

Appendix L

Non-Aboriginal (historic) heritage assessment



**TOWNSON ROAD UPGRADE STAGE 2
BETWEEN JERSEY ROAD AND BURDEKIN ROAD**

Non-Aboriginal Heritage Assessment

Prepared for GHD on behalf of Transport for NSW

Blacktown Local Government Area

June 2021

Ref. 1814

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1 Introduction

1.1 Project background

A four-lane divided road is proposed along the Townson Road/Burdekin Road corridor linking Richmond Road, Marsden Park in the west with Burdekin Road, Schofields in the east. The length of the overall program of work is about 3.6 kilometres.

The overall program of work consists of two stages:

- Stage 1 involves an upgrade of about 1.6 kilometres of road extending from Richmond Road to south of Jersey Road. This stage is being delivered within an interim and final phase, subject to a separate planning approval
- Stage 2 is about 2.0 kilometres in length involving the construction of a new road between the Stage 1 tie-in and Burdekin Road (referred to as 'the proposal' for the purposes of this assessment).

The proposal is located within the North West Growth Area which is about 37 kilometres north-west of the Sydney central business district and 3 kilometres west of Schofields. The proposal is situated between the Marsden Park Industrial and West Schofields precincts, extending into Alex Avenue precinct at its eastern end.

The roads authority is the proponent of the proposal, and an environmental assessment in the form of a Review of Environmental Factors (REF) is being prepared in accordance with the requirements of Division 5.1 of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act). Transport for NSW has prepared the concept design and BCC will prepare the detailed design and will construct the proposal. GHD on behalf of Transport for NSW (TfNSW) engaged Kelleher Nightingale Consulting Pty Ltd (KNC) to undertake a non-Aboriginal (historical) heritage assessment for the proposal to inform the REF.

1.2 Outline of the proposal

The 'study area' for this assessment comprises the construction footprint of the proposal, as shown in Figures 1 and 2. Figure 3 shows the key features of the proposal, which includes:

- Constructing a new median separated dual carriageway through greenfield sites that is approximately 2.0 km in length connecting Stage 1 in the west with Burdekin Road in the east;
- Constructing a 300 metre long viaduct over Eastern Creek;
- Providing a signalised intersection at Veron Road with pedestrian crossing facilities;
- Providing a 2.5 metre wide shared path for pedestrians and cyclists on the southern side of the carriageway up to Veron Road, then 1.5 metre footpath to Burdekin Road;
- Providing a 1.5 metre wide footpath on the northern side of the carriageway along the length of the proposal;
- Constructing a vehicular and pedestrian bridge over the western rail line with associated retaining walls and embankments before tying into Burdekin Road; and
- Railway Terrace would be terminated with a cul-de-sac

1.3 Assessment process

The heritage assessment has been designed to inform the planning and design process and identify potential non-Aboriginal heritage constraints associated with the lands where the proposed infrastructure will be installed. The scope of the non-Aboriginal heritage assessment included the following tasks:

- Undertake background research, including a search of statutory and non-statutory registers and review the available history of the study area and ascertain if any listed items may be impacted by proposed activities;
- Undertake inspection and assessment of the study area to determine whether any historic sites or places are located within or adjacent to the study area, to record any sites located and determine the potential for archaeological deposits to exist within the study area;
- Assess the impact of the proposal on the cultural heritage significance of the study area; and
- Provide management recommendations to avoid, minimise or mitigate against impacts to any identified cultural heritage values of the study area.

1.4 Summary of findings

There are no historical (non-Aboriginal) heritage items listed on statutory heritage registers or planning instruments (both active and repealed) within the study area. No historical heritage items, relics or sites were identified within the study area during this assessment.

Previous assessment for the West Schofields Precinct identified one area of archaeological potential associated with the former Pye cottage, northwest of the Kerry Road/Jersey Road intersection. This area is described in the draft Schedule 9 (West Schofields) amendment to the BCC Growth Centre Precincts DCP 2018 as “moderate potential to contain archaeological heritage”, however this is not a statutorily listed item. Further assessment for the current proposal determined that this portion of the study area has been subject to a long history of land use disturbance associated with agricultural practices and flooding. Low archaeological potential exists for fragmented and disturbed fabric/material subsurface remains associated with the cottage site. If remains are present, these would be of local heritage significance.

The remainder of the study area displayed minimal to nil potential for non-Aboriginal historical heritage items or subsurface archaeology to be present. No heritage items, fabric/materials or areas of archaeological potential were identified during background research or the site inspection. The western part of the study area, west of Eastern Creek, retains a low level of local heritage significance due to its contribution to the historical, aesthetic and increasingly rare semi-rural character of the local landscape.

The rapid urbanisation of Schofields and surrounding suburbs now represents another phase of the evolution of the landscape of north western Sydney. The low level of local heritage significance ascribed to the general landscape values of the study area does not preclude the construction and installation of the Stage 2 proposal as it would have a negligible impact on the identified low significance heritage values.

There are therefore no identified constraints to the Stage 2 proposal on non-Aboriginal heritage grounds and the works may proceed with caution. Should any items be located during construction of the proposed infrastructure that meet or have the potential to meet the definition of relics under the NSW *Heritage Act 1977*, the TfNSW *Standard Management Procedure – Unexpected Heritage Items* (Roads and Maritime 2015) should be employed. Advice should be sought from a suitably qualified and experienced archaeologist on how to proceed.

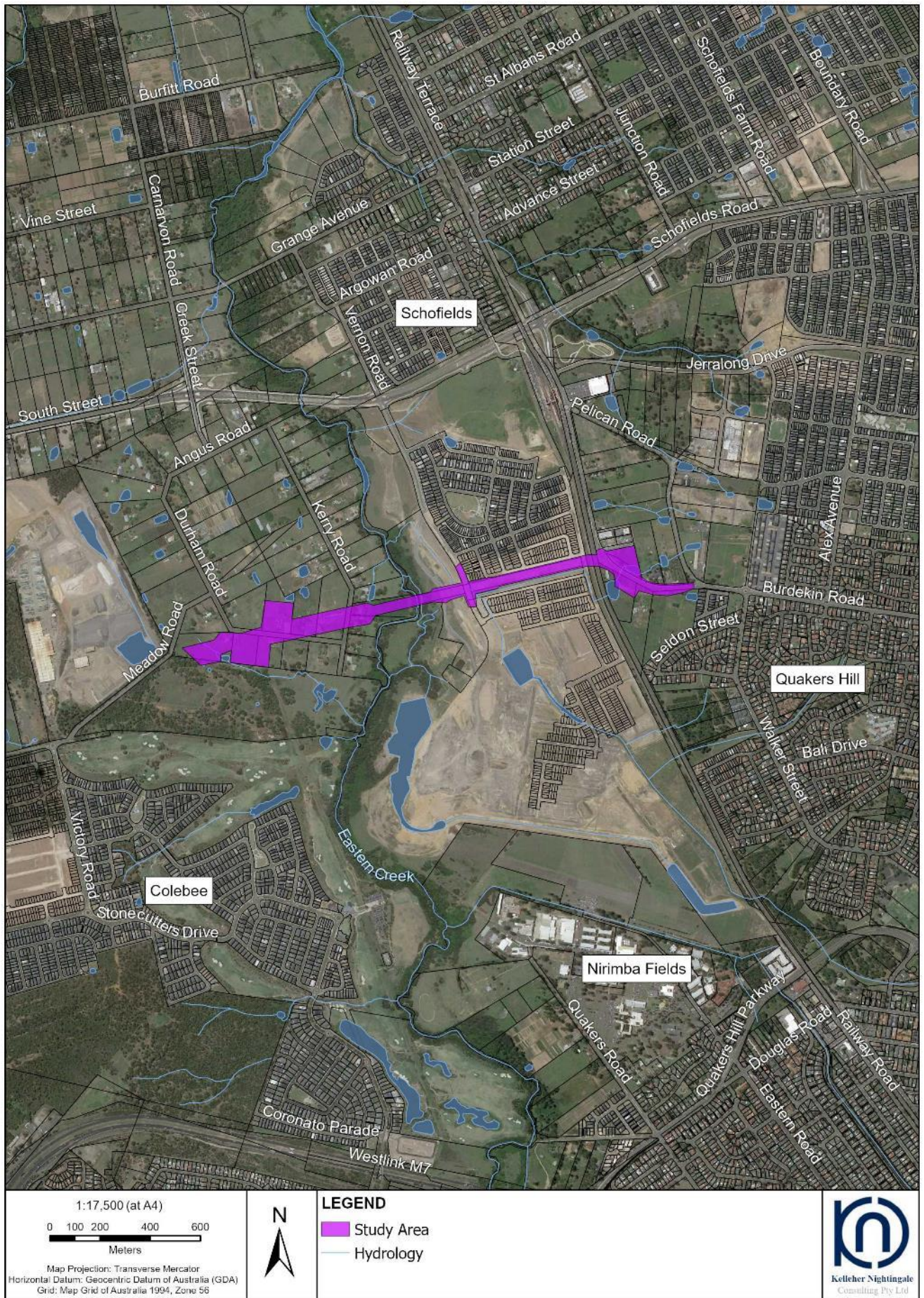
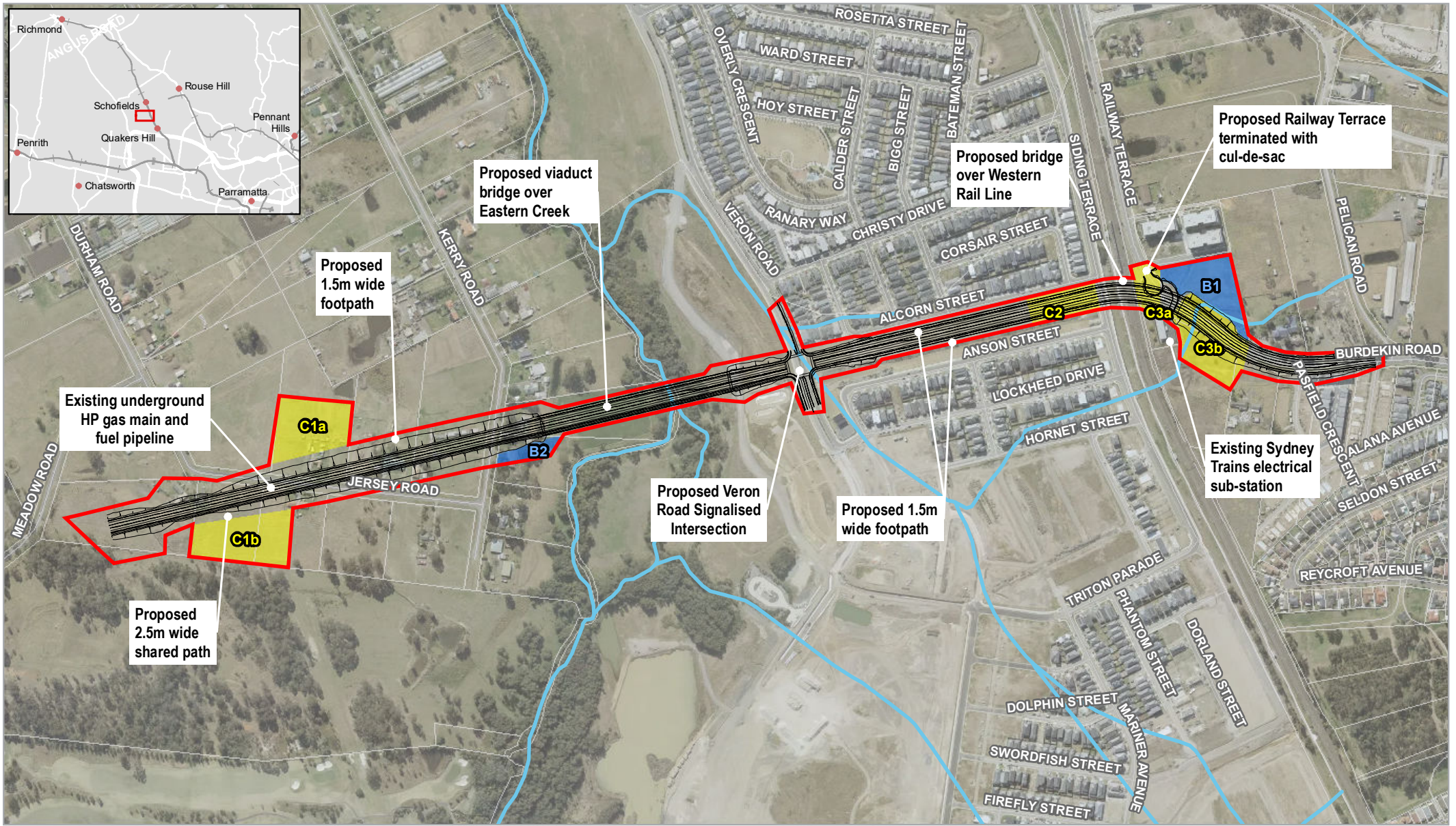


Figure 1. Study area location and overview

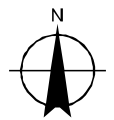
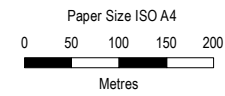


Figure 2. Detail of the study area



LEGEND

- The proposal **Subject to detailed design*
- Construction footprint
- Compound site
- Drainage basin
- Watercourse
- Cadastre



Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 56



Transport for NSW
 Townson Road Upgrade Stage 2
 Burdekin Road
 Noise and Vibration Impact Assessment

Project No. 21-12511195
 Revision No. -
 Date 28/10/2021

The Stage 2 Proposal

FIGURE 3

2 Legislative Requirements

2.1 Heritage Act 1977

Places of heritage value can be subject to different levels of recognition and protection. This protection (at local, State and Commonwealth levels) includes specific measures for the protection of heritage items. The NSW *Heritage Act 1977* (as amended 2009) is the primary statutory control dealing with non-Aboriginal heritage within the study area. The following sections of the Act must be considered in relation to any development having the potential to harm items of historic heritage.

Section 31 of the Act provides that a State Heritage Register (SHR) is to be maintained by the Heritage Council of NSW. Items can only be listed or removed at the direction of the Minister. Under section 57(1) a person must not harm a place, building, work, relic, moveable object, precinct, or land listed on the SHR without the approval of the Heritage Council of NSW.

No SHR listed items are located within or in the immediate vicinity of the study area, therefore Section 57(1) does not apply in this instance.

Section 4(1) of the Act defines *harm* to include *damage, despoil, move or alter* a relic or moveable object. A *relic* is defined in the Act as follows:

“relic means any deposit, artefact, object or material evidence that: relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and is of State or local heritage significance”.

Under section 139 of the Act, a person may not disturb or excavate land to discover, expose, move, damage or destroy a relic unless the disturbance or excavation is carried out in accordance with an excavation permit issued under section 140 of the Act. In addition, a person must not disturb or excavate any land on which a relic has been discovered or exposed except in accordance with an excavation permit.

Where archaeological relics would be disturbed, Heritage NSW (formerly the Office of Environment and Heritage (OEH), Heritage Division) requires an archaeological assessment and research design to be submitted when applying for a section 140 permit. The research design, prepared by the archaeologist undertaking the works, should clearly set out the approach and methodology for managing the archaeological deposits.

