Newcastle Light Rail
Technical Paper 4 – Aboriginal heritage due diligence assessment
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Executive summary

RPS Australia East Pty Ltd has been engaged by GHD Pty Ltd on behalf of Transport for NSW (the proponent) to prepare an Aboriginal Heritage Due Diligence Assessment for the proposed Newcastle Light Rail project (the proposal). The purpose of a due diligence assessment for Aboriginal cultural heritage is to demonstrate that reasonable and practicable measures have been taken to prevent harm to an Aboriginal object or place. This assessment has been undertaken in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (2010) (DECCW 2010).

This report has outlined the relevant environmental and archaeological context, landforms, landscape features, disturbances, legislative context and the nature of the proposed activity at the proposal site.

There are four Aboriginal sites which extend into the proposal site (AHIMS 38-4-0831, 38-4-1222, 38-4-1223 and 38-4-1716). Two sites comprise surface artefacts (artefact scatters) and two are potential archaeological deposits (PADs) which have subsurface Aboriginal objects which have been confirmed by archaeological excavation. Both of these PADs are located in proximity to Cottage Creek and uncovered thousands of Aboriginal artefacts. Geotechnical investigations show that natural sand layers are present across the proposal site from 0.7m depths, with mixed sand fill between 0.3m and 0.7m and therefore Aboriginal objects may be present either in-situ or in disturbed contexts across the proposal site. The areas of highest archaeological sensitivity have been identified; however, there is potential for additional unidentified Aboriginal objects to be present across the proposal site. The proposed impacts will encompass ground surface and subsurface works and therefore has potential to impact on the sites registered on the Aboriginal Heritage Information Management System (AHIMS), and previously unrecorded Aboriginal objects.

An approved Aboriginal Heritage Impact Permit (AHIP) will be required for the potential impacts to Aboriginal heritage arising from the ground disturbance and construction works in order to meet the legislative requirements under the *National Parks and Wildlife Act 1974*. The AHIP must be sought for the salvage of AHIMS 38-4-0831, 38-4-1222, 38-4-1223 and 38-4-1716. The AHIP also needs to include provisions for the discovery of additional Aboriginal sites, including their assessment and mitigation, as well as protocols on their collection, excavation and storage, as required. The AHIP application should cover the entire proposal site.

An Aboriginal heritage construction management plan should be prepared and must incorporate protocols for the implementation of the AHIP approval, as well as clear instruction on protocols to be followed in the event that suspected Aboriginal objects, or skeletal remains, are identified during construction works.

Recommendation 1

An AHIP should be sought from the Office of Environment and Heritage (OEH) for the proposal site prior to ground disturbance works. The AHIP should include provisions for impact on registered AHIMS sites and/or the discovery of additional Aboriginal sites. The AHIP will need to include a salvage methodology for the collection, excavation and storage of recovered Aboriginal objects. Works must be only undertaken once approval has been granted by the OEH and works must be carried out in accordance with that approval.

Recommendation 2

An Aboriginal heritage construction management plan should be prepared as part of the construction environmental management plan, which outlines heritage management and mitigation, as well as heritage induction requirements for contractors. This Aboriginal heritage construction management plan must incorporate protocols for the implementation of the AHIP approval, previously unrecorded Aboriginal objects and skeletal remains. If unrecorded Aboriginal object/s are identified in the proposal site during works, then all works in the immediate area must cease and the area should be cordoned off. The heritage consultant
and Registered Aboriginal Parties must be notified, to assess the site and identify management measures. Works cannot commence until management measures have been implemented. In the unlikely event that skeletal remains are identified, work must cease immediately in the vicinity of the remains and the area must be cordoned off. The proponent must contact the local NSW Police who will make an initial assessment as to whether the remains are part of a crime scene or possible Aboriginal remains. If the remains are thought to be Aboriginal, OEH must be contacted by ringing the Enviroline 131 555. An OEH officer will determine if the remains are Aboriginal or not; and a management plan must be developed in consultation with the relevant Aboriginal stakeholders before works recommence.
## Terms, definitions, and abbreviations

<table>
<thead>
<tr>
<th>Abbreviation/ Term</th>
<th>Meaning</th>
</tr>
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<tbody>
<tr>
<td>Aboriginal Object</td>
<td>‘any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains’ (DECCW 2010:18).</td>
</tr>
<tr>
<td>Aboriginal Place</td>
<td>‘a place declared under s.84 of the NPW Act that, in the opinion of the Minister, is or was of special significance to Aboriginal culture’ (DECCW 2010:18). Aboriginal places have been gazetted by the minister.</td>
</tr>
<tr>
<td>AHIMS</td>
<td>Aboriginal Heritage Information Management System</td>
</tr>
<tr>
<td>AHIP</td>
<td>Aboriginal Heritage Impact Permit</td>
</tr>
<tr>
<td>DECCW</td>
<td>Department of Environment, Climate Change and Water (is now the Office of Environment and Heritage – OEH)</td>
</tr>
<tr>
<td>Due Diligence</td>
<td>‘taking reasonable and practical steps to determine whether a person’s actions will harm an Aboriginal object and, if so, what measures can be taken to avoid that harm’ (DECCW 2010:18)</td>
</tr>
<tr>
<td>EP&amp;A Act</td>
<td>Environmental Planning and Assessment Act 1979 (NSW)</td>
</tr>
<tr>
<td>Harm</td>
<td>‘destroy, deface, damage an object, move an object from the land on which it is situated, cause or permit an object to be harmed.’ (DECCW 2010:18)</td>
</tr>
<tr>
<td>LGA</td>
<td>Local Government Area</td>
</tr>
<tr>
<td>m</td>
<td>metres</td>
</tr>
<tr>
<td>NPW Act</td>
<td>National Parks and Wildlife Act 1974 (NSW)</td>
</tr>
<tr>
<td>NPW Regulation</td>
<td>National Parks and Wildlife Regulation 2009 (NSW)</td>
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<td>OEH</td>
<td>Office of Environment and Heritage (formerly DECCW)</td>
</tr>
<tr>
<td>PAD</td>
<td>Potential Archaeological Deposit</td>
</tr>
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<td>Proposal</td>
<td>Newcastle Light Rail project</td>
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<tr>
<td>Proposal site</td>
<td>Proposal site is the area that would generally be affected by construction works, and is subject to study in this report</td>
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1.0 Introduction

1.1 Background

The NSW Government is revitalising the Newcastle city centre. The revitalisation will reinforce the city’s role as a 21st century regional centre, unlock the potential of the city centre as a place that can meet the needs of the current and future community, and boost economic activity across the Hunter Region.

The Newcastle Urban Transformation and Transport Program (NUTTP) has been established to deliver the NSW Government’s $510 million commitment to revitalise the city. The program aims to bring people back to the city centre by strengthening connections between the city and the waterfront, creating employment opportunities, providing more public space and amenity, and delivering better transport. The NUTTP comprises:

1. urban redevelopment/renewal projects being led by Urban Growth
2. the transport program being led by Transport for NSW.

The transport program seeks to revitalise Newcastle by improving pedestrian and vehicle connectivity within the CBD and by promoting public transport usage and accessibility. Transport for NSW is now proposing to progress development of the Newcastle Light Rail project. The construction and operation of the light rail project is referred to as ‘the proposal’ in this document.

GHD Pty Ltd (GHD) was commissioned by Transport for NSW to undertake an assessment of the potential environmental impacts of the proposal and prepare a review of environmental factors (REF) in accordance with the provisions of Part 5 of the Environmental Planning and Assessment Act 1979 (the EP&A Act). RPS has been engaged by GHD on behalf of Transport for NSW to prepare an Aboriginal Heritage Due Diligence Assessment for the proposal.

1.2 The proposal

1.2.1 Location

The proposal site (the area that would be generally affected by construction works) is located in the Newcastle city centre and extends in an east–west direction within the former rail corridor and road reserves. It is bounded to the west by the Wickham Transport Interchange near Stewart Avenue. From the Wickham Transport Interchange the proposal site extends east along Beresford Street and enters the former rail corridor near the existing Wickham Station buildings. The proposal site is located within the former rail corridor from this point until near Worth Place, where it enters the road corridor and travels along Hunter Street and Scott Street to the northern boundary of Pacific Park.

