



Project : **USYD Central Building**
University of Sydney

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Attachments : **Architectural Drawings**



INTRODUCTION

This Preliminary Assessment has been prepared to initiate the assessment of the University of Sydney (USYD Central) Building Project under Part 3A of the Environmental Planning and Assessment Act 1979 (the Act).

On 7 June 2005 Campus Property and Services at the University of Sydney issued a letter to the NSW Department of Planning seeking to lodge a project application for the USYD Central Building Project and the Law Building Project for assessment and determination pursuant to the former State Environmental Planning Policy (State Significant Development) 2005 now State Environmental Planning Policy (Major Projects) 2005.

On 18 November 2005 the NSW Department of Planning advised Campus Property and Services that the Minister, formed the opinion on 25 October 2005, that the two proposals are of a kind to which Part 3A of the Act applies.

The project application therefore needs to be lodged with the NSW Department of Planning, directed to Urban Assessments branch of the Office of Sustainable Development Assessment and Approvals. The Minister is the approval authority.

SITE LOCATION AND PROJECT DESCRIPTION

Introduction

The University of Sydney is proposing the redevelopment of a 4,500m² site within the Darlington Campus at a cost of \$65 million to accommodate a range of Student Services Departments (University Administrative Organisations), a combined Sciences and Technology Library and some retail space. The development is to be known as the USYD Central Building and will provide a total gross floor area of 14,500 m².

Site Location

The site is located at 96-148 City Road Darlington (Lot 1, DP 790620) within the Darlington Campus of the University of Sydney at Darlington, which is within the City of Sydney Local Government Area (LGA).

The oblique aerial view (Figure 1) of the project site for the USYD Central Building (pre 2000) depicts the following key features:

1. Wentworth Building (G01) – University of Sydney Union Building
2. St Michael's College (Residential College) and the University Chapel of the Resurrection
3. Maze Green – heart of the Darlington Campus
4. City Road – major arterial traffic route feeding the City CBD
5. Existing Pedestrian Footbridge linking both campuses and crossing City Road
6. Carslaw Building (F07). Note photograph is taken prior to the construction of the new Auditorium.

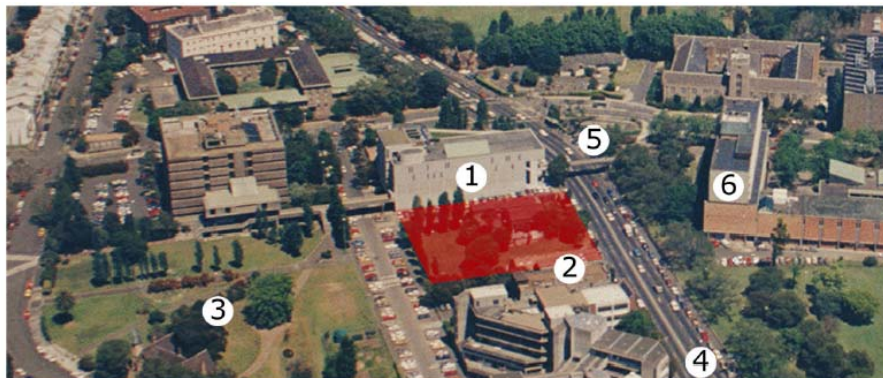


Figure 1 – Oblique Aerial View of the Project site

The site for the USYD Central Building (project site) is located between the Wentworth Building (G01), occupied by the University of Sydney Union, and St Michael's College and the University Chapel of the Resurrection owned and operated by the Catholic Archdiocese of Sydney. The project site has frontages to both City Road, providing access to commuter bus services, and Maze Crescent which forms part of the University's internal road network servicing the Darlington Campus.

The project site currently contains a number of structures including the Tin Sheds Gallery (G03) and associated Art Workshop Buildings (G02A, G02B and G02C). Given that the activities within these buildings had a close association with the Faculty of Architecture located in the Wilkinson Building (G04) the University relocated the Gallery and consolidated the workshops into this location. In addition to reinforcing this important academic relationship, this relocation in particular allowed the Tin Shed Gallery to maintain its City Road address and high level of public exposure.

The project site also accommodates a demountable building (G05) that is currently used by the School of Information Technologies for its Master's Coursework Students. This activity is planned to be relocated by the University into the new School of Information Technologies Building (due for completion mid 2006). All existing structures located on the project site are planned to be demolished.

In terms of the existing infrastructure the project site also contains a surface car park, accommodating 40 vehicles and there is an additional 50 spaces provided along Maze Crescent in the general vicinity of the project site. Car parking from the project site will be permanently relocated to new basement car parks developed as part of the new School of Information Technology Building and the new Faculty of Law Building. Some parking along Maze Crescent is proposed to be removed to improve pedestrian access and the interface of this development with Maze Green and this parking will be permanently relocated into the new facilities provided by these two projects. Overall car parking on both Campuses will be maintained at current levels (zero-growth strategy).

The USYD Central Building

The USYD Central Building is a key component of the University's Campus 2010 + Building for the Future Program (Campus 2010) and is intended to become a major University's landmark on City Road.

USYD Central is a positive step toward enlivening the University of Sydney campuses. The development could be likened to a mini city centre which will service not only the needs of the students living on and around the campus, but also the residents of the surrounding areas.

