16 Archaeology

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16 ARCHAEOLOGY

16.1 INTRODUCTION

This section provides a summary of the key findings of the EIS archaeology assessment undertaken for the Eastern Leases Project (the project) by SHIM Consulting Pty Ltd. Traditional Owners provided assistance with archaeological field surveys. The detailed results of the assessment are provided in the *Archaeology Report* (Appendix L).

The Environmental Risk Assessment presented in Section 4 identifies all potential project risks in relation to archaeology and determines the consequence and likelihood of each risk, and the overall risk rating. Risk ratings are provided for the risk both with and without the application of mitigation measures. The risk assessment has concluded that, with the application of the proposed mitigation measures, the majority of risks associated with archaeology are low risks, and that there are no high or extreme risks. This section provides further detail on the impacts on archaeology that have been identified for the project, as well as the mitigation measures that will be applied.

Separate to archaeology, the Federal and NT Governments recognise and provide statutory protection for sacred sites under the Commonwealth *Aboriginal Land Rights (Northern Territory) Act 1976* (ALRA), and the *Northern Territory Aboriginal Sacred Sites Act 1989* (Sacred Sites Act). The Anindilyakwa Land Council (ALC) is the Land Council for the Groote Eylandt Archipelago. The ALC is currently undertaking a separate sacred sites assessment of the project site, and therefore the archaeology study undertaken for the EIS does not make any assessment of sacred sites. Section 2 – Regulatory Framework provides further detail on the Sacred Sites Act and its relevance to the project.

16.2 CULTURAL SETTING

The Traditional Owners of the Groote Eylandt Archipelago are an amalgamation of two cultures, the Warnindilyakwa and the Nunggubuyu (ALC, 2014). The Traditional Owners are made up of 14 clan groups, divided into two moieties, united by a common culture of kinship, ceremony and language. Both cultures speak Anindilyakwa as their first (and sometimes only) language, and the land, people and culture are also referred to by this term.

Advice from the ALC indicates that the project site is located within land belonging to the following five clan groups:

- Maminyamanja;
- Wurrawilya;
- Amagula;
- Wurramara; and
- Mamarika.

In addition, the Lalara clan is the Jungai (spiritual leader) for the area in which the project site is located.

The remote location of the Groote Eylandt Archipelago has fostered a strong attachment to traditional culture among the Anindilyakwa people. Ceremony and spirituality play a central role in Anindilyakwa life on the Groote Eylandt Archipelago and traditional practices and cultural norms are still prominent on the Archipelago. Anindilyakwa people are proud and protective of their culture.

16.3 OVERVIEW OF REGULATORY REQUIREMENTS

Several pieces of legislation establish lists or registers which offer statutory protection to places and objects that are considered to have cultural values. The location of the project site means that it is subject to both Federal and NT legislation and the registers established therein. The Federal government registers are established under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The NT *Heritage Act* covers all places and objects of heritage value in the NT. The relevant Acts are discussed in the following sections.

16.3.1 Environment Protection and Biodiversity Conservation Act

The Commonwealth EPBC Act, which is administered by the Federal Department of the Environment (DotE), provides for the protection of a hierarchy of heritage places and objects that are listed in three registers. These include the World Heritage Register, the (Australian) National Heritage Register and the Commonwealth Heritage Register. The EPBC Act sets out a framework for the protection of places and objects listed on these registers.

The (Australian) National Heritage Register and the Commonwealth Heritage Register have now replaced the Register of the National Estate (RNE). Despite not having a current statutory function, the RNE still contains a register of sites and in some cases these sites do not appear on other databases. The RNE therefore also provides useful background information for archaeological studies.

16.3.2 Aboriginal and Torres Strait Islander Heritage Protection Act

The Commonwealth *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSIHP Act) is administered by DotE, and provides protection for Aboriginal cultural heritage. Under this Act, the Environment Minister can make declarations of preservation in relation to Aboriginal cultural heritage. Declarations can be made if the Minister is satisfied that the area is a 'significant Aboriginal area' and is under threat of injury or desecration.

16.3.3 Northern Territory Heritage Act

The *Heritage Act* is administered by the Heritage Branch of the NT Department of Lands, Planning and the Environment (DLPE). It is a requirement of the *Heritage Act* that a Work Approval be obtained from DLPE prior to any disturbance of a heritage place or object that is declared or protected under this Act.

The *Heritage Act* provides protection for the following two classes of cultural heritage:

- All places and objects formally assessed and added to the NT Heritage Register; and
- All Aboriginal and Macassan places and objects (whether previously documented or not), as listed in the Aboriginal and Macassan Sites Database.

16.3.4 ICOMOS Burra Charter

The Australia International Council on Monuments and Sites (ICOMOS) Charter for Places of Cultural Significance, known as the "Burra Charter", is the national (and internationally recognised) standard of practice for those who provide advice on, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians. The Burra Charter sets out definitions and processes for making decisions about all of the types of cultural heritage that comprise the Australian heritage estate and is based on the knowledge and experience of Australia ICOMOS members.

Importantly the Burra Charter provides definitions for important concepts such as cultural significance. The EIS archaeology assessment has drawn on the definitions of the Burra Charter in defining the cultural significance of the archaeological sites (Section 16.4.4).

16.4 ARCHAEOLOGICAL ASSESSMENT

16.4.1 Scope

An archaeological assessment was undertaken for the project and is documented in the *Archaeology Report* (Appendix L). The scope of the assessment was as follows:

- Determine, by way of a proven survey methodology, if any sites of Indigenous or non-Indigenous historical cultural heritage significance are located within the boundaries of the project site;
- Describe any identified sites, places or objects of historical cultural heritage significance;
- Assess the significance of the archaeological sites based on the cultural values of the Burra Charter;
- Assess the potential direct and indirect impacts of the project on the archaeological sites;
- Describe any requirement for obtaining approval under the *Heritage Act* for the project; and
- Describe potential mitigation and management measures to avoid significant impacts on archaeological finds.

16.4.2 Methodology

The assessment methodology included a desktop review, field survey and an assessment to determine the cultural significance of the sites identified from the field survey.

The desktop review was used to inform the field survey by estimating the likely locations and types of sites of archaeological significance that may be located on the project site. The review included:

- A search of published literature, archival records and heritage registers to establish cultural context; and
- A review of current aerial photography and the land systems of Groote Eylandt to establish a baseline correlation of land systems with archaeological finds from previous studies.

