

## **St Catherine's School Waverley, Master Plan (Stage 1 DA) and Detailed Design of RPAC (Stage 2 DA)**

26 Albion Street, Waverley

### **REQUEST FOR DIRECTOR GENERAL'S REQUIREMENTS**

Prepared on behalf of St Catherine's School  
17 December 2013 | 1330

## Contents

<b>1.0 Introduction</b>	<b>1</b>
1.1 Overview	1
1.2 Background	1
1.3 Project need	1
1.4 Project team	2
<b>2.0 Site location and description</b>	<b>3</b>
<b>3.0 The proposal</b>	<b>6</b>
3.1 Overview	6
3.2 Gross floor area and floor space ratio	9
3.3 Height	9
3.4 Population	10
3.5 Pedestrian access	10
<b>4.0 Planning context</b>	<b>11</b>
4.1 Strategic planning	11
4.2 Statutory planning	11
<b>5.0 Potential environmental issues</b>	<b>13</b>
5.1 Built form and streetscape	13
5.2 Heritage and design	13
5.3 Transport, traffic and parking	13
5.4 Landscape design and tree retention/removal	13
5.5 Residential amenity for adjoining residents	13
5.6 Drainage and stormwater	14
5.7 Construction impacts	14
5.8 Utilities and Infrastructure	14
5.9 Social and economic benefits	14
5.10 BCA and accessibility	14
5.11 ESD	14
5.12 Development contributions	14
5.13 Consultation	14
<b>6.0 Conclusion</b>	<b>15</b>

## Figures

1	Site location	4
2	Aerial photograph of the site	4
3	Approved/commenced Indoor Sports Complex elevations (DA 258/89)	5
4	Aerial perspective of St Catherine's School at competition of the Master Plan (Source: Mayoh Architects)	7
5	Aerial Perspective of RPAC on Macpherson Street frontage (Source: Mayoh Architects)	8
6	View of RPAC theatre foyer and research centre from lower playground (Source: Mayoh Architects)	8

## Tables

1	Project team and scope of work	2
2	GFA comparison	9

## Appendices

A	Quantity Surveyor's Report, by Altus Page Kirkland
B	Site Survey, by Chase Burke Harvey (dated May 2012)
C	Heritage Impact Assessment, by NBR+S
D	Parking Accumulation Surveys On-Street and Utilisation Of Drop-Off And Pick-Up Zones During Peak School Arrival and Departure Periods, by Lyle Marshall & Associates Pty Ltd
E	Tree Assessment, by Earthscape Horticultural Services

## 1.0 Introduction

### 1.1 Overview

In accordance with Schedule 2 (clause 3) of the *Environmental Planning and Assessment Regulation 2000 (EP&A Regulation)* and Schedule 1 (clause 15) of *State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)*, St Catherine's School requests the issue of Director-General's Requirements (**DGRs**) for the following proposal on its campus at 26 Albion Street, Waverley:

1. Stage 1 Concept Approval for a Campus Master Plan
2. Stage 2 Detailed Design Approval for a New Research, Performing Arts and Aquatic Centre (**RPAC**) (Stages 1A and 1B of the Campus Master Plan).

The Campus Master Plan and RPAC development are illustrated in the separate volume of plans and information prepared by Mayoh Architects.

The proposal is a State Significant Development (**SSD**) as the Capital Investment Value (**CIV**) as the threshold for education facilities is \$30 million and the CIV of the proposal is:

- \$60,288,000 for the Campus Master Plan
- \$36,646,944 for the RPAC

as shown in the Quantity Surveyor's Report, by Altus Page Kirkland (**Appendix A**).

This report has been prepared by Robinson Urban Planning Pty Ltd.

### 1.2 Background

St Catherine's School is a Kindergarten to Year 12 day and boarding school. It is both the oldest Anglican girls' school and the oldest independent girls' school in Australia. Established in March 1856, the school has occupied its current site in Waverley since 1859.

Earlier this year, the school commissioned Mayoh Architects to prepare a Campus Master Plan for the entire site and detailed plans for the RPAC.

