Public Works
NSW Water Solutions

Environmental Planning and Assessment

St Clair High School
Alterations and Additions

Statement of Environmental Effects

Prepared for Department of Education

Report No DC15195

May 2016

NSW Education

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Document Control

Issue / Revision	Author	Reviewer	Approved for Issue	
			Name	Date
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Final	Stuart Wilmot		Penny Goldin	18/5/16

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1. Introduction

This Statement of Environmental Effects (SEE) accompanies a Development Application lodged on behalf of the Department of Education (DoE). The development seeks approval for demolition, alterations and additions to St Clair High School, located at 6 Endeavour Avenue in St Clair (Lot 1 , DP 861103).

The new development is to replace a former building (which contained a number of classrooms and the library) that was mostly destroyed by fire in June 2014. The concrete floor slab with an understorey at the northern end (containing the canteen and student amenities) is all that remains of the former structure.

In addition to this SEE, the development is described in the following documentation that accompanies the Development Application:

Plans

Architectural Plans, prepared by NSW Public Works Government Architect's Office.

Reports

- Traffic & Parking Review, prepared by McLaren Traffic Engineering, dated 27 April 2016.
- Building Code of Australia Report, prepared by Philip Chun, dated 12 April 2016.
- Stormwater Management Concept Plan, prepared by NSW Public Works, dated May 2016
- Arboricultural Assessment Report, prepared by NSW Public Works, dated December 2015.
- Geotechnical Investigation, prepared by NSW Public Works, dated January 2016

This Statement describes the subject site and the surrounding area, together with the relevant planning controls and policies relating to the site and the type of development proposed. It provides an assessment of the proposed development against the heads of consideration as set out in Section 79C(1) of the *Environmental Planning and Assessment Act* (EP&A Act) 1979.

2. The Site and Surrounding Environment

The proposed development is located at 6 Endeavour Avenue, St Clair and is identified as Lot 1, DP 861103. It is located within the Penrith Local Government Area and is approximately 39 km west of the Sydney CBD.

Maps showing the general location and an aerial view of the existing St Clair High School site are provided in Figure 2-1, Figure 2-2 and Figure 2-3.

St Clair High School is located on land owned by the Department of Education.

Figure 2-1: Location Map of St Clair in relation to Sydney

Source: Google Maps, 2015

Figure 2-2: Location Map of St Clair High School and Primary School in relation to surrounding streets

Source: LPI SIX Maps, 2015

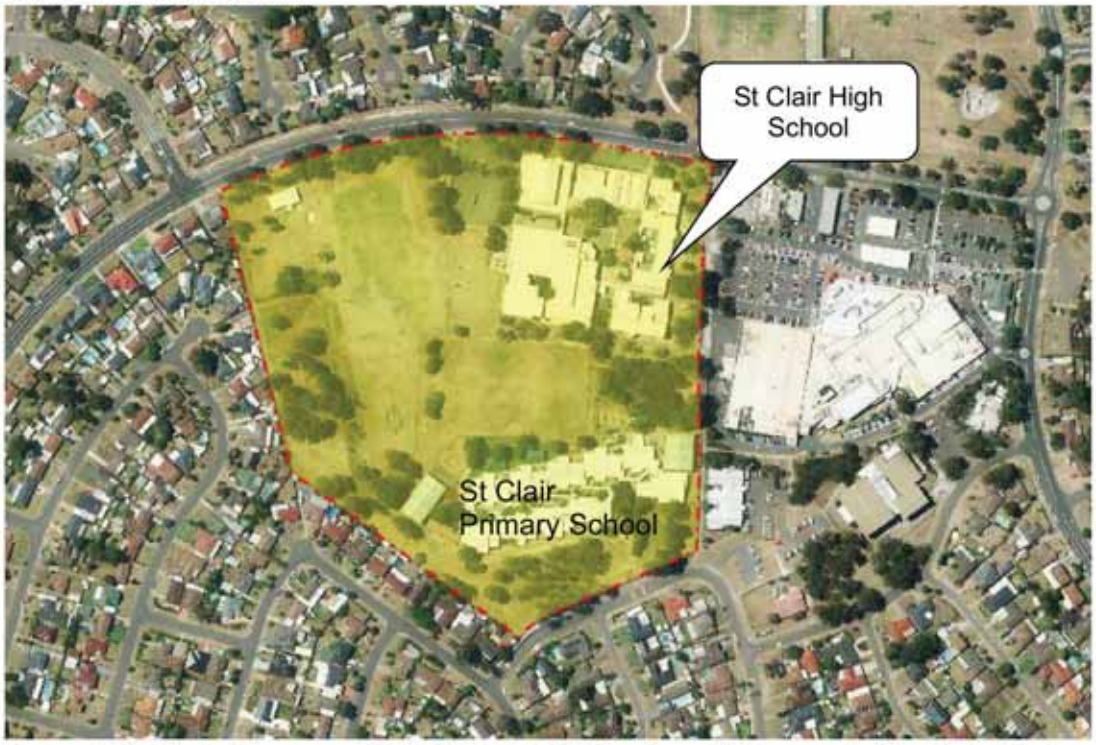


Figure 2-3: Aerial Image of St Clair High School and Primary Schhol(shaded yellow)

Source: LPI SIX Maps, 2015

2.1. Description of the Subject Site

The total area of the subject site is approximately 6.5ha and the site is irregular in shape. A survey plan accompanies the development application. The school site has large areas of cleared grassed playing field land with two stands of mature native vegetation within the site and large mature trees planted along the property boundaries.

The site slopes at a very gentle gradient to the north and north-east. However, throughout the site, the natural slopes have been modified by levelling during the previous construction of the existing buildings.

The proposed sports courts area are currently flat and occupied by a concrete floor slab, which remains from the former building, which was mostly destroyed by fire. There is an understorey at the northern end of the slab containing a canteen and student amenities. The rooftop garden will be constructed above this section of the slab.

The proposed tiered landscaping area will be located between the existing hall to the north and a two-storey classroom block to the south. The majority of the area is currently occupied by the concrete floor slab from the former building and an unoccupied understorey. To the north of the former building remains, the ground surface is mostly concrete and pebblecrete paved. There is a thin strip of garden bed retained by a low timber wall containing some small trees near the existing hall.

In terms of soils, the site is underlain by the Blacktown soil landscaping grouping, which comprises gently undulating rises on Wianamatta Group shales. In terms of geology the site is underlain by Bringelly Sale of the Wianamatta group, which is Triassic in age.

St Clair High School is a comprehensive, coeducational Year 7-12 secondary school. Vehicular access is via Endeavour Avenue.

The following table describes the existing buildings and their uses, and Figure 2-6 provides the location of each of the buildings.

Table 2-1: Existing School Buildings and Uses

Building Identifier	Current Use of Building
Block A	Administration
Block B	Classrooms Textiles and Home Sciences
Block C	Classrooms, Music
Block D	Multi-Purpose Centre/ Hall
Block E	Classrooms, Canteen, toilets
Block F	Classrooms, Wood/metal technology
Block G	Classrooms, Science

Figure 2-4: View looking east-northeast showing remaining concrete floor slab of the former building which was mostly destroyed by fire

Source: Geotechnical Report, 2015

Figure 2-5 View looking south-east towards the remains of the former building where the tiered landscaping area will be located

Source: Geotechnical Report 2015

Figure 2-6 Existing School Layout

The current student enrolment at the school is approximately 800 students. There are a maximum of 73 staff at the school, of which 57 are teachers with the remaining staff made up of administration and support staff.

2.2. Surrounding Environment

The subject site is located within the suburb of St Clair. It is located in the western suburbs of Sydney, about 39 kilometres from the Sydney CBD, and within the Penrith local government area.

Development in St Clair is mainly residential with complementary uses such as local shops, schools, light industry and recreational facilities. Existing development in the vicinity of the school site includes single and two storey dwelling houses to the north and west of the site. A large complex incorporating shopping centre, health centre, library and leisure centre is located immediately to the east of the school, and St Clair Public school is located to the south of the site.

It is considered that the school is compatible with the surrounding environment and is of community value as it provides essential education for the children of the residents of the local community in St Clair and surrounds.

3. The Development

3.1. Objectives

The objective of the proposed development is to replace a former building (which contained a number of classrooms and the library) that was mostly destroyed by fire in June 2014. The concrete floor slab with an understorey at the northern end (containing the canteen and student amenities) is all that remains of the former structure.

The proposed building will be a new Innovation Centre and will contain a number of classrooms. In addition, the proposal includes sports courts, landscaped areas and reconfiguring and increasing the existing carpark.

3.2. Pre-Development Application Meeting

One meeting was held at Penrith Council, attended by the Development Assessment Co-ordinator, Peter Wood, and Principal Planner, Robert Craig, on 7 April 2016. The proposed development was discussed together with the information requirements to submit with the development application, including Clause 4.6 exemption to allow exceedance of the permitted building height.

3.3. Design Criteria

The design of the school meets the School Facilities Standards as updated in the EFSG (Educational Facilities and Schools Guidelines). The design has also taken into account the following factors:

- scale/size;
- bulk;
- setback;
- visual;
- design principles;
- physical character;
- external appearance;
- operation noise impacts; and
- landscape.

In addition to the EFSG and the Penrith DCP 2014, the following guiding principles have been used during the design of the school:

- Be at the forefront of professional training and learning and with the School's professional partners, to set a benchmark for teaching training excellence.
- have high quality, flexible facilities that promote contemporary teaching and learning practices.
- Strengthen connections with the community by greater sharing of contemporary facilities.
- Celebrate and embrace cultural and ethnic diversity and use these differences to expand our learners' world view and skills
- The new building be the heart of our school and a focus of innovation and learning for all students, staff and the community
- Embrace sustainability in all aspects of our school

3.4. Scope of Work

The Innovation Centre will essentially be a two-storey building. A reconfigured carpark will be constructed immediately to the west of an existing carpark, adjacent to Endeavour Avenue. The new sports courts will be constructed on the southern part of the existing concrete slab, where the former building was located. To the north of the proposed sports courts will be a grassed roof area constructed on the concrete slab above the canteen and amenities. West of the grassed roof area will be a tiered landscaping area.

