

Tarrawonga Coal Project

Environmental Assessment

APPENDIX L

NON-ABORIGINAL HERITAGE ASSESSMENT

TARRAWONGA COAL PROJECT NON-ABORIGINAL HERITAGE ASSESSMENT

A REPORT FOR WHITEHAVEN COAL MINING PTY LTD

BY
MICHAEL PEARSON
HERITAGE MANAGEMENT CONSULTANTS PTY LTD.

20 MAY 2011

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1 INTRODUCTION

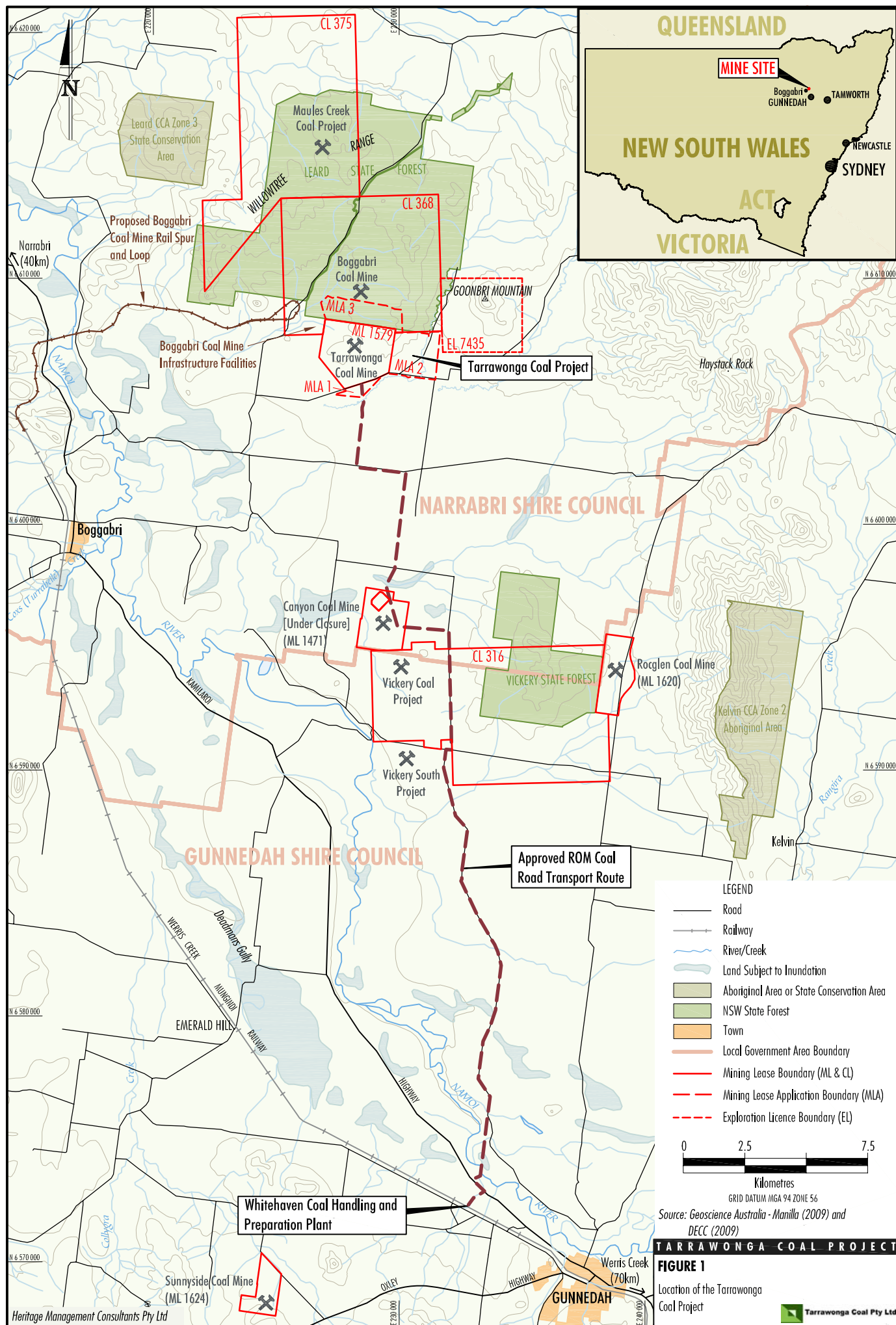
1.1 BACKGROUND

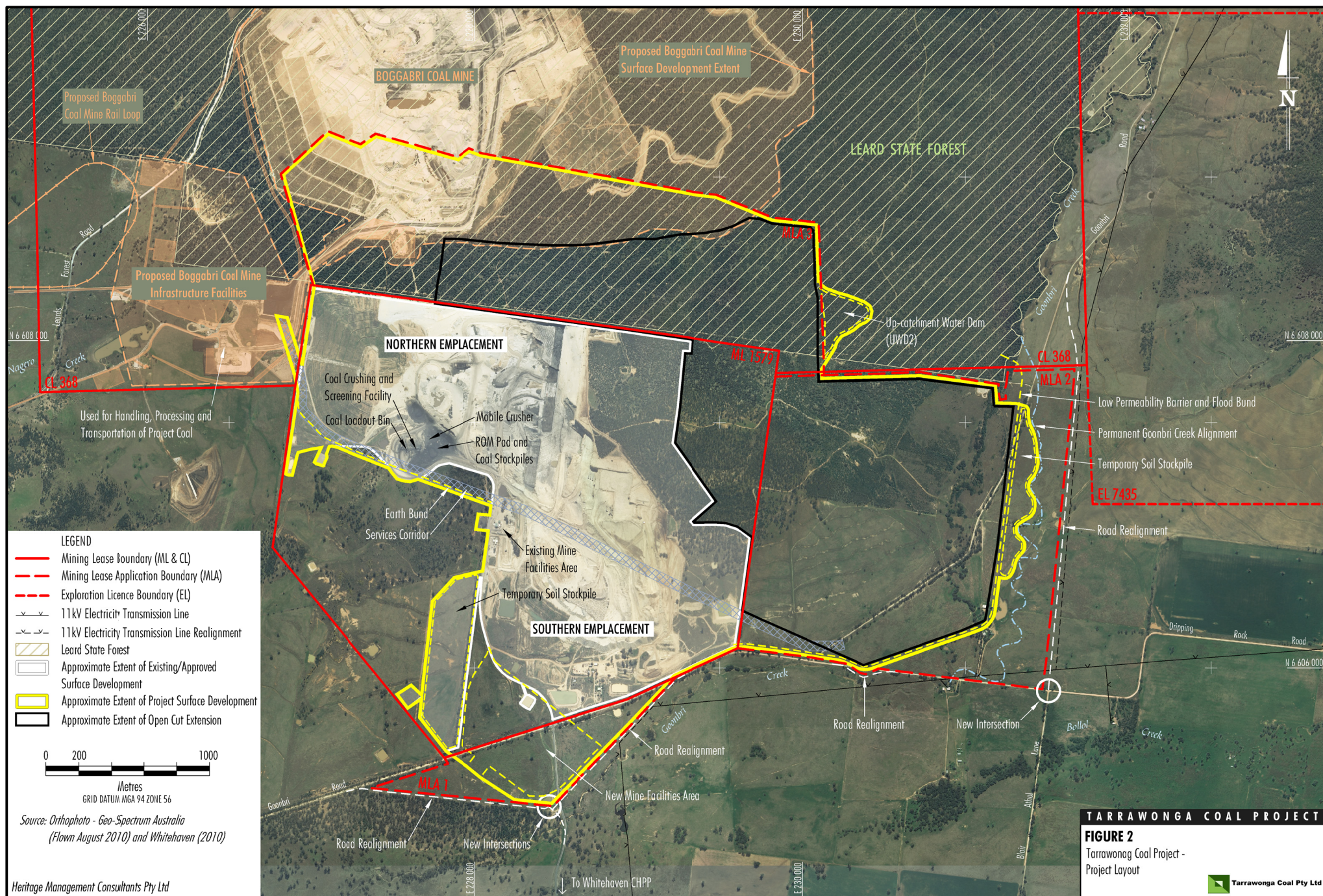
Whitehaven Coal Mining Pty Ltd (Whitehaven) is seeking approval of a life-of-mine expansion of its Tarrawonga Coal Mine under of the New South Wales (NSW) *Environmental Planning and Assessment Act 1979* (EP&A Act). The Tarrawonga Coal Mine is located approximately 15 kilometres (km) north east of the township of Boggabri, NSW (Figure 1). The Tarrawonga Coal Project (the Project) Environmental Assessment (EA) requires the preparation of a non-Aboriginal heritage assessment. This report outlines the historical context of non-Aboriginal occupation of the Project area, and investigates existing heritage registers and related information to identify any heritage places that might be impacted by the Project. An assessment of the heritage significance of the identified places and the likely impacts of the Project on non-Aboriginal heritage is then made. Figure 1 shows the location of the Project area and Figure 2 shows the extent of the Project area and immediate surrounds.

