



BTR BOMADERRY – BOMADERRY, NSW
Aboriginal Heritage Due Diligence Assessment

Prepared for Landcom

Shoalhaven Local Government Area

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1 Introduction

1.1 Project background

As part of the NSW Government's commitment to boosting housing supply and diversity in regional New South Wales, Landcom has been tasked with delivery of a 'Build to Rent' (BTR) pilot project on the NSW South Coast and in the Northern Rivers. Landcom has recently acquired a site on the South Coast for one of the BTR projects. The land is located at 53 and 57 Bolong Road and 4 Beinda Street, Bomaderry and is within the Shoalhaven local government area (LGA). The acquired lands constitute the 'study area' for this assessment and is shown on Figure 1.

Kelleher Nightingale Consulting Pty Ltd (KNC) were engaged by Landcom to undertake an Aboriginal heritage due diligence assessment of the study area to identify if Aboriginal objects were likely to be located in the study area and if so whether the proposed works were likely to harm those objects. This report presents the findings of a due diligence Aboriginal heritage assessment of the study area. This assessment has been conducted in accordance with the Heritage NSW *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (OEH 2010).

1.2 Assessment process

The due diligence assessment process is a step by step method designed to give proponents a baseline level of information outlining opportunities and constraints related to Aboriginal heritage. The relevant steps are:

- Determining if the activity will disturb the ground surface or any culturally modified trees (Step 1)
- Database search: Aboriginal heritage information management system (AHIMS) and known information sources (Step 2a)
- Landscape assessment (Step 2b)
- Impact avoidance assessment (Step 3)
- Desktop assessment and visual inspection (Step 4).

The *Code of Practice* specifies that if the initial assessment process identifies that Aboriginal objects will be or are likely to be harmed, then further investigation and impact assessment is required (Step 5).

The Heritage NSW process involves "taking *reasonable and practical measures* to determine whether your actions will harm an Aboriginal object and, if so, what measures can be taken to avoid that harm" (OEH 2010:4).

1.3 Summary of findings

The due diligence assessment and associated visual inspection of the proposed works did not identify any Aboriginal archaeological sites, objects or areas of archaeological potential within the study area. The study area displays low archaeological potential due to disturbance and modification from house and shed construction, ground surface modification and landscaping activities. There is a very low likelihood of any intact archaeological deposit remaining within the study area.

It is reasonable to assume that no Aboriginal objects would be harmed by the proposed works and according to the Heritage NSW *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*, the proposed works can proceed with caution.



Figure 1. Location of study area

2 Assessment Process

2.1 Identify if the proposed activity will disturb the ground surface

The proposal would likely involve the demolition of existing dwellings, earthworks, building construction and installation of utilities and water-related infrastructure. The proposal requires excavation and construction which would disturb the ground surface and have the potential to impact on Aboriginal objects. As a result, the due diligence process progressed to the next step.

2.2 Database searches (AHIMS) and known information sources

2.2.1 AHIMS web service

The Aboriginal Heritage Information Management System (AHIMS) is a database operated by Heritage NSW and regulated under section 90Q of the *National Parks and Wildlife Act 1974*. AHIMS contains information and records pertaining to registered Aboriginal archaeological sites (Aboriginal objects, as defined under the Act) and declared Aboriginal places (as defined under the Act) in NSW. A search of AHIMS was conducted on 17 January 2024 to identify registered (known) Aboriginal sites or declared Aboriginal places within or adjacent to the study area (AHIMS Client Service ID: 855372). The search results are attached as Appendix A.

The AHIMS Web Service database search was conducted within the following coordinates (GDA, Zone 56):

Eastings:	280421 – 281563
Northings:	6139542 – 6140633
Buffer:	0 metres (coordinates included a buffer around the study area)

The AHIMS search results showed:

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

The location of registered Aboriginal sites within these coordinates is shown on Figure 2. The frequencies of site types ('site features') within the AHIMS database search area are listed in Table 1.

Table 1. Site features and context from AHIMS database search

Site Context	Site Feature	Number	Frequency (%)
Open	Artefact	4	57.1
	Artefact; Habitation Structure; Grinding Groove	1	14.3
	Potential Archaeological Deposit	1	14.3
Closed	Artefact; Habitation Structure	1	14.3
Total		7	100

AHIMS records show that there are no previously registered sites located within the study area. The AHIMS results and previous archaeological investigations in the area are discussed further in section 2.2.3.