Plans of the proposed works have been prepared by the Government Architect's Office and have been included with this application. The following provides a summary of the proposed works.

3.4.1. Innovation Centre

The proposed Innovation Centre contains 16 classrooms, a staff room, lecture theatre, learning common areas/ resource areas, café / student hub and kitchen and toilets. The Innovation Centre will also function as a teacher-training centre. The new building would incorporate the following uses:

Ground Floor

The ground floor of the building includes:

- Six (6) classrooms
- A student hub and café with kitchen in the foyer of the main entrance to the building
- Lecture room
- Separate male, female and accessible bathrooms
- Three (3) shared storerooms
- Timber deck at the entry point
- Three (3) staircases that connect to the 1st floor and seating steps near the lecture theatre to accommodate the change of building floor height.
- a walkway with a 1 in 20 grade
- An access lift

First Floor

The first floor of the building includes:

- 10 classrooms
- The entire central section of the building running north/south contains an open learning common area. The learning common areas connect to the classrooms via sliding doors.
- Staff study
- 1 shared storeroom
- Two (2) deck areas
- Stairs
- Access lift

3.4.2. Carpark

The reconfigured carpark is located immediately to the west of an existing carpark, adjacent to Endeavour Drive. The carpark will consist of 63 car spaces including one disabled car space.

3.4.3. Sports Court

The proposed new sports court will be located on the southern part of the existing concrete slab, where the former building was located.

3.4.4. Landscaped Roof Area

To the north of the proposed sports court will be a landscaped roof area located on the concrete slab above the canteen and amenities.

3.4.5. Landscaping

Four trees will be removed within the proposed carpark area. Native trees (that are of a species not a hazards to students due to falling limbs) will be planted along the eastern side of the Innovation Centre, around the reconfigured carpark and south of the sports courts. West of the proposed landscaped roof area will be a tiered landscaping area.

3.4.6. Temporary Works

During the construction period, all demountable buildings existing on the site currently would be retained, except those to be relocated due to construction, to allow the school to remain operational. The buildings would then be removed permanently on completion of the works.

3.4.7. Construction Works

The building contractor's contract will require the contractor to meet all obligations in terms of Council construction requirements.

During construction, site facilities will be provided such as portable toilets and sheds in the contractor's compound.

The following activities are also likely to be undertaken by the contractor:

- Establishment of site preliminaries such as entry/exit points, erosion and sediment controls, stormwater management controls, temporary security fencing, etc;
- Demolition of buildings and surface preparation within the construction area (i.e. removal of vegetation, stripping and stockpiling of topsoil for backfilling and respreading);
- Excavation and establishment of the new building foundations;
- Loading/unloading, transportation and placement of construction equipment and building materials;
- Construction of the new building;
- Internal fit out of the new building;
- Connection of water, sewerage, telecommunication and electrical services;
- Site stabilisation, landscaping and associated works;
- Make good/repair any damage caused to Council assets during the construction process;
- Removal of demountables from site by DEC; and

- Clean-up site and remove all materials and equipment from the site and make good. Clean site and any facilities used during the construction process.

3.4.8. Construction Equipment

Construction equipment would include the following or similar equipment as required:

- Light commercial and passenger vehicles
- Excavator
- Crane, low loader transporters and delivery/material transport vehicles (construction and waste materials)
- Concrete agitator trucks, bob cat, back hoe, trenching machines and auger
- Chain saws, jackhammers and pneumatic hand tools

3.4.9. Earthworks

Erosion and Sediment Control Plans would be prepared and installed prior to works commencing. This plan would incorporate appropriate erosion and sediment control measures e.g. barrier fences, silt fences etc., in accordance with Landcom's "Managing Urban Stormwater, Soils & Construction Guidelines (The Blue Book)".

3.4.10. Construction Considerations

To improve the environmental sustainability and management of construction proposals undertaken within NSW, the State Government has introduced policy measures requiring the mandatory preparation of an Environmental Management Plan (EMP) by the construction contractor. A Construction EMP (CEMP) is to be prepared for all proposals that are funded and/or undertaken by or on behalf of government agencies.

To ensure that the construction contractor complies with environmental protection legislation, adopts best practice and satisfies the requirements of ecologically sustainable development, the CEMP should incorporate all the mitigation measures recommended in this SEE, any conditions of Council's development consent and the conditions of any other licences/ approvals required to undertake the works. The CEMP would be reviewed by DoE prior to commencement of construction.

3.4.11. Waste Management Plan (construction and demolition)

In terms of construction and demolition waste, it is requested that an exemption is granted from submitting a Waste Management Plan with the Development Application, and instead that a condition is placed on the development consent that a Waste Management Plan be prepared by the construction contractor as part of the NSW Public Works procurement requirements. A condition of consent in this regard may be placed on any development consent.

3.4.12. Hours of Construction

Hours of construction would be as follows:

- Monday to Friday: 7.30am to 6.00pm
- Saturdays: 7.30am to 1.00pm
- Sundays and Public Holidays: No work allowed unless special permission granted.

The program of works is anticipated to commence in 2016 for completion during 2017.

Figure 3-1: Proposed Site Layout

Figure 3-2 Proposed Visual Concepts

Figure 3-3 Proposed landscape Concept

4. Statutory Framework and Development Controls

4.1. Legislation

The following Acts are relevant to the Proposal.

4.1.1. Environmental Planning and Assessment Act 1979

As the proposed works would require development consent, Penrith Council would be the consent authority and the proposal would be assessed as a Crown development under Division 4, Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Section 79C of the EP&A Act requires that the consent authority take into account the likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.

This Statement of Environmental Effects (SEE) has been prepared to meet the requirements of Section 79C of the Act, which require a consent authority "to take into consideration such of the following matters as are of relevance to the development the subject of the development application":

(a) the provisions of:

(i) any environmental planning instrument, and

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and

(iii) any development control plan, and

(iv) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and

(v) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and

(vi) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979),

that apply to the land to which the development application relates,

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

(c) the suitability of the site for the development,

(d) any submissions made in accordance with this Act or the regulations,

(e) the public interest.

As a result of the assessment it is concluded that the development of the site in the manner proposed is considered to be acceptable and is worthy of the support of the Council.

Crown Statutory Provisions

The proposal is considered to be a Crown Development, as it is being undertaken by a government department (public authority). The following statutory provisions are relevant to Crown Development:

- Section 89 of the EP&A Act states that a consent authority (other than the Minister) must not refuse its consent to a Crown development application, except with the approval of the Minister, or impose a condition on its consent to a Crown development application, except with the approval of the applicant or the Minister.
- Pursuant to Section 109R(2) of the EP&A Act, the Crown is self-certifying and therefore a Construction Certificate will not be obtained and a Principal Certifying Authority will not be appointed for the development. However, a Section 109R Certificate will be obtained.
- Pursuant to Section 109M(2) of the EP&A Act, an Occupation Certificate is not required for the occupation or use of a new building that has been erected by or on behalf of the Crown.
- Section 69 of the *Local Government Act 1993* states that Section 68 does not require the Crown to obtain the approval of a council to do anything that is incidental to the erection or demolition of a building.
- Section 138 of the *Roads Act 1993* does not apply, as Schedule 2, Clause 5 of this Act indicates that Section 138 does not require a public authority to obtain a roads authority's consent to the exercise of the public authority's functions in, on or over an unclassified road other than a Crown road.
- Pursuant to Schedule 4A of the EP&A Act, referral to the Joint Regional Planning Panel is required for Crown Development greater than $5 million.
- Section 94 of the EP&A Act relates to contributions towards provision or improvement of amenities or services. The Department of Planning Circular D6 provides a guide on the justifiable categories of section 94 contributions towards off-site works for Crown developments. It should be noted that the Circular stipulates that where councils intend to levy contributions on Crown developments, they must be justified in a Section 94 contributions plan.
- Section 94A of the EP&A Act relates to fixed development consent levies. In accordance with Circular D6, the levying of contributions from Crown developments requires a clear nexus between the developments and the works for which they are collected. As Section 94A plans collect indirect contributions, they are not applicable to Crown developments, such as the subject application.

4.2. Penrith Local Environmental Plan 2010

4.2.1. Zoning

The subject site is zoned R2 Low Density Residential pursuant to the *Penrith Local Environmental Plan 2010* (LEP).

