



200 Aldington Road Industrial Estate, Kemps Creek: Historical Heritage Assessment

FINAL REPORT

Prepared for Fife Kemps Creek Pty Ltd

20 September 2021

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Glossary

BP	Before present
Biosis	Biosis Pty Ltd
c.	circa
PDCP	<i>Penrith Development Control Plan 2014</i>
CHL	Commonwealth Heritage List
DEE	Department of the Environment and Energy
DP	Deposited Plan
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
GFA	Gross Floor Area
Heritage Act	<i>Heritage Act 1977</i>
Heritage NSW	Heritage NSW, Department of Premier and Cabinet
HHA	Historical Heritage Assessment
LEP	<i>Penrith Local Environmental Plan 2010</i>
NHL	National Heritage List
NSW	New South Wales
SEARs	Secretary's Environmental Assessment Requirements
SEPP	<i>State Environmental Planning Policy 2009</i>
SHR	State Heritage Register
Study area	The area of impact for the proposed works
SSD	State Significant Development
SSDA	State Significant Development Application
WSSEPP	<i>State Environmental Planning Policy (Western Sydney Employment Area) 2009</i>

Summary

Biosis Pty Ltd (Biosis) was commissioned by Stockland and Fife Capital to undertake a Historical Heritage Assessment (HHA) for the proposed development of 106-228 Aldington Road, Kemps Creek NSW (the study area). The project is to be assessed as a State Significant Development (SSD) (SSD-10479) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

Secretary's Environmental Assessment Requirements (SEARs) were issued for the proposed development in July 2020. The SEARs requested that an assessment of historical heritage values be undertaken for the study area. This document presents the findings of the desktop assessment and field investigation conducted as part of the HHA and provides an assessment of impacts to historical heritage values within the study area.

A search of heritage databases was conducted to identify any heritage listings within the study area. This included a search of the State Heritage Register (SHR), Commonwealth Heritage List (CHL), National Heritage List (NHL), Section 170 heritage registers and the *Penrith Local Environmental Plan 2010* (LEP). These searches revealed that no heritage listed items were present in the study area.

As part of the HHA, background research was undertaken to identify the previous land use of the study area to determine whether items of historical significance have the potential to be impacted by the proposed works.

The study area formed a part of an initial land grant to Nicolas Bayly in 1810, which was then acquired by Richard Jones in 1826 following Bayly's death. The land was subsequently subdivided in 1891 but sales did not commence until the 1930s. The land was likely used for pastoral and agricultural uses during this time, but no residential structures appear to have been constructed in the study area until after the 1970s. Following the residential development of the study area, intense orcharding and market gardening has occurred resulting in the disturbance of large portions of the study area.

The potential archaeological remains in the study area are associated with agriculture and domestic themes. Archaeological evidence associated with this theme within the study area may include agricultural marks and post holes; although, the high levels of disturbance from the continuous use of the study area since the 1970s for market gardening makes it unlikely for these remains to still be present in the study area.

The archaeological evidence associated with domestic themes include current residential and rural structures such as sheds and houses. Historical research and a field survey have identified that these structures have been constructed post 1970s and are a common element still present throughout the Western Sydney region. They would not contribute information that is not already available and are of low significance.

Recommendations

Recommendation 1: The proposed works may proceed with caution

There are no recorded items of heritage significance in or adjacent to the study area. Works can proceed in the study area with caution as it has been assessed as possessing low archaeological potential. Should unexpected archaeological remains be uncovered during the course of the proposed works, Recommendation 2 should be implemented.

Recommendation 2: Discovery of unanticipated historical relics

Relics are historical archaeological resources of local or State significance and are protected in NSW under the *Heritage Act 1977* (Heritage Act). Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated historical archaeology be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

1 Introduction

1.1 Project background

Biosis was commissioned by Stockland and Fife Capital to undertake a HHA for the proposed development of 106-228 Aldington Road, Kemps Creek NSW (the study area) (Figure 1 and Figure 2). The project is to be assessed as a SSD (SSD-10479) under Part 4 of the EP&A Act.

SEARs were issued July 2020 for the proposed development (SSD-10497) requesting that a HHA be undertaken to identify and describe historical heritage values within the study area and surrounding area. This HHA documents the findings of the desktop assessment and field investigation conducted as part of the assessment and provides an assessment of impacts to historical heritage values identified by the assessment and mitigation measures.

The HHA will accompany an Environmental Impact Statement to be assessed by the minister for planning under the NSW Department of Planning, Industry and Environment, to help them determine if the proposed development is likely to have a significant effect on the environment, including historical heritage.

1.2 Location of the study area

The study area is located approximately 12 kilometres south-east of Penrith and approximately 40 kilometres west of the Sydney central business district (Figure 1). It encompasses 72.08 hectares of private land and consists of Lots 20, 21, 22 and 23 DP 255560 and Lots 30, 31, and 32 DP 258949.

The study area is within the:

- City of Penrith Local Government Area (LGA).
- Parish of Melville.
- County of Cumberland.

The study area is bound by Aldington Road to the west and pastoral properties to the north, east and south (Figure 2).

1.3 Project summary and chronology

This section provides a summary of the project description as lodged (11 November 2020) and publicly exhibited and subsequent amendments to the project to address issues raised by the DPIE and in submissions from agencies, Penrith City Council and the public.

The section concludes with a description of the State Significant Development Application (SSDA) for which development consent is now sought.

1.3.1 Summary of project as lodged and publicly exhibited (October 2020)

As lodged and exhibited, the SSDA sought approval for the following development:

- A concept masterplan with an indicative total building area of 375,755 sqm, comprising:
 - 357,355 sqm of warehouse gross floor area (GFA);
 - 18,200 sqm of ancillary office GFA;

- 200 sqm of café GFA;
- 13 individual development lots for warehouse buildings with associated hardstand areas and two lots for drainage infrastructure purposes;
- Internal road layouts and road connections to Aldington Road;
- Provision for 1,700 car parking spaces; and
- Associated concept site landscaping.
- Detailed consent for progressive delivery of site preparation, earthworks and infrastructure works (i.e., Stage 1 works) on the site, including:
 - Demolition and clearing of all existing built form structures;
 - Drainage and infill of existing farm dams and any ground dewatering;
 - Clearing of all existing vegetation;
 - Subdivision of the site into 15 individual lots;
 - Construction of a warehouse building with a total of 50,930 sqm of GFA, including:
 - 48,430 sqm of warehouse GFA;
 - 2,500 sqm of ancillary office GFA; and
 - 231 car parking spaces.
 - Bulk earthworks including 'cut and fill' to create flat development platforms for the warehouse buildings, and site stabilisation works (if required);
 - Roadworks and access infrastructure;
 - Stormwater and drainage works including stormwater basins, diversion of stormwater lines, gross pollutant traps and associated swale works;
 - Sewer and potable water reticulation; and
 - Inter-allotment, road and boundary retaining walls.

1.3.2 Response to Submissions (March 2021)

Following the public exhibition of the Project, changes were undertaken in response to the issues raised during the public exhibition. This included a full assessment of the Project against the Draft Mamre Road Precinct Development Control Plan (**draft MRP DCP**) which was released subsequent to lodgement of the SSDA.

The key changes and additional information on the Project included:

- A revised riparian solution in the north east corner of the site which relocated the existing first order water course and re-established the riparian corridor with a 10-metre buffer on each side in accordance with the Natural Resources Access Regulator (NRAR) guidelines;
- An evidence-based case for the proposed location of the high order road south of the site's northern boundary which was seen to provide a more logical and feasible road network outcome (for both FKC and its northern neighbour) compared to that envisioned under the draft MRP DCP;

- Revised technical inputs for the flood assessment to address the submissions raised, including revised flood modelling which addresses post development conditions in the 2-, 20- and 100-year ARI events, and providing further commentary on the flooding impacts of surrounding and downstream land;
- An integrated water management solution which can effectively allow the progressive redevelopment of the site to occur while still recognising and meeting stormwater runoff targets set out in the draft and eventual final MRP DCP;
- A revised Visual Impact Assessment showing the impact of proposed landscaping mitigation over time; and
- Rationale for minor departures from the draft MRP DCP in relation to building design and sitting, pylon signage and retaining walls.

1.3.3 Request for Additional Information (April 2021)

Further changes to the Project (which are the subject of this RTS Report) are the result of further correspondence received by DPIE (dated 28 April 2021). The changes to the Project further align the proposed development with the relevant provisions of the draft MRP DCP (especially in relation to the proposed road network) and exclude prohibited components of development from the RE2 Private Recreation zone. The Summary of key changes to the project are:

- Concept Master Plan:
 - Reconfiguration of the internal road network and external road connections to be generally consistent with the draft Mamre Road Precinct DCP including:
 - Provision of a land reservation corridor along the northern boundary to facilitate half the required future DCP road and intersection with Aldington Road
 - Inclusion of the open space edge road in the north-east section of the site with connections through to the adjoining properties to the north and east
 - Intersections with Aldington Road; signalised south intersection and roundabout northern intersection
 - Amendments to road corridor widths.
 - Reconfiguration of Lot G to facilitate the open space edge road to the adjoining eastern property and to locate the proposed warehouse footprint wholly within the IN1 zone
 - Relocation of on-site detention basin within Lot D to be outside the RE2 Private Recreation zone in within the IN1 zone;
 - Retention of existing farm dams within the RE2 zoned area in the north-east corner of the site;
 - Consequential amendments to bulk earthwork pads, retaining walls, lot and future warehouse layout, car parking and landscaping.
- Stage 1 works:
 - Overall revisions to site preparation, earthworks and infrastructure consistent with the revised concept master plan.

- Inclusion of an interim access road and temporary junction connecting to Aldington Road in the northern portion of the site to facilitate site access prior to the implementation of the northern boundary road;
- Revision to the internal road network in line with the concept master plan revisions with the provision of temporary turning heads at the site boundary where those roads will connect to properties to the east and north in the future. The road levels at the boundary interface of the site will align with existing ground level (or as required to contain stormwater).

1.3.4 Description of Project, as amended, for which development consent is now sought:

The amended SSDA seeks approval for the following development (Figure 3):

- A concept masterplan with an indicative total building area of 346,580 sqm, comprising:
 - 329,575 sqm of warehouse GFA;
 - 17,000 sqm of ancillary office GFA;
 - 13 individual development lots for warehouse buildings with associated hardstand areas and two lots for drainage infrastructure purposes (each including a bio-retention basin);
 - Roads, including:
 - Internal road layouts;
 - Southern road connection to Aldington Road
 - Northern boundary road (half road corridor) connecting to Aldington Road
 - Road connections to adjoining landholdings to the north and east;
 - Provision for 1,546 car parking spaces; and
 - Associated concept site landscaping.
- Detailed consent for progressive delivery of site preparation, earthworks and infrastructure works (i.e., Stage 1 works) on the site, including:
 - Demolition and clearing of all existing built form structures;
 - Drainage and infill of existing farm dams and any ground dewatering;
 - Clearing of all existing vegetation;
 - Subdivision of the site into 15 individual lots;
 - Construction of a warehouse building with a total of 50,930 sqm of GFA, including:
 - 48,430 sqm of warehouse GFA;
 - 2,500 sqm of ancillary office GFA; and
 - 222 car parking spaces.
 - Bulk earthworks including 'cut and fill' to create flat development platforms for the warehouse buildings, and site stabilisation works (if required);
 - Roadworks and access infrastructure, including an interim access road and temporary junction with Aldington Road ;

- Stormwater and drainage works including stormwater basins, diversion of stormwater lines, gross pollutant traps and associated swale works;
- Sewer and potable water reticulation; and
- Inter-allotment, road and boundary retaining walls.

This report addresses the amended project for which development consent is now sought. It is a stand-alone report and supersedes the previous reports and supplementary information prepared for the original development application and subsequent response to submissions.