The main activities associated with the development of the Project would include:

- continued development of mining operations in the Maules Creek Formation to facilitate a Project run-of-mine (ROM) coal production rate of up to 3 million tonnes per annum (Mtpa), including open cut extensions:
 - to the east within Mining Lease (ML) 1579 and Mining Lease Application (MLA) 2; and
 - to the north within Coal Lease (CL) 368 (MLA 3) which adjoins ML 1579;
- ongoing exploration activities;
- construction and use of a services corridor (including haul road link) directly from the Project open cut mining operation to the upgraded Boggabri Coal Mine Infrastructure Facilities¹;
- use of upgraded Boggabri Coal Mine Infrastructure Facilities for the handling and processing of Project coal and the loading of Project product coal to trains for transport on the Boggabri Coal Mine private rail spur to the Werris Creek Mungindi Railway¹;
- construction and use of a new mine facilities area including relocation of existing mine facilities infrastructure and service facilities;
- use of an existing on-site mobile crusher for coal crushing and screening of up to 150,000 tonnes of domestic specification coal per annum for direct collection by customers at the mine site;
- use an existing on-site mobile crusher to produce up to approximately 90,000 cubic metres of gravel materials per annum for direct collection by customers at the mine site;
- progressive backfilling of the mine void behind the advancing open cut mining operation with waste rock and minor quantities of coarse reject material;

¹ Subject to approvals and upgrades being in place for the transfer of Project ROM coal to the Boggabri Coal Mine Infrastructure Facilities.





- continued and expanded placement of waste rock in the Northern Emplacement (including integration with the Boggabri Coal Mine emplacement) and Southern Emplacement, as mining develops;
- progressive development of new haul roads and internal roads, as mining develops;
- realignment of sections of Goonbri Road and construction of new intersections;
- construction of an engineered low permeability barrier to the east and south-east of the open cut to reduce the potential for local drainage of alluvial groundwater into the open cut;
- removal of a section of Goonbri Creek within the Project open cut and the establishment of a permanent Goonbri Creek alignment and associated flood bund to the east and south-east of the open cut;
- progressive development of sediment basins and storage dams, pumps, pipelines and other water management equipment and structures;
- continued development of soil stockpiles, laydown areas and gravel/borrow areas;
- ongoing monitoring and rehabilitation; and
- other associated minor infrastructure, plant, equipment and activities.

The proposed life of the Project is 17 years, commencing 1 January 2013.

This assessment is based on an analysis of available documentation relating to the history and cultural heritage of the Project area, and on a field survey of the Project area. This report has been drafted in consideration of the relevant principles and articles contained in the Burra Charter (Australia ICOMOS, 2000) and the NSW Heritage Manual (NSW Heritage Office and Department of Urban Affairs and Planning, 1996).

1.2 AUTHORSHIP

The research and assessment in this report has been undertaken by Dr Michael Pearson of Heritage Management Consultants Pty Ltd.

1.3 ACKNOWLEDGEMENTS

The input and assistance of the following people is acknowledged with thanks.

Chris Thomas, Environmental Officer, Whitehaven
 Josh Peters and Meghan Farr, Resource Strategies Pty Ltd.

1.4 METHODOLOGY

Historical and archival research was carried out, drawing particularly on the resources of the National Library of Australia and web-based sources including the maps of the NSW Lands Department (Land and Property Management Authority's Parish Map Preservation Project, at <http://parishmaps.lands.nsw.gov.au/pmap.html>) and library collections nationally via the Trove search engine.

Heritage registers and databases were interrogated to identify any heritage places already identified in or near the Project area. This included the:

- Narrabri Local Environment Plan (LEP) 1992 Schedule 2, Heritage Items;
- *Australian Heritage Database* and *Australian Heritage Places Inventory* of the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC), which includes heritage registrations in the *Register of the National Estate*, the *Commonwealth Heritage List*, the *National Heritage List*, the *World Heritage List* and the registers of the States and Territories;
- Heritage Council of NSW's *State Heritage Inventory*, which includes *State Heritage Register* listings and local government *LEP heritage listings*; and
- National Trust Register (to 1995) and supplement (to 1997) (paper copies).

The Project area and adjacent land was inspected on the ground, targeting buildings and disturbed land evident on recent large scale colour aerial photographs, historical information and local knowledge. All areas subject to proposed development were traversed, as were all proposed road re-alignments. Features inspected are listed and assessed at Sections 4 and 5 below.

2 HISTORICAL OVERVIEW

2.1 EXPLORATION AND FIRST SETTLEMENT

Surveyor-General John Oxley passed to the south of the Gunnedah Basin during his 1818 expedition, but it was Alan Cunningham during his 1827 expedition to the Darling Downs who discovered the Namoi River, and came close to, if not passing through, the Project area.²

However, the first recorded European in the area was not an explorer, but the escaped convict George ‘the Barber’ Clarke, who lived with the Kamilaroi Aboriginal people for five years from 1826. Clarke based himself at Barbers Lagoon on Wilberoi Reserve, 6.4 km south east of Boggabri, and rustled cattle from the squatters further south. His descriptions of the river system of the north-west prompted Surveyor-General Major Thomas Mitchell’s expedition in 1831. Mitchell reached the Namoi (‘Ngamaay’ to the Kamilaroi) near Gulligal on 16 December 1831. He found Clarke’s stockyard, then traveled through the Leard forest area looking, unsuccessfully, for the Kindur River described by Clarke, before returning to the Namoi near Barber’s Pinnacle (‘Dhangguuldha’) and moving on northward.³

2.2 PASTORAL HISTORY

The Boggabri region was beyond the ‘Limits of Location’, the boundary of the Nineteen Counties that had been established by the Colonial Governor in 1829, within which settlement was sanctioned and could be more easily controlled. However, the promise for better grazing land ‘further out’ enticed pastoralists to send their stock beyond the ‘Limits’, and the squatting boom followed, the area of the Liverpool Plains south of the Namoi being extensively squatted between 1831 and 1835.

Edward Cox’s stockmen established his ‘Namoi Hut’ run at the confluence of the Namoi and Cox’s Creek in 1835, having probably followed Cox’s Creek north from the Mudgee area where the family had holdings, to its junction with the Namoi.⁴ The Namoi Hut property comprised of 19,200 acres by 1849.⁵ Others soon followed including I. Robertson (who was the first holder of Burburgate), Thomas Eather (on Hendriendi), Sir John Jamison (on Baan Baa to the north of Boggabri) and John Town (on Mikengowrie west of the Namoi opposite Burburgate).⁶

By the late 1830s it was clear that the ‘Limits of Location’ were not in fact limiting the spread of settlement, and that the government was making no income from, or able to effectively control, the spread of squattages beyond the limits.

² Feeken, E.H.J. & Feeken, G.E.E. 1970. *The discovery and exploration of Australia*, Nelson, Melbourne: map 16

³ Feeken & Feeken 1970: Map 16; Boggabri Adult Education Committee, 1957. *Boggabri, the story of our town*. Produced to commemorate the Golden Grain Festival, September 1957: 4.

⁴ Boggabri Adult Education Committee, 1957: 5.

⁵ Longmuir, J. (ed) 1956. *Gunnedah Centenary 1856-1956*. Gunnedah Centenary Committee: 17.

⁶ Boggabri Adult Education Committee, 1957: 7.

