

Dominic Steele Consulting Archaeology

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29 June 2017

Vee Chin Morrison Design Partnership Suite 302, 69 Christie Street St Leonards, NSW, 2065

Via email: vee@mdpa.com.au

Re: Proposed redevelopment of 181 Forest Way, Belrose, NSW (Lot 3 in DP 805710)

Aboriginal archaeological due diligence assessment

Dear Vee

Please find here a due diligence Aboriginal archaeological assessment that has been prepared to inform your Development Application submission (Application No: PLM2016/0097) to the *Northern Beaches Council* for the proposed redevelopment of the above parcel of land at 181 Forest Way in Belrose for a new aged care facility. This assessment has been completed in response to pre-lodgement advice received from Council that identifies that an Aboriginal heritage assessment is required to be prepared by a suitably qualified person and submitted with the DA.



Location of the study area at 181 Forest Way in Belrose (Six Maps 2017)

¹ This report updates (through the addition of current DA plans) a previous iteration of this document (dated 29 June 2017).

SHEET 2

D.P. 782008

T.D.P. 782008

T.D.P. 385530

SHEET 3

SHEET 4

SHEET 4

Site layout and key features (Morrison Design Partnership 2017)

This assessment has followed the methods required by the *NSW Office of Environment and Heritage* (OEH 2010) 'Due Diligence Code of Practice for the Protection of Aboriginal Objects' in order to identify potential archaeological constraints that may exist for the proposal, and to recommend how future impacts to known or suspected Aboriginal archaeological sites, objects or areas of heritage sensitivity can be avoided or mitigated according to the requirements of the *National Parks and Wildlife Act 1974*.

Proposed land redevelopment

The site is situated on the eastern side of Forest Way and is approximately 2.12 ha in size and contains an existing residential dwelling and adjacent 'granny flat' and carport situated in the northwest of the block. The vegetation across the property has been moderately cleared with remnant tall heath canopy only so much of the site comprises of open cleared ground.

The proposed development will result in the clearance of 0.62 ha out of a total of 1.99 ha of vegetation that remains on the site (Cumberland Ecology 2018). The DA seeks approval to demolish the existing residence and outbuildings, and to construct over the existing house and landscaped garden footprint a new 138 bed Residential Aged Care Facility over four storeys containing basement car parking for 46 cars.

Proposed redevelopment plan (Morrison Design Partnership 2018 – Issue B)



Proposed redevelopment elevations (Morrison Design Partnership 2018 – Issue B)



Statutory protection for Aboriginal cultural heritage

The two pieces of legislation provide statutory protection for Aboriginal heritage and the requirements for its management in NSW. These comprise the *National Parks and Wildlife Act* (1974 as amended) and *Environmental Planning and Assessment Act* (1979 as amended). The *Office of Environment and Heritage* (OEH) has the responsibility for the protection and management of Aboriginal sites, objects, places and cultural heritage values in NSW. These values are defined and managed through the provisions of the *National Parks and Wildlife Act 1974* (NPW Act) which was amended through the *NPW Act Amendment Act* 2010. Key points of the amended Act that have most relevance to this study are as follows:

- Part 6 of the NPW Act provides protection for Aboriginal objects and places by establishing offences of harm which is defined to mean destroying, defacing, damaging or moving an Aboriginal object. Aboriginal objects are defined by the NPW Act as 'any deposit, object or material evidence (not being a handicraft for sale) relating to Indigenous and non-European 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'.
- A declared Aboriginal Place this is of special significance to Aboriginal people and culture is a statutory concept
 (and may or may not contain Aboriginal objects as physical/tangible evidence) and protection provided to
 Aboriginal objects and places applies irrespective of the level of their significance or issues of land tenure.
- It is an offence (under Section 86) of the NPW Act to knowingly, or cause or permit harm to an Aboriginal object (or place) without prior written consent from the DG of the OEH. Defences and exemptions to the offence of harm under the NPW Act include that harm is carried out under the terms and conditions of an approved Aboriginal Heritage Impact Permit (AHIP).

Methods of assessment

This report has followed the heritage recording, assessment and reporting guidelines and principles

- NPWS. 1997. September. Aboriginal Cultural Heritage Standards & Guidelines Kit.
- NSW Department of Environment, Climate Change & Water. (DECCW) 2010 (September). Due Diligence Code
 of Practice for the Protection of Aboriginal Objects in New South Wales. DECCW. Sydney.