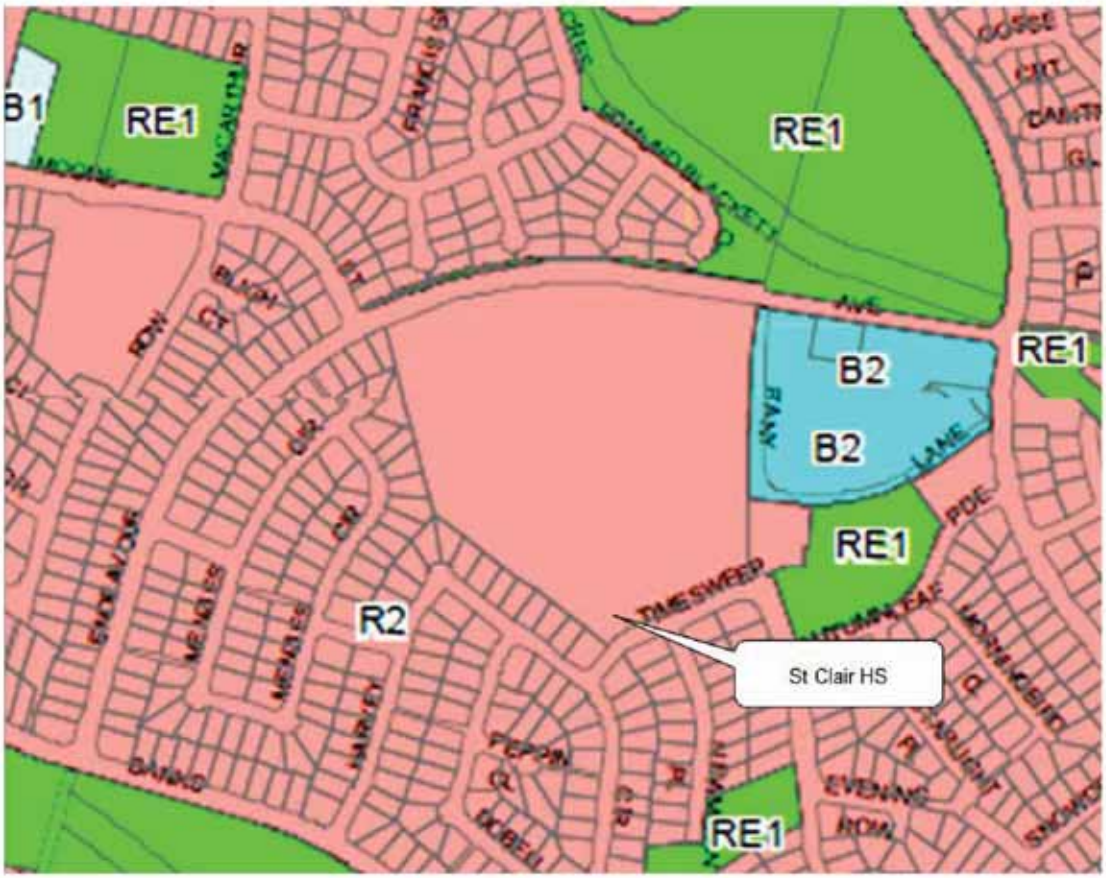


Figure 4-1: Zoning Map Extract, Penrith LEP 2010

The objectives of the R2 zone are:

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To promote the desired future character by ensuring that development reflects features or qualities of traditional detached dwelling houses that are surrounded by private gardens.
- To enhance the essential character and identity of established residential areas.
- To ensure a high level of residential amenity is achieved and maintained.

The proposal is considered to be not inconsistent with the objectives of the zone, in that the works relate to an existing school and the proposal would provide the educational facilities to meet the day-to-day needs of both existing and future residences in the suburb of St Clair and surrounds.

Development for the purpose of an educational establishment is permitted with consent in the R2 zone. In addition, Clause 5.12 of the LEP states that it "does not restrict or prohibit, or enable the restriction or prohibition of, the carrying out of any development, by or on behalf of a public authority, that is permitted to be carried out with or without development consent, or that is exempt development, under *State Environmental Planning Policy (Infrastructure) 2007*".

The proposed works are permitted with consent under *State Environmental Planning Policy (Infrastructure) 2007*, as detailed in Section 4.3.

4.2.2. Clause 4.3 Height of Buildings

Clause 4.3 of the LEP states that the height of a building on any land is not to exceed the maximum height for the land on the Height of Buildings Map, which is 8.5m for the subject site.

Figure 4-2: Height of Buildings Map Extract, Penrith LEP 2010

The maximum height of the proposal does not comply with Clause 4.3, however it is considered that the proposed height, bulk and scale of the proposed buildings are acceptable and will be consistent with development of the immediate area. Pursuant to Clause 4.6 of the LEP, a written Variation Request to vary the height development control has been prepared and is provided in Appendix A of this SEE.

4.2.3. Clause 5.9: Preservation of Trees or Vegetation

Clause 5.9 of the LEP includes requirements to obtain consent for the removal of trees that are prescribed by a development control plan made by Council.

NSW Public Works Government Architect's Office has prepared a landscape concept plan and an arborist report for the proposed works. The arborist has recommended that forty-six (46) trees (including clumps of trees) be removed due to construction of new paths, ramp, carpark area and the Innovation Centre. The arborist report concluded that there were no trees considered of heritage or of cultural significant. However, three (3) trees identified for removal are indigenous to the locality and appear to be of the Critically Endangered Ecological Community (Cumberland Plain Woodland). A seven-part assessment in accordance with s.5A of the EP&A Act has been prepared and found the proposal would not have a significant impact on the Critically Endangered Ecological Community (Appendix C).

4.2.4. Clause 5.10 Heritage Conservation

Aboriginal Cultural Heritage

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW, 2010) has been considered as part of this SEE in assessing the likelihood of encountering items of Aboriginal cultural heritage during the construction or operation of the school development.

A search of the OEH Aboriginal Heritage Information Management System database indicates that no items have been recorded within 200m of the site. The site has been subject to historical disturbance for its use as a school oval, and is likely to have resulted in total disruption of original land surfaces and deposits. A copy of the search may be found in Appendix A of this SEE.

As such, it is considered that further archaeological investigations and/or an Aboriginal Heritage Impact Permit are not required and that the works can proceed with caution.

4.3. State Environmental Planning Policy (Infrastructure) 2007

Under Clause 28 of *State Environmental Planning Policy (Infrastructure) 2007,* development for the purpose of educational establishments may be carried out by any person with consent on land in a prescribed zone. Zone R2 is a prescribed zone and therefore the alterations and additions to St Clair High School are permitted with consent under the SEPP.

In relation to determination of development applications for educational establishments, Clause 32 of the SEPP states the following:

(2) Before determining a development application for development for the purposes of a school, the consent authority must take into consideration all relevant standards in the following State government publications (as in force on the commencement of this Policy):

- *School Facilities Standards—Landscape Standard—Version 22 (March 2002),*
- *Schools Facilities Standards—Design Standard (Version 1/09/2006),*
- *Schools Facilities Standards—Specification Standard (Version 01/11/2008).*

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

It is noted that the School Facilities Standards listed in the SEPP are no longer current and that the school facilities have been designed in accordance with the current versions of these standards as updated in the EFSG (Educational Facilities and Schools Guidelines).

The proposed development is not "development permitted without consent" given the proposed Innovation Centre exceeds one storey. Nor can the Innovation Centre be categorised as "complying development" given the building height exceeds 12 metres. The proposed development being an educational establishment is permitted with the consent of Council (or in the subject case referral to the Joint Regional Planning Panel for determination is required as the development is a "Crown Development over $5 million").

It is estimated that the construction value of the proposed works at St Clair High School is approximately $12 million.

4.4. Penrith Development Control Plan 2014

The Penrith Development Control Plan (DCP) 2014 provides detailed guidelines to guide the design and assessment of development applications for land covered by Penrith Local Environmental Plan 2010.

The Penrith DCP 2014 components relevant to the proposed development are:

PART C – City Wide Controls

Part C Section 1 – Site Planning & Design Principles

Part C Section 2 – Vegetation Management

Part C Section 3 – Water Management

Part C Section 4 – Land Management

Part C Section 5 – Waste Management

Part C Section 6 – Landscape Design

Part C Section 7 – Culture and Heritage

Part C Section 10 – Transport, Access and Parking

Part C Section 12 – Noise and Vibration

Part C Section 13 – Infrastructure and Services

Part D Section 5.4 – Educational Establishments

Penrith DCP 2014	How is it addressed?	Compliance
Part C – City wide Controls – Section 1 Site Planning and Design Principles		
1.1.1 Site Analysis	A Site Analysis has been prepared (Appendix B) and accompanies the development application plans. The site analysis identified the relevant considerations required by Council and acknowledges the unique opportunities and constraints of the site that have informed the design of the development proposal. The following design principles were used in the design of the proposed development: 1. Provision of a new entry 2. Retention of the majority of Cumberland Vegetation 3. Provision of a campus courtyard 4. Protection of the school from westerly winds 5. Integration of site level changes. The Site Analysis illustrates the design principles used by GAO to development the architectural design.	Yes
1.1.2 Key Areas with Scenic and Landscape Values	Not applicable. The subject site is not located within the Scenic and Landscape Values Map under the Penrith LEP 2010. A Landscape Plan has been submitted with the Development Application.	N/A
1.2.1 Application of Certification System	The new building is designed to comply with requirements of Section J. No Green Star or National Australian Built Environment Rating System (NABERS) assessment has occurred.	Yes - Section J
1.2.2 Built Form – Energy Efficiency and Conservation	Appropriate shading, insulation and ventilation to mitigate the east west orientation will be addressed in the detail design. The building depth and planning will allow enhanced light penetration to reduce reliance on artificial lighting while shading devices and glazing selection will reduce heat loads.	Yes

Penrith DCP 2014	How is it addressed?	Compliance
1.2.3 Building Form – Height, Bulk and Scale	**a) Context:** An applicant must demonstrate how all proposed buildings are consistent with the height, bulk and scale of adjacent buildings and buildings of a similar type and use. *The Innovation Centre is located on an existing school site. The current buildings reflect 1980s approach to school design. With few exceptions they are of single storey construction. The new building replaces the second level library classroom block which was destroyed by fire .The current proposal is for a signature building which heralds a contemporary pedagogy supported by 21st Century innovative design. Part of the existing building slab will be demolished to make way for a terraced outdoor learning and recreation area.* **b) Character:** An applicant must demonstrate how any building's height, bulk and scale will avoid or minimise negative impacts on an area's landscape, scenic or rural character (where relevant) taking into account the topography of the area, the surrounding landscape and views to and from the site. *The Innovation Centre is set over 32m back from Endeavour Road, behind existing trees and set back from the school hall frontage. It serves to define and create a new school courtyard and accommodates disabled access along an area of the school which falls from playing fields to the street.* **c) Articulation:** Where the dimension of the building is 20m or more, an applicant must demonstrate how the building or surface has been articulated (either through built form or materials) to minimise impact on bulk and scale. *The Innovation Centre has been articulated by a number of architectural devices including pop out windows to the west which act as shields from the western sun, continuation of the lecture theatre to the outside area west, an articulated staff office which defines the main school access from the east and a mix of building materials and textures focussing on the north elevation/public entry.* **d) Overshadowing:** Building locations, height and setbacks should seek to minimise any additional overshadowing of adjacent buildings and/or public spaces where there would be a significant reduction in amenity for users of those buildings/spaces. *The Innovation Centre completes the school courtyard. It is located wholly within school land, over 32 m from Endeavour road and separated from the west/ residential boundary by playing fields. The school adjoins the primary school to the south and is separated from it by a fenced playing field. There are no amenity impacts for the public or adjoining property owners.* **e) Setbacks/Separations:** Buildings should be sufficiently set back from property boundaries and other buildings	Yes