A new vibrant outdoor plaza space will be created with retail space and access to the major library facility. The plaza space will be connected to the University's Camperdown campus via a new footbridge (subject to a separate DA) spanning City Road as well as integrated into the Darlington Campus as a result of the public domain upgrade works. By providing core student services and retail spaces along



the University's major thoroughfare, a 24-hour zone of activity will be established at the heart of the campus environment.

The access route to and through the USYD Central Building will be compliant with all standards and codes for disability access, ensuring comfortable movement to, from and between the campuses for all users and at times of the day and night.

The USYD Central Building will offer **three major attractions**: a combined Sciences and Technology Library, consolidation of the University's student services functions and new retail spaces as described below.

The **Sciences and Technology library** will enable the consolidation of collections from seven different campus locations into one purpose-built facility. These collections supporting research and teaching within the various science and technology disciplines comprise an estimated 256,000 volumes and extensive electronic-based resource materials. Their co-location will support and encourage cross-disciplinary study and research.

Gathering and relocating the University's **student service** providers to a single location will ensure more efficient service delivery to the student population. It will give the University the opportunity to enhance the quality of services and support delivered to students.

The building will also contain approximately 900m² of generic **retail space** which will be complemented by 3,000m² of outdoor plaza space on one level. This retail space will be flexible in its design and positioning, to allow fit outs that meet a variety of future tenants' needs.

A vital aspect of this project is the **integration** of the USYD Central Building and its associated public domain works with adjacent development. Sharing the western boundary of the project is the Wentworth Building, which accommodates major food services and support facilities managed by the University of Sydney Union. On the opposite side, the project shares a boundary with St Michael's College operated by the Catholic Archdiocese of Sydney providing residential accommodation for students and incorporates a public place of worship (University Chapel of the Resurrection).

A major objective is the achievement of a **4 star rating** under the Green Star Scheme through **environmentally sustainable design**. This objective, which was met, will establish the building as being in the top 25% of the Australian marketplace and confirm the environmental commitment of the project across the core categories of Management, Indoor Environment Quality, Energy, Transport, Water, Materials, Land Use and Ecology and Emissions. In addition to these core categories, Green Star rewards innovative initiatives of environmental benefit. The project incorporates a hybrid chilled beam and displacement solution to ensure control of heat gains and deliver fresh air to the occupants throughout the office and library spaces. This system will add further Green Star rating points. The current summary rating is shown below (Figure 2).

The public plaza and external circulation spaces within the USYD Central Building have been designed to reduce blind spots and dead-end areas in accordance with **(Crime Prevention Through Environmental Design)** (CPTED) principles. This results in a largely self-policing facility with views and sight lines maintained from secure spaces to any potential hiding places. Security patrol patterns will be developed to encompass these areas over a 24-hour cycle catering for semester and non-semester periods. The inclusion of CCTV surveillance externally and the provision of panic-buttons internally will contribute to the overall security strategy for the site. Careful attention will be paid to material selection in areas where the building fabric is likely to be exposed to vandalism and graffiti.