This Aboriginal archaeological heritage assessment has followed the 'Due Diligence Code of Practice' (OEH 2010) which is a step by step formulae method that 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' (ibid:4). The steps in the due diligence processes are detailed below and each are addressed in the following sections of this report:

- Step 1 Determining if the activity will disturb the ground surface or any culturally modified trees.
- Step 2a Database search: Aboriginal heritage information management system (AHIMS) and known information sources.

- Step 2b Landscape assessment.
- Step 3 Impact avoidance assessment.
- Step 4 Desktop assessment and visual inspection.

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

Environmental context

The site is situated on a Hawkesbury Sandstone ridgeline with shale lenses outcrops occurring between sandstone layer (Chapman & Murphy 1989). Soils are variable across the site but slightly more fertile and have higher clay content than normal Hawkesbury Sandstone soils. Sandstone outcrops are present on site as well as areas of deeper soils that are likely to be Gymea or Somersby Soil Landscape soils (Sturt Noble Aborculture 2016). They appear consistent with those belonging to the Gymea (Erosional) Soil Landscape that occurs on undulating to rolling rises and low hills with local relief 20m-80m and slopes of 10-25% on Hawkesbury Sandstone. This soil landscape is also characterised by side-slopes with narrow to wider outcropping sandstone rock benches (10-100m) that often form scarps of <5m (Bannerman and Hazelton 1990, Chapman and Murphy 1989).



Plan of bushfire protection measures (Travers Bushfire and Ecology 2017)

The site is characterised by natural and modified sandstone benches and easterly sloping ground with gradients between 15-18 degrees to the east of the site, between 10 to 15 degrees within the remnant tall heath/forest vegetation to the southeast and northeast, and level and upslope within the remnant vegetation to the south (Travers Bushfire and Ecology 2016:11). The proximity of the nearest watercourse to the study area is illustrated in the following image.

The site topography slopes to the east and down and towards Snake Creek that is located about 200-250m from the site (Sixmaps 2017)



The following images have been drawn from the flora and fauna assessment that has been prepared for the property (Cumberland Ecology December 2016) that illustrate the nature of the different types of vegetation that occur on the site, the nature of the sloping landform units contained within the study area, the types of rock surfaces currently exposed, and likely subsurface profiles with the potential to contain archaeology.





Coastal Sandstone Heath - Mallee - cleared (Cumberland Ecology 2017: Photograph 3.3)



 $Coastal\ Sandstone\ Heath-Mallee-cleared\ canopy\ regrowing\ in\ the\ west\ of\ the\ site\ (Cumberland\ Ecology\ 2017:\ Photograph\ 3.4)$



 $Coastal\ Sandstone\ Heath-Mallee-cleared\ canopy-exotic\ dominated\ ground\ layer\ (Cumberland\ Ecology\ 2017:\ Photograph\ 3.5)$



Cleared potential Coastal Upland Damp Heath Swamp (Cumberland Ecology 2017: Photograph 3.6)

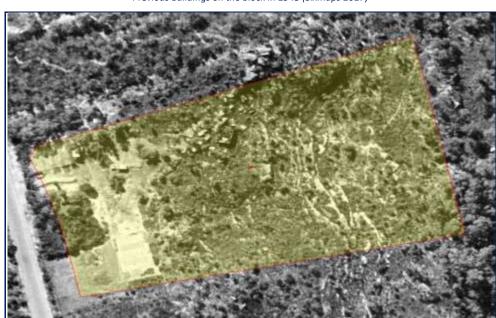


Coastal Sandstone Gully Forest – exotic dominated ground layer (Cumberland Ecology 2017: Photograph 3.7)



Land use history and archaeological impacts

The western third of the property was occupied by a different arrangement of buildings and garden surrounds in 1943, and most of these buildings were demolished and/or incorporated into the current site layout. The sandstone outcropping benches and shelves to the east are also evident.



Previous buildings on the block in 1943 (Sixmaps 2017)

Archaeological context

The Aboriginal Heritage Information Management System (AHIMS) is a database operated by the OEH and regulated under section 90Q of the *National Parks and Wildlife Act 1974* that contains information about registered Aboriginal archaeological sites, objects, and declared places as defined under the Act. Searches of AHIMS (**Appendix 1**) by Lot and DP details for the block to identify whether any registered Aboriginal sites or declared Aboriginal places occur within or adjacent to the study area indicates that no sites or Aboriginal objects have previously been recorded on and/or nearby to 181 Forest Way.