2.2.2 Other heritage registers and databases

A search was undertaken of the following statutory and non-statutory heritage registers for Aboriginal heritage items:

- Shoalhaven Local Environment Plan (LEP) 2014
- S.170 Heritage Conservation Registers
- State Heritage Register and State Heritage Inventory
- Commonwealth Heritage List
- National Heritage List
- Australian Heritage Database
- Australian Heritage Places Inventory and
- Register of the National Estate - note the Register was closed in 2007 and is no longer a statutory list. It is maintained on a non-statutory basis as a publicly available archive and educational resource.

No Aboriginal archaeological sites or Aboriginal heritage items were recorded on these databases within the study area.



Figure 2. AHIMS search results

2.2.3 Previous archaeological investigations in the vicinity of the study area

Several archaeological investigations have been conducted within the vicinity of the study area. Previous Aboriginal heritage assessments in the local area have primarily been undertaken for large scale infrastructure projects. The pertinent studies are discussed below.

Nowra Bridge Project

Aboriginal heritage assessment was undertaken for the Nowra Bridge Project by Artefact Heritage Pty Ltd (Artefact) in 2017-2018 (2018a; 2018b; 2019). The assessment undertaken by Artefact included archaeological surveys, a test excavation program, a process of Aboriginal community consultation and the preparation of a Cultural Heritage Assessment Report.

Archaeological survey of the assessment corridor was undertaken in four survey units on both sides of the Shoalhaven River extending east and west of the Princes Highway road corridor. The assessment area boundary was located southwest of the current study area. A total of five Aboriginal archaeological sites were recorded during the survey: Nowra Bridge 1, Nowra Bridge 2, Nowra Bridge 3, Nowra Bridge 4 and Nowra Bridge 5. Sites identified comprised low density artefact scatters and isolated finds, one rockshelter site with archaeological deposit and one culturally modified tree. Five PAD areas were also identified and represented areas assessed as having high archaeological sensitivity. These included Nowra Bridge PAD 1, Nowra Bridge PAD 2, Nowra Bridge PAD 3, Nowra Bridge PAD 4 and Nowra Bridge PAD 5. One PAD area, Nowra Bridge PAD 5 (AHIMS 52-5-0854) was located approximately 350 metres southwest of the current study area. The PAD area was identified on the elevated landform located above and adjacent to Bomaderry Creek.

A test excavation program was undertaken for the project. The test program included testing within portions of the newly identified PAD areas and sites identified during survey which would be impacted by the proposal. Five new subsurface artefact scatter sites were identified as a result of the test excavation program; these included sites Nowra Bridge 6, Nowra Bridge 7, Nowra Bridge 8, Nowra Bridge 9 and Nowra Bridge 10. A total of 362 artefacts were recovered from 69 test squares excavated across the entirety of the assessed impact area. A diverse range of raw materials were present, however artefacts predominantly comprised quartz and silcrete material. Quartzite, mudstone, dolerite, chert, chalcedony, basalt and ironstone raw materials were also identified. Artefact types identified consisted of complete flakes, flake fragments, cores and core fragments, and debris. Examples of mullers and geometric microliths were also present in the overall assemblage.

One site, Nowra Bridge 10 (AHIMS 52-5-0873) was identified through the test excavation program as a result of archaeological testing undertaken within a portion of Nowra Bridge PAD 5. The site was located approximately 330 metres southwest of the current study area on the raised alluvial floodplain north of Bomaderry Creek and east of the Princes Highway corridor. The site comprised a subsurface artefact scatter site consisting of 11 artefacts identified within one 50 x 50 centimetre test square. Test excavation at this site location revealed a disturbed archaeological deposit, heavily impacted by fluvial disturbance and previous land use activity. All artefacts recovered from the site consisted of complete flakes; the majority of artefacts (n=9) were of quartz raw material, one chalcedony flake and one silcrete flake were also recorded. The site was assessed as having low archaeological significance given its location in a disturbed and modified environment.

A CHAR was prepared to support an application for an AHIP for impacts to sites within the Nowra Bridge Project impact area. Several sites identified as a result of the Nowra Bridge Project were avoided as a result of design refinements. CHAR assessment proposed mitigation for impacted sites of moderate and high significance, Nowra Bridge 1, Nowra Bridge 2, Nowra Bridge 7, Nowra Bridge 8 and Nowra Bridge 9. Community collection of surface artefacts was recommended for sites Nowra Bridge 1 and Nowra Bridge 2. Given the moderate significance of sites Nowra Bridge 8 and Nowra Bridge 9, and the high significance of Nowra Bridge 2 and Nowra Bridge 7; a program of salvage excavation was recommended to offset the loss of information caused by impact to the sites. No mitigation was proposed for low significance sites Nowra Bridge 6 and Nowra Bridge 10. AHIP C0005074 was subsequently issued on 27 August 2019 for the Nowra Bridge Project.