In response Governor Bourke in 1836 introduced a licensing fee of ten pounds which every squatter had to pay each year for the right to depasture his stock on Crown land beyond the 'Limits of Location', the licensing system making it clear to the squatter that he was not the owner of the property, but a Crown tenant.⁷

As the government slowly came to grips with the reality of the spread of settlement, it created in 1839 eight pastoral districts ('squatting districts'), one of which, the Liverpool Plains District, included the Project area. By 1840 some 40 pastoral stations were already reported in the Liverpool Plains District. In 1847 the Orders-of-Council giving effect to a new leasing Act of 1846, creating long-term leases in the pastoral districts that enabled graziers to occupy very large runs and secure freehold rights over key homestead blocks. In the Boggabri area this meant that leases of 14 years became available, with the squatter being able to purchase up to 640 acres at £1 per acre each year, to secure freehold over homestead and other improvements.⁸

John Panton took up two leases, at 'Bogybry' and 'Boggabri' (spelling varying between documents), in 1843 and 1844. Panton held six leases in the Namoi River and Liverpool Plains district, and 13 other runs in the New England, Macleay River and Wellington areas (Figure 3).⁹ Boggabri was listed as being 96 square miles (61,440 acres) in extent in 1849.¹⁰ William Charles Wentworth took up six leases in the Namoi River District and four in Liverpool Plains between 1837 and 1845, including the Burburgate run.¹¹ The Well's Gazetteer of 1848 records 'Boggebie. The station of J. Panton, in the district of Liverpool Plains, N.S.W., on the Nammoy River, 63 miles from Tamworth', and 'Burburgate. The station of W.C. Wentworth, in the district of Liverpool Plains, N.S.W., on the Nammoy River, 80 miles from Murrurundi.'¹² The Project is within the bounds of the expanded Burburgate station, on what appears to have been the 'Dripping Rock' run in the 1840s, though the original boundary between Burburgate and Boggabri runs is not clear, and Burburgate absorbed Boggabri later in the century.

Thomas Mort the Sydney merchant had acquired Boggabri station from Panton by 1866, then it passed to another Sydney merchant Ebenezer Vickery.¹³

⁷ Campbell, J.F. 1968. *Squatting on Crown Lands in New South Wales*, Royal Australian Historical Society, Sydney: 12, 15-16, 19, 24; McNaught, J. 1997. *Index to Certificates of Depasturing Licences: Licence to Depasture Crown Lands beyond the Limits of Location 1837-1860*, Richmond-Tweed Regional Library, Goonellebah: 2.

⁸ Roberts, S.H. 1935. *The Squatting Age in Australia 1835-1847*, Melbourne University Press, Carlton: 263-271; Boggabri Adult Education Committee, 1957: 7.

⁹ Listed in McNaught, J. 1997. *Index to Certificates of Depasturing Licences: Licence to Depasture Crown Lands beyond the Limits of Location 1837-1860*, NSW Archives AO Reel Numbers 5067-5081, Richmond-Tweed Regional Library, Goonellebah.

¹⁰ Longmuir 1956: 17.

¹¹ McNaught 1997.

¹² Wells, W.H. 1848. *A geographical dictionary, or, Gazetteer of the Australian colonies: their physical and political geography, together with a brief notice of all the capitals, principal towns, and villages, also of rivers, bays, gulfs, mountains, population, and general statistics*. W. & F. Ford, Sydney: 61, 102.

¹³ Boggabri Adult Education Committee, 1957: 11.

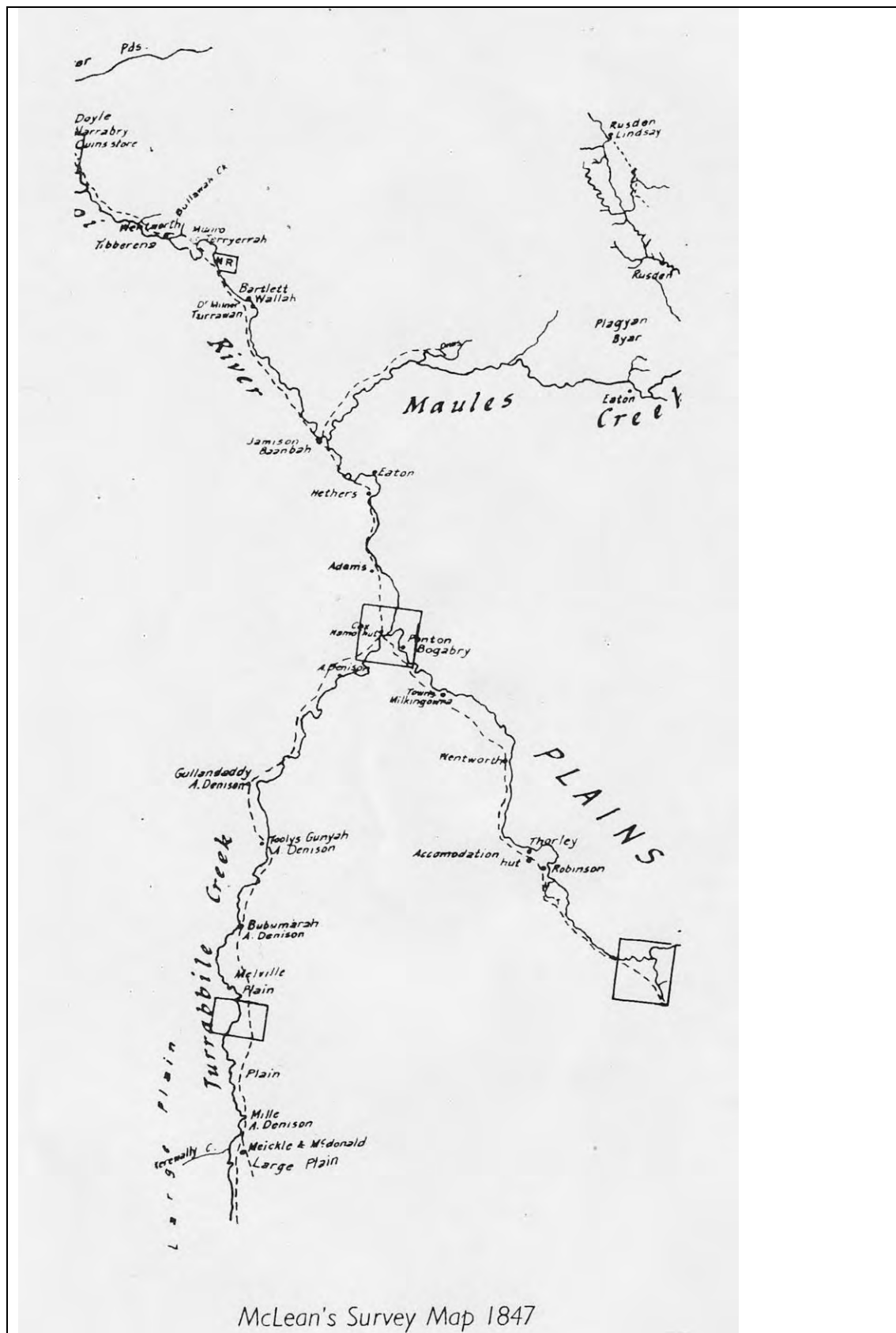


Figure 3

McLean's Survey Map of 1847, showing run locations along the Namoi River and Cox's Creek ('Turrabbile'). 'Panton Bogabry' is east of the Project area. 'Wentworth' is Burburgate homestead area. Source: Boggabri Adult Education Committee, 1957

Wentworth may have occupied Burburgate as early as the late 1830s, to the west of John Johnston's original Bulomin (Gunnedah) Run. The run was listed as being of 65,920 acres in 1849.¹⁴ In about 1848 John Charles Lloyd became the manager of the Burburgate run, and bought the property from Wentworth in 1853 (though there was a protracted legal battle with Wentworth over the sale arrangements).¹⁵ John's brother, Edward Henry Lloyd, joined him in 1848, and became manager in 1853 when John returned to England, and Charles William Lloyd joined Edward at Burburgate in 1854 as assistant manager. In 1858 Charles succeeded Edward as manager and resident partner at Burburgate.¹⁶ The Lloyds also owned Ghoolendaadi, Turrawan, Gundemain, Edgeroi, Gurley and other properties in the Gunnedah/Narrabri districts. Oscar De Satge, who became assistant manager at Burburgate and the other Lloyd properties in 1859, indicates that Burburgate was the head station of the Lloyd empire, and had the largest woolshed on the river, with 40 shearers and cover for a day's clip of 1,500 sheep.¹⁷



Figure 4
'Sunset Burburgate' 1867.
Artist unknown.
Source: National Library of Australia

Charles Lloyd was one of the first graziers to erect wire fences to delimit paddocks, and to install steam-driven pumps for washing sheep, in 1856. Forty miles of wire fencing was built initially, which Lloyd claimed to be the first of its kind adopted in NSW, and indeed it has been observed that these were the first big paddocks fenced in Australia.¹⁸

In 1861 Charles Lloyd installed wool scouring machinery, and by 1869 much of the Burburgate wool was shorn in grease and scoured.¹⁹ In 1863 Charles was also successful in the innovation of dipping sheep against scab.

¹⁴ Longmuir 1956: 17.

¹⁵ Abbott, G.J. 1974. 'Lloyd, Charles William (1830-1919)', *Australian Dictionary of Biography*, Vol 5, Melbourne University Press: 94-95.