AHIMS searches within a wider curtilage (about 2km x 2km) show there are a number of rock engravings and one rock shelter with art recorded. To the west, one of the closest of these sites is a rock engraving (AHIMS Site #45-6-007) located on Wanniti Street with three other engravings (AHIMS Sites #45-6-245-247) occurring to the south at the Frenchs Forest Cemetery. A shelter with art and potential archaeological deposit (AHIMS Site #45-2-0354) was recorded in 1992 on a private house block on the southern side of Dawes Road to the east of Forest Way. This shelter was recorded at the time to have contained at least six faded red and white hand stencils and some possible additional faded red and black drawings. Further to the northeast on Morgan Road, a number of Aboriginal engravings have previously been recorded including a kangaroo and nine associated footprints (AHIMS Site #45-6-1219), a human figure and footprints (AHIMS Site #45-6-2196), and two elliptical shaped shield motifs (AHIMS Site #45-6-2197).

Archaeological site prediction

The following Aboriginal archaeological site prediction for the study area was prepared on the basis on the above background heritage review, and prior to the commencement of the current site inspection and assessment of the land:

Rock Engravings: The distribution of engraved sites relates to the occurrence of suitable rock outcrops common in sandstone formations that were used by Aboriginal people in the past for the creation of engraved images. A considerable number of engraving sites are known to occur in the local Warringah landscape.

Engravings can occur in groups with numerous depictions of animals, human figures, possible spiritual motifs, and other images of equipment such as shields etc, or single depictions, that generally are found to occur on extensive level sandstone platforms along with smaller ledges and rock exposures.

Axe Grinding Grooves: These are grooves which resulted from the manufacture and/or maintenance of the working edge of some stone tools such as axe/hatchet heads by people in the past. They may be found where suitable sandstone is exposed in, or adjacent to, creeks or on elevated platforms where wet-grinding techniques are possible adjacent to natural rock holes and shallow 'basins'.

As for rock engravings, axe/hatchet grinding grooves may occur in large 'clusters' that serves to facilitate their ready recognition, or may conversely comprise isolated items that are often difficult to detect within certain light conditions.

Open Camp Sites: These sites are likely to occur on dry and relatively flat landforms along or adjacent to both major and minor watercourses, along with foreshore zones. However, repeatedly or continuously occupied sites are more likely to be located on elevated ground situated at principal creek confluences in the local landscape.

Surface scatters of flaked stone artefacts (or potentially durable food remains such as animal and fish bone or shell) may be the result of mobile hunting activities, while single or low density occurrences might relate to tool loss, tool maintenance activities or abandonment. These types of sites are often buried in alluvial or colluvial deposits and only become visible when subsurface sediments are exposed by erosion or disturbance.

Isolated Artefacts: These items occur without any associated evidence for prehistoric activity or occupation. Isolated finds can occur anywhere in the landscape and may represent the random loss, deliberate discard or abandonment of artefacts, or the remains of dispersed artefact scatters. Manuports are items consisting of raw materials of stone that do not naturally occur within the soil profiles of a given region. Transported onto a site by Aboriginal people from sources elsewhere, these items will have subsequently been discarded before use as flaked or ground stone tools.

Scarred Trees: These sites are the result of bark or wood removal to make shields, shelter, canoes containers or carving designs into the exposed wood. These sites have rarely survived early timber clearance, bush fires and timber cutting. The definite ascription of scarring on a tree to an Aboriginal origin is not always possible. Europeans often removed bark for roofing material and stock watering troughs. Other scars may be the result of surveyor and property owner blazes, lightning strikes or cockatoo pecking. Unless the tree is at least 150 years old (or more) the scarring is unlikely to have an Aboriginal origin.

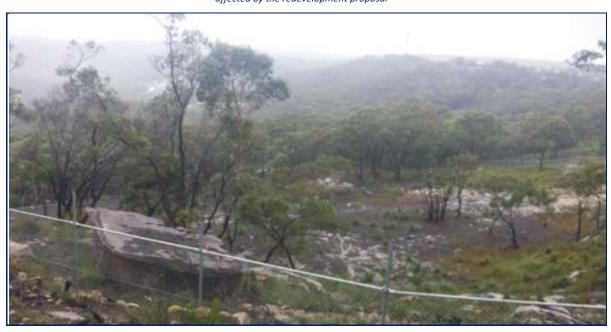
Site inspection

The following images show the locations in the western third of the site that are to be affected by the redevelopment proposal, along with views of the sloping sandstone terrain to the east that will remain unaffected by the proposed redevelopment.

