# Appin Road and St Johns Road Intersection Upgrade

## **Statement of Heritage Impact**

Statement of Heritage Impact for intersection upgrade

Prepared by Extent Heritage Pty Ltd

Prepared for BD Infrastructure

March 2025 - Final 05



extentheritage.com.au



## **Document information**

Extent Heritage Project No.:	0223037		
Client:	BD Infrastructure		
Project:	Appin Road & St. Johns Road Intersection Upgrade		
Site Location:	Existing intersection at St Johns Road and Appin Road, Bradbury		
Author(s):	Catherine Fenech Hannah Morris Hayley Edmonds		

#### **Document control**

Version	Internal reviewer	Date	Review type
Draft 1	Graham Wilson	26/6/2023	QA
	Kim Watson		Technical
Final 1	Graham Wilson	10/7/2023	QA
	Hannah Morris		
Final 2	Hannah Morris	25/8/2023	QA
Final 3	Hannah Morris	6/10/2023	QA
Final 4	Emma Whitworth	14/02/2025	Updated template
Final 5	Emma Whitworth	23/03/2025	Minor edits

#### Copyright and moral right

Historical sources and reference materials used in the preparation of this report are acknowledged and referenced in figure captions or in text citations.

Unless otherwise specified in the contract terms for this project Extent Heritage Pty Ltd

- vests copyright of all material produced by EXTENT HERITAGE PTY LTD (but excluding pre-existing material and material in which copyright is held by a third party) in the client for this project (and the client's successors in title);
- Retains the use of all material produced by Extent Heritage Pty Ltd for this project for professional presentations, academic papers or publications





# **Executive Summary**

Extent Heritage Pty Ltd (Extent Heritage) has been commissioned by BD Infrastructure on behalf of Transport for NSW (Transport) to provide a Statement of Heritage Impact (SOHI) ahead of proposed upgrades at the intersection of Appin Road and St Johns Road, Bradbury within the Campbelltown Local Government Area (LGA).

The purpose of this report is to analyse the proposed works within the intersection with regards to any potential impacts on local heritage items or archaeological remains. The proposed works are to be undertaken within the curtilage of one identified local heritage item on Schedule 5 of the *Campbelltown Local Environmental Plan 2015*. The local heritage item is identified as 'Silos' (Item #5) within that schedule. The silos are located approximately 200 metres north of the intersection of Appin Road and St Johns Road, within the northeastern portion of the study area. The proposed works are near three additional heritage items outside of the study area. They include 'Raith' (Item #16), 'St Helens Park House and Dam' (Item #100406) and 'Denfield' (Item #100540). 'Denfield' and 'St Helens Park House and Dam' are additionally listed on the State Heritage Register.

The proposed development includes the following upgrades to intersection at Appin Road and St Johns Road in Bradbury:

- Widening of Appin Road at St Johns Road to upgrade the existing northbound and south bound carriageway approaches from two lanes to three lanes in each direction, with a rightturn lane on the northern approach to St Johns Road.
- High entry angle left turn from Appin Road southbound into St Johns Road.
- Widening of St Johns Road into the median to provide two right-turn lanes from St Johns Road into Appin Road northbound and a separate left-turn lane with a high entry angle left turn into Appin Road southbound.
- Provision for cyclists in the northbound and southbound direction on Appin Road through a dedicated southbound cycle lane and wider sealed road shoulders.
- Regrading of the vertical alignment along Appin Road (to be 50 millimetres above existing levels) to address impacts to the existing pavement.
- Regrading of proposed cut batters on the southern tie-in to allow for planting and assist ongoing maintenance.
- Inclusion of road furniture, street lighting, stormwater drainage infrastructure, landscaping, line marking, traffic signal adjustments and signage.
- Provision of a flat area around the base of proposed street lighting posts to allow for maintenance access (water, power, communications).
- Adjustments, relocation and provision of new utility services.
- Establishment of construction site compounds for the duration of the construction period.

Part of the upgrade includes improvements to the street lighting along Appin Road at the location of the intersection. The new lighting will be installed beside the roadway and within the grass verge and serviced by underground cabling installed parallel to Appin Road. The lighting upgrade, including the provision of a flat area around the base of lighting and maintenance



access is the only portion of the proposed works that poses potential impacts to the local heritage item is identified as 'Silos' (Item #5).

This SOHI forms part of the Transport environmental assessment process and has assessed the works as having a minor visual impact on the heritage significance of the silos (Item # 5, Schedule 5 of the Campbelltown LEP 2015). The proposed works represent a minor amplification of existing road infrastructure, this will have no impact on heritage items in the vicinity.

The historical archaeological assessment contained within this report, establishes that the study area has undergone significant ground disturbance caused primarily from the realignment of Appin Road. Due to the shallow and ephemeral nature of much of the archaeological resources anticipated within the study area, historic ground disturbance is likely to have severely truncated or removed a substantial amount of evidence. As a result, archaeological evidence associated with all phases was assessed as holding no significance. No impacts to historical archaeological relics or resources are anticipated by the proposed development. As such, it is recommended that the works proceed with caution and that heritage is managed under an Unexpected Finds Protocol.

#### Recommendations

The following recommendations identify opportunities available to reduce the potential heritage impacts.

#### Prior to works

- Contractors must be briefed on the heritage sensitive nature of the site and informed of any recommended mitigation measures or controls required. Such as a heritage induction and Unexpected Finds Protocol.
- Planning around ground disturbing works including open trenching, etc should consider any
  potential construction-related impacts such as vibration damage to the adjacent structures,
  and any accidental physical impact due to working in close proximity.
- A condition assessment of the silos should be carried out by the contractor if vibration monitoring is required during construction to confirm commencement condition of the structures.

#### **During works**

- Building and construction materials should not be stockpiled against or adjacent heritage structures. Laydown areas and high-traffic areas should have a clear separation from heritage structures on the site.
- To avoid impacts to the silos, vibration monitoring should follow the guidelines set out in the German Standard DIN-4150 Structural Vibration, Part 3: Effect of Vibration on Structures. This Standard identifies more stringent vibration levels for building damage and includes a category specifically for heritage buildings.
- Any accidental damage to heritage items is to be treated as an incident, with appropriate recording and notification. An impact assessment must be undertaken to determine the course of action for stabilisation and restoration.



- All areas affected by works must be stabilised and restored by contractors after they have completed their works.
- Any unauthorised removal of heritage fabric not outlined and assessed in this SOHI is not permitted.
- If the scope of works is changed to involve any additional impacts to any built heritage fabric not explicitly outlined in this report, further heritage assessment will be required.
- Works may proceed with caution.
- Any unexpected heritage or archaeological finds must be managed in accordance with the Transport for NSW Unexpected Heritage Items Procedure.
- A post construction assessment of the silo structures to be carried out by the contractor to confirm no impact to structures from the works.



# Contents

1.	Intro	duction	1
	1.1	Project description	1
	1.2	Methodology	1
	1.3	Limitations	2
	1.4	Authorship	2
	1.5	Terminology	2
2.	The	Heritage Item	6
	2.1	Site location and context	6
	2.2	Heritage listings	6
	2.3	Heritage items in the vicinity	8
3.	Histo	orical Context	9
	3.1	Traditional owners	9
	3.2	Colonisation of the region	9
	3.3	Appin Road	10
4.	Phys	sical Analysis	29
	4.1	Appin Road	29
	4.2	Silos	29
	4.3	Views and settings	30
	4.4	Site inspection	34
	4.5	Disturbance	35
5.	Histo	orical Archaeology	41
	5.1	Phases of historical development	41
	5.2	Previous reports and investigations	44
	5.3	Assessment of archaeological potential	45
6.	Heri	tage Significance	47
	6.1	Silos (I5)	47
	6.2	Heritage items in the vicinity	49
	6.3	Archaeological significance	50
7.	Prop	oosed Works	54
	7.1	Rationale	54
	7.2	Outline	54
8.	Heri	tage Impact Assessment	58
	8.1	Matters for consideration	58



	8.2	Assessment against statutory and non-statutory controls	62
9.	Con	clusion and Recommendations	64
	9.1	Conclusion	64
	9.2	Recommendations	65
10.	Refe	erences	66
Lis	st c	of figures	
Figu	re 1. I	Map indicating location of Appin Road and St Johns Road Intersection Upgrade	. 7
Figu	re 2. I	Map showing heritage items in the vicinity of the study area	. 8
		Detail Parish of St Peter, 1834 showing first grantees (Source: State Library NS)	
FL37	8322	21)	11
Figu	re 4. I	Detail, Parish Map of St Peter, 1895. (Source: State Library NSW, FL20509279).	12
Figu	re 5. (	Certificate of Title issued to curator of Agnes Lennox's estate, 1896 (Source: Vol. 11	84
Fol.	43)		15
Figu	re 6. ′	145 acres transferred to Samuel Jenner in 1912. Location of Sussex Arms marked	by
		w. Study area marked in red. (Source: General Register of Deeds, Book 956 No. 88	•
		Liverpool Menangle Manoeuvre Area, 1917, with Simpson's cottage marked by wh	
arrov	v. Da	ly's cottage marked by red arrow (Source: State Library NSW, FL16167889)	18
•		1933 map of the study area. Simpson's cottage marked by white arrow (Source	
		Australia Section, 1933).	
•		1954 map of the study area. Simpson's homestead marked by white arrow. Sil	
	,	y red arrow (Source: Camden Royal Australian, 1954).	
Ū		. 1961 aerial image. Daly's cottage ruin marked by yellow arrow. Former Simpsor	
	•	narked in white. Former Sussex Arms marked in blue. Silos marked in red	
Ü		Detail, 1961 aerial showing the silos located within the study area. Ground featur om left of the image may relate to the former Sussex Arms site (red arrow)	
		. 1975 aerial image	
_		. Detail, 1975 aerial image, showing the silos (extant) but house and outbuildings	
_		ed	
		. 1990 aerial image	
		. Detail, 1990 aerial image, showing realignment of Appin Road, and retained silos	
•		mage	
		. Present state of silos	



Figure 17. View of silos.	30
Figure 18. Eastern extent of study area along St Johns Road, southern footpath fac	-
Figure 19. Eastern extent of study area along St Johns Road, southern footpath fa showing steep decline	cing east
Figure 20. Intersection of Appin Road and St Johns Road, facing north. Berm visible	
left	
Figure 21. The crest of the hill visible on the north bound side of Appin Road	
Figure 22. Decline from road level to residences. Informal vehicle tracks, possibly	
residence. Facing south.	-
Figure 23. View from St Helens Park House and Dam west to the Kellerman Drive a	
Road Intersection.	
Figure 24. View towards St Helens Park House and Dam east to the Kellerman Drive a	
Road Intersection.	32
Figure 25. View towards St Helens Park House and Dam east from the Kellerman I	Drive and
Appin Road Intersection.	33
Figure 26. Eastern extent of the study area along St Helens Park Road facing west	33
Figure 27. View towards silos from Raith facing south	33
Figure 28. View north from Raith gate.	33
Figure 29. View south towards Denfield from the Kellerman Drive and Appin Road Inte	ersection.
	34
Figure 30. View south towards Denfield from the Kellerman Drive and Appin Road Into	
Figure 31. Small concrete items north of the silos.	
Figure 32. Detail of concrete element.	
Figure 33. Landscaping associated with the storm water system looking south	
Figure 34. Informal gravel driveway north of silo site, forming north eastern extent of	
area	•
Figure 35. View of the road reserve north of the silos with disturbance of the stormwater	er system
in the background	36
Figure 36. Landscaping associated with the storm water system looking south	36
Figure 37. Storm water channel western extent of study area	36
Figure 38. Storm water channel along subdivision boundry. Western extent of study a	rea 36
Figure 39. Eastern extent of the study area along Woodland Road facing east	37
Figure 40. Park land wihtin the western portion of the study area, along Appin Road nor	th bound.
Looking north.	37



Figure 41. Open gravel exposure south of silos, north of St Johns Road, looking north 3	8
Figure 42. Open park on eastern side of Copperfield Drive, and the location of the norther	n
compound in this park, looking east. The extent of the compound site is the structure on th	е
right and stormwater channel on the left of the image	8
Figure 43. Open park on eastern side of Copperfield Drive, and the location of the souther	n
compound in this park, looking east. The extent of the compound site is the lot of houses on th	е
right and fencing on the right of the image. The outlet for the stormwater channel can be see	n
in the distance	8
Figure 44. View of the rise looking south from the silos	9
Figure 45. Concrete footing for road side railing south of silos	9
Figure 46. Lighting design layout, location of Silos indicated in red (Source: AECOM 2023). 5	5
Figure 47. Lighting design layout (Source: AECOM 2023)	5
Figure 48. Lighting design layout in relation to silos (black arrow) and I5 heritage curtilag	е
(yellow) (Source: AECOM 2023)	6
Figure 49. Typical street lighting (Source: AECOM 2023, 20)	7
Figure 50. Indicative site compound layout (Source: BD Infrastructure 2023) 5	7
List of Tables	
Table 1. Summary of heritage status.	6
Table 2 Local and State listed heritage items.	8
Table 3 Summary of archaeological potential	5



## 1. Introduction

## 1.1 Project description

Extent Heritage Pty Ltd has been commissioned by BD Infrastructure to prepare a Statement of Heritage Impact (SOHI) for the installation of lighting as part of wider upgrade works at the Appin Road and St Johns Road intersection. The purpose of the report is to analyse the proposed works, that include upgraded lighting and associated subsurface services within the Appin Road and St Johns Road intersection and assess the potential impacts on the local heritage listed item 'Silos' (Campbelltown LEP item I5). The study area (Figure 1) consists of a large portion of land along Appin Road, with the northern limit extending approximately 500 metres north of the St Johns Road intersection and the southern limit extending approximately 40 metres south of the Fitzgibbon Lane and Kellerman Drive intersection. Portions of the adjoining St Johns Road and Woodland Road are also within the bounds of the study area. In addition, five sites for use as temporary compounds will be included within the project boundary, one being located along the western side of Appin Road (opposite the Woodburn Road intersection), two in parkland on the eastern side of Copperfield Drive, and two along St Johns Road.

