4.6 Survey Results

Cumberland Paper Mill

As part of the site survey the archaeologists visited the site of the former Cumberland Paper Mill within the SC Johnson property. Permission was obtained from reception, and the archaeologists inspected the external walls of the building alongside the creek, the weir and associated stonework. The external inspection found that none of the original building was visible on the northern facade, eastern approach or western extent of the main structure.

Plate 3: Cumberland Paper Mill site – View from the study area facing south

Cumberland Paper Mill Weir

A weir associated with the paper mill was located within the grounds of the former flourmill and now part of the SC Johnson property. The weir consists of a dam on Stringybark Creek, which controlled the flow of water into the mill complex through a well-preserved stone walled channel. The southern wall of this channel is built around a natural sandstone outcrop that forms a waterfall just downstream of the weir. Also associated with the mill complex and weir is a stone retaining wall which starts immediately below the bridge into the SC Johnson property and appears to have been

constructed to formalize the creek's southern bank and its course into a straight line continuing towards its junction with the Lane Cove River

Plate 4: The weir on Stringybark Creek, facing northeast

Plate 5: Sandstone walls just downstream from the weir, facing north

Chicago Mills

The southern portion of the mill site, as listed in the Lane Cove LEP, was examined by the archaeologists from the access road. No original façade was noted, and it is considered likely that the section of the mill with the greatest historical significance is located further to the north within the Willoughby LGA. This northern section of the mill (within Willoughby LGA) was not inspected, as it is not close enough to the proposed development to warrant investigation. No other heritage items were noted within the boundary of the archaeological site (listed in the LEP) surrounding the Chicago Mills site.

Plate 6: Chicago Mills site from the access road

Eastern Lane Cove Sewer Submain

Sewer pipe manholes and pipeline were noted in several sections of the study area. A manhole cover was located on the walking track opposite Cumberland Avenue, about half way along Survey Unit 2. A sewer pipe and round brick vertical extension were located in the far eastern section of the study area approximately ten metres north of the track. A sewer pipe and manhole were located just outside the study area within 'Sewer Pipe Cave'. The exterior of the manhole superstructures showed ridging from the boards used to form the concrete.

Plate 7: Manhole cover for sewer pipe located on the walking track

Plate 8: Sewer pipeline and manhole cover in 'Sewer Pipe Cave'

4.7 Assessment of Effects on Heritage Items

The DGRs require that the possible effects of the proposed development on adjacent heritage sites area be assessed. These assessments are further detailed in relation to each of the heritage items discussed.

Chicago Starch Mill

The Chicago Starch Mill site as listed on the Lane Cove LEP is directly adjacent to the section of the proposed development area in which a multistory building will be erected. As there is no evidence that original structures remain in this section of the mill site, and considering that the primary areas of historical significance are located to the north, it is considered likely that there will be minimal effect on heritage significance caused by the proposed development.

During construction of the proposed development no excavation or disturbance of the soil should take place in the land designated as an archaeological site. It is understood that this would be unlikely as the heritage listing applies only to the adjacent property and not to the study area (See Figure 4).

This study has determined that the Chicago Starch Mill and the associated archaeological area directly adjacent to the study area will not pose heritage constraints on the proposed development.

Cumberland Paper Mill

The Cumberland Paper Mill site and surrounds is of heritage significance to the Lane Cove area and is listed in the Lane Cove LEP. A site inspection of the main building concluded that there were no obvious signs of the original structure remaining. However, the significance of the site does not just lie in the building itself but in its significance to the community as a whole entity. It is therefore important to preserve the context of the site, such as its views over Stringybark Creek and into the bush beyond. The preliminary Concept Plan suggests that the view from the SC Johnson building across the creek into the study area is to be preserved. The heritage significance of the site as a whole may be compromised if the views to and from Stringybark Creek are adversely impacted.

During construction of the proposed development no excavation or disturbance of the soil should take place in the land designated as an archaeological site. It is understood that this

would be unlikely as the heritage listing applies only to the adjacent property and not to the study area (See Figure 4).

This study has determined that the Cumberland Paper Mill and the associated archaeological area directly adjacent to the study area will not pose any other heritage constraints on the proposed development.