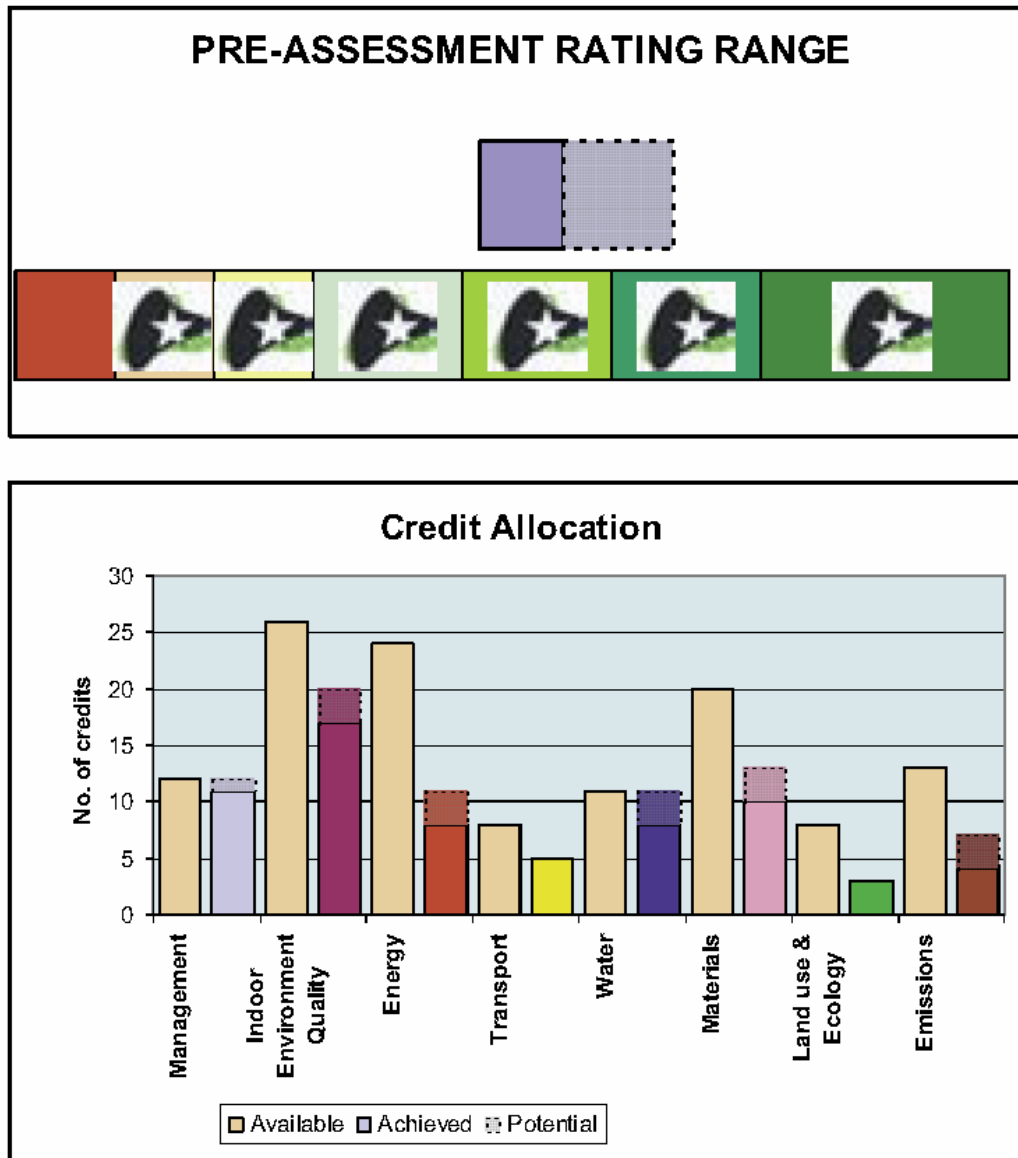


Figure 2 – USYD Central Building Green Star Rating Summary

PROJECT BACKGROUND, JUSTIFICATION & ALTERNATIVES

Campus Planning Process

The University of Sydney Campus Planning Strategy is a comprehensive planning strategy that has been developed by University of Sydney for its Camperdown and Darlington Campuses. It played an important role in guiding the development of the Campus 2010, which is a program of five (5) major Capital Works initiatives for individual projects.

The University's environmentally sustainable design (ESD) principles are intrinsic to the development of the Campus Planning Strategy, embracing aspects ranging from water to energy, materials to indoor environmental quality, and site considerations through to building emissions.



Further details regarding the Campus Planning Strategy can be found at the following website: <http://www.facilities.usyd.edu.au/documents/files/cps.shtml>

The Campus 2010 represents one of the most significant investments in capital since the University's foundation in 1850 and to which the University's is committing funding of more than \$200 million. The five projects making up the Campus 2010 include the: Faculty of Law Building, USYD Central Building, School of Information Technologies Building, Public Domain works and the Madsen Building Refurbishment as part of the consolidation of the School of Geosciences.

The Campus 2010 aims to dramatically improve the quality of the campus environment, providing world-class facilities with priority given to environmental considerations and sustainability. Other important aims include:

- ▶ fulfilling the University's aspiration to be a leader in academic excellence – to be first in Australia;
- ▶ being among the top five universities in the Asia-Pacific region;
- ▶ being one of the top 40 universities in the world; and
- ▶ protecting and maintaining the University's rich cultural heritage.

Project Background

The USYD Central Building Project was the subject of an International Design Competition held by the University of Sydney in late 2003. The Competition was advertised and Expressions of Interest were submitted to the University.

John Wardle Architects were formally awarded the commission for the design of the USYD Central Building in December 2003. The design has been developed in conjunction with the following parties who have conducted the following investigations (see Table 1):

Table 1 Project Design Team and Completed Documentation

Role	Organisation	Documentation Prepared
Client	The University of Sydney Facilities Management Office (now Campus Property & Services)	- Waste Management Plan - Detailed Design Briefs - Interpretative Strategies
Project Manager	Capital Insight	
Architects	John Wardle Architects + GHD + Wilson Architects	- USYD Central Architectural Design - Construction Management Plan - Building Envelope Comparative Analysis - Palette of external finishes and materials - Shadow analysis
Cost Consultants	Davis Langdon Australia	- Quantity Surveyors Certificate
Structural Engineer	GHD	- Structural Report
Geotechnical Surveyor	GHD LongMac	- Geotechnical Report
Site Contamination Services Engineer	Douglas Partners Lincolne Scott Australia	- Stage 1 Contamination Assessment - Hydraulic Services Report - Fire Protection Services Report
ESD Consultant	Advanced Environmental Concepts	- Environmental Design Summary
Façade Engineer	Arup Facades	- Façade and Roof Access Strategy Report



Role	Organisation	Documentation Prepared
		- Reflectivity Report
Acoustic Consultant	PKA Acoustic Consulting	- Acoustic Report
BCA Consultant	Dix Gardner	- Building Code of Australia Compliance Report
Environmental Health	Pickford and Rhyder Consulting	- Tin Sheds Asbestos and Lead in Paint Survey
DDA Consultant	Access Design Solutions	- Accessibility Report
Planning/ Environmental Assessment	GHD	- Planning/Environmental Assessment
Heritage	Taylor Brammer Landscape Architects	- Heritage Impact Statement
Non Indigenous Archaeology	Casey and Lowe	- Non Indigenous Archaeological Assessment
Aboriginal Archaeology	Jo McDonald Cultural Heritage Management	- Aboriginal Heritage Assessment
Traffic Consultants	Masson Wilson Twiney	- Cumulative Transport Report
Wind Engineer	Wind Engineering Services, University of Sydney	- Wind Assessment Report
Arborist	The Tree School	- Arborist's Report

Project Justification

The USYD Central Project forms a critical part of the Campus 2010. This project will enable strategic objectives aimed at improving the delivery of services to staff and students as well as supporting teaching and research activities across the Camperdown and Darlington Campuses to be achieved.

