Aboriginal Heritage Impact Statement
Discovery Point Precinct

June 2010

Report prepared for Discovery Point Pty Ltd

TABLE OF CONTENTS

FIGURES

PLATES

1 INTRODUCTION

Jo McDonald Cultural Heritage Management (JMcD CHM) was commissioned to produce this Heritage Impact Assessment (HIS) on behalf of 'Discovery Point' for the revised Discovery Point Part 3A Concept Plan. This HIS will satisfy the Director General's Requirements (DGRs) for an Environmental Assessment (EA) under Part 3A of the Environmental Planning and Assessment Act 1979.

The DGRs relevant to the proposed development are;

> 14c - Awareness of the possible existence of any archaeological relics which may be disturbed during the works that may require an archaeological assessment to be undertaken; and
>
> 14d - The EA shall provide an Archaeological Assessment of Aboriginal and non-indigenous archaeological resources, including an assessment of the significance and potential impact on the archaeological resources.

The purpose of the HIS is to assess the impacts on Aboriginal heritage from the proposed Concept Plan, taking into account the initial archaeological investigations of the study area and management recommendations made therein including those for the previous Masterplan (JMcD CHM 2000, 2005a, 2006). This report should be read in conjunction with these earlier reports, as much of the background information and detail of those investigations is not repeated here.

An existing Masterplan has been approved on this part of the site for similar uses. Condition 70 of the existing Masterplan consent DA 500/01 states that "A representative of the Metropolitan Local Aboriginal Land Council is to be present on site during excavation works along the foreshore area to ensure that any Aboriginal sites uncovered are identified. If a site is uncovered the National Parks and Wildlife Services (DECCW) should be notified immediately. All work being carried out in the vicinity of any site uncovered shall cease until the NSW National Parks and Wildlife Service has inspected the site". This is reflected in the recommendation of this report that the MLALC may wish to monitor some ground works.

A DA for basement car parking has also been approved for construction.

1.1 Summary of recommendations

These recommendations are based on previous archaeological studies, the current assessment of archaeological potential, the interests of the Aboriginal community, and legislative requirements relating to the proposed Concept Plan under Part 3A application. Refer to Figure 11 (page 21) for designation of zones of archaeological potential/significance.

It is recommended that:

1. Pockets of intact Aboriginal archaeological deposit (part of registered site AHIMS #45-6-2737) are likely to exist within the Zone 2 (moderate archaeological potential) sections of the study area. No Zone 1 areas of high archaeological potential exist within the precinct.

2. Further archaeological investigation is required in the Zone 2 area in the south western portion of the study area. The Concept Plan indicates that this area of the Precinct will be impacted by proposed development and this area has not been investigated previously. Prior to commencement of works in this area a test excavation programme should be carried out to ascertain whether intact archaeological material is present here:

3. Further archaeological investigation may be required in the Zone 2 area to the east of St Magdelene's Chapel if subsurface deposits are to be impacted by proposed works, as per recommendations made previously (JMcD CHM 2006);

4. Zone 3 areas (low archaeological potential) and Zone 4 areas (no archaeological potential) do not require further archaeological work. These areas are considered developable without constraint;

5. Aboriginal archaeological excavation should be co-ordinated with any proposed investigation of non-Indigenous material, since intact Aboriginal archaeological deposit will be located below any historical materials;

6. A Section 90 Aboriginal Heritage Impact Permit (AHIP) is not required to impact Aboriginal heritage under the Part 3A provisions. DECCW and the Department of Planning should be consulted regarding the approach being advocated before commencement of any proposed archaeological works.

7. A representative of the Metropolitan Local Aboriginal Land Council (MLALC) may wish to be present to monitor topsoil removal and ground disturbance works.

1.2 Report authorship

This report was written by Sandra Wallace with management input from Jo McDonald.

2 ABORIGINAL COMMUNITY INVOLVEMENT

The study area falls within the boundaries of the Metropolitan Local Aboriginal Land Council (MLALC). The MLALC has been consulted during all previous investigations of Aboriginal heritage in the study area, and during the applications for s87 and s90 permits for excavation works. Copies of these previous Aboriginal Heritage Impact Permits were lodged with Mr Allen Madden (Cultural Heritage Officer, MLALC). Members of MLALC participated in the original survey, and in both excavation programmes. MLALC was given the opportunity to provide comments on the cultural and Aboriginal heritage of the study area. A copy of this draft HIS will be forwarded to MLALC for their comments.

3 THE STUDY AREA

The Discovery Point precinct is bounded by the Cooks River, the Princes Highway, Magdalene Terrace, Brodie Spark Drive and the Illawarra railway line. It is located immediately south of the Cooks River and about 400m south of the river's junction with Wolli Creek. The Cooks River enters Botany Bay approximately 3km southeast of the study area. The current study area covered by this HIS excludes the southern area of the precinct around Tempe house, as shown in Figure 2 (study area shaded in pink).

The Discovery Point development precinct which is under this Part 3A Concept Plan application includes a portion of the State Heritage Register Conservation Precinct (Figure 7).

Figure 1: Study area in its local context (circled in red). Background image from GoogleEarth.

3.1 Proposed Development

This HIS addresses the impacts associated with a revised Concept Plan for the Discovery Point precinct. A proportion of the Discovery Point precinct has already been developed with high rise residential blocks, a train station, restoration of the heritage listed buildings Tempe House and St Magdalene's Chapel, and landscaped parks and gardens. This HIS applies to the majority of the Discovery Point precinct including the areas designated for development in the Concept Plan (Figure 2).

The proposed Concept Plan includes building envelopes for fourteen building and residential and non-residential gross floor area. An indicative design scheme accompanying the concept plans include, residential apartment buildings, retail facilities, a commercial office building, parking, pathways, landscaped gardens and a new neighborhood park. Some existing structures, such as a site shed and car park are currently within the area which is covered by this HIS. These structures will be removed as construction proceeds.

Figure 2: Discovery Point development precinct with current study area shaded (north to top).

