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# DARWIN CITY WHARF REDEVELOPMENT

## Preliminary Aboriginal Heritage Assessment

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### FINAL REPORT



Prepared by  
**Austral Archaeology Pty Ltd**  
Archaeological and Cultural Heritage Consultants

For  
URS Australia Pty Ltd

May 2004

## EXECUTIVE SUMMARY

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Austral Archaeology Pty Ltd was commissioned by URS Australia Pty Ltd (URS) to undertake a preliminary Aboriginal heritage assessment for the proposed Darwin City Wharf Redevelopment (DCWR) located immediately south of the Darwin city centre. The 25 hectare study site is bounded by the Port of Darwin, Frances Bay and the city of Darwin. While the final scope of works for the DCWR will be determined on completion of a master plan for the site, the proposal may include public buildings, residential and commercial development, marina-oriented and public transport facilities and recreational space.

The site has been subject to a variety of land uses focused on industrial, retail and tourism-related activities over the past 60 years and is currently used for industrial purposes associated with bulk cargo operations, and tourism. The study area has been modified to a high degree by previous and current land uses, and as a result, the potential archaeological sensitivity of the site has been substantially reduced.

Development of the area will require modification of the existing environment. This may include raising the existing levels of low-lying land on which buildings will be constructed, land reclamation and marina construction in Kitchener Bay, and minor reclamation and/or marine structures adjoining the western side of Fort Hill. Demolition of existing buildings and industrial structures, Fort Hill and Iron Ore Wharves and associated conveyor system in the medium term.

During the current investigation, no archaeological site or areas of archaeological sensitivity were identified within the study area boundaries which will be impacted by the proposal. On the basis of the desktop study and preliminary Aboriginal community consultation, the study area is therefore considered to have low archaeological potential.

However, two areas of Aboriginal cultural value were identified. The first is a registered Sacred Site (5073-93) on Stokes Hill. This has the potential to affect redevelopment plans as a restricted works area has been identified within this site. The second is a recorded sacred site (5073-83) in close proximity to the study area at Lamerloo Beach. While this site will not be directly impacted by the redevelopment, indirect impacts to the site should be considered. A Native Title claim on Stokes Hill was also identified.

### Recommendations

The following recommendations and management strategies are provided for the Darwin City Wharf Redevelopment proposal:

#### 1 –Ongoing local Aboriginal community consultation

As key stakeholders, the concerns of the local Aboriginal community about the development area should be appropriately addressed. As such, their input into the development process remains paramount. Extensive consultation is recommended with the relevant Aboriginal community groups, the proponent, and NT Department of Environment and Heritage to determine possible land uses of Stokes Hill and the implications for the project of the sacred site and native title claim. Regardless of the outcomes, the cultural importance of this landmark should be acknowledged and the wishes of the Aboriginal custodians respected.

#### 2 – Archaeological Investigation

At present, the final scope of works for the redevelopment of the site has not been determined. As such, no specific development impacts have been identified. When these are known, a targeted field survey of the study area should be conducted, particularly in the vicinity of Stokes Hill, to ascertain potential impacts on the archaeological resource.

#### 3 –Recognition of contemporary values

The contemporary use of area by Aboriginal people should be acknowledged. In particular, development of the escarpment base should be avoided and consideration of the indirect impacts of the proposal on this area discussed with the local Aboriginal community. In addition, consideration of the visual impacts to the wharf site and their affect on cultural

values of the wider wharf area, particularly those associated with Lamerloo Beach, should be addressed with key stakeholders.

#### **4 –Acknowledgement of Aboriginal cultural significance**

The cultural significance of the study area should be acknowledged and past and present Aboriginal land use of the wharf area should be recognised. As part of the redevelopment plans, interpretation of Darwin's Aboriginal archaeological sites and places of cultural significance should be developed and educational opportunities incorporated into the project. It is noted that a cultural centre is also proposed as part of the development and input from the Aboriginal community is key to the design and planning of this component.

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## **1.0 INTRODUCTION**

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### **1.1 Introduction**

This report provides a preliminary Aboriginal heritage assessment of the Darwin City Wharf Redevelopment Precinct (DCWRP) (Figure 1.1) and subsequent heritage recommendations. The assessment was undertaken to determine the archaeological and cultural heritage values of the study area which would be impacted by the proposal to redevelop the wharf precinct. The approach taken for the management of Aboriginal heritage included identification of areas of archaeological and cultural sensitivity and the formulation of management strategies to address these landscapes.

The DCWRP, totalling 25 hectares, is located immediately south of the Darwin city centre. The site is bounded by the Port of Darwin, Frances Bay and the City of Darwin. The site has been subject to a variety of land uses focused on industrial, retail and tourism-related activities over the past 60 years and is currently used for industrial purposes associated with bulk cargo operations, and tourism. As a result, the study area has been modified to a high degree by previous and current land uses (URS 2003).

### **1.2 Project Description**

Possible components of the redevelopment proposal for the Darwin City Wharf Precinct include:

- Open space for recreational use;
- Public buildings including a visitor and cultural / heritage centre;
- Residential and commercial development including hotel(s), serviced apartments, retail outlets, restaurants, convention and exhibition centre;
- Commercial marina-oriented and public transport facilities; and
- Focal "landmark" feature.

In order to develop the area, modification of the existing environment will occur. This may include:

- Raising the level of low-lying land on which buildings will be constructed;
- Construction of a revetment structure along the coast or a sea wall off shore;
- Land reclamation and construction of a marina in Kitchener Bay and the dredging of marine mud; and
- Minor reclamation and/or marine structures adjoining the western side of Fort Hill.

The current Concept Plan includes the demolition of a number of existing buildings, oil storage tanks and industrial plant in the short term and removal of the original Fort Hill Wharf, Iron Ore Wharf and associated conveyor system in the medium term. The final scope of works for the Darwin Waterfront will be determined on completion of a master plan for the site. The redevelopment work will be undertaken over a period of ten to fifteen years.

The above mentioned activities have the potential to directly and indirectly impact any cultural and archaeological values of the study area. The potential cultural heritage impacts arising from the proposed development are discussed in the following sections.

### **1.3 Study Objectives**

The main objectives of the assessment project as outlined in this report are:

1. to establish the history of Aboriginal occupation of the study area through the identification of known Aboriginal heritage items and sites, and landscapes of archaeological and cultural sensitivity;
2. to consult with relevant stakeholders with an interest in the study area in order to establish areas of archaeological and cultural sensitivity and assess their significance. Aboriginal community groups to be consulted with regard to Aboriginal heritage included Larrakia Nation, Northern Local Aboriginal Land Council and the Kulaluk Community;