The study area contains one local heritage item listed on Schedule 5 of the *Campbelltown Local Environmental Plan 2015* (Campbelltown LEP 2015) – Silos (Item I5). There is one local heritage item located in the vicinity of the study area – 'Raith' (Item I6). In addition, there are two State heritage items located in the vicinity of the study area – 'Denfield Homestead' (I00540) and 'St Helens Park House and Dam' (Item I00406).

This report identifies potential risks and safeguards to avoid or minimise impacts during the construction and operation of the proposed upgrades. This report specifically relates to build heritage and historical archaeology and includes recommendations and conclusions drawn from the impact assessment.

## 1.2 Methodology

The methodology used in the preparation of this Statement of Heritage Impact (SOHI) is in accordance with the principles and definitions as set out in the guidelines to *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (the Burra Charter) (Australia ICOMOS 2013)* and the latest version of the *Statement of Heritage Impact Guidelines* (Heritage Office and Department of Urban Affairs and Planning 2002), produced by the former NSW Office of Environment and Heritage (now the Department of Planning, Industry and Environment).

This SOHI reviews the relevant statutory heritage controls, assesses the impact of the proposal on the subject property and make recommendations in the light of these impact.



## 1.3 Limitations

The site was inspected and photographed by Hannah Morris (Senior Heritage Advisor) and Catherine Fenech (Heritage Advisor) of this report on 31/05/2023. The inspection was undertaken as a visual study only.

The historical overview provides sufficient historical background to provide an understanding of the place in order to assess the significance and provide relevant recommendations, however, it is not intended as an exhaustive history of the site or surrounds.

This assessment does not include an assessment of Aboriginal heritage.

## 1.4 Authorship

The following staff members at Extent Heritage have prepared this statement of heritage impact:

- Hannah Morris, Senior Heritage Advisor; and
- Catherine Fenech Heritage Advisor
- Hayley Edmonds, Heritage Advisor

This report was reviewed by Graham Wilson, Principal Heritage Advisor and Kim Watson, Senior Heritage Advisor.

## 1.5 Terminology

The terminology in this report follows definitions presented in the *Burra Charter (Australia ICOMOS 2013)*. Article 1 provides the following definitions:

**Place** means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.

**Cultural significance** means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the *place* itself, its *fabric*, *setting*, *use*, *associations*, *meanings*, records, *related places* and *related objects*. Places may have a range of values for different individuals or groups.

**Fabric** means all the physical material of the *place* including elements, fixtures, contents and objects.

**Conservation** means all the processes of looking after a *place* so as to retain its *cultural* significance.

**Maintenance** means the continuous protective care of a *place*, and its *setting*. Maintenance is to be distinguished from repair which involves *restoration* or *reconstruction*.

**Preservation** means maintaining a *place* in its existing state and retarding deterioration.



**Restoration** means returning a *place* to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.

**Reconstruction** means returning a *place* to a known earlier state and is distinguished from *restoration* by the introduction of new material.

**Adaptation** means changing a *place* to suit the existing *use* or a proposed use.

**Use** means the functions of a *place*, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.

**Compatible use** means a use which respects the *cultural significance* of a *place*. Such a use involves no, or minimal, impact on cultural significance.

**Setting** means the immediate and extended environment of a *place* that is part of or contributes to its *cultural significance* and distinctive character.

**Related place** means a place that contributes to the cultural significance of another place.

**Related object** means an object that contributes to the cultural significance of a place but is not at the place.

Associations mean the connections that exist between people and a place.

*Meanings* denote what a place signifies, indicates, evokes or expresses to people.

*Interpretation* means all the ways of presenting the cultural significance of a place.

#### **Additional definitions**

Term	Meaning
Consent authority	The person or body with whose approval that act, matter or thing may be done or without whose approval that act, matter or thing may not be done.
Conservation	Conservation means all the processes of looking after a place so as to retain its cultural significance (as defined in The Burra Charter).
Development	The erection of a building, carrying out work, use of or subdivision of land.
Heritage significance	Term used in the assessment and understanding of heritage items that have significance in relation to their historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value.
Moveable heritage	A moveable object that is not a relic.



Term	Meaning
National construction code	A code that sets minimum requirements for design, construction and performance of buildings, as well as plumbing and drainage systems throughout Australia.
Relic	Any deposit, artefact, object or material evidence that is of state or local heritage significance.
Setting	The area around an item, which may include the visual catchment.
State Heritage Inventory	An online database containing heritage items and conservation areas on statutory lists in NSW. This includes the State Heritage Register and local government items.
State Heritage Register	The NSW State Heritage Register. A list of places and items of importance to the people of NSW. Only places of state heritage significance are listed on the State Heritage Register. The State Heritage Register protects these items and their significance.
State Heritage Register item	A term to describe a heritage item that is of state heritage significance and is listed on the State Heritage Register.

## List of abbreviations

Abbreviation	Meaning
CMP	Conservation Management Plan
DA	Development application
DCP	Development Control Plan
DCCEEW	Department of Climate change, Energy, the Environment and Water
DPHI	Department of Planning, Housing and Infrastructure
EP&A Act	Environmental Planning and Assessment Act 1979
HCA	Heritage Conservation Area
Heritage Act	Heritage Act 1977 (NSW)
LEP	Local Environmental Plan
LGA	Local Government Area
NSW	New South Wales
S170 Register	Section 170 State Agency Heritage and Conservation Register
SEPP	State Environmental Planning Policies
SHI	State Heritage Inventory, NSW



Abbreviation	Meaning
SHR	State Heritage Register
SOHI	Statement of Heritage Impact



## 2. The Heritage Item

## 2.1 Site location and context

The suburb of Bradbury is located approximately 60 kilometres south of Sydney within the City of Campbelltown Local Government Area. The study area consists of a large portion of land along Appin Road extending from 500 metres north of the St Johns Road intersection to 40 metres south of the Fitzgibbon Lane and Kellerman Drive intersection. Portions of the adjoining St Johns Road and Woodland Road are also within the bounds of the study area. The study area is located wholly within the road reserve.

One local heritage item ('Silos' – Item # I5) is located within the northeastern portion of the study area. The silos are located along the southbound lane of Appin Road, contained within the eastern grass verge of the Appin Road Reserve. The silos comprise a pair of painted concrete tower silos with a single gabled corrugated steel roof covering. The silos were originally associated with an early homestead, demolished in the 1970s for the alignment of Appin Road. At present only the silos remain extant.

## 2.2 Heritage listings

There is one item of local heritage significance located within the study area, identified on Schedule 5 of the Campbelltown Local Environmental Plan 2015 (Campbelltown LEP 2015), listed as 'Silos' (I5).

Table 1. Summary of heritage status.

Register/listing	Item listed (Y/N)	Item name	Item number	
Statutory listings				
State Heritage Register	N	-	-	
State Agency Section 170 Heritage and Conservation Register	N	-	-	
Campbelltown Local Environmental Plan 2015, Schedule 5	Y	Silos	15	
Non-statutory listings				
Register of the National Trust (NSW)	N	-	-	



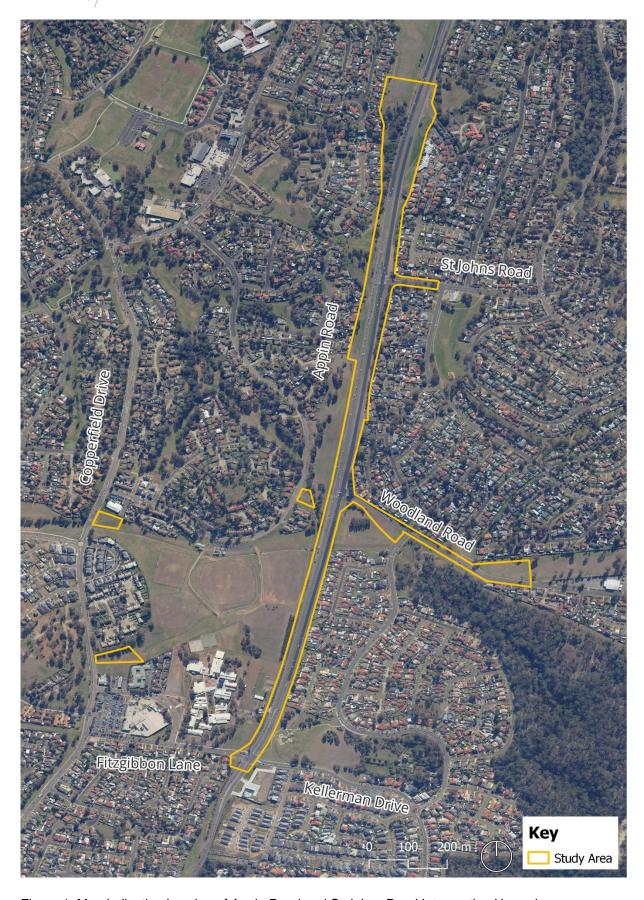


Figure 1. Map indicating location of Appin Road and St Johns Road Intersection Upgrade.



## 2.3 Heritage items in the vicinity

There are three heritage items and no heritage conservation areas (HCAs) listed on the Campbelltown LEP 2015 that are located in the immediate vicinity of the study area. 'Denfield' and 'St Helens Park House and Dam' are additionally listed on the State Heritage Register.

Table 2 Local and State listed heritage items.

Item no.	Item name	Address	Significance
16	Raith	74 Fern Avenue, Bradbury	Local
100540	Denfield homestead	Appin Road, St Helens Park	State
100406	St Helens Park House and Dam	St Helens Park Drive, St Helens Park	State



Figure 2. Map showing heritage items in the vicinity of the study area.



## 3. Historical Context

## 3.1 Traditional owners

The study area lies within an area identified as being the traditional country of the Tharawal people. The Tharawal are one of thirty distinct Aboriginal groups with their own territory, practices, diet, dress, and dialects, who were identified in the greater Sydney region at the time of English invasion in 1788. The Tharawal ethnolinguistic group originally extended from the southern side of Botany Bay to the Shoalhaven River and from the coast up to Georges Rivers and Appin, and possibly as far as Camden (Attenbrow 2002, 34). Presently, the study area is located within the boundaries of the Tharawal Local Aboriginal Land Council (LALC).

## 3.2 Colonisation of the region

In 1795 information regarding the presence of a herd of cattle, that had originally wandered away from the Sydney settlement, was transmitted to Governor Hunter. The confirmation of the presence of cattle resulted in the district being named the 'Cowpasture'. Governor Hunter declared that the Cowpasture was restricted from settlement, to allow the cattle to roam, graze, and multiply. In 1803 this restriction was renewed by Governor King.

Despite the restricted grants in the areas around the Cowpasture, new colonists began to take up residence in the wider region to take advantage of the natural open grasslands. However, this was not official policy until 1808, when two separate floods along the Hawkesbury River destroyed critical grain crops, prompting Lieutenant Governor Paterson to formally allow lands south-west of Sydney to be opened up for farming purposes. After Governor Macquarie officially took up his duties on 1 January 1810, the lands authorised by Paterson for grantees were recalled. Yet, when Macquarie toured the area in 1810, he noted that the farms were already well established, and included fields of wheat and flocks of sheep and cattle. After the tour, most of Patterson's grants were reissued.

The Cumberland Plain, that encompasses the western half of the Sydney basin into the Campbelltown area had been divided into principal districts by 1821. The majority of the colonial European population resided within this area and all the crops for the colony were produced within the districts. The Colonial Districts of Upper Minto, Minto, Airds and Appin are part of the Campbelltown LGA today (Davies 2011, 12). Campbelltown was officially established in 1820, named for the maiden name of Elizabeth Macquarie.

Land grants in the Campbelltown area were initially used for agriculture and pastoralism, crop growing and the grazing of animals, particularly beef cattle and sheep (Davies 2011, 26). Agricultural activity was beset by difficulties such as 'disease, market fluctuations, competition and lack of water', resulting in the amalgamation of many smaller landholdings throughout the nineteenth century (Davies 2011, 26). In the middle of the nineteenth century the primary industry was the production and milling of wheat, evidenced by a number of mills built in the area (Davies 2011, 26). By the 1880s, wheat farming was replaced by grazing and dairying as the primary activity of the area, as wheat farms failed due to Rust and competition from larger farms further west.



## 3.3 Appin Road

Governor Macquarie visited the south-western region in 1810, and selected the site of Liverpool and gave the name Airds to the area around present-day Campbelltown. In 1811 there were 107 settlers residing in the Liverpool area. In May 1811, the first grant in Appin was made to Deputy Commissary General W. Broughton, comprising 1,000 acres, named Lachlan Vale in honor of Macquarie. Macquarie also reserved land in the Appin area for smaller allotments of 30 to 60 acres and 100 acres.

In October 1811, Macquarie proposed the construction of a road from Sydney to Liverpool. The road, consisting of a dirt track, was constructed by 1814, and was subsequently extended to Appin. Further exploration of the area resulted in the establishment of better routes between local centres, including Charles Throsby's Cowpasture Road to Campbelltown by 1819, and the branch Appin Road by 1823. Campbelltown became a crossroad for movements to Sydney, Appin, the Illawarra, Picton, Narellan, Camden, Penrith and Nattai. Roads and bridges were built and maintained by convict road gangs from 1826 to 1858 (Davies 2011, 24). The present Appin Road largely follows its original alignment.