Alternatives

At present, the various libraries and Departments of Student Service Providers are dispersed widely across both the Camperdown and Darlington Campuses leading to an often confusing and inefficient supply of services to students.

If the project does not proceed, the current situation at the University will prevail. The USYD Central Building Project will not increase the University's staff or student population, but re-distribute this population in order to render a more efficient and centralised service to the student population. There will therefore be an impact on the delivery of services and welfare to students.

If the project does not proceed there will also be a loss of amenity to the Public Domain and the proposed publicly accessible, 24-hour and DDA-compliant access between the Camperdown and Darlington Campuses will not eventuate.

RELEVANT PLANNING INSTRUMENTS & CONTROLS

Approvals and Environmental Assessment

On 25 October 2005 the Minister formed the opinion that the proposed development was subject to the provisions of State Environmental Planning Policy (Major Projects) 2005. Prior to the Minister's opinion, the proposed development fell under the provisions of Part 5A of the Act – Development by the Crown as the University of Sydney is defined by Clause 226 of the Environmental Planning and Assessment Regulations 2000 (EP&A Regulations) as an entity of the Crown.



In early 2004 the City of South Sydney merged into the Sydney City Council. As a consolidated LEP has not been prepared for the entire area, the provisions of the South Sydney Local Environment Plan (SSLEP) 1998 apply to the University of Sydney site.

The site is zoned “Zone No. 5 – Educational Establishment” which aims to allow a range of community and civic uses for purposes undertaken by public authorities and institutions in the City of Sydney Local Government Area. The proposed development is consistent with the provisions of Zone No. 5 – Educational Establishment, is permissible, and will contribute to the use the University of Sydney as an educational institution.

The proposal does not involve any matters of significance that triggers a Referral under the Commonwealth Environment Protection and Biodiversity Conservation Act 1998.

Environmental Planning Instruments

An assessment of the following State Environmental Planning Policies of relevance to the project identified the following (see Table 2):

Table 2 State Environmental Planning Policies

State Environmental Planning Policy	Comment on Proposed Development
SEPP No. 6 – Number of Storeys in a Building (Gazetted: 10.12.82)	Height needs to follow SEPP definition.
SEPP No. 11 – Traffic Generating Developments (Gazetted: 9.8.85)	The DA does not require referral to the RTA.
SEPP No. 16 – Tertiary Institutions (Gazetted: 20.12.85)	Proposed development to be in accordance with the Consent authority.
SEPP No. 55 – Remediation of Land (Gazetted: 28.8.98)	Site contamination report found minor contamination in the form of asbestos sheeting.
SEPP No. 64 – Advertising and Signage (Gazetted: 16.3.01)	No signage is proposed as part of the DA.

There are no Regional Environmental Plans (REPs) applicable to this DA.

Clause 28 (Built environment design principles and masterplans) of the SSLEP applies to this development. The proposed development complies with the controls outlined below (see Table 3):

Table 3 Clause 28 Requirements

Sub-clause
a. Has been designed to reinforce and protect the local topography and setting.
b. Reinforces and enhances the streetscape and character of the locality.
c. Is compatible with the scale and design of neighbouring development.
d. Has been designed with adequate provision for the intended occupants, and those in the vicinity of the site of the proposed development, in terms of: i. Privacy, and ii. Access to sunlight.
e. Has been designed so as to be energy efficient in terms of natural: i. Lighting, and ii. Ventilation, and iii. Heating and cooling.



Sub-clause

- f. Established and enhances the public domain.
- g. Has been designed so as to preserve predominant view lines and vistas enjoyed from parks, reserves, roadways, footpaths and other areas of the public domain.
- h. Encourages complementary land uses and activities.

No draft environmental planning instruments apply to the site or the proposed development.

The provisions of South Sydney Development Control Plan (DCP) 1998 apply to the site. Part B of the DCP addresses Urban Design Principles for development within the LGA. The proposed development complies with the control/criteria and objectives of Part B of the DCP (see Table 4).

Table 4 South Sydney DCP – Part B Compliance Table

Control/Criteria

Development is not to encroach on view corridors, achieve distinctive building design, maintains vistas and reinstate and enhance existing vistas where appropriate.

Reinforce the block and street pattern of the city and other edge forming elements such as abutting localities of different land uses, the physical boundaries of railway lines, major institutions and major open spaces.

Reinforces and extends regional and local open space networks.

Ensure development respects, improves and enhances urban village character and identity to promote a safer and more liveable environment with a sense of community spirit and belonging.

Development is designed for ecological sustainability, is sensitive to and responds to the environmental capacity of the area.

Part C of the DCP addresses the public domain. The USYD Central building will integrate well with the existing public domain.

Part E of the DCP addresses the environmental design criteria, or building controls, for development within the former LGA. The proposed development complies with the control/criteria and objectives of Part B of the DCP (see Table 5).

