



# Eastern Creek Recycling Ecology Park Recycling Infrastructure Optimisation Project

## Appendix Q Aboriginal Heritage Due Diligence Assessment



June 2022

19 November 2021

Claire Hodgson  
Principal Environment Consultation  
Arcadis,

Level 16, 580 George Street  
Sydney, 2000

Dear Claire,

**RE: DRAFT Eastern Creek Resource Ecology Park —Aboriginal Heritage Due Diligence Assessment**

## 1.1 Background

This letter report has been prepared by Artefact Heritage at your request in relation to Dial-A-Dump (EC) (DADEC) Pty Ltd's, (the Applicant) (as owned by Bingo Industries Pty Ltd (Bingo)), proposal to expand operations at the Eastern Creek Recycling Ecology Park (REP), located at 1 Kangaroo Avenue, Eastern Creek (formerly known as the Genesis Waste Management Facility) (the study area). The Applicant is proposing to increase the total throughput of the Eastern Creek REP by 950,000 tonnes per annum (tpa) and carry out minor infrastructure upgrade works across the Eastern Creek REP (Proposal). The Eastern Creek REP is located within Lot 1 DP 1145808 and Lot 2 DP 1247691.

The Proposal is considered State Significant Development (SSD -11606719) under Clause 23 (waste and resource management facilities) of Schedule 1 of the *State Environmental Planning Policy (Planning Systems) 2021*. As a result, the environmental impact statement (EIS) is seeking approval, under Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for the construction and operation of the proposed throughput increase and required supporting infrastructure.

A scoping report was prepared by Arcadis (November 2020) which outlined previous findings in regard to Aboriginal heritage. The scoping report found the study area had a low Aboriginal archaeological sensitivity and given this result it was not necessary to provide detailed assessment for the Environmental Impact Statement (EIS). This recommendation is in line with the findings and recommendations of this due diligence assessment.

The study area, as shown in Figure 1, consists of 54 hectares within Lot 1 DP 1145808 and Lot 2 DP 1247691. This aligns with the Proposal Site in the scoping report. It is located east of Archbold Road, and south of the M4 Western Motorway, Eastern Creek. The study area is located within the Blacktown Local Government Area (LGA), the Parish of Melville, and the County of Cumberland. It is within the boundaries of the Deerubbin Local Aboriginal Land Council (LALC). The study area is illustrated in Figure 1.

Secretary's Environmental Assessment Requirements (SEARs) were provided by the Department of Planning and Environment in December 2020 and updated in April, September and October 2021. The October 2021 SEARs are listed and responded to in Table 1.

The purpose of this assessment is to present the results of an Aboriginal heritage due diligence assessment which meets the requirements of the *Due Diligence Code of Practice for the Protection*



of *Aboriginal Objects in New South Wales* (Due Diligence Code of Practice) (DECCW 2010), and include recommendations as to whether further archaeological investigation may be required in relation to the Proposal. The purpose of this report is also to provide a recommendation on whether an Aboriginal Cultural Heritage Assessment Report (ACHAR) is required as advice to Heritage NSW in accordance with their role stated in the SEARs.

**Table 1: SEARs (Cultural heritage and Aboriginal cultural heritage)**

SEAR	How addressed
An Aboriginal cultural heritage assessment including a due diligence report prepared in accordance with Due diligence code of practice for protection of Aboriginal objects in NSW (OEH, 2010) or an Aboriginal Cultural Heritage Assessment Report (ACHAR)	This due diligence assessment found that as there would be no impacts to Aboriginal cultural heritage values, given the existing low likelihood of Aboriginal heritage items and sites being present in the study area. Therefore, an ACHAR is not required.
Justification for the proposed assessment approach; and	This assessment has identified that the study area has been subject to past and continuing ground disturbance through past quarrying and construction activities and the current operation of a waste management facility and associated activities that support this industrial process. This has resulted in the complete modification of the ground surface. Overall, the study area is assessed as having nil to low Aboriginal archaeological potential and no impacts to Aboriginal cultural heritage value would occur as a result of the project. It is therefore recommended that an ACHAR is not required.
A description of the outcomes of the assessment and details of any impacts on Aboriginal cultural heritage values.	No impacts to Aboriginal cultural heritage values would occur as a result of the Proposal

This report was prepared by suitably qualified and experienced professionals. The report was written by Elizabeth Bonshek (Senior Heritage Consultant). Sandra Wallace (Director) provided management advice and review.

## 1.2 Legislative context

The *National Parks & Wildlife Act 1974* (the NPW Act) provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Aboriginal occupation of NSW) and for 'Aboriginal Places' (areas of cultural significance to the Aboriginal community).

The aim of the Due Diligence Code of Practice is to assist individuals and organisations to exercise due diligence when carrying out activities that may harm Aboriginal objects and to determine whether they should apply for consent in the form of an Aboriginal Heritage Impact Permit (AHIP) or State Significant Development (SSD) approval.

A due diligence assessment should take reasonable and practicable steps to ascertain whether there is a likelihood that Aboriginal sites will be disturbed or impacted during the proposed activity. If it is assessed that sites exist or have a likelihood of existing within the activity area and may be impacted by the proposed activity, further archaeological investigations may be required. If it is found to be unlikely that Aboriginal sites exist within the study area and the due diligence

assessment has been conducted in accordance with the Due Diligence Code of Practice, work may proceed without additional archaeological investigations.

The *Native Title Act 1994* (the Act) was introduced to work in conjunction with the *Commonwealth Native Title Act 1993*. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act. A search of the Native Title Vision database was undertaken on the 19 November 2020 and it was found that there are no Native Title claims currently registered within the study area.

The *Environmental Planning and Assessment Act 1979* (EP&A Act) establishes the framework for cultural heritage values to be formally assessed in the land use planning and development consent process. The EP&A Act requires that environmental impacts be considered prior to land development; this includes impacts on cultural heritage items and places as well as archaeological sites and deposits. The EP&A Act also requires that Local Governments prepare planning instruments (such as Local Environmental Plans [LEPs] and Development Control Plans [DCPs]) in accordance with the EP&A Act to provide guidance on the level of environmental assessment required.