An Aboriginal archaeological assessment of an addendum assessment area for the Nowra Bridge Project was undertaken in May 2019 (KNC 2019). The assessment was undertaken to assess two locations identified for additional design refinements. Design refinements consisted of the inclusion of an additional area located east of the Princes Highway, adjacent to Bomaderry Creek (approximately 400 metres southwest of the current study area) and the removal of an area west of the Princes Highway, immediately north of Illaroo Road (approximately 630 metres southwest of the current study area).

The assessment identified one newly registered site, Bomaderry Creek/Illaroo Road Rockshelter (AHIMS 52-5-0920) within the assessment area and determined that one registered AHIMS site Nowra Bridge PAD 5 (AHIMS 52-5-0854) did not extend into the assessment area. Bomaderry Creek/ Illaroo Road Rockshelter was located approximately 620 metres southwest of the current study area.

The rockshelter site was recorded positioned on the mid, north facing slopes of a long, broad east-west oriented ridgeline running parallel to Bomaderry Creek. Six artefacts including one shell fragment were observed within an eroded section of the dripline, mid-way across the front of the shelter. Based on the eroded exposure along the dripline and depth of the surrounding bedrock it was determined that the deposit was approximately 20cm in depth and in reasonable condition. No art or grinding patches were observed on the wall or boulders of the shelter. The site was determined to be of moderate archaeological significance.

Transport for NSW adjusted the project boundary to avoid Bomaderry Creek/Illaroo Road Rockshelter (52-5-0920). As a result, it was determined that no Aboriginal archaeological objects/sites would be impacted by the proposed works within the addendum assessment area. Significant disturbance of ground surfaces in the addendum assessment area was found to have impacted on the survival of archaeological deposit across the majority of the area and the presence of Aboriginal objects was considered unlikely.

Berry to Bomaderry – Princes Highway Upgrade

A series of Aboriginal archaeological investigations have been undertaken for the Berry to Bomaderry Princes Highway Upgrade project. Initial Aboriginal heritage assessment was undertaken for the project by Navin Officer Heritage Consultants (NOHC) in 2012. The assessment identified a number of archaeological sites and 'Potentially Archaeologically Sensitive Areas' or PASAs along the project alignment. Archaeological test excavation was subsequently undertaken at 16 areas along the project alignment. Of the 16 PASAs subject to test excavation, 14 were found to contain Aboriginal objects and became registered archaeological sites. No Aboriginal archaeological sites associated with the assessment are located within or in the vicinity of the current study area.

A total of 243 artefacts were recovered from 278 test squares across the overall program. Artefacts generally consisted of flakes and flake fragments (72.8%), followed by flaked pieces (16.5%). A small number of retouched flakes and cores were also identified (4.9%) with two small errillures also recovered. Test excavation results indicated that a relatively high archaeological sensitivity could be associated with certain micro-topographies within a 200 metre corridor surrounding former wetland basins (NOHC 2013). Excavation results were used to inform significance and impact assessments for the Review of Environmental Factors (REF).

AHIP C0000846 was issued in January 2015 for the project and included provision for salvage excavation at eight sites which were to be at least partially impacted by the proposal: G2B A42, G2B A44, G2B A45, G2B A47, G2B A51, G2B A53, G2B A54 and G2B A55, with surface collection to take place at site G2B A1. Following the determination of the project REF, Kelleher Nightingale Consulting (KNC) were engaged to revise the proposed salvage excavation program previously prepared by NOHC, based on changes to proposed impacts and locations of ancillary sites. KNC recommended that nine of the identified Aboriginal sites should be targeted by salvage excavation. The aim of salvage excavation was to further investigate the nature and extent of Aboriginal archaeological deposits at these locations and to mitigate against impacts associated with the proposed works. Surface collection was also recommended at two sites. Prior to the commencement of the program, TfNSW advised that one of the nine sites earmarked for salvage excavation was no longer expected to be impacted by the proposed works.

Artefact Heritage was subsequently engaged to undertake the salvage program under AHIP C0000846. Eight sites were salvaged and two sites were subject to surface collection (Artefact Heritage 2016). A total of 3066 artefacts were recovered from the eight salvaged sites. Very high artefact densities (between 50 and 100 artefact per square metre) were recovered from three of the salvaged sites (G2B151, G2B A54 and G2B A55).

