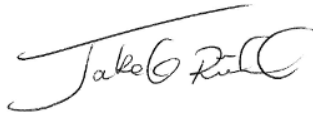


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Aboriginal Cultural Heritage Assessment

SIKH GRAMMAR SCHOOL, AUSTRALIA

JULY 2019



Document Verification



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ACRONYMS AND ABBREVIATIONS

ACHA	Aboriginal Cultural Heritage Assessment – <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i>
ACHAR	Aboriginal Cultural Heritage Assessment Report
ACHR / ACHCRP	<i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i>
AHIMS	Aboriginal heritage information management system
EP&A Act	<i>Environmental Planning & Assessment Act 1979 (NSW)</i>
Km	Kilometres
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
M	Metres
NPW Act	<i>National Parks & Wildlife Act 1974 (NSW)</i>
NSW	New South Wales
OEH	(NSW) Office of Environment and Heritage
PAD	Potential Archaeological Deposit
RAP	Registered Aboriginal Party

EXECUTIVE SUMMARY

INTRODUCTION

The Sikh Grammar School Australia has engaged NGH Environmental to investigate and examine the presence, extent and nature of Aboriginal Cultural Heritage for the proposed State Significant Development of the Sikh Grammar School (K-12); Early Learning Centre; Student Accommodation; and Ancillary Place of Public Worship, to be located at 151-161 Tallawong Road, Rouse Hill NSW 2155. The proposed location is within the Blacktown Local Government Area (LGA) and covers Lot 42 DP30186, and Lot 43 DP30186. The total site area is approximately 4.1 hectares (ha).

The proposed works would include the construction of the Sikh Grammar School and its associated services including underground carparking, bus layby area, as well as power, water, telecommunications and sewerage lines. The construction activities will involve significant ground disturbance which carries the potential to impact on Aboriginal heritage sites and objects which are protected under the NSW National Parks and Wildlife Act 1974 (NPW Act).

During an extensive search of the Aboriginal Heritage Information Management System (AHIMS) which is maintained by NSW Office of Environment and Heritage (OEH), nineteen previously recorded Aboriginal heritage sites were identified within a 1km buffer zone of the proposed works area, with no registered sites located within the project area. The purpose of this Aboriginal Cultural Heritage Assessment (ACHA) is to investigate the presence and extent of any Aboriginal sites and to assess their significance and possible impacts from the proposed works and to provide management strategies that may mitigate any impact.

Under the NSW Planning legislation, an Aboriginal Heritage Impact Permit (AHIP) from OEH would not be required for this project due to its designation as a State Significant Development for which the Department of Planning provides the approval. Despite this designation, Aboriginal heritage is still required to be considered along with appropriate consultation with the Aboriginal community.

State Significant Developments are subject to environmental planning processes and are assessed under the Secretary's Environmental Assessment Requirements (SEARs).

PROJECT PROPOSAL

The proposed construction of the new Grammar School is a State Significant Development and therefore includes the following requirements for the Aboriginal Cultural Heritage Assessment in regard to the SEARs:

- Identify and describe the Aboriginal cultural heritage values that exist across the whole area that would be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011);
- Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR; and

- Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.

ABORIGINAL CONSULTATION

The consultation with Aboriginal stakeholders was undertaken in accordance with clause 80C of the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010* following the consultation steps outlined in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (ACHCRP) guide provided by OEH. The guide outlines a four-stage process of consultation as follows:

- Stage 1 – Notification of project proposal and registration of interest.
- Stage 2 – Presentation of information about the proposed project.
- Stage 3 – Gathering information about cultural significance.
- Stage 4 – Review of draft cultural heritage assessment report.

The full list of consultation steps, including those groups and individuals that were contacted and a consultation log is provided in Appendix A. A summary of actions carried out in following these stages are as follows.

Stage 1. A letter outlining the development proposal and the need to carry out an ACHA was sent to the Deerubbin Local Aboriginal Land Council (LALC), and various statutory authorities including OEH, as identified under the ACHCRP. An advertisement was placed in *The Daily Telegraph* on the 22nd March 2019 seeking registrations of interest from Aboriginal people and organisations. A further series of letters was sent to other organisations identified by OEH in correspondence to NGH Environmental. In each instance, the closing date for submission was 14 days from receipt of the letter.

As a result of this process, 22 groups contacted NGH to register their interest in the proposal.

Stage 2. An *Assessment Methodology* document for the Rouse Hill Sikh K-12 Grammar School was sent to the RAPs and other Aboriginal stakeholders named by OEH on 9.4.2019. This document provided details of the background to the proposal, a summary of previous archaeological surveys and the proposed heritage assessment methodology for the proposal. The document invited comments regarding the proposed methodology and also sought any information regarding known Aboriginal cultural significance values associated with the subject area and/or any Aboriginal objects contained therein.

Stage 3. The *Assessment Methodology* outlined in Stage 2 included a written request to provide any information that may be relevant to the cultural heritage assessment of the study area. It was noted that sensitive information would be treated as confidential. No response regarding cultural information was received.

A site inspection and archaeological survey was organised for the 13 May 2019 and three registered parties (Deerubbin LALC, Darug Custodian Aboriginal Corporation and Darug Land Observations) were invited to participate.

Stage 4 on 27.5.2019 a draft version of this *Aboriginal Cultural Heritage Assessment Report* for the project (this document) was forwarded to the RAPs and a timeframe of 28 days was requested for the receipt of

responses to the document. NGH requested 'delivery' and 'read' receipts from all groups that were emailed. Of the 22 groups, 20 groups were emailed a reminder of the closing date for comments on the draft ACHAR and re-sent the report for their convenience on the 17.6.2019.

At the conclusion of the minimum period of 28 days (26 June 2019) for the review of the ACHAR, NGH had received 9 responses from 8 groups.

ARCHAEOLOGICAL CONTEXT

Within 1km of the project area there are 19 registered sites in the AHIMS database. No sites have previously been registered on the AHIMS database as being within the project area. The closest registered site is located 145 meters to the south of the project area boundary.

The AHIMS database is a record of those places that have been identified and had site cards submitted to OEH. It is not a comprehensive list of all Aboriginal cultural heritage sites / places in NSW as site identification relies on an area being surveyed and on the submission of site forms to AHIMS. There are likely to be many areas within NSW that have yet to be surveyed and therefore have no sites recorded. However, further Aboriginal cultural heritage sites have the potential to be present in proximity to the project area.

As stated above, the AHIMS survey results for the present investigation cannot be relied upon to be a comprehensive account of the Aboriginal cultural heritage located within the project area. Indeed, the area holds further potential for sites to exist which have not been previously recorded. However, the scale of farming and residential development and infrastructure within the general area has altered the natural landscape in some places. This activity has also greatly disturbed the archaeological record and there are unlikely to be many places that retain *in situ* archaeological material due to the scale of past development.

With regard to the limitations of the information available, archaeologists rely on Aboriginal parties to provide information about places with cultural or spiritual significance in situations where non-archaeological sites may be threatened by development. To date, we have not been informed of the presence of any such places within the project area. There is always the potential for such places to exist but insofar as the current project is concerned, no such places or values have been identified.

SURVEY RESULTS

No new Aboriginal heritage sites or areas of potential were located during the site survey. The vegetation across the site significantly reduced the surface visibility of the proposal area.

The previous historical practices at the site, including the construction of houses, the introduction of fill, the construction of a dam, the introduction of a sub-surface sewerage line, and historical farming practices, has characterised the site as being highly modified. Due to the level of modification of the project area landscape, the likelihood of locating any cultural material across the site is considered to be low.

SIGNIFICANCE ASSESSMENT

All sites or places have some degree of value, but of course, some have more than others. In addition, where a site is deemed to be significant, it may be so on different levels or contexts ranging from local to regional to national, or in very rare cases, international. Further, sites may either be assessed individually,

or where they occur in association with other sites the value of the complex as a whole should be considered.

Social or cultural value

While the true cultural and social value of Aboriginal sites can only be determined by local Aboriginal people, as a general concept, all sites hold cultural value to the local Aboriginal community. An opportunity to identify cultural and social value was provided to the RAPs for this proposal through the fieldwork and draft reporting process.

No social or cultural values were identified by the Aboriginal representatives either prior to or during site survey of the project area.

Scientific (archaeological) value.

The research potential of the project area is considered to be low. The land has undergone disturbance including vegetation clearing, farming, residential settlement and the damming of the unnamed tributary that historically bisected the site. No sites were identified and therefore no scientific significance is attributed to the place.

Further assessment of the site through excavation would not be appropriate due to the highly modified nature of the site. No areas of potential archaeological deposit (PADs) were identified whilst on site.

Aesthetic value

No identified aesthetic values for the proposal area.

Other Values

There are no other known heritage values associated with the proposal area.

CONSIDERATION OF HARM

Mitigation of harm to cultural heritage sites generally involves some level of detailed recording to preserve the information contained within the site. Mitigation can be in the form of minimising harm through slight changes in the development plan or through direct management measures of the artefacts.

As there are no previously recorded AHIMS sites within the project area footprint, and no sites identified during the site survey, mitigation measures including salvage, detailed recording, or changes to the design footprint of the works are not considered necessary. The proposal area is located on a site of historical ground modification, minimising the potential for locating in-situ surface and subsurface artefacts.

RECOMMENDATIONS

As a result of the field survey and consultation with the local Aboriginal community, it is recommended for the project, that:

1. The proposed works for the Sikh Grammar School at 151-161 Tallawong Road, Rouse Hill NSW, do not require further investigation and the proposed construction works can proceed with caution.

2. As a State Significant Development, an AHIP permit would not be required if works were to uncover Aboriginal material. However, in the unlikely event that previously undiscovered Aboriginal finds are identified during construction, works in the vicinity of the find should cease and a qualified archaeologist/heritage consultant called in to inspect the find and provide recommendations on proceeding.
3. In the unlikely event that human remains are discovered during the construction, all work must cease. OEH, the local police and Deerubbin LALC should be notified. Further assessment would be undertaken to determine if the remains are Aboriginal or non-Aboriginal.
4. Further archaeological assessment would be required if the proposal activity extends beyond the area of the current investigation. This would include consultation with the RAPs for the project and may include further field survey and/or test excavation.
5. Continued consultation with the RAPs for the project should be undertaken if there are any major changes in project design or scope, further investigations or finds.

1 INTRODUCTION

NGH Environmental has been contracted by The Sikh Grammar School Australia to investigate and examine the presence, extent and nature of Aboriginal heritage for the proposed State Significant Development of the Sikh Grammar School and Ancillary Place of Worship, located at 151-161 Tallawong Road, Rouse Hill NSW 2155. The proposed Sikh Grammar School is located within the local government area of Blacktown Council covering Lot 42 DP30186 and Lot 43 DP30186 (refer to Figure 1). The total site has an area of approximately 4.1 hectares (ha).

The proposed works would include the construction of the Sikh Grammar School and its associated services including access roads, underground carparking, bus layby area, as well as power, water, telecommunications and sewerage lines. The construction activities will involve causing significant ground disturbance which carries the potential to impact on Aboriginal heritage sites and objects which are protected under the NSW *National Parks and Wildlife Act 1974* (NPW Act).

During an extensive search of the Aboriginal Heritage Information Management System (AHIMS) which is maintained by NSW Office of Environment and Heritage (OEH), nineteen previously recorded Aboriginal heritage sites were identified within a 1km buffer zone of the proposed works area, with no registered sites located within the project area. The purpose of this Aboriginal Cultural Heritage Assessment (ACHA) is to investigate the presence, extent and significance of any Aboriginal sites within the project area. Additionally, the possible impacts from the proposed works will be assessed to help determine management strategies that may mitigate any impacts.

Under the NSW Planning legislation, an Aboriginal Heritage Impact Permit (AHIP) from OEH would not be required for this project due to its designation as a State Significant Development for which the Department of Planning provides the approval. Despite this designation, Aboriginal heritage is still required to be considered along with appropriate consultation with the Aboriginal community.

State Significant Developments are subject to environmental planning processes and are assessed under the Secretary's Environmental Assessment Requirements (SEARs).

1.1 PROJECT PROPOSAL

The proposed Sikh Grammar School project area covers approximately 4.1 hectares of land at Rouse Hill, NSW (Figure 1).

The proposed construction of the new Grammar School is a State Significant Development and therefore includes the following requirements for the Aboriginal Cultural Heritage Assessment in regard to the SEARs:

- Identify and describe the Aboriginal cultural heritage values that exist across the whole area that would be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011);
- Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR; and

- Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.

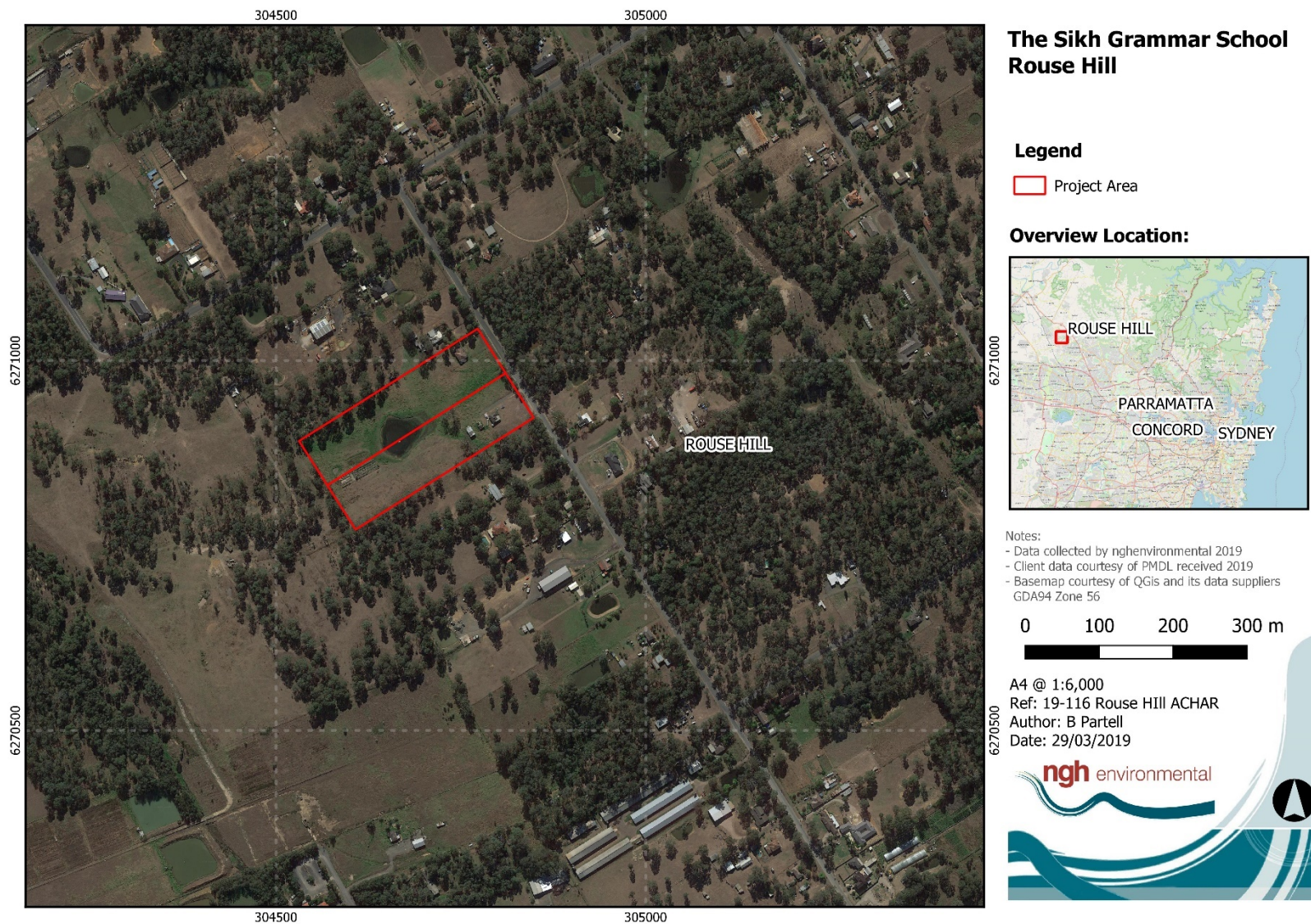


Figure 1. General Project Location.

1.2 PROJECT PERSONNEL

This assessment was undertaken by Heritage Consultant Ingrid Cook of NGH Environmental, including background research, Aboriginal community consultation, field survey and report preparation.

Consultation with the Aboriginal community was undertaken following the process outlined in OEH's *Aboriginal cultural heritage consultation requirements for proponents 2010*. As part of this process the Deerubbin Local Aboriginal Land Council was contacted, and a notice was placed in *The Daily Telegraph* (22.3.2019) to provide notification of the Rouse Hill Sikh grammar School proposal and to request the registration of interest in the project by Aboriginal stakeholder groups. A total of 60 Aboriginal stakeholder groups were contacted directly by NGH, with 22 parties registering a formal interest in the project:

1. Deerubbin Local Aboriginal Land Council	2. Kamilaroi Yankuntjatjara Working Group
3. Darug Land Observations	4. Widescope Indigenous Group
5. Amanda Hickey Cultural Services	6. Darug Aboriginal Land Care
7. B.H. Heritage Consultants	8. Darug Tribal Aboriginal Corporation
9. Darug Aboriginal Cultural Heritage Assessments	10. Ngambaa Cultural Connections
11. Darug Custodian Aboriginal Corporation	12. Didge Nigunawal Clan
13. Yurrandaali Cultural Services	14. Warragil Cultural Services
15. Barraby Cultural Services	16. A1 Indigenous Services
17. Yulay Cultural Services	18. Goodradigbee Cultural & Heritage Aboriginal Corporation
19. Wailwan Aboriginal Group	20. Gunjeewong Cultural Heritage Aboriginal Corporation
21. Barking Owl Aboriginal Corporation	22. Kawul Cultural Services

A field survey of the construction footprint of the proposed Sikh Grammar School site was undertaken on 13 May 2019. Three RAPs selected by the proponent in accordance with guideline requirements were invited to participate in the fieldwork:

Table 1. RAP participation table in the field survey, 13.05.2019

Organisation Name	Attended	Attendee Name
Deerubbin LALC	YES	Steve Randall
Darug Custodian Aboriginal Corporation	YES	Lana Wedgwood
Darug Land Observations	YES	Mark Newham

Further detail and an outline of the consultation process is provided in Section 2.

1.3 REPORT FORMAT

This Aboriginal Cultural Heritage Assessment Report (ACHAR) was prepared in line with the following:

- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011);
- *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales* (OEH 2010a), and

- *Aboriginal cultural heritage consultation requirements for proponents 2010* (OEH 2010b) produced by the NSW Office of Environment and Heritage (OEH).

The purpose of this ACHAR is therefore to provide an assessment of the Aboriginal cultural values associated with the project area and to assess the cultural and scientific significance of any Aboriginal heritage sites.

The objectives of the assessment were to:

- Conduct Aboriginal consultation as specified in clause 80c of the *National Parks and Wildlife Regulation*, using the consultation process outlined in the *Aboriginal cultural heritage consultation requirements for proponents 2010*;
- Undertake an assessment of the archaeological and cultural values of the project area and any Aboriginal sites therein;
- Assess the cultural and scientific significance of any archaeological material; and
- Provide management recommendations for any objects found.

2 ABORIGINAL CONSULTATION PROCESS

The consultation with Aboriginal stakeholders was undertaken in accordance with clause 80C of the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010* following the consultation steps outlined in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (ACHCRP) guide provided by OEH. The guide outlines a four-stage process of consultation as follows:

- Stage 1 – Notification of project proposal and registration of interest.
- Stage 2 – Presentation of information about the proposed project.
- Stage 3 – Gathering information about cultural significance.
- Stage 4 – Review of draft cultural heritage assessment report.