2.1 Blacktown Local Environment Plan 2015

Heritage items are protected under the provisions of the Blacktown Local Environment Plan (LEP) (2015). Part 5 Clause 5.10 lists the actions which require development consent from Council. Heritage items and archaeological sites are listed in Schedule 5 to the LEP.

There are no heritage items identified in Schedule 5 that are located within or immediately adjacent to the study area.

Under the Blacktown LEP 2015, development consent is required for works disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed.

2.2 Sydney Environmental Planning Policy (Sydney Region Growth Centres) 2006

The State Environmental Planning Policy (SEPP) is the environmental planning instrument which sets controls for the North West, South West and the Wilton Growth Centres of Sydney. The SEPP contains a number of precinct plans referring to particular areas. The study area is located within the North West Growth Centre, within the Schofields, West Schofields and Alex Avenue Precincts.

Each Precinct Plan is included as an Appendix to the SEPP (note the West Schofields Precinct Plan is not finalised and has not yet been appended). Each Precinct Plan sets out requirements for consideration of heritage matters for development within the Precinct.

Part 5 Clause 5.10 in each Precinct Plan lists the actions which require development from a consent authority. Heritage assessment might be required from a consent authority for a land on which a heritage item is located, for land that is within the heritage conservation area, or for land that is within the vicinity of those lands. Heritage management document would assess the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.

Heritage items are listed and described in Schedule 5 of the Precinct Plans.

There are no heritage items identified in Schedule 5 of the Alex Avenue and Riverstone Precinct Plan 2010 (SEPP Appendix 4) that are located within or immediately adjacent to the study area.

There are no heritage items identified in the draft West Schofields Precinct (North West Growth Centre - Heritage Map) that are located within or immediately adjacent to the study area.

*There is one heritage item identified in Schedule 5 of the Schofields Precinct Plan 2012 (SEPP Appendix 7) that is located to the south of the study area. It is listed as **'Runway remnant'** associated with the former Schofields Aerodrome. The item is assessed as having local significance. [NB. This item has been destroyed and does not pose a constraint to the current project].*

Its location as originally mapped in the SEPP is given in Figure 4. The indicative location of the study area in relation to this heritage item is outlined in pink. The SEPP map does not reflect the item's destroyed status.

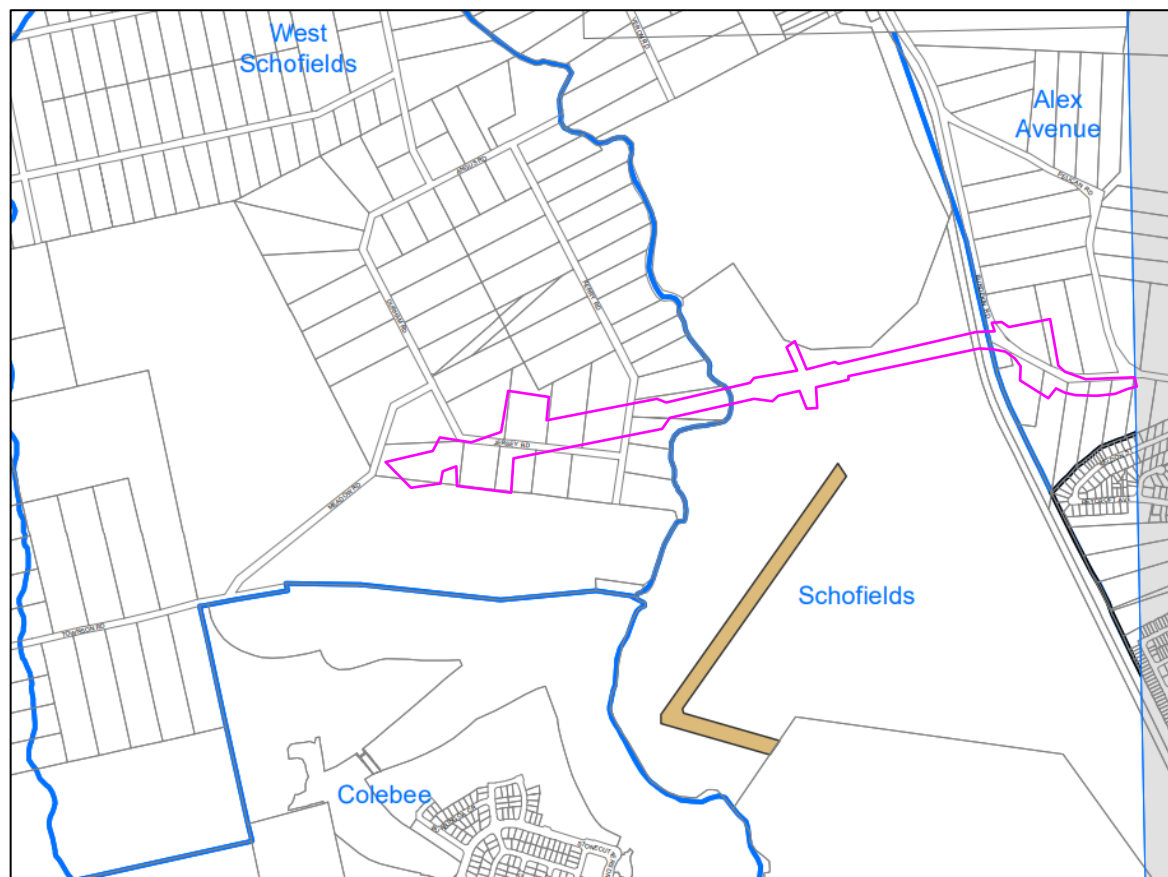


Figure 4. Non-indigenous heritage item, 'Runway remnant', (shown in light brown) as mapped in the SEPP (Sydney Region Growth Centres) 2006, North West Growth Centre Heritage Map Sheet HER_005

2.3 Blacktown City Council (BCC) Growth Centre Precincts Development Control (DCP) Plan 2010

The BCC Growth Centre DCP came into force in May 2010 and has been repeatedly amended in recent years. This DCP applies only to Precincts where precinct planning has been completed. Section 2.3.3 (5) of the DCP states that: "Applications for subdivision and building on the properties identified on the European cultural heritage sites figure, in the relevant Precinct's Schedule, are to be accompanied by a report from a suitably qualified heritage consultant detailing the results of archaeological investigation undertaken to confirm the presence of archaeological material relating to the heritage site. Where archaeological material is identified, the proposal is to address the requirements of the *Heritage Act 1977*."

The study area is located across two scheduled precincts, and one further precinct which has yet to be formally scheduled in an amendment but for which the draft schedule is now available:

- *Schedule 1 – Alex Avenue Precinct*; eastern section of the study area, located east of the Blacktown-Richmond Railway
- *Schedule 5 – Schofields Precinct*; middle section of the study area, located between the Blacktown-Richmond Railway and Eastern Creek

- *DRAFT Schedule 9 – West Schofields Precinct*; western section of the study area, from Eastern Creek to the study area’s western boundary.

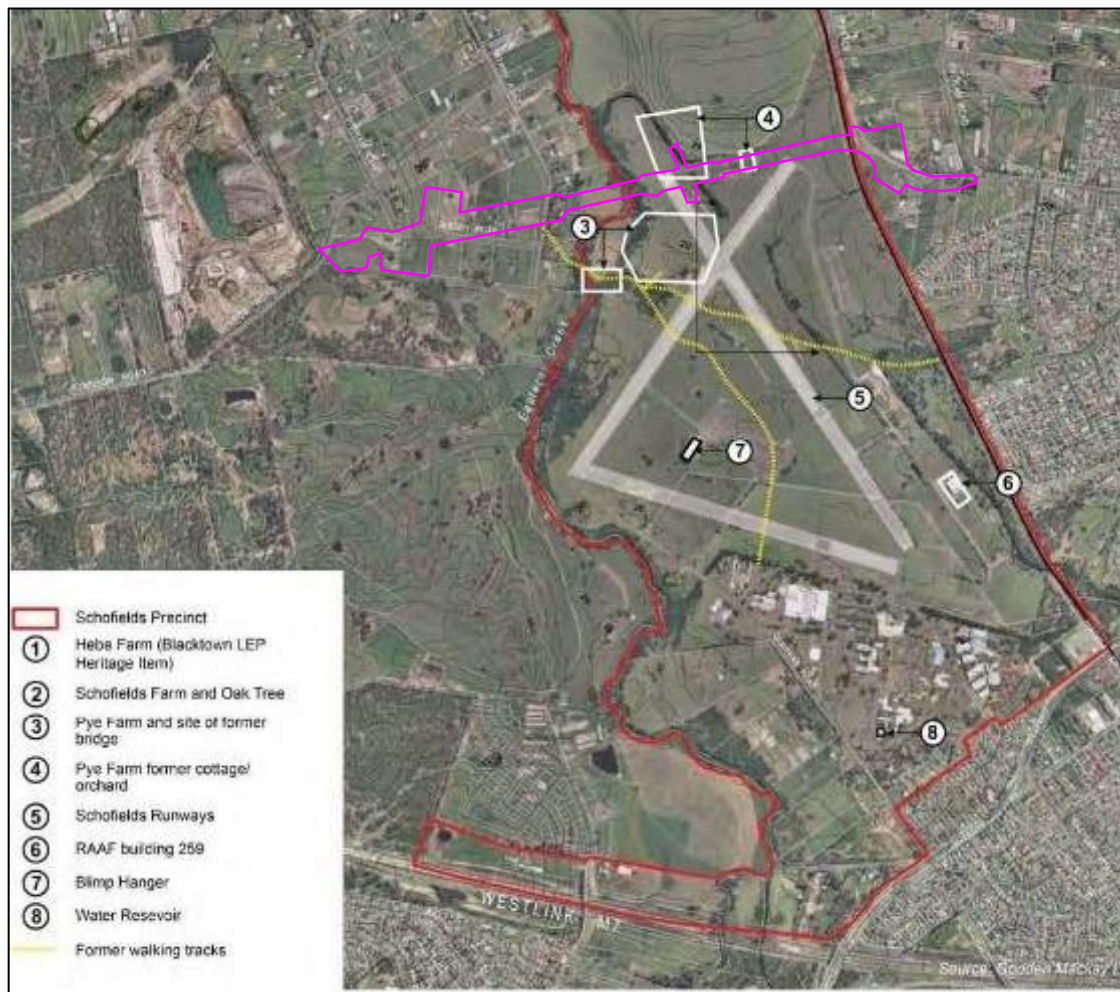


Figure 5. Non-indigenous heritage items listed on BCC Growth Centre DCP 2010, *Schedule 5 – Schofields Precinct*. Approximate location of the study area outlined in pink.

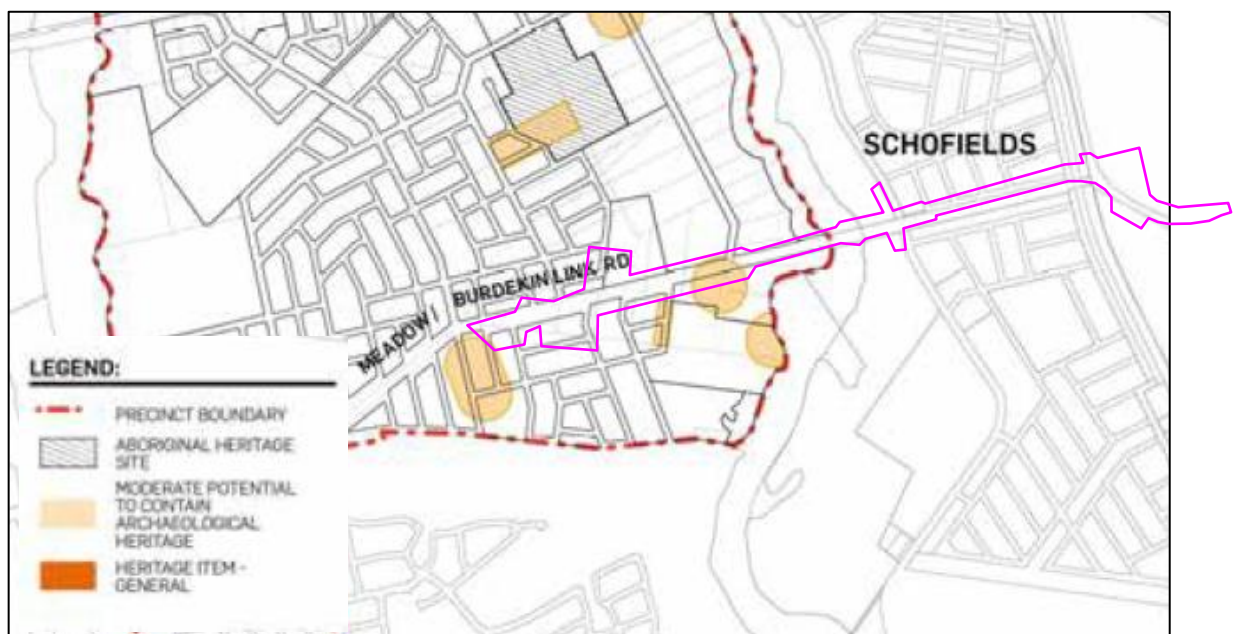


Figure 6. Non-indigenous cultural heritage described in BCC Growth Centre DCP 2010, *DRAFT Schedule 9 – West Schofields Precinct*. Approximate location of the study area outlined in pink.

There are no heritage items identified on Schedule 1 (Alex Avenue Precinct) that are located within or immediately adjacent to the study area.

There are three heritage items identified on Schedule 5 (Schofields Precinct) that are within or in proximity to the study area. These are shown on Figure 5, including item 4 ('Pye Farm former cottage/orchard'), item 5 ('Schofields Runways') and 'former walking tracks'. [NB. These items have been destroyed and do not pose a constraint to the current project. The BCC Growth Centre Precincts DCP Schedule 5 mapping does not reflect the items' destroyed status].

There are two heritage features/items identified on DRAFT Schedule 9 (West Schofields Precinct) that are within or in proximity to the study area. These are shown on Figure 6, and comprise two areas assessed as displaying 'moderate potential to contain archaeological heritage'. One is located around Kerry Road, north of the intersection with Jersey Road, and intersects the study area. The other is located south of Jersey Road within Lot 25 DP 12076 and does not intersect the study area.

2.4 Heritage Listings

Heritage registers, lists and databases (both statutory and non-statutory) and various Planning Instruments were searched for listed historical heritage items within or adjacent to the study area.

Sources included the following:

- UNESCO World Heritage List
- State Heritage Register
- State Heritage Inventory
- *Heritage Act 1977* Section 170 Heritage and Conservation Registers, including Transport for NSW, State Water, Water NSW, Department of Planning and Infrastructure, and Sydney Water
- Commonwealth Heritage List
- National Heritage List
- Australian Heritage Database
- Australian Heritage Places Inventory
- Register of the National Estate (non-statutory archive).

World Heritage List (UNESCO)

Currently there are no items listed on the World Heritage List within or adjacent to the study area.