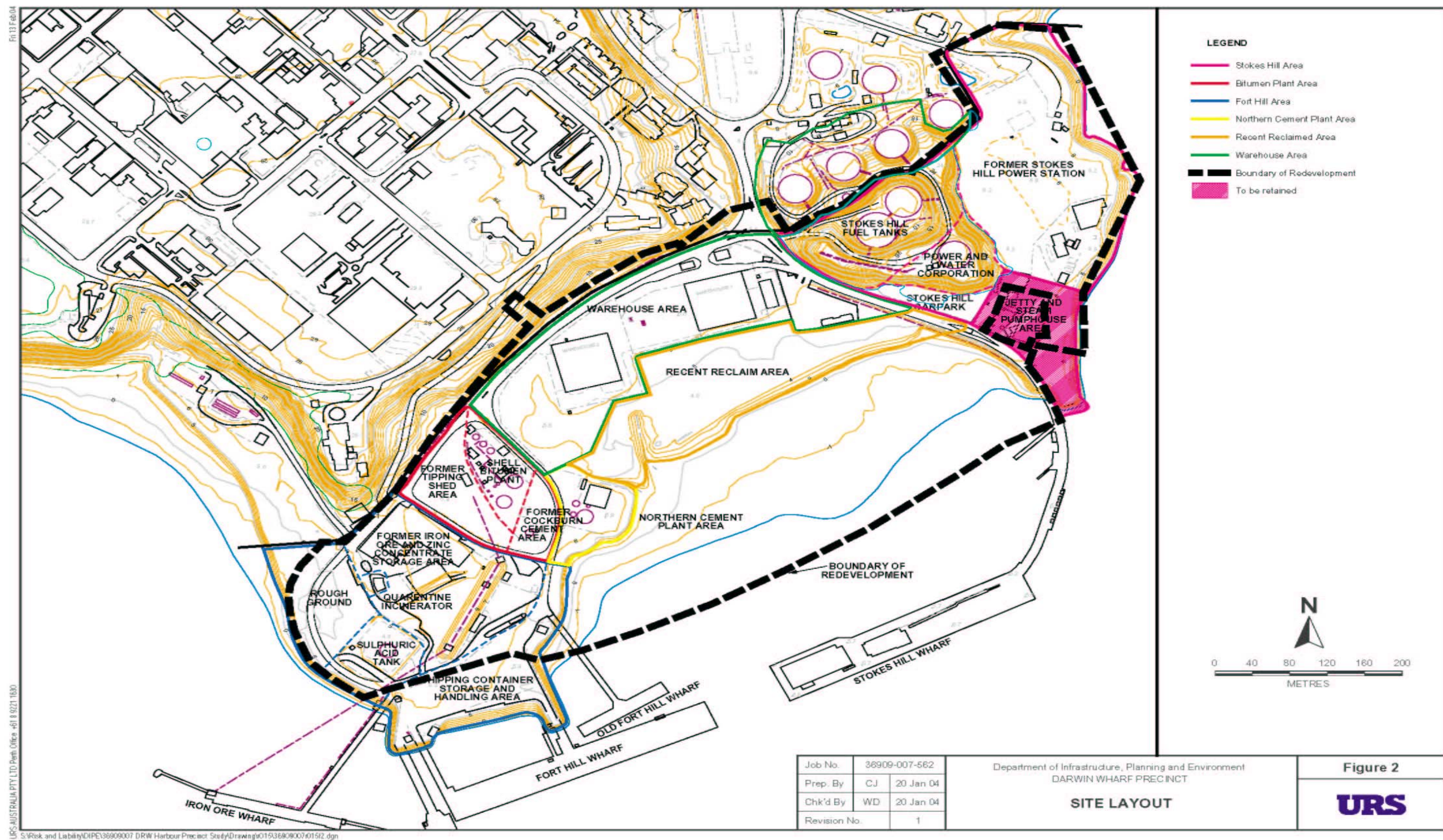


Figure 1.1 Study Area



3. to conduct a field survey to locate and document surface Aboriginal archaeological and/or cultural heritage sites and identify any areas of potential archaeological sensitivity within the study area;
4. on the basis of a desktop study and field survey, assess the significance of all sites recorded within the study area in accordance with established significance criteria; and
5. provide strategic advice regarding opportunities and constraints in terms of known and potential areas of Aboriginal cultural heritage and develop appropriate management strategies to ensure that significant archaeological and cultural landscapes are protected, where possible and that future impact to sites of lesser significance are mitigated as required.

All recommended management measures have been formulated in consultation with relevant stakeholders as required by legislative requirements and best practice cultural heritage management principles.

Due to the development of key issues during the study, it should be noted that a number of components are yet to be completed. As discussed below, preliminary consultation has been undertaken for the project. However due to project constraints, further consultation is required as the final scope of works is formulated in light of the sacred site registration on Stokes Hill and the associated work restrictions. Consequently, no site inspection has been conducted to date. As discussed, a full assessment of known and potential heritage issues with input from local Aboriginal stakeholders is yet to be completed.

#### **1.4 Aboriginal Heritage Legislative Framework**

Aboriginal cultural heritage in Australia is protected and managed under the *Environment Protection and Biodiversity Act 1999* and the *Aboriginal and Torres Strait Islander Heritage Protection Amendment Act 1987*. Aboriginal cultural heritage in the Northern Territory is also protected by the *Northern Territory Aboriginal Sacred Sites Act 1989* and the *Heritage Conservation Act 1991 (NT)*. Principles for assessment and conservation management are provided by the non-statutory *ICOMOS Australia Burra Charter (1999)*.

##### **1.4.1 Environment Protection and Biodiversity Act 1999**

A new national heritage system started on 1<sup>st</sup> January 2004. Under a raft of changes, three new Acts come into force. The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) [amended in 2003 under the *Environment and Heritage Legislation Amendment Act (No 1)*] now includes “national heritage” as a new matter of National Environmental Significance and protects listed places to the fullest extent under the Constitution. A National Heritage List will be established and comprise natural, historic and indigenous places that are of outstanding national heritage value to the Australian nation. The *Australian Heritage Council Act 2003* establishes a new heritage advisory body to the Minister of the Environment and Heritage, the Australian Heritage Council, and retains the Register of the National Estate. The *Australian Heritage Council (Consequential and Transitional Provisions Act 2003* repeals the *Australian Heritage Commission Act 1975*, amends various Acts as a consequence of this repeal and allows for the transition to the new heritage system.

These changes establish a new framework for the identification, protection and care of nationally significant places, and requires the Commonwealth, for the first time, to publicly identify and care for Commonwealth owned and leased heritage places. In summary, the changes:

- repeal the *Australian Heritage Commission Act 1975*;
- replace the Australian Heritage Commission with a new Australian Heritage Council;
- retain the Register of the National Estate (RNE);
- regulate Commonwealth identification, conservation and protection of its own heritage properties and establishes the Commonwealth Heritage List;
- establish the National Heritage List protecting places of national significance;
- provide protection for places overseas which are of Australian national heritage significance (such as Anzac Cove);
- provide strong civil and criminal penalties for breaches of the Act;
- ensure broad community engagement with national heritage protection through the provision of community consultation and public disclosure mechanisms.

Actions (defined under the EPBC Act) that have or are likely to have a significant impact on a matter of national environmental significance or a place listed on the National Heritage List or the Commonwealth Heritage List, require approval from the Commonwealth Environment Minister under the EPBC Act. Approval is also required for actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land) and actions taken by the Commonwealth that will have a significant impact on the environment anywhere in the world.

Aboriginal sites and places may be listed on the National List if they are of outstanding significance or on the Register of the National Estate (RNE) if significant in terms of their association with a particular community or social group for social, cultural or spiritual reasons. Listing in the RNE does not affect State authorities/owners or private individuals whereas National Listing will. Note that items of local level significance may be included on the RNE.