Three flaked glass artefacts identified at sites G2B A54 and G2B A55 were also interpreted as indicating the presence of possible contact sites at these site locations. General trends drawn from the site assemblages included consistently low proportions of retouched artefacts, small variation in proportions of cores and significant variations in artefact densities (Artefact Heritage 2016: 109). The Berry to Bomaderry assemblage largely comprised fine grained sedimentary stone varieties (predominantly good quality chert and chalcedony) with retouched artefacts also comprising high quality silcrete. General trends supported the assessment that the salvaged sites likely represented secondary knapping sites. This was supported by the overall very low proportion of cortex, micro-debitage, and retouch identified at all sites, as well as the low proportion of cores and the relatively small size of cores overall.

Following completion of the program, TfNSW identified that adjustments to the project footprint would be required, including additional work areas outside the existing AHIP boundary. Artefact Heritage undertook an archaeological assessment of the additional areas and identified seven Aboriginal sites within the new boundary ('addendum study area'), considered to comprise archaeologically sensitive landforms which had not been subject to investigation during the previous archaeological programs (Artefact Heritage 2017a). It was recommended that four of these be subject to a mitigatory salvage program and a salvage methodology was prepared (Artefact Heritage 2017b).

A variation to AHIP C0000846 was granted by OEH in May 2017 to extend the AHIP area (OEH Notice No. C0002726). Variation was also made to allow for the mitigatory salvage excavation within the new impact area at the four site extensions identified by Artefact Heritage 2017a: G2B A48, G2B A50, G2B A59 and G2B A61. KNC was subsequently engaged to undertake the addendum salvage excavations in accordance with the approved Salvage Methodology

(Artefact Heritage 2017b). A total of 157 artefacts were recovered during the salvage excavations (Phase 1 and Phase 2 combined). A total of 52m² was excavated across the four sites. Overall artefact densities were low: one third of squares (33%) yielded zero artefacts, with 48% of squares yielding less than 1-5 artefacts and 19% yielding 6-11 artefacts. The highest density squares were at sites G2B A48 (Area 1 and Area 2) and G2B A50 (Phase 1 squares TS2 and TS3) where the density peaked at 10-11 artefacts/m². The mean artefact density at all the sites was low, peaking at 5.4/m² for the Phase 1 program at G2B A50, closely followed by the Phase 2 areas at G2B A48 where the mean density was 4.6/m². The remaining sites (G2B A59 and G2B A61) recorded much lower densities of between 1.1 and 2.1 artefacts/m².

The archaeological record salvaged from the sites G2B A48, B2B A50, G2B A59 and G2B A61 suggested casual resource gathering along the margins of Wiley's Creek, Abernethy's Creek and connecting spur lines (KNC *in prep*). The evidence of domestic activity did not suggest intensive use of any of these locations. The artefacts resulting from core reduction formed a mainly low density assemblage, and consisted of knapping debris related to the secondary reduction of cores. Site G2B A61 yielded the highest mean artefact density of the four sites under investigation. However, sites in similar environmental contexts, excavated for the Berry to Bomaderry Upgrade, yielded much higher artefact densities of between three and ten times the mean artefact density compared to G2B A61. The peak artefact density at G2B A61 was modest in comparison to the peak densities recorded for sites with larger assemblages, also in creek-side contexts within the Berry to Bomaderry Upgrade corridor. Overall, the salvage results were comparable with those from the previous salvage program undertaken by Artefact Heritage for the project.

Foxground and Berry Bypass Project

Archaeological investigations were also undertaken by NOHC (2012) for the Foxground and Berry Bypass - Princes Highway Upgrade project located northeast of the current study area. Initial investigations were completed for the Environmental Assessment (EA) and included a review of background information, development of a predictive model and completion of an archaeological field survey. This identified 29 Aboriginal cultural heritage items within the project area. These included two surface artefact sites, four non-archaeological places considered to hold Aboriginal cultural significance and 23 locations designated as PASAs. No Aboriginal archaeological sites associated with the assessment are located within or in the immediate vicinity of the current study area.

Twenty one PASAs were selected for test excavation across the project area. In total, 298 test pits were excavated yielding 236 artefacts. Eighteen PASAs subject to test excavation were determined to contain subsurface archaeological deposit. The most frequent raw material was chert (71%), followed by quartz (27%), with smaller frequencies of silcrete, chalcedony, mudstone/tuff, quartzite, sandstone and volcanics.

Results of the test excavation revealed that higher artefact incidence and/or assemblage richness tended to coincide with major spur lines and low gradient basal slopes above, and set back from, the valley floor, whereas the valley floors (and in particular the alluvial flats) were generally characterised by intermittent and low incidences of artefacts. Ten sites were identified as displaying low significance with no further investigation warranted. Nine sites displayed moderate archaeological potential and were located on spur lines, basal slopes bordering valley floors and locally elevated micro-topographic features within the valleys. Three sites were determined to display moderate to high archaeological significance. The majority of sites with moderate archaeological significance, and all sites to be impacted by the proposal with moderate to high significance were recommended for mitigatory salvage excavation.

