State Significant Development

Environmental Impact Statement

O'Connell Street Primary School

Old Kings School Site - 24A O'Connell Street, Parramatta

Submitted to Department of Planning and Environment
On Behalf of NSW Department of Education

June 2016 ▪ 15456

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This report has been prepared by:

Chris Ferriera 15/06/2016

This report has been reviewed by:

Kate Tudehope 15/06/2016

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Submitted Under Separate Cover

Submitted on Separate CD

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Development Application Details

Applicant name	Department of Education
Applicant address	Level 4, 35 Bridge Street, Sydney NSW 2000

Land to be developed

Address	Legal Description
3 Marist Place	Lot 1 / DP 1112822
24A O'Connell Street	Lot 6 / DP 1182647

Proposed development	Adaptive reuse of existing buildings, and construction of new hall to accommodate a new primary school as described in Section 3.0 of this Environmental Impact Statement

Prepared by

Name	Kate Tudehope
Qualifications	BPlan MPIA
Address	Level 7, 77 Berry Street, North Sydney
In respect of	State Significant Development – Development Application

Certification

I certify that I have reviewed the content of this EIS and to the best of my knowledge:

it is in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*;

all available information that is relevant to the environmental assessment of the development to which the statement relates; and

the information contained in the statement is neither false nor misleading.

Signature

Name	Kate Tudehope
Date	15/06/2016

Executive Summary

Purpose of this Report

This submission to the Department of Planning and Environment (the Department) comprises an Environmental Impact Statement (EIS) for a Development Application under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP& A Act). It relates to the adaptive reuse of the Old Kings School Site for a new public primary school, which will be referred to as the O'Connell Street Primary School. The proposal involves minor demolition works, the reuse of existing buildings, construction of a new school hall and covered outdoor learning area (COLA) and landscaping works.

The proposed development has a Capital Investment Value (CIV) of over $30 million and is therefore classified as State Significant Development (SSD) pursuant to Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* (SEPP SRD).

A request for the issue of Secretary's Environmental Assessment Requirements (SEARs) was sought on 9 November 2015. Accordingly, the SEARs were issued on 30 November 2015. This submission is in accordance with the Department's guidelines for SSD applications lodged under Part 4 of the EP&A Act, and addresses the issues raised in the SEARs.

Overview of the Project

This application seeks approval for:

- Demolition of various internal building elements and ground floor slabs of Buildings E, F and H;
- Use of the site as a primary school for approximately 1,000 students, including before and after school care functions;
- Refurbishment of Building A to accommodate administration and office spaces;
- Refurbishment of Building B to accommodate a new library / resource centre and 'home base' classrooms;
- Refurbishment of Building C to accommodate staff areas, a canteen, 'home base' classrooms and common learning areas;
- Refurbishment of Building D to accommodate 'home base' classrooms and practical activities spaces; and
- Construction of a new hall (to be made available for community uses outside of school hours) and a Covered Outdoor Learning Area (COLA).

In addition to the works described above, the development will also include:

- Services upgrades;
- A bus pick-up and drop-off area on Marist Place;
- A kiss and drop area on Marist Place and Market Street;
- Reconfiguration of existing parking areas off O'Connell Street and Marist Place;
- Category 1 remediation works including removal of the existing Underground Storage Tank;
- Construction of new security fencing, including a fence along the oval; and
- Tree removal and new landscaping to accommodate passive and active recreation spaces, including covered outdoor play and learning areas.

The Site

The O'Connell Street Primary School is located in the Parramatta Local Government Area (LGA) on the northern edge of the Parramatta CBD. The site is located approximately 920m north-west of Parramatta Station.

The proposed school campus extends over two (2) lots, with a total landholding of approximately 2.47 hectares. The proposal relates to the land at 3 Marist Place and 24A O'Connell Street, Parramatta.

Planning Context

Section 6 of the EIS considers all applicable legislation in detail. The proposal is consistent with the requirements of all relevant SEPPs. The site is zoned B4 Mixed Use. The proposal is permissible with consent and meets the objectives of the subject zone. The proposal complies with the height and floor space ratio (FSR) standards applicable to the site.

Environmental Impacts and Mitigation Measures

This EIS provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by the Department of Education to manage and minimise potential impacts arising from the development.

Consultation

Section 4 of the EIS details the consultation that has been undertaken with the various project stakeholders including Parramatta City Council, RMS, Transport for NSW, the NSW Heritage Council, the NSW State Aboriginal Land Council and the general public. The outcomes of the consultation process have been considered in the design of the proposal. Consultation around some aspects of the proposal, including the fence to the south of the oval and community use of school facilities, are the subject of ongoing discussions with the relevant stakeholders.

Conclusion and Justification

The EIS addresses the SEARs, and the proposal provides significant benefits for the community and the conservation of the site's heritage significance. The potential impacts of the development are acceptable and are able to be managed. Given the planning merits of the proposal, the development warrants approval by the Minister for Planning and Environment, or his delegate.

1.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the Department of Planning and Environment pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in support of an application for State Significant Development (SSD).

Development for an educational establishment with a capital investment value of more than $30 million is identified in Schedule 1 of *State Environmental Planning Policy State and Regional Development) 2011* (SEPP SRD) and is therefore declared to be SSD for the purposes of the EP&A Act.

The EIS has been prepared by JBA on behalf of NSW Department of Education, and is based on the Architectural Drawings provided by Tonkin Zulaikha Greer (see **Appendix A**) and other supporting technical information appended to the report (see Table of Contents).

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), and the SEARs for the preparation of the EIS, which are included at **Appendix B**. This EIS should be read in conjunction with the supporting information and plans appended to and accompanying this report.

1.1 Objectives and Overview of Proposed Development

The NSW Department of Education has identified the need to reuse this unique heritage site as a new primary school. The proposed school will greatly assist in meeting the anticipated growth and future demand for education facilities in the region. The new facilities will incorporate future focused, flexible teaching spaces. The key objectives of the proposed scheme are to:

- Provide a high-quality and safe environment for children;
- Facilitate the adaptive and sensitive reuse of the existing site with a focus on the retention of built and landscape elements of exceptional and high heritage significance; and
- Retain and consolidate the existing layout of historic buildings and the relationship of open and built spaces.

Consistent with these objectives, this SSD DA seeks approval for the following development:

- Demolition of various internal building elements and ground floor slabs;
- Use of the site as a primary school for approximately 1,000 students, including before and after school care functions;
- Refurbishment of Building A to accommodate administration and office spaces;
- Refurbishment of Building B to accommodate a new library / resource centre and 'home base' classrooms;
- Refurbishment of Building C to accommodate staff areas, a canteen, 'home base' classrooms and common learning areas;
- Refurbishment of Building D to accommodate 'home base' classrooms and practical activities spaces; and
- Construction of a new hall and a Covered Outdoor Learning Area (COLA).

In addition to the works described above, the development will also include:

- Services upgrades;
- A bus pick-up and drop-off area on Marist Place;
- A kiss and drop area on Marist Place and Market Street;
- Reconfiguration of existing parking areas off O'Connell Street and Marist Place;
- Category 1 remediation works including removal of the existing Underground Storage Tank;
- Construction of new security fencing, including a fence along the oval; and
- Tree removal and new landscaping to accommodate passive and active recreation spaces, including covered outdoor play and learning areas.

1.2 Background to the Development

Parramatta is a significant growth area, and it is anticipated that the number of dwellings in the CBD, Parramatta North and Westmead will continue to increase in the near future, putting pressure on existing schools which are already at capacity. To meet this demand, the Department of Education is seeking to develop a new primary school on the Old Kings School site with capacity for approximately 1,000 students.

The Kings School was the first large public boarding school (secondary) to be established in the colony of NSW, and developed to become one of Australia's notable private schools. The proposed development seeks to re-establish the site's original use as an educational establishment.

The first of the current Kings School buildings was built in 1834, when the site was formally donated to the Kings School by the Agricultural and Horticultural Society who operated a nursery on the site. Development of the site continued until the late 1930s, and the School continued to occupy the site until 1964 when it was sold to the NSW Department of Health.

The site was then used as a training and rehabilitation centre, known as Marsden Rehabilitation Centre. The centre gradually reduced in scope and capacity, until the Centre closed in 2002.

In 2003, the original main Building (Building B) and headmaster's residence (Building A) were conserved and refurbished for use as offices for the NSW Heritage Branch, and rented commercial offices, respectively.

The northern portion of the Kings School site was recently sold to the Catholic Church and now forms part of the adjacent St Patrick's Cathedral site. In November 2015, the Sydney West Joint Regional Planning Panel (JRPP) approved a Development Application for demolition, tree removal and construction of an office building, Chancery building and a Parish Hall and associated basement parking on this site. The approval also gives consent for the construction of a part 5 / part 6 storey residential flat building, comprising 77 units with two levels of basement parking on the site.

1.2.1 Early Works DA

The site is the subject of an early works DA which is currently under assessment by Parramatta City Council (DA/81/2016). A copy of the DA package is provided under separate cover. The application was lodged with Council on 9 February 2016, and seeks approval for above-ground demolition and removal of some hazardous materials. Council's assessment of the application is now nearing completion, with determination expected imminently.
The objectives of the early works DA are to:

- Allow commencement of demolition and the removal of some hazardous materials from the existing buildings, as far as practicable, in order to expedite the future redevelopment process and ensure that the site is safe for its future reuse;
- Ensure that the site is readily available for the redevelopment proposed in the future; and
- To assist in meeting the vision and commitment of the NSW Government to re-establish a much needed primary school facility on this site.

Consistent with these objectives, the early works DA sought approval for:

- Some hazardous materials removal for Buildings A, B, C, D, E, F, G and H;
- Removal of existing exposed redundant services in Buildings A, B, C, D, E and F, including hydraulic/fire services, electrical services isolated and disconnected, decommissioning and removal of redundant mechanical services and decommissioning of an existing dumbwaiter;
- Partial demolition of Building C in the courtyard (to slab level), including the removal of internal elements, ceilings and non-structural walls from certain areas of the Building C Group;
- Demolition of Building E, being the former boiler house (to slab level);
- Demolition of Building F, being the former school dormitory and gym (to slab level); and
- Demolition of Building H (to slab level).

Due to the imminent determination of this application, this EIS assumes that the early works DA has been approved, and that the works have been carried out.

It is noted that the early works DA does not include any ground disturbance, with no remediation works, investigations, excavation works, tree removal or landscape works proposed to be carried out. As a result, slab removal of the demolished buildings is included as part of this SSD application, and so an assessment has been provided of any impacts associated with the proposed ground disturbance.

1.3 Analysis of Alternatives

Strategic need for the Proposal

The site is in need of redevelopment in order to capitalise on infrastructure which is currently unused, and to address the demand for education facilities in the Sydney metropolitan region. The new development will constitute the adaptive reuse of the Old Kings School site and provide education facilities in line with the vision of the NSW Department of Education.

Alternative Options

Three options are available to the Department of Education in responding to the identified need for the redevelopment of their facilities.

Option 1 – The Proposal

Option 1 involves undertaking the proposed redevelopment as outlined in this SSD DA (as described in **Section 3.0**). The proposal will ensure that a high quality educational facility is provided on the site that responds to the strategic need identified above, whilst conserving the site's heritage significance.

Option 2 – Do Nothing

Under the 'do nothing' scenario the Old Kings School site would remain unused and derelict and would continue to fall into disrepair. This would result in an

underutilised site which would not contribute to the demand for educational facilities in the region, or the conservation of the site's heritage significance.

Option 3 – Alternative Designs

The Department of Education undertook an analysis of the options available in responding to the need for a new facility on the site including consideration of the site constraints and the planning regime. The proposed redevelopment has been the subject of a robust design process aimed at creating a facility that meets its functional educational needs and recognises and responds to the context of the school site and its heritage values.

1.4 Secretary's Requirements

In accordance with Section 89G of the EP&A Act, the Secretary of the Department of Planning and Environment issued the requirements for the preparation of the EIS on 30 November 2015. A copy of the Secretary's Environmental Assessment Requirements (SEARs) is included at **Appendix B**.

Table 1 provides a detailed summary of the individual matters listed in the SEARs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Table 1 – Secretary's Requirements

Requirement	Location in Environmental Assessment	
General	**Report / EIS**	**Technical Study**
The Environmental Impact Statement (EIS) must be prepared in accordance with, and meet the minimum requirements of clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000 (the Regulation). Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Page i Section 1 Section 7 Section 8	-
Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: ▪ adequate baseline data; ▪ consideration of potential cumulative impacts due to other development in the vicinity (completed, underway or proposed); and ▪ measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	Section 5	
The EIS must be accompanied by a report from a qualified quantity surveyor providing: ▪ a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; ▪ an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and ▪ certification that the information provided is accurate at the date of preparation.	-	Included under separate cover
Key Issues	**Report / EIS**	**Technical Study**
1. Statutory and Strategic Context – including: Address the statutory provisions contained in all relevant environmental planning instruments, including: ▪ State Environmental Planning Policy (State & Regional Development) 2011; ▪ State Environmental Planning Policy (Infrastructure) 2007; ▪ State Environmental Planning Policy No.55 – Remediation of	Section 5.1	EIS

Requirement	Location in Environmental Assessment	
Land; and ▪ Parramatta Local Environmental Plan 2011.		
2. Policies Address the relevant planning provisions, goals and strategic planning objectives in the following: ▪ NSW State Priorities; ▪ A Plan for Growing Sydney; ▪ NSW Long Term Transport Master Plan 2012; ▪ Sydney's Cycling Future 2013; ▪ Sydney's Walking Future 2013; ▪ Healthy Urban Development Checklist, NSW Health; and ▪ Parramatta Development Control Plan (4.3.3.7 City Centre Special Areas C) Park Edge).	Section 5.1	EIS
3. Built Form and Urban Design ▪ Address the height, density, bulk and scale, setbacks of the proposal in relation to the school campus and the surrounding development, topography, streetscape and adjacent riverfront. ▪ Address design quality, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, colours and Crime Prevention Through Environmental Design Principles. ▪ Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	Section 5.2	**Appendix A**
4. Environmental Amenity Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses and open space areas must be demonstrated.	Section 5.4	**Appendix A** **Appendix O**
5. Transport and Accessibility Include a transport and accessibility assessment, which details: ▪ the existing and proposed pedestrian and cycle routes and facilities within the vicinity of the site and to public transport facilities as well as measures to maintain road and personal safety in line with CPTED principles; ▪ an estimate of the total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and cycle trips; ▪ the adequacy of public transport to meet the likely future demand of the proposed development; ▪ impact of the proposed development on existing and future public transport infrastructure within the vicinity of the site; ▪ measures to promote travel choices that support sustainable travel, such as a location-specific sustainable travel plan, provision of end-of-trip facilities, green travel plans and wayfinding strategies; ▪ the daily and peak (AM, PM and events) vehicle movements impact on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for upgrading or road improvement works (if required); ▪ the proposed active transport access arrangements and connections to public transport services; ▪ the proposed access arrangements, including car and bus pickup/ drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and cycle networks; ▪ proposed car and bicycle parking provision, including consideration of the availability of public transport and the requirements of the relevant parking codes and Australian Standards; ▪ service vehicle access, delivery and loading arrangements and	Section 5.5	**Appendix P**

Requirement	Location in Environmental Assessment	
estimated service vehicle movements (including vehicle type and the likely arrival and departure times); and ▪ traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking and public transport, including the preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of the impact. ▪ Relevant Policies and Guidelines: – *Guide to Traffic Generating Developments (Roads and Maritime Services)* – *EIS Guidelines – Road and Related Facilities (DoPI)* – *Cycling Aspects of Austroads Guides* – *NSW Planning Guidelines for Walking and Cycling* – *Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development*		
6. Ecologically Sustainable Development (ESD) ▪ Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the design and ongoing operation phases of the development. ▪ Demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice. ▪ Include a description of the measures that would be implemented to minimise consumption of resources, water (including water sensitive urban design) and energy.	Section 5.15	**Appendix N**
7. Heritage ▪ Include a Heritage Impact Assessment (HIA), prepared by a suitably qualified and experienced heritage consultant, that addresses: – impacts of the proposal on the heritage significance of former Kings School Group (SHR 00771) and its later function as the Marsden Rehabilitation Centre (SHR 00826) and Parramatta Park & Old Government House (SHR 1547); – compliance with the endorsed Former Kings School/Marsden Rehabilitation Centre Conservation Management Plan and Archaeological Assessment (GML Heritage, 2004 and 2005); – comments provided by the Heritage Council at its meeting on 4 November 2015; and – any impacts to key views to and from heritage items in the vicinity (incl. conservation areas), and wider heritage impacts to the area surrounding the site, by way of a Visual Impact Assessment. ▪ Provide an historical archaeological assessment prepared by a suitably qualified and experienced historical archaeologist. The assessment should identify the location and significance of any relics and associated deposits within the site, and consider the impacts from the proposal on this potential resource. Where harm is likely to occur, the significance of the relics should be considered in determining an appropriate mitigation strategy.	Section 5.6	**Appendix D** **Appendix E** **Appendix F**
8. Aboriginal Heritage Where relevant, the EIS shall identify Aboriginal cultural heritage values for the site and address impacts on Aboriginal cultural heritage in accordance with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation 2005 and Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.	Section 5.6	**Appendix E**
9. Biodiversity ▪ Biodiversity impacts related to the proposed development are to be assessed and documented in accordance with the Framework for Biodiversity Assessment (FBA)(OEH 2014), unless otherwise agreed by OEH, by a person accredited in accordance with s142B(1)(c) of the Threatened Species Conservation Act 1995. ▪ Buildings within the subject site may provide roosting or breeding habitat for threatened microchiropteran bats. The EIS therefore	Section 5.8	**Appendix U**

Requirement	Location in Environmental Assessment	
must also identify: – the suite of such species likely to use habitat within the subject site; – methods and results of targeted survey techniques for those species that are likely to occur; and – measures proposed to avoid, minimise and manage any identified direct and indirect impacts.		
10. Noise and Vibration Identify and provide a quantitative assessment of the main noise and vibration generating sources during construction and operation. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. ▪ Relevant Policies and Guidelines: – *NSW Industrial Noise Policy (EPA)* – *Interim Construction Noise Guideline (DECC)* – *Assessing Vibration: A Technical Guideline 2006*	Section 5.3 Section 5.11	**Appendix V**
11. Contamination Demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. ▪ Relevant Policies and Guidelines: – *Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)*	Section 5.9	**Appendix H**
12. Utilities ▪ Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation requirements of the development for the provision of utilities including staging of infrastructure. ▪ Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.	Section 3.10	**Appendix J** **Appendix K** **Appendix L**
13. Contributions Address Council's Section 94A Contribution Plan and/or details of any Voluntary Planning Agreement.	Section 5.16	-
14. Drainage Detail drainage associated with the proposal, including stormwater and drainage infrastructure.	Section 5.10	**Appendix L**
15. Flooding ▪ Assess any flood risk on site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity. ▪ The development should, if practical, have a flood refuge area with a floor level greater than or equal to the Probable Maximum Flood (PMF) flood level and good road access up to the PMF. ▪ Considering is to be given to the vulnerability of students at the site and the potential for the school being used as a flood emergency evacuation centre by the State Emergency Service by ensuring that some of the floors are located above the PMF flood level. ▪ If the flood assessment identifies that the proposed development may be isolated during a flood it should recommend that the school has an Emergency Flood Plan which considers the safety of students, teachers and parents.	Section 5.10	**Appendix Q**
16. Waste Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Section 3.12	**Appendix M**

Requirement	Location in Environmental Assessment	
Plans and Documents	**Report**	**Technical Study**
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following:		
▪ Architectural drawings (dimensioned and including RLs)	**Appendix A**	
▪ Site Survey Plan, showing existing levels, location and height of existing and adjacent structures / buildings and boundaries	**Appendix C**	
▪ Site Analysis Plan	**Appendix A**	
▪ Stormwater Concept Plan	**Appendix L**	
▪ Sediment and Erosion Control Plan	**Appendix W**	
▪ Shadow Diagrams	**Appendix A**	
▪ View Analysis / Photomontages	**Appendix S**	
▪ Landscape Plan (identifying any trees to be removed and trees to be retained or transplanted)	**Appendix I**	
▪ Preliminary Construction Management Plan, inclusive of a Preliminary Construction Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures;	**Appendix V**	
▪ Geotechnical and Structural Report	**Appendix G and Appendix AA**	
▪ Accessibility Report	**Appendix X**	
▪ Arborist Report	**Appendix T**	
▪ Acid Sulphate Soils Management Plan (if required)	-	
▪ Schedule of materials and finishes	**Appendix A**	
Consultation		
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: ▪ Parramatta Council; ▪ Transport for NSW; ▪ Roads and Maritime Services; ▪ Office of Environment and Heritage; and ▪ NSW Heritage Office. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.	Section 4	**-**
Further consultation after 2 years		
If you do not lodge a development application and EIS for the development within two years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.	-	**-**
References		
The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified.	-	**-**

2.0 Site Analysis

2.1 Site Location and Context

The Old Kings School site is located to the north of the Parramatta River, on the northern outskirts of the Parramatta CBD. The site is bounded by O'Connell Street to the west and Marist Place to the east. To the north of the site lies the St Patrick's Cathedral site (subject to a DA for mixed use development). To the south, the site adjoins the Parramatta River, although it is outside of the land zoned RE1 Public Recreation. The site is located approximately 920m north-west of Parramatta Station.

The site's locational context is shown at **Figure 1**.