#### *1.4.2 Aboriginal and Torres Strait Islander Heritage Protection Amendment Act 1987*

This Federal Act administered by the Aboriginal and Torres Strait Islander Commission, provides blanket protection for Aboriginal heritage in circumstances where such protection is not available at a state level. This Act comes under Commonwealth jurisdiction which means that it can override state and territory provisions.

#### *1.4.3 Northern Territory Sacred Sites Act 1989*

Aboriginal cultural heritage in the Northern Territory is protected by the *Northern Territory Aboriginal Sacred Sites Act 1989*. The Act establishes a procedure by which sacred sites are identified, registered and protected, to enable land to be utilised and developed without injury to sites and/or custodians. The Act is administered by the Aboriginal Areas Protection Authority (AAPA).

A sacred site is one 'that is sacred to Aboriginals or is otherwise of significance according to Aboriginal tradition'. Sites are identified by the AAPA and traditional custodians and listed on a Register of Sacred Sites. Registration has the effect of prohibiting a range of activities over a site, including entry or leave to remain on site; undertaking of work or use on a site, or desecration of a sacred site. If work is to be conducted on or within the vicinity of a sacred site, an application for a certificate allowing such activities should be made to the AAPA. A certificate may be issued if the work can proceed without impact or disturbance to the site or if the applicant and the custodians have agreed to allow work to be undertaken.

#### *1.4.4 Heritage Conservation Act 1991 (NT)*

This legislation provides a system for the identification, assessment, protection and conservation of the Northern Territory's natural and cultural heritage. Such heritage is classified as fossils, buildings, gardens, ruins, archaeological sites, landscapes, ecosystems, coastlines, plant and animal communities. It covers 'archaeological places and objects' which have been prescribed under the Northern Territory Regulations (1991 No.53). An 'archaeological place' is described as a place or places which have been modified by the activities of Aboriginal or Macassan people. An 'archaeological object' is one which relates to the past occupation of any area in Australia by Aboriginal or Macassan people. It is an offence to damage, desecrate or alter objects or areas without permission.

#### *1.4.5 The Burra Charter 1999*

The Burra Charter (1999) also provides guidance for the conservation and management of places of cultural significance (cultural heritage places). The Charter was adopted by Australia ICOMOS (the Australian National Committee of ICOMOS) in 1979 with recent revisions adopted in 1999. The Charter sets a standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians.

In summary, Aboriginal places, objects, and sacred sites in the Northern Territory are protected. Permission to disturb or destroy Aboriginal archaeological and cultural sites, and sacred sites, must be obtained prior to impact on a site. Applications are determined on the basis of the significance of the heritage object, place or site according to the abovementioned legislation. Local Aboriginal groups are expected to play an active role in the heritage



assessment process and are given the opportunity to comment on each application with their views taken into consideration when determination of the application takes place.

### **1.5 Stakeholder Consultation**

Consultation with key stakeholder groups has been ongoing throughout the heritage assessment. Consultation has been undertaken with a range of stakeholder groups with an interest in the project. These include:

- Aboriginal Areas Protection Authority (AAPA);
- Heritage Conservation Services (HCS);
- Department of the Chief Minister (DCM); and
- Larrakia Nation Aboriginal Corporation (LNAC).

Leslie Mearns, (Senior Anthropologist) of the AAPA was consulted with regard to known cultural sites which may occur within the development zone. A search of the Sacred Sites Register for the study area was conducted on 12<sup>th</sup> November 2003 on behalf of Austral Archaeology. This revealed two recorded sites, one within the development area on Stokes Hill (5073-93) and another at Lamerook Beach (5073-83), just beyond the development area to the west. Ms Mearns advised that registration of the Stokes Hill site would occur in late 2003. The nature of the sites was not discussed.

Consequently, an AAPA Authority Certificate (C2003/144) for registered site 5073-93 was issued on 19<sup>th</sup> December 2003. The sacred site is centred on the peak of Stokes Hill (Figure 1.2) and extends north to include the majority of the hill feature which contains remnant fuel storage tanks, several of which have been excavated into the phyllite bedrock (URS 2003). The Authority Certificate stipulates that a restricted works area is contained within the sacred site boundaries. This prohibits any works without the formal approval of the site's senior Aboriginal custodians. The ramifications of the certificate conditions on the redevelopment plans are discussed in Section 5.

Steve Sutton, Director of HCS was consulted with regards to the Aboriginal heritage assessment and the implications of the redevelopment project on the archaeological resource. Mr Sutton indicated that there were no known archaeological issues within the wharf precinct as the area was highly disturbed thus reducing the archaeological potential of the site. Searches of the Aboriginal Sites Register and reports catalogue were also undertaken to establish the known archaeological context of the study area in order to predict what types of Aboriginal sites, if any, were likely to be present and where these would occur.

The consultant also met with Mr Larry Bannister, Director of Innovation & Knowledge Economy and Ms Jane Munday, Director of Marketing & Communication in the DCM to inform them of Austral's discussions with LNAC. Mr Bannister and Ms Munday are involved in the coordination of the NT Government community consultation program for the project. They confirmed that a specific consultation program with Darwin's local Aboriginal community was planned but was yet to commence as of November 2003.

Larrakia Nation Aboriginal Corporation (LNAC), a key local Aboriginal organisation, is one of several Aboriginal community groups in Darwin with an interest in the project. From discussions with this group, it emerged that the Northern Land Council (NLC) and the Kulaluk Community (KC) should also be consulted. Austral Archaeology was unsuccessful in reaching the NLC by phone on two occasions (November 2003). Face to face meetings were planned with this organisation and the KC in early 2004 to seek their views on the archaeological and cultural values of the area and the proposal. However, the consultation process was constrained due to time pressures. As a result, these meetings have not yet occurred.

Discussions with Donna Jackson and Lorraine Williams of LNAC confirmed that two Native Title Claims are centred on the Darwin Wharf area. The claims were registered by the Larrakia People (National Native Title Tribunal number DC96/7). They covers Lot 5225 (Figure 1.3) on Stokes Hill within the proposed development zone and Lot 5706 at Lamerook Beach to the north west of the wharf outside the study area. Ms Jackson indicated that the ramifications of the Stokes Hill claim on the Darwin Wharf Redevelopment should afford an appropriate level of consultation with the relevant parties including LNAC. To date, no formal consultation regarding the proposal has involved LNAC. Ms Williams also informed the consultant that there were family links with the Stokes Hills area. No specific