Consultation with Waverley Council is underway. St Catherine's lodged a formal pre-lodgement meeting request on 19 November 2013 and it is hoped that Council will schedule a meeting early in 2014. The school has also commenced a consultation program with the local and school community, including a community information session held on 12 December 2013.

### 1.3 Project need

St Catherine's School has identified the following objectives for the Campus Master Plan:

- Provide state-of-the-art facilities which complement St. Catherine's commitment to providing broad, challenging and vibrant education within a nurturing environment
- Enhance the current educational curriculum for Sport/PDHPE by introducing an Aquatic Centre in place of the existing, aged outdoor pool
- Enhance the current educational curriculum for Performing Arts by providing a new state-of-the-art professional grade lyric theatre which addresses the constraints of the existing "play-box theatre" within the Dame Joan Sutherland Centre (ie. small spectator gallery, insufficient back-of-house facilities, inadequate size to accommodate school performances etc)
- Introduce a new Research Centre which reflects a contemporary world-leading teaching and learning environment for staff and K-12 students, equipped with a broad variety of leading-edge and learning based technology within a diverse range of learning environments
- Ensure an efficient, adaptive reuse of residual spaces created by the development of new facilities to create a variety of education based precincts throughout the school campus

- Create new Junior and Senior School entries off Albion St. and Leichhardt St. respectively, which are sympathetic to existing traffic conditions and provide a safe, accessible pedestrian link between Albion St. and Leichhardt St. for the school community
- Create a new, safe formal school entry from Macpherson Street directly to the Administration Building via the Museum, separating vehicle entry from pedestrian entry whilst emphasising the significance of the school's heritage
- Minimise dependency on external facilities to support the educational curriculum, as well as co-curricular and extracurricular activities offered by St. Catherine's School to the school community.

#### 1.4 Project team

**Table 1** sets out the project team and summarises each consultant's scope of work for the EIS.

**Table 1 – Project team and scope of work**

Discipline	Consultant	Scope of work for the EIS
Project Manager	Sandrick Project Directions	Assist the project team through the Campus Master Plan and RPAC.
Project Architect	P.D. Mayoh	Prepare Campus Master Plan to reflect the school's long term objectives and detailed plans for the RPAC.
Town Planner	Robinson Urban Planning	Prepare and submit a EIS for the Campus Master Plan and RPAC.
Landscape Architect	To be confirmed	
Acoustic Consultant	To be confirmed	
Land Surveyor	Chase Burke & Harvey	Survey Plan.
Quantity Surveyor	Altus Page Kirkland	Cost Estimate for the school's Campus Master Plan and RPAC.
Arboricultural Consultant	Earthscape Horticultural Services	Prepare a Preliminary Tree Assessment on all trees within or immediately adjacent the RPAC and prepare a plan showing the Retention Values and Tree Protection Zones for each tree.
Geotechnical Consultant	Jeffrey & Katauskas	Prepare a Geotechnical Report identifying the subsurface conditions of the RPAC site providing recommendations on geotechnical aspects of civil and structural design.
Heritage Consultant	NBRS + Partners	Prepare a Heritage Report identifying heritage issues associated with Campus Master Plan and RPAC.
Traffic Consultant	Lyle Marshall & Associates	Prepare a Traffic Report identifying the existing traffic congestion and parking accumulation conditions surrounding St Catherine's School. Assess impacts of the Campus Master Plan and RPAC.
Structural Engineer	Cardno	Provide early structural engineering advice for RPAC.
Mechanical Engineer	ARUP	Provide early mechanical engineering advice for RPAC.
Aquatic Engineer	Collingridge & Associates	Early aquatic engineering advice for the RPAC.
Electrical Engineer	Shelmerdines Consulting Engineers	Provide an estimate of the power load requirements of the RPAC and investigate the available power capacity.