¹⁶ Abbott, G.J. 1974. 'Lloyd, Charles William (1830-1919)', *Australian Dictionary of Biography*, Vol 5, Melbourne University Press: 94-95; McLean, R. 2006. *The Way We Were: Sesquicentenary of Gunnedah 1856 – 2006*. Gunnedah and District Historical Society, Gunnedah Shire Council.

¹⁷ De Satge, O. 1901. *Pages from the Journal of a Queensland Squatter*. Hurst and Blackett, London.

¹⁸ Walsh, G. 1993. *Pioneering Days: people and innovations in Australia's rural past*. Allen & Unwin, St Leonards, NSW: 13; Rolls, E. 1984. *A Million Wild Acres*. Penguin, Ringwood, Victoria: 166.

¹⁹ Rolls 1984: 176.

While Charles left for Sydney in 1863 and appears to have withdrawn from the family partnership, he is listed in 1866 as being the owner of Dripping Rock and five other runs in partnership with John, Dripping Rock being one of the runs comprising Burburgate and the location of the Tarrawonga Project. In the 1870s Charles Lloyd moved back to the Namoi, to Tarriaro at Gulligal.²⁰



In 1865 Burburgate was acquired by Mort, Cameron and Buchanan, and subsequently by Ebenezer Vickery. Vickery (1827-1906) was a prominent merchant and manufacturer, and one of the largest land-owners and property speculators in NSW.²¹ The property then came under the ownership of the Namoi Pastoral Company (a Vickery company?), which also owned Edgeroi and Gundamain properties, about 30 miles out of Narrabri, also previously owned by the Lloyds. There are press reports of the movement of stock between the properties in the 1880s²².

It is interesting to note that in 1866 Boggabri was a very small settlement with 7-8 houses, a hotel and about 50 people, while it was Gulligal, 15 km to the south east, that was the postal township, both settlements being linked to the south with a twice-weekly coach service.²³ Gulligal no longer exists as a settlement.

The Burburgate Run was said in 1886 to comprise 220,000 acres, 'a struggling kind of run', of which 45,000 was freehold, the property running 60,000 sheep.²⁴ The Lands Department map 573244 of Burburgate property²⁵, stemming from the *Subdivision of Runs Act, 1884* indicates a leasehold area of 174,700 acres, and a resumption area of 144,900 acres, or 319,600 acres in total. The resumption area was called in from the lease in 1894 for closer settlement.

²⁰ Abbott 1974: 94-95.

²¹ Walsh, G.P. 1976. 'Vickery, Ebenezer (1827-1906)', *Australian Dictionary of Biography*, Vol 6, Melbourne University Press: 333-334.

²² eg *The Maitland Mercury & Hunter River General Advertiser*, Tuesday 26 May 1885, 'Pastoral News, stock movements'

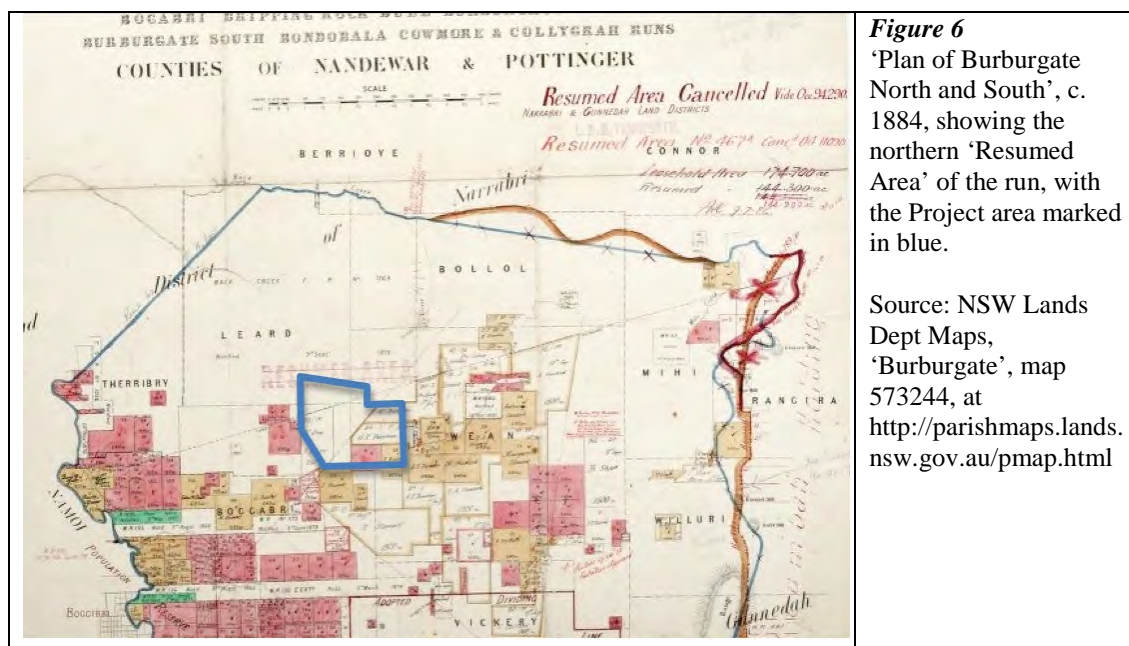
²³ Whitworth, R.P. 1866. *Bailliere's New South Wales Gazetteer and Road Guide*, F.F. Bailliere, Sydney: 243-244.

²⁴ *The Maitland Mercury & Hunter River General Advertiser*, Tuesday 24 August, 1886, 'Irrigation at Burburgate'.

²⁵ 'Burburgate', Map 573244 within <http://parishmaps.lands.nsw.gov.au/pmap.html>

The *Subdivision of Runs Act, 1884* was a reform following the outdated Robertson land reforms for closer settlement of 1861. It limited free selection, and instead each squatter's run was to be divided into two portions, one retained by the lessee and the other 'resumed area' to be opened to settlement by small farmers. The map shows 'Burburgate North & South [annotated within the Lands Department to cross out 'North and South' and replaced it with 'Holding'], Liverpool Plains District, comprising Bogabri (sic), Dripping Rock, Bull, Burburgate North, Burburgate South, Bondobala, Cowmore & Collygrah Runs, Counties of Nandewar and Pottinger', and this list of incorporated runs is repeated in a pastoral handbook of 1889, being owned at that date by the Australasian Mortgage and Agency Company. By this date the combined acreage had shrunk to 179,765 acres (though this might have reflected the leasehold area alone).²⁶

The Project area is within the 'resumed' section of Dripping Rock run.



However, the 1880s and 90s were periods of decline in the central and western regions, and increasingly the runs were in the hands of banks (across the state 623 runs and 577 occupation leases in resumed areas were encumbered to or relinquished to banks by 1889). By 1893, 8 million acres of settled land had been abandoned in NSW. This land system was in place for a decade, but rural recession led to a decline in pastoral settlement, and the resumed areas were not effectively taken up. In 1894 the Carruthers Land Settlement Act returned the remaining balance of the Resumed Areas back to the leaseholder, to be resumed by government only when needed.²⁷ However, much of the Burburgate run was subdivided for rural settlement, and the Burburgate pastoral activities withdrew to the area closer to Gunnedah, focused on the station homestead which is about 13 km north of Gunnedah and 25 km south of Tarrawonga.

²⁶ Hanson, W. 1889. *The Pastoral Possessions of New South Wales*. Gibbs, Shallard & Co., Sydney: 212.

²⁷ Roberts, S.H. 1968. *History of Australian Land Settlement 1788-1920*. Macmillan of Australia, Melbourne. pp 309-311.

In 1905 the surviving Burburgate property, by that date reduced to about 47,000 acres, was sold to H.S Rich and Sons for subdivision for closer settlement, and 58 blocks of from 105 to 2,200 acres, and the homestead block of 4,088 acres, were subsequently auctioned at the Gunnedah School of Arts.²⁸

The history of the ownership of portions within the Project area, as recorded on parish maps, is indicated at Table 1. Title searches have not been carried out to clarify or expand this sequence of ownership, so it is indicative rather than definitive. Note that the maps studied are working maps that have been annotated within the Lands Department, so the information quoted is often more recent than the map date, having been manually updated for many years.