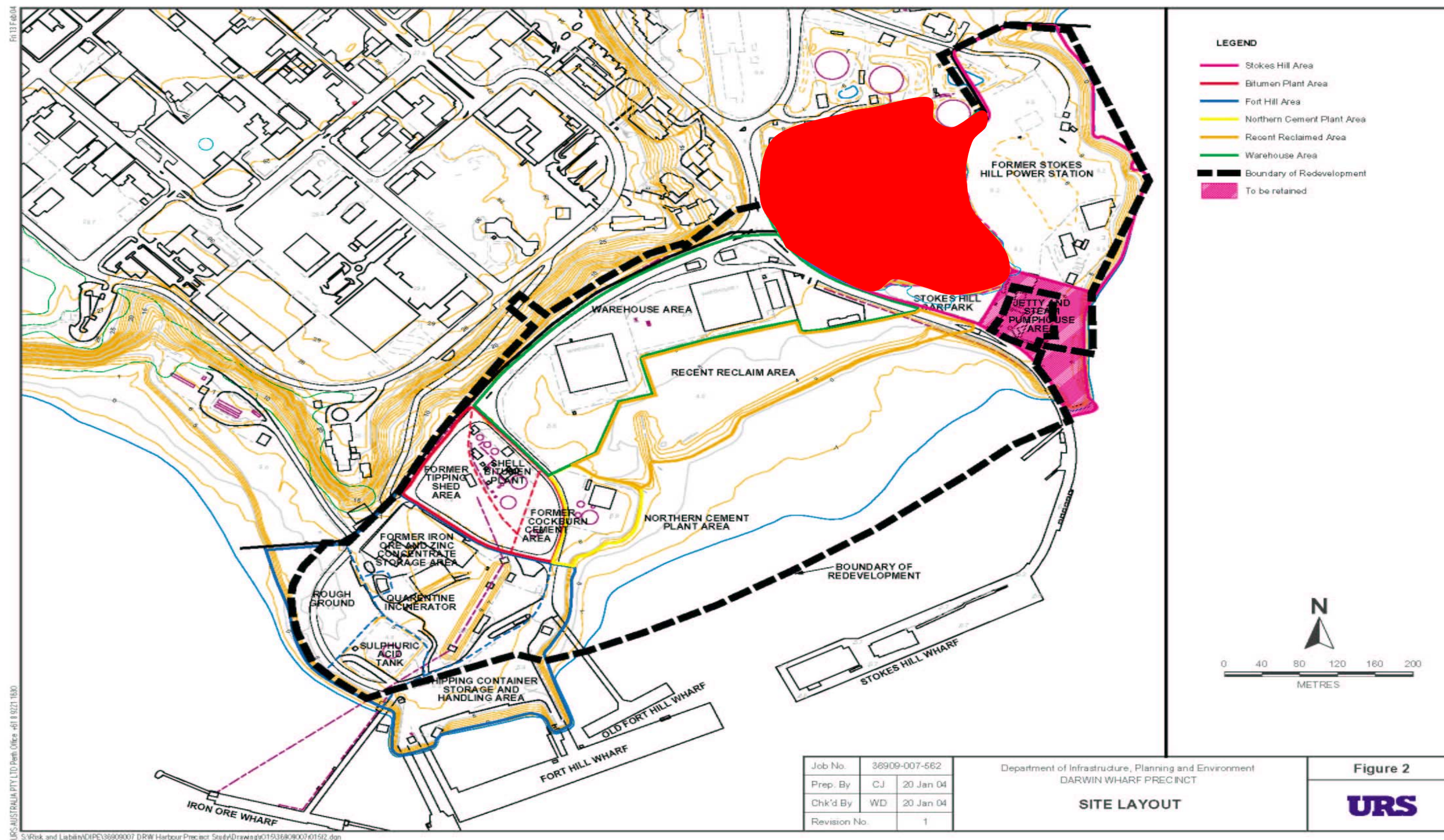


Figure 1.2 Registered Sacred Site Area on Stokes Hill



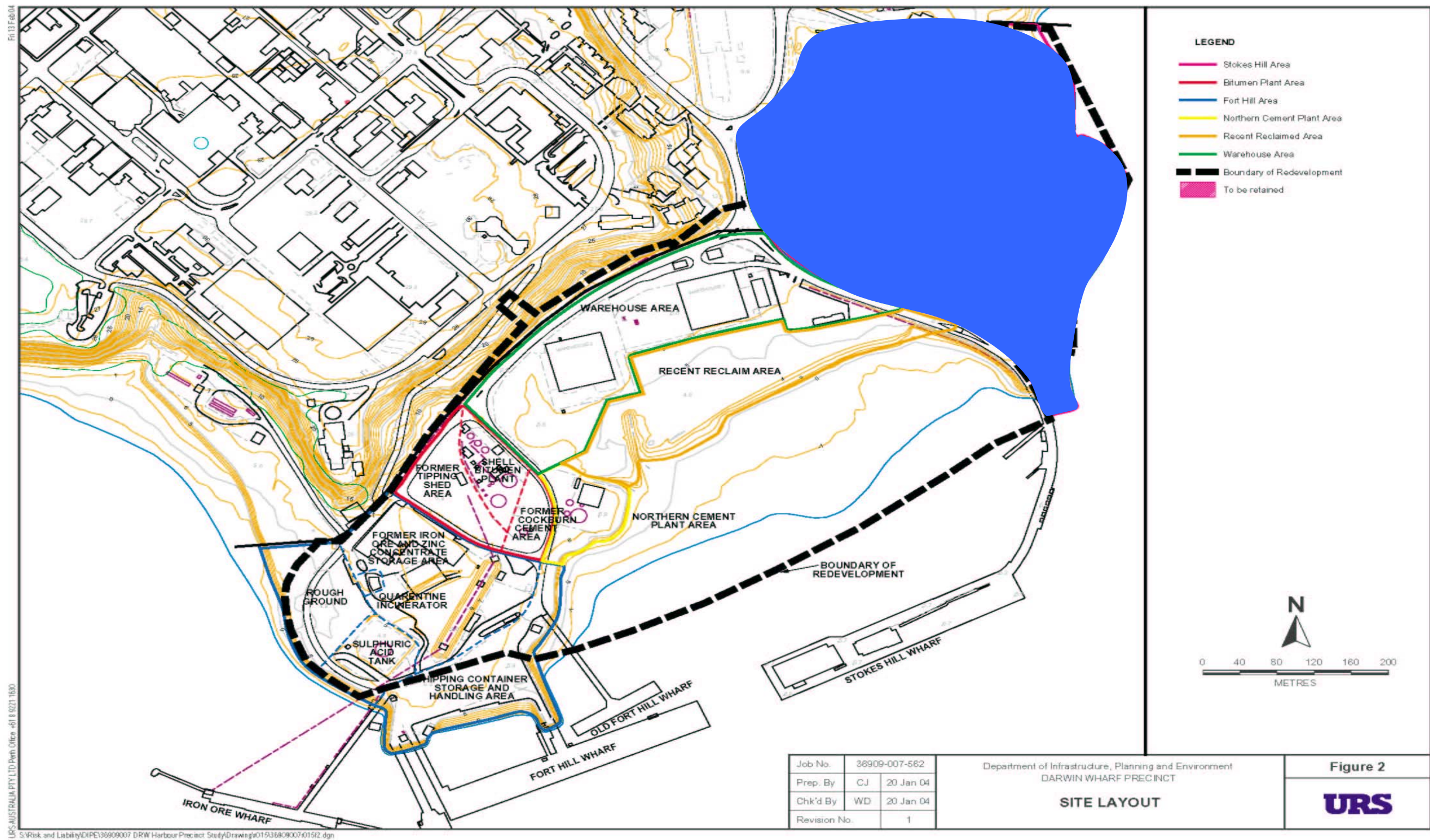


Figure 1.3 Approximate Extent of Native Title Claim on Stokes Hill

archaeological issues were raised during this discussion. However, the preservation of the environmental integrity of the wharf area and its surrounds was raised, particularly the escarpment between Kitchener Drive and the Esplanade, and Lameroo Beach to the north west of Fort Hill. Ms Jackson and Ms Williams expressed a desire to participate in a site inspection; this has been delayed indefinitely by the registration of a sacred site within the development zone.