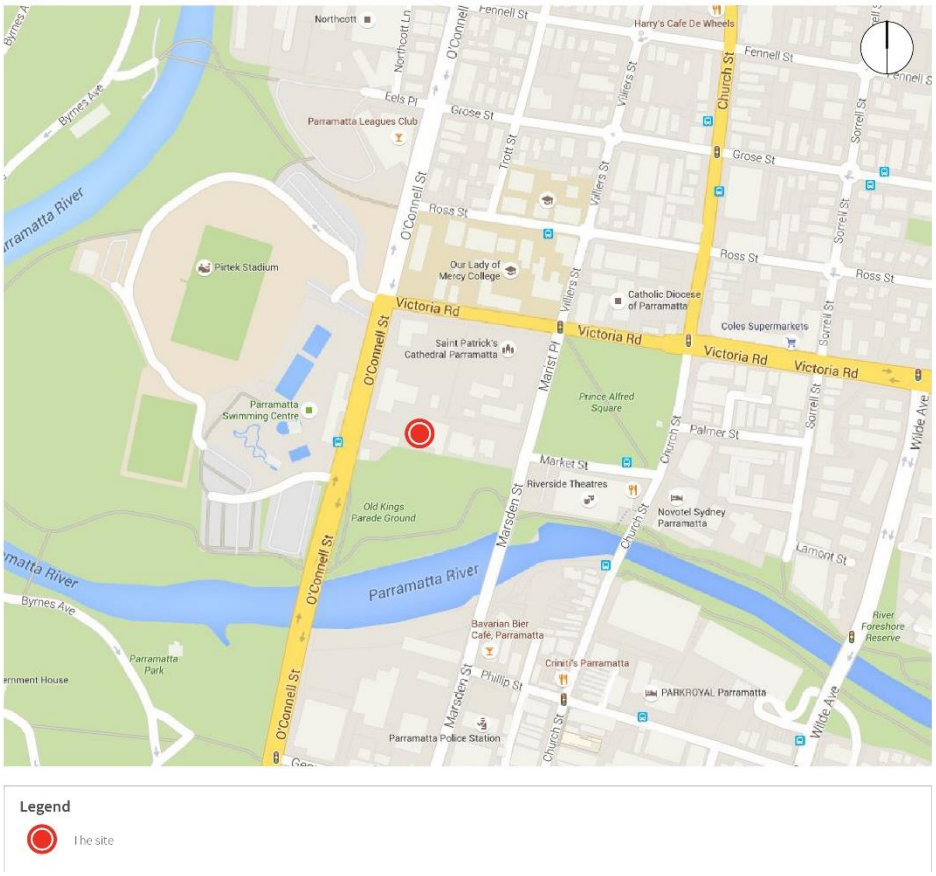

Figure 1 – Context Plan
Source: Google Maps

2.2 Land Ownership

The development site comprises two (2) lots with a combined area of 2.47 hectares. A legal description of the land is provided in **Table 2**. The land is owned by the NSW Department of Education.

A Survey Plan prepared by Rygate & Company Pty Ltd is located at **Appendix C**. An aerial photo of the site is provided in **Figure 2**.

Table 2 – Legal description

Address	Legal Description
3 Marist Place	Lot 1 / DP 1112822
24A O'Connell Street	Lot 6 / DP 1182647

Figure 2 – Aerial Photograph
Source: Nearmap

2.3 Site Description

2.3.1 Existing Development and Heritage Significance

The site is listed on the State Heritage Register and Section 170 Register under both its original function (former Kings School Group, SHR 00771) and its later function as the Marsden Rehabilitation Centre (SHR 00826). Further, the site is listed as the 'Marsden Rehabilitation Centre and Potential Archaeological Site' under *Parramatta Local Environmental Plan 2011* (LEP 2011). The site's archaeological significance is discussed in **Section 2.3.2**.

Following the demolition of three buildings (Buildings E, F and H) as part of the early works DA, the site contains five buildings dating from 1836 to 1934, most of which have been unoccupied for a number of years, and are in a state of disrepair. The buildings range in height from 10.40m to 18.70m, and are all located in the northern part of the site as shown in **Figure 3**.

The site also contains some highly significant landscape elements such as a large oval to the south which fronts the Parramatta River, and several trees of heritage significance. In addition, there are two areas of at-grade parking on the site, including a formal area on the site's eastern boundary and an informal parking area on the site's western boundary.

The buildings, and their level of significance, are described below and in **Figure 3**.

- **Building A (very high significance):** The former Headmaster's residence was originally a one-storey dwelling built in 1836. A second storey was constructed with an encircling two-storey verandah in 1889. Until recently, the building has been used as a commercial office.
- **Building B (very high significance):** Building B1 was the original King's School building dating from 1836, with a Greek Doric style portico. An additional stone storey was added to the building in 1925. Building B2 comprises a verandah, variously enclosed, that was added to the original school building in 1924. The building has recently been vacated, following its use as a commercial office by the NSW Heritage Branch.
- **Building C Group (high significance):** The main wings of the Building C group were constructed in various stages over the period 1900 – 1923 and gradually enclosed a courtyard space. The wings of the Building C group are interconnected at various points, although there are significant level changes throughout the group. The building is currently vacant, and is in a state of significant disrepair.
- **Building D (high significance):** Building D was built in 1934 as a three-storey Georgian Revival dormitory building, to a design by Power, Adam and Munnings. The building has a 'T shaped' plan with a tiled roof and face brick external walls. A clock tower projects through the roof above the central bay to O'Connell Street. The building is currently vacant, however is in fair condition.
- **Building G (moderate significance):** This is a single-storey building located on the O'Connell Street boundary. It was built in 1929 as 'fives courts' for the school and had garages added later. Together with Building H (to be demolished as part of early works DA), Building G forms a continuous element in the streetscape. The street facade is face brick but is different from the adjoining Building H. It is likely that the building was converted for use as a workshop in the 1970s, when the roof, timber windows and doors were added. The building is currently vacant, and is in a state of disrepair.

Figure 3 below is adapted from the *Marsden Rehabilitation Centre (Former Kings School) Parramatta: Conservation Plan (1994)*, prepared by Peddle Thorp Architects for the NSW Health Department. The buildings are identified based on the 2014 Master Pan prepared by the NSW Government Architects Office, as shown below.

In addition, the NSW Heritage Office publication Heritage Curtilages defines 'heritage curtilage' as the area of land surrounding an item or area of heritage significance that is essential for retaining and interpreting its heritage significance. As shown in **Figure 4**, the proposed site is located within the curtilage of 'King's School Group (former)'. Other names for the site include Old King's School and Marsden Rehabilitation Centre.

A Statement of Heritage Impact (SOHI) has been prepared by TZG Heritage which considers the heritage significance of the site, assesses the proposed development and provides a number of recommendations and conclusions with regard to mitigating the potential impact of the proposal on the heritage significance of the site. These recommendations are discussed in **Section 5.6** of this SEE and in **Appendix D**.

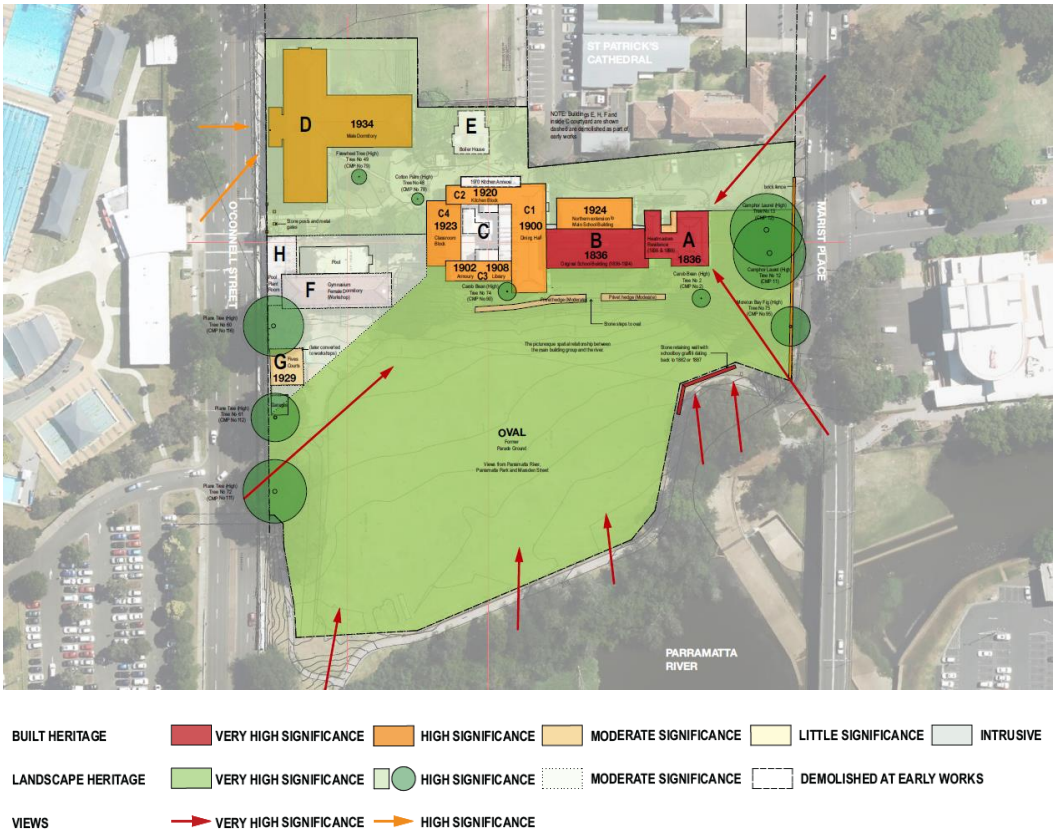

Figure 3 – Levels of Significance Diagram
Source: TZG

Figure 4 – King's School (former) curtilage established by CMP
Source: TZG

Photographs of the existing development on the site are provided in **Figures 5 -12.**

Figure 5 – View of Building A, looking east from Marist Place
Source: JBA

Figure 6 – The southern façade of Building B (right) as viewed across the oval
Source: JBA

Figure 7 – The northern façade of Building B, and its interface with Building C (right)
Source: JBA

Figure 8 – View of Building C
Source: JBA

Figure 9 – View of Building D from O'Connell Street
Source: JBA

Figure 10 – View of Building D from within the site
Source: JBA

Figure 11 – View of the forecourt adjacent to Buildings C (right) and D (background)
Source: JBA

Figure 12 – Building G (right) as viewed from O'Connell Street
Source: JBA

2.3.2 Archaeological Heritage Significance

Aboriginal Archaeological Heritage

An *Old Kings School, Parramatta: Aboriginal Heritage Impact Assessment Report* (AHIA) for the site has been prepared by Archaeological and Heritage Management Solutions (AHMS). The purpose of the AHIA is to characterise and manage any Aboriginal heritage that may be present within the site. Potential impacts on Aboriginal cultural heritage associated with the proposed works are addressed within that document, in accordance with the *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation 2005,* the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* and the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW.*

Key findings of the assessment with regard to Aboriginal archaeological heritage on the site include:

- While Aboriginal populations continued to occupy parts of Parramatta into the European period, there is no evidence of Aboriginal occupation or activity within the subject area during this time.
- Proximity to water is an important factor in archaeological patterning across the Sydney region, with sites generally found within 100m, and larger, more complex and more densely clustered along larger/permanent water sources.
- The subject area is characterised by two soil profiles. An overlay of past activities (disturbance) and the depth of the soil profile indicates that much of the northern portion of the subject area - the duplex soil - has likely been heavily impacted. Localised disturbance is also evident within the deeper alluvial sand body, but in general this deposit been largely unaffected by previous development.
- The subject area has been heavily modified through development, especially in the northern sections. This has had an impact on the potential for surface and sub-surface cultural deposits, as well as other site types such as culturally modified trees. A lack of pre-or early European vegetation on the site reducing the potential for these latter site types to occur.
- Based on the information above, and the test excavations that have been undertaken, a model of archaeological sensitivity has been developed for the site (**Figure 13** below). The testing has confirmed that the northern portion of the site has low archaeological sensitivity. Initially, the southern portion of the site, which contains a profile similar to the Parramatta Terrace Sand Sheet, was considered as having higher potential for significant cultural material. The testing has confirmed this, and has identified significant cultural material in one discrete area of approximately 25m^2, to the east of Building G. As such, this is the only area that has been identified as having high archaeological sensitivity, with other parts of the sand sheet being classified as having low sensitivity.

AHMS have prepared a Predicted Archaeological Sensitivity map based on the key findings which have informed the proposed redevelopment, as shown in **Figure 13** below. An assessment of the proposed works on the Aboriginal archaeological heritage of the site is included in **Section 5.6** and in **Appendix E**.

Figure 13 – Aboriginal Archaeology Sensitivity
Source: AHMS

Historical Archaeological Heritage

A Statement of Heritage Impact for Historical Archaeology prepared by Archaeological and Heritage Management Solutions (AHMS) also accompanies the proposal and is included in **Appendix F**. The site is identified as an Archaeological Management Unit (AMU 2866) included in the Parramatta Historical Archaeology Landscape Management Study (PHALMS). This AMU has high archaeological research potential and has the potential to be of State significance.

The subject area has been subject to more than 210 years of non-Indigenous occupancy. This occupancy includes early agricultural activity that consisted of private development as well as the operation of the Agricultural and Horticultural Society. Development of the site has, however been dominated by the presence of the King's School between 1834 and 1964. This was one of the major education facilities in New South Wales and developed into a notable institution and a Parramatta landmark.

The survival of intact, significant archaeological deposits and features has been assessed as follows:

Phase 1 – Early agricultural activity (Pre-1834)
Including 1790s land grants, 'Mount Betham' estate, the Agricultural and Horticultural Society.

- Low potential for survival of substantial remains, some potential for the survival of ephemeral remains including fence lines, paths, 'pine pits' and garden beds.

Phase 2 – King's School (1834-1964)

- High potential for the survival of relics, deposits, services and subsurface structural elements; and
- Survival is likely to be patchy with the highest potential for survival to be within the footprint of the early school buildings (both extant and demolished).

Phase 3 – Marsden Rehabilitation Centre (1964-2001)

- High potential for survival of relics, deposits, services and subsurface structural elements but considered to be of limited research value.'

The potential archaeological resource is primarily associated with the Kings School phase of development. There is, however, some potential for the survival of archaeological remains associated with pre-1834 agricultural phase. This may include former fence lines, evidence of former plantings and facilities associated with the propagation of plants. This is a poorly documented stage of the site's history and any associated physical evidence has the potential to be of State significance. However, any such surviving evidence is likely to be limited in extent and fragmentary in nature.

The north-west portion of the site may contain evidence of the private occupation of the lots created in the period after 1822. Only a portion of these lots extend into the subject area but include a number of dwellings and outbuildings. Any remains associated with these private allotments are likely to be of Local significance.

Any potential archaeological resources in the vicinity of Building E (to be demolished under the early works DA) and the northern side of Building C are likely to have been compromised by cutting for the installation of the Boiler House (Building E) and for the installation of services. The gap between these two buildings appears to have been used as a corridor for a number of major underground utilities.

The potential for the survival of archaeological deposits with a significant research potential is reasonably high within the footprint of the early school buildings. During the later nineteenth century there were a range of ancillary buildings scattered through the school grounds. The survival of physical evidence for these structures is a possibility.

The locations of potential archaeological deposits are shown in **Figure 14** below. An assessment of the proposed development on the historical archaeological heritage of the site is included in **Section 5.6** and in **Appendix F**.

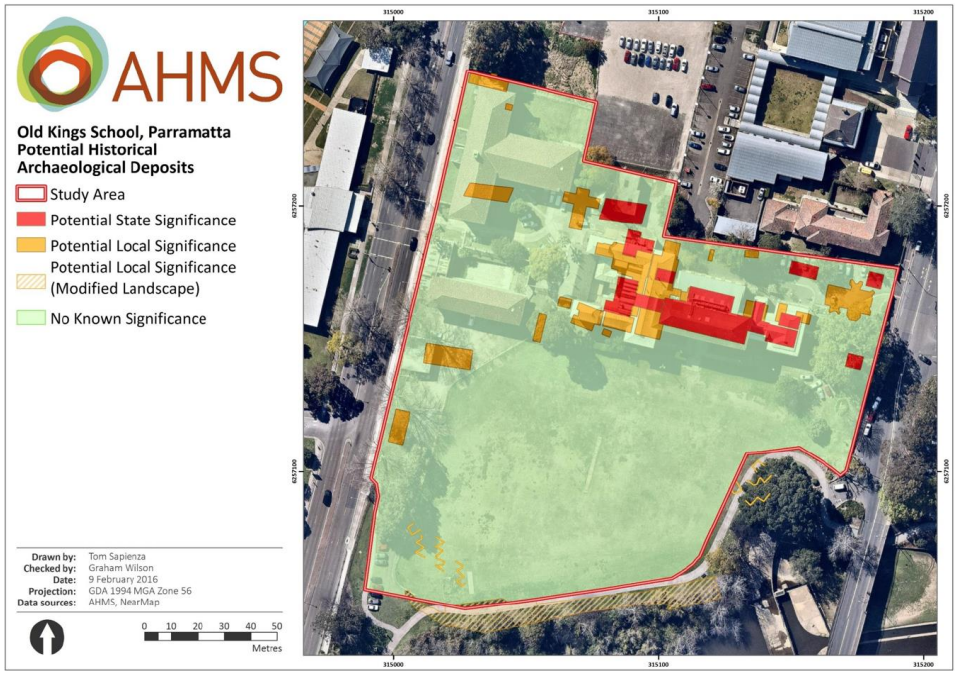

Figure 14 – Potential Historical Archaeological Deposits
Source: AHMS

2.3.3 Topography

As shown on the Survey Plan at **Appendix C**, the site generally slopes from north to south, with a slight cross-fall from west to east. The site is characterised by two distinct levels, being the level of the oval in the south of site at RL8.01 (in the centre of the oval), and the main campus level being RL11.15 (in the centre of the main forecourt to the west of Building C).

2.3.4 Soils and Geotechnical Conditions

Geotechnical

The Geotechnical Investigation prepared by SMEC (refer to **Appendix G**) has identified that the site is underlain by Ashfield Shale bedrock from the Wianamatta Group. In general, Ashfield Shale comprises black to dark grey shale and laminate. Clays derived from the weathering of Ashfield Shale are characteristically of high plasticity and moderate to high reactivity.

All soils encountered within the study area have been classified as fill, possible alluvial deposit, residual soil, weathered rock and bedrock based on their origin and deposition process.

Contamination

A Detailed Site Investigation has also been prepared by SMEC (refer to **Appendix H**) based on site investigations involving the sampling of soils, fill, and groundwater, laboratory analysis for metals, pesticides, petroleum hydrocarbons, PAHs, pH, solvents, asbestos, and phenols.

Historically, the former building uses included offices, dormitory, gym, classrooms, dining hall, kitchens, storage sheds, wards, and garages. A Preliminary Site Investigation undertaken by GHD in 2015 included a review of five previous investigation reports and identified:

- An underground storage tank(s) (UST(s)), as having the potential to contribute heavy metals and petroleum hydrocarbons as contaminants to the environment;

- Heavy metals exceeding criteria in fill material at locations within the south east and south west corners of the oval and three locations outside the vicinity of former classrooms, i.e. Building C.

The key findings of the investigation with regard to the existing soil conditions on the site include:

- Previous and current investigations achieved a sampling density of >80 locations (30 and 50 locations respectively), and 127 samples, compared with a general requirement of 35 locations for the area of 2.4ha area
- Hazardous Building Materials were contained in all building and appropriate management measures are required during demolition/construction to avoid contaminating the soils on site
- The site is generally underlain by silty clay and sands overlying sandstone
- Analytical results across the entire site for the recent investigation include exceedances in levels of TRH, Benzo(a)pyrene, Carcinogenic PAHs (as BaP TEQ), Lead, Copper, Nickel and Zinc;
- **Oval:** The Oval comprises natural, reworked, non-contaminated fill material across most of the Oval from a depth of 0.15m bgl near the buildings to about 1.3m bgl near the southern boundary. Fill material containing ACM and building rubble was encountered below surface soils (0.2 to 0.85 m bgl) in one localised pocket of fill identified in the south west corner of the oval, within former building foundations.
- **Carpark:**
  - Fill and broken-up pavement materials (asphalt, gravel, road base and bricks) potentially exceeding criteria were encountered within the carpark and approaches. The depth of material ranged from 0.2 to 0.6m bgl.
  - Fill containing soils, bricks, pavements, and some rubbish was observed in the green strip along O'Connell Street along some of the carpark. The material was affected by contaminants including benzo(a)pyrene, asbestos, copper, lead, zinc, ash and slag.
- **Building Precinct:** In general, concentrations of potential contaminants in soil were less than the adopted assessment criteria, with the following exceptions:
  - TPH, lead, copper and zinc in surface sediments sampled from the concrete floor of Building H
  - Copper, lead, and zinc in near surface soils (originating from deterioration of lead based paint) surrounding Building D
  - Copper in the ashy fill layer in the quadrangle area located south east of Building D
- **UST(s) and Boiler House:** Previous and current soil and groundwater investigations did not detect soil or groundwater contamination levels associated with the UST facility and boiler house as posing unacceptable risks to human health or the environment

An assessment of the suitability of the site to accommodate the proposed development, as assessment of the proposal against the provisions of SEPP 55 and recommended mitigation measures are considered in **Section 5.9** of this report.

Acid Sulfate Soils

With respect to acid sulphate soils, Parramatta LEP 2011 identifies the site as containing Class 5 acid sulphate soils. The Detailed Site Investigation (**Appendix H**) also confirms that the site, according to the Land and Water Conservation Acid Sulphate Soil Risk Map (1997), Prospect and Parramatta, there is no known occurrence of potential acid sulphate soils on the site, and that they are not expected to occur.

2.3.5 Vegetation

There are 46 trees on the site, with three trees identified off-site but in vicinity of the proposed development. Of the 46 trees on site, nine are identified as being regionally significant.

The majority of trees are located along the perimeter of the oval to the south, east and west. A number of trees are also present along the northern boundary of the site, with some trees scattered along the forecourt of the Old Kings School site. An extract of the tree site plan, taken from the Arborist Report prepared by TLC Tree Solutions, is included in **Figure 15** below.

Figure 15 – Tree site plan
Source: TLC Tree Solutions

2.3.6 Access and Parking

The school is highly accessible by both private and public transport. A number of bus routes link the site with the surrounding area, with stops on O'Connell Street, Market Street and Marist Place. Parramatta Railway Station is located approximately 920 metres to the south-east and has good pedestrian access and bus links.