Table 5 South Sydney DCP - Part E Compliance Table

Control	Control
Site Analysis	Height and scale
Site layout	Setbacks
Public open space	Façade treatment
Private open space	Heritage and conservation
Landscaping	Safety and security
Parking, access and servicing	Visual and acoustic privacy
Stormwater drainage	Access and mobility
Site contamination	BCA Requirements
Site facilities	Energy efficiency
Building envelope	Operational controls
Floor Space Ratio	

STATUS of CURRENT DEVELOPMENT APPLICATIONS

A **Stage 1 Development Application** was developed for the Campus 2010+ Building for the Future Program. This DA was lodged with the City of Sydney Council in June 2004 and approved on 7 June 2005. A modification to the DA was approved on 21 July 2005.



In relation to the USYD Central Building the approved modification related to building envelope setbacks along City Road and Maze Crescent (refer to conditions 6-9 inclusive).

The **status of other Development Applications for individual projects (various Stage 2 approvals)** forming part of the Campus 2010 Program are as follows:

- ▶ USYD Central Building – Early Works approved by City of Sydney Council on 28 September 2005;
- ▶ Faculty of Law Building - Early Works approved by City of Sydney Council on 6 December 2005;
- ▶ Barff Rd/City Rd Intersection was lodged with City of Sydney Council on 27 September 2005;
- ▶ Darlington Public Domain works was lodged with City of Sydney Council on 28 October 2005;
- ▶ Camperdown Public Domain works was lodged with City of Sydney Council on 21 November 2005;
- ▶ City Road Footbridge was lodged with City of Sydney Council on 28 November 2005; and
- ▶ Faculty of Law Building – Preliminary Assessment to be lodged with the Department of Planning in December 2005.

STATUTORY CONSULTATION

As part of the preparation of the project documentation (see Table 1) consultation has taken place with and/or information has been obtained from the following statutory authorities: City of Sydney Council; Roads & Traffic Authority; Environment Protection Authority; WorkCover NSW; Sydney Water Corporation; NSW Fire Brigade; Energy Australia; and Telstra.

The Aboriginal heritage assessment was prepared in consultation with the Metropolitan Local Aboriginal Land Council.

As part of the assessment of the Stage 1 Development Application, officers of City of Sydney Council liaised with the Roads and Traffic Authority and the State Transit Authority.

ENVIRONMENTAL ASSESSMENT & SUMMARY OF ISSUES

An environmental assessment was undertaken. A range of relevant issues have been examined (see Table 6).

Table 6 – Issues Addressed as part of Environmental Assessment

Land use and site suitability	Economic and social issues
Traffic and transport	Heritage and archaeological impacts
Landscape and visual assessment (including Arborist assessment)	Microclimate impacts
Noise and air quality	Soils and hydrogeology
Hydrology and water quality	Safety, security and crime prevention
ESD considerations	Cumulative impacts

An assessment of the project was also undertaken in accordance with the requirements of Section 79C under the Environmental Planning and Assessment Act 1979.

No issues of a critical nature were identified during the assessment. However, it was recommended that the following mitigation measures be incorporated into either the detailed design of the project or as conditions of consent:



- ▶ Water quality – The preparation of a detailed soil and water management plan to ensure minimal impact on water quality during the construction phase;
- ▶ Traffic management – Development of consent conditions to manage traffic during the construction phase of the project; and
- ▶ Noise – Install noise attenuation on all mechanical plant to reduce the potential for impact of the plant.

Vehicular and Pedestrian Traffic Assessment

Background to Transport Planning

As part of the Master Plan Stage 1 DA, a detailed traffic and transport assessment was undertaken by MWT (April 2004) to consider the traffic, transport and pedestrian activity implications of the master plan development with respect to the stated transport objectives of Campus 2010. These objectives were:

- ▶ Encourage drivers to become pedestrians as quickly as possible on entering the campus;
- ▶ Develop a recognisable hierarchy of pedestrian routes linking all parts of the campus and that assists people in negotiating the site;
- ▶ Establish a continuously accessible external paths of travel through the campus to ensure equity of access to all people visiting the University; and
- ▶ Develop and promote the provision of new major bus stops for the University along City Road that encourages public transport access close to the heart of the campus.

Key elements of the Stage 1 DA included:

- ▶ Neutral growth for 'on site' University car parking; and
- ▶ Provision of pedestrian and public realm improvements.

The Stage 2 DA for the USYD Central Building is consistent with the transport objectives and key elements as specified by the Master Plan Stage 1 DA

Assessment of Transport Implications

Traffic Generation Impacts

- ▶ No additional on site car parking will be provided as part of the proposed USYD Central development.
- ▶ It is proposed that some of the existing at grade parking surrounding the USYD Central building will be relocated to the proposed SIT or Faculty of Law Building Car Parks.
- ▶ As the car parks are located in close proximity to the external road network, the relocation of at grade parking will reduce the volume of traffic travelling through the Campus including along Maze Crescent adjacent to the USYD Central Building.
- ▶ Therefore it is considered that the proposal will not generate additional traffic flows within or external to the University campus.

Pedestrian Activity

- ▶ The proposal includes the provision of a new access compliant pedestrian footbridge across City Road between the USYD Central building and the Camperdown Campus.



- Public realm improvements and reduced traffic flows along Maze Crescent will reduce the potential pedestrian / traffic conflict along Maze Crescent. Maze Crescent will effectively be transformed from an access road to car parking to a “shared zone”.
- This will represent a significant improvement to the existing situation.

Public Transport

- The proposal does not include the provision of additional car parking and thus seeks to encourage alternate modes of transport such as public transport, walking and cycling.
- The proposal will not have implications to the proposed / existing bus facilities along City Road or Butlin Avenue.