## 2.0 Site location and description

The key characteristics of the site are summarised below:

Location	St Catherine's School, at 26 Albion Street, Waverley is located on the north-eastern corner of Albion Street and Macpherson Streets. The school also has frontage to Leichhardt Street and Leichhardt Lane ( <b>Figures 1 and 2</b> ).
Legal description	<p>Lot 1 DP 77895</p> <p>Lot 12 DP 2049</p> <p>Lot 13 DP 2049</p> <p>Lot 560 DP 1138118</p> <p>Lot 10 DP 80046</p> <p>Lot 1 DP 80046</p> <p>Lots A, B &amp; C DP 318719</p> <p>Lot 16 DP 2049</p> <p>Lot 117 DP 161589</p> <p>(See Site Survey, <b>Appendix B</b>)</p>
Site area	22,327m <sup>2</sup>
Zoning	Zone SP2 Infrastructure (Educational Establishment), pursuant to Waverley Local Environmental Plan 2012 ( <b>WLEP 2012</b> ).
Heritage	The site is a heritage item and is located in a heritage conservation area pursuant to WLEP 2012.
Approved/commenced development consent	<p>Development Application (<b>DA</b>) No. 258/89 was approved by the Land and Environment Court on 10 April 1992 (Proceedings No. 10342 of 1991). The consent comprises a Performing Arts Centre and Indoor Sports Complex along the St Catherine's School's frontage to Macpherson Street. The Performing Arts Centre was completed in 1994 and is known as the Dame Joan Sutherland Centre. This constituted physical commencement of DA 258/89.</p> <p>The approved Indoor Sports Complex, which occupies the footprint of the now proposed RPAC, was not constructed. It accommodated an indoor swimming pool, a gymnasium and ancillary facilities. At Macpherson Street, the approved Indoor Sports Complex presents a three storey form and a height of around 15m.</p> <p><b>Figure 3</b> illustrates the approved/commenced elevations of the Indoor Sports Complex (south, east and west). The approved/commenced envelope is also shown on the Master Plan elevations prepared by Mayoh Architects.</p>