1.4 Scope of assessment

This report was prepared in accordance with current heritage guidelines including *Assessing Heritage Significance*, *Assessing Significance for Historical Archaeological Sites and 'Relics'*¹ and the *Burra Charter*.² This report provides a heritage assessment to identify if any heritage items or relics exist within or in the vicinity of the study area. The heritage significance of these heritage items has been investigated and assessed in order to determine the most appropriate management strategy.

The following is a summary of the major objectives of the assessment:

- Identify and assess the heritage values associated with the study area. The assessment aims to achieve this objective through providing a brief summary of the principle historical influences that have contributed to creating the present – day built environment of the study area using resources already available and some limited new research.
- Identifying sites and features within the study area which are already recognised for their heritage value through statutory and non – statutory heritage listings.
- Assess the impact of the proposed works on the heritage significance of the study area.
- Recommend measures to avoid or mitigate any negative impacts on the heritage significance of the study area.

1.5 Limitations

This report is based on historical research and a field inspection of the study area. It is possible that further historical research or the emergence of new historical sources may support different interpretations of the evidence in this report.

Although this report was undertaken to best archaeological practice and its conclusions are based on professional opinion, it does not warrant that there is no possibility that additional archaeological material will be located in subsequent works on the site. This is because limitations in historical documentation and archaeological methods make it difficult to accurately predict what is under the ground.

The significance assessment made in this report is a combination of both facts and interpretation of those facts in accordance with a standard set of assessment criteria. It is possible that another professional may interpret the historical facts and physical evidence in a different way.

¹ Heritage Office 2001

² Australia ICOMOS 2013

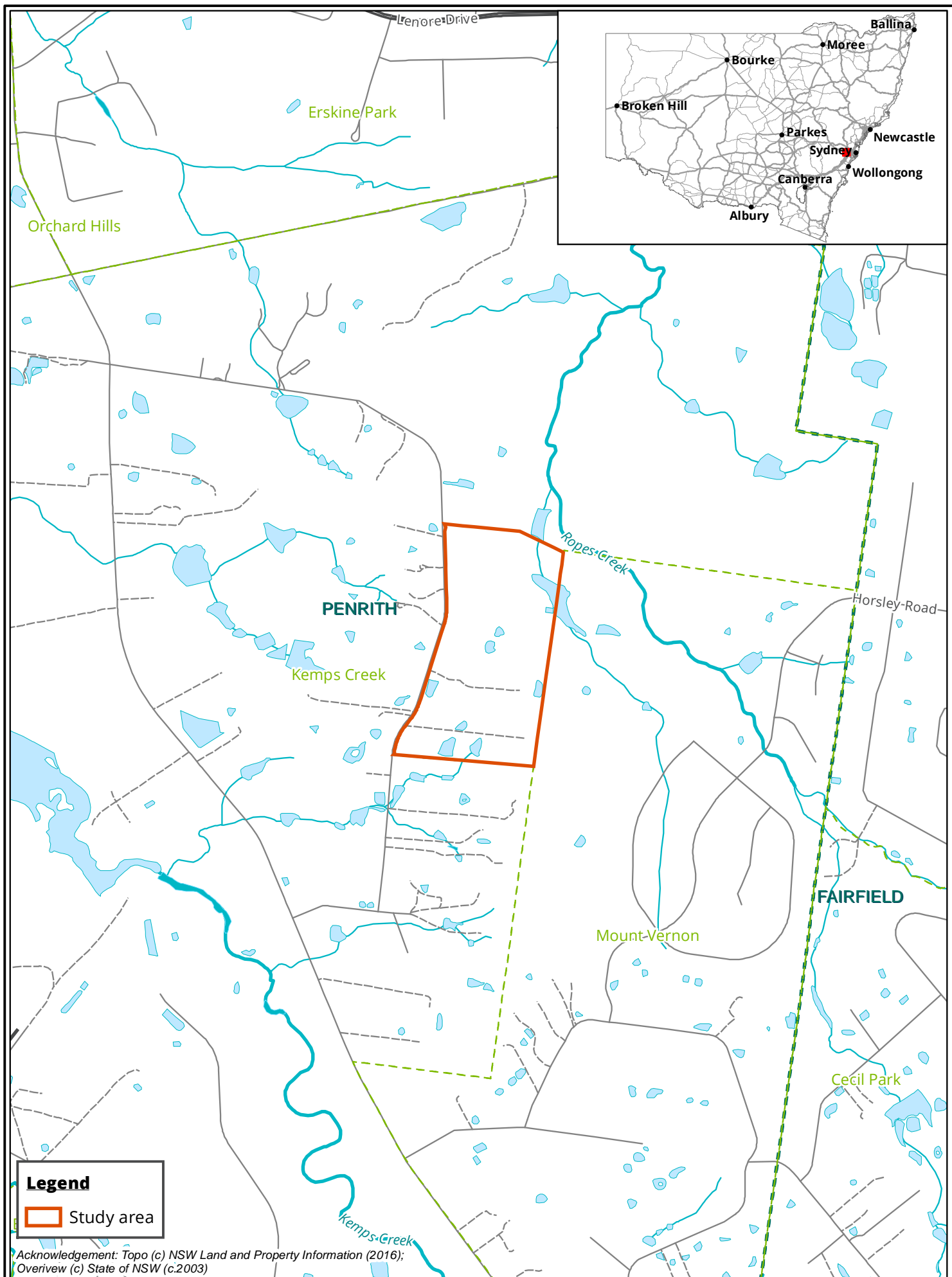
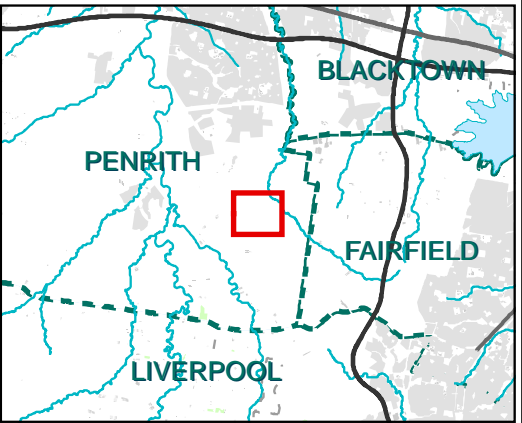


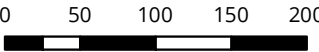
Figure 1 Location of the study area



Legend

- Study area
- Lot

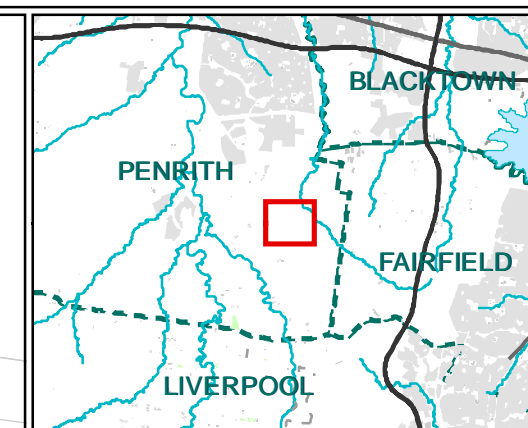
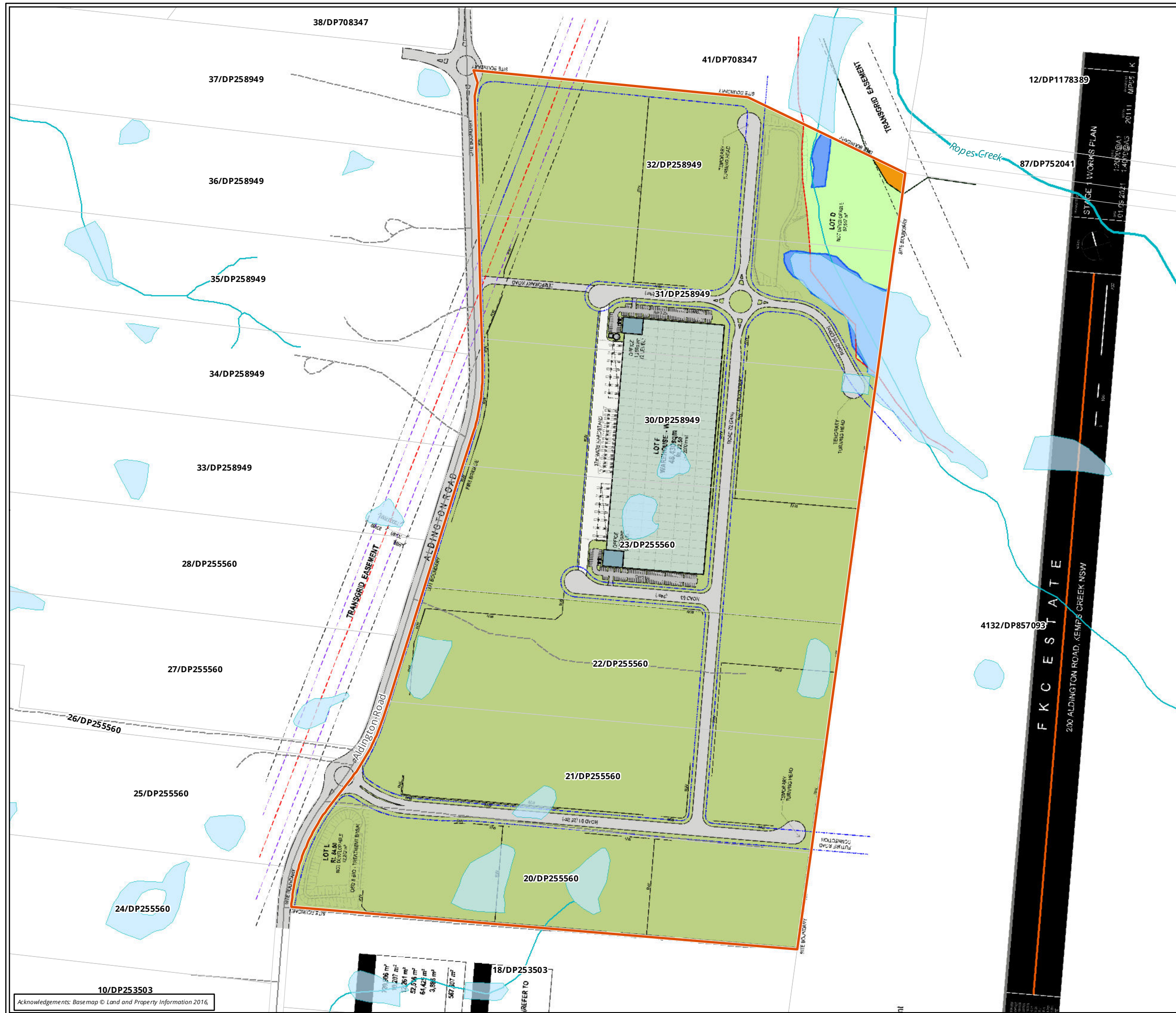
Figure 2 Study area detail



Scale: 1:5,000 @ A3
Coordinate System: GDA 1994 MGA Zone 56



Matter: 31837,
Date: 23 March 2021,
Checked by: SJK, Drawn by: AEDM, Last edited by: jturner
Location: P:\31800s\31837\Mapping\31837_ACHA_F2_StudyArea.mxd



Legend

- Study area
- Lot

Figure 3 Proposed development, Stage 1 Works Plan

0 50 100 150 200
Metres

Scale: 1:5,000 @ A3
Coordinate System: GDA 1994 MGA Zone 56



Matter: 31837,
Date: 10 September 2021,
Checked by: AKE, Drawn by: AM, Last edited by: amackegard
Location:
P:\31800s\31837\Mapping\31837_ACHA_F3_ProposedDevelopment_Stage1.mxd

2 Statutory framework

In NSW, cultural heritage is managed in a three-tiered system: national, state and local. Certain sites and items may require management under all three systems or only under one or two. The following discussion aims to outline the various levels of protection and approvals required to make changes to cultural heritage in the state.