Part of the study area passes through or between land grants issued in 1816 and 1817. The recipients of these grants include Bernard Byrne (Portion 26; Serial 6 Page 92), James Haydon (Portion 27; Serial 6 Page 96), Jeffrey Cooney (Portion 28; Serial 8 Page 226), Thomas Phillips (Portion 41 Serial 8 Page 19), Thomas Acres Sen. (Portion 40; Serial 8 Page 219), John Wild's Egypt Farm (Portion 42; Serial 8 Page 24), Edward Kenny (Portion 55; Serial 8 Page 208), and Richard Brown (Portion 56; Serial 8 Page 204); and James Gordon (Portion 85; Serial 8 Page 217).

Figure 4 suggests one of the compounds falls within the property of Charles Daly (Portion 40; Serial 8 Page 221) whereas Figure 5 suggests it's in the lot to the north owned by T Rixton, and previously by Cornelius Lyons (Portion 39; Serial 8 Page 220). Due to inaccuracies in the mapping, this cannot be fully established.



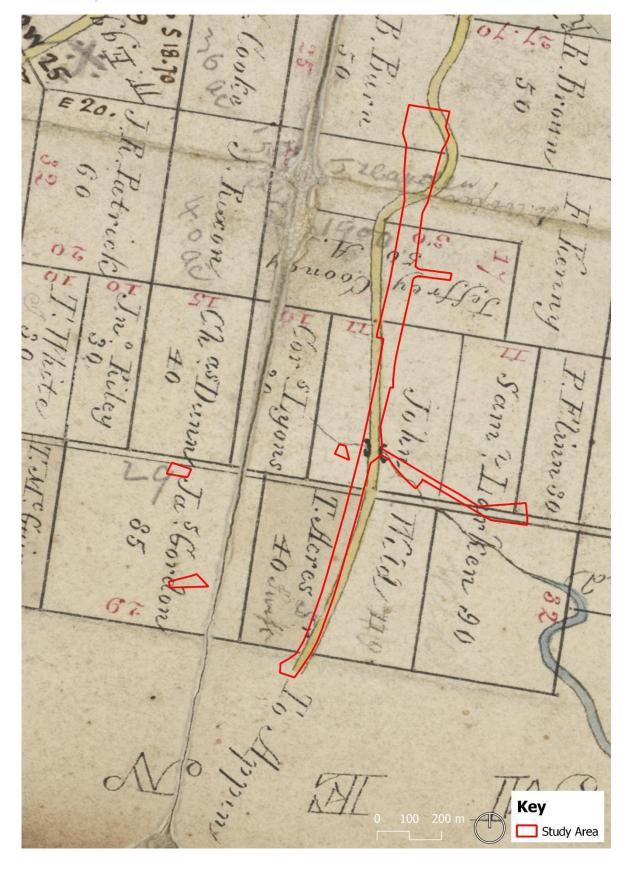


Figure 3. Detail Parish of St Peter, 1834 showing first grantees (Source: State Library NSW, FL3783221).



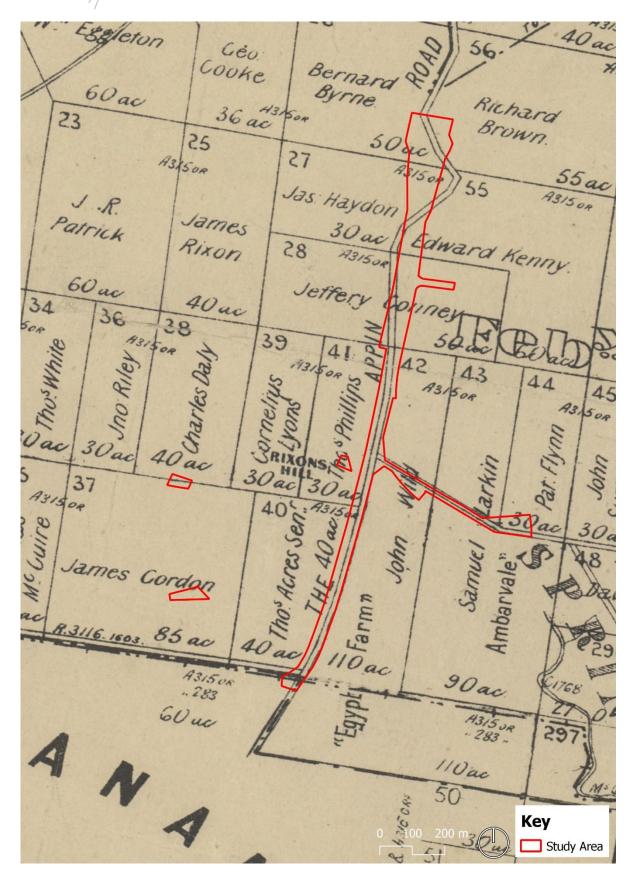


Figure 4. Detail, Parish Map of St Peter, 1895. (Source: State Library NSW, FL20509279)



## 3.3.1 Nineteenth century farms and estates

The land around the study area appears to have followed the general development of the Campbelltown area, remaining agricultural and pastoral throughout the nineteenth century.

#### 3.3.1.1 Simpson's cottage

In the early nineteenth century, George Simpson constructed a dwelling along Appin Road (Figure 8). This feature lies outside the study area, directly east of the silos, however it is on the grant of land that extends into the study area.

Simpson acquired the land grants of James Haydon, Richard Brown and James Gordon in the 1820s and is believed to have constructed a dwelling by the 1830s (Allen 2015). It was demolished in the 1970s. It was recorded as an early stone and brick colonial house (Proudfoot 1973, 98).

#### 3.3.1.2 The Sussex Arms

An inn, the Sussex Arms, was established on Appin Road by the 1840s (Figure 6). <u>The inn site lies outside the study area</u>. However, it is considered an important associative feature in relation to the silo LEP item (SHR listing).

The inn was located on the western side of Appin Road, on an area of one acre excised from Haydon's grant in 1827 (Book S No. 234). The Sussex Arms had been established by 1846 and was at that time owned by Edward Larkins (*Bell's Life in Sydney and Sporting Reviewer* 1846, 4). In 1852, this land parcel was sold from Larkins to John Stephenson and John Winsor. The land contained a 'Messuage or dwelling house thereon... known by the sign of name of "The Sussex Arms" (Book. 24 No. 518). In 1860, the Sussex Arms was advertised for lease —

The lease – for 3, 5, 7, 10, or 15 years – of that very excellent family residence, lately kept as an inn, and known as the Sussex Arms.

The house is most beautifully situated, being only one mile from Campbelltown, on the Appin Road. The house contains fourteen rooms; a kitchen, two store-rooms. a six-stall stable, and coach-house, a neat kitchen garden, and orchard well-stocked with fruit-trees. (The Sydney Morning Herald 1860, 7).

The site was acquired by William and Edwin Fieldhouse in the 1870s. The inn appears to have been demolished in the late-nineteenth or early twentieth century, as it is not shown on the 1917 plan of the area.

#### 3.3.1.3 Denfield

South of the study area, the Denfield Homestead was constructed in the 1830s. Denfield is also referred to as Airds Cottage. The feature is listed as a state significant built heritage item (item number 100540).

The farmhouse was constructed by John Farley in 1837. Farley is noted for his link to the local legend of Fisher's Ghost. Farley was a respected local man who reported to have seen the ghost of Fredrick Fisher in the nearby railway bridge following Fisher's suspicious disappearance in 1826. His statement led to an investigation that revealed Fisher's remains.



#### 3.3.1.4 St Helens Park House and Dam

South-east of the study area, St Helens Park House and Dam Homestead is located on John Wild's 'Egypt Farm' grant. The structure is listed as a state significant built heritage item (item number I00406).

In 1886 the land was transferred from John Edmond Wild to George Charles Westgarth, who also obtained adjacent land parcels. The two-story neo-gothic mansion was constructed in 1877, designed by George Allen Mansfield.

#### 3.3.1.5 Raith

North-east of the study area, 'Raith' is a large house located on an area of 55 acres issued to Richard Brown in 1816. The property was owned by George Simpson from 1834 and was known as Simpson's Farm. Raith is a locally listed built heritage item (item number 16).

The property was sold by James Simpson to the Reverend Edwin Robinson in 1871 and passed through different hands until its purchase by Herbert Merewether in 1903. Raith was built in 1903 for H.J.M Merewether and his wife, Wilhelmina Gore. Wilhelmina was the daughter of A.J. Gore., manager of Campbelltown Bank.

#### 3.3.1.6 Lennox's Farm

James Gordon's 85-acre grant was purchased by Simpson in 1828 and held by the Simpson family until the 1860s. It was purchased by Alexander, a shoemaker, and Agnes Lennox in 1878, and held by Agnes until her death in 1892 (Primary Application 9680). The land was transferred to the curator of her estate in 1896, with the certificate of title depicting built structures and fencing in the north-east corner of the property between the fork of two creeks, and dams established along the creek line at the eastern boundary (Vol. 1184 Fol. 43). The structures are outside of the study area, east of the compound sites along Copperfield Drive. An auction advertisement for the property in 1897 noted that the farm contained a four-room weatherboard cottage (*The Daily Telegraph* 1897, 2). It is not known if the structures were established by the Lennoxs' or by previous occupants.





Figure 5. Certificate of Title issued to curator of Agnes Lennox's estate, 1896 (Source: Vol. 1184 Fol. 43).

## 3.3.2 Dairying

From the middle of the nineteenth century, dairying developed as the dominant industry in the region. In the 1870s, the several land grants on either side of Appin Road, including those of Edward Kenny, Jeffrey Cooney, James Haydon, were purchased by Edwin and William Fieldhouse (Vol 130 Fol. 71). The Fieldhouses owned a store and hotel in Campbelltown and acquired several landholdings in the district and elsewhere in NSW, that appear to have been leased.

In 1911, following the death of William Fieldhouse, his estate offered for sale several dairy farms in the Campbelltown, Camden, Picton and Bargo districts (*Camden News* 1911, 5). The sale included:

Lot 1 – Denfield Farms, containing 235 acres, 3 miles from Campbelltown

Lot 1a - Reachs Farm, 50 acres, 3 miles on Appin Road

Lot 2 – One Tree Paddock, 34 acres, 1 mile from Campbelltown.

Lot 2a - Chapel Hill Farm, 210 acres adjoining Campbelltown



Lot 3 - Baptiste Place, 13 acres, 1 mile from Campbelltown

Lot 4a – Daly's, about 20 acres, adjoining Dalys stone cottage, 3 miles from Campbelltown partly fenced

Lot 4 - Nicol's Farms, 147 acres, 2 miles from Campbelltown

Lot 5 – Glenlora, 163 acres, 2 miles from Campbelltown

Lot 6 - Sugarloaf (Hayden's) 70 acres 3 miles from Campbelltown

Lot 6a - Lack's Farm, 60 acres, adjoining Glenlora

A subsequent advertisement described 'Nichol's Farm, 2 miles Campbelltown, on Appin-road, 147 acres. Good Brick Cottage, and improvements' (*The Sydney Morning Herald* 1911, 23). Nichol's Farm may comprise landholdings along the western side of Appin Road, that would have contained Simpson's Cottage and the former Sussex Arms site (General Register of Deeds, Book 956 No. 884).

Jenner also acquired an additional 26 acres on the opposite side of Appin Road, and in in 1922 the property was sold to Joseph Quirk (Vol. 2747 Fol. 160).

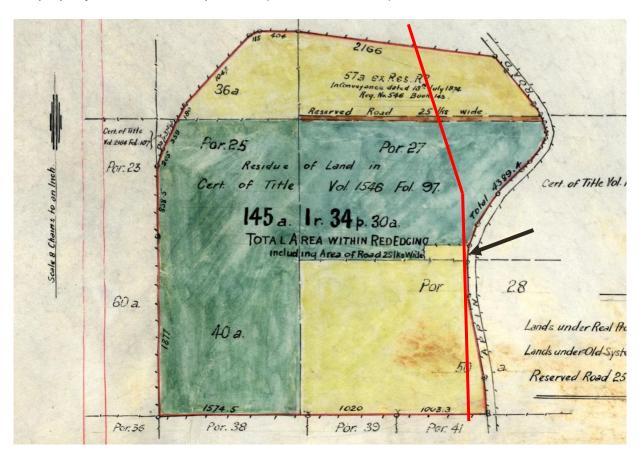


Figure 6. 145 acres transferred to Samuel Jenner in 1912. Location of Sussex Arms marked by black arrow. Study area marked in red. (Source: General Register of Deeds, Book 956 No. 884).



#### 3.3.2.1 Daly's Cottage

The 1917 map depicts several built structures within or adjacent to the study area (Figure 10). A structure labelled 'Ruin' may refer to Daly's cottage referenced in the 1911 advertisement for the sale of the Fieldhouse farms.

Daly's cottage was located within the land grant of 60 acres issued to Edward Kenny. In 1872, Kenny's grant was converted to Torrens Title by Louisa Smith, and it was noted that the farm was 'now in the occupation of Patrick Daley' (*New South Wales Government Gazette* 1872, 1718). The structure is not shown on the 1933 or 1954 maps.

#### 3.3.2.2 Lennox's Farm

The former Lennox farm was used for dairying by the O'Loughlan family in the first decades of the twentieth century, and subsequently by the Rofe family from the 1920s until the 1970s. The cottage and outbuildings first depicted on the 1896 certificate of title appears in aerial photography to have remained on the property until the early 1970s.