Stringybark Creek Weir

The weir associated with the paper mill is within the area designated as an archaeological site in the Lane Cove LEP. It is unlikely that it will be affected by the proposed development as it is on the other side of Stringybark Creek and in private land (owned by SC Johnson). It is unlikely that increased pedestrian access will impact the weir, as the creek will make it inaccessible from the walking track. The Concept Plan indicates that views from the SC Johnson property towards the bush within the study area will be unmodified. It is therefore considered that the heritage significance of Stringybark Creek Weir, as part of the Cumberland Paper Mill site, will not be affected by the proposed development.

This study has determined that the Cumberland Paper Mill Weir poses no constraints on the proposed development.

East Lane Cove Sewer Submain

The East Lane Cove Sewer Submain is listed on the Sydney Water Heritage Inventory as an item of heritage significance as part of the Northern Suburbs Ocean Outfall Sewer (NSOOS). It is understood that the sewer pipelines observed within the study area are part of the submain. Sydney Water is in the process of confirming this. If the sewer structures present within the study area are not formally part of the submain, they are nevertheless worthy of further investigation, as they represent early infrastructure of the area and have heritage value. It is advised that in the Sydney Water Heritage Listing that 'the boundary and curtilage of the NSOOS is to include all original fabric from 1933 from Parramatta to North head outfall within a 2 metre buffer zone parallel to the existing structures'. It is likely that the walking track upgrade would impact within this buffer zone. It is also stated that recommended management strategy is to 'manage the place and its significant components in accordance with the State Owned Heritage Asset Management Guidelines', and 'undertake a Heritage Assessment and/or Statement of Heritage Impact as required by EIA procedures'. Until the design, route and construction techniques of the track upgrade are known, impact on the sewer line is difficult to accurately assess.

5. Aboriginal Cultural Heritage Assessment

5.1 Background

The aim of the Aboriginal Cultural Heritage Assessment is to 'address and document the information requirements as set out in the draft *Guidelines of Aboriginal Cultural Heritage Impact Assessment and Community Consultation July 2005* involving a heritage assessment and consultation with the Aboriginal community' (DGRs 2010). These requirements were addressed using best practice standards set out by the Department of Environment Climate Change and Water (DECCW) guidelines.

5.2 Legislation and Regulatory Guidelines

Two principal pieces of legislation provide automatic statutory protection for Aboriginal heritage and the requirements for its management in New South Wales. These are the *National Parks and Wildlife Act 1974* as amended (2010) and the *Environmental Planning and Assessment Act 1979*. The *National Parks & Wildlife Service* (NPWS) now comprises an administration branch of the Department of Environment and Climate Change and Water (DECCW).

National Parks & Wildlife Act (1974)

The *National Parks & Wildlife Act 1974* provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Aboriginal occupation of NSW) under Section 90 of the Act, and for 'Aboriginal Places' (areas of cultural significance to the Aboriginal community) under Section 84. Aboriginal objects are afforded automatic statutory protection in NSW whereby it is an offence to:

> damage, deface or destroy Aboriginal sites without the prior consent of the Director-General of the National Parks and Wildlife Service (now the DECCW).

The Act defines an Aboriginal 'object' 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 the occupation of that area by persons of non-Aboriginal European extraction, and includes Aboriginal remains'.

The Act was recently amended (2010) with the legislative structure for seeking permission to impact on heritage items modified. An s.90 permit is now the only Aboriginal Heritage Impact Permit (AHIP) available and may only be granted by the DECCW if the conditions of the 'due diligence guidelines', and/or an 'archaeological investigation' have been met. The penalties and fines for damaging or defacing an Aboriginal object have also increased. As noted below however, s90 AHIPs are not required for impacts to Aboriginal objects for projects such as the current one which are assessed under Part 3A of the *Environmental Planning & Assessment Act 1979*.

Draft guidelines outlining the preferred structure for archaeological investigations and reporting on Part 3A projects were devised by the DECCW in 2005, and include a requirement for Aboriginal community consultation following interim DECCW guidelines.

Environmental Planning & Assessment Act (1979)

In contrast with the NPW Act, the EP&A Act is designed more specifically to cater for heritage issues within the context of new development projects and is closely linked with the process of preparing environmental impact studies. This act has three main parts of direct relevance to Aboriginal cultural heritage. Namely, Part III which governs the preparation of planning instruments, Part IV which relates to development assessment process for local government (consent) authorities and Part V which relates to activity approvals by governing (determining) authorities.