The site is currently serviced by two vehicular access points and two separate at-grade parking areas accommodating a total of 34 parking spaces, as follows:

- A single vehicular access driveway off Marist Place, to the north of Market Street. This driveway provides access to 14 formalised parking spaces; and
- A single vehicular access driveway off O'Connell Street, approximately 120m to the north of the Parramatta River. This driveway provides access to an informal parking area that is capable of accommodating approximately 20 vehicles.

Pedestrian access is provided via a formal pedestrian entry on Marist Place, immediately opposite Market Street. A second entry is provided off O'Connell Street, in the immediate vicinity of the existing signalised pedestrian crossing. In addition, pedestrian access is provided along the site's southern boundary, adjacent to the Parramatta River. As well as providing access to the site, this path provides grade separated crossings of both O'Connell Street and Marist Place. This path will not be impacted by the proposed development.

2.4 Surrounding Development

The land surrounding the site comprises a range of religious and recreation uses, as well as government offices and parks and open space.

To the immediate north and north-east of the site is land which was formerly part of the Old Kings School site, for which an approval was granted by the Sydney West Joint Regional Planning Panel (JRPP) in November 2015 for the demolition of existing structures and construction of an office building, chancery building, parish hall and basement parking, and a part 5 and part 6 storey residential flat building, comprising 77 units with two levels of basement parking. This site, owned by the Diocese of Parramatta, was previously the subject of a demolition and remediation works DA. The site to the immediate north is currently vacant, with the land to the north-east occupying St Patrick's cathedral and associated buildings owned by the Diocese of Parramatta.

To the east the site is bounded by Marist Place, beyond which lies Prince Alfred Square. To the south the site is bound by the Parramatta River, with the Parramatta CBD beyond.

To the west and north-west of the site, on the opposite side of O'Connell Street, is the Parramatta Swimming Centre and Parramatta Stadium. This area is largely characterised by vast areas of open space along the edge of the Parramatta River.

Surrounding development is shown at **Figures 16 – 19**.

Figure 16 – Marist Place and Prince Alfred Square to the east of the site
Source: JBA

Figure 17 – The Parramatta River and CBD to the south of the site
Source: JBA

Figure 18 – The Parramatta Swimming Centre and Parramatta Stadium to the west of the site
Source: JBA

Figure 19 – The Parramatta Swimming Centre and Parramatta Stadium to the west of the site
Source: JBA

3.0 Description of the Development

This chapter of the report provides a detailed description of the proposed development. Architectural Drawings prepared by TZG are included at **Appendix A**.

This application seeks approval for the following development:

- Demolition of various internal building elements and ground floor slabs of Buildings E, F and H and Building C Courtyard slabs;
- Use of the site as a primary school for approximately 1,000 students, including before and after school care functions;
- Refurbishment of Building A to accommodate administration and office spaces;
- Refurbishment of Building B to accommodate a new library / resource centre and 'home base' classrooms;
- Refurbishment of Building C to accommodate staff areas, a canteen, 'home base' classrooms and common learning areas;
- Refurbishment of Building D to accommodate 'home base' classrooms and practical activities spaces; and
- Construction of a new hall (to be made available for community uses outside of school hours) and a Covered Outdoor Learning Area (COLA).

In addition to the works described above, the development will also include:

- Services upgrades;
- A bus pick-up and drop-off area on Marist Place;
- A kiss and drop area on Marist Place and Market Street;
- Reconfiguration of existing parking areas off O'Connell Street and Marist Place;
- Category 1 remediation works including removal of the existing Underground Storage Tank;
- Construction of new security fencing, including a fence along the oval; and
- Tree removal and new landscaping to accommodate passive and active recreation spaces, including covered outdoor play and learning areas.

3.1 Demolition, Excavation and Tree Removal

3.1.1 Demolition and Excavation

In addition to the demolition works which form part of the early works DA, various elements are proposed to be demolished to facilitate the proposed development. The following demolition is proposed, with the number in brackets denoting the year in which the element was constructed, where applicable.

- **Building A:**
  - Removal of lightweight partition walls (2003).
  - Removal of plasterboard ceilings (2003).
  - Removal of redundant services (2003).
  - Removal of laminate joinery items (2003).
- **Building B:**
  - Removal of redundant services from the building (2003).

  - Removal of ground floor glass screen walls (2003).
  - Removal of central glass stair (2003).
  - Removal of later infill panels (2003).
  - Reduction in size of western fire stair (2003).
  - Removal of modern sanitary fittings.
  - Removal of modern ceilings where required.
- **Building C1:**
  - Removal of ground floor addition slab (facing courtyard).
  - Removal of enclosed 'verandah' wall facing the courtyard on three levels, including all windows and doors.
  - Creation of new opening in the eastern wall to connect to Building B on ground and first floor, opening up of original opening on second floor.
  - Removal of existing corrugated iron roof (to be replaced).
  - Removal of intrusive internal fit-out and finishes.
  - Demolition of the small entrance porch on eastern side at northern end.
  - Removal of lightweight walls on level two.
- **Building C2:**
  - Removal of kitchen northern annex slab and part of ground floor slab.
  - Creation of openings in the northern wall on ground floor and first floor to new annex.
  - Removal of all plant and existing services associated with the kitchen.
  - Removal of timber framed floors to first floor and second floor.
  - Creation of new openings in the southern elevation (courtyard).
  - Removal of existing corrugated iron roof (to be replaced).
  - Removal of intrusive internal fit-out and finishes.
  - Removal of external steel framed fire stairs, and doors to fire stairs.
- **Building C3:**
  - Removal of part of timber framed floors to first floor and second floor.
  - Removal of some, generally non load bearing, internal walls.
  - Removal of internal stairs.
  - Creation of new openings in the northern elevation (courtyard).
  - Removal of existing corrugated iron roof (to be replaced).
  - Removal of eastern fire stair.
  - Removal of doors to fire stair.
- **Building C4:**
  - Creation of new openings in the eastern elevation (courtyard).
  - Removal of non-compliant concrete stair.
  - Removal of ground level flooring due to deteriorated condition (to be replaced).
  - Creation of new openings in ground floor walls, fabric to interpret former openings.
- **Building C Courtyard:**
  - Removal of ground floor slabs.
- **Building D:**
  - Removal of internal floors and walls to eastern wing on three levels and centre of north / south wing.
  - Removal of amenities on the ground floor.

  - Creation of new opening on the eastern elevation of northern wing to ground floor.
  - Creation of central lift shaft extending through the building (not through the roof overrun accommodated within roof space). Windows and doors in this area to be removed.
  - Removal of redundant sewer lines and vents.
  - Removal of roof over the former ablutions wing at ground level (western side).
  - Removal of louvre windows to level two verandahs on northern side.
- **Building G:**
  - Demolition of remaining floor slabs and part of the roof and wall, where required.

Demolition plans are included with the Architectural Drawings in **Appendix A**. Excavation will be limited to building footings, removal of the Underground Storage Tank and the installation of the proposed stormwater tanks.

3.1.2 Tree Removal

The development requires the removal of 20 trees. The trees are not required as native fauna habitat and most are specimens planted as part of past landscaping or gardening activities, and are requirement for removal due to poor health or condition, or being located adjacent to proposed new infrastructure.

An assessment of the proposed tree removal is provided at **Section 5.7** and **Appendix T**.

3.2 Numerical Overview

The key numeric information is summarised in **Table 3**. The site has a maximum FSR development standard under the Parramatta LEP 2011 of 0.4:1, and a maximum height standard of 10m. The development complies with the FSR development standard, and all new additions are within the 10m height limit.

Table 3 – Key development information

Component	Proposal
Site area	24,700m^2
GFA proposed	9,119.57m^2
FSR	0.37:1
Maximum Height	▪ The existing heritage-listed buildings range from 10.40m to 18.70m in height. ▪ The new hall has a maximum height of 9.60m overall, with a wall height of 6.95m maximum above existing ground. ▪ The roof of the new sports court has a maximum height of 8.32m above existing ground. ▪ The new additions to Building C have a maximum height of 10m above existing ground (new covered external circulation including walkway, stairs and ramps).
Minimum Boundary Setbacks ▪ North ▪ South ▪ East ▪ West	▪ **North:** 1.2m setback from new sports court to adjacent northern boundary. Existing 7m setback maintained from existing Building D to the north and setbacks from Buildings A and B maintained to the north. ▪ **East:** Current 28m setback (approx.) from Building A maintained ▪ **West:** Zero setback (replacement of the service wing to Building F by a new wing of service rooms related to the new hall). Main hall component setback 11.3m from O'Connell Street ▪ **South:** To the south, the new hall projects 20.6m southwards from the line of the existing Building F. The existing oval maintains a substantial setback to the south.

Component	Proposal
Car parking, student pick-up and drop-off and loading	38 on-site vehicular parking spaces are proposed in two locations, as follows: ▪ A staff only parking area is proposed off O'Connell Street, providing 27 passenger vehicle parking spaces. ▪ A visitor parking area is proposed off Marist Place, providing 11 passenger vehicle parking spaces. ▪ Bus zone: 60m long 'Bus Zone' (3 buses) proposed along the western Marist Place kerb alignment, between the southern site boundary and the existing / proposed vehicular access driveway. ▪ Kiss and drop: 215m of formalised student set-down / pick-up areas proposed on-street, within Marist Place and Market Street ▪ A formalised loading dock is proposed adjacent to the western site boundary, accessed via the staff car parking off O'Connell Street.

3.3 Alterations and Additions to Existing Buildings

The proposed development involves alterations and additions to existing buildings on the site. These works are shown in **Figure 20** and are described in detail below:

- **Building A** - Refurbishment of Building A to accommodate administration and office spaces. Works will include:
  - New lightweight walls.
  - New services.
  - In certain areas, new ceramic tiling and sanitary fittings to bathrooms.
  - New glass screen and doors in the ground floor corridor.
  - Joinery to kitchenette.
  - Minor alteration to landscape levels adjacent to building.
  - New internal and external lighting.
  - New ramp to front entry
- **Building B** - Refurbishment of Building B to accommodate a new library / resource centre and 'home base' classrooms. Works will include:
  - New lightweight walls and doors to create classrooms.
  - New ceramic tiling and sanitary fittings to bathrooms.
  - Joinery to classrooms, practical activity rooms and kitchenettes.
  - New floor finishes.
  - New ceilings.
  - New services.
  - Reduction in size of western fire stair.
  - New internal and external lighting.
  - The refurbishment of the existing screened rooftop plant.
- **Building C1** - Refurbishment of the Building C group to accommodate staff areas, a canteen, 'home base' classrooms and common learning areas. Works will include:
  - New lightweight internal walls.
  - New ceramic tiling and sanitary fittings to bathrooms.
  - Joinery to classrooms, practical activity rooms and classrooms.
  - New floor finishes.
  - New plasterboard ceilings.
  - New services.
  - New internal and external lighting.

- **Building C2** - Refurbishment of the Building C group to accommodate staff areas, a canteen, 'home base' classrooms and common learning areas. Works will include:
  - Contemporary addition to north over two levels – footprint similar to former kitchen annex.
  - The replacement of some existing flooring on the ground, first and second floors, with a new concrete slab for improved structural stability, in and adjacent to the area of the new extension.
  - New lightweight internal walls.
  - New doors.
  - Joinery to practical rooms and classrooms.
  - New ceramic tiling and sanitary fittings to bathrooms.
  - New plasterboard ceilings.
  - New services.
  - New floor finishes.
  - New internal and external lighting.
  - New windows to former fire stair door openings (west elevation).
- **Building C3** - Refurbishment of the Building C group to accommodate staff areas, a canteen, 'home base' classrooms and common learning areas. Works will include:
  - New concrete slabs to ground, first and second floors.
  - New canteen window and access doors to northern courtyard elevation.
  - New lightweight internal walls.
  - New doors.
  - Joinery to practical activity spaces.
  - New plasterboard ceilings.
  - New services.
  - New floor finishes.
  - New internal and external lighting.
- **Building C4** - Refurbishment of the Building C group to accommodate staff areas, a canteen, 'home base' classrooms and common learning areas. Works will include:
  - New lightweight internal walls.
  - New openings windows and doors to eastern courtyard elevation.
  - Joinery to special use spaces as required.
  - New plasterboard ceilings at ground level.
  - New services.
  - New floor finishes.
  - New internal and external lighting.
  - Replacement of timber floor on ground level and structure as required.
- **Group C Courtyard:**
  - New covered external circulation including walkways, stairs and ramps.
  - Landscape treatment to courtyard.
- **Building D** - Refurbishment of Building D to accommodate 'home base' classrooms and practical activities spaces. Works will include:
  - New concrete floors and columns to the interior of the east wing.
  - New lightweight walls to create new class rooms and associated facilities.
  - Joinery to classrooms and practical activity spaces.

- New ceramic tiles and sanitary fittings to bathrooms.
- Adjustments to landscape levels adjacent to building where damp proof course is breached.
- Alteration and replacement of some existing window openings and windows.
- New plasterboard ceilings.
- New services.
- New floor finishes.
- New internal and external lighting.

- **Building G:**
  - Incorporation of part of existing building into new school hall.
  - O'Connell Street façade and part of east / west walls to be conserved and adapted as a maintenance store and to enclose the courtyard.

Further to the alterations and additions to the existing buildings, a number of conservation works are proposed to each of the existing buildings including (but not limited to) repairs, new services, internal and external lighting, stonework repairs, replacement of verandah decking and render repairs. These are detailed in the Statement of Heritage Impact at **Appendix D**.

3.4 Proposed New Buildings and Structures

The primary new building elements comprise the new school hall, sports court and additions to the Building C group. These works are described below. A site plan is provided at **Figure 20**, for reference.

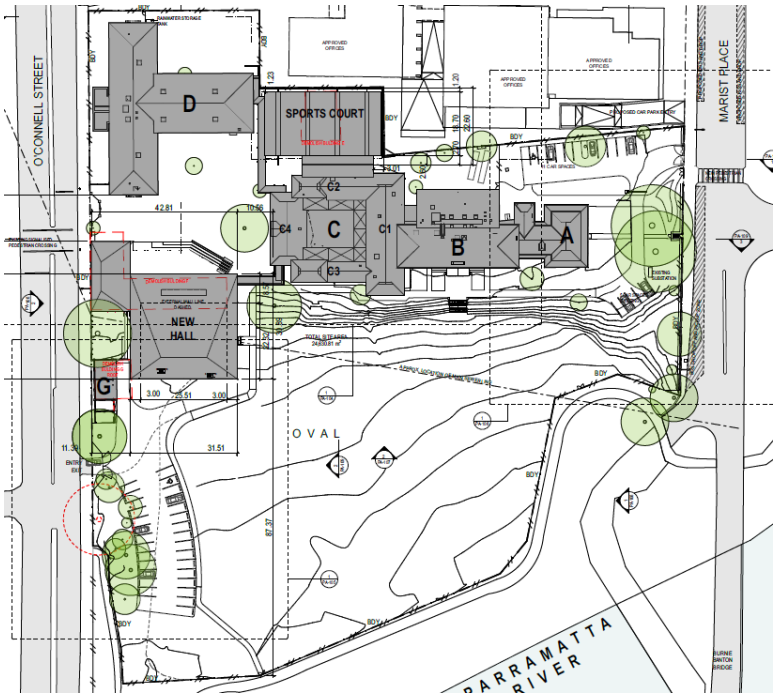

Figure 20 – Site Plan
Source: TZG

3.4.1 New School Hall

A new multi-purposes hall (GFA of 1,223.05m^2) is proposed on the site's western boundary, in the vicinity of existing Buildings F, G and H (noting that Buildings F and H will be demolished as part of the early works DA).

As described above, the new school hall has a maximum height of 9.60m, with a wall height of 6.95m along O'Connell Street. The hall will comprise face brick facades, with a steel roof and external verandahs. The new hall:

- Includes an integrated COLA to the north, with an area of 200m^2;
- Provides a new structure in the location of former Building H to accommodate out of school hours' facilities, such as a store room, kitchen, offices, a sports equipment storage room, as well as a sprinkler pump room and amenities;
- Incorporates covered walkways, or 'learning verandahs', to serve as additional covered outdoor learning areas;
- Incorporates Building G to create new bulk / garden storage rooms and a bin storage area; and
- Provides roof vents and photovoltaic panels for ESD requirements.

A photomontage of the new hall, as viewed from O'Connell Street is provided at **Figure 21**.

Figure 21 – Photomontage of the school hall, as viewed from O'Connell Street
Source: TZG

3.4.2 Sports Court

A new covered sports court is proposed to the north of Building C, adjacent to the site's northern boundary. This flexible space will have the capacity for entire school events (such as assembly or presentations) and will also facilitate full court basketball games. The court will be covered with a steel roof for weather and UV protection. The roof has a maximum height of 8.32m.

The sports court includes a 2m high retaining wall setback 1.2m from the site's northern boundary. The retaining wall incorporates a planted screen / ball mesh above to soften the appearance of this space when viewed from the approved office building on the adjoining the site.

3.4.3 Additions to the Building C Group

The proposed development includes an addition to the Building C group, being a contemporary addition over two levels on the north façade of Building C2. The height of the addition will be 8.62m at its tallest point, and is shown in the extracts below at **Figures 22** - **24**.

The proposed development also includes new additions to Building C courtyard in the form of new covered external circulation areas including walkway, stairs and ramps, which have a maximum height of 10m above existing ground.

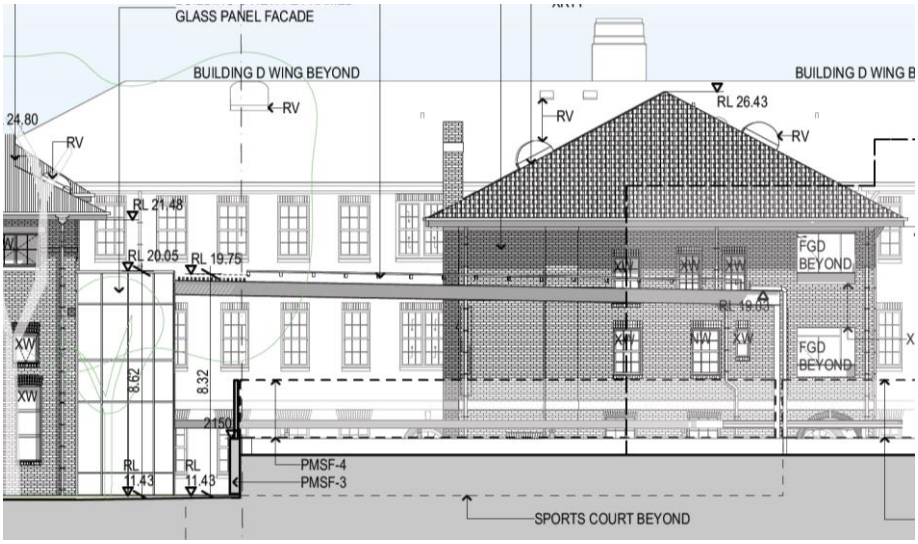

Figure 22 – Extract from eastern elevation, showing proposed contemporary addition to the north of Building C2
Source: TZG

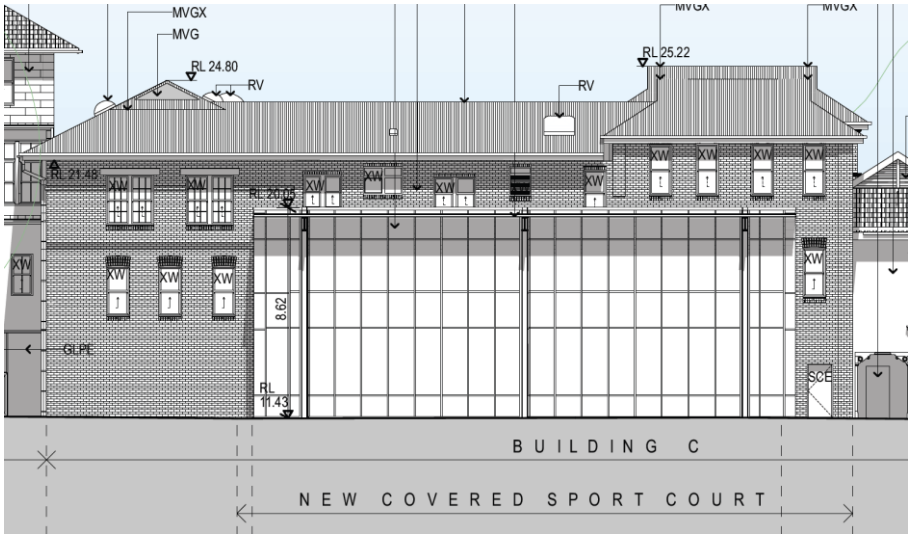

Figure 23 – Extract from northern elevation, showing proposed contemporary addition to the north of Building C2
Source: TZG

Figure 24 – Extract from section plans demonstrating new walkways and awnings to Group C Courtyard
Source: TZG

3.5 Built Form

3.5.1 Building Height

The proposed development, including new building elements and alterations and additions to existing buildings, will not result in any new development above 10m. The existing heritage-listed buildings range in height from 10.40m to 18.70m in height. The additions to Building C represent the tallest new structure on the site, and will have a maximum height of 10m.

3.5.2 Building Setbacks

For the majority of the site, the setbacks will remain unchanged. This includes the presentation to Marist Place to the east, and most of the southern elevation to the oval and Parramatta River foreshore.

To O'Connell Street, the replacement of Building H (to be demolished under the early works DA) with a new wing of service rooms associated with the hall will have a similar street presence, comprising single-storey elements with zero setbacks, in similar locations to existing structures. The taller part of the hall is set back 11.3m from O'Connell Street, as shown in **Figure 25**.

To the south, the new hall projects 20.6m further than the line of the existing Building F (to be demolished under the early works DA), although the length of the new façade is only 30.50m compared to 39.60m for Building F. This reduced set back partly extends over the area of landscape listed as having very high significance. The impact of the proposal on this landscape area is assessed in the Statement of Heritage Impact at **Appendix D** and **Section 5.6**.