## **1.6 Issues Arising From Consultation**

While no archaeological issues were identified during the consultation process that have the potential to affect the redevelopment project, a number of cultural issues were raised which will require further and careful consideration. These include:

- limited formal consultation with local Aboriginal stakeholders regarding the proposed redevelopment plans had been undertaken to date;
- a registered Native Title Claim exists on the Stokes Hill area within the study area;
- an Authority Certificate has been issued for registered sacred site 5073-93 (Stokes Hill) within the study area with associated works restrictions; and
- the importance of the physical environment of the Darwin City Wharf Precinct to LNAC and the potential effects the proposed wharf redevelopment will have on these values.

As stated, these issues will require further discussion with government agencies and the local Aboriginal community, particularly the senior Aboriginal custodians of site 5073-93 and the DC96/7 Native Title claimants.

## **1.7 Project Team and Acknowledgements**

This project was directed by Charles Parkinson (NSW Manager, Austral Archaeology). The Aboriginal heritage assessment was managed, conducted and written by Megan Mebberson (Senior Archaeologist). Charles Parkinson reviewed the final report.

Austral Archaeology would like to acknowledge the participation of the following people who have contributed to the preparation of this report.

Charlie Johnston	URS Australia Pty Ltd
Paul Lloyd	URS Australia Pty Ltd
Leslie Mearns	Aboriginal Areas Protection Authority
Steve Sutton	Heritage Conservation Services
Gerard Niemoeller	Heritage Conservation Services
Donna Jackson	Larrakia Nation Aboriginal Corporation
Lorraine Williams	Larrakia Nation Aboriginal Corporation

## **2.0 ENVIRONMENTAL BACKGROUND**

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### **2.1 The Study Area**

The following sections outline the environmental context of the study area within the Darwin region and the historic land uses which have affected the landscape since settlement. The degree to which the original soil context has been disturbed has significant ramifications for the preservation of archaeological deposits. The archaeological potential of the study area is considered in terms of past land disturbance in Section 3.0.

The topography of the Darwin Waterfront area is generally flat with the exception of the escarpment and Stokes Hill which constitutes a major topographic feature within the study area. Fort Hill, located in the west of the study area, was originally a natural vantage point; however, the hill was levelled in the 1960s to provide an operational area for the iron ore export industry. There are no natural surface water drains in the project area. All surface water drains from the escarpment into a series of artificial drainage channels which discharge into Kitchener Bay (URS 2003).

### **2.2 Geological Context and Soil Landscapes**

On the basis of historical land use information and previous site investigations, the redevelopment site is likely to contain mixed fill material including building rubble, sandy clayey gravels and silt. The underlying geology includes Quaternary sediments along the foreshore consisting of mud, clays, silts, intertidal marine alluvium; Bathurst Island Formation sediments comprising sandy and clayey claystone, and quartz, ferruginous and glauconitic sandstone. Underlying the Bathurst Island Formation is the Burrell Creek Formation of the Finnis River Group comprising siltstone; shale; sandstone; quartz pebbles conglomerate; metamorphosed to phyllite (URS 2003).

### **2.4 Past Land Use Practices**

Information concerning past land use practices in the study area vicinity has been based on available environmental data supplied by URS Australia Pty Ltd, sourced historical information and aerial maps. This environmental data was collected to ascertain the degree to which recent land use is likely to have affected the archaeological resource which may be present in the study area. A summary of the past land use history is given below.

The original shoreline ran around the base of Fort Hill, along the present alignment of Kitchener Drive and curved around the base of Stokes Hill. The areas between the two hills and seaward of Kitchener Drives have been progressively reclaimed over the last 60 years. Anecdotal information suggests that the fill material used in the land reclamation is likely to be a combination of clean excavated phyllite soil and rock, construction and building debris, and industrial waste (URS, 2003).

The study area incorporates a number of existing facilities which were identified to be of potential environmental concern. URS has divided the site into six major land use areas. A brief description of each area is given with reference to the impact of such activities on the potential archaeological resource which may remain.

- Fort Hill Area comprising a former iron ore storage area and associated wharf, sulphuric acid storage tank area. Fort Hill Wharf and the Old Fort Hill Wharf, the Royal Australian Navy refuelling facility, shipping container storage and handling area, a quarantine incinerator and rough ground (URS 2003).

The original landform of Fort Hill has been levelled and part of this area is reported to be reclaimed. Fort Hill was the original site of Goyder's Camp, an early historic place, set up by South Australian Surveyor General Goyder in early 1869 when he and approximately 120 men arrived in the Darwin region to establish the town and survey the surrounding hinterland. The site originally consisted mainly of tents and log buildings where both Goyder's survey team were stationed and overland telegraph activities took place from 1872.

It is reported that in 1869, there were about 700 Larrakia Aboriginal people living on the harbour foreshores and hinterland and it is probable that there was extensive contact



between the Larrakia and the settlers. In this respect, the camp area is likely to have originally yielded evidence of this interaction.

As the settlement continued to grow, the Gulnare jetty below Fort Hill was developed. This was fashioned from fill and the unseaworthy hull of the 'Gulnare' originally used by Goyder's survey team. Shortly afterward customs facilities for the incoming cargoes were built nearby (Clinch 1999:9).

A dramatic change occurred in 1965 with the removal of Fort Hill to allow the construction of an iron ore facility. The Iron Ore Wharf was the first special purpose wharf in Darwin. It was built in response to the development of the Francis Creek Iron Mining Corporation Pty Ltd (FIMCO) at Francis Creek and Morgan Mining and Industrial Co Pty Ltd at Mount Bunday. Both companies supplied iron ore to Japan. A wharf, ship loader, conveyor system, stacker/reclaimer and an iron ore facility linked to the railway were built on the site of the Boom Wharf. The first shipment left the wharf on 25 June 1967 and shipments continued for the next nine years, until the combined effects of Cyclone Tracy and the liquidation of FIMCO closed the facility. (Pedersen n.d.:22).

Whether subsurface archaeological evidence of Goyder's Camp exists in the vicinity of Fort Hill remains to be seen. If this is the case, then there is also the possibility that Aboriginal archaeological evidence in and around the camp also remains. This factor in combination with the level of heavy industrial activity and the construction of associated infrastructure renders the potential Aboriginal archaeological sensitivity of this area as low.

- Bitumen Plant Area comprising the Shell bitumen plant area, the former tipping shed area and the former Cockburn Cement area;
- Warehouse Area comprises two large warehouse buildings and associated yard areas, a general secure storage area located between the two warehouse buildings used as a helicopter landing pad, a public toilets, and office buildings;
- Northern Cement Plant Area comprises an area of rough ground. Below ground infrastructure is thought to be present; and
- Recent Land Reclamation Areas within Kitchener Bay have been filled from 1975 until the mid 1990s. The total reclaimed area is estimated to extend from the southern perimeter of the Warehouse Area down to the high water mark between Stokes Hill Wharf and the Old Northern Cement area (URS 2003).