The study area falls within the boundaries of the Blacktown Local Government Area (LGA) and is subject to the Blacktown LEP 2015 and Blacktown DCP 2015. The Blacktown LEP and DCP recognises that Blacktown has a rich Aboriginal heritage and that a pre-cautionary approach should be taken during development.

Development approval is sought under Part 4, Division 4.7 of the EP&A Act (SSD). As a result, section 86 of the NPW Act is switched off and an AHIP is not required for impacts to Aboriginal objects (if any are identified), which instead would be managed under the conditions of approval.

### 1.3 The proposal

The Applicant is seeking approval of its proposed development as SSD (Eastern Creek Recycling Ecology Park Expansion – Scoping Report (Arcadis 2020 page iii). The Applicant is proposing to enhance resource recovery outcomes across the Greater Sydney area by increasing throughput at the Eastern Creek REP to capitalise on the underutilised state-of-the-art processing facilities (namely MPC2), and plant and equipment within the Eastern Creek REP. The Proposal would include the upgrade and construction of supporting infrastructure to optimise the current operation at the Eastern Creek REP and facilitate an increase in throughput of 950,000 tpa. As outlined in Figure 2, the following construction activities are proposed:

- site establishment
- clearing and grubbing
- earthworks
- installation of two new exit connections and associated weighbridges and offices
- internal road upgrades and necessary water management infrastructure
- provision of new staff parking and amenities
- construction of Site Workshop and skip bin Maintenance and Manufacturing Workshop
- installation of landscaping, signage, security fencing and perimeter works

These works would impact on ground surfaces and subsurface deposits. Impacts to Aboriginal heritage items and sites are largely dependent on the footprint of the works being carried out. As such, impacts have been determined assuming all construction works would occur at one time (i.e., full footprint and construction activities collectively) and a worst case operational scenario



representing the full build (i.e. all three stages are completed) in terms of the Proposal footprint and other operational impacts.

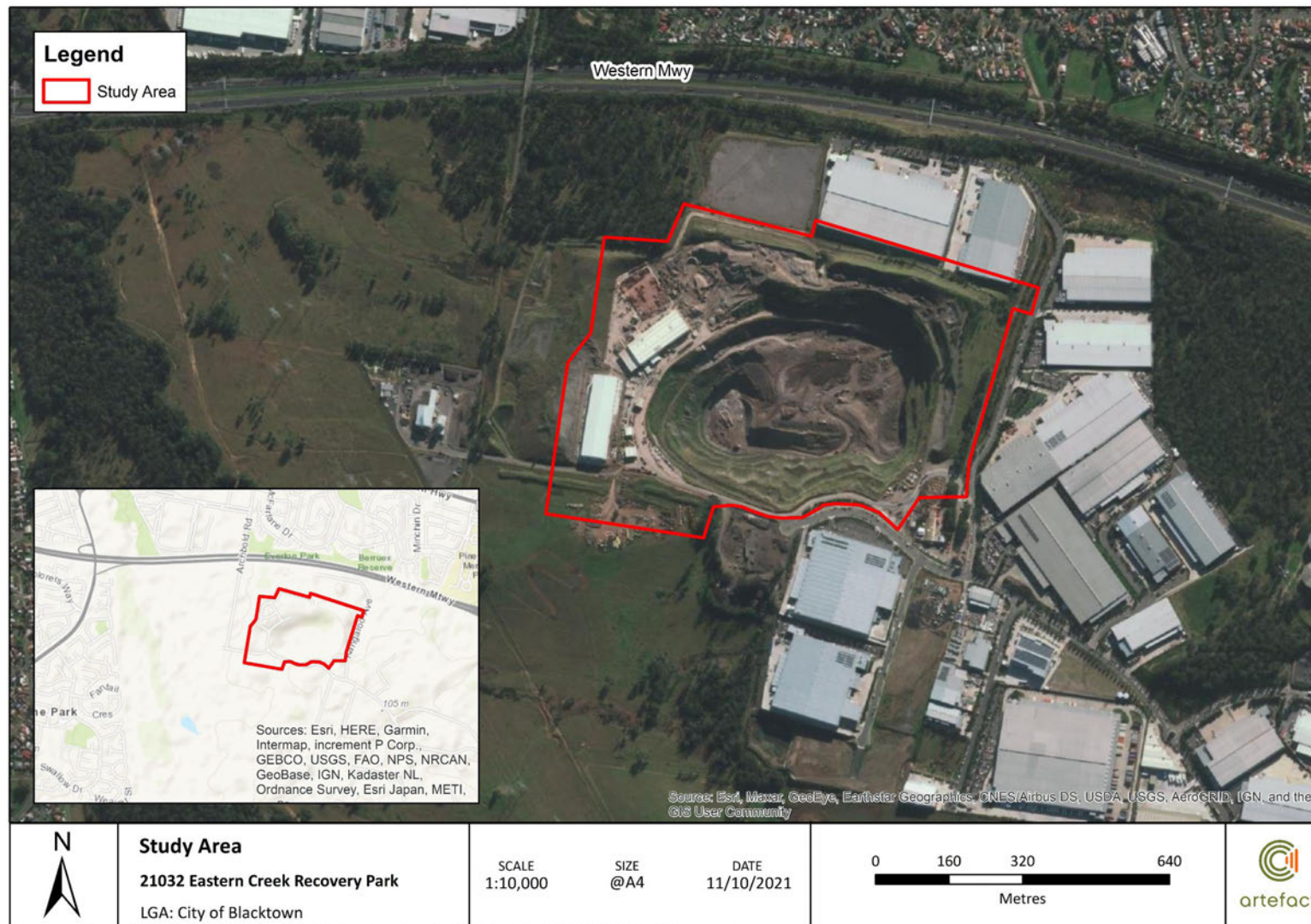
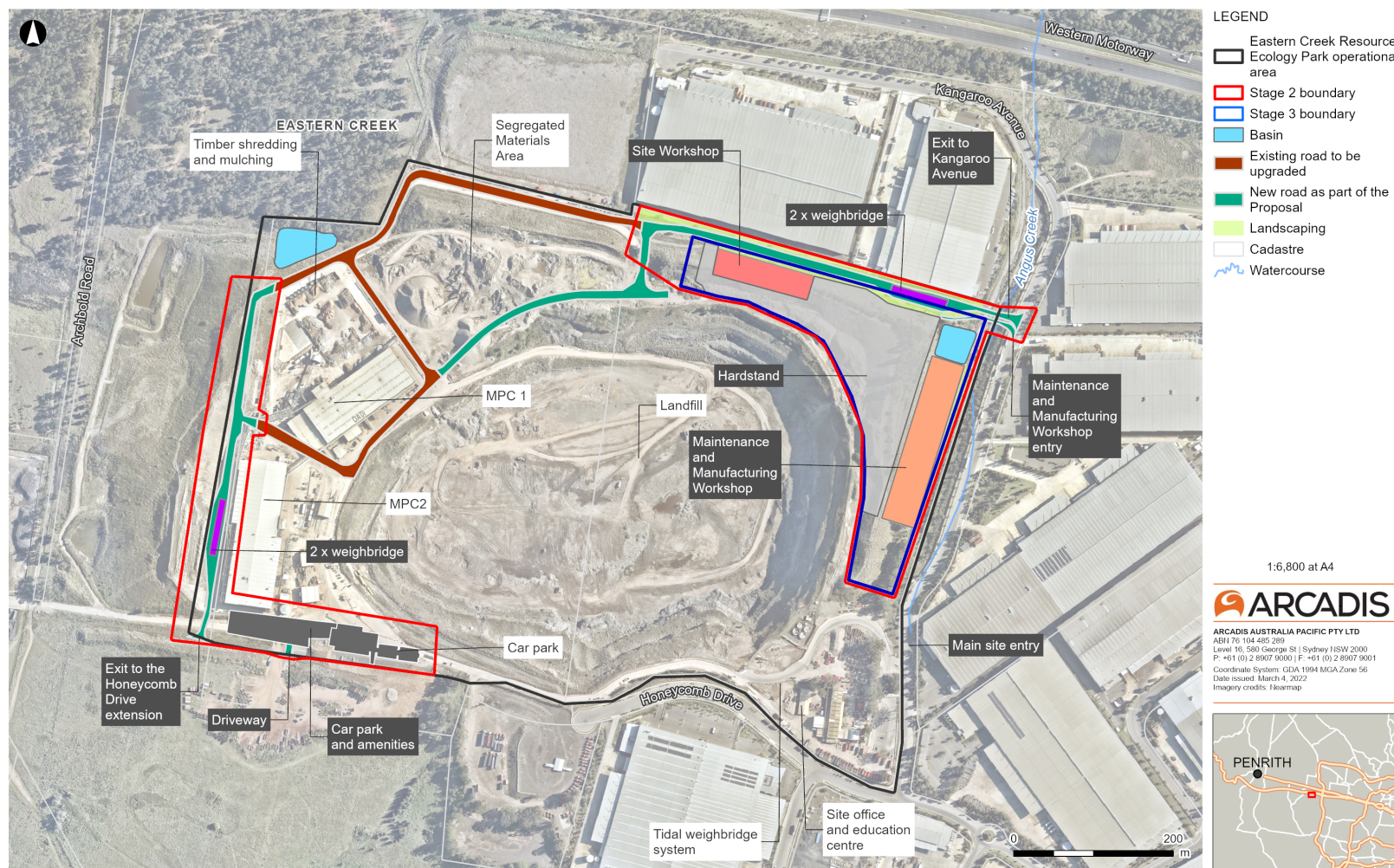