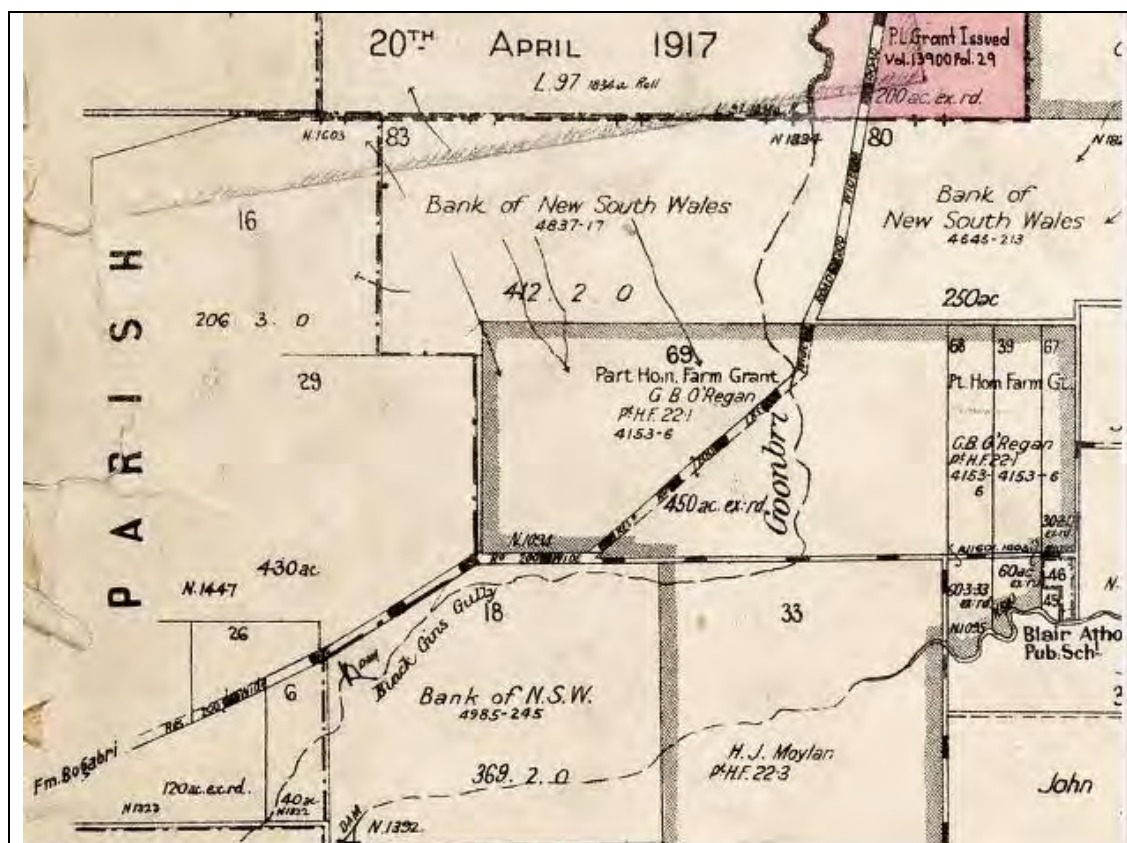


Figure 7 Map of Parish Wean, 1940, showing the main portions referred to in Table 1
Source: NSW Land Dept Map image 12572001

²⁸ Sydney Morning Herald Friday 18 August 1905, 'Sale of Burburgate Station'; McLean, R. 2006. *The Way We Were: Sesquicentenary of Gunnedah 1856 – 2006*. Gunnedah and District Historical Society, Gunnedah Shire Council.

Table 1. Ownership of portions within the Project area

Project Area	Portion	Owner	Reference¹
Open Cut	Parish Wean Portion 69	GT Dunstan 1884	Burbugate pastoral map (1884?)
		James Patrick Brady, Conditional Lease, 1890	Parish Wean 1881; 1896; 1906
		AMP Society, 1910	Parish Wean 1912
		George Bernard O'Regan, Homestead Farm Area, 1922 'The Meadows Station' (Soldier Settlement)	Parish Wean 1926
		Run by Richard Ivo Eather and his brothers 1948-1968 as 'Bollol', then with son Stephen till his retirement in 1995.	Jackson, D. (ed). 2010. <i>Boggabri & Districts Settlers' register Sesquicentenary Edition 1860-2010.</i>
	Parish Wean Portion 80	Daniel Ryan, 1881?	Parish Wean 1881
		M. Dunstan, Pre-lease 1884	Burbugate pastoral map (1884?)
		William Charles McDonald, Original Conditional Purchase, 1906	Parish Wean 1906
		Bank of NSW (by 1926)	Parish Wean 1926
	Parish Wean Portion 83	Daniel Ryan, 1881?	Parish Wean 1881
		John George De Gruchy, Conditional Purchase, 1909.	Parish Wean 1912.
	Leard State Forest (portions within proposed open cut)	L.W. Laird, improvement lease, 1893	Parish Leard 1893; 1927; 1935.
		A.G. and G.A. Fox, 1928	
Infrastructure area	Parish Leard Portion 6	John Andrews, Conditional Purchase 1895.	Parish Leard 1882
		Captain Donald Macansh, part of Harkers Settlement Purchase Area with Pt 29, 15 and 26, 1920. 'Thuin' (soldier settlement area)	Parish Leard 1910; 1927
		Charles Thomas Cross, 1942	Parish Leard 1935
	Parish Leard Portion 26	John Andrews, ACP 1900.	Parish Leard 1882
		See for Pt 6 above- consolidated as part of Harkers Settlement Purchase Area	
	Parish Leard Portion 16	Thomas Andrews, Conditional Purchase 1903	Parish Leard 1910
		AJS Bank (sometime after 1907)	Parish Leard 1907
		AMP 1914	Parish Leard 1910

Table 1. Ownership of portions within the Project area (Continued)

Project Area	Portion	Owner	Reference¹
Southern Emplacement	Parish Leard Portion 6	See Infrastructure Area above	
Goonbri Road Re-alignment	Parish Wean Portion 80	See Open Cut above	
	Parish Wean Portion 69	See Open Cut above	
	Parish Wean Portion 68	James Patrick Brady Conditional Purchase 1890	Parish Wean 1881; 1896
	Parish Leard Portion 6	See Infrastructure Area above	
	Parish Leard Portion 26	See Infrastructure Area above	
	Parish Boggabri Portion 122	Thomas Stewart, Conditional Purchase 1883	Parish Boggabri 1882.
		Australian Joint Stock Bank Ltd, (by 1907?)	Parish Boggabri 1907.
	Parish Boggabri Portion 121	Francis Moore, Conditional Purchase 1883	Parish Boggabri 1882.
		Thomas Stewart, Conditional Purchase 1886	Parish Boggabri 1906.
		AMP Society (1914)	Parish Boggabri 1913.
Adjacent areas	Parish Wean Portion 45	'Public School' dedicated 25 Nov. 1887.	Parish Wean 1881
		'Bollol Ck Public School'	Parish Wean 1912
		'Blair Athol Pub. Schl.'	Parish Wean 1926
		'Revd. Gaz. 24-4-69'	Parish Wean 1926
	Parish Wean Portion 33	Edwin Eather, Conditional Purchase, 1883	Parish Wean 1912.
		AMP Society, ACP 1910.	Parish Wean 1906.
		Hugh J. Moylan, Homestead Farm (returned soldier?), 1922	Parish Wean 1912; 1926.
		Bank of NSW (by 1926)	Parish Wean 1926.
	Parish Wean Portion 18	Ebenezer Vickery, (1881?)	Parish Wean 1881.
		John O'Brien, Homestead Grant, 1899	Parish Wean 1896.
		W.C.McDonald, or Henry Smith Conditional Purchase 1910 (different maps have different names with same CP number)	Parish Wean 1906: 1912.
		Bank of NSW (by 1926)	Parish Wean 1926.