New South Wales Archaeology Pty Ltd (2013) was engaged to conduct an archaeological salvage excavation program at sites where geotechnical works were proposed in preparation for construction of the highway upgrade. Seventy six proposed geotechnical work locations were found to occur within the boundaries of known Aboriginal sites. Eighteen of these fell within Aboriginal site areas which had been recommended for archaeological salvage in the EA (cf. NOHC 2012). An Aboriginal Heritage Impact Permit (AHIP) #1132202 was issued to allow the geotechnical works to impact on the specified Aboriginal sites ahead of project approval, with provision for further salvage excavation for these sites required to mitigate project impacts. A total of 215 artefacts were recovered from the salvage program. Recovered artefact densities were generally low to moderate. Artefact raw materials were dominated by chert (61%), followed by silcrete (12%) and quartz (11%). Key issues identified by the assessment included the importance of considering geomorphology and the influence of fluvial and erosive processes on archaeological sites within the creek valley landscape context.

KNC (2016) were engaged to complete an archaeological excavation program for the 12 salvage sites and nine ancillary sites (21 total sites) identified in the Navin Officer investigations for the Foxground and Berry bypass project. The program involved the hand excavation of 383m² resulting in the recovery of 5,260 artefacts. Archaeological and cultural investigations identified a range of Aboriginal places from the mundane and domestic to selective and specialised. Evidence included a clear differentiation between the archaeology of the identified Aboriginal Battleground (Little Mountain or Dicky Woods Meadow Battleground Cultural Area) and the surrounding support camps. The activities in the Battleground were seen to be physically different, which reinforced and extended the cultural interpretation of the area. Three radiocarbon samples were analysed for the Foxground and Berry bypass project. Dates ranged from 11,937 years ago to 903 years ago. The time span between these dates indicates the project area was being used intermittently over a time span of at least 11,000 years.

Implications for Study Area

A review of the database searches and associated background information did not identify any Aboriginal objects or sites within the study area. Previously identified Aboriginal archaeological sites within the wider area consist of artefact scatters and isolated artefacts, PAD areas, grinding grooves and rockshelter sites with archaeological deposit.

Site types recorded around the study area demonstrate that the local landscape retains archaeological evidence of varied Aboriginal activities and landscape uses. Nearby large scale excavations have demonstrated that where limited disturbance is present, sites retain important information on Aboriginal landscape use history. Excavation undertaken southwest of the study area identified a disturbed deposit of low archaeological significance. The current study area has been subject to land use disturbance, leading to a low likelihood of any intact archaeological deposit remaining within the study area.

2.3 Landscape Assessment

The Heritage NSW *Code of Practice* identifies several landscape features that were often used by Aboriginal people in the past and consequently are often associated with Aboriginal objects, provided that the landscape has not been significantly disturbed. An evaluation of landscape features within the study area aids in assessing whether Aboriginal archaeology is likely to exist.

The study area is located on the southern Illawarra Coastal Plain, a sub-region of the Sydney Basin. The Sydney Basin is a large geological feature that stretches from Batemans Bay to Newcastle and west to Lithgow. The formation of the basin began between 300 to 250 million years ago when river deltas gradually replaced the ocean that had extended as far west as Lithgow.

The underlying geology of the study area is Permian in age, with geology of the study area consisting of the Nowra Sandstone Member of the Shoalhaven Group (Figure 3). The Nowra Sandstone Formation consists of fine to coarse-grained, often pebbly, quartzose sandstone (Psn) (Bowman et al. 1972).

The Shoalhaven soil landscape is present across the study area (Figure 3). This soil landscape is characterised by moderately deep Prairie Soils occurring on levees. Red Earths and Yellow and Red Podzolic Soils occur on terraces. These soils are produced mainly as a result of alluvium associated with estuarine sediments and appear on undulating floodplains. Erosion scours occur as a result of flooding events and minor stream bank erosion. Soil materials consist of hardsetting brownish black fine sandy loam topsoils as well as brown weakly pedal light sandy clay loam and dull yellowish brown massive sandy clay subsoils.

Topography in the region is characterised by rolling hills interspersed with valley floors, drainage channels and floodplains below the basal ranges and spurs of the Cambewarra Range. Topography around the study includes moderately to gently undulating rises to undulating low hills on sandstone on the Coastal Plain. The study area is primarily located on a broad north to south orientated ridge crest and slope overlooking the floodplain of Bomaderry Creek. The study area is located within proximity to Bomaderry Creek which joins the Shoalhaven River southeast of the study area. Contemporary land use practices including the construction of dwellings and vegetation clearance have contributed to disturbance across the study area. Native vegetation has been mostly cleared with regrowth native vegetation covering parts of the study area.