Originally, these four areas would have been tidal mudflats which proved a valuable resource base for Aboriginal people. However, as reclaimed land, the potential archaeological sensitivity is very low as any remnant archaeological material in the area is likely to be concealed by landfill.

- Stokes Hill Area comprises a fuel tank storage area, the former Stokes Hill Power Station, the Stokes Hill Wharf and jetty and steam pump station area.

The storage tanks are located in an excavated depression that was dug to house the pre-World War II tanks.

The Stokes Hill Power Station became operational in 1962. The facility included a large steam pump house, water tanks, transformers, switching yards, oil fuel storage tanks, a workshop, storage areas and underground cooling water infrastructure. The tanks were arranged around the perimeter of Stokes Hill and in a depression in the middle. Excavation was carried out predominantly by steam shovels, horse carts and early trucks with 11 tanks in place by 1940. Although set into the hill, they suffered severe damage during the 1942 Japanese bombing. With only one useable tank remaining, new tanks were built with anti-splinter concrete protective walls surrounding around them and no further damage was sustained on the tanks from subsequent bombing (Clinch 1999:63).

The site is predominantly vacant comprising exposed soils, grassed areas and remaining concrete foundations. The former power station features which remain include the cooling

water inlet and outlets and associated underground cooling pipes. The current shoreline shows evidence of demolished building rubble and equipment such as pipes and metal components. It is likely that the former Stokes Hill Power Station was partially founded on the excavated area that was part of the original Stokes Hill. This implies that the subsurface material is likely to be phyllite bedrock or with some excavated phyllite fill over phyllite bedrock. Stokes Hill Wharf comprises a concrete decking on steel piles and bracing. Wooden piles are used as mooring piles and protection from ships. Stokes Hill Wharf is currently used by Naval and commercial vessels.

The western end of Stokes Hill Wharf currently includes a commercial complex with shopping, restaurants and tourist facilities. The jetty and steam pump house area is located in between the former Stokes Hill Power Station and Stokes Hill Wharf. The former pump house was used to pump fuel oil from the nearby Wharf to the Naval Oil Fuel Installation and the former Jetty Pump House was used for the sea water cooling water system for Stokes Hill Power Station. Other buildings in the jetty and steam pump station area include the Indo-Pacific Marine Australian Pearl exhibition and a small storage shed. The buildings in this area are to be retained due to their heritage values and previous development. This area is not part of the redevelopment works but it is relevant to the surrounding areas as a potential off site source of contamination (URS 2003).

This area has also been highly modified and heavily utilised for mainly industrial purposes. On the basis of the original landform, the area would have been used as a vantage point to view the coastline and an elevated area on which to camp. Like Fort Hill, the original landform would have been visited and the associated coastal and terrestrial resources utilised by Aboriginal people. However, given the high level of ground surface modification, it is highly unlikely that any archaeological evidence of occupation remains.

In addition to these six areas, the northern boundary of the site contains fuel pipelines and World War II storage tunnels area at the base of the escarpment. This is beyond the study area; however information regarding these features has been incorporated as the area is adjacent to the redevelopment zone and as such, may be indirectly affected. The fuel pipelines and World War II storage tunnels area comprise a small corridor through which pipelines run between the three operating wharves and the Navy Oil Fuel Installation, the Stokes Hill power station fuel tanks and the fuel terminals located in Stuart Park. The World War II storage tunnels area is reported to comprise five tunnels, two of which are accessible to tourists. Two others can be accessed from the eastern end of Kitchener Drive and are reported to be used by the Navy to house pumps. The fifth tunnel is said to be located under Government House (URS 2003).

This area is also substantially disturbed and as a result, the archaeological potential is likely to be reduced. Given the base of the escarpment approximates the original shoreline; this area potentially represents a highly archaeologically sensitive zone. However, given the degree of ground disturbance which has occurred here, it is unlikely to contain extensive intact archaeological deposits although the existence of cultural material cannot be precluded. As such, this area retains limited archaeological potential. Where possible, further impact associated with the wharf redevelopment in this area should be avoided.

On the basis of previous and current land use information, the study area is unlikely to yield intact surface or subsurface archaeological deposits. As much of the study area has been reclaimed and original landforms levelled, filled and excavated, any archaeological evidence that may have existed in the past in this area, is unlikely to remain intact. This theory however, is subject to confirmation through field inspection.

In summary, Aboriginal archaeological sites in the region have been greatly affected by recent development activities in and around Darwin Harbour particularly during and since WWII. Numerous Aboriginal archaeological sites are known to have been destroyed as a result (Hiscock and Hughes 1996:7). In terms of archaeological integrity, much of the study area has been extensively modified. Consequently, the archaeological resource in the immediate vicinity of Darwin Harbour has undoubtedly been affected and the potential for intact archaeological sites is severely reduced because of this disturbance.

It should be noted however, that despite the low predicted Aboriginal archaeological sensitivity of the study area, the cultural and environmental values of the Darwin Wharf Precinct area may remain. While the physical landscape of the study area has changed dramatically, the contemporary Aboriginal community of Darwin has indicated specific cultural links with the Kitchener Bay coastline and in particular, the Stokes Hill area. The cultural and/or spiritual values of a place can only be assessed by the local Aboriginal community. Two sites of cultural significance have been identified in the Kitchener Bay vicinity. Of these, Sacred Site 5073-93 is within the redevelopment area and Sacred Site 5073-83 lies adjacent to the study area. In this respect, the importance of the area should be acknowledged and the relevant Aboriginal custodians and stakeholders engaged in extensive consultation to determine, where possible, the ramifications of these values on the proposal.

### 3.0 CULTURAL & ARCHAEOLOGICAL BACKGROUND

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#### 3.1 The Darwin Regional Archaeological Context

Darwin's Aboriginal Traditional Owner language group name is Larrakia. Their country comprises the land and waters of the Darwin and Cox Peninsulas, much of Gunn Point and central and rural Darwin, including Darwin Harbour (Wells, (ed). n.d; 6). The contemporary Larrakia community in Darwin are made up of eight major family groups (n.d; v). They are largely represented by the Larrakia Nation Aboriginal Corporation.

Many important cultural sites occur within Larrakia country including conception and birthing sites, ceremonial and burial sites, and landmarks representing the location of a variety of Dreaming. The latter site type is usually associated with physical landscape features and includes sites regarded as sacred (n.d; 6).

A large number of shell middens, have been documented in the Darwin region, including Darwin Harbour, indicating the resource rich nature of the coastline and its importance to the Larrakia (n.d: 9; Gregory, 1996; Richardson, 1996; Burns, 1994, 1997a & b). These predominantly comprise *Anadara granosa* species shell and commonly contain few stone artefacts. Most middens are located on hill crests and/or rocky knolls overlooking the coastlines and mangrove areas (Burns, 1997: 2).