¹ All ownership data has been sourced from NSW Department of Lands maps (Land and Property Management Authority, Parish Map Preservation Project)

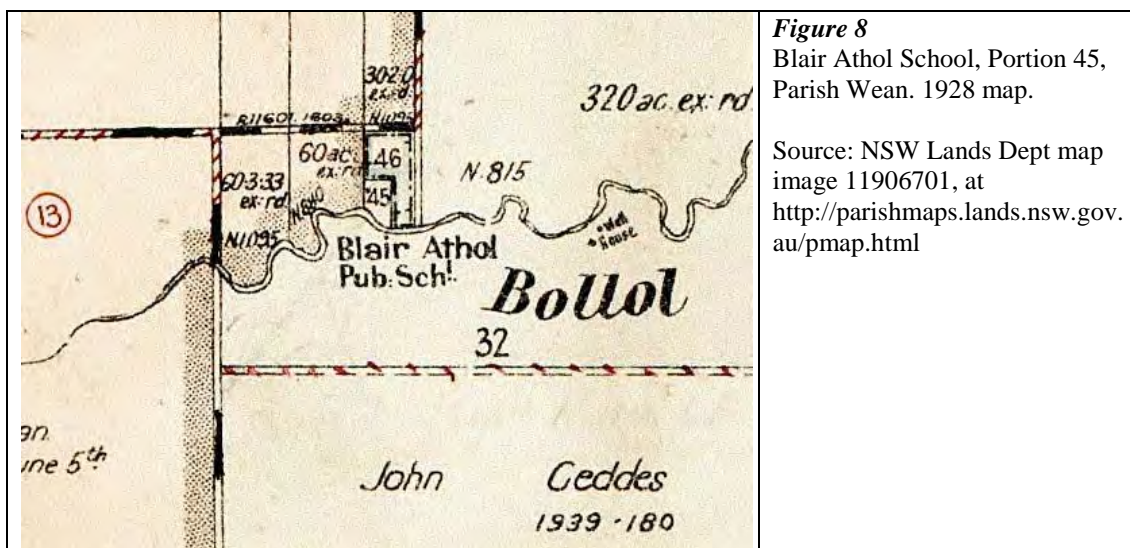
Parts of the proposed open cut are within the Leard State Forest, which was gazetted as the Back Creek Forest Reserve in 1878, becoming the Leard State Forest in 1917. Sections of the forest abutting the Project area and within the proposed northern open cut area appear to have been leased as improvement leases or timber leases in the late nineteenth century, but these were subsequently withdrawn. Many of the holdings were mortgaged to banks both in the late 19th century and during the depression in the 1930s.

2.3 SCHOOLS

The proposed re-alignment of Goonbri Road that is part of the Project is about 500m west of an early school (on portion 45, Parish Wean). The Bollol Creek School was established as a provisional school (ie in an area having at least 15 but fewer than 25 children requiring education) in 1886 and ran until 1888, when it was downgraded to a half-time school with Willowdale, meaning its local student numbers had fallen to about ten and a teacher travelled between the two schools. From 1890 to 1897 the school was downgraded even further to a house-to-house school, where generally untrained teachers travelled between several places teaching basic subjects in whatever accommodation was available.²⁹

The Bollol Creek School appears to have closed completely from 1897 until 1911, when it was reinstated as a provisional school and renamed Blair Athol School. Blair Athol ran as a provisional school until 1931, when it was upgraded to a public school (having at least 20 students), and continued at that classification until 1944, when it was again re-graded due to falling numbers to a provisional school. In 1957 public school status was again attained, until the school closed at the end of 1958.³⁰

The Willowdale School, which ran from 1881 to 1897, which operated as a half-time school with the Bollol Creek School for two years, was located north west of the Project area, beyond the Leard State Forest.



²⁹ Department of School Education Library (NSW), 1993. *Government Schools of New South Wales 1848-1993*, NSW Board of School Education, Parramatta.

³⁰ Department of School Education Library (NSW), 1993.

3 OTHER HERITAGE STUDIES AND LISTINGS

Previous heritage studies covering the Project area and surrounds have included:

- Narrabri LEP 1992 Schedule 2, Heritage Items (no heritage items in or near the Project area);
- Environmental Impact Statement for the Boggabri Coal Project 1987, NHP-AGIP-Idemitsu Joint Venture, (no heritage items in or near the project area);
- Archaeology Australia, for Hansen Bailey, 2009. Non-Aboriginal Cultural Heritage Assessment, Continuation of Boggabri Coal Mine (no heritage items in or near the project area); and
- Cupper, M. 2010. Cultural Heritage Assessment; Report to Tarrawonga Coal Pty Ltd.

The existence of heritage listed properties within the Project area has been tested by interrogating the following databases and paper sources:

- Narrabri LEP 1992 Schedule 2, Heritage Items;
- *Australian Heritage Database* and *Australian Heritage Places Inventory* of the DSEWPoC, which includes heritage registrations in the *Register of the National Estate*, the *Commonwealth Heritage List*, the *National Heritage List*, the *World Heritage List* and the registers of the States and Territories;
- Heritage Council of NSW's *State Heritage Inventory*; and
- National Trust Register (to 1995) and supplement (to 1997) (paper copies),

No heritage items have been previously identified in or adjacent to the Project area. The nearest listed heritage items to the Project area are in Boggabri, 15 km to the west: the Boggabri Railway Station (Rail Corp's s.170 State Agency Heritage Register), and the iron bridge over the Namoi River near Boggabri (Roads and Traffic Authority's s.170 State Agency Heritage Register). The nearest item in the State Heritage Register is the Gunnedah Railway Station, 40 km to the south.

4 HERITAGE SURVEY OF THE PROJECT AREA

The Project area comprises undulating hilly land to the north, including the southern edge of the Leard State Forest, and extends southward into the flat valleys of the Goonbri and Bollol Creeks. The Leard State Forest section to the north is heavily wooded with mainly cypress pine, much of it regenerated as a scrubby coverage, while the southern section is cleared agricultural and grazing land with timbered creek lines.

Table 2 provides a summary of items that were assessed for heritage significance, which are described more fully in Section 4.2. The location of these items is provided on Figure 9. Clearly modern rural infrastructure, such as most current fencing, steel yards and modern steel silos were not included, as they have no heritage value.

Table 2 *Summary of heritage items located within or in close proximity to the Project area*

ID	Item	Location (Latitude/ Longitude)	Description	Significance
H1*	Pole structure	-30.6375 150.191	Nine pine posts 1.7m high supporting collapsed cross beams with rusted twitched fencing wire. Use unknown. On Portion 80.	None
H2*	Rubbish dump	-30.63916 150.1896	Dump of car bodies, harvester, harrows, cultivator, oil engine and rubbish along 150m of eroded creek. Rural property dump. On Portion 80.	None
H3	Windmill and tank stand	-30.6553 150.1715	Windmill next to timber tank stand. 300m south east of southern road re-alignment.	None
H4*	Old telephone line	-30.64735 150.18242	Line of timber telephone poles c.300m paralleling roadway, some collapsed, no wires.	None
H5	Bollol Creek Station	-30.6463 150.19416	Weatherboard and fibro cottage, corrugated galvanised iron (CGI) roof, mid-20 th century (older core?), extended unsympathetically, new sleep-out cottage in garden, swimming pool, garage/shed, avenue of trees to drive. 130m from the proposed open cut. Modern steel shed to north on edge of the proposed open cut.	None
H6*	Templemore Station	-30.6495 150.1927	Hardyboard and timber cottage, CGI roof, mid-late 20 th century. 350m from the proposed open cut.	None
H7	Templemore sheds	-30.6538 150.1923	Two steel-framed CGI clad open sheds, and four steel silos. Late 20 th century. 700m from the proposed open cut.	None

Table 2 *Summary of heritage items located within or in close proximity to the Project area (Continued)*

