

Aboriginal Archaeological Impact Assessment Waitara Public School, 48-58 Myra Street, Wahroonga, NSW

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**Report Prepared for
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CONTENTS

1.0 INTRODUCTION & STUDY AREA	3
1.1 STUDY AREA.....	3
1.2 STUDY CONTEXT & AIMS	3
1.3 LEGISLATION SUMMARY	4
1.3.1 National Parks and Wildlife Act 1974 (amended 2010).....	4
1.3.2 Environmental Planning and Assessment Act 1979.....	5
1.4 LIMITATIONS AND AUTHORSHIP	7
1.5 REPORT OUTLINE	8
2.0 ENVIRONMENTAL CONTEXT	10
2.1 GEOLOGY & LANDSCAPE	10
2.2 SOILS	10
2.3 FLORA AND FAUNA	11
2.4 LAND USE HISTORY	12
3.0 ARCHAEOLOGICAL CONTEXT	13
3.1 REGIONAL PREDICTIVE MODELLING.....	13
3.2 LOCAL CONTEXT	14
3.2.1 Database Searches	15
3.3 SUMMARY	16
4.0 SITE INSPECTION.....	18
4.1 AIMS & METHODS.....	18
4.2 RESULTS	18
5.0 DISCUSSION & RECOMMENDATIONS	20
5.1 DEVELOPMENT IMPACTS	20
5.2 ABORIGINAL COMMUNITY INPUT	20
5.3 DISCUSSION & CONCLUSIONS	20
5.4 RECOMMENDATIONS.....	20
REFERENCES	22
APPENDIX 1 – MLALC COMMENTS	25
APPENDIX 2 – DEVELOPMENT PLANS	27

FIGURES

FIGURE 1: STUDY AREA LOCATION	9
FIGURE 3: AHIMS SEARCH RESULTS	17
FIGURE 4: STUDY AREA DISTURBANCES (FACING WEST).....	19
FIGURE 5: REMNANT BUSHLAND IN NORTHWEST CORNER OF STUDY AREA.....	19

1.0 INTRODUCTION & STUDY AREA

1.1 STUDY AREA

Cultural Heritage Connections Pty Ltd was commissioned by Heritage 21 in May 2017 to undertake an Aboriginal Archaeological Impact Assessment (AAIA) of an area of land at Lots 11-13, DP 17375, Lot A, DP 309739 and Lot 1, DP 333142, also known as 48-58 Myra Street, Wahroonga, NSW (the study area). The study area occupies a corner site at the intersection of Edgeworth David Avenue and Myra Street within the Hornsby LGA.

The location of the study area is shown in Figure 1.

1.2 STUDY CONTEXT & AIMS

The aim of the assessment is to consider the potential for harm to Aboriginal objects on the subject land prior to the proposed construction of additional classrooms. No specific design or impacts were provided as part of the assessment.

The school grounds are listed as an item (#760) on the Wahroonga Local Environmental Plan (LEP) and the study area falls within the Wahroonga North Heritage Conservation Area. No reference to Aboriginal sites or objects is included within these listings.

No Aboriginal objects have been previously recorded within the study area boundaries.

As detailed in “The process for investigating and assessing Aboriginal cultural heritage” (Figure 1 of the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*), the first step is “Have you determined if your proposed activity could harm Aboriginal objects or declared Aboriginal places?”. If the answer is no, then the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010c) should be referred to. This report is intended to address that question as a first step in determining harm.

Preliminary consultation was undertaken with Metropolitan Local Aboriginal Land Council (MLALC). MLALC comments on the proposed development are included in **Error! Reference source not found.** and summarised in Section 5.2. The consultation undertaken does not conform to the requirements of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010a).

The major aims of the assessment are to:

- identify whether or not Aboriginal objects are, or are likely to be, present in the area;
- if objects are present or likely to be present, determine whether or not the proposed development activities are likely to harm Aboriginal objects; and
- determine whether further assessment or an Aboriginal Heritage Impact Permit (AHIP) is required.

In order to meet these objectives, the following tasks are required:

- undertake a search of the OEH AHIMS and a review of site cards for those sites within close proximity of the study area;
- check for landscape features which may indicate the presence of Aboriginal objects;

- undertake a desktop assessment using relevant background data to categorise the study area and form predictions about the likely presence of cultural sites;
- undertake a site inspection in collaboration with the MLALC to check the desktop conclusions as well as to look for Aboriginal objects and any other relevant features that may not have been revealed during background review; and
- if necessary, consider strategies to avoid harming Aboriginal objects.

The assessment has been prepared as a consideration of the potential for the proposed development to harm Aboriginal objects and with reference to the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010b). It is not, however, an Aboriginal Cultural Heritage Assessment as defined in the OEH *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*.

1.3 LEGISLATION SUMMARY

1.3.1 National Parks and Wildlife Act 1974 (amended 2010)

The *National Parks and Wildlife Act 1974* (NPW Act) protects Aboriginal objects and Aboriginal places in NSW. It has been amended by the National Parks and Wildlife Regulation 2009 (NPW Regulation). Under the NPW Act, the following are offences unless an exemption or defence is provided for under the Act:

- A person must not knowingly harm or desecrate an Aboriginal object (knowing offence)
- A person must not harm or desecrate an Aboriginal object or Aboriginal place (strict liability offence)

The maximum penalty for the knowing offence is \$550,000 or \$275,000 (depending on whether there are aggravating circumstances) and 1 or 2 years' goal for an individual. For a corporation the maximum penalty for the knowing offence is \$1.1 million. The maximum penalty for the strict liability offence is \$110,000 or \$55,000 (depending on whether there are aggravating circumstances) for an individual or \$220,000 for a corporation.