The proposal site also includes the proposed location for the two new electrical substations in the former rail corridor to the west of Argyle Street and the placement of two temporary construction compounds.

The location of the proposal site is shown in Figure 1.

1.2.2 Key features

The proposal involves the construction and operation of a light rail system in the Newcastle city centre, and associated changes to the road and bus network (refer Figure 1).
This would include:

- About 2.7 kilometres of light rail track, consisting of about 2.5 kilometres of dual track and 180m of single track.
- Six light rail stops and associated infrastructure (such as platforms, shelters and lighting):
  - Wickham Interchange.
  - Honeysuckle.
  - Civic.
  - Crown Street.
  - Market Street.
  - Pacific Park.
- A light rail stabling and maintenance facility at the location of the existing Wickham Station.
- Terminus facilities near the Pacific Park stop.
- Ancillary infrastructure, including two new substations, power supply, wiring and utilities.
- Works in the former rail corridor.
- Removing seven existing bus stops along Hunter and Scott streets, and providing four new stops in Watt Street, Wharf Road (two stops) and Centenary Road.
- Changes to intersections and the configuration of traffic lanes in a number of locations.

Further information on the proposal is provided in Chapters 6 and 7 of the REF.

1.3 Purpose of report

This assessment has been prepared as an input to the REF. Proposed works would involve ground disturbance and portions of the alignment are also within 200m of watercourses. Therefore a due diligence assessment is required under s.1 and s.2a of the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (Due Diligence Code)(DECCW 2010:11-12).

The purpose of a due diligence assessment for Aboriginal heritage is to demonstrate that reasonable and practicable measures were taken to prevent harm to an Aboriginal object or place.

1.4 Methodology

In accordance with the Due Diligence Code (DECCW 2010) this report has considered relevant legislation, environmental context and historical information. A search of the NSW Aboriginal Heritage Information Management System (AHIMS) database has been undertaken and a review of relevant archaeological reports included (AHIMS search results are provided in Appendix 2).

The report has identified registered AHIMS sites (Appendix 2 – AHIMS database search 4 November 2015). The areas considered to have potential for Aboriginal sites to exist and, as such, the potential for impact by the proposed works on sites or potential sites has been addressed.

It should be noted that the construction methodology will be finalised by the contractor engaged to do the works, and as such the following advice should be reassessed if changes are made.
1.5 Authorship and acknowledgements

This report was prepared by RPS Senior Cultural Heritage Consultant, Laraine Nelson and reviewed by Tessa Boer-Mah, Newcastle Cultural Heritage Manager. Editorial and consistency review was undertaken by Greg Marshall and Lisa King of GHD and Erin Williams of RPS.
Figure 1 Proposal site
2.0 Legislative context

The following overview of the legal framework is provided as background information and should not be interpreted as legal advice. RPS is not liable for any actions taken by any person, body or group as a result of this general overview, and recommends that specific legal advice be obtained from a qualified legal practitioner prior to any action being taken as a result of the summary below.

A more detailed description of relevant legislation is provided in Appendix 1.

There is currently an Aboriginal native title claim (NC2013/002) over an area that includes the proposal site. The claim by the Awabakal and Guringai was submitted under the Commonwealth Native Title Act 1993.

2.1 Commonwealth Native Title Act 1993

The Awabakal and Guringai people have applied for recognition and have submitted a claim for registration, which was accepted on 13 June 2013, under ss. 190B and 190C of the Native Title Act 1993. The land under the claim covers the Newcastle local government area (LGA) and includes the proposal site. Following acceptance of the claim, the Awabakal and Guringai people were included in the Register of Native Title Claims providing them with certain procedural rights, including the right to negotiate (sections 190A to 190C Native Title Act 1993).

Native Title claims cannot be made in areas where the law states Native Title has been extinguished, even if Aboriginal people still have a traditional connection to that land or water. Areas subject to Native Title claim include vacant Crown land, National Parks, State Forests, Crown reserves, some non-exclusive leases, land covered by permissive occupancies and licences, and inland waters and the sea.

Under the Native Title Act 1993 Awabakal and Guringai are to be consulted in relation to the proposal site, but it should be noted that the tribunal has not made a decision on their Native Title claim and therefore they are not determined Native Title claimants.

2.2 NSW Aboriginal Land Rights Act 1983

In January 2015 the Awabakal Local Aboriginal Land Council made a claim under the NSW Aboriginal Land Rights Act 1983 covering the Wickham to Newcastle rail corridor. Under the Act, an Aboriginal Land Council can make a claim over Crown land that is not in use or occupation or that is not needed for an ‘essential public purpose’ or residential use. The decision for approval rests with the Minister and the Minister rejected the claim on the 13 March 2015 as the land was ‘no longer held by her Majesty’. This claim is thus no longer current for the proposal site.

2.3 NSW National Parks and Wildlife Act 1974

The National Parks and Wildlife Act 1974 (NPW Act) protects Aboriginal heritage (places, sites and objects) within NSW. Protection of Aboriginal heritage is outlined in s86 of the Act, as follows:

- ‘A person must not harm or desecrate an object that the person knows is an Aboriginal object’ s86(1).
- ‘A person must not harm an Aboriginal object’ s86(2).
- ‘A person must not harm or desecrate an Aboriginal place’ s86(4).
Penalties apply for harming an Aboriginal object or place. The penalty for knowingly harming an Aboriginal object (s86[1]) and/or an Aboriginal place (s86[4]) is up to $550,000 for an individual and/or imprisonment for two years; and in the case of a corporation the penalty is up to $1.1 million. The penalty for a strict liability offence (s86[2]) is up to $110,000 for an individual and $220,000 for a corporation.

Harm under the NPW Act is defined as any act that: destroys, defaces or damages the object, moves the object from the land on which it has been situated, and/or causes or permits the object to be harmed. However, it is a defence from prosecution if the proponent can demonstrate 1) that harm was authorised under an Aboriginal Heritage Impact Permit (AHIP) (and the permit was properly followed), or 2) that the proponent exercised due diligence in respect to Aboriginal heritage. The ‘due diligence’ defence (s87(2)), states that if a person or company has exercised due diligence to ascertain that no Aboriginal object was likely to be harmed as a result of the activities proposed for the proposal site (subject area of the proposed activity); then liability from prosecution under the NPW Act will be removed or mitigated if it later transpires that an Aboriginal object was harmed.

2.3.1 Notification of Aboriginal objects

Under section 89A of the NPW Act an Aboriginal object (or site) must be reported to the Director-General (now Chief Executive) of the Office of Environment and Heritage (OEH) within a reasonable time (unless it has previously been recorded and submitted to AHIMS). Penalties of $11,000 for an individual and $22,000 for a corporation may apply for each object not reported.

2.4 NSW National Parks and Wildlife Regulation 2009

The National Parks and Wildlife Regulation 2009 (NPW Regulation) provides a framework for undertaking activities and exercising due diligence in respect to Aboriginal heritage. The NPW Regulation outlines the recognised due diligence code of practice which is relevant to this report, but it also outlines procedures for AHIP applications and Aboriginal Cultural Heritage Consultation Requirements (ACHCRs); amongst other regulatory processes.

Under s80A of the NPW Regulation, a number of due diligence codes are recognised. This report has been written to meet the Due Diligence Code, discussed further below.

2.5 Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW 2010)

The purpose of the code is to set out the minimum benchmark for reasonable and practical steps in order to:

1. Identify whether or not Aboriginal objects (and places) are, or are likely to be, present in an area.
2. Determine whether or not their activities are likely to harm Aboriginal objects (if present).
3. Determine whether an AHIP application is required (DECCW 2010:2).