Figure 1. Location of study area





Date: 4/03/2022 Path: C:\Users\tk85103\ARCADIS\30065850 - EC Throughput Increase - C-GIS\A\_Current\B\_Maps\BDAR\BDAR.aprx  
Created by : TK  
QA by : GC

Figure 2: Proposed works



## 1.4 Site context

### 1.4.1 Environmental context

The study area is located within the Cumberland Plain, which is typified by an undulating landscape of rolling hills and prominent rises. The underlying geology of the study area consists of late Triassic period Bringelly shale deposits belonging to the Wianamatta Group (Clark and Jones 1991). These deposits consist predominantly of claystone and siltstone with thin laminate horizons.

The soils within the study area would have originally consisted of the residual Blacktown soil landscape (Bannerman and Hazleton 1990). The Blacktown soils are shallow (<1000 millimetres [mm]) hard setting mottled red and brown podzolic soils on crests and yellow podzolic soils on lower slopes and along drainage lines (Bannerman and Hazleton 1990). The Blacktown soil landscape is generally associated with gently undulating rises. The soils are primarily poorly drained with very little erosional activity. However, the study area, consisting of a quarry void and supporting infrastructure (buildings, and unsurfaced roads) has subjected the original terrain to significant disturbance. Remaining soils have been disturbed by human activity to a depth of at least 100 cm, and the original vegetation cleared.

The nearest watercourse to the study area is a channelled portion of Angus Creek, which flows directly adjacent the eastern boundary of the study area. The nearest major watercourse is Ropes Creek located approximately 700 m to the west. Ropes Creek flows into South Creek, which eventually drains into the Hawkesbury River 17 km to the west.

The region would have originally featured the Cumberland Plain Woodland, which formerly vegetated much of Western Sydney. This vegetation was characterised by mixed Grey Box (*Eucalyptus moluccana*), Forest Red Gum (*E. tereticornis*) and Narrow-leaved Ironbark (*E. crebra*) woodland with a grass and shrub understory (Benson and Howell 1995:70). The current landscape has been largely modified for industrial development and cleared of native vegetation. Any vegetation is likely to be regrowth.