Harm includes acts or omissions that "destroy, deface or damage" an Aboriginal object or Aboriginal Place, and in relation to an object, move the object from the land on which it has been situated. Harm does not include something that is trivial or negligible.

Section 91 of the Act also obliges any person who discovers an Aboriginal object to report it to the OEH for it to be entered on the AHIMS.

An Aboriginal object 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."

An Aboriginal object is legally protected irrespective of land tenure, the significance of the object and whether or not it has been recorded.

"Aboriginal Places" are places so declared under Section 84 of the Act.

Anyone who exercises due diligence in determining that their actions will not harm Aboriginal objects has a defence against prosecution for the strict liability offence if they later harm an object. Due diligence can be exercised by complying with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010c) (or industry-specific codes of practice) that has been adopted under the National Parks and Wildlife Regulation 2009. The code provides a process to enable a reasonable determination of whether or not Aboriginal objects will be harmed by an activity or whether further investigation or an Aboriginal Heritage Impact Permit (AHIP) are required.

There is also a range of defined exemptions and low impact activities defined in the Regulation for which due diligence is not required. These include undertaking specified farming, land management, maintenance, surveying or environmental rehabilitation works.

Clause 80B Defence of carrying out certain low impact activities: section 87 (4)

(1) It is a defence to a prosecution for an offence under section 86 (2) of the Act, if the defendant establishes that the act or omission concerned:

(a) was maintenance work of the following kind on land that has been disturbed:

(i) maintenance of existing roads, fire and other trails and tracks,

Under the amended Act a permit will no longer be required to *look for* Aboriginal objects providing the investigation is undertaken in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010b). Archaeological test excavations that follow the code do not require an AHIP. If objects are present and harm cannot be avoided it is necessary to apply for an AHIP.

There are also requirements for consultation with Aboriginal people relating to AHIP applications. These are set out in the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW 2010a).

1.3.2 Environmental Planning and Assessment Act 1979

The *EP&A Act* requires that environmental impacts are considered in land use planning and decision-making. The definition of 'environmental impacts' includes impacts on the cultural heritage of the project area. The Act sets out specific statutory assessment processes including:

- Part 4: Development that requires consent under consideration of environmental planning instruments.
- Part 5: An assessment process for activities undertaken by public authorities and for developments that do not require a development consent but an approval under another mechanism.

Hornsby LEP 2013

Part 5 Clause 5.10 of the Hornsby LEP 2013 includes the following provisions for Aboriginal Heritage:

(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.

(4) Effect of proposed development on heritage significance

The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).

(5) Heritage assessment

The consent authority may, before granting consent to any development:

- (a) on land on which a heritage item is located, or
- (b) on land that is within a heritage conservation area, or
- (c) on land that is within the vicinity of land referred to in paragraph (a) or (b),

require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.

(6) Heritage conservation management plans

The consent authority may require, after considering the heritage significance of a heritage item and the extent of change proposed to it, the submission of a heritage conservation management plan before granting consent under this clause.

(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.

1.4 LIMITATIONS AND AUTHORSHIP

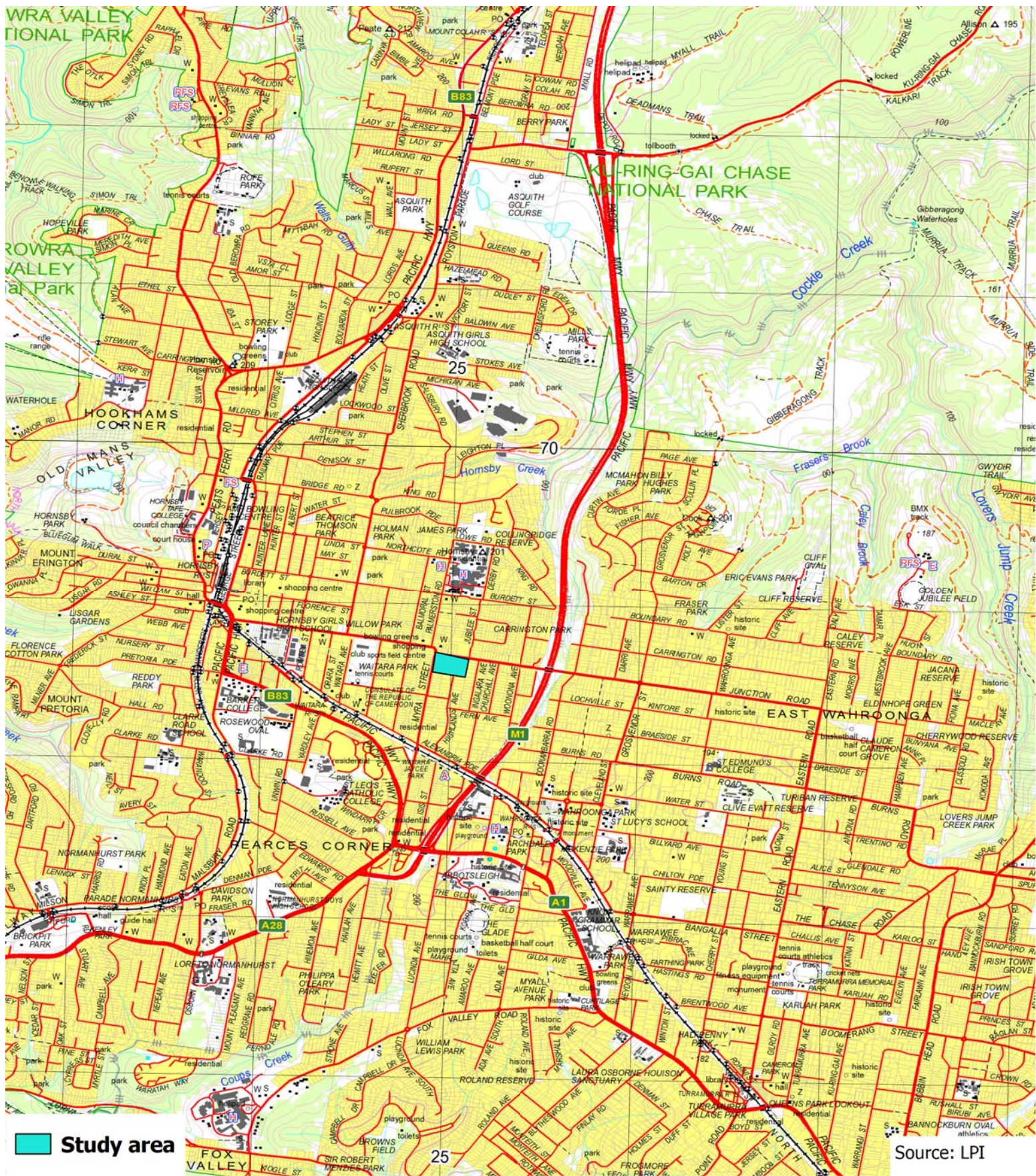
This assessment addresses the Aboriginal archaeological potential of the project area, the archaeological (scientific) value and the likely presence of Aboriginal objects. Cultural Heritage Connections recognises that Aboriginal people are the determinants of the cultural significance of their heritage. This is also recognised by OEH who provide a guideline for minimum requirements for consultation with Aboriginal stakeholders (DECCW 2010a) when archaeological testing or an AHIP are required. This report includes a summary of the comments by the MLALC. A copy of their comments is included in Appendix 1.