Summary

The study area is located within proximity to landform features (watercourses and ridgelines) which are associated with Aboriginal occupation/activity as determined by the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (OEH 2010).

Aboriginal objects (artefacts) have previously been identified on both the broad ridgelines surrounding the study area and on more elevated ground bordering the Bomaderry Creek and Shoalhaven River watercourses within the vicinity of the study area. Aboriginal objects have also been previously in the vicinity, even in areas of moderate to high disturbance. Accordingly, the due diligence process progressed to the next step.

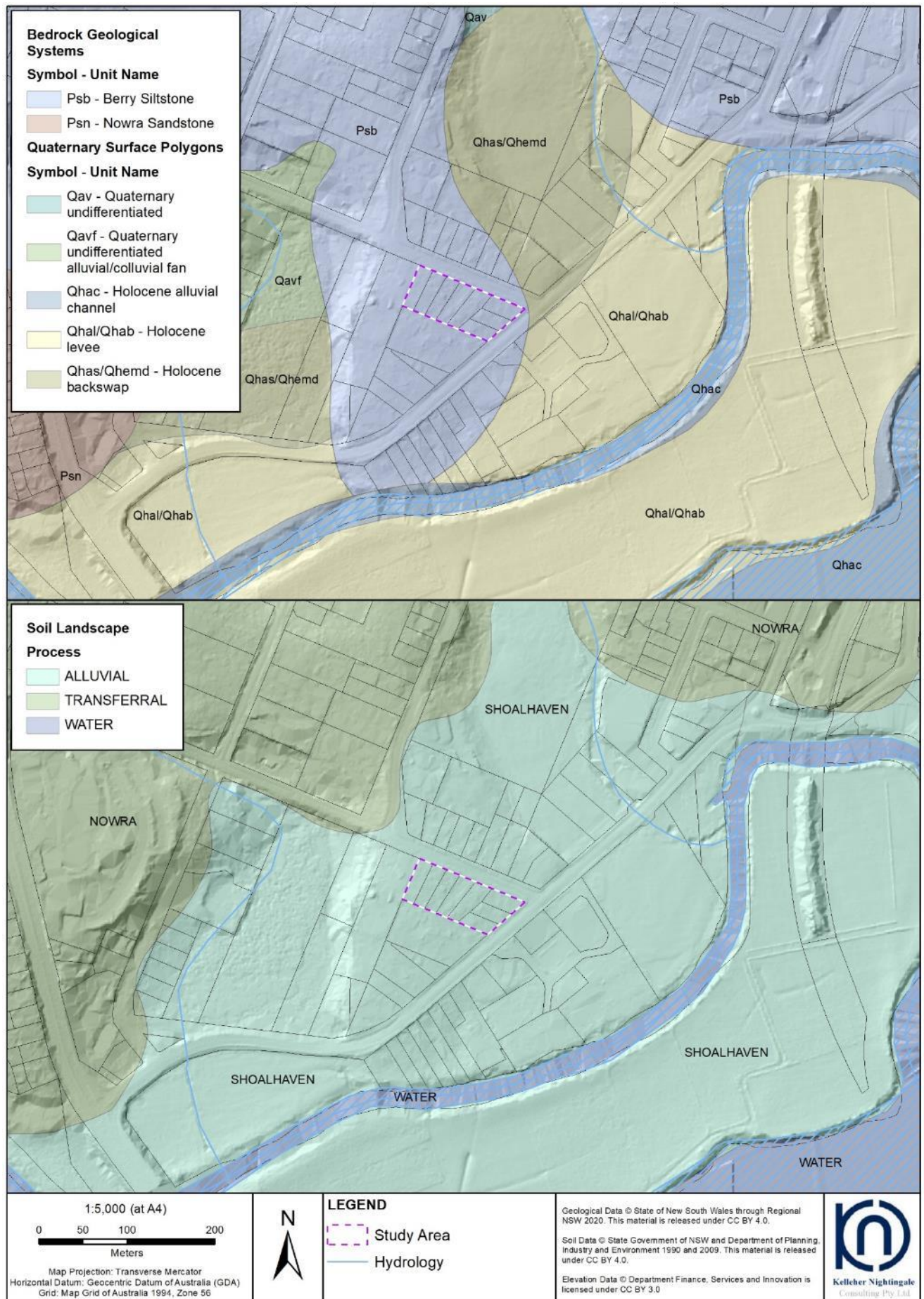


Figure 3. Geology and soil landscapes

2.4 Impact avoidance

Background research did not identify any Aboriginal archaeological sites in the current study area. Landscape assessment identified landscape features considered archaeologically sensitive by Heritage NSW under the *Due Diligence Code of Practice*.