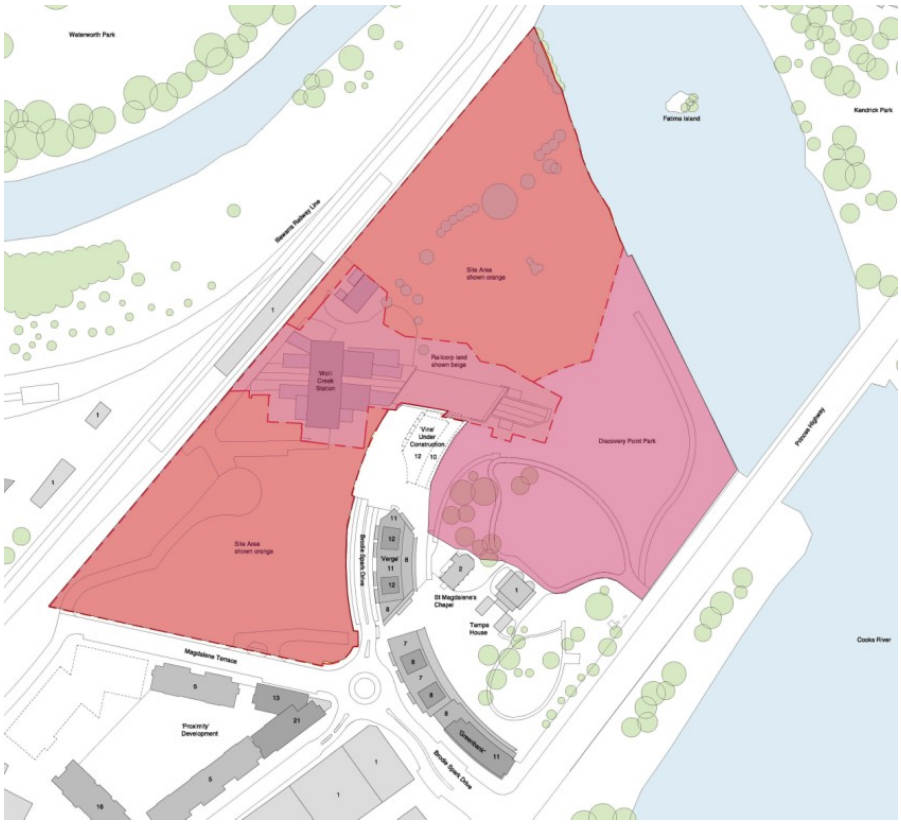


Figure 3: Part 3A Concept Plan for the Discovery Point precinct (northwest at top of page).

3.2 Environmental Context

The study area is located on Quaternary alluvium adjacent to the Cooks River estuary. The local soils are silty to peaty quartz sand with ferruginous and humic cementation in places over Hawkesbury sandstone (JMcD CHM 2006: Appendix 2). Shell layers are common within the soil profile.

Tempe House is located on the edge of a sandstone outcrop known as Mount Olympus. The high point of this feature is to the southeast of the house, and slopes away to the north and west. A detailed discussion of the geomorphology and environmental context of the study area can be found in JMcD CHM 2006: Appendix 2. This area is not part of the current Part 3A Concept Plan application, with works completed under previous consents.

3.3 Land-use impact assessment

The study area has experienced periods of considerable disturbance during its 150+ years of European occupation. The landscape of the study area and its surrounds has been highly modified during the construction of the Princes Highway, construction of various buildings and then during the initial development of the Discovery Point Precinct and the Wolli Creek railway station.

The riverfront has been modified as land has been reclaimed and filled. The northern most section of the study area has been reclaimed, with the original river bank bending around under the railway line to the west of its current position. The south eastern portion of the Discovery Point precinct is also reclaimed land.

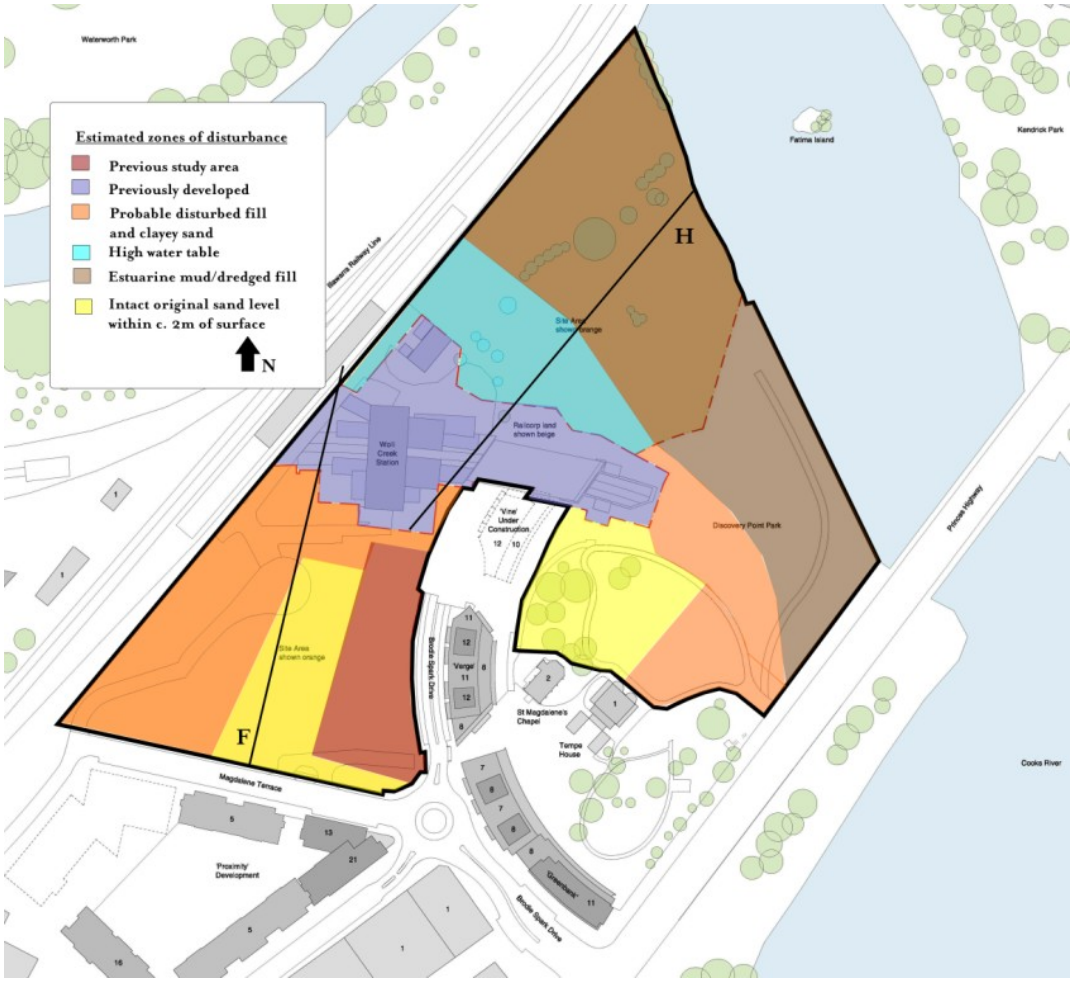
The river bank has also been modified through infilling of dredge deposit from the Cooks River, and construction fill. A 1947 aerial photo shows dredging and filling underway (JMcD CHM 2006: Appendix 2) with impact extending almost to the turning circle to the east of Tempe House.