No assessment of non-Aboriginal archaeological potential has been undertaken.

Analysis of the archaeological background, design of the methodology, field inspection and reporting for the assessment was undertaken by Vanessa Hardy (BA Hons), archaeologist and Director of Cultural Heritage Connections Pty Ltd.

1.5 REPORT OUTLINE

The following section (Section 2.0) of this report provides a summary of the environmental context of the study area. Section 3.0 examines the archaeological background and Section 4.0 presents the results of the site inspection. Section 5.0 provides a discussion, looks at potential impacts of the development and presents recommendations arising from the assessment.



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Figure 1: Study area location

2.0 ENVIRONMENTAL CONTEXT

Analysis of the environmental context is essential for developing accurate models of cultural activity, site distribution patterns and the archaeological potential of any given area. Environmental characteristics influence the types of archaeological sites. An understanding of how the landscape looked and behaved in the past can help us to predict where Aboriginal people may have undertaken various activities and therefore the types of archaeological sites that may be found in the present. In addition, environmental processes influence the preservation of sites. Heavy erosion or acidic soils are likely to destroy or damage certain types of evidence, reducing the likelihood of locating evidence of past occupation.

The study area is located within the Sydney Basin. Its environmental setting is discussed below.

2.1 GEOLOGY & LANDSCAPE

The study area is within the Hornsby Plateau physiographic region of the Sydney Basin (Chapman and Murphy 1989). The Sydney Basin is underlain by Triassic sediments, which dip gently from the east and north towards a central lowland situated south-west of Parramatta. As the basin rises to the north it is transacted by the drowned river valleys of the Parramatta and Georges Rivers exposing sandstone. The sandstones continue to rise to the north to the 'broad dissected plateau capped in places with Wianamatta Group shale' that is the Hornsby Plateau (Chapman and Murphy 1989).

Stone suitable for tool manufacture occurs across the Sydney Basin. Recorded artefacts have been made from silcrete, chert, 'indurated mudstone'/'silicified tuff', quartz, quartzite and basalt. Many of these materials can be commonly found as cobbles or boulders eroding out of deposits near creek lines.

The nearest significant waterway, Hornsby Creek and its tributaries, is over 500 metres from the study area. The area appears to be an upper slope landform. No sandstone rock overhangs or other typically sensitive landforms are present in the study area which is predominantly an upper slope landform.

2.2 SOILS

The study area is mapped as within the erosional Glenorie Soil Landscape (Chapman, et al. 1989). This landscape is underlain by Wianamatta Group Ashfield Shale and Bringelly Shale formations. Topography is predominantly low rolling and steep hills with local relief of 50-120 m, slopes of 5-20%, convex narrow (20-300 m) ridges and hillcrests grading into moderately inclined sideslopes with narrow concave drainage lines. The dominant landform is moderately inclined slopes of 10-15% (Chapman and Murphy 1989).

Typical soil profiles of the Glenorie soil landscape are prone to erosion and relatively shallow. Topsoil consists of an A1 horizon of friable dark brown loam. Shale fragments occur with occasional charcoal. Roots are commonly present. Where present an A2 horizon is typically a brown clay loam to fine sandy clay loam with shale, roots and charcoal common. Subsoil B horizons are moderate to heavy clays. Aboriginal objects most commonly occur in A1 or A2 horizons. Deeper B horizon clays are usually considered culturally sterile.

Typical depths of Glenorie landscape range as follows:

- Crests – up to 15 cm of A1 Horizon overlying 10-30 cm of A2.
- Upper slopes and midslopes – up to 15 cm of A1 horizon and 5-30 cm of A2
- Lower slopes – 10-60 cm of A1 with A2 absent
- Drainage lines – can contain up to 100 cm of recently transported topsoil (A1) overlying base clays.

Soils are prone to erosion and it is likely that any Aboriginal objects on crest and slope landforms would have been disturbed by soil movement.

