

M1 Pacific Motorway widening and replacement, Tuggerah to Doyalson: Historic Heritage Impact Assessment

Prepared by Australian Museum Business Services
for SMEC Australia Pty Ltd

Final Report

April 2014

1300320

Document Information 1300320

Citation:	AMBS (2014) <i>M1 Pacific Motorway widening and replacement, Tuggerah to Doyalson: Historic Heritage Impact Assessment</i> . Report prepared for SMEC Australia Pty Ltd.
LGA:	Wyang
Versions:	Version 1: Draft Report issued May 2013 (combined Aboriginal & Historic) Version 2: Draft Report issued June 2013 Version 3: Final Draft Report issued June 2013 Version 4: Report issued July 2013 Version 5: Report issued August 2013 Version 6: Final Report issued April 2014
Recipient:	Peter Fawcett, Environment Manager, NSW, SMEC Australia Pty Ltd
Approved by:	Jennie Lindbergh, AMBS Senior Project Manager

Contents

1	Introduction	1
1.1	Preamble.....	1
1.2	Study Area	1
1.3	Overview of the Proposal	1
1.4	Methodology.....	1
1.5	Authorship and acknowledgements	2
2	Heritage Context	5
2.1	Preamble.....	5
2.2	<i>Environment Protection & Biodiversity Conservation Act 1999</i>	5
2.3	<i>Heritage Act 1977</i>	5
2.3.1	<i>Roads and Maritime Services Section 170 Register</i>	6
2.4	<i>Environmental Planning & Assessment Act 1979</i>	6
2.4.1	<i>State Environmental Planning Policy (Infrastructure) 2007</i>	6
2.4.2	<i>Wyong Local Environmental Plan 1991</i>	7
2.5	Non-statutory registers	7
2.5.1	<i>Register of the National Estate</i>	7
2.5.2	<i>National Trust of Australia (NSW)</i>	8
3	Historic Context	9
3.1	Early European exploration	9
3.2	Early Settlement.....	10
3.2.1	<i>Frederick Augustus Hely</i>	11
3.2.2	<i>William Cape (Snr) and William Timothy Cape (Jnr)</i>	12
3.2.3	<i>William and Charles Alison</i>	14
3.2.4	<i>The Wamsley family</i>	16
3.3	Early industries	17
3.3.1	<i>Shell Gathering</i>	17
3.3.2	<i>Timber Getting</i>	18
3.4	Transport.....	18
3.4.1	<i>Shipping</i>	18
3.4.2	<i>Roads</i>	19
3.4.3	<i>Railways</i>	22
3.5	Subdivision and farming	23
3.6	Suburban development	23
3.7	Tourism and leisure	24
3.8	Post-War settlement.....	24
4	Physical Analysis.....	25
4.1.1	<i>Survey methodology</i>	25
4.1.2	<i>Ancillary Sites</i>	25
4.1.3	<i>Alison Homestead</i>	31
4.1.4	<i>Wyong Dairy Co-operative (former)</i>	32
4.1.5	<i>30 Mardi Road, Mardi</i>	33
4.2	Archaeological Potential	34
4.3	Preamble.....	35
4.4	Impact Assessment & Mitigation	35
4.4.1	<i>Noise & Vibration</i>	35
4.4.2	<i>Visual Amenity</i>	35
4.4.3	<i>Potential Heritage Items</i>	36
	Bibliography	37

Tables

Table 2.1 Heritage items listed on the Wyong LEP 1991.	7
Table 2.2 Items listed on the RNE.	7

Figures

Figure 1.1 Location of the study area.	3
Figure 1.2 M1 Pacific Motorway widening concept design (21 March 2013).	4
Figure 2.1 Heritage items in the vicinity of the study area.	8
Figure 3.1 Chart of Broken Bay, 1788; by W Bradley, Charts from his journal, c.1802 (Source: NSW State Library, Ref: Safe 1/ http://acms.sl.nsw.gov.au/item/itemdetailpaged.aspx?itemid=404927#). .	9
Figure 3.2 View in Broken Bay New South Wales. March 1788; by W Bradley, Drawings from his Journal, c.1802, opposite p.90 (Source: William Bradley. Mitchell Library, State Library of NSW, Ref: Safe 1/14/opp.p.90).	10
Figure 3.3 Detail from 1924 Parish map of Tuggerah showing extent of Hely's grant.	12
Figure 3.4 Detail from 1922 Parish map of Wyong showing William Cape's Freeland property.	14
Figure 3.5 Detail from 1940 Parish map of Munmorah and William Alison's extensive holdings.	15
Figure 3.6 View of Alison Homestead prior to the fire of 2011 (http://www.environment.gov.au/cgi-bin/heritage/photodb/imagesearch.pl?proc=detail;barcode_no=rt07751).	16
Figure 3.7 Detail from 1940 Parish map of Munmorah and the Wamsley family holding, now bisected by the motorway.	17
Figure 3.8 Early railway stations in the vicinity of the study area, and Tuggerah wharf.	19
Figure 3.9 Location of early roads in the Brisbane Water district, including Maitland Road (Strom 1982:Map 4).	20
Figure 3.10 Two views of the construction of the Sydney to Newcastle motorway in 1966 (Newcastle Morning Herald http://trove.nla.gov.au/version/50933366).	22
Figure 4.1 Comparison of the McPherson Road Ancillary Site in the 1980s, with satellite imagery from 2013. Landfill activity can be seen in the earlier imagery, left, immediately east of the proposed site.	26
Figure 4.2 View south across the ancillary site from near McPherson Road.	26
Figure 4.3 Disturbance within the mine subsidence district at the Hue Hue Road Ancillary Site arising from rural land use, and construction of the M1 in the 1980s (left) and subsequent rehabilitation (2013 right).	27
Figure 4.4 View looking northeast across the pastoral land toward the M1.	27
Figure 4.5 View from the northern edge of the Warnervale Airport site looking south with the airport buildings in the background, left.	28
Figure 4.6 Comparison of the Warren Road Ancillary Site in the 1980s and 2013. Note that site has now been entirely stripped.	29
Figure 4.7 The Warren Road Ancillary Site showing clearance and regrowth with spoil heap in the north east corner.	29
Figure 4.8 Structural remains at the Sparks Road Ancillary Site. Concrete foundation (left) and floor waste surrounded by tiles.	30
Figure 4.9 Remnant garden at the Sparks Road Ancillary Site. A flowering bush encroaches onto a concrete floor (left), and the overgrown garden, with grass covering mounds of rubble o(right). ...	30
Figure 4.10 The most recent satellite image (right), shows the little change in the Sparks Road Ancillary Site.	30
Figure 4.11 Homestead main building viewed from the entrance lane showing extensive fire damage. ...	31
Figure 4.12 The timber-slab cottage seen among the trees is the southernmost building on the site.	32
Figure 4.13 View from the Alison Road overpass to the former Wyong Dairy Co-operative complex. The motorway is to the right of the image.	32
Figure 4.14 View south to the former Wyong Dairy Co-operative complex, left, and the motorway, right. The new car park is in the middle distance.	33
Figure 4.15 View to the main buildings of the former Wyong Dairy complex from the Alison Road entry.	33

Figure 4.16 The eastern boundary of the McPherson Road Ancillary Site is defined by the chain wire security fence. The 30 Mardi Road property is beyond the trees.....34

1 Introduction

1.1 Preamble

Australian Museum Business Services (AMBS) has been commissioned by SMEC Australia Pty Ltd (SMEC), on behalf of Roads and Maritime Services (Roads and Maritime), to prepare a historic heritage impact assessment (HIA) for the proposed M1 Pacific Motorway widening and replacement, Tuggerah to Doyalson, including ancillary areas (the proposal). This report, and the accompanying Aboriginal heritage report, will form part of the Review of Environmental Effects (REF) prepared by SMEC under Part 5 of the *Environmental Planning & Assessment Act 1979* (EP&A Act).

AMBS is preparing an Aboriginal Archaeological Survey Report for the proposal concurrently.

1.2 Study Area

The study area comprises the M1 Pacific Motorway (formerly F3 Freeway) between Wyong Road (Tuggerah Interchange) and the Doyalson Link Road, Kiar (Doyalson Interchange), in the Wyong Local Government Area (LGA) (Figure 1.1).

1.3 Overview of the Proposal

Roads and Maritime propose to replace and widen around 12.1 kilometres of the Pacific Motorway (or M1 Pacific Motorway) to six lanes between Wyong Road, Tuggerah, and the Doyalson Link Road, Kiar.

This study has been prepared as a technical document to support the Review of Environmental Factors (REF) for the proposed replacement and widening of the M1 Pacific Motorway. The proposal would involve the provision of two additional lanes (one northbound and one southbound) on the M1 Pacific Motorway by pavement widening, asphalt overlays and new line-marking. It would generally involve the following:

- Replacement of the existing pavement through full removal and reconstruction. This comprises about two kilometres of flexible (asphalt) pavement and about nine kilometres of rigid (concrete) pavement.
- Upgrades to the existing Warnervale Interchange (Sparks Road) including a new northbound G-type entry ramp, reconfiguration of intersections and approaches, and a new pedestrian overbridge at Sparks Road.
- Upgrades to the existing Doyalson Link Road Interchange including a modified northbound off ramp, new southbound off ramp, and new Doyalson link Road motorway overpass and northbound on ramp.
- Provision of two additional lanes (one each northbound and southbound) on each of the six twin motorway bridges by new line-marking.
- Ancillary facilities to support construction activities including stockpiling, storage, concrete batching and crushing.

The full description of the proposal is provided in Section 3 of the Review of Environmental Factors that this study supports. Figure 1.1 provides an overview of the proposal and the proposed ancillary sites are shown on Figure 1.2.

1.4 Methodology

This report is consistent with the principles of the Burra Charter (*The Australia ICOMOS charter for the conservation of places of cultural significance*). It has been prepared in accordance with current best-practice heritage guidelines as identified in the *NSW Heritage Manual* (1996), published by the Heritage Office and Department of Urban Affairs and Planning (now the Heritage Branch, OEH).

The key heritage requirements for this proposal are:

- identification of any historic heritage sites within the study area;
- assessment of historic heritage values of the study area; and
- provision of recommendations for the management of historic heritage resources within the study area.

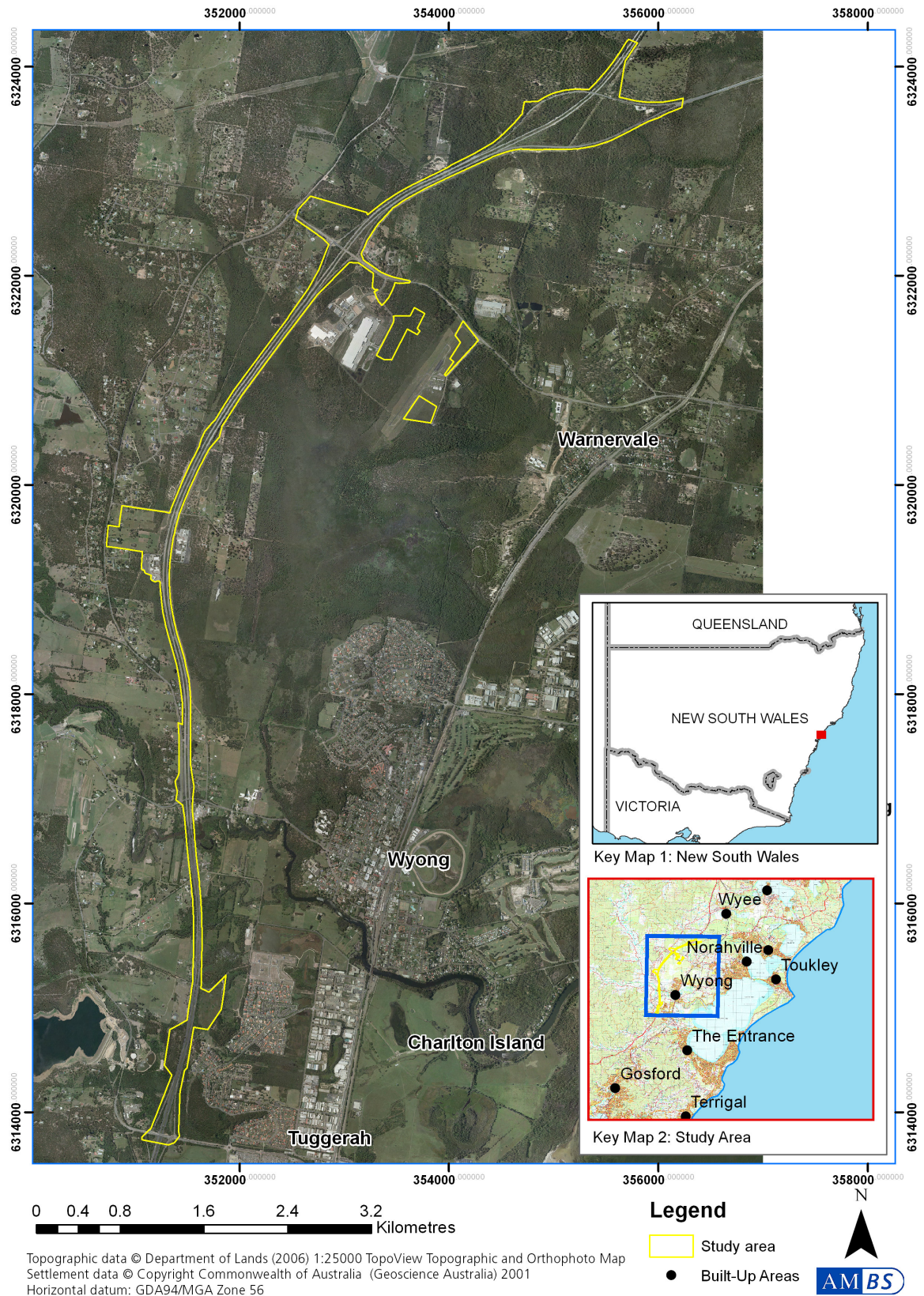
To fulfil the requirements of the proposal, the following tasks were undertaken:

- searches of the statutory and non-statutory heritage registers and lists, as described in Section 3 'Heritage Context', undertaken in February 2013;
- preparation of a thematic history for the study area based on primary and secondary documentary resources;
- physical analysis to allow identification and assessment of historic heritage values that may be present within the study area; and
- preparation of a report describing the results of the background research, the extent and significance of any historic heritage items identified in the study area, and recommendations to mitigate impacts to any identified heritage values.