Service Vehicles

- It is noted that service vehicle / loading would not occur along City Road and thus avoid potential adverse implications to City Road operation.
- Servicing would occur from the Campus’ internal roads (ie. Maze Crescent).

Summary

The USYD Central Stage 2 DA is one part of a broader Master Plan Stage 1 DA for future development of the University of Sydney’s Darlington and Camperdown Campuses.

This assessment concludes that the USYD Central Stage 2 DA is consistent with the transport objectives and key transport elements proposed as part of the Master Plan Stage 1 DA.

CONCLUDING STATEMENT

The USYD Central Building Project is an integral part of the University of Sydney’s Campus 2010 + Building for the Future Program. It represents an investment of \$65 million or over 30% of this program’s budget. Considerable planning effort in terms of time, cost and resources has been expended in the development of the program and this project. To date over \$4 million has been expended representing 6% of the overall budget for the project. This level of effort has translated into a thoroughly evaluated and high quality design which will deliver benefits to the University through the establishment of world class facilities and the integration of the design into the surrounding environment to benefit local and regional communities.

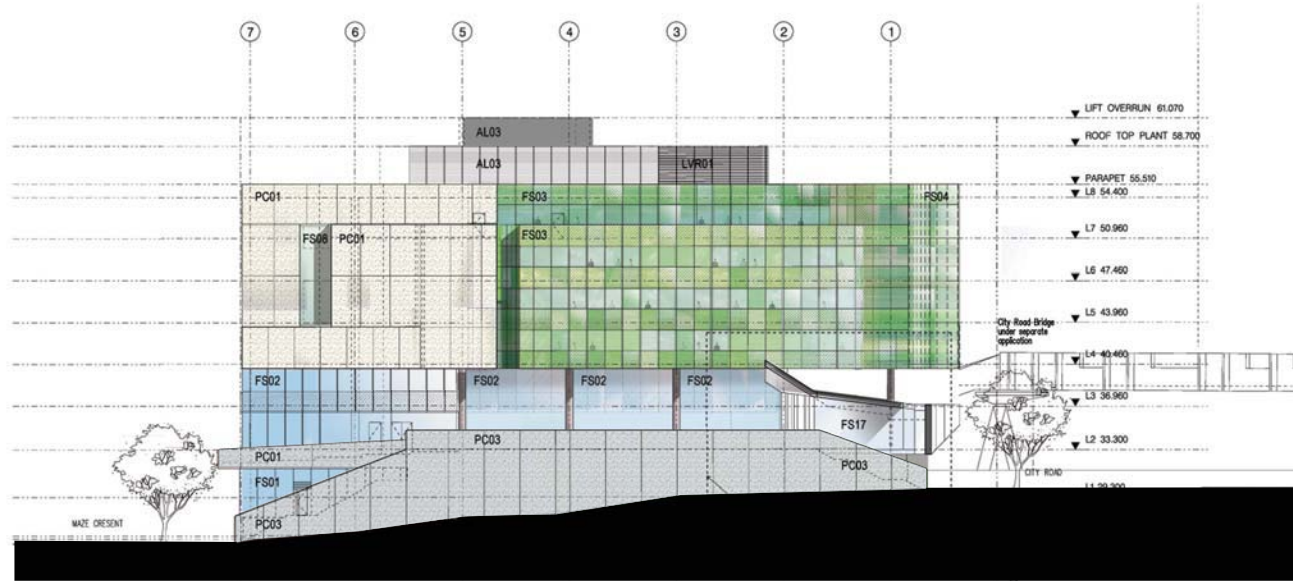
A summary of the project’s costs and benefits is described in Table 7 below.

Table 7 – Summary of Project Costs and Benefits

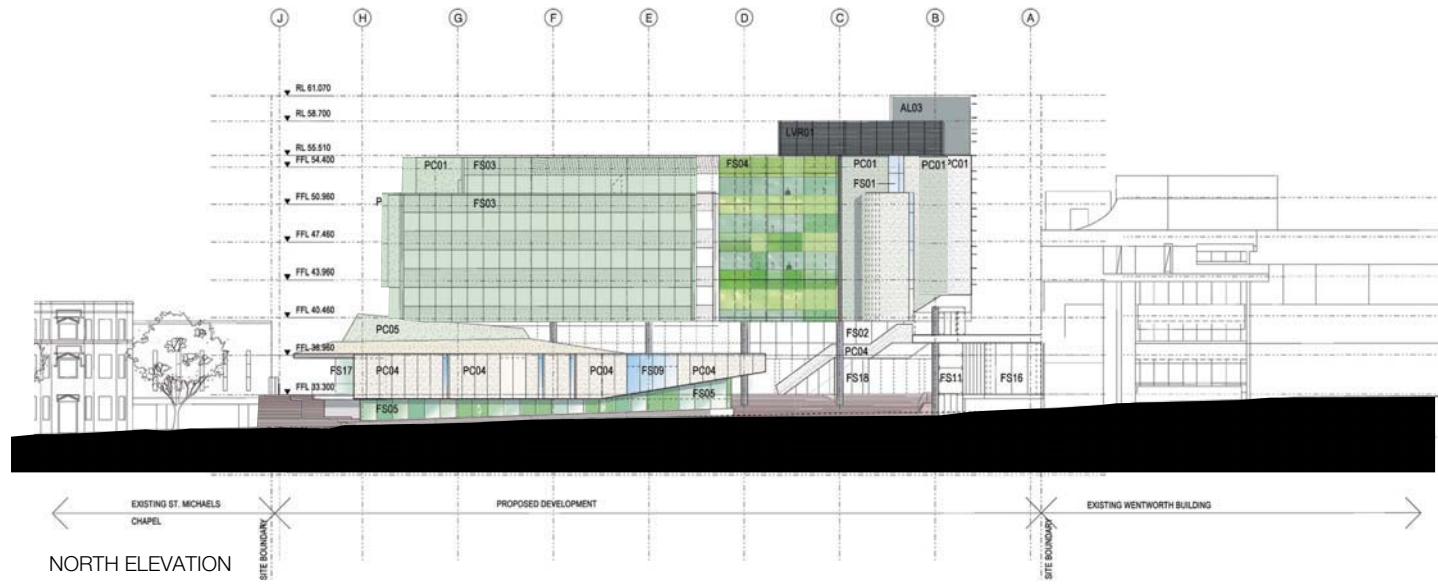
Costs	Benefits
\$65 million capital outlay	Part of a program to establish Sydney University to be: Number 1 in Australia, Top 5 in Asia-Pacific and Top 40 in the world
Part of one of the most significant capital developments since the University’s foundation in 1850	High quality design that will transform the City Road frontage
4 years of project development involving a multi-disciplinary team of professionals	Integration into surrounding land uses
\$4 million spent on project development to date	Create a new vibrant public space



