

# ABORIGINAL TEXT EXCAVATION REPORT

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Picton High School Redevelopment  
480 Argyle Street  
Picton NSW  
(Wollondilly Shire LGA)



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**for**

**Billard Leece Partnership**

**On behalf of**

**Department of Education NSW**

**Version 3**

**March 2018**

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**Cover Image**

North Section Trench 7  
AMAC, 2018 [DSCN1497]

## INTERNAL REVIEW

Version	Written/ Edited By	Date	Document Status	Reviewed By	Issue Date
1	Y. Pavincich/ B.Streat	25/01/18	Draft V.1	Client/RAPs	06/02/18
2	Y.Pavincich/ B. Streat	23/02/18	Draft V.2	Client	23/02/18
3	Y.Pavincich/ B. Streat	08/03/18	Final	Client	04/04/18

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## EXECUTIVE SUMMARY

### **Study Area**

Streat Archaeological Services Pty Ltd (SAS) was commissioned by Billard Leece Partnership on behalf of the Department of Education (DoE) in October 2017, to prepare an Aboriginal Cultural Heritage Assessment for the proposed State Significant Development #8640 Picton High School Redevelopment at 480 Argyle Street, Picton, New South Wales.

As part of this investigation a programme of test excavation was conducted under the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010). This report forms the results and analysis of said test excavation.

The study site is that piece of land described as Lot 2 of the Land and Property Information Deposited Plan 520158 forming the following street address 480 Argyle street, Picton, in the Parish of Couridjah, County of Camden. This redevelopment also includes works within Argyle Street out the front of the current school boundary as well as within Wollondilly Council land at the SE corner of the school boundary.

### **Aboriginal Consultation**

Consultation for this report has been undertaken in accordance with the Office of Environment and Heritage and National Parks and Wildlife Act 1974: Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010), as part of the programme of test excavation under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010).

*There is a mandatory 28-day period for the Aboriginal stakeholders to comment on this document. A final Aboriginal stakeholder approved version of this report shall be issued at the close of this period (should any changes be required as a result of the exhibition process or Aboriginal stakeholder comment they will be included at this stage).*

### **Physical Evidence**

Test excavation was undertaken over four days 22/01/18 – 25/01/18. The programme was conducted under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales and consisted of the excavation of 14 test trenches (50cm x 50cm).

The soil profile was found to be consistent throughout the study area. It is clear and observable that the A1 horizon was found to be absent in majority of the study area, however an A2 horizon was evident but was found to be reworked. The topsoil across the study area was found to be redeposited and heavily disturbed.

No Aboriginal objects and/or deposits or features of cultural significance were identified during the programme of test excavation. Therefore, no further investigation is warranted, and works may proceed with caution.

## **Significance**

The site is found to be of nil-low archaeological significance this is on account to the test excavation resulting in no Aboriginal objects and/or deposits of cultural or archaeological significance being located. The soil was found to be heavily disturbed with evidence of being reworked and/or redeposited.

## **Recommendations**

The findings from the test excavation indicate the site to be of nil-low archaeological significance. The soil was found to be heavily disturbed with evidence of being reworked and/or redeposited. The programme resulted in no Aboriginal objects and/or deposits of cultural significance being located, therefore the development should be allowed to proceed with caution.

The recommendations have been formulated after consultation with RAPs, the proponent and the OEH;

- Consultation with the registered Aboriginal stakeholders should continue. Stakeholders have been given the opportunity to comment on the recommendations of this report and these comments are included in this report;
- An Aboriginal Cultural Heritage Management Plan should be devised as a final document for the study area as State Significant Development (SSD) status (SSD #8640), in order to manage any Aboriginal archaeological and cultural constraints that may arise;
- Consideration should be given to the recommendations of D'harawal Traditional Descendents' and Knowledgeholders' Circle (p.53 of *AMAC 2018 Aboriginal Cultural Heritage Report; Picton High School Redevelopment; 480 Argyle Street; Picton NSW; Wollondilly Shire LGA*) in regard to the native vegetation of the area, including the request for a detailed botanical survey, protection of existing native flora where possible, planting of healthy native (to the region) specimens, including Turpentine, Forest Red Gum, Stringy Bark and Ironbark species and that consultation continue with RAPs regarding the landscaping of the development as part of the Aboriginal Cultural Heritage Management Plan.
- Archaeological test excavation in accordance with Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010) revealed no Aboriginal archaeological objects or deposits: the development as shown (Figures 4.1 – 4.11) should be allowed to 'proceed with caution';
- After this and before any ground disturbance takes place all development staff, contractors and workers should be briefed prior to works commencing on site, as to the status of the area and their responsibilities in ensuring preservation of the said area. They should also be informed of their responsibilities regarding any Indigenous archaeological deposits and/or objects that may be located during the following development;

**If any Aboriginal archaeological deposits and/or objects are located during the development, then the following should take place;**

- All work is to cease in the immediate vicinity of the deposits and/or objects

- The area is to be demarcated
- OEH, a qualified archaeologist and the participating RAPs are to be notified.

**Should any human remains be located during the following development;**

- All excavation in the immediate vicinity of any objects of deposits shall cease immediately;
- The NSW police and OEH's Enviroline be informed as soon as possible;
- Once it has been established that the human remains are Aboriginal ancestral remains, OEH and the relevant Registered Aboriginal Parties will identify the appropriate course of action.

**Additional Recommendations**

Copies of the final version of this report should be forwarded to the following organisations:

- Kamilaroi – Yankuntjatjara Working Group
- D'harawal Traditional Descendents 's and Knowledgeholders circle;
- Didge Ngunawal Clan;
- Koolkuna Elders;
- Tharawal LALC;
- Biamanga;
- Goobah;
- Murramarang;
- Cullendulla;
- Cubbitch Barta

## 1.0 INTRODUCTION

### 1.1 BACKGROUND

Archaeological Management and Consulting Group (AMAC) in conjunction with Streat Archaeological Services Pty Ltd (SAS) was commissioned by Billard Leece Partnership on behalf of the Department of Education (DoE) in October 2017, to prepare an Aboriginal Cultural Heritage Assessment for the proposed State Significant Development #8640 Picton High School Redevelopment at 480 Argyle Street, Picton, New South Wales.

As part of this investigation a programme of test excavation was conducted under the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010). This report forms the results and analysis of said test excavation.

### 1.2 STUDY AREA

The study site is that piece of land described as Lot 2 of the Land and Property Information Deposited Plan 520158 forming the following street address 480 Argyle street, Picton, in the Parish of Couridjah, County of Camden. This redevelopment also includes works within Argyle Street out the front of the current school boundary as well as within Wollondilly Council land at the SE corner of the school boundary.

Address	Lot	Deposited Plan
480 Argyle Street	2	520158
Argyle Street works (front of current school boundary)	n/a	n/a
Wonga Road works (council land located at SE corner of current school boundary)	n/a	n/a

### 1.3 SCOPE & OBJECTIVES OF THE ASSESSMENT

This report forms the results of the programme of test excavation that was conducted, including the synthesis and analysis of information of which may contribute to our understanding of the site characteristics and local and/or regional prehistory. The results of the test excavation will aid in the formalisation of appropriate management recommendations and conservation goals for the proposed development and any archaeological material recovered.

This assessment is intended for submission in conjunction with an Aboriginal Cultural Heritage Assessment and Aboriginal Archaeological Assessment (AMAC Group 2016), to the New South Wales, Office of Environment and Heritage, Department of Premier and Cabinet, (OEH).

### 1.4 ABORIGINAL CONSULTATION & PARTICIPATION SUMMARY

Consultation for this report has been undertaken in accordance with the Office of Environment and Heritage and National Parks and Wildlife Act 1974: Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010), as part of the Aboriginal Cultural

Heritage Assessment and programme of test excavation under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010).

*There is a mandatory 28-day period for the Aboriginal stakeholders to comment on this document. A final Aboriginal stakeholder approved version of this report shall be issued at the close of this period (should any changes be required as a result of the exhibition process or Aboriginal stakeholder comment they will be included at this stage).*

## 1.5 AUTHOR IDENTIFICATION

The analysis of the archaeological background and the reporting were undertaken by Benjamin Streat (B.A, Grad Dip Arch Her, Grad Dip App Sc), archaeologist and director of Streat Archaeological Services Pty Ltd and archaeologist Yolanda Pavincich (B Arch, Grad Dip Cul Her) in association with and under the guidance of Mr Martin Carney, archaeologist and managing director of AMAC Group.

## 1.6 ACKNOWLEDGEMENTS

The author would like to thank the following for advice and input into this assessment:

- S. Wood and A. Croker from Billard Leece Partnership Pty Ltd;
- I. White from MACE Group;
- Kamilaroi – Yankuntjatjara Working Group;
- D'harawal Traditional Descendents 's and Knowledgeholders circle;
- Didge Ngunawal Clan;
- Koolkuna Elders;
- Tharawal LALC;
- Biamanga;
- Goobah;
- Murramarang;
- Cullendulla;
- Cubbitch Barta;

## 2.0 LEGISLATIVE CONTEXT AND STATUTORY CONTROLS

This section of the report provides a brief outline of the relevant legislation and statutory instruments that protect Aboriginal archaeological and cultural heritage sites within the state of New South Wales. Some of the legislation and statutory instruments operate at a federal or local level and as such are applicable to Aboriginal archaeological and cultural heritage sites in New South Wales. This material is not legal advice and is based purely on the author's understanding of the legislation and statutory instruments. This document seeks to meet the requirements of the legislation and statutory instruments set out within this section of the report.

### 2.1 COMMONWEALTH HERITAGE LEGISLATION AND LISTS

One piece of legislation and two statutory lists and one non-statutory list are maintained and were consulted as part of this report: the National Heritage List; the Commonwealth Heritage List and the Register of the National Estate.

#### 2.1.1 Environmental Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) offers provisions to protect matters of national environmental significance. This act establishes the National Heritage List and the Commonwealth Heritage List which can include natural, Indigenous and historic places of value to the nation. This Act helps ensure that the natural, Aboriginal and historic heritage values of places under Commonwealth ownership or control are identified, protected and managed (Australian Government 1999).

#### 2.1.2 National Heritage List

The National Heritage List is a list which contains places, items and areas of outstanding heritage value to Australia; this can include places, items and areas overseas as well as items of Aboriginal significance and origin. These places are protected under the Australian Government's EPBC Act.

#### 2.1.3 Commonwealth Heritage List

The Commonwealth Heritage List can include natural, Indigenous and historic places of value to the nation. Items on this list are under Commonwealth ownership or control and as such are identified, protected and managed by the Federal Government.

#### 2.1.4 Register of the National Estate

The Register of the National Estate is a list of natural, Indigenous and heritage places throughout Australia. It was originally established under the *Australian Heritage Commission Act 1975* (AHC Act). This has now been replaced by the Environment Protection and Biodiversity Conservation Act 1999. The register will continue to operate until February 2012 when it will be completely replaced by The Commonwealth Heritage List.

## 2.2 NEW SOUTH WALES STATE HERITAGE LEGISLATION AND LISTS

The state (NSW) based legislation that is of relevance to this assessment comes in the form of the acts which are outlined below.

### 2.2.1 National Parks and Wildlife Act 1974

The NSW National Parks and Wildlife Act 1974 (as amended) defines Aboriginal objects and provides protection to any and all material remains which may be evidence of the Aboriginal occupation of lands continued within the state of New South Wales. The relevant sections of the Act are sections 84, 86, 87 and 90.

An Aboriginal object, formerly known as a relic is defined as:

*any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains” (NSW Government, 1974).*

It is an offence to harm or desecrate an Aboriginal object or places under Part 6, Section 86 of the NPW Act:

Part 6, Division 1, Section 86: Harming or desecrating Aboriginal objects and Aboriginal places:

- (1) *A person must not harm or desecrate an object that the person knows is an Aboriginal object.*

*Maximum penalty:*

- (a) *in the case of an individual—2,500 penalty units or imprisonment for 1 year, or both, or (in circumstances of aggravation) 5,000 penalty units or imprisonment for 2 years, or both, or*

- (b) *in the case of a corporation—10,000 penalty units.*

- (2) *A person must not harm an Aboriginal object.*

*Maximum penalty:*

- (a) *in the case of an individual—500 penalty units or (in circumstances of aggravation) 1,000 penalty units, or*

- (b) *in the case of a corporation—2,000 penalty units.*

- (3) *For the purposes of this section, **circumstances of aggravation** are:*

- (a) *that the offence was committed in the course of carrying out a commercial activity, or*

- (b) *that the offence was the second or subsequent occasion on which the offender was convicted of an offence under this section.*

*This subsection does not apply unless the circumstances of aggravation were identified in the court attendance notice or summons for the offence.*

- (4) *A person must not harm or desecrate an Aboriginal place.*

*Maximum penalty:*

- (a) *in the case of an individual—5,000 penalty units or imprisonment for 2 years, or both, or*

- (b) *in the case of a corporation—10,000 penalty units.*
- (5) *The offences under subsections (2) and (4) are offences of strict liability and the defence of honest and reasonable mistake of fact applies.*
- (6) *Subsections (1) and (2) do not apply with respect to an Aboriginal object that is dealt with in accordance with section 85A.*
- (7) *A single prosecution for an offence under subsection (1) or (2) may relate to a single Aboriginal object or a group of Aboriginal objects.*
- (8) *If, in proceedings for an offence under subsection (1), the court is satisfied that, at the time the accused harmed the Aboriginal object concerned, the accused did not know that the object was an Aboriginal object, the court may find an offence proved under subsection (2).*

### **2.2.2 Environmental Planning & Assessment Act 1979**

*The Environmental Planning and Assessment Act 1979 (EP&A Act)* states that environmental impacts of proposed developments must be considered in land use planning procedures. Four parts of this act relate to Aboriginal cultural heritage.

- Part 3, divisions 3, 4 and 4A refer to Regional Environmental Plans (REP) and Local Environmental Plans (LEP) which are environmental planning instruments and call for the assessment of Aboriginal heritage among other requirements.
- Part 4 determines what developments require consent and what developments do not require consent. Section 79C calls for the evaluation of *The likely impacts of that development, including environmental impacts on both the natural and built environments and the social and economic impacts in the locality (NSW Government 1979).*
- Part 5 of this Act requires that impacts on a locality which may have an impact on the aesthetic, anthropological, architectural, cultural, historic, scientific, recreational or scenic value are considered as part of the development application process (NSW Government, 1979).

### **2.2.3 The Aboriginal Land Rights Act 1983**

The NSW *Aboriginal Land Rights Act 1983* (ALR Act), administered by the NSW Department of Aboriginal Affairs, established the NSW Aboriginal Land Council (NSWALC) and Local Aboriginal Land Councils (LALCs). The ALR Act requires these bodies to:

- take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law;
- promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

These requirements recognise and acknowledge the statutory role and responsibilities of New South Wales Aboriginal Land Council and Local Aboriginal Land Councils.

The ALR Act also establishes the Office of the Registrar whose functions include but are not limited to, maintaining the Register of Aboriginal Land Claims and the Register of Aboriginal Owners.

Under the ALR Act the Office of the Registrar is to give priority to the entry in the Register of the names of Aboriginal persons who have a cultural association with:

- lands listed in Schedule 14 to the NPW Act;
- lands to which section 36A of the ALR Act applies (NSW Government, 1974 & DECCW 2010).