2.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Act 1999* (EPBC Act) is the national Act protecting the natural and cultural environment. The EPBC Act is administered by the Department of the Environment and Energy (DEE). The EPBC Act establishes two heritage lists for the management of the natural and cultural environment:

- The NHL contains items which have been assessed to be of outstanding significance and define 'critical moments in our development as a nation'.³
- The CHL contains items which are natural and cultural heritage places that are on Commonwealth land, in Commonwealth waters or are owned or managed by the Commonwealth. A place or item on the CHL has been assessed as possessing 'significant' heritage value.⁴

A search of the NHL and CHL did not yield results associated with the study area.

2.2 NSW Heritage Act 1977

Heritage in NSW is principally protected by the Heritage Act (as amended) which was passed for the purpose of conserving items of environmental heritage of NSW. Environmental heritage is broadly defined under Section 4 of the Heritage Act as consisting of the following items: 'those places, buildings, works, relics, moveable objects, and precincts, of State or Local heritage significance'. The Heritage Act is administered by the Heritage Council, under delegation by the Heritage Division, Heritage NSW. The Heritage Act is designed to protect both known heritage items (such as standing structures) and items that may not be immediately obvious (such as potential archaeological remains or 'relics'). Different parts of the Heritage Act deal with different situations and types of heritage and the Heritage Act provides a number of mechanisms by which items and places of heritage significance may be protected.

2.2.1 State Heritage Register

Protection of items of State significance is by nomination and listing on the SHR created under Part 3A of the Heritage Act. The Register came into effect on 2 April 1999. The Register was established under the *Heritage Amendment Act 1998*. It replaces the earlier system of Permanent Conservation Orders as a means for protecting items with State significance.

A permit under Section 60 of the Heritage Act is required for works on a site listed on the SHR, except for that work which complies with the conditions for exemptions to the requirement for obtaining a permit. Details of which minor works are exempted from the requirements to submit a Section 60 Application can be found in

³ 'About National Heritage' <http://www.environment.gov.au/heritage/about/national/index.html>

⁴ 'Commonwealth Heritage List Criteria' <http://www.environment.gov.au/heritage/about/commonwealth/criteria.html>

the Guideline 'Standard Exemptions for Works requiring Heritage Council Approval'. These exemptions came into force on 5 September 2008 and replace all previous exemptions.

There are no items listed on the SHR within or adjacent to the study area.

2.2.2 Archaeological relics

Section 139 of the Heritage Act protects archaeological 'relics' from being 'exposed, moved, damaged or destroyed' by the disturbance or excavation of land. This protection extends to the situation where a person has 'reasonable cause to suspect' that archaeological remains may be affected by the disturbance or excavation of the land. This section applies to all land in NSW that is not included on the SHR.

Amendments to the Heritage Act made in 2009 changed the definition of an archaeological 'relic' under the Act. A 'relic' is defined by the Heritage Act as:

'Any deposit, object or material evidence:

(a) Which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and

(b) Which is of State or Local significance'.

It should be noted that not all remains that would be considered archaeological are relics under the NSW Heritage Act. Advice given in the Archaeological Significance Assessment Guidelines is that a 'relic' would be viewed as a chattel and it is stated that,

'In practice, an important historical archaeological site will be likely to contain a range of different elements as vestiges and remnants of the past. Such sites will include 'relics' of significance in the form of deposits, artefacts, objects and usually also other material evidence from demolished buildings, works or former structures which provide evidence of prior occupations but may not be "relics".⁵

Section 139 of the Heritage Act requires any person who knows or has reasonable cause to suspect that their proposed works will expose or disturb a 'relic' to first obtain an Excavation Permit from the Heritage Council of NSW (pursuant to Section 140 of the Act), unless there is an applicable exception (pursuant to Section 139(4)). Excavation permits are issued by the Heritage Council of NSW in accordance with Sections 60 or 140 of the Heritage Act. It is an offence to disturb or excavate land to discover, expose or move a relic without obtaining a permit. Excavation permits are usually issued subject to a range of conditions. These conditions will relate to matters such as reporting requirements and artefact cataloguing, storage and curation.

Exceptions under Section 139(4) to the standard Section 140 process exist for applications that meet the appropriate criterion. An application is still required to be made. The Section 139(4) permit is an exception from the requirement to obtain a Section 140 permit and reflects the nature of the impact and the significance of the relics or potential relics being impacted upon.

If an exception has been granted and, during the course of the development, substantial intact archaeological relics of state or local significance, not identified in the archaeological assessment or statement required by this exception, are unexpectedly discovered during excavation, work must cease in the affected area and the Heritage Office must be notified in writing in accordance with Section 146 of the Heritage Act. Depending on the nature of the discovery, additional assessment and, possibly, an excavation permit may be required prior to the recommencement of excavation in the affected area.

⁵ NSW Heritage Branch, Department of Planning 2009, p.7

2.2.3 Section 170 Heritage and Conservation Registers

Section 170 of the Heritage Act requires that culturally significant items or places managed or owned by Government agencies are listed on departmental Heritage and Conservation Register. Information on these registers has been prepared in accordance with Heritage Division guidelines.

Statutory obligations for archaeological sites that are listed on a Section 170 Register include notification to the Heritage Council in addition to relic's provision obligations. There are no items within or adjacent to the study area that are entered on a State government instrumentality Section 170 Register.

2.3 Environmental Planning and Assessment Act 1979

2.3.1 Local Environmental Plan

The Penrith LEP 2010 contains schedules of heritage items that are managed by the controls in the instrument. Heritage items in the vicinity of the study area are identified in Figure 4.

There are no heritage items listed in the Penrith LEP 2010 Schedule 5 located within or adjacent to the study area. The study area is situated within the local vicinity of the following heritage item of local significance:

- The Fleurs Radio Telescope site (Item No. 832), located at 885 (a) Mamre Road, Kemps Creek, Lot 21 DP 258414. Heritage item of local significance located approximately 1.6 kilometres south west of the study area.

2.3.2 State Environmental Planning Policy

The WSSEPP contains schedules of heritage items by the controls in the instrument. These items contain state or regional environmental planning significance. Heritage items in the vicinity of the study area are identified within Figure 4.

There are no heritage items listed in the WSSEPP 2009 Schedule 5 located within or adjacent to the study area.

The study area is situated within the local vicinity of the following heritage listed items of local significance:

- Brick Farmhouse (Item No. I4), 282 Aldington Road, Kemps Creek, Lot 142 and DP 1033636. Heritage item of local significance located approximately 500 metres south of the study area.
- Gateposts to Colesbrook (Item No. I3), 269 – 285 Mamre Road, Kemps Creek, Lot 8 DP 253503. Heritage item of local significance located approximately 430 metres south of the study area.
- Bayley Park, house (Item No. I2), 919 – 929 Mamre Road, Kemps Creek, Lot 35 DP 258414. Heritage item of local significance located approximately 970 metres west of the study area.

2.3.3 Penrith Development Control Plan 2014

The *Penrith Development Control Plan 2014* (PDCP) outlines built form controls to guide development. The PDCP supplements the provisions of the Penrith LEP. The PDCP outlines the following controls for the development of heritage items:

- Be consistent with an appropriate SoHI and information of the SHR.
- Protect the setting of the heritage item.
- Retain significant internal and external fabric and building elements, and spaces.
- Remove unsympathetic material.

- Reinstate missing detail and building elements.
- Use materials, finishes and colours that are appropriate to significant periods of development or architectural character.

Controls are also provided for development within the vicinity of a heritage item:

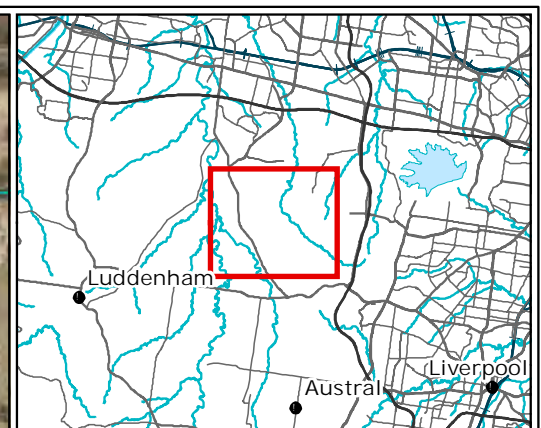
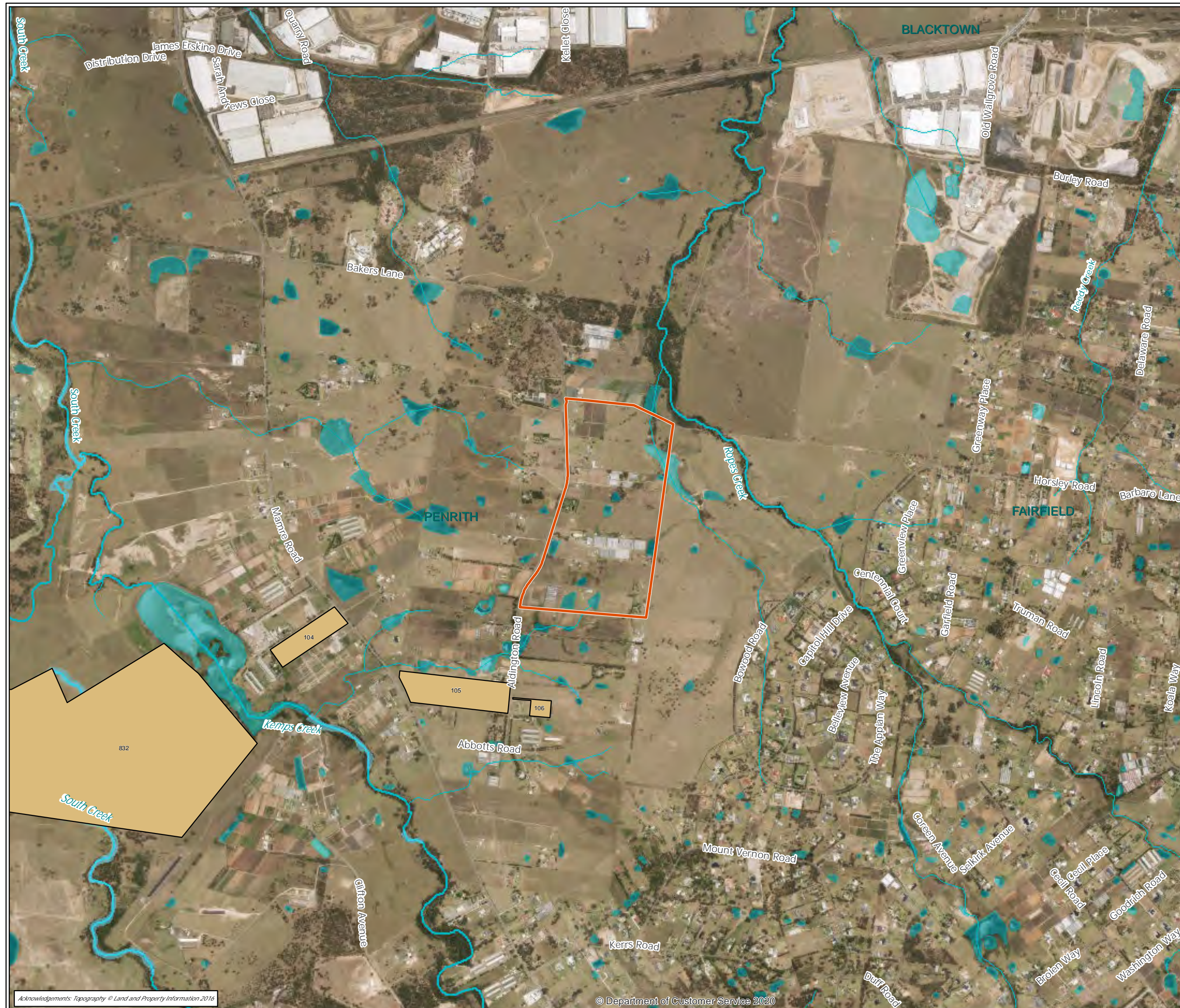
- A Heritage Impact Statement must be lodged with the development application if it may impact heritage setting, undermine or cause physical damage, or any adverse impact to the item.