State Heritage Register and State Heritage Inventory

Currently there are no items listed on the State Heritage Register (SHR) within or in the immediate vicinity of the study area. The closest item is The Colebee and Nurragingy Land Grant (approximately 1.5 kilometres south west of the study area), an Aboriginal post-contact site, SHR No. 01877.

Transport for NSW Section 170 Register

The Transport for NSW Section 170 Heritage and Conservation Register does not list any heritage items within or adjacent to the study area.

State Water Section 170 Register

The State Water section 170 Heritage and Conservation Register does not list any heritage items within or adjacent to the study area.

Water NSW Section 170 Register

The Water NSW section 170 Heritage and Conservation Register does not list any heritage items within or adjacent to the study area.

Department of Planning and Infrastructure Section 170 Register

The Department of Planning and Infrastructure section 170 Heritage and Conservation Register does not list any heritage items within or adjacent to the study area.

Sydney Water Section 170 Register

The Sydney Water section 170 Heritage and Conservation Register does not list any heritage items within or adjacent to the study area.

Commonwealth Heritage List

Currently there are no items listed on the Commonwealth Heritage List within or adjacent to the study area.

National Heritage List

Currently there are no items listed on the National Heritage List within or adjacent to the study area.

Australian Heritage Database, Australian Heritage Places Inventory and Register of the National Estate (non-statutory)

There is one indicative place listed on the Register of the National Estate (Non-statutory archive):

Schofields Aerodrome (former), Eastern Rd, Schofields, Place ID 103057

2.5 Summary

Based on the review of heritage listings, registers, and databases, the study area does not contain any listed heritage items protected under the *Heritage Act 1977* or the provisions of local planning instruments. Other heritage items/features within or in the vicinity of the study area are listed in Table 1 below.

Table 1. Identified non-Indigenous heritage items/features within or in proximity to the study area.

Name	Instrument	Item number/reference
Schofields Aerodrome (former)	Register of the National Estate (Indicative Place)	103057
Runway remnant	SEPP (Sydney Region Growth Centres) 2006, Appendix 7: Schofields Precinct Plan 2012, Schedule 5	N/A
Pye Farm former cottage / orchard	BCC Growth Centre DCP 2010, Schedule 5 – Schofields Precinct	4
Schofields Runways	BCC Growth Centre DCP 2010, Schedule 5 – Schofields Precinct	5
Former Walking Tracks	BCC Growth Centre DCP 2010, Schedule 5 – Schofields Precinct	N/A
Area with moderate potential to contain archaeological heritage	BCC Growth Centre DCP 2010, DRAFT Schedule 9 – West Schofields Precinct	N/A
Area with moderate potential to contain archaeological heritage	BCC Growth Centre DCP 2010, DRAFT Schedule 9 – West Schofields Precinct	N/A

3 Historical context and previous investigations

3.1 Early non-Aboriginal exploration and settlement of north-western Sydney

The study area lies within an area that was originally explored by Governor Arthur Philip in the first decade of settlement in order to establish if the Hawkesbury River connected with the Nepean River. The expedition, amongst others, included Lieutenant Tench, Surgeon White, servants, convicts, privates, sergeants and two Aboriginal guides: Colebee and Boladeree. A very rich agricultural land was unveiled with significant natural resources. A Common was set aside by Governor King in 1802 and was named 'Prospect Hill, including Toongabbee and the west side of Seven Hills Road', gazetted in August 1804. King established a total of six commons for public use in recognition of the difficulty the majority of smaller landowners were having in grazing stock on their own land which was proving insufficient for that purpose (Cole 1988:6). The actual boundaries of the Prospect Hill Common are not clear, but are considered to generally correspond to the present-day Blacktown municipal area.

Eastern Creek and Breakfast Creek would have provided permanent water for stock grazing, and a track that later became Schofields Road would have given access to the rich pasturage of the river swamps. This common land seems to have been used prior to Governor King's proclamation as a Government Stock Reserve (Schofield 1985: 230). In 1806, Governor Bligh sent out Government Surveyor James Meehan to survey the area around the eastern branch of South Creek that is today known as Eastern Creek. Meehan's surveys were later used as the basis for various land releases.

When Governor Macquarie arrived in the Colony in 1810 he made the decision to release large areas of not only the six commons established by King, but also substantial areas of government reservations, as there was an ever-increasing demand for land by free settlers and emancipated convicts wanting to settle within reach of the Sydney markets. The area of land upon which the study area is located was released at this time (Cole 1988). The majority of Governor Macquarie's disposed grants consisted of between 50 and 100 acres with some prominent persons close to the Governor gaining substantially larger grants, such as Maurice O'Connell's 'Riverstone' grant of 2500 acres to the north east of the current study area. Other land grants in the area were substantially smaller.

3.2 History and development of the study area

The study area is located across a number of these original land grants, generally between 50 and 100 acres in size and extending from 'Iron Bark Range' to present day Burdekin Road (Figure 7). It includes parts of the following Portions of the Gidley Parish Maps covered by the earliest land grants:

- William Bateman (alternatively Batman) – 60 acres (Portion 35)
- James Chisholm (alternatively Chisholme) – 150 acres (Portion 44)
- John Pye – 85 acres (Portion 45) and 300 acres (Portion 50).

These original land grants were made between 1815 and 1818. Some of the grant holders were ex-convicts, such as William Bateman, John Pye and Charles Ivory (who owned Portion 36 to the south of Bateman). Grants were conditional on the holders cultivating a certain number of acres, generally proportional to the size of the grant. Other land grants within the study area include 150 acres given to James Chisholm, ex-soldier, merchant, landowner and influential Sydney businessman. His property was named 'Calder Farm' after his birth place, Mid Calder in the Scottish Lowlands approximately 20km west of Edinburgh. South of Calder Farm, a series of grants were made to John Pye and his son Joseph Pye. The arrangement of these early land grants either along Richmond Road or along Eastern Creek resulted in a portion of unalienated land along the ridgeline between Bells Creek and Eastern Creek. This was referred to as Iron Bark Ridge or Range as shown on the Gidley Parish Map from the early 1800s (Figure 7).

The northern portion of the 'Iron Bark Range' parcel (145.2 acres) was promised to Charles Ivory in 1831 and granted in 1832. The southern portion was divided between James Roberts (Portion 30), and Joseph Pye (Portion 31). By the 1820's Joseph Pye was buying surrounding land, including Chisholm and Suttor's properties on either side of the existing Pye holdings east of Eastern Creek. The census of NSW from 1828 records that John Pye in conjunction with his son Joseph, ran 762 head of cattle, with Joseph's land coming to a total of 820 acres, located both east and west of Eastern Creek (Figure 8).

The smaller properties around Eastern Creek had mostly been consolidated into larger properties by 1842. These were all held by four individuals: Robert Fitzgerald, Joseph Pye, Charles Ivory and James Roberts. Figure 8 shows the extent of ownership across the study area and its immediate surroundings at this time. By this stage the precursor to Townson Road was formed, running east from Richmond Road along the boundaries of the land grants to Burbridge, Alcorn, James Roberts and Charles Ivory, with the alignment visible on early maps and plans.

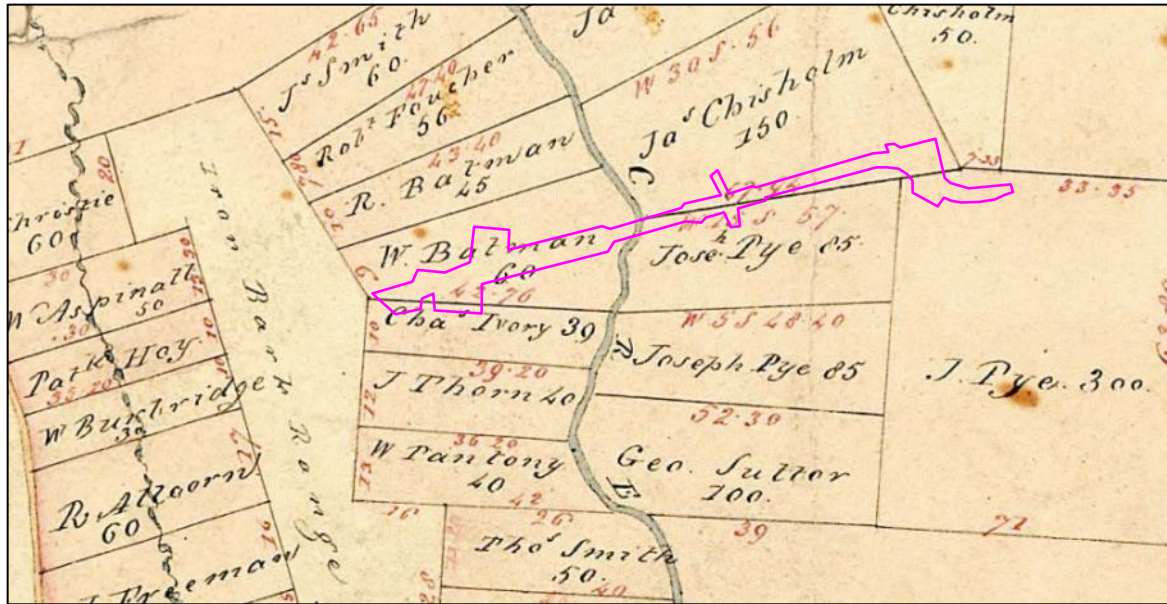


Figure 7. Parish Map of Gidley, County of Cumberland, 140755. LPI Historical Land Records Viewer. Approximate location of the study area outlined in pink

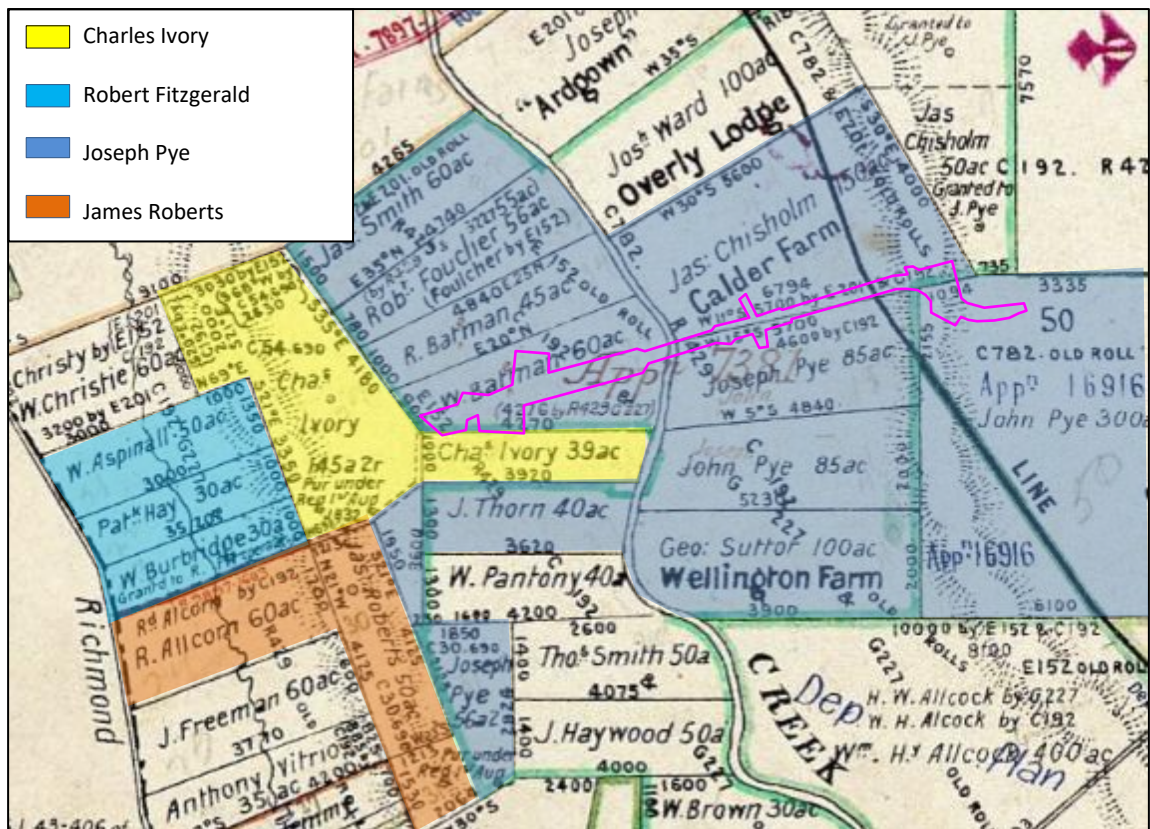


Figure 8. Parish Map of Gidley, County of Cumberland, from July 1884, 140686. LPI Historical Land Records Viewer. Consolidated land parcels during 1840s. Approximate location of the study area outlined in pink.

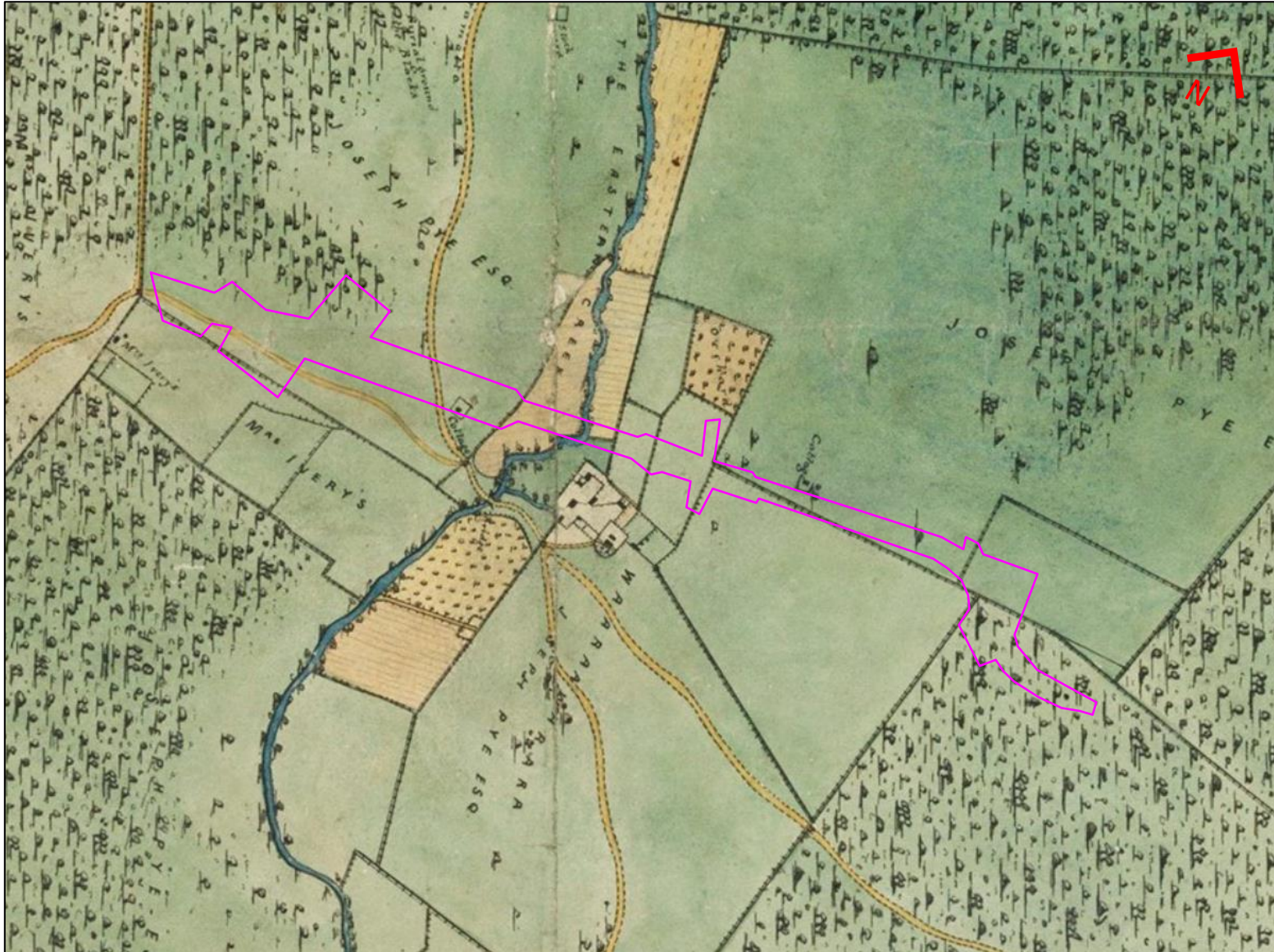


Figure 9. Detail from Musgrave's 1842 Plan showing Pye complex 'Waawaar Awa' at Eastern Creek.