Investigations under the code include the following:

- A search of the AHIMS database to identify if there are previously recorded Aboriginal objects or places at the proposal site.
- Identification of landscape features including land within 200m of water, dune systems, ridgetops, headlands, land immediately above or below cliff faces and/or rockshelters/caves.
- Desktop assessment including a review of previous archaeological and heritage studies and any other relevant material.
- Visual inspection of the proposal site to identify if there are Aboriginal objects present.
Assessment as to whether an AHIP is required.

The aim of a due diligence assessment is to:

- Assist in avoiding unintended harm to Aboriginal objects.
- Provide certainty to land managers and developers about appropriate measures for them to take.
- Encourage a precautionary approach.
- Provide a defence against prosecution if the process is followed.
- Result in more effective conservation outcomes for Aboriginal cultural heritage.

One of the benefits of the due diligence provisions are that they provide a simplified process of investigating the Aboriginal archaeological context of an area to determine if an AHIP is required. This report has complied with the requirements of the code listed above.

Other requirements under the code are outlined below.

**Aboriginal consultation** is not required for an investigation under the Due Diligence Code (DECCW 2010:3). However, if the due diligence investigation shows that the activities proposed are likely to harm objects or likely objects within the landscape, then an AHIP will be required with full consultation.

**A record** of the due diligence procedure followed must be kept to ensure it can be used as a defence from prosecution (DECCW 2010:15).

Following a due diligence assessment (where an AHIP application was not required), an activity must proceed with caution. If any Aboriginal objects are identified during the activity, then works should cease in that area and the OEH must be notified (DECCW 2010:13). The due diligence defence does not authorise continuing harm.
3.0 Environmental context

The purpose of reviewing the relevant environmental information is to assist in identifying whether Aboriginal objects or places are present, or likely to be present, within the proposal site. The environmental context forms part of the desktop assessment required under the Due Diligence Code (DECCW 2010:12-13).

3.1 Geology and soils

The Newcastle foreshore is underlain by sandstone, siltstone, claystone, coal and tuff associated with the Nobbys Head formation. Broadly, the Newcastle foreshore falls within the Hamilton Soil Landscape, variation A: Developed Terrain. Topsoils in this landscape are typically brownish black specked loamy sand (A1) which is 20 to 60 centimetres thick. This is underlain by 15 to 30 centimetres of loose, pale coarse sand (A2), followed by brown to orange sandy pan (B horizon) and may further be underlain by clay (Matthei 1995:38-40). Although this is the typical soil formation, variations may occur due to previous Aeolian or alluvial events. Additional detail and information on geology and soils is provided in the land use summary (Section 3.4).

3.2 Topography and hydrology

The development of Newcastle as a major port has led to the reclamation of land and reworking of the shape of the Hunter River foreshore. The foreshore and environs, from its junction with Throsby Creek to Nobbys Headland, has undergone major modifications since European settlement; the original shore line was characterised by mud flats and sand spits (Melville 2014 p. 22).

Two watercourses, which cross the proposal site, are tributaries of the Hunter River. They are Cottage Creek, east of Wickham Station, and an unnamed watercourse between Brown and Crown Streets. Archaeological evidence shows that Aboriginal occupation was highly concentrated around Cottage Creek. Although it is likely that Aboriginal occupation would have occurred adjacent to the Brown and Crown Street watercourse; this has not been tested archaeologically.

3.3 Flora and fauna

This section provides an indication of the types of flora and fauna resources which were likely to have been available to Aboriginal people in the past. It is based on broad scale vegetation mapping for NSW (Keith 2006).

Past Aboriginal people are likely to have encountered Hunter-Macleay Dry Sclerophyll Forests in the vicinity of proposal site, as well as coastal vegetation. Dry sclerophyll forests have open canopies with trees up to 30m tall; common tree species include spotted gums, iron barks, grey gums, boxes and turpentines (Keith 2006:124-125). The understory of this vegetation community includes shrubs, herbs, ferns and grasses, thus providing habitat for smaller mammal species. The shrubby understory includes silver-stemmed wattle and forest oak which present as tall shrubs or small trees; smaller shrubs include coffee bush, gorse bitter pea, peach heath, large mock-olive, narrow-leaved geebung and mutton wood (Keith 2006:124-125).

This vegetation community, along with the coastal vegetation, would have provided habitat for a variety of animals and would have also provided potential food and raw material sources for Aboriginal people. Coastal resources are likely to have included fish and oysters, while typical animals likely to have been hunted in the vicinity include kangaroos, wallabies, sugar gliders, possums, echidnas, a variety of lizards and snakes, birds, as well as rats and mice.
The bones of such animals have been recovered from excavations of Aboriginal sites suggesting that they were sources of food (Attenbrow 2010:70-76), although the hides, bones and teeth of some of the larger mammals may have been used for Aboriginal clothing, ornamentation, or other implements.

3.4 Previous geotechnical investigations

The Newcastle city area has undergone significant landform modification since historic settlement. This modification is aligned with the development of Newcastle as the industrial, commercial, retail and residential hub of the Hunter region.

The proposal site has previously been used as a rail corridor, road pavement, footpath and contained structures and infrastructure. The rail corridor has associated disturbance in the form of rail ballast, tracks and associated infrastructure and results from previous geotechnical investigations show that beneath the ground surface, disturbance ranges from 0.7m to over 1.8m in depth (RCA Australia 2015:7). Outside the rail corridor geotechnical testing has shown that road pavements have typical disturbance for 0.4m beneath the ground surface (RCA Australia 2015:7). The amount of ground surface disturbance beneath buildings is likely variable (this has not been subject to geotechnical testing).

Water seepage in geotechnical testing areas typically appeared 0.5m to 2.8m below ground surface (although the water table is also likely affected by tidal fluctuations) (RCA Australia 2015:7). The geotechnical testing has identified the extent of fill and characteristics of the subsurface soils. A selection of geotechnical testing locations has been summarised in Table 1. The selection of sites has been based on proximity to areas of archaeological interest or where there are changes in subsurface soils which will assist in the archaeological assessment. The results of the geotechnical testing in Table 1 have been summarised as relevant to the archaeological assessment, however the RCA Australia report (2015) should be referred to directly if results are required for other purposes.

<table>
<thead>
<tr>
<th>Indicative location</th>
<th>Geotechnical testing location</th>
<th>Summary as relevant to archaeological assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wickham Station</td>
<td>TP01</td>
<td>Test pit undertaken in rail corridor. Ballast and gravel fill noted up to 0.77m below ground surface, followed by fill mixed with silty sand to 1.3m*. Layers below comprised silty clayey sand (1.3-1.7m) and silty sand (1.7m - 2.0m)</td>
</tr>
<tr>
<td>West of Steel Street (vicinity of Palais site)</td>
<td>TP03</td>
<td>Test pit undertaken in rail corridor. Ballast and gravel fill noted up to 0.58m, followed by fill mixed with sand to 1.15m. Sand from 1.15 to 2.8m.</td>
</tr>
<tr>
<td>Civic Theatre</td>
<td>BH18</td>
<td>Borehole through pavement near Civic Theatre. Concrete to 0.32m, then fill comprising mainly of sand (0.32-0.7m). Sand from 0.7 to 7.2m, followed by clay and sand 7.2-8.95m.</td>
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<tr>
<td>Wolfe Street</td>
<td>BH13</td>
<td>Borehole through pavement near Wolf Street. Pavement (asphaltic concrete) to 0.35m, then fill, gravel and sand 0.35-0.8m, followed by sand 0.8-3.9m, followed by clayey sandy silt 3.9-5m. Sandstone encountered from 5m onwards.</td>
</tr>
<tr>
<td>Newcastle Station</td>
<td>BH17</td>
<td>Concrete to 0.31m, then fill and sand (0.31-1.2m), followed by siltstone 2.3-3m. Sandstone from 3m onwards.</td>
</tr>
<tr>
<td>Pacific Street</td>
<td>BH14</td>
<td>Borehole through road pavement. Pavement to 0.14m, then fill with sand until 2.1m, from this level onward sand to 7.6m followed by silty clay.</td>
</tr>
</tbody>
</table>

*measurements in metres below ground surface
The results of the geotechnical testing in Table 1 show that while there are high levels of disturbance in the upper layers, natural sand layers can be present from 0.7m. Thus there is potential for in-situ Aboriginal objects to occur from 0.7m depth, onwards. Typically, there is a layer of mixed sand and fill below pavements and rail ballast which may contain out of context Aboriginal objects. Thus while there is substantial disturbance in the proposal site, out of context Aboriginal objects may be present from approximately 0.3m below pavements and in-situ from 0.7m. This needs to be considered in the assessment of proposed impacts.