The proposed redevelopment footprint will take in the existing house, outbuildings and garden area on the block, and will extent towards the break in slope to the east where the sloping sandstone shelved and benched landforms that are present in the eastern two-thirds of the property will remain unaffected by the proposal



Looking south over the sloping sandstone shelves and benches that are present in the eastern two-thirds of the property that will not be affected by the redevelopment proposal



Nature of the grassed-over landscape between the existing house and garden in the western third of the property (right) and sandstone slopes (left) to the east



Carport to the left and house to the right, separated by an unsealed gravel entrance drive. The grassed-over mound in the left foreground is likely to be excavated/graded spoil materials leftover from previous constructions and/or demolitions on the block



The house and wrap-around garden area illustrated will be demolished for the new aged care facility. This land is gently undulating and does not have the slope gradients required to have formally retained large and overhanging outcropping (rock shelters). It is also expected that former sandstone surfaces that may have been originally been exposed in this part of the site will have been considerably impacted by site preparation and construction and landscaping works required during two separate building phases since the 1940s



A sub surface profile of sand and sandstone fragments is evident beneath the grass in various exposures where no in situ soil development is apparent. It is unlikely that any intact soil profiles with the potential to contain any Aboriginal archaeology survive here



The excavations required to create the building platform for the existing house are evident in this image



Relationship of the already disturbed building and landscaping footprint created by the ongoing occupation and use of the block, and the break in slope marking the commencement of the main sandstone benched and shelved rock outcrops that characterise the more steeply sloping eastern two-thirds of the property



Results

The background Aboriginal archaeological research, site inspection, and assessment of the 181 Forest Way property undertaken for the current study indicate that:

- No previously documented Aboriginal archaeological sites or 'objects' are known to occur within the boundaries of the subject site and/or in immediately adjacent areas.
- No sandstone overhangs, created through processes of cavernous weathering and/or rock fall from extensive cliff-lines, suitable for habitation or use by people in the past occur on those parts of the property that will be affected by the proposal with the potential to contain occupation deposits or painted art. The same applies to the east of the property, where the exposed sandstone landforms will remain unaffected by future works. The sandstone bedrock exposure across the site is generally characterised by a mixture of small and low benches and scarps, along with eroded (and jumbled) boulders and cobbles.
- No rock engravings have been identified on the surfaces of the exposed sandstone bedrock within the property. The majority of the horizontal and sloping surfaces of the exposed sandstone (all outside of the proposed development area) are irregular and eroded with friable and undulating surfaces that may have been unsuitable (or at least unattractive and not first choice) to Aboriginal people for the creation of engraved (see below).
- No axe grinding grooves have been identified on the property.

Sandstone benches and horizontal surfaces exposed in the eastern part of the site (looking east) in December 2016 (Travers Ecology and Bushfire 2016: Photograph 5)



The surfaces of these sandstone exposures are extremely soft and friable and irregular and thereby unlikely to have been be suitable for engraving if exposed in the past (Travers Ecology and Bushfire 2016: Photograph 6)



- None of the timber inspected on the property displays any evidence for cultural modification. In any case, the native trees on the site consist either of re-growth or relatively immature specimens that are highly unlikely to be of a sufficient age to display evidence of past Aboriginal scarification.
- No open campsites (or isolated finds of flaked stone etc) have been identified on the property. While these types of archaeological evidence can be difficult to detect in sandstone landscape contexts such as reported here, there is no reason to expect that the current study area was subject to intensive or repeated visitation and use by Aboriginal people in the past that would have created substantial and significant archaeological deposits. The site takes in an unremarkable section of elevated 'side-slope' terrain characterised by relatively steeply sloping topography with a series of shelved and benched rock outcrops occurring at breaks in slope that are separated by grass cover and low vegetation over shallow sandy soils and broken and jumbled rock 'scree' materials. The site itself would not seem to contain any highly valuable resources, suggesting the place may have been visited sporadically by people in the past as they moved to and from more attractive landscape contexts and resource zones. These may have potentially included such areas as the catchments of Snake Creek to the east.
- No areas of potential archaeological sensitivity relative to the redevelopment proposal have been identified in the course of preparing this report.