Approximate location of study area outlined in pink. State Library of NSW, Mitchell Map Collection, Z/M4 811.1122/1842/1). NB. North to top right.

Joseph Pye was a successful farmer in the area who operated a dairy and an orchard on both sides of the Eastern Creek, as well as growing grain. He also bred and sold race horses and kept the first pack of foxhounds in Australia, with the Sydney Hunt Club running regular events on their land. Joseph Pye built a homestead on his property in the 1830's which he named 'Waawaar Awaa' after the Aboriginal Darug word for the area meaning 'fresh water'. It is unknown if the name derived from direct conversations with the local Darug people, but they would certainly have had interactions from the early days of the Pye family settlement. By 1825 the majority of the Pye's land had been cleared of vegetation leaving the land 'enclosed in paddocks, with a good garden, dwelling house, farm, out-houses and newly planted garden and orchard, of 5 acres' (*The Sydney Gazette and New South Wales Advertiser*, 7 November 1825, 4). The Waawaarawaa Homestead lay on the land that would be later part of the runway of the Schofields Aerodrome. It remained with the Pye family until 1938 and was also known by the name 'Liberty Hall' and 'Liberty Estate'.

The 1842 plan of Windsor by surveyor J. Musgrave shows the early development of the Pye farm complex (Figure 9). It shows the homestead complex, bridge crossing over Eastern Creek, and two areas planted as orchards, one to the north and the other to the immediate south of the homestead. Two small cottages are also visible, one to the south east of the northern orchard and the other on the western side of Eastern Creek. Areas along the Eastern Creek floodplain are shown as being planted with crops and cultivated, with the remainder of the area predominantly cleared. A network of roads and walking tracks is also visible, as are various fences, yards and land divisions.

Joseph Pye's orangery was highly celebrated and he won an award in 1845 at the Floral and Horticulture Show for his common and china oranges (*The Sydney Morning Herald*, 25 September 1845, p.3). The orangery was located about half a mile from the homestead, on an elevated area well sheltered from winds and comprised more than 20 acres in which 1,400 orange trees were planted (Archaeological and Heritage Management Solutions (AHMS) 2015a: 13). The system of cultivation relied on drain pipes in order to provide deep drainage; the pipes were most likely made of local clay and sourced from numerous Parramatta pipe industries. It is likely that original structures built by John and Joseph Pye were simple timber slab huts and barns, that would have been replaced and/or expanded over time. The entire farm property has been at the forefront of the growth and development of innovative agricultural practices including irrigation and cultivation. Also, the planting pattern used at the farm included fruit, vegetables and grains with some of the fields dedicated to stock, both in meat and dairy production and breeding (AHMS 2015a: 16).

The current study area passes across the northern extent of the Homestead, south of the northern orchard and its associated cottage. These areas correspond to heritage items 3 and 4 as mapped on the Schedule 5 – Schofields Precinct Heritage Map (BCC Growth Centre DCP 2010) and are shown in Figure 5 and listed in Table 1. The bridge across Eastern Creek and the walking tracks within the Schofields Precinct as shown on Musgrave's plan are south of the current study area boundary. West of Eastern Creek (within the West Schofields Precinct), Musgrave's 1842 plan indicates two structures associated with the Pye property. These include a cottage at the south-east end of the property, located within the current extent of the study area (Figure 9); and a stockyard a fair distance away to the north-west. Both structures were located on cleared land, with a narrow section of cultivated land along Eastern Creek. The cottage was located adjacent to one of the main 19th century road reserves designated as 'Wilmington to Parramatta'. The location of the cottage corresponds to the area identified as 'Moderate potential to contain archaeological heritage' around Kerry Road, as indicated on the DRAFT Schedule 9 – West Schofields Precinct Heritage Map (BCC Growth Centre DCP 2010) (Figure 6).

When Joseph Pye died in 1853 the property was inherited by his son, David, who ensured the Pye family remained well known and respected within their community. One of David's sons, Leslie Walter Pye was a well-known cricketer who was born in July 1871 at Waawaarawaa. He worked in Parramatta as a chemist, but was so successful in cricket that in 1906 he was described as 'one of the best colt batsmen in Australia' during the 1897-8 season (*The Sydney Mail and New South Wales Advertiser*, 3 January 1906, 36). In 1893 David Pye subdivided the land to three of his sons (Figure 10): Sydney George Pye inherited the Homestead which included the original grants to Joseph and John Pye and to George Suttor, as well as a portion of land on the east side of the railway; Charles Ward Pye received the land on the western side of the Eastern Creek; and James John Pye inherited the northern part of the property containing the original grants to Chisholm and Ward, plus a portion of the land to the east of the railway.

James John Pye became a District Councillor of Blacktown Shire, 'one of our most up to date farmers, and a public man', and also ran 'fine herd of buffalos' (bulls) on Waawaarawaa, 'the fame of which has spread throughout the length and breadth of the Commonwealth' (*The Cumberland Argus and Fruitgrowers Advocate*, 4 June 1910, 12). The Argus' reporter gives details about the fruits and animals produced on James' land and mentions also that:

"...The old homestead is on (Eastern) Creek, and is occupied by a brother, Mr S.G.Pye. The country in which the cattle run is mostly open, but it was originally forest, cleared by convicts... The herd numbers 90 heads, Mr James Pye uses the estate for other purposes than grazing, for he has three orchards, one of these being over 60 years... There are 50 acres under fruit, and I saw a fine crop of maize... The old homestead, on the creek, is on what is known as Cow Flat, where the original settler grew fine crops of wheat. After the wheat was off it was ground into flour on the place. The wheat paddock was a long strip, and this was afterwards loaned to Mr Thomas Ivory, the well-known breeder of race horses, to enable his horses to get water. Wheat is still grown..." (*The Cumberland Argus and Fruitgrowers Advocate*, 4 June 1910, 12).

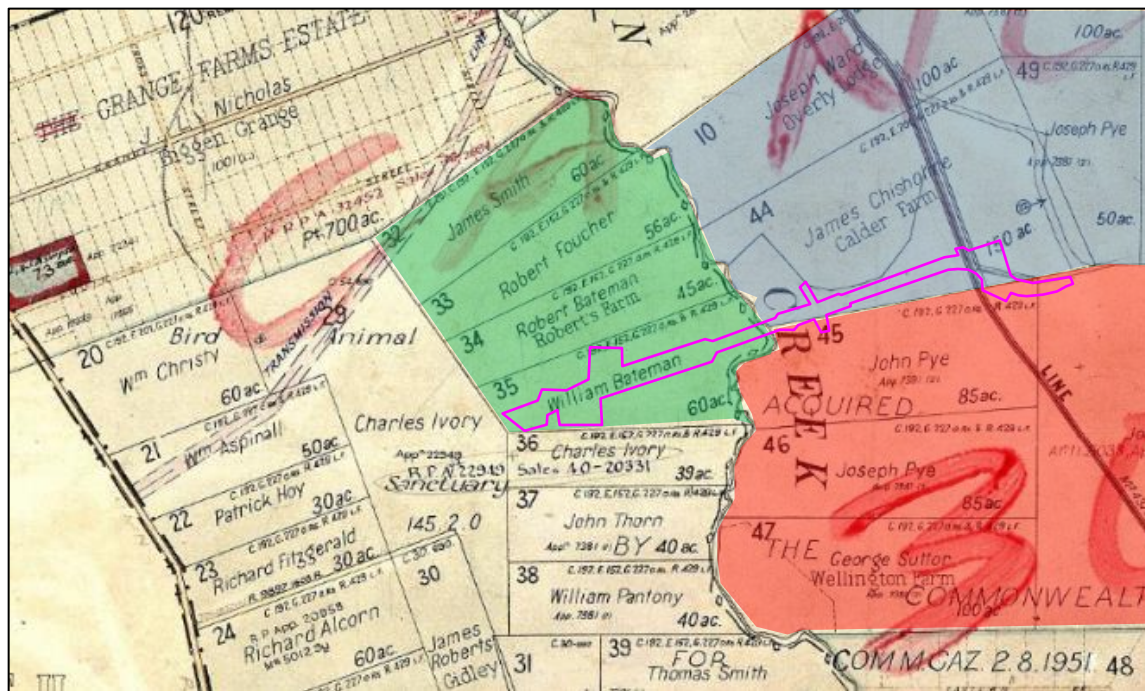


Figure 10. Parish Map of Gidley, County of Cumberland, from 1924, 140144. LPI Historical Land Records Viewer. David Pye's division of land between his three sons: James John Pye – shaded blue; Sydney George Pye – shaded red; and Charles Ward Pye – shaded green. Approximate location of the study area outlined in pink.

Waawaarawaa was one of the few original homesteads, including Jerusalem and Clydesdale, that still remained in the area in 1928 when George Reeve listed 'the old-time neighbours' of Windsor and Riverstone. In 1938 James Pye died and his aged brother Sydney George Pye inherited the land. Sydney put both farms on the market and sold to Joseph and Harold Langlade, who established 'Langlade's Dairy'. The Langlades held the dairy for four years only, constructing a number of dairy buildings near the old homestead in which they lived. The house remained in use until 1942 when it was demolished. It is considered that around this time the current small-lot subdivision was made, including the development of Jersey Road within the current study area and Angus Road to the north.

When World War II broke out in 1939, the Royal Australian Air Force (RAAF) began looking for suitable locations for satellite aerodromes. It was said that one of the pilots spotted the fields of the former Pye farm which was then Langdale's Dairy and landed there in 1941, taxied past some cows and up to the homestead Waawaarawaa to ask the then owners if they would like to sell the property, as it was an attractive place due to its flatness and proximity to the railway. The property was soon after commandeered by the government under the provision of the National Security (General) Regulations and later purchased by the Commonwealth Government in 1952. In June 1942 the land was cleared including the demolition of the homestead. The site became RAAF Station Schofields, an aerodrome used between 1942 and 1944. Further land was purchased by the Commonwealth Government south of the site and by September 1945 accommodation for 2000 Royal Navy personnel was constructed on this land. This area is located approximately 1km south of the current study area.

The northern part of James Pye's farm (Portion 44, James Chisholm's original grant), containing 144 acres was sold in 1947 to Douglas Lindsay, dairyman, who ran a dairy in the area. He ran four other dairies in the vicinity, with his Schofields dairy having 350 to 400 milking cows until the early 1980's. Lindsay did not live on site, but its buildings included two houses for the manager and workers. One was located near the gate constructed in the 1970's; the other one lay near the rear of the dairy. Both houses were located outside of the current study area, to the north, and have been since demolished. Other structures included a milking shed, hay and food sheds and a long undercover feeding shed all built throughout the 1970's.

In 1951 the Schofields Aerodrome came under control of the Royal Australian Navy and it was recommissioned as HMAS ALBATROS II, RANARY, Schofields; then in 1953 recommissioned again as HMAS NIRIMBA. It was downgraded from a Repair Yard to "Care and Maintenance" status in 1955, and then in 1956 it became a naval apprentice training ground. During the 1950's the base was also used as a racing circuit. Part of the disused portion of the airstrip was utilised in a 2.3 mile (3.7km) motor circuit which was eventually closed in 1958. The aerodrome was then operated as a civil airfield for many years. It was used by the Schofields Flying Club from 1975 to 1994. In 1986 Airships Pacific Limited built an especially large hangar for its Skyship 600-02, which was colloquially known as 'Bondy's Blimp' after its association with businessman Alan Bond. The HMAS NIRIMBA was officially decommissioned in December 1993 and the Schofields Aerodrome was closed for flying in 1994.

It was then leased for motor vehicle driver training, and some casual vehicle testing as well as used occasionally as a film/television shooting location. Schofields (then titled Schofields Defence Depot) last major use was as a rehearsal ground for the Opening Ceremony of the 2000 Olympic games held in Sydney. In 2008 the Schofields Aerodrome site was put up for sale. It had been unused for years and at the time of the sale it had a blimp hangar and a large sawtooth aircraft hangar, as well as two partial remnants of the three original runways. These remnants were included as the item 'Runway remnant' on the SEPP (Sydney Region Growth Centres) 2006 (Figure 4), with the full former runway extent included as item 5 'Schofields Runways' on the Schedule 5 – Schofields Precinct Heritage Map (BCC Growth Centre DCP 2010) (Figure 5). The northern portions of the former runways originally intersected the current study area.

3.3 Review of historical aerial photography

A review of historical aerial photos gives an indication of the changes to the study area through time, particularly in the more recent past. It helps to indicate what sort of land use practices have been taking place over the last six decades and the construction and demolition history of any structures present within the area. This may indicate whether structures that were present previously may still be present in a subsurface context, and whether traces of these survive. Plates 1-6 show a series of historical aerial photos of the study area between 1955 – 2004 (NSW Government Spatial Services 2021)

The 1955 aerial (Plate 1) shows that the entirety of the study area had been cleared by this time, with the exception of a small strip of thicker vegetation bordering Eastern Creek. Smaller subdivision of the original grants is evident and closely resembles the present-day lot layout. The majority of the area appears uncultivated and was likely used for grazing. Some small areas of cultivation are present in properties along Jersey Road. Visible features within the Schofields Aerodrome include the runways and several tracks/roads around the areas, with some small sheds south of a plane holding area leading to the runway. The majority of current roads were established by this time, including Meadow Road, Jersey Road, Kerry Road and Burdekin Road. The potential 'cottage' site west of Eastern Creek, as marked on Musgrave's 1842 plan, is under cultivation at this time and appears recently ploughed. Farm sheds and outbuildings have been constructed in the area and there does not appear to be a house or residential structure on the lot. An eroded area is visible between the cultivated paddock and Kerry Road. No physical remains or above-ground fabric of a former cottage or similar structure are visible on the area in the vicinity.