In 2005 Part III of the Act was amended with the introduction of section Part 3A. This section 'switches off' Part 6 of the NPW Act which specifies penalties for destruction of Aboriginal heritage. NPW Act s90 AHIPs are therefore not required to impact on Aboriginal heritage under Part 3A development applications as the penalties for doing so are nullified. Under Part 3A assessments proponents must adhere to the *Draft Guidelines for Aboriginal Heritage Impact Assessment and Community Consultation 2005* developed by DECCW and the NSW Department of Planning.

Implications

The proposed development at 150 Epping Rd, Lane Cove is being assessed under Part 3A of the EP&A Act. Subsequently permits from DECCW are not required in order to impact Aboriginal heritage. Instead of the statutory control lying solely with the DECCW, a Part 3A application is assessed in relation to the Director General's Requirements (DGRs) advised by the Director General of the Department of Planning. Best practice, regardless of the statutory context, advocates that development impact to documented and/or potential

sites of Aboriginal cultural heritage sensitivity be avoided where practicable and/or mitigated at the minimum, and that all decisions made for either course of action be made consequent to direct guidance provided by Aboriginal stakeholders.

5.3 Aboriginal Occupation and Site Types

Aborigines have lived in the Sydney area for at least 20,000 years. The oldest dated site in the greater Sydney region is 22,000 years before present, which was recorded in a rock shelter in the Blue Mountains. Several other dates of a similar age have been recorded along the Nepean (Nanson et al 1987) and Parramatta Rivers (JMcD CHM 2005).

Material traces of this long occupation exist throughout the landscape and are known as Aboriginal sites. The primary site types that may be present in the study area are as follows.

- Stone Artefacts – Flaked and ground stone artefacts are the most common trace of Aboriginal occupation in the Sydney region. Aboriginal people used particular techniques to flake stone and these changed over time. The approximate age of a tool can often be diagnosed by the way that it was made. Stone artefacts are most often found in scatters that may indicate an Aboriginal campsite was once present. Stone tools in the Sydney region are most often made from raw materials known as silcrete, tuff and quartz. These are all easily flaked and form sharp edges, which can be used for cutting or barbing spears. It is possible that stone artefacts, either on the surface, or buried, exist within the study area.

- Rock shelters with deposit – Rock shelters were used by Aboriginal people for habitation, rest places and as art or ceremonial sites. Deposits can build up on the floor of these shelters over time and bury traces of Aboriginal occupation. If these deposits are not disturbed, rock shelters can provide an intact stratigraphy that can tell us about the way Aboriginal occupation changed through time. Rock shelters are the site type most likely to occur within the study area. Sandstone outcrops occur commonly within Hawkesbury sandstone geologies, and it is possible that a shelter may have retained a protected area of intact deposit.

- Shell middens – Shell middens are remains of campsites in which the primary traces are shell and/or bones of fish. Shell middens are often found close to rivers or streams and are either along banks or within enclosed shelters. The majority of

shell middens in the Sydney region were destroyed when they were mined for lime in the early days of the colony. It is unlikely that any major shell midden remains in the study area, although it is possible that remains of shellfish or fish could be found in an archaeological deposit.

- Rock engravings/Rock art – Rock engravings are often found in Hawkesbury geologies on flat sandstone platforms. Shapes of animals, ancestor figures or other symbols were carved into the sandstone. Weathering has affected the visibility of many rock engravings. Other rock art of various forms has also been recorded in the Sydney basin. Stencils, charcoal drawings and paintings are examples of the techniques used by Aboriginal people. Rock art is relatively rare, but is more common on sandstone geologies than on the plains of western Sydney. It is possible that engravings may exist in the study area, or may once have existed but are now weathered.

- Axe grinding grooves – Axe grinding grooves are created when axe blanks (often basalt cobbles) are shaped by rubbing the stone across an abrasive rock such as sandstone, often using water. Sharpening axes and other tools also forms them. Axe grinding grooves are often found on the banks of streams or rock pools. It is unlikely that axe-grinding grooves remain within the study area as the damming of Stringybark Creek would have submerged any sandstone outcrops on the former waterline.