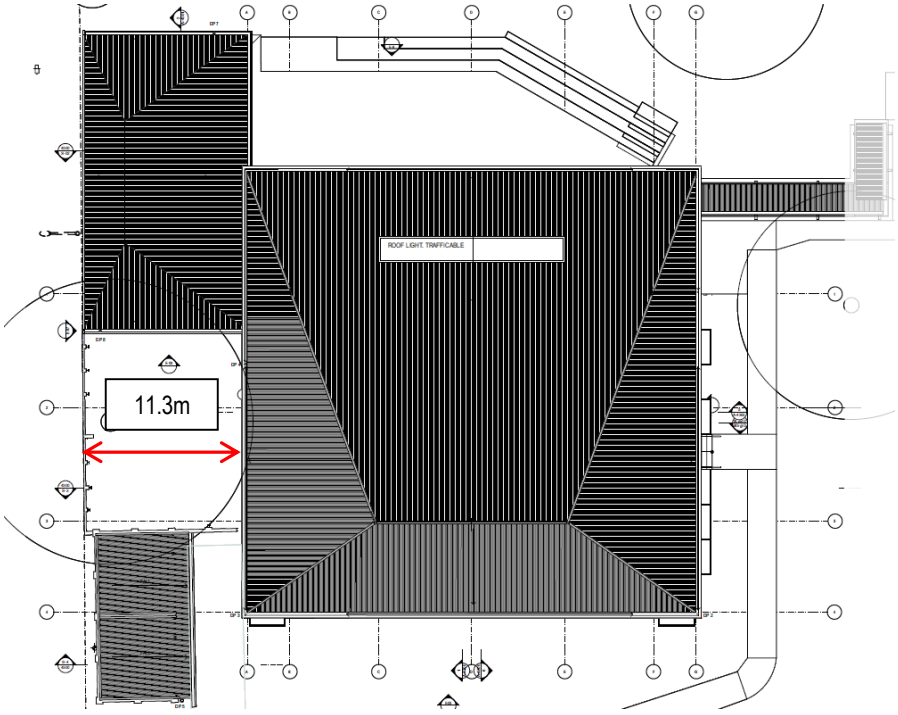

Figure 25 – Proposed hall and ancillary buildings (roof plan) and proposed setback to O'Connell Street
Source: TZG

3.5.3 External Materials and Finishes

The existing heritage façade fabric of Buildings A, B, C, D and G will be conserved, with rendered portions repainted and joinery repaired. New elements to Building C will be contemporary, and will comprise metal framed glazing with coloured infill panels. This work will not be prominent from public viewpoints.

The facades of the new hall and its adjoining western service wing will be face brick, partly constructed from bricks recycled from the demolished portions of Building C and from Building F, with the verandas screened with steel mesh, which will be paint finished. New bricks will match those of Building C.

The facades of the proposal will retain the heritage character of the site, with contemporary components designed to complement this key character element.

The proposed materials and finishes are shown on the Material Schedule at **Appendix A**.

3.6 Community Use of School Facilities

The Department of Education is willing to allow the public to use the school's oval and hall on the weekends, and outside of school hours. The details of these community uses are yet to be determined, however discussions are ongoing with Council and other community groups. In summary:

- The oval will be available for Council to use for public events. The use of the oval will be subject to a license agreement, which will be managed on a case by case basis; and
- Discussions are continuing with Arts NSW around the use of the school hall. These arrangements will be formalised once the site is operational.

3.7 Fencing

Fencing is proposed in and around the site, in accordance with the Department of Education's security requirements.

As shown in the Fence Schedule at **Appendix A**, a 1.2m high fence will be constructed around the oval to ensure that the site is secure from the public thoroughfare along the Parramatta River. The specification chosen for the fence is aimed at being recessive and sympathetic to the existing site's historical heritage. The final design and alignment of the fence is subject to ongoing consultation with the Government Architect.

3.8 Landscaping

Landscape Plans have been prepared by Spackman Mossop and Michaels and are included at **Appendix I**. This application includes the following landscape elements:

- Substantial new planting within the school grounds;
- New landscape planting along the southern building frontage, along the O'Connell Street frontage and along the Marist Place frontage;
- New landscaping within parking areas;
- Landscaping within the proposed new playground to the north of Building D;
- The major open space on the site, the oval, will be retained and enhanced with the removal of weed species and the selective planting of new trees to screen new the development;
- The smaller play areas to the north of Buildings B and D will be landscaped in detail as play areas for children, incorporating edible gardens and shaded gathering areas;
- The courtyard between Buildings C and D and the forecourt of the new hall will be paved, with additional tree planting and an adjoining small amphitheatre facing the new hall, part of which will be roofed as a COLA (refer to **Figure 26**); and
- The weather protected sports court to the north of Building C, which will be screened from the adjoining development to the north by a mesh ball screen with vines planted to soften the space.

Figure 26 – The proposed hall (right) and adjoining amphitheatre and forecourt
Source: TZG

3.9 Vehicular, Pedestrian Access and Parking

Vehicular Access and Parking

The site is proposed to be serviced by two access driveways, as follows:

- An existing 6m wide combined ingress / egress driveway connecting with the southbound O'Connell Street carriageway (located approximately 50m to the south of the existing signalised pedestrian crossing) is to service a formalised staff only car parking area containing 27 passenger vehicle parking spaces; and
- An existing 6m wide combined ingress / egress driveway connecting with Marist Place (approximately 10m to the north of Market Street) is to service a visitor/staff parking area containing 11 passenger vehicle parking spaces for visitor.

Pedestrian Access

The primary student and staff entry point will be via an existing gate on Marist Place, adjacent to the vehicular entry point. A new pedestrian crossing along Marist Place is proposed adjacent to this main entry. This entry connects with the western Marist Place footpath, approximately opposite Market Street.

Parent Set-Down and Pick-Up

The school is expected to generate short term parking demand associated with the setting-down / picking-up of students by parents / guardians prior to the commencement and following the completion of the school day. All student set-down / pick-up activity is proposed to occur off-site, with formalised on-street set-down / pick-up areas proposed within Marist Place and Market Street.

Alterations to existing on-street parking restrictions will result in the provision of 215m of formalised student set-down / pick-up area on Marist Place and Market Street, as follows:

- 50m (capable of accommodating up to 8 passenger vehicles) along the western side of Marist Place;
- 85m (capable of accommodating up to 14 passenger Vehicles) along the eastern side of Marist Place; and
- 80m (capable of accommodating up to 13 passenger vehicles) along the northern side of Market Street.

The proposed set-down / pick-up capacity within Marist Place and Market Street is therefore proposed to be 35 vehicles. The proposed student set-down / pick-up activity on both sides of Marist Place and on the northern side of Market Street, as well as the general operation of the school, is expected to result in pedestrian crossing demand over Marist Place.

On this basis, it is proposed to construct a formalised school threshold type pedestrian crossing over Marist Place to the immediate north of Market Street. The crossing will provide safe and efficient connectivity between the school grounds and the formalised student setdown / pick-up areas on the eastern side of Marist Place and Market Street. The crossing will also provide a safe and efficient crossing facility to provide connectivity between the school grounds and the greater Parramatta CBD to the southeast, accessed via Church Street.

Bus Set-Down and Pick-Up

Bus servicing of the site is proposed to occur along the western Marist Place kerb alignment, between the southern site boundary and the existing / proposed vehicular access driveway. This is proposed to be achieved through modifications

to existing sign posted restrictions governing kerb side parking along Marist Place. These alterations to existing on-street parking restrictions will result in the provision of a 60m long 'Bus Zone' during school start and finish periods, which is capable of accommodating up to three buses at any one time.

Bicycle Parking

Further to the passenger vehicle parking spaces, a total of 20 bicycle parking racks, capable of accommodating up to 40 bicycles are proposed to be provided for use by staff and students, being provided at-grade within the school campus.

Loading

The school will be required to be serviced by heavy vehicles associated with the regular collection of waste and occasional deliveries. It is expected that the largest vehicle to service the site will be a Medium Rigid Vehicle (MRV).

All site servicing is proposed to occur via a formalised loading dock located adjacent to the western site boundary, accessed via the staff car parking area off O'Connell Street.

3.10 Services and Utilities

Services statements have been prepared by Wood & Grieve Engineers detailing the proposed services arrangements for the development. These statements are provided at **Appendix J**, and are summarised below.

Electrical Services

The site has access to the necessary electrical services to facilitate the proposed development. The site is supplied from an Endeavour Energy Substation located off Marist Place. An application has been submitted to Endeavour Energy, who have provided an approval letter outlining the provision of up to 600Amp supply from the existing substation (letter included in **Appendix K**).

Telecommunications Services

There are existing Telstra incoming copper and fibre optic services to Buildings A and B. It is intended to reuse these services as there is sufficient capacity to serve the proposed school.

These incoming services will be distributed through the site via new underground and through-building connections.

Water Supply and Sewer Drainage

The site is supplied by a 225mm water main located on O'Connell Street and a 300mm sewer main. Based on the anticipated load calculated, the existing infrastructure has adequate capacity to service the proposed development. A formal request for the Notice of Requirements will be lodged with Sydney Water upon lodgement of the SSD application.

Stormwater Infrastructure

Stormwater Infrastructure is described in **Section 3.11** below. The development incorporates two OSD tanks comprising one new tank, and one existing tank that will be upgraded.

3.11 Water Cycle Management

The Stormwater Plans prepared by Wood & Grieve Engineers (**Appendix L**) outline the proposed stormwater concept design for the proposed development. The proposed stormwater system will be designed in accordance with Parramatta Council's requirements, and will comply with the relevant Australian Standards and accepted engineering practice.

The Stormwater Management Report has also been prepared as included at **Appendix L**. This report outlines the conceptual DA level stormwater design for the proposed development, and specifically addresses the following items for both the construction and operational phases of the development:

- Stormwater runoff volumes and detention (Stormwater Quantity);
- Stormwater quality treatment measures (Stormwater Quality); and
- Erosion and Sedimentation Control.

Surface Drainage

The surface areas will be drained through a variety of methods, in accordance with AS3500.3:2003 and Council's stormwater drainage guidelines. The in ground drainage has been designed to meet the following criteria:

- In the minor design storm event (20 year) there will be no surcharging of the in ground drainage system; and
- In the major design storm event (100 year) there will be no uncontrolled discharge from the site onto the residential properties to the east of the site.

Surface runoff from the road and surrounding landscapes areas will be directed to stormwater inlet structures using the design topography of these elements. The inlet structures have been designed to adequately convey the surface runoff into the in-ground drainage network. The runoff will then be conveyed underground across the site to the on-site detention basin and then the legal point of discharge using gravity and the geometric falls of the pipe system.

Stormwater Attenuation

The development currently has an OSD tank installed which attenuates the flows back to the required discharge rate, however the development of the site means that this tank will need to be removed and replaced with a new tank. The development proposes an additional OSD tank which has been designed in accordance with Council's and UPRCT's design guidelines. The two tanks are shown in **Figure 27** below.

Legal Point of Discharge

There will be two legal points of discharge for the development. For the western catchment, the discharge point will be a headwall to the Parramatta River via a direct connection into the proposed headwall. For the eastern catchment, it will be the existing junction pit via a direct connection into the existing kerb inlet pit.

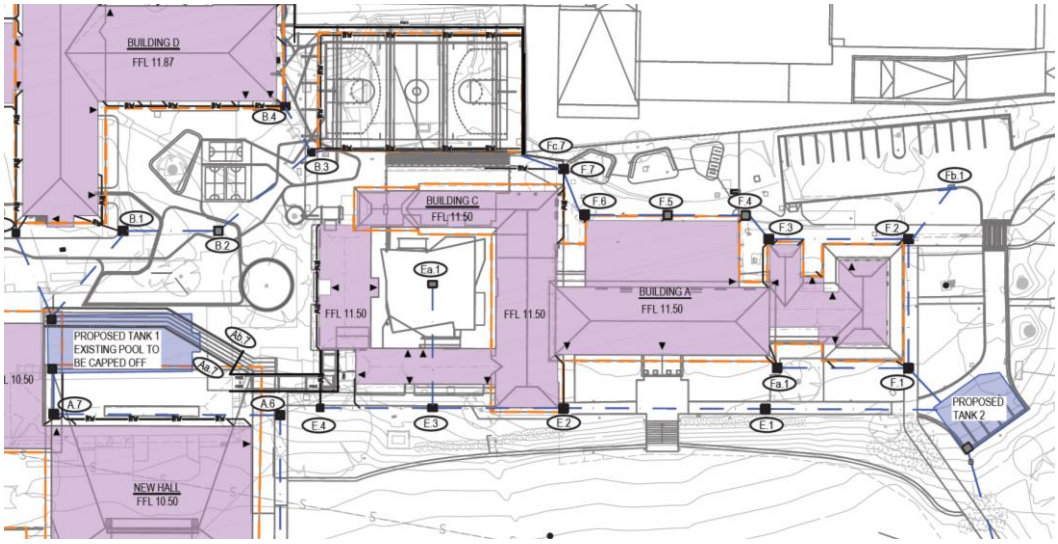

Figure 27 – Proposed OSD tanks (coloured purple)
Source: Wood & Grieve Engineers

3.12 Operational Waste Management

A Waste Management Plan (WMP) has been prepared by SMEC to assess waste quantities, storage and management procedures during the demolition, construction and operational phases of the development (refer to **Appendix M**). With respect to operational waste, the WMP proposes:

- **General Strategy:** The overall strategy is to provide a waste management system that:
  - Minimises the generation of waste through avoid-reduce-reuse-recycle policies;
  - Will provide the opportunity to educate students in waste management and resource recovery;
  - Meets the relevant regulatory guidelines;
  - Is 'hands on' but safe, (students/staff segregate their wastes into different receptacles at source); and
  - Is cost effective
- **System Components:**
  - Purchasing policies, education programs;
  - Internal bins (e.g. 30L) at source (two or three bin system for most areas, potentially more bins in kitchen and office areas);
  - Special bins for special purposes (e.g. workshop, kitchen);
  - Waste storage area for 770L waste storage bins (wheelie bins) in/adjacent to Building G. Approximately 26m^2 of storage space is required for bin storage, which is readily accommodated in Building G; and
  - Approximately 12 x 770L wheelie bins would be required to service the projected waste/recyclables generation.
- **The Segregation & Collection Process**
  - Waste is placed by staff/students into separate internal bins (paper/cardboard, other recyclables comingled, remaining general waste);
  - From the internal bins the material is transferred to external 770L located at Building G by cleaning staff at the end of every day;

- On collection day, bins containing materials will be placed in the collection area by cleaning staff from where they will be emptied by a suitable vehicle, outside student attendance times, twice per week; and
- Access to the collection areas has to be designed to allow commercial collection vehicles to enter and exit safely.

An extract of the proposed waste management scheme is provided at **Figure 28**, below.

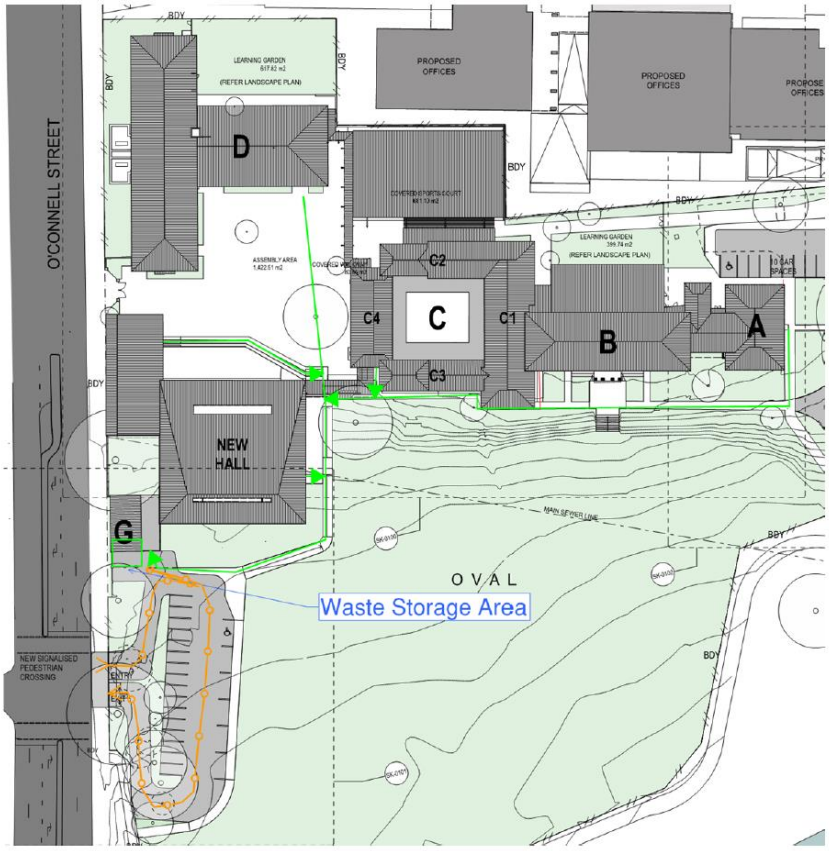

Figure 28 – Extract of general waste management scheme
Source: SMEC

3.13 Energy Efficiency

The proposed development incorporates Environmentally Sustainable Development (ESD) strategies and principles as defined in Clause 7(4) of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

Wood & Grieve Engineers' Environmental Sustainability Management Plan (**Appendix N**) provides an overview of the proposed development's ecologically sustainable design (ESD) components in line with the relevant SEARs and the EP&A Act.

Energy and more specifically, energy efficiency and reductions in Greenhouse Gas Emissions, remains a key driver for sustainability within the project. Energy Efficiency initiatives proposed for inclusion within the development include:

- Vernacular architecture through building shape and function, to encourage natural light and a connection to nature, which reduces artificial light requirements;

- Thermal mass, quality glazing and shading eliminates the need for air conditioning;
- Low lighting densities and no use of incandescent lamps in rooms and primarily LED lights;
- Timing of lights and occupancy sensors in common areas for energy reduction;
- Window extent has reduced and is not full façade;
- Premium efficiency motors on fans as rated by National Electrical Manufacturer's Association; and
- Significant reduction in embodied energy of the building, through reusing existing buildings, as well as recycled bricks.

Through these measures, the energy consumption of the building is expected to be approximately 35-45% below that of a standard practice building.

3.14 Category 1 Remediation Works

The suitability of the site for use as a primary school will be achieved through the proposed development works and the implementation of a Long Term Environmental Management Plan (LT EMP). In accordance with SEPP 55, this work could be described as "mitigating or containing the contamination of any land" and thereby satisfies the definition of "remediation" provided in SEPP 55. Given that the proposed development is State Significant Development and that the site is listed on the State Heritage Register, the works to be conducted to contain and mitigate the identified contamination on the site are classified as Category 1 remediation work and require consent.

The proposed works on the site will ensure that existing suitable surface coverings are maintained, and where required, will establish suitable new surface coverings which provide a physical barrier to prevent exposure of the future users to any contaminated or potentially contaminated soils that may remain in the sub-surface of the site at the completion of the development works.

The proposed works also include the decommissioning and removal of the identified abandoned USTs and associated infrastructure, as well as the removal of hazardous building materials that may be present in existing buildings. These works will be completed in accordance with a CEMP to be developed for the construction works.

As identified in the SEPP 55 Assessment prepared by Consara (refer to **Appendix H** and **Section 5.9**), the remediation of the site will be undertaken through the proposed development works, through the implementation of a CEMP.

Once the development works are completed and prior to use of the site as a primary school, a LT EMP will be prepared to ensure that:

- Users are not exposed to potentially contaminated soils located beneath the constructed surfaces of the completed primary school; and
- Works that require disturbance of the any surface coverings on the site are undertaken in a manner that protects the health of the workers and users of the site.

3.15 Construction and Operational Jobs

The works are expected to generate approximately 100 jobs during the construction phase.

Once operational, the school will accommodate approximately 1,000 students. Based on the Department of Education's current staffing ratios, this would generate the need for 61 staff, indicatively comprising:

- One Principal;
- Two Deputy Principals;
- Four Assistant Principals;
- 38 teaching staff;
- Six administration staff; and
- 10 non-teaching staff (counsellors, learning support teachers, English and additional language teachers etc.).

4.0 Consultation

In accordance with the SEARs issued for this project, consultation has, and will continue to be, undertaken with Council, agencies and the community.

A summary of the consultation that has been undertaken is provided below. Several consultants have undertaken additional consultation with relevant parties during the preparation of their reports.

Table 4 below provides a summary of the consultation undertaken on the project to date.