### 1.4.2 Aboriginal ethnohistorical background and historical land use

Prior to the appropriation of their land by Europeans, Aboriginal people lived in small family or clan groups that were associated with particular territories or places. It seems that territorial boundaries were fluid, although details are not known. The language group spoken on the Cumberland Plain is known as Darug (Dharruk – alternative spelling). The Darug language group is thought to have extended from Appin in the south to the Hawkesbury River, west of the Georges River, Parramatta, the Lane Cove River and to Berowra Creek (Attenbrow 2010:34). This area was home to several different clan groups throughout the Cumberland Plain.

European expansion throughout the Cumberland Plain displaced Aboriginal people from their traditional land and effectively cut off access to many resources. The first European activity in the area was exploratory; however, this was shortly followed by settlement. The first land grants in the Blacktown region were at Prospect Hill. Governor Phillip granted a total of 13 plots, ranging in size from 30 to 70 acres, to emancipated convicts in 1791 (Historical Records of NSW 1978). Between 1818 and 1920, the area along the M4 Western Highway between Prospect and South Creek was granted to ex-convicts and free settlers.

The Proposal Site was quarried for breccia during the 1800s. By the 1930s, the quarry had been expanded. During the 1950s, it was run by Ray Fitzpatrick Quarries. The site remained an active quarry until September 2006 at which time the quarry void was estimated to be 12 million m<sup>3</sup>. In 2009, the site was acquired by Dial-A-Dump Industries (DADI) who commenced operation of the

Genesis Xero Waste Management Facility (currently the Eastern Creek REP) which included recycling facilities in 2012. In February 2019, Bingo acquired DADI and continued the operation of the Eastern Creek REP (Arcadis 2020:12). Aerial maps of the quarry area taken between 1956 and 2005 held in the NSW Government Historical Imaging database document the increasing expansion of the site westward and southward, into areas already denuded of trees and vegetation.

Figure 3 illustrates the extent of land disturbance by 1975, revealing extensive surface and subsurface excavation. Signs of this excavation are now obscured by the regrowth of vegetation on the site. Figure 4 shows that the eastern portion of the site which is now vegetated has been subject to extensive disturbance in the past which would have removed any potential intact deposits.



**Figure 3. Quarry site in 1975 (Source: Historical Imaging item number 2327\_05\_67, photographed 6/8/1975)**

## 1.5 Aboriginal Heritage Information Management System (AHIMS) Search

**NOTE:** The location of Aboriginal sites is considered culturally sensitive information. It is advised that this information, including the AHIMS data appearing on the heritage map for the proposal be removed from this report if it is to enter the public domain.

An extensive search of the Aboriginal Heritage Information System (AHIMS) was undertaken on 10 March 2021 (Client Service ID 572851) to determine the location of Aboriginal sites in relation to the current study area. The search included the study area and a surrounding one kilometre (km) buffer. The parameters of the search were as follows:

GDA, Zone 56	298405 – 299300 E 6257840 – 6258685 N
Buffer	1000 metres (m)
Number of sites	98

The search determined that there are 98 registered Aboriginal sites within the search area. The AHIMS database records sites using a list of twenty standard site types, of which two were found within the extensive search (Office of Environment and Heritage (OEH) 2012):

- Artefacts: Objects such as stone tools, modified glass or shell showing evidence of use by Aboriginal people.
- Potential archaeological deposit: An area where Aboriginal objects may exist below the ground surface.

Of the 98 sites identified in the search, about 92 per cent of the sites are artefact sites, 2 per cent consist of Potential Archaeological Deposits (PAD), and about 6 per cent consists of both PAD and Artefact. The results of the search are summarised in Table 2 and the distribution of sites shown in Figure 3. Importantly, no recorded sites were located within the study area. The distribution of sites recorded in the AHIMS extensive search lie within a 1000m buffer of the study area.

**Table 2: Frequency of site features in AHIMS search results**

Site Types	Frequency	Percentage
Artefact	90	91.83%
Potential Archaeological Deposit (PAD)	2	2.04%
PAD and Artefact	6	6.12%
<b>Total</b>	<b>98</b>	<b>100%</b>

The existing archaeological record is limited to certain materials and objects that can withstand degradation and decay. The exact nature of Aboriginal land use patterns in the vicinity of the study area before colonisation is unknown. As Aboriginal people were mobile hunter-gatherers, it is likely that they moved across the landscape between resources. The availability of fresh water and resources was a significant factor in repeated and long-term occupation. Certain site types, such as culturally modified trees, are particularly vulnerable to destruction through historical occupation. As a



result, more resilient site types, such as stone artefacts, are predominant in the archaeological record because of this, the nature and location of registered Aboriginal sites is an imperfect reflection of past Aboriginal occupation. Furthermore, the surviving archaeological record is also a reflection not only of historical land-use, disturbance, and the post-depositional events, but also reflects the sampling bias of previous archaeological investigations.

The study area lies in proximity to several sites located on the western side of Archbold Road which have been identified in the AHIMS extensive search lie within a 1000m buffer of the study area. However, no sites are located within the study area.