The disturbance of the northern section of the study area can be seen in the collected core samples (Coffey Geosciences 2003). Section H, formed by extrapolating five core samples to estimate stratigraphy (Figure 6), shows that introduced fill overlies estuarine mud to c. 10m depth adjacent to the river. Near the railway station the water table is high, from 1-2 meters below the surface, placing it above any possible archaeological deposit within the non-uniform sand lenses interspersed between sandy clay. It is

therefore unlikely that any original land surface or intact archaeological deposit exists above the water table within the northern section of the study area.

The southwestern section of the study area has been subject to relatively high levels of previous disturbance. The western edge of the study area was once State Rail Authority land and contained a number of buildings. High levels of disturbance and relatively deep fill layers (c. 5m) can be seen in core samples taken in this section of the study area. Sand deposits that may contain archaeological material here are under fill and interspersed with sandy clay (possibly indicating disturbance). The original land surface here may also have been removed, or moved elsewhere within the site. Any possible intact sand layers are also under the water table in this area.

Figure 4: Estimated disturbance zones based on the geotechnical report (Coffey 2003) and previous archaeological excavations. Note: Lines H and F correspond to core sections below.



The land to the east of this highly disturbed area, and to the west of the 2004 study area (Figure 4), is likely to contain some undisturbed sand deposit including archaeological material. It is likely that undisturbed area will be in the form of pockets as was found during the previous two test excavations within the precinct. Some subsurface impact has occurred with laying of cables and other works in the area.

Any pockets of undisturbed deposit would lie beneath the fill layer. The core samples on section F (Figure 5) show that the fill layer above the sand is less than 2m deep in some areas. This was also demonstrated by core sampling further to the east of section F. Archaeological excavations here in 2004 demonstrated that areas of high archaeological significance survived despite the high disturbance.

It is likely that the area north of Tempe House contains some intact archaeological deposit. The 2006 excavations demonstrated that pockets of fairly undisturbed deposit remained beneath topsoil and fill along a corridor to the north of the chapel and the east of Tempe house (Figure 7). Sections of this area that have not previously been archaeologically excavated could contain undisturbed archaeological deposit.

Figure 5: Geotechnical cores showing F section through designated Zone 2 area. AL1 is sand layer with possible intact archaeological deposit – vertically exaggerated two fold (Coffey Geosciences 2003).

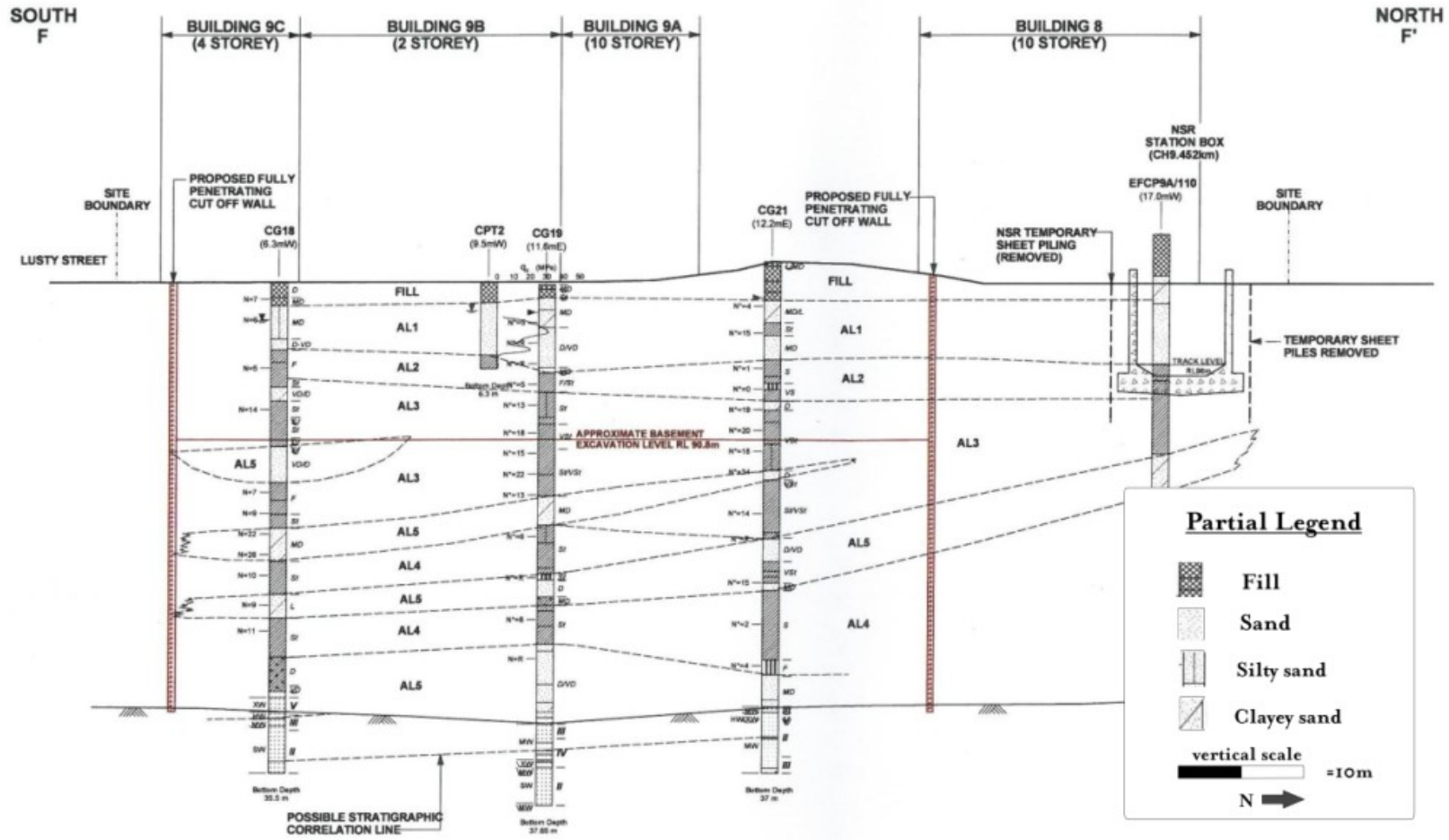
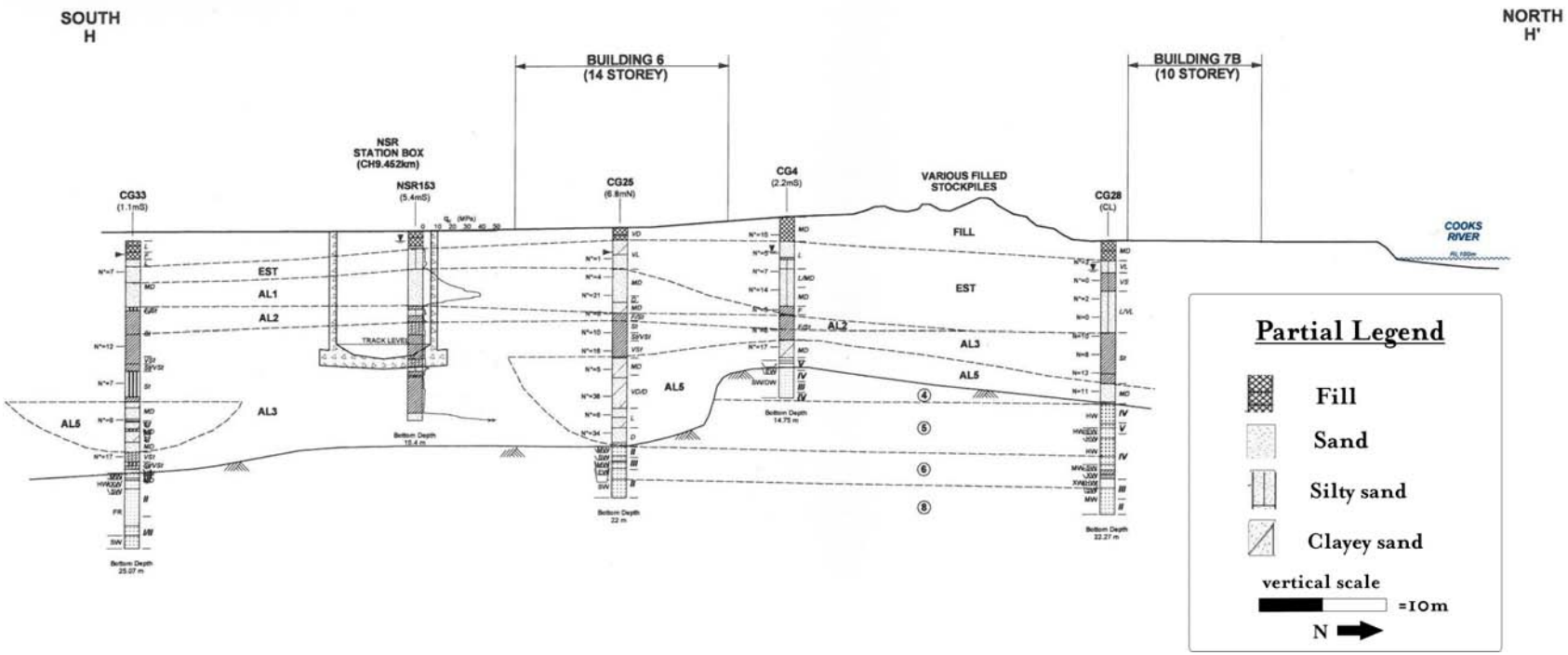