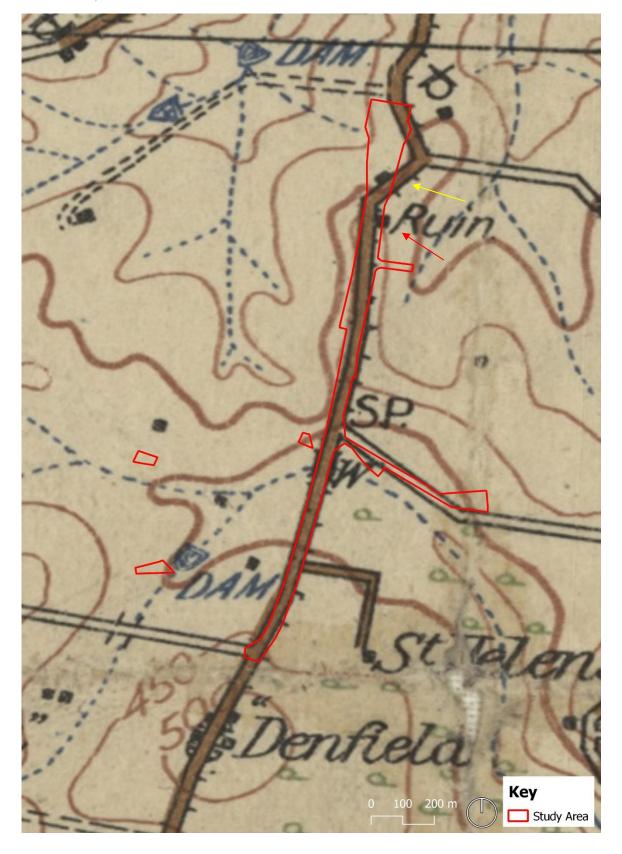


Figure 7. Liverpool Menangle Manoeuvre Area, 1917, with Simpson's cottage marked by white arrow. Daly's cottage marked by red arrow (Source: State Library NSW, FL16167889).



## 3.3.3 **Silos**

In 1928, Quirk leased the property on which the former Simpson's cottage stood to Smith Bros Ltd. It was advertised as having 'choice dairy herd and plant etc.' (*Camden News* 1928, 4). The property was later leased to farmer Christopher Johnston from 1933, and to dairy farmer Marsiglio Bonomini from 1946. The property was eventually sold to the grazier William Bradley in 1957 (Vol. 5069 Fol. 43).

The construction of the silos likely dates to between 1933-1934, during which the property was occupied by Christopher Johnston (Artefact 2018, 28). Silos of this period are typically constructed alongside feeding stalls, yards, and barns (Artefact 2018, 28). By 1961 a low shed had been constructed on the southern side of the silos. This had been removed by 1975. Simpson's cottage was demolished prior to 1975 for the realignment of Appin Road, leaving the silos as the only extant structure in the complex (Artefact 2018, 29). An image of silos is quoted as being the silos along aping road in the Artefact (2018) report, however the dimensions and structure lead us to believe this image depicts other silos of the era, not the silos of Appin Road (Campbelltown City Library, Ref. 006600) (Artefact 2018, 29).



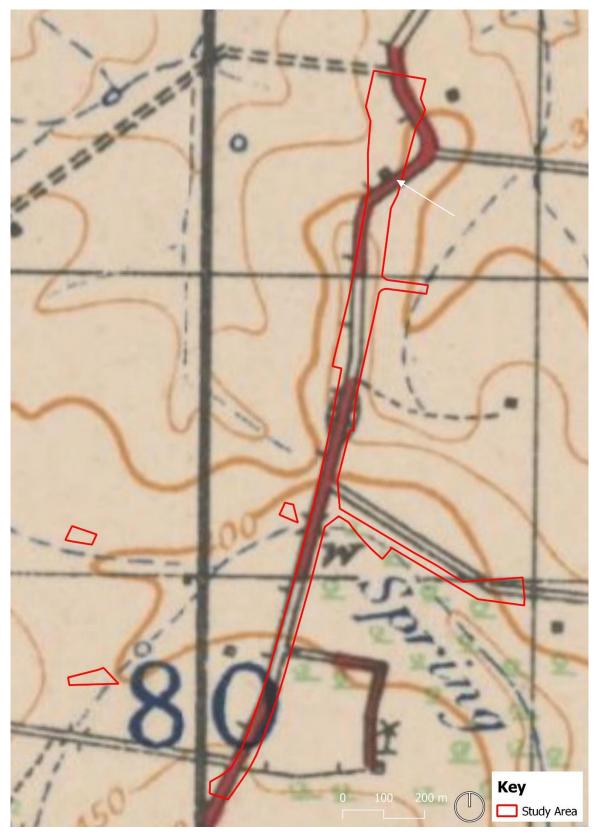


Figure 8. 1933 map of the study area. Simpson's cottage marked by white arrow (Source: Camden Australia Section, 1933).



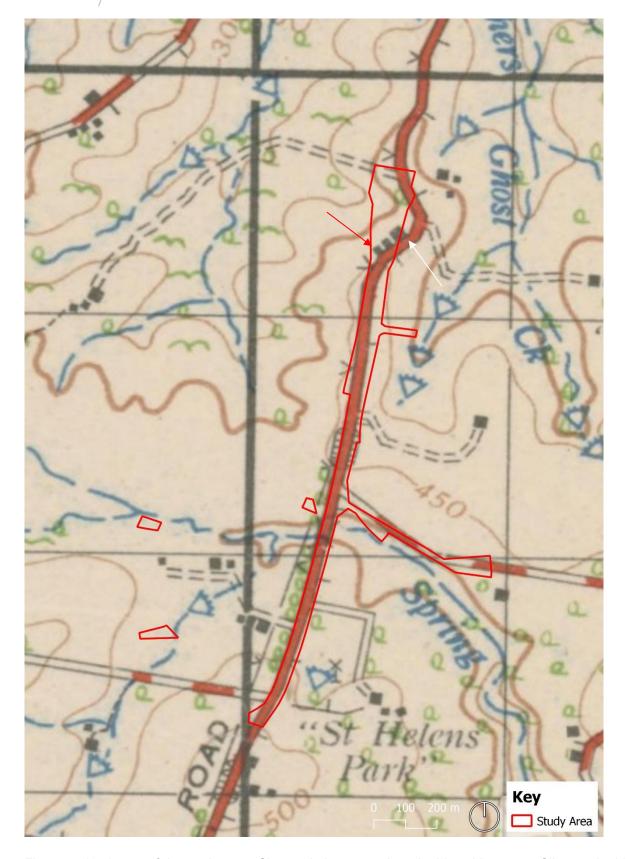


Figure 9. 1954 map of the study area. Simpson's homestead marked by white arrow. Silos marked by red arrow (Source: Camden Royal Australian, 1954).



## 3.3.4 Appin Road upgrade

The majority of Appin Road has maintained its original alignment since its establishment, however there is a deviation to the original alignment contained within the northern portion of the study area (Figure 1). Appin Road was also subject to upgrades during the 1970s as suburban residential development led to the widening of the road corridor to the present 40m (Clouston Associates 2018, 22). This development led to the demolition of the house that was associated with the silos.



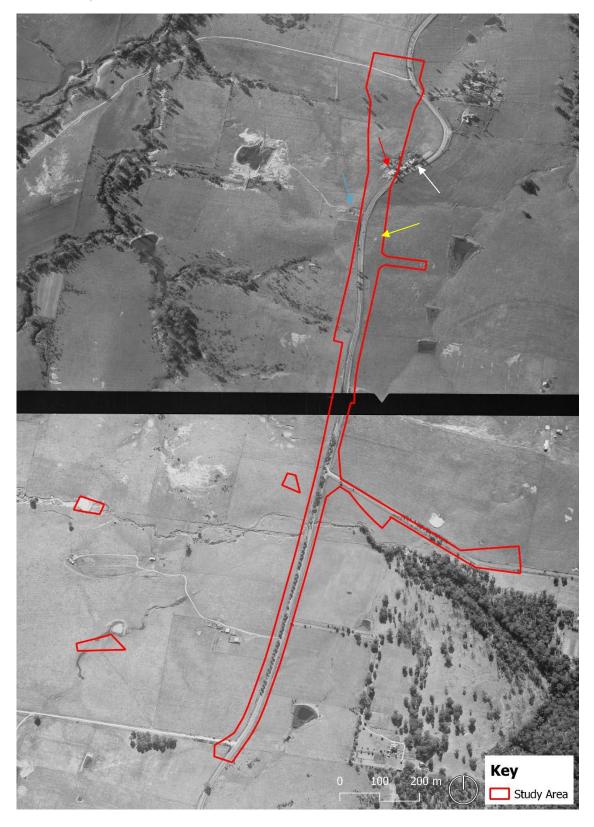


Figure 10. 1961 aerial image. Daly's cottage ruin marked by yellow arrow. Former Simpson's Cottage marked in white. Former Sussex Arms marked in blue. Silos marked in red.



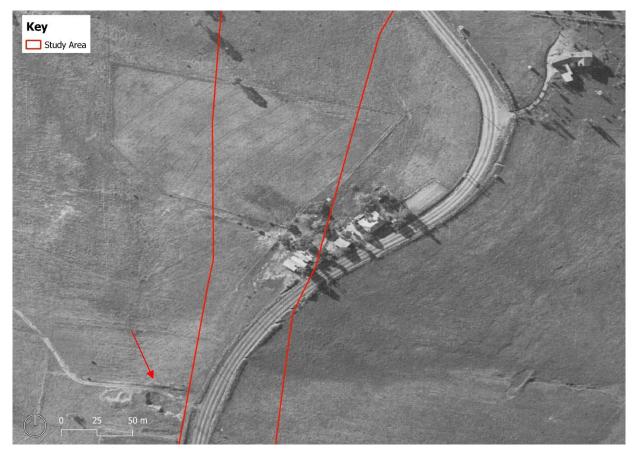


Figure 11. Detail, 1961 aerial showing the silos located within the study area. Ground features in the bottom left of the image may relate to the former Sussex Arms site (red arrow).





Figure 12. 1975 aerial image.





Figure 13. Detail, 1975 aerial image, showing the silos (extant) but house and outbuildings as demolished.





Figure 14. 1990 aerial image.





Figure 15. Detail, 1990 aerial image, showing realignment of Appin Road, and retained silos at centre of image.



## 4. Physical Analysis

## 4.1 Appin Road

Appin Road is a secondary highway, that runs from Campbelltown to Wollongong. The area of proposed works covers part of Appin Road and St Johns Road. It consists of a divided carriageway with two travel lanes in each direction and a wide grassed median. The carriageway is generally bounded by concrete gutters, with turfed shoulders. There is no formal footpath on either side of Appin Road. Existing road infrastructure includes road signs, streetlights, electricity poles, and traffic lights.

St Johns Road is a local collector road that generally consist of a through lane in each direction and kerbside lane parking and a landscaped central median.

#### 4.2 Silos

The physical description of the silos is quoted from the Heritage NSW State Heritage Inventory Sheet for the item.

The silos are located to the east of Appin Road in the road reservation, west of 17-21 Poplar Crescent, Bradbury.

The silos are a pair of painted concrete tower silos, two separated concrete cylinders each approx. 4.7m outside diameter about approx. 7.7m high, with a single gabled corrugated steel roof covering both silos. Gable ends are corrugated steel. The formwork used for the exterior was corrugated steel, therefore the silo walls reflect the characteristic ridge pattern of corrugated steel. The walls are 125mm thick, steel reinforced, cast in-situ with 8 equal segments with 75mm wide reinforced concrete studs between each segment. There are three access hatches in each silo arranged symmetrically opposite each other (hatch covers missing). The original wall colour was light stone. The floors are compacted blue metal gravel, with floor level approx. 400mm above the outside ground level at the lowest hatch. The roof framing is of hardwood, and the roof is without fascia's. All exposed timber was originally painted red oxide colour. The roof of corrugated steel has roll caps at gable overhangs and with sheet steel ridge capping. Timber tongue and grooved vertically boarded walls were constructed between the silos to enclose the access hatches, and two timber chutes are also located between the silos.

Sandstone footings can be discerned embedded in the soil immediately to the south of the silos.







Figure 16. Present state of silos.

Figure 17. View of silos.

## 4.3 Views and settings

The landscape within the study area is generally characterised by a cutback roadway and grass verge. Along Woodland Road the study area includes areas of parkland. Parklands include Woodland Road Reserve and St Helens Park south of Woodland Road and Pinaroo Reserve and Flynn Reserve to the north of Woodland Road. The northern extent of study area also consists of St Helens Park Reserve parkland east of Appin Road and north of Kellerman Drive.

The wider setting of the study area comprises low density residential development dating from the late-twentieth century. The western side of Appin Road is bounded by open green space, with residential development separated from the road. Along the eastern side, residential development abuts the road more closely. Within this setting, the silos retain a highly visible position when viewed along Appin Road.

Two compound sites, located along Copperfield Drive, are positioned in a moderately sized park. The flat, open park is accessible by road slopes gently eastward to a Rosemeadow sporting field.





Figure 18. Eastern extent of study area along St Johns Road, southern footpath facing west.



Figure 19. Eastern extent of study area along St Johns Road, southern footpath facing east showing steep decline.



Figure 20. Intersection of Appin Road and St Johns Road, facing north. Berm visible to the far left.



Figure 21. The crest of the hill visible on the north bound side of Appin Road.





Figure 22. Decline from road level to residences. Informal vehicle tracks, possibly used by residence. Facing south.

## 4.3.1 Heritage items in the vicinity

#### St Helens Park House and Dam

St Helens Park House and Dam is located south-east of the study area. It is an elaborate twostorey Neo-Gothic mansion dating to 1887. It is set on a large remnant rural lot. The house is approximately 350m east of Appin Road, separated by open green public space, private open space and surrounded by mature vegetation. It is a prominent feature in the landscape when viewed from Appin Road (Figure 23, Figure 24).



Figure 23. View from St Helens Park House and Dam west to the Kellerman Drive and Appin Road Intersection.



Figure 24. View towards St Helens Park House and Dam east to the Kellerman Drive and Appin Road Intersection.