The sites located during the field survey were then assessed for their cultural significance based on defined cultural values and attributes.

Cultural Context

Prior to the EIS archaeological assessment, there had been seven studies completed of the archaeology of the Groote Eylandt Archipelago. These studies were undertaken between 1802 and 2014. They were primarily undertaken in the coastal areas of Groote Eylandt, or on the nearby islands of the archipelago. The studies described and documented Indigenous art and artefacts, with the majority of sites located in land systems comprising rock shelters and overhangs. These studies are discussed further in the *Archaeology Report* (Appendix L).

A search of the World Heritage List, the (Australian) National Heritage Register, Commonwealth Heritage Register, NT Heritage Register, Aboriginal and Macassan Sites Database, and the RNE, found numerous sites of archaeological significance located on Groote Eylandt. However, these sites are mostly located in coastal areas of the island, which is reflective of the coastal focus of previous field archaeological surveys. There have been very few archaeological surveys undertaken of the interior of the island. None of the registers contained records of archaeological sites within the project site.

Land Systems

Land systems are broad landforms characterised by specific associations of slope, soil and vegetation (Lynch and Wilson, 1998).

There are five land systems (as identified by Lynch and Wilson, 1998) within the project site (Figure 16-1 and Figure 16-2), namely the Bundah, Effington, Groote, Queue and Yarrawirrie Land Systems. These land systems are described in the *Archaeology Report* (Appendix L).

The Groote Land System comprises rugged dissected plateaux on quartz sandstone; bare rock and Leptic Rudosols; with mid high to tall open woodland of *Eucalyptus tetrodonta* and *E. ferruginea*. The rocky outcrops of this land system typically form rock shelters and overhangs that provide the opportunity for the establishment and preservation of archaeological material. A review of the findings of archaeological surveys undertaken on Groote Eylandt has confirmed this association. It was therefore anticipated that the results of the field survey would indicate a strong link between the Groote Land System, and archaeological finds. There is a lower potential for the other land systems to contain archaeological sites. However, all land systems within the project site were surveyed.

Field Survey

A field survey of the project site was undertaken from 11 to 24 July 2014. The survey was extensive and non-invasive, and designed to seek and document Indigenous and non-Indigenous archaeological sites, including rock art.

Permission to access the project site for the purpose of undertaking field surveys was obtained from the ALC. The ALC also reviewed and approved the proposed field survey plan. Traditional Owners who represented the land, and could speak on behalf of it, participated in the archaeology surveys and provided invaluable knowledge regarding the archaeology of the project site. This included offering significant insight into local traditions, the artwork and their connections to dreamtime stories.

The surveys were conducted as pedestrian traverses, with some walking-pace vehicle traverses. A total of 220.5 km were surveyed across the five land systems found within the project site (Figure 16-2). Although all land systems were surveyed, the survey placed a special emphasis on the Groote Land System, given its likely association with archaeological sites.

16.4.3 Field Survey Results

A total of 28 sites were located during the survey, comprising 13 sites in the Northern Eastern Lease (Northern EL), and 15 sites in the Southern Eastern Lease (Southern EL) (Figure 16-3). Table 16-1 provides a summary of the sites found. Photographs and detailed descriptions of these sites are provided in the *Archaeology Report* (Appendix L).

There were two locations where sites were clustered within a small area. Nine of the 13 sites found within the Northern EL were found to be clustered within an area of approximately 5 ha (i.e. sites ELN04 to ELN06 and ELN08 to ELN13). Within the Southern EL, nine of the 15 sites were clustered within an area of just over 3 ha (i.e. sites ELS06 to ELS13 and ELS15).

There were no sites found within the haul road corridor.

Only one non-Indigenous cultural heritage site was found on the project site. The site is located in the north-west of the Southern EL (site ELS01) and appears to be remnants from a previous geological survey in the region.

Table 16-1 Summary of Sites Found within the Project Site

SITE TYPE	NUMBER OF SITES FOUND		LAND SYSTEM
	Northern EL	Southern EL	
Historic	-	1	Effington
Manuport	-	1	Yarrawirrie
Stone Artefact Scatter	-	1	Groote

SITE TYPE	NUMBER OF SITES FOUND		LAND SYSTEM
	Northern EL	Southern EL	
Rock Shelter with Art	9	10	Groote
Rock Shelter with Art, Artefacts and Deposit	1	1	Groote
Rock Shelter with Art and Grinding	-	1	Groote
Rock Shelter with Art and Deposit	3	-	Groote

The number and type of sites found within the project site is significant. In particular, it is noteworthy that 25 of the 28 sites found in the field survey were rock shelters containing art. Many of these rock shelters also contained other archaeological features such as artefacts, deposit and grinding. Although this reflects the findings of other archaeological surveys undertaken in the Groote Eylandt archipelago, archaeological finds in Australia typically comprise stone scatters, and rock shelters with art have been relatively rare. The significance of individual sites is described in Section 16.4.4.

The sites found during the EIS archaeology assessment have contributed to a general understanding of the archaeology of Groote Eylandt. The following conclusions of the assessment have implications beyond the scope of the EIS:

- The majority of sites were found within the Groote Land System. This confirms the findings of previous surveys that there is a clear pattern in the distribution of site types based on land systems, and provides useful information for planning any further archaeological surveys on Groote Eylandt.
- The Groote Land System is widespread on the island. There is consequently the potential that there are significant, as yet undocumented, rock art sites within this land system in other areas across the island. As noted in Section 16.4.2, there have only been very limited archaeological surveys on Groote Eylandt to date. Taken in context with the recent survey work on Groote Eylandt which has also found a relatively high number of rock art sites (Sutton, 2014, Welch, 2013), the rock art on Groote Eylandt may in time prove to be as rich and diverse as other major regions in Australia such as west Arnhem Land and the Kimberley.

16.4.4 Assessments of Significance

An assessment of cultural significance, guided by the Burra Charter, was undertaken for the 28 sites identified during the field survey. It was based on the results of the field survey with consideration of the character of the sites both individually and collectively.

Significance was determined for each site by assessing its cultural value in terms of aesthetics, historic, scientific, social and spiritual values, against defined attribute criteria (refer to the *Archaeology Report*, Appendix L).

The assessment identified five sites that displayed higher significance due to their cultural values in comparison to other sites within the project site:

- ***Site ELS03 – Rock Shelter with Art, Artefacts and Deposit***

  Located in the Southern EL, this site includes three large rock shelters with art comprising mostly marine motifs, quartzite stone and glass artefacts, as well as archaeological deposit (Plates 16-1 and 16-2).