Figure 6: Geotechnical cores showing H section through northern part of the study area. AL1 layer is sand deposit with EST estuarine mud and clayey sands – vertically exaggerated two fold (Coffey Geosciences 2003).

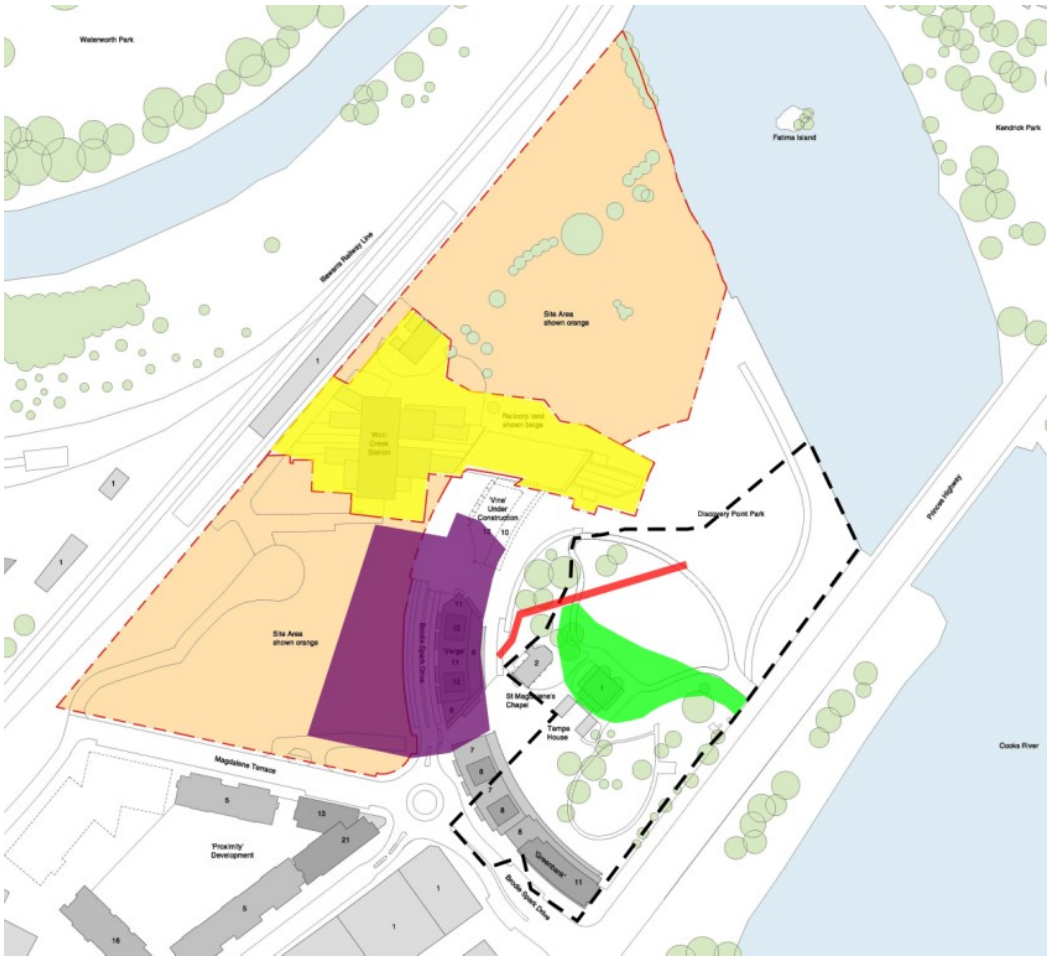


4 PREVIOUS ARCHAEOLOGICAL STUDIES AT DISCOVERY POINT

Several studies of Aboriginal heritage have been conducted within the Discovery Point development precinct (JMcD CHM 2000, 2005a, 2006). These reports should be referred to for discussions of local and regional archaeological context.