3.5 Synthesis of environmental context

The natural resources and location of the proposal site suggests that the area would have been suitable for Aboriginal occupation. Fresh water resources may have been available in the vicinity of Cottage Creek, Brown and Crown streets. Analysis of land use and prior disturbances from European occupation based on available geotechnical results, show that while the upper layers are moderate to highly disturbed, there are layers of natural sands which have potential to contain in-situ Aboriginal objects.
4.0 Heritage context

The purpose of reviewing the relevant heritage information is to assist in identifying whether Aboriginal objects or places are present within the proposal site. The heritage context forms part of the desktop assessment required under the Due Diligence Code (DECCW 2010:12-13).

4.1 Aboriginal occupation in the Hunter Valley region

Archaeological evidence suggests that Aboriginal occupation of the Hunter Valley region began at least 35,000 years ago (Koettig 1987). Additional chronological evidence was recovered from the Hunter Valley’s north-east mountains for which the following dates were assigned: 34,580±650 (Beta-17009), >20,000 (Beta-20056) and 13,020±360 years before present (BP) (Beta-17271) (Koettig 1987, as cited in Attenbrow 2006). In the lower Hunter Valley, excavations at Moffats Swamp on Tomago Coastal Plain have revealed basal dates of 15,376 calibrated BP.

The majority of Aboriginal sites in the region, however, are dated to the more recent Holocene (<11,000 years ago). This may reflect Aboriginal occupation patterns, but may also be influenced by the inaccessibility of potential coastal Pleistocene sites that may have been inundated when sea levels rose and reached present levels approximately 6,000 years ago (Mulvaney and Kamminga 1999 p.223) Other factors such as post depositional processes that may have obscured sites, or a lack of archaeological research in particular areas, could account for the lack of evidence for Pleistocene or early Holocene occupation (AMBS 2005). At Black Hill excavations revealed a stone lined hearth dated to approximately 2,000 BP calibrated.

Throughout the Hunter Valley, archaeological investigations have provided a basis for the development of predictive models of site distribution within this region. Studies completed by Koettig and Hughes (1983a) and (1983b) have demonstrated that open artefact scatters are common throughout the Hunter Valley. Large open sites were generally located in proximity to large creeks that provided a more reliable source of potable water, with smaller open sites distributed through a variety of landforms including large and small creeks, slopes and crests.

Certain typological temporal markers such as backed blades and eloueras are present within the Hunter Valley assemblages. Whilst these provide only a gross indication of time scale, based on the age of the soils and the presence of backed artefacts, the majority of sites in the Hunter Valley are considered to date to the late Holocene period.

Using colonial records, (Brayshaw 1986) conducted extensive research of the landscape and the known Aboriginal communities in the broader Hunter Valley area. Although the ethnographic literature refers to ceremonial grounds and carved trees, these represent only a small portion of the sites which would have occurred in the Hunter Valley. Camp sites would have occurred more commonly, but little is recorded regarding the locations of such sites. The literature does indicate that in the Hunter Valley, as elsewhere, Aboriginal numbers were quickly and greatly reduced by introduced European diseases.

Brayshaw’s research into the ethnographic record also showed the distinction between the material culture and goods manufactured inland compared to coastal areas which were dependent on the resources available. The exchange of goods between inland and coastal inhabitants was also evident. Bark was probably the most commonly utilised raw material, associated with the construction of huts, canoes, nets, drinking vessels, baskets, shields, clubs, boomerangs and spears. Being manufactured from an organic material, very few such artefacts survive today. Scarred trees, carved trees, burial sites, ceremonial or bora grounds, cave paintings, rock engravings, axe grinding grooves, quarries and wells have all been recorded in the Hunter region. The distribution of these sites would generally have been reliant on environmental and cultural factors such as resource availability.
4.2 Archaeological evidence for Aboriginal occupation in the Newcastle area

The summary of environmental context (Section 3.0) has identified that there has been substantial modification to the original landforms in the Newcastle city area. This has included infilling of the harbour in some areas, canalisation of Cottage Creek, as well as roads, infrastructure and buildings. The presence of archaeological evidence for Aboriginal occupation in the Newcastle area is influenced by the previous land use, although a number of recent excavations have shown that Aboriginal sites are located below historic structures, or intermixed with historic occupation (City of Newcastle 2015:27).

In addition, the detection of Aboriginal archaeological evidence can depend on the sample size of areas archaeologically excavated (i.e. dimensions of trenches) and the location of archaeological excavations. The locations of archaeological investigations have been determined according to development proposals and, as such, have not systematically tested landforms or archaeological areas in Newcastle. The AHIMS database of Aboriginal sites is also limited by the same factors and many of the AHIMS sites have been identified as a result of archaeological excavation for development. This means that the extent of some of the subsurface AHIMS sites are unknown, as often only a sample of them were excavated, and as such the AHIMS results are evaluated following review of a synthesis of the available archaeological and historical literature for Newcastle.

4.2.1 Archaeological and heritage literature review

There are numerous sources of information on the Aboriginal occupation of Newcastle, this section; however, focuses on those studies which are most relevant to understanding the archaeological evidence for the Aboriginal occupation of Newcastle. The studies have been summarised according to the date issued/completed.

4.2.1.1 Convict Limber Yard (Bairstow 1989) (AHIMS 38-4-1020)

During the excavation of the Convict Limber Yard at Scott Street (SHR 00570) small quantities of Aboriginal artefacts were identified (Bairstow 1989). These appeared at the eastern end of the excavation and comprised chert, stone, shell and bone that were recorded at a depth of 1.5m, the same depth as the convict era deposit (Bairstow 1989:45-53), which is perhaps evidence of mixed deposits in that location. This site was registered as a potential archaeological deposit (PAD), AHIMS 38-4-1020. The excavation results suggest that the Aboriginal material is unlikely to extend beyond the area investigated and there did not appear to be in-situ deposits associated with the site.

4.2.1.2 Accor Ibis Hotel Site 700 Hunter Street Newcastle (AHMS 2001a, 2001b) (AHIMS 38-4-0544)

This excavation was undertaken approximately 120m east of Cottage Creek, immediately south of the proposal site, and included the investigation of AHMS 38-4-0544, which was registered as a PAD. The excavation of this site revealed an Aboriginal shell midden with 2,939 whole and fragmentary shells, 326 pieces of animal bone and 5,734 lithics, 4,000 of which on preliminary counts were identified to be stone artefacts (AHMS 2001:12). Local shell species, cockle and mud whelk were the dominant shell types contained in the midden material. Tuff was the dominant raw material for stone artefacts, although silcrete, chert and quartz were also present. The preliminary survey had not identified any Aboriginal objects, however the area was considered to be archeologically sensitive due to its proximity to Cottage Creek (AHMS 2001b). Due to the density of artefacts at this site, it is considered that it likely extends into the proposal site, and as such, this area has been identified as an area of archaeological sensitivity (Figure 2).
4.2.1.3 **Aboriginal Heritage Study (AMBS 2005)**

The Aboriginal Heritage Study for Newcastle Local Government Area (LGA) (AMBS 2005) did not involve subsurface archaeological investigation, however it provides archaeological sensitivity modelling and a collation of historic information including documentation of local Aboriginal people making extensive use of the resources of the Hunter River and its environs. An important source of historical information on Aboriginal people in the area was from Reverend Lancelot Threlkeld, who lived in the area of Cottage Creek, Honeysuckle between 1825 and 1826 (Threlkeld in Gunson 1974). Threlkeld records the procuring of fish by line and net, the gathering of shellfish, the opportune use of beached whales and the hunting of kangaroo, bandicoot, lizards and snakes (AMBS 2005:38).