2.4 Summary of heritage listings

A summary of heritage listings within the locality of the study area is presented in Table 1 and Figure 4.

Table 1 Summary of heritage listings within and adjacent to the study area

Site number	Site name	Address / Property description	Listings		Significance
			Individual item	As a Conservation Area	
832	The Fleurs Radio Telescope site	885 (a) Mamre Road, Kemps Creek, Lot 21 DP 258414	LEP		Local
I4	Brick farmhouse	282 Aldington Road, Kemps Creek, Lot 142 and DP 1033636	SEPP		Local
I3	Gateposts to Colesbrook	269 – 285 Mamre Road, Kemps Creek, Lot 8 DP 253503	SEPP		Local
I2	Bayley Park, house	919 – 929 Mamre Road, Kemps Creek, Lot 35 DP 258414	SEPP		Local



Legend

- Study area
- Item - General

Figure 4 Location of the heritage items in the vicinity of the study area

0 200 400 600 800 1,000
Metres

Scale: 1:20,000 @ A3
Coordinate System: GDA 1994 MGA Zone 56



Matter: 33680,
Date: 11 August 2020,
Checked by: ML, Drawn by: LW, Last edited by: lwilson
Location: P:\33600s\33680\Mapping\33680_F3_Heritage.mxd

3 Historical context

Historical research has been undertaken to identify the land use history of the study area, to isolate key phases in its history and to identify the location of any built heritage or archaeological resources which may be associated with the study area. The historical research places the history of the study area into the broader context of Kemps Creek.

3.1 Topography and resources

The study area is located within the Cumberland Lowlands physiographic region that consists of low lying, gently undulating plains and low hills, with a dense drainage net of predominantly northward flowing channels.⁶ The study area itself is a series of undulating moderately inclined slopes and crests which gradually descends towards unnamed tributaries of Ropes Creek in the north-east and Kemps Creek in the south. This landscape is situated on the Bringelly Shale formation which is part of the Wianamatta group. Bringelly shale consists of shale, carbonaceous claystone, laminate, lithic sandstone and rare coal.

There are two creek lines within the study area. The first is an unnamed first order tributary of Ropes Creek that transects the north-east corner of the study area. Ropes Creek, a third order creek, is located 70 metres from the north-east corner of the study area. The second is in the south of the study area and is a first order tributary of Kemps Creek, which is located 1.2 kilometres to the south east.

The study area is located partly within the Blacktown soil landscape, the Luddenham soil landscape and the South Creek soil landscape. These soil landscapes support a range of flora and fauna species. Plant species likely to be available within the landscape include, Forest Red Gum *Eucalyptus tereticornis*, Narrow-leaved Ironbark *Eucalyptus crebra*, and Grey Box *Eucalyptus moluccana*. Spotted Gum *Corymbia maculata* are present on shale hills. Hard-leaved Scribbly Gum *Eucalyptus sclerophylla*, Rough-Barked Apple *Angophora floribunda*, and Old-man Banksia *Banksia serrata* are identified on alluvial sands and gravels. Broad-leaved apple *Angophora subvelutina*, Cabbage Gum *Eucalyptus amplifolia*, Forest Red Gum *Eucalyptus tereticornis*, and Swamp Oak *Casuarina glauca* are present on river flats. Tall Spike Rush *Eleocharis sphacelata* and Juncus *Juncus effuses* with Parramatta Red Gum *Eucalyptus parramattensis* are noted around lagoons and swamps.⁷

This would have supported a range of animal species such as, Australian Wood Duck *Chenonetta jubata*, White-Faced Heron *Egretta novaehollandiae*, Eastern Long-Necked Tortoise *Chelodina longicollis*, Eastern Water Skink *Eulamprus quoyii*, Garden Skink *Lampropholis guichenoti*, Welcome Swallow *Hirundo neoxena*, Western Swampphen *Porphyrio porphyrio*, as well as arboreal fauna including owls Strigiformes, Ringtailed Possum *Pseudocheirus peregrinus* and Brushtailed Possums *Trichosurus vulpecula*, and gliders *Petauridae*.

3.2 Aboriginal past

It is generally accepted that Aboriginal people have inhabited the Australian landmass for the last 65,000 years.⁸ Dates of the earliest occupation of the continent by Aboriginal people are subject to continued revision as more research is undertaken. The timing for the human occupation of the Sydney Basin is still uncertain. While there is some possible evidence for occupation of the region around 40,000 years ago, the earliest known radiocarbon date for the Aboriginal occupation of the Sydney Basin is associated with a

⁶ Clarkson et al. 2017

⁷ NPWS 2003, p.193

⁸ Allen & O'Connell 2003

cultural archaeological deposit at Parramatta, which was dated to $30,735 \pm 407$ Before Present (BP).⁹

Archaeological evidence of Aboriginal occupation of the Cumberland Plains indicates that the area was intensively occupied from approximately 4,000 years BP.¹⁰ Such 'young' dates are probably more a reflection of the conditions associated with the preservation of this evidence and the areas that have been subject to surface and sub-surface archaeological investigations, rather than actual evidence of Aboriginal occupation prior to this time.

Our knowledge of Aboriginal people and their land-use patterns and lifestyles prior to European contact is mainly reliant on documents written by non-Aboriginal people. These documents are affected by the inherent bias of the class and cultures of their authors, who were also often describing a culture that they did not fully understand - a culture that was in a heightened state of disruption given the arrival of settlers and disease. Early written records can however be used in conjunction with archaeological information and surviving oral histories from members of the Aboriginal community in order to gain a picture of Aboriginal life in the region.

Despite a proliferation of Aboriginal heritage sites there is considerable ongoing debate about the nature, territory and range of pre-contact Aboriginal language groups in the greater Sydney region. These debates have arisen largely because, by the time colonial diarists, missionaries and proto-anthropologists began making detailed records of Aboriginal people in the late 19th century, pre-European Aboriginal groups had been broken up and reconfigured by European settlement activity. The following information relating to Aboriginal people on the Cumberland Plains is based on such early records.

There is some confusion relating to group names, which can be explained by the use of differing terminologies in early historical references. Language groups were not the main political or social units in Aboriginal life. Instead, land custodianship and ownership centred on the smaller named groups that comprised the broader language grouping. There is some variation in the terminology used to categorise these smaller groups; the terms used by Attenbrow will be used here.¹¹

The study area is in the vicinity of three language groups, Dharawal, Gundungurra and the hinterland Darug. Attenbrow suggests:

- The Gundungurra covered "the southern rim of the Cumberland Plain west of the Georges River, as well as the southern Blue Mountains".
- The Dharawal covered "the south side of Botany Bay, extending as far as the Shoalhaven River; from the coast to the Georges River and Appin, possibly as far west as Camden".
- The hinterland Darug covered the area "from Appin in the south to the Hawkesbury River in the north; west of the Georges River, Parramatta, the Lane Cove River and Berowra Creek".¹²

These areas are considered to be indicative only and would have changed through time.

After the arrival of European settlers the movement of Aboriginal people became increasingly restricted. European expansion along the Cumberland Plain was swift and soon there had been considerable loss of land to agriculture. At the same time diseases such as small pox were having a devastating effect on the Aboriginal population. Death, starvation and disease were some of the disrupting factors that led to a reorganisation of the social practices of Aboriginal communities after European contact. The formation of

⁹ Jo McDonald Cultural Heritage Management Pty Ltd 2005a, Jo McDonald Cultural Heritage Management Pty Ltd 2005b

¹⁰ Dallas 1982

¹¹ Attenbrow 2010

¹² Attenbrow 2010, p.34

new social groups and alliances were made as Aboriginal people sought to retain some semblance of their previous lifestyle.

3.3 Kemps Creek – historical development

3.3.1 Exploration (1789 to 1830)

The earliest exploration of the Penrith region was led by Captain Watkin Tench, an officer in the Marine Corps, accompanied by Mr Lowe (surgeon's mate of the Sirius), Mr Arndell (assistant surgeon to the Colony), two other marines, and a convict, in 1789. The group reached the Nepean River on 28 June.¹³ Later that year, the Penrith Ford was crossed, and in 1791 the course of the Nepean had been explored from the ford to Grose River. By 1791, it had been confirmed that the Hawkesbury and Nepean rivers were the same watercourse; however, each of the names were kept, transitioning from one to the other at the junction with the Grose River.¹⁴ From 1803, Charles Grimes and James Meehan surveyed areas of the eastern bank of the Nepean River following the sanctioning of settlement in this area by Governor Philip Gidley King, likely in part for the fertile soils associated with the Nepean River floodplain. The portions of land ranged from 40 to 200 acres (approximately 16.2 to 81 hectares), with several of 1,000 acres (404.6 hectares) and above. These were granted to officials, free settlers and military staff.¹⁵ Over time, around 1,699 Europeans had settled in the Nepean region, most of whom were of Irish and English heritage and were emancipists or convicts assigned to free settlers or those associated with the government or military.¹⁶ Until the establishment of the Great Western Road around 1815, there was no official passage to the Nepean area. In the same year, Governor Lachlan Macquarie conducted his inspection tour of the region.¹⁷ The Great Western Road had developed into a main route for travel and communication for the Nepean region by 1817, and in this year the government town of Penrith was also established. Penrith remained a small, roadside settlement into the 1830s.¹⁸

3.3.2 Early development and land grants within the study area (1810 to 1900)

A review of Melville Parish maps and Crown plans for Aldington Road indicates that the study area was previously part of a 1070 acre plot of land granted to Nicholas Bayly in 1810, known as Macquarie Place (Photo 1).¹⁹ Bayly was the son of a British politician and arrived in Australia as and ensign in the NSW Corps in 1798.²⁰ Bayly had originally been granted a 330 acre portion of land to the west of the study area that he called King Down in 1805.²¹ Following his resignation from the Corps, he was appointed Naval Officer in 1809 by Lieutenant-Governor William Paterson, and granted himself the 1070 acre grant within the study area called Macquarie Place and a 550 acre portion of land called Bayly Park, located to the west of the study area in 1810.²² Prior to his death in 1823, Bayly was cashier and secretary of the Banks of NSW.

¹³ Oehm, A. 2006, Paul Davies Pty Ltd 2007a, pp. 11

¹⁴ Thorpe 1986, pp. 12

¹⁵ Paul Davies Pty Ltd 2007a, pp. 11, Thorpe 1986, pp. 12

¹⁶ Paul Davies Pty Ltd 2007b

¹⁷ Thorpe 1986, pp. 12

¹⁸ Thorpe 1986, pp. 12

¹⁹ Paul Davies Pty Ltd 2007a, pp. 112–113

²⁰ Fletcher 1966

²¹ Paul Davies Pty Ltd 2007a, p.112

²² Fletcher 1966



Photo 1 Parish map of Mellville n.d., with the study area outlined in red (Source: NSW Land Registry Services, Parish Map of Mellville)

According to Paul Davies, a house was built by 1814 which was surrounded by gardens and cultivated grounds and in 1823 Bayly engaged government road gangs to undertake extensive clearing across his estate.²³ The location of this house is within the Bayly Park Estate, to the west of the study area. It was also noted that Bayly has 2630 acres, with only 40 cleared for growing wheat and 34 cattle and eight sheep. It is unclear if the land within the study area was cleared at this point in time. In 1819, 1050 acres of the original 1070 acre grant, containing the study area was purchased by Henry Brooks.²⁴ Little information is available for Brooks, however the land was likely used for pastoral purposes as this was the primary occupation of the area at the time.

Following Nicholas Bayly's death in 1823, Bayly Park was then acquired by Richard Jones in 1826, and became known as Fleurs Estate.²⁵ Only a small portion of what was originally part of Bayly's 1070 acre portion, not containing the study area, was a part of this Estate transfer. In 1891, Fleurs Estate was subdivided into smaller 20 acre farms, however little land was sold, with over 2000 acres placed on the market again in the 1930s (Photo 2).²⁶ The auction advertisement describes the land as suitable for farms, orchards and dairies; but no structures were recorded on the plan.²⁷ The sale of land was likely hampered by the depression within the 1890s caused by drought.