2.3 FLORA AND FAUNA

The vegetation communities of the greater Sydney area have over 200 species with edible parts (Attenbrow 2002). Many plants were exploited as a minor food resource, for example berries or plant nectars. Aboriginal firing of the landscape may have resulted in opening up of grasslands in the valleys and ridge tops, which, in turn, increased the habitat for large macropods.

The study area has been completely cleared since European settlement. In the past, the area would have provided a wide variety of flora and fauna resources for the Aboriginal communities who lived there.

Tall open-forest (wet sclerophyll forest) is most commonly associated with soils of the Glenorie soil landscape. Dominant tree species include Sydney blue gum (*Eucalyptus saligna*) and blackbutt (*E. pilularis*). Other species common to the area include turpentine (*Syncarpia glomulifera*), grey ironbark (*E. paniculate*), white stringybark (*E. globoidea*) and rough-barked apple (*Angophora floribunda*). Common understory species include pittosporum (*Pittosporum undulatum*) and coffee bush (*Breynia oblongifolia*) (Chapman and Murphy 1989). Within the study area a remnant patch of Turpentine Ironbark forest is contained within the northeast corner.

Wood was used to make canoe poles, weapons, woomeras, boomerangs and was used for firewood. Plant resins were used to fix parts of tools together. Bark was used for huts, carrying vessels, canoes, shields, fishing lines, bedding, blankets and torches, amongst other things (Attenbrow 2002: 113). Fibres were used to make ropes that could then be used in traps and nets for trapping animals, birds and fish. Local knowledge of medicine plants was also an important part of Aboriginal culture.

Animal resources were important to the Aboriginal people of the region, not only as a food source but because they could also be used for manufacturing. The use of animal skin clothing and animal bone tools has been well documented.

Overall, the resources available to inhabitants of the study area region could have provided a varied and generally reliable resource to sustain the many economic and social requirements of large Aboriginal groups.

2.4 LAND USE HISTORY

The study area has been in use as a school since 1927. Ground surfaces are mostly artificial hard surface with some landscaped areas. It is likely that soil has been imported to fill some landscaped areas.

Construction of the various buildings, landscaping and ongoing use of the study area would most likely have removed any intact archaeological deposit that may have been present. Based on this, the probability of Aboriginal objects being located within the study area is low.

3.0 ARCHAEOLOGICAL CONTEXT

For the purposes of determining settlement and site location patterns, archaeologists examine regional and local trends in the distribution of known sites in relation to environment and topography. This information can be used to provide a picture of behaviour in the past as well as indicate how evidence of that past behaviour might be preserved in the archaeological record. The following provides a brief overview of relevant regional and local archaeological evidence.

3.1 REGIONAL PREDICTIVE MODELLING

Much of the archaeological work done in the Sydney Basin has been focused on the Cumberland Lowlands, where hundreds of artefact sites (also known as open campsites or artefact scatters) have been recorded. This is despite the extent of urban development. Open artefact scatters can range from a few discarded stone pieces (resulting from a one-off use of an area) to large sites which may have been visited by a large number of people and/or been repeatedly used over many years. In these larger sites, distinct areas relating to specific activities can sometimes be located, such as knapping floors where individuals would have sat to manufacture stone tools. They can also include other habitation remains such as animal bone, shell or fireplaces (known as hearths). In areas where sandstone rock overhangs are present sites are commonly located within the overhangs. Other sites such as middens, where shellfish are processed and discarded occur along waterways.

Over the last 30 years, a series of models of occupation of the Cumberland Lowlands have been proposed. These are being continually refined as further work takes place across the broader Sydney region. A review of the various occupation models based on the wealth of data in the Rouse Hill Development Area (McDonald and White 2010) produced the following key findings supporting some of the previous models:

- artefact distribution can better be seen as part of a landscape rather than discrete sites;
- artefact distribution does appear to be related to proximity to water, although this further varies with stream order;
- stream order does seem to be a significant factor in site distribution as suggested by McDonald and Mitchell (1997);
- artefact density does appear to vary significantly with landform (McDonald and Mitchell 1997);
- the orientation of open land surfaces seems to have an influence on the selection of artefact discard locations - with slopes facing north and north-east generally having higher densities;
- distance from known silcrete sources does not seem to have a large influence on artefact density;
- these trends in artefact density and distribution indicate long-term, large scale patterns; and
- social and/or symbolic factors may also have influenced site selection (McDonald and White 2010; AECOM 2011).

Investigations in the Hawkesbury Sandstone areas, have tended to focus on rock shelters and the diversity of rock art present in these areas. As part of a detailed study of sites undertaken in the late 1980s (McDonald 1990), McDonald noted that of the 5300 sites recorded at that time across the Sydney Basin over 55% of them were art sites, with engraving/petroglyph sites (1450) being slightly more common than shelter art sites (1370).

The Sydney pigment art (mostly located in rock shelters), using ochres and charcoal and the engravings/petroglyphs (on Hawkesbury Sandstone surfaces) are generally referred to as belonging to a style known as “Simple Figurative”. While it is very difficult to reliably date rock art sites, some research has suggested that this style was common across the region from between 5000 and 200 years ago (Stanbury and Clegg 2000). The collection of varied art motifs recorded in the Sydney region includes: human figures, human/animal composite figures, macropods (kangaroos/wallabies), other animals (such as dingos, wombats, echidnas, koalas, possums and gliders), animal tracks, fish, other marine creatures (whales, dolphins, turtles and stingrays), reptiles, birds, tools (boomerangs, axes, spears, dilly bags, fishing lines, shields, etc.) and non-figurative symbols.