Penrith DCP 2014	How is it addressed?	Compliance
	to: i) Maintain consistency with the street context and streetscape character, especially street/front setbacks; ii) Maximise visual and acoustic privacy, especially for sensitive land uses; iii) Maximise deep root planting areas that will support landscape and significant tree plantings integrated with the built form, enhancing the streetscape character and reducing a building's visual impact and scale; iv) Maximise permeable surface areas for stormwater management; and v) Minimise overshadowing. *The Innovation Centre is set over 29 metres back from Endeavour Road boundary, approximately 137 metres from boundary of the adjoining residential dwellings to the west and behind the building line of the existing school buildings fronting Endeavour Avenue. The proposed carpark is setback approximately 2.5 metres from the Endeavour Road boundary and behind existing mature trees.* *The building setbacks are sufficient to avoid visual, privacy and overshadowing impacts on adjoining residents. The carpark and building setbacks are sufficient to provide deep root planting areas for landscaping.* **f) Building Façade Treatment:** The aim is to ensure that any built form will: i) promote a high architectural quality commensurate with the type of building and land use; ii) adopt façade treatments which define, activate and enhance the public domain and street character; iii) ensure that building elements are integrated into the overall building form and façade design; iv) compose façades with an appropriate scale, rhythm and proportion that responds to the building's desired contextual character; v) design façades to reflect the orientation of the site using elements such as sun shading, light shelves and appropriate glazing as environmental controls; vi) express important corners by giving visual prominence to parts of the façade, for example, a change in	Yes

Penrith DCP 2014	How is it addressed?	Compliance
	building articulation, material or colour, roof expression or building height, and vii) co-ordinate and integrate building services to improve the visual presentation. *The Innovation Centre has been designed as a signature building, distinct from the existing school buildings in form and materials. This building is intended to herald innovative contemporary design in support of new pedagogies. The building is intended to include public access for after hours community use. The roof void will enhance thermal performance and can accommodate air conditioning equipment if required at a future date. A drop screen from the eaves conceals and reveals the entries and north deck and terraces as well as providing sunscreening. The west elevation has been modulated to provide screening from the west while maintaining some outlook to the north and north/west. An existing tree grouping of remnant Cumberland Plain vegetation provides partial shading to the west. The building opens up to the school campus to the east and makes use of screening elements to enhance shading along this elevation.* **g) Roof Design: The roof is an important architectural element of any building and:** i) the shape and form of the roof should respond to its surrounding context and minimise visual impact from any key viewpoints; and ii) should consider opportunities for incorporating 'green roofs'. *The low pitch roof is elevated at the north to further emphasise the building, which will act as a new school entry. To the north of the proposed sports court will be a grassed roof area located on the concrete slab above the canteen and amenities.*	Yes
1.2.4 Responding to the Site's Topography and Landform	The Site slopes at very gentle gradients (approximately 2° to 3°) to the north and northeast. However, throughout the Site, the natural slopes have been modified by levelling (cutting and filling) during construction of the existing development. The Innovation Centre exceeds the 8.5 building height restriction that applies to the site due to the slope of the land and the desire for the building roof to incline towards Endeavour Avenue to maintain the aesthetic and function purpose of the building. Section 6 of this SEE provides justification for exceeding the permissible building height.	Yes
1.2.5 Safety and Security (Principles of	The Innovation Centre and location will provide passive (natural) surveillance from areas surrounding the building and the schools site. The design has minimised hiding spaces around the building. The building's fabric will be robust to resist vandalism and arson.	Yes

Penrith DCP 2014	How is it addressed?	Compliance
Crime Prevention through Environmental design)	In terms of the existing school the school provides: • Clear way finding through the site. • An Evacuation Management Plan. • Clear sightlines to building entries and central circulation space. • Regular maintenance / pruning of adjacent landscaping to eliminate hiding places and provide good supervision of the building and school landscaping. • Security lighting around the buildings. • Movement detectors and read switches on doors and windows as a part of NSW DEC security policy. • Continued maintenance to school buildings, lighting and security systems.	
1.2.6 Maximising Access and Adaptability	The Innovation Centre incorporates lift access to each floor. NSW Public Works Government Architect's Office engaged Philip Chun Building Compliance to reviewed for accessibility to and within the new building with reference to the minimum requirements of the Building Code of Australia 2015 (BCA), as it relates to accessibility, and statutory obligations imposed by the Disability Discrimination Act 1992 (Cth) (DDA), including the Disability (Access to Premises - Buildings) Amendment Standards 2010 (No. 1) and relevant Australian Standards as applicable to this project. Philip Chun Building Compliance have provided a statement that confirms accessibility has been appropriately addressed in the associated development application documentation listed below, relative to the level of detail provided, and confirms the Client's commitment to the development of an equitable and accessible environment for all. Philip Chun's report accompanies the Development Application.	Yes
C2 Vegetation Management		
2.1 Preservation of trees and Vegetation	An Arboricultural Impact Assessment Report prepared by NSW Public Works accompanies the development application. The following was taken from that report. The arborist indicated that the site appears to have been cleared and reshaped (grading and tiering) during the establishment of the school site in 1984. It has been predominantly replanted (cultivated) with a small group of trees identified as indigenous to the locality. This group of trees were retained and appear to be of the Critically endangered Ecological Community (Cumberland Plain Woodland). The arborist concludes that the area is currently managed through mowing and the development is unlikely to have any significant impact. The arborist inspected 56 trees on the subject site. The proposed development will impact on trees # 1, 2, 5 to 47	Yes

Penrith DCP 2014	How is it addressed?	Compliance
	and these trees are recommended for removal as their root zone will be significantly impacted on. Tree # 4 is of poor form and is recommended for removal. The Arboricultural report makes a number of recommendations in section 5 and 6 of that report which would be acceptable as conditions of consent. The Arboricultural report found no trees of heritage or cultural significance on the site. The Tree Survey Schedule within the report identifies three trees indigenous to the area that appear to be of Critically Endangered Ecological Community (Cumberland Plain Woodland) and recommends a preliminary Flora and Fauna Assessment for determination of vegetation community type and confirm their importance would be recommended The Arboricultural report concludes the *"remaining trees to be affected by the proposed development were a mix of exotic to Australian native species of good to poor health. It is important to protect the remaining existing trees during the construction phases of the project without impacting on the trees long-term health. The proposed landscape design is to provide new plants including native trees of local remnant species, suitable for the altered environment and deciduous trees in keeping with the traditional planting of the area which should be seen as beneficial and an asset to the school and community".*	
2.2 Biodiversity Corridors and Areas of Remnant Indigenous Vegetation in Non-Urban Areas	The site is not critical habitat, within a conservation area or an item of environmental heritage. A seven-part assessment was prepared to assess the potential impact of the proposal on the remanent Cumberland Plain Woodland, which is listed as a Critically Endangered Ecological Community. The seven-part assessment concluded the proposed development would not have a significant impact on the Cumberland Plain Woodland and preparation of a Species Impact Statement is not required.	Yes
2.3 Bushfire Management	S149 certificate obtained from Council states that the subject site is not bush fire prone land.	N/A
C3 Water Management	NSW Public Works – Dams and Civil Section has been engaged by Government Architects Office (GAO), to prepare a Stormwater Management Concept Plan report (SWMCP) in support of a proposed Development Application (DA) to Penrith City Council (Council).	Yes
3.1 The Water Cycle / Water	In accordance with Council's policies and advice from Council Development Officers, a SWMCP incorporating	

Penrith DCP 2014	How is it addressed?	Compliance
Conservation **3.2 Catchment Management and Water Quality**	Water Sensitive Urban Design (WSUD) principles has been formulated and adopted to cater for the proposed works on site. The stormwater management plan is to incorporate water quantity and water quality controls in accordance with Council's development policies. Hydrologic water quantity modelling has been carried out using RAFTS (XP Software, Pty Ltd, 2015) for the stormwater pit and pipe drainage system with results verified using the Probabilistic Rational Method (PRM) as recommended in AR&R (1997). OSD requirements have been established in accordance with Council's "Stormwater Drainage for Building Developments" document. The results of the proposed stormwater models indicate that: • Rainwater Harvesting - A proposed 80kL Rainwater tank system is to be incorporated in the design for reuse purposes, e.g. irrigation. • No OSD is required in accordance with Council's "Stormwater Drainage for Building Developments" document; • A new pit and pipe stormwater drainage system to cater for additional stormwater runoff from the proposed development for the up to the 20 year ARI storm event – minimum 225mm diameter and 1% slope; • Designated and improved overland flow paths of sufficient capacity to carry overland flows up to the 100 year ARI storm event; • Connection of the new stormwater drainage system to Council's existing system; • New stormwater pits with medium and heavy duty covers to capture stormwater runoff into the underground pipe conveyance system; • Water quality management; comprising a treatment train of structures consisting of: o Subsoil drainage, tree pits, vegetated panting area to encourage stormwater infiltration and biological uptake; and o Enviropod pit inserts for the removal of gross pollutants e.g. coarse sediment, trash and debris; • Erosion and Sediment Controls; and • A regular operation and maintenance program. Refer to Stormwater Concept Management Plan accompanying the Development Application.	Yes
3.3 Watercourses	N/A	N/A