- Scarred trees – Aboriginal people practiced tree marking or scarring for a variety of reasons. Large scars are often the result of a tree being debarked for a canoe blank and smaller scars may have been the result of making shields or coolamons (storage vessels). Tree marking may have been the result of ritual practices, or associated with burial. Scarred trees that remain today would be over 150 years old and the scar would retain certain characteristics that enable its identification as cultural. It is highly unlikely that scarred trees remain in the study area, as intensive logging would have removed any trees old enough to bear cultural scars.

- Contact sites – Sites where evidence of early interaction between Aboriginal people and Europeans are known as contact sites. Artefacts found at contact sites may include flaked glass or ceramic. It is possible that a contact site was located within the study area, as Europeans settled Lane Cove very early in the colonization.

- Potential Archaeological Deposit (PAD) – Areas are classified as PADs if there is a likelihood of archaeological material existing below the ground surface or on the ground surface but obscured from view. An Aboriginal object does not need to be recorded for an area of PAD to be specified.

5.4 Ethnohistory of the Local Area

The study area is within the territory of the Cameray-gal (or Gamaragal) clan. The exact boundaries of the territory are not known, and may have been fluid, but the Cameray-gal area is thought to have extended around Sydney Harbour from Mosman to the Lane Cove River (Irish 2006).

European appropriation of Cameray-gal territory and specifically the Lane Cove region occurred very early in the colonization period. Boats were sent up the Lane Cove River within weeks of the arrival of the First Fleet. Numerous overland parties quickly arrived to explore the potential of land surrounding the river. Information about the way that Aboriginal people lived before white settlement can be gained from observations of these early parties of explorers. The Lane Cove Heritage Study discusses what records remain of these early observations.

Lieutenant William Bradley wrote on his observations of Aboriginal people during an expedition up the Lane Cove River in February 1788. He noted that Aborigines were plying the river in canoes, but it is not known what their activities were.

> 'We did not meet with any Natives again 'till this day, at day light saw several canoes in the Cove we were surveying; they all fled, some out of the Cove and others up to a Cove above' (Bradley 1969: 74)'

In 1790 Governor Philip sent Lieutenant Ralph Clark to Lane Cove as part of his attempt to establish amicable relations with the Aboriginal people of the area so that the extraction of natural resource could be facilitated. Clark built a relationship with two Aboriginal men of the area named Dourrawan and Tirriwan. He described an early encounter with the men.

> 'On seeing it was me who had given them the hatchet yesterday, they both came down to me, they had left some mussels on the fire to roast, which they both begged of me to eat some of' (Clark 1981:109).

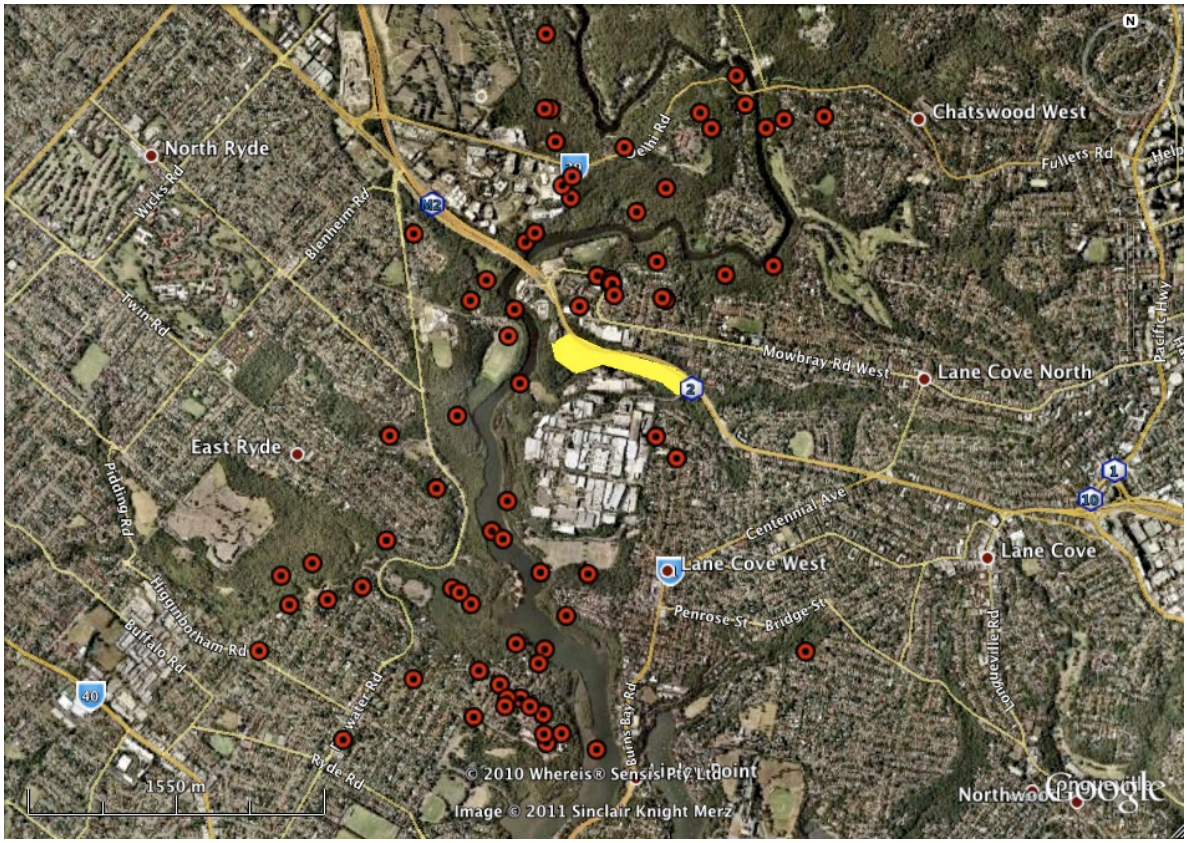
The small pox epidemic of 1789 has a profound effect on the population of the Sydney region, and would have decimated groups in the Lane Cove area. Clark's journal records that Dourrawan had lost both his wife and child to the epidemic. From 1790 any