Over 95% of rock engraving/petroglyph sites in the Hornsby LGA region are located on flat horizontal surfaces. The majority of them are located on ridge tops (56%) with a significant percentage on slopes (41%). Only a very few (3%) occur in valleys (Koettig 1996). This may be because valleys are unlikely to contain large exposed flat areas of sandstone.

In general sites have been recorded across landform types where resources are available. Analysis of assessments undertaken in the study area region have produced a number of generalisations about the nature of sites and site distribution. These, in turn can be used to help form predictive models. The following generalisations are applicable;

- Aboriginal sites can be located across any environmental or physiographic zone across the whole Sydney basin.
- Resources/resource availability in some areas are highly localised and may influence the distributions of sorts of sites (also they may be seasonally dependant).
- The density of sites will vary across different resource zones (some areas will have more sites than others).
- Some types of sites will be more commonly associated with some landscape types.
- Within a specific site the density and range of evidence can vary.
- The distribution of known and recorded sites does not necessarily reflect the past distribution (may be rather a reflection of survey locations or visibility).
- Not all sites will be able to be detected through surface inspection (Koettig 1996).

3.2 LOCAL CONTEXT

Koettig’s study (1996) of the whole of Hornsby Local Government area was designed to assess, promote and make recommendations for conservation and management of the Aboriginal Heritage within the Shire. In total 454 sites were identified as falling within the Shire boundaries, including those within Ku-Ring-gai National Park. Of these, 235 sites

outside the National Park areas were the focus of Koettig's study. Over 70% of the sites contained art either alone or in combination with other features, with engravings/petroglyphs the most common site feature over all. She noted that different landscape elements tended to favour different types of archaeological evidence. Petroglyphs are most commonly found on ridge tops, habitation evidence in sandstone overhangs and grinding grooves in creek beds (Koettig 1996: 57). Evidence from the limited number of excavations in the region suggests that sub-surface occupation evidence is not always indicated by the surface evidence within shelters. Estuarine foreshore areas were identified as being highly archaeologically sensitive.

An assessment was undertaken prior to the construction of the southern extension of the F3 from Wahroonga to Berowra in 1984 (Brayshaw & Associates 1984). Surveys were undertaken along corridors, marked by the RTA, where vegetation had been slashed. In these corridors, flat areas of sandstone were inspected.

Sites were recorded along the entire length of the area studied. Recorded sites included art sites, shelter sites, a midden/open site and grinding grooves. A total of three shelters with archaeological deposit (one in association with grinding grooves and one with petroglyphs) were recorded as well as a shelter with art, an open artefact scatter, a midden and four isolated finds. A total of 13 shelters with "habitation potential" (ie potential archaeological deposit) were also recorded. In general the shelter sites were found in gullies and all within 200 metres of a water source (Brayshaw & Associates 1984).

A regional study undertaken for Baulkham Hills Shire Council (Dallas and Sullivan 1993) reviewed previous archaeological investigations in the area and proposed a predictive model for the region. At the time the study was undertaken a total of 188 Aboriginal sites were known within the LGA.

The most common site types in the LGA were rock shelters with art (23.9 %), rock shelters with deposit (21.3 %), axe grinding grooves (16 %), rock shelters with art and deposits (10.6 %), artefact sites (open camp sites) (9.6 %) and petroglyphs (rock engravings) (8 %). The authors argued that site type and distribution for any given area are closely correlated with the variations in underlying bedrock. The study's site location model divided the area into shale-based landforms and Hawkesbury sandstone landforms. It predicted that shale landforms site types would be most commonly artefact sites and modified trees. The Hawkesbury sandstone landforms site types predicted types would more commonly be art sites (petroglyphs and rock paintings), rockshelters and axe grinding grooves with artefact sites and modified trees occurring less frequently. The model also predicted that a higher density of sites would be found within close proximity to fresh water sources (Dallas and Sullivan 1993).

3.2.1 Database Searches

Searches of the NSW State Heritage Register, Inventory and the Australian Heritage database were undertaken on the 28 June 2017. No Aboriginal archaeological sites or places of Aboriginal cultural heritage significance were recorded on these databases within the study area. No Aboriginal sites are recorded on the *Hornsby LEP 2013*.

A search of the OEH AHIMS database was undertaken via a map search on 11 July 2017 for an area from Lat, Long: -33.7171, 151.1031 to Lat, Long: -33.699, 151.1211 with a

Buffer of 1000 meters. A total of 18 sites was recorded within this area. None of the sites is within the study area.

The locations of the registered sites recorded in AHIMS are shown in Figure 2. The location information for sites recorded within the AHIMS is subject to variation in recording methods. Coordinates provided are often indicative rather than exact. As can be seen by some of the site being recorded in the water, the accuracy of locations cannot always be relied on. The author cannot vouch for the accuracy of the information provided by OEH or other agencies.

Table 1: Site features from AHIMS results

Site Feature	Frequency	Approximate %
Art (open site / rock engraving)	4	22.2
Art (engraving) with grinding grooves	1	5.6
Art (shelter site)	4	22.2
Artefact with deposit (shelter)	1	5.6
Artefacts (Open Camp Site or Isolated Finds)	1	5.6
Grinding Grooves	3	16.6
Potential Archaeological Deposit (PAD)	4	22.2
Total	18	100%

3.3 SUMMARY

The most common site type in the locality is art sites. This is consistent with predictive modelling. Areas of outcropping sandstone geology in the broader area means that shelter sites with deposit and grinding grooves are also present.

In summary, there would have been relatively large Aboriginal populations utilising the study area and surrounds. The number of sites recorded on AHIMS is a fraction of what once would have been present. Open artefact sites have been recorded, but will be less frequent in areas where shelter sites are common. Major factors influencing the potential for unrecorded sites to be located and the types of sites will be: the geology; distance to water; and the level of disturbance in this developed area.