1.5 Authorship and acknowledgements

AMBS Project Officer Jenna Weston prepared the Sections 1–3 of the report and AMBS Project Officer, Ronan Mc Eleney undertook the survey and prepared Section 4, Physical Analysis. AMBS Senior Project Manager Jennie Lindbergh prepared Section 5, Assessment of Heritage Impact and, reviewed the report for quality and consistency.

The authors acknowledge the assistance of Peter Fawcett, Environment Manager, NSW, SMEC Australia Pty Ltd and Jai Reddy, Project Development Manager, Hunter Region, Roads and Maritime.



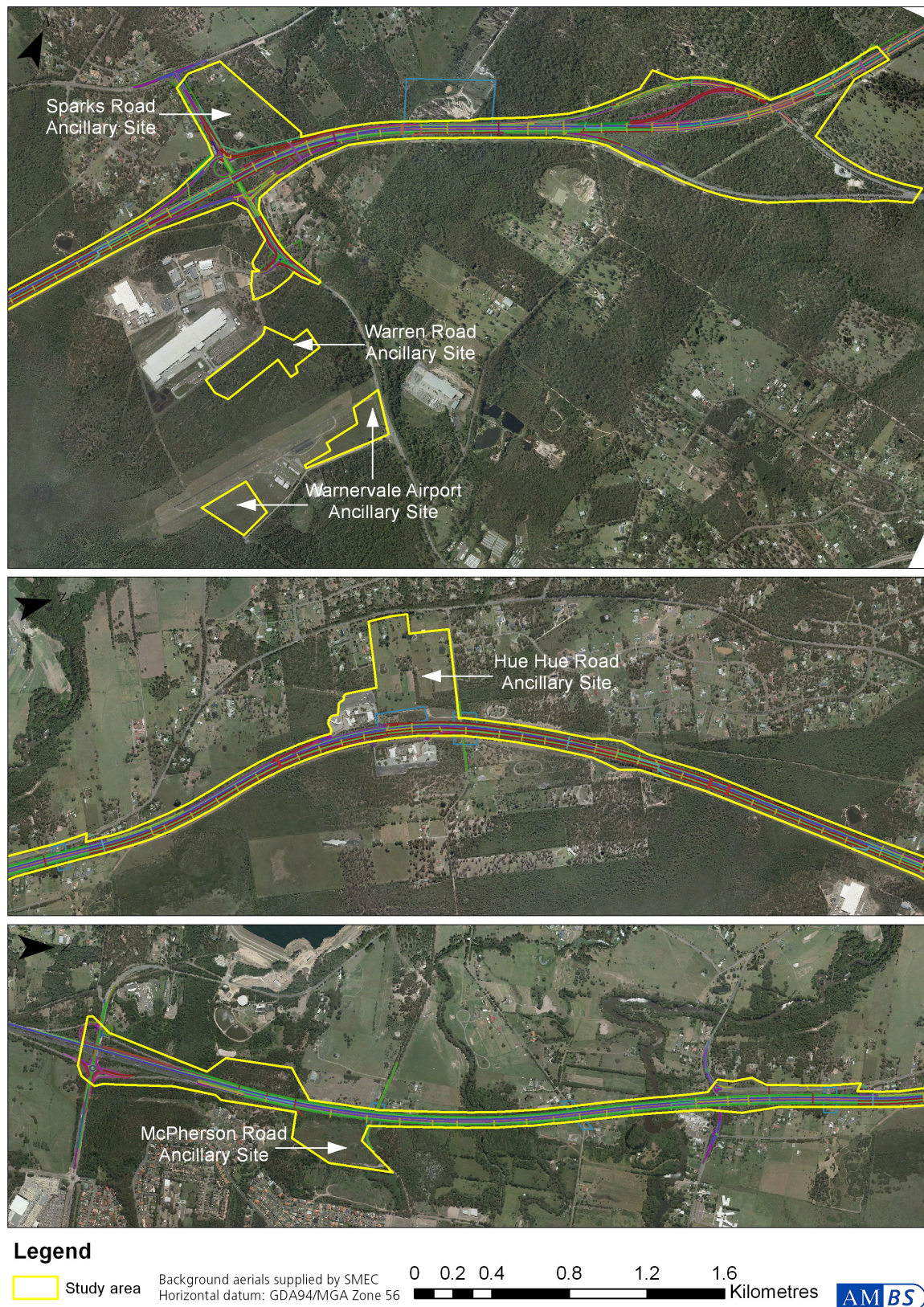


Figure 1.2 M1 Pacific Motorway widening concept design (21 March 2013).

2 Heritage Context

2.1 Preamble

The conservation and management of heritage items, places, and archaeological sites takes place in accordance with relevant Commonwealth, State or local government legislation. Non-statutory heritage lists and registers, ethical charters, conservation policies, and community attitudes and expectations can also have an impact on the management, use, and development of heritage items. The relevant statutory and non-statutory heritage listings for the study area are identified below and illustrated in Figure 2.1.

2.2 *Environment Protection & Biodiversity Conservation Act 1999*

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework for the protection and management of places of national environmental significance. Several heritage lists are addressed by the EPBC Act, including the National Heritage List (NHL) and Commonwealth Heritage List (CHL). The NHL protects places that have outstanding value to the nation. The CHL protects items and places owned or managed by Commonwealth agencies. The Australian Government Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) is responsible for the implementation of national policy, programs and legislation to protect and conserve Australia's environment and heritage and to promote Australian arts and culture. Approval from the Minister is required for controlled actions which will have a significant impact on items and places included on the NHL or CHL.

There are no historic heritage items listed on the NHL or CHL within the study area or in its vicinity.

2.3 *Heritage Act 1977*

The NSW *Heritage Act 1977* (Heritage Act) provides protection for heritage places, buildings, works, relics, moveable objects, precincts and archaeological sites that are important to the people of NSW. These include items of Aboriginal and non-Aboriginal heritage significance. Where these items have particular importance to the state of NSW, they are listed on the State Heritage Register (SHR).

Sections 56 to 69 of Part 4 address the requirements for items and places listed on the SHR, or which are the subject of an Interim Heritage Order (IHO). Works which include demolition, damage or alteration of a state heritage item or place require the approval of the Heritage Council or its delegates. There are no Aboriginal or historic heritage items or places within the study area, or its vicinity, listed on the SHR.

Sections 139 to 146, Divisions 8 and 9 of Part 6 of the Act refer to the requirement that excavation or disturbance of land that is likely to contain, or is believed may contain, archaeological relics is undertaken in accordance with an excavation permit issued by the Heritage Council (or in accordance with a gazetted exception under Section 139(4) of the Act). An archaeological relic is defined as meaning any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
- (b) is of State or local heritage significance.

There are no identified archaeological sites within the study area, or its vicinity.

2.3.1 Roads and Maritime Services Section 170 Register

Section 170 of the Heritage Act requires government instrumentalities to maintain a Heritage and Conservation Register (Section 170 Register). This Register provides a list of assets which may have State or local heritage significance, including:

- (i) *heritage items under environmental planning instruments,*
- (ii) *items subject to interim heritage orders,*
- (iii) *items listed on the State Heritage Register,*
- (iv) *items identified by the government instrumentality as having State heritage significance.*

There are no heritage items listed on the Roads and Maritime Section 170 Register within the study area or its vicinity.

2.4 Environmental Planning & Assessment Act 1979

The *Environmental Planning & Assessment Act 1979* (EP&A Act) is the main act regulating land use planning and development in NSW. The EP&A Act controls the making of environmental planning instruments (EPIs). Two types of EPIs can be made: Local Environmental Plans (LEPs), covering LGAs; and State Environment Planning Policies (SEPPs), covering areas of State or regional environmental planning significance. LEPs and SEPPs commonly identify and have provisions for the protection of local heritage items and heritage conservation areas. The study area is in Wyong LGA.

Under Section 111 of the Act, Roads and Maritime as proponent and determining authority for the proposal:

must examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity.

Clause 228(2)(e) of the *Environmental Planning and Assessment Regulation 2000* states that, for the purposes of Part 5 of the EP&A Act, the factors to be taken into account when consideration is being given to the likely impact of an activity on the environment include:

any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations.

2.4.1 State Environmental Planning Policy (Infrastructure) 2007

The State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) includes provisions for the development of roads and traffic infrastructure and facilities. However, in accordance with *Part 1 - Preliminary, Note* of the Infrastructure SEPP, these provisions do not affect requirements for an approval or permit from the Heritage Council under the Heritage Act. Thus, assessment and management of heritage is required.

Clause 94(2)(c) 'Development permitted without consent-general' permits development in connection with a road or road infrastructure facilities if it is for the purpose of alterations or additions to an existing road (such as widening, duplication or reconstruction of lanes, changing the alignment or strengthening of the road). However, Clause 14 'Consultation with councils – development with impacts on local heritage' requires that a public authority should consult with the local Council where the development:

- (a) *is likely to have an impact that is not minor or inconsequential on a local heritage item (other than a local heritage item that is also a State heritage item) or a heritage conservation area.*

Clause 5 ‘Interpretation-general’ defines a local heritage item as *a place, building, work, relic, tree, archaeological site or Aboriginal object that is identified as a heritage item (or by a similar description) in a local or regional environmental plan.*

2.4.2 Wyong Local Environmental Plan 1991

Clauses 32-37 and 118 of the Wyong LEP 1991 provide for the protection of heritage buildings, places, works and trees, heritage conservation areas, and archaeological relics, including Aboriginal objects.

The following heritage items are listed on Schedule 1 ‘Heritage Items’ of the Wyong LEP within the study area or its vicinity:

Table 2.1 Heritage items listed on the Wyong LEP 1991.

Listing No.	Name	Address	Significance
62	Alison Homestead	1 Cape Road, Wyong	Regional*
96	Wyong Dairy Co-operative (former)	141-145 Alison Road, Wyong	Local
20	Dwelling	30 Mardi Road, Mardi	Local
11	Jilliby Cemetery	Jilliby Road, Jilliby	Regional*
19	Road bridge over Deep Creek	Collies Road, Mardi	Local
13	Old Maitland Road	Old Maitland Road, Kangy Angy	Regional*

* It should be noted that the NSW Heritage Council recognises State and Local levels of heritage significance only. Since these items are not currently listed on the SHR, they have local heritage significance only; however, they should be considered to have particular value to the local community.

Figure 2.1 illustrates the relative proximity of heritage items within the vicinity of the study area. Old Maitland Road is adjacent to the section of the Pacific Motorway to the south, and immediately adjacent to the current proposal. Jilliby Cemetery and the road bridge over Deep Creek are to the west of the current study area, by more than 500m and 900m respectively and as such will not be affected by the proposal.

2.5 Non-statutory registers

2.5.1 Register of the National Estate

The Register of the National Estate (RNE) was originally established under Section 22 of the *Australian Heritage Commission Act 1975* (AHC Act). Since the establishment of the NHL and CHL, there is now a considerable level of overlap between the RNE and heritage lists at the national, state and territory, and local government levels. From February 2012, all references to the RNE have been removed from the EPBC Act and the AHC Act. The RNE is now being maintained on a non-statutory basis as a publicly available archive.

The following heritage items are listed on the RNE within the study area or its vicinity:

Table 2.2 Items listed on the RNE.

Place ID	Name	Address
1492	Alison Homestead	Alison Road, Wyong
1490	Old Maitland Road Section	Old Maitland Road, Kangy Angy
1491	Felton Mathews (Survey) Tree	Old Maitland Rd, Mardi via Wyong

The mahogany tree marked by Felton Mathews during a survey of the area in 1831, is on the verge of Old Maitland Road approximately 1km from its intersection with Cobbs Road and as such will not be affected by the proposal.

2.5.2 National Trust of Australia (NSW)

The National Trust of Australia is a private, not-for-profit organisation committed to conserving Australia's heritage. Listing with the National Trust of Australia does not have statutory authority; however, it does have a role in raising public awareness of heritage issues.