Table 4 – OSPS Consultation Activity Summary

Stakeholder	Date	Consultation Activity / Meeting	Agenda	Meeting Outcome
Arts NSW	15/9/15	Consultation Meeting #1	Project update	▪ 3-phase power and access to water for open-air performances on the oval to be considered.
Arts NSW	20/11/15	Consultation Meeting #2	Project update	▪ Arts NSW to confirm possibility of funding to be made available for any potential Arts NSW enhancements to the facilities.
Heritage Council	4/11/16	Heritage Council of NSW	Project update	▪ None - Heritage Council note proponents appear to be taking due consideration of the site's heritage aspects.
Parramatta City Council	16/10/15	Consultation Meeting #1	Project update	▪ Opportunity for future PCC/community use of the oval to be reviewed as project progresses.
Parramatta City Council	7/12/15	Consultation Meeting #2	Project update and clarification	▪ PCC contact provided for DoE to seek advice on current arrangements for the use of the oval. ▪ PCC interested in using the school hall facilities outside of school hours if it meets with their specifications. DoE to further progress this dialogue with PCC and advise specific design requirements, if any. ▪ Pre-DA lodgement meeting to be convened prior to submission for PCC to confirm submission requirements.
Parramatta City Council	3/2/16	Consultation Meeting #3	Project update, Presentation of Building Layouts, School Oval, School Hall and Out of Hours Community Use, Car Parking & Site Circulation, Flooding & On Site Detention	▪ PCC advised they would like community/public access to the Oval, School Hall and Resource Centre outside of school's hours. ▪ PCC advised Marsden Street and Marist Place could be utilised for kiss & drop provisions, subject to suitable design being produced. ▪ Need for pavement strengthening for bus drop-off to be assessed. ▪ Requirement for on-site detention to be reviewed.
Community General	2/11/15	Information Booth #1	Community General	6 Survey Forms completed.
Community General	1/12/15	Information Booth #2	Community General	1 Survey Form completed.
Community General	11/2/16	Information Booth #3	Community General	0 Survey Forms completed.
Community	14/4/16	Information	Community General	TBC

Stakeholder	Date	Consultation Activity / Meeting	Agenda	Meeting Outcome
General		Booth #4		
NSW Office of Environment & Heritage (OEH)	7/3/16	Consultation Meeting	Project update	TZG to develop design and review fence type and location
Aboriginal Education Consultative Group (AECG)	5/4/16	RPA attendance at AECG Regional Committee Meeting	Project update, Design, Community use of facilities, Program & delivery, Aboriginal archaeology & consultation.	Opportunity for AECG input into naming of school to be reviewed. ▪ Further AECG consultation activity to be confirmed. ▪ Need to consult with Aboriginal Land Council to be confirmed.
RMS	21/1/16	Consultation Meeting	Project update	▪ DoE to seek Council's endorsement to utilise the existing carpark adjacent the swimming centre for temporary parent parking. ▪ Follow up consultation with RMS on proposed design, should this affect RMS assets.
Transport NSW	7/4/16	Consultation Meeting	Transport NSW	▪ DoE to provide info on school demographics for Parramatta schools. ▪ No OSPS actions/outcomes.
Football NSW	4/12/16	Consultation Meeting	Project update	▪ Football NSW questioned if the existing oval could accommodate a football field. ▪ RP questioned if the school hall could be utilised as an indoor sports facility.
NSW Techers Federation	N/A	DoE advised it would convene with NSW Techers Federation directly. No action required by RPA.		
Primary Principal's Association	N/A	DoE advised it would convene with Primary Principal's Association directly. No action required by RPA.		
Secondary Schools Principal Council	N/A	DoE advised it would convene with Secondary Schools Principal Council directly. No action required by RPA.		
NSW State Aboriginal Land Council and Darug Tribal Aboriginal Corporation		Formal consultation process in accordance with OEH's Aboriginal Cultural	Identification of Aboriginal stakeholders by liaising with Government bodies including: ▪ Office of Environment and Heritage,	These organisations identified 39 Aboriginal stakeholder groups.

Stakeholder	Date	Consultation Activity / Meeting	Agenda	Meeting Outcome
			▪ Parramatta City Council, ▪ Local Aboriginal land councils, ▪ Aboriginal Land Rights Act Registrar, ▪ National Native Title Tribunal, ▪ NTS Corporation ▪ Greater Sydney Local Land Services	
NSW State Aboriginal Land Council and Darug Tribal Aboriginal Corporation		Notification	NSW State Aboriginal Land Council and Darug Tribal Aboriginal Corporation	Registered Aboriginal Parties (RAPs) identified as follows: ▪ Kamilaroi Yankuntjatjara Working Group (KYWG) ▪ Deerubbin Local Aboriginal Land Council ▪ Darug Custodian Aboriginal Corporation ▪ Darug Tribal Aboriginal Corporation ▪ Darug Aboriginal Cultural Heritage Assessments ▪ Darug Land Observations ▪ Gunjeewong Cultural Heritage Aboriginal Corporation ▪ Murri Bidgee Mullangari Aboriginal Corporation ▪ Muragadi Heritage Indigenous Corporation ▪ Tocomwall ▪ Amanda Hickey Cultural Services ▪ Widescope Indigenous Group ▪ Murramarang Cultural Heritage Technical Services ▪ Biamanga Cultural Heritage Technical Services ▪ Cullendulla Cultural Heritage Technical Services ▪ Gulaga Cultural Heritage Technical Services
NSW State Aboriginal Land Council and Darug Tribal Aboriginal Corporation	22/2/16	Written presentation of project information and assessment methodology – consultation period 28 days in length from issuance of methodology,	This document is intended to provide the stakeholders with information on the project and approval process, as well as a description of the assessment (in this case monitoring and test excavation).	Selection of Aboriginal stakeholders (RAP Group) to be involved in the fieldwork, based on previous projects undertaken in Parramatta, groups who are Darug and have cultural knowledge and understanding of the area and groups who are known to have appropriate work insurance for fieldwork. Selection as follows: ▪ Darug Custodian Aboriginal Corporation ▪ Deerubbin LALC ▪ DACHA ▪ Darug Land Observations ▪ Darug Tribal Aboriginal Corporation
NSW State Aboriginal Land Council and Darug Tribal	21/3/16	Fieldwork	Fieldwork activities including monitoring of contamination testing and Aboriginal Archaeological test excavations.	Input into AHIA report by the RAP Group.

Stakeholder	Date	Consultation Activity / Meeting	Agenda	Meeting Outcome
Aboriginal Corporation				
NSW State Aboriginal Land Council and Darug Tribal Aboriginal Corporation	TBC	Input into report by RAP – to be undertaken – 28 days in length		The AHIA will form one of the EIS appendices with recommendations for the overall development.
Fire NSW	12/4/16	Provision of Fire Engineering Brief Questionnaire & supporting documentation.		Pending

5.0 Environmental Assessment

This Section of the report assesses and responds to the environmental impacts of the proposed DA. It addresses the matters for consideration set out in the SEARs (see **Section 1.4**).

The Mitigation Measures in **Section 7** complement the findings of this Section.

5.1 Consistency with Relevant EPIs, Policies and Guidelines

The following legislation, planning instruments and strategies are relevant to the proposed development and have been addressed in **Table 5**:

- *Threatened Species Conservation Act 1995;*
- *Water Management Act 2000;*
- *Roads Act 1993;*
- *Environmental Planning and Assessment Act 1979* (EP&A Act);
- *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation);
- *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP);
- *State Environmental Planning Policy (Infrastructure) 2007* (SEPP Infrastructure);
- *State Environmental Planning Policy 55 – Remediation of Land* (SEPP 55);
- *State Environmental Planning Policy 33 – Hazardous and Offensive Development* (SEPP 33);
- *Parramatta Local Environmental Plan 2011* (Parramatta LEP 2011);
- NSW State Priorities;
- A Plan for Growing Sydney;
- NSW Long Term Transport Masterplan 2012;
- Sydney's Cycling Future 2013;
- Sydney's Walking Future 2013;
- Healthy Urban Development Checklist, NSW Health; and
- Parramatta Development Control Plan 20113 (4.3.3.7 City Centre Special Areas C) Park Edge);

Table 5 – Summary of consistency with relevant Strategies, EPIs, Policies and Guidelines

Instrument/Strategy	Comments
Strategic Plans	
NSW State Priorities	NSW State Priorities are five high-level priorities for the State, being: ▪ A strong budget and economy; ▪ Building infrastructure; ▪ Protecting the vulnerable; ▪ Better services; and ▪ Safer communities. The proposal seeks to refurbish disused educational facilities and create additional educational capacity in western Sydney. The proposal will therefore contribute to the provision of infrastructure, as well as jobs and education, thereby contributing to strengthening the local and regional economy.
A Plan for Growing Sydney	One of the key goals of the Plan is to *'…Identify and plan for new school sites throughout Sydney'* to meet Sydney's growing needs.

Instrument/Strategy	Comments
	One of the key directions of the Plan is to plan for education and health services to meet Sydney's growing needs. The proposal is consistent with Action 1.10.1, which aims to assist the Department of Education to identify and plan for new school sites throughout Sydney. The proposed development will enhance the provision of education infrastructure in the region, thereby supporting the actions of A Plan for Growing Sydney.
NSW Long Term Transport Master Plan 2012	The proposed development is consistent with the Master Plan as it supports the provision of education facilities in proximity of existing bus and rail infrastructure. In doing so, and by providing limited on-site parking for staff and visitors only, the proposal supports a reduced reliance on private vehicles, assisting in improving the modal split between cars and public transport.
Sydney's Cycling Future 2013	The Department of Education is supportive of students and staff using bikes as a mode of transport. New bicycle racks will be provided for use by staff and students. A total of 20 bicycle parking racks, capable of accommodating up to 40 bicycles are proposed to be provided for use by staff and students, being provided at-grade within the school campus.
Sydney's Walking Future 2013	Whilst the development does not propose any walking infrastructure on the site, the school's location near the Parramatta CBD, Parramatta train station and bus infrastructure means that students will continue to have safe walking and cycling access to transport and amenities.
Healthy Urban Development Checklist	The proposed development is consistent with the HUD checklist in that it: ▪ Provides recreation facilities within the school campus which promotes and encourages physical activity and exercise; ▪ Is highly accessible by public transport and constitutes infill development in a key destination to promote use of active transport infrastructure; ▪ Has been designed having regard to preventing crime and promoting a sense of security for future students and teachers having regard to the CPTED principles; ▪ Provides access to green space and natural areas associated with the oval to the south of the site, and has been designed having regard to the preservation and enhancement of the historical and cultural significance of the subject site; ▪ Will respond to existing community needs and current gaps in educational facilities in the region; and ▪ Has been designed to minimise disturbance and health effects associated with noise, odour and light pollution, and has been designed to address the potential for hazards (both natural and manmade) and address their mitigation.
State Legislation	
Threatened Species Conservation Act 1995	The NSW Threatened Species Conservation Act 1995 (TSC Act) aims to protect and encourage the recovery of threatened species, populations and communities listed under the Act. The Act is integrated with the NSW EP&A Act and requires consideration of whether project is likely to significantly affect threatened species, populations and ecological communities or their habitats. The Biodiversity Assessment carried out by Eco Logical Australia concludes that any impact from the proposed works is not considered to be significant, and will not impact the long-term survival of these five threatened bat species. In this regard, referral to the Commonwealth Department of the Environment is not required.
Water Management Act 2000	Part of the proposed works are located on 'waterfront land', however controlled Activity Approvals are not required for State Significant Development under Section 89J of the EP&A Act.
Roads Act 1993	In accordance with Section 89K of the EP&A Act, the provisions of Section 138 of the Roads Act 1993 continue to apply to State Significant Development. The development involves works to a public road, and so requires approval under Section 138(1)(a) of the Roads Act 1993. This application will be referred to Parramatta City Council and RMS for consideration.
EP&A Act	The proposed development is consistent with the objects of the EP&A Act, in particular: ▪ it promotes the social welfare of the community; ▪ it allows for the orderly and economic development of land; and ▪ it is development for public purposes and will facilitate the delivery of

<table>
<tr><th>Instrument/Strategy</th><th>Comments</th></tr>
<tr><td></td><td>community services.
The proposed development is consistent with Division 4.1 of the EP&A Act, particularly for the following reasons:
▪ the development promotes education services and stimulates social welfare of the community; and
▪ the development has been evaluated and assessed against the relevant heads of consideration under Section 79C.</td></tr>
<tr><td>EP&A Regulation</td><td>This EIS has addressed the criteria within Clauses 6 and 7 of Schedule 2. Similarly, the EIS has addressed the principles of ecologically sustainable development through the precautionary principle, which assesses the threats of any serious or irreversible environmental damage.

Clause 7(1)(d)(v) of Schedule 2 is addressed below.
<table>
<tr><th>Act</th><th>Approval Required</th></tr>
<tr><td colspan="2">Legislation that must be applied consistently</td></tr>
<tr><td>Fisheries Management Act 1994</td><td>N/A</td></tr>
<tr><td>Mine Subsidence Compensation Act 1961</td><td>N/A</td></tr>
<tr><td>Mining Act 1992</td><td>N/A</td></tr>
<tr><td>Petroleum (Onshore) Act 1991</td><td>N/A</td></tr>
<tr><td>Protection of the Environment Operations Act 1997</td><td>N/A</td></tr>
<tr><td>Roads Act 1993</td><td>Yes
(refer above)</td></tr>
<tr><td>Pipelines Act 1967</td><td>N/A</td></tr>
<tr><td>Protection of the Environment Operations Act 1997</td><td>N/A</td></tr>
</table></td></tr>
<tr><td>State and Regional Development SEPP 2011</td><td>The aim of the policy is to identify development that is State Significant Development (SSD). Pursuant to the SRD SEPP a project will be SSD if it falls into one of the classes of development listed in Schedule 1 of the SEPP.
'Educational establishment (including associated research facilities)' with a CIV of $30 million or more are identified as SSD and are considered to be development of State significance.
The works have a CIV of over $30 million, and so qualifies as State Significant Development. A Quantity Surveyor's certificate prepared by Slattery confirming the total CIV is included with the application.</td></tr>
<tr><td>Infrastructure SEPP</td><td>Under Clause 32 of SEPP (Infrastructure) 2007, proposals for new school buildings need to address School Facilities Standards State government publications, including:
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).
These standards provide a guide for the development of new schools, new facilities at existing schools and the refurbishment of existing facilities to ensure the creation of an environment which is conducive to learning whilst being safe and robust in a school environment.
These standards were considered in the design and planning of the redevelopment of the site, and the project meets the objectives of the standards.
As the development will accommodate more than 50 students, the development meets the trigger for "traffic generating development" and is to be referred to the RMS under Schedule 3 of the Infrastructure SEPP.
A Traffic and Parking Assessment has been prepared by Thompson Stanbury Associates (Appendix P) which provides and assessment of the likely alterations to existing traffic and parking demand associated with the proposal and to recommend where appropriate, treatments to ameliorate such impacts, in accordance with the requirements of Clause 104 of the Infrastructure SEPP.</td></tr>
<tr><td>SEPP 55</td><td>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. The SEPP specifies when consent is required for remediation of contaminated</td></tr>
</table>

Instrument/Strategy	Comments
	land. A Detailed Site Investigation prepared by SMEC and a SEPP 55 Assessment prepared by Consara are included in **Appendix H** of this report and discussed in **Section 5.9**. In considering the findings of the Detailed Site Investigation, Consara has confirmed that the proposed use and construction works are suitable with regards to the provisions of SEPP 55, with Category 1 Remediation works required.
SEPP 33	Conara's Assessment considers the provisions of SEPP 33 (refer to **Appendix H**). It is noted that the identified USTs and their associated infrastructure that are currently present on the site have not been in use for a number of years and are not required to be re-commissioned for use in the proposed development for the site. Consequently under the UPSS Regulation they are required to be decommissioned and removed from the site. This decommissioning work, as part of the proposed development on the site, does not satisfy the definition of "hazardous or offensive industry" or "potentially hazardous or offensive industry" under SEPP 33 and as such the proposed development does not trigger any requirements under SEPP 33.
Local Planning Instruments and Controls	
Parramatta Local Environmental Plan	Refer to detailed discussion at **Section 5.1**.
Parramatta DCP 2011	
4.3.3.7 City Centre Special Areas C) Park Edge	DCPs are not a matter for consideration for SSD applications. Notwithstanding this, consideration has been given the key controls outlined in DCP 2011. This section of the Parramatta DCP 2011 relates to land within the 'Park Edge' precinct, in which the site is located. The Park Edge Special Area is located at the western edge of the Parramatta city centre adjacent to and including part of Parramatta Park, with buildings in this area forming a backdrop to Parramatta's Old Government House and Domain (OGHD). The Park Edge (Highly Sensitive) Area has been identified in the study *Development in Parramatta City and the Impact on Old Government House and Domain's World and National Heritage Listed Values, Planisphere 2012,* as an area where development is likely to have a significant impact on the world and national heritage values of OGHD, unless it is designed to mitigate potential impact to below a significant impact threshold. The planning controls developed for land in this area to mitigate significant impacts of development on the values of OGHD under its world and national heritage listing. The site is located in Area B, which encompasses land from Victoria Road to the north of the site down to the railway line and between Marsden Street / Marist Place and O'Connell Street. The proposal is consistent with the planning controls set out in this Section of the DCP. The proposed development, being predominantly an adaptive reuse of the existing site, will not result in any significant adverse impacts on the heritage OGHD heritage site.

5.1.1 Parramatta LEP 2011

Parramatta LEP 2011 is the applicable local planning instrument for the proposed development and establishes the relevant land uses and other development standards for the site. **Table 6** sets out the proposal's compliance against the relevant provisions.

Table 6 – Parramatta Local Environmental Plan 2011

Control	Compliance
Clause 2.1 - Land Use Zones	The proposed development (educational establishment) is permissible in the B4 Mixed Use zone.
Clause 2.3 – Zone objectives	The proposal is consistent with the zone objectives as it will: ▪ Contribute to the mixture of land uses in the B4 Mixed Use zone in this locality;

Control	Compliance
	▪ Proposes an educational establishment in an accessible location which will maximise public transport patronage and encourage walking and cycling; ▪ Will redevelop a derelict site and contribute to an active, vibrant and sustainable neighbourhood; ▪ Reinvigorate areas of public domain in and around the site through its redevelopment; ▪ Not detract from the B3 Commercial Core zone while catering to the demand for educational establishments for local and regional students; ▪ Contribute to the protection and enhancement of the unique qualities and character of special areas within the Parramatta City Centre as it seeks the adaptive reuse of existing heritage buildings on the site.
Clause 4.3 Height of buildings	LEP 2011 sets a maximum height of 10m for the entire site. The highest point of any new structure associated with the proposed new works (being the proposed courtyard additions to Building C) is 10 metres. The proposal is therefore compliant with this development standard.
Clause 4.4 Floor Space Ratio	LEP 2011 sets a maximum floor space ratio (FSR) of 0.4:1 for the entire site. The total GFA of the proposal is 9,119.57m^2, which equates to an FSR of 0.37:1. The proposal is therefore compliant with this development standard.
Clause 5.9 Preservation of trees or vegetation	The development requires the removal of 20 trees. The trees are not required as native fauna habitat and most are specimens planted as part of past landscaping or gardening activities, and are requirement for removal due to poor health or condition, or being located adjacent to proposed new infrastructure. The majority of trees are also of very low to low retention value. The trees do not contribute to the heritage significance of the site. See **Section 5.7** for further discussion.
Clause 5.10 Heritage Conservation	The site is identified in Schedule 5 Environmental Heritage of the LEP 2011 as an item of heritage significance, as follows: ▪ Marsden Rehabilitation Centre (and potential archaeological site), 24 and 24A O'Connell Street and 3 Marist Place, Lot 1, DP 1112822; Lots 3 and 4, DP 1132683, State significance, I00826 / I00771 The site is located within the curtilage of the Marsden Rehabilitation Centre and in close proximity to a number of State Heritage Items listed in Schedule 5 – Environmental Heritage of Parramatta LEP 2011, as outlined below: ▪ Parramatta Regional Park (I00596) ▪ St Patrick's Cathedral, presbytery (and precinct and potential archaeological site) (I00238) ▪ Parramatta Dam archaeological site weir (I732) ▪ Alfred Square (and potential archaeological site) (I686) ▪ Former St Andrew's Uniting Church, hall (and potential archaeological site) (I736) ▪ Parramatta hospital archaeological site (opposite side of the River) (A12) ▪ Brislington property, Moreton Bay Fig tree and potential archaeological site (I00059 / I00828) The Old Kings School site is listed under the NSW Heritage Act in the State Heritage Register under both its original function (former Kings School Group, SHR 00771) and its later function as the Marsden Rehabilitation Centre (SHR 00826). A Statement of Heritage Impact has been prepared by TZG Heritage (**Appendix D**) and provides an assessment of the impact of the proposed development on the heritage significance of the site and surrounds. The heritage assessment demonstrates that there will be minimal impact on the heritage significance of the site as a whole or the significant elements within it as a result of the proposed development, with any potential impacts to be mitigated by the proposed mitigation measures. See **Section 5.6** for further discussion.
Clause 6.1 Acid sulfate soils	The site is identified as Class 5 land on the Acid Sulphate Soils map of the LEP 2011. The Detailed Site Investigation (**Appendix H**) also confirms that the site, according to the Land and Water Conservation Acid Sulphate Soil Risk Map (1997), Prospect and Parramatta, there is no known occurrence of potential

Control	Compliance
	acid sulphate soils on the site, and that they are not expected to occur.
Clause 6.2 Earthworks	The proposed development will not include bulk earthworks. The proposal will involve minor excavation associated with footings for the proposed new hall and works associated with remediation of any contaminated soils on the site, including any replacement fill, which is not anticipated to be substantial.
Clause 6.3 Flood planning	The proposed development has been designed to be compatible with the flood hazard of the land. A Flood Assessment has been prepared by TTW and is included in **Appendix Q**, which identifies that the entire site is within the Probable Maximum Flood (PMF) flood extent, however the proposed building areas are above the 100-year flood level. Only a small portion of the proposed parking areas is within the 100-year flood extent. The lowest proposed ground floor level across the site is at 9.67m Australian Height Datum (AHD). This is at least 1.5m above the 100-year Average Recurrence Interval (ARI) flood level.

5.2 Built Form and Urban Design

5.2.1 Height

The proposed development comprises the adaptive reuse of the majority of buildings on the site. As a result, there are limited new built form elements, with new structures restricted to the school hall and sports court, and additions to the Building C group. The maximum height of the new development is 10m, being the new additions to the Building C courtyard. All elements of the new development are substantially lower than the height of existing buildings on the site, which range from 10.4m to 18.7m in height.

In this regard, the height of the overall development will remain largely unchanged, and the site will continue to present in a similar manner in terms of height and scale.

5.2.2 Density, Bulk and Scale

The proposed development seeks approval for the use of 9,119.57m^2 of floor space, constituting an FSR of 0.37:1, which is compliant with the maximum FSR of 0.4:1 permitted on the site under Parramatta LEP 2011.

The majority of the floor space will be contained within existing buildings on the site, with the new hall comprising only 1,223.05m^2 of GFA, or approximately 13% of the total floor space on the site.

As a result of the retention of the existing heritage buildings, the existing bulk and scale of the site will not be significantly altered by the proposal. Rather, it is considered that the removal of unsympathetic additions to Building C, and the overall improvement in maintenance, landscape and finishes resulting from the proposal will improve the presentation of the site.

The existing heritage articulation of the facades will remain unchanged, and the new buildings and elements have been scaled and massed in a manner that is sympathetic to existing development on the site, and will present a similar overall scale when viewed from adjacent properties and the public domain.

5.2.3 Site Layout

The site layout will remain largely unchanged given the retention of the majority of existing buildings on the site. The primary entry to the school from Marist Place will ensure connectivity to the site is maintained largely from the east, with playgrounds generally within the western and southern portions of the site.