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Figure 2: AHIMS search results

4.0 SITE INSPECTION

A site inspection was carried out on 12 July 2017 by the archaeologist, Vanessa Hardy. Conditions were overcast with some rain. An additional inspection was undertaken with Selina Timothy, Culture and Heritage Officer for MLALC on Tuesday 14 November in fine and sunny conditions.

4.1 AIMS & METHODS

The aim of the site inspection was to determine whether any unrecorded Aboriginal objects or areas of sub-surface archaeological potential would be likely to occur in the study area and whether development of the subject land could have the potential to impact these sites or areas. The external parts of the study area were inspected on foot. No inspection was undertaken within standing buildings. . In addition, it was central to the assessment to provide the MLALC with opportunity to comment on any cultural values of the project area.

4.2 RESULTS

The area has been substantially disturbed. Most of the area is covered in hard surface inhibiting surface visibility (Figure 3). The ground is relatively flat and has likely been filled in some areas. Generally, the area slopes to the southeast. The northwest corner includes some regrowth bushland (Figure 4). Some sand has been imported in this area.

No known sites are recorded within the study area boundaries. No Aboriginal objects were located during the site inspection. No trees with potential for Aboriginal scarring are located in the study area. No areas of archaeological sensitive landform were noted within the study area.

The site inspection revealed a disturbed landscape. The area would have been within an upper slope landform over 500 metres from the nearest water source and therefore unlikely to be a favoured location for camping. Decades of use as a school have resulted in disturbance to and removal of natural A horizon soils over much of the area. There is an area of low disturbance in the northwest. However, due to the distance from water and the low likelihood of high density use of the area in the past, it is assessed that there is low potential for Aboriginal objects to be present. The whole study area is assessed as having low archaeological sensitivity.

Figure 3: Study area disturbances (facing west)



Figure 4: Remnant bushland in northwest corner of study area



5.0 DISCUSSION & RECOMMENDATIONS

This section provides a summary of the results of the assessment. It also presents recommendations for ongoing management based on the assessment findings and the legislative context.

5.1 DEVELOPMENT IMPACTS

The proposal is to demolish a number of existing buildings and construct a new multi-storey classroom building. Additional works will include landscaping, and remaking of sports courts/hard surfaces. The proposed development plans assessed area included in Appendix 2.

5.2 ABORIGINAL COMMUNITY INPUT

The MLALC provided written comment on 8 December 2017 (see Appendix 1). No specific cultural values were described for the site. The comments supported the conclusions of this archaeological assessment and reiterated that there is no impediment to the development on archaeological grounds. The MLALC wish to be contacted if any unexpected Aboriginal objects are located during the development and to be consulted on any additional cultural heritage matters that might arise in the course of the project. MLALC also stated that a procedure for dealing with unexpected finds should be implemented and prior to the commencement of works, on site employees or contractors should be made aware of the statutory obligations that apply to the discovery of Aboriginal objects.

5.3 DISCUSSION & CONCLUSIONS

Based on the observed disturbance on site it is concluded that the study area has low archaeological potential. The study area is over 500 metres from a significant water source. It is therefore unlikely to have been a favoured camping location. While lower density artefact sites or other evidence of transient land use may have been present in the area the extent of the disturbance to the ground surface is considered likely to have removed any traces of past Aboriginal occupation. It is unlikely that Aboriginal objects would be preserved sub-surface.

No objects are known to be present. The study area landscape is not assessed as archaeologically sensitive due to its distance from water, slope and the level of surface disturbance. It is concluded that there is low potential for intact deposits or Aboriginal objects to occur.

5.4 RECOMMENDATIONS

Based on the findings of the above archaeological assessment, the views expressed by the MLALC and the legislative framework for protecting and assessing Aboriginal archaeological sites in NSW, the following recommendations are provided:

- There is no impediment to development in the project area on archaeological grounds and it is recommended that development can proceed with the following conditions:

- On-site employees or contractors involved in ground surface disturbance should be made aware of the statutory obligations that apply to the discovery of Aboriginal objects.
 - If Aboriginal objects are uncovered during ground surface works, all works must cease and OEH and the MLALC should be contacted to determine a course of action.
 - In the unlikely event that suspected human remains are found the *Coroners Act 2009* requires that all work must cease, the site should be secured and the NSW Police and the NSW Coroner's Office should be notified. If the remains are found to be archaeological, OEH and the MLALC should be contacted to assist in determining appropriate management.
- MLALC should be provided with a copy of the final version of this report for their records.

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APPENDIX 1 – MLALC COMMENTS



Metropolitan Local Aboriginal Land Council

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9733 Email: bookings@metrolalc.org.au

Cultural Heritage Connections Pty Ltd
PO Box 490 Dulwich Hill NSW 2203 Australia
admin@heritageconnect.com.au

8th December 2017

To whom it may concern,

**MLALC Reply Aboriginal Archaeological Impact Assessment By Vanessa Hardy November 2017
Report Prepared for Heritage 21 Suite 48 / 20-28 Maddox Street Alexandria NSW 2015
Waitara Public School, 48-58 Myra Street, Wahroonga, NSW**

Firstly to introduce Metropolitan LALC(MLALC), MLALC is the legislated Aboriginal authority representing all Aboriginal people and body responsible for protection, preservation & promotion of Aboriginal Cultural heritage within our prescribed boundaries that includes areas of Redfern, CBD Sydney, Sydney Harbour, Domestic & International Airports, Olympic Park precinct and the Georges, Cooks, Lane Cove, Parramatta, Hawkesbury and McDonald rivers.