20 month construction period	Encourage public use of the facility
	Improve access through the Camperdown and Darlington Campuses

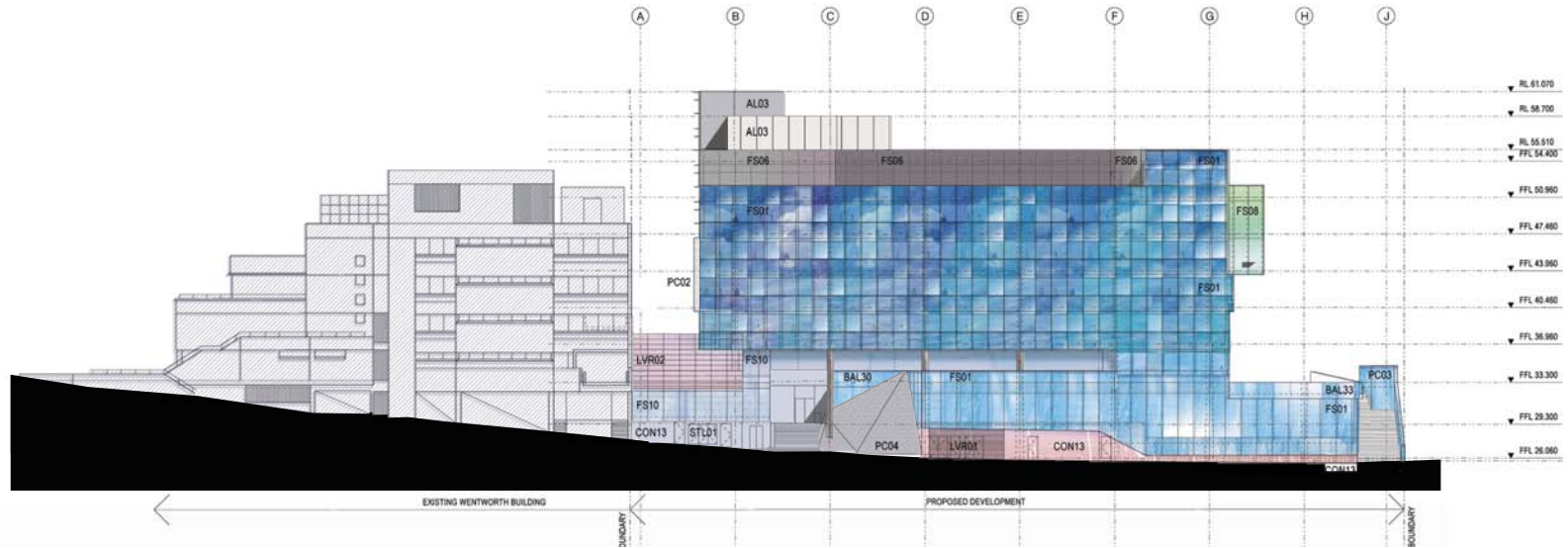


EAST ELEVATION

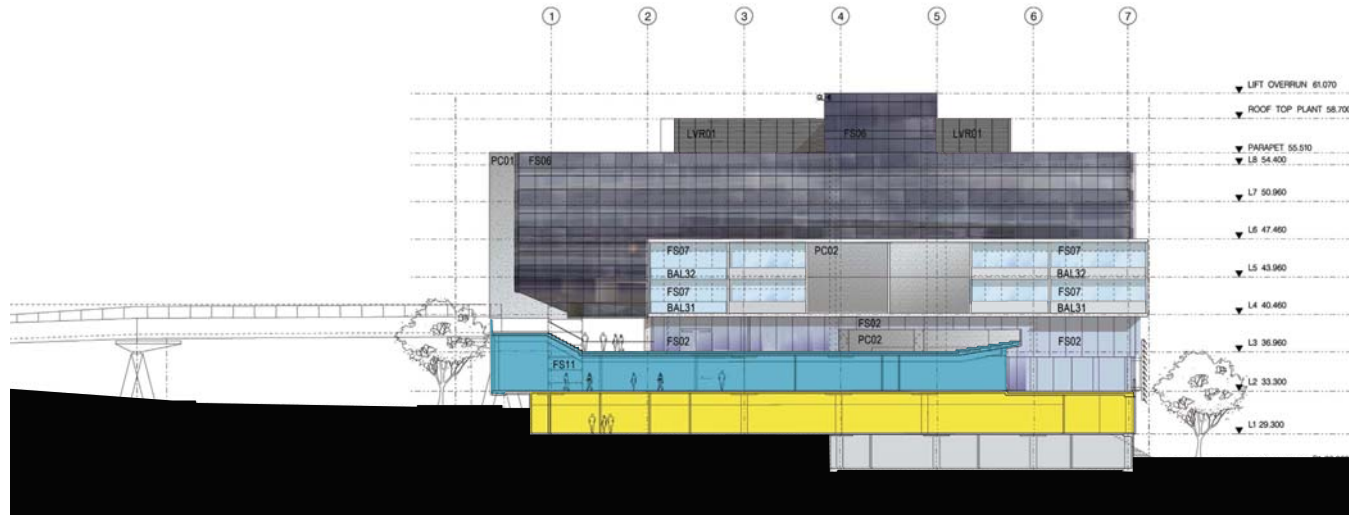


NORTH ELEVATION

USYD Central Building



SOUTH ELEVATION



WEST ELEVATION

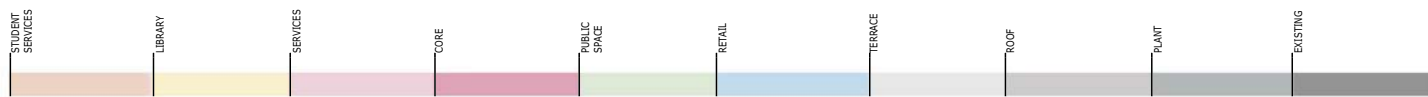
USYD Central Building



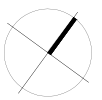