The 1966 aerial (Plate 2) shows further development of the area including the commencement of quarrying activity within the former 'Iron Bark Range' lots to the west (outside of current study area). Further development around Burdekin Road is also evident, with remaining regrowth vegetation having been cleared from grazing pastures and replaced by small-lot agriculture and market gardens. Additional earthworks are visible around the aerodrome, likely cut drains to improve drainage and control flooding around Eastern Creek. The properties west of Eastern Creek around Kerry Road and Jersey Road have been further developed, with additional structures evident including houses and sheds on the lots immediately adjoining Eastern Creek. The 'cottage' site has been subjected to additional clearing and possibly earthworks associated with the construction of two large shed structures (possibly poultry sheds) and an additional shed or enclosure to the north west. The small sheds present on the 1955 aerial have been demolished and the area comprises a large, eroded exposure, clearly visible on the aerial imagery. To the south are cultivated plots and a newly-built residential structure to the west corresponding to the position of the present day house on the lot. A small farm dam or soak is present between the cultivated paddocks and Kerry Road at the location of the formerly eroded area.

The 1975 aerial (Plate 3) shows further development of the properties between Kerry Road and Eastern Creek with construction of additional buildings and development of driveways/access tracks and new fencing. A third shed is visible at the 'cottage' site, west of and perpendicular to the larger northern shed. The small dam/soak near the road is no longer visible. Drainage earthworks are visible in the south western corner of the study area within Lot 28 DP 12076. Further to the west, expanded quarry operations are visible. At the eastern end of the study area, further vegetation clearing is visible around Burdekin Road but land use appears otherwise unchanged. By the 1986 aerial photograph (Plate 4), further development is also evident within Lot 1 DP 12076 with the construction of several buildings and sheds. Formal plantings around the residential structures along Jersey Road and Kerry Road are also well-established by this time and construction of additional buildings has taken place at the end of Kerry Road. North of Jersey Road, a trotting track or circuit has been created within Lot B DP 376106 and drainage earthworks are visible, associated with the construction of dams along the northern property boundary. The former cultivation paddock south of the sheds at the 'cottage site' shows signs of flooding, waterlogging and boggy conditions in the eastern part of the paddock fronting Kerry Road. This may have resulted from alteration of the small soak in this area which formerly controlled drainage.

The 1994 aerial (Plate 5) shows increased cultivation of the floodplain area between Kerry Road and Eastern Creek, with extensively planted paddocks. Construction of additional buildings and sealed tracks/driveways has also been undertaken. Within the Aerodrome, more tracks and buildings are also visible. At the eastern end of the study area, some large dams have been constructed along Burdekin Road. Earthworks and disturbance associated with construction of dirt bike tracks is visible within the former Ivory grant to the southwest of the study area. The extent of this disturbance is clearly visible on the following aerial photograph from 2004 (Plate 6). By this point, the southern shed structure at the 'cottage site' has fallen into disrepair/disuse with increased unmanaged vegetation growing around this area. The shed was demolished and the surrounding area stripped between 2006-2007. Modern aerial imagery shows frequent waterlogging/flooding within the former cultivation paddock to the south.



Plate 1. 1955 aerial photo (PENRITH 9030 Film 232, Run R13, Frame 5158)

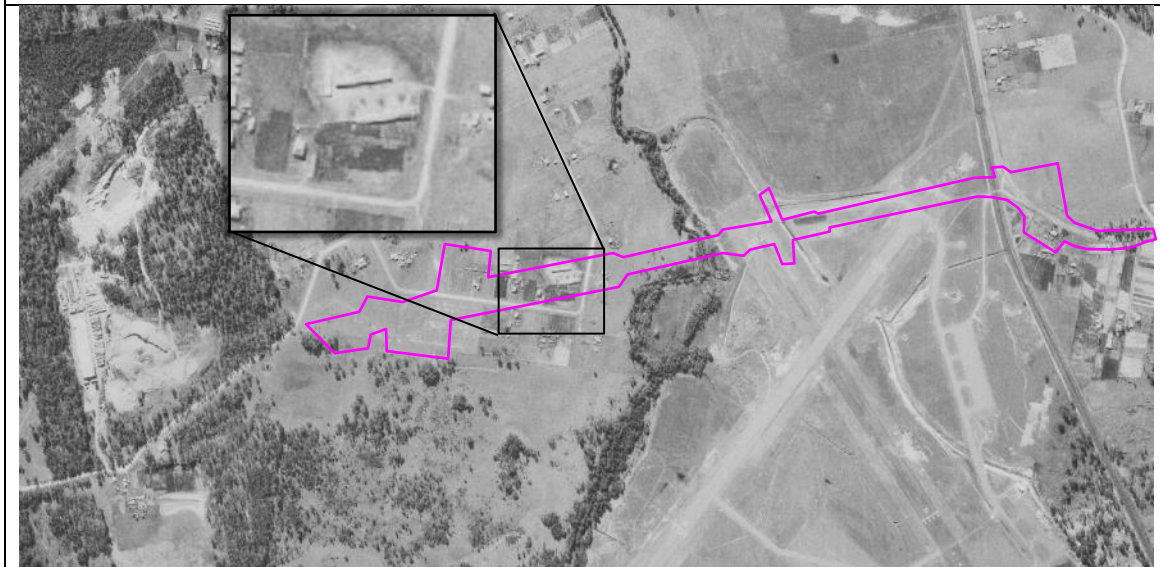


Plate 2. 1966 aerial photo (PENRITH 9030 Film 1460, Run R5W, Frame 5077). Inset shows 'cottage' site.



Plate 3. 1975 aerial photo (PENRITH 9030 Film 2326, Run R4, Frame 142)

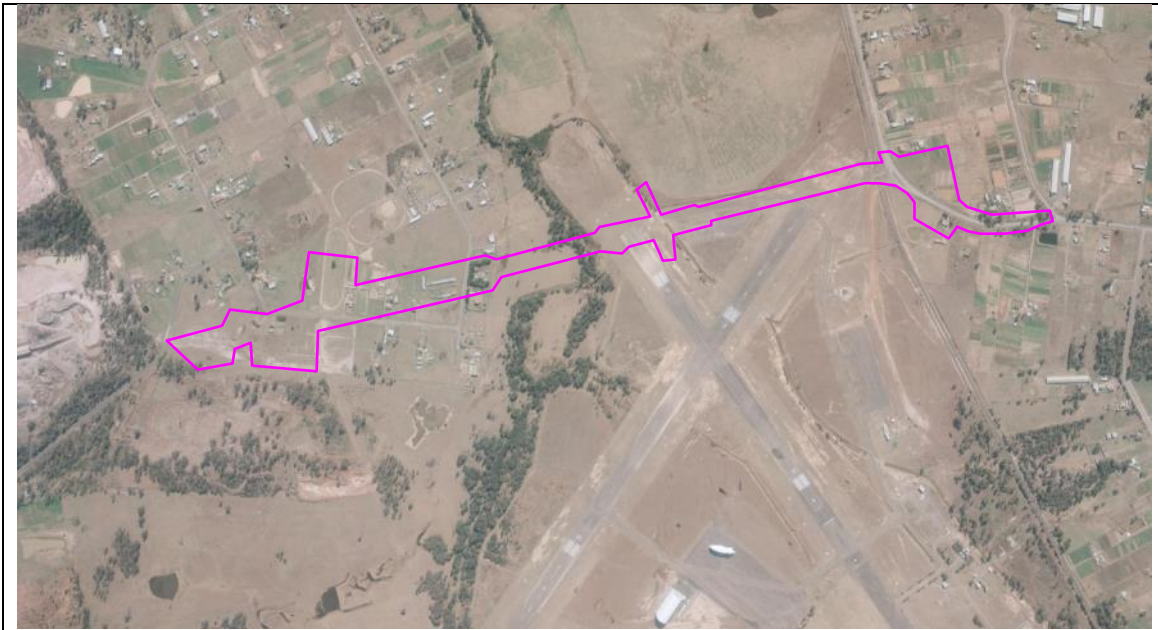


Plate 4. 1986 aerial photo (PENRITH 9130 Film 3534, Run R15, Frame 30)



Plate 5. 1994 aerial photo (PENRITH 9030 Film 4245, Run R6, Frame 83)



Plate 6. 2004 aerial photo (PENRITH 9030 Film 4836, Run R4, Frame 50)

3.4 Previous non-Aboriginal heritage assessments around the study area

The suburb of Schofields and adjacent suburbs Marsden Park, Nirimba Fields and Colebee are located within Sydney's North West Growth Centre. It is proposed that over the next 25-30 years, the North West Growth Centre will contain housing for 200,000 people with the construction of 70,000 new dwellings and the creation of associated employment lands, schools, shops, bushland, parks and new or upgraded infrastructure. The North West Growth Centre is approximately 10,000 hectares in size and includes parts of The Hills, Blacktown and Hawkesbury local government areas. It is divided into 16 precincts that are being progressively released and rezoned for sustainable urban development. The study area is located across three precincts: Alex Avenue Precinct includes the eastern section of the study area, located east of the Blacktown-Richmond Railway, Schofields Precinct includes the middle section of the study area between the Blacktown-Richmond Railway and Eastern Creek, and West Schofields Precinct includes the western section of the study area, from Eastern Creek to the study area's western boundary. Due to the rapid urbanisation and development of this area over the past two decades, there have been several heritage studies undertaken on lands within the growth centre and in the vicinity of the study area. These studies have provided a comprehensive resource for understanding the non-Aboriginal historical and archaeological context of the study area.

Marsden Park Industrial Precinct

GML was later commissioned in 2009 to prepare a preliminary non-Indigenous heritage assessment of the Marsden Park Industrial Precinct in order to identify and describe the cultural values of the precinct. The assessed area included the portion of Townson Road west of Bells Creek, west of the current study area. The assessment included desktop review, site survey and constraints and opportunities mapping with recommendations to protect any identified heritage items or values. No significant historical heritage items were located, and overall, the potential for archaeological resources to survive within the assessed area was considered to be low (GML 2009: 19). The only feature identified with a high degree of archaeological potential was the historical Richmond Road alignment corridor where associated features and artefacts might be unearthed during any subsurface works. It was recommended that a Heritage Impact Statement be prepared to consider potential archaeological impacts.

Schofields Precinct and Aerodrome

In 1997 Godden Mackay Logan (GML) prepared a heritage significance assessment for Schofields Aerodrome. It was stated that the site was the location of "Australia's only Royal Navy Air Base", finding that the aerodrome displayed "associations with the important developments of the Australian Navy and was part of a growing national commitment to self-sufficiency in defence capability in the years following World War II" (GML 1997: 4). The assessment identified that the site had social significance as a place which had important associations and memories for a large number of former military personnel who were stationed there or who were trained at the Apprentice Training Establishment. Moderate significance was given to the Airfield Runways, portions of which were formerly located within the current study area. This assessment did not address the potential archaeological remains associated with the Pye Farm as it was considered they were not located within the area of Schofields Aerodrome.

In 2011 GML undertook a non-Aboriginal heritage assessment of the Schofields Precinct for the NSW Department of Planning (GML 2011), incorporating the portion of the current study area between Eastern Creek and the Blacktown-Richmond Railway. The Schofields Precinct study area was approximately 424 hectares bounded by Hebe Farm to the north, the Richmond railway line to the east, Quakers Hill Parkway to the south east, the M7 motorway to the south west, and Eastern Creek to the west. The precinct was divided into several subdivision assessment areas. The current study area falls within The Dairy and the Schofields Aerodrome assessment areas (GML 2011: Figure 2.2). Several areas of archaeological potential were identified that related to different phases of historical development from the early 19th century.

The Former Dairy Farm originally made up the northern part of the former Pye farm and was later subdivided. Historical research and site inspection of the site by GML in 2011 confirmed that the remnant standing structures were in poor condition and did not possess any heritage significance. No other areas of archaeological potential were identified associated with The Dairy Farm (GML 2011: 71). A number of features within the Schofields Aerodrome assessment area were identified with particular significance to people who had past associations with the Schofields Aerodrome (social significance). The airport runways, which were intact, were early features that provided a very tangible connection with its former land use. They were prominent markers in the area and it was considered beneficial to the area if they were interpreted in a meaningful way. It was recommended that parts of the runway should be retained if possible, with the opportunity for the other parts of the runway to be incorporated in the planning of streets and open space. These conservation planning and interpretation actions would assist in the retention of associations with people who worked at the RAAF site and aerodrome.

The Pye Farm site was located within the Schofields Aerodrome assessment area (GML 2011: 72). The location of the homestead and farm represent the earliest phase of settlement in this area. It was considered that the Pye homestead archaeological site had the potential to contain subsurface cultural resources that would contribute towards our current understanding of the evolving cultural history of the local area, and to inform research into settlement in the early colonial period. It was recommended that if any development was to occur within the site of the homestead and other associated farm features, an archaeological impact assessment and research design for the complex would be required.

Defence Housing Australia commissioned Archaeological & Heritage Management Solutions (AHMS) in 2015 to prepare a Heritage Impact Statement for the initial stage earthworks associated with residential development of the former Schofields Aerodrome (AHMS 2015a). The assessed area encompasses the part of the current study area between Eastern Creek and the Blacktown-Richmond Railway. The assessment comprised background review and site survey. Potential heritage impact was addressed in relation to two main phases of historical occupation of the area: the Pye Farm; and the later Schofields Aerodrome and subsequent occupation. The location of the Pye homestead complex was considered to be outside and immediately adjacent to the development boundary. As such, the proposed development would not directly impact on the remains of the homestead complex (AHMS 2015a: 48). The cottage and the northern orchard shown on Musgrave's 1842 plan were located within the proposed development footprint, in the approximate alignment of a future road extension. Stripping of the topsoil was considered likely to result in the removal of any remains associated with the cottage and the orchard. The former roads/tracks were also largely covered by the development footprint, although the western end of the tracks and the bridge across Eastern Creek were outside of the proposed impact area. It was considered that the potential for archaeological remains associated with the tracks was minimal and negligible.

In relation to the Schofields Aerodrome phase of historical land use, three items were identified: RAAF building 259, the Airship Hangar and the Runways. The northern part of the runway alignment originally extended into the current study area. Proposed impact to the runways included bulk earthworks and cut/fill works. It was considered that removal of the runways would comprise the removal from the area of the last substantial feature associated with the development and occupation of the Schofields Aerodrome. Staging of further heritage investigation and mitigation was recommended as follows:

- Prior to commencement for the Stage 1 DA that would allow for cut/fill earthworks – Completion of archival heritage recording of the study area, as well as the Schofields Aerodrome runways; submission of excavation permit application in order to undertake archaeological excavations at the Pye Farm complex site.
- Prior to commencement of the Stage 2 development in the vicinity of the Pye homestead and orchards – Detailed survey of the Pye homestead and orchard locations; historical archaeological test excavations; test excavation analysis and reporting, and completion of an updated historical archaeological assessment; consideration of design and construction options to allow retention of significant historical archaeological remains, depending on the results of the updated assessment.
- Prior to design and construction of subsequent stages of redevelopment of the area – Detailed documentary research into the history of the study area; oral history program including interviews with descendants of the Pye family; and development of a heritage interpretation strategy.