Figure 25. View towards St Helens Park House and Dam east from the Kellerman Drive and Appin Road Intersection.



Figure 26. Eastern extent of the study area along St Helens Park Road facing west.

#### Raith

Raith is located north-east of the study area, on Pine Avenue. The house is situated on a rise, on higher ground than Appin Road. The house is shielded from Appin Road by fencing and vegetation (Figure 27, Figure 28).



Figure 27. View towards silos from Raith facing south.



Figure 28. View north from Raith gate.

#### **Denfield**

Denfield is located south-east of the study area. It is situated on a hill, with access from Appin Road. The site contains house and outbuildings, as well as mature trees and vegetation. The Appin Road frontage is lined by hedges and vegetation that obscure views to the property. The property is also obstructed by modern residential and commercial development (Figure 29-Figure 30).





Figure 29. View south towards Denfield from the Kellerman Drive and Appin Road Intersection.



Figure 30. View south towards Denfield from the Kellerman Drive and Appin Road Intersection.

## 4.4 Site inspection

Extent Heritage advisors Hannah Morris (Senior Heritage Advisor) and Catherine Fenech (Heritage Advisor) carried out a physical assessment of the study area on 31/05/2023. The site visit aimed to assess the landscape, evaluate levels of disturbances, and identify any visible historical archaeological features. The inspection was undertaken as a visual study carried out as a pedestrian survey on both the north bound and south bound verges of Appin Road, between Therry Road in the north and Woodland Road in the south. Views from local heritage items in the vicinity were also assessed. This site inspection has informed the following sections.

No historical archaeological relics were identified. However, a small concrete item was observed directly north of the silos. The feature continued underground to an unknown depth. The function could not be determined, although it may relate to a service access point.





Figure 31. Small concrete items north of the silos.



Figure 32. Detail of concrete element.

### 4.5 Disturbance

#### 4.5.1 Road cut-out

The original landscape was low rolling hills. In the northern portion of the study area, a crest was located on the eastern side of Appin Road and the hill sloping down to the west (Figure 33). The hill was severely cut into for the construction of modern-day Appin Road (Figure 34). It is possible that part of this rise is comprised of spoil from the realignment of the road in the 1970s. Due to levelling for the construction of the modern-day Appin Road, disturbance within the road corridor is high.



Figure 33. Landscaping associated with the storm water system looking south.



Figure 34. Informal gravel driveway north of silo site, forming north eastern extent of the study area.



### 4.5.2 Service infrastructure

Landscaping has been undertaken on both sides of Appin Road to facilitate a storm water drainage system. This system has been cut into the hill side on the eastern side of Appin Road approximately 120m north of the silos (Figure 35, Figure 36). Landscaping associated with this feature is deep and extensive. It would cause substantial ground disturbance. The stormwater system on the western side of the road meets up with storm water infrastructure on the western side of Appin Road (Figure 37, Figure 38). Ground disturbance is more localised but still appears to have caused substantial subsurface impacts.



Figure 35. View of the road reserve north of the silos with disturbance of the stormwater system in the background.



Figure 36. Landscaping associated with the storm water system looking south.



Figure 37. Storm water channel western extent of study area.



Figure 38. Storm water channel along subdivision boundry. Western extent of study area.



## 4.5.3 Landscaping

Additional landscaping has taken place on the western side of Appin Road, in the very northern extent of the study area. Terracing by machine for an unknown purpose can be identified. The ground disturbance does not appear to be as deep as in other locations, as such the disturbance in this area would be considered moderate. Other evidence of shallow landscaping and disturbance were observed across the study area (Figure 41).

Two compounds are located in a park located between Copperfield Drive (west) and Appin Road (east). Both compounds are generally flat, but it is likely some landscaping and works associated with underground service installation have taken place. The southern boundary of the northern-most compounds is a large stormwater system (Figure 42). A similarly stormwater channel is located directly beneath the southern-most compound site (Figure 43). As a result, subsurface disturbance would be considered even greater in this portion of the study area.



Figure 39. Eastern extent of the study area along Woodland Road facing east.



Figure 40. Park land wihtin the western portion of the study area, along Appin Road north bound. Looking north.





Figure 41. Open gravel exposure south of silos, north of St Johns Road, looking north.



Figure 42. Open park on eastern side of Copperfield Drive, and the location of the northern compound in this park, looking east. The extent of the compound site is the structure on the right and stormwater channel on the left of the image.



Figure 43. Open park on eastern side of Copperfield Drive, and the location of the southern compound in this park, looking east. The extent of the compound site is the lot of houses on the right and fencing on the right of the image. The outlet for the stormwater channel can be seen in the distance.

#### 4.5.4 Silos

The silos are situated on a slight rise. The ground on the northern, eastern, and southern sides surrounding the silos did not appear to have been impacted by road works (Figure 44, Figure 45). Directly to the west of the silos, however, has been cut down for the construction of modern-day Appin Road. As a result, subsurface historical features (such as the concrete feature in Figure 31) may survive in all areas around the silos except to the west.





Figure 44. View of the rise looking south from the silos.



Figure 45. Concrete footing for road side railing south of silos.

## 4.5.5 Historical aerial images

The 1961, 1972, and 1975 aerial images show that the study area was predominantly farmland during these decades (Figure 10, Figure 12). Fields were used for a combination of grazing and crops with evidence of plough marks across much of the study area. Evidence of scouring around the waterway directly south of St Johns Road indicate a moderate level of ground disturbance.

The two compounds located along Copperfield Drive were either in the direct vicinity of, or on, agricultural dams (Figure 10). One of these dams was mapped as early as 1917 (Figure 7). While these compounds were located along the tributories to a spring located on the eastern side of Appin Road (Figure 7), the establishement of these dams and formalisation of the natural waterways would have created severe ground disturbance. Water movement through the the dams would also cause additional impacts to the integrity of subsurface archaeological remains.

By 1990, Appin Road had been realigned. The original bend in the road at the northern extent of the study area is bare. Ground disturbance works appear to extend into the study area in this location, however the area directly around the silos appears to have been protected. The large stormwater drain identified was also established around this time (Figure 35, Figure 36).

During the second half of the twentieth century, residential housing had begun to populate both sides of Appin Road. Large open spaces remained and, over time, these become established parks (Figure 12-Figure 14).

## 4.5.6 Summary

Most of the study area has undergone moderate to high levels of disturbance. The construction of modern-day Appin Road and stormwater infrasturure have caused severe ground disturbance from cutting into the natural hill along Appin Road. The parkland along Copperfield Drive has also been disturbance as a result of the construction of water and stormwater infrastructure in the twentieth century. These works will have impacted evidence of agricultural



activities associated with early land grants. Moderate levels of disturbance have been caused by the demolition of the original Appin Road alignment, scouring, and other landscaping across the sites.

The ground in some areas within the study area appear to retain higher integrity. This includes the area around the silos, excluding to the west where the modern-day Appin Road was established.



## 5. Historical Archaeology

The assessment of archaeological potential at the Appin Road and St. Johns Road intersection is based on information obtained from various historical sources such as historical plans, aerials, and photographs, as well as a review of current listings and general observations made during a site inspection carried out by Extent Heritage on 31 May 2023.

It includes analysis of the potential for the study area to contain archaeological remains. The ability of archaeological resources to address research questions and provide useful information primarily depends on its nature, integrity, and significance.

## 5.1 Phases of historical development

### Phase 1: Traditional owners (pre-1816)

Aboriginal archaeology and heritage are beyond the scope of this assessment.

## Phase 2: Early land grants (1816-1870s)

Early land use of the study area was associated with agricultural and pastoral pursuits. The first recorded land grant in Appin occurred in 1811. During this period the study area passes through or between land grants issued in 1816 and 1817. The recipients of these grants include Bernard Byrne (Portion 26), James Haydon (Portion 27), Jeffrey Cooney (Portion 28), Thomas Phillips (Portion 41), Thomas Acres Sen. (Portion 40), John Wild's 'Egypt Farm' (Portion 42), Edward Kenny (Portion 55), and Richard Brown (Portion 56). No structures are identified in the 1843 mapping (Figure 3).

During the early nineteenth century a dwelling was constructed by George Simpson along Appin Road. Simpson acquired the land grants of James Haydon, Richard Brown and James Gordon in the 1820s and is believed to have constructed a dwelling by the 1830s. This dwelling was located outside the study area (Figure 8), adjacent to the present-day silos and was demolished in the 1970s. It was recorded as an early stone and brick colonial house (Proudfoot 1973, 98).

From the middle of the nineteenth century, dairying developed as the dominant industry in the region. In the 1870s, the several land grants on either side of Appin Road, including those of Edward Kenny, Jeffrey Cooney, James Haydon, were purchased by Edwin and William Fieldhouse who acquired several landholdings which they appear to have leased. By the 1890s, a dwelling and outbuildings were established on James Gordon's grant, possibly associated with Alexander and Agnes Lennox. These are outside the study area. The property was used for dairying from the 1900s by the O'Loughlan and Rofe families.

Archaeological remains associated with early land grants may include evidence of agricultural land use and landscape modification. Resources may consist of cuts and fills associated with landscaping and trenching, burned or stumped tree boles, postholes from fencing or temporary structures and irrigation systems. Isolated artefacts, and discrete artefact scatters from the period and items related to agriculture may be identified across the site.



There is a low potential for evidence of these resources to remain within the study area. These resources are generally shallow and ephemeral. As a result, landscaping, installation of stormwater infrastructure, grading, and road realignment will have disturbed, truncated, and/or removed archaeological remains (Section 4.5).

## Phase 3: Appin Road (1823-1970s)

Appin Road was under construction by 1823 with roads and bridges built and maintained by convict labour from 1826 to 1858. It was originally constructed from compact earth and was declared a road in August 1928. Sealing of Appin Road was undertaken in sections following the issue of grants to Council in the period after 1954 (The Picton Post 21 July 1954, 2). The original Appin Road ran through the study area in approximately the same alignment as it is today. There were two obvious deviations toward the northern extent of the study area (Figure 3). A timber bridge crossing Spring Creek was located just south of the junction of Appin Road and St Johns Road although this is not visible in the 1961 aerial image. Spring Creek was subsequently channelised during the road-widening program of the 1970s. The creek bed was widened and lined with concrete and now forms a stormwater channel.

The new Appin Road alignment was constructed in the 1970s. Evidence of the original roadway is unlikely be presented. Later iterations of the road are likely be identified by layers of introduced gravels. Other evidence may include stone kerbing, culverts, and services.

Evidence of the original roadway is likely to have been removed by the substantial ground disturbance associated with later roadworks in Phase 4. For example, the 1961 aerial image (Figure 11) shows the type of grading that took place on the original line of road. Moreover, the modern road was made level and cut into the hills. There is low potential for archaeological evidence of an early bridge which was removed between 1954 and 1960.

## **Phase 4: Dairy Farming (1870-1920)**

A 1911 advertisement described 'Nichol's Farm on Appin-road, 147 acres. Good Brick Cottage, and improvements' (*The Sydney Morning Herald* 1911, 23). Nichol's Farm may comprise landholdings along the western side of Appin Road, that would have contained Simpson's Cottage.

Simpson's cottage was an 1820s stone and brick colonial house located to the east of the silos. The house appears on the 1933 plan (Figure 8). The 1954 plan (Figure 9) indicates that two additional structures were built on Appin Road to the west of the house. The 1961 aerial image (Figure 10) shows that the central structure is likely to be a shed and the western structure is the silos (see Phase 5). On these maps all three structures appear to be located within the study area, however aerial images demonstrate clearly that the cottage was located to the east of the project boundary.

Based on these aerial images, any features directly surrounding the house are also located outside the study area. However, some features that that may extend into the study area include postholes from fences, isolated artefacts or discrete artefact scatters, tree boles, yard spaces, gardens and edging, paths, irrigation systems, cisterns, and services. The site visit and later



aerial images indicate that disturbance in the area appears to be generally low. As such, there is a low to moderate potential for evidence of these resources to remain within the study area.

Samuel Jenner also acquired an additional 26 acres on the opposite side of Appin Road, and in 1922 the property was sold to Joseph Quirk.

The 1917 map shows a structure labelled 'Ruin' may refer to Daly's cottage referenced in the 1911 advertisement for the sale of the Fieldhouse farms. It is located within the land grant of 60 acres issued to Edward Kenny. In 1872, Kenny's grant was converted to Torrens Title by Louisa Smith, and it was noted that the farm was 'now in the occupation of Patrick Daley' (*New South Wales Government Gazette* 1872, 1718). The structure is not shown on the 1933 or 1954 maps.

Daly's dwelling was a small, 1830s stone and brick colonial house. Like the Simpson's cottage, from dating to the same period, archaeological evidence associated with the cottage may likely include brick or sandstone footings, postholes associated with fencing and structures including barns, sheds, and feeding stalls. Other features may include yard surfaces or underfloor deposits, paths, irrigation systems, isolated artefacts and discrete artefact scatters. As the site is directly within the modern carriageway, there is little chance of survival of these remains.

## Phase 5: Silos (1928- 1970s)

In 1928, Quirk leased the property on which the silos sit to Smith Bros Ltd. The property was leased to farmer Christopher Johnston from 1933, and to dairy farmer Marsiglio Bonomini from 1946. The property was sold to the grazier William Bradley in 1957.

The construction of the silos likely dates to between 1933-1934, during which the property was occupied by Christopher Johnston (Artefact 2018, 28). Silos of this period are typically constructed alongside feeding stalls, yards, and barns (Artefact 2018, 28). A shed was constructed adjacent to the southern side of the silos prior to 1961. The dwelling and shed were demolished prior to 1975 for the realignment of Appin Road, leaving the silos as the only extant structure (Artefact 2018, 29).