Although the Discovery Point development precinct has been highly disturbed by previous construction and land modification, some significant remnant intact archaeological deposit has been found to exist. The areas already investigated for Aboriginal heritage by subsurface excavations are shown in Figure 7.

Figure 7: Locations of previous study areas: 1997 (yellow), 2004 (purple), SWC (red), SHR (green). The SHR boundary is indicated by the dashed black line.



1997 Monitoring of the railway development site

In 1997 Ian Stuart conducted a monitoring programme at the site of the new southern railway in the northwestern section of the Discovery Point precinct (Stuart 1997). No

Aboriginal archaeological material was located, possibly due to the high levels of previous disturbance.

2000 Survey

Stephanie Garling and Ben Marwick (JMcD CHM), and Andrew Roberts (MLALC) undertook an Aboriginal heritage survey of the former Tempe House grounds in February 2000. No *in situ* Aboriginal stone artefacts or shell were encountered on the surface. The high level of disturbance in the study area was considered to have contributed significantly to this survey being unable to locate any evidence of prehistoric occupation. Based on the survey results, it was concluded that there was little likelihood of finding intact subsurface Aboriginal archaeological sites/deposits within the study area.

2004 Salvage excavations

In July 2004, during an investigation on the flanks of the former Tempe House to locate historic garden areas, Casey & Lowe (2004) uncovered a number of Aboriginal stone artefacts. This exploratory investigation was situated at the western boundary of the Permanent SHR Conservation Area for Tempe House (Figure 5). The vicinity of these original find spots was not further investigated at that time because it fell within the designated conservation precinct. The site was registered with DECCW as AHIMS #45-6-2737.

The discovery of the Aboriginal material by Casey & Lowe demonstrated that there were intact Aboriginal archaeological deposits remaining within sections of the precinct. An archaeological salvage was thus conducted ahead of the construction of an underground parking area to the northwest of Tempe House (JMcD CHM 2005a). Only the eastern section of the 2004 study area has been impacted by the car park construction.

Both mechanical and conventional archaeological techniques were employed for the test excavation phase of the investigation. Backhoe trenches were initially used to ascertain the geomorphic context of the study area and determine if intact soil horizons were present. Once a concentration of apparently intact Aboriginal cultural material was encountered, hand excavation was commenced at that location.

A total of 19 backhoe trenches were excavated on a grid system established across the study area. The locations of the trenches were chosen to avoid the areas found by a

previous geotechnical investigation to have a high water table or deep historical fill deposits. More than 33m^2, (about 67m^3), within the study area (c.1%) was tested in this manner. Intact remnant ground surfaces were located in a number of backhoe trenches, particularly in the southern section of the study area. The intact deposit was light grey sand, underlain by coffee rock. The majority of cultural lithics were recovered from the light grey sand layer.

Backhoe trenches that exposed intact natural deposit and contained artefacts were expanded by hand excavation of 1x1m pits. Forty pits were hand excavated across the study area in three groups. The group at Locus 1 consisted of 24 pits, Locus 2 of 10 pits and the third group comprised of 6 outlying pits.

Plate 1: Dated charcoal feature in test pit 8 (from JMcD CHM 2005:32).

A charcoal feature in the Locus 2 open excavation was radiocarbon dated. A date of 9,376 ± 61 BP (Wk-16167) calibrated to 10,700 BP (95.4% probability) is the earliest date for an occupation site in the eastern coastal strip of the Sydney Basin. It provides contextualization of an earlier phase of stone tool production that has now been identified in a number of open stratified sand bodies around the region (at Richmond, Rouse Hill, and Parramatta (JMcD CHM 1997, 2001, 2005b).

Three hundred and eight-nine artefacts were recovered at this time (JMcD CHM 2005a). A limited range of cultural material was recovered from this extensive, low-density scatter. Discovery Point was possibly a place that people visited, repeatedly, for

short periods of time. These visits would appear to have occurred over many thousands of years.

The absence of midden deposit here suggests that the activities at this part of the site did not include gathering local shellfish or fish. Perhaps all the occupation periods here predated the complete establishment of estuarine resources around 6,000 BP. Alternatively, the high sea level between c.3-3,700 BP (Mitchell in JMcD CHM 2005a: Appendix 2) may have affected the survival of midden deposit that was deposited here between 6-3,700 years ago.

The recommendations from the 2004 excavations were as follows:

1. The Discovery Point site had high archaeological significance. It represented a surviving intact archaeological feature (surrounded by high levels of disturbance) with evidence of several low intensity episodes of occupation. The investigated landscape is a sand sheet near the confluence of Wolli Creek and the Cooks River. The excavated evidence may well be representative of Indigenous archaeological material surviving in the adjacent conservation area. The Casey & Lowe (2004) investigation indicates that Indigenous cultural material exists at the boundary of the State Heritage Register Precinct;

2. This archaeological salvage was completed in accordance with the conditions of the NSW NPWS s90 Consent and Permit to salvage (#2016). There is no requirement for further archaeological investigation at this site in relation to the proposed Australand Discovery Point construction for which this section 90 permit was granted;

3. The JMcD CHM 2005a report completed the legal obligations of the client under the terms and conditions of Permit #2016 relating to Aboriginal objects (previously "relics") on the subject land;

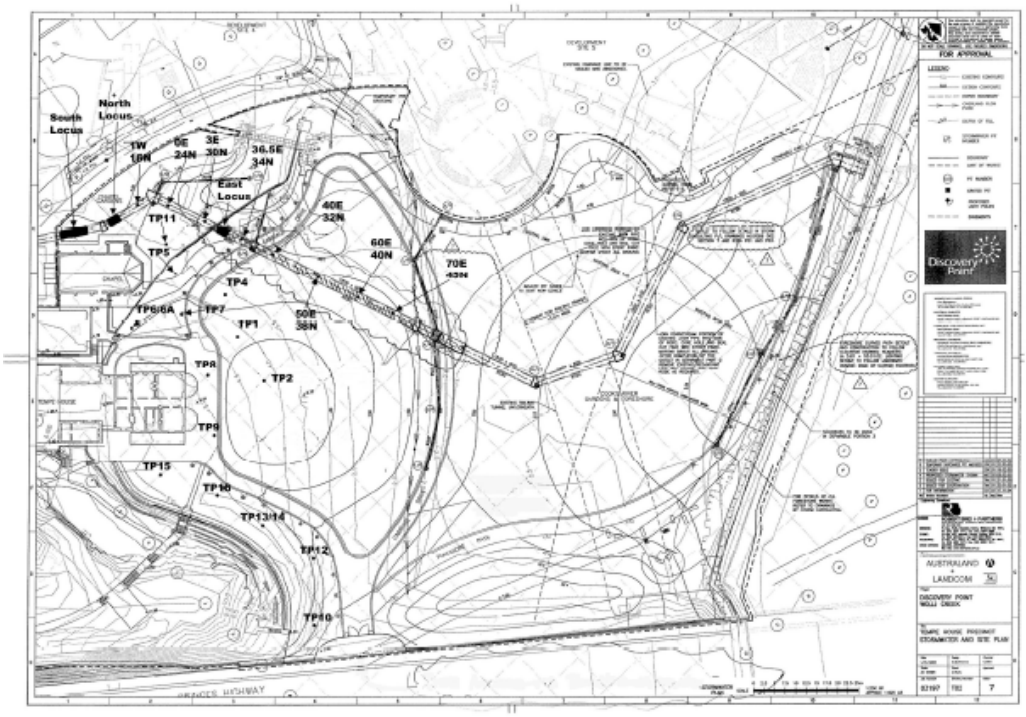
4. At this time Australand was advised to include Indigenous and archaeological values in the Conservation Management Plan for Tempe House - in addition to its high historic significance. Management of Indigenous values within the CMP needs to address the likely nature of current and intended future uses of the SHR Precinct and any likely impacts that will affect sub-surface deposits in this area. Relevant stakeholders to this process were identified as including the