  This site was assessed as having a high significance for scientific and historic values due to the presence of a range of different archaeological features at the site. These included the polished and ground surface of rocks on the floor of the shelter, the presence of artefacts made of glass and a substantial area of sandy floor that is likely to contain datable archaeological material. This range of material means that the site has enhanced historic values compared to many of the other sites as well as the potential to provide information for archaeological scientific purposes. The site was also assessed to have a high significance for aesthetic values places and objects.

- ***Site ELS04 – Rock Shelter with Art and Grinding***

  Located in the Southern EL, this site comprises two archaeological features including a shallow rock shelter with a faded painting (possibly a human figure with a spear or weapon), and a grinding groove (Plates 16-3 and 16-4).

  This site was assessed as having high significance for its aesthetic, social and scientific values and is considered unique for two reasons, primarily relating to the grinding groove. Firstly, this is the only known example of a grinding groove in bedrock recorded on the island to date. Grindstones have been recorded elsewhere on Groote Eylandt, but were typically a portable stone (e.g. manuport), whereas this grinding groove is situated on top of a prominent rock outcrop and is part of the rock. Secondly, most permanent grinding grooves are horizontal, often found on nearly level outcrops of rock in stream beds. The grinding groove at this site is steeply inclined and in a locality with very little other evidence of grinding which adds to the site's significance. The groove is situated immediately adjacent to a small depression in the rock that contained a small amount of water, which may have been used to assist the grinding operation.

- ***Site ELN05 – Rock Shelter with Art, Artefacts and Deposit***

  Located in the Northern EL, this site comprises two large rock shelters with unusual art motifs, small stone artefacts and archaeological deposit (Plates 16-5 and 16-6).

  This site was assessed as having a high significance for aesthetic and social values, primarily because of a variety of unusual art motifs and artefacts and the prospect of considerable archaeological deposit. One rock shelter contains a striking motif of a large human figure with an amphora shape. Two artefacts were also found at this site and have been assumed to be remnants from the artefact manufacturing process.

- ***Site ELN06 – Rock Shelter with Art***

  Located in the Northern EL, this site comprises a rock shelter in a small box canyon with paintings on two major surfaces and some minor areas (Plates 16-7 and 16-8).

  This site was assessed with a high significance for aesthetic and social values because of the variety, clarity and unusual subject matter of the rock art. The most prominent art surface contains a human figure holding a spear, which is stylised and unusual. The art also displays clear superimposition, and this site has the potential to contribute to the sequencing of rock art styles on Groote Eylandt.

- ***Site ELN13 – Rock Shelter with Art and Deposit***

  Located in the Northern EL, this site includes a 75 m extent of shelters and overhangs with a wide range of art motifs distributed throughout the site, and significant archaeological deposit (Plates 16-9 and 16-10).

  This site was assessed with a high significance for a number of reasons. It is a very large site with a range of settings starting at the sand plain, leading up to shelters with art perched 8 m above the plain. The art shows a wide range of motifs ranging from marine to terrestrial animals, but also, unusually strong motifs that appear to be of plants. The site has archaeological deposit which may extend to some depth, and therefore has the prospect of providing information for scientific research. The Traditional Owners accompanying the survey remarked that the art material found at this site provides evidence of a connection with a dreaming story found at a nearby site (Site ELN09 - discussed further in the *Archaeology Report*, Appendix L), given the similar suite of motifs found at both sites.

The two locations where sites were found to be clustered are also considered noteworthy (i.e., sites ELS06 to ELS13 and ELS15 in the Southern EL, and ELN04 to ELN06 and ELN08 to ELN13 in the Northern EL). The clustering of sites and the commonality of archaeological finds at these sites suggests that these areas may have been communal areas, akin to villages. When assessed collectively, these clusters are likely to provide information about the social relations which are portrayed in the extensive array of art motifs and the archaeological deposits found at these sites. The significance of these sites as a collective, contributes to their value beyond the values assessed of the individual sites.

The other art sites (i.e. ELS02, ELN01, ELN02, ELN03, ELN07) did not display the same wide range of cultural values as the five sites discussed above, but were still considered to have high or moderate aesthetic value.

It should also be noted that the following individual sites have local significance due to the rarity of the type of site:

- Site ELS05 in the Southern EL is a stone artefact scatter (Plate 16-11). While stone artefact scatters are the most common site type in mainland Australia, they are very rare on Groote Eylandt and consequently any site with stone artefacts has elevated significance in the context of the island. Despite the fact that the scatter was small, it is considered to be unique or rare, and therefore has an elevated level of significance.
- Site ELS14 in the Southern EL contained a manuport, which is considered unique in the context of the survey (Plate 16-12). A manuport is a natural object which has been moved from its original context by humans, but otherwise remains unmodified. Other manuports identified on the island have comprised stone blocks or cobbles. At this site, the stone block has been placed on a raised section of laterite making it a prominent feature in the low flat grassy plain in which it occurs. Testimony provided by the Traditional Owner accompanying the survey indicated that the manuport was a 'marker stone' indicating a path or direction through the landscape.

16.5 IMPACT ASSESSMENT AND MITIGATION

The project has the potential to have direct and indirect impacts on sites of cultural significance. These impacts are discussed below.

16.5.1 Direct Impacts

Of the 28 archaeological sites found within the project site, only one site (ELS14 – the manuport) is located within the disturbance footprint of the project (Figure 16-4 and Figure 16-5).

A proposed management approach for this site involves relocating the manuport beyond the mine disturbance footprint. Given the social value of this site, agreement with the ALC would need to be sought in order to relocate the manuport, and the ALC would need to agree to its altered location. Following mining, the manuport could potentially be repositioned back in its original location. Under the *Heritage Act*, relocation of this site would be considered to be disturbing or destroying a site. The proponent will therefore obtain approval under Section 72 of this Act prior to disturbing the site.

The remaining 27 identified archaeological sites will not be directly impacted by project activities (refer to Figure 16-4 and Figure 16-5).

16.5.2 Indirect Impacts

A range of indirect impacts have the potential to affect the long-term conservation of the archaeological sites found within the project site. These include increased visitor access, dust, and blasting. Appropriate mitigation measures are therefore required to avoid indirect impacts.