²³ Paul Davies Pty Ltd 2007b, pp. 114

²⁴ NSW Land Registry Services, Primary Application Number 48377

²⁵ Paul Davies Pty Ltd 2007b, pp. 114

²⁶ NSW Land Registry Services, Certificate of Title Volume 912 Folio 55

²⁷ Richardson & Wrench & McCarron, Stewart & Co & Chatfield & Brown 1895

The land containing the study area remained within the Brookes family until 1890 when it was transferred to number of people, notably Alfred Stanley Marks in 1893.²⁸ The land within the study area was renamed Littleham, which was used to run cattle by the Marks family.²⁹ No plans of the study area are available to identify if any structures were developed within the area.

³⁰ Thorpe 1986

3.3.3 Modern development within the study area (1900 to current)

The World War I and World War II saw a military presence within the area, developing a Royal Australian Air Force base within a portion of Fleurs Estate. In addition to this, industrial development began to rise, farmland was repurposed into housing estates, turf farming, vegetable growing, vineyards and some specialty crops.³¹

The land within the study area remained within the Marks family for much of the early 1900s, then transferred through a series of companies from 1944. Littleham Pty Ltd obtained the land in 1949 and was the occupier of the land in 1953 when Aldington Road was proposed for development.³² This company was recorded to have run sheep on the land, continuing its primary use of pastoral grazing seen within the previous century.³³

In 1960, Mainline Enterprises Pty Ltd obtained the land within the study area. A crown plan dated to 1963 records a transmission line [1] transecting the study area (Photo 3). Mamre Road is recorded to the south, while no other structures are recorded within the study area. In 1971, Mainline Enterprises Pty Ltd changed their name to LC O'Neil Enterprises Pty Ltd, after the O'Neil family who owned the business.³⁴ It is unclear how the company used the land, however they later co-signed a mortgage with Unit Construction Pty Ltd in 1971 indicating intentions for development.³⁵

³¹ Thorpe 1986

³² 'Notification of Proposed Opening of Road' 1953

³³ 'Sheep Prices Down 5/- A Head At Homebush' 1954

³⁴ NSW Land Registry Services, Primary Application 48377

³⁵ NSW Land Registry Services, Primary Application 48377

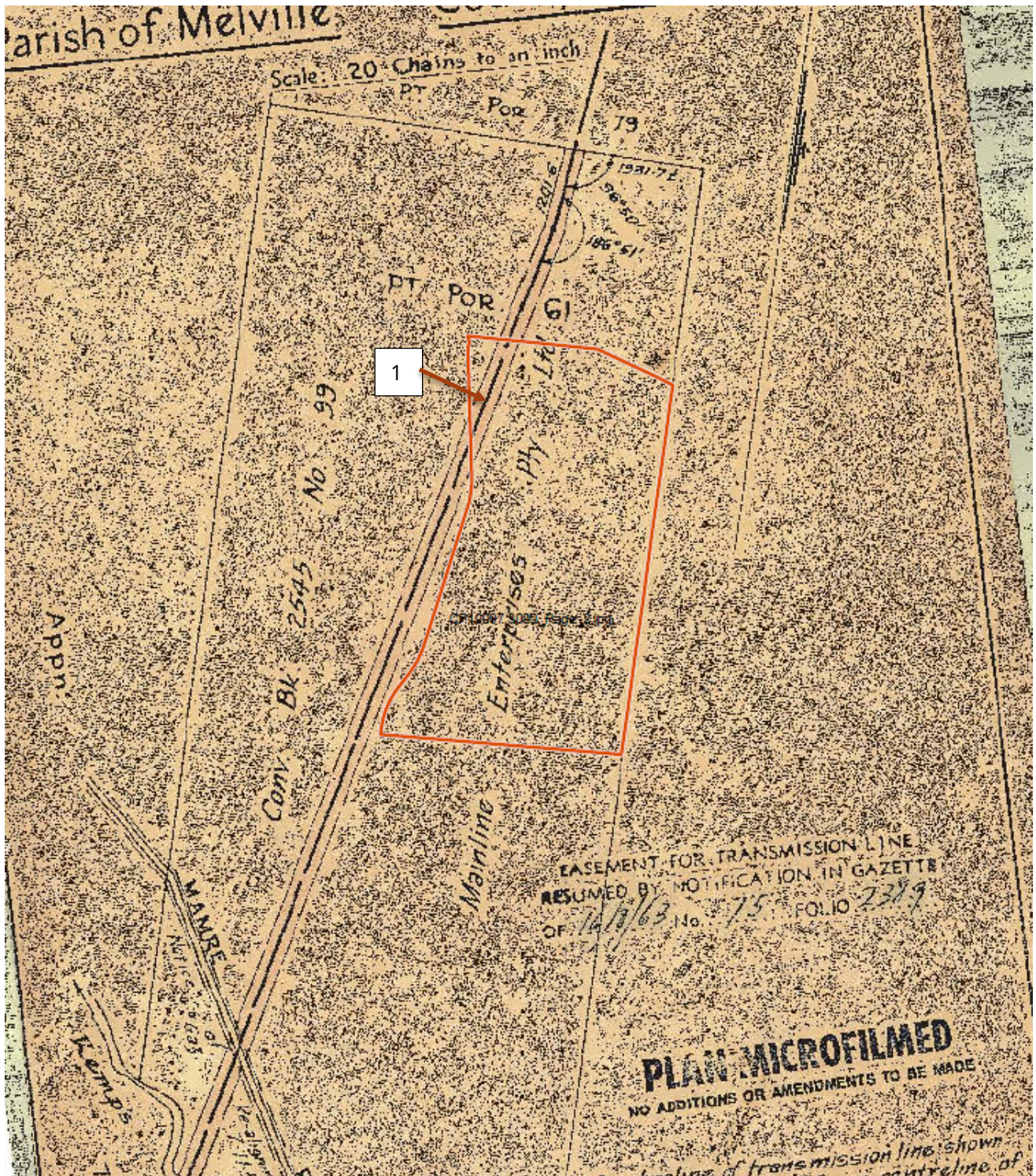


Photo 3 Crown plan dated to 1963, with the study area outlined in red (Source: NSW Land Registry Services, Crown Plan 19097.3000)

Historical aerial photographs record modern developments that have occurred within the study area. A historical aerial from the 1970s (Photo 4) shows the study area to be mostly cleared of vegetation. Despite this, few other developments have taken place within the study area. The tributary of Ropes creek in the north-east remains intact as does the creek line to the south. A number of dams are visible within the north-west, central and southern portions of the study area. A vehicle track longitudinally transects the central portion of the study area and the south-western corner, while a fence line [2] transects the central portion of

the study area. A residential property is located to the south and is likely the primary residence developed within the 1050 acre allotment the study area was originally part. A smaller residential property can also be seen outside of the study area to the west, also contained within the 1050 acre allotment. This indicates that the land within the study area was primarily used for pastoral grazing rather than domestic occupation.

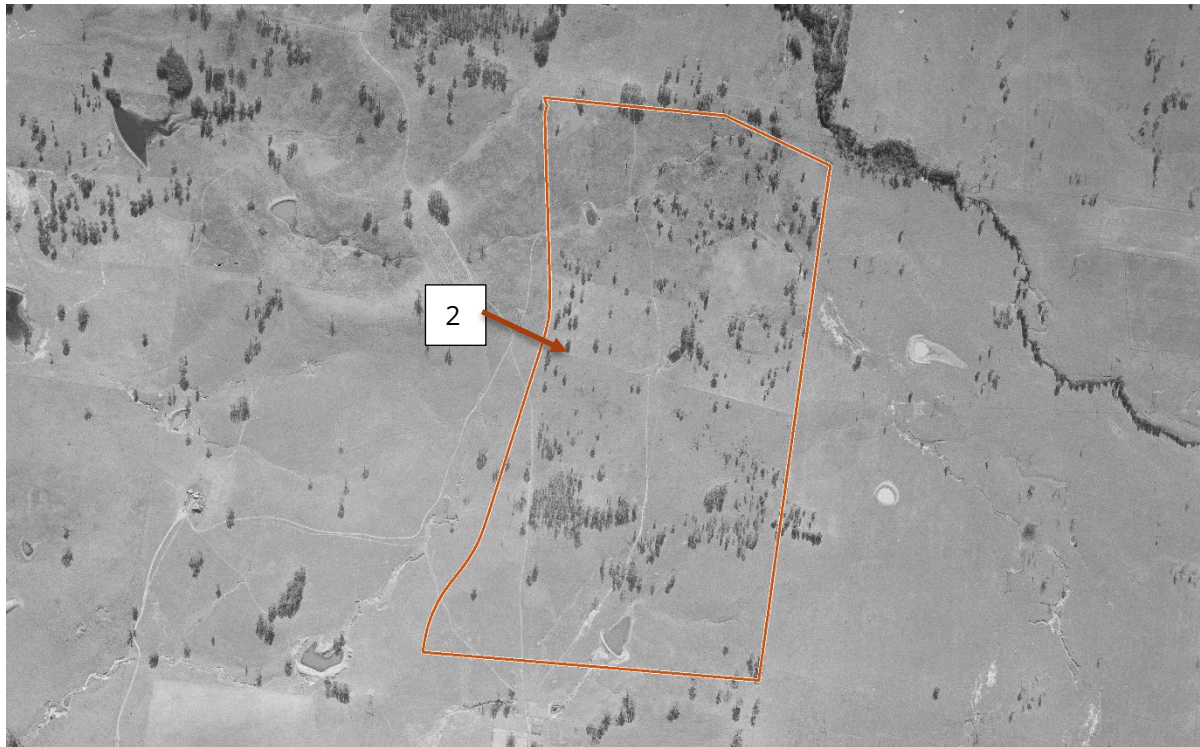


Photo 4 1970s aerial photograph of the study area (Source: NSW aerial imagery)

An aerial from 1986 (Photo 5) shows the study area to be somewhat disturbed. Although originally gazetted in the 1950s, Aldington Road was not constructed until the 1980s and is recorded to be abutting the western border of the study area. By this time more intensive farming practices began to take place within the study area. This included the construction of more dams located within the western, central, southern and south eastern portions of the study area. A number of residential houses were also constructed throughout the area between 1970 and 1986, representing the first development of the study area. The residential property in the north-west [3] also contains one large and one small associated shed [4]. A residential property [5] to the south of this also contains a large shed [6] and evidence of stockpiling. Three residential properties [7] [8] and [9] have been developed in the central west, including associated sheds. Three further residential properties [10] [11] and [12] and associated sheds, including one large shed [13], are present within the southern portion of the study area. Significant cropping and market gardening practices have occurred extensively throughout portions of the area from the 1970s.