Activities associated with the proposed works would impact the ground surface to some degree and therefore have the potential to harm Aboriginal objects which may be present. Some level of ground disturbance to archaeologically-sensitive landforms is unavoidable for the proposal as a whole. As a result, the due diligence process progressed to the next step.

2.5 Desktop review summary

The desktop review and assessment combined the results of heritage register searches, previous investigations and landscape assessment. Background research has confirmed that no previously identified Aboriginal archaeological sites occur within the study area.

Previously recorded sites within the vicinity of the study area comprise low density surface and subsurface artefact scatter sites. The desktop assessment identified the potential for Aboriginal sites in the form of stone artefact scatters (open camp sites), isolated artefacts, grinding grooves and PAD areas to occur within the study area, especially on elevated landforms in proximity to Bomaderry Creek and the Shoalhaven River. Previously recorded sites of this type have been recorded in the general vicinity of the study area.

The Shoalhaven soil landscape is generally conducive to the preservation of archaeological deposits where vegetation clearance and modern land use have not led to increased erosion and soil movement. Overall, disturbance levels across the study area appear to range between moderate and high and are associated with use of the study area for private residences. Slope gradients across the study area are generally gentle to moderate.

Nonetheless, Heritage NSW identifies particular landscape features that are often linked with the presence of Aboriginal objects, including waterways and ridgelines. These features are known to occur in and around the study area, necessitating a visual inspection to identify the spatial relation to the proposed works and assess the level of landscape disturbance and archaeological potential.

Visual inspection of the study area was therefore the next step of the due diligence assessment process.

2.6 Visual Inspection

The study area was inspected and assessed on 21 December 2023 by Tristram Miller (KNC). The visual inspection aimed to identify Aboriginal objects or sites and assess the potential of the archaeologically sensitive landforms identified within the study area to contain Aboriginal objects.

Visual inspection assessed a cleared, disused block at 4 Beinda Street and residential blocks at 51, 53, 55 and 57 Bolong Road, Bomaderry, NSW. In general, the study area was positioned on sloping land not generally considered suitable for Aboriginal occupation and open context campsites. Visual inspection also confirmed that any potential Aboriginal archaeological subsurface deposits have likely been disturbed or removed as a result of historic landuse.

The portion of the study area at 4 Beinda Street encompassed a broad, gently-sloping ridge side overlooking Bomaderry Creek. The property had been mostly cleared apart from a linear patch of remnant Spotted Gum forest running alongside the street to the north and a single Spotted Gum tree in the southwest. The cleared parts of the lot were covered in exotic lawn, interspersed with numerous flat sandstone bedrock exposures. Exposed bedrock was carefully inspected for any evidence of rock engravings or grinding groove sites. None were identified. Additional disturbance was evident and consisted of gravel vehicle tracks and a large pile of dumped vegetation waste.



Plate 1. Facing southeast at 4 Beinda Street. Note landscape clearing and introduced gravels in foreground.



Plate 2. Photo showing example of exposed bedrock inspected for evidence of Aboriginal grinding grooves.

The entire block showed evidence of deposit modification including machinery scrape-marks across the exposed bedrock and machinery levelling of the ground surface; the removal of pre-existing natural micro-topography was evident. Signs of machinery disturbance also existed up to the base of the remnant trees with a mix of native and exotic understorey vegetation appearing to have recolonised the ground surface post-disturbance. Ground surface visibility within the property located at 4 Beinda Street was very low to zero. No Aboriginal objects or areas of archaeological sensitivity were identified within this part of the study area.



Plate 3. Evidence of disturbance related to landuse, including vegetation dumping and ground surface modification.



Plate 4. Photo showing building structure, eroded ground surface and landscaping.

The portion of the study area containing 51, 53, 55a and 57 Bolong Street was located across a broad, featureless, gentle mid-slope landform overlooking Bomaderry Creek located to the southeast. This part of the study area had been entirely cleared of native vegetation, landscaped and developed as residential land, with two house structures as well as numerous associated sheds, driveways, paths and garden beds present. The original deposit appeared to have been either removed or heavily modified.

No Aboriginal objects or areas of archaeological sensitivity were identified within this part of the study area as a result of visual inspection. Ground surface visibility was very low to zero. Visibility was impeded by long grasses and structures.