The silos themselves are extant and considered a built heritage item. Construction of the silos, however, may include archaeological elements such as cuts and fills from construction. These features would be considered extant as they are part of the silos which has high integrity.

The 1961 aerial image shows that these auxiliary structures were present on both sides of the silos.

Archaeological evidence associated with the structures located alongside the silos may include postholes associated with fencing and structures including barns, sheds, and feeding stalls. Other features may include yard surfaces, paths, irrigation systems, isolated artefacts and discrete artefact scatters. Tree boles from this period may also be identified. Sandstone footings identified in the Artefact (2018) report located immediately south of the silos may have been related to the former shed. On the northern side of the silos the ground surface was subject to considerable disturbance during vegetation clearance and landscaping works undertaken between May 2017 and August 2019.



The 1975 aerial image shows the area directly following the demolition of Simpson's cottage and the associated shed (Figure 13). The area around the silos has been cleared. While demolition works will have disturbed, truncated, and/or removed shallow and non-substantial archaeological remains, it is possible for contexts to survive within the immediate vicinity of the silos. The site visit and later aerials indicate that disturbance in the area appears to be low overall. As such, there is a limited potential for evidence of these resources to survive within the study area.

## Phase 6: Realignment of Appin Road (1970s – present)

By 1937 portions of the land were resumed by the Commissioner of Main Roads, with the remainder of the property containing the silos acquired by the NSW Department of Planning in 1978. The dwelling was demolished in the 1970s for the realignment of Appin Road, leaving the silos as the only extant structure. The modern-day Appin Road is not considered to be associated with any archaeological resources.

## 5.2 Previous reports and investigations

Artefact Heritage (2018) 'Appin Road Upgrade, Historical (non-Aboriginal) Statement of Heritage Impact'

In 2018, Artefact Heritage was engaged by WSP to provide a SOHI for proposed works associated with residential subdivision within Bradbury. Based on the preliminary archaeological assessment, Artefact Heritage identified that any excavation had potential to uncover evidence of earlier roadworks, fence lines, entrances, drainage and road alignments along the existing road corridor (Artefact 2018, 43).

Artefact Heritage identified a high potential area within the curtilage of the locally listed Silos heritage item (LEP #I5), that would reach the threshold for local significance and may contain relics of State significance depending on nature and intactness. The heritage curtilage of the locally listed Silos (LEP #I5) is noted in the SHI database listing to contain sandstone footings embedded in the soil immediately south of the silos. This was not observed during the site inspection, several ground exposures were observed containing building rubble (Artefact 2018, 33). The SHI database listing for the Silos heritage item identifies that the site may retain archaeological evidence of early farming practices (Artefact 2018, 33). Relics are likely to be present within the curtilage of the locally listed Silos. There is a nil-low potential that unexpected remains that would be classified as relics would be located outside the Silos curtilage (Artefact 2018, 34).

## Davies, P. (2011) 'Campbelltown Local Government Area Heritage Review- Thematic History'

In 2011, Paul Davies was engaged by Campbelltown City Council to prepare a heritage review for the Campbelltown LGA. Davies provides a brief overview of the silos. He suggested the silos were constructed to store fodder for dairy cattle and is direct evidence of 1930s depression era unemployment relief scheme work for the dairying industry (Davies 2011, 1). Little more is noted about their significance or history.



## Proudfoot, H. (1973) 'Campbelltown, Camden, Appin, survey and report on nineteenth century buildings and sites'

In 1973, Helen Proudfoot surveyed 19<sup>th</sup> century buildings of the Campbelltown region. This report includes a description of the house at 302 Appin Road. The house was abandoned at the time. It was described as an early colonial house about one mile from Fishers Ghost Bridge on the Appin Road. The walls were of stone and brick, stuccoed, small-paned windows, side lights flanking the front door, and a stone flagged verandah (Proudfoot 1973, 98).

This report estimates it is construction to have been during the 1820s. Recommendation was made in this report for the structure to be restored and retained as a local landmark. There is a photograph of the structure, and no mention or visual indication of the silos (Proudfoot 1973, 98).

## 5.3 Assessment of archaeological potential

Archaeological potential across the study area is low, as aerial images show the wider area was used primarily for agricultural and pastoral purposes with few structures constructed within the bounds of the study area. Archaeological potential within the vicinity of the silo is low to moderate, as the rise appears to have been disturbed south of the storm water system. There is the potential for archaeological remains associated with Phases 4 and 5. This includes evidence of agricultural land use and modification, cuts and fills associated with landscaping and trenching, burned or stumped tree boles, postholes from fencing or temporary structures, and irrigation systems. Evidence concentrated around the dwellings and sheds may also include paths, garden beds and associated soils and edgings, yard surfaces, isolated artefacts, and discrete artefact scatters. Within the study area it is likely that sheds and other infrastructure may be associated with dairying or agricultural uses in the twentieth century.

Table 3 Summary of archaeological potential

Phase	Resources	Potential
Phase 1: Aboriginal occupation	NA	NA
Phase 2: Early land grants	Land use and modification relating to agriculture	Low
	Cuts and fills	
	Landscaping and trenching	
	Burnt or stumped tree boles	
	Postholes for fencing or temporary structures	
	Irrigation systems	
	Isolated artefacts or discrete artefact scatters	
Phase 3: Appin Road	Compacted earth	Low



Phase	Resources	Potential
	Wheel ruts	
	Drainage channels	
	Post holes	
	Simpson's cottage	Low
	Postholes	
	Tree boles	
	Yard spaces	
	Gardens and garden edging	
	Paths	
	Irrigation systems	
	Cisterns	
	Services	
	Isolated artefacts or discrete artefact scatters	
Phase 4: Dairy farming	Daly's cottage	Low
	Foundations	
	Underfloor deposits	
	Postholes	
	Tree boles	
	Yard spaces	
	Gardens and garden edging	
	Paths	
	Irrigation systems	
	Cisterns	
	Services	
	Isolated artefacts or discrete artefact scatters	
Phase 5: Silos	Cuts and fills	Low-Moderate
	Concrete footings	
Phase 6: Realignment of Appin Road (1970s- present)	Nil	Nil



## 6. Heritage Significance

## 6.1 Silos (I5)

This chapter provides the basis for assessing heritage significance in New South Wales as outlined in the Guidelines for preparing a statement of heritage impact (Department of Planning and Environment 2023b, 16-18).

#### 6.1.1 Assessment criteria

The NSW heritage assessment criteria was developed by the (predecessors of) Heritage NSW to provide the basis for an assessment of heritage significance of an item or place. This is achieved by evaluating the place's or item's significance in reference to eight criteria, which can be applied at a State or local level. They are outlined below.

**Criterion (a)** An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area);

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

**Criterion (c)** An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);

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

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

**Criterion (f)** An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area);

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



### 6.1.2 Assessment against criteria

An assessment of significance against the NSW heritage criteria is recorded in the State Heritage Inventory (SHI) online database for the Silos. This assessment is reproduced below.

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);

The silos are of historical significance as evidence of dairying in the Campbelltown District and dairying practices in the 1930s. The silos are of historical significance as examples of a standard concrete silo design promoted by the NSW Department of Agriculture during the 1930s depression and associated with the NSW Government unemployment relief scheme of that period. The silos are also historical evidence of the previous alignment of Appin Road.

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);

No assessment against this criterion was recorded in the SHI listing sheet.

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

The silos are of aesthetic significance as a landmark structure on Appin Road. The silos are of technical significance as representative examples of a standard concrete tower silo design promoted by the NSW Department of Agriculture in the 1930s, illustrative of cast-in-place concrete forming techniques.

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;

No assessment against this criterion was recorded in the SHI listing sheet.

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);

The cultural significance of the site is vested in the surviving built elements that may have some small potential to yield information regarding details of fodder storage in the period after 1930.

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);

No assessment against this criterion was recorded in the SHI listing sheet.



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

Representative 1930s concrete tower silos built to a standard design issued by the NSW Department of Agriculture.

## 6.1.3 Statement of significance

The following Statement of Significance is taken from the SHI listing sheet for the heritage item Silos:

The silos are of historical significance as evidence of dairying in the Campbelltown District and dairying practices in the 1930s; as examples of a standard concrete silo design promoted by the NSW Department of Agriculture during the 1930s depression and as structures associated with the NSW Government unemployment relief scheme of that period; and as historical evidence of the previous alignment of Appin Road. The silos are of aesthetic significance as a landmark structure on Appin Road. The silos are of technical significance as representative examples of a standard concrete tower silo design promoted by the NSW Department of Agriculture in the 1930s, illustrative of cast-in-place concrete forming techniques. The site of the silos and its vicinity is of archaeological research significance as the site of the silos may retain evidence of early farming practices, and is in the vicinity of the associated former site of an early homestead built between 1828-1830, and the site of "The Sussex Arms" recorded on the site in 1852.

It should be noted that the 'Sussex Arms' site has no relationship with the silos/Simpson's Cottage site and should be subject to a separate listing. Its inclusion in the Silos listing has only served to confuse matters.

## 6.2 Heritage items in the vicinity

There are three heritage items located in the vicinity of the study area. The Statements of Significance for these items are taken from the respective SHI listing sheets.

Heritage item	Existing statement of significance
Raith	"Raith", built 1903, is of historical significance as the rural estate of the family of Herbert Merewether, a prominent local family, from 1903 to 1927, and for its role as a child welfare institution from 1964 till the early 1990s. Raith has strong historical association with the family of Herbert Merewether, for whom the house was constructed, and with architects Wardell and Denning, its designers. Herbert Wardell, brother-in-law of Herbert Merewether, was a respected architect in the first years of the 20th century. Raith is of aesthetic significance as a substantial and distinctive architect-designed Federation bungalow style house, the external form of which is intact, for its unusual benched site, and as an important component of the local townscape. Raith is a fine



representative Federation Bungalow style residence that, with its grounds, are representative of substantial early 20<sup>th</sup> century rural estates in the Campbelltown area. Raith is a rare example of a substantial architect-designed Federation Bungalow in the Campbelltown area. Raith is likely to have social significance for the people who lived in the house during its period as a child welfare institution.

#### Denfield Homestead

Denfield has State heritage significance. Denfield, built 1835-1837, is of State historical significance as one of the earliest intact collections of buildings of its kind in the Campbelltown and Appin areas, particularly since it has retained a significant setting and garden. Denfield is associated with early farming identities John Farley (infamous for reporting the first sighting of Fisher's Ghost in Campbelltown), and John Bray who, along with his family, owned and farmed the property from 1840 until well into the 1900's. Denfield played an important part in the early settlement of Campbelltown/Appin area, having been a focus of farming in the area since the 1830's. It has a strong connection with the development and history of the area through social interactions and contributions by its owners and residents to the private, public and farming life of Campbelltown and Appin.

#### St Helens Park House and Dam

St Helen's Park House and Dam is an elaborate two storey neo-Gothic mansion built in 1887 for the wealthy Sydney Westgarth family and designed by architect George Allen Mansfield. It is well detailed and generally intact. Its distinctive massing and architectural character and its position, make it a prominent feature in the landscape viewed from the Appin Road demonstrating the past rural estate character of the outskirts of Campbelltown.

## 6.3 Archaeological significance

Archaeological significance refers to the heritage significance of known or potential archaeological remains. While they remain an integral component of the overall significance of a place, it is necessary to assess the archaeological resources of a site independently from above-ground heritage elements. Assessment of archaeological significance is more challenging as the extent and nature of the archaeological features is often unknown and judgment is usually formulated on the basis of expected or potential attributes.

To facilitate the significance assessment of historical archaeological remains, the Heritage Branch, Department of Planning NSW (now Heritage NSW) prepared a set of criteria in the publication Assessing Significance for Historical Archaeological Sites and 'Relics' (December 2009).

The NSW heritage criteria for assessing significance related to archaeological sites and relics include:

archaeological research potential (current NSW Heritage Criterion E)



- associations with individuals, events or groups of historical importance (NSW Heritage Criteria A, B & D)
- aesthetic or technical significance (NSW Heritage Criterion C)
- ability to demonstrate the past through archaeological remains (NSW Heritage Criteria A, C, F & G).

#### **Archaeological research potential (Criterion E)**

The early land grants associated with study area and wider Campbelltown area during Phase 2 were predominantly used for agricultural pursuits. The potential and integrity for resources associated with this land use is low as they have likely been truncated or removed by the upgrade of Appin Road. Due to the nature of the archaeological resources, it is also unlikely that evidence of early postholes, cuts and fills could be accurately attributed to either the early land use (Phase 2) and the later use of the site as a dairy farm (Phase 4). As such, resources associated with Phase 2 would not possess any research potential.

The original alignment of Appin Road (Phase 3) is associated with an important period of the colonisation of Campbelltown. The road was a key thoroughfare from the early establishment of the Campbelltown region and remains a key route today. Evidence of the road has been recorded in historical records, plans, and even aerials as the modern realignment only occurred in the 1970s. Evidence of the original road is unlikely to provide additional evidence that cannot be gleaned from other sources. Moreover, the integrity of the original roadway is likely to be very low. Evidence associated with Phase 3 would not meet the threshold for this criterion.

Phases 4 and 5 are associated with the dairy industry. The archaeological resources have a low to moderate potential for survival but are likely to comprise features associated with sheds, barns, feeding stalls, and yards. Evidence of these features are unlikely to provide information about pastoralism that is unique and not otherwise represented across other sites and resources within the Campbelltown region.

Potential evidence associated with Simpson's cottage (Phase 4 and Phase 5) is anticipated to relate to auxiliary features on the property. Evidence is not anticipated to relate clearly or substantially to the lives and work of the Simpson, Jenner, and Quirk families who lived on the property. The cottage site has also been significantly compromised by recent development. Archaeological associated with Phase 4 and Phase 5 would not meet the threshold for this criterion.