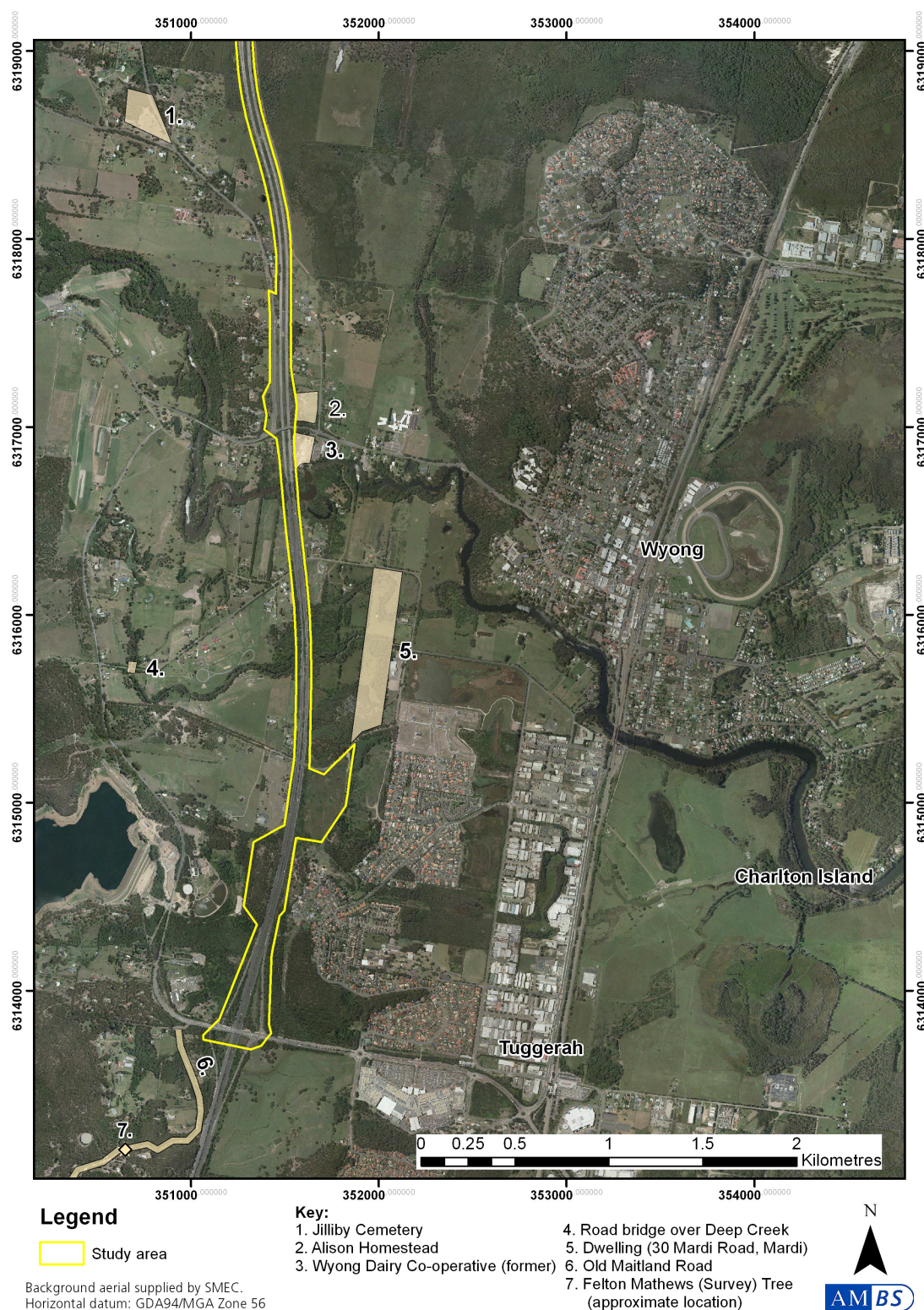


Figure 2.1 Heritage items in the vicinity of the study area.

3 Historic Context

3.1 Early European exploration

In March 1788, five weeks after the arrival of the First Fleet in Sydney Cove, Governor Arthur Phillip and a small group of officers and marines set out on a voyage to explore the coast to the north of Sydney Harbour. Phillip hoped to find good grazing and agricultural land that could supply food to the new colony. The voyage lasted eight days, during which time they made a brief exploration of both sides of Broken Bay, including a tributary variously called the northern branch and the north-west branch (Figure 3.1). This tributary was later known as the north-east arm and, from the 1820s, as Brisbane Water after the incumbent governor; with the Gosford/Wyong region first known as the 'Brisbane Water District'. The Englishmen encountered numerous Aboriginal people within the bounds of Broken Bay, both in canoes and on land (Figure 3.2). They were left with the impression of a rocky landscape, heavily timbered, and unlikely to be suitable for growing crops (Bradley c.1802:89-90; Dundon 1997:9-10; Phillip 1789:76-77; Strom 1982:6-8; Tench 1789:10).

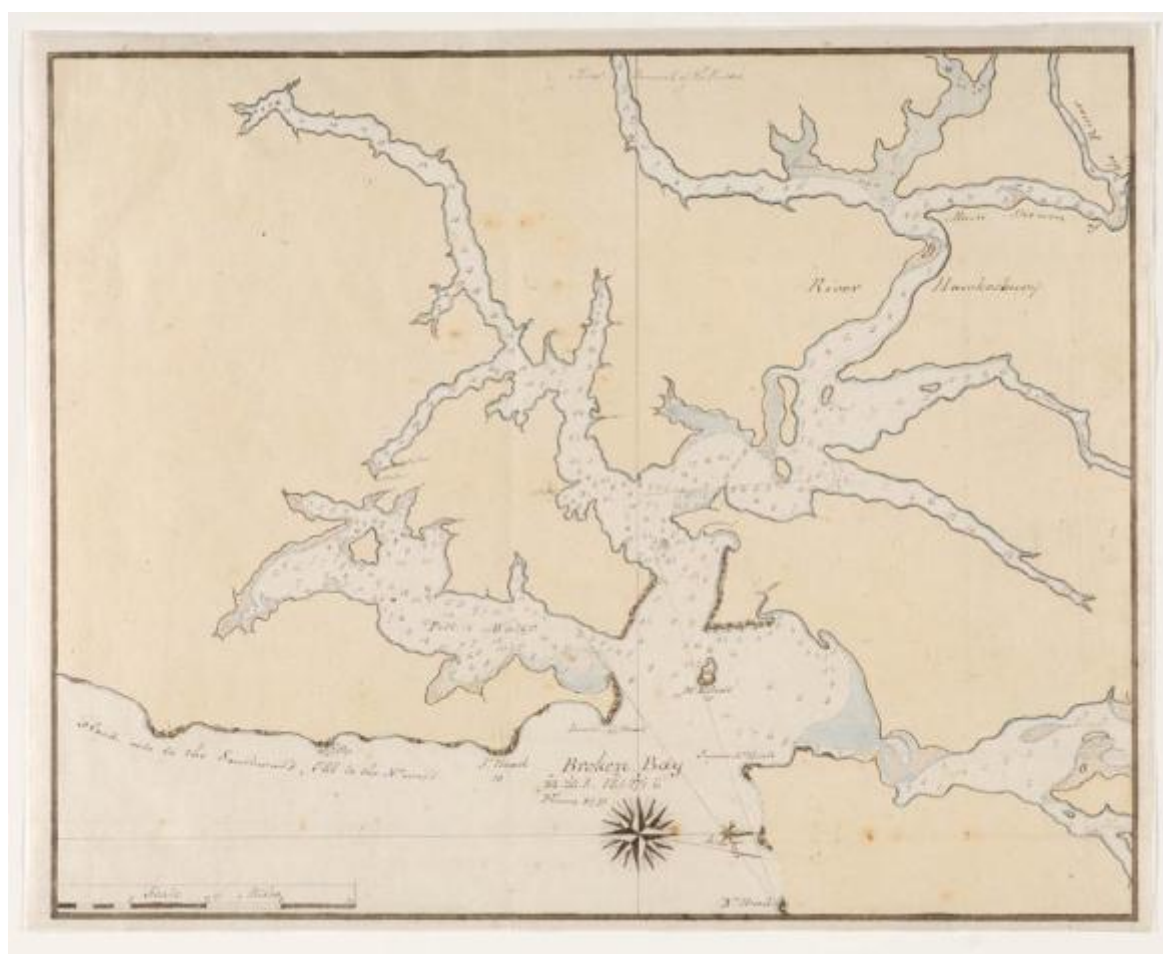


Figure 3.1 Chart of Broken Bay, 1788; by W Bradley, Charts from his journal, c.1802 (Source: NSW State Library, Ref: Safe 1/<http://acms.sl.nsw.gov.au/item/itemdetailpaged.aspx?itemid=404927#>).

Governor Phillip undertook a second voyage to Broken Bay in June 1789, during which he made a more thorough investigation of Brisbane Water. It was during this trip that Phillip also navigated the Hawkesbury River to a point upstream of Windsor and found land which would be good for growing crops. In the following decade, the Hawkesbury district was settled and provided much of the food needed to sustain the colony. In contrast, the land along the banks of Brisbane Water was left undisturbed until the 1820s; and even later in the rest of the district (Dundon 1997:9; Hunter 1793:141-142; Strom 1982:6-8).



Figure 3.2 View in Broken Bay New South Wales. March 1788; by W Bradley, Drawings from his Journal, c.1802, opposite p.90 (Source: William Bradley. Mitchell Library, State Library of NSW, Ref: Safe 1/14/opp.p.90).

The name Tuggerah may have come from an Aboriginal word for ‘cold’, while Wyong may be Aboriginal for ‘yam’. Mardi is said to be an Aboriginal name for ‘stone knife’, and Jilliby means ‘where two creeks meet’. Alison was named after the Alisons who created Wyong township (see Section 3.2.3), while Warnervale was named after Albert Hamlyn Warner, who sold the land containing this township (see Section 3.6) (Wyong Shire Library Service 2008).

3.2 Early Settlement

There were very few settlers north of Brisbane Waters in the 1830s, with only a handful between Gosford and Wyee; very few between Maitland Road and the coastline; and none along Wyong or Ourimbah Creeks – the main outpost for settlers on Wyong Creek was Mangrove Creek, with Maitland Road also providing some communication with Gosford (see Section 3.4.2). Two grants on Wyong Creek were made in 1840-1, at Yarmalong and Lemon Tree; however, the 1840s depression greatly impacted the Brisbane Water district, reducing land sales and bankrupting many large landholders, and the predominant industry of timber-getting declined. However, with the gold rush of the 1850s, the economy boomed and settlement spread into the district, with country lots for small-scale farming being sold by the government in Tuggerah Lake and Wyong Creek, to its junction with Cedar Brush Creek and to Little Jilliby, up Jilliby Creek. Most settlers came from the Hunter, Macdonald and Hawkesbury Rivers (Strom 1982:9, 14, 16).

The Robertson Land Acts offered incentives for settlement on small land blocks, which were being sold along Wyong Creek and its tributaries, bringing many settlers to the area in the 1860s for subsistence farming. However, although the soil was good along these waterways, most of the land had not been cleared, as there was great difficulty transporting timber south to the Sydney market across the steep Kangy Angy Range.

The earliest available parish maps for the area, show that land within the study area was eventually granted to Joseph Lees, Joseph Bakewell, Frederick Augustus Hely, E.J. Morton, William Timothy

Cape Jnr (Wyang Place), William Alison, William Cape Snr (Freeland), A.E. Wamsley, W.H. Kent, N.D. Rae, Alan Lester Kaye, J.J. Toepfer and W.N. Johns.

3.2.1 Frederick Augustus Hely

Frederick Augustus Hely, son of Colonel Forbes Francis Hely, was born in 1794 in County Tyrone, Ireland. He was married at 18 to Georgina Lindsay Bucknell of Hollymount House, and had three children before being appointed NSW Principal Superintendent of Convicts on 1 January 1823, a post he held until his death 13 years later. Hely and his wife and children thence travelled to Sydney, and the following year he was granted 1340 acres in Narara (Brisbane Water), where he established his farm 'Wyoming'. Although this was the first permanent settlement and development of a citrus fruit orchard in the district, Hely was unable to reside there permanently because of his job in Sydney. Apart from his main role with convicts, he sat on several official inquiries, was a justice of the peace from 1825, president of the Board of Magistrates in 1826, acting superintendent of police in 1827, a member of the Assignment Board in 1831, and foundation director of the Commercial Banking Co. of Sydney in 1834. Hely did apply for an appointment as stipendiary magistrate at Brisbane Water in 1832; however, he was considered so capable as superintendent of convicts that he was induced to stay by a large salary increase (Pike 1966; Strom 1982:9).

Hely was the largest landowner of the Gosford/Wyang region in its pioneering period, with his original grant increased to more than 4000 acres of land, with grants in the parishes of Ourimbah and Tuggerah (Figure 3.3). His Tuggerah grant included 100 acres of land that William Cape (see Section 3.2.2 below) had cleared and built a barn on, without reporting his selection to the government. Although Cape wrote many letters petitioning the government, he lost his court case. Meanwhile, Hely joined the Agricultural Society and his farm had some success. Further, he was cutting hardwood (particularly blue gum) in Narara Creek valley, and he received approval for a Cedar Licence *on his Lease from the Crown at Yarrmalong on Wyong Creek...and also at the Head of Tuggerah Beach (Ourimbah) Creek* in 1835 (Cedar Licenses Papers, list of licence applications; cited in Strom 1982:9). In 1836, Hely was in ill health and it was recommended that he retire as superintendent of convicts, on a pension. However, the Colonial Office had not yet approved the request before Hely died of apoplexy at age 42, on 8 September 1836. He was buried on his Wyoming property, leaving his wife, three daughters and two sons; his son Hovenden went on Ludwig Leichhardt's second expedition (Pike 1966; Strom 1982:9).