#### **2.2.4 The Native Title Act 1993**

The *Native Title Act 1993* (NTA) provides the legislative framework to:

- recognise and protect native title;
- establish ways in which future dealings affecting native title may proceed, and to set standards for those dealings, including providing certain procedural rights for registered native title claimants and native title holders in relation to acts which affect native title;
- establish a mechanism for determining claims to native title;
- provide for, or permit, the validation of past acts invalidated because of the existence of native title.

The National Native Title Tribunal has a number of functions under the NTA including maintaining the Register of Native Title Claims, the National Native Title Register and the Register of Indigenous Land Use Agreements and mediating native title claims (NSW Government, 1974 & DECCW 2010).

#### **2.2.5 New South Wales Heritage Register and Inventory 1999**

The State Heritage Register is a list of places and objects of particular importance to the people of NSW. The register lists a diverse range of over 1,500 items, in both private and public ownership. Places can be nominated by any person to be considered to be listed on the Heritage register. To be placed an item must be significant for the whole of NSW. The State Heritage Inventory lists items that are listed in local council's local environmental plan (LEP) or in a regional environmental plan (REP) and are of local significance.

#### **2.2.6 Register of Declared Aboriginal Places 1999**

The NPW Act protects areas of land that have recognised values of significance to Aboriginal people. These areas may or may not contain Aboriginal objects (i.e. any physical evidence of Aboriginal occupation or use). Places can be nominated by any person to be considered for Aboriginal Place gazettal. Once nominated, a recommendation can be made to EPA/OEH for consideration by the Minister. The Minister declares an area to be an 'Aboriginal place' if the Minister believes that the place is or was of special significance to Aboriginal culture. An area can have spiritual, natural resource usage, historical, social, educational or other type of significance.

Under section 86 of the NPW Act it is an offence to harm or desecrate a declared Aboriginal place. Harm includes destroying, defacing or damaging an Aboriginal place. The potential impacts of the development on an Aboriginal place must be assessed if the development will be in the vicinity of an Aboriginal place (DECCW 2010).

## **2.3 LOCAL PLANNING INSTRUMENTS**

### **2.3.1 Wollondilly Shire Local Environment Plan 2011**

The Wollondilly Shire Local Environment Plan was endorsed in 2011. Heritage Conservation is discussed in Part 5; Clause 5.10. The following section highlights the archaeological considerations of a site in relation to developments:

#### **5.10 Heritage conservation**

##### **(1) Objectives**

*The objectives of this clause are as follows:*

- (a) to conserve the environmental heritage of Wollondilly*
- (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,*
- (c) to conserve archaeological sites,*
- (d) to conserve Aboriginal objects and Aboriginal places of heritage significance.*

##### **(2) Requirement for consent**

*Development consent is required for any of the following:*

- (a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):*
  - (i) a heritage item,*
  - (ii) an Aboriginal object,*
  - (iii) a building, work, relic or tree within a heritage conservation area,*
- (b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,*
- (c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,*
- (d) disturbing or excavating an Aboriginal place of heritage significance,*
- (e) erecting a building on land:*
  - (i) on which a heritage item is located or that is within a heritage conservation area, or*
  - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,*
- (f) subdividing land:*
  - (i) on which a heritage item is located or that is within a heritage conservation area, or*
  - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.*

##### **(3) When consent not required**

However, development consent under this clause is not required if:

- (a) *the applicant has notified the consent authority of the proposed development and the consent authority has advised the applicant in writing before any work is carried out that it is satisfied that the proposed development:*
  - (i) *is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or archaeological site or a building, work, relic, tree or place within the heritage conservation area, and*
  - (ii) *would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place, archaeological site or heritage conservation area, or*
- (b) *the development is in a cemetery or burial ground and the proposed development:*
  - (i) *is the creation of a new grave or monument, or excavation or disturbance of land for the purpose of conserving or repairing monuments or grave markers, and*
  - (ii) *would not cause disturbance to human remains, relics, Aboriginal objects in the form of grave goods, or to an Aboriginal place of heritage significance, or*
- (c) *the development is limited to the removal of a tree or other vegetation that the Council is satisfied is a risk to human life or property, or*
- (d) *the development is exempt development.*

**(8) Aboriginal places of heritage significance**

*The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:*

- (a) *consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and*
- (b) *notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent*

**(10) Conservation incentives**

*The consent authority may grant consent to development for any purpose of a building that is a heritage item or of the land on which such a building is erected, or for any purpose on an Aboriginal place of heritage significance, even though development for that purpose would otherwise not be allowed by this Plan, if the consent authority is satisfied that:*

- (a) *the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and*

- (b) *the proposed development is in accordance with a heritage management document that has been approved by the consent authority, and*
- (c) *the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out, and*
- (d) *the proposed development would not adversely affect the heritage significance of the heritage item, including its setting, or the heritage significance of the Aboriginal place of heritage significance, and*
- (e) *the proposed development would not have any significant adverse effect on the amenity of the surrounding area*

### **2.3.2 Wollondilly Development Control Plan 2016**

The Wollondilly Development Control Plan was prepared by the Wollondilly Shire Council in 2016. Volume 1 – General Part 7 deals with Aboriginal heritage;

#### **7.1 Objectives**

- a) *To achieve appropriate means of conservation, management and protection for archaeological sites, Aboriginal objects and Aboriginal places of heritage significance.*
- b) *To achieve compliance with the requirements of the National Parks and Wildlife Act, 1974 and associated Regulations and guidelines with respect to Aboriginal objects and Aboriginal places of heritage significance.*
- c) *To consider and manage Aboriginal objects and Aboriginal places of heritage significance at the earliest practical stages in the land development process.*

#### **7.2 Controls**

*An indigenous heritage and archaeological report must be prepared for any development application on land which contains a known Aboriginal object or Aboriginal places of heritage significance. The report must be prepared by a suitably qualified archaeologist. The report must be prepared in accordance with the Code of Practice for Archaeological Investigation of Aboriginal objects in NSW. A report may also be required at the discretion of the assessing officer where:*

- 1. There is impact or disturbance to the content, or within the immediate vicinity (100 metres) of a known Aboriginal object or Aboriginal place of heritage significance;*
- 2. There is impact or disturbance to, or within the immediate vicinity (100 metres) of a previously recorded or known Aboriginal object or Aboriginal place of heritage significance and can include a cultural landscape, an existing or former ceremonial ground, a burial ground or cemetery, a story place or mythological site, a former Aboriginal reserve or historic encampment, or an archaeological site of high significance;*
- 3. A proposal (including subdivision) which affects primarily undeveloped land (irrespective of land size) and has the following site features:*
  - *river frontage*
  - *creek line*
  - *sandstone exposures at ground level larger than 5m<sup>2</sup>*
  - *sandstone cliff line or isolated boulder higher than 2m*

- disturbance to the roots, trunk, branches, of old growth trees, which are native to the Wollondilly Shire and greater than 150 years of age.
- 4. Ensure that all works cease in the vicinity of any previously unidentified Aboriginal objects or places identified during excavation and construction and that the following be notified
  - a) The Office of Environment and Heritage NSW (OEH)
  - b) A qualified archaeologist
  - c) Aboriginal stakeholders.
- 5. Ensure that should human skeletal remains be discovered that the following process will be undertaken:
  - a) The remains will be reported to the police and the state coroner.
  - b) Wollondilly Shire Council and the land owner will be notified of the find.
  - c) Aboriginal stakeholders will be notified of the find.
  - d) OEH NSW will be notified.
- 6. If the skeletal remains are of Aboriginal ancestral origin an appropriate management strategy will be developed in consultation with the Aboriginal stakeholders.
- 7. The find will be recorded in accordance with the National Parks and Wildlife Act 1974 (NSW) and the NSW NPWS Aboriginal Cultural Heritage Standards and Guidelines Kit.
- 8. The findings will be incorporated into any proposed Aboriginal Heritage Plan's management regime.

## **2.4 DUE DILIGENCE CODE OF PRACTICE FOR THE PROTECTION OF ABORIGINAL OBJECTS IN NEW SOUTH WALES**

This assessment conforms to the parameters set out in the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010).

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales states that if;

- a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely, then further archaeological investigation and impact assessment is necessary.

## **2.5 CODE OF PRACTICE FOR ARCHAEOLOGICAL INVESTIGATION OF ABORIGINAL OBJECTS IN NEW SOUTH WALES**

Any further work resulting from recommendations should be carried out conforming to the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010).

## **2.6 GUIDELINES**

This report has been carried out in consultation with the following documents which advocate best practice in New South Wales:

- Aboriginal Archaeological Survey, Guidelines for Archaeological Survey Reporting (NSW NPWS 1998);

- Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010);
- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010);
- Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1998);
- Australia ICOMOS 'Burra' Charter for the conservation of culturally significant places (Australia ICOMOS 1999);
- Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010);
- Protecting Local Heritage Places: A Guide for Communities (Australian Heritage Commission 1999).

### 3.0 DESCRIPTION OF STUDY AREA

The study site is that piece of land described as Lot 2 of the Land and Property Information Deposited Plan 520158 forming the following street address 480 Argyle street, Picton, in the Parish of Couridjah, County of Camden. This redevelopment also includes works within Argyle Street out the front of the current school boundary as well as within Wollondilly Council land at the SE corner of the school boundary.

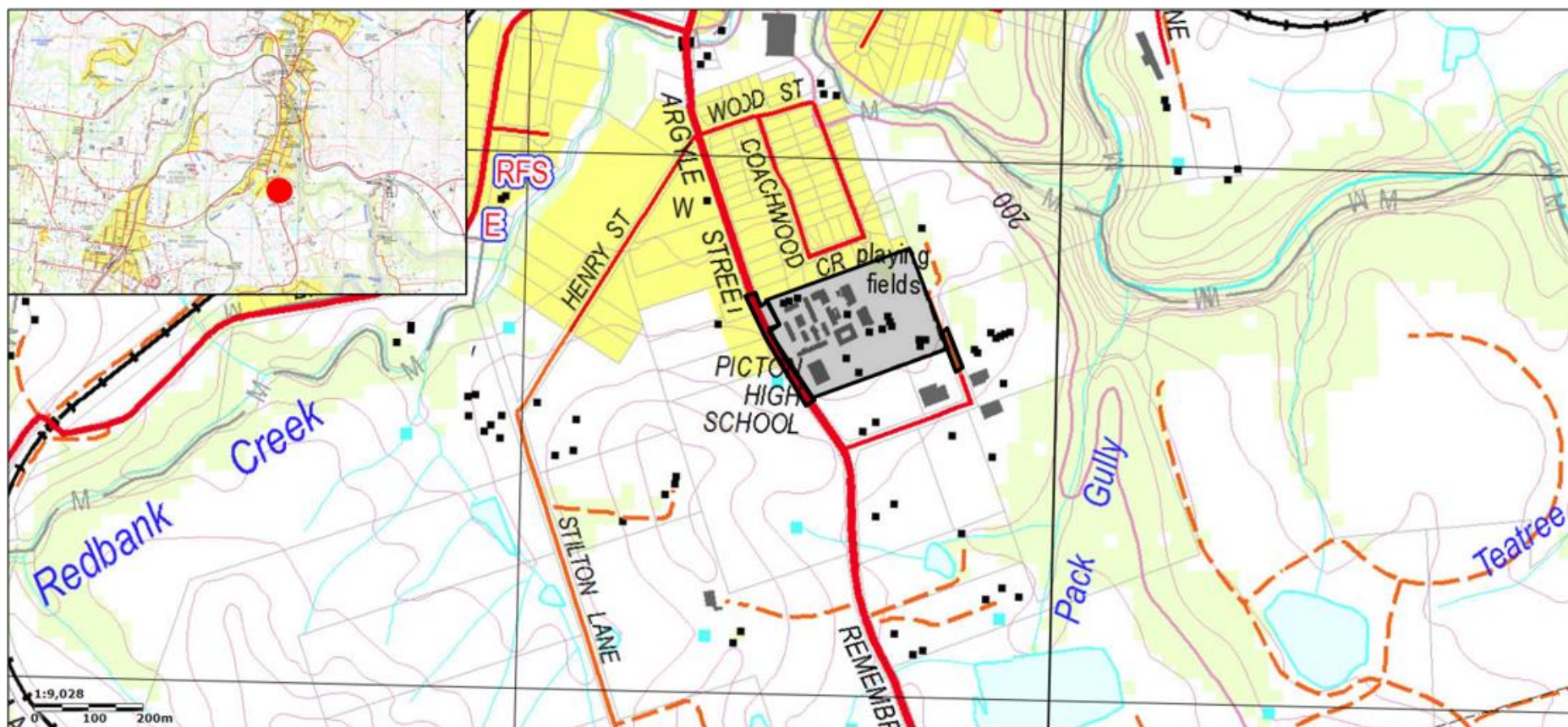
Address	Lot	Deposited Plan
480 Argyle Street	2	520158
Argyle Street works (front of current school boundary)	n/a	n/a
Wonga Road works (council land located at SE corner of current school boundary)	n/a	n/a

#### REGISTERED ARCHAEOLOGICAL SITES WITHIN THE STUDY AREA

There are no registered sites within the study area that the author of this report is aware of. Test excavation resulted in no new sites being registered.



**Figure 3.1 Aerial of study area**  
 Study area outlined in red. Six Maps, LPI Online (accessed 11/10/17).



**Figure 3.2** Topographic map with site location.  
Study area outlined in black. Six Maps, LPI Online, accessed 15/11/2017.

## 4.0 PROPOSED ACTIVITY

The proposed activity is a state significant development (SSD) # 8640 of the redevelopment of Picton High School (Figure 4.1-4.11). The proposed build consists of 3 floors of education spaces (Ground floor, lower floor and first floor). The tiered building design utilises the stepped terrain of the site for accessibility. The highest point is RL 22.47 of the roof, while the lowest point of the development is RL 21.35, making the build approximately 11.2m. The topography is raised towards the west and declines towards the east in a terraced effect, therefore the ground level of the build towards the west is 3.5m higher than the base of the lower ground level at the eastern end. (Figure 4.6)

Significant landscaping has been proposed including terraced grass spaces at the northern end to align with the tiered nature of the building design and topography.

External facilities have either been amended or added such as the proposed new service delivery access road along the south-eastern boundary, as well as carparking facilities along the western, northern and southern perimeter.

### BLP Area Calculations:

- Total Site Area= 56900sqm
- Argyle Street (RMS land within boundary) = 750 sqm
- Argyle Street road upgrades area = 3634 sqm
- Total Argyle Street area of proposed work = 4384 sqm
- Wonga Road (Council land) = 2750sqm

No formal areas of exclusion have been identified in the current plans.

### 4.1 ECOLOGICAL SUSTAINABLE DEVELOPMENT AND INTERGENERATIONAL EQUITY

The ability of any development to be completely ecologically sustainable will be limited by definition. However, the proponents of this development appear to have made significant efforts to meet the needs of the current generation without compromising the ability of future generations to meet their own needs. This has been accomplished by proposing a plan on a manageable and affordable scale while still protecting and conserving the archaeological resources. This is being accomplished by a program of subsurface test excavation with the possibility of further salvage excavation if needed as well as extensive consultation with the relevant Aboriginal community.

Inter- generational equity refers to the equitable sharing of resources between current and future generations. The planet's current generation should ensure that future generations have the same opportunities and resources available. This idea is being accomplished by designing a building with as little disturbance to the ground surface as possible and as such any archaeological or cultural material that may be present in these areas either identified or unidentified will be left intact and persevered for future generations.