Penrith DCP 2014	How is it addressed?	Compliance
Wetlands and Riparian Corridors		
3.4 Groundwater	At the time of geotechnical fieldwork, groundwater was not intersected in any of the boreholes within the depths of drilling. It should also be noted that the presence of groundwater/seepage will depend on prevailing weather conditions at the time of construction.	N/A
3.5 Flood Planning	The s149 Certificate obtained from Council states that this land has not been identified as being below the adopted flood planning level (i.e. the 1% Annual Exceedance Probability flood level plus 0.5 metres).	N/A
3.6 Stormwater Management and Drainage	Refer to response to items 3.1 and 3.2 above and the Stormwater Concept Management Plan	Yes
3.7 Water Retention Basins / Dams	N/A	N/A
3.8 Rainwater / Storage Tanks	Two 40kL rainwater tank system is to be incorporated in the design for reuse purposes. The rainwater tanks will be located at the rear of the proposed Innovation Centre and approximately 8 metres high.	Partially – tanks exceed 3 metres high
C4 Land Management		
4.1 Site Stability and Earthworks	NSW Water Solutions prepared a Geotechnical Investigation report in January 2016. That report accompanies the Development Application. A summary of the geotechnical report is outlined below: **Site Classification** • The Site is not within a proclaimed Mine Subsidence District. • In the proposed building area, the subsurface profile comprises a layer of fill (0.15m to 1.0m thick) underlain by residual soil and weathered bedrock (interbedded sandstone/ siltstone/ shale). **Material Classification**	Yes

Penrith DCP 2014	How is it addressed?	Compliance
	• Drilling investigation of the site revealed very uniform subsurface conditions across the site, with some minor variations. • The bedrock is mantled by a relatively thin fill layer followed by residual deposits comprising silty clay. • There is an area of fill comprising sandy clayey silt and silty sand; with gravelly sandy clay below the bitumen. **Earthquake Site Sub-Soil Class** • Earthquake sub-soil class for the Site, in accordance with AS.1170.4-2007: Structural Design Actions - Part 4: Earthquake Actions in Australia, may be taken as Class C_e. For the above site subsoil class, it is assumed that all fill placements, where required, would be controlled. **Earthworks** • The majority of the building area will be cut, apart from the central southern part, which will be up to approximately 1.0m above the existing surface levels. • The topsoil (fill) would be stripped within the foundation area and either stockpiled for landscaping purposes, subject to meeting any environmental requirements (see separate contamination report 15-GT01B), or put to spoil. • Any other fill such as roadbase materials (gravelly sand), sandy clayey silt and silty sand may be re-used as engineered fill, also subject to meeting any environmental requirements (see separate contamination report 15-GT01B), or put to spoil. • The local residual soil (silty clay) and extremely weathered sandstone is generally considered to have poor to good compaction characteristics for use as controlled fill. If reused, the materials should be placed in maximum 150mm (loose) layers, and be compacted to meet requirements specified within the Geotech Report (January 2016). • If imported fill materials are required, suitable materials (preferably granular for controlled fill) as described in Section 4 of AS 3798-2007 "Guideline on Earthworks for Commercial and Residential Development" should be used. Also, imported material should be validated in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM). The fill material should not contain asbestos, and not be acid sulfate soil or saline soil. The imported fill material should be 'virgin excavated	

Penrith DCP 2014	How is it addressed?	Compliance
	natural material' (VENM) and 'excavated natural material' (ENM), as defined in the DECC's waste guidelines because of their low risk of contamination. • During the course of soil filling, "Level 1 Inspection and Testing" should be conducted in accordance with AS 3798-2007 "Guideline on Earthworks for Commercial and Residential Development". On completion of the earthwork, the report prepared by the "Geotechnical Inspection and Testing Authority" would be submitted to the Principal for review. **Footings** • Considering that the proposed Innovation Centre will comprise essentially a two-storey structure, piers may be adopted and carried down to Class IV shale. • Consideration may be given to isolate the ground floor slab from reactive pressure from underneath by providing a minimum 50mm gap between the underside of the floor slab and the ground. • It is recommended that excavations for foundations and pier augering be inspected by an experienced geotechnical engineer or engineering geologist in order to confirm the target founding materials and depths that are required to achieve the strength parameters given above. • For detailing and construction requirements, reference should be made to Sections 5 and 6 of AS 2870-2011, respectively. For foundation performance and maintenance, reference should be made to Appendix B of the above standard. **Pavement** • In consideration of the subsurface conditions encountered, a CBR value of 4% is recommended for pavement design. However, if the subgrade needs to be raised, then the design CBR value would need to be determined for the type of fill material that would be imported. • Adequate subsoil drainage should be provided to prevent ingress of water into the subgrade. • The thickness of pavement would depend on the design traffic loading (equivalent standard axles, ESA) and the type of pavement selected. The final design selected would also depend on the economy and life expectancy of the pavement.	

Penrith DCP 2014	How is it addressed?	Compliance
4.2 Landfill	Imported fill material would be 'virgin excavated natural material' (VENM) or 'excavated natural material' (ENM), as defined in the DECC's waste classification guidelines	Yes
4.3 Erosion and Sedimentation	The contractor would prepare an Erosion and Sediment Control Plan in accordance with the Managing Urban Stormwater – Soils and Construction, Landcom ('The Blue Book') and Council's Engineering Specifications (Public Works – Dams and Civil Section 2015).	Yes
4.4 Contaminated Lands	S149 certificate obtained from Council indicates that: • The land is not subject to a management order within the meaning of the Contaminated Land Management Act 1997. • The land is not the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997. • The land is not the subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997. • The land is not the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997.	Yes
4.5 Salinity	The NSW Water Solutions Geotechnical Investigation (2015) that accompanies the Development Application included chemical testing on a representative soil sample from the site. Soil corrosion and scaling assessment results indicated strong acidity, moderate salinity, low sulphate and low chloride levels. According to AS2159:2009 the pH is considered mildly-aggressive towards concrete and non-corrosive towards steel. The low sulphate and low chloride levels are considered non-aggressive towards concrete and non-corrosive towards steel. Overall, the likelihood of aggressive corrosion is mild.	Yes
C5 Waste Management		
5.1 Waste Management Plans	In terms of construction waste, an exemption from submitting a Waste Management Plan with the Development Application is requested and a condition be placed on any development consent that a Waste Management Plan be prepared by the contractor as part of the NSW Public Works procurement requirements. The Construction Waste Management Plan shall be prepared for construction which shall include the following: o Identify all potential waste streams associated with the works. o Identify opportunities to minimise the use of resources, and to reuse and recycle materials. o Outline methods of disposal of waste that cannot be reused or recycled at appropriately licensed	Exemption sought

Penrith DCP 2014	How is it addressed?	Compliance
	facilities. Waste will be disposed of at a facility able to accept the waste. o Waste (including vegetation) will not be burnt onsite. o General waste and recycling bins will be provided onsite. Waste will be transported to an appropriate waste management facility. o Working areas will be maintained, free of rubbish and cleaned up at the end of each working shift. Once the Innovation Centre is constructed waste will be managed in accordance with current school practices.	
5.2 General Controls	Resource management hierarchy principles will be followed in accordance with the Waste Avoidance and Resource Recovery Act 2001: o Avoid unnecessary resource consumptions as a priority o Avoidance is followed by resource recovery (including reuse of materials, reprocessing, recycling and energy recovery) o Disposal is undertaken as a last resort	Yes
5.3 Development Specific Controls	The school will continue to use the existing waste management facility near the existing car park area. Detail design of the kitchen may include cooking facilities and a grease trap.	Yes
5.4 Hazardous Waste management	N/A	N/A
5.5 On-Site Sewage Management	N/A	N/A
C6 Landscape design	The proposed landscape concept design consist of: • retaining a number of existing trees on site, • planting 44 trees to replace the trees to be removed, • grassed roof area located on the concrete slab above the canteen and amenities,	Yes

Penrith DCP 2014	How is it addressed?	Compliance
	• tiered landscaping garden bed with mass planting west of the proposed grassed roof area , • concrete paths and pavement area as indicated on the landscape drawings.. New plants will include native trees of local remnant species and deciduous trees in keeping with the traditional planting of the area, which should be seen as beneficial, and an asset to the school and community. The selection of plant species would be subject to their suitability and safety for the school environment (i.e. avoid trees that drop limbs).	
C7 Culture and Heritage	N/A. The proposal is not located on land that contains or within the vicinity of a known heritage item, conservation area or archaeological site.	N/A
C8 Public Domain	N/A	N/A
C9 Advertising and Signage	N/A	N/A
C10 Transport, Access and Parking	*State Environmental Planning Policy (Infrastructure) 2007* requires a consent authority to take into consideration the School Facilities Standards when assessing a school development. The most recent edition/revision of the standards is the Educational Facilities Standards and Guidelines (2015). The Educational Facilities Standards and Guidelines (EFSG) sets a maximum parking provision of 76 vehicle and 36 bicycle spaces for a 4 stream high-school. The new car park will increase the number of onsite car spaces from 59 car spaces to 63 car spaces and the proposal will provide an additional 16 bicycle storage spaces. While the number of onsite car spaces is 13 less than the EFSG requirements the Traffic Impact Assessment report accompanying the Development Application demonstrates there is currently sufficient on-street parking available during the typical 8:30AM – 4PM school day and the increase of four onsite car spaces will reduce demand for on street parking (Maclaren Traffic Engineering 2016).	Yes
C11 Subdivision	N/A	N/A
C12 Noise and Vibration	Construction works will occur during standard construction hours (i.e. Monday to Friday 7am to 6pm and Saturday 8am to 1 pm). No background noise monitoring has occurred. However, given the residential nature of the area, background noise levels at the nearest noise receptor are predicted to be 40 dBA (using Figure 2.2 of the Noise Guide for Local Government (DECCW, 2010) as a guide). The construction noise level objective would therefore	Partially