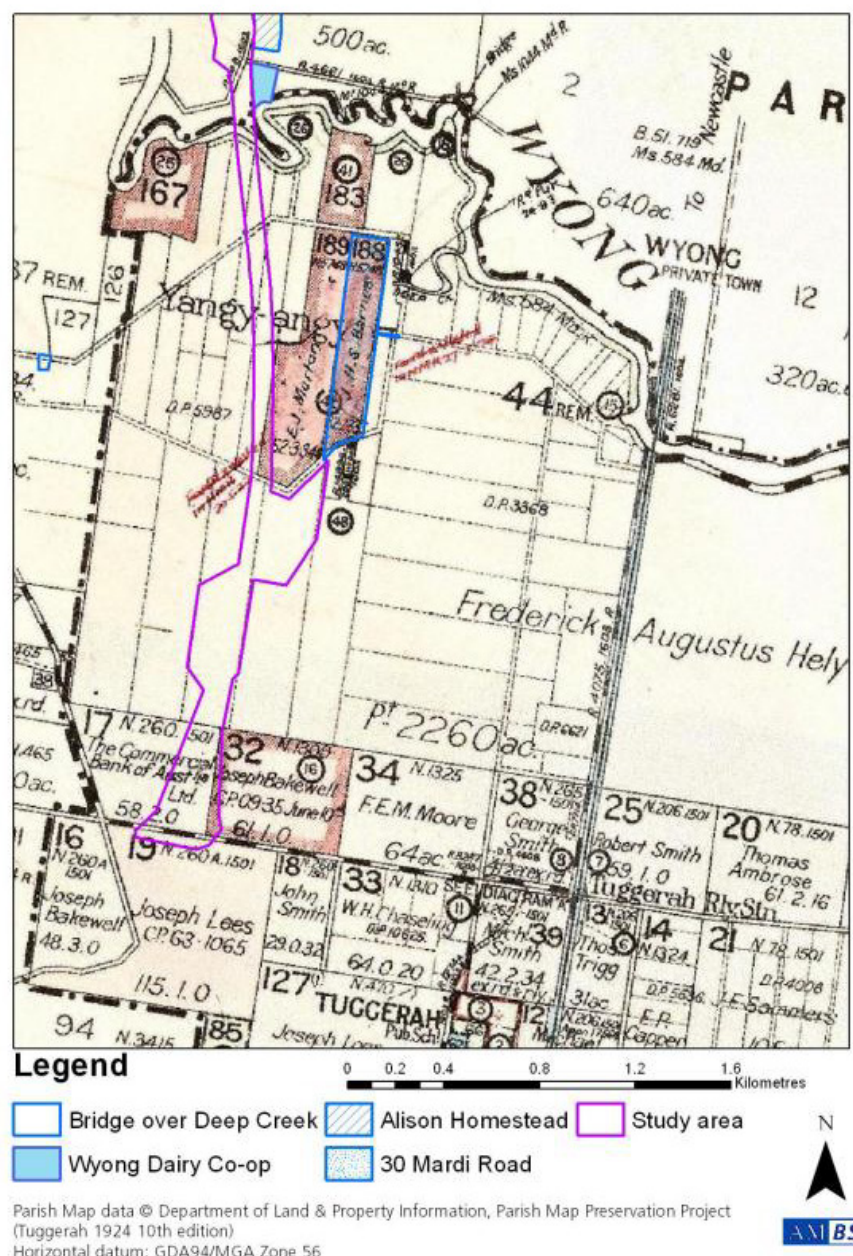


Figure 3.3 Detail from 1924 Parish map of Tuggerah showing extent of Hely's grant.

3.2.2 William Cape (Snr) and William Timothy Cape (Jnr)

William Cape was born in 1773 in Ireby, Cumberland, England, and married Mary Ann Knight of Tenterden, Kent in 1805. Together with their seven children William Timothy, Richard, John, Henry, Mary Ann, Eliza, and Emily, they migrated to Australia in 1822. Although they had booked to make the journey in the *Thalia*, the captain purposefully left without them, and when they later arrived in Hobart on the *Denmark Hill*, they discovered that their goods had been looted after being unloaded from the *Thalia*. Cape and his eldest son, William Timothy, travelled to Sydney and successfully sued the *Thalia's* captain, thereafter returning to the family in Hobart. Cape became schoolmaster of the Sydney Academy in April 1823, after the death of founded Isaac Wood; and a year later became schoolmaster of the main Sydney public school in Castlereagh Street. Helped by his older children, Cape organised the school on the recently adopted Madras system. Cape also published weather tables in Sydney papers from 1826 to 1840. He left the school in 1827 and became the first to settle in the Wyong district, having already made extensive improvements to his lands, Freeland, and brought the first cattle and sheep into the district (Figure 3.4). However, after an accident in 1828 in

which he was permanently lamed, he went back to live in Sydney until his death on 19 November 1847 (Goodin 1966).

Cape's eldest son, William Timothy Cape was born on 25 October 1806 at Walworth, Surrey. He assisted his father at the Sydney Academy and likewise served with him at the Sydney Public School from April 1824; and in 1826 he was appointed under master at Sydney Public Free Grammar School. Although that school failed, in 1827 he became schoolmaster of the Sydney Public School at only 20 years of age, in recognition of his great teaching abilities; he was particularly passionate about teaching classics and the higher branches of study. His reputation continued to grow, and in 1829 he opened his own academy in King Street. However, there was an increasing need for a complete secondary school, which was finally met by the establishment of Sydney College, built on a government land grant in College Street (which is today still in use as part of Sydney Grammar School). Cape was unanimously chosen as this school's first headmaster, and teaching began on 19 January 1835. Most of the original enrolment comprised 60 of the students from Cape's academy. However, by 1841 things were going downhill, with Cape accusing the school's trustees of overspending on the building programme while inadequately paying the staff. He left the school at the end of the year, and before the end of the decade the College was closed. Cape, meanwhile, had opened Elfred House Private School in 1842, on a grant in Glenmore Road, Paddington. The school was soon full, and he had to turn away almost as many as were admitted, until he retired in 1856 as perhaps the best known and loved of Australia's early teachers (Goodin 1966).

Although a strict disciplinarian, Cape was also kind and showed a keen interest in his students' welfare, encouraging them as the future leaders of the community to serve as gentlemen, and lead by example. Cape himself did this by generously supporting many worthy causes; in 1833 he assisted in establishing the Sydney Mechanics' School of Arts, helping with lectures and administration until he left Australia; in 1844 he became a councillor of the Sydney District Council; and he was also a trustee of the Australian Subscription Library, a fellow of St Paul's College, a magistrate, member of parliament for Wollombi, and commissioner of the Board of National Education (Goodin 1966).

Unfortunately, the last decade of Cape's life included the loss of several family members; Eliza Jane, his eldest daughter married and left home in 1854; Francis Henry, his second son died in 1856 at only 21 years old; and in 1858 his wife of 17 years, Jane (daughter of William Jaques of the Survey Department) died at 46. In 1860 he decided to take his younger children to England to complete their education. Cape died in London on 14 June 1863, and the first memorial in St Andrew's Cathedral was his; however, it was destroyed during reorientation in 1941 (Goodin 1966).

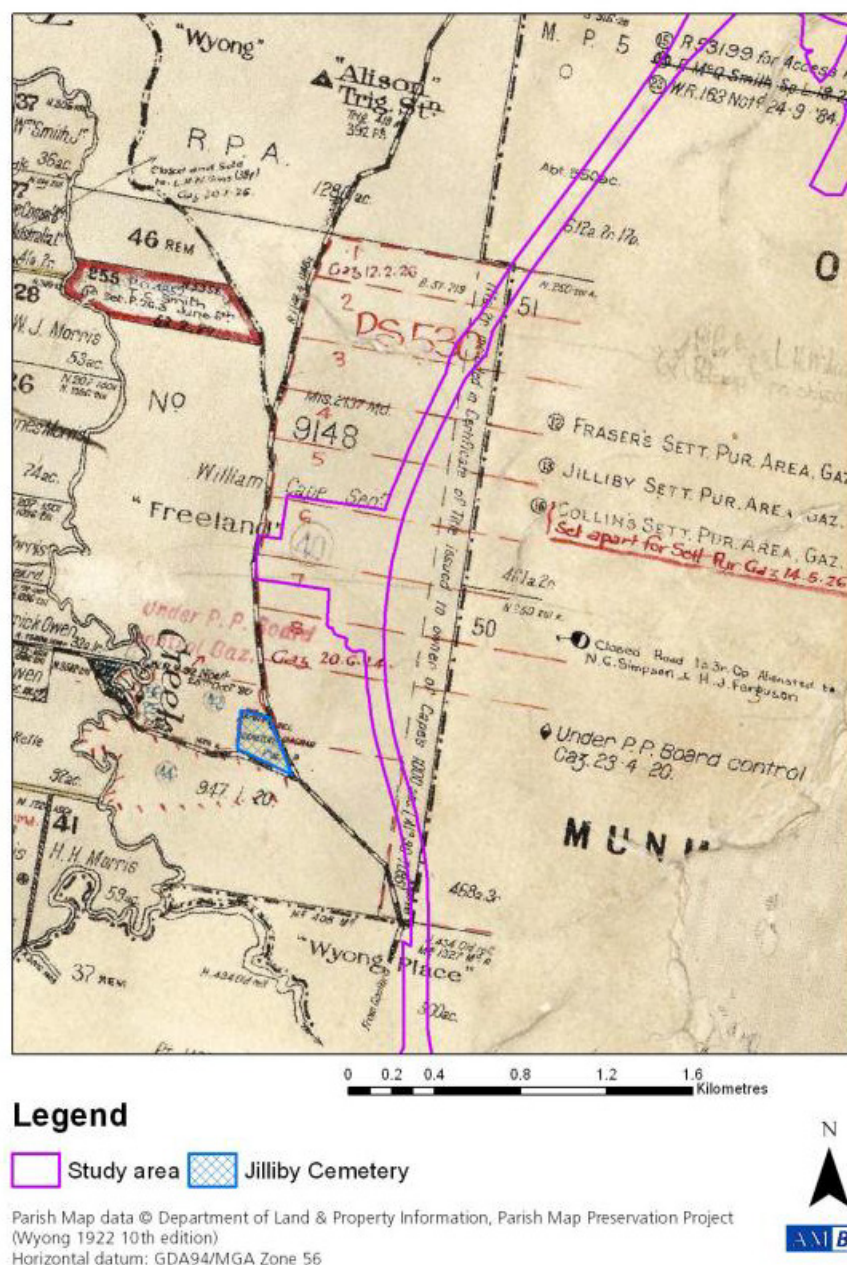


Figure 3.4 Detail from 1922 Parish map of Wyong showing William Cape's Freeland property.

3.2.3 William and Charles Alison

William Alison Snr settled in the Wyong area in 1875, when he purchased thousands of acres of land in the Wyong/Warnervale area (see Figure 3.5). The heritage listing for Alison Homestead identifies it as the oldest house in Wyong, built in 1885 and given to William's eldest son Charles, who extended the homestead when he married the granddaughter of Blue Mountains explorer, William Cox (Figure 3.6). Charles Alison was responsible for creating the private township of Wyong, and also offered land for Wyong Public School which was established in 1889 (Strom 1982:23). Alison Homestead was severely damaged in an alleged arson attack in December 2011.

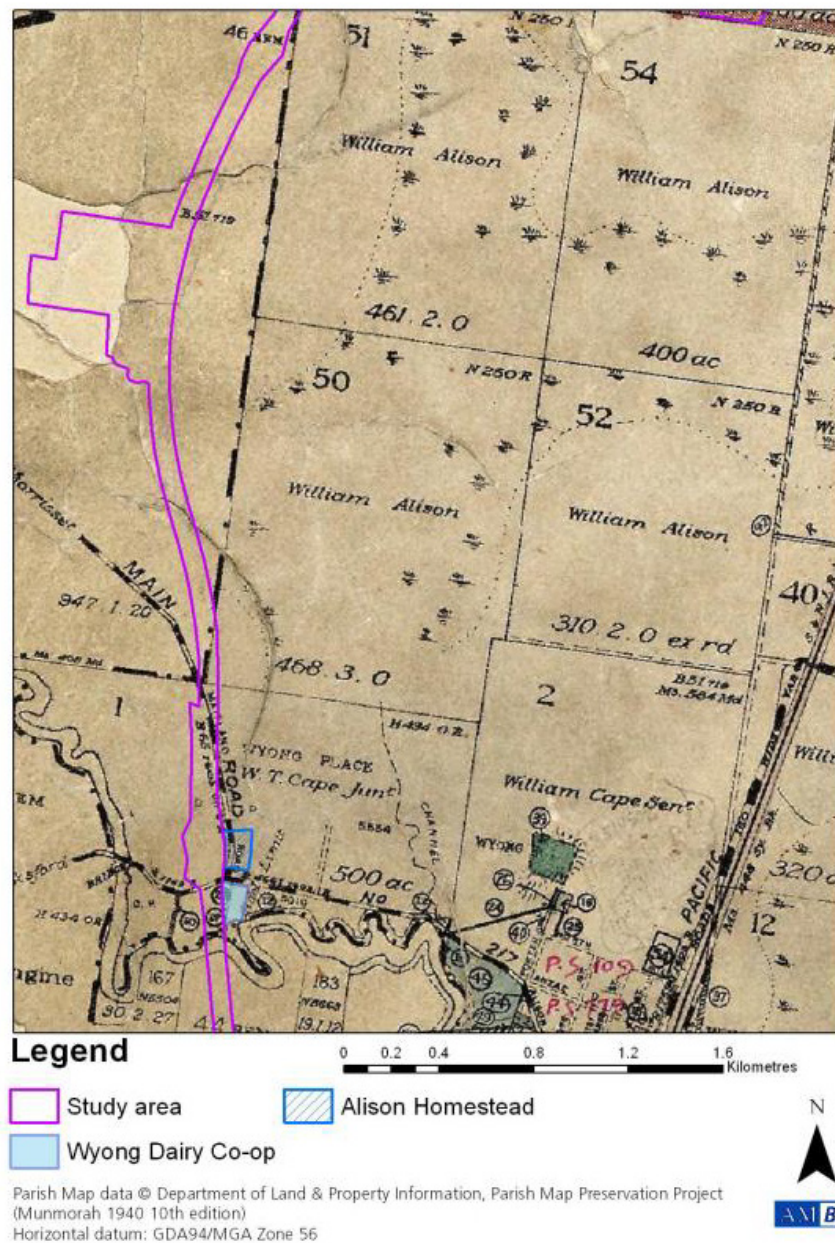


Figure 3.5 Detail from 1940 Parish map of Munmorah and William Alison's extensive holdings.



Figure 3.6 View of Alison Homestead prior to the fire of 2011 (http://www.environment.gov.au/cgi-bin/heritage/photodb/imagesearch.pl?proc=detail;barcode_no=rt07751)

The value of the homestead to the local community is demonstrated in the fact that the Homestead complex continues to be identified as a heritage item and, it is apparently the intention of the Wyong District Museum and Historical Society to reconstruct the homestead on the site.