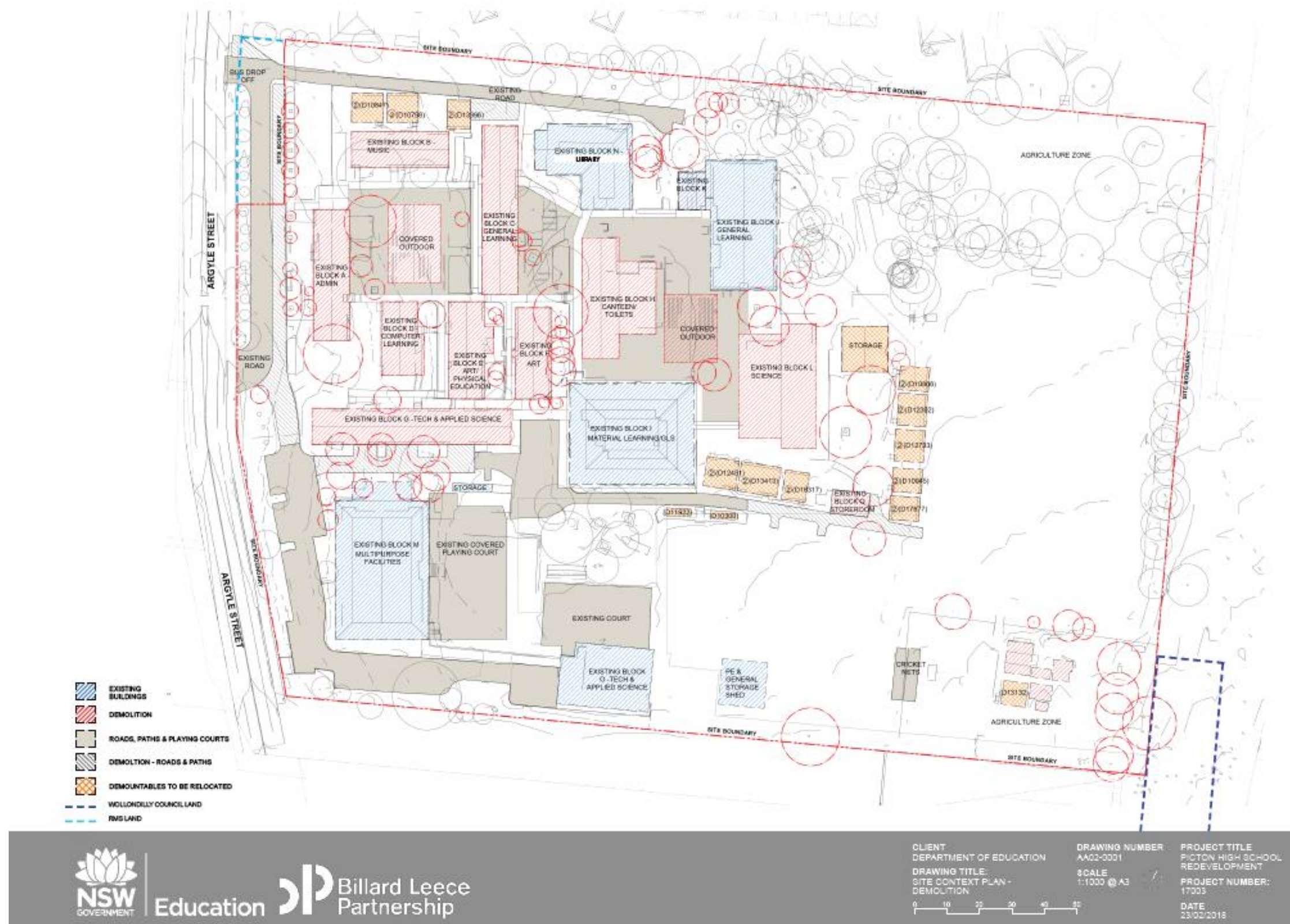


Figure 4.1: Demolition Plan  
 Billard Leece Partnership Pty Ltd (2018) Drawing No. AA02-0001



Education **Billard Leece Partnership**

CLIENT  
DEPARTMENT OF EDUCATION  
DRAWING TITLE  
SITE CONTEXT PLAN - PROPOSED

DRAWING NUMBER  
AA03-0001  
SCALE  
1:1000 @ A3

PROJECT TITLE  
PICTON HIGH SCHOOL REDEVELOPMENT  
PROJECT NUMBER:  
17003  
DATE  
23/02/2018

Figure 4.2 Proposed Development Buildings  
 Billard Leece Partnership Pty Ltd (2018) Drawing No. AA03-0002

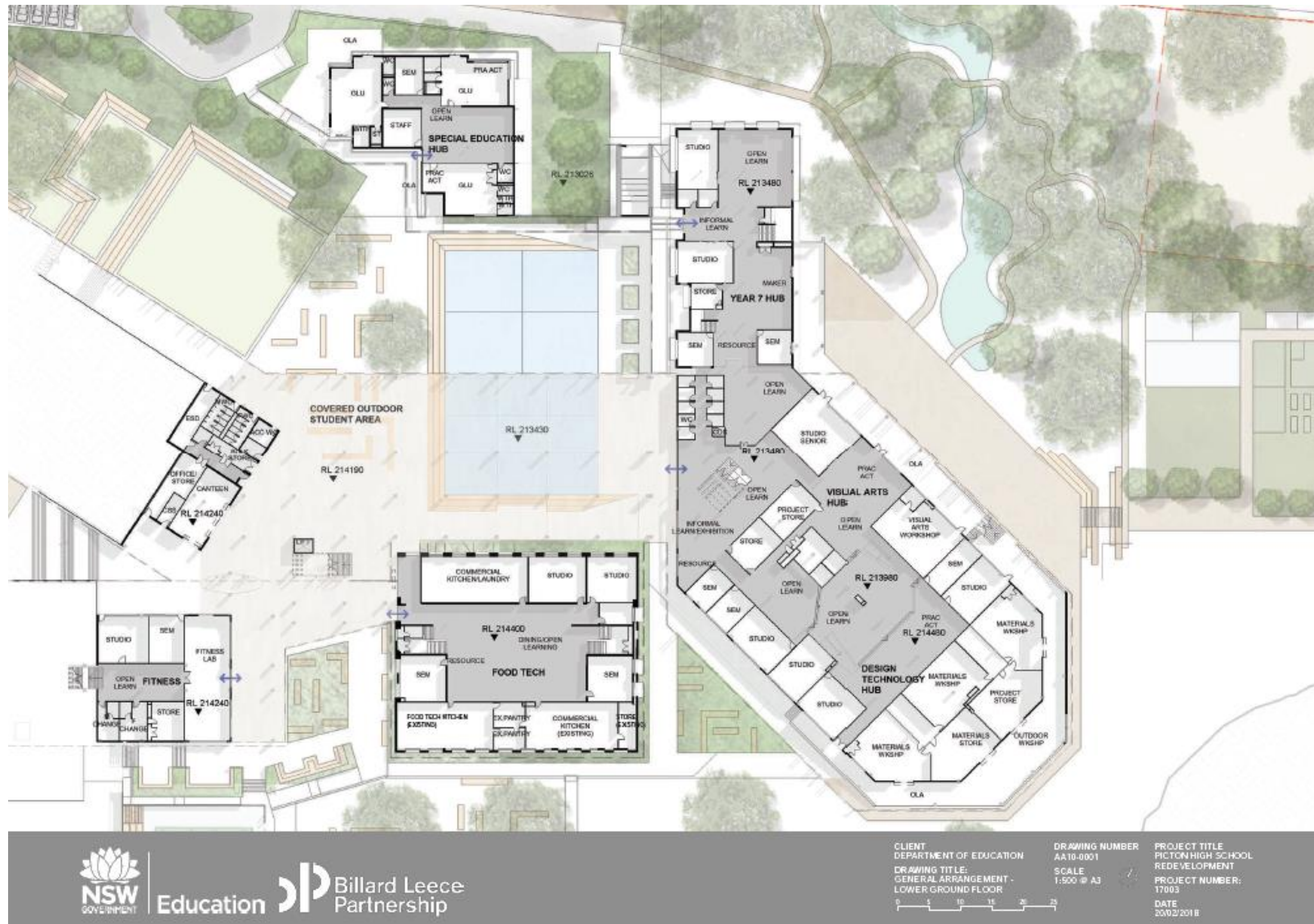


Figure 4.3 Lower Ground Floor Plan  
 Billard Leece Partnership Pty Ltd (2018) Drawing No. AA10-0001

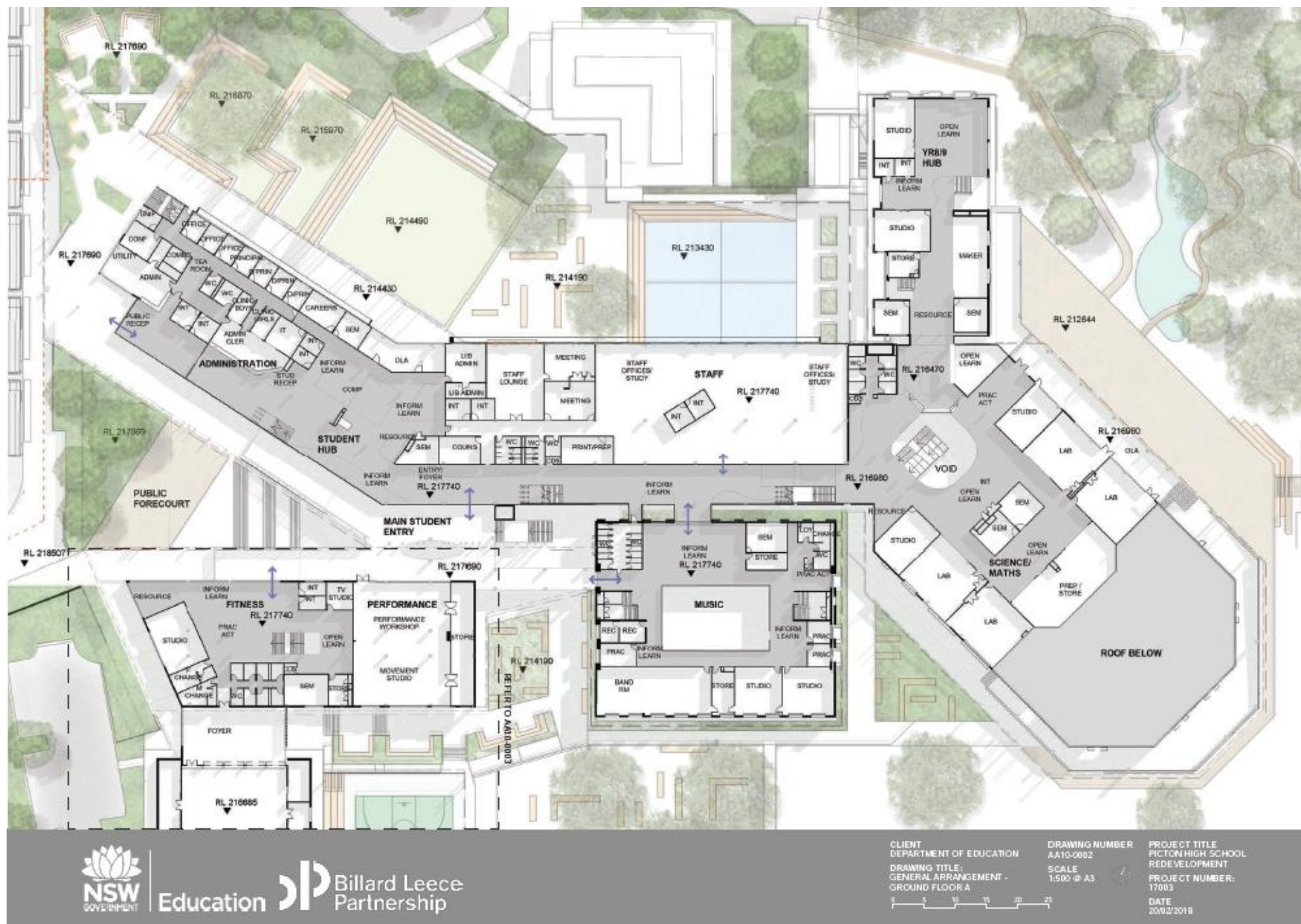
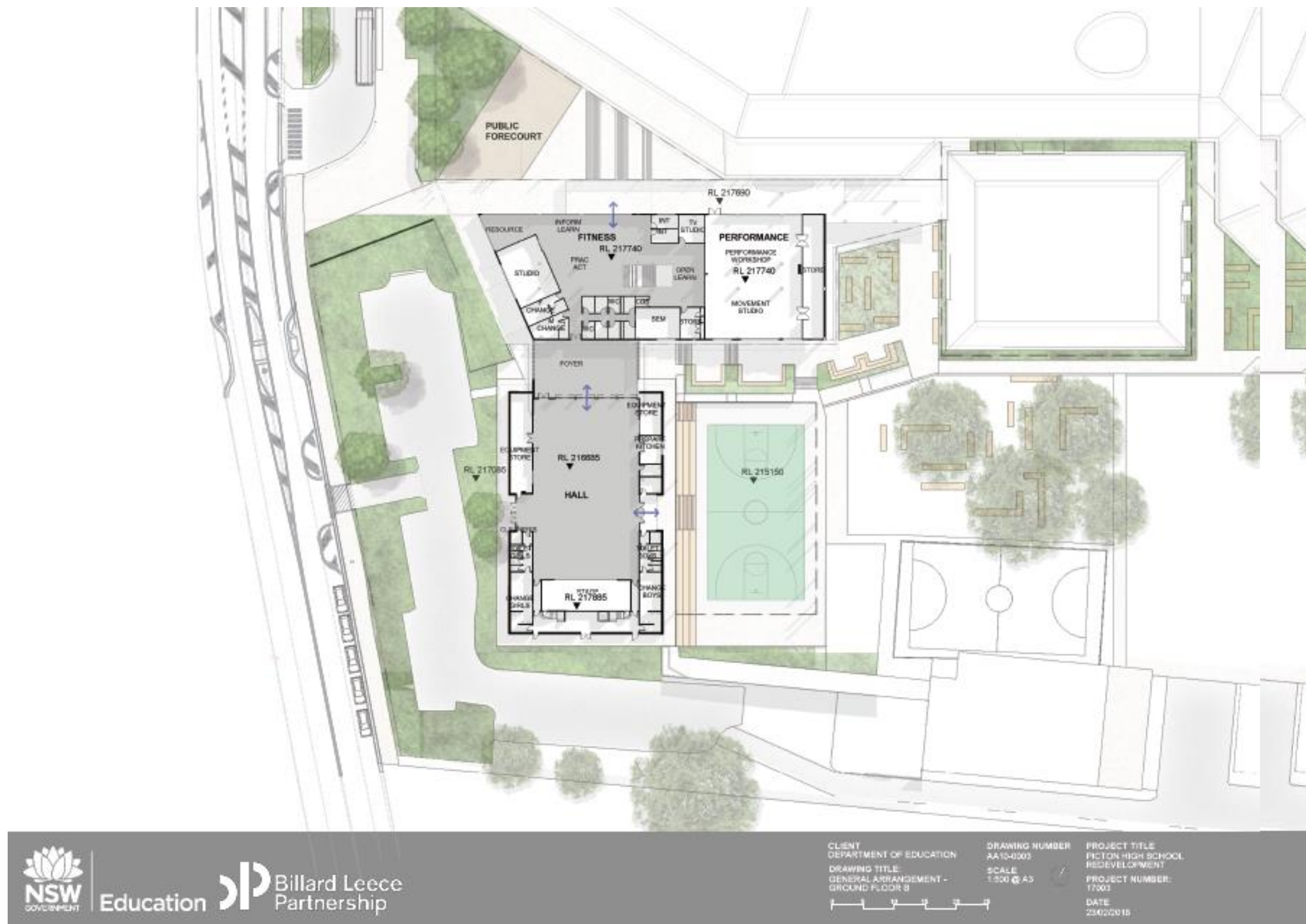
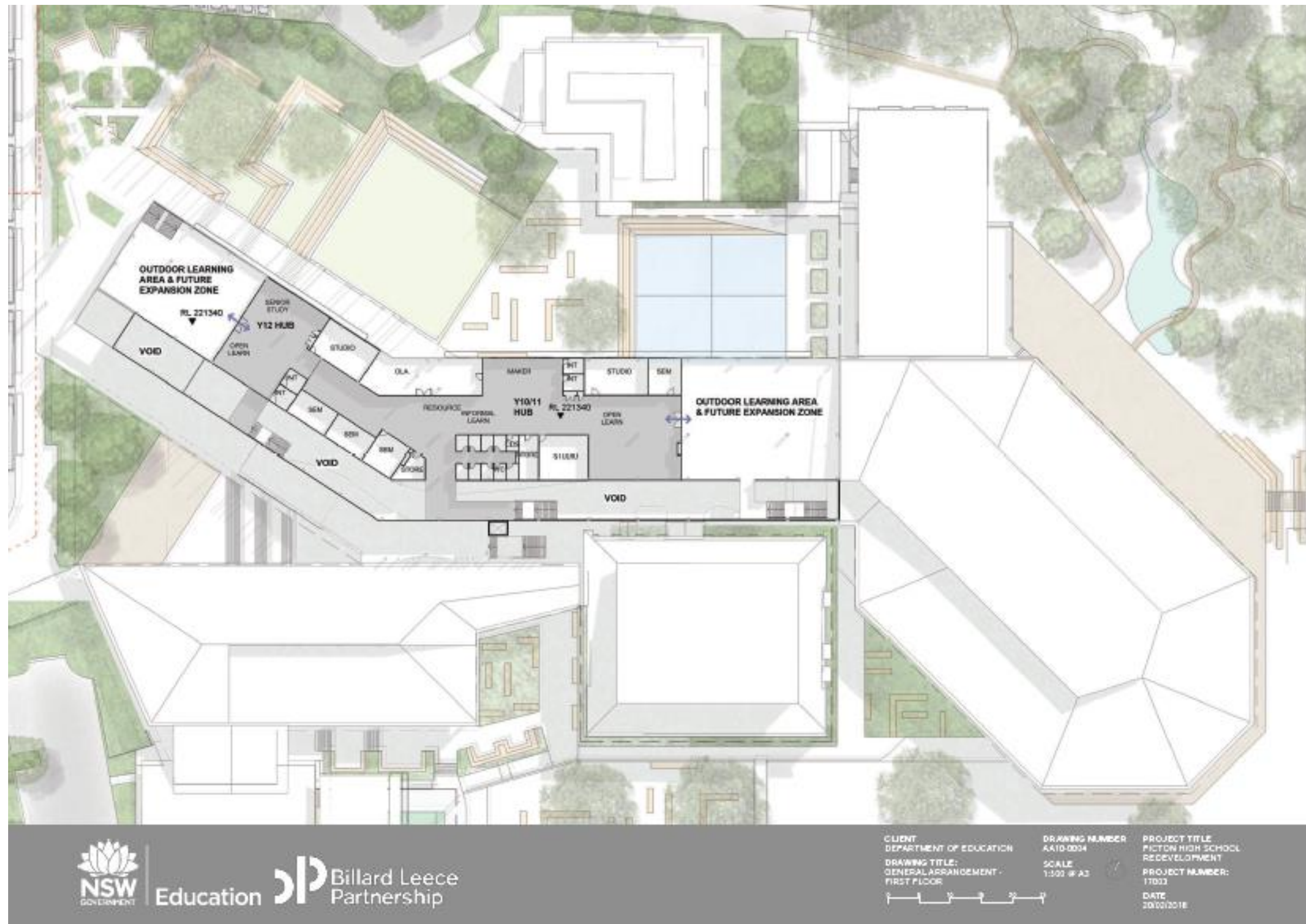