Access

Increased access or visitation to sites often leads to a deterioration in the key cultural features. Art is rubbed, touched or dampened (for photographs) leading to increased fading and loss of clarity and colour. Archaeological deposit can be trampled and in the worst of cases, sections of the site removed.

The proponent will place restrictions on access during mining operations to the areas where archaeological sites occur. Regular monitoring of the art sites to assess compliance with these restrictions will also be undertaken.

Dust

Dust from mining activities may indirectly impact a number of archaeological sites, particularly those containing art. Dust emissions from mining activities are a recognised problem for rock art conservation. Management measures

are proposed to control dust emissions (refer to Section 12 – Air Quality). In addition, the art sites are located a significant distance from proposed mining activities, with the nearest shelters being located approximately 400 m from mining operations and the majority of shelters located well over a kilometre from mining activities. Nevertheless, there is a possibility that dust caused by mining may settle on the rock art and add to existing natural factors leading to its deterioration (such as exfoliation of the art surface).

The following two-stage process will be adopted in relation to these potential impacts:

- Stage 1 is the establishment of a record of the art, including a baseline assessment of the colour and condition of the art. This would establish a detailed database of the rock art at each of the sites located to date, with specific attention to the state of preservation, visibility, vibrancy and colour of the art (which can be measured using electronic colour measurement devices). This baseline will be established prior to the commencement of construction activities.
- Stage 2 involves documenting any discernible rate of change or dust deposition through an annual monitoring program, assessing the visibility, vibrancy and colour of a set of art datums representative to the art as a whole. Monitoring data will be reviewed annually and additional dust control measures will be implemented if found to be necessary based on the results of this monitoring work. This may include additional dust control measures within the project site, or measures at the art site/s (e.g. cleaning using a suitable method such as a puffer brush). Any work at the arts site/s would be undertaken in consultation with the ALC, and in accordance with any necessary permits under the *Heritage Act*.

Blasting

Blasting activities may potentially impact nearby archaeological sites occurring in rock shelters. Ground vibration due to blasting could cause disaggregation of the substrate of the rock shelters and art. The proponent has committed to preparing a Blast Management Plan which will include:

- Survey of the rock shelters that contain art to determine a ground vibration limit for the individual sites that would minimise the risk of damage to the sites. The survey would be undertaken prior to any blasting, and would be conducted by a suitably qualified and experienced person such as a geotechnical engineer.
- Designing blasts that are located in close proximity to the rock shelters to ensure compliance with the nominated ground vibration limits for these sites.
- Periodic monitoring of the rock shelters to confirm the integrity of the sites.

Blasting is discussed further in Section 13 – Noise and Vibration.

16.6 MANAGEMENT MEASURES

16.6.1 Introduction

This section describes the management measures that are proposed by the proponent to mitigate potential direct and indirect impacts of the project on archaeological sites. These measures have been included as commitments in Section 19 – Environmental Management Plan.

16.6.2 Further Site Survey

As discussed in Section 16.4.4, there were two locations where sites were found to be clustered (i.e., sites ELS06 to ELS13 and ELS15 in the Southern EL, and ELN04 to ELN06 and ELN08 to ELN13 in the Northern EL). The sites in these clusters were surveyed and recorded in line with the requirements of the EIS Terms of Reference for the project. However, the area in which the clustered sites are located is an extensive cavernous landscape, containing a high density of archaeological material. It is therefore possible that not all of the archaeological features in the vicinity of these clusters were recorded during the EIS survey. In order to ensure that mitigation

measures conserve all of the archaeological resources in the vicinity of the clusters, further archaeological surveys of these two clusters will be undertaken prior to the commencement of the project.

It should be noted that the clusters of sites are outside the project disturbance footprint, and will therefore not experience any direct impacts as a result of the project. The additional survey of these sites is required to ensure that all appropriate mitigation measures for potential indirect impacts can be implemented for the sites at these two locations.

16.6.3 Management Plans

A Cultural Heritage Management Plan will be prepared that will:

- Document the restrictions that are to be placed on access to archaeological sites;
- Document a program of awareness training, including employee inductions, to ensure all of the mine employees and contractors are informed of their obligations in relation to archaeological items. These obligations include complying with the access restrictions described in Section 16.5.2, as well as the procedures to be adopted in relation to any unexpected finds (Section 16.6.4);
- Prepare a detailed record of the characteristics of the art (including any additional art located during the further survey described in Section 16.6.2). The baseline characteristics to be recorded include vibrancy, visibility and colour; and
- Outline a program of annual monitoring of the art for changes that may be due to mine related dust.

In addition, the proponent will prepare a Blast Management Plan ensuring blasting activities are appropriately managed so as not to cause harm to rock shelters and art during the life of the operations.