3.2.4 The Wamsley family

The Wamsleys (or Walmsleys, before the shortened name became more commonly used), owned land in the sawmill district of Ourimbah. From 1878 the Wamsleys owned a hotel, the Traveller's Rest, in the area of Ourimbah known as Blue Gum Flat. Edward Wamsley (1829-1895) was listed as licensee of the hotel in 1882. Edward was one of 10 children of Edward William P. Wamsley and Sarah (nee Walker); his father lived to the age of 103 in 1885. Edward Jnr married to Isabella Phillips (1831-1863) in 1849 and had seven children; after Isabella's death he married Alice Owens in 1865 and had another nine children. Edward's fifth son, Archibald Albert Ernest Wamsley (1859-1934) was the hotel licensee from 1883-1885, while Edward's third son, Alfred Edward Wamsley, was licensee in 1888 and again in 1894. The hotel was a timber building that burned down in 1950, leaving only the stone chimney standing (Ancestry 2013a; Down n.d.; Jones & Evers 1988; Strom 1982:16).

Alfred Edward Wamsley was born on 23 May 1855. He married Mary Jane Morris in Brisbane Water in 1877, and had twelve children, one being Arthur Edward Wamsley (born in 1881, married to Wilhelmina Goldie and having four children before his death in 1971). Alfred died on 16 June 1922, and both he and Arthur are buried in Jilliby Cemetery. It seems that the Wamsleys owned several blocks of land in the district, particularly around Ourimbah, with Alfred becoming the owner of 31 acres at the junction of Chittaway Road and Brownlee Street in 1886. However, in later life Alfred was identified as a grazier, and owned land in the vicinity of modern-day Kiar (Figure 3.7; Ancestry 2013a, 2013b; Australian Cemeteries Index 2013a, 2013b; Jones & Evers 1988).



Figure 3.7 Detail from 1940 Parish map of Munmorah and the Wamsley family holding, now bisected by the motorway.

3.3 Early industries

3.3.1 Shell Gathering

In the earliest years of the colony, builders relied on lime putty mortar to construct masonry buildings. Lime was also in great demand for stuccoing and plastering over other inferior building materials. The major source of lime was shells collected from local beaches and from Aboriginal shell middens along the foreshore of Sydney Harbour and the surrounding coastline. Brisbane Water provided a ready supply of shell in the form of middens, and shell gathering or digging became one of the first industries of the region. Shell diggers dug up the middens at low tide, and transported the shells in bushel baskets to Sydney for burning (Dundon 1997:18-22.).

In the 1850s and 1860s, as the more accessible middens were exhausted, some shell gatherers resorted to taking live oysters from the water. These activities were implicated in the depletion of fresh oyster supplies in Sydney Harbour, and in 1868 the Government passed an Act prohibiting the burning of

live oysters for lime. Despite this, the Brisbane Water shell trade lasted well into the 1870s, and only began to decline in the late nineteenth century as a consequence of the increasing availability of rock lime, which could then be transported to Sydney from inland areas by rail (Dundon 1997:18-22.).

3.3.2 Timber Getting

By the 1840s, the Brisbane Waters district had become known for its hardwood timbers and timber getting became an important source of local employment. Timber roofing shingles, split in the Brisbane Water forests, formed a major component of cargos to Sydney. Sydney Blue Gum and turpentine were used locally for building boats, wharves and jetties. As mentioned above, Frederick Augustus Hely was getting hardwood (particularly blue gum) in Narara Creek valley, while George Bloodsworth was getting cedar in the Wyong district and rafting the logs across Tuggerah Lake, where they were transported overland to Cabbage Tree Harbour and thence shipped to Sydney. Further, the renewed economy of the 1850s saw the development of a large sawmill industry at Ourimbah Creek, near Palmdale, with sawn materials from the southern side of Ourimbah Creek transported by road to Narara Creek wharf, and then on to Sydney by shallow-draft ketch. However, there was great difficulty transporting timber from the Wyong Creek area south to the dominant Sydney market across the steep Kangy Angy Range. Early settlers in this area had been taking cedar logs north to places like Wollombi; and carrying large quantities of cut shingles to Mangrove Creek, where they could then continue on to Sydney (Dundon 1997:10,16-17; Strom 1982:9,14,16).

Increased settlement of the Wyong Creek area from the 1860s and subsequent improvements in transport with the surveying of roads, and the development of the railway in the 1880s, enabled a number of sawmills to be established in the Wyong Creek valley by the beginning of the twentieth century. The first was that of James Waters in the Yarramalong area around 1880, which exploited the local hardwoods and probably supplied some of its wares to the railway for sleepers and girders. The timber industry of the area began to decline after 1910, with large amounts of land in the valleys having been cleared by this time. This then enabled the settlers to pursue agriculture and dairying on their properties, which were well-suited given their location along the fertile flats of Wyong Creek and its tributaries (Strom 1982:18).

3.4 Transport

3.4.1 Shipping

For much of the nineteenth century, the study area and surrounding region was sparsely populated and difficult to access by the general public. The Brisbane Water district was initially accessed only by water, using the north branch of Broken Bay, the Hawkesbury River, or a few difficult harbours along the coast, because land access was hampered by the need to cross the Hawkesbury River, and the hilly nature of the countryside (Strom 1982:12).

Like many of the state's rivers and estuaries, the entrance to Brisbane Water was subject to periodic problems of access as a result of the movement of sand and silt building up in the channel. The relative depth of water in the channel at low tide meant that masters of vessels preparing to enter or leave Brisbane Water would often have to wait for favourable conditions. Wyong Creek, which entered into Tuggerah Lake, was full of snags and was thus unable to be safely navigated by boat until it was cleared in 1908; this was most likely prompted by the increase in population of the local region, which required maintaining clear, navigable channels for ships and boats. A government wharf was also built at the end of Lake Road, east of Tuggerah Railway Station, extending c.350m into Tuggerah Lake (see Figure 3.8). The wharf was used by local fisherman to transport their catch to Sydney by rail, and by recreational users travelling to The Entrance (Dundon 1997:13-15; Strom 1982:23).



Figure 3.8 Early railway stations in the vicinity of the study area, and Tuggerah wharf.

3.4.2 Roads

The first Post Office Directory of 1832 identifies that there were a number of roads into the Brisbane Water district, including the tolerable Maitland Road, which extended from the Sydney Road, via Peats Ferry, through the Narara Valley, crossing Ourimbah and Wyong Creeks and continuing north (Figure 3.9). The road had not been surveyed or formed at that time, and was not generally used to access Maitland, but rather for communication between settlers in the district. In fact, the early roads were generally defined through their usage by settlers for communication and transport of timber and other resources, rather than formal surveying (Strom 1982:12-13).

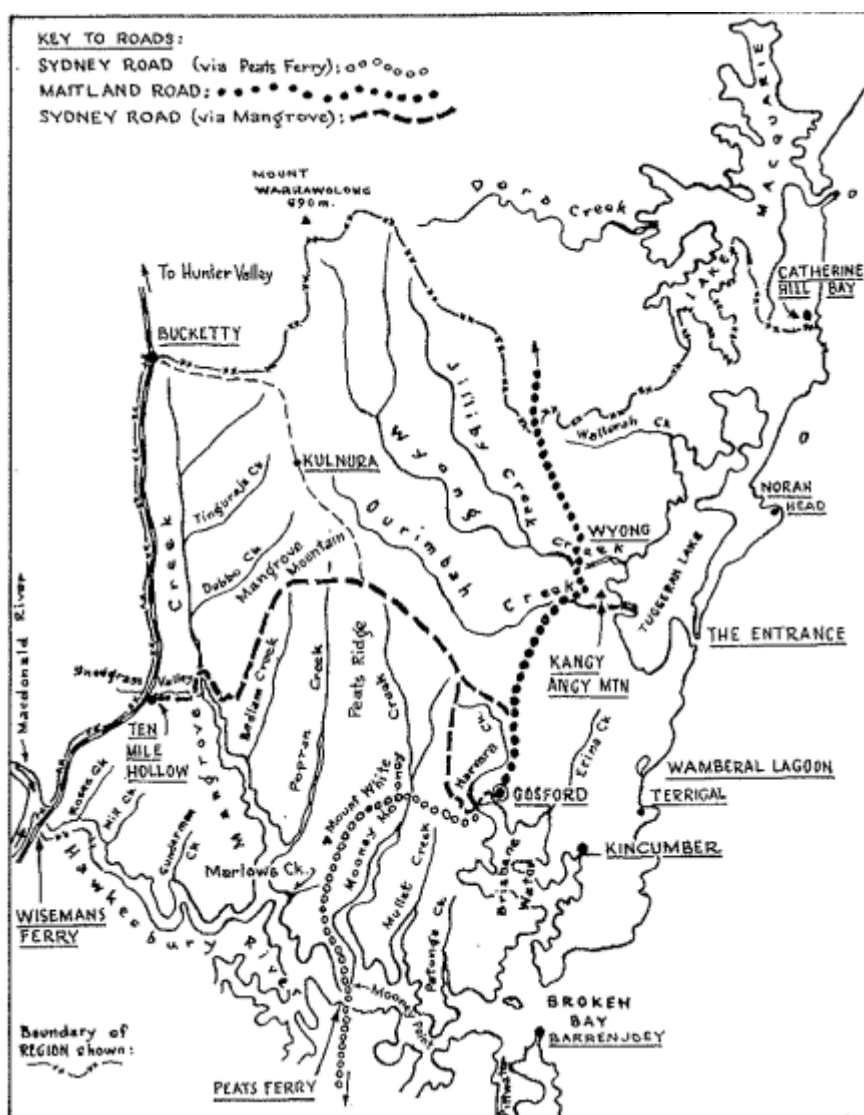


Figure 3.9 Location of early roads in the Brisbane Water district, including Maitland Road (Strom 1982:Map 4).

The Great North Road was built by convict “iron gangs” in the 1830s to provide a more direct route between Sydney and the Hunter Valley, with a branch from Ten Mile Hollow to Brisbane Water. The road was *perhaps the most elaborate public work in the colony*, according to Surveyor-General Sir Thomas Mitchell in 1855 (Strom 1982:8).

Nevertheless, a more direct route between Sydney and the Brisbane Water district was desired, with the 20 September 1843 edition of the Sydney Morning Herald having described the great north road as long, tedious and circuitous. Surveyor Shone was commissioned by the Brisbane Water District Council to propose a new route, and traced out three routes; one led to Gosford and was in use by Edward Kelly of Popran Creek; one followed Peat’s Ridge from Samuel Taylor’s inn at Mangrove Creek (at Marlow’s Creek, where Taylor operated a punt) to Mount White; and one had been marked out by George Peat, who had land on both sides of the Hawkesbury River and operated a punt for his stock. Peat’s route crossed Mooney Creek to Mount White, and was the preferred route chosen by the Council; it was approximately the same route as the modern-day Pacific Highway. However, the Council soon ceased to function and most of this road remained basically a bridle track (Strom 1982:12-13).

By 1856, the Sydney Road, via Peats Ferry and the Maitland Road, were the only roads marked in the Brisbane Water district, but were not suitable for drays. In fact, Maitland Road was said to be in a very bad and sometimes dangerous condition, particularly where it crossed Kangy Angy Mountain; some attempts were made to stabilise the road here using stone walling and culverts, and much of the stonework on Old Maitland Road in this area (south of the current study area) still remains to this day. A new section of road was surveyed around Kangy Angy Mountain in 1875, and in the 1930s this route was used for the Pacific Highway, in addition to the two old Sydney and Maitland Roads, with a few minor diversions. However, the difficulty of a direct land route between the Brisbane Water district and Sydney remained unresolved until the railway was established in the 1880s (Strom 1982:13).

The first road in the Wyong Creek area was surveyed in 1864, extending to Mangrove Creek from an intersection with Maitland Road near its crossing of Wyong Creek (around Yarramalong Road). The road followed the early timber-getters track to Yarramalong, then went up Bumble Hill and over to the wharf at Mangrove Creek. Yarramalong soon became important as the junction of other roads that were surveyed to service the settlers in the Ravensdale and Cedar Brush Creek regions (Strom 1982:18).

The Main Roads Board (MRB), precursor to Roads and Maritime, was established in 1925, in order to maintain and construct roads for motor traffic. Although a rough alignment for the Pacific Highway had been marked out by the beginning of the twentieth century, the MRB did not begin to connect the roads between the river valleys of the north coast until the 1930s. The route between Sydney and Brisbane was gradually improved, until it was linked by a continuous bitumen and concrete road in 1952 (HLA 2007:10; Kass 2006:46;). Planning for the F3 Sydney to Newcastle Freeway (now the M1 Pacific Motorway) commenced in the 1950s. It was intended to provide *a road of freeway standard*, and superseded the Pacific Highway as the main road corridor linking Sydney, the Central Coast and Newcastle (Roads and Maritime 2012b). The first section of the motorway, from the Hawkesbury River to Mount White, opened in December 1965. The section between Kangy Angy and Wallarah Creek, of which the study area is a part, opened in the 1980s (Figure 3.10: Roads and Maritime 2012b; Kass 2006:50). As indicated in Figure 3.10 the construction of the motorway had a significant impact as it cut a swathe through the local landscape.

The majority of roads shown on the parish maps within the vicinity of the study area exist today as formalised roads, and it is possible that evidence of the early roads may remain beneath the modern road surfaces. However, it appears that a road through the Wamsley property was not formalised, and is no longer extant. Mountain Road/Kiar Ridge Road is unsurfaced, and Sparks Road and Cobbs Road are elevated across the motorway. St Johns Road and Macpherson Road appear to be roughly surfaced and extend beneath the motorway; and the old alignments of Maitland Road, Alison Road and Mardi Road/Collies Lane would have passed beneath the motorway. Any evidence of early road construction in the study area is therefore likely to have been extensively disturbed or destroyed during the construction of the motorway and associated access roads in the 1980s, particularly where the motorway has been cut down rather than built up. It is unlikely that these roads will be impacted by the proposal, as the current design would result in no change to the bridge piers, abutment or culverts existing along the motorway alignment.