Penrith DCP 2014	How is it addressed?	Compliance
	be 50 dBA. Construction works would require the use of hand tools, excavator, bobcat, air compressor, concrete agitator, light commercial vehicles and generator. Noise impacts were estimated using the formulae from the Interim Construction Noise Guideline and AS 2436 Guide to Noise and Vibration on Construction, Demolition and Maintenance sites. The calculations conservatively assumes all the machinery was operating at the same time and found noise at the nearest residential receiver would be approximately 70 dBA. It should also be noted that these calculations assume flat ground surfaces and do not account for propagating effects such as ground conditions, atmospheric absorption or weather. Construction noise at the nearest receptors may exceed the recommended maximum daytime goal of 50 dBA on occasions when all pieces of equipment are operating. The contractor will therefore be required to prepare a noise management plan to minimise noise on residents and students during the 12 month construction period. The equipment used during construction will produce levels of vibration that are unlikely to exceed the British Standard (BS) 6472 – 2008, Guide to Evaluation of Human Exposure to Vibration and German Standard DIN 4150-3: 1999 Structural Vibration – Part 3: Effects of vibration on structures, which are generally used as the relevant standards in the absence of any Australian Standard. The school will mainly use the Innovation Centre during school hours and occasionally during evenings and on weekends for teaching or community purposes. There is no noise assessment during operation of the proposed Innovation Centre given there will be no increase in student or staff numbers.	
C13 Infrastructure and Services	Given the proposed innovation centre will replace existing demountable classrooms its anticipated there will not be a significant increase (if any) on demand for sewer, water and electricity. Electricity loadings are, however, being designed to accommodate future air-conditioning as required by DEC.	Yes
D5 Other land uses		
5.4 Educational Establishments		
B Objectives	a) To ensure that the design and location of educational establishments does not adversely impact on the amenity of the area or neighbouring properties, including properties used for agriculture; *The Innovation Centre is sufficiently setback from neighbouring residential properties to avoid impact on their amenity. Use of the Innovation Centre will occasionally occur outside of schools hours as currently occurs with existing school facilities. However, use of the Innovation Centre and associate carpark will not generate a significant amount of noise that would disturb the amenity of local residents.*	

Penrith DCP 2014	How is it addressed?	Compliance
	b) To ensure that educational establishments are located on sites of sufficient size to accommodate buildings, sports fields, parking areas and other associated facilities; *Not Applicable. The proposal is on an existing school site.* c) To ensure that educational establishments are located on sites which have sufficient infrastructure and services to support the use; *The proposal will replace existing demountable classrooms that were installed after the previous classroom building was burnt. The proposal will utilise the infrastructure and services currently available.* d) To ensure that the road access to educational establishments is sufficient to cater for expected traffic with minimal impact; *The proposal will not intensify use of the school site.* e) To ensure that educational establishments do not locate near uses that will have an adverse effect on children's health or learning; *Not Applicable. The proposal is on an existing school site.* f) To ensure that, where they are located on a major road, the visual impact of educational establishments is consistent with the character of the area. *Not applicable. The school is not located on a major road.*	
C Controls		
1 Location and Design	The proposed Innovation Centre completes the enclosure of the school courtyard. The building exceeds the 8.5 metre height restriction. However, it is located over 32 metres from Endeavour road with a landscaped front to reduced visual impact. Existing playing fields separate the Innovation Centre from residential dwellings to the west. The school adjoins the primary school to the south and is separated from it by a fenced playing field. There are no amenity impacts for the public or adjoining property owners.	Yes
2 Servicing	The proposed Innovation Centre will be connected to all services, including power, reticulated water and reticulated sewer.	Yes

Penrith DCP 2014	How is it addressed?	Compliance
3 Transport Access and parking	The proposal will not alter current transport arrangements for student travelling to and from the school. The Traffic Impact Assessment report that accompanies this Development Application demonstrates that there would be sufficient parking available and the proposed parking complies with relevant Australian Standard requirements (Maclaren Traffic Engineering 2016).	Yes

4.5. Other Relevant Matters

4.5.1. Social and Economic Impacts

The benefits of the proposal are:

- Replaces a former school building, mostly destroyed by fire, and the temporary demountable classrooms.
- Long term education needs of the St Clair area are met.
- Students will be accommodated in ideal learning spaces which meet current code and legislative standards.
- Students will have facilities appropriate to its class group that are consistent with the School Facilities Standards as updated in the EFSG (Educational Facilities and Schools Guidelines).
- Flexibility in design and layout – optimum use of the site, can use the latest technology more effectively and efficiently, can suit the need and requirements more readily.
- Allows the provision of appropriate facilities for the delivery of best practice and the best functional relationships.
- Provides opportunities for the local building industry in the provision of facilities (i.e. local trades, local employment, etc).
- Better human capital outcomes (i.e. morale, state of mind, etc) by providing a signature design building as the centre piece to the school rather than demountables which could have a detrimental impact (i.e. perception of care, worth, temporary status, etc)

The project objectives that have been built on the project vision are to provide an environmentally sustainable, high quality designed integrated development comprising social, private and affordable schooling.

With regards to economic impacts, the proposal will result in short term and medium term employment opportunities during the construction works, and will maintain employment opportunities for teachers and other professions and persons at the school. The proposal is unlikely to result in the displacement of employment or create any adverse economic trade impacts upon the locality.

Accordingly the proposal is not considered to raise any adverse social or economic impacts, or result in any cumulative adverse impacts upon the locality.

4.5.2. Other Services

The site is serviced by mains water, sewer and electrical services.

During construction measures would be taken to ensure that construction activities do not impact on existing utilities and services within the site. The new building would be connected to the existing services.

5. Conclusions

5.1. Environmental Planning Instruments – Section 79C(1)(a)

The provisions of relevant environmental planning instruments relating to the proposed development are provided in this Statement of Environmental Effects and have been satisfactorily addressed. The proposed development is generally consistent with the requirements of the *Penrith Local Environmental Plan 2010*, and *State Environmental Planning Policy (Infrastructure) 2007*.

5.2. Impacts of the Development – Section 79C(1)(b)

An assessment of key issues relating to the proposed development is provided in this Statement of Environmental Effects and it is considered that the likely impacts of the development, including height, traffic and carparking, amenity, stormwater, open space and landscaping and the like have been satisfactorily addressed and that the proposed development will result in beneficial social impacts in the St Clair area.

5.3. Suitability of the Site – Section 79C(1)(c)

The subject site is identified as being zoned R2 Low Density Residential pursuant to the *Penrith Local Environmental Plan 2010* and educational establishments are permitted with consent in this zone. Further, the subject development is considered satisfactory in terms of the likely impacts of the development and, as such, the subject site is considered suitable for the proposed development.

Accordingly, the development is considered to be suitable for the site.

5.4. The public interest – Section 79C(1)(e)

The proposed development is for the purpose of improving educational facilities at an existing educational establishment within the St Clair area. The development therefore represents an orderly development of the land. A Clause 4.6 Variation Request has been prepared in relation to the proposed height of the development. The additional building scale does not have an unreasonable material effect on the surrounding built form. The proposed development otherwise provides a compatible landscaped setting and setbacks indicating it is a reasonable density and intensity of development. Accordingly, it is considered that the development is in the public interest.

6. Clause 4.6 Variation Request

6.1 Introduction

Clause 4.6 of LEP 2011 states the following:

(1) The objectives of this clause are as follows:
(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,
(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

The relevant criteria for the assessment of this request are expressly set out in Clause 4.6. In summary, they are that a written request from the applicant must be made to Council that seeks to justify the contravention of the development standard by adequately demonstrating:

(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and

(b) that there are sufficient environmental planning grounds to justify contravening the development standard.

Council must be satisfied that the proposed development will be in the public interest because it is consistent with:

(i) the objectives of the particular standard; and
(ii) *the objectives for development within the R2 Low Density Residential Zone* in this case.

The concurrence of the Director-General (DG) must be obtained. It is assumed that Council enjoys delegated authority of the DG in this regard.

In deciding whether to grant concurrence, the DG must consider whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and the public benefit of maintaining the development standard, and any other matters required to be taken into consideration by the DG before granting concurrence.

We are not aware if there are any "other matters" required to be taken into consideration by the DG under Clause 4.6 subclause (5)(c) of Penrith LEP 2010 and assume there are none.

6.2 Description of the planning instrument, development standard and proposed variation

6.2.1 What is the name of the environmental planning instrument that applies to the land?

The Penrith Local Environmental Plan 2010 (Penrith LEP 2010).

6.2.2 What is the zoning of the land?

The land is zoned R2 Low Density Residential Zone under Penrith LEP 2010.

6.2.3 What are the objectives of the zone?

The objectives of the R2 Low Density Residential are:

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To promote the desired future character by ensuring that development reflects features or qualities of traditional detached dwelling houses that are surrounded by private gardens.
- To enhance the essential character and identity of established residential areas.
- To ensure a high level of residential amenity is achieved and maintained.

The proposal is consistent with the objective of providing an education facility and service that meets the day-to-day needs of residents. The building would be a signature building for the school and a statement to the local community of the importance of education. It is considered the building will help enhance the school's local identity and contribute to the desired character of the area. It is considered that quality educational facilities are an important component of the residential amenity of a local area.

6.2.4 What is the development standard being varied?

The development standard being varied is the building height development standard. The Penrith LEP 2010 defines building height as:

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

6.2.5 Is the development standard a performance based control?

The development standard is not a performance based control, the building height development standard is a numerical control.

6.2.6 Under what Clause is the development standard listed in the environmental planning instrument?

The development standard is listed under clause 4.3 Height of Buildings of the Penrith LEP 2010.

6.2.8 What is the numerical value of the development standard in the environmental planning instrument?

Clause 4.3 of the Penrith LEP 2010 establishes the height control of 8.5 metres for the site of the proposed development as shown on the extract of the Height of Buildings Map included in Figure 4-2.

6.2.9 What is the proposed numeric value of the development standard in the development application?

The vertical distance between ground level (existing) and the highest point of the building is 15.808 metres at the northern eastern end. At the southern end the building height is 6.75 metres above existing ground level (Refer to Figure 6-1 below).