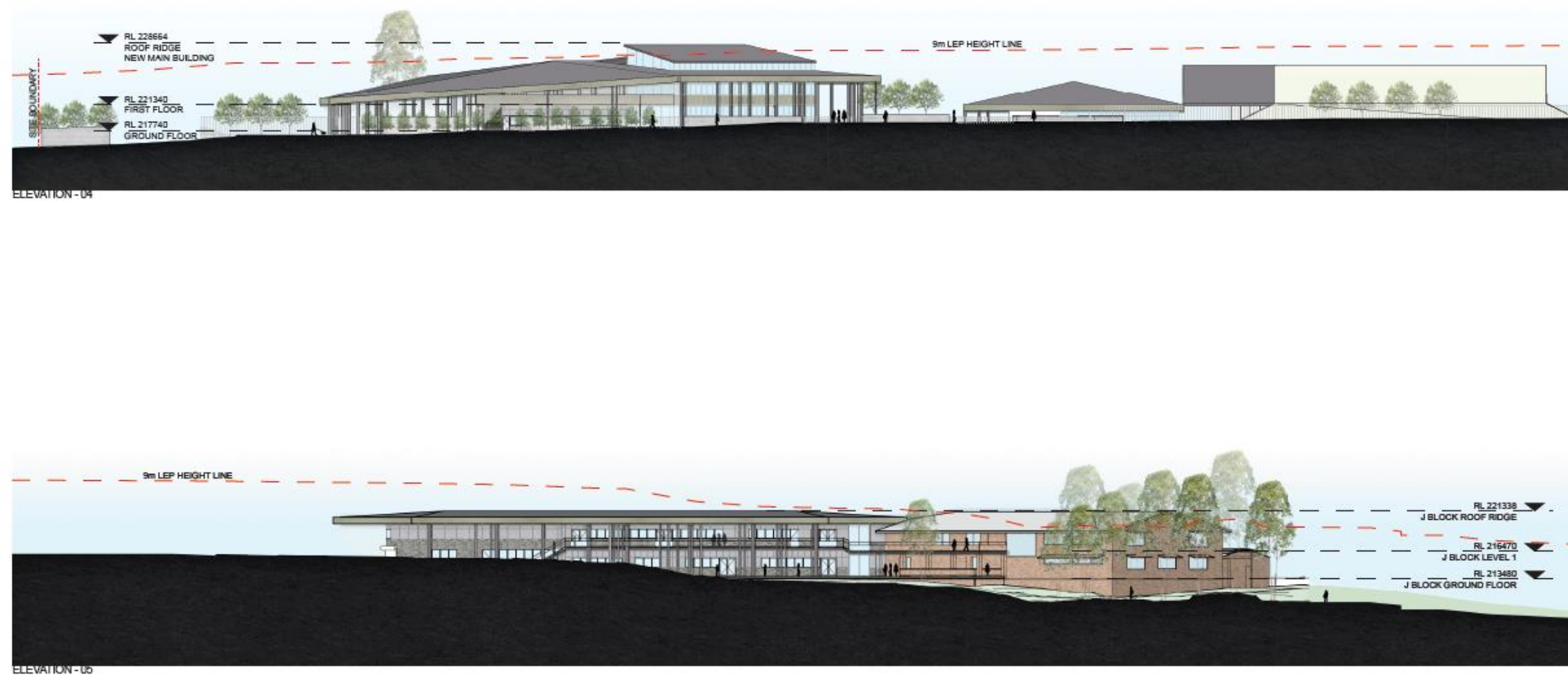
Figure 4.4: Ground Floor A  
 Billard Leece Partnership Pty Ltd (2018) Drawing No. AA10-0002



**Figure 4.5 Ground Floor B**  
 Billard Leece Partnership Pty Ltd (2018) Drawing No. AA10 - 0033



**Figure 4.6 First Floor Plan**  
 Billard Leece Partnership Pty Ltd (2018) Drawing No. AA10 - 0034



 <b>NSW</b> GOVERNMENT	 <b>Education</b>	 <b>Billard Leece</b> Partnership	CLIENT DEPARTMENT OF EDUCATION	DRAWING NUMBER AA20-0002	PROJECT TITLE PICTON HIGH SCHOOL REDEVELOPMENT
			DRAWING TITLE: GENERAL ARRANGEMENT - ELEVATIONS - SHEET 2	SCALE 1:500 @ A3	PROJECT NUMBER: 17003
					DATE 23/02/2018

**Figure 4.7 Elevations – Sheet 2**  
 Billard Leece Partnership Pty Ltd (2017) Drawing No. AA20 -0002



 <b>NSW</b> GOVERNMENT	 <b>Education</b>	 <b>Billard Leece</b> Partnership	CLIENT DEPARTMENT OF EDUCATION	DRAWING NUMBER AA20-0003	PROJECT TITLE PICTON HIGH SCHOOL REDEVELOPMENT
			DRAWING TITLE: GENERAL ARRANGEMENT - ELEVATIONS - SHEET 3	SCALE 1:500 @ A3	PROJECT NUMBER: 17003
				DATE 23/02/2018	

**Figure 4.8 Elevations – Sheet 3**  
 Billard Leece Partnership Pty Ltd (2017) Drawing No. AA20 -0003



			CLIENT DEPARTMENT OF EDUCATION	DRAWING NUMBER AA00-0020	PROJECT TITLE PICTON HIGH SCHOOL REDEVELOPMENT
			DRAWING TITLE: SITE BOUNDARY PLAN	SCALE 1:2500 @ A3	PROJECT NUMBER: 17003
			DATE 23/02/2018		

**Figure 4.9** Site Boundary Plan including access works  
 Billard Leece Partnership Pty Ltd (2018) Drawing No. AA00-0020

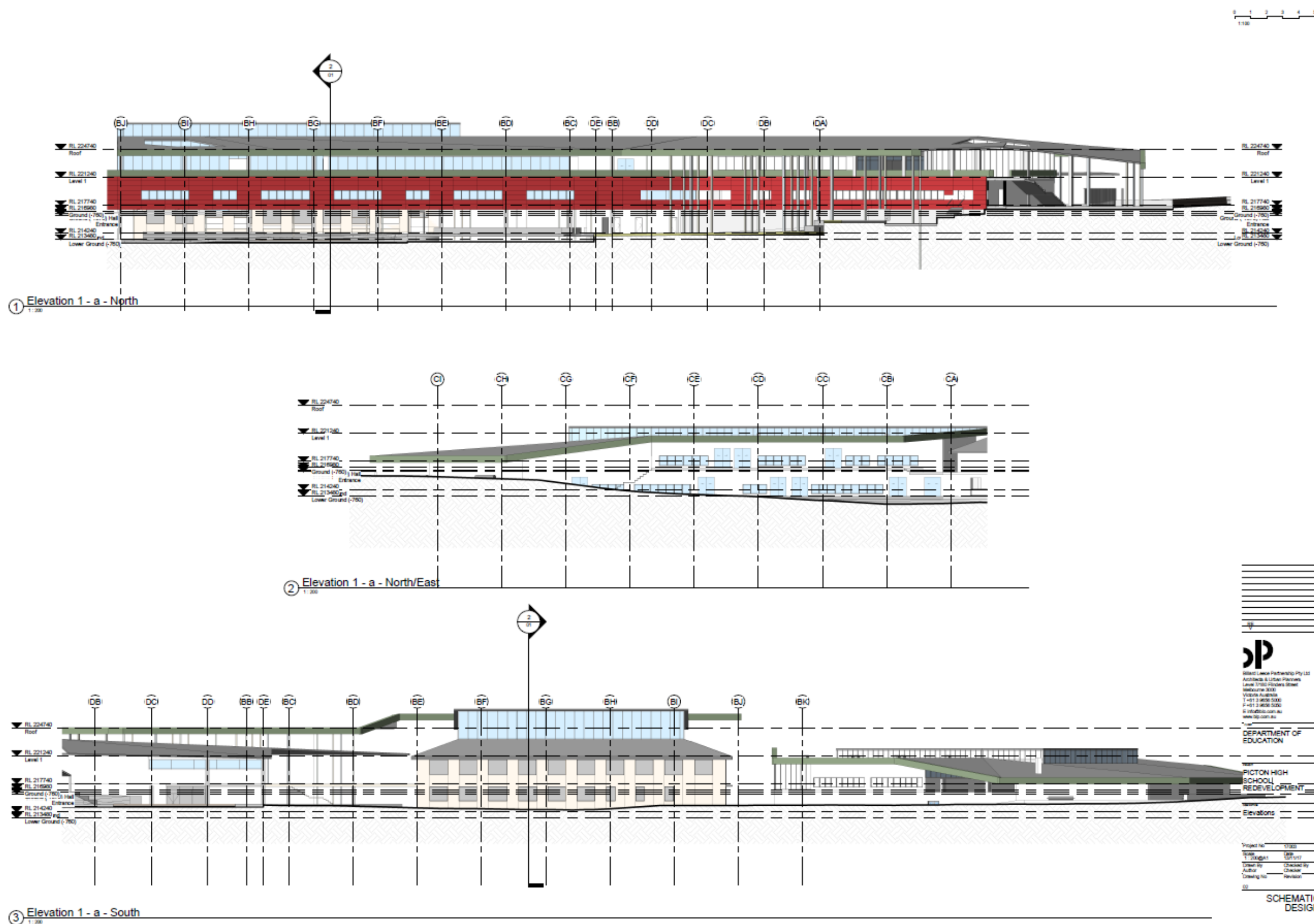


Figure 4.10 Proposed Elevations  
 Billard Leece Partnership Pty Ltd (2017) Drawing No. 02