Figure 1 – Site location



Figure 2 – Aerial photograph of the site

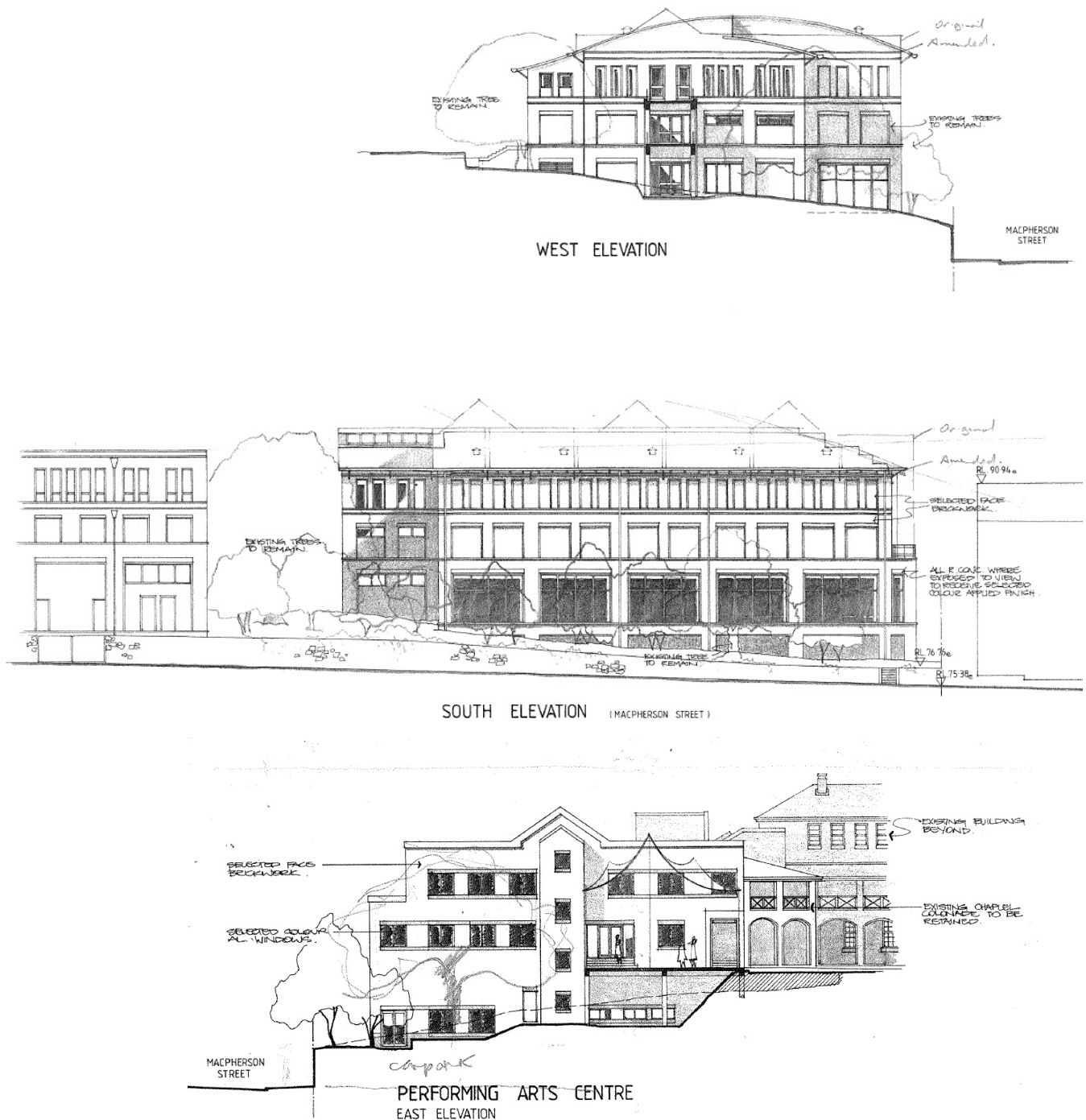


Figure 3 – Approved/commenced Indoor Sports Complex elevations (DA 258/89)



### 3.0 The proposal

#### 3.1 Overview

The proposed SSD comprises the following:

**1. Stage 1 Concept Approval for a Campus Master Plan that comprises:**

- (a) Demolition of Jane Barker Hall, existing swimming pool, change rooms and other minor demolition works throughout the site
- (b) Master Plan building envelopes to accommodate:
  - (i) A total site gross floor area (**GFA**) of 22,982m<sup>2</sup> which equates to a floor space ratio (**FSR**) of 1:1 (the existing/approved/commenced GFA on the site is 20,122m<sup>2</sup> which equates to a FSR of 0.9:1)
  - (ii) A total of 66 car spaces (a net increase of 11 car spaces)
  - (iii) New buildings, alterations and additions comprising:
    - New Research, Performing Arts and Aquatic Centre (**RPAC**) forming Stage 1 of the Campus Master Plan (to be completed in two stages : Stage 1A and Stage 1B)
    - Creation of educational based precincts throughout the site
    - New three storey building on the former Jane Barker Hall footprint
    - Infill of the undercroft beneath the Boarding House
    - New entry points, circulation networks, wet weather and disabled access arrangements.
- (c) Tree removal and landscape master plan.

The Campus Master Plan is illustrated and explained in the *St Catherine's School Waverley Masterplan* (November 2013) and *Gross Floor Space Calculation*, by Mayoh Architects (separate cover).

**2. Stage 2 detailed design approval for RPAC (Stages 1A and 1B) which comprises:**

- (a) Demolition of the existing swimming pool, change rooms, portable class room
- (b) Tree removal
- (c) Construction of RPAC in the location of existing swimming pool and the approved commenced Indoor Sports Complex (DA 258/89) to include basement car parking, an aquatic centre with associated amenities, multi-purpose hall, 500 seat lyric theatre with associated amenities and research centre
- (d) Landscaping of the site.

The detailed design proposal is illustrated on Architectural Drawings A.001, A.002, A.090, A.100-106, A.150, A.151, A.160, A.161 and A. 200, by Mayoh Architects (separate cover).