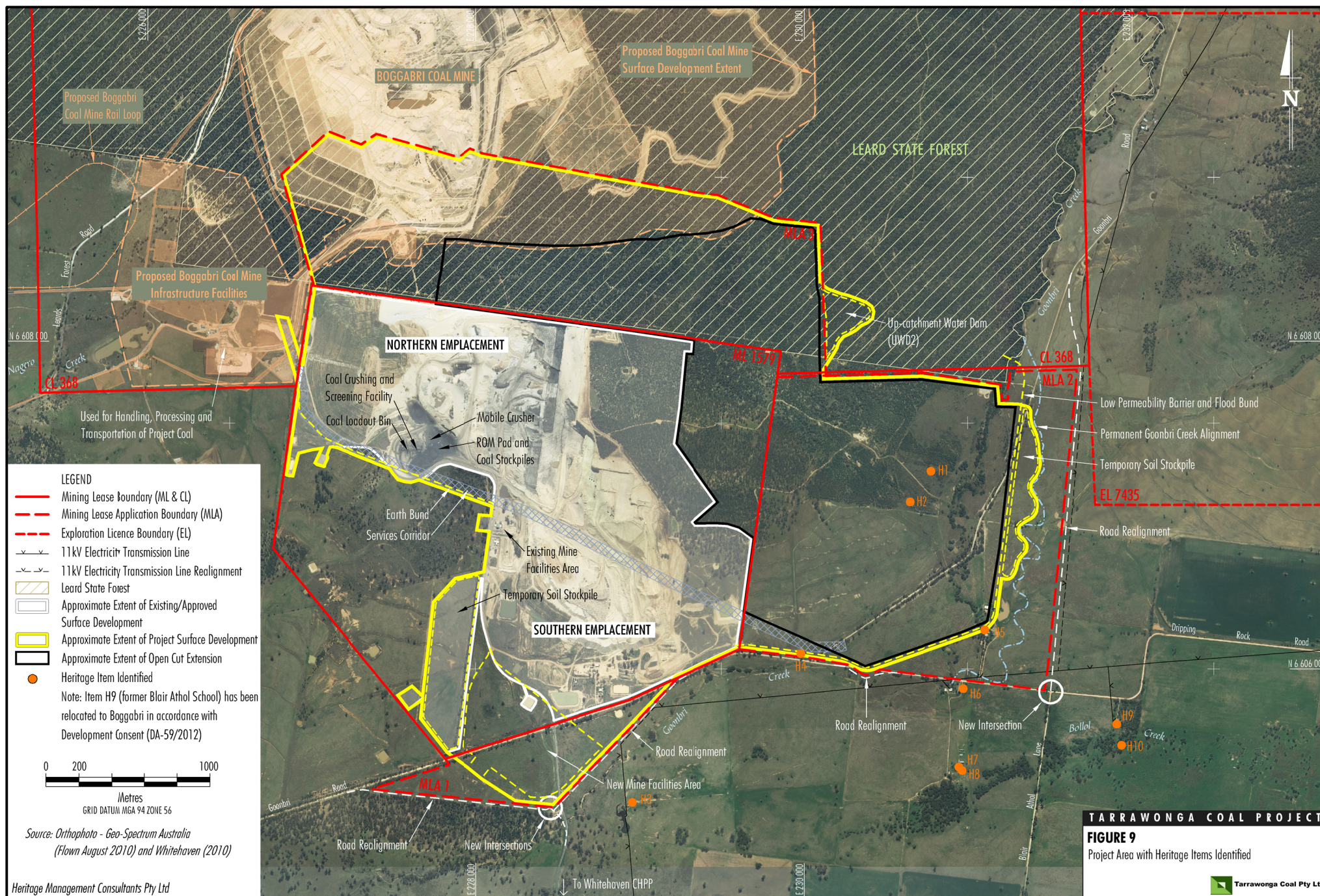
ID	Item	Location (Latitude/ Longitude)	Description	Significance
H8	Templemore woolshed	-30.654 150.1925	Pole-framed, timber and CGI clad two-stand shearing shed. Roof and some walls collapsed, timber decayed, drive shaft and wheels for two hand sets remain. Portion 33. 800m from the proposed open cut.	None
H9	Blair Athol School	-30.6513 150.2.2024	The schoolhouse, possibly dating to 1911, is a weatherboard clad single-roomed building with open porch to the north. It has been extended twice to the east as a residence, but is now vacant.	local
H10	School block survey tree	-30.65283 150.20267	Dead tree near south east corner of portion 45 school block, with blaze carved with ↑ / 45 / 106. 600m to east of road re-alignment.	local

* site to be disturbed by Project activities

4.1 SITE DESCRIPTIONS

Leard State Forest

The section of the Project area in the Leard State Forest and adjacent area to the south is thickly wooded with cypress pine, much of it regeneration scrub growth. Inspection of this area was only feasible from the formed vehicle tracks through it. In some sections of the forested area are pine stumps, indicating earlier forestry activities, but no specific forestry work sites were identified.



H1. Pole structure

Nine pine posts, 1.7m high, in three rows of three describing a 5m square, located in an area of mixed pine growth and open land (Figure 10). The posts, six of which have morticed cuts to house cross beams, support several cross-beams made of pine saplings attached with rusted twisted fencing wire, though most have fallen to the ground. The use of the site is unknown, but it may have been an animal or equipment shelter. It is located on Portion 80, 250m from site H2 rubbish dump. The site is within the footprint of the proposed open cut.



Figure 10

Site H1, pole structure

Source: M.Pearson 2011

H2. Rubbish dump

A collection of car and truck bodies and components, a stripper-header, harrows, a cultivator, an oil engine, building materials and assorted waste materials scattered along approximately 150m of an eroded creek line on Portion 80 (Figure 11). A number of exotic plant species have also been introduced, probably as garden waste. It has the appearance of a rural property dump, possibly associated with nearby Bollol Station or its predecessor Meadows Station to the east (and also on Portion 80), or with Thuin Station to the west. The site is within the footprint of the proposed open cut.



Figure 11

Site H2, Rubbish dump

Source: M.Pearson 2011

H3. Windmill and tank stand

A small windmill on a steel tripod mast, next to a heavy timber post and landing water tank stand (Figure 12). The mill is still working, the ground around it being flooded. The site is 300m south east of the proposed road re-alignment. Located on Portion 18.

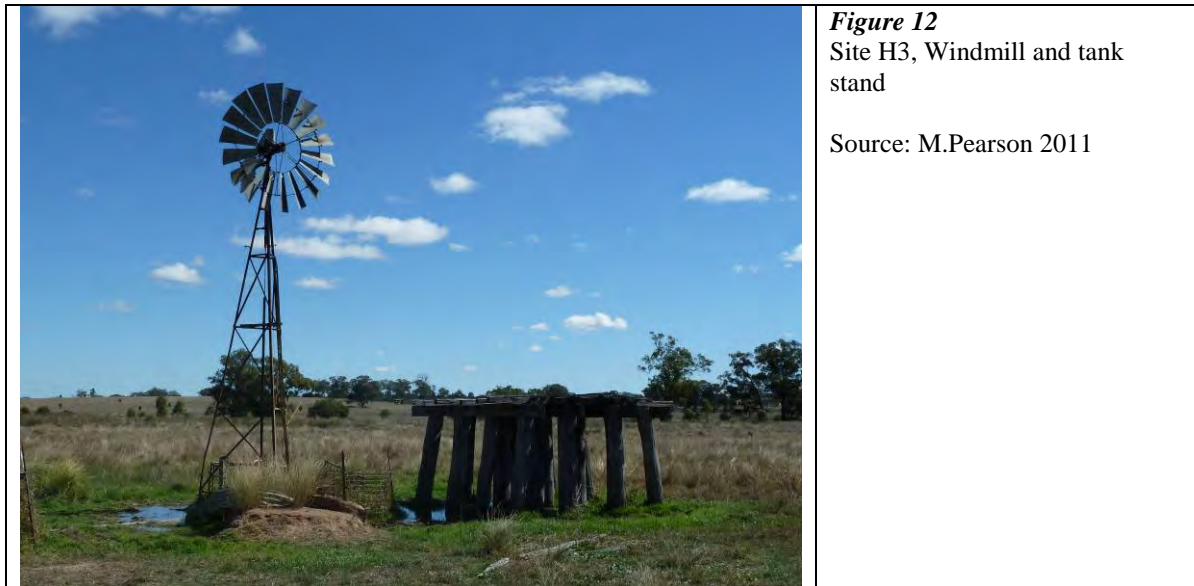


Figure 12
Site H3, Windmill and tank stand

Source: M.Pearson 2011

H4. Old telephone line

A line of timber telephone poles running intermittently for about 300m parallel to the roadway. Some poles have collapsed, and the wires have been removed. Probably mid-late 20th century in date.

H5. Bollol Creek Station

A weatherboard and fibro cottage with corrugated galvanised iron roof, mid-20th century in age but possibly with an older building at its core, possibly the original 'Meadows' station homestead, on Portion 80 (Figure 13). The building has been extended unsympathetically with a skillion extension extending into the original roof plane. A recently erected small weatherboard sleep-out cottage is located in the garden, and a swimming pool and a garage/shed flank the house. An avenue of trees lines the drive to the road. The complex is situated immediately south-east of the proposed open cut.



Figure 13
Site H5, Bollol Creek Station
Homestead

Source: M.Pearson 2011

H 6. Templemore Station

A Hardyboard and timber cottage with corrugated galvanised iron roof, mid-late 20th century in date, with minor work sheds around it (Figure 14). Located 350m south east of the proposed open cut. Located on portion 33.



Figure 14
Site H6, Templemore Station
Homestead

Source: M.Pearson 2011

H7. Templemore sheds and silos

Two steel-framed corrugated galvanised iron clad open sheds for machinery and possibly hay storage, and four modern steel grain/fertiliser silos and a concrete water tank (Figure 15). Late 20th century in date. Located 700m from the proposed open cut and 350m south of the homestead (H6). Located on portion 33.



Figure 15

Site H7, Templemore sheds and silos

Source: M.Pearson 2011

H8. Templemore woolshed

A pole-framed, timber and corrugated galvanised iron clad two-stand shearing shed, probably mid-20th century in date and in ruinous condition (Figure 16). The roof and some walls have collapsed, and the raised timber floor has decayed. The drive shaft and friction wheels for two hand sets remain in place, in part supported by steel pipe posts. Located 800m from the proposed open cut, and 100m from the Templemore sheds (H7). Located on portion 33.