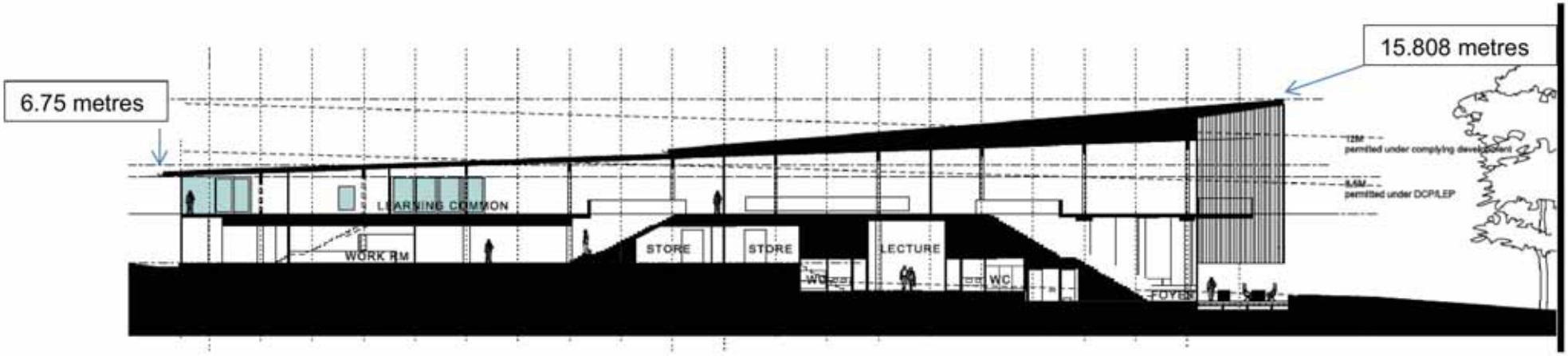


Figure 6-1 Proposed Building Heights (East Elevation)

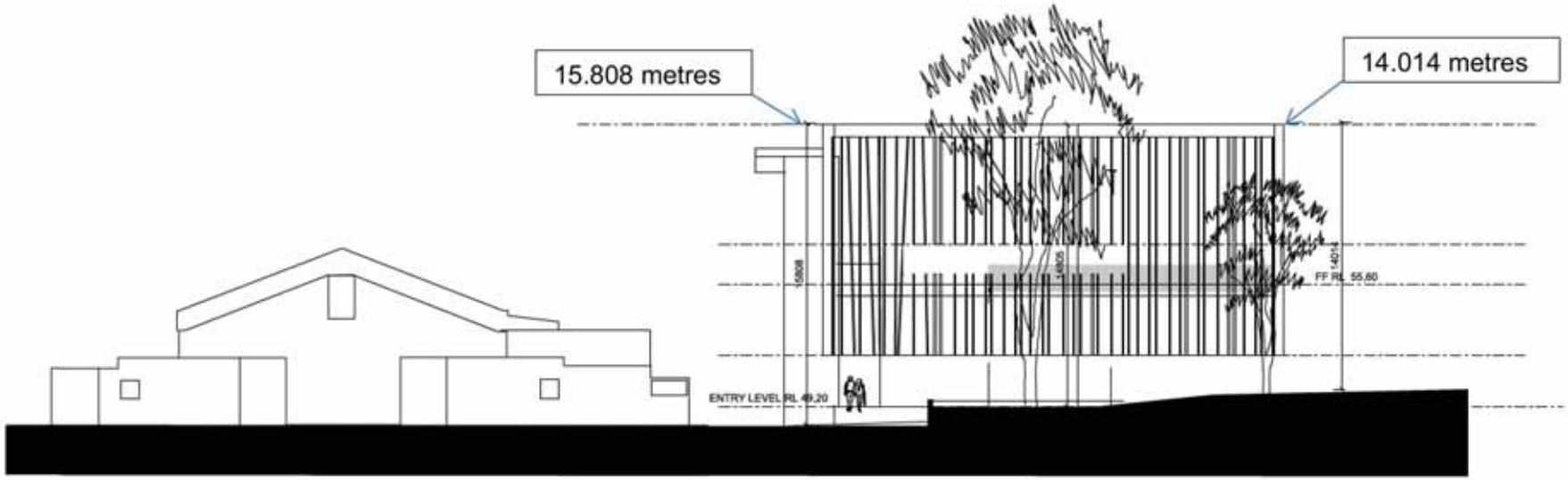


Figure 5-1 Proposed Building Height (North Elevation)

6.2.10 what is the percentage variation (between the proposal and the environmental planning instrument)?

Approximately 186%

6.3 Assessment of the Proposed Variation

6.3.1 How is strict compliance with the development standard unnecessary or unreasonable particular in this particular case?

Compliances with the standard is unreasonable

At the southern end of the height of the ground floor to the 1st floor of the proposed building is 3.6 metres and 2.7 metres for floor to ceiling height on the 1st floor. The floor to ceiling heights of the combined ground and first floor is 1.5 metres higher than a two storey residential dwelling, which is normally 4.8 metres, due to the additional height requirements to accommodate plant and equipment servicing the building. The vertical distance between the ground level (existing) and the highest point of the building at the southern end will be 6.75 metres (including roof thickness), which complies with the height requirements (Refer to Figure 6-1).

Starting at the southern end, the roof height inclines by 2 and 5 degrees for the length of the building, which is approximately 75.4 metres long. The incline of the roof cannot be reduced without reducing the effectiveness of rainwater runoff and collection. The roof incline has the effect of increasing the overall building height by about 5.35 metres at the northern end. At the same time the slope of the land falls by approximately 3.3 metres. Therefore, the vertical distance between the ground level (existing) and the highest point of the building at the northern eastern end is 15.808 metres due to the declining slope of the land and the opposing incline of the roof.

Reversing the incline of the roof so that the roof drains in a south to north direction with a 5.25 degree roof slope would reduce the maximum building height to 8.5 metres. However, this would require the rainwater tanks to be located at the front of the building and installation of a pump to pump rainwater upslope for reuse. Locating the rainwater tanks at the front of the building would have an undesirable visual impact on the aesthetic appearance of this signature building and would financially burden the school with additional ongoing maintenance costs to maintain the pumps.

Sloping the roof towards the entry point would also require designing the building with split levels. Split-level design would require construction of stairs and ramps between each of the levels. The construction of stairs and ramps to accommodate the circulation of 420 students would increase the footprint and cost of the building or require reduction in the size of learning areas. Reversing the incline of the roof and creation of split level design would affect the functionality and feasibility of the building and would severely affect the expression of the building and its signature statement.

Reorientating the building in an east west direction was also considered as an alternative design. Construction of the building across the slope would possibly reduce the height of the building to comply with height requirements. However, reorientating the building would mean the courtyard would no longer be created, require removal of more Cumberland Plain Woodland and increase the length of building visible from the street.

It is considered unreasonable for the school building to comply with a building height intended for residential dwellings when, in this particular case, compliance would

compromise the strong visual statement of the building design, affect the functional purpose of the building and result in additional environmental impacts.

Compliance with the standard is unnecessary

Low density residential dwellings are located to the north, south and west of the school. A shopping centre is located east and sports fields to the northeast of the school. The proposed building is located approximately 50 metres from the nearest adjoining property and is setback over 26m from the street front and screened by existing trees. The setback from the street and adjoining residential dwellings provides the building with its own visual curtilage that allows interpretation and expression of the building within the confines of its own school setting when viewed from the street. The buffer provided between adjoining residents and the street front reduces the visual impact of the building on the surrounding residential dwellings. In addition, the building setback avoids any overshadowing of the adjoining residential building and would not obstruct any significant views.

6.3.2 Sufficient environmental planning grounds to justify contravening the development standard

In the circumstances of the case, there are sufficient planning grounds to justify contravening the development standard being:

- The proposal satisfies the objectives of the R2 Low Density Residential Zone and the objectives of the building height standards as described in Section 6.3.3 below;
- The non-compliance with the standard does not contribute to adverse environmental impacts in terms of overshadowing, visual impacts or view loss;
- The setback from the street and adjoining residential dwellings provides the building with its own visual setting when viewed from the street and does not adversely affect the character with the surrounding residential development;
- The proposed development complies with the intent of the controls, contained in the Penrith Development Control Plan 2014;
- The variation is specific to the functional purpose of the Innovation Centre and approval to exceed the building height would not establish a precedent for other development within the R2 – Low Density Residential Zone;
- The proposed building height exceeds the 12 metre height standard permissible for educational facilities under the complying development provisions of the ISEPP (cl 31A(4)); and
- The development as proposed is consistent with the provisions of orderly and economic development and will provide signature learning centre for St Claire School and the local community.

6.3.3 Consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out

The objectives of this height standard are:

(a) to ensure that buildings are compatible with the height, bulk and scale of the existing and desired future character of the locality,

The length and depth of the proposed building is not inconsistent with the surrounding the surrounding built form. The proposed building is less than the adjoining school buildings and shopping centre as it is 22.85 metres wide and 75.4 metres long. East of the proposed building is an existing hall combined with single storey classrooms, which are 113 metres long and between 27 and 40 metres wide. Adjoining the school site to the east is a single storey shopping centre, approximately 170 long and 100 metres wide.

The bulk and scale of the proposed building is typical of modern secondary school buildings. A recent example is a three storey building approved by the JRPP at Harbord Public School on 12 march 2015. This building, currently under construction, is 14 metre in height and height is 8.5 metres (DA 2014/1290).

(b) to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development and to public areas, including parks, streets and lanes,

The building setback avoids any overshadowing of the adjoining residential buildings and loss of privacy. The proposed building does not obstruct any significant views. The visual impact of the proposed development is discussed in section 6.3.3 above.

(c) to minimise the adverse impact of development on heritage items, heritage conservation areas and areas of scenic or visual importance,

There are no heritage items near the proposed building.

(d) to nominate heights that will provide a high quality urban form for all buildings and a transition in built form and land use intensity.