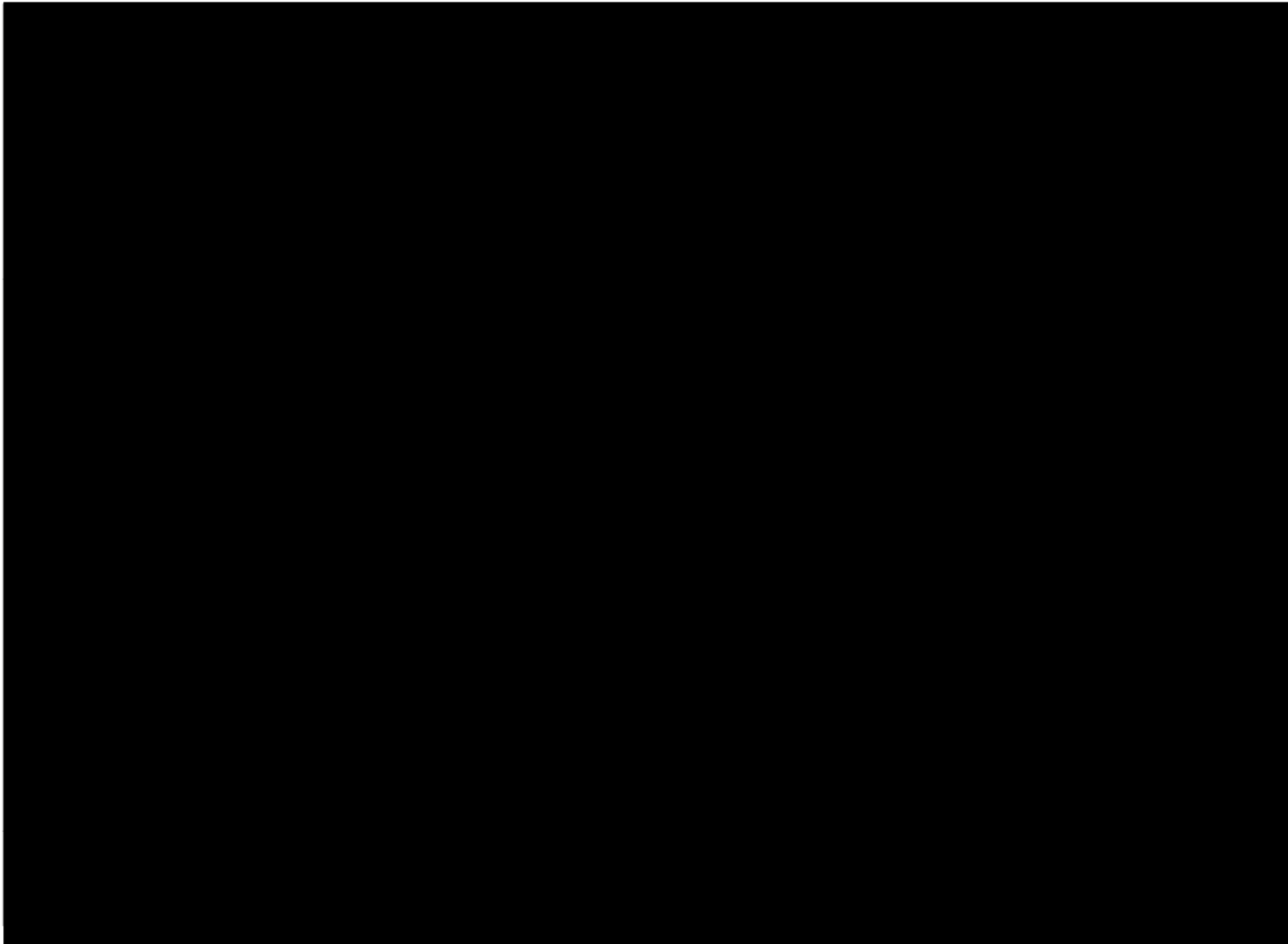


Figure 4. Extensive AHIMS search results

## 1.6 Previous archaeological assessments

There has been extensive archaeological assessment around Eastern Creek. The majority of this work has been in response to planning requirements driven by industrial development associated with the Eastern Creek Precinct. The location of the previous studies and assessments overlap with the study area which is the subject of this Due Diligence report, taking in approximately half of the study area on the western side of its north south axis.

**Table 3: Summary of previous archaeological reports**

Report	Assessment type	Key outcomes
<b>The Archaeological Investigation of Lot 2, DP 120673, the site of a proposed new clay and shale extraction area. Old Wallgrove Road Horsley Park, west of Sydney NSW (Appleton 2002)</b>	Aboriginal archaeological assessment	<ul style="list-style-type: none"> <li>The study area for this assessment was located 1.5 km to the southwest of the study area between Ropes Creek and Old Wallgrove Road.</li> <li>The survey identified an area of PAD and two isolated flakes.</li> <li>The artefacts were located at a depth of 20 cm below the surface.</li> <li>The assessment identified that areas of archaeological sensitivity were associated with possible camp sites and/or activities along the creek bank.</li> </ul>
<b>Heritage Conservation Strategy for Aboriginal sites in the lands owned by Valad Funds Management Ltd and Sargents P/L, in the Eastern Creek Business Park (Stage 3) Precinct Plan (JMcD CHM 2005).</b>	Heritage conservation strategy	<ul style="list-style-type: none"> <li>Jo McDonald CHM prepared a Heritage Conservation Strategy for an area adjacent to the study area.</li> <li>High value landforms were identified as shale hill slopes, first order tributary creek lines, and shale ridges.</li> <li>Areas of low archaeological sensitivity were those that demonstrated high levels of disturbance. This included the quarry site of the current study area.</li> <li>A conservation zone was recommended for the area immediately west of the study area.</li> <li>This assessment was undertaken prior to construction of a building pad site to the north of the study area (see Proposed Warehouse and Distribution Facility below).</li> </ul>
<b>Energy From Waste (EFW) Plant, Eastern Creek: Aboriginal Archaeological Technical Report (GML Heritage)</b>	Aboriginal archaeological assessment	<ul style="list-style-type: none"> <li>GML conducted a field survey of two adjacent lots in Eastern Creek.</li> <li>An area of high archaeological potential was registered on AHIMS at this time.</li> <li>The assessment was based on the site being an intact sloped landform. The results of this assessment fall outside of the study area.</li> </ul>
<b>Energy From Waste Facility, Eastern Creek (Artefact Heritage 2014)</b>	Test excavation	<ul style="list-style-type: none"> <li>Test excavation and assessment was conducted on an area approximately 1km from the southern boundary of the study area, known as EFW South (see Figure 3).</li> </ul>