Figure 16

Site H8, Templemore woolshed

Source: M.Pearson 2011

H9. Blair Athol School

The schoolhouse, possibly dating to 1911 when the school was re-established and its name changed from Bollol Creek to Blair Athol, or to 1931 when it was upgraded to a Public School. It is a weatherboard clad single-roomed building with corrugated galvanised iron roof, three windows on the southern wall and two windows and a door on the northern side, and an open porch/verandah to the north (Figures 17 to 20). The interior lining, originally boarded, has been replaced with masonite wall and ceiling cladding. This was a standard design for small rural schools in the early 20th century. The building has been extended twice to the east for use as a residence, with the eastern wall of the schoolhouse penetrated to provide hallway access to the adjacent extension. Since this recording, the schoolhouse has been relocated to Boggabri in accordance with Development Consent (DA-59/2012) granted by Narrabri Shire Council. Therefore, no further assessment has been undertaken. Its previous location is shown on Figure 9.



Figure 17

Site H9. Blair Athol Schoolhouse from north. Original schoolhouse is at the right hand end with the higher eaves line.

Source: M.Pearson 2011



Figure 18

Site H9. Blair Athol Schoolhouse from south. Original schoolhouse is to the left, with three windows.

Source: M.Pearson 2011



Figure 19
Site H9. Blair Athol Schoolhouse from north west. Original schoolhouse and porch/verandah (now partly enclosed) in foreground.

Source: M.Pearson 2011



Figure 20
Site H9. Blair Athol Schoolhouse interior. Original schoolhouse windows, wall and ceiling cladding replaced with masonite.

Source: M.Pearson 2011

H10. School block survey tree

A dead tree near the south east corner of portion 45, on which Blair Athol school was built. The tree has a blaze carved with ↑ / 45 / 106 (Figure 21 and Figure 22). It is located 500m to south east of the proposed road re-alignment.



Figure 21

Site H10. Survey marker tree at south east corner of the Blair Athol School reserve (Portion 45).

Source: M.Pearson 2011



Figure 22

Site H10. Survey marker tree at south east corner of the Blair Athol School reserve (Portion 45), showing blaze and survey details

Source: M.Pearson 2011

5 EVALUATION OF THE HERITAGE SIGNIFICANCE OF ANY IDENTIFIED HERITAGE ITEMS

5.1 HERITAGE CRITERIA

The evaluation of the heritage significance of the identified items is based on the NSW State Heritage Register criteria. The application of the criteria at the local level is done by simply replacing the words 'NSW's' with the word 'local'. The criteria are as follows:

- Criterion A:** an item is important in the course, or pattern, of NSW's cultural or natural history;
- 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;
- Criterion C:** an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW;
- Criterion D:** an item has strong or special associations with a particular community or cultural group in NSW 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;
- Criterion F:** an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history; and
- 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.

5.2 ASSESSMENT AGAINST CRITERIA

None of the items identified are assessed as meeting the criteria at the state level: that is, they cannot be considered to be of state significance and would not meet the threshold for entry in the NSW State Heritage Register.

The assessments below are therefore made within the context of local significance alone: that is, whether they are sufficiently uncommon, representative of their type, historically important, architecturally or aesthetically noteworthy, or of such social value in the terms of the criteria as to be considered of significance within the local area.

The sites H1 to H7 described in Table 2 and Section 4.1 above are not assessed as being of local heritage significance in relation to any of the criteria. They are common types of places in rural Australia and the local region, and are not unusual or special in any way. They do not warrant conservation or detailed recording.

Site H8, the Templemore woolshed is part of the pattern of pastoral development of NSW, but is not important in that pattern (Criterion A). It is of some historical and technological interest as shearing practices have changed over time and such small woolsheds are becoming less common, though many still survive. However, the shed is in very poor condition and has low integrity because of the loss of significant fabric. As a result, it is not assessed as being important as a good example of small woolsheds at the local level (Criterion G), nor is it assessed as being uncommon (Criterion F), or likely to provide important research information (Criterion E). Site H8 is therefore not assessed as being of local significance and does not warrant conservation, and its detailed recording would add little to the knowledge of such sheds.

Sites H9 and H10, the Blair Athol school (this item was subsequently relocated to Boggabri) and survey marker, are assessed as being of local significance in relation to Criterion F and G. Schoolhouses of this early 20th century era are now uncommon, and despite the extensions to it, the schoolhouse and associated school reserve, in part demarked by the surviving survey tree, demonstrate principal characteristics of early 20th century small rural schools (schoolhouse, dedicated land block, sufficient land for play and enclosed pasturage of horses). The site may have some significance to the local community for its historical associations, but this has not been ascertained in this study. While significance can be attributed to the place in a study such as this, it may still not meet the threshold for listing in the LEP, due to the integrity of the schoolhouse being compromised by later additions.

5.3 ASSESSMENT OF ‘RELICS’

As a result of the 2009 amendments to the NSW *Heritage Act 1977* (Heritage Act), none of the sites are assessed as having archaeological deposits or objects that are ‘relics’ in the meaning of the Heritage Act, and are hence not specifically protected by the Heritage Act. Previously the Heritage Act defined relic as being a deposit or artefact older than 50 years, but the 2009 amendments s.4(1) altered the definition of ‘relic’ to say:

relic means any deposit, artefact, object or material evidence that:

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

While ‘object and material evidence’ might be initially interpreted as including the standing buildings, a reading of the Heritage Branch’s guideline *Assessing significance for historical archaeological sites and ‘relics’* (2009) would not lead to this interpretation. The use of ‘relics’ is clearly aimed at protection of significant archaeological resources. None of the sites H1 to H8 and the deposits or artefacts associated with them are assessed as being of local or state heritage significance, and therefore are not ‘relics’ in the meaning of the Heritage Act. Sites H9 and H10, the Blair Athol School and survey marker, are assessed as being of local significance, and therefore any significant deposits or artefacts associated with them might be defined as a ‘relic’. However, in the brief recording of the sites no artefacts, object, material evidence or deposits were identified, and the use of the place as a school would be unlikely to result in objects or material of such significance as to warrant protection as ‘relics’.

The Heritage Act and the Heritage Branch's guideline are not clear as to whether 'of local significance' means identified in the LEP. If it does, and it is reasonable to expect that in law some official recognition of 'local significance' would be necessary, these places are not yet 'relics' in the meaning of the Heritage Act as the sites are not identified on the LEP. Even if the school were to be entered in the LEP in the future, it is unlikely that the deposits and associated artefacts would be assessed as being of great enough archaeological potential to warrant their definition as 'relics' under s.4(1)(b) of the *Heritage Act*.

6 ASSESSMENT OF THE POTENTIAL IMPACTS OF THE PROJECT ON NON-ABORIGINAL HERITAGE

On the basis of the assessment in Section 5 above, only sites H9 and H10, the Blair Athol Schoolhouse and survey marker, are found to be potentially of local significance, meeting Criterion F and G of the *Heritage Act* at the local level. Site H9 has subsequently been relocated to Boggabri (in accordance with Development Consent [DA-59/2012]) and Site H10 is located 500m south east of the proposed road re-alignment, and over 1 km south east of the nearest point of the proposed open cut. As such the potential for impacts through direct action, vibration or blasting³¹ impact is very small.

7 ASSESSMENT OF THE CUMULATIVE EFFECTS OF THE PROJECT

On the basis of the information presented above, there would not appear to be any cumulative effects of the Project on non-Aboriginal heritage identified at this point.

8 DEVELOPMENT OF MITIGATION MEASURES

No potential impacts on heritage items have been identified.

Site H2, while not of heritage significance as a site, contains objects that would potentially be of interest to local historical collections. It is recommended that Whitehaven offers the opportunity to the Boggabri Historical Society (in the first instance), and the Gunnedah Rural Museum (in the second instance) to select items that would be useful additions to their collections.

9 CONCLUSIONS

The study of the non-Aboriginal heritage places in the Project area has indicated that two places, the Blair Athol Schoolhouse (H9) (subsequently relocated to Boggabri) and the associated survey marker demarking the boundary of the school block (H10), are of local significance.

It is **recommended** that Whitehaven offers the opportunity to the Boggabri Historical Society (in the first instance), and the Gunnedah Rural Museum (in the second instance) to select from the rubbish dump at site H2 any items that would be useful additions to their collections.

³¹ Wilkinson Murray. 2011. *Tarrawonga Coal Project Noise and Blasting Assessment*.

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