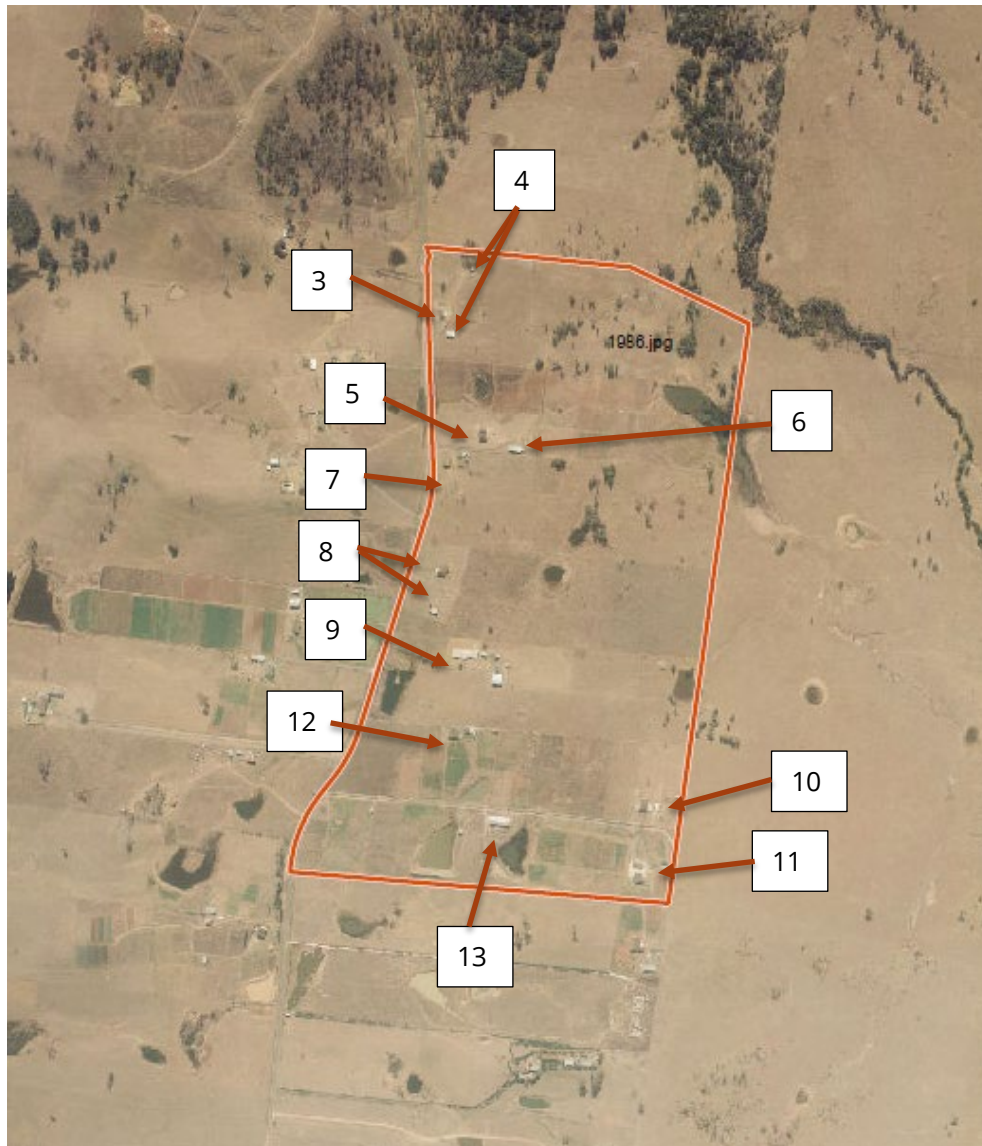


Photo 5 1986 aerial photograph of the study area (Source: NSW aerial imagery)

A later aerial taken in 1998 (Photo 6) shows crop farming practices had intensified in the study area with extensive cropping visible throughout. A dam in the north western corner has been filled in and a residential property constructed [14]. A shed [6] associated with the original house in that area has also been expanded, in addition to the construction of a shed [15] in the central southern portion of the study area. As well as cropping, the southern portion displays evidence of orcharding, reflecting the increased use of the study area.

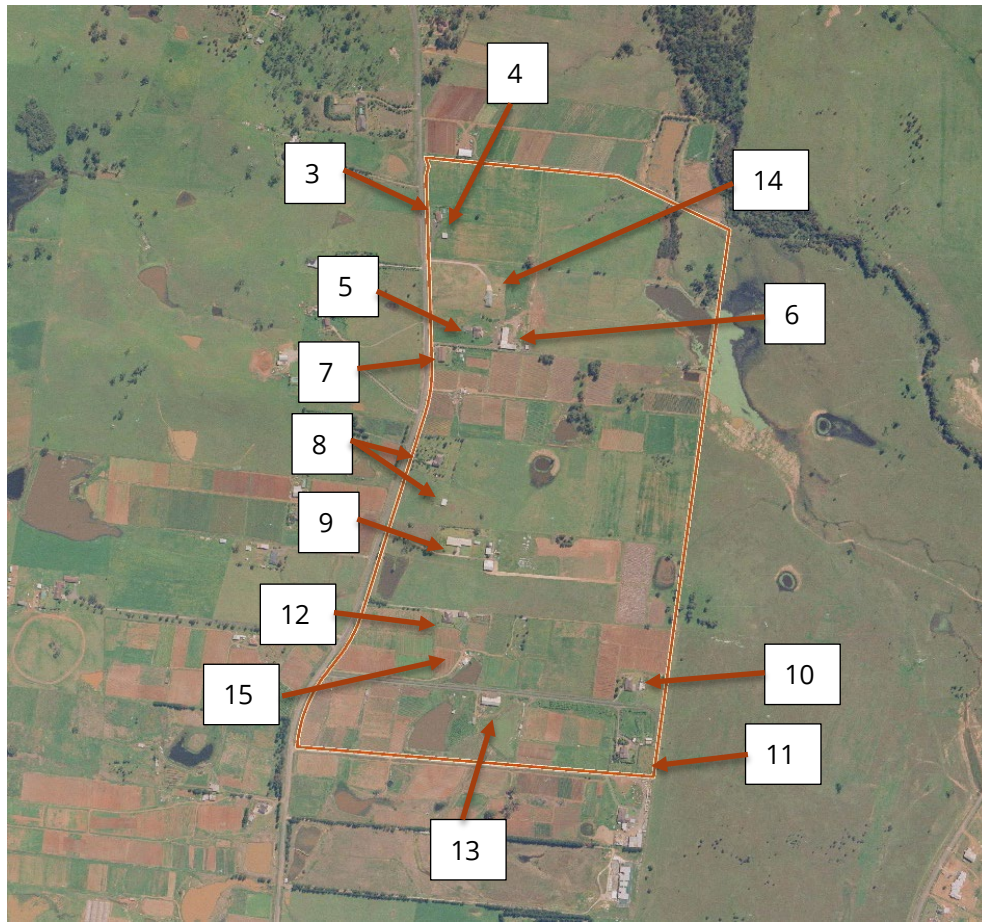


Photo 6 1998 aerial photograph of the study area (Source: NSW aerial imagery)

A current aerial photograph of the study area shows continued development has occurred (Photo 7). A residential property [16] has been constructed in the north western corner of the study area. A pool has been added to a property [14] to the south of this, while the construction of hothouses dominates areas within the central [17] and [18] and southern portion [19] and [20] of the study area. Water tanks have also been developed in the south in addition to small sheds in the south west.

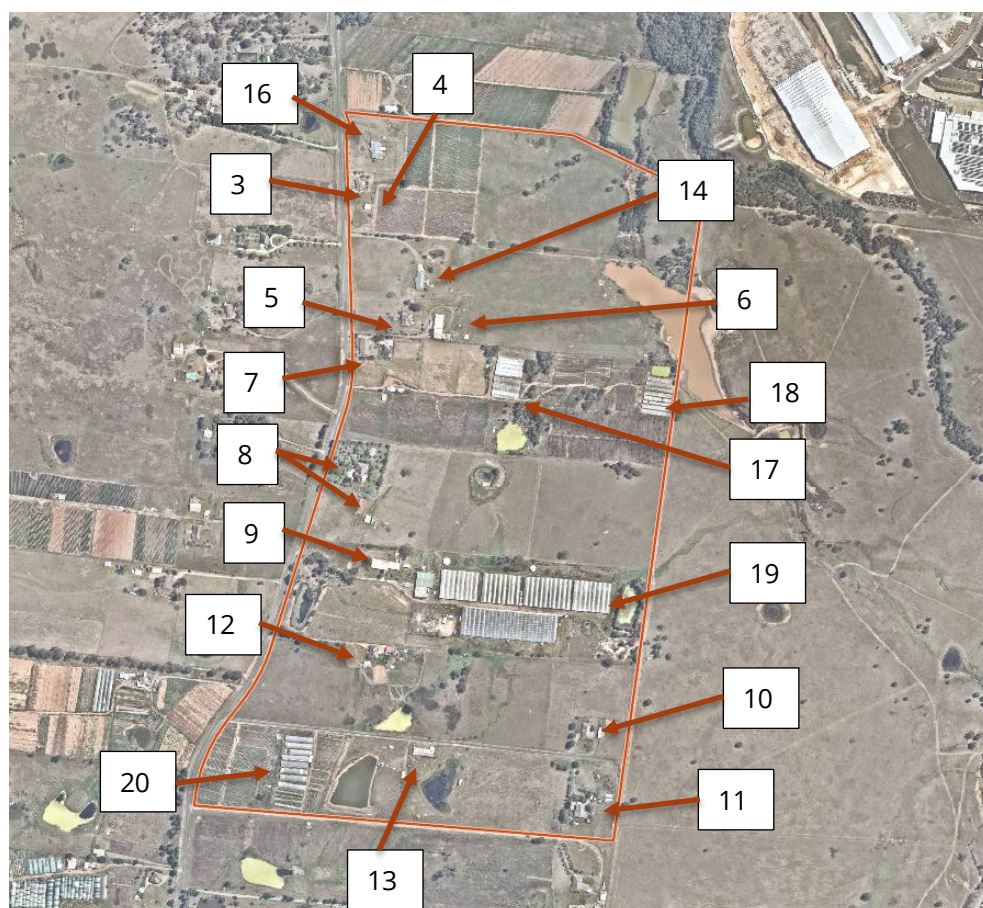


Photo 7 A current aerial photograph with the study area outlined in red (Source: Department of Customer Service)

3.4 Chronology of the study area

Based upon the historical research presented it is possible to summarise the chronology of the study area, this is presented in Table 2.

Table 2 Chronological development of the study area

No.	Building	Date
1	Transmission line	1963
2	Fence line	Pre 1970
3	Residential property in north-west	Pre 1986
4	Sheds associated with residential property in north-west	Pre 1986
5	Residential property in north west	Pre 1986
6	Large shed associated with residential property	Pre 1986
7	Residential property in central-west and associated structures	Pre 1986
8	Residential property in central-west and associated structures	Pre 1986
9	Residential property in central-west and associated structures	Pre 1986

No.	Building	Date
10	Residential property in south and associated structures	Pre 1986
11	Residential property in south and associated structures	Pre 1986
12	Residential property in south and associated structures	Pre 1986
13	Large shed in south	Pre 1986
14	Residential property in north-west	Pre 1998
15	Shed in central-south	Pre 1998
16	Residential property in north-west	Pre 2020
17	Hot house in centre	Pre 2020
18	Hot house in east	Pre 2020
19	Hot house in south-east	Pre 2020
20	Hot house in south-west	Pre 2020

3.5 Research themes

Contextual analysis is undertaken to place the history of a particular site within relevant historical contexts in order to gauge how typical or unique the history of a particular site actually is. This is usually ascertained by gaining an understanding of the history of a site in relation to the broad historical themes characterising Australia at the time. Such themes have been established by the Australian Heritage Commission and the Heritage Office and are outlined in synoptic form in Historical Themes.³⁶

There are 38 State historical themes, which have been developed for NSW, as well as nine National historical themes. These broader themes are usually referred to when developing sub-themes for a local area to ensure they complement the overall thematic framework for the broader region.

A review of the contextual history in conjunction with the local historical thematic history has identified two historical themes which relates to the occupational history of the study area.³⁷ This is summarised in Table 3.

Table 3 Identified historical themes for the study area

Australian theme	NSW theme	Local theme
Developing local, regional and national economies	Agriculture	Activities relating to the cultivation and rearing of plant and animal species, usually for commercial purposes, can include aquaculture
Developing Australia's cultural life	Domestic life	Activities associated with creating, maintaining, living in and working around houses and institutions.

³⁶ NSW Heritage Council 2001

³⁷ Kass 2005

4 Physical inspection

A physical inspection of the study area was undertaken on 13 August 2020, attended by Biosis Archaeologist Mathew Smith. The principal aims of the survey were to identify heritage values associated with the study area; this included any heritage items and places (Heritage items can be buildings, structures, places, relics or other works of historical, aesthetic, social, technical/research or natural heritage significance. 'Places' include conservation areas, sites, precincts, gardens, landscapes and areas of archaeological potential).