The landscape model of archaeological sensitivity presented in the AMBS report is useful as a general guide, although more recent excavations have contributed additional information which will be discussed later. The area of central Newcastle and the Hunter River delta are described as being highly disturbed and modified, though it was considered that, in areas where landscape modification has been minimal, there is high potential for archaeological evidence to remain (AMBS 2005:80). In a summary of archaeological sensitivity for industrial Newcastle, the southern estuary shore is described as having moderate archaeological sensitivity (AMBS 2005:93).

4.2.1.4 **Palais Royale Site 684 Hunter Street Newcastle (AHMS 2011) (AHIMS 38-4-0831)**

This excavation was undertaken approximately 180m east of Cottage Creek and immediately south of the proposal site and included AHIMS 38-4-0831 (it should be noted that the AHIMS co-ordinates of the site are erroneous and place the site approximately 80m to the northwest of its actual location). The Aboriginal archaeological salvage of this site entailed digging a trench 16m long by 3m wide (48 square m), which was excavated to one to two m deep in 10 centimetre spits (arbitrary levels). The excavation recovered 5,534 Aboriginal objects (AHMS 2011:10). Radiocarbon dating of excavated material indicated the site was occupied from approximately 6,700 years ago and three occupation periods were identified: 6,716 to 6,502 years BP, c. 3,500 years BP and 2,480 to 1,933 years BP.

From 3,500 years BP the use of exotic stone raw materials including chert, chalcedony and silcrete were noted. An Aboriginal hearth (fireplace) was dated to 2,188 to 1,933 cal. years BP and this level (2,480-1,933 years BP) appears to have been a focus for occupation with artefacts becoming four times more numerous than previous levels. Nobbys tuff was used as a raw material for stone artefacts throughout the sequence. Backed blades were present throughout all layers of the site with a proliferation of this tool type in the upper layers. Campsite occupation including the consumption of local shell species only appears to have occurred at the site after about 1,933 years BP (AHMS 2011).

4.2.1.5 **Wickham Transport Interchange, Newcastle: Aboriginal Heritage Summary Report, (Artefact Heritage 2014) (AHIMS 38-4-1716)**

Artefact Heritage was engaged by Transport for NSW to prepare an Archaeological Survey Report (ASR) for the proposed Wickham Transport Interchange (Artefact Heritage 2014). The report found that the study area had potential for archaeological deposits and that further archaeological investigation would be required where sub-surface impacts had the potential to impact buried Aboriginal archaeological deposits. The study area was registered as a PAD (AHIMS 38-4-1716).

Artefact Heritage also prepared an Aboriginal Cultural Heritage Assessment Report (ACHAR). This ACHAR recommended a program of archaeological test excavation be undertaken to further investigate the archaeological potential of the study area. As a result of this, an AHIP (#C0000892) was issued on the 13 March 2015.
Salvage excavations were undertaken in two stages (Artefact Heritage 2015). Stage I was undertaken between 13 April and 30 April 2015 and identified approximately 391 artefacts. Stage II, undertaken between 11 June and 7 July 2015, was completed in an area adjacent to areas of high artefact concentration identified during Stage I. Approximately 3,912 artefacts were identified during Stage II salvages. It was concluded there was the potential for two main vertical concentrations, possibly representing two occupation layers, of artefacts to be present within the collected assemblage, and as a result the site had high significance and research value.

4.3 Aboriginal Heritage Information Management System

The AHIMS database is comprised of sites that have been registered as a result of survey or archaeological excavation. As detailed in Section 3.4 much of the proposal site has been subject to previous built infrastructure and thus the detection of Aboriginal sites has been limited to the ground surfaces that have been exposed and/or areas which have been subject to archaeological excavation.

The results of the AHIMS search indicate that 18 Aboriginal sites have been previously recorded within the search area (Appendix 2), however there are actually only 17, as 38-4-0851 and 38-4-0772 are separate registrations of the same site. The duplicate has been removed in the summary of site types (Table 2). PADs are the most common site type registered accounting for over half of the site types registered. Some of these PADs also have middens associated with them. Surface artefacts comprising artefact scatters and isolated finds accounted for the remaining site types.

<table>
<thead>
<tr>
<th>Site type</th>
<th>Count</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAD</td>
<td>7</td>
<td>41.18%</td>
</tr>
<tr>
<td>PAD + Midden</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>Surface Artefact(s)</td>
<td>8</td>
<td>47.06%</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Search parameters GDA Zone 56 Eastings 382900-386600, Northings 6355700-6357200 3 November 2015

There are four Aboriginal sites which extend into the proposal site (Table 3). Two sites comprise surface artefacts (artefact scatters) and two are PADs which have subsurface Aboriginal objects which have been confirmed by archaeological excavation (AHMS 2001, Artefact Heritage 2015). Due to the ambiguities in the AHIMS site cards for 38-4-1222 and 38-4-1223, the AHIMS Registrar was contacted who confirmed that these sites were artefact scatters and clarified their extent, this information was used for the mapping in Table 3.

<table>
<thead>
<tr>
<th>AHIMS</th>
<th>Site Name</th>
<th>Site Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>38-4-0831</td>
<td>Palais Royale</td>
<td>PAD</td>
</tr>
<tr>
<td>38-4-1222</td>
<td>Cottage Creek OS1</td>
<td>Artefact Scatter</td>
</tr>
<tr>
<td>38-4-1223</td>
<td>Wickham UFCCALE OS1</td>
<td>Artefact Scatter</td>
</tr>
<tr>
<td>38-4-1716</td>
<td>Wickham Transport Interchange PAD</td>
<td>PAD</td>
</tr>
</tbody>
</table>

The two PADs identified are located in the general vicinity of Cottage Creek and were excavated and found to contain thousands of Aboriginal artefacts, as described in the previous section. It is notable that both PADs were present despite disturbance in the upper layers of the sites. In the case of AHIMS 38-4-1716, the PAD was present beneath the rail ballast and beneath the demolished Palais building for AHIMS 38-4-0831.
The results of the archaeological excavations suggest that the Cottage Creek area has archaeological sensitivity, even in sections which have been previously developed. As a result, an area of archaeological sensitivity has been identified (Figure 2).

Landforms on the banks of previous watercourses are typically identified as being archaeologically sensitive. Historic maps indicate that there was a previous watercourse in the vicinity of Brown Street and thus this has been assessed to be an archaeologically sensitive landform (Figure 2). The geotechnical investigations (RCA Australia 2015), summarised previously in Section 3.4, show that natural sand layers are present across the proposal site from 0.7m depths, with mixed sand fill between 0.3m and 0.7m and therefore Aboriginal objects may be present either in-situ or in disturbed contexts across the proposal site.

These two areas of highest archaeological sensitivity have been identified for the proposal site. However, there is potential for additional unidentified Aboriginal objects to be present across all areas of the proposal site.
Figure 2 Aboriginal Heritage Sites (AHIMS) and Areas of Sensitivity
4.4 Synthesis of Aboriginal context

There are four Aboriginal sites which extend into the proposal site (Figure 2). Two sites comprise surface artefacts (artefact scatters) and two are PADs which have subsurface Aboriginal objects confirmed by archaeological excavation. Both of these PADs (38-4-1716 and 38-4-0831) are located in the general vicinity of Cottage Creek and excavations uncovered thousands of Aboriginal artefacts. The geotechnical investigations show that natural sand layers are present across the proposal site from 0.7m depths, with mixed sand fill between 0.3m and 0.7m and therefore Aboriginal objects may be present either in-situ or in disturbed contexts across the proposal site. The areas of highest archaeological sensitivity have been identified (Figure 2); however, there is potential for additional unidentified Aboriginal objects to be present across the proposal site.
5.0 Visual inspection and field results

A visual inspection of the proposal site was undertaken to identify whether Aboriginal objects are present on the ground surface or are likely to be present below the ground surface. In accordance with the Due Diligence Code a qualified archaeologist undertook the visual inspection (DECCW 2010:12-13).