The location of the proposed new sports court is considered optimal given the limited options presented on the site. The location of the sports court allows a more centralised playing area between the proposed new hall, Building D and Building C, and ensures the size and flexibility of the oval can be maintained.

The location of proposed parking areas have also been determined in order to minimise any potential conflicts with pedestrians whilst maintaining good access levels to and from Marist Place and O'Connell Street. The reuse of Building A as the main student office has been chosen in order to ensure the first point of entry for visitors into the school grounds is through the office.

5.2.4 Streetscape and Setbacks

The development's relationship with the streetscape will remain largely unchanged from a built form perspective, however, the proposal will result in an overall positive change from the existing situation, as the site will be well utilised. The site will still maintain its overall heritage character, with the following proposed elements contributing to the streetscape character of the proposal. In summary:

- **Proposed hall:** The proposed hall has been designed to fit within the heritage character of existing buildings on the site and has been designed with an angled roof form to provide visual interest when viewed from O'Connell Street. The height of the proposed hall is substantially less than other buildings on site, ensuring it does not dominate the heritage character of the site; and
- **Fencing:** The proposed fencing has been designed to provide a sense of permeability through the site, particularly along the oval perimeter. Existing brick walls / facades along O'Connell Street will be retained.

The following is an assessment of the degree of change to the existing streetscape:

- **Southern (oval) elevation:** Little change. The proposed new hall, fencing along the perimeter of the oval and the proposed staff car park along O'Connell Street and landscaping along the northern section of the oval will provide a sense of renewal, however overall the streetscape will remain unchanged. The southern elevation, including the new hall, is shown at **Figure 29**.
- **Western (O'Connell Street) elevation:** Little – moderate change. The proposed new hall and associated ancillary buildings will provide a degree of change to the streetscape, however the existing dominant elements in the streetscape, being Buildings B, C and D and the retention of the 1930s brick wall along the O'Connell Street frontage, will ensure that there is little to moderate change to this streetscape. Whilst the new services wing associated with the hall is built to the boundary (consistent with the former Building F) the main component of the hall has been setback over 11m from O'Connell Street to mitigate any adverse streetscape impacts.
- **Northern elevation:** Moderate change. The northern elevation will retain the existing dominant elements, being Buildings A, B, C and D, however the provision of the covered sports court, and the Building C addition (which will include a glazed façade) will form a significant feature of the elevation, providing a contemporary contrast. The new sports court is setback 1.2m from the northern boundary, and will be screened from the adjoining development by a retaining wall and landscaped screen.
- **Eastern (Marist Place) elevation:** Little change. The site, when viewed from Marist Place, will be dominated by the heritage character of existing buildings, particularly Building A, which will be retained. The views of the covered sports court and new hall in the background will provide some change to the site when viewed from the streetscape, however on balance, these will serve as contemporary and positive additions.

Overall, the proposed development will reinvigorate the streetscape, whilst retaining the distinct heritage character of the site.

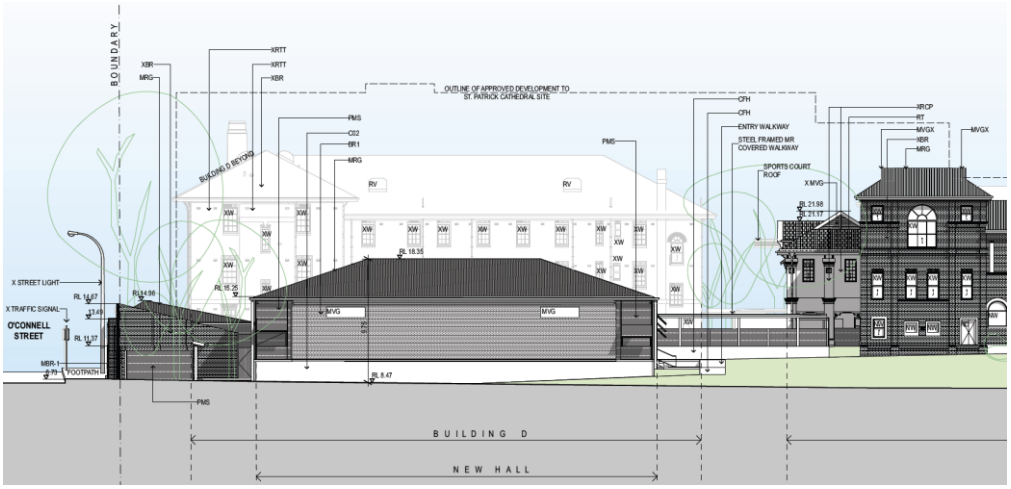

Figure 29 – The site's southern elevation, including the proposed hall (left)
Source: TZG

5.2.5 Open Spaces

The existing primary open space on the site, being the oval to the south, will be retained, with enhancements in the form of new trees and landscaping. Similarly, the existing public path to the south of the oval along the Parramatta River will be preserved.

The smaller play areas to the north of Buildings B and D will be landscaped in detail as play areas for children, incorporating edible gardens and shaded gathering areas. The major assembly area between Buildings C and D and the new hall will be paved, with additional tree planting and an adjoining small amphitheatre facing the new hall, part of which will be roofed as a COLA. The new sports court will also provide additional, functional open space.

The proposed development has been designed to maximise the open space available to the site, and has done so by limiting any increase to the footprint of buildings on the site. A substantial amount of the site will therefore be used for circulation, open space and functional play areas.

5.3 Environmental Amenity

5.3.1 Solar Access and Overshadowing

Shadow Diagrams have been prepared by TZG to demonstrate the shadow impacts created by the proposed development (refer to **Appendix A**). The position of the site to the south of the adjoining mixed use development means that there are no overshadowing impacts on the adjoining site, and overshadowing impacts will generally fall onto the school's own buildings and recreational areas.

Within the site, the shadowing of the oval will be reduced through the reduced bulk of the new hall compared to the existing Building F (to be demolished under the early works DA). Shadows cast by the proposed development compared with the existing development on the site will be virtually the same during midwinter, and therefore will not result in any adverse impacts.

5.3.2 Acoustic Impacts

An Acoustic Assessment has been prepared by Acoustic Studio (**Appendix R**) which addresses the requirements in the SEARs and provides an assessment to determine whether the relevant criteria can be achieved based on the proposed operations and construction methods.

With respect to operational noise impacts, the Assessment considers noise emissions from the use of the proposed hall, as well as mechanical plant and additional traffic generated by the proposal. The Assessment notes that primary noise emissions from the proposal will be mechanical plant and performance noise associated with the use of the hall and concludes that:

- Mechanical plant will be selected and noise controls implemented to ensure that the noise emitted is not loud relative to the pre-existing ambient and background noise levels that surround the site;
- The acoustic performance requirements for the new hall are driven by traffic noise intrusion. This in turn limits noise emissions from the use to surrounding noise sensitive receivers;
- There is potential for annoyance from low frequency noise emitted from amplified music, however provided that noise emissions are adequately controlled, this should not be intrusive, and should not adversely impact on the amenity of surrounding receivers; and
- By controlling noise emissions (associated with the operation of the proposed development) in accordance with the relevant criteria, amenity of noise sensitive receivers will be maintained and noise emissions should not be intrusive, therefore it is not expected that people and noise sensitive receivers will be adversely affected by the development.

A detailed assessment of construction noise and vibration is included in **Section 5.11** below.

5.3.3 Visual Privacy

The visual privacy of the approved mixed use development to the north of the site has been carefully considered during the design of the proposal. The proposal will not result in any significant overlooking of the adjoining site. In summary:

- The upper levels of the existing Building D will have screened views of the open space adjoining the residential building, but this will be from viewpoints approximately 20m from the boundary and not into direct line of sight to private open space. These views will be screened by existing and new landscaping;
- The upper levels of the existing Building C will have views towards the site to the north, but will be directly facing the approved commercial office building, which requires a lesser degree of privacy than a residential development;
- The new sports court will have a 2m high boundary retaining wall and planted screen to prevent views into the adjoining commercial development; and
- The proposed fencing and playground to the north of Building D have been carefully considered in consultation with the community, to mitigate any privacy and proximity impacts.

As a result of these measures, there will be no adverse impacts to the visual privacy of the neighbouring property to the north.

5.3.4 Lighting Impacts

There will be no new upward-facing external lighting. New external lighting will be downward facing to illuminate the ground plane for pedestrian movement. Existing façade illumination to the south elevations of Buildings A and B will be retained. This is currently focussed on the façade and has little overspill. As a result, there will be no adverse impacts on surrounding receivers.

5.3.5 Wind Impacts

The existing site has a low scale character, and is not subject to high winds. As the new elements are lower than existing buildings they replace, there will be no additional wind impact from the development.

5.4 Visual Impacts

A Visual Impact Assessment (VIA) has been prepared by TZG (**Appendix S**) which assesses the impact of the proposed development on a series of four Historic Views identified by Parramatta City Council as being worthy of protection, as well as three additional views considered worthy of analysis. These views are identified in **Table 7** below.

The methodology of the VIA is identified in the report as follows:

> *From each of the identified viewpoints a photograph of the existing condition is overlaid with a CAD view of the proposed O'Connell Street Primary School buildings with existing portions in outline only, and new built elements in greyscale. An assessment is made regarding the impact of the new built form on the view.*
>
> *At the conclusion of the Assessment, three other views are similarly analysed, selected for their long history or relationship to other heritage sites. These views are from publicly accessible spaces only.*

The views are identified in **Figure 30** and **Figure 31** below. The VIA provides the following assessment on all views selected:

Table 7 – Assessment of proposal's visual impact from key views

Selected View	Assessed Impact	Key Observations
Listed views		
View 1 – Old Government House	None	▪ A small area of the roof of the existing Building D is visible between well-grown, heritage-significant trees in the OGH grounds and in Parramatta Park. ▪ No new works are visible.
View 1A – Alternative viewpoint from portico group	None	▪ No clearly identifiable part of the School project is visible
View 1B – From lower slope north-east of OGHP	None	▪ Large area of the roof of the existing Building D is visible between well-grown, heritage-significant trees in the OGH grounds and in Parramatta Park. ▪ No new works are visible.
View 8 – Mary's Hill	None	▪ No part of the School project is visible
View 8 – Mary's Hill (Panorama)	None	▪ No part of the School project is visible
View 9 – The Crescent	None	▪ No clearly identifiable part of the School project is visible

Selected View	Assessed Impact	Key Observations
Other views		
View 10 – Northwest from Marsden Street Bridge	None	▪ No new works are visible.
View 11 – East from Marist Place	Minor/Positive	▪ The new Hall will be clearly visible, but is of a similar scale and lesser height compared to the removed Building F, and its articulation and materials are sympathetic to the retained buildings. ▪ The conservation of the high significance buildings will improve their presentation from this viewpoint.
View 12 – From O'Connell Street	Minor/Positive	▪ The new Hall will be clearly visible, but is of similar scale and lesser height compared to the removed Building F, and its articulation and materials are sympathetic to the retained buildings. ▪ The conservation of the high significance buildings will improve their presentation from this viewpoint.

Figure 30 – Listed views
Source: TZG

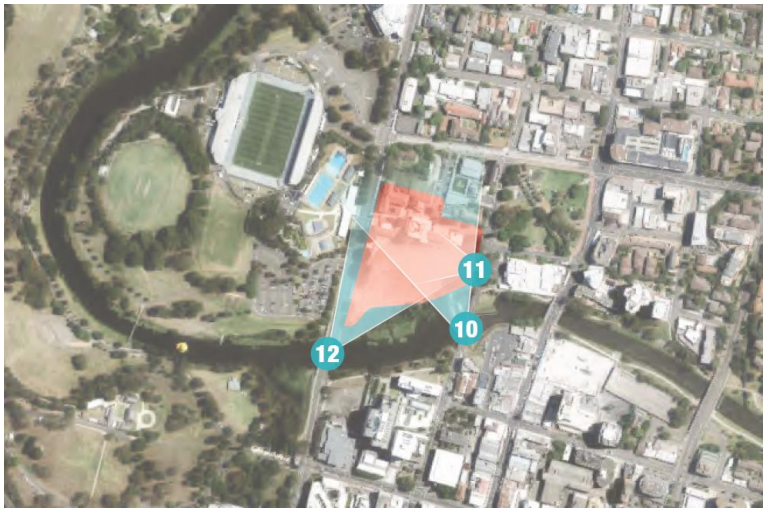

Figure 31 – Additional views
Source: TZG

5.5 Transport and Accessibility

Thompson Stanbury Associates has assessed the traffic and parking impacts associated with the proposed development. The report is provided in **Appendix P**.

The assessment has been prepared to respond to the SEARs by assessing and documenting the likely alterations to existing traffic and parking demand associated with the proposal, and by recommending, where appropriate, treatments to ameliorate such impacts.

The school population is projected to be 1,000 students and 61 staff members. In order to estimate the likely staged traffic generation of the school, an estimation of the likely origin of the students and their likely mode of travel has been undertaken. These two factors are interrelated as the closer the students live to the school, the less likely those students are to be driven to and from the school. The NSW Department of Education has indicated a likely primary catchment area providing boundaries of Grose Street to the north, Parramatta River to the south and west and Macarthur Street to the east.

The traffic study anticipates that approximately 30% of students will be driven to and from the school on a daily basis. Accounting for 60% sibling rate (based on information supplied by the Department of Education), on average, each private parent vehicle will transport 1.43 students to and from the site. On this basis, approximately 210 vehicles are projected to set-down / pick-up students during the school start and finish times following full occupation of the school.

Based on the school start and finish period occurring over a one and a half hour period (8.00am – 9.30am and 2.30pm – 4.00pm) the following peak hour traffic generation is projected:

- The school will generate in the order of 140 inbound and outbound passenger vehicle trips per hour associated with parent set-down / pick-up activities during both the morning and afternoon peak period, occurring via Marist Place and Market Street; and
- The school will generate up to 27 inbound passenger vehicle trips during the morning peak and 27 outbound vehicle trips during afternoon peak period associated with staff journey to and from work trips, occurring via the proposed staff car park accessed via O'Connell Street.

The report concludes:

- The proposed development provides adequate off-street parking to accommodate the long term parking demand associated with school staff, as well as the minor short term demand associated with visitors;
- The existing (and proposed) 6m wide combined ingress / egress driveways exceed the minimum specification of AS2890.1-2004 and are therefore considered to be satisfactory;
- With the satisfactory implementation of an appropriate site Operational Management Plan, the proposed implementation of formalised on street set-down / pick-up areas within Marsden Street / Marist Place and Market Street is envisaged to be capable of accommodating the peak instantaneous demand of parent vehicles during school start and finish periods;
- SIDRA modelling indicates that the surrounding local road network currently operates with a reasonable level of service with spare capacity; and
- The school has been projected to ultimately generate in the order of 307 peak hour vehicle trips to and from the site during school start and finish periods.

The surrounding road network is projected to be capable of accommodating the additional traffic projected to be generated by the proposed development.

These recommendations have been incorporated into the Mitigation Measures at **Section 7**.

5.6 Heritage

The proposed adaptive re-use of the buildings and site for a primary school is considered to be a compatible use that will preserve the unique heritage and landscape significance of the place. Accompanying the proposal is a Statement of Heritage Impact prepared by TZG Heritage (**Appendix D**), an Aboriginal Heritage Impact Assessment report prepared by Archaeological & Heritage Management Solutions (AHMS) (**Appendix E**) and a Statement of Heritage Impact: Historical Archaeology report, also prepared by AHMS (**Appendix F**). Each of these reports considers the proposed works and the potential impacts of these works on the heritage significance of the site, the assessments of which are detailed below.

5.6.1 Heritage Significance

As identified in **Section 2.3.1**, the overall site is listed on the State Heritage Register and is also identified as a local heritage item. Therefore, an assessment of the proposed development's potential impacts on the heritage significance of the site is required. The Statement of Heritage Impact (SOHI) responds to the requirements of the SEARs, considers the statutory context and historical context of the site, provides a detailed fabric assessment summary and provides an assessment of the heritage impact of the proposed works. The assessment also provides a set of conclusions and recommendations for the proposal.

The SOHI identifies that the former King's School site has very high heritage significance that applies to both the existing buildings and to the site generally, including its archaeology and landscape setting. This is reflected in **Figure 3** in **Section 2.3.1** of this report. Within this overarching grading of significance, each component of the site has been individually graded as having 'very high', 'high', 'moderate' or 'little' significance, as well as items identified as being intrusive to the general significance of the site (as per the *Marsden Rehabilitation Centre Conservation Plan* prepared by Peddle Thorp Architects in 1994).

The proposed works involving most intervention are generally limited to areas of the site with moderate or lesser heritage significance. All parts of the site identified as having 'very high' or 'high' significance are to be retained and conserved. Proposed works in these areas involve internal refurbishments and service upgrades. In this way, permanent impacts on the site's heritage significance will be mitigated wherever possible.

The bulk and scale of the existing heritage buildings will not be altered by the new proposal. The removal of unsympathetic additions and elements of little significance to Building C, and the overall improvement in maintenance and finishes resulting from the proposal will improve the presentation of the site overall. Views to and from the existing significant buildings will be generally improved as a result of the construction of the new hall.

The existing heritage articulation of the facades will remain unchanged. The new buildings and elements will be scaled and massed in a sympathetic way to the existing. **Table 8** below provides an assessment of the heritage significance of each building on the site and details the heritage impact of the proposed works. This assessment is taken from the TZG report at **Appendix D**.

Table 8 – Impact of proposed works on the heritage significance of existing buildings on the site

Building	Level of Significance	Heritage Impact of Proposed Works
Building A	Very high	Little
Building B	Very high	Little
Building C1	High	Little
Building C2	High	Little
Building C3	High	Little
Building C4	High	Little
Group C Courtyard	Little	Little / Positive
Building D	High	Little
Building G	Moderate	Positive

The SOHI also provides a detailed assessment of the heritage impact associated with the proposed external works, identifying that the site layout, streetscape and proposed landscaping have been developed to maintain the heritage landscape, result in little change to the streetscape. The SOHI concludes that the proposed external works will be sympathetic with the existing heritage fabric of the site.

Finally, the SOHI provides an assessment of each component of the development against the endorsed *Former Kings School / Marsden Rehabilitation Centre Conservation Management Plan and Archaeological Assessment* (GML Heritage, 2004 and 2005), as well as an assessment against the Masterplan Guidelines prepared by Tanner Architects for the site in 2006 for State Property and which were subsequently endorsed by the NSW Heritage Council.

The impact of the proposal is also considered against the Assessment of Significance of the 'Kings School Group (Former)' extracted from the NSW State Heritage Register listing. The assessment concludes that the proposed adaptive re-use of the former Kings School site for a new primary school is an appropriate use for the site. The proposed use will enable the heritage significance of the place to be retained and enhanced, with the significant urban context of the site and it's setting to be retained and preserved.

A number of recommendations and mitigation measures are proposed throughout the SOHI which are suggested to further mitigate any potential heritage impacts. These range from undertaking works in accordance with the principles of the ICOMOS Burra Charter and the policies contained in the *1994 Conservation Management Plan*, including repair and conservation works to all buildings, and preparing a photographic and written recording of areas affected (archival recording).

The recommendations of the SOHI are included in the mitigation measures at **Section 7**.

5.6.2 Archaeology

Aboriginal Archaeological Heritage

An Aboriginal Heritage Impact Assessment (AHIA) report has been prepared by AHMS and is included at **Appendix E**. This report presents the findings of Aboriginal community consultation and previous investigations regarding the Aboriginal cultural and archaeological heritage values of the subject area. It provides information on the location, distribution and significance of Aboriginal objects within the subject area, the likely harm to objects resulting from the proposed development and provides recommendations for the management of such harm.

The AHIA was initially developed and finalised in April 2016 with limited on-site investigation, and indicated that substantial parts of the subject area had the potential to contain the Parramatta Terrace Sand Sheet – a sand unit known to contain cultural deposits of considerable antiquity and significance. Following these findings, a program of test excavations was undertaken to further characterise these cultural deposits and inform the development. The submitted AHIA presents the findings of the test excavations and further refines the distribution of Aboriginal cultural deposits within the subject area.
The test excavations consisted of 23 mechanically dug test pits across the southern portion of the subject area, at 5-20m spacing in the vicinity of potential direct and indirect impacts. Overall, the excavations revealed that a thin unit of sand was present across the site, and was characteristic of the Parramatta Terrace Sand Sheet. The excavations retrieved 61 Aboriginal objects from this unit, of which 57 were recovered from a single test pit (test pit number 5) located on the western edge of the subject area.

A further phase of excavation was undertaken to characterise this deposit, and found it to be less than 25m^2 in size, in an area intersected by services. Compositionally, the objects are characteristic of a small hunting camp, likely to be deposited during the Pleistocene (10-30,000 years BP). For management purposes, this area was redefined as the 'Old Kings School AS1' to reflect the identification of an artefact scatter and deposits (and to ensure compatibility with other sites labelled similarly nearby).

'Old Kings School AS1' was considered to have high research potential, and was assessed as being of local significance (with potential for State significance pending results from further stages of work in the area). It was determined that approximately 50% of 'Old Kings School AS1' would be directly impacted by the construction of the new hall, and that the remaining 50% would also likely be affected due to the proximity of the works. Given the site's significance, archaeological mitigation in the form of salvage excavation has been proposed to allow ex-situ conservation of the site prior to development.

Based on these findings, the AHIA puts forward a number of recommendations and mitigation strategies in order to manage any archaeological impacts, including:

- Management of Aboriginal heritage should be included in the project's Environmental Management Plan. Information should include the findings, mitigation measures and recommendations of this report, along with guidance on unexpected archaeological and cultural finds (including human remains).
- The development has the potential to impact one Aboriginal site - 'Old Kings School AS1' (artefact scatter and deposit) partially located within the development footprint of the proposed hall. Given the significance of this site, archaeological mitigation measures in the form of salvage excavations should be undertaken in accordance with the AHIA prior to development.
- While isolated Aboriginal objects are found in other parts of the subject area, the potential for significant or extensive cultural materials is considered unlikely, and works can proceed with no further archaeological mitigation measures, and in accordance with the project's Environment Management Plan.
- Consultation should be maintained with the Aboriginal stakeholders during the finalisation of the development proposal. This should focus on the long term curation and management of the Aboriginal objects recovered through the archaeological excavation program, and any mitigation measures implemented prior to, and during, the works.
- If relocation of any element of the development outside the area assessed in this study is proposed, further assessment of the additional area(s) should be

undertaken to identify and appropriately manage Aboriginal objects / sites / places that may be in this additional area(s).