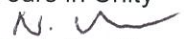
MLALC provides this response to the Aboriginal Archaeological Impact Assessment By Vanessa Hardy November 2017 Report Prepared for Heritage 21 in relation to proposed redevelopment at Waitara Public School, 48-58 Myra Street, Wahroonga, NSW and Aboriginal Cultural assessment sites inspection undertaken by MLALC Culture & Heritage Officer Selina Timothy 14/11/17.

Based on the findings of the archaeological assessment provided, the views expressed by the MLALC and the legislative framework for protecting and assessing Aboriginal archaeological sites in NSW, the following recommendations are provided and MLALC requests the following conditions be imposed upon the development consent:

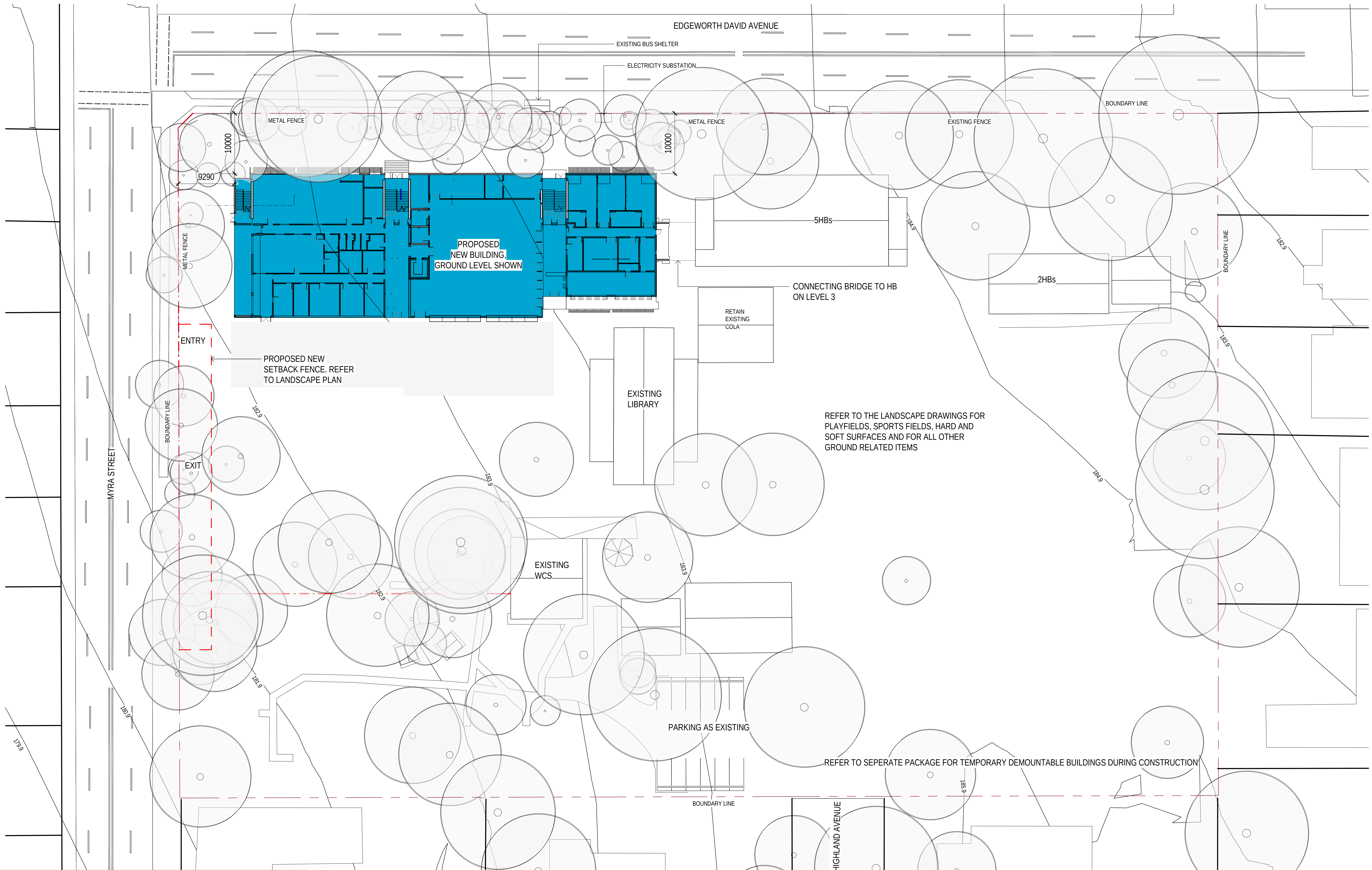
- The "*Procedure for Handling Unexpected Aboriginal Cultural Heritage Objects*" is to form part of the development consent.
- There is no impediment to development in the project area on archaeological grounds and it is recommended that development can proceed with the following conditions:
- On-site employees or contractors involved in ground surface disturbance should be made aware of the statutory obligations that apply to the discovery of Aboriginal objects.
- If Aboriginal objects are uncovered during ground surface works, all works must cease and OEH and the MLALC should be contacted & engaged to determine a course of action.
- In the unlikely event that suspected human remains are found the Coroners Act 2009 requires that all work must cease, the site should be secured and the NSW Police and the NSW Coroner's Office should be notified. If the remains are found to be archaeological, OEH and the MLALC should be contacted to assist in determining appropriate management.
- MLALC requests to be provided with a copy of the final version of this report for our records.
- MLALC to be engaged should any further Aboriginal Cultural Heritage material and or matters arise throughout the duration of the project

Please advise if you require any additional clarification & or further information or if you simply wish to discuss the matter further.