Archaeological excavations and analysis was planned to allow for a revised assessment of the archaeological remains and detailed management recommendations once the extent of the archaeological resource was known.

During 2017 and 2018 GML completed test and salvage historical archaeological excavations to mitigate the impacts of development on three heritage items associated with the c.1820 homestead of the Pye family: the Cottage site – a rural 19th century cottage with evidence of brickmaking; the Orchard site - a purposefully planted orchard with the potential to contain evidence of early contact between local Aboriginal people and the Pye family; and the Homestead site – 'Waawaarawaa', the homestead built by the Pye family in 1825 with remaining evidence of outbuildings and landscape modifications. All works were completed in accordance with Excavation Permits issued under Section 141 of the *Heritage Act 1977*. A preliminary overview of the results prepared by GML (2018) indicated that a range of archaeological evidence was identified by the excavation program, including that associated with rural industry, early colonial lifeways, interaction between Aboriginal groups and European settlers, early modifications to the natural landscape and later military use of the site. Subsequent development of the Schofields precinct has destroyed these heritage items.

The eastern Cottage site, located within the extent of the current study area and shown on Musgrave's 1842 plan (Figure 9), contained evidence of early brick manufacture, a cottage, outbuildings and landscape features. The industrial landscape of brickmaking and habitation was clearly legible and provided insight into how the larger 'Waawaarawaa' estate site was established. The cottage itself appears to have been a one room timber structure with a brick hearth, with multiple phases of construction and repair. The cottage apparently existed on site from the 1820s, prior to brick manufacture, with the extensions made afterwards. Brick manufacture was likely established to enable construction of the Homestead and associated outbuildings. There is evidence of building up the terrain in order to improve drainage around the cottage and restabilise structural posts moved due to boggy conditions. It is possible that the cottage was occupied by the convict overseer, the brickmaker, a haired labourer or a tenant farmer. The absence of material culture post-dating 1850 suggests that it was abandoned by the mid-19th century and supports the notion that it was situated on a marginal, low-lying part of the land selected for its proximity to good quality brick-making clays near the waterway.

Archaeological excavations of the Homestead site revealed evidence of outbuildings and landscape elements associated with the occupation and use of Waawaarawaa. Further analysis of the recovered features and objects is currently being undertaken. Amongst other features, a stable/workshop, a brick hearth, a sandstock brick privy, and a large stone paved structure of undetermined function were excavated. Evidence of water management included a large concrete-rendered brick beehive cistern and an extensive network of drains and later pipes extending from it. Two garden plots

with a range of artefacts were recovered relating to various farming activities. A deposit of artefacts for the early 1940's was recovered at the north-west corner of the homestead, including date stamped institutional ironstone china, heavy gauge shell casings, belt buckles, ointment pots and a lead bullet, likely resulting from use of the site by the Royal Australian Air Force during World War II when tent camps were erected in order to accommodate the soldiers.

The Orchard site was located south west of the Homestead, corresponding to the southern orchard marked on Musgrave's 1842 plan. Archaeological excavations at this site provided possible evidence of early interactions between local Aboriginal groups and the Pye family as part of a broader contact period cultural landscape, including potentially Aboriginally-worked fragments of glass and ceramics. The results also provided evidence of early orcharding practice and possibly failure of some species. Root systems and boles were not extensive, and the lack of formal drainage works suggested the area was not cultivated as an orchard for long, perhaps with the focus shifting to the northern orchard near the Cottage site.

West Schofields Precinct and Townson Road Precinct

AHMS was commissioned in 2015 by the then Department of Planning and Environment to undertake an Aboriginal and Historic Heritage Gap Analysis of the two remaining unreleased North West Growth Centre precincts: Shanes Park and West Schofields (AHMS 2015b). The subject area encompassed the western portion of the current study area and stretched between Bells Creek and Eastern Creek. There were no listed historical items identified within the assessment area.

Further assessment was recommended at a number of localities across the West Schofields precinct that were identified from Musgrave's 1842 plan of the area. These included two locations in proximity to the current study area: Ivory Farm and associated potential horse stud and a cottage near present day Kerry Road. 'Ivory Farm' is located within Portion 36 (refer Figures 7-10), located to the south of the current study area. This potential heritage feature was assessed as part of the Townson Road Upgrade Stage 1 (refer KNC 2020) and does not extend within the current Stage 2 study area and proposed impact area. The cottage near present-day Kerry Road is the western cottage within the Pye property as indicated on Figure 9. While Musgrave's 1842 plan is not spatially accurate, the placement indicates the area identified by AHMS is most likely within the current study area.

Further assessment was recommended on a number of localities including 'Wilmington' a large estate associated with the Marsden and Betts families, the site of the early 19th century horse stud (Ivory's Farm), and several small cottages dating to between 1815 and 1840 (including Pye's cottage to the west of Eastern Creek and a farm building mapped to the south of Townson Road, west of the current study area). It was noted that the degree to which any of these elements survived in terms of physical or archaeological features was unknown and had not been demonstrated. Overall, the gap analysis indicated that further, detailed analysis of potential historic heritage sites identified by the study would help determine the appropriate management strategy for these locations.

Extent Heritage was subsequently engaged in 2018 to prepare a Non-Indigenous Heritage Assessment of the southern part of the West Schofields Precinct in preparation for the release of the land for development. The assessment area encompasses the western part of the current study area, ending at Eastern Creek. No previously identified heritage items were located within or in the vicinity of the assessed area. Site survey did not identify any above ground built heritage structures that would meet the criteria for heritage listing at state or local levels. The remaining evidence of significant historical phases was therefore considered to be limited to the subsurface archaeological record and to some degree the associated cultural landscape.

In general, it was considered that the assessment area had the potential to contain archaeological relics from the early colonial phases of settlement. The potential archaeology was considered likely to be marginal elements associated with agricultural and stock breeding activities and infrastructure such as footings for workers cottages, stockyards, enclosures, access roads and artefacts dating from the second quarter of the 19th century. Any identified historical archaeology was considered likely to display a local level of significance. The later land subdivision phases of the late 19th and early 20th century were found to be reflected in the small farm lot subdivisions and pastoral and agricultural uses. This period together with World War I and World War II veteran resettlement was assessed as having limited research potential and heritage value (Extent Heritage 2018).

In total, seven locations of historical archaeological potential were identified within the southern part of the West Schofields Precinct. These then became the areas identified as heritage features on the DRAFT Schedule 9 – West Schofields Precinct heritage map in the BCC Growth Centre DCP 2010 (shown in Figure 6). The current study area intersects the area of moderate potential associated with the Pye cottage around Kerry Road. This area was identified as an area of potential based on the position of the structures shown on Musgrave's 1842 plan. It was noted that the position was approximated to 150 metres given the inaccuracies of the 1842 plan. Potential historical archaeological relics and features associated with this area included possible physical remains of the pre-1842 cottage, associated with the Pye Estate and located near the 'Wilmington to Parramatta' road. This would include evidence of subsurface features such as wall foundations in the form of stone, brick or timber footings (depending on the type of material the structure was made of) and associated underfloor deposits; domestic and agricultural rubbish pits; drainage systems; a well;

cistern and cess-pit. The assessment noted that the cottage was demolished/removed sometime prior to 1947 given the absence of any physical remains or evidence on historical aerial photographs of the area. The assessment included a site inspection of the potential cottage location, with the following observations made (after Extent Heritage 2018:37):

- According to the overlay of the 1842 historic plan and the current aerial, the most likely location of the small cottage associated with the Pye Family's Estate is at or near the northern portion of a dwelling at 76 Kerry Road, located near the intersection of Kerry Road and Jersey Road.
- The possible site location is vacant land, separated from the rest of the property at 76 Kerry Road by a light double wire fence. The land is covered with dense grass, and no archaeological remains were observed.
- It is also possible that the cottage was located within the boundaries of 9 Jersey Road, which is located opposite 76 Kerry Road. The possible location also includes the vacant grassed yard of the property.

Other identified locations of archaeological potential in proximity to the current study area (refer Figure 6) included the location of the bridge over Eastern Creek as shown on the 1842 Musgrave plan, and a potential 19th century farm site at 20 Jersey Road (within Lot 25 DP 12076). Both are located outside the current study area. The bridge over Eastern Creek was considered likely to have been destroyed by flooding over the centuries but some archaeological potential was possible around the creekbanks. The potential 19th century farm site was identified based on the presence in historical aerials of a cottage, which was demolished some time after 2013, and tree plantings towards the rear (south) of the property. Assessment of the item ascribed it nil historical significance but noted that some archaeological remains were possible.

Taken together, the potential archaeological information within the West Schofields precinct was considered to be able to demonstrate practices relating to the settlement pattern of Schofields, and to supplement the existing knowledge of the local area. The study area was assessed as having various levels of archaeological potential ranging from nil to low and moderate, with a moderate research value. Therefore, the overall precinct was assessed to be archaeologically significant at a local level. It was noted however that the potential subsurface archaeological resource was likely to have been impacted by flooding from Eastern Creek. The development history of the study area also identified various levels of disturbance including land cultivation (orcharding, market gardening, stock breeding, etc), subdivision and infrastructure upgrades, quarrying and construction. This land use history has resulted in the modification of the original landscape and removal of all of the structures associated with the early grants. These processes have disturbed or removed evidence of the former buildings and enclosures. The same processes have likely affected any subsurface archaeological resource. The presence of well-preserved, legible archaeological remains would be required to contribute significantly to our existing understanding of the area's 19th century rural development.

Recommendations included further archaeological investigation within the identified areas of potential to establish whether archaeological deposit was present and, if so, its nature and significance. Results could then be used to formulate an appropriate archaeological management strategy for each site based on the extent, intactness/integrity and significance of any confirmed relics. The remainder of the West Schofields precinct was assessed as displaying low to nil potential to contain archaeological relics, with no further constraints to development. Various interpretive avenues were also recommended, including preservation in situ, display of artefacts, signage, 3D scanning and modelling, naming of streets and places with prominent landholders and horses (Extent Heritage 2018: 83). It was recommended that if any future ground disturbance works resulted in the discovery of potential archaeological remains, an unexpected finds procedure should be implemented including assessment by an archaeologist as to whether they were historical relics and if so their nature and significance.

NBRS + Partners carried out a heritage assessment and Statement of Heritage Impact in 2012 for the proposed rezoning application of the West Schofields (Townson Road) Precinct. The assessed area was located west of the current study area south of Townson Road, from Bells Creek to Victory Road. The precinct area was found to demonstrate property divisions dating to the 19th century and had been used for grazing since that time with little further development. Dams, tracks and fencing are standard agricultural infrastructure throughout NSW and were not considered to be of cultural or historical significance. The only building that was identified during the site survey was a 1920's bungalow located at 68 Townson Road. Assessment determined that the building was so extensively altered that it did not cross the threshold for cultural significance as a local heritage item (NBRS + Partners 2012: 28). It displayed poor integrity and had lost its original external fabric apart from its windows. It was determined that the proposed development of the area would not have an adverse heritage impact on the cultural heritage inventory of Blacktown. No mitigation measures were recommended.

Alex Avenue Precinct

ENSR Australia Pty Ltd undertook a historic heritage assessment for the Alex Avenue and Riverstone Precincts as part of the initial land release planning process (ENSR 2008). The assessment comprised a desktop study including review of previous investigations, environmental context, known archaeology of the region and an assessment of potential distribution patterning of heritage items within the landscape based on the local context. A field survey was then undertaken with three aims: ground-truthing the known heritage items within the assessment area, identification and recording of other sites with historic heritage value within the area, and an assessment of historical archaeological sensitivity.

The portion of the current study area extending into the Alex Avenue precinct was identified as forming part of early Parish of Gidley grants to James Chisholme (Portion 44, 'Calder Farm') and John Pye (Portions 45 and 50). Review of historical background noted that the Pye Farm was well-established by the time of the 1828 census, which listed 1500 acres of which 300 acres were cleared and 10 acres under cultivation. This large landholding was primarily located along Eastern Creek. Musgrave's 1842 plan shows the portion of the current study area extending into Alex Avenue precinct as forested/uncleared, presumably used for grazing. It was considered unlikely that any evidence of these early activities would survive in this area. One further historical development of relevance for the area was identified, namely the advent of the railway:

The railway line from Blacktown to Richmond which linked the Hawkesbury River settlements of Windsor and Richmond with Sydney was a project proposed in the early 1850s and commenced in 1860. The route of the line was surveyed in 1862 and the land was resumed. The line was opened in December 1864. There was a station at Riverstone and some form of unofficial stopping place at Schofields. The railway allowed quick trips to Parramatta or Sydney and opened up the possibility of quick transport of farm produce to the markets of Sydney. The advent of the railway was a critical point in the history of the study area as it improved access to Sydney allowing changes in land use in the area based on access to the market for agricultural products. Following the opening of the railway the study area went through a period of development with subdivision of farms, the development of industry and the emergence of the villages of Schofields and Riverstone.

In total, the study identified 92 heritage sites within the two precincts. Of these, 30 were previously listed and 62 were identified from field survey or other sources. Four sites with varying archaeological potential were identified: Grantham Farm (medium potential), the former Riverstone Sawmill, Schofields Sawmill and along the alignment of Windsor Road (all low potential). None of the identified sites or areas of potential were located within the Alex Avenue Precinct; all were located within the Riverstone Precinct. Apart from the identified heritage items, within the assessment area there were also features such as roads, fences and dams, that were generic in nature and which may have some heritage value, however this would vary depending on age and condition. A general statement of significance was prepared for the two precincts, as follows (ENSR 2008:67):

"The Riverstone and Alex Avenue Precincts have a significant European cultural landscape representing an important area of the Cumberland Plain's pastoral, agricultural and urban development history. The area is reflective of the early European land grants dating from the early 1800s, which set the scene for the emergence of small scale farming within the area. Historically important are the many built heritage sites that reflect the changing landscape from pastoralism to small-scale farming to semi-urban lifestyles."

Townson Road Upgrade Stage 1

Historic heritage assessment for Stage 1 of the wider Townson Road upgrade proposal was undertaken by KNC in 2020. The study area for the Stage 1 assessment is located to the south west of the current study area, along Townson Road between Richmond Road and Jersey Road. Background information review did not identify any historical heritage items within the area. Previous assessment for the West Schofields Precinct identified one area of archaeological potential on the former Ivory property within present-day Lot 3 DP 232574 south of Meadow Road. The identification of this area was based on Musgrave's 1842 plan which indicated two small structures and several apparent stock enclosures on the property. No other potential historical heritage was identified.

Historical maps, plans and aerial photography indicated that the Townson Road and Meadow Road corridors have been present in their general locations since relatively early in the region's settlement history. Surrounding properties to the west remained uncleared through the first half of the 19th century, while those in the east (the Ivory farm and the Pye property) were cleared and cultivated. The surrounding area was used for grazing purposes for the adjacent land grants. The structures and enclosures indicated within the Ivory property on the 1842 plan were likely related to these early agricultural enterprises, with the property potentially later used as a horse stud or horse grazing pasture for animals owned by son Thomas Ivory. Ivory's stables themselves were located in Surry Hills and not at the Schofields property. Potential heritage items associated with these earlier land uses were considered likely to comprise remnant posts or post holes associated with fencing and stock enclosures or fragmented heritage fabric/materials associated with the small structures. If present, these are likely to be of local heritage significance.