The visual inspection included the areas of archaeological sensitivity around Cottage Creek and the modified watercourse near Crown and Brown Streets. The Cottage Creek area is grassed and largely undeveloped, although there has been some disturbance due the canalisation of the creek and additional fill has been placed on top of the original ground surface in some areas (Plate 1, Section 9.0). Ground surface exposure was low and visibility was moderate in grassed areas.

The area inspected near the Crown/Brown Street watercourse is highly developed and had low ground surface exposure and visibility (Plate 2, Section 9.0). The area in the vicinity of 200 Hunter Street (AHIMS 38-4-0796) was also inspected (Plate 3, Section 9.0).

Ground surface exposure and visibility were poor along the entire length of the proposal site due the emplacement of infrastructure, roads, pavements and buildings. Thus the detection of surface Aboriginal sites was very restricted.

No artefacts or previously recorded Aboriginal sites were identified as a result of the visual inspection; however as noted above, ground surface visibility was low. It should also be noted that any evidence of Aboriginal occupation in the proposal site, given the evidence of previous archaeological excavations, is likely to be sub-surface potentially to depths greater than 0.7m.
6.0 Impact assessment

The purpose of a due diligence assessment is to identify whether Aboriginal objects are present, or likely to be present, in the proposal site; to determine whether proposed activities are likely to harm Aboriginal objects (if present); and to determine whether an AHIP is required.

Previously recorded sites which are registered in AHIMS and their extent and nature have been documented (Figure 2). A number of locations have been identified as likely to contain unrecorded subsurface Aboriginal sites and these have been shown as areas of archaeological sensitivity in Figure 2. Geotechnical testing has identified natural sand layers are present across the proposal site from 0.7m depths, with mixed sand fill between 0.3m and 0.7m (RCA Australia 2015) and therefore Aboriginal objects may be present either in-situ or in disturbed contexts across the proposal site.

The proposed works encompass construction of a light rail between Wickham Station and Pacific Street, Newcastle. The scope of the proposal is described in Section 1.2. There are several components of proposal construction that would have the potential to impact on recorded and unrecorded Aboriginal sites.

6.1 Potential for impacts as a result of ground disturbance works

Ground disturbance for the proposed construction would involve excavation for:

- Six new light rail stops.
- Poles supporting overhead wires.
- Six new traffic signals.
- New substations at Argyle Street (in the rail corridor).
- Stabling and maintenance facility.
- Underground trenching for services to a depth of 1.6m.

The works would also involve the removal of Wickham Railway Station including the removal of the heavy rail infrastructure in the rail corridor which may involve subsurface impact. Construction compounds would also be erected in two locations.

6.1.1 Light rail stops

The construction of the light rail stops would require ground disturbance works which has the potential to uncover Aboriginal objects. The potential for impact on objects is dependent on the location of the works and the depth of excavation. The light rail stops are proposed at the following locations: Wickham Transport Interchange; Honeysuckle; Civic; Crown Street; Market Street; and Pacific Park. The light rail stops at the Wickham Transport Interchange and Crown Street are located in areas designated as ‘Landforms with Aboriginal Archaeological Sensitivity’ (Figure 2) and there is moderate-high likelihood for Aboriginal objects to occur.

6.1.2 Poles supporting overhead wires

Poles supporting overhead wires would require the excavation of pits about three m deep and 0.8 by x 0.8m in extent. The excavation of these pits has the potential to uncover Aboriginal objects. The likelihood of this occurring is largely dependent on the location. In the areas designated as ‘Landforms with Aboriginal Archaeological Sensitivity’ (Figure 2) and in the vicinity of AHIMS 38-4-0796 and AHIMS 38-4-0851 (recorded as PADs) there is moderate-high likelihood for Aboriginal objects to occur.
6.1.3 New traffic signals

The construction of traffic signals (including signalised pedestrian crossings) would require ground disturbance works, which have the potential to uncover Aboriginal objects. The potential for impact on objects is dependent on the location of the works and the depth of excavation. The traffic signals are proposed for Stewart Avenue and Beresford Street; Steel Street and Honeysuckle Drive; Worth Place and Hunter Street; Crown Street and Hunter Street; Market Street and Hunter Street; and Pacific Street and Scott Street.

There are also some areas where road upgrades would be undertaken. These are not anticipated to require extensive, if any, excavation works.

The traffic lights to be installed at Stewart Avenue and Beresford Street; Steel Street and Honeysuckle Drive; Crown Street and Hunter Street are in areas designated as ‘Landforms with Aboriginal Archaeological Sensitivity’ (Figure 2) and there is moderate-high likelihood for Aboriginal objects to occur.

6.1.4 Argyle Street substations

The area of the Argyle Street substations is immediately north-west of a designated ‘Landform with Aboriginal Archaeological Sensitivity’ (Figure 2). Ground disturbance works in the area of Argyle Street have moderate potential to disturb Aboriginal objects.

6.1.5 Wickham stabling and maintenance facility

The area of the Wickham depot and stabling yard is in an area designated as a ‘Landform with Aboriginal Archaeological Sensitivity’ (Figure 2). Ground disturbance works in this area have high potential to disturb Aboriginal objects.

6.1.6 Underground trenching for services

The trenching for installation of underground services is likely to require excavation to a depth of 1.6m (Addendum to Pre-Concept Report - Volume 1: PSC 2967 Newcastle Light Rail – Engineering and Operational Technical Advisor. 2015:38). Ground disturbance works for installation of services in the areas designated as ‘Landforms with Aboriginal Archaeological Sensitivity’ (Figure 2) have moderate-high likelihood for Aboriginal objects to occur.

6.1.7 Removal works

The proposed removal works would involve the removal of Wickham Station platforms and buildings. There is a high likelihood that these works will result in the disturbance of sub-surface material, given the proximity to a ‘Landform with Aboriginal Archaeological Sensitivity’ (Figure 2). There is a high potential for Aboriginal objects to occur.

6.1.8 Construction compounds

The establishment of the required construction compounds (eastern and western) will entail the installation of portable buildings and associated temporary structures, however the works will not include sub-surface disturbance (Figure 2). The compound sites will be decommissioned and buildings removed at completion of works. The location of the western construction compound will impact on the Aboriginal cultural heritage site (AHIMS 38-4-1223). Prior to works commencing in this area an AHIP must be sought and granted from OEH.
6.1.9 Heavy rail infrastructure and trackwork

Proposal construction would require the removal of heavy rail infrastructure for portions of the proposal site where the line is not being reused. This will involve the removal of redundant tracks and ballast as necessary, as well as rehabilitation of the area. Given the depth of ballast it is considered that ground disturbance will have a low impact on subsurface Aboriginal deposit.

6.2 Impact assessment of AHIMS recorded sites in the proposal site

There are four Aboriginal sites which extend into the proposal site (AHIMS 38-4-0831, 38-4-1222, 38-4-1223 and 38-4-1716). Two sites comprise surface artefacts (artefact scatters) and two are PADs which have subsurface Aboriginal objects which have been confirmed by archaeological excavation. On the basis of the impacts outlined above, there is high potential for impact to these registered AHIMS Aboriginal sites.

6.3 Unrecorded Aboriginal sites in the proposal site

The Aboriginal archaeological sensitivity of the proposal site varies dependent on a number of factors including: suitability of the site for Aboriginal occupation such as proximity to potable water and other resources; post settlement impact where depth of previous excavation as part of construction works since settlement may have previously destroyed sites; inundation from sea level rise or flooding of the Hunter River making areas less favourable for occupation; and post depositional processes that may have obscured sites, or a lack of archaeological research in potential areas.