4.1 Site setting

The study area consists of seven lots located across undulating hills and slopes which gradually descends towards unnamed tributaries of Ropes Creek in the north-east and Kemps Creek in the south. It is bordered on its west by Aldington Road, with alluvial flats to the east (Photo 8). The study area consists primarily of cleared paddocks, market gardens, and scattered residential dwellings. These residential dwellings are primarily located on the western side of the study area, near to road access, although two residential dwellings are located on the eastern boundary in the southern section of the study area. The study area appears to have been used primarily for grazing and agricultural practices, with sheep livestock, orcharding and market gardening observed (Photo 9).



Photo 8 East views from study area out across alluvial flats



Photo 9 Photo showing example of orcharding occurring in study area, photo facing east

4.2 Built fabric assessment

A number of modern structures and elements of the built environment were present within the study area, reflecting the relatively recent development of the study area. The primary built elements consisted of fronted brick veneer residential dwellings which are common across Western Sydney. Roofing styles were a mixture of hipped, gable and hip and gable combinations with roof cladding consisting of tiles primarily, although the most modern house in the study area displayed corrugated sheet roof cladding (Photo 10 and Photo 11).



Photo 10 Modern brick veneer house in the northern extent of the study area with gable sheet metal roof, photo facing east.



Photo 11 1970s hipped brick veneer house and shed in southern extent of the study area, photo facing south west

A number of sheds were present throughout the study area reflecting the semi-rural nature of land use. These sheds were primarily constructed of corrugated sheet metal and timber (Photo 12). The study area also featured temporary market garden structures showcasing the modern agricultural uses (Photo 13).



Photo 12 Modern corrugated steel farm shed, photo facing south east



Photo 13 Temporary market garden structures, photo facing south east

5 Archaeological assessment

The potential archaeological resource relates to the predicted level of preservation of archaeological resources within the study area. Archaeological potential is influenced by the geographical and topographical location, the level of development, subsequent impacts, levels of onsite fill and the factors influencing preservation such as soil type. An assessment of archaeological potential has been derived from the historical analysis undertaken during the preparation of this report.

5.1.1 Archaeological resource

The potential archaeological resource relates to the predicted level of preservation of archaeological resources within the study area. Archaeological potential is influenced by the geographical and topographical location, the level of development, subsequent impacts, levels of onsite fill and the factors influencing preservation such as soil type. An assessment of archaeological potential has been derived from the historical analysis undertaken during the preparation of this report.

Background research undertaken for the project did not identify any existing or potential heritage items within the study area. Review of Crown plans and aerial imagery indicated that no physical structures were constructed in the study area until after 1970, with the primary use up until then low intensity agricultural use. As a result the only potential archaeological resource in the area would be associated with the agricultural activities undertaken in the study area and could include fence lines and post holes, and agricultural marks such as plough lines.

The results of the field survey confirm this as built structures in the study area are typical of post 1970s brick veneer architecture that is common throughout Western Sydney. The study area has also been used for market gardens, orcharding and stock grazing continuously from the 1970 until the present, resulting in large areas of ground disturbance and removal of potential archaeological resources associated with agricultural uses.

5.1.2 Research potential

Archaeological research potential refers to the ability of archaeological evidence to provide information about a site that could not be derived from any other source and which contributes to the archaeological significance of that site. Archaeological research potential differs from archaeological potential in that the presence of an archaeological resource (i.e. archaeological potential) does not mean that it can provide any additional information that increases our understanding of a site or the past (i.e. archaeological research potential).

The research potential of a site is also affected by the integrity of the archaeological resource within a study area. If a site is disturbed, then vital contextual information that links material evidence to a stratigraphic sequence may be missing and it may be impossible to relate material evidence to activities on a site. This is generally held to reduce the ability of an archaeological site to answer research questions.

Assessment of the research potential of a site also relates to the level of existing documentation of a site and of the nature of the research done so far (the research framework), to produce a 'knowledge' pool to which research into archaeological remains can add.

Agriculture

Archaeological remains that may be present which fall under the research theme of agriculture include agricultural marks, such as plough lines and hoe marks, and post holes. While there may be multiple fence lines and post holes present due to the numerous subdivisions, it is unlikely these archaeological remains will contribute any information that is not already known about this area as these land divisions have been well documented on certificate of titles. The study area has also been used for market gardens and orchards since the 1970s resulting in significant disturbances across the study area.

Domestic life

The history of the study area indicates it was used primarily for agricultural purposes after the initial grant, going through several land holder changes until subdivision into 20 acre lots in the early 20th century. No residential development occurred in the study area until after 1970, by which time the lives of western Sydney residents were becoming well documented in newspapers and other historical sources. The residential buildings constructed in the study area are all still in use and represent the brick veneer house types common across western Sydney. The study area would therefore contribute no information that is not currently available.

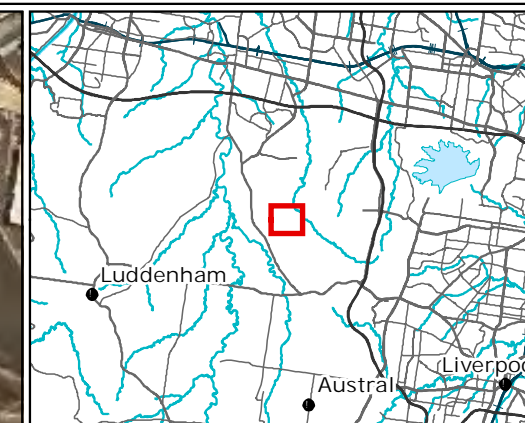
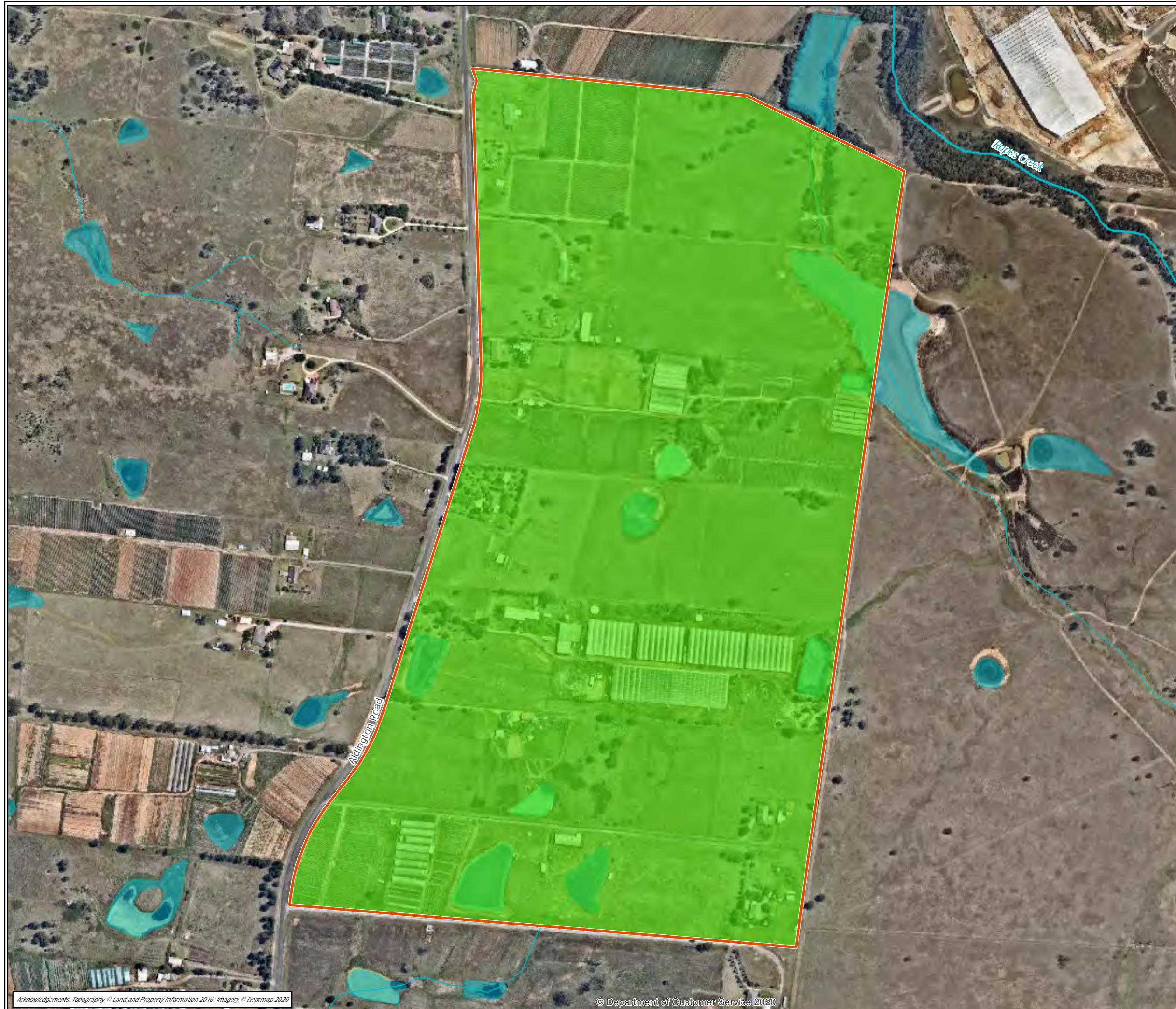
5.1.3 Summary of archaeological potential

Through an analysis of the above factors a number of assumptions have been made relating to the archaeological potential of the study area that is presented in Figure 5.

The assessment of archaeological potential has been divided into three categories:

- **High archaeological potential** – based upon the historical context and documentary evidence presented within this report there is a high degree of certainty that archaeologically significant remains relating to this period, theme or event will occur within the study area.
- **Moderate archaeological potential** – based upon the historical context and documentary evidence presented within this assessment it is probable that archaeological significant remains relating to this period, theme or event could be present within the study area.
- **Low archaeological potential** – based upon the historical context and documentary evidence presented within this assessment it is unlikely that archaeological significant remains relating to this period, theme or event will occur within the study area.

Based upon the historical context and documentary evidence presented within this assessment it is unlikely that the study area contains any archaeologically significant remains which have research potential. Therefore the archaeological potential of the study area is considered to be low.



Legend

Study area

Archaeological potential

Low

Figure 5 Assessment of archaeological potential

0 50 100 150 200 250
Metres

Scale: 1:5,000 @ A3
Coordinate System: GDA 1994 MGA Zone 56



Matter: 33680,
Date: 20 August 2020,
Checked by: ML, Drawn by: LW, Last edited by: lwilson
Location: P:\33600s\33680\Mapping\33680_F4_ArchPotent.mxd

6 Significance assessment

An assessment of heritage significance encompasses a range of heritage criteria and values. The heritage values of a site or place are broadly defined as the 'aesthetic, historic, scientific or social values for past, present or future generations.'³⁸ This means a place can have different levels of heritage value and significance to different groups of people.

The archaeological significance of a site is commonly assessed in terms of historical and scientific values, particularly by what a site can tell us about past lifestyles and people. There is an accepted procedure for determining the level of significance of an archaeological site.

A detailed set of criteria for assessing the State's cultural heritage was published by the (then) NSW Heritage Office. These criteria are divided into two categories: nature of significance, and comparative significance.

Heritage assessment criteria in NSW fall broadly within the four significance values outlined in the Burra Charter. The Burra Charter has been adopted by state and Commonwealth heritage agencies as the recognised document for guiding best practice for heritage practitioners in Australia. The four significance values are:

- Historical significance (evolution and association).
- Aesthetic significance (scenic/architectural qualities and creative accomplishment).
- Scientific significance (archaeological, industrial, educational, research potential and scientific significance values).
- Social significance (contemporary community esteem).