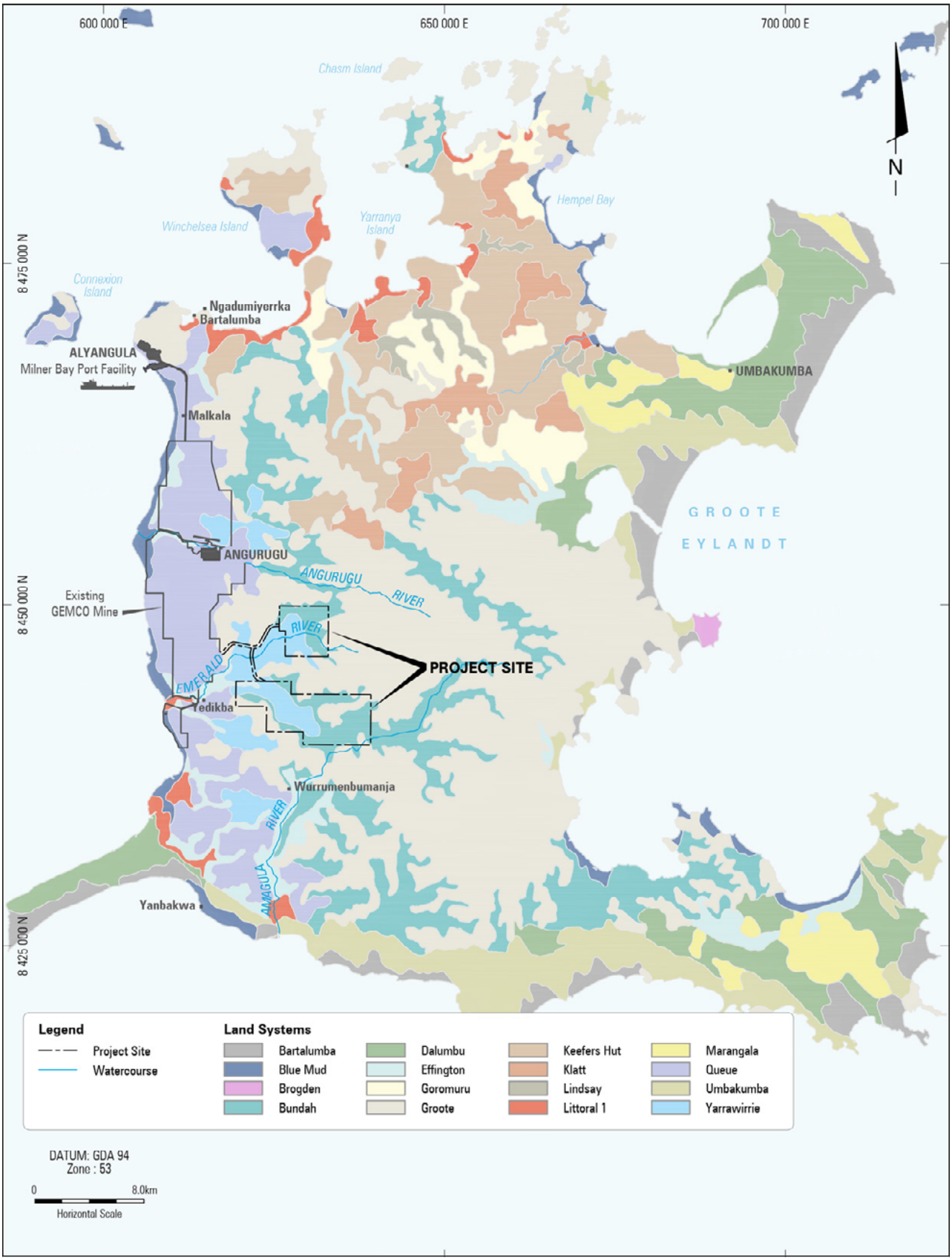
16.6.4 Unexpected Finds

Figure 16-4 and Figure 16-5 show the proposed disturbance footprint, which encompasses areas within the Bundah (sandy colluvial footslopes) and Yarrawirrie Land Systems (level to gently undulating plains), and largely avoids the Groote Land System in which the majority of archaeological finds were located. The rocky outcrops of the Groote Land System do not contain manganese (refer to Section 3 – Project Description) and consequently mining will not be undertaken in these areas. Given the distribution of archaeological material found in the field survey, it is extremely unlikely that any other material (i.e. material not located during the survey) will be found within the project disturbance footprint. However, in the event that any of the mine employees or contractors suspect that they have uncovered an archaeological find, the following procedures will apply:

- Immediately cease disturbance of any areas surrounding the find;
- If it is considered that the find is at risk of being inadvertently damaged by mining activities, a temporary fence/barricade will be erected around the find;
- The ALC will be notified of the discovery of areas of potential archaeological significance immediately following the discovery and prior to any disturbance;
- The ALC, and if necessary, a suitably qualified archaeologist, will be requested to inspect the find and determine its significance;
- The confirmed site will be registered and referenced in the proponent's CHMP; and
- Should the find be of archaeological significance, the NT Heritage Branch will be notified, and appropriate mitigation strategies will be developed in consultation with the ALC and the NT Heritage Branch.

These measures will help mitigate impacts in the unlikely event that previously unrecorded sites of cultural heritage significance are located during disturbance associated with the project.

FIGURES



EASTERN LEASES PROJECT

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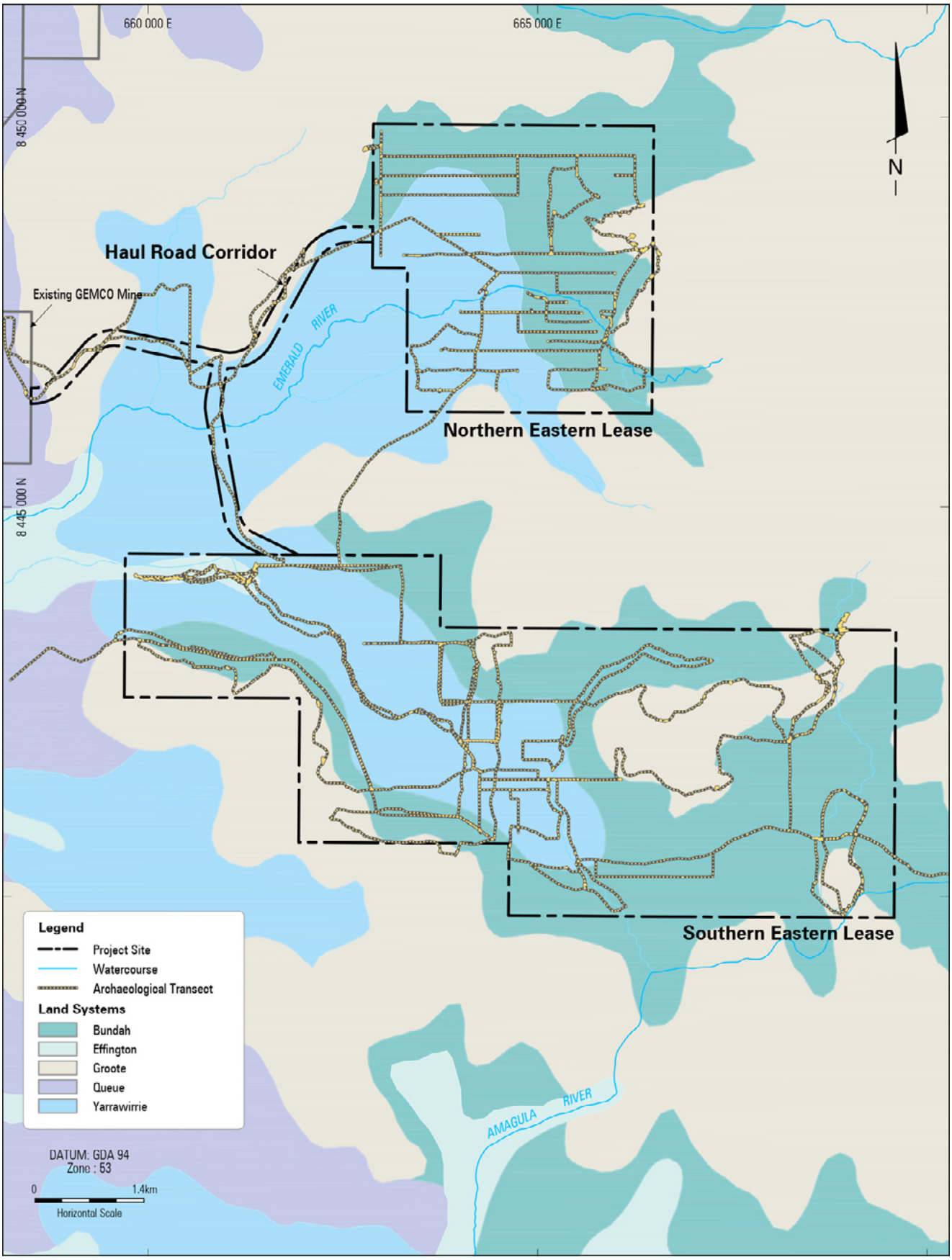
Land Systems of Groote Eylandt