Aboriginal community and the regulators of Indigenous archaeological materials i.e. the DECCW NSW. .

2006 Salvage Excavations

Two excavation programmes were undertaken by JMcD CHM in 2006. These were the testing and salvage of the proposed storm water corridor (SWC), and the testing and salvage of the broader SHR area.

Figure 8: Location of test pits and areal excavation during the SWC and SHR projects (from JMcD CHM 2006:33).



This investigation of the SWC was completed in accordance with a s90 Consent and Permit to Salvage (#2209) dated 18 July 2005. A series of test excavations across the State Heritage Register Conservation Precinct (SHR) was also conducted to identify the presence, nature and distribution of possible cultural deposits. This work was completed in accordance with a s87 Permit (#2210) dated 19 August 2005.

SWC Investigation

The proposed storm water works involved the construction of an outlet channel from the main development area and through the western side of the conservation precinct,

through to the Cooks River. This corridor was 140m long, 3m wide and 0.9m deep. Only the impact corridor south of the railway tunnel was investigated.

A two-phase programme of test excavations and areal salvage was performed along the SWC. Test pits were placed at regular intervals along the entire length of the stormwater corridor, south of the rail tunnel. Test pits were generally placed at 10m intervals although this often varied due to the presence of built structures and other features in the easement. Eleven test pits were thus excavated in order to determine the presence, nature and distribution of cultural materials across the study area. Open-plan excavations targeted areas with the highest numbers of artefacts/cultural material found during testing.

Plate 2: Test pit 1W 8N showing historical fill layer over compact shell layer and the artefact bearing grey sand (from JMcD CHM 2006:28).

Due to the width of the stormwater easement and because the archaeological evidence was dispersed, three areas were targeted for areal excavation: the East Locus, North Locus and South Locus. A total of 26.4m^2 were excavated in the three loci - resulting in approximately 28.4m^3 of sediment being removed and wet sieved. The East Locus consisted of five contiguous units located just east of a brick wall, between Tempe House and the chapel. This locus covered an area of c.5m^2. The North and South Loci were located along the corridor immediately west of the chapel. These were the largest areal excavations undertaken during this project, comprising a total excavated area of 21.4m^2. A variety of existing modern features (e.g. angle pegs, containers and protective fencing) precluded excavating between the two loci.

A total of 457 stone artefacts were recovered during the SWC test excavations, with a further 2,072 artefacts recovered from the expansions of test pits with highest artefact density.

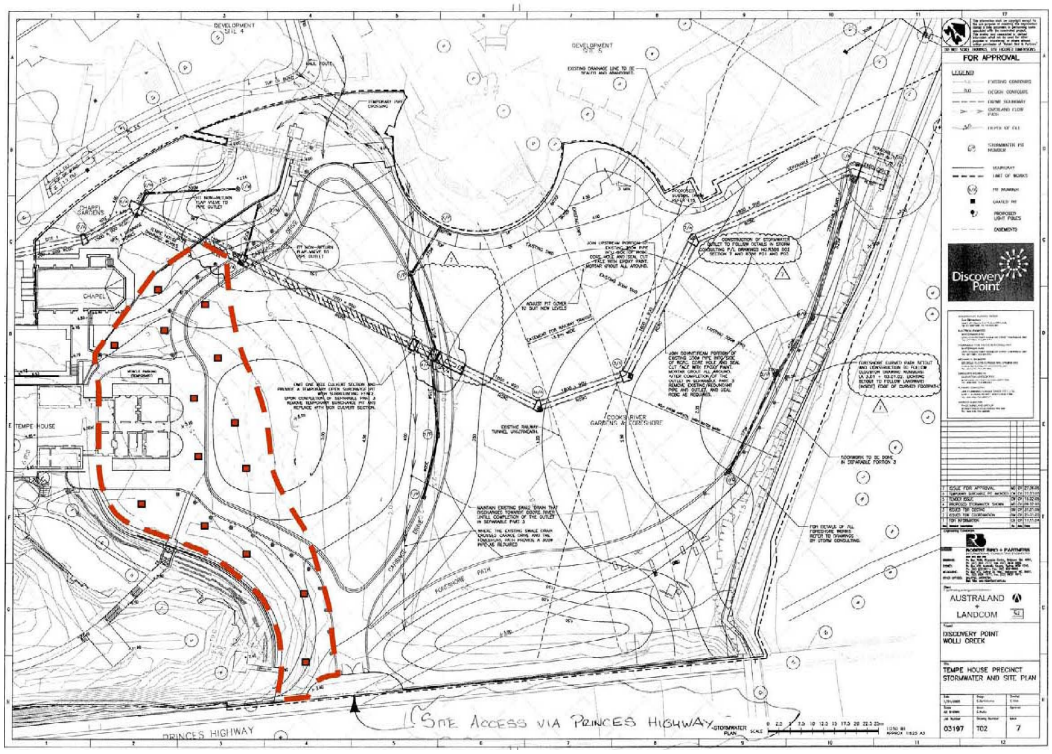
SHR area investigations

A number of landscaping amendments were proposed for the Tempe House State Heritage Register Conservation Precinct (SHR) to improve its amenity and make it suitable as a public recreational space. The major impact on any archaeological remains present would be a result of covering the area in between 0.5m to 2m of fill. Footpaths, lighting, drainage, seating and BBQ areas were to be installed. Many of these were constructed into the fill layer – and not the underlying archaeological deposits. The aim of the test excavation, prior to development was to determine the nature and extent of intact Indigenous archaeological deposit across the SHR Precinct and to determine the appropriate management strategies for this.