Plate 5. Example of cleared slope landform within the lots fronting Bolong Road.



Plate 6. Example of ground surface disturbance resulting from existing landuse.

Visual inspection confirmed that no Aboriginal objects or areas of Aboriginal archaeological potential were located within the study area. The study area had been heavily modified as a result of landscaping, ground levelling and modification activities, and the construction of the residential dwellings.

3 Statutory Requirements

The *National Parks and Wildlife Act 1974* (NPW Act) is the primary statutory control dealing with Aboriginal heritage in New South Wales. Items of Aboriginal heritage (Aboriginal objects) or Aboriginal places (declared under section 84) are protected and regulated under the NPW Act.

Under the Act, an “Aboriginal object” is defined as “any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains”. As such, Aboriginal objects are confined to physical evidence and are commonly referred to as Aboriginal sites.

Aboriginal objects are protected under section 86 of the Act. It is an offence to harm or desecrate an Aboriginal object, either knowingly [section 86 (1)] or unknowingly [section 86 (2)]. An Aboriginal heritage impact permit (AHIP) issued under section 90 (1) of the Act is required for any activity which will harm an Aboriginal object or declared Aboriginal place.

Section 87 (2) of the Act provides a defence against prosecution under section 86 (2) if “the defendant exercised due diligence to determine whether the act or omission constituting the alleged offence would harm an Aboriginal object and reasonably determined that no Aboriginal object would be harmed”. This defence appears to specifically relate to Aboriginal objects.

Under section 87 (1) it is also a defence if “(a) the harm or desecration concerned was authorised by an Aboriginal heritage impact permit, and (b) the conditions to which that Aboriginal heritage impact permit was subject were not contravened”.

Section 89A of the Act relates to the notification of sites of Aboriginal objects, under which it is an offence if the location of an Aboriginal object is not notified to the Director-General in the prescribed manner within a reasonable time.

Under section 90 (1) of the Act “the Director-General may issue an Aboriginal heritage impact permit”. The regulation of Aboriginal heritage impact permits is provided in Part 6 Division 2 of the Act, including regulations relating to consultation (section 90N).

4 Conclusions and Recommendations

No Aboriginal heritage was identified within the study area located at Bomaderry, NSW. The proposed works were assessed under the Heritage NSW *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*.


The due diligence desktop assessment and visual inspection did not identify any Aboriginal objects or areas of potential for subsurface deposits within the study area. Landform and disturbance assessment found that landscaping, ground levelling and modification activities, and the construction of the residential dwellings has led to high levels of disturbance within the study area.

Based on the results of this assessment, there are no archaeological constraints to the proposal and according to the Heritage NSW *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* the proposed works can proceed with caution.

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Appendix A – AHIMS Search Results



Office of Environment & Heritage

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 2014

Client Service ID : 546303

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports	
52-5-0858	Nowra Bridge PAD 4	GDA	56	280356	6139758	Open site	Valid	Potential Archaeological Deposit (PAD):-		103860	
	Contact	Recorders	Artefact - Cultural Heritage Management - Pyrmont.Artefact - Cultural Heritage Ma							Permits	
52-5-0920	Bomaderry Creek / Illaroo Road Rockshelter	GDA	56	280416	6139685	Closed site	Valid	Artefact :-			
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd.Miss.Kristen Taylor							Permits	
52-5-0874	Nowra Bridge 9	GDA	56	280492	6139686	Open site	Valid	Artefact :-			
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd.Artefact - Cultural Heritage Management -							Permits	4479
52-5-0876	Nowra Bridge 8	GDA	56	280531	6139772	Open site	Valid	Artefact :-			
	Contact	Recorders	Artefact - Cultural Heritage Management - Pyrmont.Mr.ryan taddeucci							Permits	4479
52-5-0873	Nowra Bridge 10	GDA	56	280623	6139812	Open site	Valid	Artefact :-			
	Contact	Recorders	Artefact - Cultural Heritage Management - Pyrmont.Mr.ryan taddeucci							Permits	4479
52-5-0854	Nowra Bridge PAD 5	GDA	56	280757	6139797	Open site	Valid	Potential Archaeological Deposit (PAD):-		103860	
	Contact	Recorders	Kelleher Nightingale Consulting Pty Ltd.Artefact - Cultural Heritage Management -							Permits	

Report generated by AHIMS Web Service on 29/10/2020 for Matthew Kelleher for the following area at Datum : GDA, Zone : 56, Eastings : 280286 - 280836, Northings : 6139637 - 6140232 with a Buffer of 0 meters. Additional Info : Arch Assessment. Number of Aboriginal sites and Aboriginal objects found is 6

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