Report	Assessment type	Key outcomes
		<ul style="list-style-type: none"> <li>An assemblage of 14 artefacts was excavated, including partial and complete flakes. These objects were indicative of tool manufacture including discarded material. The results suggested intermittent use of the area but with low research or educational value. Whilst the area was close to water sources it was also prone to flooding. Following the predictive model established by previous studies, the assessment identified that the higher slopes and crests surrounding the assessment area would have been more preferable camp sites.</li> </ul> <p>The results of this excavation fall outside of the study area.</p>
<b>PACHCI Stage 2 – Archbold Road Archaeological Survey Report (Artefact Heritage 2016)</b>	Survey	<ul style="list-style-type: none"> <li>The assessment included an area immediately adjacent to the north, west, and south of the current study area.</li> <li>The assessment identified that areas of archaeological potential were confined to locations with minimal disturbance.</li> </ul>
<b>Proposed Warehouse and Distribution Facility Aboriginal Due Diligence Assessment (Artefact 2021)</b>	Survey	<ul style="list-style-type: none"> <li>IRM Property Group NO2 Pty Limited's (IRM Property Group) proposed warehouse and distribution facility is located adjacent to the study area abutting the northern perimeter.</li> <li>Two previously recorded sites were assessed. One of these was established to have been completely impacted by upgrades to the M4 Western Motorway. The second site, known as Archbold Road 1, was discovered to have been incorrectly mapped onto the study area. Rather its correct location was limited to the area of intact woodland to the west of the study area (as shown in Figure 4).</li> </ul>

Archaeological assessments of Aboriginal sites have resulted in the development of several predictive trends.

Key findings of these studies include:

- Archaeological evidence of Aboriginal occupation is likely to be focussed on higher order watercourses, which is reflected in the predominance of PADs and artefacts surrounding these resources. Lesser order watercourses are less likely to contain evidence of prolonged or frequent Aboriginal occupation.
- Minimally disturbed lower slopes or ridgelines overlooking water courses are highly sensitive. These areas have the potential to contain evidence of more permanent or frequent occupation by Aboriginal people; these may be reflected by higher density artefact assemblages. Areas which are a significant walking distance from water or within a flood

plain are not considered to be desirable places for camping. Furthermore, flooding can also reduce the potential for intact archaeological material in these areas.

- Historical development is a major factor in reducing the potential for archaeological deposits. Historical development includes quarrying, the construction of dams, and the establishment of road networks.

The western half of the study area was included in the *Energy From Waste Plant, Eastern Creek: Aboriginal Archaeological Technical Report* (GML Heritage). The western half of study area assessed within Energy From Waste Plant technical report did not show evidence of any archaeological potential. The findings of the remaining studies and assessments fall outside of the study area.

## 1.7 Site inspection

An inspection of the study area was undertaken by Elizabeth Bonshek (Senior Heritage Consultant, Artefact Heritage) and Brye Marshall (Heritage Consultant, Artefact Heritage) on 8 March 2021. Access to the site was subject to safety considerations. Inspection of selected areas was undertaken after discussion with the site manager.

Areas selected for inspection are shown in Figure 5 (assessed areas 1, 2 and 3) while the remaining areas were unable to be inspected due to ongoing site operations. Assessed area 1 was reached by vehicle (escorted); assessed areas 2 and 3 were visited unaccompanied and comprised road verges and car park areas.

The site inspection was undertaken on foot, using a handheld GPS as well as physical maps. As the study area lies in an active site, a photographic record was made of areas that were accessible. Within this constraint, photographs were taken to record different aspects of the landform units within the study area, vegetation, levels of disturbance, and any sensitive landform areas.