The proposed architectural design will contribute to providing high quality urban form within its own school setting. The distance between to nearest residential dwellings provides sufficient separation to avoid a structure that is overbearing to adjoining residents. The building form is consistent with the existing school and the adjoining shopping centre to the east.

6.3.4 How would strict compliance hinder the attainment of the objects specified in Section 5(a)(i) and (ii) of the Act?

The objects set down in Section 5(a)(i) and (ii) are as follows:

> *"to encourage:*
>
> *(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural area, forest, mineral, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment.*
>
> *(ii) the promotion and co-ordination of the orderly and economic use and development of land…"*

Compliance with the standard would not hinder the attainment of the objects of section 5(a)(i) and (ii) of the Act, which are to encourage development that promotes the social and economic welfare of the community and a better environment, and to promote and coordinate orderly and economic use and development of land.

Strict compliance with the development standard would not result in discernible benefits to the amenity of adjoining sites or public space. Further, the proposal satisfies objectives of both the zone and development standard. The development as proposed is consistent with the provisions of orderly and economic development and will provide a signature design education facility as the centrepiece to St Claire School and community. Strict compliance with the standard is not required in order to achieve compliance with the objectives.

Appendix A: AHIMS Search

AHIMS Web Services (AWS)
Search Result

Purchase Order/Reference : St Clair HS

Client Service ID : 196887

NSW Public Works

Date: 28 October 2015

Level 14W, McKell Building 2-24 Rawson Place
Sydney New South Wales 2000

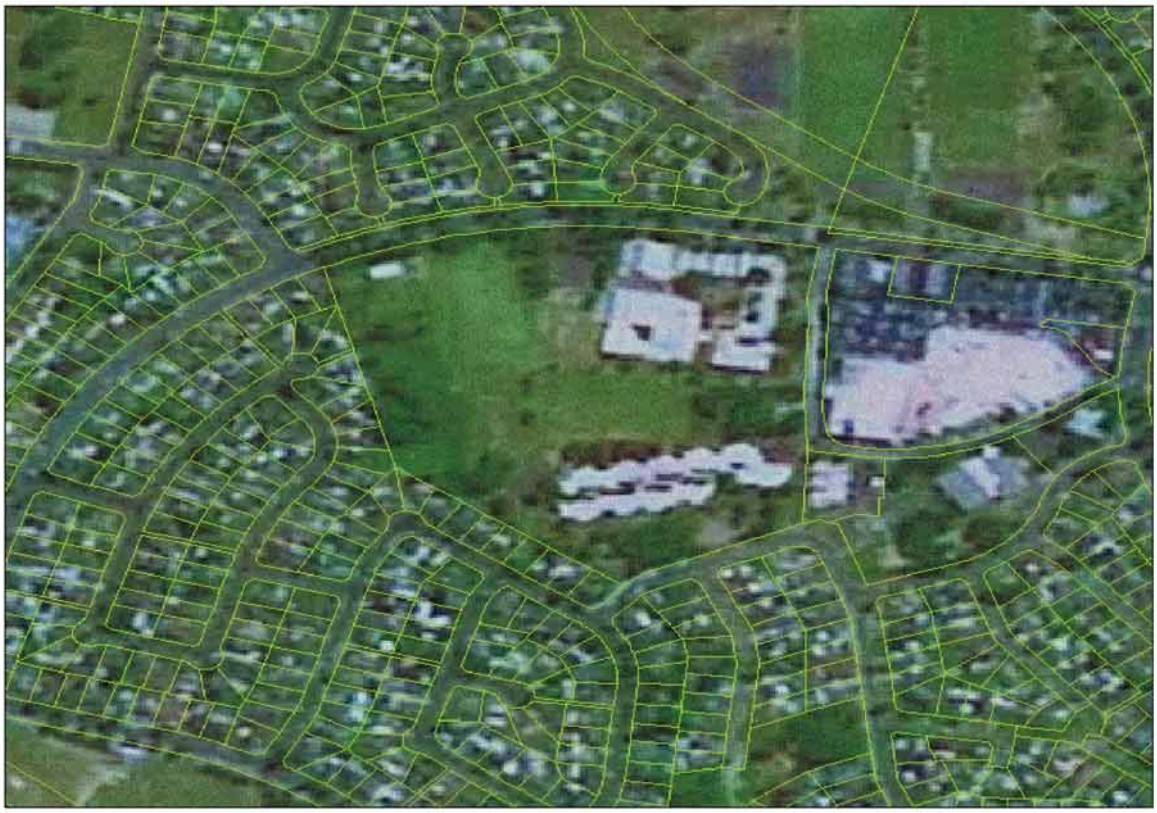
Attention: Kristen Parmeter

Email: kristen.parmeter@services.nsw.gov.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 1, DP:DP861103 with a Buffer of 200 meters, conducted by Kristen Parmeter on 28 October 2015.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

3 Marist Place, Parramatta NSW 2150
Locked Bag 5020 Parramatta NSW 2220
Tel: (02) 9585 6380 Fax: (02) 9873 8599

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au

Appendix B: Site Analysis

COMPLETE CAMPUS COURTYARD

RETAIN CUMBERLAND VEGETATION
- conservation, outlook and shading from west

INTEGRATE SITE LEVEL CHANGES

NEW ENTRY
- away from access road to shopping mall
- located next to out of hours community use facilities, hall, playing fields, new cafe and lecture theatre

PROTECTION FROM WESTERLIES

Appendix C: Seven-part Assessment

Part 1, Section 5A of the EP&A Act (the Assessment of Significance) requires a consideration of the impacts of a proposed action on threatened species, populations and communities listed under the TSC Act.

Vegetation at the site is composed of numerous remnant and planted trees above regularly mown lawns and some planted garden beds. NPWS map the site as containing Shale Plains Woodland (which constitutes part of the Critically Endangered Ecological Community - Cumberland Plain Woodland) with canopy cover less than 10% (Native Vegetation of the Cumberland Plain, Map 4 of 16, October 2002).

Figure C-0-1 Shale Plains Woodland Mapping for the Site (Source SIX April 2016)

Three trees (all Narrow-leaved Ironbark *Eucalyptus crebra*) are identified as indigenous to the local area and appear to be remnants of the pre-existing Shale Plains Woodland. The proposed development would not result in the removal of any of these trees. Other native plant species, which are also listed as Shale Plains Woodland species (eg *Corymbia maculata*, *Eucalyptus tereticornis*) occur on the site but are not identified as indigenous to the locality. Forty-six (46) trees on the site will be removed, which includes thirty-nine species not indigenous to the locality but listed as Shale Plains Woodland species.

It is unclear in the final determination of Cumberland Plain Woodland as a critically endangered ecological community on the TSC Act (NSW Scientific Committee 2009) whether remnant trees or groups of trees above a heavily modified understorey are part of the community. Accordingly, a precautionary approach has been applied and the likely impacts of the proposal on the community assessed.

(a) in the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

Not applicable to a critically endangered ecological community.

(b) in the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction:

Not applicable to a critically endangered ecological community.

(c) in the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:

(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

The proposal would not result in the removal of the three locally indigenous trees remnant of the pre-existing Cumberland Plain Woodland community. It is considered the removal of non-indigenous species would not place the local occurrence of this community at risk of extinction.

(ii) or is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

The area within which the remnant trees occur is already heavily modified by previous clearing, creation of landscaped areas and introduced pasture grasses. The proposal would remove 54 native plant species that are not indigenous to the local area and therefore do not constitute part of this remnant Cumberland Plain Woodland. The removed plants would be replaced with native plant species elsewhere on the site. The removal and replacement of non-indigenous plant species on the school site would not significantly alter the composition of the existing vegetation community. The proposed activities associated with the development are unlikely to have an impact on this remnant community and would not place it at risk of extinction.

The wider remnant of Cumberland Plain Woodland within which the affected trees can be said to occur is already fragmented from other areas of Cumberland Plain Woodland by intervening development. The proposal is unlikely to contribute to fragmentation or isolation of remaining stands of the community within this locality.

(iii) and the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality,

Given the small number of indigineous trees affected and the degraded condition of the canopy cover and understorey, it is considered that the area affected is not vital to the long-term survival of the community in the locality.

(e) whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly),

No critical habitat would be adversely affected by the proposal. The subject site is not listed as critical habitat under Part 3 Division 1 of the TSC Act.

(f) whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan,

A recovery plan has been prepared for the Cumberland Plain (DECCW 2011), which encompasses Cumberland Plain Woodland. To provide for the long-term survival of the threatened biodiversity of the Cumberland Plain, the recovery plan has four specific recovery objectives, these being:

1. To build a protected area network, comprising public and private lands, focused on the identified priority conservation lands.

2. To deliver best practice management to remnant bushland across the Cumberland Plain on public lands where the primary management objectives are compatible with biodiversity conservation.

3. To develop an understanding and enhanced awareness in the community of the Cumberland Plain's threatened biodiversity, the best practice standards for its management, and the recovery program.

4. To increase knowledge of the threats to the survival of the Cumberland Plain's threatened biodiversity, and thereby improve capacity to manage these threats in a strategic and effective manner.

Ensuing recovery actions and key performance targets accompany these four objectives. Penrith Council is among those government agencies charged with responsibility for other actions contained in Recovery Objectives that could be relevant to this proposal. This includes:

'Support and promote the adoption of best practice standards for bushland management and restoration (as specified in Appendix 2) on public and private lands within the Cumberland Plain.'

It is considered that given the highly degraded nature of the vegetation community the implementation of specific bushland management and restoration measures are not warranted.

(g) whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

Currently 35 Key Threatening Processes for mainland NSW are listed under Schedule 3 of the TSC Act. Of these, 'clearing of native vegetation' and 'invasion of native plant communities by exotic perennial grasses' would be applicable to the proposed works. The proposal is not considered to significantly contribute to these Key Threatening Processes such that the life cycle requirements of the Cumberland Plain Woodland would be compromised.