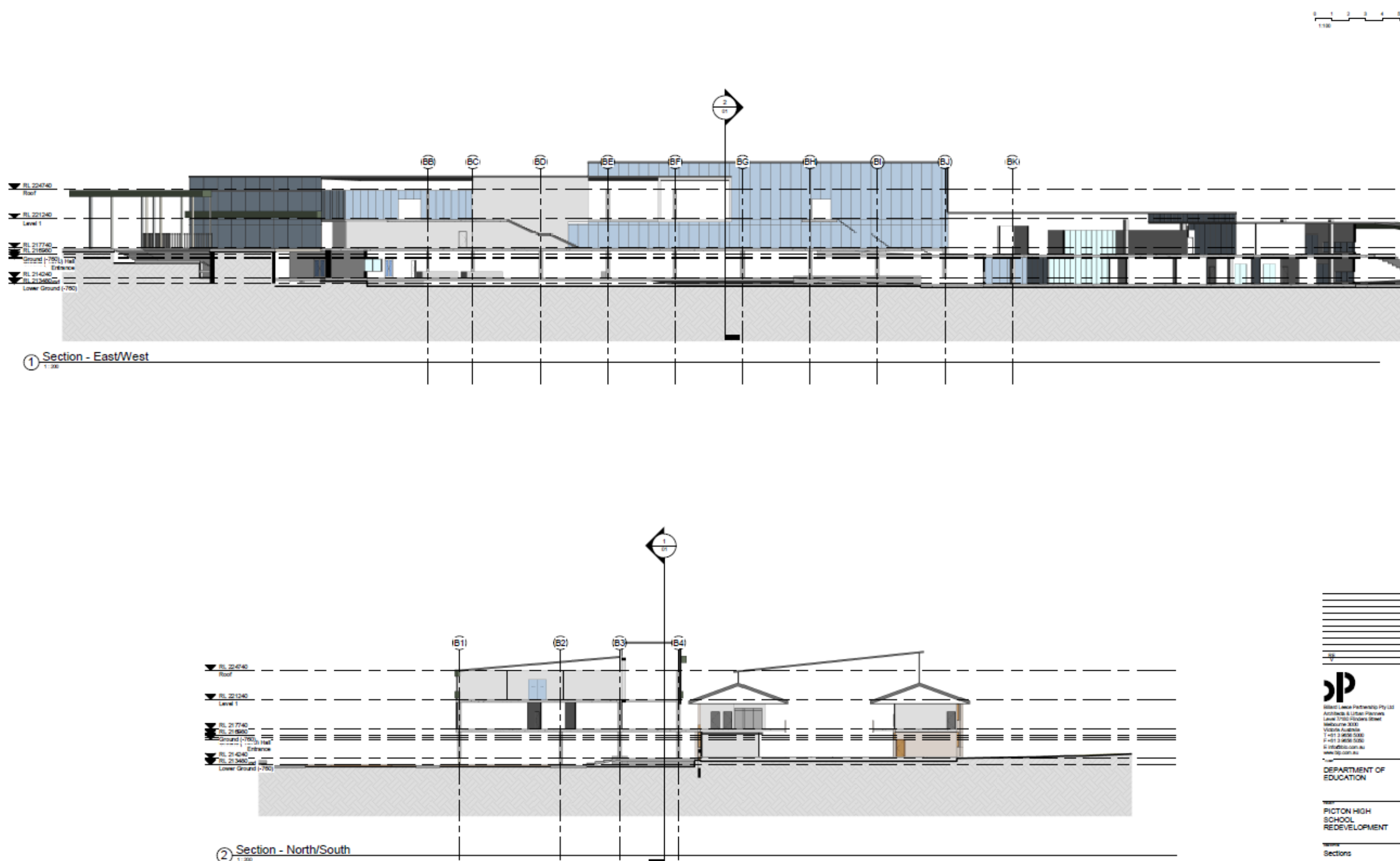


Figure 4.11 Proposed Sections  
 Billard Leece Partnership Pty Ltd (2017) Drawing No. 01

## 5.0 ENVIRONMENTAL CONTEXT

To adequately understand and assess the potential Aboriginal archaeological resource that may be present within the study area it is vital to understand the environment in which the Aboriginal inhabitants of the study area carried out their activities. The environment that Aboriginal inhabitants lived in is a dominant factor in shaping their activity and therefore the archaeological evidence created by this activity. Not only will the resources available to the Aboriginal population have an influence on the evidence created, but the survival of said evidence will be influenced by the environment.

### 5.1 TOPOGRAPHY

The study area lies between the terraces of the Hawkesbury/Nepean River System. It is in the vicinity of major tributaries, such as the Nepean River as well as minor ones including Redback Creek and Stonequarry Creek.

The Blacktown (bt) soil landscape consists of mostly gently undulating rises on Wianamatta Shale with a local relief 10-30m and slopes generally <5%. The crests and ridges are found to be broad and rounded (200-600m). Shale outcrops are not naturally located but can be the result of the removal of upper soils.

### 5.2 GEOLOGY AND SOILS

The geology of the study area consists of Quaternary alluvium of sand silt and gravel derived from the erosion of the Hawkesbury and Nepean sandstones and shale from the Wianamatta and Bringelly groups, which are the dominant geological formations of the Sydney Basin. The nature of the alluvial deposit varies according to the lithology of its source and how far it has been transported.

The Blacktown (bt) soil profile is located over much of the Cumberland Lowlands and the Moss Vale Tablelands as well as on the Woronora Plateau at Menai, Engadine, Sutherland, Caringbah and Darkes Forest. The geology is Ashfield laminite and siltstone and Bringelly shale containing occasional claystone, laminite and coal. Soils are typically shallow to moderately deep red and brown podsols on crests and upper slopes and deeper yellow podsols and soloths on lower slopes along drainage lines. Soil acidity, ironstone and gravel shale fragments tend to increase with depth.

**Table 5.1** Description of dominant soil material

Dominant Soil Material	Soil Horizon	Description
bt1	A1 Horizon	Friable brownish-black loam to clay loam, can range from dark reddish brown to dark yellowish-brown. Blocky structure with rounded iron indurated fine gravel-sized shale fragments and charcoal fragments.
bt2	A2 Horizon	Hardsetting brown clay loam to silty clay loam, can range from dark reddish brown to dark brown. Weakly pedal structure with platy ironstone and

		gravel sized shale fragments as well as charcoal fragments.
bt3	B Horizon	Brown light- medium clay, can range from reddish brown to brown. Mottles of red, yellow and grey are common, increasing in depth. Strongly pedal polyhedral or sub angular blocky structure with fine coarse gravel sized shale fragments, these often occur in stratified bands.
bt4	B/C Horizon	Plastic light grey silty clay to heavy clay can range from greyish yellow. Mottles of red, yellow and grey are common. Moderate pedal polyhedral to sub angular blocky structure and smooth faced dense ped fabric, contains gravel sized shale fragments as well as strongly weather ironstone concretions and rock fragments are common.

**Table 5.2 Expected Blacktown soil profile depth based on landform**

<b>Crest</b>
<ul style="list-style-type: none"> <li>➤ up to 30cm of greyish brown loam (<b>bt1</b>)</li> <li>➤ 10 - 20cm of brown clay loam (<b>bt2</b>)</li> <li>➤ up to 100cm of brown mottled light clay (<b>bt3</b>)</li> </ul> <p><i>N.B The total soil profile will not exceed 150cm, with the greyish loam (bt1) occasionally absent and the boundaries between the soil horizons generally clear.</i></p>
<b>Upper Slopes and Mid Slopes</b>
<ul style="list-style-type: none"> <li>➤ up to 30cm of greyish brown loam (<b>bt1</b>)</li> <li>➤ up to 30cm of brown mottled light clay (<b>bt3</b>)</li> <li>➤ up to 100cm of light grey mottled clay (<b>bt4</b>)</li> </ul> <p><i>N.B The total soil profile will not exceed 200cm, with the greyish loam (bt1) occasionally absent and the boundaries between the soil horizons are generally clear up to 30 cm of greyish brown loam (bt1).</i></p>
<b>Lower Slopes</b>
<ul style="list-style-type: none"> <li>➤ 10 - 30cm of brown clay loam (<b>bt2</b>)</li> <li>➤ 40 - 100cm of brown mottled light clay (<b>bt3</b>)</li> <li>➤ up to 100cm of light grey mottled clay (<b>bt4</b>)</li> </ul> <p><i>N.B The total soil profile will not exceed 200cm and the boundaries between the soil horizons are generally clear.</i></p>
<b>Poor Drainage</b>
<ul style="list-style-type: none"> <li>➤ up to 20cm of greyish brown loam (<b>bt1</b>)</li> <li>➤ brown mottled light clay (<b>bt3</b>)</li> </ul>

*N.B The total soil profile will not exceed 200cm and the boundaries between the soil horizons are generally clear.*

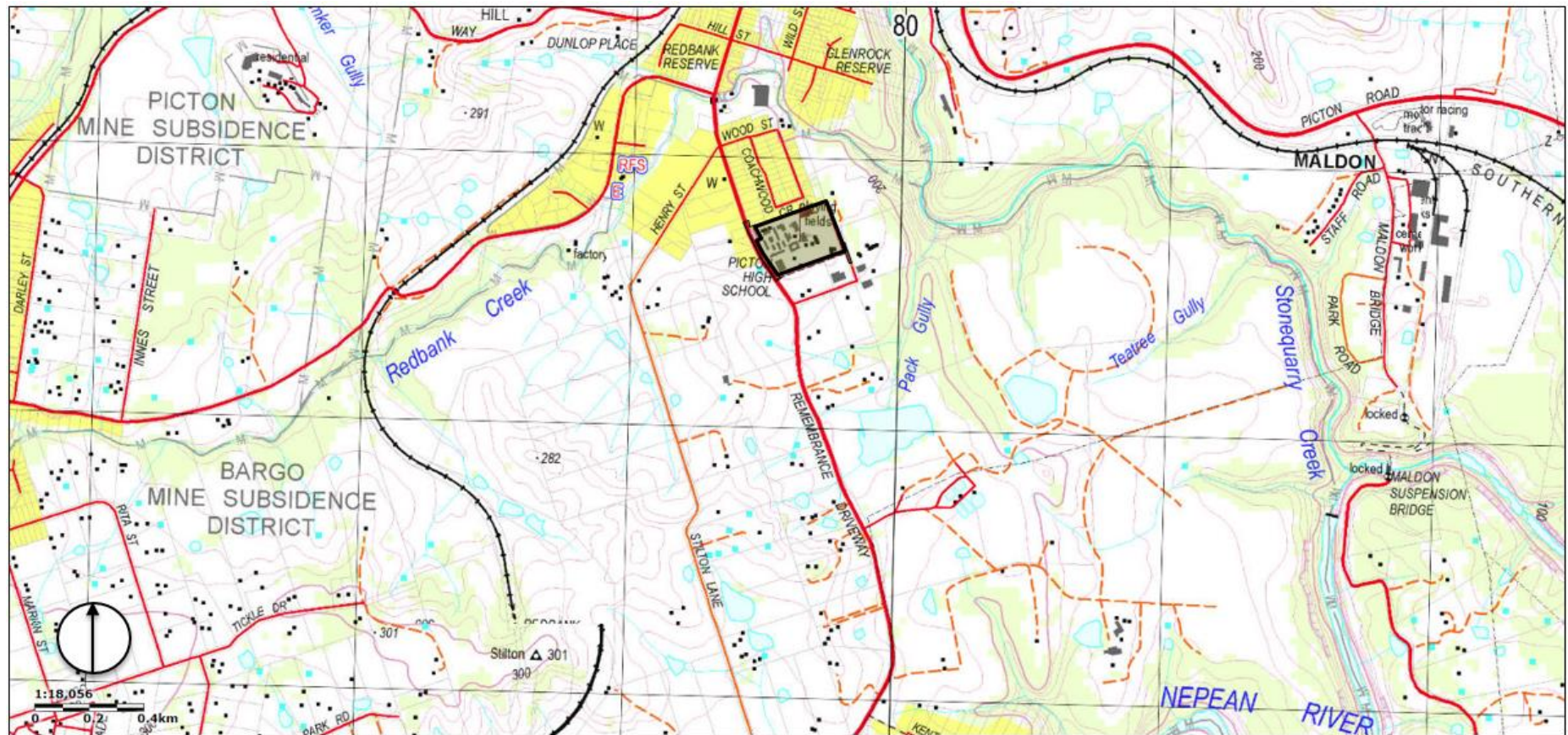
### 5.3 WATERCOURSES

The study area lies to the northwest of the Nepean River approximately 2.1 km. This is a freshwater major tributary, in the past it would have channelled Aboriginal activity as a major resource of food and water. There are also a number of drainage channels, manmade dams and minor tributaries within the vicinity as a result of European occupation and past land use. Some of the creeks within the area consist of Redbank Creek (west approx. 520m), Pack Gully (southeast approx. 250m), Stonequarry Creek (east approx. 330m) (Figure 5.1)

### 5.4 VEGETATION

The vegetation found in the study area is no longer in a native state and is comprised of a variety of introduced and noxious types of vegetation. This movement away from the natural vegetation is a result of previous land clearing for farming, residential and urban development. These lands were cleared soon after European settlement due to the relatively high agricultural value of the soils upon which they are situated.

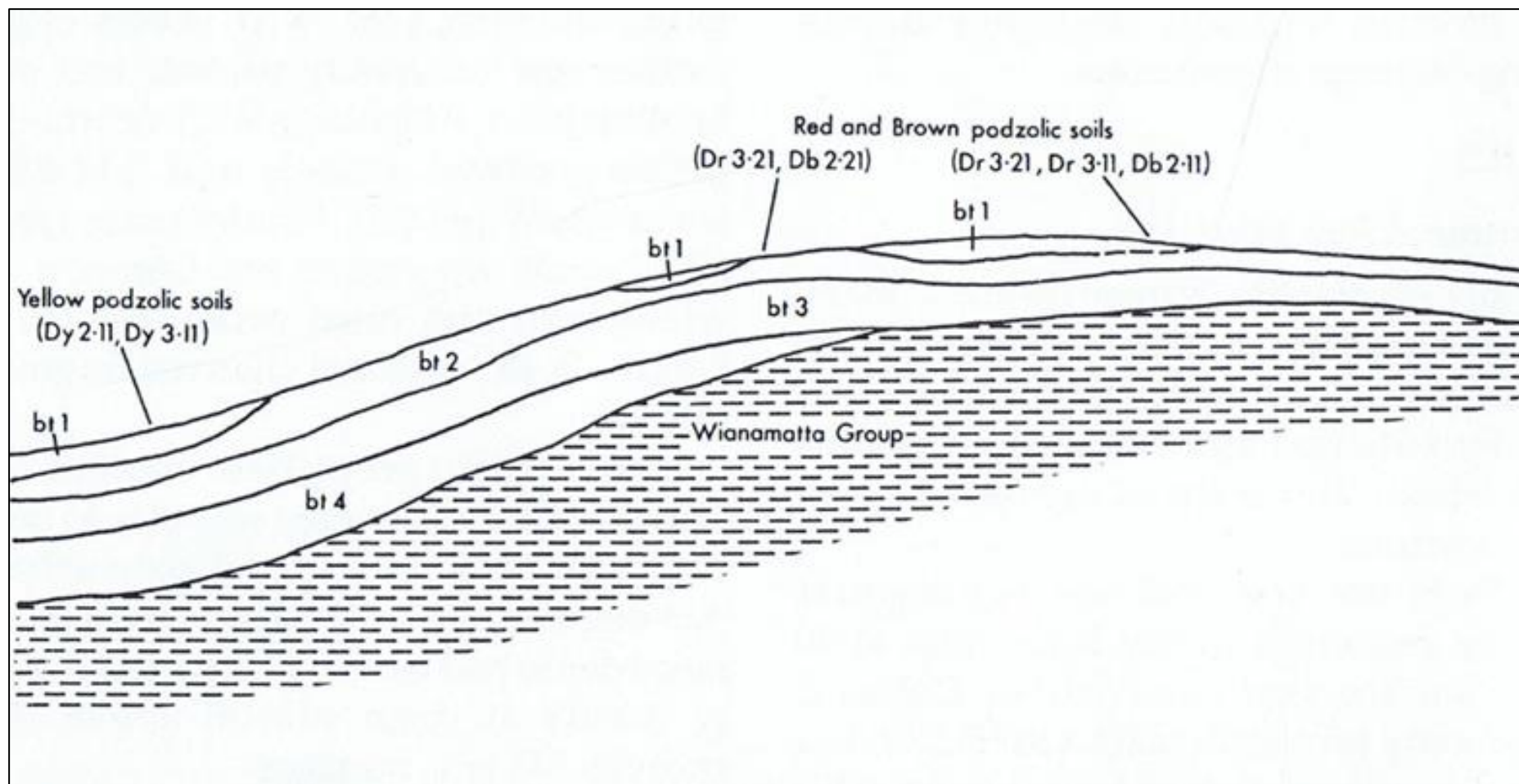
The native vegetation of this area probably comprised of dry sclerophyll forests and woodlands that are associated with the Wianamatta and Bringelly Shale Groups. These vegetative communities principally contain Grey Box (*Eucalyptus hemipholia*), Forest Red Gum (*Eucalyptus teraticornis*), Sydney Blue Gum (*Eucalyptus saligna*), Spotted gum (*Eucalyptus maculate*) and Blackbutt (*Eucalyptus pilularis*). Secondary populations of Cabbage Gum (*Eucalyptus amplifolia*), Broad Leaved Apple (*Angophora subvelutina*) and Narrow Leaved Apple (*Angophora bakeri*) may have existed along the banks of rivers and creeks in association with swamp communities of Swamp Sheoak (*Casuarina glauca*) and Tea Tree (*Melaleuca alternifolia*) (Hazelton & Tille 1990 p. 29 & 64). Understorey species included grasses, such as spear grass, shrub species such as Blackthorn, ferns including Bracken and vines such as Sarsparilla. This type of forest is typical of those located in podsolic deposits. For the most part this indigenous vegetation has been cleared for grazing, urban residential and light industry land use throughout the Cumberland Plain (Walker 1975, p. 11 – 13).