Aboriginal people remaining in the Lane Cove area would have been further disenfranchised, as convicts were moved in to harvest the timber and lime resources of the area.

5.5 Registered Aboriginal Sites in the Local Area – AHIMS search

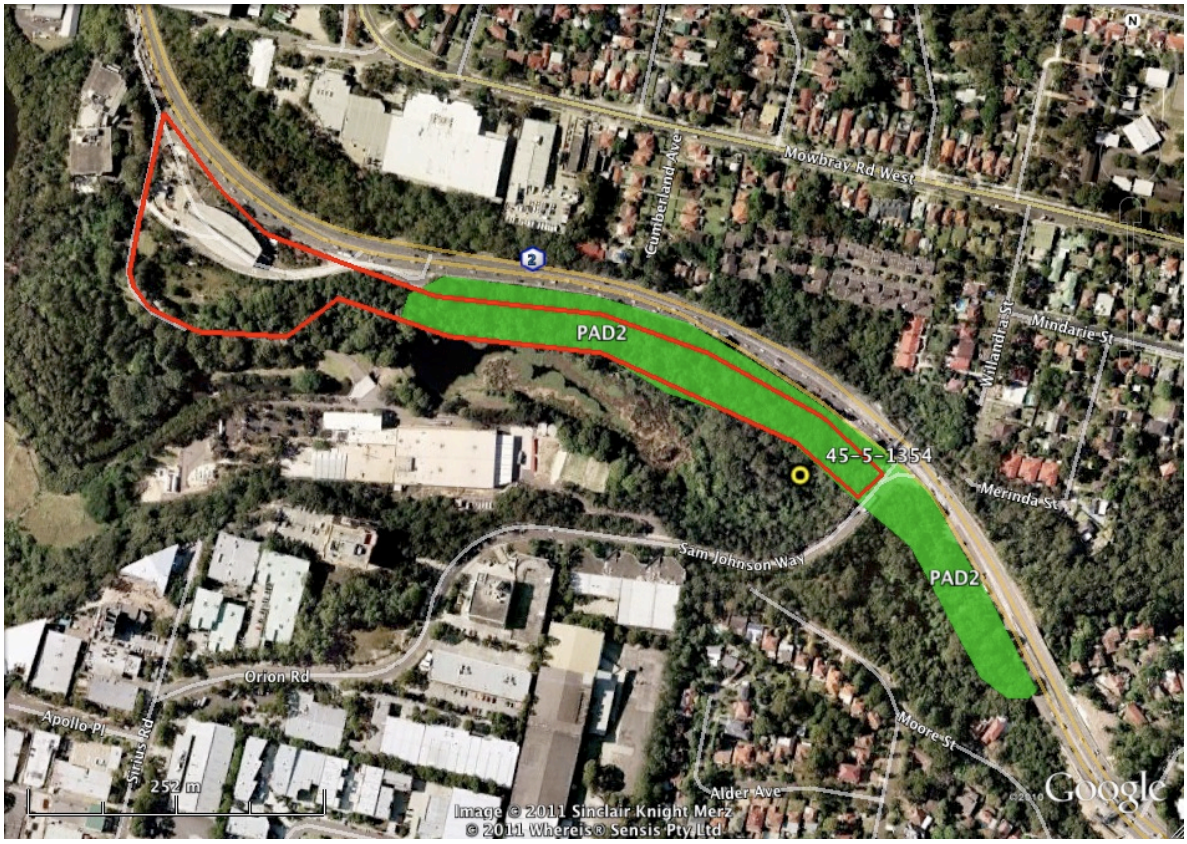
A search of the Aboriginal Heritage Information Management System (AHIMS) was conducted on 28 January 2011.