LEVEL 1 PLAN

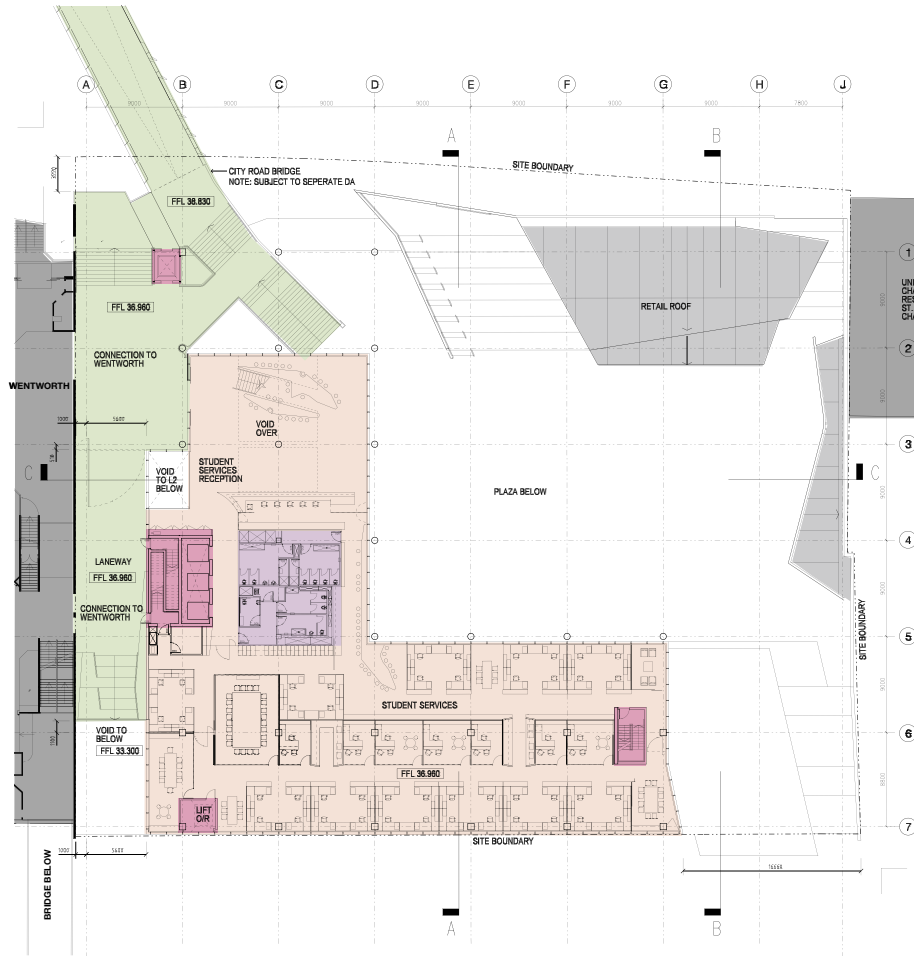


LEVEL 2 PLAN



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LEVEL 3 PLAN



LEVEL 4 PLAN





FOR MORE DETAIL
SEE MAP 386

USYD
CENTRAL
BUILDING

University of Sydney

DARLINGTON

Golden Grove

EVELEIGH

Sydney



CHIPPENDALE

NEWTOWN

Macdonaldtown

Eveleigh Workshops

2015

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