FIGURE 16-1



EASTERN LEASES PROJECT

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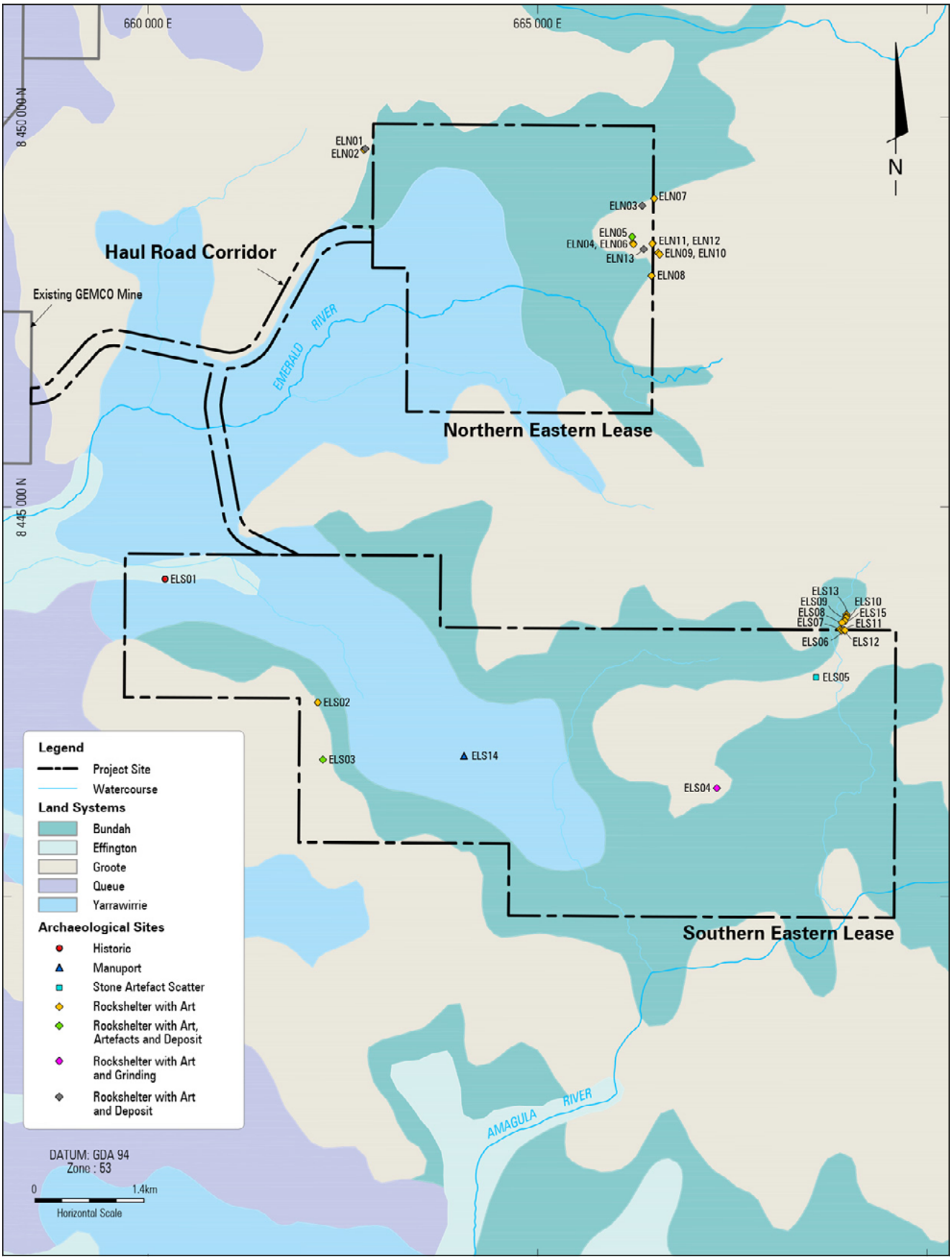
Location of Survey Transects