Based on the above, and in light of previous archaeological excavations in the vicinity of the proposal site, two areas, Cottage Creek and the Crown and Brown Streets unnamed watercourse, are considered to be archaeologically sensitive; that is, there is a higher risk of impact on Aboriginal cultural objects during ground disturbance works at these locations (Figure 2). The remainder of the area is considered to have moderate – low archaeological sensitivity, with the grading of low being dependent on previous ground disturbance during construction and distance from the proposal site. This is consistent with the findings of the Aboriginal Heritage Study (AMBS 2005).

There is the potential for Aboriginal objects to occur beneath the level of historical disturbance. Subsequently excavation may potentially impact on Aboriginal objects located in sub-surface archaeological deposits.

6.4 Mitigation measures

The following measures are proposed to mitigate impacts and potential impact as a result of the proposed works.

6.4.1 AHIP requirements

An AHIP should be sought from the OEH. The AHIP should include provisions for impact to registered AHIMS sites and include a salvage methodology for the collection, excavation and storage of recovered Aboriginal objects. The AHIP will require consultation with the Aboriginal community in accordance with the Aboriginal Cultural Heritage Consultation Requirements (DECCW 2011). The AHIP application should also include a methodology for investigating and salvaging unrecorded Aboriginal objects.

6.4.2 Aboriginal Heritage Construction Management Plan

The Aboriginal heritage construction management plan will need to outline protocols for the implementation of the AHIP approval as well as clear instruction on protocols to be followed in the event that suspected Aboriginal objects are identified during construction works. The plan will also need to include protocols for the discovery of skeletal remains during works. A heritage induction for contractors should be conducted to ensure the protocols stipulated in the Aboriginal heritage construction management plan are understood and followed.
7.0 Conclusions and recommendations

The purpose of a due diligence assessment for Aboriginal cultural heritage is to demonstrate that reasonable and practicable measures were taken to prevent harm to an Aboriginal object or place and that the assessment has been undertaken in accordance with the Due Diligence Code (DECCW 2011).

This report has outlined the relevant environmental and archaeological context, landforms, landscape features, disturbances, legislative context and the nature of the proposed activity.

There are four Aboriginal sites which extend into the proposal site (AHIMS 38-4-0831, 38-4-1222, 38-4-1223 and 38-4-1716). Two sites comprise surface artefacts (artefact scatters) and two are PADs which have subsurface Aboriginal objects which have been confirmed by archaeological excavation. Both of these PADs are located in proximity to Cottage Creek and uncovered thousands of Aboriginal artefacts. Previous geotechnical investigations show that natural sand layers are present across the proposal site from 0.7m depths, with mixed sand fill between 0.3m and 0.7m and therefore Aboriginal objects may be present either in-situ or in disturbed contexts across the proposal site. The areas of highest archaeological sensitivity have been identified; however, there is potential for additional unidentified Aboriginal objects to be present across the proposal site. The proposed impacts will encompass ground surface and subsurface works and therefore has potential to impact on the identified AHIMS sites.

An AHIP will be required for the potential impacts to Aboriginal heritage arising from the ground disturbance and construction works in order to meet the legislative requirements under the National Parks and Wildlife Act 1974. The sites AHIMS 38-4-0831, 38-4-1222, 38-4-1223 and 38-4-1716 are within or in close proximity to the proposal site and will either be impacted by works or have a high potential to be impacted. The AHIP will seek approval for salvage of AHIMS 38-4-0831, 38-4-1222, 38-4-1223 and 38-4-1716, and include provisions for the discovery of additional Aboriginal sites, including their assessment and mitigation, as well as protocols on their collection, excavation and storage, as required. The AHIP application should cover the entire proposal site.

An Aboriginal heritage construction management plan should be prepared and must incorporate protocols for the implementation of the AHIP approval, as well as clear instruction on protocols to be followed in the event that suspected Aboriginal objects, or skeletal remains, are identified during construction works.

**Recommendation 1**

An AHIP should be sought from the OEH for the proposal site prior to ground disturbance works. The AHIP should include provisions for impact to registered AHIMS sites and/or the discovery of additional Aboriginal sites. The AHIP will need to include a salvage methodology for the collection, excavation and storage of recovered Aboriginal objects. Works must be only undertaken once approval has been granted by the OEH and works must be carried out in accordance with that approval.

**Recommendation 2**

An Aboriginal heritage construction management plan should be prepared as part of the construction environmental management plan which outlines heritage management and mitigation, as well as heritage induction requirements for contractors. This Aboriginal heritage construction management plan must incorporate protocols for the implementation of the AHIP approval, previously unrecorded Aboriginal objects and skeletal remains. If unrecorded Aboriginal object/s are identified during works, then all works in the immediate area must cease and the area should be cordoned off. The heritage consultant and Registered Aboriginal Parties must be notified, to assess the site and identify management measures. Works cannot commence until management measures have been implemented. In the unlikely event that skeletal remains are identified, work must cease immediately in the vicinity of the remains and the area must be cordoned off.
The proponent must contact the local NSW Police who will make an initial assessment as to whether the remains are part of a crime scene or possible Aboriginal remains. If the remains are thought to be Aboriginal, OEH must be contacted by ringing the Enviroline 131 555. An OEH officer will determine if the remains are Aboriginal or not; and a management plan must be developed in consultation with the relevant Aboriginal stakeholders before works recommence.
8.0 References


Koettig, M. (1987). Monitoring Excavations at Three Locations along the Singleton to Glennies Creek Pipeline Route, Hunter Valley: third report on archaeological investigations along this route, NSW Department of Public Works.


RCA Australia (2015). Geotechnical and Contamination Investigation: Newcastle Light Rail Project, Report to Transport for NSW.

9.0 Plates

Plate 1 Cottage Creek, facing south, note fill in middle ground

Plate 2 Vicinity of watercourse (Crown/Brown St), facing south
Plate 3 Vicinity of AHIMS 38-4-0796 facing east
Appendix I

Legislative overview
Summary of Statutory Controls

The following overview of the legal framework is provided solely for information purposes for the client, it should not be interpreted as legal advice. RPS will not be liable for any actions taken by any person, body or group as a result of this general overview, and recommend that specific legal advice be obtained from a qualified legal practitioner prior to any action being taken as a result of the summary below.

COMMONWEALTH

Aboriginal & Torres Strait Islander Heritage Protection Act 1984 (ATSIHP Act)

The purpose of this Act is to preserve and protect all heritage places of particular significance to Aboriginal and Torres Strait Islander people. This Act applies to all sites and objects across Australia and in Australian waters (s4).

It would appear that the intention of this Act is to provide national baseline protection for Aboriginal places and objects where State legislation is absent. It is not to exclude or limit State laws (s7(1)). Should State legislation cover a matter already covered in the Commonwealth legislation, and a person contravenes that matter, that person may be prosecuted under either Act, but not both (s7(3)).

The Act provides for the preservation and protection of all Aboriginal objects and places from injury and/or desecration. A place is construed to be injured or desecrated if it is not treated consistently with the manner of Aboriginal tradition or is or likely to be adversely affected (s3).

Native Title Act 1993

Native title recognises a set of rights and interests over land or waters where Aboriginal and Torres Strait Islander groups have practised and continue to practise, traditional laws and customs prior to sovereignty (British occupation). Native title recognises an Aboriginal or Torres Strait Islander people's traditional law and custom. For the courts to recognise native title there are two key legal questions that must be answered:

- Under the traditional laws and customs of the group of Indigenous people claiming native title, are their rights and interests to the claim area based on their traditional connection to the area?
- Has this connection been either entirely or partially ‘extinguished’ (lost) by specific government actions? For example, selling that area of claimed land.

‘Extinction’ of native title means that all or some native title rights are lost under Australian law. Once native title has been extinguished, it cannot be revived except in very limited circumstances.

The extinguishment of native title can be: total extinguishment which takes away all native title rights or partial extinguishment which takes away only some native title rights.

STATE

It is incumbent on any land manager to adhere to state legislative requirements that protect Aboriginal Cultural heritage. The relevant legislation is NSW includes but is not limited to the summary below.