During the site inspection no non-Aboriginal historical items or areas of potential were identified. The previously identified area of archaeological potential associated with the Ivory property was found to have been subject to extensive and severe disturbance. Very low to no potential for subsurface historical archaeology was identified within the study area. To the south of a proposed compound location, some potential was identified in a treed area of higher ground adjoining the golf course, part of the former 'Iron Bark Range' parcel. This area appeared less disturbed and was considered more likely to retain any subsurface remains relating to earlier land use. If present, these would be of local heritage significance. This area of better potential was located outside of the Stage 1 study area and would not be impacted by the proposal. The remainder of the Stage 1 study area displayed very low potential for non-Aboriginal historical heritage items or subsurface archaeology to be present. It was recommended that an unexpected finds procedure be put in place during construction but no further historical heritage assessment was warranted.

4 Historical heritage within the study area

4.1 Potential historical archaeological sites within the study area

Review of historical records, parish maps and plans and historical aerial photos indicates that the study area and its immediate surroundings were sparsely settled and non-intensively exploited during much of the 19th and the beginning of the 20th century. Recent archaeological test and salvage excavations have been completed for historical items associated with the Pye estate within the former Schofields aerodrome: The Homestead, former orchard and a cottage to the north-east. The former airstrip runways have since been demolished as part of residential development within the new suburb of Nirimba Fields.

Previous assessment for the West Schofields Precinct identified one area of 'moderate potential to contain archaeological heritage' within the current study area, associated with the location of a cottage within the Pye estate shown on Musgrave's 1842 plan of the area. The potential for archaeological remains to be present within the study area is affected by a range of site formation processes and land use practices that might have destroyed them. Potential archaeological remains and their likelihood of survival within the study area are discussed below and shown in Table 2.

Evidence of land clearing

Potential archaeological relics would include cleared tree stumps and remnant natural landforms. Early development of the study area and its immediate surrounding with extensive farming activities resulted in extensive land clearing. The earliest available sketch plan of the area from 1842 indicates that extensive clearing had already taken place by this time. Early historical aerial photos confirm the extent of vegetation clearance. Further subdivision of land, establishment of roads, agricultural activities, construction of the Schofields Aerodrome runways and modern residential construction have largely modified the natural landscape. As a result, there is low potential for such archaeological evidence as ground disturbance is generally high.

Evidence of agricultural/pastoral improvements and/or activities

Potential archaeological relics would include fence lines, dam building, ploughing and soil deposits indicating cultivated areas, such as orcharding and archaeo-botanical remains. The subdivision activities that took place in the 1920s and later throughout the study area, as well as market gardens and cultivation, have involved expansive land modifications. Construction of an airfield and runways and modern residential developments have significantly changed the original appearance of the landscape. Archaeological relics that would consist of seed remains and evidence of ploughing would be ephemeral in nature within very shallow soil profiles. As such, they would be highly affected by later farming and other land use activities including residential development, as well as natural processes such as erosion and flooding. Some small potential for older fence lines and plant seeds is possible within areas that have undergone minimal ground disturbance since the early 20th century. Ploughing activities are visible on the 1842 plan within areas around Eastern Creek (Figure 9), however these same landforms within the current study area have been subject to intensive cultivation during the modern era. Other sections, including the Pye orchards, have now been impacted by development and retain no archaeological potential.

Evidence of early roads, paths, and foot tracks

Potential archaeological relics include dirt or gravel surfaces, roadbase and associated side drains and cuts into natural ground. The 1842 plan indicates that small roads with alignments roughly analogous to the present day positions of Townson Road and Meadow Road were present by this time, as well as tracks crossing the Pye estate east of Eastern Creek. These were likely of dirt or simple gravel and not highly formalised. The only more substantial road is considered to be the 'Wilmington to Paramatta' road shown on the 1842 plan, that intersects the study area approximately at the intersection of Jersey Road and Kerry Road, and is adjacent to the location of the Pye cottage site. It is considered unlikely that any substantial remains of these former roads and paths are still present within the study area. They have been most likely impacted by subsequent agriculture works construction of new roads and buildings. The modern alignments and easements of Meadow Road, Jersey Road and Kerry Road have generally been disturbed by road construction, drainage works and infrastructure, which has involved both excavation and introduction of fill to level out the area. These activities are likely to have disturbed any subsurface deposits associated with previous alignments, hence archaeological potential for these items is low.

Evidence of subdivision of land in the late 19th century within the study area

The majority of the study area was subdivided in the late 19th and early 20th centuries. Archaeological evidence for such land division may include fencelines and evidence of land clearing or other activities which are evident up to the property boundary, however the potential for such items is considered to be low based on the development of road corridors along the former grant boundaries, which would have caused substantial disturbance, and the extent of clearing when large parts of the area formed part of the Pye estate. Areas to the west of Eastern Creek contain small farmhouses and associated infrastructure. Archaeological survey completed in 2018 by Extent Heritage identified one potential late 19th century farm site at 20 Jersey Road, south of the current study area boundary. Aerials dating from 1947 to 2013 indicated the former existence of a simple square shaped high pitch roofed cottage which has been subsequently demolished. The area of identified archaeological potential associated with this item does not extend into the current study area.

Pye Homestead Site Complex, east of Eastern Creek

The 'Waawaarawaa' homestead was established in 1825 by the Pye family. Historical documents and Musgrave's plan from 1842 indicate the homestead was located on a rise overlooking Eastern Creek on its eastern banks, and that its northern portion was formerly located within the current study area. The wider site complex on the eastern side of Eastern Creek included two orchards and a cottage associated with the northern orchard. Archaeological remains associated with these features were tested and salvaged by GML during 2017 and 2018 (see Section 3.4). No further areas of archaeological potential are located within the study area associated with the Homestead and its complex of outbuildings including the eastern cottage or the former orchard areas.

Schofields Aerodrome runways

The northern portions of the two Schofields Aerodrome runways were formerly located within the study area boundary. The area has since been subject to residential development as part of new suburb Nirimba Fields. No further areas of archaeological potential are located within the study area associated with the runways or former aerodrome.

Ivory's Farm

The current study area adjoins the Ivory grant within Portion 36 (shown on the 1842 Musgrave plan as 'Mrs Ivery's'). No known current or former structures associated with the Ivory property exist within the study area and the former grant has been extensively disturbed. The area was assessed for Stage 1 of the Townson Road upgrade proposal (KNC 2020). No archaeological potential associated with the grant was identified within the current Stage 2 study area.

Pye's cottage on the western side of Eastern Creek

A small cottage associated with the Pye estate was located on the western side of Eastern Creek, shown in Musgrave's 1842 plan. The exact location of the cottage is unknown but the 1842 plan places it just north west of the 'Wilmington to Parramatta' road intersection with a track leading west to Richmond Road, within present day Lot D DP 376106 (9 Jersey Road) at the intersection of Kerry Road and Jersey Road. The West Schofields Precinct historical heritage assessment (Extent 2018) identified this location as displaying 'moderate potential to contain archaeological heritage' based on an overlay of the 1842 plan with modern satellite imagery. The location was subsequently included on the draft West Schofields Precinct heritage plan. A review of historical aerial imagery for the current report (see Section 3.3) indicates that the general area identified by Extent has been subject to disturbance through cultivation, construction and demolition of structures, stripping, erosion and flooding over the last 70 years. No surface remains or above-ground evidence of the cottage location have been identified to date. Potential archaeological relics associated with the cottage site would be restricted to subsurface features such as wall foundations, in the form of stone, brick or timber footings and associated deposits including domestic and agricultural rubbish pits, drainage systems, wells, cisterns and cess-pits. The likelihood of such subsurface features surviving is low given the extent and duration of land use disturbance within the property.

A summary of the potential historical archaeological sites within the study area and likelihood of survival is given in Table 2 below:

Table 2. Potential archaeological remains and likelihood of survival

Potential archaeological sites or items	Association with land use of the study area	Processes affecting survival	Likelihood of survival
Cleared tree stumps and remnant natural landforms	Evidence of land clearing	Later agricultural processes such as ploughing, additional land clearing and subdivision and subsequent development of the site	Minimal
Fence lines, dam building, ploughing and soil deposits indicating cultivated areas, such as orcharding and archaeological remains.	Evidence of agricultural/pastoral improvements and/or activities Evidence of subdivision of land	Later agricultural processes such as ploughing, additional land clearing and subdivision and subsequent development of the area, road construction, flooding from Eastern Creek	Minimal
Dirt or gravel surfaces, roadbase and associated side drains and cuts into natural ground.	Evidence of early roads, paths, and foot tracks	Later land use including agriculture, residential development and construction of modern roads	Minimal
Cottage and homestead footings, associated outbuildings, orchard, tracks, cess-pits, refuse dumps, wells, seed remains, deposits indicating agricultural practices	Pye Homestead Site Complex (including cottage and orchards east of Eastern Creek)	Construction of Schofields Aerodrome, flooding from Eastern Creek, Test and salvage excavations prior to bulk earthworks and subsequent development	Nil (destroyed), outside of study area

Potential archaeological sites or items	Association with land use of the study area	Processes affecting survival	Likelihood of survival
Wall foundations, postholes, services, cess-pits, rubbish pits and dumps, wells, cisterns and isolated artefacts	Ivory Farm	Vegetation clearance, agriculture, installation of BMX motorbike tracks, earthworks	Low, outside of study area
Stone, brick or timber footings and associated deposits including domestic and agricultural rubbish pits, drainage systems, wells, cisterns and cess-pits.	Pye's cottage on the western side of Eastern Creek	Later agricultural processes such as ploughing, construction and demolition of shed structures, stripping, erosion/flooding, possibly road construction along Kerry Road	Low
Evidence of farm or residential buildings, fences and outbuildings, including the property at 20 Jersey Road	Evidence of subdivision and use of land in the late 19 th century	Agriculture, recent land modifications including demolition and clearing of house	Low
Runways	Schofields Aerodrome runways	Bulk earthworks and subsequent development	Nil (destroyed), outside of study area

4.2 Site inspection

The site inspection of the study area was undertaken on separate occasions in 2019-2020 by Ana Jakovljevic, Mark Rawson and Dr Matthew Kelleher of KNC. The site inspections were undertaken on foot and covered the entirety of the study area. A section of the study area east of Eastern Creek could not be accessed directly due to construction and earthmoving activity however this was inspected from the newly constructed Alcorn Street, immediately north of the study area. This section of the study area has been previously assessed for historical heritage as part of the Schofields Precinct planning and development process, and known heritage in the area has been destroyed. The lack of pedestrian access to this part of the study area was not considered a constraint to survey coverage. The site inspection included a particular focus on the area previously identified as displaying 'moderate potential for archaeological heritage' associated with the potential cottage site west of Eastern Creek, as indicated on Musgrave's 1842 plan. Background research and review of previous studies and heritage listings indicated the area of potential was located immediately north west of the Kerry Road/Jersey Road intersection, within the property at 9 Jersey Road. This corner of the block was closely inspected for any potential historical remains. Additional analysis of land use and extent of disturbance was also undertaken. In general, the site inspection aimed to confirm previous findings for the study area regarding the absence of historical heritage items and make an assessment of historical archaeological potential.

The eastern portion of the study area along Jersey Road is characterised by small, post-1950s cottages and associated gardens, with small scale agricultural practices. It represents early 20th century rural residential subdivision of medium sized blocks around the rectangular street arrangement. None of the houses or farm outbuildings displayed heritage features of any significance. The majority of the properties were covered in grass with scattered regrowth trees and associated farm outbuildings and sheds (Plates 7-8). The visibility was generally low due to landscaped gardens or pasture grass and tree cover. The entire area has been through previous extensive land clearing and modifications due to semi-rural land use practices and development of houses, farm outbuildings and driveways. Small dams/soaks are scattered across the landscape and drainage modification are evident (Plate 9). Some properties included dilapidated/abandoned houses and farm infrastructure and were heavily overgrown. Current land use is primarily small lot cultivation, market gardening and pasture/grazing for horses and cattle. No potential historical heritage items or relics were identified. Archaeological potential for historical remains associated with previous land use is considered to be low given the long history of disturbance.

Inspection proceeded to the corner property at 9 Jersey Road and the potential cottage site. Previous studies and the current assessment have identified this area as the most likely location of the cottage based on overlays of Musgrave's 1842 plan with modern satellite imagery. The associated area of 'moderate archaeological potential to contain historical heritage' as mapped on the draft Schedule 9 West Schofields Precinct heritage map is approximately 150 metres by 150 metres. The whole of this area was inspected and assessed during the site visit. The property is cleared and currently used for horse agistment. The former sheds at 9 Jersey Road are in a dilapidated state (Plate 10). The horse paddock to the south of the shed was uneven underfoot with hummocks of earth, covered in pasture grasses and weeds (Plates 11-12). Former ground disturbance and cultivation was evident in the uneven ground surface. No physical remains or indications of subsurface archaeological material were identified.

The small farm dam/soak area adjacent to Kerry Road was also inspected and found to comprise a low-lying boggy area vegetated with scattered rushes and reeds, indicating an at least semi-permanent state of inundation. A cut drain runs east below Kerry Road from this area, indicating the need to manage drainage. This area has been subject to frequent flooding as indicated by historical aerial photos and observations made during the West Schofields Precinct site assessment, and some level of previous modification for water storage associated with agricultural use. It is possible this low-lying area is associated with the former cottage structure however given the extent of disturbance and frequent flooding, the probability of intact subsurface archaeological remains is considered to be low.

Moving east, the portion of the study area between Kerry Road and Eastern Creek was found to comprise mostly low-lying floodplain which is regularly cultivated. The houses along Kerry Road occupy the edge of the primary floodplain and are located atop a raised terrace which drops relatively sharply to the floodplain below extending to the Eastern Creek channel (Plates 13-15). No historical heritage items or areas of historical archaeological potential were identified in this area. East of Eastern Creek to Burdekin Road is an active construction zone associated with redevelopment of the former Schofields Aerodrome lands as new suburb Nirimba Fields (Plates 16-19). Historical heritage items and areas of potential in this part of the study area were assessed and managed previously as part of the precinct planning process and are no longer extant. The former Schofields Aerodrome runways have been removed. The area displays no remaining heritage value or potential. The eastern extent of the study area, from the Blacktown-Richmond railway along Burdekin Road to Pelican Road, comprised a highly modified environment (Plates 20-21). The area has been subject to earthworks and modern road construction which have resulted in severe disturbance. No historic heritage items or areas of archaeological potential were identified.

Overall, the site inspection found the study area to display low to no historical heritage potential. No historical heritage items, relics or fabric/materials were identified. The area associated with the potential Pye cottage site at 9 Jersey Road was found to be substantially disturbed, and the likelihood of intact areas of subsurface archaeological deposit is considered to be low due to flooding and the land use history of the property.



Plate 7. View north east from south-western boundary of study area across typical cleared small-lot landscape, west of Eastern Creek.