The full list of consultation steps, including those groups and individuals that were contacted and a consultation log is provided in Appendix A. A summary of actions carried out in following these stages are as follows.

Stage 1. A letter outlining the development proposal and the need to carry out an ACHA was sent to the Deerubbin Local Aboriginal Land Council (LALC), and various statutory authorities including OEH, as identified under the ACHCRP. An advertisement was placed in *The Daily Telegraph* on the 22nd March 2019 seeking registrations of interest from Aboriginal people and organisations. A further series of letters was sent to other organisations identified by OEH in correspondence to NGH Environmental. In each instance, the closing date for submission was 14 days from receipt of the letter.

As a result of this process, 22 groups contacted NGH to register their interest in the proposal.

Stage 2. An *Assessment Methodology* document for the Rouse Hill Sikh K-12 Grammar School was sent to the RAPs and other Aboriginal stakeholders named by OEH on 9.4.2019. This document provided details of the background to the proposal, a summary of previous archaeological surveys and the proposed heritage assessment methodology for the proposal. The document invited comments regarding the proposed methodology and also sought any information regarding known Aboriginal cultural significance values associated with the subject area and/or any Aboriginal objects contained therein.

Stage 3. The *Assessment Methodology* outlined in Stage 2 included a written request to provide any information that may be relevant to the cultural heritage assessment of the study area. It was noted that sensitive information would be treated as confidential. No response regarding cultural information was received.

The following table lists all of the registered Aboriginal parties for this project and their responses to the project in general as well as the investigation methodology prepared by NGH.

Table 2. List of Registered Aboriginal Parties and comments provided on the NGH Aboriginal Heritage Investigation Methodology

Organisation name	Comments provided on the investigation methodology
Deerubbin Local Aboriginal Land Council	Supports the project methodology. No further comments.
Kamilaroi Yankuntjatjara Working Group	Supports the project methodology. No further comments.
Darug Land Observations	Supports the project methodology. No further comments.
Widescope Indigenous Group	Supports the project methodology. No further comments.
Amanda Hickey Cultural Services	Supports the project methodology. No further comments.
Darug Aboriginal Land Care	Supports the project methodology. No further comments.
B.H. Heritage Consultants	No comment provided on the methodology.
Darug Tribal Aboriginal Corporation	No comment provided on the methodology.
Darug Aboriginal Cultural Heritage Assessments	Supports the project methodology. No further comments.
Ngambaa Cultural Connections	Supports the project methodology. No further comments.
Darug Custodian Aboriginal Corporation	Supports the project methodology. No further comments.
Didge Nigunawal Clan	Supports the project methodology. No further comments.
Yurrandaali Cultural Services	Supports the project methodology. No further comments.
Warragil Cultural Services	No comment provided on the methodology.
Barraby Cultural Services	Supports the project methodology. No further comments.
A1 Indigenous Services	Supports the project methodology. No further comments.
Yulay Cultural Services	Supports the project methodology. No further comments.
Goodradigbee Cultural & Heritage Aboriginal Corporation	No comment provided on the methodology.
Wailwan Aboriginal Group	No comment provided on the methodology.
Gunjeewong Cultural Heritage Aboriginal Corporation	No comment provided on the methodology.

Barking Owl Aboriginal Corporation.	No comment provided on the methodology.
Kawul Cultural Services	No comment provided on the methodology.

At this stage, the fieldwork was organised. A field survey of the construction footprint of the proposed Sikh Grammar School was undertaken on 13 May 2019. Three RAPs were invited to participate in the fieldwork:

Organisation Name	Attended	Attendee Name
Deerubbin LALC	YES	Steve Randall
Darug Custodian Aboriginal Corporation	YES	Lana Wedgwood
Darug Land Observations	YES	Mark Newham

Stage 4 on 27.5.2019 a draft version of this *Aboriginal Cultural Heritage Assessment Report* for the project (this document) was forwarded to the RAPs and a timeframe of 28 days was requested for the receipt of responses to the document. NGH requested 'delivery' and 'read' receipts from all groups that were emailed. Of the 22 groups, 20 groups were emailed a reminder of the closing date for comments on the draft ACHAR as well as another copy of the report on the 17.6.2019.

At the conclusion of the minimum period of 28 days (26 June 2019) for the review of the ACHAR, NGH had received 9 responses from 8 groups.

2.1 ABORIGINAL COMMUNITY FEEDBACK

Aboriginal community feedback was sought during the design of methodology and field work stages. No information in respect of the project area holding specific cultural values or known heritage was provided by the Aboriginal representatives.

Representatives of the Aboriginal community were present during the fieldwork and provided feedback on the project. The Aboriginal Representatives present did not voice any objections to the project's commencement during or prior to fieldwork.

2.1.1 Registered Aboriginal Party Feedback to this ACHAR

A draft of this report was forwarded on its completion to the RAPs in May 2019. A summary of the responses received are provided in the table below and in Appendix A and provided in full in Appendix B.

RAP	Response to ACHAR	NGH Response
Deerubbin Aboriginal Council Local Land	Deerubbin LALC noted that they had previously attended site twice prior to the ACHAR fieldwork for this project. Their report outlined the previous ground disturbance that had taken place across the site and outlined that they had no objection to the Sikh Grammar School development proceeding without further investigation.	NA
Darug Aboriginal Corporation Custodian	Darug Custodian Aboriginal Corporation outlined in their response that they hold extensive knowledge of the land and culture.	In accordance with clause 80C of the <i>National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation</i>

		Darug Custodian Aboriginal Corporation stated in their response that they do not support personal profit groups or the input they may have in the recommendations. Apart from the number of groups consulted for the report, Darug Custodian Aboriginal Corporation supports the draft report.	2010 and the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (ACHCRP)</i> guide provided by OEH, NGH was obliged to include any and all organisations or individuals who registered their interest in the project. As such, NGH cannot comment on the number of RAPs registered for the project, however, we acknowledge the comment provided by Darug Custodian Aboriginal Corporation regarding the significant quantity of registrations.
Yurrandaali Cultural Services	Cultural	Read and supports the methodology for the project.	NA
Barraby Cultural Services	Cultural	Read and supports the methodology for the project.	NA
Yulay Cultural Services	Cultural	Read and supports the methodology for the project.	NA
Barking Aboriginal Corporation	Owl	Agreed and are satisfied with the Rose Hill Draft ACHA report.	NA
Kamilaroi Yankuntjatjara Working Group		Agree and support all recommendations outlined within the report.	NA
Widescope Indigenous Group		Received, reviewed and support the draft ACHAR.	NA

Further discussion of the issues raised by the RAPs in their feedback to the draft ACHAR is included in section 6.5 of this report.

3 BACKGROUND INFORMATION

3.1 REVIEW OF LANDSCAPE CONTEXT

3.1.1 General Description

The proposed K-12 Sikh Grammar School and associated Place of Public Worship (the project area) is located within the suburb of Rouse Hill in the Local Government Area (LGA) of Blacktown Council. The site has a total area of 4.1 hectares (ha). The site is proposed to include school buildings and learning spaces, open areas, car parking and a library building (Figure 12). A subdivision of the western portion of the lot for housing is also proposed, subject to Council DA approval upon the State Significance Development Application (SSDA) approval.

Land within the project area is predominately cleared and flat and contains existing residential and farming structures, as well as a dam.

3.1.2 Geology and Topography

Reference to the 1:100,000 Geological Series Sheet for Penrith indicates that the proposal area is underlain by Triassic shale and sandstone and unconsolidated Quaternary sediments. The Bringelly Shale is the uppermost unit of the Wianamatta Group. Bringelly Shale is interpreted as a coastal alluvial plain, which grades up from a lagoonal coastal marsh sequence at the base, to an increasingly terrestrial, alluvial plain sediment towards the top of the formation.

Lithology's which comprise the project area landscape include:

- Recent alluvium – fine grained sand, silt and clay;
- Bringelly Shale (Wianamatta Group) – shale, carbonaceous claystone, laminate, lithic sandstone, rare coal;

The topography of the area is characterised by gently undulating rises on Wianamatta Shale with local relief of 10-30m and sloped generally >5% but occasionally up to 10%. Crests and ridges are broad (200-600m) and rounded with convex upper slopes grading into concave lower slopes. Outcrops of shale do not occur naturally on the surface but may occur where soils have been removed.

3.1.3 Soils and Native Vegetation

The area of Rouse Hill is almost completely cleared open-forest and open-woodland (dry sclerophyll forest). Originally the woodland and open-forest would have been dominated by *Eucalyptus tereticornis* (forest red gum), *E. crebra* (narrow-leaved ironbark), *E. moluccana* (grey box) and *E. maculate* (spotted gum).

The project area is located within the Blacktown soil landscape, with the South Creek profile located to the west of the project area along the First Ponds Creek drainage depression. Both soil profiles are summarised below:

Table 3. Soil landscapes in the project area.

Soil type	Description
Blacktown	<p><u>Landscape</u> – gently undulating rises on Wianamatta Group shales. Local relief to 30m, slopes usually >5%. Broad rounded crests and ridges with gently inclined slopes. Cleared Eucalypt woodland and tall open forest (dry sclerophyll forest).</p> <p><u>Soils</u> – shallow to moderately deep (>100cm) hardsetting mottled texture contrast soils, red and brown podzolic soils on crests grading to yellow podzolic soils on lower slopes and in drainage lines.</p> <p><u>Limitations</u> – localised seasonal waterlogging, localised water erosion hazard, moderately reactive highly plastic subsoil, localised surface movement potential.</p>
South Creek	<p><u>Landscape</u> – floodplains, valley flats and drainage depressions of the channels on the Cumberland Plain. Usually flat with incised channels; mainly cleared.</p> <p><u>Soils</u> – Often very deep layered sediments over bedrock or relict soils. Where pedogenesis has occurred structured plastic clays or structured loams in and immediately adjacent to drainage lines; red and yellow podzolic soils are most common terraces with small areas of structured grey clays, leached clay and yellow solodic soils.</p> <p><u>Limitations</u> – flood hazard, seasonal waterlogging, localised permanently high-water tables, localised water erosion hazard, localised surface movement potential.</p>

3.1.4 Hydrology

Water supply is often suggested as being the most significant factor influencing peoples' prior land-use strategies.

Archaeologists, White and McDonald (2010), used 'stream order' (a term developed by Strahler; 1952) within the Cumberland Plain to form an archaeological predictive model around water supply. The greater the stream order, the larger and more permanent the water supply, the more likely longer and larger habitation sites may occur.

An unnamed tributary of First Ponds Creek historically bisected the project area (eSPADE 2019), joining with First Ponds Creek, a second order stream, running approximately 400m to the west of the project area. The unnamed tributary within the project area no longer exists on site due to the construction of a dam.

Aboriginal people are likely to have frequently camped close to water sources and as a result, occupation sites may occur within or close to the proposal area.

3.1.5 Historic Land use

It is believed that Governor Phillip and a support party were the first white visitors to the Hills District in 1788, four months after European settlement. Their aim was to find new country for settlement and farming to feed the struggling Sydney colony (The Hills Sydney's Garden Shire 2019).

The project area for the proposed Sikh Grammar School was historically part of a large land holding held by Richard Rouse. Rouse and his wife Elizabeth, née Adams, arrived in Sydney as free settlers in 1801 and he rose to become Superintendent of Public Works at Parramatta. In 1816 Rouse was given a grant of 450 acres (later extended to 1,200 acres) at Vinegar Hill. Governor Macquarie made the suggestion to change the name of the estate to Rouse Hill, most likely in an attempt to remove the convict association with the area due to the Battle of Vinegar Hill (named after a similar clash in Ireland in 1798) that occurred in the

vicinity in 1804 (The Hills Sydney's Garden Shire 2019). Rouse placed his two-storey solid Georgian house on a prominent ridge overlooking the Windsor Road as he extended his pastoral and agricultural holdings in inland New South Wales.

The area surrounding the Sikh Grammar School project area has historically been used for farming, with light settlement occurring with the subdivision of larger farms into smaller land holds. The project area has been historically cleared and ploughed (Figure 7) and the historic unnamed tributary bisecting the site was dammed for agricultural uses.

Light residential settlement of the project area occurred with the building of structures in the north-east and south-eastern sections of the project area, and in the western section of the project area agricultural buildings were constructed (Figures 5 + 6).

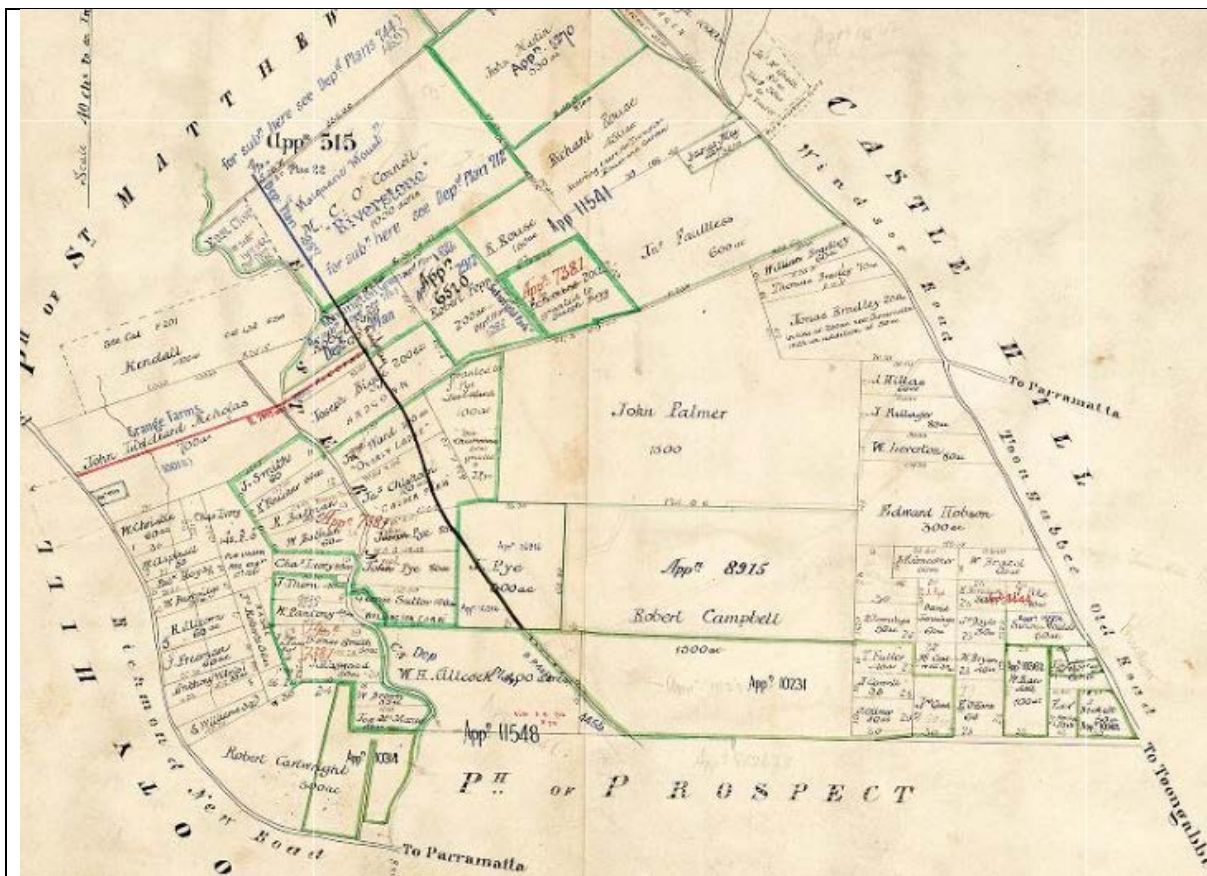


Figure 2. Historical Parish Maps, Parish Maps, Cumberland, Gidley, Parish of Gidley, Date unknown.

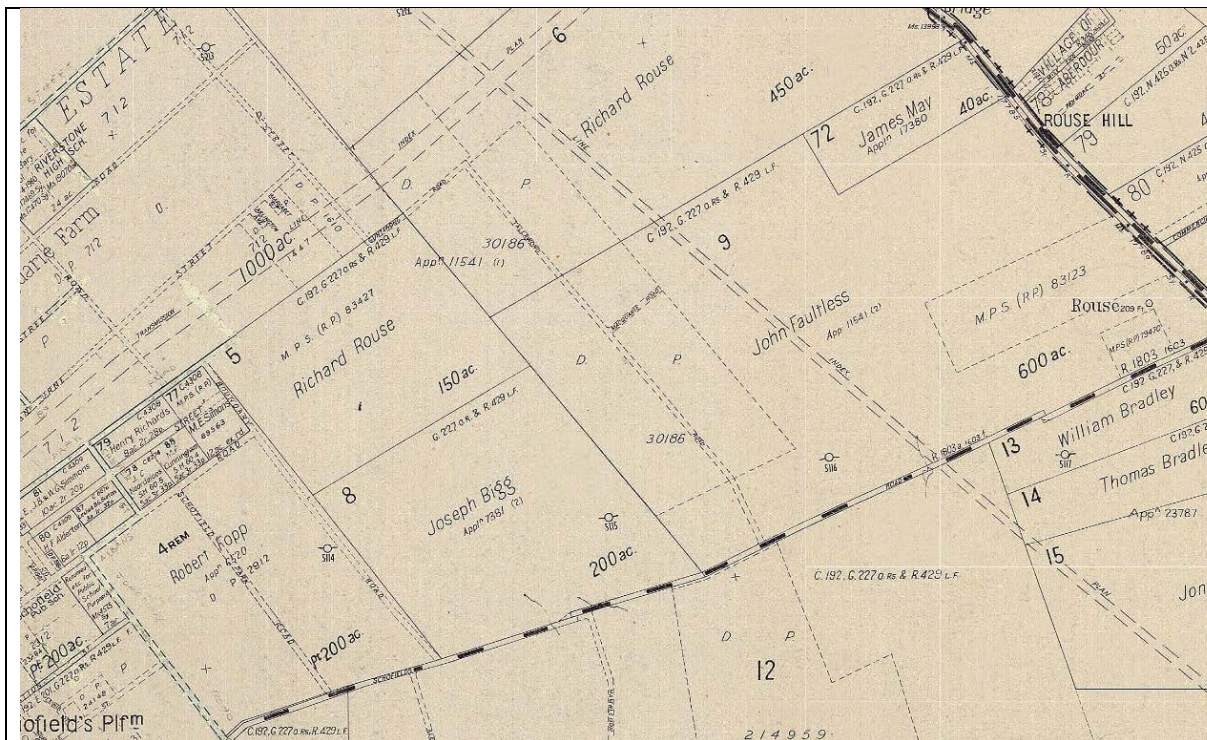


Figure 3. LTO Charting Maps, Parish Map, Cumberland, County of Cumberland Parish Gidley, 12th October 1964.