**Figure 4** shows an aerial perspective of the site after completion of the Master Plan.

**Figures 5 and 6** show perspective sketches of the RPAC as viewed from Macpherson Street and the lower playground.



**Figure 4 –** Aerial perspective of St Catherine's School at competition of the Master Plan (Source: Mayoh Architects)



Figure 5 – Aerial Perspective of RPAC on Macpherson Street frontage (Source: Mayoh Architects)



Figure 6 – View of RPAC theatre foyer and research centre from lower playground (Source: Mayoh Architects)

### 3.2 Gross floor area and floor space ratio

**Table 1** summarises the existing, permitted, approved/commenced and proposed GFA<sup>1</sup> and FSR based upon the *Gross Floor Space Calculation*, by Mayoh Architects. It shows that at completion of the Campus Master Plan, the site will accommodate a GFA of 22,982m<sup>2</sup> and a FSR of 1:1. Compared with the existing/approved development on the site, this equates to an additional GFA of 2,860m<sup>2</sup> (or 14%).

**Table 2 – GFA comparison**

	GFA (m <sup>2</sup> )	FSR
FSR standard, WLEP 2012	13,396	0.6:1
Existing	17,757	0.8:1
Existing + approved/commenced Indoor Sports Complex (DA 258/89)	20,122	0.9:1
Existing + proposed RPAC	22,988	1:1
<b>Existing + proposed Master Plan</b>	<b>22,982</b>	<b>1:1</b>

### 3.3 Height

The tallest building in the Campus Master Plan is the proposed RPAC which has the following *building height*<sup>2</sup>:

- Macpherson Street 14-16m
- Plant room 15.4 – 18.8m
- Fly gallery 16.9-20.6m

<sup>1</sup> Pursuant to WLEP 2012:

**gross floor area** means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:

- (a) the area of a mezzanine, and
  - (b) habitable rooms in a basement or an attic, and
  - (c) any shop, auditorium, cinema, and the like, in a basement or attic,
- but excludes:
- (d) any area for common vertical circulation, such as lifts and stairs, and
  - (e) any basement:

- (i) storage, and
- (ii) vehicular access, loading areas, garbage and services, and
- (f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
- (g) car parking to meet any requirements of the consent authority (including access to that car parking), and
- (h) any space used for the loading or unloading of goods (including access to it), and
- (i) terraces and balconies with outer walls less than 1.4 metres high, and
- (j) voids above a floor at the level of a storey or storey above.

<sup>2</sup> Pursuant to WLEP 2012:

**building height (or height of building)** means the vertical distance between ground level (existing) and the highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

**ground level (existing)** means the existing level of a site at any point.

### 3.4 Population

St Catherine's School has an 2014 enrolment of 995 students, with 202 employees (including 175 full time and 27 part time employees). The Campus Master Plan will provide the potential for up to:

- 205 additional students to be introduced progressively over a 15 year period (ie. total 1,200)
- 10 additional employees (approximately).

### 3.5 Pedestrian access

St Catherine's School currently has numerous pedestrian entries, but there is no clear hierarchy or function of access points. The campus master plan preserves and improves the pedestrian environment on the site by improving the clarity and function of the following key pedestrian access points:

- New formal school entry from Macpherson Street
- New performing arts and sports centre entry from Macpherson Street
- Junior School entry from Leichhardt Street with a major internal student link to the Senior School entry from Albion Street.

Other secondary entries will be retained or consolidated with proposed entries (for example the pedestrian entry to the Dame Joan Sutherland Centre will be consolidated with the new performing arts and sports centre entry from Macpherson Street).

Lifts are included in the RPAC and future new building on the Jane Barker Hall site to facilitate accessibility throughout the site.



## 4.0 Planning context

### 4.1 Strategic planning

The following strategic plans and studies are relevant to the proposal and the consistency of the proposal will be addressed in the EIS:

- NSW 2021 State Plan
- Draft Metropolitan Strategy for Sydney to 2031
- Metropolitan Plan for Sydney 2036
- Draft East Subregional Strategy

### 4.2 Statutory planning

#### 4.2.1 Environmental Planning and Assessment Act, 1979

The *Environmental Planning and Assessment Act, 1979 (EP&A Act)* establishes the assessment framework for SSD. Under s89D of the EP&A Act, the Minister for Planning is the consent authority for SSD. Section 78A (8A) requires that a DA for SSD is to be accompanied by an EIS.