FIGURE 16-2



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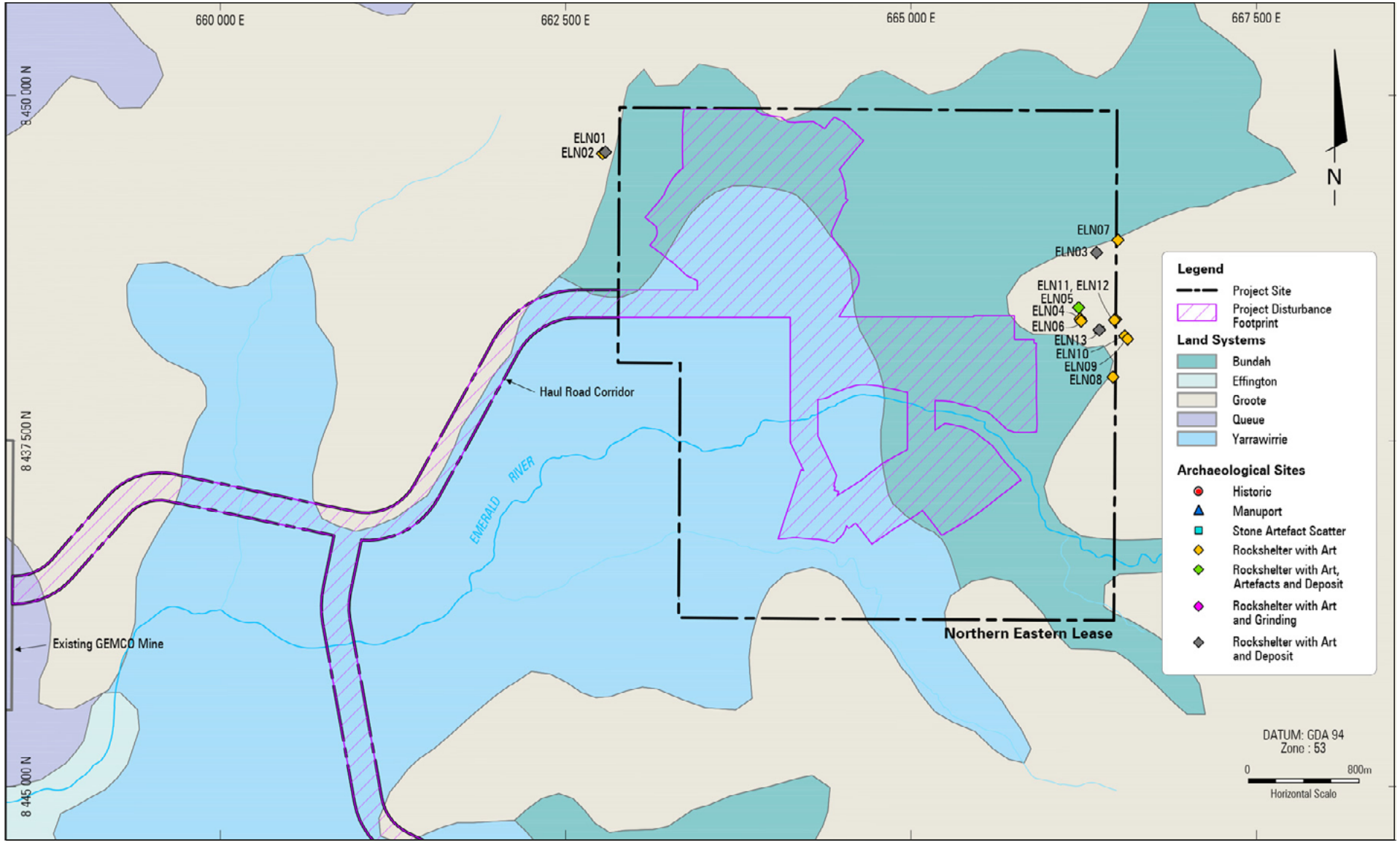
Location of Archaeological Sites

FIGURE 16-3



EASTERN LEASES PROJECT

Location of Archaeological Sites and Project Disturbance Footprint
Northern Eastern Lease

FIGURE 16-4

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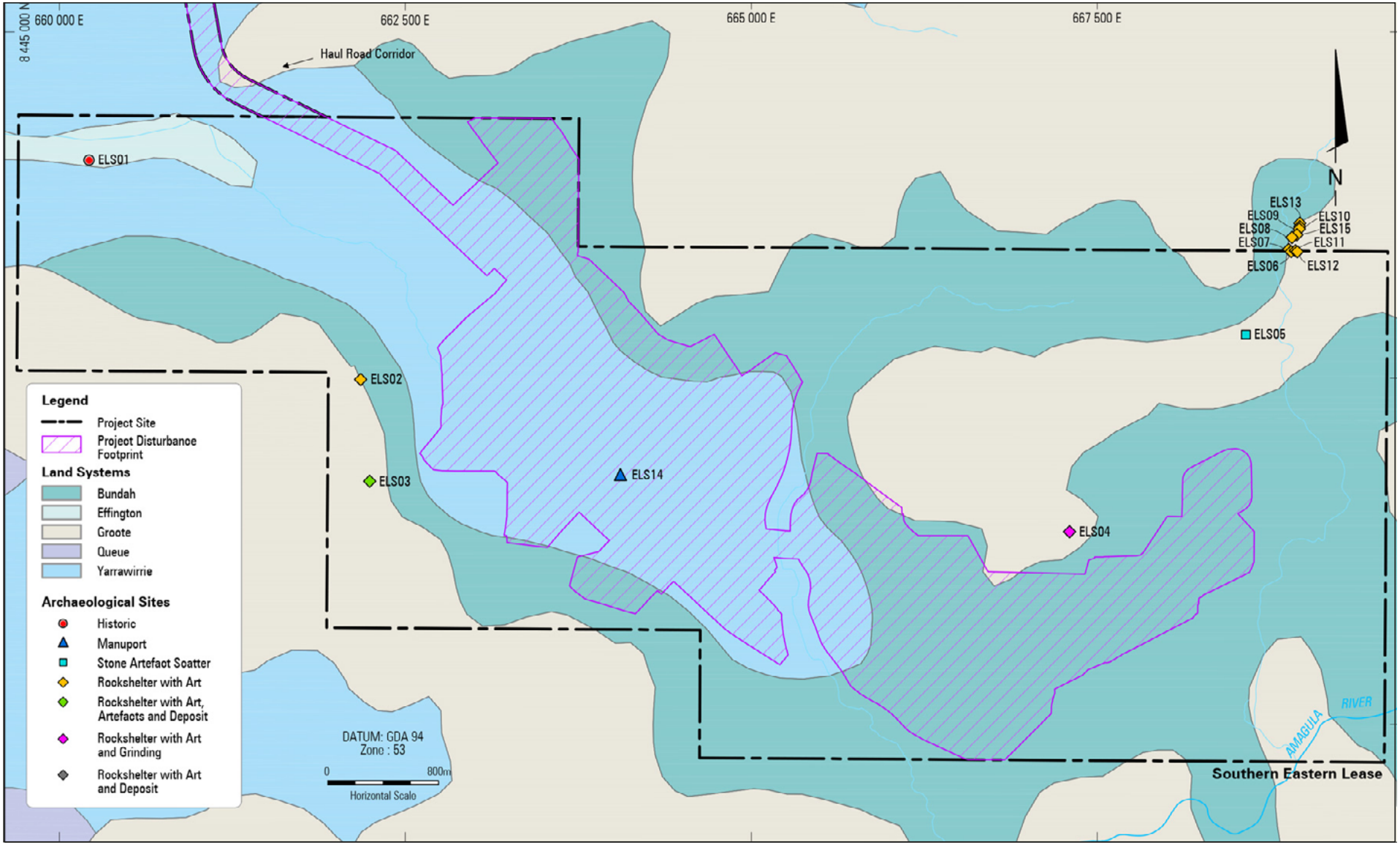