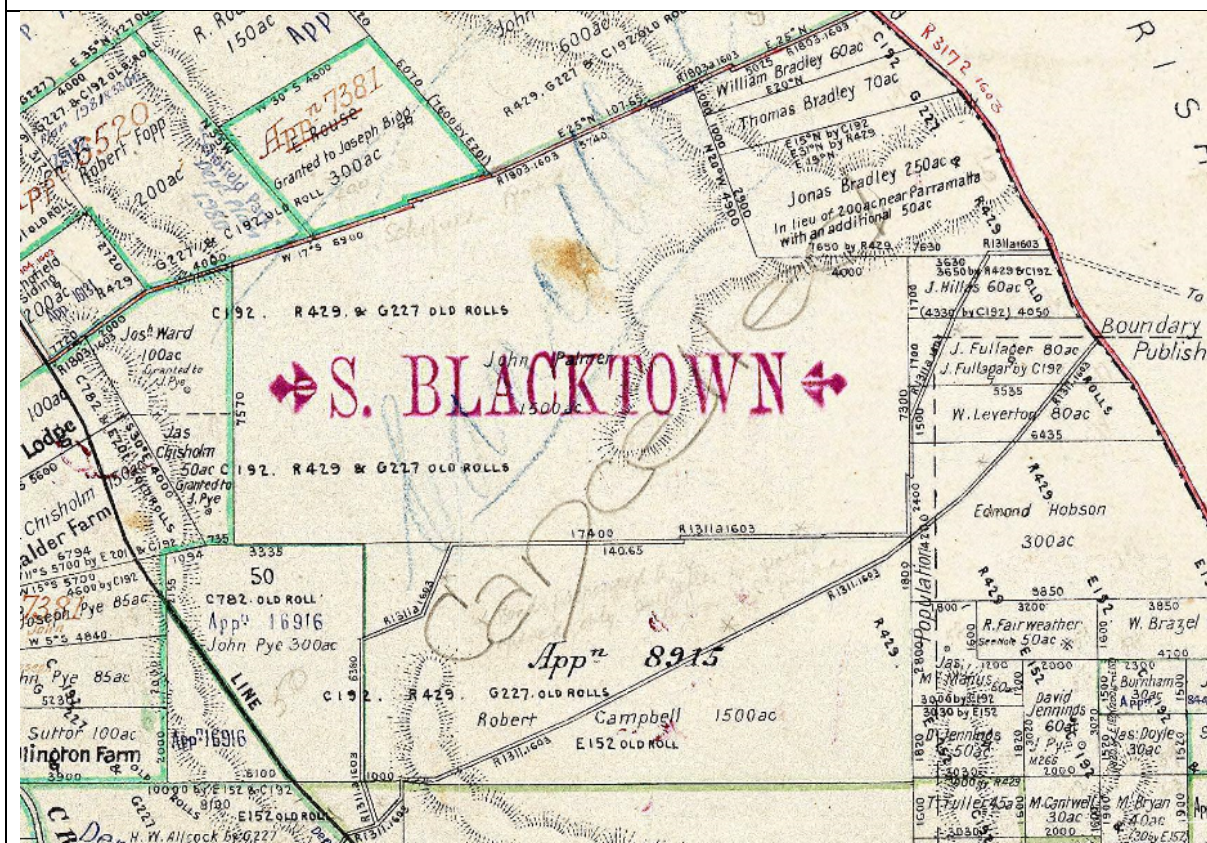


Figure 4. Historical Parish Maps, Parish Maps, Cumberland, Gidley, Parish of Gidley, 24th July 1984.



Figure 5. 16.8.2016 image of the project area. Three additional buildings are located in the south-eastern section of the project area (Image: Google Earth).



Figure 6. 12.10.2016 image of the project area. The three buildings are located in the south-eastern section of the project area have been removed (Image: Google Earth).



Figure 7. Aerial image displaying plough/crop lines across the entire project area (Six Maps).

3.2 REVIEW OF ABORIGINAL ARCHAEOLOGICAL CONTEXT

3.2.1 Ethnographic Setting

Cultural areas are difficult to define and “must encompass an area in which the inhabitants have cultural ties, that is, closely related ways of life as reflected in shared meanings, social practices and interactions” (Egloff *et al.* 2005:8). Depending on the culture defining criteria chosen - i.e. which cultural traits and the temporal context (historical or contemporary) - the definition of the spatial boundary may vary. In Australia, Aboriginal “marriage networks, ceremonial interaction and language have been central to the constitution of regional cultural groupings” with the distribution of language speakers being the main determinate of groupings larger than a foraging band (Egloff *et al.* 2005:8 & 16).

The project area is within the Darug language group boundaries; however, the borders were not static, and were most likely fluid, expanding and contracting over time to the movements of smaller family or clan groups. Boundaries ebbed and flowed through contact with neighbours, the seasons and periods of drought and abundance (Howitt 1996, Tindale 1974, Horton 1994).

It was the small family group that was at the core of Aboriginal society, the basis for their hunting and gathering life. The immediate family camped, sourced food, made shelter and performed daily rituals together. The archaeological manifestations of these activities are likely to be small campsites, characterised by small artefact scatters across the landscape. These small family units were part of a larger band which comprised a number of families. They moved within an area defined by their particular religious sites (MacDonald 1983). Such groups might come together on special occasions such as pre-ordained times

for ceremonies, rituals or simply if their paths happened to cross. They may also have joined together at particular times of the year and at certain places where resources were known to be abundant. The archaeological legacy of these gatherings would be larger sites than small family camps.

References and accounts documenting the Aboriginals of the Sydney region have occurred since the arrival of the First Fleet. Some of the early settlers, pastoralists, surveyors, explorers, administrators and others observed traditional Aboriginal activities, including ceremonies, burial practices and general way of living, and recorded these in letters, journals and books. These early records of Aboriginal lifestyle and society within the region assist in understanding parts of the traditional Aboriginal way of life, albeit through the eyes of largely ignorant and uninformed observers.

It wasn't long after European arrival in the Sydney area that the Aboriginal population began to decline due to diseases such as smallpox and influenza as well as dispossession from traditional lands and acts of violence against Aboriginal people. Any resistance by Aboriginal groups was often met with retaliatory acts of violence by early European settlers. Those who survived the outbreak of disease and acts of violence were forced to live either in marginal area or to integrate with European settlements. During this time, there was great social upheaval and partial disintegration of the traditional way of life with access to traditional resource gathering and hunting areas, religious life, marriage links and access to sacred ceremonial sites disrupted or destroyed. A severe influenza outbreak was recorded in the Liverpool districts in 1820 which also killed many people.

Like everywhere in Australia, the Aboriginal people of the Sydney region were adept at identifying and utilising resources either on a seasonal basis or all year round. The difference between coastal and inland resources were often noted with Tench (as cited in Kohen 1986: 39) describing the inland Aborigines in the Sydney region as being more reliant on small animals and roots rather than fish. Terrestrial animals such as the possum was noted by many early observers as a prime food source and the skins were made into fine cloaks that evidently were very warm (Evans 1815, Oxley 1820, Mitchell 1839). Kangaroos were also eaten, and their skins made into cloaks as well. A range of reptiles including turtles, snakes and lizards and other mammals were food sources in the Cumberland Plains (see Kohen 1986:54).

Fish and mussels would have been prevalent from the rivers and creeks and insects were also a common food type, in particular grubs and ants and ant eggs (Pearson 1981, Fraser 1892). Birds including emus were common as a food source, often being caught in nets made from fibres of various plants such as flax, rushes and kurrajong trees. Bird hunts were also often undertaken as group activities, with emus, ducks and other birds targeted through groups of people flushing them out and driving them into pre-arranged nets (Ramson 1983).

A number of early accounts noted that plant foods were equally as important in the diet of the Aborigines in the Sydney region with seeds of the Australian cycad (*Macrozamia communis*) harvested and processes to remove the toxins. Collins (as cited in Kohen 1986: 39) also noted that the diet of the Aborigines in the Sydney region mostly consisted of roots, tubers, berries and the flowers from Banksia plants and that the inland groups were also made a paste from the roots of ferns and added ants and ant eggs. Many plants were also used to make string, rope and weapons such as spears, spear throwers, clubs, and shields, boomerangs, digging sticks, bark vessels and canoes. Other materials such as stone axes, shell and stone scrapers and bone needles were also observed.

In an archaeological context, few of these items would survive, particularly in an open site context. Anything made from bark and timber and animal skins would decay quickly in an open environment. However, other items, in particular those made of stone would survive where they were made, placed or

dropped. Shell material may also survive in an archaeological context. Sources of raw materials, such as the extraction of wood or bark would leave scars on the trees that are archaeologically visible, although few trees of sufficient age survive in the modern context. Outcropping stone sources also provide clues to their utilisation through flaking, although pebble beds may also provide sources of stone which leave no archaeological trace.

3.2.2 AHIMS Search

The Aboriginal Heritage Information Management System (AHIMS) is maintained by the NSW Office of Environment and Heritage (OEH) and provides a database of previously recorded Aboriginal heritage sites. A search provides basic information about any sites previously identified within a search area. However, a register search is not conclusive evidence of the presence or absence of Aboriginal heritage sites, as it requires that an area has been inspected and details of any sites located have been provided to OEH to add to the register. As a starting point, the search will indicate whether any sites are known within or adjacent to the investigation area and provides some indication of the type of artefacts and the respective landforms that may occur within a project area.

NGH conduct searches of the AHIMS utilising different buffer areas around the project area to understand if any sites are located within the broader regional context of the project area as well as within the immediate vicinity of the proposed works. A search of the AHIMS database was conducted on 21.2.2019 by NGH centred around the project area with coordinates of Lat, Long From: -33.6926, 150.8838 - Lat, Long To: -33.6745, 150.9019 plus a buffer of 200m resulting in a search area of approximately 2.5km x 3.1km. The AHIMS Client Service Number was: 400815. Refer to Figures 8 + 9, below, for the AHIMS search area.

There were 35 Aboriginal sites and no declared Aboriginal Places recorded in the search area.

Table 4 shows a breakdown of the site types.

Table 4. Breakdown of previously recorded Aboriginal sites in the region.

Site Type	Number
Artefact	30
Potential Archaeological Deposit (PAD)	3
Artefact; Potential Archaeological Deposit (PAD)	1
Artefact; Potential Archaeological Deposit (PAD); Modified Tree (Carved or Scarred)	1
TOTAL	35

A second search of the AHIMS database was made within 1km of the project area. This search resulted in 19 registered sites with the closest site (identified as an artefact) located 145 metres to the south of the project area (AHIMS ID #45-5-5030). No sites are currently registered within the Sikh Grammar School project area.

Table 5, below, shows the sites located within 1km of the project area.

Table 5. AHIMS sites located within 1km of the project area.

No.	AHIMS ID	Context	Site Type
1	45-5-3924	Valid	Artefact : 3
2	45-5-3925	Valid	Artefact : 1
3	45-5-4080	Valid	Artefact : 1
4	45-5-4081	Valid	Potential Archaeological Deposit (PAD)
5	45-5-4187	Destroyed	Artefact : 1
6	45-5-4311	Partially Destroyed	Artefact : 1, Potential Archaeological Deposit (PAD) : 1, Modified Tree (Carved or Scarred) : 1
7	45-5-4466	Partially Destroyed	Artefact
8	45-5-4467	Valid	Artefact
9	45-5-4561	Valid	Artefact
10	45-5-4646	Destroyed	Artefact
11	45-5-4835	Valid	Artefact, Potential Archaeological Deposit (PAD)
12	45-5-4907	Valid	Artefact
13	45-5-4899	Valid	Artefact
14	45-5-4887	Valid	Artefact
15	45-5-5110	Valid	Artefact
16	45-5-4955	Valid	Artefact : 1
17	45-5-4968	Valid	Artefact
18	45-5-4969	Valid	Artefact
19	45-5-5030	Valid	Artefact

The results of the AHIMS search demonstrate that the dominant recorded site type in proximity to the proposal area are isolated finds and scatters.

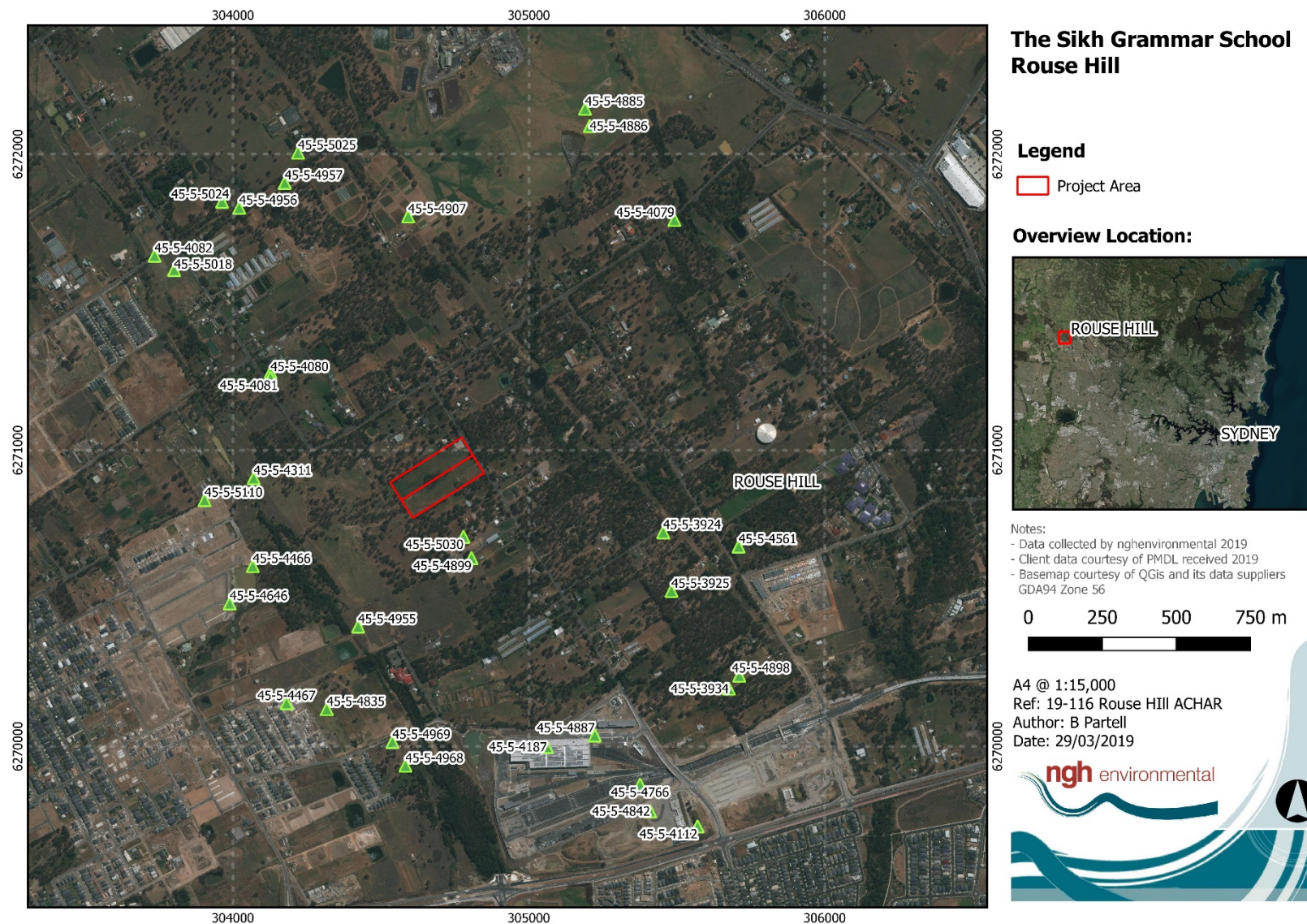


Figure 8. Location of AHIMS sites within 1km of the project area.

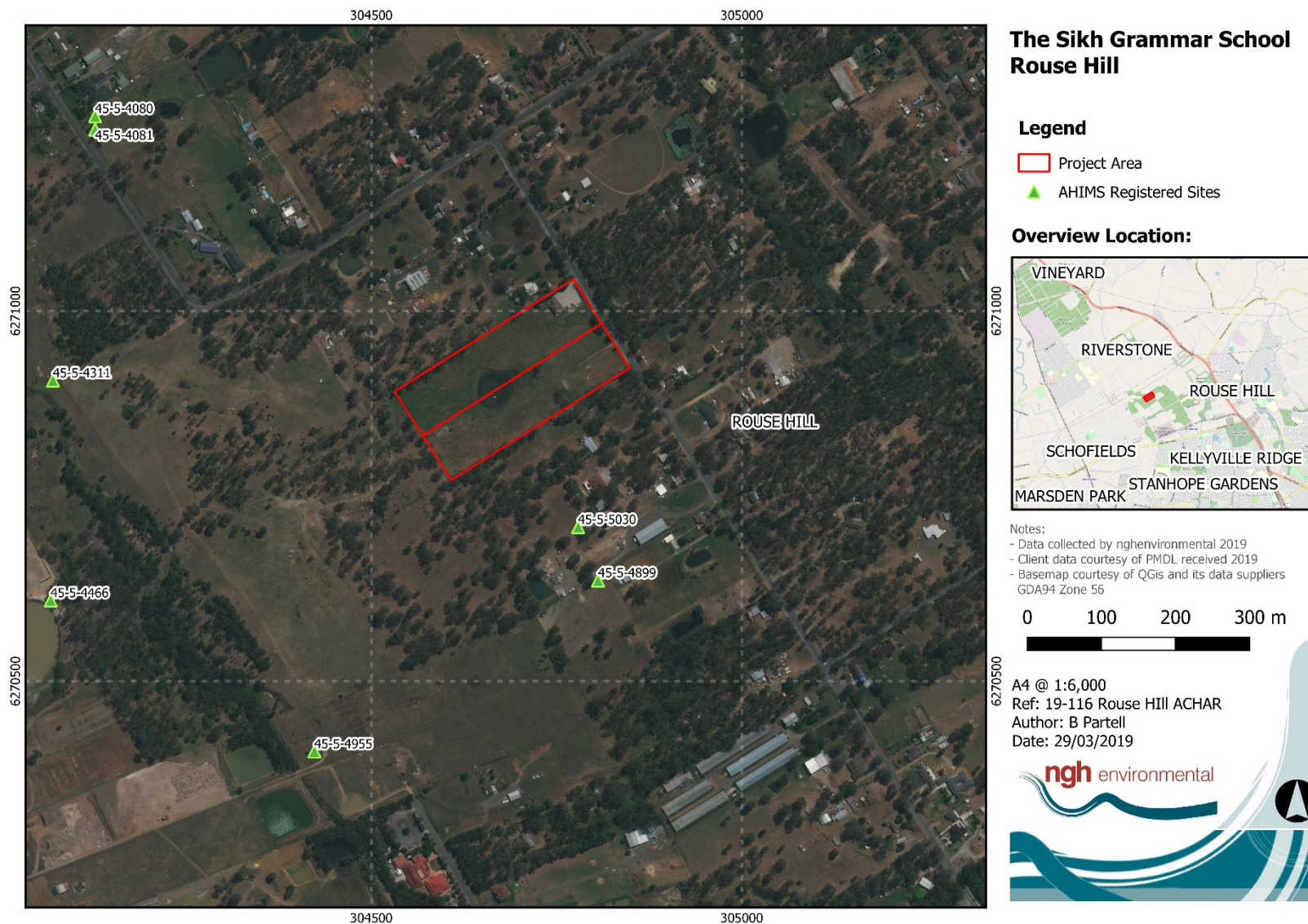


Figure 9. Location of AHIMS sites within 500m of the project area (including AHIMS site ID numbers).

3.2.3 Previous archaeological studies

More than 4,500 sites have been recorded and registered with the OEH Aboriginal Heritage Information Management System (AHIMS) for Sydney, reflecting both the wealth of archaeology in the region and the number of archaeological investigations undertaken.

The dominant site types in the Sydney region (in the 15 - 20 % frequency range) are rock shelters with midden deposit, rock shelters with art, rock art engravings and open artefact scatters (Attenbrow 2002). The distribution, density and size of sites are largely dependent on environmental context.