Daly's cottage (Phase 4) was located on the north-eastern portion of the study area, set back from the original road. The 1830s dwelling was a small, early stone and brick colonial house. 1961 aerial image may show the location of the ruins. While it is unclear whether anything remained standing, it doesn't appear so. The site is located within the line of the current Appin Road carriageway. Due to the substantial ground disturbance associated with the construction of the road and verge, it is unlikely that any features associated with the structure or surroundings remain. As such, evidence associated with this cottage is unlikely to provide substantial research potential.

Evidence associated with Phase 1 and Phase 6 are not assessed under this criterion.



## Associations with individuals, events or groups of historical importance (Criteria A, B & D)

The archaeology associated with Phases 2-5 are not considered to be associated with any individuals, events, or groups of importance. Any archaeological evidence associated with the Simpson, Jenner, and Quirk family (and others) who owned the property to the east of the study area, is also not likely to provide significant information about their lives or work. Moreover, while the silos were established during the interwar period, the associated archaeology would not provide any substantive information about this period.

#### **Aesthetic or technical significance (Criterion C)**

The aesthetic and technical significance of the silos has been addressed in Section 6.1.2. As the archaeological resources are subsurface, the aesthetic and technical significance of features is currently unknown. Based on the types of resources anticipated, it is unlikely that evidence of the agricultural pursuits that dominate the history of the site would be considered to hold significance under this criterion. The technical significance of the cuts and fills or footings of the silos is also unlikely to meet the threshold of this criterion.

Aesthetic and technical significance may be reassessed following the discovery of any archaeological remains within the study area.

#### Ability to demonstrate the past through archaeological remains (Criteria A, C, F & G).

The potential archaeological resources are unlikely yield information that could be used to address research questions about depression era employment schemes, the dairying industry, interwar construction methods, and the development and implementation of drought tolerant techniques as part of the resilience of the industrial productivity of the wider Macarthur region.

## 6.3.1 Existing statement of archaeological significance

The SHI register notes that the silos are a built heritage item. However, there are two references to potential elements of archaeological significance associated with the item. The statements below are referring to the entire curtilage of the silos and not the actual location of the silos themselves.

The site of the silos and its vicinity is of archaeological research significance as the site of the silos may retain evidence of early farming practices, and is in the vicinity of the associated former site of an early homestead built between 1828-1830, and the site of "The Sussex Arms" recorded on the site in 1852.

The listing refers to two elements – the 1820s homestead and the Sussex Arms that are outside the curtilage of the element being listed.

Within the study area, the archaeological remains associated with the early land grants in the area and the homestead (Phase 2) would be associated with agricultural pursuits. These include evidence of land use and modification, cuts and fills, tree boles, postholes, irrigation systems,



and artefacts. Due to the realignment of Appin Road, there is a very low potential for such elements to retain a degree of integrity that would allow meaningful analysis.

The construction of the silos themselves and associated sheds would have also caused moderate levels of impact to earlier evidence of farming. Due to the nature of the archaeological resources, it is unlikely that evidence of early postholes, cuts and fills could be accurately attributed to either the early land use (Phase 2) and use of the site as a dairy farm (Phase 4).

As such, evidence of early farming practices within the study area itself are unlikely to provide sufficient evidence to hold significant research potential.

The associated buildings (and earlier buildings in the vicinity) have been demolished but archaeological evidence such as sandstone footing blocks remain in situ.

The buildings referred to are outside the study area. An analysis of aerial images and disturbance, suggests that there is a low to moderate potential for some archaeological features associated with the house at 302 Appin Road to extend within the study area. However, these relate to ancillary features such as fences, yard spaces, gardens, and services. They would not include the sandstone footings or other significant remains being referred to above.

## 6.3.2 Summary statement of archaeological significance

The impacts of the modern realignment of Appin Road are likely to have caused substantial ground disturbance which would have severely truncated or removed archaeological resources associated with all phases of development. Evidence associated with Simpson's cottage (Phase 4) and the construction of the silos (Phase 5) have the highest potential for survival, however the types of resources are unlikely to provide evidence that would meet the threshold of significance under any of the NSW heritage criteria. Potential archaeological evidence associated with Simpson's cottage itself which may hold significance, as referenced in the SHR listing sheet, are likely to be located outside the study area boundary.

In sum, archaeological evidence associated with Phases 1-6 do not hold significance at a State or local level under the heritage guidelines.



## 7. Proposed Works

## 7.1 Rationale

Proposed works comprises of upgrades of the intersection of Appin Road and St Johns Road in Bradbury, within Campbelltown LGA. Proposed works include upgrades to street lighting along Appin Road at the location of the St Johns Road intersection. The new lighting will be installed on both north and southbound lanes of Appin Road, beside the roadway and within the grass verge. The electric lighting upgrades include the provision of flat space around the base of the lighting to allow for access for both installation and maintenance.

Lighting upgrades are the only proposed works that have the potential to cause visual impact on the locally heritage item 'Silos' within the study area. No ground disturbance will occur within the curtilage of the 'Silos' (Figure 48). No impacts to any additional heritage items located outside the study area are anticipated.

## 7.2 Outline

The proposed street lighting will consist of a standard steel electrical pole with light fittings attached, sufficient to illuminate the traffic lanes (Figure 46-Figure 49). The new lighting will be installed on both north and southbound lanes of Appin Road, adjacent to the carriageway and within the grass verge. The electric lighting will be serviced by underground cabling, installed via trenching parallel to Appin Road and again on both north and southbound sides. At its closest point, trenching for the new cabling would occur approximately four (4) metres from the 'Silos', at a typical depth of between 450-470mm.

To comply with street light standards AS/NZS 1158.1.1:2022, a total of 35 new streetlight columns and 4 replacement luminaries are required and 2 floodlight to cover the pedestrian zebra crossings (AECOM 2023, 25).

As part of the street lighting, the design proposes to flatten the areas where street lighting posts are proposed to 1(V):6(H) maximum for maintenance accessibility that extends 1 m behind each post as requested by Endeavour Energy. As some of street lighting posts are proposed on steep slopes, localised earthworks are required to tie into the existing surface (AECOM 2023, 19).

To assist with these works, five compounds will be located on the eastern side of Appin Road and along St Johns Road. These compounds would temporarily hold storage and laydown areas, parking area, and offices. As the sites are relatively flat, there is no need for significant subsurface works to establish the site compound. However, some site preparation including minor earthworks to create level pads, access roads, and parking areas may be required. Following the completion of the project, the sites would reinstate the site to its previous condition, including removal of imported material, replacement of topsoil and undertaking reseeding. An indicative compound layout is presented in Figure 50.

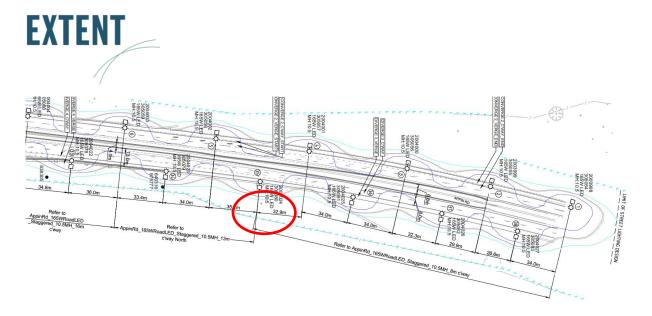


Figure 46. Lighting design layout, location of Silos indicated in red (Source: AECOM 2023).

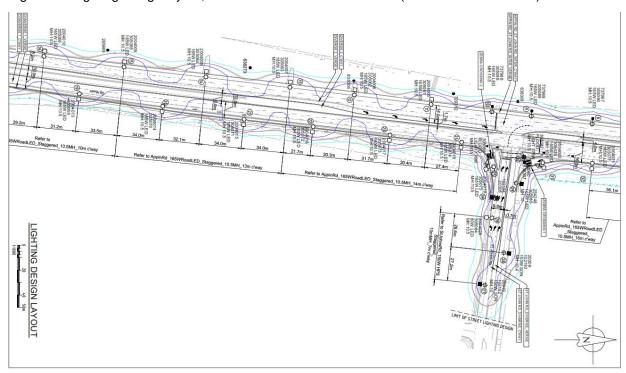


Figure 47. Lighting design layout (Source: AECOM 2023)

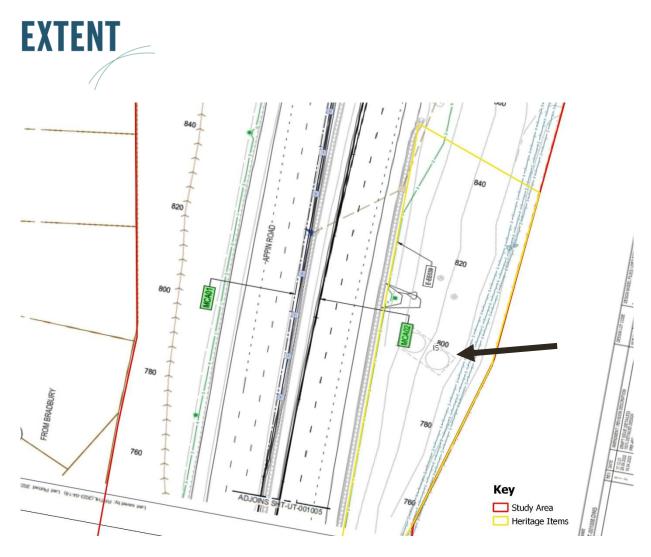


Figure 48. Lighting design layout in relation to silos (black arrow) and I5 heritage curtilage (yellow) (Source: AECOM 2023)



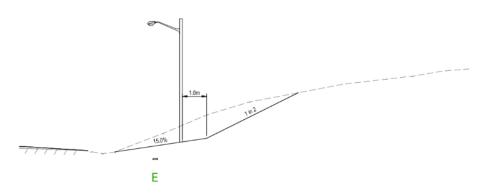


Figure 14: Typical Street lighting post in cut

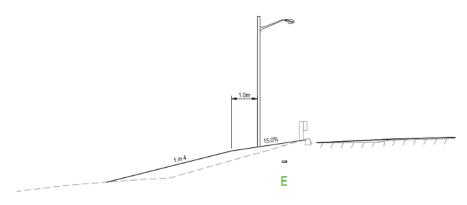


Figure 15: Typical Street lighting post in fill

Figure 49. Typical street lighting (Source: AECOM 2023, 20).



Figure 50. Indicative site compound layout (Source: BD Infrastructure 2023).



## 8. Heritage Impact Assessment

This chapter provides the basis for to accurately assess the impacts of the proposed works on heritage significance in New South Wales as outlined in the Guidelines for preparing a statement of heritage impact (Department of Planning and Environment 2023b, 18-20).

### 8.1 Matters for consideration

The study area consists of a large portion of land along Appin Road extending from 500 metres north of the St Johns Road intersection to 40 metres south of the Fitzgibbon Lane and Kellerman Drive intersection. Portions of the adjoining St Johns Road and Woodland Road are also within the bounds of the study area. The study area is located wholly within the road reserve. There is one item of local heritage significance within the study area, 'Silos', identified on Schedule 5 of the Campbelltown LEP 2015 (I5). The 'Silos' comprise a pair of painted concrete tower silos, each approximately 4.7m in diameter and approximately 7.7m in height, with a single gabled corrugated steel roof which covers both silos. The silos have historic and aesthetic significance at the local level, as well as landmark qualities, and contribute to our understanding of dairying in the local area during the 1930s.

### 8.1.1 Fabric and spatial arrangements

The proposed works to install and upgrade the lighting along Appin Road will be wholly contained within the road reserve and will not involve direct impacts to the fabric of the Silos. The proposed upgrade will see the extension of lighting along Appin Road, with one light pole located adjacent to the item within the road reserve (Figure 46). While the underground services will be in close proximity to the heritage item, approximately four (4) metres away, there will be no direct impact to significant fabric associated with the silos.

Within this landscape there are limited existing services in the vicinity of the silos. The installation of a lighting pole will have a minor visual impact through the introduction of standard roadside infrastructure. The visual impact of the proposed works is mitigated and reduced through the location of the light. By locating the light directly next to the silo, the proposal will retain key views to the silos when viewed from Appin Road.

This assessment of heritage impact establishes the proposed works will have a minor visual impact on the heritage significance of the silos. It is recommended works occurring in the vicinity of the heritage item develop mitigation measures to ensure the protection of significant fabric and establish no-go zones in the vicinity of the item.

To avoid impacts to the silos during construction, vibration monitoring should follow the guidelines set out in the German Standard *DIN-4150 Structural Vibration*, *Part 3: Effect of Vibration on Structures*. This Standard identifies more stringent vibration levels for building damage and includes a category specifically for heritage buildings.



## 8.1.2 Setting, views and vistas

The proposed works involve the installation of new street lighting along Appin Road in the immediate vicinity of the Silos. The design involves 35 new streetlight columns, 4 replacement luminaries and 2 floodlights to cover the pedestrian zebra crossing.

The proposed works will alter the settings and views of the Silos, through the installation of new road infrastructure. At present, road infrastructure around the Silos consists of electricity poles located behind the Silos along the boundary of the residential allotments.

The installation of new street lighting and associated infrastructure is a minor amplification of the existing road environment. The proposed works will not detract from the significance of the item, nor will they detract significantly from significant views to and from the item. The proposed works are assessed as having a minor impact on the views and setting of the silos.

## 8.1.3 Historical archaeology

Archaeological potential across the study area is low, as aerial images show the wider area was used primarily for agricultural and pastoral purposes, with few structures constructed within the bounds of the study area. Archaeological potential within the vicinity of the silos is low, since the rise on which the silos are located have been subject to disturbance south of the storm water system.