Yours in Unity


Mr Nathan Moran
CEO MLALC

APPENDIX 2 – DEVELOPMENT PLANS

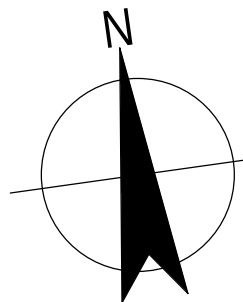


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SITE SETOUT PLAN
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C	ISSUED FOR SCHEME DESIGN	AA	MD*	BM*	21.09.2017	
B	ISSUED FOR DEVELOPMENT APPLICATION	AA	MD*	BM*	19.09.2017	
A	PRELIMINARY ISSUE TO CLIENT	AA	MD*	BM*	28.08.2017	
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date



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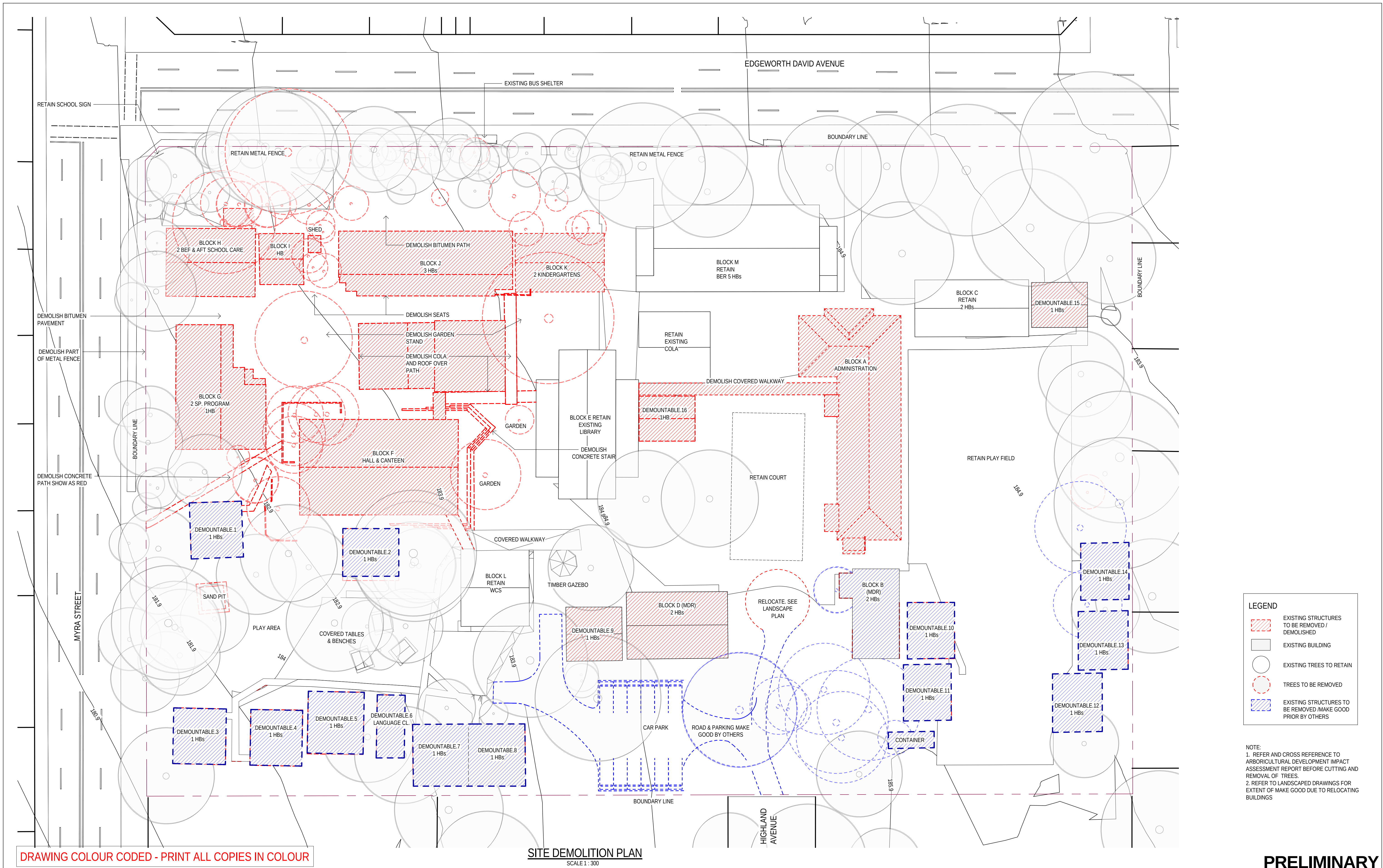
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Approved (Project Director)			
Nominated / Responsible Architect	A. MILLER		
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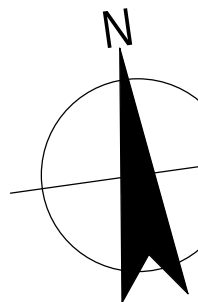
SITE DEMOLITION PLAN
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LEGEND	
	EXISTING STRUCTURES TO BE REMOVED / DEMOLISHED
	EXISTING BUILDING
	EXISTING TREES TO RETAIN
	TREES TO BE REMOVED
	EXISTING STRUCTURES TO BE REMOVED / MAKE GOOD PRIOR BY OTHERS

NOTE:
1. REFER AND CROSS REFERENCE TO ARBORICULTURAL DEVELOPMENT IMPACT ASSESSMENT REPORT BEFORE CUTTING AND REMOVAL OF TREES.
2. REFER TO LANDSCAPED DRAWINGS FOR EXTENT OF MAKE GOOD DUE TO RELOCATING BUILDINGS

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