Plate 8. View east down Jersey Road corridor towards Eastern Creek



Plate 9. Typical modified semi-rural landscape north of Jersey Road, small farm dam/soak in foreground, view east across rear of Lot C DP 376106 towards Kerry Road



Plate 10. Dilapidated sheds at 9 Jersey Road, high ground disturbance area



Plate 11. View east across potential 'cottage site' within 9 Jersey Road, north west of Kerry Road/Jersey Road intersection. Houses along Kerry Road visible at rear.



Plate 12. View south west across potential 'cottage site' within 9 Jersey Road from Kerry Road



Plate 13. View east from terrace edge rear of 83 Kerry Road, looking across cultivated paddock to Eastern Creek



Plate 14. View west from floodplain to raised terrace containing houses at 83 and 87 Kelly Road



Plate 15. View north along Eastern Creek



Plate 16. View east from Eastern Creek into former Schofields Aerodrome lands, now under development as new suburb Nirimba Fields



Plate 17. Construction activities within former Schofields Aerodrome, Eastern Creek in the background, facing south-west



Plate 18. East of Eastern Creek, location of former northern extents of two runways in the foreground, facing south-west.



Plate 19. View west down study area alignment from Railway Terrace, Blacktown-Richmond Railway line in foreground. Eastern Creek at tree line in distance. Highly disturbed and developed landscape.



Plate 20. Eastern end of study area, view south east along Burdekin Road, heavily disturbed area



Plate 21. View north west along Burdekin Road towards Stoke Street, eastern end of study area

4.3 Discussion

The historical archaeological potential of the study area has been determined through a combination of historical research, analysis of historical plans, maps and photographs, review of heritage listings and other historical archaeological assessments within the vicinity of the study area, as well as a site inspection.

Background information review did not identify any historical heritage items within the study area, listed or unlisted. The entirety of the study area has been subject to comprehensive previous assessments undertaken as part of the precinct planning process for the North West Growth Centre. Schofields Precinct (between Eastern Creek and the Blacktown-Richmond railway) is now under development and heritage items within this area have been destroyed and are no longer extant. Impact was mitigated by a series of archaeological investigations undertaken by GML. The West Schofields Precinct assessment identified one area of 'moderate potential to contain archaeological heritage' within the current study area, located north west of the Kerry Road/Jersey Road intersection. The identification of this area was based on Musgrave's 1842 plan which indicated a cottage near this location, associated with the Pye estate. Other areas of potential identified by this assessment do not intersect the current study area.

Historical maps, plans and aerial photographs indicate that the land use history of the study area is one of continuous and ongoing rural to semi-rural residential development. Musgrave's 1842 plan indicates that the majority of the Pye Estate and adjoining Ivory grant were already cleared by this time, with areas undergoing cultivation. The surrounding area was used for grazing. The structures, fences, tracks and enclosures on the 1842 plan are related to these early agricultural enterprises and the movement of people through the landscape between the major grants and early settlements on the Cumberland Plain. Investigations undertaken by GML within the former Schofields Aerodrome have provided information on some of the activities undertaken within the eastern part of the Pye Estate which appears to have been more intensively settled. The western part of the Estate within the study area appears to have been used less intensively, comprising predominantly cleared grazing land and a small strip of cultivation adjacent to Eastern Creek. The western cottage site indicated on the 1842 plan may have been occupied by a stockkeeper, farmer or overseer for activities on the western side of the creek. The southern part of the Pye Estate was included in the land used as the aerodrome by the RAAF between 1942-1944 and the Waawaarawaa homestead was demolished in 1942. Smaller subdivision of the remainder of the estate and the Jersey Road and Kerry Road layouts were likely established at this time.

Potential heritage items associated with these earlier land uses are likely to comprise remnant posts or post holes associated with fencing and stock enclosures or fragmented heritage fabric/materials associated with small farm outbuildings and structures. Potential archaeological material associated with the former cottage site would include subsurface features such as wall foundations, in the form of stone, brick or timber footings and associated deposits including domestic and agricultural rubbish pits, drainage systems, wells, cisterns and cess-pits. Archaeological remains of other landscape use including the former tracks/roads and cultivated fields marked on the 1842 plan were likely to have been ephemeral in nature and are unlikely to survive given the area's subsequent land use history. If present, the archaeological material described above would be of local heritage significance. The likelihood of survival of intact subsurface deposits associated with the former cottage site is assessed as low due to the intervening centuries of agricultural use and cultivation, construction/demolition of structures, clearing and ongoing flooding associated with Eastern Creek. The former cottage location is unconfirmed and no specific areas of higher archaeological potential were identified.

During the site inspection no historical items, relics, fabric, materials or areas of potential were identified. The previously identified area of archaeological potential associated with the former Pye cottage site was found to be disturbed, with low potential for intact or significant subsurface deposits. The remainder of the study area displayed very low to minimal potential for historical heritage items or subsurface archaeology to be present. No heritage items, fabric/materials or areas of archaeological potential were identified during background research or the site inspection.

5 Significance Assessment

Significance assessment is the process whereby buildings, items or landscapes are assessed to determine their value or importance to the community. The significance assessment for the study area has been prepared using the criteria detailed below. These criteria have been developed by the NSW Office of Environment and Heritage and embody the values contained in the Burra Charter. The Burra Charter provides principles and guidelines for the conservation and management of cultural heritage places within Australia.

Based on the findings of the current assessment, the study area does not contain any identified historical heritage items. The significance assessment below has been developed based on the general landscape characteristics of the study area and its historical context.

SHR 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) (Historical significance)

The study area is associated with some of the earliest land management decisions made by the Colonial administration in relation to north-western Sydney, being located within the Prospect Hill Common set aside by Governor King in 1802. This was followed by Governor Macquarie's decision just eight years later to begin converting government land in the area into land grants. Within the study area the earliest land grants were given to three individuals, William Bateman (alternatively Batman) with 60 acres, James Chisholm (alternatively Chisholme) with 150 acres and John Pye with 85 and 300 acres. These grants soon became part of the farms belonging to the Pye family, who were well-known farmers and prominent members of early colonial society. Their homestead 'Waawaarawaa' on the eastern side of Eastern Creek and the farm represent the earliest phase of non-indigenous settlement and pastoral movement in the local area. Other early local landholders include the Ivory family, who cultivated their 39 acre grant bordering Eastern Creek immediately south of the study area in the early 19th century. The property later passed to Thomas Ivory, a noted racehorse breeder and trainer, who may have used it as a horse stud or pasturage for his Surry Hills stables.

The study area is considered to demonstrate a general level of local historical significance, as it forms part of the pattern of early occupation and settlement of the local area in the 19th century and continued to play a part in the economy and community through to the 20th century. Subsequent use of the central part of the study area as the Schofields Aerodrome is associated with an important period in Australia's military and defence history, and in particular with the development and operation of the Royal Australian Navy and the Royal Australian Air Force. The study area therefore satisfies this criterion at the local level.

SHR 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) (Associative significance)

The study area displays a low level of associative significance through its location within first the Prospect Hill Common, then the issue of land grants in 1815 and 1816 to ex-convicts such as William Bateman, John and Joseph Pye and Charles Ivory. The study area is associated with a few well-known and prominent families and individuals in 19th and early 20th century Sydney. The Pyes, although of convict descent, became prominent members of colonial society. They kept on their property the first pack of fox hounds and for many years, Sydney Hunt Club hunted over their paddocks. The Pyes also developed the land into the prosperous orchard and dairy, and were growing wheat. Leslie Walter Pye was a well-known cricketer who was born in 1871 at Waawaarawaa. James John Pye became a District Councillor of Blacktown Shire, one of the most prominent farmers who also had a herd of fine bulls on his Waawaarawaa farm during the late 19th and early 20th century. The Ivory property was at one time owned by Thomas Ivory, who was an accomplished horse breeder, jockey and trainer, and was a significant persona in 19th century Sydney. While these personages are associated with the study area through their land ownership, the study area does not retain any identified material evidence or associations relating to their life or works. The study area is therefore not considered to possess "strong or special association" with these individuals and thus does not satisfy this criterion at the either the State or local level.

SHR Criterion c) an item is important in demonstrating aesthetic characteristics and/or a high degree of technical achievement in NSW (or in the local area) (aesthetic significance)

The historical research and site inspection of the study area and surrounding landscape indicates that the study area demonstrates some aesthetic characteristics of importance to the local area in that it is located within an area of small, semi-rural landholdings which formed the landscape character of Schofields and neighbouring suburbs for the majority of the past 100 years. The aesthetic characteristics of this landscape along the major waterway of Eastern Creek are rapidly disappearing as a result of the ongoing urbanisation of north western Sydney. The western part of the study area up to Eastern Creek satisfies this criterion at the local level. The eastern part of the study area east of Eastern Creek has undergone recent development and does not satisfy this criterion.

SHR 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 (Social significance)

Previous assessment (GML 1997 and 2011) indicates that the Schofields Aerodrome has associations and memories for a large group of former military personnel who were stationed or trained there as well as for their families and descendants. This part of the study area was assessed as displaying social significance in this regard however the lack of extant fabric did not support inclusion on any local or State statutory listing. The removal of the remnant material remains and fabric associated with this item has been undertaken in the course of redevelopment as new suburb Nirimba Fields. No other associations with particular community or cultural groups have been identified for the study area during background research or the site inspection. The study area therefore does not satisfy this criterion at the State or local level.

SHR 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) (Research potential)

The eastern part of the study area has been subject to contemporary earthmoving, construction and development. Previous historical heritage assessment and subsequent archaeological excavation east of Eastern Creek within the Schofields Precinct has contributed further to our understanding of the local area's cultural history and early colonial farming practices. This part of the study area retains no further research potential.

West of Eastern Creek, the study area displays a generally low level of research potential. Background research identified one area previously assessed as displaying 'moderate potential to contain archaeological heritage' associated with a cottage on the Pye estate as shown in Musgrave's 1842 plan. The estimated location of the cottage is within 9 Jersey Road, north west of the Kerry Road/Jersey Road intersection and within the study area. Review of historical aerial photography and site inspection for the current project confirmed this general area has been subject to extensive and ongoing agricultural land use disturbance. The likelihood of intact subsurface archaeological remains associated with the cottage is considered to be low. Any remaining heritage material or fabric is likely to be fragmentary and highly degraded in nature, and is unlikely to offer information substantially different from that already recovered via archaeological investigations in the eastern part of the Pye estate and homestead complex. Based on these factors, the study area does not satisfy this criterion at the State or local level.

SHR 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) (Rarity)

On the basis of the historical research, site inspection and understanding of the ongoing urbanisation of the land within the North West Growth Centre, the study area and surrounding landscape represent an aspect of the cultural history of north western Sydney, and thus the local area. The small-lot semi-rural landscape west of Eastern Creek is becoming rarer as the various Precincts of the North West Growth Centre are released and developed, however this landscape still exists in the local area both within and outside of the growth centre and remains an important aspect of the wider region. The study area is therefore not considered to satisfy this criterion at either the State or local level.

Integrity/Intactness

The study area displays a generally low level of integrity/intactness. The eastern portion has been severely disturbed by redevelopment and no longer represents the original landscape. The western portion is located along the existing road corridor and small rural residential properties with a long history of cultivation and agriculture. Flooding from Eastern Creek is also frequent. No built heritage or above-ground heritage fabric or materials exist within the study area and it is likely that the land use history of the area has impacted on the integrity and intactness of any subsurface deposits that may once have been present

5.1 Statement of significance

The study area does not contain any identified historic heritage items or relics of heritage significance at the local, State, or Commonwealth levels.

The study area retains one area of low potential for archaeological deposit associated with the Pye cottage site north west of the Kerry Road/Jersey Road intersection. Historical research, review of previous investigations, historical aerial photography and the site inspection did not identify any extant remains of this heritage feature; however, the area retains some potential for subsurface material. If present, these archaeological deposits are likely to be fragmented and disturbed and would not display greater than local heritage significance. More broadly, the study area displays some (low) local historical heritage significance in relation to the remaining historical and aesthetic values within the western portion of the study area. These typify the small-lot agricultural, rural residential landscape of north western Sydney that is becoming increasingly rare due to rapid urbanisation through the development of the North West Growth Centre.

6 Statement of heritage impact

The study area does not contain any listed historical items with heritage significance at the local, State or Commonwealth levels. The area associated with the former Pye cottage site displays low archaeological potential for fragmentary and disturbed remains associated with this former land use. If present, these would be of local significance. The remainder of the study area displays minimal to nil archaeological potential due to a long history of land use disturbance and agriculture.

Whilst the study area displays some general values of low local heritage significance (historical and aesthetic), the proposed works would have a negligible impact on these values, whose significance lies in the contribution they make as a component of the larger cultural landscape within the local area. No material evidence or heritage items relating to these values have been identified within the study area.

7 Conclusion and recommendations

The historical archaeological value and potential of the study area has been determined through a combination of historical research, analysis of historical plans, maps and photographs, review of heritage listings and other historical archaeological assessments within the vicinity of the study area, as well as a site inspection.

There are no historical (non-Aboriginal) heritage items listed on statutory heritage registers or planning instruments (both active and repealed) within the study area. No historical heritage items, relics or sites were identified within the study area during this assessment.

Previous assessment for the West Schofields Precinct identified one area of archaeological potential associated with the former Pye cottage, northwest of the Kerry Road/Jersey Road intersection. This area is described in the draft Schedule 9 (West Schofields) amendment to the BCC Growth Centre Precincts DCP 2018 as “moderate potential to contain archaeological heritage”, however this is not a statutorily listed item. Further assessment for the current proposal determined that this portion of the study area has been subject to a long history of land use disturbance associated with agricultural practices and flooding. Low archaeological potential exists for fragmented and disturbed fabric/material subsurface remains associated with the cottage site. If remains are present, these would be of local heritage significance.

The remainder of the study area displayed minimal to nil potential for non-Aboriginal historical heritage items or subsurface archaeology to be present. No heritage items, fabric/materials or areas of archaeological potential were identified during background research or the site inspection. The western part of the study area, west of Eastern Creek, retains a low level of local heritage significance due to its contribution to the historical, aesthetic and increasingly rare semi-rural character of the local landscape.

The rapid urbanisation of Schofields and surrounding suburbs now represents another phase of the evolution of the landscape of north western Sydney. The low level of local heritage significance ascribed to the general landscape values of the study area does not preclude the construction and installation of the Stage 2 proposal as it would have a negligible impact on the identified low significance heritage values. The study area has been used for transit since the Pye era, with various road/tracks and the bridge over Eastern Creek used to facilitate movement of people and goods between the homesteads and early settlements of the Cumberland Plain. The upgraded and extended road corridor would not represent a change in this type of land use.

There are therefore no identified constraints to the Stage 2 proposal on non-Aboriginal heritage grounds and the works may proceed with caution.

Should any items be located during construction of the proposed infrastructure that meet or have the potential to meet the definition of relics under the NSW *Heritage Act 1977*, the TfNSW *Standard Management Procedure – Unexpected Heritage Items* (Roads and Maritime 2015) should be employed. Advice should be sought from a suitably qualified and experienced archaeologist on how to proceed.

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