There is the potential for archaeological remains associated with the ancillary structures constructed adjacent to the silos in the twentieth century. as well as some potential evidence of agricultural land use and modification. Resources may consist of cuts and fills associated with landscaping and trenching, burned or stumped tree boles, postholes from fencing or temporary structures, and irrigation systems. Evidence concentrated around the sheds may also include paths, garden beds and associated soils and edgings, yard surfaces, isolated artefacts, and discrete artefact scatters. Within the study area it is likely that and the sheds may be associated with dairying or agricultural uses.

There is a low potential for evidence of these activities to survive within the study area as archaeological remains, the silos however survive intact as a built element. The 1970s road works will have disturbed, truncated, and/or removed shallow and non-substantial archaeological remains, it is possible for contexts to survive within a 10 metre buffer around the silos. The historical aerial images in particular demonstrate the disturbance caused by the road realignment clearly visible between the 1975 image (Figure 12) and the 1990 image (Figure 14). The road reserve has also been subject to on-going maintenance, landscaping and vegetation control since its construction. Modern disturbance in the area of site compounds on Copperfield Road associated with the construction of dams and formalisation of waterways, and later establishment of park, will have also led to a low potential for survival of this evidence in these locations.



## 8.1.4 Other heritage items in the vicinity

The proposed works are located within the vicinity of several heritage items. Below is an assessment of the proposed works on each item in the vicinity of the study area.

#### Raith

Raith is located to the north-east of the study area. The dwelling is separated from Appin Road by existing residential development and vegetation along the road reserve. The dwelling addresses Pine Avenue, and there are no views from Appin Road to the heritage item.

The installation of new street lighting and associated infrastructure is a minor amplification of the existing road environment, and will not impact on the views and settings of the heritage items in the vicinity.

#### **Denfield**

Denfield is located south of the study area. The proposed works do not form part of the views or immediate setting of the heritage item.

The installation of new street lighting and associated infrastructure is a minor amplification of the existing road environment, and will not impact on the views and settings of the heritage items in the vicinity.

#### St Helens Park House and Dam

St Helens Park House and Dam is located south-east of the study area. The dwelling is set back approximately 200 metre from the study area and surrounded by mature vegetation.

The installation of new street lighting and associated infrastructure is a minor amplification of the existing road environment, and will not impact on the views and settings of the heritage items in the vicinity.

#### 8.1.5 Additional matters for consideration

The proposed works will see minor alterations to the ground level at the location of each new light, consisting of levelling the ground one metre behind each new post to allow for ease of access for maintenance purposes. This work may involve cutting or filling, depending on the direction of the slope in the road reserve to or away from the road.

#### Landscape

The proposed works will be discreet, and isolated to each new light post and will not alter the overall topography or appearance of the landscape within the study area. Although there is one light post located within the curtilage of the Silos, the discreet works will have negligible impacts on the character of the landscape as it contributes to the heritage significance of the Silos.



Use	The proposed works will see no changes to the use of the road or the heritage items within or in the vicinity of the study area.	
Demolition	The proposed works will see no demolition to existing structures; removal of material is limited to discreet landscaping works around each new light post. The impact of this removal has been assessed above, and there will be no further impacts as a result of the demolition of material on the heritage significance of the Silos, or other heritage items within the vicinity of the study area.	
Curtilage	The proposed works will not result in a change to the curtilage of the Silos or any other heritage items in the vicinity of the study area; therefore the proposed works will have no impacts to the curtilage of any heritage items.	
Moveable heritage	There are no identified items of moveable heritage within or in the vicinity of the study area; therefore the proposed works will have no impacts to items of moveable heritage.	
Aboriginal cultural heritage	Aboriginal cultural heritage was not assessed as part of this scope.	
Natural heritage	There are no natural heritage items within or in the vicinity of the study area; therefore, the proposed works will have no impacts to natural heritage items.	
Conservation areas	There are no heritage conservation areas within or in the vicinity of the study area; therefore, the proposed works will have no impacts to heritage conservation areas.	
Cumulative impacts	The proposed works are not part of a broader scope, and have been assessed as an individual scope of works. There will be no cumulative impacts on the heritage significance of the Silos or other heritage items within the vicinity of the study area.	



# 8.2 Assessment against statutory and non-statutory controls

## 8.2.1 Heritage Act 1977 (NSW)

The Heritage Act 1977 (NSW) provides protection for items of State heritage significance that are listed on the State Heritage Register, as well as for unlisted archaeological relics. Works proposed for items protected by the Heritage Act 1977 are approved by the Heritage Council of NSW or its delegates, as appropriate.

#### **Extent Heritage comment**

The proposed works are located in the vicinity of two items listed on the State Heritage Register. This SOHI has assessed the potential impacts of the proposed works on the heritage items in the vicinity and found that there is no impact to the significant views and settings of the items, nor to their heritage significance.

In regard to historical archaeology the site has a low to moderate potential to contain scattered material. The archaeological resources do not meet the threshold of significance as the research potential has been assessed as low. Potential archaeological remains that may be of local significance would be located outside the study area, in the vicinity of Simpson's cottage.

## 8.2.2 Environmental Planning and Assessment Act 1979

Environmental planning instruments made under the Environmental Planning and Assessment Act 1979 (NSW) (EPA Act) include state environment planning policies (SEPPs), that deal with matters of state or regional environmental planning significance, and local environmental plans (LEPs), that guide planning decisions for local government areas. The relevant SEPP is the State Environmental Planning Policy (Transport and Infrastructure) 2021. The relevant local environmental planning instrument is the Campbelltown Local Environmental Plan 2015.

#### 8.2.2.1 State Environmental Planning Policy (Transport and Infrastructure) 2021

The Transport and Infrastructure SEPP sets out the planning rules and controls for infrastructure. Chapter 2 provides for essential services such as hospitals, roads, water supply, telecommunications and electricity networks.

Section 2.20 sets out general requirements for exempt development, including:

(e) if it is likely to affect a State or local heritage item or a heritage conservation area, must involve no more than minimal impact on the heritage significance of the item or area,

Division 17 pertains to roads and traffic. Section 2.113 sets out requirements for exempt development for road and traffic works.



#### **Extent Heritage comment**

This SOHI has considered the impact of the proposed scope of works on the heritage items in the vicinity of the defined proposal area. The proposal has been assessed as having no more than a minimal impact on the heritage significance of the silos, a local heritage item within the study area and no impact to heritage items in the vicinity.

The development meets the requirements of exempt development in regard to section 2.20(2)(e).

#### 8.2.2.2 Campbelltown Local Environmental Plan 2015

Clause 5.10 of the Campbelltown LEP 2015 applies to heritage conservation and 5.10(4) requires, among other things, that before granting consent Council must assess the effect of a proposed development on the heritage significance of the item or conservation area concerned.

Clause 5.10(5) specifies that Council may, before granting consent, require a heritage management document to be prepared that assesses 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.

#### **Extent Heritage comment**

As the proposed works are exempt development under the Transport and Infrastructure SEPP 2021, development consent from the Campbelltown City Council is not required. However, this report may be supplied to Council as a courtesy.

This SOHI has considered the impacts of the proposed development on the heritage items in the vicinity of the proposal area. The proposal has been found to have no impact on the heritage significance of heritage items in the vicinity. This report has established the proposal will have a minor visual impact on the significance of the silos (item #I5).



## 9. Conclusion and Recommendations

#### 9.1 Conclusion

#### **Built heritage**

This SOHI has assessed the potential impact of the proposed Appin Road and St Johns Road Intersection upgrade works, involving street light upgrades and subsurface works against the heritage significance of the locally listed silos, heritage items in the vicinity and potential historical archaeological resources.

The study area contains one local heritage item listed on Schedule 5 of the *Campbelltown Local Environmental Plan 2015* (Campbelltown LEP 2015) – Silos (Item I5). There is one local heritage item located in the vicinity of the study area – Raith (Item I6). In addition, there are two State heritage items located in the vicinity of the study area – Denfield Homestead (I00540) and St Helens Park House and Dam (Item I00406).

This proposed lighting upgrade works will alter the immediate setting of the Silos through the installation of new street lighting infrastructure. Given the distance separating the heritage items in the vicinity to the study area, the proposed works are assessed as having no impact to the wider setting of the heritage items in the vicinity. The installation of new street lighting and associated infrastructure is considered a minor amplification of the existing road environment. This is assessed as having a minor visual impact on the heritage significance of the silos.

#### **Archaeology**

The study area has undergone significance ground disturbance caused primarily by the realignment of Appin Road. The exception is the area directly surrounding the silos that appears to have undergone minimal ground disturbance. Due to the shallow and ephemeral nature of much of the archaeological resources anticipated within the study area, historic ground disturbance is likely to have severely truncated or removed a substantial amount of evidence across the study area.

A low level of archaeological potential was assessed for evidence associated with Phase 2 (early land grants), Phase 3 (Appin Road), and Daly's cottage in Phase 4 (dairy farming). A low level of archaeological potential was assessed for evidence associated with Simpson's cottage in Phase 4 (dairy farming). While Simpson's cottage itself is outside the study area, the archaeological resources are anticipated to relate to mid-twentieth century agricultural activities undertaken in the direct vicinity of the silos.

Evidence associated with Phase 1 (Aboriginal occupation) was not assessed as part of this report. Phase 6 (realignment of Appin Road) was not considered to be associated with archaeological evidence and therefore also not assessed as part of this report.

Archaeological evidence associated with all phases was assessed as not meeting thresholds for local or State significance. The types of resources, mainly associated with small-scale agriculture, could not provide sufficient research potential to meet the criteria of local



significance. Archaeological resources that may hold research potential are unlikely to be located within the study area but may be present outside the project footprint

No impacts to historical archaeological relics or resources are anticipated by the proposed development.

#### 9.2 Recommendations

The following recommendations identify opportunities available to reduce the potential heritage impacts.

#### **Prior to works**

- Contractors must be briefed on the heritage sensitive nature of the site and informed of any recommended mitigation measures or controls required. Such as a heritage induction and Unexpected Finds Protocol.
- Planning around ground disturbing works including open trenching, etc should consider any
  potential construction-related impacts such as vibration damage to the adjacent structures,
  and any accidental physical impact due to working in close proximity.
- A condition assessment of the silos should be carried out by the contractor if vibration monitoring is required during construction to confirm commencement condition of the structures.

#### **During works**

- Building and construction materials should not be stockpiled against or adjacent heritage structures. Laydown areas and high-traffic areas should have a clear separation from heritage structures on the site.
- To avoid impacts to the silos, vibration monitoring should follow the guidelines set out in the German Standard DIN-4150 Structural Vibration, Part 3: Effect of Vibration on Structures. This Standard identifies more stringent vibration levels for building damage and includes a category specifically for heritage buildings.
- Any accidental damage to heritage items is to be treated as an incident, with appropriate recording and notification. An impact assessment must be undertaken to determine the course of action for stabilisation and restoration.
- All areas affected by works must be stabilised and restored by contractors after they have completed their works.
- Any unauthorised removal of heritage fabric not outlined and assessed in this SOHI is not permitted.
- If the scope of works is changed to involve any additional impacts to any built heritage fabric not explicitly outlined in this report, further heritage assessment will be required.
- Works may proceed with caution.
- Any unexpected heritage or archaeological finds must be managed in accordance with the Transport for NSW Unexpected Heritage Items Procedure.
- A post construction assessment of the silo structures to be carried out by the contractor to confirm no impact to structures from the works.



## 10. References

Artefact Heritage. 2018. 'Appin Road Upgrade, Historical (non-Aboriginal) Statement of Heritage Impact'. Report for WSP. PDF.

Australia ICOMOS. 2013. The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance. Burwood, Vic.: Australia ICOMOS.

Bell's Life in Sydney and Sporting Reviewer. 1846. 'Country News.' 7 February 1846, 4. http://nla.gov.au/nla.news-article59766111.

Camden News. 1911. 'Advertising.' 9 March 1911, 5. http://nla.gov.au/nla.news-article136641040.

Camden News. 1928. 'Advertising.' 7 June 1928, 4. <a href="http://nla.gov.au/nla.news-article136635450">http://nla.gov.au/nla.news-article136635450</a>.

The Daily Telegraph. 1897. 'Advertising.' 27 October 1897, 2. http://nla.gov.au/nla.news-article238438977

Davies, P. 2011. 'Campbelltown Local Government Area Heritage Review – Thematic History'. For Campbeltown City Council. PDF.

Department of Planning and Environment. 2023a. Assessing heritage significance. Sydney: Department of Planning and Environment. <a href="https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Heritage/assessing-heritage-significance-guidelines-assessing-places-objects-against-criteria-230167.pdf">https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Heritage/assessing-heritage-significance-guidelines-assessing-places-objects-against-criteria-230167.pdf</a>

Department of Planning and Environment. 2023b. Guidelines for preparing a statement of heritage impact. Sydney: Department of Planning and Environment. <a href="https://www.environment.nsw.gov.au/-/media/OEH/Corporate-">https://www.environment.nsw.gov.au/-/media/OEH/Corporate-</a>

<u>Site/Documents/Heritage/guidelines-for-preparing-a-statement-of-heritage-impact-230201.pdf</u>

New South Wales Government Gazette. 1872. 'Notice Under Real Property Act.' 5 July 1872, 1718. http://nla.gov.au/nla.news-article225842855.

Proudfoot, H. 1973. 'Campbelltown, Camden, Appin, survey and report on nineteenth century buildings and sites'. Heritage Library. Urban and regional research. PDF.

The Sydney Morning Herald. 1860. 'Advertising.' 14 February 1860, 7. http://nla.gov.au/nla.news-article13036608.

The Sydney Morning Herald. 1911. 'Advertising.' 16 September 1911, 23. http://nla.gov.au/nla.news-article15274504.