A study of the regional archaeology of the Cumberland Plain by Kohen (1986) made a number of findings about site location patterns in the Sydney area. The study demonstrated that proximity to water was an important factor in site patterning. Kohen found that 65 % of open artefact scatter sites were located within 100 metres of permanent fresh water (Kohen 1986). Only 8 % of sites were found more than 500 metres away from permanent fresh water. In short, Kohen argued that open artefact scatters are larger, more complex and more densely clustered along permanent creek and river lines. Kohen's study also found that silcrete (51 %) and chert (34 %) are the most common raw materials used to manufacture stone artefacts. Other raw materials include quartz, basalt and quartzite.

Although the patterns described above have been generally supported by subsequent investigations, Kohen's study was limited by a reliance on surface evidence. Extensive excavation across the Cumberland Plain has since shown that areas with no surface evidence often contain sub-surface archaeological deposits. This is a critical consideration in aggrading soil landscapes, such as those commonly found across the Cumberland Plain.

In a 1997 study of the Cumberland Plain, McDonald (1997) found that:

- 17 out of 61 excavated sites had no surface artefacts prior to excavation;
- The ratio of recorded surface to excavated material was 1:25; and
- None of the excavated sites could be properly characterised on the basis of surface evidence. In short, surface evidence (or the absence of surface evidence) does not necessarily indicate the potential, nature or density of sub-surface material.

The results of McDonald's study clearly highlight the limitations of surface survey in identifying archaeological deposits in this landscape. The study also shows the importance of test excavation in establishing the nature and density of archaeological material on the Cumberland Plain.

The following are summaries of those archaeological survey reports that have been completed in the Rouse Hill and surrounding areas and in relative proximity (within 10km) to the current assessment area. As not all archaeological reports are available on OEH, summaries from other reports have been used where necessary.

Jo McDonald CHM Pty Ltd (2002) *Aboriginal Archaeological Assessment: Landcom Project 12015, Kellyville, NSW.*

Jo McDonald (2002) undertook an archaeological survey for the Rouse Hill Infrastructure Project, which proposed the installation of a number of water, sewerage and drainage related facilities for the Rouse Hill Development Area along the Second Ponds Creek Corridor. The study involved an assessment and field survey of the entire Second Ponds Creek Corridor, from Parklea north to the confluence of Second Ponds Creek and Caddies Creek.

A large portion of the assessment area was determined to have been significantly disturbed during past land practices including building, market farming, drains, dams and other excavations. Some areas of remnant vegetation remained within the precinct, which was generally where archaeological sites were located.

In addition to re-visiting and updating the details of previously recorded sites, an additional 3 sites and 2 PADs were identified.

The sites were generally located on the margins of Second Ponds Creek, extending across gently sloping land up to 100m from the creek line.

Kelleher Nightingale Consulting Pty Ltd (2010) Area Precinct North West Growth Centre Aboriginal Heritage Assessment. Report to the NSW Department of Planning.

Kelleher Nightingale (2010) undertook an Aboriginal Heritage Assessment precinct study of the north-west growth centre. The study area contained a large portion of the suburb of Rouse Hill, with the western boundary of the growth centre study area approximately 250m to the east of the Sikh Grammar School project location.

The precinct comprised a total of 101 Lots and numerous landowners. Of the lots, 74 were accessible for the site inspection.

The North West Growth Centre survey identified 19 Aboriginal archaeological sites, and 8 areas of PAD. The majority of the sites were located on slopes or flats in the vicinity of Second Ponds Creek and were also located on ridge lines and slopes adjacent to ridge crests. Sites occurred primarily in areas that had been subject to minimal historical ground disturbance.

Artefact Heritage (2014) Memorial Avenue, Kellyville: PACHI Stage 2 Aboriginal Archaeological Report. Report to Roads and Maritime Services.

Artefact Heritage (2014) were engaged by Roads and Maritime Services to undertake a Stage 2 PACHI for the proposed 2km road upgrade works along Memorial Avenue in Kellyville, located approximately 5.6km south-east of the Sikh Grammar School proposal area on the Blacktown soil landscape.

The project area contained a number of landforms including crests, upper slopes, slope, flats, open depressions, creek lines. Overall surface visibility and exposure was low, with the average below 10%. No Aboriginal sites or PADS were identified during the survey.

Artefact Heritage found that the majority of the study area had been subject to high levels of ground disturbance due to road and residential construction, and that a number of the previously recorded sites within the project footprint has already been destroyed under previous AHIP applications.

Comber Consultants (2015) Aboriginal Cultural Heritage Assessment: North West Rail Link Project, Kellyville Station Priority Precinct Rezoning Proposal. Report to Aver on behalf of Department of Planning & Environment.

Comber Consultants (2015) undertook an Aboriginal Cultural Heritage Assessment for Department of Planning & Environment for the proposed rezoning of Kellyville Station Precinct. The Kellyville Station precinct covers an area of approximately 437 ha and includes the area within an 800m radius of the new Kellyville Station. The project area is located on Blacktown soils approximately 5.0km south-west of the Sikh Grammar School project area.

Eighteen sites had been previously recorded within the Kellyville Station Precinct consisting of 7 open artefact scatters, 1 open artefact scatter and axe grinding groove, 3 isolated finds, 4 Potential

Archaeological Deposits (PADs), 1 scared tree, 1 grinding groove, and 1 artefact scatter and grinding groove. Sites were concentrated in the vicinity of second and third order creek lines, whilst site density is higher in the vicinity of the Caddies, Strangers and Elizabeth Macarthur Creeks.

Comber Consultants (2016) 132 Tallawong Rd, Rouse Hill: Aboriginal Due Diligence Assessment. Report to JS Architects.

Comber Consultants (2016) undertook a due diligence assessment of the proposed redevelopment of 132 Tallawong Road into a multi-dwelling residential. Three new local streets within the property were also proposed. The site is located approximately 145m to the south-east of the Sikh Grammar School proposal area.

The study area was located 200m from an unnamed tributary of the Killarney Chain of Ponds, a first order creek was located on the property, and was located between two second order streams and approximately 3km from a third order stream.

Poor ground visibility resulted in no Aboriginal objects were located within the project area during the due diligence survey of the site. However, Comber identified through background environmental and archaeological data that the site contained an area of Aboriginal archaeological potential and recommended a testing ACHAR be undertaken prior to ground disturbance works.

Dominic Steele Consulting Archaeology (2017) Due Diligence Aboriginal Archaeological Assessment of 95 Cudgegong Road, Rouse Hill NSW Lot 79 DP208203, Proposed Residential Subdivision. Report to Bing Wei Pty Ltd.

Dominic Steele Consulting Archaeology completed a Due Diligence assessment (2017) in consultation with Deerubbin Local Aboriginal Land Council at 95 Cudgegong Road, Rouse Hill, NSW for the proposed subdivision of Lot 79 DP208203. 95 Cudgegong Road is located approximately 800 metres south-east of the Sikh Grammar School within the same Blacktown Soil region.

The local landscape of the area contained gently undulating flats and low rolling hills with broad rounded crests and ridges with gently inclined slopes. The site itself was identified as undulating and gently sloping land that ranged in relative elevation from c.58m AHD at the eastern site boundary to c.68m AHD at the centre of the property. A saddle was present through the centre of the property with adjacent westerly and easterly aspects with grades of generally <8%. The lot was situated between the catchments of First Ponds and Second Ponds Creek. The site contained a residential dwelling, numerous sheds, and associated cleared ground used for work and equipment storage areas were present on the eastern half of the lot. A small dam was also located in the south east of the block. Native bushland with mature trees was located across the western half of the site.

One registered Aboriginal archaeological site RH/A20P/10 (AHIMS #45-5-3925) had previously been recorded on the western half of the property and was described by Kelleher Nightingale (2010: 77) to be a pink silcrete isolated surface stone artefact and associated areas of potential archaeological deposit (PAD) located on the ridge crest. During the initial recording of the site, the PAD was assessed to have moderate archaeological and cultural heritage significance. Archaeological test excavation or targeted salvage excavation of the site and PAD was recommended to be undertaken to mitigate against the loss of information if the land was to be developed.

Dominic Steele Consultancy agreed with the previous conclusions of the Kelleher Nightingale (2010) study and recommended that the western half of the property was an area of PAD based on its landform, surviving topsoil, and location of the previously recorded Aboriginal site and recommended a program of test excavation across the site, with a focus on the western sensitive area.

Eco Logical Australia (2018) Residential Development of Lots 1 & 8 DP30211, Riverstone NSW. Report for Elite International Development Pty Ltd.

Eco Logical Australia undertook an Aboriginal Cultural Heritage Assessment Report for the proposed residential development of Lots 1 & 8 DP30211 in Riverstone, NSW, approximately 1.2km to the north of the Sikh Grammar School project location. The proposed development included the establishment of two precincts containing up to 270 dwellings across the lots.

The topography of the study area was characterised by gentle slopes and the floodplains of First Ponds Creek. The development located was located just to the east of First Ponds Creek (variable 2nd or 3rd order stream at this location).

An archaeological survey was undertaken to identify any previously unregistered sites in the area and any sensitive landforms that may contain archaeological deposits.

No sites or areas of potential were located within Lot 8 DP30211 due to the considerable ground disturbance that had occurred within the area due to residential development and land use. Within Lot 1 DP30211 a large area in the southern portion of the lot and a smaller area in the eastern portion of the lot were identified as highly disturbed as contained very low archaeological potential.

A test excavation was conducted on the northern section of Lot 1 DP30211 revealing the presence of two previously unidentified Aboriginal sites (AHIMS #45-5-4956 Riverstone Road 1, and AHIMS #45-5-4957 Riverstone Road 2).

Riverstone Road 1 (AHIMS #45-5-4956) was situated on a hill crest approximately 400m east of First Ponds Creek and 100m west of an unnamed drainage line. The site consisted of six artefacts recovered from 15 test pits. The artefacts were all manufactured from silcrete and included one core and broken flake pieces. The site was assessed as having low archaeological potential due to its lack of integrity and its low artefact density.

Riverstone Road 2 (AHIMS #45-5-4957) was a scatter containing two artefacts situated above an unnamed drainage line on an eastern facing slope. 19 test pits were placed across the landform revealing a moderate degree of disturbance across the site. The site was assessed as having low archaeological potential due to its low artefact density and degree of subsurface disturbance.

Deerubbin Local Aboriginal Land Council (2018) Proposed School Development of 161 Tallawong Road, Rouse Hill. Report for PMDL Architecture and Design.

PMDL Architecture and Design contacted Deerubbin Land Council to undertake a site survey of the current project area in 2018 to determine the presence of any sites within the area. A representative from Deerubbin LALC attended site to evaluate the likely impact any proposed development would have on the cultural heritage of the land.

It was assessed that historical land use had reduced the sensitivity of the landscape and no cultural materials were found during the assessment.

3.2.4 Summary of Aboriginal land use

The results of previous archaeological surveys surrounding the Rouse Hill area show that sites occurred primarily in areas that had been subject to minimal historical disturbance. Previous archaeological studies in the surrounding area highlight that the land use history of the proposal area and surrounds included clearing, ploughing, farming, residential and public development.

Previous archaeological studies and predictive modelling of the area surrounding Rouse Hill outline that sites are present across a range of landforms, with most sites located on ridge lines, hill crests or within proximity to water.

3.2.5 Archaeological models

At the time of European settlement, the Aboriginal people of the Sydney region were organised into named territorial groups. Groups local to the study area are likely to have belonged to the Darug (Dharug), language group (Attenbrow 2010: 221,222).

Aboriginal occupation of the Sydney region is likely to have spanned at least 20,000 years with dates of more than 40,000 years claimed for artefacts found in gravels of the Cranebrook Terrace on the Nepean River (McDonald 2005; Nanson et al. 1987; Stockton 1993; Stockton & Holland 1974). The majority of sites in the Sydney region date to within the last 3,000 to 5,000 years, with many researchers proposing that occupation intensity increased from this period (Kohen 1986; McDonald 1994; McDonald & Rich 1993).

Due to significant urban residential development over the last 30 years, the Cumberland Plain has become the most intensively investigated archaeological landscape in Australia. The studies carried out over these decades of development in the west provide a broad picture of the archaeological context of the region. Over 400 Aboriginal sites have been recorded for the area.

A number of predictive models relating to Aboriginal occupation patterns and site locations have been formulated through archaeological investigations in the Cumberland Plain (Dallas 1989a; Haglund 1980; Kohen 1986; Smith 1989). More recent works have contributed to refining these models (AMBS 2000a, 2002; Jo McDonald Cultural Heritage Management [JMCHM] 1997, 1999, 2001a; McDonald 1999).

Archaeological research of the wider Cumberland Plain and Western Sydney region has adopted a number of theoretical stances which are important to outline—the majority of these are mainly based on the quantity of stone artefact concentrations present, due to their ability to survive in the record more commonly than other archaeological features or objects. Many research questions surrounding the analysis of stone artefacts are concerned with the interpretation of stone artefacts as representations of occupational histories in the landscape. Researchers have asked questions such as:

- How did Aboriginal people use the landscape?
- How did Aboriginal people use the resources and landscape available to them?
- What patterns of occupation can we see?
- Did Aboriginal people stay in some places longer than others?
- What is the age of the deposit and what time duration does the deposit represent?

Archaeological interpretations of occupation intensity are based on two major paradigms: a modification of the Eastern Regional Sequence (ERS) and the Cumberland Plain Predictive Model (CPPM which is also known as the stream order and distance from lithics sources predictive model). The ERS predicts the structure of the archaeological record, the appearance of certain artefact technologies, difference in raw material use, and artefact densities. However, because of the nature of the archaeological record, and in particular for stone artefacts, the local context of sites and objects is not always taken into account.

Influenced by the ERS, and other archaeologists, Aboriginal history is seen to be composed of a small number of dramatic changes separated by periods of prolonged stasis.

Haglund (1980) developed a predictive model of site location based on an early survey in the Blacktown area. Haglund predicted that sites would most likely be located near water courses such as creeks, and on high ground near water.

Stream order theory outlines that a first order stream is the smallest type of stream and is a small tributary that flows into and feeds larger streams. The joining of two first order streams will create a second order stream and the joining of two second order streams will form a third order stream, the joining of two third order streams will create a fourth order stream etc. The joining of two streams of different orders will result in the higher order remaining the same i.e. the joining of a second order stream with a third order will remain as a third order.

McDonald and Mitchell (1994) outline that stream order can be used to predict areas of archaeological potential on the Cumberland Plain. The model hypothesis' that a permanent water source will result in higher occupation of the area. Occupation along water sources is therefore more likely to occur along higher order streams, with less occupation along more temporary first order streams. Kohen (1986) also determined that the availability of water was the most important factor influencing the distribution of sites across the landscape.

Other important criteria that also played a role in the site location within the Cumberland Plain are the proximity to a diversity of economic resources such as food and lithic materials, and to an extent elevation. Smith (1989) also supports the predictive model that sites will most commonly be found near water sources.

Smith (1989) suggested that:

- Sites will occur in all areas of the Cumberland Plain, except where destroyed by European land use, erosion processes and flooding;
- Sites will be located in all topographic units;
- Site densities may be expected to be 10% higher in the northern section of the Plain because of the greater concentrations of stone resources in that area;
- Sites will tend to be more frequent around permanent water sources (apart from areas overlying the Londonderry Clay or Ricaby Creek Formation, and the Werrington Downs area); and
- Sites will be expected in relatively high frequencies on or near stone resources.

White and McDonald (2010) highlight that artefact distribution varies significantly with stream order. Testing on the Cumberland Plain around water sources suggested that artefacts were least likely to occur in 1st order water supplies, more likely in on 2nd order supplies, more likely again on 3rd order supplies, and most likely to occur on 4th order supplies. The data on artefact distribution and artefact density supports the theory that water supply was an important factor influencing Aboriginal land-use and habitation patterns on the Cumberland Plain.

J. McDonald has undertaken over 20 years of consulting archaeology in the Cumberland Plain, and like Kohen has developed predictive models for the distribution of Aboriginal objects. In a recent publication, White & McDonald (2010:29) summarised the Stream Order model as follows:

Topographic and stream order variables correlate with artefact density and distribution. High artefact density concentrations may have resulted from large number of artefact discard activities and/or from intensive stone flaking. Highest artefact densities occur on terraces and lower slopes associated with 4th and 2nd order streams, especially 50 – 100 m from 4th order streams. Upper slopes have sparse discontinuous artefact distributions, but artefacts are still found in these landscape settings.

As outlined by Owen and Cowie (2017), all Cumberland Plain archaeology makes extensive use of predictive modelling as an investigative tool due to the absence of surface-based archaeology. The results of previous archaeological surveys indicate that the most common site types found on the Cumberland Plain are open artefact scatters/open camp sites, followed by scarred trees and isolated finds. Shelter sites and grinding

grooves are also found, although mainly around the periphery of the Plain in sandstone geology. Key trends are summarized below:

- The results of previous archaeological surveys surrounding the Rouse Hill area show that sites occurred primarily in areas that had been subject to minimal historical disturbance.
- site frequency and density are directly related to the location of sites within the landscape;
- complex sites are usually located close to permanent water sources, with major confluences being a key requirement for occupation sites, and would have been used intensively by larger groups, or used repeatedly by smaller groups over a longer period of time;
- sites with large numbers of artefacts can occur on ridge tops and hill crests;
- sites situated in alluvial soils retain the potential for stratified deposits;
- Potential Archaeological Deposits (PADs) are most likely to be located along valley floors and low slopes in well-drained areas;
- surface artefact distribution does not accurately reflect the composition or density of subsurface archaeological deposits. Some areas with few or no surface manifestations have often been shown to contain subsurface archaeological deposits;
- artefact scatters are most commonly linked to the close proximity of permanent water sources in areas such as creek and riverbanks and alluvial flats. The majority of these sites are located within 100m of permanent fresh water;
- artefact assemblages generally comprise a small proportion of formal tool types with the majority of assemblages dominated by unretouched flakes and debitage;
- high concentrations of artefacts are more likely to be located within resource rich areas;
- silcrete is the dominant raw material used for tool manufacture, followed by chert (also known as tuff);
- Silcrete sources are located in the north western Cumberland Plain at places such as St Marys, Plumpton Ridge, Marsden Park, Schofields, Riverstone, Deans Park, Llandilo and Ropes Creek. Other raw materials include indurated mudstone from Nepean River gravels, quartz, porphyry and hornfels which may be derived from Rickabys Creek gravels, and basalt;
- stands of remnant old growth vegetation retain the potential for scarred trees to be present, although, large scale land clearance of the plain in general means that such stands of vegetation are rare; and
- evidence of post-contact camp sites may be located in close proximity to early European houses and farms, or official buildings.

3.2.6 Predictive Model

Kellehar Nightingale (2010) highlights that previous archaeological survey and excavations across the Cumberland Plain have provided a large amount of information regarding the way people moved across the land and utilised resources.

The following predictive model is applied to the Rouse Hill site based on previous archaeological research (White & McDonald 2010; Smith 1989; and Owen and Cowie 2017):

- site frequency and density are directly related to the placement of sites in relation to features within the natural landscape;

- complex sites are usually located close to permanent water sources, with major confluences being a key requirement for occupation sites which would have been used intensively by larger groups, or used repeatedly by smaller groups over a longer period of time;
- surface artefact distribution does not always accurately reflect the composition or density of subsurface archaeological deposits. Some areas with few or no surface manifestations have often been shown to contain subsurface archaeological deposits;
- artefact scatters are most commonly linked to the close proximity of permanent water sources in areas such as creek and riverbanks and alluvial flats;
- artefact assemblages generally comprise a small proportion of formal tool types with the majority of assemblages dominated by unretouched flakes and debitage;
- silcrete is the dominant raw material used for tool manufacture, followed by chert (also known as tuff); and
- stands of remnant old growth vegetation retain the potential for scarred trees to be present, although, large scale land clearance of the plain in general means that such stands of vegetation are rare.