**Figure 5.1** Topography Map indicating watercourses in blue  
Study site indicated in black, Six Maps (2017)



**Figure 5.2 Soil Map of study area**  
Study area indicated in red circle. Espade v2.0 (accessed 14/11/17)



**Figure 5.3** Cross Section of soil landscape illustrating relationships between landscape features and dominant soil materials.  
Soil Landscapes of the Sydney 1:100 000 sheet (Chapman & Murphy, 1989)

## 6.0 BACKGROUND INFORMATION

Pre-field work research consisted of an analysis and synthesis of the background data to determine the nature of the potential archaeological and cultural heritage resource in the region.

A search of the OEH AHIMS was undertaken and the results examined. The site card for each site within 1000m in all directions from the centre of the study area was inspected (where available) and an assessment made of the likelihood of any of the sites being impacted by the proposed development.

The OEH library of archaeological reports (Hurstville) was searched and all relevant reports were examined. Searches were undertaken on the relevant databases outlined in Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010); Further to this the following sources were examined:

- OEH archaeological assessment and excavation reports and cultural heritage assessments;
- OEH Library;
- State Library of NSW including the Mitchell Library;
- Local libraries and historical associations;
- National Library of Australia.
- The National Heritage List;
- The Commonwealth Heritage List;
- The NSW State Heritage Inventory;
- The National Native Title Register;
- The Register of Declared Aboriginal Places;
- Prevailing local and regional environmental plans;
- Environmental background material for the study area.

### 6.1 ARCHAEOLOGICAL CONTEXT

It is generally accepted that Aboriginal occupation of Australia dates back at least 40,000 years (Attenbrow 2002 p.20 - 21 & Kohen et al 1983). The result of this extensive and continued occupation which includes the Sydney region has left a vast amount of accumulated depositional evidence and the Cumberland Lowlands is no exception. The oldest date generally considered to be reliable for the earliest occupation around the region comes from excavations at Parramatta which contain objects or features which have been dated to 30,735 ± 407 BP (McDonald et al 2005).

The majority of reliably dated archaeological sites within the region are less than 5,000 years old which places them in the mid to late Holocene period. A combination of reasons has been suggested for this collection of relatively recent dates. There is an argument that an increase in population and 'intensification' of much of the continent took place around this time, leading to a great deal more

evidence being deposited than was deposited as a result of the sparser prior occupation period. It is also the case that many archaeological sites along the past coastline may have been submerged as the seas rose approximately to their current level around 6,000 years ago. This would have had the effect of covering evidence of previous coastal occupation. In addition it is also true that the acidic soils which are predominate around the Sydney region do not allow for longer-term survival of sites (Hiscock 2008 p. 106).

Different landscape units not only influence the preservation of sites but can determine where certain site types will be located. Across the whole of the Sydney Basin, the most common Aboriginal archaeological site type is occupation evidence within Rock Shelters. However, the most common Aboriginal archaeological site type in the Cumberland Lowlands is Open Artefact Scatters or Open Campsites, which are locations where two or more pieces of stone show evidence of human modification. These sites can sometimes be very large, with up to thousands of artefacts and include other habitation remains such as animal bone, shell or fireplaces [known as *hearths*] (Attenbrow 2002 p. 75 – 76). Many hundreds of artefact sites have been recorded within the Cumberland Lowlands. This is despite the fact that at least 50% of the Cumberland Lowlands has already been developed to such an extent that any archaeological evidence which may have once been present has been destroyed.

## **6.2 PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS NEAR THE STUDY AREA**

As part of the research process of this report the library of Archaeological assessments, test excavation and salvage excavation reports, which is located at the offices of OEH at Hurstville, was consulted. This list is by no means exhaustive and merely represents some of the more relevant recent studies that have taken place within the vicinity of the study area in the opinion of the author of this document.

### **AHMS 2014 – Aboriginal Cultural Heritage Assessment – Remembrance Drive and Menangle Street, Picton**

Archaeological & Heritage Management Solutions conducted an Aboriginal Cultural Heritage Assessment in 2014 as part of the Picton East Rezoning program. This involved the assessment of the following land at 1735 Remembrance Drive, 108 - 114 Menangle Street and 116-118 Menangle Street, Picton. As part of this assessment a site survey was conducted which resulted in the location of no Aboriginal archaeological and cultural material however, it did result in the identification of landforms of archaeological potential. A sensitivity predictive model was formulated, identifying areas near watercourses and ridges to be of moderate to high significance.

The practical ramifications of the results of the above mentioned archaeological assessments and excavations indicates that there is a moderate to high potential for Aboriginal archaeological objects or deposits to be present within any intact original soil profiles located within study area and/or near watercourses.

### 6.3 OEH AHIMS SEARCH RESULTS

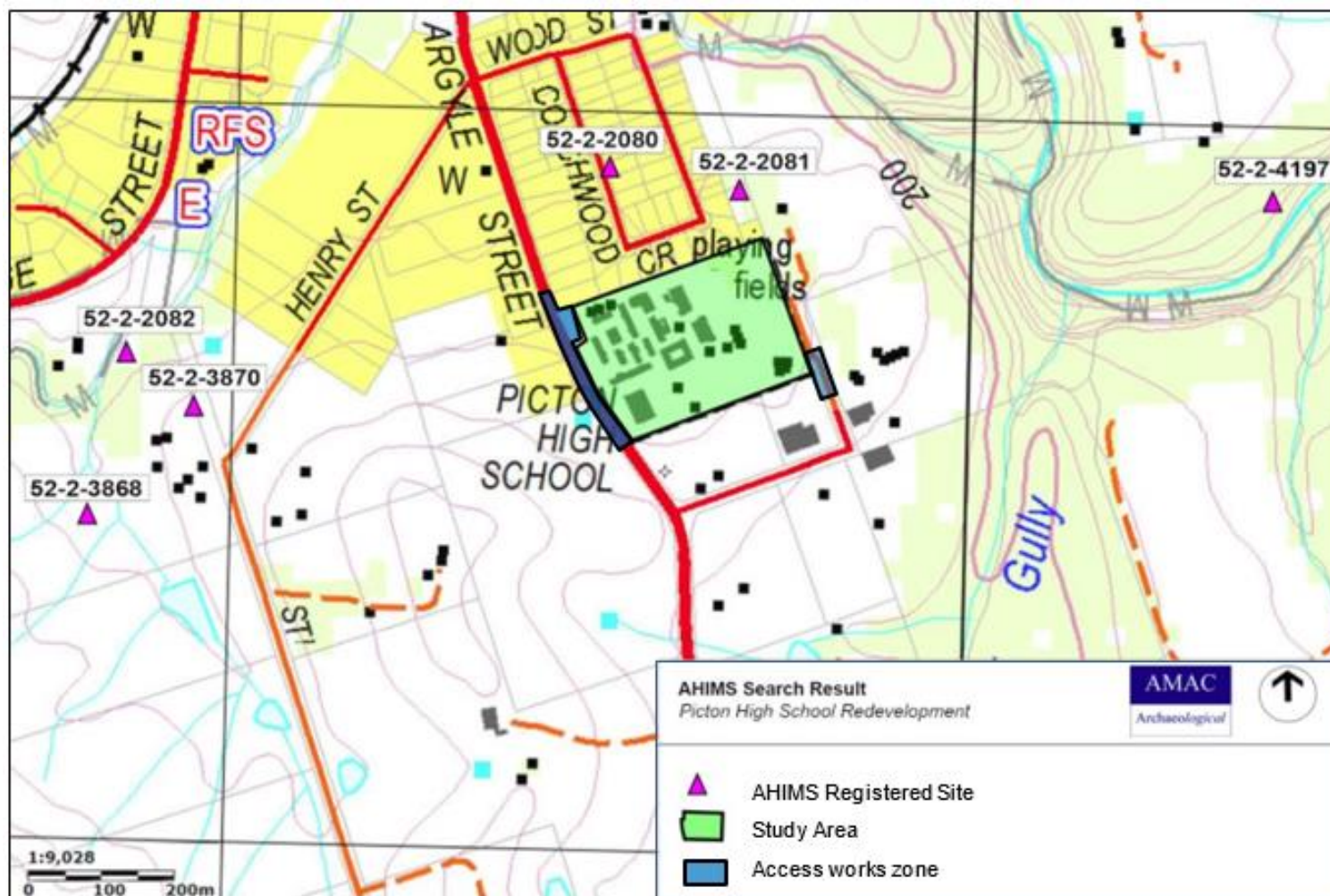
The Archaeological Heritage and Information Management System Database (AHIMS) is located at the OEH Offices at Hurstville in New South Wales. This database comprises information about all the previously recorded Aboriginal archaeological sites registered with OEH. Further to the site card information that is present about each recorded site, the assessments and excavation reports that are associated with the location of many of these sites are present in the library of reports.

The location of these sites) must be viewed as purely indicative as errors in the recording of the locations of sites often occurs due to the disparate nature of the recording process, the varying level of experience of those locating the sites and the errors that can occur when transferring data. If possible, sites that appear to be located near a study area should be relocated.

An AHIMS extensive 1km search was conducted on the 15<sup>th</sup> September 2017 (ID 301800). This search resulted in six registered sites near the study area. The following table is comprised of the results listed from the extensive search.

**Table 6.1 AHIMS Search Results**

Site ID	Site name	Site status	Site features
52-2-2080	Redbank Creek 2	Valid	Shelter/ Art (Pigment or Engraved)
52-2-2081	Redbank Creek 3	Valid	Shelter/Art (Pigment or Engraved)
52-2-2082	Redbank Creek 4	Valid	Grinding Groove
52-2-3868	Redbank Tunnel 3/A	Valid	Artefact
52-2-3870	Redbank Tunnel 35/A	Valid	Artefact
52-2-4197	SQ2 (Picton)	Valid	Potential Archaeological Deposit (PAD)



**Figure 6.1: AHIMS Search Results.**  
Registered sites indicated in pink with the study area indicated in green. OEH (2017) Memory Map (2012) Topographic Map 1:25000

## 6.4 OTHER SEARCH RESULTS

Results for other statutory databases searched are given below;

- The study area does not appear on the National Heritage List (DSEWPC, 2012);
- The study area does not appear on the Commonwealth Heritage List (DSEWPC 2012);
- The study site does not appear on the State Heritage Register (DSEWPC, 2012).
- The study area does not appear on the Register of Declared Aboriginal Places (DECCW, 2012);

## 7.0 TEST EXCAVATION

Test excavation was undertaken by Streat Archaeological Services Pty Ltd in association with AMAC Group in response to the proposed redevelopment of Picton High School and its impact on potential intact Aboriginal archaeological and cultural deposits and/or objects. The study area was considered to have low-moderate potential in containing Aboriginal objects.

Test excavations were carried out by Benjamin Streat as director of Indigenous archaeology with archaeologists Steve Vasilakis and representatives from the following Registered Aboriginal Parties;

Organisation	Representative
Cubbitch Barta	E.Chalker
Kamilaroi-Yankuntjatjara Working Group	J. Currell
Didge Ngunawal Clan	T. Lughton & p. Boyd
Goobah	R. M Dutton
Tharawal LALC	A.Hanson
D'harawal Traditional Descendents and Knowledgeholders Circle	R. Evans & G. Bodkin
Biamanga	R. Hampton
Murramarang	M. Dutton
Cullendulla	R.J Dutton

Test excavation was undertaken over four days 22/01/18 – 25/01/18. The programme was conducted under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales and consisted of the excavation of 14 test trenches (50cm x 50cm).

The footprint of the proposed development will encompass the majority of the current school site. Including the incorporation of several current buildings into the new design, however the majority of the school buildings will be demolished with areas being repurposed for outside learning and terraced green zones as well as a new paved quadrangle.

Test excavation identified a redeposited and disturbed topsoil, where majority of the A horizon was found to be absent. Only five test pits exhibited traces of A2 horizon, however these were found to be reworked soil with disturbed elements. All test pits were excavated until a sterile B horizon was located.

No Aboriginal objects and/or deposits or features of cultural significance were identified during the programme of test excavation. Therefore, no further investigation is warranted, and works may proceed with caution.

All RAPs present on site were informed of the status of the investigation and condition of the study area. They acknowledged the disturbed nature of the soil and

likelihood of the investigation resulting in no objects being location. They had no objections to the development taking place with caution.

## 7.1 AIMS

The purpose of subsurface test excavation is to identify the nature and extent of any intact archaeological deposit and/ or objects which may be situated within the study area and its significance.

It aims to collate additional information regarding any site characteristics which may enhance our understanding of the local and/or regional prehistory of the area. The results of the test excavation aid in the formalisation of appropriate management recommendations and conservation goals for the proposed development and any archaeological material recovered.

The methodology and recommendations presented in the following section of the report take into account the following:

- Legislation which protects Aboriginal cultural and archaeological objects and places in New South Wales;
- Research and assessment carried out by the author/s of this report and previous reports;
- Results of previous archaeological assessment and excavation in the vicinity of the study area;
- The impact of the proposed development on any Aboriginal archaeological material that may be present;

## 7.2 TEST EXCAVATION UNDER THE CODE OF PRACTICE

As detailed in the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974 (DECCW 2010). The purpose for test excavation

*“...is to collect information about the nature and extent of sub-surface Aboriginal objects, based on a sample derived from sub-surface investigations. Test excavations contribute to the understanding of site characteristics and local and regional prehistory and they can be used to inform conservation goals and harm mitigation measures for the proposed activity”*

As the proposed test excavation is not being carried out in the following areas;

- in or within 50 m of an area where burial sites are known or are likely to exist
- in or within 50 m of a declared Aboriginal place
- in or within 50 m of a rock shelter, shell midden or earth mound
- in areas known or suspected to be Aboriginal missions or previous Aboriginal reserves or institutes
- in areas known or suspected to be conflict or contact sites.