The applicant intends to seek staged consent for the Campus Master Plan (building envelopes, GFA, population, parking spaces, access arrangements etc) and the detailed design of the RPAC. Future DAs will be lodged for the detailed design of subsequent stages. Section 83B of the EP&A Act sets out the requirements for a staged DA.

#### 4.2.2 State Environmental Planning Policy (State and Regional Development) 2011

The SRD SEPP identifies development which is declared to be State Significant. Clause 15 of Schedule 1 specifies the following as SSD:

*Development for the purposes of educational establishments (including associated research facilities) that has a capital investment value of more than \$30 million.*

As proposal comprises educational facilities with an estimated CIV of \$60,288,000 for the Master Plan and \$36,646,944 for the RPAC, it would be considered SSD (see attached cost estimate by Altus Page Kirkland, **Appendix A**).

#### 4.2.3 State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

Pursuant to *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (ECDC SEPP)* (Requirements for complying development for all environmental planning instruments), the proposal cannot be carried out as complying development as St Catherine's School is an item of environmental heritage.

#### 4.2.4 State Environmental Planning Policy (Infrastructure) 2007

Clause 32 of *State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)* specifies relevant standards that apply to DAs for school development, noting that the specified standards prevail if there is an inconsistency with the provision of a development control plan.

#### **32 Determination of development applications**

- (1) *(Repealed)*
- (2) *Before determining a development application for development for the purposes of a school, the consent authority must take into consideration all relevant standards in the following State government publications (as in force on the commencement of this Policy):*
  - (a) *School Facilities Standards—Landscape Standard—Version 22 (March 2002),*
  - (b) *Schools Facilities Standards—Design Standard (Version 1/09/2006),*
  - (c) *Schools Facilities Standards—Specification Standard (Version 01/11/2008).*

- (3) *If there is an inconsistency between a standard referred to in subclause (2) and a provision of a development control plan, the standard prevails to the extent of the inconsistency.*

...

Given the number of additional students, clause 104 of the Infrastructure SEPP (traffic generating developments) is also likely to be relevant to the proposal, necessitating referral to Roads and Maritime Services (**RMS**).

#### 4.2.5 Waverley Local Environmental Plan 2012

WLEP 2012 is the principal environmental planning instrument applying to the site. It sets out the following key provisions:

- **Zone** The site is in Zone SP2 Infrastructure (Educational Facilities). The proposal is permissible with consent.
- **Heritage** The site is a local heritage item (I444 and I521) and is within the Charing Cross Conservation Area (C7). A Heritage Impact Assessment has been prepared by NBR+S (see attached).
- **Height** The site is subject to a 9.5m height of buildings standard (architectural roof features may exceed the height standard). With a maximum height of 20.6m, the proposed RPAC exceeds the height standard. The EIS will address this non-compliance, considering in detail the shadow, privacy, streetscape and view/outlook impacts of the building and comparing the proposed built form with the approved/commenced Indoor Sports Complex.
- **FSR** The site is subject to a 0.6:1 FSR standard. The existing and proposed development on the site exceed the FSR standard (1:1 at completion of the Campus Master Plan). The EIS will address this non-compliance, noting that the proposed FSR is commensurate with other schools in Sydney's East.

#### 4.2.6 Waverley Development Control Plan 2012

Waverley Development Control Plan 2012 (**WDCP 2012**) does not include specific provisions relevant to schools.

## 5.0 Potential environmental issues

### 5.1 Built form and streetscape

The EIS will address the height, density, bulk and scale of the proposed development within the context of the locality and will demonstrate the proposal integrates with the local environment, and that the form, layout and siting of the building achieves optimal design and amenity outcomes.

### 5.2 Heritage and design

NBR+S has prepared a Heritage Impact Assessment (**Appendix C**).

Mayoh Architect has extensive expertise in heritage and the design of education facilities. Proposed new buildings on the site will be sited and designed to respect the curtilage and outlook significant heritage buildings on the site.