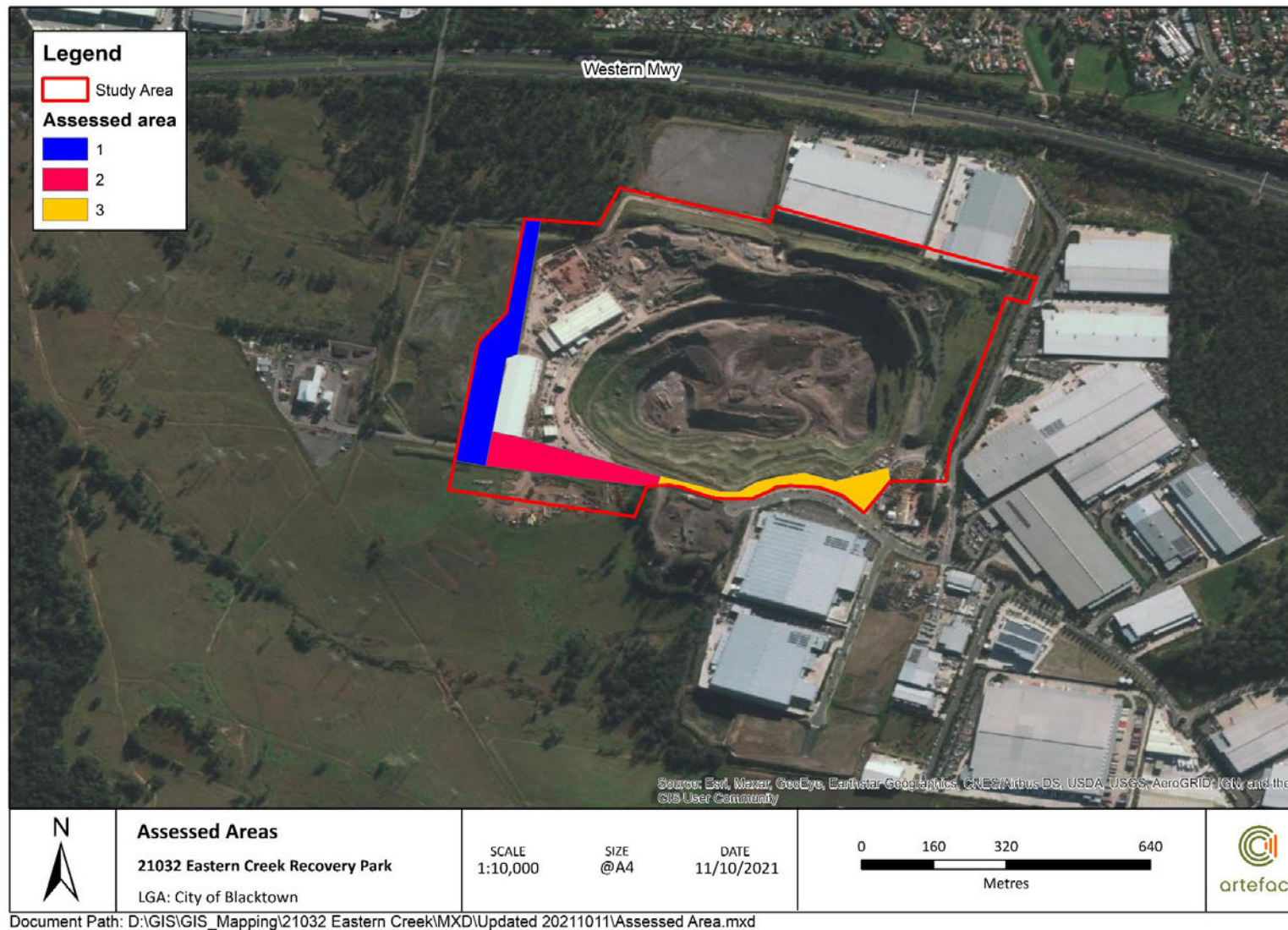


Figure 5. Areas selected for assessment given safety conditions on the day of the visit



### 1.7.1 Assessed area 1

Work areas and buildings are located on the east side of assessed area 1. The western side runs parallel to Archbold Road beginning at its intersection with Honeycomb Drive. Access to this area was achieved from Archbold Road. The road is unsurfaced and rocky in many places and infilled with blue stone and road aggregate (Figure 6). Off the road, the grassy vegetation was up to one metre high and visibility less than five per cent. Wet areas lay on either side of the road with several small ponds on the western side with higher grasses growing (Figure 7). These ponds were in close proximity to a perimeter fence. The land on the eastern side of the road rose to a ridge, which formed the boundary of the study area, and overlooked buildings and a worksite with heavy equipment (Figure 8 and Figure 9). The gradient of the slope increased from a slight slope to a steep ascent towards the top. The area was rocky, had high growing weed and vegetation, pot holes and poor visibility and provided good sanctuary for animals such as snakes and wallaby. The top of the ridge was marked by excavator tracks. A pond receiving run off and overflow was located towards the base of the eastern slope and was fenced off from the road. Parts of the road had been stabilised against run off and debris and were fenced. There appeared to be no undisturbed ground in this area, including along the ridgetop.

No Aboriginal objects or areas of archaeological potential were identified in this area.



**Figure 6. Archbold Road looking in northerly direction, unsurfaced road.**



**Figure 7. Ponds and perimeter fence along west side of Archbold Road.**



**Figure 8. Top of ridge along the eastern boundary parallel to Archbold Road.**



**Figure 9. Top of ridge along the eastern boundary parallel to Archbold Road**

### 1.7.2 Assessed area 2

Assessed area 2 comprised the entrance to an area used to store skips (Figure 10) which were stacked throughout the site to allow access for large trucks. The ground was largely heavily compacted dirt and gravel with disturbance caused by trucks (Figure 11 and Figure 12); the area had narrow grass verges and islands of weedy vegetation. There appeared to be no undisturbed ground in this area.

No Aboriginal objects or areas of archaeological potential were identified in this area.



**Figure 10. Entrance to skip area**



**Figure 11. Skip storage site showing denuded ground and gravel**



**Figure 12. Ground disturbance in skip storage area**

### 1.7.3 Assessed area 3

Assessed area 3 comprised two car parks and the verges of the road in the vicinity of the Learning Centre. The car park in front of the Learning Centre (Figure 13) was compacted dirt, with concrete blocks used to demarcate edgings and had little vegetation. The road verge (Figure 14) most distant to the quarry had been replanted with European trees at regular intervals and was interspersed with grass and weeds. Large concrete blocks delineated an access path in this area of heavy traffic. The similarly marked access way on the other side of the road, adjacent to the quarry, was fenced off (Figure 15). A small recess area where apparently redundant large equipment was housed, was grassed over in part. A second car park, with two tiers, had been surfaced with a rough gravel material. There appeared to be no undisturbed ground in this area.

No Aboriginal objects or areas of archaeological potential were identified in this area.



**Figure 13. Carpark in front of Learning Centre**



**Figure 14. Verges along road with replanted trees along edges**



**Figure 15. View over quarry from road opposite Learning Centre**

## 1.8 Assessment of archaeological potential

Archaeological potential is closely related to levels of ground disturbance. However, other factors are also considered when assessing archaeological potential, such as whether artefacts were located on the surface, and whether the area is within a sensitive landform unit according to the predictive statements.

The Due Diligence Code of Practice identifies five landscape features that indicate the likely existence of Aboriginal objects. These include:

- Within 200m of waters, or
- Located within a sand dune system, or



- Located on a ridge top, ridge line or headland, or
- Located within 200m below of above a cliff face, or
- Within 20m of or in a cave, rock shelter or a cave mouth

Examination of assessed areas 1, 2 and 3 did not reveal any Aboriginal objects or areas of archaeological potential, largely due to the heavily disturbed ground. Due to the constraints on the day of the visit, a site survey of the northern and eastern perimeter was not carried out. This area currently has areas of vegetation present. An examination of historical aerial maps was undertaken to establish the nature of the ground subsurface in the unvisited sections. Figure 16 is evidence of extensive ground disturbance currently not visible due to regrowth in this area especially in the perimeter area adjacent to the quarry void (see outline in black). In addition, the remainder of the northern perimeter has also been subject to industrial excavation. This part of the boundary formed part of the previous archaeological investigations and assessments as discussed above (Section 1.6). In summary, the study area is a heavily modified environment with little, if any, natural landscape remaining.