It is therefore excluded from the definition of harm and as such will not require an Aboriginal Heritage Impact Permit and can be completed under the Code of Practice (DECCW 2010).

As set out in the Code of Conduct for the Investigation of Archaeological Objects in NSW:

*“The test excavation should be sufficiently comprehensive to allow characterisation of the Aboriginal objects present without having a significant impact on the archaeological value of the subject area” (DECCW 2010)*

Any test excavation carried out under this requirement must cease when:

- suspected human remains are encountered;
- enough information has been recovered to adequately characterise the objects present, with regard to their nature and significance.

The Code of Conduct for the Investigation of Archaeological Objects in NSW ‘enough information’ means that the sample of excavated material clearly and self-evidently demonstrates the deposit’s nature and significance, and may include things like:

- locally or regionally high object density
- presence of rare or representative objects
- presence of archaeological features or locally or regionally significant deposits, stratified or not.

Decisions regarding the nature and significance of the site and choices about discontinuing the test excavation program shall be made by the excavation director in consultation with the registered Aboriginal stakeholders and OEH if required. Information will be reviewed on a daily basis and the excavation director reserves the right to cease all excavation if he/she believes the nature and extent of the site is understood in accordance with the Code of Conduct for the Investigation of Archaeological Objects in NSW.

### **7.3 TESTING METHODOLOGY**

The following measures will be taken to establish the nature and extent of any such material discovered during test excavations under the Code of Practice (DECCW 2010)

The proposed development does have the potential to disturb any Aboriginal archaeological deposits and/or objects which are, or may be present. Therefore, in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974 (DECCW 2010), it is recommended a programme of test excavation be conducted before the development can proceed.

The first priority in test excavations, and recording Aboriginal objects during test excavations, must always be to avoid or minimise, as far as practicable, the risk of harm to the objects under investigation. This means due care must be taken when excavating and collecting objects.

In compliance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010) the following test excavation methodology will be conducted;

- Test excavation units will be placed on a systematic grid appropriate to the scale of the area – either PAD or site – being investigated e.g. 10 m intervals, 20 m intervals, or other justifiable and regular spacing.
- Any test excavation point will be separated by at least 5 m.
- Test excavations units will be excavated using hand tools only.

- Test excavations will be excavated in 50 cm x 50 cm units.
- Test excavations units may be combined and excavated as necessary to understand the site characteristics, however: the maximum continuous surface area of a combination of test excavation units at any single excavation point conducted in accordance with point (above) will be no greater than 3 m<sup>2</sup>. The maximum surface area of all test excavation units will be no greater than 0.5% of the area – either PAD or site – being investigated.
- The first excavation unit will be excavated and documented in 5 cm spits at each area – either PAD or site – being investigated. Based on the evidence of the first excavation unit, 10 cm spits or sediment profile/stratigraphic excavation (whichever is smaller) will then be implemented.
- Test excavation units will be excavated to at least the base of the identified Aboriginal object-bearing units, and will continue to confirm the soils below are culturally sterile.
- Photographic and scale-drawn records of the stratigraphy/soil profile, features and informative Aboriginal objects will be made for each single excavation point.
- Test excavations units will be backfilled as soon as practicable.
- Following test excavation, an Aboriginal Site Impact Recording form will be completed and submitted to the AHIMS Registrar as soon as practicable

#### **7.3.1 Sieving**

The excavated soil from each spit is to be placed in buckets of uniform size (9-10kg limit); these buckets will be counted, and all material excavated from the test excavation units will be sieved using a 5 mm aperture wire-mesh sieve. All archaeological material that is recovered from sieving will be placed in a zip lock bag and labelled with the site number, date, trench and spit. All of the bags will then be placed in a larger zip lock bag for processing.

#### **7.3.2 Recording**

A photographic record will be kept of the progress of each test trench as well as photographic and scale-drawn records of the stratigraphy/soil profile and features will be made for each single excavation point.

Details pertaining to individual spits will be recorded through the completion of site forms. The details on the form include site name, pit number, location and landform, area, spit number, spit depth, soil horizon, artefacts, stratigraphic profile as well as additional notes relating to the soil deposits encountered.

Personal records are also to be noted in the director's field journal. Any artefacts recovered shall be recorded under the parameters set out in the Code of Conduct for the investigation of Archaeological objects in NSW and will be stored as outlined in the care and control agreement.

#### **7.3.3 Care and Control Agreement**

Any archaeological material recovered shall be subject to a care and control agreement established after the nature and significance of the archaeological or cultural material is understood as per requirement 26 of the Code of Conduct for the investigation of Archaeological objects in NSW. Any artefacts recovered shall be

subject to an as yet unestablished care and control agreement. A secure temporary storage location in accordance with requirement 26 of the Code of Conduct for the investigation of Archaeological objects in NSW, shall be established (AMAC Offices) pending any agreement being reached as to the long-term management of the salvaged Aboriginal objects. The excavation director is responsible for ensuring that procedures are put in place so that Aboriginal objects are not harmed. The location of the secure temporary storage location will be submitted to AHIMS with a site update record card for the site(s) in question.

If long term management of any objects recovered has not been decided in a timely fashion, the objects will be lodged with the Australian Museum

#### **7.4 TEST PIT LOCATION**

Test trench locations were placed with reference to known or suspected locations of Aboriginal archaeological deposits, the location of development excavation and areas of known disturbance as well as services.

The order of excavation was established on site as logistics and site access were factors that needed to be considered, as well as ensuring the investigation of all landforms were performed accordingly in order to maximise the results.

The study area was divided into four zones. These zones were based on paddock access. Due to the scale of the study area this division also assisted in ensuring a systematic approach was undertaken.



Figure 7.1 Site plan with Aboriginal test trenches indicated in white  
AMAC (2017)

## 7.5 RESULTS

Test excavation was undertaken over four days 22/01/18 – 25/01/18. The programme was conducted under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales and consisted of the excavation of 14 test trenches (50cm x 50cm).

The soil profile was found to be consistent throughout the study area. It is clear and observable that the A1 horizon was found to be absent in majority of the study area, however an A2 horizon was evident but was found to be reworked. The topsoil across the study area was found to be redeposited and heavily disturbed, containing roadbase and other inclusions.

The soils observed through testing are consistent with the Blacktown soil landscape (bt), in which a brown -reddish loamy clay was present overlaying a mottled clay B horizon. The soils were found to be shallow with an average depth of 25cm.

No Aboriginal objects and/or deposits or features of cultural significance were identified during the programme of test excavation. Therefore, no further investigation is warranted, and works may proceed with caution.

Table 7.1 Test Trench Summary

Test Trench No.	No. Spits	Final depth	Description	No. Artefacts
1	3	25cm	Redeposited brown fill containing concrete debris and rocks overlaying orange brown mottled clay B horizon.	0
2	1	5cm	Redeposited brown fill containing debris and rubbish.	0
3	2	15cm	Redeposited brown fill containing debris and rubbish overlay mottled clay B horizon.	0
4	3	25cm	Redeposited brown fill containing roadbase material overlaying mottled clay B horizon.	0
5	3	25cm	Redeposited brown fill containing debris overlaying B1 horizon – red mottled clay with yellow brown B2 horizon (both heavily disturbed)	0
6	3	25cm	Redeposited brown fill containing roadbase overlaying mottled clay B horizon.	0
7	6	50cm	Redeposited brown fill overlaying disturbed A2 which overlayed mottled clay B horizon.	0
8	6	51cm	Brown to red loamy clay A1 horizon overlaying A2 brown hard loamy clay with ironstone which overlayed compacted mottled clay B horizon	0
9	3	25cm	Redeposited brown fill containing debris and gravel overlaying mottled brown clay B horizon.	0
10	4	35cm	Redeposited brown fill containing gravel overlaying firm brown loamy clay A2 horizon which overlays mottled red/white compact clay B horizon.	0
11	3	25cm	Redeposited brown fill containing gravel overlaying reworked A2 horizon which overlays a mottled brown red clay B horizon.	0
12	2	15cm	Redeposited brown fill containing roadbase overlaying mottled clay B horizon.	0
13	4	25cm	Redeposited brown fill containing roadbase overlaying asphalt layer which overlayed mottled clay B horizon.	0
14	5	37cm	Redeposited loamy clay containing rubbish overlaying compacted brown clayey loam A2 horizon which overlays a mottled red/ white clay B horizon.	0

### 7.5,1 Test Trench Photographs



Figure 7.2 ATT 1: Start Up, Facing North [DSCN1433]



Figure 7.3 ATT 1: Final Shot – Facing North [DSCN1436]



Figure 7.4 ATT 2: Start Up, Facing North [DSCN1444]



Figure 7.5 ATT 2: Final Shot, Facing North [DSCN1449]



Figure 7.6 ATT 3: Start Up, Facing North [DSCN1434]



Figure 7.7 ATT 3: Final Shot, Facing North [DSCN1482]



Figure 7.8 ATT 4: Start Up, Facing North [DSCN1453]



Figure 7.9 ATT 4: Final Shot, Facing North [DSCN1483]



Figure 7.10 ATT 5: Start Up, Facing North [DSCN1455]



Figure 7.11 ATT 5: Final Shot, Facing North [DSCN1472]



Figure 7.12 ATT 6: Start Up, Facing North [DSCN1458]



Figure 7.13 ATT 6: Final Shot, Facing North [DSCN1488]



Figure 7.14 ATT 7: Start Up, Facing North [DSCN1461]



Figure 7.15 ATT 7: Final Shot, Facing North [DSCN1496]



Figure 7.16 ATT 8: Start Up, Facing North [DSCN1464]



Figure 7.17 ATT 8: Final Shot, Facing North [DSCN1500]



Figure 7.18 ATT 9: Start Up, Facing North [DSCN1512]



Figure 7.19 ATT 9: Final Shot, Facing North [DSCN1520]



Figure 7.20 ATT 10: Start Up, Facing North [DSCN1514]



Figure 7.21 ATT 10: Final Shot, Facing North [DSCN1526]



Figure 7.22 ATT 11: Start Up, Facing North [DSCN1516]



Figure 7.23 ATT 11: Final Shot, Facing North [DSCN1528]



Figure 7.24 ATT 12: Start Up, Facing North [DSCN1519]



Figure 7.25 ATT 12: Final Shot, Facing North [DSCN1532]



Figure 7.26 ATT 13: Start Up, Facing North [DSCN1494]



Figure 7.27 ATT 13: Final Shot, Facing North [DSCN1506]



Figure 7.28 ATT 14: Start Up, Facing North [DSCN1491]



Figure 7.29 ATT 14: Final Shot, Facing North [DSCN1508]

### 7.5.2 Stratigraphic Analysis

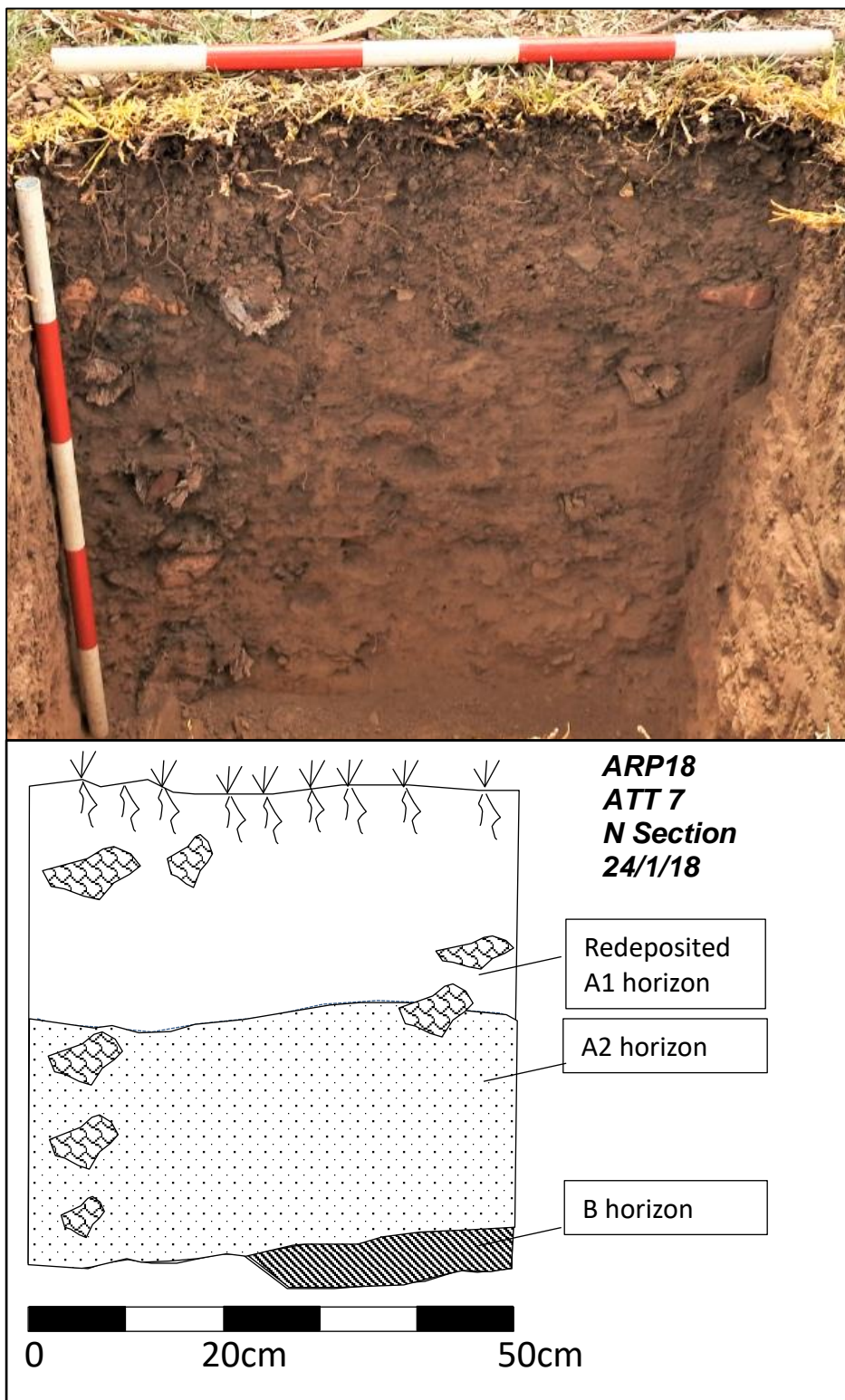
This section of the report is a summary of the soil profiles encountered. It aims to identify and ascertain the stratigraphic integrity of the site.

The soil landscape for the study area consists of the Blacktown soil profile (bt). The geology of the study area is consistent with the Cumberland lowlands. The soil was found to be shallow on average 25cm with a maximum excavation depth of 50cm. The A horizon is found to be absent and instead a redeposited top soil was present containing inclusions such as roadbase. This is found to overlay in areas an A2 horizon. The A2 horizon shows evidence of disturbance and is found to be reworked in areas, containing large stone inclusions. The level of disturbance and inclusions indicates the deposits are not intact and have been subject to activities which have reworked any potential intact soils.

Stratigraphy observed;

- Redeposited A1 horizon – brownish clay loam with roadbase inclusions (15cm) overlaying;
- A2 horizon (bt2) – hardsetting brown/ reddish brown clay loam contained large stone inclusions (10cm) overlaying;
- B horizon (bt3) – brown medium mottled red, grey clay.