During the SHR project a total of 18m^2 was excavated to explore the nature and context of the subsurface material across the SHR. This included test pits at 15 locations across the SHR. Extensions to two of the test pits; with one additional test pit location added another 3m^2.

A total of 214 stone artefacts were recovered from the SHR test excavations.

Figure 9: Location of test pits for the SHR excavation (from JMcD CHM 2006:33).



All of the excavated areas within the SHR contained historic disturbances, with no predictable pattern in the amount or range of disturbances apparent. Most of the stone artefacts recovered during the testing were found in association with historic artefacts and/or features. The association between stone artefacts and historic materials was likely due to taphonomic processes and not to the contemporaneous presence of Aboriginal and European occupation in this location.

In light of the archaeological excavation results and a study of previous land use impacts management zones for the 2006 study area where designated (Figure 10). The area was divided into zones of archaeological potential; Zone 2- moderate potential, Zone 3 - low potential, and Zone 4 - no potential (the 2006 report designates these zones with different numbering but reflects the same potential level as used in this report).

Figure 10: Management zones as outlined in the SHR salvage excavation report (adapted from JMcD CHM: 116).

Recommendations from the 2006 excavations

The management recommendations from the 2006 excavations were:

1. The Discovery Point archaeological site AHIMS #45-6-2737 is likely to retain intact surviving pockets of high archaeological significance within the SHR. The salvaged portions of the site represent surviving intact archaeological features (surrounded by high levels of disturbance) with evidence of repeated low intensity episodes of occupation. The test excavations demonstrate that Indigenous archaeological material survives in the conservation area, and that the western portion of this SHR zone has continuing archaeological sensitivity;

2. The archaeological salvage of the SWC was completed in accordance with the conditions of s90 Consent and Permit to salvage (#2209). There was no requirement for further archaeological investigation at this part of the site in relation to the proposed Australand Discovery Point construction for which this section 90 permit was granted;

3. This 2006 report completed the client's obligations under the conditions of Permit #2209 relating to Aboriginal objects (previously "relics") on the subject land;

4. The archaeological test excavation of the SHR demonstrated the continuous distribution of Indigenous objects across the front of the former Tempe House. This investigation was completed in accordance with the conditions of the s87 Permit (#2210). Australand was advised to apply for a s90 Consent for any future works which might impact on the deposit within the SHR conservation zone. Any proposed works within areas of low archaeological sensitivity (equivalent to Zone 3/4) would not require salvage prior to development; any proposed works to occur in areas of archaeological sensitivity (equivalent to Zone 2), would require further archaeological salvage before the s90 could be granted;

5. Australand was advised to incorporate Indigenous cultural and archaeological values into the Conservation Management Plan (CMP) for the SHR Conservation Precinct for Tempe House. These values are in addition to its high historic significance. Managing Indigenous values within the CMP needs to address the likely nature of current and intended future uses of the SHR Precinct and any likely future impacts that will affect sub-surface deposits in this area. The Aboriginal community and the regulators of Indigenous archaeological materials i.e. DECCW were identified as relevant stakeholders to this process

5 INDIGENOUS HERITAGE IMPACTS

The highly disturbed nature of the site makes it difficult to predict the location of further pockets of remnant intact archaeological deposit. Previous work has demonstrated that these isolated pockets do exist in parts of the site even when it is expected that they would have been destroyed by previous land use impacts (JMcD CHM 2005a, 2006). Based on the examination of geotechnical results, the results of previous Aboriginal and non-Indigenous archaeological excavations, and the known history of site impacts, the study area has been divided into zones of archaeological sensitivity/potential.

In order to appropriately manage the Aboriginal heritage values, it is necessary to assess the area's archaeological sensitivity and/or potential. This assessment includes the identification of lands with the greatest potential to contain intact archaeological deposit (i.e. only minimally disturbed by previous land use impact) and those which are locally and regionally threatened by urban development. These two factors affect the assessment of high conservation potential.

Figure 11: Zones of archaeological potential.

Four zones of archaeological potential are commonly identified for this purpose, although only three are found within the current study area. No Zone 1 areas are located within the current study area.

- Zone 1 – High archaeological potential
- Zone 2 – Moderate archaeological potential
- Zone 3 – Low archaeological potential
- Zone 4 – No archaeological potential

These zones are used to assist in the assessment of the sites and landscapes within the study area. The 2004 study area, which has already been investigated, is excluded from this assessment.

The northern and eastern sections of the study area adjacent to the riverbank have been designated as Zone 4 (no archaeological potential). This area is either reclaimed land or highly modified and has been filled with material from river dredging and construction waste. If any remnant surface does exist below the fill layers it would consist of estuarine mud deposits from under the mangrove stands along the river banks. These soils are very low in the profile, under deep fill layers, and would probably not be impacted by construction. It is also unlikely that people would have camped in the estuarine mud flats - and therefore unlikely that any archaeological material would have been deposited there.

Zone 3 lands (low archaeological potential) are to the north of the railway station, to the east of Tempe House, and in the south western section of the study area. To the north of the railway station the water table is high and any remnant archaeological deposit would be waterlogged. Excavation here would be impractical. High levels of disturbance from the construction of the railway complex and other previous developments mean that archaeological material is also unlikely to have been preserved here.

The south-west of the study area and the area to the east of Tempe House also have a low archaeological potential. There is evidence of extensive disturbance in these areas (see Figure 6). Some archaeological deposit may remain but probably in a disturbed context.

The Zone 2 area located to west of the 2004 study area has moderate archaeological potential. Geotechnical cores drilled in 2003 show that remnant archaeological deposit may exist from 1-2 metres below the current ground surface, especially in the south eastern section of the Zone 2 area. As the core placement distribution was not intensive, it is difficult to accurately estimate the nature and extent of remaining archaeological deposit. Some disturbance has occurred in this area, such as the laying of cables but pockets of undisturbed deposit may remain,

The Zone 2 area to the east St Magdelene's Chapel was designated as archaeologically sensitive in the 2006 excavation report. It was recommended that if excavation works were to take place in this area further archaeological salvage may be required. Some landscaping works have already been approved and completed (under DA 462/01) within this area and some minor landscape/planting changes may be made, although it is

unlikely that these would involve excavation. If landscaping and parkland works currently proposed in the Concept Plan will impact subsurface deposits in this area, archaeological salvage may be required.

6 DISCUSSION

Previous archaeological investigations have demonstrated that pockets of remnant archaeological deposit exist amongst the disturbed areas across the Discovery Point precinct. Highly significant archaeological information has been recovered from the site, including an occupation date of 10,700 years before present, one of the oldest dates so far recorded in the Sydney region. The site also represents a rare example of Aboriginal occupation in an estuarine landscape throughout the Holocene. Occupation has been demonstrated by the recovery of an assemblage of cultural lithics and evidence of resource use, such as shell fish.