Figure 8: Aboriginal sites in the local area



The search took in a 4km radius of the study area (Zone 56, Easting from 326680 to 330680, Northing from 6256000 to 6260000). Seventy-nine registered Aboriginal sites were located within this area. Figure 2 shows the location of these listings. The locations may be slightly inaccurate as not all AHIMS data has been modified to reflect the most recent geographic datum positioning (current map is in GDA94 and some AHIMS co-ordinates are in AGD84). Sites close to the study area have been adjusted as accurately as possible to reflect this change (Figure 9). Information about Aboriginal site locations is sensitive and should be removed from any public access versions of this final report.

Figure 9: Sites previously recorded within and around the study area (study area shown in red)



One registered area of potential archeological deposit (PAD) was found to be within the study area, and one registered Aboriginal site was found in close proximity to the study area. These were –

AHIMS # 45-5-2982 PAD2

PAD 2 is an area of potential archaeological deposit (PAD) that covers the majority of the study area from Sam Johnson Way, west to the turn off into the service station from Epping Road. The PAD extends from the edge of Epping Road to the banks of Stringybark Creek. It is shown shaded in green in Figure 8 below.

AHIMS #45-6-1354 Sewer Pipe Cave- Stringybark Creek.

This site is located 70m west of Sam Johnson Way, and approximately 20m to the south of the walking track which forms the boundary of the study area. The rock shelter was relocated during this survey.

No previously unrecorded Aboriginal sites were located during the site survey.

5.6 Previous Archaeological Studies in the Local Area

There have been a number of archaeological studies within the local area, especially along the banks of the Lane Cove River, and in the Lane Cove River National Park to the north of the study area.

During an archaeological survey along the route of the F2-Castelreagh Freeway in 1989 Laila Haglund located two rock shelters with deposit five hundred metres to the west of the current study area. Both shelters (AHIMS #45-6-1855 and AHIMS #45-6-1854) contained middens with oyster and whelk shell recorded, while the later also had possible remnants stencil art along the back wall.

In 1990 Conyers conducted a comprehensive survey of the Lane Cove River State Recreation Area, now known as Lane Cove National Park. Approximately one third of the SRA was surveyed during a twelve-day survey. The Recreation Area is located from 1 km north of the current study area and continues north along the route of the Lane Cove River. Seven previously unrecorded Aboriginal sites were located - two engraving sites, two middens, and three rock shelters with deposit. Five potential habitation site were also recorded along with three engraving sites which had previously been recorded

In 1995 Wirrima Consulting conducted a survey for Aboriginal sites for the widening of Delhi Rd by the RTA. A rock shelter with midden (AHIMS #45-6-2211) which was first recorded by Conyers was relocated. Its position is approximately 1 km to the north of the current study area.

In 1997 Tessa Corkhill conducted an excavation of rock shelter with potential archaeological deposit (CSIRO PAD1) at Riverside Corporate Park, approximately 500m to the northwest of the current study area. The PAD was first located in 1991 and it was recommended at that time that further investigation would be required if the site was to be affected by development. Ten test pits were excavated to bedrock at depths varying from 47cm to 18cm. Fourteen stone artefacts were recovered although the deposit was found to be relatively disturbed with evidence of European material throughout much of the profile.