3.2.7 Comment on Existing Information

The AHIMS database is a record of those places that have been identified and had site cards submitted to OEH. It is not a comprehensive list of all places in NSW as site identification relies on an area being surveyed and on the submission of site forms to AHIMS. There are likely to be many areas within NSW that have yet to be surveyed and therefore have no sites recorded. However, this does not mean that sites are not present.

The AHIMS search results indicate that there are 35 Aboriginal cultural heritage sites within 1km of the project area, however, due to the lack of previous study within the immediate project area, this result cannot be interpreted as a comprehensive account of all sites that may be located within or in proximity to the project area. It is therefore possible that sites yet to be identified exist within the project area, however despite this possibility, the scale of farming and residential development and infrastructure has altered the natural landscape in some places. This activity has also greatly disturbed the archaeological record and there are unlikely to be many places that retain *in situ* archaeological material due to the scale of past development.

With regard to the limitations of the information available, archaeologists rely on Aboriginal parties to provide information about places with cultural or spiritual significance in situations where non-archaeological sites may be threatened by development. To date, we have not been told of any such places within the project area. There is always the potential for such places to exist but insofar as the current project is concerned, no such places or values have been identified.

4 ARCHAEOLOGICAL INVESTIGATION RESULTS

4.1 SURVEY STRATEGY AND DESCRIPTION

Site survey was undertaken on 13 May 2019 by one NGH Environmental archaeologist and three representatives from the RAP groups were invited to attend the field work. The proposal area was covered by pedestrian survey until all participants were satisfied that the project area had been sufficiently covered. Whilst the usual survey strategy is to divide the project area into survey units according to changes in land form units to ensure that all land forms are sample surveyed, the project area was small enough that the survey team simply traversed it as a whole in transects running east to west.

Due to the small footprint area, transects were placed between 10-20m apart, depending on the ground surface (some areas were deemed to be too wet and sludgy to effectively walk, with the dam in the centre of the project area also avoided). The group completed 2 transects of approximately 70m width to complete the majority of the property survey.

The field survey had an average of 10% ground exposure across the site. Approximately 90% of the project area contained significant grass cover, reducing ground exposure in these areas to >1%. The remaining 10% of the project area contained areas of disturbance with full ground exposure (90-100%).

Overall, the visibility across the project area was significantly reduced due to the presence of the long grass vegetation across the majority of the site. Average visibility across the site was <5%.

4.2 SITE DESCRIPTION

The project area is located on the western side of Tallawong Road and contains two adjacent lots (Lot 12 DP874058 and Lot 43 DP30186). The project area is private property and is fenced on all sides with agricultural wire fencing. Entrance to the site is via two gates from Tallawong Road, Rouse Hill. The project area consists of gently undulating land due to the historic creek line bisecting the site.

The project area is bounded on three sides (all sides but the eastern boundary of Tallawong Road) by mature trees which are outside of the project area footprint. A small number of large, mature *Eucalyptus Crebra* were present on site however no signs of cultural markings or modification were present on any of the trees.

A one-storey brick residential house and area of fill for parking is located in the north-eastern section of the project area (Plates 2 + 3, below). The area surrounding the house contained grass of approximately 10-20cm length with limited ground exposure. Dark brown silty soils were present in this location with no inclusions noted. Visibility in this area was <5%.

Long grass approximately 50-70cm in length covered the majority of the project area (Plates 4 + 5), reducing visibility to <1% across most of the site. Underneath the long grass across the site a number of historic plough lines were present.

An historic (unnamed) tributary from First Ponds Creek (located approximately 430 metres to the west) originally bisected the project area from east to west. This tributary has been historically dammed for agricultural uses which has resulted in the creation of a large dam in the centre of the project area (Plate 4). Whilst the historic tributary is not currently an active creek line, the area currently remains a drainage

channel and contained wet, dark-brown mud and long grass (40-70cm length) during the site visit. It was noted whilst walking through the long grass that plough lines were present in this section of the site, creating wet channels and uneven ground that was difficult to traverse due to zero visibility. Due to the danger of snakes in the long grass and the wet ground that was causing survey participants to significantly sink into the mud, it was determined whilst on site that a small portion of the historic creek line between the dam and Tallawong Road would not be surveyed as archaeological potential in this area was deemed to be low to nil.

To the west of the dam a number of concrete slabs and metal elements for an agricultural structure were placed in a rectangular form over the top of a (machine-made) cut in the landscape (Plate 8). This cut was filled with long, unmanicured grass making visibility into the pit difficult. A single width brick wall approximately 70cm tall was present along the length of the northern edge of the agricultural structure.

A sub-surface sewerage line runs east to west through the project area, with a man cover for the line present in the south-western area of the site (Plate 6).

Areas of ground disturbance were present across the site (Plate 7), with large areas along the southern edge of the project area recently disturbed and contained zero grass cover (Plates 10-12). Soils within this southern area were light brown silty sand with inclusions ranging up to 50mm. Some fill and rubbish was also present within this area.

Overall, the visibility on site was low, with significant vegetation growth. No new Aboriginal sites or places were recorded during the survey. Discussions with the RAPs on site indicated that they had determined that due to the past land uses of the site, there was nil-low potential of surface or subsurface sites to be remaining.

4.2.1 Site Photographs



Plate 1. Tallawong Road and residential development



Plate 2. Residential house and area of fill located in the north-east corner of the site.



Plate 3. Ground exposure of area of fill in north-east corner of the site.



Plate 4. Facing west from the residential house towards the dam. Long grass cover present across the majority of the site which significantly reduced visibility.



Plate 5. Long grass cover (50-70cm) across the majority of the project area.



Plate 6. Sewerage cover located on the western side of the project area.



Plate 7. Bricks located within the ground.



Plate 8. Brick wall and cement and metal agricultural area located to the west of the dam near the western boundary of the site.



Plate 9. View north towards the dam from the southern side of the project area.



Plate 10. View south towards an area of ground disturbance from the southern side of the project area.



Plate 11. Ground exposure in area of disturbance on southern boundary of the project area.



Plate 12. Ground exposure in area of disturbance in the project area. Facing towards the south-east corner of the project area and Tallawong Road.

4.3 SURVEY COVERAGE

The effective survey coverage is calculated in Table 6 below. Between the four survey participants, approximately 2.5km of transects were walked across the entire proposal area. Allowing for an effective view width of 5 m each person, this equates to a surface area of 12,500m², representing 30.88% of the 4.1 hectares. The survey coverage has been calculated according to the seven landform disturbance categories. The extent and nature of these disturbance categories were recorded during survey across the site and are shown in Figures 10 + 11 below.

The cropped paddock areas present the largest coverage on site with an area of 22395m² and effective coverage of 1.68%. The second largest landform area is represented through the modified dam area, which covers 6525m² of the site area. The effective survey coverage for the modified dam area was 0.65%. The ground disturbance area covered 6507m² with an effective survey coverage of 1%, representing the second highest effective coverage across the project area. The drainage line / creek area covered a total of 2562m² and had an effective coverage of 0.3%, while the garden and house areas totalled a combined 1215m² and had an effective coverage of 0.12%. The remaining two areas, the carpark (858m²) and the agricultural building (2985m²) both had 0% effective survey coverage. While this is extremely low, it was the significant levels of previous disturbance and modifications evident across the area that were responsible for preventing effective survey coverage, and therefore the potential for these areas to retain *in situ* archaeological material was found to be low-nil.

Overall, it is considered that the surface survey of the project area had low effective survey coverage due to the significant amount of vegetation and disturbance across the site. However, this is offset by the area having been subject to significant landscape modification dramatically reducing archaeological potential.

Table 6. Survey Coverage across the Rouse Hill Sikh Grammar School project area.

Landform	Survey area (sq m)	Unit area	Visibility	Exposure	Effective Coverage (sq m)	Effective coverage %
Cropped	22395m ²		0-1%	1-2%	37.623m ² Unit area x visibility x exposure	1.68%
Drainage Line	2562m ²		0-1%	30%	7.686m ²	0.3%
Ground Disturbance	6507m ²		90%	95%	6.507m ²	1%
Carpark	858 m ²		90%	0%	0	0%
Garden and House	1215 m ²		<1%	1-2%	1.5 m ²	0.12%
Agricultural Building	2985 m ²		0%	0%	0	0%
Dam Area	6525 m ²		<1%	1-2%	42.4 m ²	0.65%

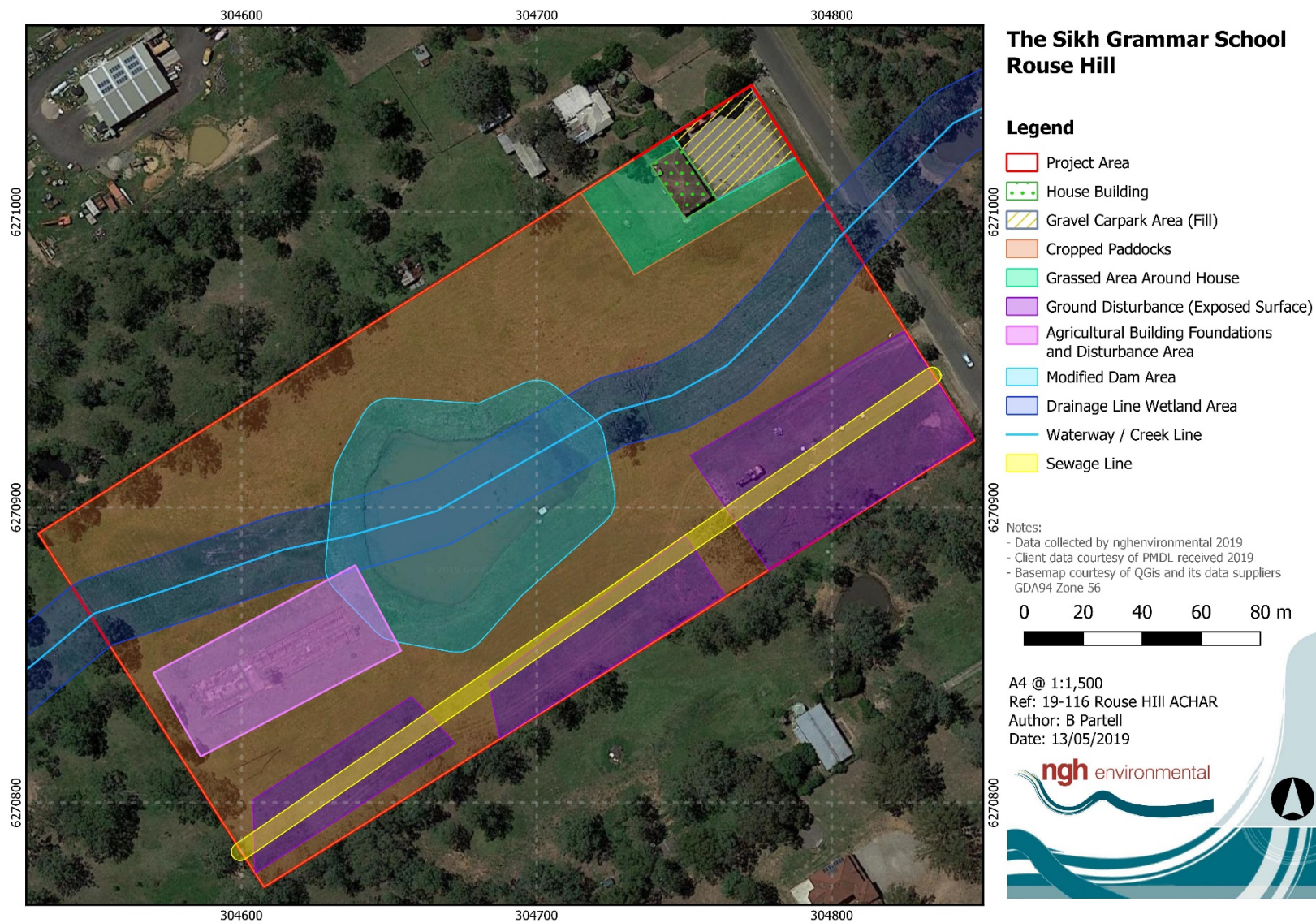


Figure 10. Landform mapping of the Rouse Hill Sikh Grammar School project area.

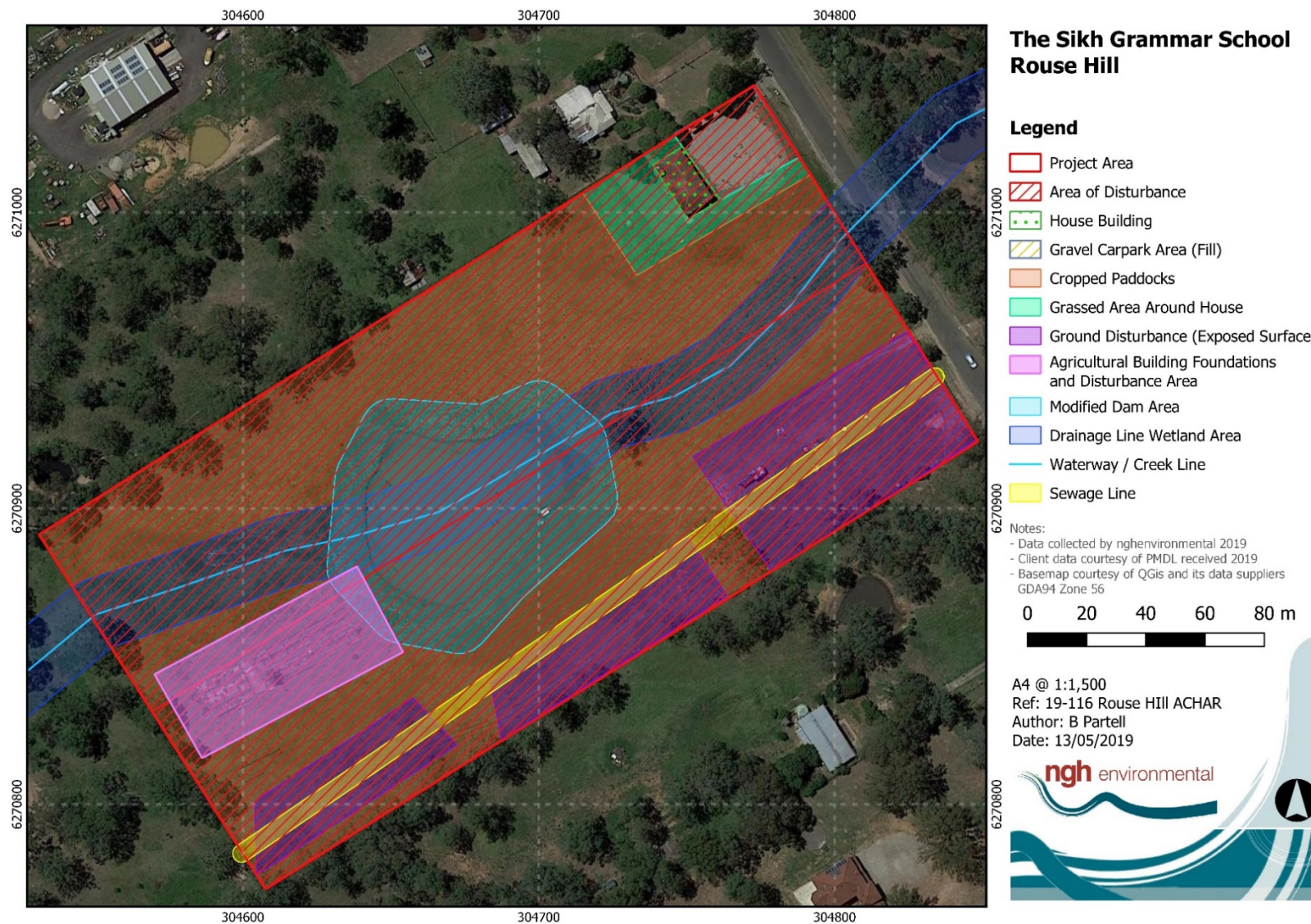


Figure 11. Disturbance mapping of the Rouse Hill Sikh Grammar School project area.

4.4 SURVEY RESULTS

No new Aboriginal heritage sites or areas of potential were located during the site survey. The vegetation across the site significantly reduced the surface visibility of the proposal area.

The previous historical practices at the site, including the construction of the house, the introduction of fill, the construction of the dam, the introduction of the sub-surface sewerage line, and historical farming practices, has characterised the site as being highly modified. The comprehensiveness of this disturbance reduces the likelihood of locating any cultural material across the site to low.

4.5 DISCUSSION

The predictive model for the Sikh Grammar School project area suggests that sites occurred primarily in areas that had been subject to minimal historical disturbance and that the more complex sites generally occurred within proximity of permanent fresh water sources. It is also noted within the model that on the Cumberland Plain surface artefact distribution does not accurately reflect the composition or density of subsurface archaeological deposits. Some areas with few or no surface manifestations have often been shown to contain subsurface archaeological deposits.

As the natural landscape has been intensely modified through historical activities (residential development, agricultural practices including damming and building construction, sub-surface sewerage line, and general ground disturbance) NGH has undertaken both 'disturbance' mapping and 'landscape' mapping. Figures 10 + 11, above, display the areas varying landforms as well as areas of disturbance and modification across the project area site. The landform mapping has been split into nine clear categories:

- House/building

The presence of the house in the north-eastern section of the lot did not allow for surface inspection in this area during the survey.

Subsurface potential in this area is very low-nil due to the construction of housing foundations and associated residential services in this area.

- Gravel carpark area (fill)

The gravel carpark located between the current residential house and Tallawong Road contained a substantial amount of gravel fill. Due to this introduction of fill material, no surface finds were located during the survey.

This area contains low subsurface archaeological potential due to its close association with the house and its associated services.

- Cropped Paddocks

The majority of the project area contained a previously cropped paddock. Plough lines were still present across the majority of the site; however they were not visible due to the long grass cover (50-70cm) across the site. No surface finds were found during the survey, but visibility was very poor due to the long grass cover.

In-situ subsurface archaeological potential within the cropped area is low-nil due to historic ploughing, agricultural practices, and installation of sewerage piping. No areas of PAD were identified within the cropped zones.

- Grassed area surrounding house

The grassed area surrounding the remaining house in the north-eastern section of the project area contained low visibility (<5%) with grass length approximately 10-20cm. No surface finds were located within this area.

This area contains low subsurface archaeological potential due to its close association with the house and its associated services.

- Ground disturbance (exposed surface)

Recent ground disturbance has occurred along the southern boundary of the project area. Historical images of the site (Figures 5 + 6) show the area as grassed with three residential buildings located on the eastern boundary of the site, near Tallawong Road. The aerial images show that the residential structures were removed in late 2016, but that the area continued to be vegetated with grass cover. During the site visit, these areas were devoid of all vegetation cover due to recent ground disturbance.

Visibility in these areas was very good (90-100%), but some rubbish material and small amounts of fill were present. No surface artefacts were uncovered during the site visit and sub-surface archaeological potential was assessed as low-nil.

- Agricultural building foundations and disturbance area

The agricultural structure foundations and disturbance area is located on the western side of the project area between the dam and the western project boundary. This feature contains a (machine) cut into the ground to create a divert into the landscape to be used for agricultural purposes. Whilst visibility in this area was very low due to the presence of long grass vegetation, the potential for in-situ surface and subsurface finds in this area is very low-nil.

- Modified dam area

The current on-site dam is located in the centre of the site and is significantly built up on the western side of the dam to maintain the water. This has significantly altered the landscape surrounding the dam, reducing the surface and subsurface archaeological potential around the dam to very low-nil.