## Selected Section



## 7.6 DISCUSSION

A background analysis of the environmental and archaeological context, revealed that parts of the study area were likely to contain Aboriginal archaeological material, however, test excavation revealed no Aboriginal objects.

As the proposed development is intending to impact the entirety of the study area, all landscape units both identified as potentially disturbed and/ or intact were tested as part of the programme of test excavation. All test trenches were found to contain evidence of disturbance and/or reworked/ redeposited material. The test pits were excavated to a significant depth to confirm their sterility and/or into the B horizon.

The results of this exercise should form the basis of decisions for ongoing management and further action of which further investigation is not warranted however caution is necessary.

## 7.7 RESEARCH CONTEXT

The research questions are based on the information that has been gathered from previous excavations within and within the vicinity of the study area as well as making an attempt to place the site in a regional context and offer some explanation for the activities that may have taken place within the study area.

### 7.7.1 Response to research questions

No artefacts were located as a result of the programme of test excavation, therefore the following research questions could not be addressed.

- Are archaeological or cultural materials present in the Holocene Age deposits?
- If so how do these artefact densities compare at a local and regional level?
- Are rare or representative archaeological or cultural materials present?
- Are locally or regionally significant archaeological or cultural material present in the Holocene age deposits?
- Is it possible to assign a temporal framework to any of the excavated material?
- What was the nature and extent of the activity that took place within the study area and how does the study area compare with other sites in the immediate vicinity and similar landforms to the study area?
- What raw materials were chosen for the manufacture of stone implements?
- Is the area suitable to be set aside for preservation of Aboriginal archaeological material?

## 8.0 SIGNIFICANCE ASSESSMENT

The processes of assessing significance for items of cultural heritage value are set out in *The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance: the Burra Charter* (amended 1999) formulated in 1979 and based largely on the Venice Charter of International Heritage established in 1966.

Archaeological sites may be significant according to four criteria, including scientific or archaeological significance, cultural significance to Aboriginal people, representative significance which is the degree to which a site is representative of archaeological and/or cultural type, and value as an educational resource. In New South Wales the nature of significance relates to the scientific, cultural, representative or educational criteria and sites are also assessed on whether they exhibit historic or cultural connections.

The criteria for formulating significance values are set out below:

- a) An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area).
- b) An item has strong or special association with the life or works of a person, or group of persons, of importance in the cultural or natural history of NSW (or the cultural or natural history of a local area).
- c) An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).
- d) An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.
- e) An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area).
- f) An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area).
- g) An item is important in demonstrating the principal characteristics of a class of NSW's: cultural or natural places; or cultural or natural environments (or a class of the local areas' cultural or natural places; or cultural or natural environments).

### 8.1 ARCHAEOLOGICAL SIGNIFICANCE

#### 8.1.1 Educational Significance

The educational value of any given location will depend on the importance of any archaeological material located, on its rarity, quality and the contribution this material can have on any educational process (Australia ICOMOS, 1999 p. 11).

No archaeological and/or Aboriginal cultural material was located as a result of the programme of test excavation. Therefore, no educational significance can be assigned to the study area.

### **8.1.2 Scientific Significance**

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located, on its rarity, quality and on the degree to which this may contribute further substantial information to a scientific research process. (Australia ICOMOS, 1999 p.11).

No archaeological and/or Aboriginal cultural material was located as a result of the programme of test excavation. Therefore, no scientific significance can be assigned to the study area.

### **8.1.3 Representative Significance**

The representative value of any given location will depend on rarity and quality of any archaeological material located and on the degree to which this representativeness may contribute further substantial information to an educational or scientific research process. (Australia ICOMOS, 1999 p.11).

No archaeological and/or Aboriginal cultural material was located as a result of the programme of test excavation. Therefore, no representative significance can be assigned to the study area.

## **8.2 SOCIAL AND CULTURAL SIGNIFICANCE**

As defined in the 'Burra Charter' (ICOMOS, 1999) cultural significance is broken into three parts: aesthetic, historic and scientific value for past, present or future generations. Cultural significance is a concept which assists in estimating the value of any given place. Places that are likely to be of significance are those which can contain information which may assist with the understanding of the past or enrich the present, and which will be of value to future generations. The meaning of these terms in the context of cultural significance is outlined below. It should be noted that they are not mutually exclusive, (Australia ICOMOS, 1999 p.12).

### **8.2.1 Historic Significance**

A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment. (Australia ICOMOS, 1999 p.11).

No historical significance has been assigned to the study area by any participating Aboriginal Stakeholders.

### **8.2.2 Scientific Significance**

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located, on its rarity, quality and on the degree to which this may contribute further substantial information to a scientific research process. (Australia ICOMOS, 1999 p.11).

No scientific significance has been assigned to the study area by any participating Aboriginal Stakeholders.

### **8.2.3 Aesthetic Significance**

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; the smells and sounds associated with the place and its use. (Australia ICOMOS, 1999 p.11).

No aesthetic significance has been assigned to the study area by any participating Aboriginal Stakeholders.

## 9.0 IMPACT ASSESSMENT

This section aims to evaluate and discuss the potential archaeological impact of the proposed development.

No Aboriginal objects and/or features of cultural and archaeological significance were located during the programme of test excavation. The soil profile was found to be heavily disturbed/ reworked with redeposited material present and roadbase inclusions as well as debris. There is a low- nil possibility of their being artefacts present and works may proceed with caution.

Site No. / Unit	Type of Harm	Degree of Harm	Consequence of Harm
N/a	N/a	N/a	N/a

### 9.1 POTENTIAL HARM TO ABORIGINAL OBJECTS AND CULTURAL HERITAGE

No Aboriginal objects and/or features of cultural and archaeological significance were located during the programme of test excavation. The soil profile was found to be heavily disturbed/ reworked with redeposited material present and roadbase inclusions as well as debris. There is a low- nil possibility of their being artefacts present and works may proceed with caution.

### 9.2 ASSESSING HARM

No Aboriginal objects and/or features of cultural and archaeological significance were located during the programme of test excavation. The soil profile was found to be heavily disturbed/ reworked with redeposited material present and roadbase inclusions as well as debris. There is a low- nil possibility of their being artefacts present and works may proceed with caution.

### 9.3 AVOIDING AND MINIMISING HARM TO ABORIGINAL OBJECTS

No Aboriginal objects and/or features of cultural and archaeological significance were located during the programme of test excavation. The soil profile was found to be heavily disturbed/ reworked with redeposited material present and roadbase inclusions as well as debris. There is a low- nil possibility of their being artefacts present and works may proceed with caution.

### 9.4 JUSTIFICATION OF HARM TO ABORIGINAL OBJECTS

No Aboriginal objects and/or features of cultural and archaeological significance were located during the programme of test excavation. The soil profile was found to be heavily disturbed/ reworked with redeposited material present and roadbase inclusions as well as debris. There is a low- nil possibility of their being artefacts present and works may proceed with caution.

## 10.0 MANAGEMENT AND MITIGATION

The management recommendations presented in the following section of the report take into account the following:

- Legislation outlined in this report which protects Aboriginal cultural and archaeological objects and places in New South Wales;
- Research and assessment carried out by the author/s of this report;
- Results of previous archaeological assessment and excavation in the vicinity of the study area;
- The concerns and views of the Aboriginal stakeholders listed in this report;
- The impact of the proposed development on any Aboriginal archaeological material that may be present;
- The requirements of the consent authority (Wollondilly Shire Council).

### 10.1 RECOMMENDATIONS

The findings from the test excavation indicate the site to be of nil-low archaeological significance. The soil was found to be heavily disturbed with evidence of being reworked and/or redeposited. The programme resulted in no Aboriginal objects and/or deposits of cultural significance being located, therefore the development should be allowed to proceed with caution.

The recommendations have been formulated after consultation with RAPs, the proponent and the OEH;

- Consultation with the registered Aboriginal stakeholders should continue. Stakeholders have been given the opportunity to comment on the recommendations of this report and these comments are included in this report;
- An Aboriginal Cultural Heritage Management Plan should be devised as a final document for the study area as State Significant Development (SSD) status (SSD #8640), in order to manage any Aboriginal archaeological and cultural constraints that may arise;
- Consideration should be given to the recommendations of D'harawal Traditional Descendents' and Knowledgeholders' Circle (p.53 of *AMAC 2018 Aboriginal Cultural Heritage Report; Picton High School Redevelopment; 480 Argyle Street; Picton NSW; Wollondilly Shire LGA*) in regard to the native vegetation of the area, including the request for a detailed botanical survey, protection of existing native flora where possible, planting of healthy native (to the region) specimens, including Turpentine, Forest Red Gum, Stringy Bark and Ironbark species and that consultation continue with RAPs regarding the landscaping of the development as part of the Aboriginal Cultural Heritage Management Plan.
- Archaeological test excavation in accordance with Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010) revealed no Aboriginal archaeological objects or deposits; the development as shown (Figures 4.1 – 4.11) should be allowed to 'proceed with caution';

- After this and before any ground disturbance takes place all development staff, contractors and workers should be briefed prior to works commencing on site, as to the status of the area and their responsibilities in ensuring preservation of the said area. They should also be informed of their responsibilities regarding any Indigenous archaeological deposits and/or objects that may be located during the following development;

**If any Aboriginal archaeological deposits and/or objects are located during the development, then the following should take place;**

- All work is to cease in the immediate vicinity of the deposits and/or objects
- The area is to be demarcated
- OEH, a qualified archaeologist and the participating RAPs are to be notified.

**Should any human remains be located during the following development;**

- All excavation in the immediate vicinity of any objects of deposits shall cease immediately;
- The NSW police and OEH's Enviroline be informed as soon as possible:
- Once it has been established that the human remains are Aboriginal ancestral remains, OEH and the relevant Registered Aboriginal Parties will identify the appropriate course of action.

**Additional Recommendations**

Copies of the final version of this report should be forwarded to the following organisations:

- Kamilaroi – Yankuntjatjara Working Group
- D'harawal Traditional Descendents 's and Knowledgeholders circle;
- Didge Ngunawal Clan;
- Koolkuna Elders;
- Tharawal LALC;
- Biamanga;
- Goobah;
- Murramarang;
- Cullendulla;
- Cubbitch Barta;

## GLOSSARY

Term	Definition
Aboriginal/ Aborigine	These terms apply to indigenous Australians throughout time.
Aboriginal Object	A term now used (formerly 'relic') within the NSW <i>National Parks and Wildlife Act, 1974</i> to refer to "...any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains."
AHIP	Aboriginal Heritage Impact Permit, issued under Part 6 of the National Parks and Wildlife Act 1974, where harm to an Aboriginal object or Aboriginal place cannot be avoided.
Alluvial	Describes material deposited by, or in transit in flowing water.
AMAC	Archaeological Management and Consulting Group.
Artefact	Any object, usually portable, that has been made or shaped by human hand.
Assemblage	A collection of artefacts found in close proximity with one another often excavated together.
Axe grinding Grooves	Areas on a stone surface where other items such as stone tools, wood or bones have been sharpened.
Basalt	A dark coloured, basic volcanic rock.
Bioturbation	Reworking of sediments through the action of ground dwelling life forms. This can also include soil cracking and root activity.
Broken Flake	A flake fragment which displays only part of the diagnostic features of a complete flake.
BP	Before present (AD1950).
Burial	Sites containing the physical remains of deceased Aboriginal people.
Ceremonial Sites	Places or objects of ceremonial, religious or ritual significance to Aboriginal people.
Chert	A hard siliceous rock suitable for flaking into tools.
DCP	Development Control Plan.
DP	Deposited Plan.
Erosion	Process where particles are detached from rock or soil and transported away principally via water, wind and ice.
Flake	A piece of stone, detached by striking a core with another stone.
Flaking/Knapping	The process of making stone tools by detaching flakes from a piece of stone.
Friable	Easily crumbled or cultivated.
Hard setting	Soil which is compact and hard. It appears to have a pedal structure when dried out.
Heritage Division	Formerly known as the Heritage Branch
Holocene	The period of time since the last retreat of the polar icecaps, commencing approximately 10,000 – 110,000

Intensification	Increased social and economic complexity.
Landscape Unit	An area of land where topography and soils have distinct characteristics, are recognisable, describable by concise statements and capable of being represented on a map.
Laminite	A thinly bedded, fine grained sedimentary rock.
LEP	Local Environment Plan.
LGA	Local Government Area.
Lithics	A term used to describe stone and stone artefacts.
Loam	A medium textured soil of approximate composition of 10- 25% clay, 25-50% silt and 2% sand.
Loose	A soil which is not cohesive.
Matrix	Finer grained fraction, typically a cementing agent within soil or rock in which larger particles are embedded.
Midden	Aboriginal occupation site consisting chiefly of shells, which can also include bone, stone artefacts and other debris.
NPW Act	National Parks and Wildlife Act 1974
OEH	NSW Office of Environment and Heritage (formerly known as the DECCW)
Open Campsite	A surface accumulation of stone artefacts and/ or other artefacts exposed on the ground surface.
Potential Archaeological Deposit (PAD)	An area where no surface archaeological remains are visible but where it has been assessed that there is some potential for sub-surface archaeological remains to be present.
Ped	An individual, natural soil aggregate.
Pedal	Describes a soil in which some or all of the soil material occurs in the form of peds in a moist state.
Pleistocene	The epoch of geological time starting 1.8 million years ago.
Quartz	Common mineral with naturally sharp edges and poor fracturing properties. Colour ranging from clear, to milky white and pink.
Quartzite	Homogenous medium to coarse grained metamorphosed sandstone.
Rock Painting	Encompassing drawing, paintings or stencils that have been placed on a rock surface usually within a rock shelter.
Rock Engraving	Pictures which have been carved, pecked or abraded into a rock surface, usually sandstone and predominantly open, flat surfaces.
Sandstone	A detrital sedimentary rock with predominantly sand sized particles.
Scarred/ Carved Tree	A tree from which bark has been deliberately removed.
Sclerophyll	Denoting the presence of hard stiff leaves, typically used to classify forest and indicative of drier conditions.
Sedimentation	Deposition of sediment typically by water.
Silcrete	A sedimentary rock comprising of quartz grains in a matrix of fine grained – amorphous silica.
Silt	Fine soil particles in size ranges of 0.02 – 0.002mm.
Slope	A landform element inclined from the horizontal at an angle measured in degrees or as a percentage.

SHI	State Heritage Inventory
SHR	State Heritage Register
Subsoil	Subsurface material comprising the B and C horizons of soils with distinct profiles.
Stone Resource Site	A geological feature in the landscape from which raw material for the manufacture of stone tools was obtained.
Texture	The coarseness or fineness of a soil as measured by the behaviour of a moist ball of soil when pressed between the thumb and forefinger.
Topsoil	A part of the soil profile, typically the A1 Horizon, containing material which is usually darker, more fertile and better structured than the underlying layers.
Weathering	The physical and chemical disintegration, alteration and decomposition of rocks and minerals at or near the earth's surface by atmospheric and biological agents.

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## APPENDIX ONE – SAMPLE TEST TRENCH CONTEXT FORM

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LEVELS			Pit Number:	
Location of Datum:	Level	RL (=HOI – Lvl)	Level	RL (=HOI – Lvl)
	1.		6.	
Datum:	2.		7.	
Backsight (BS):	3.		8.	
Height Of Instrument (HOI) (= Dat + BS):	4.		9.	
	5.		10.	