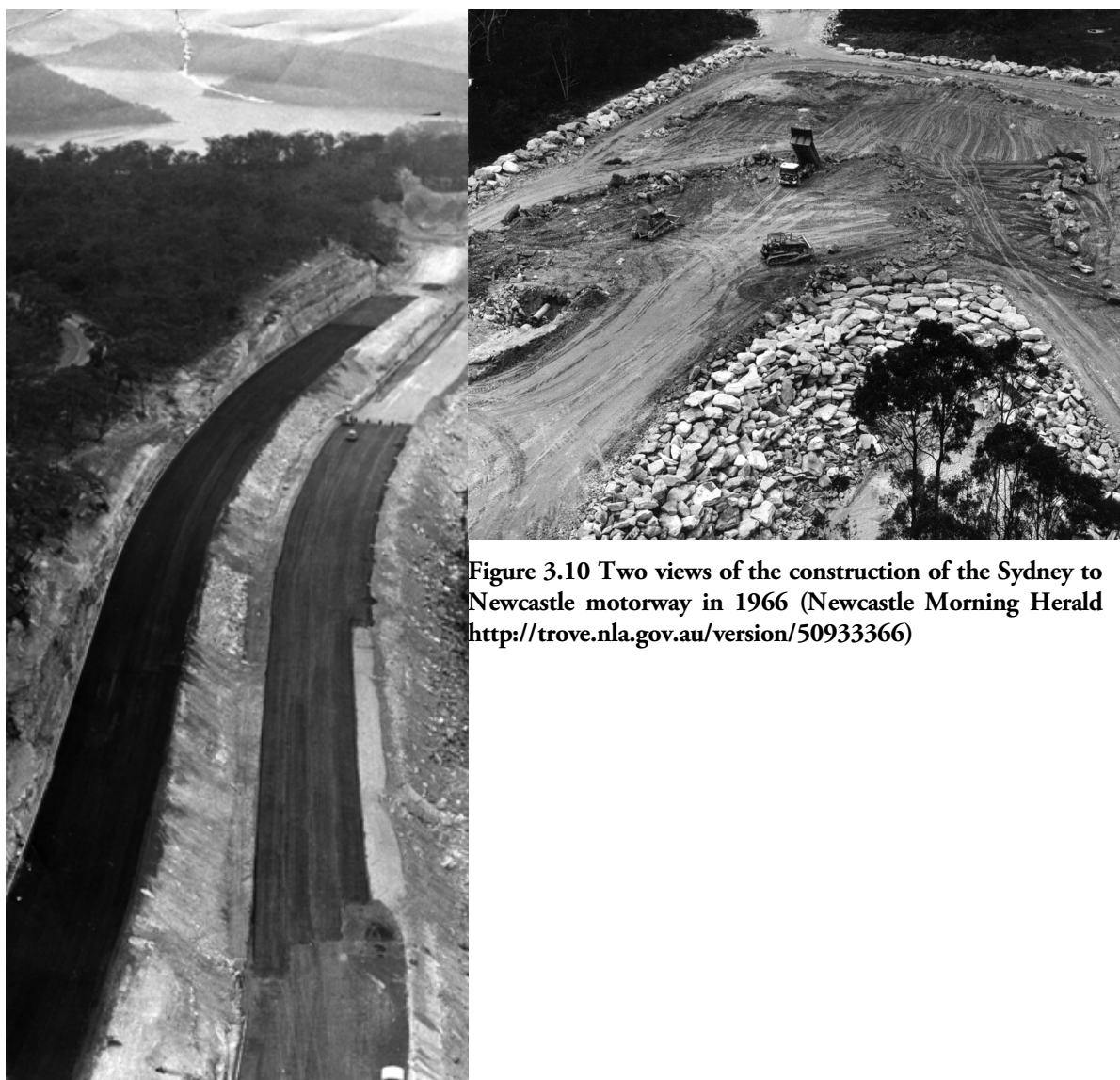


Figure 3.10 Two views of the construction of the Sydney to Newcastle motorway in 1966 (Newcastle Morning Herald <http://trove.nla.gov.au/version/50933366>)

3.4.3 Railways

In 1881, the Premier and Colonial Secretary Sir Henry Parkes introduced a new railway policy to Parliament, including a proposal to construct the Homebush to Waratah railway, to link Sydney with Newcastle. Parliament approved construction of the line, which became known as part of the Great Northern Railway. It was completed in five main stages between 1886 and 1889, with the section between Gosford and Islington opening on 5 August 1887. Wyong and Wyee Stations opened on 15 August 1887, although the latter (originally known as Norahville) was closed on 1 February 1896 after a new station just to the south opened on 1 August 1892 (today's Wyee Station). A platform was also added to this station in February 1896. The stations at Tuggerah (originally known as Tuggerah Lakes) and Warnervale opened in 1890 and 1907, respectively. A platform was added to Warnervale Station in 1910, and although the station closed in 1974, it was re-opened at a later (unknown) date. Given the difficult terrain and limited 1880s technology, the construction of this railway was a feat of engineering. The Hawkesbury River Railway Bridge, opened on 1 May 1889, was heralded as the last link in the line, uniting the eastern States from Adelaide to Brisbane by rail, and became one of Sir Henry Parkes' symbols in the campaign for Federation (Bozier 2011; Singleton 1965:167-177; Strom 1982:21).

3.5 Subdivision and farming

The coming of the railway led to intensive economic development of the Gosford/Wyong region in the 1880s, including the establishment of Wyong township and new land uses including agriculture, dairying and recreation, as well as bolstering the timber and fishing industries. The railway also provided work for contractors supplying materials, and those providing food and transport to the railway workers (Strom 1982:18, 21).

The 1884 Crown Lands Act made small blocks of Crown land available for people to earn their living. Many large privately-held blocks of land were thus subdivided, including those along Maitland Road between Gosford and Wyong, where the railway passed through. Small farming blocks (mostly less than 40 acres) and residential lots were sold along Maitland Road, especially in the vicinity of the railway stations (Strom 1982:21).

Citrus farms were established on a number of the small farming blocks, with orange trees having been brought in to some places from 1855, including Wyoming. The areas of the Narara Valley and Gosford Model Farms also had citrus orchards prior to 1885. More commercial citrus farming began after the railway came through, in places like Davistown and Somersby, later spreading to the Kulnura, Mangrove Mountain and Peats Ridge regions, and the Wyong valleys. Citrus trees grew well in the soil, as had the hardwood trees that originally covered the area, and this became an important industry of the Gosford/Wyong area (Strom 1982:21, 23).

Dairying was another significant industry in the Wyong region, with the first dairy in the area founded in 1897 by William Chapman. Chapman was successful in this venture, with a dairy on a large estate known as the Pioneer Dairy in 1902. He sent cream and milk to Sydney by train, where the New South Wales Fresh Food and Ice Company purchased the goods. Other district farmers were therefore encouraged to get involved in the Wyong dairy industry, and a co-operative dairy company was proposed in 1904. This proposal was supported by the Wyong Sports Club, and the butter factory opened in 1907, on land subdivided from the Alison Estate, which was one of the earliest and largest dairy farms in the Wyong area. The first chairman of the board was Harry Davey, who lived in Alison homestead, the oldest house in Wyong, just north of the factory. Although the factory struggled for several years, it began to thrive by 1912, and incorporated an ice works in 1914. It was a major local employer, and although the factory burnt down in 1921, a new factory opened later that same year. By 1924 the co-operative began selling milk, in addition to butter and ice. The decline of the dairy industry led to the factory being closed in 1993, but the site still remains today, adjacent to the current study area, on the southern side of Alison Road (GML 2005).

3.6 Suburban development

Prior to the arrival of the railway in 1887, a village had been developing in what is today known as Wyong Creek, where a church and school were built in the early 1880s. The new township of Wyong was built around the new railway station, with the Wyong Township subdivision occurring in 1893. Charles Alison offered land for Wyong Public School (established in 1889; however, no longer a school). The road to old Wyong (Wyong Creek) was named Alison Road after the family. Although the Cape family had been promised over 2000 acres of this land in the 1820s, and were the first settlers in the Wyong region, they were not involved in the development of the area (see Section 3.2.2 above). Hotels, including the Royal and Commercial, and stores, including Wilkinsons and Chapman & Son, were some of the first buildings in the township, which serviced the area west of the railway line; there having been no significant settlements on the eastern side of the line when the town was established (Strom 1982:23).

Most of the Alisons' properties were purchased by Albert Hamlyn Warner in 1903, and were subsequently offered for sale in the Warner Estate. This large area of land extending from Wallarah Creek to the Wyong River and west to Jilliby Creek, included Warnervale (named after Warner) and its two centres around the Warnervale Railway Station and at Kanwal. Warner built shops near Wyong Station and a private residence on the Wyong River, now called Strathavon. These buildings exhibit ornamental architecture, of which Warner was fond. Wyong eventually became the commercial and administrative centre of the Wyong district, and a local Council building was erected here in 1948 (Strom 1982:23).

3.7 Tourism and leisure

The end of the nineteenth century brought the Gosford/Wyong region within 2-3 hours of Sydney with the opening of the railway. It also saw a "developing health-and-leisure consciousness in the community and movement towards shorter working hours, free weekends and annual holidays for all workers" (Strom 1982:23). This soon led to recreational visits to the region, with the Wyong valleys being popular for the *fine bush scenery* (Strom 1982:23). As it was further from Sydney than Gosford, Wyong's place as a recreational stopover depended on overnight accommodation being available in the town and from landholders around Tuggerah Lakes; the first major tourist accommodation in the Wyong district being Dunleith Guest House at North Entrance, opened by the Denisses in 1895 (Strom 1982:23).

3.8 Post-War settlement

As identified in Section 3.5 above, public access to the Wyong region had improved with the completion of the rail line between Sydney and Newcastle in 1889. The area was also accessible by motor vehicle from the 1930s, following the opening of the Pacific Highway which linked Sydney to Newcastle via Gosford by a coastal route. Blocks of land located close to the lagoons and near the seaside, which were not suitable for farming, were sold as the area became more attractive as a scenic and recreational holiday destination. After the Second World War, agricultural land use declined in favour of urbanisation, particularly of the eastern part of the Gosford/Wyong district. Improved rail and road systems have enabled people to commute from this area to Sydney for work, and the increased urbanisation and changes in land zoning has led to greater local commerce and industry, including the development of large power stations. According to census data, the number of people living on the Central Coast rose from 73,410 in 1976 to 282,725 in 2006. It has also become a popular place to retire, with approximately 36% of people living in Wyong aged 55 years and over in 2011 (Australian Bureau of Statistics 2011; Broomham 2001:116,125; Garling 1938; GDHRA 1981:56-57; Gosford Chamber of Commerce 1935; Gosford City Library 2006; Wyong Shire Council *et al.* 2004:57; Strom 1982:28).

4 Physical Analysis

4.1.1 Survey methodology

A survey and assessment of the study area was undertaken on 1-2 May 2013 by AMBS archaeologists Ngaire Richards and Ronan Mc Eleney for Aboriginal and historic cultural heritage purposes. For safety reasons, no pedestrian access to any part of the paved motorway areas was permitted, including the central median strip, shoulder and breakdown bays. Entry to private properties and road reserves was through defined access points. The survey was undertaken on foot, with personnel transported between access points by vehicle.

The aims of the survey were to inspect the study area for any potential heritage items or sites, and to identify the potential extent of impacts on identified heritage items. Photographs of the study area were taken using Fuji FinePix HS20EXR and Canon PowerShot S100 digital cameras.

The landscape on either side of the motorway is characterised by a mixture of pastoral farmland and light scrub, with occasional areas of swamp. The Wyong Dairy co-operative is located on a meandering bend of the Wyong River, which is the most prominent topographical feature in the immediate vicinity of the survey area. The fertile alluvial soils deposited by the river are likely to be one of the factors that enticed early European settlers to the area. As noted above, construction of the motorway has had a significant impact on the lands along the road corridor, with the construction of road embankments and cuttings through local prominences (Section 3.4.2 and Figure 3.10).

The historical survey focused on the following areas:

- The boundary between the Motorway Corridor and the Alison Homestead site.
- The boundary between the Motorway Corridor and the Wyong Dairy complex.
- The southern boundary of 30 Mardi Road where it is closest to the McPherson Road Ancillary site.
- The proposed locations of the Sparks Road, Warnervale Airport, Warren Road, Hue Hue Road and McPherson Road Ancillary Sites.

The three known historical sites were targeted for detailed inspection due to their proximity to the proposed works. There is some potential for archaeological sites to be present within the Ancillary Sites and these were also a focus of assessment. The historical survey was undertaken in conjunction with the Aboriginal heritage survey for the proposal.

4.1.2 Ancillary Sites

The **McPherson Road Ancillary Site** is to the east of the motorway, adjacent to the former Mardi Landfill Site (Figure 4.1). The landfill site adjoins the ancillary site along its eastern boundary and the south-west corner of the 30 Mardi Road property. The site was characterised by rough uneven ground, overgrown with grass, shrubs and bushes (Figure 4.16). The previous use of this land make it unlikely that historic relics would remain intact, which was confirmed by the visual inspection. The land is covered by a series of mounds to create an uneven ground indicating relatively recent disturbance.