- Waterway/creek line

The waterway/creek line bisects the centre of the project area from east to west. The waterway has been dammed to be used for agricultural purposes, and no longer contains flowing water. However, whilst on site it was noted that the ground in these areas was very wet and muddy, with survey participants significantly sinking down into the ground whilst surveying these areas.

Whilst a water source within the project area, the historic creek line was a first order stream and would not have been a reliable permanent water source. Predictive modelling for the site

highlights that larger artefact scatters are more likely to occur within proximity to permanent water sources.

The surface and subsurface potential of the historic tributary is very low-nil as prior to damming, the waterway would have been a transeasonal water source, subject to water movement and flooding.

- Sewerage line

A subsurface sewerage line has been installed in an east-west alignment along the southern boundary of the project area. This installation would have resulted in substantial ground disturbance in the vicinity of the pipeline, reducing potential for in-situ surface, or subsurface material to be nil.

It is considered unlikely that the unnamed tributary (first-order creek) bisecting the project area provided a permanent water source, however First Ponds Creek, approximately 430 meters to the west, would have provided water to the area on a more permanent basis.

The survey located no new heritage sites, potentially a result of the limitations provided by the lack of visibility due to the significant amount of vegetation across the site. However, taking into consideration the substantial site modification that has occurred across the site, the presence of in-situ surface archaeology is low-nil.

With regard to subsurface archaeological potential, the results of the background research and site visit suggest that the proposal area has been significantly historically modified and disturbed. During the site visit no areas of PAD were identified within the site. Whilst the predictive model for the project area outlines that surface artefacts (or lack thereof) will not necessarily reflect the potential for subsurface deposits, the model also highlights that previously recorded sites occurred primarily in areas that had been subject to minimal historical disturbance. Figures 10 + 11 depict the various forms of ground disturbance that the project area has undergone, and it is this disturbance that is responsible for reducing the potential to locate *in-situ* archaeological material to low-nil. Based on the level of disturbance encountered across the site, NGH Environmental has determined that subsurface testing would be unlikely to yield any further information about the presence, extent or nature of archaeological material or Aboriginal cultural heritage values within the project area test excavation is not recommended.

Management recommendations are provided in section 9 to mitigate any risks to cultural heritage.

5 CULTURAL HERITAGE VALUES AND STATEMENT OF SIGNIFICANCE

The assessment of the significance of Aboriginal archaeological sites is currently undertaken largely with reference to criteria outlined in the ICOMOS Burra Charter (Marquis-Kyle & Walker 1994). Criteria used for assessment are:

- *Social or Cultural Value*: In the context of an Aboriginal heritage assessment, this value refers to the significance placed on a site or place by the local Aboriginal community – either in a contemporary or traditional setting.
- *Scientific Value*: Scientific value is the term employed to describe the potential of a site or place to answer research questions. In assessing Scientific Value issues such as representativeness, rarity and integrity are addressed. All archaeological places possess a degree of scientific value in that they contribute to understanding the distribution of evidence of past activities of people in the landscape. In the case of flaked stone artefact scatters, larger sites or those with more complex assemblages are more likely to be able to address questions about past economy and technology, giving them greater significance than smaller, less complex sites. Sites with stratified and potentially *in situ* sub-surface deposits, such as those found within rock shelters or depositional open environments, could address questions about the sequence and timing of past Aboriginal activity, and will be more significant than disturbed or deflated sites. Groups or complexes of sites that can be related to each other spatially or through time are generally of higher value than single sites.
- *Aesthetic Value*: Aesthetic values include those related to sensory perception and are not commonly identified as a principal value contributing to management priorities for Aboriginal archaeological sites, except for art sites.
- *Historic Value*: Historic value refers to a site or place's ability to contribute information on an important historic event, phase or person.
- *Other Values*: The Burra Charter makes allowance for the incorporation of other values into an assessment where such values are not covered by those listed above. Such values might include Educational Value.

All sites or places have some degree of value, but of course, some have more than others. In addition, where a site is deemed to be significant, it may be so on different levels or contexts ranging from local to regional to national, or in very rare cases, international. Further, sites may either be assessed individually, or where they occur in association with other sites the value of the complex as a whole should be considered.

Social or cultural value

While the true cultural and social value of Aboriginal sites can only be determined by local Aboriginal people, as a general concept, all sites hold cultural value to the local Aboriginal community. An opportunity to identify cultural and social value was provided to the RAPs for this proposal through the fieldwork and draft reporting process.

No social or cultural values were identified by the Aboriginal representatives either prior to or during site survey of the project area.

Scientific (archaeological) value.

The research potential of the project area is considered to be low. The land has undergone disturbance including vegetation clearing, farming, residential settlement and the damming of the unnamed tributary that historically bisected the site. No sites were identified and therefore no scientific significance is attributed to the place.

Further assessment of the site through excavation would not be appropriate due to the highly modified nature of the site. No areas of potential (PADs) were identified during background assessment or pedestrian survey.

Aesthetic value

No identified aesthetic values have been identified for the proposal area.

Other Values

There are no other known heritage values associated with the proposal area.

6 PROPOSED ACTIVITY

6.1 HISTORY AND LANDUSE

Desktop research and site survey have revealed that the project area has been subjected to changes and modification of the landscape due to the past agricultural land uses of the project area. The project area has undergone vegetation clearing as well as the damming of the tributary on site. Fill, debris, residential and agricultural structures and remains are present across the site, with recent areas of ground disturbance present along the southern boundary of the project area.

6.2 PROPOSED DEVELOPMENT ACTIVITY

The proposed development includes the staged construction, and ultimate operation, of the Sikh Grammar School, Ancillary Place of Public Worship, and housing subdivision on the 4.1ha site at Rouse Hill, NSW.

The proposed SGSA Rouse Hill will cater to students from years K to 12 in an integrated education campus of 1260 students along with an 86 child Early Learning Centre (ELC) and student boarding for 112 students. Proposed is a three stream primary and a four stream secondary school. Adjoining this will be a place of worship Gurdwara which, together with the school buildings, frame a central open space.

The project will be constructed in nine stages. The initial stage encompassing temporary buildings suitable for a two stream primary school and school hall. While the school buildings will need to progress sequentially to keep ahead of the demand for both the growth of the student intake and the natural progression of the year cohorts, all of the appropriate infrastructure such as outdoor areas, parking and covered outdoor play will proportionately follow the demands of the student numbers. The Gurdwara, student boarding and the early learning centre will be constructed according to the schools funding model and demand.

The following stages of construction are indicative only and will depend on funding and construction constraints and opportunities:

- STAGE 1
 - Permanent construction:
 - Play space (becomes part of Village Green)
 - Tallawong Road upgrade
 - New northern half road construction
 - Stormwater infrastructure to north-east corner
 - North-east corner on-grade carparks
 - Temporary construction:
 - Relocatable primary school building
 - Multipurpose hall

- On-ground parking
- Demolition:
 - Existing house
 - Existing on-ground carpark
- STAGE 2
 - Permanent construction:
 - Primary school block
 - Village Green (part construction to meet Stage 1)
 - K-2 play space
 - Multipurpose court and cricket nets
- STAGE 3
 - Permanent construction:
 - Primary school block, including library and staff room on 3rd & 4th floors
 - Part civic heart construction under library building
 - Southern entry to future underground parking
 - Early Learning Centre
 - ELC outdoor play area
 - ELC carpark
 - Temporary construction:
 - Play space to south-west corner
- STAGE 4
 - Permanent construction:
 - Secondary school block with specialist science facilities
 - Part Village Green construction
- STAGE 5
 - Permanent construction:
 - Secondary school block with Cafe, TAS, Performing & Visual Arts, Secondary Library and Staff room
 - Part Civic Heart construction

- Temporary construction:
 - On-ground Kiss & Drop
- STAGE 6
 - Permanent construction:
 - Secondary school block with specialist TAS facilities and remaining homebases
 - TAS outdoor workshops
 - Services pavilion
- STAGE 7
 - Permanent construction:
 - Multi-purpose Hall & bridge link
 - Gurdwara & Langar
 - Finish Civic Heart construction
 - Landscaping along Tallawong Road
 - Secondary school courtyard
 - Underground carpark
 - Demolition:
 - Temporary parking to south-east corner
 - Temporary multi-purpose hall
- STAGE 8
 - Permanent construction:
 - Administration building
 - Final 3 GLAs for Primary school
 - School reception and sick bay
 - Principal and support staff offices
 - Demolition:
 - Temporary carpark to north-west corner
 - Relocatable classrooms
- STAGE 9

- Permanent construction
 - Boarding House
 - Staff Apartments
 - Undercroft parking for boarding house

See Figure 12, below, for the proposed Sikh Grammar School construction works plan.

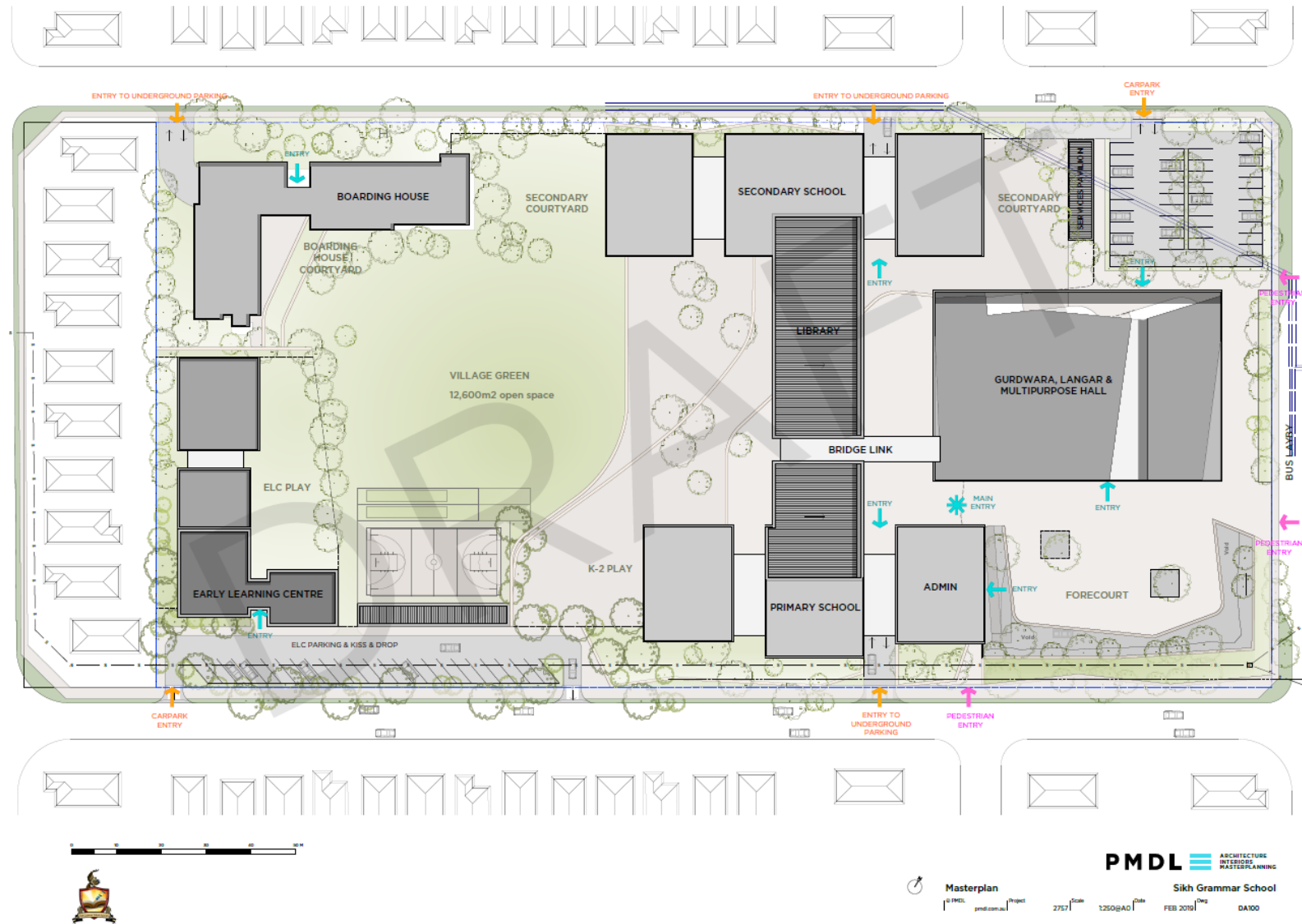


Figure 12. Proposed Sikh Grammar School Masterplan.

6.3 ASSESSMENT OF HARM

There are no recorded Aboriginal heritage sites within the proposal area, and no new sites identified during the site survey. As the site has been identified as disturbed due to historical uses of the site, the proposed works are assessed as posing little harm to the site itself or its research potential.

6.4 ABORIGINAL STAKEHOLDER COMMENTS AND CONCERNS REGARDING THIS ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

This section includes details of the views of the Registered Aboriginal Parties (RAPs) in relation to this report and its recommendations.

6.4.1 *Aboriginal Cultural Heritage Consultation - Stage 2 & 3*

Stage 2 and 3 of the Aboriginal Cultural Heritage Consultation process involves obtaining feedback on the proposed methodology for the assessment of Aboriginal cultural heritage in relation to the proposed project.

In April 2019, NGH provided all of the 22 registered RAPs the proposed Aboriginal cultural heritage assessment methodology. NGH received fourteen responses, all of which supported the NGH methodology. No specific comments were made by any of the RAPs requesting a change in methodology or alerting NGH to any specific cultural places within the proposal area.

6.4.2 *Aboriginal Cultural Heritage Consultation - Stage 4*

Stage 4 of the Aboriginal Cultural Heritage Consultation process involves obtaining feedback on the draft Aboriginal Cultural Heritage Assessment report. NGH provided all 22 RAPs with the draft ACHAR in May 2019 and received 9 responses from 8 groups.

All 9 responses agreed with the conclusions and recommendations of the report and did not feel the need for further testing to be completed due to the disturbed nature of the terrain.

7 AVOIDING OR MITIGATING HARM

7.1 CONSIDERATION OF HARM

Mitigation of harm to cultural heritage sites generally involves some level of detailed recording to preserve the information contained within the site. Mitigation can be in the form of minimising harm through slight changes in the development plan or through direct management measures of the artefacts.

As there are no previously recorded AHIMS sites within the project area footprint, and no sites identified during the site survey, mitigation measures including salvage, detailed recording, or changes to the design footprint of the works are not considered necessary. The proposal area is located on a site of historical ground modification, minimising the potential for locating in-situ surface and subsurface artefacts.

8 LEGISLATIVE CONTEXT

Aboriginal heritage is primarily protected under the NSW *National Parks and Wildlife Act 1974* (NPW Act) and as subsequently amended in 2010 with the introduction of the *National Parks and Wildlife Amendment (Aboriginal Objects and Places) Regulation 2010*. The aim of the NPW Act includes:

The conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including but not limited to: places, objects and features of significance to Aboriginal people.

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 the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains.

Part 6 of the NPW Act concerns Aboriginal objects and places and various sections describe the offences, defences and requirements that harm an Aboriginal object or place. The main offences under section 86 of the NPW Act are:

- A person must not harm or desecrate an object that the person knows is an Aboriginal object.
- A person must not harm an Aboriginal object.
- For the purposes of this section, "circumstances of aggravation" are:
 - that the offence was committed in the course of carrying out a commercial activity, or
 - that the offence was the second or subsequent occasion on which the offender was convicted of an offence under this section.
- A person must not harm or desecrate an Aboriginal place.

Under section 87 of the NPW Act, there are specified defences to prosecution including authorisation through an Aboriginal Heritage Impact Permit (AHIP) or through exercising due diligence or compliance through the regulation.

Section 89A of the Act also requires that a person who is aware of an Aboriginal object, must notify the Director-General in a prescribed manner. In effect this section requires the completion of OEH AHIMS site cards for all sites located during heritage surveys.

Section 90 of the NPW Act deals with the issuing of an AHIP, including that the permit may be subject to certain conditions.

The EP&A Act is legislation for the management of development in NSW. It sets up a planning structure that requires developers (individuals or companies) to consider the environmental impacts of new projects. Under this Act, cultural heritage is considered to be a part of the environment. This Act requires that Aboriginal cultural heritage and the possible impacts to Aboriginal heritage that development may have are formally considered in land-use planning and development approval processes.

Under the NSW Planning legislation for this project, an Aboriginal Heritage Impact Permit (AHIP) from OEH would not be required for the project as under the State Significant Development regime the Department of Planning provides the approval. However, Aboriginal heritage still needs to be considered including conducting consultation with the Aboriginal community.

9 RECOMMENDATIONS

The recommendations are based on the following information and considerations:

- Results of the archaeological survey;
- Consideration of results from other local archaeological studies;
- Results of consultation with the registered Aboriginal parties;
- Appraisal of the proposed development, and
- Legislative context for the development proposal.

As a result of the field survey and consultation with the local Aboriginal community, it is recommended for the project, that:

1. The proposed works for the Sikh Grammar School at 151-161 Tallawong Road, Rouse Hill NSW, do not require further investigation and the proposed construction works can proceed with caution.
2. As a State Significant Development, an AHIP permit would not be required if works were to uncover Aboriginal material. However, in the unlikely event that previously undiscovered Aboriginal finds are identified during construction, works in the vicinity of the find should cease and a qualified archaeologist/heritage consultant should be contacted to inspect the find and provide recommendations on proceeding.
3. In the unlikely event that human remains are discovered during the construction, all work must cease. OEH, the local police and Deerubbin LALC should be notified. Further assessment would be undertaken to determine if the remains are Aboriginal or non-Aboriginal.
4. Further archaeological assessment would be required if the proposal activity extends beyond the area of the current investigation. This would include consultation with the RAPs for the project and may include further field survey and/or test excavation.
5. Continued consultation with the RAPs for the project should be undertaken if there are any major changes in project design or scope, further investigations or finds.

10 REFERENCES

- AMBS (2000) *Menagerie Park Town Centre, Archaeological Salvage Excavations near Kellyville, Cumberland Plain, NSW*. Volumes 1 and 2. Unpublished report to the Department of Urban Affairs and planning.
- Artefact Heritage (2014) *Memorial Avenue, Kellyville: PACHI Stage 2 Aboriginal Archaeological Report*. Report to Roads and Maritime Services.
- Attenbrow V. (2010) *Sydney's Aboriginal Past: Investigating the archaeological and historical records*. Sydney: University of NSW Press.
- Brayshaw McDonald Pty Ltd (1993) *Historical Archaeological Heritage Study and Assessment of Old Windsor Road and Windsor Road Rouse Hill NSW*. Report for Rouse Hill Infrastructure Project (Stage 1) Works.
- Comber Consultants (2015) *Aboriginal Cultural Heritage Assessment: North West Rail Link Project, Kellyville Station Priority Precinct Rezoning Proposal*. Report to Aver on behalf of Department of Planning & Environment.
- Comber Consultants (2016) *132 Tallawong Rd, Rouse Hill: Aboriginal Due Diligence Assessment*. Report to JS Architects.
- Deerubbin Local Aboriginal Land Council (2018) *Protection of Aboriginal Cultural Heritage: Proposed School Development 161 Tallawong Road, Rouse Hill*. Report to PMDL Architecture and Design.
- Dominic Steele Consulting Archaeology (2017) *Due Diligence Aboriginal Archaeological Assessment of 95 Cudgegong Road, Rouse Hill NSW Lot 79 DP208203, Proposed Residential Subdivision*. Report to Bing Wei Pty Ltd.
- Eco Logical Australia (2018) *Residential Development of Lots 1 & 8 DP30211, Riverstone NSW*. Report for Elite International Development Pty Ltd.
- Haglund, L. (1980) *Report on an Archaeological Survey in the City of Blacktown*. Prepared for NSW National Parks and Wildlife Services.
- Jo McDonald CHM Pty Ltd (1997) *Interim heritage management report: ADI site St Marys. Test excavation report* (2 vols). Report to Lend Lease – ADI Joint Venture in response to the Section 22 Committee Interim Report.
- Jo McDonald CHM Pty Ltd (1999) *Survey for archaeological sites: Proposed Rouse Hill Stage 2 Infrastructure Works at Rouse Hill, Parklea & Kellyville, NSW*. Report to GHD on behalf of RHIC.
- Jo McDonald CHM Pty Ltd (2001) *Salvage excavation of six sites along Caddies, Second Ponds and Cattai Creeks in the Rouse Hill (Stage 2) Development Area, NSW*. Report prepared for Rouse Hill Infrastructure Consortium.
- Jo McDonald CHM Pty Ltd (2001) *Salvage excavation of six sites along Caddies, Second Ponds, Smalls and Cattai Creeks in the Rouse Hill Development Area, NSW*. Report prepared for Rouse Hill Infrastructure Consortium.
- Jo McDonald CHM Pty Ltd (2002) *Aboriginal Archaeological Assessment: Landcom Project 12015, Kellyville, NSW*.