### 5.3 Transport, traffic and parking

Lyle Marshall & Associates Pty Ltd has completed a report titled *Parking Accumulation Surveys On-Street and Utilisation Of Drop-Off And Pick-Up Zones During Peak School Arrival and Departure Periods* (**Appendix D**). The report assesses existing parking conditions, the morning drop-off and afternoon pick-up arrangements, then makes management recommendations on that would improve traffic conditions around the site. A full Traffic Study will accompany the EIS addressing the following matters:

- Recommendation of the Lyle Marshall & Associates Pty Ltd findings in relation to pick-ups and drop-offs
- Existing traffic and parking conditions surrounding the site
- Suitability of the proposed parking in terms of supply and layout
- Pedestrian, bicycle and loading requirements
- Potential traffic generating and mitigating characteristics of the proposal
- Suitability of the proposed access arrangements
- Transport impact of the proposal
- Green Travel Plan.

### 5.4 Landscape design and tree retention/removal

Earthscape Horticultural Services has assessed the significance of trees in the vicinity of the RPAC proposal (**Appendix E**). A complete arborist report will be included in the EIS.

A detailed landscape plan will be prepared for the RPAC proposal, including tree replacement proposals.

### 5.5 Residential amenity for adjoining residents

The EIS will include detailed assessments in relation to the following potential residential amenity impacts:

- Views/outlook
- Privacy
- Noise from plant and activities in the RPAC
- Solar access
- Hours of operation for the RPAC.

### 5.6 Drainage and stormwater

Adequate stormwater management infrastructure will be proposed to address the impact of the new buildings including requirements for infiltration and rainwater capture.

### 5.7 Construction impacts

As relevant to the RPAC development, the EIS will address and consider the construction impacts:

- Noise and vibration
- Soil, groundwater and geotechnical attributes of the site and environs
- Access, parking and traffic
- Stormwater and airborne pollutant control
- Servicing and infrastructure for the development.

### 5.8 Utilities and Infrastructure

The existing buildings on the site are currently serviced with electricity, gas, sewer, water, stormwater and telecommunications. Any potential shortfalls in supply (and required upgrades) will be identified as part of the EIS process.

### 5.9 Social and economic benefits

The Project will have a positive social and economic impact by:

- Improving educational facilities for existing and future St Catherine's School students
- Providing opportunities for use of the RPAC by members of the extended school community
- Providing an additional 205 student places (giving a total of 1,200 students on the site) which will make a meaningful contribution to the Sydney's growing demand for more schools
- Ongoing employment within the school plus construction jobs and expenditure.

### 5.10 BCA and accessibility

All new buildings will be designed to comply with the relevant provisions of the BCA and regulations for impaired access.

### 5.11 ESD

The EIS will explore options for sustainability in the planning, design and management of all new buildings.

### 5.12 Development contributions

Waverley Council Development Contributions Plan 2006 (Amendment No. 1) provides that Council may impose a condition requiring the payment of a 1% levy on the cost of carrying out the development (pursuant to cl.25J of the EP&A Regulation).

### 5.13 Consultation

St Catherine's School (and its project team) is presently consulting Waverley Council and adjoining residents to explain the proposal and seek their views. Relevant utilities providers will be consulted throughout the EIS process.

## 6.0 Conclusion

---

This submission relates to the proposal by St Catherine's School Waverley to lodge a DA seeking Stage 1 Concept Approval for a Campus Master Plan and Stage 2 Detailed Design Approval for a New Research, Performing Arts and Aquatic Centre (**RPAC**) (Stages 1A and 1B of the Campus Master Plan).

The proposal comprises a SSD as described in Schedule 1 of the SRD SEPP.

This submission provides sufficient information to allow the Director General to issue DGRs for the preparation of the necessary EIS.



## **Appendix A**

Quantity Surveyor's Report, by Altus Page Kirkland



## **Appendix B**

Site Survey, by Chase Burke Harvey (dated May 2012)



## **Appendix C**

Heritage Impact Assessment, by NBR+S





## Appendix D

Parking Accumulation Surveys On-Street and Utilisation Of Drop-Off And Pick-Up Zones During Peak School Arrival and Departure Periods, by Lyle Marshall & Associates Pty Ltd



## **Appendix E**

Tree Assessment, by Earthscape Horticultural Services