The site types most commonly found along the Darwin coastline include shell middens and artefact scatters (occasionally found in association with middens) although earth mounds (containing shell, bone and stone artefacts), quarries (stone procurement areas), grinding hollows (for sharpening tools), engraving sites (art sites) and burial sites are also reported (Burns, 1997: 4). Other sites around coastline are acknowledged as important to contemporary Aboriginal people as key resource areas which were used in the past and continue to be utilised in the present.

#### 3.2 Previous Archaeological Investigations

Most stone artefact scatters in the Darwin region were located through small intensive survey. Surveys surrounding Darwin Harbour have been conducted by Bourke (2000), Burns (1997a, b), Hiscock (1996), Hiscock & Hughes (1996), Gregory (1996), Richardson (1996), Burns (1994) and Bourke (2000).

Shell middens located within Darwin Harbour have been dominated by the shell species *Anadara granosa*, a marine mollusc with an ecological range from Australia to Japan. This rough-backed cockle had a huge economic importance in Indo-Pacific prehistory. Bourke suggests this species represents "an important cultural resource from which a great deal can be learnt about prehistoric human interaction with a dynamic late Holocene landscape" (2000:2). However, commercial development within Darwin, and in particular along its foreshore and estuary, has impacted and disturbed many of the remaining sites (Richardson 1996:2).

Excavation of shell middens has been undertaken by Hiscock (1996), Burns (1994) and Bourke (2000). These middens primarily consisted of *Anadara* species with lesser quantities of *Terebralia*, *Telescopium*, *Cerithidea*, *Geloina* and *Nerita* (Gregory 1996:27). Documented excavated shell middens vary in size from a 2-3 m to 10-12 m in diameter with 50 cm deep deposit of shell material. Typical material recovered from excavations of Bayview Haven 3, Francis Bay (Hiscock 1996) includes fish and macropods bone together with abundant quantities of large shells. Midden material is often well preserved in the Darwin high alkaline soil matrix along with a small number of stone artefacts.

Dates for human occupation within the Darwin Harbour area have given similar results as those found by Hiscock (1996) at Bayview Haven 3. The earliest age estimate from the base of the shell deposit indicated that formation of the midden began at least 1,250-1,550 years ago and the site was in use until approximately 700 to 1000 years ago. In addition, 17 shell mounds were recorded by Hiscock and Hughes (1996) in Haycock Reach, Middle Arm Peninsula. Shell samples from the surface of four mounds were submitted for radiocarbon

assaying. Age estimates indicated a terminal period of midden accumulation between 600 to 1,200 years ago (Hiscock & Hughes 1996:4).

Research undertaken by Bourke (2000) describes the results the excavation of eight open archaeological sites on the coast of two different estuaries in the Darwin region; three shell deposits at Darwin Harbour on the Middle Arm Peninsula; and five shell and earth deposits at Hope Inlet, Shoal Bay. Radiocarbon dates for the shell deposits also indicated that they accumulated between around 2,000 and 500 before present (BP).

Further detailed analysis of this excavation enabled accumulation rates to be calculated as well. The radiocarbon dates suggested that there was a faster rate of accumulation for the larger Hope Inlet mounds than those on Middle Arm Peninsula. Bourke (2000:243) suggested that this is representative of different functions for the same site type, even though they can often appear superficially similar. The Hope Inlet middens were interpreted as specialised processing sites accumulated over a very short period of time around 1,450 BP, and possibly related to ceremonial activity. These are different to other processing sites where discarded shells, usually small quantities of one species, were cooked and the meat removed and carried back to a home base. These sites are generally small and can easily be destroyed by natural processes. Those at Middle Arm were thought to have accumulated over much longer periods, prior to, during and after accumulation of the large Hope Inlet sites. These mounds are the remains of home base camps, accumulated gradually, through repeated scraping up of material left over from previous episodes of use (Bourke, 2000:243).

Throughout the occupation history of the investigated sites, the shell species encountered were generally dominated by *Anadara* (Hiscock 1996:4). The overwhelmingly abundant *Anadara* shells are thought to reflect the availability of the food species in the region rather than the selective gathering of *Anadara* from the mangrove margins. The wider environmental implications of the propensity of *Anadara* within archaeological sites suggests that the silty-sand shorelines on which they thrived, (now rare in the north eastern portion of the Darwin Harbour embayment, such as Bayview Haven 3) may have an antiquity of only 700 to 1,000 years (Hiscock 1996:6).

Although a limited amount of archaeological research has been undertaken in the Darwin Harbour region, Burns (1996:35) put forward a number of archaeological predictions including:

- There are large numbers of unrecorded prehistoric sites in the region;
- Middens are the most common site type in the region, followed by artefact scatters;
- Middens will generally be associated with mangrove communities; and
- The distribution of all site types will be focused on biogeographic land unit boundaries.

### **3.2 Heritage Database Search Results**

As search of National, State and local heritage databases was undertaken to establish the archaeological context of the study area. The results of these searches are presented below.

#### **3.2.1 Northern Territory Heritage Register**

A search of registered Aboriginal archaeological sites was conducted through the Northern Territory Government Office of Environment and Heritage for the Darwin Wharf area on 26<sup>th</sup> February 2004 on behalf of Austral Archaeology. No known Aboriginal sites were identified within the proposed redevelopment area.

#### **3.2.2 Other Heritage Register Search Results**

Searches of the Australian Heritage Places Inventory (AHPI), the Register of the National Estate (RNE), the National Heritage List (NHL) and the Commonwealth Heritage List (CHL) websites did not identify any other recorded Aboriginal objects or places in or around the study area.

On this basis, there are currently no known Aboriginal heritage constraints to the proposal.



### **3.3 Summary of Site Types Common in the Region**

On the basis of registered archaeological sites in the region and the results of past archaeological investigations, shell middens and/or shell mounds are the most common site types likely to occur in the study area vicinity in relatively undisturbed areas. Open artefact scatters, including stone artefacts, faunal and shell remains and charcoal, and isolated finds (single artefacts) are also likely to be present in the Darwin region. As discussed, some recorded shell middens comprise a stone artefact component.

In many cases, surface sites are also indicators of associated subsurface archaeological deposits which may remain intact, dependant on the degree of land disturbance which has occurred in the past.

### **3.4 Potential Land Use Impacts on the Archaeological Resource**

As discussed, the archaeological resource within Darwin Harbour has been greatly affected by substantial levels of land modification which has occurred along the coastline, particularly on Fort Hill and Stokes Hill. This land disturbance is the result of relatively recent industrial development which has changed the natural harbour and in this case, natural landforms (Fort Hill). Consequently, intact archaeological deposits are unlikely to have survived such activities as modification would have removed archaeological material and destroyed the context of any remaining archaeological deposit in the area.

### **3.5 Predictive Statement**

In general, locational data for sites is based on local topography, access to and distance from permanent water, and degree of previous land disturbance. Originally the study area would have provided an ideal locale for Aboriginal occupation due to its proximity to valuable coastal food and raw material resources. However, the archaeological potential of the study area has been greatly reduced due to severe land modification which has occurred within the immediate harbour. As a result, no intact archaeological material is expected to be present within the redevelopment area.

## **4.0 CONCLUSIONS AND MANAGEMENT RECOMMENDATIONS**

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### **4.1 Conclusions**

The preliminary cultural heritage assessment of the proposed Darwin City Wharf Redevelopment Precinct did not locate any known Aboriginal archaeological sites which would be impacted by the development. Moreover, the archaeological potential of the study area has been assessed as being low as a result of the continual modification of Darwin Harbour prior to WWII.