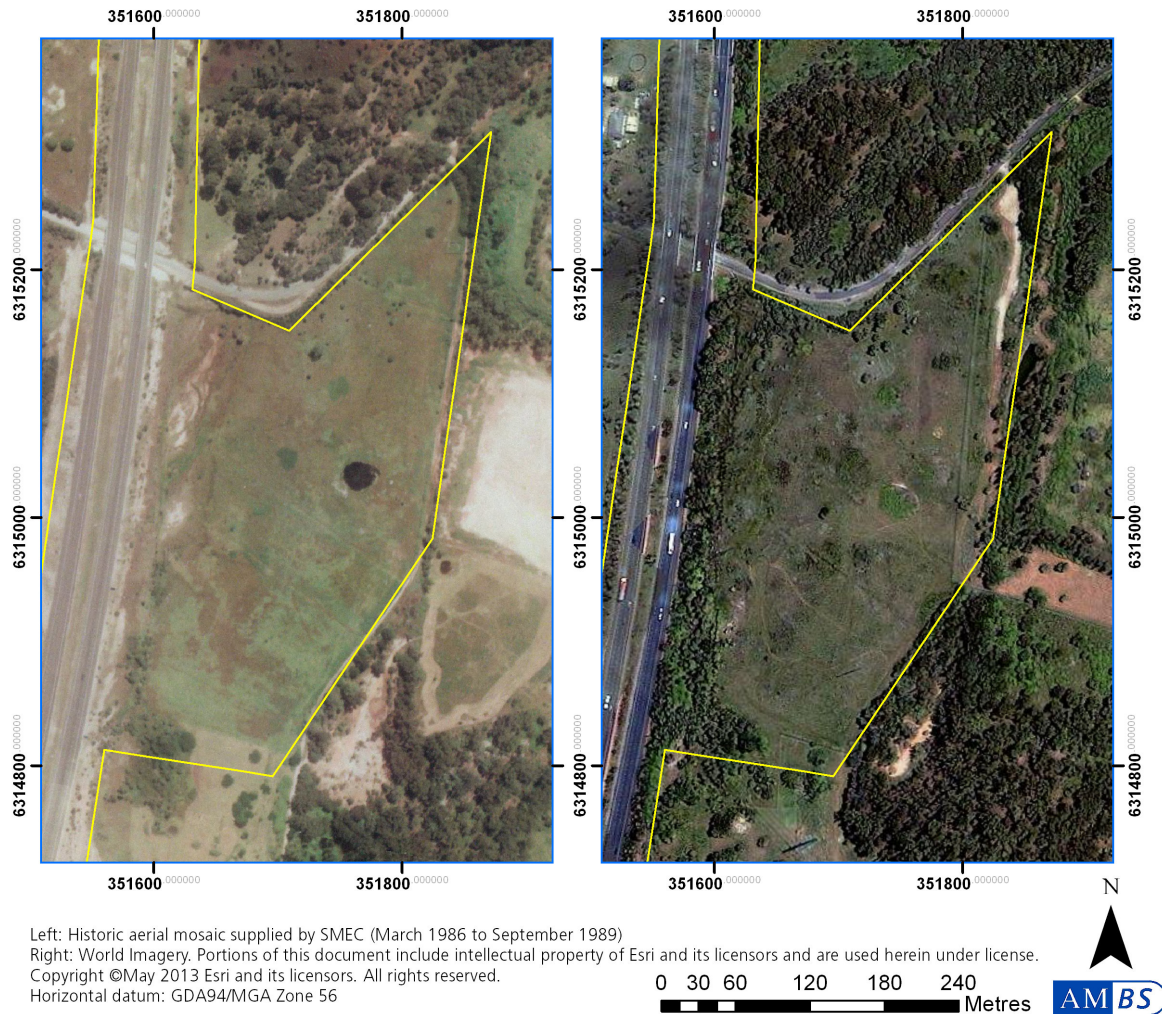


Figure 4.1 Comparison of the McPherson Road Ancillary Site in the 1980s, with satellite imagery from 2013. Landfill activity can be seen in the earlier imagery, left, immediately east of the proposed site.



Figure 4.2 View south across the ancillary site from near McPherson Road.

The **Hue Hue Road Ancillary Site** is bounded by the M1 to the east, St Johns Road to the north, Hue Hue Road to the west, and is part of the Hue Hue Mine Subsidence District (Figure 4.3). Much of the site is rural in character, used for cultivation and as agistment for horses (Figure 4.4). According to Martin Schuller, a local resident, part of this area was used as a concrete batching site during construction of the motorway. Evidence of this was found, in the form of some concrete spillage, off a side track in the north east corner of the site. The southern lot of the proposed site is occupied by a motorway service centre and truck stop.

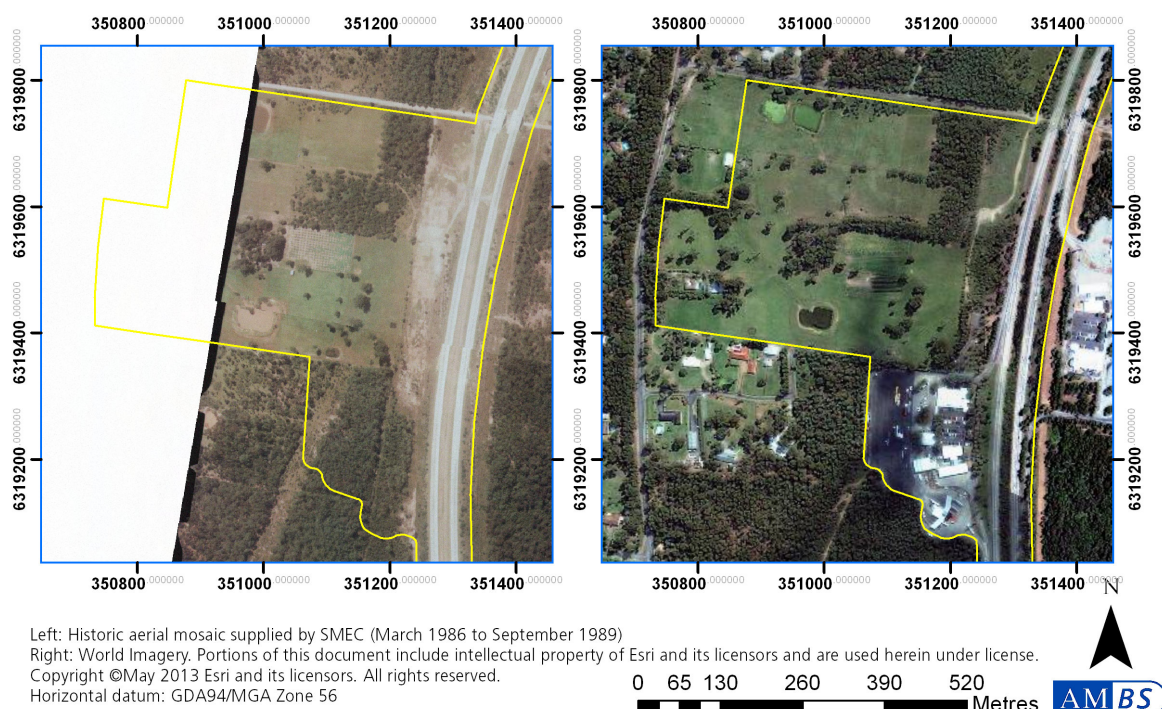


Figure 4.3 Disturbance within the mine subsidence district at the Hue Hue Road Ancillary Site arising from rural land use, and construction of the M1 in the 1980s (left) and subsequent rehabilitation (2013 right).



Figure 4.4 View looking northeast across the pastoral land toward the M1.

Inspection of the *Warnervale Airport Ancillary Site* confirmed that the land is typical of a rural airfield. The site comprises a large flat expanse covered in grass with no indication of historic activity other than as an airfield with associated administrative and operational areas (Figure 4.5). The area along the southern boundary of the proposed ancillary area is quite marshy.



Figure 4.5 View from the northern edge of the Warnervale Airport site looking south with the airport buildings in the background, left.

The *Warren Road Ancillary Site* is indicated in the current Land and Property Information maps as being heavily vegetated (<http://maps.six.nsw.gov.au/>). However, by the time of the current survey, the area had been cleared of almost all vegetation, as also indicated in the satellite imagery below (Figure 4.6). Grass had begun to regrow over parts of the site, including over several large spoil heaps (Figure 4.7). There was also a dam on the property and evidence of construction of modern drainage features.

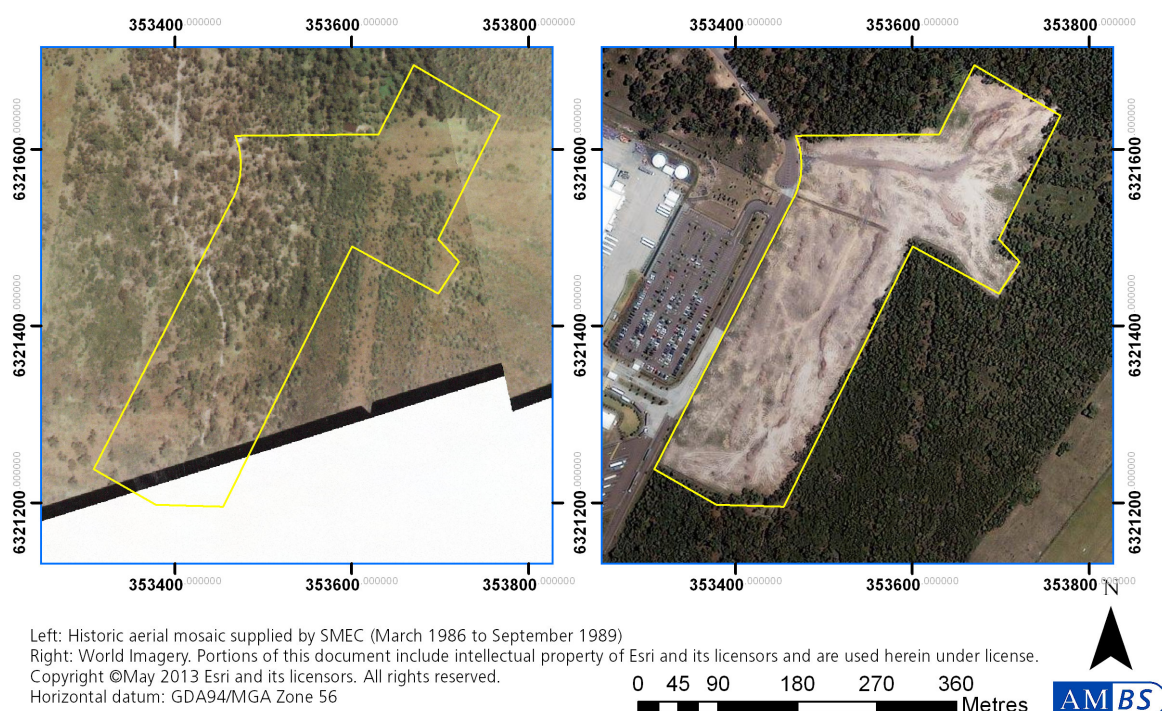


Figure 4.6 Comparison of the Warren Road Ancillary Site in the 1980s and 2013. Note that site has now been entirely stripped.



Figure 4.7 The Warren Road Ancillary Site showing clearance and regrowth with spoil heap in the north east corner.

The *Sparks Road Ancillary Site* is predominantly rural in character. Grassed areas had evidently been cleared for grazing in the past and there had been at least four dams on the property at some time. The remains of two buildings were investigated. One likely dates to the mid to late twentieth century with an associated driveway, water tank, two out-buildings and overgrown garden. Concrete foundations and some adhering floor tiles were all that was left to indicate the location of most of the buildings. One of the outhouses was still largely intact. Small mounds overgrown with grass probably indicate mounds of rubble. Towards the south-east corner of the site were the concrete remains of what appears to have been an industrial building. The aerial photographs shown below suggest this building was erected after 1986.



Figure 4.8 Structural remains at the Sparks Road Ancillary Site. Concrete foundation (left) and floor waste surrounded by tiles.



Figure 4.9 Remnant garden at the Sparks Road Ancillary Site. A flowering bush encroaches onto a concrete floor (left), and the overgrown garden, with grass covering mounds of rubble (right).

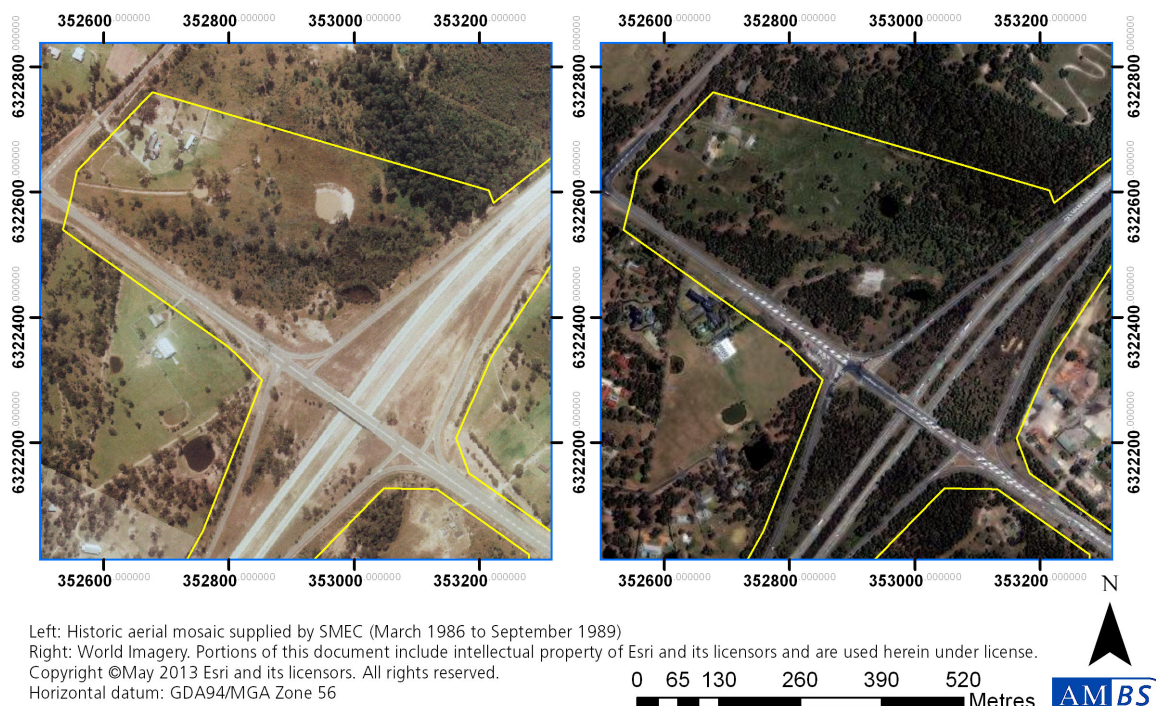


Figure 4.10 The most recent satellite image (right), shows the little change in the Sparks Road Ancillary Site.

