be provided to the Director General of the Department of Planning</p>	To be submitted to the Director General of the Department of Planning prior to the commencement of any demolition works
19. Hazardous Materials Survey	<p>a. A Hazardous Materials Survey is to be prepared for existing building structures.</p>	To be submitted with any Project Application proposing demolition

Subject	Commitment	Timing
		works
20. Contamination	a. If impacted fill is identified during excavation, a plan and procedures should be prepared to manage the assessment and disposal of any surplus material.	During construction.

8.0 Conclusion

Thakral is proposing a major redevelopment of the eastern access ways to Wynyard Station concourse from George Street, Thakral House and the Menzies Hotel (including Shell House) buildings to deliver significant improvements to Wynyard Station as well as retail uses and a new commercial office tower.

The development will revitalise the Wynyard precinct by contributing to a world class station and transport interchange. The proposed envelope for the commercial tower allows for the delivery of a new landmark building which will establish a clear identity for Wynyard Station with minimal environmental impacts.

Wynyard Station is currently at capacity and needs significant works to the Station and to support future development in the surrounding area, including the redevelopment of Barangaroo. The CityOne Project will deliver significant public benefits through modernising aspects of the station.

The CityOne project is in the public interest as the site is an integral component of the Wynyard Station public transport interchange and an integrated and holistic approach is the best way to deliver the significant improvements to the function and amenity needed. Thakral is in a unique position to deliver the required improvements to the public domain, streetscape and pedestrian environment amenity of the area, including Wynyard Park.

The commercial tower is integrated into the redevelopment of the station concourse east of Carrington Street and has been designed to respect the urban form of the Wynyard Park precinct and surrounding heritage items. In particular the building envelope has been designed to the Sydney LEP sun access plane requirements and results in no overshadowing of the GPO facade and steps and only very minor overshadowing of the Martin Place footpath for a short period of time in winter.

The Concept Plan demonstrates that the proposed development has significant public benefits and does not have unacceptable environmental impacts. All measures that have been recommended as part of the supporting technical investigations and studies to mitigate potential environmental impacts have been incorporated into the Concept Plan or are included in the Statement of Commitments.