The paucity of recorded archaeological material within the study area does not preclude the presence of Aboriginal sites within the study area nor does it accurately reflect the archaeological and cultural sensitivity of the original coastline. As discussed, the natural environment of Darwin Harbour would have provided Aboriginal people in the past a range of coastal and terrestrial resources, ensuring that the area was frequently visited. However, the degree of past and present land disturbance seen across the study area due mainly to industrial and commercial development is likely to have substantially affected the archaeological resource of the site. As a result, intact archaeological deposits are not expected to be encountered.

In summary, there are no currently identified Aboriginal heritage constraints to the current proposal. However, two areas of cultural value were located. The first is a registered Sacred Site (5073-93) on land in the vicinity of Stokes Hill which will affect the redevelopment plan as a restricted works area has been identified within this site. The second is a recorded sacred site (5073-83) in close proximity to the study area at Lamerou Beach. While this site will not be directly impacted by the redevelopment, indirect impacts to the site should be considered. In addition, a Native Title claim on Stokes Hill was also identified.

### **4.2 The Proposed Work and Potential Heritage Impacts**

While the redevelopment of the Darwin Wharf precinct is unlikely to significantly impact any remaining Aboriginal archaeological values of the area, it will potentially affect the cultural values of Kitchener Bay.

As previously stated, several important issues have been highlighted by the current investigation. These include the registration of a Sacred Site and a Native Title claim on Stokes Hill. The former issue has the potential to limit future land use, including commercial and residential development, of the Stokes Hill area. The Authority Certificate for the site stipulates that no excavation works may be carried out on site and that no works may be undertaken within the restricted works area without formal approval of the senior Aboriginal site custodians. This will obviously influence the scope of works for the area but more importantly, this issue will require extensive consultation with the relevant custodians to determine what land uses, if any, are appropriate for the site. The Native Title claim less likely to influence development plans, however, the applicants should be consulted with regard to their claim and their thoughts on the project.

The potential indirect impacts of the development have also been raised by the Department of Environment and Heritage and the LNAC. The issues raised include the visual impact of the development and its relation of other sites in the vicinity, particularly at Lamerou Park. In addition, the contemporary use of the escarpment base by Aboriginal people was also highlighted. While the final scope of works is yet to be confirmed, these concerns should be addressed through Aboriginal community consultation.

It is assumed that redevelopment activities will involve substantial ground disturbance such as deep excavation and ground levelling, and land modification including reshaping and landscaping. These activities have the capacity to damage the context of any surface site or subsurface archaeological deposit and/or destroy an archaeological site via soil removal.

While there are no predicted Aboriginal heritage impacts associated with the proposal, the impact of such a development on the cultural values of the area must be considered.

### **4.3 Recommendations**

On the basis of the preliminary assessment, possible heritage management strategies and mitigation measures have been formulated to avoid significant Aboriginal cultural and heritage sites where possible. Austral Archaeology considers the preservation of important archaeological and cultural heritage sites as the most appropriate outcome. It should be noted that these recommendations have been formulated prior to a formal site inspection, and as such, are subject to change once the final components of the assessment are complete.

#### **1 –Ongoing local Aboriginal community consultation**

As key stakeholders, the concerns of the local Aboriginal community about the development area should be appropriately addressed. As such, their input into the development process remains paramount. Extensive consultation is recommended with the relevant Aboriginal community groups, the proponent, and NT Department of Environment and Heritage to determine possible land uses of Stokes Hill and the implications for the project of the sacred site and native title claim. Regardless of the outcomes, the cultural importance of this landmark should be acknowledged and the wishes of the Aboriginal custodians respected.

#### **2 –Archaeological Investigation**

At present, the final scope of works for the redevelopment of the site has not been determined. As such, no specific development impacts have been identified. When these are known, a targeted field survey of the study area should be conducted, particularly in the vicinity of Stokes Hill, to ascertain potential impacts on the archaeological resource.

#### **3 –Recognition of contemporary values**

The contemporary use of area by Aboriginal people should be acknowledged. In particular, development of the escarpment base should be avoided and consideration of the indirect impacts of the proposal on this area discussed with the local Aboriginal community. In addition, consideration of the visual impacts to the wharf site and their affect on cultural values of the wider wharf area, particularly those associated with Lameroo Beach, should be addressed with key stakeholders.

#### **4 –Acknowledgement of Aboriginal cultural significance**

The cultural significance of the study area should be acknowledged and past and present Aboriginal land use of the wharf area should be recognised. As part of the redevelopment plans, interpretation of Darwin's Aboriginal archaeological sites and places of cultural significance should be developed and educational opportunities incorporated into the project. It is noted that a cultural centre is proposed as part of the development and input from the Aboriginal community is key to the design and planning of this component.

Copies of this report should be forwarded to the Darwin Aboriginal community and the Heritage Conservation Services.

## 5.0 REFERENCES

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### Publications

Australia ICOMOS. 1999. *Australia ICOMOS charter for the conservation of places of cultural significance [the Burra Charter]*. Australia ICOMOS, Canberra.

Bourke, P. 2000. *Late Holocene Indigenous Economies of the Tropical Australian Coast: An Archaeological Study of the Darwin Region*. Unpublished PhD Thesis, Northern Territory University.

Burns, T. 1997a. *A report on Aboriginal Shell Midden Sites at Winnellie, Darwin Harbour*. Report prepared for the Department of Lands Planning and Environment.

Burns, T. 1997b. *An archaeological report on results of an Aerial Survey of Darwin Harbour*. Report prepared for the Department of Lands Planning and Environment.

Burns, T. 1996. *The Northern Territory Archaeological Survey Stage 1, Darwin Catchment Region*. Unpublished Report to the Australian Heritage Commission.

Burns, T. 1994. *Mound Over Matter*. Unpublished Honours Thesis, Northern Territory University.

Clinch, M. (ed) 1999. *The Old Darwin Port Area, Heritage and History Notes*. A Report to the Northern Territory Historical Society.

Gregory, R. 1996. *Seashells by the Seashore: A Draft Management Strategy for Middens in the Darwin Region*. Heritage Conservation Branch, Department of Lands Planning and Environment.

Hiscock, P. 1996. Archaeological Evidence for Environmental Change in Darwin Harbour. In Hanley, J. and Caswell, G.(eds). *The Marine Flora and Fauna of Darwin Harbour, Northern Territory*. Museums and Art Galleries of the Northern Territory.

Hiscock, P. and Huges, P. 1996. *Prehistoric and World War Two Use of Shell Mounds in Darwin Harbour*. Unpublished Manuscript held by the Archaeology Section, Museums and Art Galleries of the Northern Territory, Darwin.

Pedersen, B. n.d. *Darwin Wharf and Port Precinct Study*.

Richardson, N. 1996. *Archaeological Site Survey and Documentation – Darwin Region*. A report to the Australian Heritage Commission.

URS Australia Pty Ltd 2003, Darwin Wharf Redevelopment Contamination and Geotech Assessment- Phase 1, Draft Report to DIPE.