4.1.3 Alison Homestead

The Alison Homestead is on the east side of the motorway and immediately to the north of the Alison Road overpass. The Homestead property stands above the level of the motorway from which it is not visible and, although below the overpass, it is screened from view by a dense growth of trees and bushes.

Since the fire of 2011, the Alison Homestead has been protected behind a chain link safety fence (Figure 4.11). At the time of the survey the Alison Homestead Museum was closed to the public and was not accessed. However, it was noted that the property is well vegetated with large trees, gardens and a number of small out-buildings.



Figure 4.11 Homestead main building viewed from the entrance lane showing extensive fire damage.

The larger trees that are visible at the rear of the house define the site's western property boundary along the motorway corridor. There is a considerable fall in the ground level between the western edge of the tree line and the motorway below. The trees along the western and southern boundaries provide shelter to the out-buildings on the property and are integral to the character of the site. In addition, they provide a visual buffer to the motorway and overpass and may dissipate the volume of sound generated by the motorway.

Among the associated outbuildings is a reconstructed timber-slab hut or cottage, built as a bicentennial project in 1988, and which was moved to its present location on this site in 2009 (Figure 4.12). The hut is typical of early rural vernacular architecture and appears to have been built to demonstrate traditional technologies. All of the outbuildings within the curtilage appear to be more recent constructions than the former homestead itself, and none are likely to be impacted by the proposed works.

The proposed scope of works includes the installation of a variable message sign to the north of Alison Homestead. The sign is to be erected at a distance of approximately 800m from the Homestead complex which, when considering the northward slope of the road between the sign and Homestead and the screening trees, indicate that it is unlikely that the sign will be visible from the property.



Figure 4.12 The timber-slab cottage seen among the trees is the southernmost building on the site.

4.1.4 Wyong Dairy Co-operative (former)

The former Wyong Dairy Co-operative is on the east side of the motorway, immediately to the south of the Alison Road overpass and directly across the road from the Alison Homestead complex. Although the site is visible from the motorway, it is elevated above it and the motorway is therefore not visible from the complex. It is also below the level of the overpass, from which it can be seen (Figure 4.13). The complex has been adapted to house several commercial ventures including a fitness centre, a veterinarian, a café and a processed food factory. A new entry and concreted car park have recently been added to the west side of the property, along its boundary with the motorway corridor (Figure 4.14 and Figure 4.15).



Figure 4.13 View from the Alison Road overpass to the former Wyong Dairy Co-operative complex. The motorway is to the right of the image.



Figure 4.14 View south to the former Wyong Dairy Co-operative complex, left, and the motorway, right. The new car park is in the middle distance.

Despite its proximity to the motorway and the proposed improvement works, it is not likely that there will be any impact upon the site. The motorway corridor is clearly demarcated by the fence line and that part of the site that is closest to the proposed upgrade works is occupied by a new car park. It is understood that work in this area will be focused on the central median, further ensuring that the site will not be impacted.



Figure 4.15 View to the main buildings of the former Wyong Dairy complex from the Alison Road entry.

4.1.5 30 Mardi Road, Mardi

The dwelling at 30 Mardi Road is obscured from view by the surrounding garden of dense vegetation. The house is not visible from the motorway which is at a distance of approximately 400m. The south-west corner of the property is diagonally opposite the north-east corner of the McPherson Road

Ancillary Site and its southern boundary is separated from the Mardi Landfill Site by McPherson Road. In addition, the McPherson Road Ancillary Site, is more than 900m from the dwelling itself.

The Mardi Road property, particularly the residence, is separated from the focus of proposed activities by a distance of at least 400m and as such is unlikely to be affected by the proposal.



Figure 4.16 The eastern boundary of the McPherson Road Ancillary Site is defined by the chain wire security fence. The 30 Mardi Road property is beyond the trees.

4.2 Archaeological Potential

The historic background and physical analysis have identified the Alison Homestead and the former Wyong Co-op Dairy, on land formerly granted to Cape, and later purchased by Alison, as the only listed heritage items within the near vicinity of the proposed works. Although it is possible that other evidence of settlement, including homesteads, barns, fences, orchards or other agricultural remains, may have been present on these properties and elsewhere within the study area, any such evidence is likely to have been extensively disturbed by the construction of the motorway and its associated access roads, and surrounding modern development. There have been no indications of the likely presence of physical remains associated with the early settlement of lands within the study area.

It was not possible to access the median strip due to safety considerations; however, construction of the motorway is likely to have significantly disturbed or destroyed any archaeological resources that may have been present within this area.

Assessment of Heritage Impact

4.3 Preamble

The M1 Motorway is a critical part of the National Transport Network and one of the busiest roads in NSW. The section between the Tuggerah Interchange at Wyong Road and the Doyalson Interchange, Doyalson Link Road, is a major part of the through road for long-distance and for local traffic accessing the Central Coast. The current proposal involves widening the motorway to a minimum of six lanes between Wyong Road, Tuggerah, and the Doyalson Link Road, Kiar.

Seven listed local heritage items are identified within the vicinity of the proposal, of which three are within the near vicinity; Alison Homestead, the former Wyong Dairy Co-operative and a residential property at 30 Mardi Road, Mardi. As noted above, Section 4.1.5, the Mardi Road property is located some distance from the McPherson Road Ancillary Site, and as such will not be affected by the proposal. The residence is at the northern end of the property, surrounded by dense vegetation, which provides additional screening.

4.4 Impact Assessment & Mitigation

As identified above three local heritage items have been identified as being within the near vicinity of the proposal and as such there is some potential for impacts to their heritage values. In addition, the likelihood of archaeological relics or sites to be present on any of the five Ancillary Sites has been assessed as low. As such, it is unlikely that the proposed works will have a direct impact on archaeological remains.

4.4.1 Noise & Vibration

The Alison Road Homestead and former Wyong Dairy Co-operative are on the east side of the motorway and immediately north and south of the Alison Road overpass. As such there is potential for impacts on these places during and following construction. The increase in heavy vehicle traffic during the construction phase will likely result in an increase the levels of noise and vibration. Similarly, following construction there is potential for an increase in the effects of noise and vibration following the upgrade works with increases in road traffic. Historic structures can be adversely affected by vibration levels above 3mm/s and as such it may be appropriate to monitor the effects of vibration on the Alison Homestead and former Wyong Dairy Co-operative. However, the potential for the effects of vibration on heritage buildings will also be addressed in the Noise and Vibration study (in preparation).

4.4.2 Visual Amenity

The Alison Homestead and former Wyong Dairy Co-operative are directly adjacent to the motorway and Alison Road overpass.

As described in Section 4.1.4, the former Dairy has been modernised with new entries and car park which are invisible from the motorway, but clearly visible from the overpass. Works associated with the proposal are unlikely to have an adverse impact on its heritage significance, which is largely based on its historical development, from 1907, as a co-operative formed of local dairies, rather than its aesthetic significance which:

Demonstrates the layout and process of a local dairy cooperative of medium size. The factory buildings also demonstrate landmark qualities for the local region (Criterion e. <http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2720378>).

The proposal will not adversely affect the landmark qualities of the former Wyong Dairy Co-operative.

Despite the damage done to the Alison Homestead by the fire of 2011, the property retains many of the features that contribute to its heritage value. The statement of significance refers to the Homestead building rather than its setting:

A relatively intact homestead complex, the site has changed in minor degrees since its construction in the late 19th century. The site has a historical value for the association with William Cape and William Alison, original settlers from the 1870's in the Wyong area. The building is historically significant as the oldest house in the town of Wyong, and as a representative example of a late 19th Century farm house. The site is valued by the community as a cultural Museum interpreting both the site history and that of the Wyong Shire (State Heritage Inventory <http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2720096>)

Criterion e, which refers to the aesthetic value of an item or place, also disregards the setting of the Homestead.

It is of modest design, although relatively large. Has potential to reveal information about the lifestyle and working life of a major regional farming pioneer family.

As described above, Section 4.1.3, the Alison Homestead property includes out-buildings set within a landscaped garden setting, contributing to the setting and sense of place. The trees along the western and southern boundaries provide a visual buffer to the motorway and overpass, and as such make an important contribution to the setting and visual amenity of the property. As such, there are no view corridors between the Alison Homestead and the motorway or Alison Road overpass.

Recommendation 1

The screening plantings along the western and southern boundaries of the Alison Homestead should be maintained and, if removed, replaced with appropriate alternative plantings following construction works.

4.4.3 Potential Heritage Items

Should any suspected historic heritage artefacts or features be uncovered during the proposed activity, all work would immediately cease in the vicinity of discovery, and managed in accordance with the Roads and Maritime Standard Management Procedure - *Unexpected Archaeological Finds* (2012a).

Bibliography

Australian Bureau of Statistics (2011) 2011 *Census Community Profile Series: Wyong (State Suburb)*. Available at http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/communityprofile/SSC12587?opendocument&navpos=230 Accessed 7/3/2013.

Australian Cemeteries Index (2013a) *Inscription for Alfred Edward Wamsley*. Available at <http://austcemindex.com/inscription.php?id=8379630> Accessed 8/3/2013.

Australian Cemeteries Index (2013b) *Inscription for Arthur Edward Wamsley*. Available at <http://austcemindex.com/inscription.php?id=8379013> Accessed 8/3/2013.

Bozier R (2011) *NSWrail.net*. Available at <http://www.nswrail.net/> Accessed 7/3/2013.

Bradley W (c.1802) *William Bradley journal: A Voyage to New South Wales, December 1786 - May 1792*, Available at <http://purl.library.usyd.edu.au/setis/id/brajour> Accessed 22 November 2011.

Broomham R (2001) *Vital Connections: A History of NSW Roads from 1788*. Hale & Iremonger Pty Ltd, Alexandria.

Down G (n.d.) *The Down Family Genealogy – Australia*. Available at http://genealogy.downau.com/individual.php?pid=I12630&ged=Down_Complete.GED&tab=0 Accessed 8/3/2013.

Dundon G (1997) *The Shipbuilders of Brisbane Water, New South Wales*. Gosford.

Garling PS (1938) *Gems of... Coastal Scenery revealed by The New Scenic Highway in The Shire of Erina near Gosford, NSW, Australia [booklet]*. Available at http://www.gosford.nsw.gov.au/library/local_history/Tourist%20Guides/documents/gems-of-coastal-scenery-circa-1938.pdf Accessed 19/8/2008.

Goodin VWE (1966) 'Cape, William (1773–1847)'. Australian Dictionary of Biography, National Centre of Biography, Australian National University. Available at <http://adb.anu.edu.au/biography/cape-william-1880/text2207> Accessed 6/3/2013.

Gosford Chamber of Commerce (1935) *The Scenic Glory of the Gosford District [booklet]*. Available at http://www.gosford.nsw.gov.au/library/local_history/Tourist%20Guides/documents/scenic-glory-of-the-gosford-district.pdf Accessed 19/8/2008.

Gosford City Library (2006) *Population Growth — Gosford City Council*. Available at http://www.gosford.nsw.gov.au/library/local_history/population/popgrowth.html Accessed 15/8/2008.

Heritage Office (1996) *Archaeological Assessments*. Archaeological assessment guidelines, based on a study conducted for the Department of Urban Affairs & Planning by Godden Mackay Pty Ltd.

Heritage Office (2001) *Assessing Heritage Significance: A NSW Heritage Manual update*.

Heritage Office and Department of Urban Affairs & Planning (1996) *NSW Heritage Manual*. Sydney.

Hunter J (1793) *An Historical Journal of the Transactions at Port Jackson and Norfolk Island*. Available at <http://purl.library.usyd.edu.au/setis/id/hunhist> Accessed 22/11/2011.

Jones BC & AC Evers (1988) *Ourimbah: History of a New South Wales Timber Town to 1930*. Available at <http://www.cafewaratah.info/ourimbah/4.htm> Accessed 7/3/2013.

Kass, T (2006) *RTA Thematic History*. Compiled for the Roads and Traffic Authority as the basis for its Heritage and Conservation (Section 170) Register.

Lough JC (1981) *Freeway No. 3 Wallarah Creek Interchange to Wallsend: Archaeological Survey*. Consultancy report to Department of Main Roads NSW.

Murphy CL (1993) *Soil Landscapes of the Gosford-Lake Macquarie 1:100 000 Sheet Report*. Department of Conservation & Land Management.

Phillip A (1789) *The Voyage of Governor Phillip to Botany Bay*. Available at <http://purl.library.usyd.edu.au/setis/id/phivoya> Accessed 22/11/2011.

Pike AF (1966) 'Hely, Frederick Augustus (1794–1836)'. Australian Dictionary of Biography, National Centre of Biography, Australian National University. Available at <http://adb.anu.edu.au/biography/hely-frederick-augustus-2177/text2797> Accessed 6/3/2013.

Roads and Maritime Services (Roads and Maritime) (2012a) *Standard Management Procedure - Unexpected Archaeological Finds*. Roads and Maritime Services, North Sydney.

Roads and Maritime (2012b) *F3 Freeway Central Coast Projects*. http://www.rta.nsw.gov.au/roadprojects/projects/central_coast_region/f3_freeway/ Accessed 16/05/2013.

Singleton C (1965) *The Short North – The Sydney-Newcastle Link Railway: Part 3*. Hawkesbury River to Gosford. The Australian Railway Historical Society Bulletin 335, pp167-177.

Strom B (1982) *Gosford/Wyong History and Heritage*. Gosford Printing Pty Ltd, Gosford.

Tench W (1789) *A Narrative of the Expedition to Botany Bay*. Available at <http://adc.library.usyd.edu.au/data-2/p00039.pdf> Accessed 22/11/2011.

Wyong Shire Council, Gosford City Council, Central Coast Health, and University of Newcastle (2004). *Central Coast Social Atlas*. Available at http://www.wyong.nsw.gov.au/wyongshire/social_atlas.html Accessed 19/8/2008.

Wyong Shire Library Service (2008) *Wyong Shire Place Names*. Available at <http://www.wyong.nsw.gov.au/my-community/libraries/local-studies/> Accessed 7/3/2013.