EASTERN LEASES PROJECT

Location of Archaeological Sites and Project Disturbance Footprint
Southern Eastern Lease

FIGURE 16-5

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PLATES

Plate 16-1 Site ELS03 – Rock Shelter with Art, Artefacts and Deposit

Plate 16-2 Site ELS03 – Rock Shelter with Art, Artefacts and Deposit

Plate 16-3 Site ELS04 – Rock Shelter with Art and Grinding

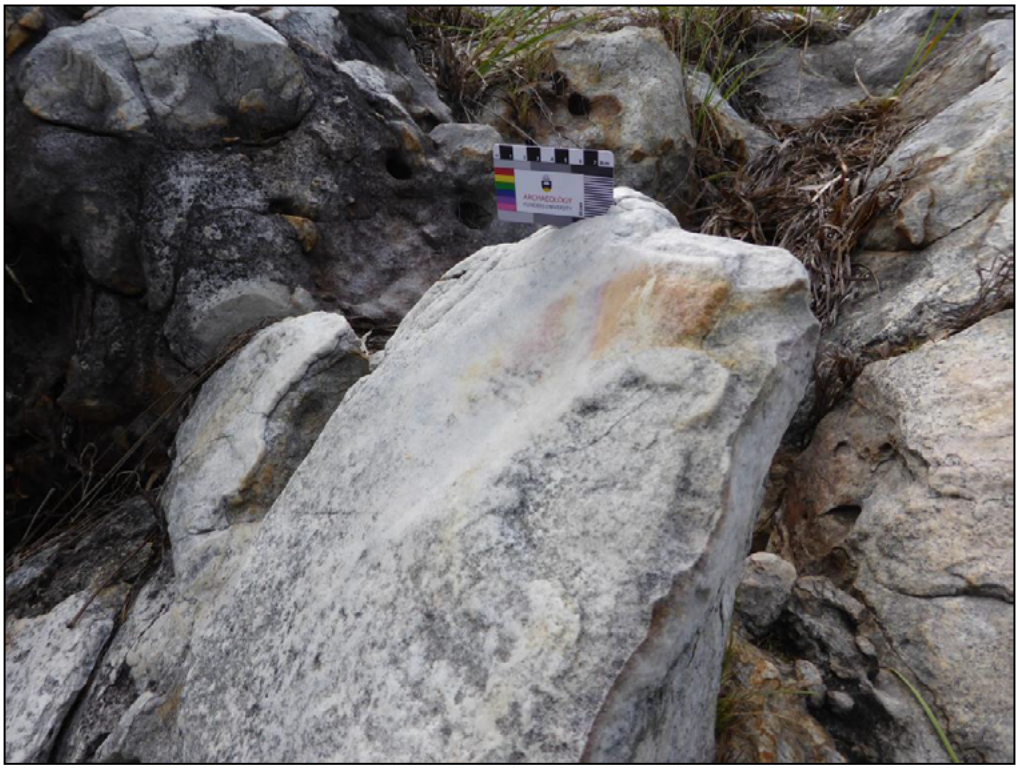

Plate 16-4 Site ELS04 – Rock Shelter with Art and Grinding

Plate 16-5 Site ELN05 – Rock Shelter with Art, Artefacts and Deposit

Plate 16-6 Site ELN05 – Rock Shelter with Art, Artefacts and Deposit

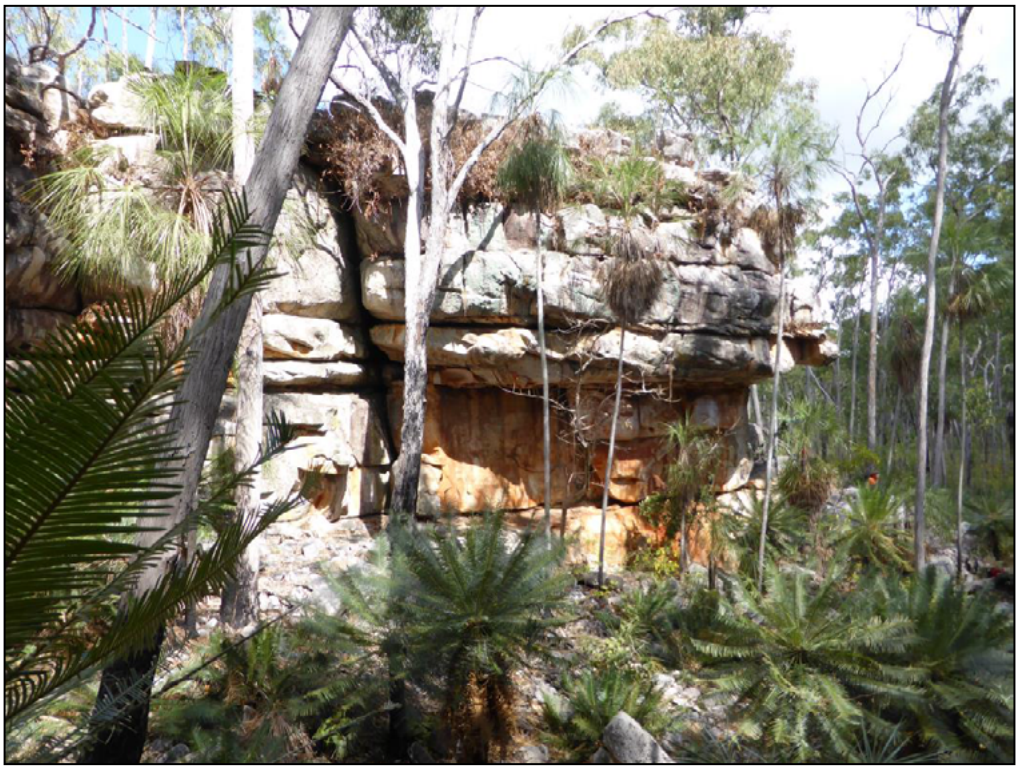

Plate 16-7 Site ELN06 – Rock Shelter with Art

Plate 16-8 Site ELN06 – Rock Shelter with Art

Plate 16-9 Site ELN13 – Rock Shelter with Art and Deposit

Plate 16-10 Site ELN13 – Rock Shelter with Art and Deposit

Plate 16-11 Site ELS05 – Stone Artefact Scatter

Plate 16-12 Site ELS14 – Manuport