National Parks and Wildlife Act 1974 (NPW Act)

The NPW Act provides statutory protection for all Aboriginal heritage, places and objects (not being a handicraft made for sale), with penalties levied for breaches of the Act. This legislation is overseen by the Office of Environment and Heritage (OEH), and specifically the Chief Executive (formerly the Director-General) of OEH. Part 6 of this Act is the relevant part concerned with Aboriginal objects and places, with
Section 86 and Section 90 being the most pertinent. In 2010, this Act was substantially amended, particularly with respect to Aboriginal cultural heritage requirements. Relevant sections include:

Section 86

This section now lists four major offences:

1. A person must not harm an object that the person knows is an Aboriginal object;
2. A person must not harm an Aboriginal object;
3. For the purposes of s86, ‘circumstances of aggravation’ include:
   a. The offence being committed during the course of a commercial activity; or
   b. That the offence was the second or subsequent offence committed by the person;
4. A person must not harm or desecrate an Aboriginal place.

Offences under s86 (2) and (4) are now strict liability offences, i.e., knowledge that the object or place harmed was an Aboriginal object or place needs to be proven. Penalties for all offences under Part 6 of this Act have also been substantially increased, depending on the nature and severity of the offence.

Section 87

This section now provides defences to the offences of s86. These offences chiefly consist of having an appropriate Aboriginal Heritage Impact Permit (AHIP), not contravening the conditions of the AHIP or demonstrating that due diligence was exercised prior to the alleged offence.

Section 87A & 87B

These sections provide exemptions from the operation of s86; Section 87A for authorities such as the Rural Fire Service, State Emergency Services and officers of the National Parks & Wildlife Service in the performance of their duties, and s87B for Aboriginal people performing traditional activities.

Section 89A

If a person knows of the location of an Aboriginal object or place that has not been previously registered and does not advise the Director-General (now Chief Executive) of that object or place within a reasonable period of time, then that person is guilty of an offence under this Section of the Act.

Section 90

This section authorises the Director-General (now Chief Executive) to issue an AHIP.

Section 90A-90R

These sections govern the requirements relating to applying for an AHIP. In addition to the amendments to the Act, OEH have issued three new policy documents clarifying OEH’s requirements with regards to Aboriginal archaeological investigations: Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW and Code of Practice for Archaeological Investigations in NSW. The Consultation Requirements formalise the consultation with Aboriginal community groups into four main stages, and includes details regarding the parties required to be consulted, advertisements inviting Aboriginal community groups to participate in the consultation process, requirements regarding the provision of methodologies, draft and final reports to the Aboriginal stakeholders and timetables for the four stages.
The Due Diligence Code of Practice sets out the minimum requirements for investigation, with particular regard as to whether an AHIP is required. The Code of Practice for Archaeological Investigation sets out the minimum requirements for archaeological investigation of Aboriginal sites.

**Aboriginal Heritage Impact Permits (AHIP)**

OEH encourages consultation with relevant Aboriginal stakeholders for all Aboriginal Heritage Assessments. However, if an AHIP is required for an Aboriginal site, then specific OEH guidelines are triggered for Aboriginal consultation.

**Aboriginal Cultural Heritage Consultation Requirements for Proponents**

In 2010, the Aboriginal Cultural Heritage Consultation Requirements for Proponents (ACHCRs) were issued by OEH (12 April 2010). These consultation requirements replace the previously issued Interim Community Consultation Requirements (ICCR) for Applicants (Dec 2004). These guidelines apply to all AHIP applications prepared after 12th April 2010; for projects commenced prior to 12th April 2010, transitional arrangements have been stipulated in a supporting document, Questions and Answers 2: Transitional Arrangements.

The ACHCRs include a four stage Aboriginal consultation process and stipulate specific timeframes for each state. Stage 1 requires that Aboriginal people who hold cultural information are identified, notified and invited to register an expression of interest in the assessment. Stage 1 includes the identification of Aboriginal people who may have an interest in the proposal site and hold information relevant to determining the cultural significance of Aboriginal objects or places. This identification process should draw on reasonable sources of information including: the relevant OEH regional office, the relevant Local Aboriginal Land Council(s), the Registrar of Aboriginal Owners, Aboriginal Land Rights Act (1983), the Native Title Tribunal, Native Title Services Corporation Limited, the relevant local council(s), and the relevant catchment management authority. The identification process should also include an advertisement placed in a local newspaper circulating in the general location of the proposal site. Aboriginal organisations and/or individuals identified should be notified of the project and invited to register an expression of interest (EoI) for Aboriginal consultation. Once a list of Aboriginal stakeholders has been compiled from the EoIs, they need to be consulted in accordance with ACHCRs Stages 2, 3 and 4.

**Environmental Planning & Assessment Act 1979 (EP&A Act)**

This Act regulates the system of environmental planning and assessment for New South Wales. Land use planning requires that environmental impacts are considered, including the impact on cultural heritage and specifically Aboriginal heritage. Within the EP&A Act, Parts 3, 4 and 5 relate to Aboriginal heritage.

Part 3 regulates the preparation of planning policies and plans. Part 4 governs the manner in which consent authorities determine development applications and outlines those that require an environmental impact statement. Part 5 regulates government agencies that act as determining authorities for activities conducted by that agency or by authority from the agency. The National Parks & Wildlife Service is a Part 5 authority under the EP&A Act.

In brief, the NPW Act provides protection for Aboriginal objects or places, while the EP&A Act ensures that Aboriginal cultural heritage is properly assessed in land use planning and development.
Heritage Act 1977

This Act protects the natural and cultural history of NSW with emphasis on non-indigenous cultural heritage through protection provisions and the establishment of a Heritage Council. Although Aboriginal heritage sites and objects are primarily protected by the *National Parks and Wildlife Act* 1974, if an Aboriginal site, object or place is of great significance, it may be protected by a heritage order issued by the Minister subject to advice by the Heritage Council.

Other legislation of relevance to Aboriginal cultural heritage in NSW includes the *NSW Local Government Act* 1993. Local planning instruments also contain provisions relating to indigenous heritage and development conditions of consent.

**NSW Aboriginal Land Rights Act 1983**

The preamble to the Aboriginal Land Rights Act 1983 (NSW) states that land in New South Wales was traditionally owned and occupied by Aboriginal people, and is of spiritual, social, cultural and economic importance to Aborigines. It recognises the need of Aboriginal people for land and acknowledges that land set aside for Aboriginal people in the past was progressively reduced without compensation.

The Aboriginal Land Rights Act, under legislation, recognises the rights of Aboriginal people in New South Wales and provides a vehicle for the expression of self-determination and self-governance.

The purposes of the Act are:

(a) to provide land rights for Aboriginal persons in New South Wales,

(b) to provide for representative Aboriginal Land Councils in New South Wales,

(c) to vest land in those Councils,

(d) to provide for the acquisition of land, and the management of land and other assets and investments, by or for those Councils and the allocation of funds to and by those Councils,

(e) to provide for the provision of community benefit schemes by or on behalf of those Councils.

The Aboriginal Land Rights Act 1983 provides that the New South Wales Aboriginal Land Council and Local Aboriginal Land Councils may make claim(s) to claimable Crown land(s). Crown lands' means lands that:

(f) are able to be lawfully sold or leased, or are reserved or dedicated under the Crown Lands Act 1989,

(g) are not lawfully used or occupied,

(h) are not needed or likely to be needed as residential lands in the opinion of the Minister administering the Crown Lands Act,

(i) are not needed or likely to be needed for an essential public purpose,

(j) are not subject to native title or an application for a determination of native title (other than an unopposed non-claimant application).

Land that is needed for the purpose of nature conservation may be claimed if the land council making the claim agrees to lease the land as a national park under Part 4A of the *National Parks and Wildlife Act* 1974 (*NPW Act*).
Appendix 2

AHIMS search results
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This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.
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Contact: T Russell
Recorders: Mary Dallas Consulting Archaeologists

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