Despite that effective archaeological visibility is constrained due to the presence of buildings, hard surfaces and landscaping, the land to be affected by the proposed redevelopment appears extensively to totally disturbed from past building and landscaping (cut and fill and gradin works), and no intact soils or sandstone surfaces are likely to survive in the land to be developed with the potential to contain Aboriginal objects or deposits or rock engravings. The probability that Aboriginal sites or features of significance are present within the property is minimal, as is the likelihood that the development works proposed will impact upon any archaeology.

Due diligence

Step 1. Will the activity disturb the ground surface?

The works proposed will require demolition of the existing house and outbuildings and landscape elements on the western third of the site, and the construction of a new aged care facility with basement car parking over an enlarged construction footprint in the same location. This will require considerable excavation and filling to construct a building platform.

Step 2a. Search the AHIMS database and use any other sources of information of which you are already aware

No Aboriginal sites or objects occur on and/or immediately nearby to the subject property.

Step 2b. Activities in areas where landscape features indicate the presence of Aboriginal objects

There are no specific landscape features contained within the study area that indicate (or increase the likelihood for) the presence of Aboriginal objects other than its elevation and relatively proximity to Snake Creek that is situated about 200m to the east (and accessed via steep sandstone terrain).

Step 3. Can you avoid harm to the object or disturbance of the landscape feature?

No identified Aboriginal objects will be impacted by the proposed works.

Step 4: Desktop assessment and visual inspection

The site as a whole and the areas to be affected by the proposal in particular, possess minimal potential to retain intact subsurface archaeological profiles or sandstone surfaces because of a) the impacts of two phases of building construction and demolition works and associated landscaping, and b) because the site itself is an unremarkable parcel of land in a landscape position with no obvious resource attributes.

Step 5. Further investigations and impact assessment

No further heritage assessment of the property is warranted.

Aboriginal heritage impact statement

The background archaeological research and assessment of the 181 Forest Way site indicates that:

- No Aboriginal sites, objects or isolated finds have been identified on the property.
- No specific areas of potential Aboriginal archaeological sensitivity have been identified.

Evaluation

On the basis of the above considerations, it is concluded that the future redevelopment of the 181 Forest Way property for a new aged care facility is not going to have an adverse impact upon the Aboriginal archaeological heritage values of the place and that no Aboriginal archaeological heritage constraints are apparent for the proposal proceeding as planned.

Recommendations

The 181 forest Way property contains no documented Aboriginal sites or objects, or any specific areas of potential Aboriginal archaeological sensitivity as evaluated in this report. As a result, it is assessed that the proposal is unlikely to have an adverse impact upon the Aboriginal archaeological values of the place and it is concluded there are no Aboriginal archaeological constraints for the proposal proceeding as planned subject to the recognition of the following considerations:

Recognition of the legal requirements and automatic statutory protection provided to Aboriginal 'objects' and 'places' under the terms of the *National Parks and Wildlife Act* of 1974 (as amended), where it is an offence to knowingly damage, deface or destroy Aboriginal sites or relics without the prior consent of the Director-General of the *National Parks and Wildlife Service* (NPWS) that now comprises an administration branch of the OEH.

It is recommended that:

• In the (largely) unexpected circumstance that any Aboriginal objects are unearthed as a result of works in the future, it is recommended that activities should temporarily cease within the immediate vicinity of the find locality, be relocated to other areas of the subject site (allowing for a curtilage of at least 50m), and the OEH be

contacted to advise on the appropriate course of action to allow the *Metropolitan Local Aboriginal Land Council* to record and collect the identified item(s).

Yours Sincerely,

Dominic Steele.

Dominic Steele Consulting Archaeology

Appendix 1

AHIMS Site Search



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : 181 Forest Way

Client Service ID : 268361 Date: 24 February 2017

Dominic Steele Archaeological Consulting

21 Macgregor Street

CROYDON New South Wales 2132

Attention: Dominic Steele

Email: dsca@bigpond.net.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot: 3. DP:DP805710 with a Buffer of 50 meters. conducted by Dominic Steele on 24 February 2017.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

- 0 Aboriginal sites are recorded in or near the above location.
- 0 Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it.
 Aboriginal places gazetted after 2001 are available on the NSW Government Gazette
 (http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from
 Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested.
 It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are
 recorded as grid references and it is important to note that there may be errors or omissions in these
 recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded
 as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

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Email: ahims@environment.nsw.gov.au Web: www.environment.nsw.gov.au

Appendix 2

OEH Due Diligence - Protection of Aboriginal Objects in NSW