**Figure 16. Subsurface features of northern and eastern perimeters of study area apparent in aerial map taken in 1975 (Historical Imaging item number 2327\_05\_67, photographed 6/8/1975).**

This due diligence assessment has identified, within the Due Diligence Code of Practice, that the sections of the study area accessible on the day of the survey, together with the evidence of the historical aerial photographs, have been subject to past and continuing ground disturbance through past quarrying and construction activities and current operation of a waste management facility and associated activities that support this industrial process. This has resulted in the complete modification of the ground surface. Overall, the study area is assessed as having nil to low Aboriginal archaeological potential (Figure 17).



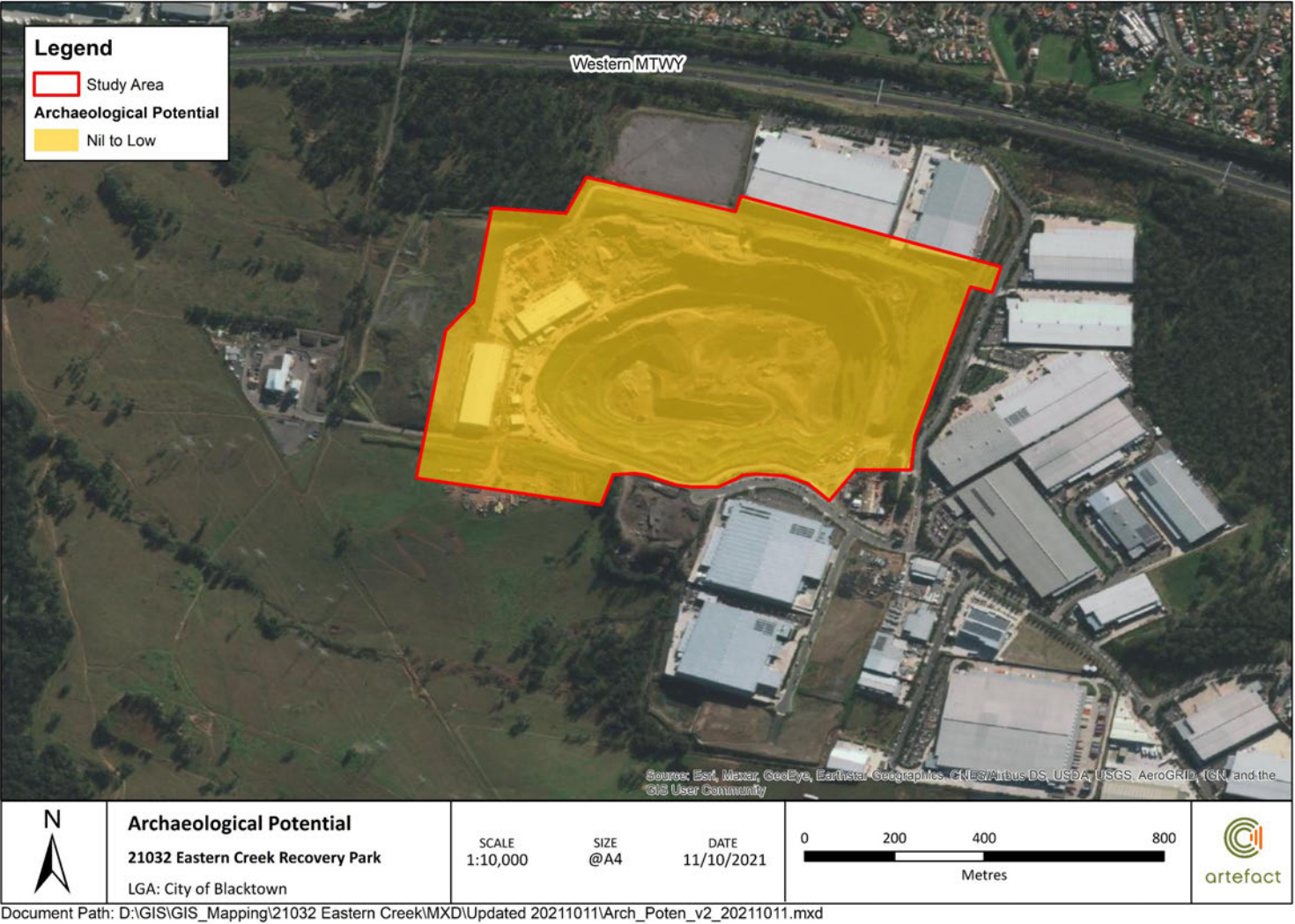


Figure 17. Areas of archaeological potential

## 1.9 Conclusions and recommendations

The following recommendations regarding Aboriginal heritage are based on consideration of:

- Statutory requirements under the *National Parks and Wildlife Act 1974* as amended.
- Due Diligence Code of Practice.
- The results of the background research, site survey and assessment.
- The likely impacts of the proposed development.

It was found that:

- No previously unrecorded Aboriginal sites or objects were identified within the study area during the site inspection.
- After examination of historical aerial photography of those sections not accessed on the day of the site visit, the study area has been assessed as having nil to low potential to retain intact archaeological deposits.

The following recommendations are therefore made:

- As the study area was found to be comprehensively disturbed and to have a nil-low potential for Aboriginal objects to be located within it, it is recommended that further assessment is not required.
- If changes are made to the Proposal that may result in impacts to areas not assessed by this due diligence further assessment would be required.
- Unexpected Aboriginal objects remain protected by the *National Parks and Wildlife Act 1974*. If any such objects, or potential objects, are uncovered in the course of the activity, all work in the vicinity should cease immediately. A qualified archaeologist should be contacted to assess the find and Heritage NSW and Deerubbin LALC must be notified.
- If human remains, or suspected human remains, are found in the course of the activity, all work in the vicinity should cease, the site should be secured and the NSW Police and Heritage NSW should be notified.

Kind regards,



Senior Heritage Consultant  
Artefact Heritage  
0478 248 059  
Elizabeth.Bonshek@artefact.net.au

## REFERENCES

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