Jo McDonald CHM Pty Ltd (2005) *Archaeological salvage excavation of site RTA-G1 109-113 George Street Parramatta*. Report to Landcom Pty Ltd.

Kelleher Nightingale Consulting Pty Ltd (2010) *Area Precinct North West Growth Centre Aboriginal Heritage Assessment*. Report to the NSW Department of Planning.

Kohen J. (1986) *Aboriginal Settlement Pattern in the Western Cumberland Plain: Resources, Environment and Technology*. Unpublished PHD Thesis, Macquarie University.

McDonald J. and P. Mitchell (1994) *An assessment of archaeological context and land-use history for Aboriginal archaeology in the Australian Defense Industries Site, St Marys, NSW*. Report to ADI Ltd, NSW Property Group.

McDonald, J., E. Rich and H. Barton 1994. 'The Rouse Hill Infrastructure Project (Stage 1) on the Cumberland Plain, Western Sydney'. In M.E. Sullivan et. Al. (eds.) *Archaeology in the North: Proceedings of the 1993 Australian Archaeological Association Conference*. North Australian Research Unit, Australian National University: Darwin.

McDonald, J. (1999) *Test Excavation of PAD5 (RH/SP9) and PAD31 (RH/CC2) for the Rouse Hill (Stage 2) Infrastructure Project at Rouse Hill and Kellyville, NSW*.

Nanson G.C., R.W. Young and E. Stockton (1987) 'Chronology and Palaeoenvironment of the Cranebrook Terrace (near Sydney) containing artefacts more than 40,000 years old'. In *Archaeology in Oceania* 22(2):72-8.

OEH (2010a) *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*.

OEH (2010b) *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*.

OEH (2010c) *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*.

OEH (2011) *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*.

OEH (2018) eSpade v.02: Soil Landscapes. Accessed 13.12.2018.

<<https://www.environment.nsw.gov.au/eSpade2Webapp>>

Owen, T. and D. Cowie (2017) 'Four predictive models to describe the Aboriginal lithic artefact site patterning on the Cumberland Plain.' In *Journal of the Australian Association of Consulting Archaeologists, Volume 5: 1-13*.

Smith (1989) *Final Report: Site Survey and Site Analysis on the Northern Cumberland Plain*. Prepared for NPWS.

The Dictionary of Sydney (2019) *Rouse Hill*. Accessed 25.2.2019.
https://dictionaryofsydney.org/place/rouse_hill.

The Dictionary of Sydney (2019) *Rouse Hill Estate*. Accessed 25.2.2019.
https://dictionaryofsydney.org/entry/rouse_hill_estate.

The Hills Sydney's Garden Shire (2019) *A Brief History of the Shire*. Accessed 25.2.2019.
<https://www.thehills.nsw.gov.au/About-The-Sydney-Hills/History-of-The-Hills-Shire/A-Brief-History-of-the-Shire>.

The Hills Sydney's Garden Shire (2019) *Aborigines in the Hills District*.

The Hills Sydney's Garden Shire (2019) *Origin of Suburb & Street Names*. Accessed 25.2.2019.
<https://www.thehills.nsw.gov.au/About-The-Sydney-Hills/History-of-The-Hills-Shire/Origin-of-Suburb-Street-Names>.

White, E., J. McDonald (2010) 'Lithic artefact distribution in the Rouse Hill development area, Cumberland Plain'. *Australian Archaeology* 70:29-38.

APPENDIX A ABORIGINAL COMMUNITY CONSULTATION

ABORIGINAL CULTURAL HERITAGE CONSULTATION – STAGE 1: NOTIFICATION OF PROJECT PROPOSAL AND REGISTRATION OF INTEREST

Organisation	Contact	Action	Date Sent	Date Replied	Replied by	Response
OEH	Susan Harrison	Sent email letter requesting potential stakeholder information	21.2.2019	21.3.2019	Fran Scully	Provided list of potential Aboriginal Stakeholders.
Deerubbin Local Aboriginal Land Council		Sent email letter requesting potential stakeholder information	21.2.2019	22.3.2019	Steve Randall	Ingrid spoke to Steve on the phone and he requested that Deerubbin be registered for the project.
Local Land Services Greater Sydney		Sent email letter requesting potential stakeholder information	21.2.2019	7.3.2019	Margaret Bottrell - Senior Strategic Land Services Officer	GS LLS is a partner with many Aboriginal communities in the region on many natural resource management (NRM) projects. However, GS LLS is not the primary source for contacting or managing contact lists for Aboriginal communities or persons that may inform or provide comment on planning issues. GS LLS considers cultural heritage issues that relate to land-use planning in general and only considers culture and heritage issues in the context of NRM.
National Native Title Tribunal		Sent email letter requesting potential stakeholder information	21.2.2019	22.2.2019	Geospatial	We strongly recommend that you make contact with the Office of Environment and Heritage (OEH), Cultural Heritage Division, for all-inclusive contact lists of persons and organisations that may assist with your investigation.
Native Title Services Corp		Sent email letter requesting potential stakeholder information	21.2.2019			
Office of the Registrar of Aboriginal Lands Rights Act		Sent email letter requesting potential stakeholder information	21.2.2019	7.3.2019	Elizabeth Loane - Project Officer	Under Section 170 of the Aboriginal Land Rights Act 1983 the Office of the Registrar is required to maintain the Register of Aboriginal Owners (RAO). A search of the RAO has shown that there are not currently any Registered Aboriginal Owners in the project area.
The Hills Shire City Council		Sent email letter requesting potential stakeholder information	21.2.2019	25.2.2019	Richard Old. Community and Events Coordinator	We suggest you contact Deerubbin Local Aboriginal Land Council on 02 4724 5600
Blacktown City Council		Sent email letter requesting potential stakeholder information	21.2.2019	13.3.2019	Trevor Taylor	OEH has advised us that their consultation list for this purpose is confidential and may only be obtained on a project by project basis from the officers at OEH.

The Daily Telegraph			22.3.2019			Advertisement for interested parties to register in the project.
Deerubbin Local Aboriginal Land Council	Kevin Cavanagh	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Darug Custodian Aboriginal Corporation	Justine Coplin	Emailed letter asking for interested parties to register in the project.	25.3.2019	5.4.2019	Justine	Emailed stating that they would like to register for the project.
Darug Tribal Aboriginal Corporation		Sent letter via registered post.	22.03.2019	28.3.2018	Dirk Schmitt	Would like to register interest for the project.
Darug Aboriginal Cultural Heritage Assessments	Gordon Morton	Sent letter via registered post.	22.03.2019	5.4.2019	Celestine	Called Ingrid and Jakob to register interest in the project.
Darug Land Observations	Jamie Workman and Anna Workman	Emailed letter asking for interested parties to register in the project.	25.3.2019	18.3.2019	Anna	Darug Land Observations registered their interest in the project via email letter.
Des Dyer		Sent letter via registered post.	22.03.2019			
A1 Indigenous Services	Carolyn Hickey	Emailed letter asking for interested parties to register in the project.	25.3.2019	26.3.2019	Carolyn	Would like to register interest for the project.
Gunjeewong Cultural Heritage Aboriginal Corporation	NP	Emailed letter asking for interested parties to register in the project.	25.3.2019	1.4.2019	Cherie	Would like to register interest for the project.

Merrigam Indigenous Corporation	Shaun Carroll	Sent letter via registered post.	22.03.2019	1.4.2019		Letter RTS as not being located at this address.
Bidjawong Aboriginal Corporation	James Carroll	Sent letter via registered post.	22.03.2019			
Phil Kahn	NP	Sent letter via registered post.	22.03.2019			
Wurrumay Consultancy	Kerrie Slater	Emailed letter asking for interested parties to register in the project.	25.3.2019	25.3.2019 and 16.2019	Vicki	Confirmed receipt of email. Letter RTS as unclaimed.
Warragil Cultural Services	Aaron Slater	Emailed letter asking for interested parties to register in the project.	25.3.2019	26.3.2019	Aaron	Would like to register interest for the project.
Kawul Cultural Services	Vicki Slater	Emailed letter asking for interested parties to register in the project.	25.3.2019	8.4.2019	Vicki	Would like to register interest for the project.
Tocomwall	Scott Franks	Sent letter via registered post.	22.03.2019			
Amanda Hickey Cultural Services	Amanda Hickey	Emailed letter asking for interested parties to register in the project.	25.3.2019	25.3.2019	Amanda	Amanda Hickey Cultural Services would like to register an interest in the project.
Widescope Indigenous Group	Steven Hickey and Donna Hickey	Sent letter via registered post.	22.03.2019	29.3.2019	Steven Hickey	Would like to register interest for the project.
HSB Consultants	Patricia Hampton	Sent letter via registered post.	22.03.2019			
Rane Consulting	Tony Williams	Emailed letter asking for interested parties to register in the project.	25.3.2019	28.3.2019		Letter RTS as not being located at that address.
Anthony Williams		Sent letter via registered post.	22.03.2019			
Dhinawan-Dhigaraa Culture & Heritage Pty Ltd	Ricky Fields	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Dhinawan-Dhigaraa Culture & Heritage Pty Ltd	Athol Smith	Sent letter via registered post.	22.03.2019	16.4.2019		Letter RTS as unclaimed.

Gunyyuu	Kylie Ann Bell	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Walbunja	Hika Te Kowhai	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Badu	Karia Lea Bond	Sent letter via registered post.	22.03.2019			
Goobah Developments	Basil Smith	Sent letter via registered post.	22.03.2019			
Wullung	Lee-Roy James Boota	Sent letter via registered post.	22.03.2019			
Yerramurra	Robert Parson	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Nundagurri	Newton Carriage	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Murrumbul	Mark Henry	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Jerringong	Joanne Anne Stewart	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Pemulwuy CHTS	Pemulwuy Johnson	Sent letter via registered post.	25.3.2019	1.4.2019		Letter RTS as not being located at this address.
Bilinga	Simalene Carriage	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Munyunga	Kaya Dawn Bell	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Wingikara	Hayley Bell	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Minnamunnung	Aaron Broad	Sent letter via registered post.	22.03.2019			
Walgalu	Ronald Stewart	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Thauaira	Shane Carriage	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Dharug	Andrew Bond	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Bilinga Cultural Heritage	Robert Brown	Emailed letter asking for interested parties to register in the project.	25.3.2019	25.3.2019		Email not deliverable

Technical Services						
Gunyu Cultural Heritage Technical Services	Darlene Hoskins-McKenzie	Emailed letter asking for interested parties to register in the project.	25.3.2019	25.3.2019		Email not deliverable
Munyunga Cultural Heritage Technical Services	Suzannah McKenzie	Emailed letter asking for interested parties to register in the project.	25.3.2019	25.3.2019		Email not deliverable
Murrumbul Cultural Heritage Technical Services	Leve McKenzie-Kirkbright	Emailed letter asking for interested parties to register in the project.	25.3.2019			Email not deliverable
Wingikara Cultural Heritage Technical Services	Wandai Kirkbright	Emailed letter asking for interested parties to register in the project.	25.3.2019	25.3.2019		Email not deliverable
Gulaga	Wendy Smith	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Biamanga	Seli Storer	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Callendulla	Corey Smith	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Murramarang	Roxanne Smith	Emailed letter asking for interested parties to register in the project.	25.3.2019			
DJMD Consultancy	Darren Duncan	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Butucarbin Aboriginal Corporation	Jennifer Beale	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Didge Nigunawal Clan	Lillie Carroll and Paul Boyd	Emailed letter asking for interested parties to register in the project.	25.3.2019	26 and 27.3.2019	Lilly and Paul	Would like to register interest for the project.

Ginninderra Aboriginal Corporation	Steven Johnson and Krystie Carroll	Emailed letter asking for interested parties to register in the project.	25.3.2019			
Nerrigundah	Newton Carriage	Emailed letter asking for interested parties to register in the project.	25.3.2019	25.3.2019		Email not deliverable
Wailwan Aboriginal Group	Philip Boney	Emailed letter asking for interested parties to register in the project.	25.3.2019	4.4.2019	Phil Boney	Would like to register interest for the project.
Barking Owl Aboriginal Corporation	Mrs Jody Kulakowski	Emailed letter asking for interested parties to register in the project.	25.3.2019	4.4.2019		Would like to register interest for the project.
Thoorga Nura	John Carriage	Emailed letter asking for interested parties to register in the project.	25.3.2019	16.4.2019		Letter RTS as unclaimed.
Darug Boorooberonga I Elders Aboriginal Corporation	Gordon Workman d	Emailed letter asking for interested parties to register in the project.	25.3.2019			
B.H. Heritage Consultants	Ralph Hampton and Nola Hampton	Emailed letter asking for interested parties to register in the project.	25.3.2019	25.3.2019	Ralph	B.H. Heritage Consultants would like to register for the project. Letter RTS 1.5.2019
Ngambaa Cultural Connections	Kaarina Slater	Emailed letter asking for interested parties to register in the project.	25.3.2019	27.3.2019	Kaarina Slater	Would like to register interest for the project.
Goodradigbee Cultural & Heritage Aboriginal Corporation	Caine Carroll	Emailed letter asking for interested parties to register in the project.	25.3.2019	25.3.2019	Caine Carroll	Goodradigbee would like to be registered for the project.
Mura Indigenous Corporation	Phillip Carroll	Emailed letter asking for interested parties to register in the project. Email RTS as does not exist. Registered with OEH as 'mura.indigenous.com.bigpond.com' which is not an email address.	25.3.2019	25.3.2019	Email bounced as address doesn't exist. Also emailed 'mura.indigenous@bigpond.com' to see if it had been a typo from OEH.	

ABORIGINAL CULTURAL HERITAGE CONSULTATION – STAGE 2 & 3: 2) PRESENTATION OF INFORMATION ABOUT THE PROPOSED PROJECT; 3) GATHERING INFORMATION ABOUT CULTURAL SIGNIFICANCE

Organisation	Contact	Action	Date Sent	Date replied	Replied by	Response
Methodology						
Deerubbin Local Aboriginal Land Council	Steve Randall	Sent methodology via email	9.4.2019	8.5.2019	Steven	Ingrid spoke to Steve on the phone and he stated that his rate would be \$1000.00 (plus GST) for fieldwork and for a report. He would be available on Monday for fieldwork.
Darug Land Observations	Jamie Workman and Anna Workman	Sent methodology via email	9.4.2019	1.5.2019	Anna	Happy with methodology and has provided insurances and daily rates.
Amanda Hickey Cultural Services	Amanda Hickey	Sent methodology via email	9.4.2019	7.5.2019	Amanda	Happy with the methodology and would like to be considered for the fieldwork.
B.H. Heritage Consultants	Ralph Hampton and Nola Hampton	Sent methodology via email	9.4.2019	8.5.2019	Ralph	Ingrid resent methodology.
Darug Aboriginal Cultural Heritage Assessments	Celestine Everingham / Gordon Morton	Sent methodology via registered express post	9.4.2019	11.4.2019	Celestine	Ingrid spoke on the phone to Celestine who indicated that she was happy with the methodology. She has asked to be considered for fieldwork - rate would be \$880 for the day (inc GST) (no half-day rates).
Darung Custodian Aboriginal Corporation	Justine Coplin	Sent methodology via email	9.4.2019	27.4.2019	Justine	Supports methodology and has provided insurance and daily rates.
Yurrandaali Cultural Services	Bo Field	Sent methodology via email	9.4.2019	10.4.2019	Bo	Supports methodology and would like to be considered for fieldwork. Provided rates and insurance details.
Barraby Cultural Services	Lee Field	Sent methodology via email	9.4.2019	10.4.2019	Lee	Supports methodology and would like to be considered for fieldwork. Provided rates and insurance details.