The NSW Heritage Office issued a more detailed set of assessment criteria to provide consistency with heritage agencies in other States and to avoid ambiguity and misinterpretation. These criteria are based on the Burra Charter. The following SHR criteria were gazetted following amendments to the Heritage Act that came into effect in April 1999:

- Criterion (a) - an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area).
- Criterion (b) - an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area).
- Criterion (c) - an item is important in demonstrating the aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).
- Criterion (d) - an item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.
- Criterion (e) - an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area).
- Criterion (f) - an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area).

³⁸ Heritage Office 2001

- Criterion (g) - an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural or natural environments; or a class of the local area's cultural or natural places; or cultural or natural environments.

6.1 Levels of heritage significance

Items, places, buildings, works, relics, movable objects or precincts can be of either local or state heritage significance, or have both local and state heritage significance. Places can have different values to different people or groups.

Local heritage items

Local heritage items are those of significance to the local government area. In other words, they contribute to the individuality and streetscape, townscape, landscape or natural character of an area and are irreplaceable parts of its environmental heritage. They may have greater value to members of the local community, who regularly engage with these places and/or consider them to be an important part of their day-to-day life and their identity. Collectively, such items reflect the socio-economic and natural history of a local area. Items of local heritage significance form an integral part of the State's environmental heritage.

State heritage items

State heritage items, places, buildings, works, relics, movable objects or precincts of state heritage significance include those items of special interest in the state context. They form an irreplaceable part of the environmental heritage of NSW and must have some connection or association with the state in its widest sense.

The following evaluation attempts to identify the cultural significance of the study area. This significance is based on the assumption that the site contains intact or partially intact archaeological deposits.

6.2 Evaluation of significance

Criterion A: An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area).

Archaeological remains that may be present include fence post holes and agricultural marks. However, archaeological remains such as these are unlikely to be of importance in the pattern of NSW's cultural history.

The current structures in the study area are a combination of residential and rural (sheds etc.) which were constructed and altered post 1970s. Structures such as these are common throughout the Western Sydney region and the history does not indicate that they are particularly important in the course, or pattern, of NSW's cultural history.

The potential archaeological remains and built structures do not satisfy this criterion at a local or state level.

Criterion B: An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area).

The study area formed a part of the 1070 acre land grant to Nicolas Bayly in 1810, which was then acquired by Richard Jones in 1826 following Bayly's death. The land was then subdivided in 1891 but sales did not commence until the 1930s. The land was used for pastoral and agricultural uses; however there are no special associations relating to tenure of the land by Bayly, Jones or subsequent owners and the historical

research did not indicate the study area had any association with anyone of importance in NSW's cultural history, or the history of the local area.

The potential archaeological remains and built structures do not satisfy this criterion at a local or state level.

The study area does not satisfy this criterion at a local or state level.

Criteria C: An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).

Archaeological remains that may be present include fence post holes and agricultural marks. Archaeological remains such as these would not demonstrate aesthetic characteristics of a high degree of creative or technical achievement in NSW or the local area.

The current structures in the study area are a combination of residential and rural (sheds etc.) which were constructed and altered post 1970s. The majority of these are brick veneer houses and corrugated sheet metal sheds which do not demonstrate aesthetic characteristics and/or a high degree of creative or technical achievement in NSW.

The potential archaeological remains and built structures do not satisfy this criterion at a local or state level.

Criterion D: An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.

While no community consultation has been undertaken for this report, the history has not indicated that the potential archaeological remains or current structures would have an association with a particular community or cultural group in NSW or the local area.

The potential archaeological remains and built structures do not satisfy this criterion at a local or state level.

Criterion E: An item has the potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area).

Archaeological remains that may be present include fence post holes and agricultural marks. Archaeological remains such as these are not uncommon in a study area which has been used for agricultural purposes.

The current structures in the study area are a combination of residential and rural (sheds etc.) which were constructed and altered post 1970s. It is unlikely that these structures, which are still found throughout Western Sydney would have the potential to yield information that will contribute to an understanding of NSW's cultural or natural history.

The potential archaeological remains and built structures do not satisfy this criterion at a local or state level.

Criterion F: An item possesses uncommon, rare or endangered aspects of the area's cultural or natural history (or the cultural or natural history of the local area).

Archaeological remains that may be present include fence post holes and agricultural marks. Archaeological remains such as these are not uncommon in a study area which has been used for agricultural purposes.

The current structures in the study area are a combination of residential and rural (sheds etc.) which were constructed and altered post 1970s. Structures such as these are common throughout the Western Sydney region and are not uncommon, rare or endangered aspects of the area's cultural or natural history.

The potential archaeological remains and built structures do not satisfy this criterion at a local or state level.

Criterion G: An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places, or cultural or natural environments (or a class of the local area's cultural or natural places, or cultural or natural environments).

The history has not indicated that the types of archaeological remains present across the study area or current built structures within the study area would be important in demonstrating the principal characteristics of a class of NSW's cultural places or environments.

The potential archaeological remains and built structures do not satisfy this criterion at a local or state level.

6.1 Statement of significance

6.1.1 Statement of significance

Based upon the evaluation criteria outlined above the following statement of significance has been formulated for the study area:

The study area forms a small part (80 acres) of the larger 1070 acre land grant given to Nicholas Bayly in 1810. Following Nicholas Bayly's death in 1823, the study area was then acquired by Richard Jones in 1826, and became known as Fleurs Estate. No evidence has been uncovered that the study area was used by Bayly or Jones for any specific purpose; however it is likely that it was used for farming and/or grazing purposes.

The land was subdivided into 20 acre farms in 1891, with sales beginning in the 1930s. From this point, the study area was likely utilized for grazing purposes, but it was not until after 1970 that scattered residential development occurred in the study area, resulting in intense market garden farming and orcharding.

This assessment has not revealed any evidence of items, activities, or events occurring within the study area which are historically significant, either to the local area or NSW. Archaeological remains that may be present within the study area are likely to include fence post holes and agricultural marks which hold no research potential and are unlikely to provide information that is of importance in the pattern of NSW's cultural history at a state or local level. The study area is not associated with a significant figure or community group within the local area and possesses low aesthetic value.

7 Conclusions and recommendations

7.1 Conclusions

The study area formed a part of an initial land grant to Nicolas Bayly in 1810, which was then acquired by Richard Jones in 1826 following Bayly's death. The land was then subdivided in 1891 but sales did not commence until the 1930s. The land was likely used for pastoral and agricultural uses in this time, but no residential structures were constructed in the study area until after the 1970s. Following the residential development of the study area, intense orcharding and market gardening occurred resulting in large disturbances to the study area.

The potential archaeological remains in the study area are associated with agriculture and domestic themes. Archaeological evidence associated with this theme within the study area may include agricultural marks and post holes; although, the high levels of disturbance from the continuous use of the study area since the 1970s for market gardening makes it unlikely these remains will still be present in the study area.

The archaeological evidence associated with the domestic theme include current residential and rural structures such as sheds and houses. Historical research and a field survey have identified that these structures have been constructed post 1970s and are common element still present throughout the Western Sydney region. These structures would not contribute information that is not already available and are of low significance.

7.2 Recommendations

These recommendations have been formulated to respond to client requirements and the significance of the site. They are guided by the ICOMOS *Burra Charter* with the aim of doing as much as necessary to care for the place and make it useable and as little as possible to retain its cultural significance.³⁹

Recommendation 1: The proposed works may proceed with caution

There are no recorded items of heritage significance in or adjacent to the study area. Works can proceed in the study area with caution as it has been assessed as possessing low archaeological potential. Should unexpected archaeological remains be uncovered during the course of the proposed works, Recommendation 2 should be implemented.

Recommendation 2: Discovery of unanticipated historical relics

Relics are historical archaeological resources of local or State significance and are protected in NSW under the Heritage Act. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated historical archaeology be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.

³⁹ Australia ICOMOS 2013

References

- Allen, J & O'Connell, J 2003, 'The long and the short of it: archaeological approaches to determining when humans first colonised Australia and New Guinea', *Australian Archaeology*, vol. 57, pp. 5–19.
- Attenbrow, V 2010, *Sydney's Aboriginal Past. Investigating the Archaeological and Historical Records*, 2nd edn, University of New South Wales Press Ltd, Sydney NSW.
- Australia ICOMOS 2013, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance*, Australia ICOMOS, Burwood, VIC.
- Clarkson, C et al. 2017, 'Human occupation of northern Australia by 65,000 years ago', *Nature*, vol. 547, no. 7663, p. 306.
- Dallas, M 1982, *An Archaeological Survey at Riverstone, Schofields and Quakers Hill, NSW*, Report prepared for the Land Commission of NSW.
- Fletcher, BH 1966, *Bayly, Nicholas (1770-1823)*, *Australian Dictionary of Biography*, viewed 8 November 2020, <<http://adb.anu.edu.au/biography/bayly-nicholas-1758>>.
- Heritage Office 2001, 'Assessing Heritage Significance', viewed 31 January 2018, <<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Heritage/assessing-heritage-significance.pdf>>.
- Jo McDonald Cultural Heritage Management Pty Ltd 2005a, *Archaeological Salvage Excavation of Site RTA-G1 109-113 George Street Parramatta, NSW*, Jo McDonald Cultural Heritage Management Pty Ltd. Report to Landcom.
- Jo McDonald Cultural Heritage Management Pty Ltd 2005b, *Archaeological Salvage Excavation of Site CG1 (NPWS #45-5-2648), at the corner of Charles and George Streets, Parramatta, NSW*, Jo McDonald Cultural Heritage Management Pty Ltd. Report prepared for Meriton Apartments Pty. Ltd.
- Kass, T 2005, *Western Sydney Thematic History. State Heritage Register Project*.
- 'Notification of Proposed Opening of Road' 1953, *Government Gazette of the State of New South Wales (Sydney, NSW: 1901-2001)*, viewed 8 November 2020, <<https://trove.nla.gov.au/newspaper/article/220015251?searchTerm=%22Littleham%20Pty%20Ltd%22>>.
- NPWS 2003, *The Bioregions of New South Wales: their biodiversity, conservation and history NSW National Parks and Wildlife Service. NSW National Parks and Wildlife Service, Hurstville*.
- NSW Heritage Branch, Department of Planning 2009, 'Assessing Significance for Historical Archaeological Sites and "Relics"', <<https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/ArchSignificance.pdf>>.
- NSW Heritage Council 2001, 'New South Wales Historical Themes', <<https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/themes2006.pdf>>.
- Oehm, A. 2006, *Wollondilly Local Government Area Thematic History*, Wollondilly Shire Council, Picton.

Paul Davies Pty Ltd 2007a, *Penrith Heritage Study. Volume 1: Study Report*, Prepared for Penrith City Council.

Paul Davies Pty Ltd 2007b, *Penrith Heritage Study. Volume 2: Thematic History*, Prepared for Penrith City Council.

'Registration of Brands Act of 1866' 1899, *NSW Government Gazette (Sydney, NSW: 1832-1900)*, viewed 8 November 2020,
<<https://trove.nla.gov.au/newspaper/article/221000160?searchTerm=%22Alfred%20Stanley%20Marks%22%20AND%20%22Littleham%22>>.

Richardson & Wrench & McCarron, Stewart & Co & Chatfield & Brown 1895, 'Subdivision of farm, orchard & dairy lands on the famous Fleurs Estate St Mary's for auction sale on the ground Saturday 23rd February at 1 o'clock', viewed 15 April 2019, <<http://nla.gov.au/nla.obj-230481253>>.

'Sheep Prices Down 5/- A Head At Homebush' 1954, *The Farmer and Settler (Sydney, NSW: 1906 - 1955)*, viewed 8 November 2020,
<<https://trove.nla.gov.au/newspaper/article/117084186?searchTerm=%22Littleham%20Pty%20Ltd%22>>.

Thorpe, W 1986, *The Penrith Heritage Study, the Historical Archaeology Component*, Report to Fox and Associates on behalf of Penrith City Council.