In 2000 Bobbie Oakley completed a survey for a proposed sewerage upgrade within Lane Cove National Park. Two new Aboriginal sites were located in the southern portion of the National Park, approximately 1km north of the current study area. Both new sites (LCRM1 and LCRM2) are shell midden scatters and associated areas of potential archaeological

deposit (PAD). It was recommended that the sewer line should be redirected to avoid these sites, or if this was not possible that further archaeological work, such as a test excavation, should be conducted.

5.7 Previous Archaeological Work Within the Study Area

Portions of the study area, or areas immediately surrounding the study area, have been surveyed a number of times previously for Aboriginal sites.

Rosemary Taplin, an amateur archaeologist who recorded many Aboriginal sites in the Lane Cove area, conducted an early study. A rock shelter with a black charcoal stencil of two fish (AHIMS # 45-6-1354) located approximately 20m to the south of the study area was first recorded by Taplin in 1963. Taplin named the shelter 'Sewer Pipe Cave'. Michael Guider submitted a site form based on Taplin's notes to AHIMS and the site was formally registered in 1980.

In 1990 Mary Dallas Consulting Archaeologists (MDCA) conducted an Aboriginal heritage survey as part of the Environmental Impact Statement for the upgrading of Epping Road for the RTA. The rock shelter recorded by Taplin was relocated and re-recorded. Dallas observed that although the pipeline had been laid through the floor of the shelter disturbing any occupation deposit, the art had not been disturbed. Dallas recommended the installation of a siltation trap and a temporary fence above the shelter while construction works were in progress.

A survey for Aboriginal archaeological sites at the junction of Sam Johnson Way and Epping Road was conducted in 1997 (Edgar 1997). The rock shelter AHIMS #45-6-1354 was again relocated. A site card update was submitted to AHIMS. It was reported that the art was still in good condition but that the sewer main was leaking. It was recommended that the leak should be reported to Sydney Water and that repairs take place under supervision of a representative from the Metropolitan Local Aboriginal Land Council. Edgar reported that the area was highly disturbed due to construction of Epping Rd and other infrastructure such as pipelines.

In 2001 Mills Archaeological and Heritage services surveyed areas to be impacted by the Lane Cove Tunnel Project. This included the current study area. Mills identified the banks of Stringybark Creek from just east of the service station, to the Stringybark Creek Bridge (east of the current study area) as an area of potential archaeological deposit. This was justified on the basis that some areas were inaccessible and may contain archaeological

sites such as axe grinding groves or rock engravings. PAD 2 was registered with AHIMS as AHIMS # 45-5-2982.

A section of PAD2 was excavated by HLA in 2004 to test whether archaeological deposit, or buried sandstone platforms used for axe grinding or engraving, remained. The machine scrapes took place on the western side of Moore Rd approximately 300m east of the current study area, but still within the bounds of PAD2. Test pits were manually and mechanically excavated but it was concluded that the area was highly disturbed and that any natural soil profiles were truncated and any archaeological deposit had been eroded. No archaeological objects were recovered during the test excavations by HLA.

The northern portion of the study area was investigated most recently in 2006 when Paul Irish investigated the road corridor of Epping Road immediately to the north of the study area as part of his *Aboriginal Heritage Impact Assessment Report for the Lane Cove Tunnel Project Stage 2* to Theiss John Holland. Irish surveyed an area slightly larger than the road corridor that included sections of the current study area. He revisited 'Sewer Pipe Cave' and recommended that the art was still in good condition, and that an acoustic and vibration assessment should be undertaken on the cave to ensure that it would not be affected by construction. It was also reiterated that as recommended by Edgar 1997 protective measures to prevent silt run off into the cave should be put in place prior to construction.

Paul Irish also recommended that sections of PAD 2, within 20m of Epping Rd should not be considered as archaeologically significant. He recommended that the area was generally highly disturbed and that after a site inspection no Aboriginal objects or places were located. He stated that, '[t]he current assessment shows that the areas examined within the study area should no longer be considered to have any Aboriginal archaeological potential or sensitivity. It is noted however that this should not be taken to apply to the remaining areas of Stringybark Creek' (Irish 2006:51).

5.8 Recent Land Disturbance

Construction works have heavily impacted the study area and its surrounds. The western section of the study area has been profoundly disturbed by the construction of a large building complex, and more recently a Shell service station and access roads. The service station has been constructed on a concrete platform into the hillside. It is almost certain that any archaeological material that may have existed in this area would have been impacted.