Yulay Cultural Services	Arika Jalomaki	Sent methodology via email	9.4.2019	10.4.2019	Arika	Supports methodology and would like to be considered for fieldwork. Provided rates and insurance details.
Wailwan Aboriginal Group	Philip Boney	Sent methodology via email	9.4.2019			
Barking Owl Aboriginal Corporation	Mrs Jody Kulakowski	Sent methodology via email	9.4.2019	11.4.2019	Jody	Provided rates and insurances.
Kamilaroi Yankuntjatjara Working Group	Philip Khan	Sent methodology via email	9.4.2019	23.4.2019	Phil	Reviewed and support the methodology. Insurances and rates provided.
Widescope Indigenous Group	Steven Hickey and Donna Hickey	Sent methodology via email	9.4.2019	10.4.2019	Steven	Reviewed and support the methodology.
Darug Aboriginal Land Care	Des Dyer	Sent methodology via email	9.4.2019	22.4.2019	Des	Read and reviewed methodology. Provided rates.
Darug Tribal Aboriginal Corporation	NP	Sent methodology via email	9.4.2019			
Ngambaa Cultural Connections	Kaarina Slater	Sent methodology via email	9.4.2019	3.5.2019	Kaarina	Supports the methodology and has no further comments. Will provide insurances and daily rate.
Didge Nigunawal Clan	Lillie Carroll and Paul Boyd	Sent methodology via email	9.4.2019	2.5.2019		Happy with methodology and would like to be considered for the fieldwork.
Warragil Cultural Services	Aaron Slater	Sent methodology via email	9.4.2019			
A1 Indigenous Services	Carolyn Hickey	Sent methodology via email	9.4.2019	14.4.2019	Carolyn	A1 Indigenous Services supports the ACHAR methodology and would like to be involved in the fieldwork.
Goodradigbee Cultural & Heritage Aboriginal Corporation	Caine Carroll	Sent methodology via email	9.4.2019			

Gunjeewong Cultural Heritage Aboriginal Corporation	Cherie Carroll Turrise	Sent methodology via registered express post	9.4.2019			
Kawul Cultural Services	Vicki Slater	Sent methodology via email	9.4.2019			
<u>Reminder of the closing date of the methodology</u>						
Deerubbin Local Aboriginal Land Council		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Darug Land Observations		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Amanda Hickey Cultural Services		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			

B.H. Heritage Consultants		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Darug Custodian Aboriginal Corporation		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Yurrandaali Cultural Services		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Barraby Cultural Services		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Yulay Cultural Services		Emailed reminding RAPs of closing date for comments	2.5.2019			

		for the methodology and requesting insurance details and rates				
Wailwan Aboriginal Group		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Barking Owl Aboriginal Corporation		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Kamilaroi Yankuntjatjara Working Group		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Widescope Indigenous Group		Emailed reminding RAPs of closing date for comments for the methodology and requesting	2.5.2019			

		insurance details and rates				
Darug Aboriginal Land Care		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Darug Tribal Aboriginal Corporation		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Ngambaa Cultural Connections		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Didge Nigunawal Clan		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			

Warragil Cultural Services		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
A1 Indigenous Services		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Goodradigbee Cultural & Heritage Aboriginal Corporation		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Kawul Cultural Services		Emailed reminding RAPs of closing date for comments for the methodology and requesting insurance details and rates	2.5.2019			
Fieldwork						

Deerubbin Local Aboriginal Land Council	Steve Randall	Jakob spoke to Steve and emailed him to confirm invitation for fieldwork. CONFIRMED	9.05.2019			
Darug Custodian Aboriginal Corporation	Justine Coplin	Jakob spoke to Justine and emailed her to confirm invitation for fieldwork. CONFIRMED	9.05.2019			
Darug Land Observations	Jamie Workman and Anna Workman	Jakob spoke to Jamie Workman and emailed DLO to confirm invitation for fieldwork. Anna texted that Mark Newham will be available.	9.05.2020			
<u>Informing RAPs that were not selected to participate in the survey</u>						
Amanda Hickey Cultural Services	Amanda Hickey	Informed RAPs they were not selected for the fieldwork via email.	14.5.2019			
B.H. Heritage Consultants	Ralph Hampton and Nola Hampton	Informed RAPs they were not selected for the fieldwork via email.	14.5.2019			
Yurrandaali Cultural Services	Bo Field	Informed RAPs they were not selected for the	14.5.2019			

		fieldwork via email.				
Barraby Cultural Services	Lee Field	Informed RAPs they were not selected for the fieldwork via email.	14.5.2019			
Yulay Cultural Services	Arika Jalomaki	Informed RAPs they were not selected for the fieldwork via email.	14.5.2019			
Barking Owl Aboriginal Corporation	Mrs Jody Kulakowski	Informed RAPs they were not selected for the fieldwork via email.	14.5.2019			
Kamilaroi Yankuntjatjara Working Group	Philip Khan	Informed RAPs they were not selected for the fieldwork via email.	14.5.2019			
Darug Aboriginal Land Care	Des Dyer	Informed RAPs they were not selected for the fieldwork via email.	14.5.2019			
Didge Nigunawal Clan	Lillie Carroll and Paul Boyd	Informed RAPs they were not selected for the fieldwork via email.	14.5.2019			
A1 Indigenous Services	Carolyn Hickey	Informed RAPs they were not selected for the fieldwork via email.	14.5.2019			

ABORIGINAL CULTURAL HERITAGE CONSULTATION – STAGE 4: REVIEW OF DRAFT CULTURAL HERITAGE ASSESSMENT REPORT

Organisation	Contact	Action	Date Sent	Reply Date	Replied by	Response
<u>DRAFT ACHA REPORT SENT</u>						
Deerubbin Local Aboriginal Land Council	Steve Randall	Emailed draft ACHAR.	27.5.2019	17.6.2019	Steve	Noted the previous ground disturbance that has taken place on the site and outlined that they had no objection to the development proceeding.
Darug Land Observations	Jamie Workman and Anna Workman	Emailed draft ACHAR.	27.5.2019			
Amanda Hickey Cultural Services	Amanda Hickey	Emailed draft ACHAR.	27.5.2019			
B.H. Heritage Consultants	Ralph Hampton and Nola Hampton	Emailed draft ACHAR.	27.5.2019			
Darug Aboriginal Cultural Heritage Assessments	Celestine Everingham / Gordon Morton	Draft ACHAR sent via express post - 605 38792979 096	27.5.2019			
Darug Custodian Aboriginal Corporation	Justine Coplin	Emailed draft ACHAR.	27.5.2019	11.6.2019 and 24.6.2019	Justine	Confirmed receipt of report. Justine also noted Darug's knowledge of land and culture and that they do not support personal profit groups or the input they may have in the recommendations. Apart from the number of groups consulted for the report, Darug Custodian Aboriginal Corporation supports the draft report.
Yurrandaali Cultural Services	Bo Field	Emailed draft ACHAR.	27.5.2019	17.6.2019	Bo	Read the report and supports the methodology for the project.

Barraby Cultural Services	Lee Field	Emailed draft ACHAR.	27.5.2019	27.5.2019 and 17.6.2019	Lee	Received report. Read the report and supports the methodology for the project.
Yulay Cultural Services	Arika Jalomaki	Emailed draft ACHAR.	27.5.2019	17.6.2019	Arika	Read the report and supports the methodology for the project.
Wailwan Aboriginal Group	Philip Boney	Emailed draft ACHAR.	27.5.2019			
Barking Owl Aboriginal Corporation	Mrs Jody Kulakowski	Emailed draft ACHAR.	27.5.2019	20.6.2019	Jody	Agreed and are satisfied with the Rose Hill Draft ACHA report.
Kamilaroi Yankuntjatjara Working Group	Philip Khan	Emailed draft ACHAR. Sent ACHAR via registered post - 605 38792977 092	27.5.2019 and 3.6.19	21.6.2019	Phil	Agree and support all recommendations outlined within the report.
Widescope Indigenous Group	Steven Hickey and Donna Hickey	Emailed draft ACHAR.	27.5.2019	5.6.2019	Steven	Received, reviewed and support the draft ACHAR.
Darug Aboriginal Land Care	Des Dyer	Emailed draft ACHAR.	27.5.2019			
Darug Tribal Aboriginal Corporation	NP	Emailed draft ACHAR.	27.5.2019			
Ngambaa Cultural Connections	Kaarina Slater	Emailed draft ACHAR.	27.5.2019			
Didge Nigunawal Clan	Lillie Carroll and Paul Boyd	Emailed draft ACHAR.	27.5.2019			
Warragil Cultural Services	Aaron Slater	Emailed draft ACHAR.	27.5.2019			

A1 Indigenous Services	Carolyn Hickey	Emailed draft ACHAR.	27.5.2019			
Goodradigbee Cultural & Heritage Aboriginal Corporation	Caine Carroll	Emailed draft ACHAR.	27.5.2019			
Gunjeewong Cultural Heritage Aboriginal Corporation	Cherie Carroll Turrise	Draft ACHAR sent via express post - 605 38792978 099	27.5.2019			
Kawul Cultural Services	Vicki Slater	Emailed draft ACHAR.	27.5.2019			
<u>ACHAR Closing Date for comments</u> <u>Reminder Email</u>						
Deerubbin Local Aboriginal Land Council	Steve Randall	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Darug Land Observations	Jamie Workman and Anna Workman	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Amanda Hickey Cultural Services	Amanda Hickey	Emailed reminding of closing date for ACHAR comments.	17.6.2019			

B.H. Heritage Consultants	Ralph Hampton and Nola Hampton	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Darug Custodian Aboriginal Corporation	Justine Coplin	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Yurrandaali Cultural Services	Bo Field	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Barraby Cultural Services	Lee Field	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Yulay Cultural Services	Arika Jalomaki	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Wailwan Aboriginal Group	Philip Boney	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Barking Owl Aboriginal Corporation	Mrs Jody Kulakowski	Emailed reminding of closing date for	17.6.2019			

		ACHAR comments.				
Kamilaroi Yankuntjatjara Working Group	Philip Khan	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Widescope Indigenous Group	Steven Hickey and Donna Hickey	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Darug Aboriginal Land Care	Des Dyer	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Darug Tribal Aboriginal Corporation	NP	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Ngambaa Cultural Connections	Kaarina Slater	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Didge Nigunawal Clan	Lillie Carroll and Paul Boyd	Emailed reminding of closing date for ACHAR comments.	17.6.2019			

Warragil Cultural Services	Aaron Slater	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
A1 Indigenous Services	Carolyn Hickey	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Goodradigbee Cultural & Heritage Aboriginal Corporation	Caine Carroll	Emailed reminding of closing date for ACHAR comments.	17.6.2019			
Kawul Cultural Services	Vicki Slater	Emailed reminding of closing date for ACHAR comments.	17.6.2019			

Advertisement placed in The Daily Telegraph 22.3.2019

Notification for registration of interest for Aboriginal stakeholders

NGH Environmental has been contracted by PMDL Architects (17/124 Walker Street, North Sydney 2000) to undertake an Aboriginal Cultural Heritage Assessment (ACHA) on behalf of The Sikh Grammar School Australia (the proponent), for the proposed construction of a Sikh K-12 Grammar School and Ancillary Place of Worship in Rouse Hill, NSW.

The assessment area for the proposed grammar school is located at 151-161 Tallawong Road, Rouse Hill, NSW 2155, within the local government area of Blacktown Shire Council. The proposal area consists of two lots - Lot 42 DP30186, and Lot 43 DP30186. The proposal area has historically been used for farming and currently consists of cleared land with a dam constructed in the centre of the site.

The purpose of the consultation with Aboriginal people is to assist the proponent in the preparation of the ACHA; to be involved in consultation regarding Aboriginal cultural heritage; and, to be involved in the assessment and management of potential impact to Aboriginal cultural heritage values, including the possible lodgement of an Aboriginal Heritage Impact Permit application.

In order to fulfil the requirements set out in the NSW Office of Environment and Heritage *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, NGH Environmental is seeking interested Aboriginal parties who hold cultural knowledge of the assessment area to register their interest in the consultation process for the project and to assist in the determination of cultural significance of any Aboriginal objects or places located there.

Registrations should be provided in writing to:

**NGH Environmental Pty Ltd
Unit 18, 21 Mary Street
SURRY HILLS NSW 2010**

Or via email to:

paige.d@nghenvironmental.com.au or ingrid.c@nghenvironmental.com.au

Closing date for registration is **8 April 2019**.

Those registering an interest will be contacted to discuss the project further. Those who do register are advised that their details will be provided to OEH and the Local Aboriginal Land Council, unless they specifically advise in writing that their details are not to be forwarded.

APPENDIX B CONSULTATION BETWEEN NGH AND RAPS ON THE ACHAR

Darug Custodian Aboriginal Corporation

11.6.2019 Response:



DARUG CUSTODIAN
ABORIGINAL
CORPORATION

[REDACTED]
PHONE: [REDACTED]
MOBILE [REDACTED]
EMAIL: [REDACTED]

Attention: ngh environmental

Subject: 19-116 Rouse Hill Sikh Grammar School Draft ACHAR

Dear Ingrid

We have received the Report for 19-116 Rouse Hill Sikh Grammar School Draft ACHAR, We would like to add that our sites are a complex and not all separate sites and recommend that the connections are interpreted throughout the project. Information gathered during these projects is of high significance, once our sites are gone there is no other evidence of the sites or connections. This area has shown in recent excavations and surveys that this is a Darug landscape and there are still numerous parts of our histories to be recorded. Darug people stayed in this area to present times, the oral histories of this area support the families staying here for thousands of years.

Within this document the amount of groups for consultation is high with many groups not from this area, we do not support personal profit groups and also do not support any input that they have into the recommendations. Apart from the amount of people consulted we support the draft report. Please contact us with all further enquiries on the above contacts.

Regards

Justine Coplin

24.6.2019 Response:



DARUG CUSTODIAN
ABORIGINAL
CORPORATION

[REDACTED]
PHONE: [REDACTED]
MOBILE [REDACTED]
EMAIL: [REDACTED]

Attention: NGH environmental

Date:240619

Subject: 19-116 Rouse Hill Sikh Grammar School

Dear Ingrid

Our group is a non- profit organisation that has been active for over forty years in Western Sydney, we are a Darug community group with over three hundred members. The main aim in our constitution is the care of Darug sites, places, wildlife and to promote our culture and provide education on the Darug history.

Our group promotes Darug Culture and works on numerous projects that are culturally based as a proud and diverse group. It has been discussed by our group and with many consultants and researches that our history is generic and is usually from an early colonists perspective or solely based on archaeology and sites. These histories are adequate but they lack the people's stories and parts of important events and connections of the Darug people and also other Aboriginal people that now call this area home and have done so for numerous generations.

This area is significant to the Darug people due to the evidence of continued occupation, within close proximity to this project site there is a complex of significant sites.

Landscapes and landforms are significant to us for the information that they hold and the connection to Darug people. Aboriginal people (Darug) had a complex lifestyle that was based on respect and belonging to the land, all aspects of life and survival did not impact on the land but helped to care for and conserve land and the sustenance that the land provided. As Darug people moved through the land there were no impacts left,

although there was evidence of movement and lifestyle, the people moved through areas with knowledge of their areas and followed signs that were left in the landscape. Darug people knew which areas were not to be entered and respected the areas that were sacred.

Knowledge of culture, lifestyle and lore have been part of Darug people's lives for thousands of years, this was passed down to the next generations and this started with birth and continued for a lifetime. Darug people spent a lifetime learning and as people grew older they passed through stages of knowledge, elders became elders with the learning of stages of knowledge not by their age, being an elder is part of the kinship system this was a very complicated system based on respect.

Darug sites are all connected, our country has a complex of sites that hold our heritage and past history, evidence of the Darug lifestyle and occupation are all across our country, due to the rapid development of Sydney many of our sites have been destroyed, our sites are thousands of years old and within the short period of time that Australia has been developed pre contact our sites have disappeared.

The *Aboriginal cultural heritage consultation requirements for proponents* Section 4.1.8 refers to "Aboriginal organisations representing Aboriginal people who hold cultural knowledge". Recent consultation meetings have revealed that many of these Aboriginal organisations and individuals do not hold cultural knowledge of the Western Sydney area. The increasing involvement of such parties in cultural heritage management means that genuine local Aboriginal organisations are unable to properly care for our cultural heritage.

Many Aboriginal organisations listed in the OEH response letter do not contribute to the Aboriginal community of Western Sydney. Individuals listed in the OEH response letter do not represent the community and while they may be consulted with, should not be employed for their own personal financial benefit.

Our organisation is committed to providing benefits back to our local Aboriginal community through such measures as funding the local Aboriginal juniors' touch football team, painting classes for the local children and donating money to various charities. Employment in cultural heritage activities is source of income that organisations such as ours can use to contribute to beneficial activities and support within the community.

Darug custodian Aboriginal Corporation's site officers have knowledge of Darug land, Darug Culture, Oral histories, landforms, sites, Darug history, wildlife, flora and legislative requirements. We have worked with consultants and developers for many years in Western Sydney (Darug Land) for conservation, site works, developments and interpretation/education strategies.

Darug Custodian Aboriginal Corporation have received and reviewed the report for 19-116 Rouse Hill Sikh Grammar School.

We support the recommendations set out in this report.

Please contact us with all further enquiries on the above contacts.


Regards



Justine Coplin

Kamilaroi Yankuntjatjara Working Group

RE: 19-116 Rouse Hill Sikh Grammar School Draft ACHAR for RAP comment

 philip.khan@...
To  Ingrid Cook

Hi Ingrid,

Thank you for your assessment report, we agree and support all your recommendations regarding 19-116 Rouse Hill Sikh Grammar School.

We look forward to working with you in the near future.

Regards
Phil

Kamilaroi Yankuntjatjara Working Group

Aboriginal Cultural Heritage Surveys, Lawn Mowing & Fencing

ABN 33 979 702 507

Not registered for GST

Mobile: [REDACTED]
Email: [REDACTED]




Barking Owl Aboriginal Corporation

Re: 19-116 Rouse Hill Sikh Grammar School Draft ACHAR for RAP comment



Barking Owl Aboriginal Corporation

To  Ingrid Cook



19-116 Rouse Hill ACHAR_Final Draft_20190527.pdf
11 MB

Dear Ingrid,

Myself and the members of Barking Owl Aboriginal Corporation have agreed and are satisfied with the Draft ACHAR RE: Rouse Hill Sikh Grammar School Rouse Hill NSW, and have no further comments or recommendations.

Kind regards

Jody Kulakowski
Barking Owl Aboriginal Corporation

Deerubbin Local Aboriginal Land Council



W: <http://www.deerubbin.org.au>

Sikh Grammar School
151-161 Tallawong Road
ROUSE HILL NSW 2155

Our Ref: 3031

17 June 2018

PROTECTION OF ABORIGINAL CULTURAL HERITAGE

Proposed Sikh Grammar School Development

151 - 161 Tallawong Road, Rouse Hill

Attention: Craig Kerslake

A representative of Deerubbin Local Aboriginal Land Council inspected the site of proposed Grammar School development at 151-161 Tallawong Road, Rouse Hill on Monday, 13th May 2019. An Aboriginal cultural heritage assessment was undertaken to evaluate the likely impact the proposed development has on the cultural heritage of the land.

Because of the impact of structures & the landscape from past land use. No Aboriginal cultural materials (in the form of stone artefacts, for example) was found during the assessment.

Deerubbin Local Aboriginal Land Council therefore, has no objection for the proposed Grammar School development of 151-161 Tallawong Road, Rouse Hill on the grounds of Aboriginal cultural heritage.

Yours Faithfully,

A handwritten signature in black ink, appearing to read "S Randall".

Steven Randall

(Senior Aboriginal Cultural Heritage Officer)

C.c. Barry Gunther – Office of Environment & Heritage

C.c. Ingrid Cook – NGH Environmental

Yulay Cultural Services

Re: FW: 19-116 Rouse Hill Sikh Grammar School Draft ACHAR for RAP comment



Arika Jalomaki
To  Ingrid Cook

Hi Ingrid


I on behalf of Yulay have read and supports the report for this project.

Kind Regards
Arika Jalomaki

Yurrandaali Cultural Services

Re: FW: 19-116 Rouse Hill Sikh Grammar School Draft ACHAR for RAP comment



Bo Field [REDACTED]
To  Ingrid Cook

Hi Ingrid

I on behalf of Yurrandaali Cultural Services have read and supports the report associated with this project.


Kind regards
Bo Field

Barraby Cultural Services

Re: FW: 19-116 Rouse Hill Sikh Grammar School Draft ACHAR for RAP comment



lee field [REDACTED]

To  Ingrid Cook

Hi Ingrid,

I on behalf of Barraby has read and supports the report associated with this project.

Kind regards
Lee Field

Widescope Indigenous Group

RE: 19-116 Rouse Hill Sikh Grammar School Draft ACHAR for RAP comment



WIDESCOPE : [REDACTED]
To  Ingrid Cook

Hi Ingrid,

I have received, viewed and support the Draft ACHAR

Regards
Steven Hickey

APPENDIX C UNEXPECTED FINDS PROCEDURE

An unexpected heritage item means any unanticipated discovery of an actual or potential heritage item, for which the Proponent does not have prior approval to disturb or does not have a safeguard in place to manage the disturbance.

These discoveries are categorised as either:

- a) Aboriginal objects
- b) Historic/non-Aboriginal heritage items
- c) Human skeletal remains

If any of the above items are suspected or identified during construction activities then a series of steps must be followed. These are outlined below:

1. all work should cease in that area and notify a Project Manager or Supervisor immediately of the find;
2. A 'no-go' zone should be established around the find, using visibility fencing (where applicable);
3. Inform all on-site personnel and staff of the find and the demarcated 'no-go' zone;
4. Contact a qualified archaeologist/heritage consultant to inspect the find and provide recommendations.
5. In the event that human remains are identified, complete steps 1-3. Replace Step 4 by immediately contacting the local police to investigate if the find relates to a criminal investigation. The police may take command of part or all of the site.
6. Once clearance of the site has been given by either the qualified archaeologist/heritage consultant then works may proceed within the 'no-go' zone UNLESS specifically instructed by the professional that no further works can be completed.