These measures are detailed in the AHIA in **Appendix E** and are included in the mitigation measures at **Section 7**.

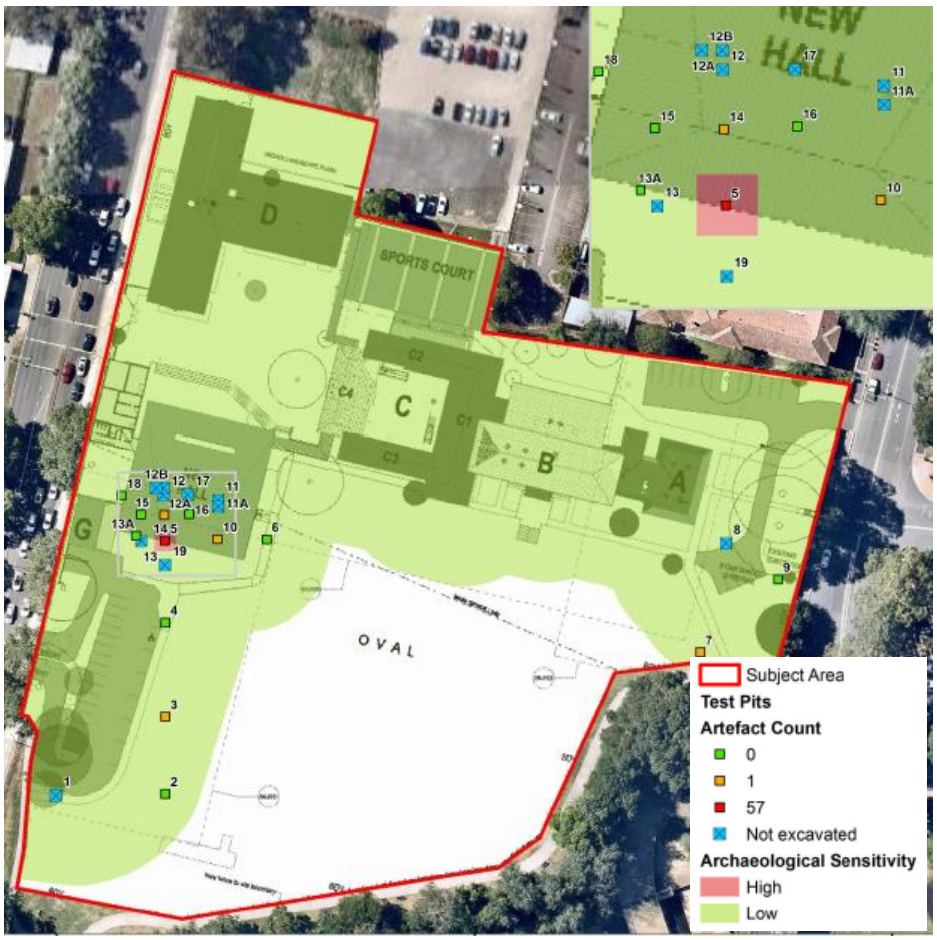

Figure 32 – Map showing the potential impacts to the zones of sensitivity assuming a 20m buffer around the proposed development activities
Source: AHMS

Historical Archaeological Heritage

A Statement of Heritage Impact; Historical Archaeology has been prepared by AHMS and is included at **Appendix F**. This report has been prepared to:

- Identify the type, nature and extent of any historical sites, objects, archaeological deposits, and potential archaeological deposits within the subject area;
- Assess and identify heritage constraints and opportunities and the potential impacts of the proposed development; and
- Identify and recommend measures to mitigate any heritage impacts, and risks to the proposed development.

As discussed at **Section 2.3.2**, the subject area has been occupied for more than 210 years, and the potential archaeological resources are primarily associated with the Kings School phase of development. However, there is also some potential for the survival of archaeological remains associated with the pre-1834 agricultural phase. This may include former fence lines, evidence of former plantings and facilities associated with the propagation of plants.

The potential for survival of archaeological remains and their research potential is summarised in **Table 9** below.

Table 9 – Potential survival of archaeological deposits remains and their research potential.

Site	Potential Survival	Research Potential
Refurbishment of Buildings A, B, C and D	High	High
Demolition of intrusive additions to Building C	Low-moderate	Moderate-high
Demolition of Building E slab, the boiler house	Low-moderate	Moderate
Demolition of Building F slab, the former gymnasium	None-low	Low
Partial demolition of Building G, fives court	Moderate	Low
Demolition of Building H slab, garages	Nil-low	Low
Construction of seating steps below the current ground surface, to the north of the new hall	None-low	Low
Construction of covered sports court north of Building C	Moderate-high	Moderate-high
Lowering of the ground surface at the site of Building F for the construction of the new hall and associated Covered Outdoor Learning Area (COLA).	Low	Low
Refurbishment of the car park at the southern end of the O'Connell Street frontage	High	Low
Refurbishment of the Marist Place car park	High	Low-moderate

The report identifies the impacts that may be associated with the works. In summary:

- **Refurbishment of Buildings A, B, C and D:** Works associated with this portion of the development are unlikely to have an impact on archaeological resources. However if subfloor works, such as reductions in ground levels, are to be undertaken then there may be impacts on potentially State significant deposits in Buildings A, B and C.
- **Demolition of intrusive additions to Building C:** Demolition works within this area may result in some ground disturbance.
- **Lowering of the ground surface at the site of Building F for the construction of the new hall and associated Covered Outdoor Learning Area (COLA):** A single outbuilding dating to the period after 1880 is within the footprint of the demolition area. Any deposits associated with this structure are likely to be of local significance. The deposits are likely to have been compromised by the construction of Building G.
- **Construction of the covered Sports Court north of Building C:** Some impacts on deposits with moderate to high research potential may occur.
- **Refurbishment of the car park at the southern end of the O'Connell Street frontage:** A single outbuilding dating to the period after 1880 is within the footprint of the proposed car park. Any deposits associated with this structure are likely to be of local significance. Construction impacts are likely to be minor but may have an adverse impact on these deposits.
- **Refurbishment of the Marist Place car park:** Construction impacts are likely to be minor and are unlikely to have an adverse impact on archaeological remains in this portion of the site.

Figure 33 below demonstrates the potential impact of the proposed works on the historical archaeology.

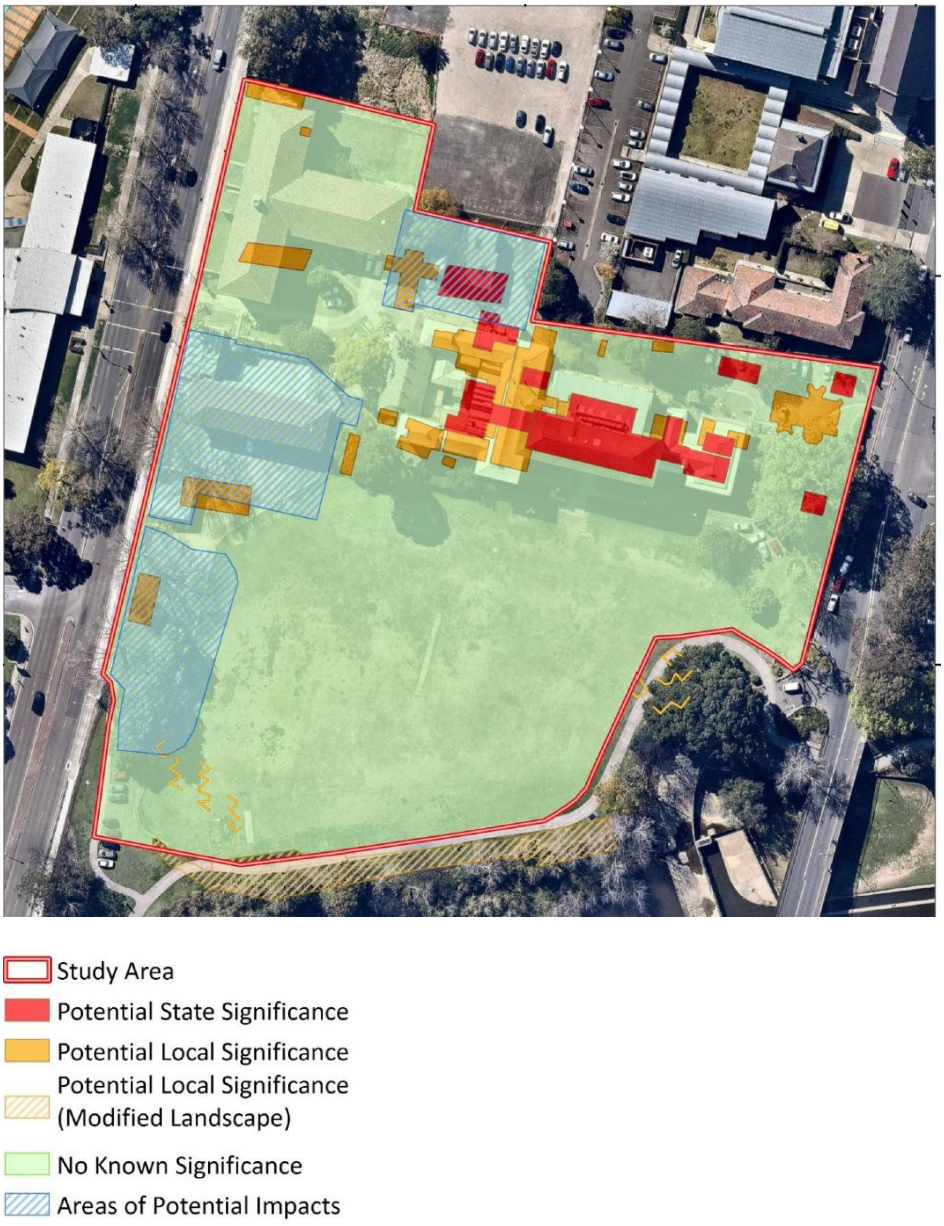

Figure 33 – Map showing the potential impacts on areas assessed as having the potential to contain deposits of State or local significance.
Source: AHMS

The report proposes a number of recommendations and mitigation strategies in order to minimise any potential historical archaeological impacts, including:

- A Heritage Management Plan should be prepared following development approval. This plan should be developed to ensure appropriate investigation and management of cultural deposits across the site prior to, during, and following the development.
- As part of the Heritage Management Plan a Research Design should be prepared in order to provide a framework within which the archaeological data can be managed;
- In regard to specific work zones the following recommendations are made:

- **Refurbishment of Buildings A, B, C and D:** Assess once precise impacts have been determined. Salvage if warranted otherwise monitor in order to manage relics and remains within the sub-floor area of the buildings.
- **Demolition of intrusive additions to Building C:** Archaeological monitoring in order to determine the presence of any buried relics and remains and to record findings.
- **Demolition of Building E, the boiler house:** Archaeological monitoring in order to determine the presence of any buried relics and remains and to record findings.
- **Demolition of Building F, the gymnasium:** Stop work protocol to manage the discovery of any unforeseen remains.
- **Construction of seating steps below the current ground surface, to the north of the new hall:** Stop work protocol to manage the discovery of any unforeseen remains.
- **Lowering of the ground surface at the site of Building F for the construction of the new hall and associated COLA:** Stop work protocol to manage the discovery of any unforeseen remains.
- **Construction of the covered Sports Court north of Building C:** Archaeological monitoring during groundworks in order to determine the presence of any buried relics and remains and to record findings.
- **Refurbishment of the car park at the southern end of the O'Connell Street frontage:** Stop work protocol to manage the discovery of any unforeseen remains.
- **Refurbishment of the Marist Place car park:** Stop work protocol to manage the discovery of any unforeseen remains.

These are detailed in the report in **Appendix F** and are included in the mitigation measures at **Section 7**.

5.7 Tree Removal

An Arboricultural Impact Statement has been prepared by TLC Tree Solutions and is included in **Appendix T**.

The assessment identifies that 20 trees are required to be removed from the site due to poor health or condition, or their location adjacent to components of the proposed works. Of the nine (9) regionally significant trees on the site, two (2) are proposed to removed. The two (2) to be removed are T74 (Carob), from which cuttings will be taken to establish replacement plantings and T72 (Plane Tree), which has declined in health and condition such that its removal is required to protect public safety irrespective of any proposed development works.

On this basis, 26 trees are proposed to be retained, with all trees off-site in the vicinity of the development (three (3) trees) also being retained.

Replacement plantings are proposed, as detailed in the landscape plan at **Appendix I**. The report concludes that the removal and replacement of these trees will have no lasting adverse impact on the arboricultural amenity of the site.

The assessment also includes a series of recommendations to protect retained trees during the construction phase. These recommendations are included in the mitigation measures at **Section 7** of this report.

5.8 Biodiversity

A Biodiversity Assessment has been prepared by Eco Logical Australia to assess the impact of the proposal on threatened flora and fauna species likely to occur in the study area (refer to **Appendix U**).

The field survey confirmed that the subject site does not contain any native vegetation which would provide suitable habitat for threatened species. Therefore, the proposed development does not require the calculation of credits, and the Framework for Biodiversity Assessment cannot be undertaken for the proposed development. Correspondence between Eco Logical Australia and the Office of Environment and Heritage confirmed that the Framework Biodiversity Assessment does not apply to the proposal, and that a Flora and Fauna Assessment report is suitable.

The Assessment included field surveys of the site, and a nocturnal fauna survey which targeted microchiropteran bats. The surveys were undertaken in accordance with the *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities* (DEC 2004). A review of the NSW National Parks and Wildlife Service (2002) vegetation mapping identified two vegetation types within the study area, and the field survey confirmed the presence of weeds and exotics and cleared land within the study area. One additional vegetation type, planted native vegetation, was also recorded within the study area. No threatened ecological communities or threatened flora species were recorded within the study area during the survey.

Twenty threatened flora species, 35 threatened fauna species and seven migratory species listed under either the *Threatened Species Conservation Act* and / or *Environmental Protection and Biodiversity Conservation Act* were identified by the data audit as being known to occur, or with the potential to occur, within a 5km radius of the site. However with the exception of the species identified below, the likelihood of these species occurring on the site is generally considered unlikely due to the absence of suitable habitat.

Two threatened bat species, Eastern Bentwing-bat (*Miniopterus schreibersii oceanensis*) and Grey-headed Flying-fox (*Pteropus poliocephalus*), were recorded within the study area during field surveys. Potential foraging habitat was also recorded for an additional three threatened bat species, being Miniopterus Australis (*Little Bentwing-bat*), Mormopterus Norfolkensis (*Eastern Freetail-bat*) and Myotis Macropus (*Southern Myotis*), within the study area.

Assessments of significance consistent with section 5A of the EP&A Act were undertaken for these five threatened bat species. Given that only limited trees will be removed as a result of the proposed development, no roosting habitat will be impacted, and higher quality habitat is available in the surrounding landscape. Eco Logical Australia concludes that any impact from the proposed works is not considered to be significant, and will not impact the long-term survival of these five threatened bat species. In this regard, referral to the Commonwealth Department of the Environment is not required.

5.9 Soils, Geotechnical and Groundwater

A Detailed Site Investigation has been prepared by SMEC, and a SEPP 55 Assessment has been prepared by Consara. SMEC has also undertaken a Geotechnical Investigation which builds on the findings of previous reports prepared for the site. These reports are provided at **Appendix H** and **Appendix G** respectively, and are summarised below.

The recommendations from these reports have been included in the Mitigation Measures at **Section 7**.

5.9.1 Contamination

As identified in **Section 2.3.4** of this report, the Detailed Site Investigation (DSI) prepared by SMEC identifies minor exceedances in contamination criteria for the areas of the site encompassing the oval, the carpark, the building precinct and the UST and Boiler House (refer to **Appendix H** for details of test results).

The DSI concludes that the site is considered suitable for the proposed development, subject to managing the exceedances as outlined in the DSI as part of the proposed redevelopment works, and, if required, through a Long Term Environmental Management Plan (LT EMP) post construction. The DSI recommends:

- The UST(s) near the Boiler House be removed in accordance with regulatory requirements;
- The management of soils and/or fill exceeding criteria in areas associated with Buildings D and H, the Quadrangle, O'Connell Street carpark area, and south western corner of the oval be managed as part of proposed redevelopment works, and, if required, through a LT EMP post construction; and
- Management be carried out in accordance with the relevant regulatory requirements.

Consara has reviewed the findings of the DSI in preparing the SEPP 55 Assessment for the site. The SEPP 55 Assessment identifies that:

- Given the history of the site, it is considered that the presence of these substances is likely the result of the use of hazardous materials in the buildings, and that the contamination present is minor, and its nature and distribution limited.
- The identified soil contamination on the site is not considered to pose a risk of harm to the health of future users of the site under the proposed development for a primary school. The existing surface coverings (where they will be retained) and the proposed final surface coverings (where improvements or changes are required as part of the proposed development) are considered to be sufficient to provide an effective physical barrier between any retained contaminated or potentially contaminated soils, and the future users of the land, subject to the implementation of a LT EMP.
- Given that the proposed development includes the maintenance or improvement of suitable surface cover and surface treatments, and the minor and limited nature of the contamination identified on the site, it is considered that the site can be made suitable without the preparation of a Remediation Action Plan through:
    - The construction of the proposed development, including suitable surface coverings;
    - The implementation of a CEMP during construction; and
    - The preparation and implementation of a LT EMP for the ongoing use of the site.

5.9.2 Geotechnical

The site is underlain by Ashfield Shale bedrock from the Wianamatta Group. In general, Ashfield Shale comprises black to dark grey shale and laminate. Clays derived from the weathering of Ashfield Shale are characteristically of high plasticity and moderate to high reactivity. All soils encountered within the study area have been classified as fill, possible alluvial deposit, residual soil, weathered rock and bedrock based on their origin and deposition process.

Based on the results of the site investigations, the report provides a series of recommendations around footings and building foundations for the new school hall.

5.9.3 Groundwater

Groundwater was generally not encountered in the augered intervals of the boreholes. Water was used as a drilling fluid in the cored sections of the boreholes, hence groundwater could not be monitored during the coring. However, based on the preliminary geotechnical investigation report prepared by Connell Wagner, groundwater was encountered at the depths of between 2.9m and 5.3m below the site surface across the site. Therefore, any footing excavation below these levels may be impacted by groundwater inflows which will need to be controlled and allowed for in design and planning.

The Geotechnical Report makes a series of recommendations around building footings.

5.10 Drainage and Flooding

Drainage

As outlined in **Section 0** and in the Stormwater Management Report in **Appendix L**, the surface areas will be drained through a variety of methods, in accordance with AS3500.3:2003 and Council's stormwater drainage guidelines. The proposed stormwater attenuation method, through the provision of OSD tanks, will involve all roof catchments discharging into the OSD tanks. The proposed development will also include Stormwater Quality Improvement Devices (SQID's).

The Pollutant Export Modelling undertaken by Wood & Grieve Engineers demonstrates the effectiveness of the treatment system in achieving the reduction targets set by Council. The report outlines that the stormwater quality improvement devices implemented are expected to assist in reducing a wide range of pollutants. For example, heavy metals are commonly associated with, and bound to fine sediments. Thus reducing the discharge of fine sediment during the construction and operational phases will also reduce the discharge of heavy metals to existing stormwater systems.
The Stormwater Management Report concludes that the following will be achieved as a result of the proposed stormwater concept:

- Appropriate standards to be maintained on all aspects of stormwater within the site;
- Pollution control to be maintained; and
- Establishment of a unified, clear and concise stormwater management strategy.

Flooding

A Flood Assessment has been prepared by TTW and is included at **Appendix Q**. Whilst the entire site is within the Probable Maximum Flood (PMF) flood extent, all of the proposed building areas are above the 100-year flood level. Notwithstanding this, a small portion of the proposed parking area on the site's western boundary is within the 100-year flood extent.

TTW has assessed the proposed development against Parramatta's Local Floodplain Risk Management Policy, and notes that the lowest proposed ground floor level across the site is at 9.67m Australian Height Datum (AHD). This is at least 1.5m above the 100-year Average Recurrence Interval (ARI) flood level of 8.0m AHD.

TTW concludes that the proposal is unlikely to adversely affect flood behaviour, or cause any detrimental increases in the potential flood affectation of other properties. The impact on flooding is mainly limited to the PMF event, and the impact of the development on such a flood event is considered to be minimal. Whilst there is a small portion of carpark area within the 100-year flood extent, given that the size of the area is limited, and due to its proximity to the oval and the Parramatta River, it is not expected to create any actionable nuisance to surrounding properties.

5.11 Construction Impacts

5.11.1 Construction Hours and Duration

The proposed hours of construction are:

- Monday to Friday: 7:00am to 6:00pm;
- Saturday: 8:00am to 3:30pm; and
- No work on Sundays and NSW public holidays.

It is noted that the proposed hours for Saturdays are outside the EPA's standard hours for construction, however these extended hours will enable the construction noise and vibration generating activities to be carried out in a more efficient manner, thereby shortening the overall construction period.

The expected duration of construction works (excluding early works) is approximately 12 months.

5.11.2 Construction Noise and Vibration

The Acoustic Assessment of Operation and Construction Noise and Vibration prepared by Acoustic Studio addresses construction noise and vibration, and the potential impacts of construction on surrounding sensitive receivers (refer to **Appendix R**).

Construction Noise

The report sets out the construction noise criteria as prescribed by the *Interim Construction Noise Guidelines 2009* for both the standard construction hours, and the works to be undertaken outside of the standard construction hours. Based on typical construction practices and equipment used, it is anticipated that the principal source of noise emissions will be during the demolition and ground excavation phases.
The Assessment has found that there are likely to be times when demolition and new-build works may exceed the nominated criteria, particularly when works occur in the areas closer to sensitive receivers, notably St Patricks Cathedral to the north.