6.1 Statement of Heritage Significance

The appropriate management of cultural heritage items is usually determined on the basis of their assessed significance as well as the likely impact of the proposed development. Scientific, cultural and public/education significance are currently identified as baseline elements of this assessment, and it is through the combination of these elements that the overall cultural heritage values of a site, place or area are resolved.

Cultural significance

This type of assessment indicates the importance of a site, place or feature to the relevant cultural group – in this case the Aboriginal community. Aspects of cultural significance include assessment of sites, items, and landscapes that are traditionally significant or that have contemporary importance to the Aboriginal community. This importance involves both traditional links with specific areas as well as an overall concern by Aboriginal people for their sites generally and the continued protection of these. This type of significance may not be in accord with interpretations made by the archaeologist - a site may have low scientific significance but high Aboriginal significance (or *vice versa*). The cultural significance of the site will be addressed by the MLALC.

Scientific significance

Assessing a site in this context involves placing it into a broader regional framework, as well as assessing the site's individual merits in view of current archaeological discourse. This type of significance relates to the ability of a site to answer current research questions. It is also based on a site's condition (integrity), information potential and representativeness and/or rarity (see above).

The scientific significance of the open sites and PADs are generally not easily assessed on the basis of their surface manifestations. A ranking of archaeological potential or sensitivity is made, based on land-use mapping, localised disturbance factors and the predictive model. The remains of the intact subsurface archaeological deposit that exist within the Discovery Point precinct have a ***high scientific potential*** to provide further information on a rare surviving example of prehistoric habitation in this coastal/estuarine landscape.

Public significance

Sites that have public significance do so because they can educate people about the past. By reducing ignorance about why sites are important to the Aboriginal and scientific community, our human heritage can be protected from ignorant or inadvertent destruction. For a site to have high public significance it should contain easily identifiable and interpretable elements, and be relatively easily accessed.

The public significance of the sites/archaeological features within the Discovery Point precinct is assessed as being generally low on the basis of their poor surface manifestations. Open sites are extremely difficult to appreciate by a lay-public due to the 'invisibility' of the evidence present. The study area therefore has a ***low public significance.***

7 RECOMMENDATIONS

The following recommendations are made on the basis of:

- the Director General's Requirements for the Environmental Assessment of the proposed development at Discovery Point made under Part 3A of the Environmental Planning and Assessment Act 1979;

- the interests of the Metropolitan Local Aboriginal Land Council;
- the results of previous investigations of Aboriginal heritage values at Discovery Point;
- the nature of the areas of archaeological sensitivity/potential defined during this study and the likely impacts arising from alterations to the Masterplan of the precinct (Figure 11).

It is recommended that:

1. Pockets of intact Aboriginal archaeological deposit (part of registered site AHIMS #45-6-2737) are likely to exist within the Zone 2 (moderate archaeological potential) sections of the study area. No Zone 1 areas of high archaeological potential exist within the precinct.

2. Further archaeological investigation is required in the Zone 2 area in the south western portion of the study area. The Concept Plan indicates that this area of the Precinct will be impacted by proposed development and this area has not been investigated previously. Prior to commencement of works in this area a test excavation programme should be carried out to ascertain whether intact archaeological material is present here;

3. Further archaeological investigation may be required in the Zone 2 area to the east of St Magdelene's Chapel if subsurface deposits are to be impacted by any new landscape works, as per recommendation made previously (JMcD CHM 2006);

4. Zone 3 areas (low archaeological potential) and Zone 4 areas (no archaeological potential) do not require further archaeological work. These areas are considered developable without constraint;

5. Aboriginal archaeological excavation should be co-ordinated with any proposed investigation of non-Indigenous material, since intact Aboriginal archaeological deposit will be located below any historical materials;

6. A Section 90 Aboriginal Heritage Impact Permit (AHIP) is not required to impact Aboriginal heritage under the Part 3A provisions. DECCW and the Department of Planning should be consulted regarding the approach being advocated before commencement of any proposed archaeological works.

7. A representative of the Metropolitan Local Aboriginal Land Council (MLALC) may wish to be present to monitor topsoil removal and ground disturbance works;

8. If human skeletal material is found, all works must cease immediately and the NSW Police Department and DECCW must be informed. Works cannot recommence until the Police Department is satisfied that the bones do not relate to a recent crime. Then, DECCW will have to grant a Section 90 AHIP for removal of the Aboriginal bones. This must be done in consultation with the Aboriginal community;

9. MLALC may wish to have Care and Control of the archaeological material retrieved by this salvage excavation. This will need to be negotiated by them, DECCW NSW and the Australian Museum;

11. One copy of this report should be sent to:

    Mr Robert Welsh
    Chairperson,
    Metropolitan LALC,
    PO BOX 1103,
    STRAWBERRY HILLS, NSW, 2770.

12. Two hard copies and one electronic copy of this report should be sent to:

    Ms. Lou Ewins
    Planning and Aboriginal Heritage Section,
    Department of Environment and Conservation,
    Level 7, 79 George Street,
    PARRAMATTA, NSW 2150

8 REFERENCES

Casey & Lowe. 2002. Archaeological Management Plan – Tempe House and Grounds. Report to Australand.

Coffey Geosciences. 2003. Interciti Development (Discovery Point), Arncliffe: Geotechnical Investigation report. Report to Australand.

Jo McDonald CHM. 1997. Archaeological salvage of site RM1 at Richmond, NSW: Test and Salvage excavation report. Report prepared for Restifa & Partners.

Jo McDonald CHM. 2001. Salvage Excavations of six sites along Caddies, Second Ponds, Smalls, and cattail Creeks in the Rouse Hill Development Area, NSW. Report to RHIC.

Jo McDonald CHM. 2000. Archaeological survey of proposed urban subdivision at Tempe House, North Arncliffe, NSW. Report to Landcom (NSW) Pty Ltd.

Jo McDonald CHM. 2005a. Archaeological Testing and Salvage Excavation at Discovery Point, Site #45-6-2737 in the former grounds of Tempe House, NSW. Report to Australand.

Jo McDonald CHM. 2005b. Archaeological Salvage Excavation of Site CG1, Parramatta, NSW. Report to Meriton Apartments Pty Ltd.

Jo McDonald CHM. 2006. Archaeological salvage of stormwater easement and testing within the State Heritage Register Conservation Precinct at the former Tempe House, Discovery Point. Report to Australand.

Stuart, I. 1997. Report on Archaeological monitoring conducted during the construction of the New Southern Railway. Report to HLA-Envirosciences Pty Ltd on behalf of Kinhill Engineers Pty Ltd.