In order to mitigate potential impacts, reasonable and feasible noise management measures will need to be adopted. The following mitigation measures could be adopted to reduce construction noise impacts:

- Selection of the quietest feasible construction equipment;
- Localised treatment such as barriers, shrouds and the like around fixed plant such as pumps, generators and concrete pumps;
- Scheduling activities to minimise noise impacts;
- Schedule noisy activities to occur outside of the most sensitive times of the day for each nominated receiver, and provide respite periods in the case of unavoidable maximum noise levels events; and

- Avoid unnecessary idling of trucks and equipment.

In addition, a communications register will be implemented to ensure that the local community is aware of anticipated changes to noise and vibration emissions prior to the works being undertaken. The plan will also explain the complaint procedures and response mechanisms.

Vibration

Acoustic Studio has set vibration criteria for building damage, human comfort and sensitive equipment. Given the limited amount of excavation required, Acoustic Studio does not anticipate that there will be any adverse vibration impacts at surrounding receivers.

Notwithstanding this, the Contractor will carry out a preliminary vibration assessment at the commencement of each phase of work to determine whether the existence of significant vibration levels justifies a more detailed investigation.

If required, all practical means would be used to minimise impacts on the affected buildings and occupants from activities generating significant levels of vibration. Measures may include:

- Modifications to construction equipment used;
- Modifications to methods of construction; and
- Rescheduling of activities to less sensitive times.

The recommendations of the Acoustic Assessment of Operation and Construction Noise and Vibration are included in the Mitigation Measures at **Section 7**.

5.11.3 Air and Water Quality

Air Quality

The Preliminary Construction Management Plan has been prepared by Root Projects Australia (refer to **Appendix V**) and contains a series of mitigation measures that will be adopted to ensure that the construction process does not result in any unacceptable amenity impacts, including adverse air quality impacts. The Contractor will be required to address air quality measures in its Site Specific Construction Environmental Management Plans including measures to limit the effects of dust / pollution on adjoining properties, land / habitat and watercourses. This should include consideration of:

- Managing stockpiles and excavation areas to mitigate potential dust problems; and
- Operating water carts to spray exposed surfaces and minimise wind-blown dust.

Water Quality

A Concept Erosion and Sediment Control Plan has been prepared by Wood & Grieve Engineers (refer to **Appendix W**) which outlines the erosion and sediment control measures that will be employed.

Some specific site management measures include:

- Maintaining all erosion control measures until the land is effectively stabilised;
- Stabilising all disturbed areas as soon as practicable.;
- Demarcating / controlling areas for construction activities and traffic movements – to minimise disturbance on-site;

- Progressively rehabilitating areas (where practical) - to minimise area of exposed soils;
- Locating stockpiles / material storage areas away from flood-prone land, drainage paths, water bodies and stormwater systems; and
- Regular street-sweeping (or similar) of roadways adjacent to, and within, the site during the course of construction - to ensure they are kept free and clear of mud and sediment.

5.11.4 Construction Waste Management

A Waste Management Plan has been prepared by SMEC to assess waste quantities, storage and management procedures during the demolition, construction and operational phases of the development (refer to **Appendix M**). With respect to demolition and construction waste, the WMP proposes the following waste management measures:

- A Project Manager and Site Supervisor will be responsible for separating waste types on site;
- Materials will be re-used on other projects, or transported to recycling facility where possible;
- All waste generated at the site will be disposed of at the appropriate licensed waste facility. All waste movement (transportation and disposal) records should be retained and documented by the appointed contractor; and
- Appropriate professional advice will be sought immediately for any unexpected finds.

5.11.5 Construction Traffic

The Traffic Report prepared by Thompson Stanbury Associates establishes the principles for the management of construction traffic which will be implemented during the construction phase (refer to **Appendix P**). In summary:

- Construction vehicle transit routes to and from the site will be selected to minimise the impact on the adjoining arterial road network, with routes governed by load limits being avoided as necessary;
- The site access location (likely to be via Victoria Road and Marist Place) is considered appropriate for the development construction process in order to eliminate construction vehicle access movements along the lower order internal roads;
- This site access is to be supervised by appropriately qualified traffic controllers, and site access movements should be reduced during peak commuter periods (6.00am – 9.00am and 3.00pm – 7.00pm) to minimise impacts on adjoining traffic flow and pedestrian / cycle movements; and
- Whilst the proposal will generate additional construction traffic, it is not envisaged that the construction works will result in unreasonable impacts on the surrounding road network.

5.12 Accessibility

An Accessibility Report prepared by Funktion is included at **Appendix X**. The report reviews the proposed development to ensure that ingress and egress, paths of travel, circulation areas, recreation facilities and amenities comply with the relevant statutory guidelines.

The Report concludes that the access provisions for people with physical and sensory disabilities redeveloped areas can comply with the accessibility requirements of BCA (2015) sections D3, E3.6 and F2.4; AS1428.1, AS2890.6,

AS1735.12 and the Disability (Access to Premises - Buildings) Standards 2010 for accessibility and equity.

Similarly, the proposed new areas have the ability to provide continuous accessible paths of travel and accessible facilities to ensure inclusive design to meet the anticipated requirements of staff, students and visitors.

5.13 Structural Adequacy

A Structural Design Statement has been prepared by SDA (**Appendix AA**) to address the structural requirements of the building, particularly in light of the building's specific functional requirements. The statement confirms that the structural design for alterations to the existing buildings and new works will be design in accordance with the following Australian Standards, as applicable:

- AS 1720 Timber Structures Code.
- AS 2159 Piling Code.
- AS 2870 Residential Slabs & Footings Code.
- AS 3600 Concrete Structures Code.
- AS 3700 Masonry Structures Code.
- AS 4100 Steel Structures Code.
- AS 1170 Parts 0, 1 ,2 & 4 SAA Structural Design Actions.

5.14 Crime Prevention Through Environmental Design

A Crime Prevention Through Environmental Design (CPTED) Assessment has been conducted by JBA Planning and is included at **Appendix Y**. The Assessment identified that the proposed development is likely to provide a safer and more secure environment than the current situation. Notwithstanding this, the Assessment makes a number of recommendations to further improve the safety and security of the development, as outlined below:

- Installation of secure fencing and signage separating the publically accessible portions of the oval from the school grounds;
- Ensure that car parking areas are restricted and locked to ensure cars cannot enter the grounds outside of school hours;
- Consider the use of way finding signage to reinforce visitor's perception of safety and legibility of the development. The signage should reflect the student access to the site from Marist Place and is to provide clear means of identifying public spaces, private spaces, visitor spaces and entries to the buildings and at the same time restrict access to unauthorised areas;
- Ensure the landscaping design does not give rise to concealment opportunities and does not restrict sightlines or surveillance opportunities from the development overlooking the public domain spaces, and in particular maintain the landscaping to the south of the new hall building and around the perimeter of the site;
- Provide restricted access keys or the like to the secure gates / doors at the entrance / exit points of the site to prevent unauthorised entry outside of school hours;
- Ensure that fire exists are for emergency use only and doors should be alarmed to alert security. These exits should be brightly lit and free of obstructions to ensure good sightlines to these doors;

- Consider the use of CCTV throughout the site. This may include at points of entry, the car parking areas and any areas which could potentially be used for loitering/ concealment, particularly the south of the new hall building. The CCTV should be used in conjunction with adequate illumination to ensure clear CCTV footage can be captured;
- Undertake consultation with a qualified lighting engineer to ensure the correct lighting is provided to meet minimum Australia and New Zealand Lighting Standards, to enable sufficient surveillance of the entire site and be vandal proof or resistant to limit breakage and minimise maintenance;
- Installation of suitable lighting along all pedestrian and vehicular pathways;
- Use of high quality materials for construction to lessen the likelihood of damage and help to reduce maintenance costs; and
- Ensure mechanisms are in place for on-going maintenance of landscaping and the buildings, which includes:
  - rapid removal policy for vandalism repair and the removal of graffiti; and
  - maintenance of landscaped spaces.

5.15 Ecologically Sustainable Development

An Environmental Sustainability Management Plan prepared by Wood & Grieve Engineers is included in **Appendix N**. ESD principles will be incorporated into the design, construction and ongoing operation phases of the development. Whilst the development will be designed to achieve an equivalent 4 Star Green Star Design & As Built development rating, no formal rating will be pursued, as this is not required in line with the Government's EFSG. A 4 Star rating is equivalent to "Australian Best Practice".

The report sets out sustainability performance indicators for the project, including:

- Reducing the stormwater run-off impacts of the development and the overall impact on the surrounding ecology;
- Energy efficiency and reductions in Greenhouse Gas Emissions;
- Addressing water efficiency and reduce the potable water demand;
- Addressing ecologically damaging emissions;
- Targeting a number of elements to increase the indoor environment quality; and
- Ensuring best practice operational and construction waste management.

The sustainability initiatives that could be adopted to achieve these performance indicators are detailed in Wood & Grieve Engineers' Plan, and will be finalised during detailed design.

The environmental performance of the development has also been assessed against Clause 7(4) of Schedule 2 of the EP&A Regulations. The proposed development is consistent with the five accepted principles of ESD, as described below.

Precautionary Principle

If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

The proposal is supported by environmental studies and technical reports which conclude that there are no environmental constraints that would preclude the development of the site, subject to appropriate management during the design,

construction and operational stages. It is considered that through adherence to the Mitigation Measures outlined in **Section 7**, the proposal will not result in negative environmental impacts.

Integration Principle

The integration principle states that decision-making processes should effectively integrate both long-term and short-term economic, environmental and social considerations. The design of the development has been developed to integrate the short and long-term effects of economic, environmental and social considerations in the provision of teaching and educational facilities at the school.

Intergenerational Equity

The principle of intergenerational equity holds that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations. The proposal has been developed to directly benefit current and future generations in that it contributes to the provision of education services for the community without causing significant impact to the environment.

Biological Diversity

Under the biodiversity principle, the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.

The development site does not contain any threatened or vulnerable species, populations, communities or significant habitats. The construction and ongoing operation of the facility will be managed in accordance with the Mitigation Measures, ensuring no significant indirect impacts on the surrounding environment.

Valuation and Pricing of Environmental Resources

Under this principle, improved valuation, pricing and incentive mechanisms as well as environmental factors should be included in the valuation of assets and services.
The cost of infrastructure and other design measures to ensure an appropriate level of environmental performance has been incorporated into the cost of development. In addition, the level of waste will be appropriately managed during the construction and the operation of the development. These measures have also been incorporated into the cost of development.

5.16 Development Contributions

The relevant contributions plan for the site is the *Parramatta City Centre S94A Development Contribution Plan (Amendment No. 4)*, effective since December 2007.

The underlying purpose of Council's Civic Improvement Plan for the Parramatta City Centre is to raise funds from private, commercially driven developments to be put towards the cost of public facilities and infrastructure which are burdened by those developments. Imposing a levy on the Department of Education's own public infrastructure conflicts with the public policy of the Plan, particularly as the proposed development will provide a new piece of infrastructure which will relieve pressure on existing public facilities.

Whilst Council's Plan does not automatically exclude Crown Developments or educational establishments from the payment of section 94A contributions, an exemption is considered appropriate in this instance. The Department of Education is a government agency which relies on government grants to provide new facilities for both the school community, and the general public. The levying of a

development contribution would divert a portion of these public funds, which have been specifically provided to fund a new primary school, to local services without any direct nexus to the impact on those services.

The inherent public character of the proposed development is in contrast to a strictly commercial development where a full levy might be considered reasonable. The nature of the development means that the infrastructure which Council typically seeks to levy for will largely be provided by the school for use by staff, students and the general public. In this regard, the proposed development facilitates the Plan by conserving and enhancing the City's heritage assets and providing a hall for use by the broader community, outside of school hours.

The Department of Education's position is supported by the provisions of Circular D6, as discussed below.

Crown applications – Department of Planning Circular D6

Again, it is noted that Council does not automatically grant exemptions to Crown Developments, however the Department of Planning's Circular D6 sets out the reasons why Crown developers should be able to seek exemptions from section 94 payments.

While the Department of Planning's Circular D6 *"Crown Development Applications and Conditions of Consent"* was formulated in 1995, it still remains the guiding document in relation to Crown applications and development contributions. The effect of this circular is that, where the applicant is a Crown authority and the development is for Educational Services, no contributions should be collected for open space, community facilities, parking, and general local and main road upgrades. As the proposed development is for the purpose of a new primary school, it is clearly development for the purposes of Educational Services.

The exemption from payment of contributions relating to community facilities, public domain and new open space is considered appropriate, as the new school will provide an oval which will be available for Council use, as well as other community facilities. These include:

- Provision of an upgraded school oval, which will be available for Council use outside of school hours, on the weekend and during school holidays;
- Construction of a new school hall, which will be available for community use outside of school hours, on the weekend and during school holidays; and
- Provision of a new school library, which will relieve pressure on existing local libraries.

The availability of these amenities and services on the site, which are maintained by the Department of Education, reduces the demand on public amenities outside the school campus. Further, the proposed development will directly contribute to the retention and conservation of Parramatta's significant heritage assets.

Taking into account the significant public benefits which the proposed development, and the presence of a new School generally, will provide, and the positive impact that this development will have on local and regional infrastructure, it is clear that no development contributions should be levied against this development.

As stated in Circular D6:

> *Crown Activities providing a public service or facility lead to significant benefits for the public, in terms of essential community services and employment opportunities. Therefore, it is important that these essential community services are not delayed by unnecessary disputes over*

conditions of consent. These activities are not likely to require the provision of public services and amenities in the same way as developments undertaken with a commercial objective.

5.17 Site Suitability

The site is suitable for the proposed development in that it is returning the site to its original use and hence reinstating a primary aspect of its heritage significance. The site is in close proximity to transport infrastructure, shops and other services, and the built form is in keeping with the existing surrounding development, and seeks to retain and adapt the existing buildings on the site, where possible.

The development is suitable for the site for the following reasons:

- The development is permissible in the zone, and will return the site to its original use as an educational establishment;
- The proposal involves the adaptive reuse and conservation of significant heritage buildings on the site, and construction of high quality new structures which enhance the streetscape and read as distinctly new elements;
- The site has adequate open space to support the proposed educational establishment;
- The site is located on the edge of the Parramatta CBD, in close proximity to existing amenities and transport;
- The development will improve the functionality, accessibility and safety of the site; and
- The development considers and minimises impacts on the surrounding locality.

5.18 Public Interest

The proposed redevelopment of the school is in the public interest as it:

- Will provide a significant new education facility in the area to meet the needs of the growing population;
- Will strengthen Parramatta's position as Sydney's second CBD;
- Is of a high architectural standard, and the built form is compatible with the existing buildings on the site and surrounding buildings;
- Will facilitate the conservation of the site's significant heritage assets, and will prevent the site from falling into further disrepair;
- Retains and respects the site's heritage significant building whilst developing new facilities which are in-keeping with the heritage built form; and
- Will facilitate public use of school facilities (the new school hall and oval) outside of school hours, on the weekend and during the school holidays.

6.0 Environmental Risk Assessment

The Environmental Risk Assessment (ERA) establishes a residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for Project Archimedes has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools.

The Risk Assessment Matrix at **Figure 34** illustrates how the residual environmental impacts of a proposal are assigned. The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented as follows:

- The significance of impact is assigned a value between 1 and 5 based on:
  - the receiving environment;
  - the level of understanding of the type and extent of impacts; and
  - the likely community response to the environmental consequence of the project.
- The manageability of environmental impact is assigned a value between 1 and 5 based on:
  - the complexity of mitigation measures;
  - the known level of performance of the safeguards proposed; and
  - the opportunity for adaptive management.

The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented.

Significance of impact	Manageability of impact				
	5 Complex	4 Substantial	3 Elementary	2 Standard	1 Simple
1 – Low	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)	2 (Low)
2 – Minor	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)
3 – Moderate	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)
4 – High	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)
5 – Extreme	10 (High)	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)

Figure 34 – Risk Assessment Matrix

In accordance with the SEARs, the ERA addresses the following significant risk issues:

- The adequacy of baseline data;
- The potential cumulative impacts arising from other developments in the vicinity of the site; and
- Measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

Table 10 presents the ERA for this project.

Table 10 – Environmental Risk Assessment

Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Significance of Impact	Manageability of Impact	Residual Impact
Key: C - Construction O - Operation						
Noise and Vibration	C + O	▪ Increase in noise and vibration levels during construction activities ▪ Increase in noise levels during the operation of the school facility	▪ Implementation of Construction Noise and Vibration Measures which considers the construction methodology and details specific mitigation measures in accordance with the DECCW Interim Construction Noise Guideline. ▪ Appropriate mitigation measures to be implemented to ensure vibration levels will not compromise human comfort or result in building damage. ▪ Appropriate sound minimisation measures to be incorporated within the plant and mechanical areas.	C = 3 O = 1	C = 2 O = 2	C = 5 (low/medium) O = 3 (low)
Traffic and Parking	C + O	▪ Increase in construction traffic on local roads ▪ Increase in traffic and parking on local roads during operation	▪ A Construction Traffic Management Plan has been prepared detailing measures to minimise any adverse impacts arising from construction traffic. ▪ Additional parking demand generated by the proposed development will be accommodated within the proposed on-site parking areas. The existing road network has capacity to support any increase in traffic associated with the proposed development.	C = 3 O = 2	C = 2 O = 1	C = 5 (low/medium) O = 3 (low)
Heritage	C + O	▪ Potential to impact on the site's heritage significance. ▪ Potential for vibration to impact the structural integrity of the site's heritage item.	▪ The new works have been designed to ensure that there will be no adverse impact on the site's heritage significance. ▪ The works will be managed to avoid any potential vibration impacts during construction.	C = 2 O = 1	C = 3 O = 1	C = 5 (low/medium) O = 2 (low)
Archaeology	C	▪ Potential to impact on the site's archaeological significance.	▪ Appropriate mitigation measures to be implemented to ensure the proposed development will not adversely impact on the site's archaeological significance.	C = 3	C = 3	C = 6 (medium)

Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Significance of Impact	Manageability of Impact	Residual Impact
Visual and Built Form	O	▪ Visual impact of the development when viewed from the public domain. ▪ Visual impact of the development when viewed from development to the north.	▪ Due to the retention of existing structures on the site, the built form will remain largely unchanged. ▪ Measures have been incorporated to reduce the visual impact of the development when viewed from O'Connell Street.	O = 2	O = 2	O = 4 (low/medium)
Amenity of Adjoining Properties	C + O	▪ Potential privacy impacts on adjoining properties. ▪ Potential overshadowing of adjoining properties.	▪ The building has been designed to limit privacy and overlooking of the adjoining property to the north. ▪ The location of the building, to the south of the neighbouring property, ensures no adverse overshadowing impact.	C = 3 O = 3	C = 2 O =1	C = 5 (low/medium) O =4 (low/medium)
Air and Water Quality	C	▪ Potential for reduced air and water quality during construction	▪ A detailed Construction Environmental Management Plan will be developed once a contractor has been appointed to implement measures to ensure that air and water quality are maintained.	C = 2	C = 2	C = 4 (low/medium)

7.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 11** below. These measures have been derived from the previous assessment in **Section 5** and those detailed in appended consultants' reports.

Table 11 – Mitigation Measures

Mitigation Measures
Traffic and Access During Construction and Operation Construction and operational traffic will be managed in accordance with the Traffic, Transport and Parking Assessment prepared by Thompson Stanbury Associates and dated April 2016.
Heritage The recommendations of the Statement of Heritage Impact prepared by TZG Heritage and dated April 2016 will be implemented prior to, and during construction.
Archaeology The recommendations of the Aboriginal Heritage Impact Assessment (AHIA) and Statement of Heritage Impact; Historical Archaeology prepared by AHMS and dated June 2016 and May 2016 will be implemented prior to, and during construction.
Construction Impacts A Construction Environmental Management Plan (CEMP) will be prepared by the appointed contractor prior to the commencement of works. The CEMP will establish site management principles generally in accordance with the preliminary Construction Management Plan prepared by Root Projects Australia dated March 2016.
Contamination The recommendations of the SEPP 55 Letter prepared by Consara and dated June 2016 will be implemented prior to, and during construction.
Geotechnical Conditions The recommendations of the Geotechnical Investigation undertaken by SMEC and dated April 2016 will be implemented prior to, and during construction.
Environmentally Sustainable Development The development will be designed to achieve an equivalent 4 star Green Star Education V1 rating, in accordance with the Environmental Sustainability Management Plan prepared by Wood & Grieve Engineers dated March 2016. Initiatives will be finalised during detailed design.
Noise and Vibration Measures to mitigate operation and construction noise and vibration will be implemented in accordance with the recommendations of Acoustic Assessment of Operation And Construction Noise and Vibration for Planning Application prepared by Acoustic Studio and dated March 2016.
Tree Removal Trees to be retained will be protected in accordance with the recommendations of the Arborist's Report prepared by TLC Tree Solutions and dated June 2016.

8.0 Conclusion and Justification

This EIS has been prepared to consider the environmental, social and economic impacts of the proposed development O'Connell Street Primary School. The EIS has addressed the issues outlined in the SEARs (**Appendix B**) and accords with Schedule 2 of the EP&A Regulation with regards to consideration of relevant environmental planning instruments, built form, social and environmental impacts including traffic, heritage, noise, construction impacts and stormwater.

It is considered the project warrants approval for the following reasons:

- The assessment of this proposal has demonstrated that the development will not generate any environmental impacts that cannot be appropriately managed, and is consistent with the relevant planning controls for the site.
- The development will provide a significant new piece of social infrastructure, providing a new primary school with capacity for approximately 1,000 students. The provision of a new teaching and education facility will support and strengthen the availability of education facilities in the region.
- The proposed development will facilitate the conservation of the significant heritage items on the site, and will return the site to its original use, thus reinstating a primary aspect of the site's heritage significance.
- The area and shape of the site allows for the provision of new teaching and education facilities that meet the special design requirements for the proposed uses, whilst not resulting in any significant adverse impacts on surrounding uses.
- The proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2(7)(4) of the EP&A Regulation 2000.
- The proposal will not result in any adverse traffic impacts on the surrounding road network, and parking demand associated with the proposed development can be accommodated within the site.

Given the planning merits described above, it is requested that the Minister approve the application.